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**REPUBLIC OF KAZAKHSTAN**

Phone: +7 (7172) 704282  
AFS: UAAKYNXX  
Email: aip@ans.kz  
Post: Bldg 15, E522 str.,  
010014 Astana,  
Republic of Kazakhstan

AIRAC AMDT 011/2025  
Effective Date: 27 Nov 2025

**1. Amendment content:**

GEN

GEN 0.2 Information updated

GEN 0.4 Information updated

GEN 2.7 Information updated

GEN 3.3 Information updated

ENR

ENR 2.2 Information updated

ENR 3.2 Information updated

ENR 4.1 Information updated

ENR 4.4 Information updated

ENR 6 Changes in aeronautical chartss

AD

UATT 2.14 Information updated

UACC 2.20 Information updated

UAAH 2.12 Information updated

UAIK 2.2 Information updated

UAKD 2.2, 2.19 Information updated

UAKK 2.12 Information updated

UAOO 2.12 Information updated

UASS 2.12 Information updated

UAAT 2.12 Information updated

UARR 2.12 Information updated

UASU 2.12, 2.17 Information updated

UAAL 2.12 Information updated

UAI 2.23 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:**

Nil

**NOTAM series A:**

Nil

**NOTAM series C:**

C5979/25

NOTAM incorporated to this AMDT will be cancelled by NOTAMC on the 12 DEC 2025

**SUP:**

Nil

**AIC:**

Nil

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

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27 NOV 2025	GEN 0.4 - 5/6	30 OCT 2025
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27 NOV 2025	GEN 0.4 - 9/10	30 OCT 2025
27 NOV 2025	GEN 2.7 - 1/2	20 FEB 2025
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27 NOV 2025	ENR 2.2 - 5/6	11 JUL 2024
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27 NOV 2025	ENR 2.2 - 9/10	21 MAR 2024
27 NOV 2025	ENR 3.2 1 - 1/2	30 OCT 2025
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27 NOV 2025	ENR 3.2 1 - 5/6	30 OCT 2025
27 NOV 2025	ENR 3.2 1 - 7/8	30 OCT 2025
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27 NOV 2025	ENR 3.2 2 - 19/20	30 OCT 2025
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27 NOV 2025	ENR 3.2 2 - 27/28	30 OCT 2025
27 NOV 2025	ENR 3.2 2 - 29/30	30 OCT 2025
27 NOV 2025	ENR 3.2 2 - 31/32	30 OCT 2025
27 NOV 2025	ENR 3.2 2 - 33/34	30 OCT 2025
27 NOV 2025	ENR 3.2 2 - 35/36	30 OCT 2025
27 NOV 2025	ENR 3.2 2 - 37/38	30 OCT 2025
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27 NOV 2025	ENR 3.2 2 - 41/42	30 OCT 2025
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27 NOV 2025	ENR 4.4 - 1/2	10 AUG 2023
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27 NOV 2025	ENR 4.4 - 9/10	04 SEP 2025
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27 NOV 2025	ENR 4.4 - 35/36	30 OCT 2025
27 NOV 2025	ENR 6.1 1 - 1/2	30 OCT 2025
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27 NOV 2025	AD 2 UATT ADC 2 24 1 - 1/2	10 JUL 2025
27 NOV 2025	AD 2 UAAA ADC 2 24 1 - 1/2	04 SEP 2025

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AD 2 UACC - 15/16  
AD 2 UACC ADC 2 24 3 - 1/2  
AD 2 UACC ADC 2 24 10 - 1/2  
AD 2 UAAH - 3/4  
AD 2 UAAH - 9/10  
AD 2 UAAH ADC 2 24 7 3 - 1/2  
AD 2 UAAH ADC 2 24 7 4 - 1/2  
AD 2 UAAH ADC 2 24 9 3 - 1/2  
AD 2 UAAH ADC 2 24 9 4 - 1/2  
AD 2 UAAH ADC 2 24 11 3 - 1/2  
AD 2 UAAH ADC 2 24 11 4 - 1/2  
AD 2 UAIK - 1/2  
AD 2 UAIK ADC 2 24 7 1 - 1/2  
AD 2 UAIK ADC 2 24 7 2 - 1/2  
AD 2 UAIK ADC 2 24 9 1 - 1/2  
AD 2 UAIK ADC 2 24 9 2 - 1/2  
AD 2 UAIK ADC 2 24 11 1 - 1/2  
AD 2 UAIK ADC 2 24 11 2 - 1/2  
AD 2 UAKK - 5/6  
AD 2 UAKK - 7/8  
AD 2 UAKK - 9/10  
AD 2 UAKK - 11/12  
AD 2 UAKK - 13/14  
AD 2 UAKK - 15/16  
AD 2 UAUU ADC 2 24 3 - 1/2  
AD 2 UAOO - 3/4  
AD 2 UAOO - 5/6  
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AD 2 UAOO - 9/10  
AD 2 UAOO ADC 2 24 7 3 - 1/2  
AD 2 UAOO ADC 2 24 7 4 - 1/2  
AD 2 UAOO ADC 2 24 9 3 - 1/2  
AD 2 UAOO ADC 2 24 9 4 - 1/2  
AD 2 UAOO ADC 2 24 9 5 - 1/2  
AD 2 UAOO ADC 2 24 11 5 - 1/2  
AD 2 UAOO ADC 2 24 11 6 - 1/2  
AD 2 UASS - 3/4  
AD 2 UASS - 5/6  
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AD 2 UAII - 9/10  
AD 2 UAII - 11/12  
AD 2 UAII ADC 2 24 6 - 1/2  
AD 2 UAII ADC 2 24 7 3 - 1/2  
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AD 2 UAII ADC 2 24 9 7 - 1/2  
AD 2 UAII ADC 2 24 9 8 - 1/2  
AD 2 UAII ADC 2 24 11 1 - 1/2  
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AD 2 UAII ADC 2 24 11 6 - 1/2  
AD 2 UAII ADC 2 24 11 7 - 1/2  
AD 2 UAII ADC 2 24 11 8 - 1/2  
AD 2 UAAT - 3/4  
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AD 2 UAAT - 9/10  
AD 2 UAII - 11/12  
AD 2 UAII ADC 2 24 6 - 1/2  
AD 2 UAII ADC 2 24 11 1 - 1/2  
AD 2 UAII ADC 2 24 11 3 - 1/2  
AD 2 UAII ADC 2 24 11 4 - 1/2  
AD 2 UAII ADC 2 24 11 5 - 1/2  
AD 2 UAII ADC 2 24 11 9 - 1/2  
AD 2 UAII ADC 2 24 11 11 - 1/2  
AD 2 UARR - 3/4  
AD 2 UARR - 5/6  
AD 2 UASU - 3/4  
AD 2 UASU - 5/6  
AD 2 UASU - 7/8  
AD 2 UASU ADC 2 24 7 3 - 1/2  
AD 2 UASU ADC 2 24 7 4 - 1/2  
AD 2 UASU ADC 2 24 9 3 - 1/2  
AD 2 UASU ADC 2 24 11 2 - 1/2  
AD 2 UAAL - 3/4

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AD 2 UACC - 9/10	30 OCT 2025
AD 2 UACC - 11/12	30 OCT 2025
AD 2 UACC - 13/14	30 OCT 2025
AD 2 UACC - 15/16	30 OCT 2025
AD 2 UACC ADC 2 24 3 - 1/2	30 OCT 2025
AD 2 UACC ADC 2 24 10 - 1/2	04 SEP 2025
AD 2 UAAH - 3/4	07 AUG 2025
AD 2 UAAH - 9/10	04 SEP 2025
AD 2 UAIK - 1/2	30 OCT 2025
AD 2 UAIK ADC 2 24 7 1 - 1/2	30 OCT 2025
AD 2 UAIK ADC 2 24 7 2 - 1/2	30 OCT 2025
AD 2 UAIK ADC 2 24 9 1 - 1/2	30 OCT 2025
AD 2 UAIK ADC 2 24 9 2 - 1/2	30 OCT 2025
AD 2 UAIK ADC 2 24 11 1 - 1/2	30 OCT 2025
AD 2 UAIK ADC 2 24 11 2 - 1/2	30 OCT 2025
AD 2 UAKK - 5/6	08 AUG 2024
AD 2 UAKK - 7/8	17 APR 2025
AD 2 UAKK - 9/10	30 OCT 2025
AD 2 UAKK - 11/12	30 OCT 2025
AD 2 UAKK - 13/14	30 OCT 2025
AD 2 UAKK - 15/16	30 OCT 2025
AD 2 UAUU ADC 2 24 3 - 1/2	04 SEP 2025
AD 2 UAOO - 3/4	10 JUL 2025
AD 2 UAOO - 5/6	10 JUL 2025
AD 2 UAOO - 7/8	05 SEP 2024
AD 2 UAOO - 9/10	05 SEP 2024
AD 2 UASS - 3/4	20 MAR 2025
AD 2 UASS - 5/6	20 MAR 2025
AD 2 UASS - 7/8	20 MAR 2025
AD 2 UASS - 9/10	31 OCT 2024
AD 2 UASS - 11/12	04 SEP 2025
AD 2 UAIi - 9/10	04 SEP 2025
AD 2 UAIi - 11/12	04 SEP 2025
AD 2 UAIi ADC 2 24 6 - 1/2	05 SEP 2024
AD 2 UAIi ADC 2 24 11 1 - 1/2	15 MAY 2025
AD 2 UAIi ADC 2 24 11 2 - 1/2	10 JUL 2025
AD 2 UAIi ADC 2 24 11 5 - 1/2	04 SEP 2025
AD 2 UAIi ADC 2 24 11 6 - 1/2	15 MAY 2025
AD 2 UAAT - 3/4	08 AUG 2024
AD 2 UAAT - 5/6	08 AUG 2024
AD 2 UAAT - 7/8	08 AUG 2024
AD 2 UAIT - 11/12	30 OCT 2025
AD 2 UAIT ADC 2 24 6 - 1/2	15 MAY 2025
AD 2 UAIT ADC 2 24 11 1 - 1/2	04 SEP 2025
AD 2 UAIT ADC 2 24 11 3 - 1/2	30 OCT 2025
AD 2 UAIT ADC 2 24 11 4 - 1/2	04 SEP 2025
AD 2 UAIT ADC 2 24 11 5 - 1/2	04 SEP 2025
AD 2 UAIT ADC 2 24 11 9 - 1/2	04 SEP 2025
AD 2 UAIT ADC 2 24 11 11 - 1/2	04 SEP 2025
AD 2 UARR - 3/4	05 SEP 2024
AD 2 UARR - 5/6	08 AUG 2024
AD 2 UASU - 3/4	16 MAY 2024
AD 2 UASU - 5/6	20 MAR 2025
AD 2 UASU - 7/8	04 SEP 2025
AD 2 UAAL - 3/4	05 OCT 2023

AD 2 UAAL - 5/6  
AD 2 UAAL - 7/8  
AD 2 UASK ADC 2 24 11 1 - 1/2  
AD 2 UAKD - 1/2  
AD 2 UAKD - 5/6  
AD 2 UAKD - 11/12  
AD 2 UAKD ADC 2 24 1 - 1/2  
AD 2 UAKD ADC 2 24 3 - 1/2  
AD 2 UAKD ADC 2 24 4 - 1/2  
AD 2 UAKD ADC 2 24 7 1 - 1/2  
AD 2 UAKD ADC 2 24 7 2 - 1/2  
AD 2 UAKD ADC 2 24 7 3 - 1/2  
AD 2 UAKD ADC 2 24 7 4 - 1/2  
AD 2 UAKD ADC 2 24 7 5 - 1/2  
AD 2 UAKD ADC 2 24 7 6 - 1/2  
AD 2 UAKD ADC 2 24 9 1 - 1/2  
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AD 2 UAKD ADC 2 24 9 3 - 1/2  
AD 2 UAKD ADC 2 24 9 4 - 1/2  
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AD 2 UAKD ADC 2 24 10 - 1/2  
AD 2 UAKD ADC 2 24 11 1 - 1/2  
AD 2 UAKD ADC 2 24 11 2 - 1/2  
AD 2 UAKD ADC 2 24 11 3 - 1/2  
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AD 2 UAKD ADC 2 24 11 7 - 1/2  
AD 2 UAKD ADC 2 24 11 8 - 1/2  
AD 2 UAKD ADC 2 24 11 9 - 1/2  
AD 2 UAKD ADC 2 24 11 10 - 1/2  
AD 2 UAKD ADC 2 24 12 - 1/2  
AD 2 UAKD ADC 2 24 14 - 1/2

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AD 2 UAAL - 5/6  
AD 2 UAAL - 7/8  
AD 2 UASK ADC 2 24 11 1 - 1/2  
AD 2 UAKD - 1/2  
AD 2 UAKD - 5/6  
AD 2 UAKD - 11/12  
AD 2 UAKD ADC 2 24 1 - 1/2  
AD 2 UAKD ADC 2 24 3 - 1/2  
AD 2 UAKD ADC 2 24 4 - 1/2  
AD 2 UAKD ADC 2 24 7 1 - 1/2  
AD 2 UAKD ADC 2 24 7 2 - 1/2  
AD 2 UAKD ADC 2 24 7 3 - 1/2  
AD 2 UAKD ADC 2 24 7 4 - 1/2  
  
AD 2 UAKD ADC 2 24 9 1 - 1/2  
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AD 2 UAKD ADC 2 24 9 3 - 1/2  
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AD 2 UAKD ADC 2 24 10 - 1/2  
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AD 2 UAKD ADC 2 24 11 8 - 1/2  
  
AD 2 UAKD ADC 2 24 12 - 1/2  
AD 2 UAKD ADC 2 24 14 - 1/2

21 MAR 2024  
04 SEP 2025  
04 SEP 2025  
08 AUG 2024  
05 SEP 2024  
04 SEP 2025  
17 APR 2025  
20 MAR 2025  
30 OCT 2025  
15 MAY 2025  
11 JUL 2024  
11 JUL 2024  
11 JUL 2024  
  
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05 SEP 2024  
11 JUL 2024  
  
11 JUL 2024  
31 OCT 2024  
31 OCT 2024  
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11 JUL 2024  
11 JUL 2024  
31 OCT 2024  
11 JUL 2024  
11 JUL 2024  
  
05 SEP 2024  
11 JUL 2024

**GEN 0.2 RECORD OF AIP AMENDMENTS**

<b>AIRAC AIP AMENDMENT</b>			
<i>NR/Year</i>	<i>Publication date</i>	<i>Effective date</i>	<i>Inserted by</i>
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	
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003/2021	03-Jun-2021	15-Jul-2021	
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001/2023	15-Dec-2022	26-Jan-2023	
002/2023	12-Jan-2023	23-Feb-2023	

AIRAC AIP AMENDMENT			
<i>NR/Year</i>	<i>Publication date</i>	<i>Effective date</i>	<i>Inserted by</i>
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	
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003/2024	04-Apr-2024	16-May-2024	
004/2024	30-May-2024	11-Jul-2024	
005/2024	27-Jun-2024	08-Aug-2024	
006/2024	25-Jul-2024	05-Sep-2024	
007/2024	19-Sep-2024	31-Oct-2024	
001/2025	12-Dec-2024	23-Jan-2025	
002/2025	09-Jan-2025	20-Feb-2025	
003/2025	06-Feb-2025	20-Mar-2025	
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ENR-4.4 - 7	27 NOV 2025	ENR-4.4 - 22	27 NOV 2025	ENR-4.5 - 1	30 MAR 2017
ENR-4.4 - 8	27 NOV 2025	ENR-4.4 - 23	27 NOV 2025	ENR-4.5 - 2	30 MAR 2017
ENR-4.4 - 9	27 NOV 2025	ENR-4.4 - 24	27 NOV 2025		
ENR 5	NAVIGATION WARNINGS				
ENR-5.1 - 1	23 APR 2020	ENR-5.1 - 4	11 AUG 2022	ENR-5.1 - 7	11 AUG 2022
ENR-5.1 - 2	02 DEC 2021	ENR-5.1 - 5	11 AUG 2022	ENR-5.1 - 8	11 AUG 2022
ENR-5.1 - 3	11 AUG 2022	ENR-5.1 - 6	26 JAN 2023	ENR-5.1 - 9	11 AUG 2022

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ENR-5.1 - 11	23 APR 2020	ENR-5.1 - 20	23 FEB 2023	ENR-5.4 - 1	08 AUG 2024
ENR-5.1 - 12	23 APR 2020	ENR-5.1 - 21	23 FEB 2023	ENR-5.4 - 2	30 MAR 2017
ENR-5.1 - 13	23 APR 2020	ENR-5.1 - 22	23 FEB 2023	ENR-5.5 - 1	30 MAR 2017
ENR-5.1 - 14	23 APR 2020	ENR-5.1 - 23	23 FEB 2023	ENR-5.5 - 2	30 MAR 2017
ENR-5.1 - 15	23 APR 2020	ENR-5.1 - 24	23 FEB 2023	ENR-5.6 - 1	10 SEP 2020
ENR-5.1 - 16	04 NOV 2021	ENR-5.2 - 1	07 NOV 2019	ENR-5.6 - 2	10 SEP 2020
ENR-5.1 - 17	04 NOV 2021	ENR-5.2 - 2	07 NOV 2019		
ENR-5.1 - 18	23 APR 2020	ENR-5.3 - 1	11 AUG 2022		

ENR 6 EN-ROUTE CHART

ENR-6 - 1	15 JUL 2021	ENR-6.1 - 1	27 NOV 2025
ENR-6 - 2	30 MAR 2017	ENR-6.1 - 2	10 JUL 2025

PART 3 - AERODROMES (AD)

AD 0

AD-0.1 - 1	23 MAY 2019	AD-0.6 - 1	30 OCT 2025	AD-0.6 - 11	30 OCT 2025
AD-0.1 - 2	30 MAR 2017	AD-0.6 - 2	30 OCT 2025	AD-0.6 - 12	30 OCT 2025
AD-0.2 - 1	23 MAY 2019	AD-0.6 - 3	30 OCT 2025	AD-0.6 - 13	30 OCT 2025
AD-0.2 - 2	30 MAR 2017	AD-0.6 - 4	30 OCT 2025	AD-0.6 - 14	30 OCT 2025
AD-0.3 - 1	23 MAY 2019	AD-0.6 - 5	30 OCT 2025	AD-0.6 - 15	30 OCT 2025
AD-0.3 - 2	30 MAR 2017	AD-0.6 - 6	30 OCT 2025	AD-0.6 - 16	30 OCT 2025
AD-0.4 - 1	23 MAY 2019	AD-0.6 - 7	30 OCT 2025	AD-0.6 - 17	30 OCT 2025
AD-0.4 - 2	30 MAR 2017	AD-0.6 - 8	30 OCT 2025	AD-0.6 - 18	30 OCT 2025
AD-0.5 - 1	23 MAY 2019	AD-0.6 - 9	30 OCT 2025		
AD-0.5 - 2	30 MAR 2017	AD-0.6 - 10	30 OCT 2025		

AD 1 AERODROMES/HELIPORTS - INTRODUCTION

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

AD 2 AERODROMES

AD-2-UATE - 1	12 JUN 2025	UATE AD 2.24.9-2 - 1	05 SEP 2024	UATE AD 2.24.12 - 1	23 FEB 2023
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AD-2-UATE - 3	30 OCT 2025	UATE AD 2.24.9-3 - 1	05 SEP 2024	UATE AD 2.24.14 - 1	23 FEB 2023
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AD-2-UATE - 6	30 OCT 2025	UATE AD 2.24.9-4 - 2	23 FEB 2023	AD-2-UATT - 2	26 JAN 2023
AD-2-UATE - 7	30 OCT 2025	UATE AD 2.24.9-5 - 1	05 SEP 2024	AD-2-UATT - 3	16 MAY 2024
AD-2-UATE - 8	30 OCT 2025	UATE AD 2.24.9-5 - 2	11 JUL 2024	AD-2-UATT - 4	08 AUG 2024
AD-2-UATE - 9	30 OCT 2025	UATE AD 2.24.9-6 - 1	05 SEP 2024	AD-2-UATT - 5	27 NOV 2025
AD-2-UATE - 10	30 OCT 2025	UATE AD 2.24.9-6 - 2	16 MAY 2024	AD-2-UATT - 6	10 JUL 2025
AD-2-UATE - 11	30 OCT 2025	UATE AD 2.24.10 - 1	05 SEP 2024	AD-2-UATT - 7	10 JUL 2025
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UATE AD 2.24.7-4 - 1	05 SEP 2024	UATE AD 2.24.11-8 - 1	15 JUN 2023	UATT AD 2.24.9-1 - 1	17 APR 2025
UATE AD 2.24.7-4 - 2	16 MAY 2024	UATE AD 2.24.11-8 - 2	23 FEB 2023	UATT AD 2.24.9-1 - 2	25 FEB 2021
UATE AD 2.24.7-5 - 1	05 SEP 2024	UATE AD 2.24.11-9 - 1	05 SEP 2024	UATT AD 2.24.9-2 - 1	17 APR 2025
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UATT AD 2.24.11-2 - 2	25 FEB 2021	UAAA AD 2.24.7-12 - 1	11 JUL 2024	UAAA AD 2.24.11-12 - 2	31 OCT 2024
UATT AD 2.24.11-3 - 1	17 APR 2025	UAAA AD 2.24.7-12 - 2	11 JUL 2024	UAAA AD 2.24.11-13 - 1	23 JAN 2025
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UATT AD 2.24.11-5 - 1	04 SEP 2025	UAAA AD 2.24.9-1 - 2	15 JUN 2023	UAAA AD 2.24.12 - 1	10 JUL 2025
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AD-2-UAAA - 14	15 MAY 2025	UAAA AD 2.24.9-13 - 1	11 JUL 2024	AD-2-UACC - 16	31 OCT 2024
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AD-2-UASK - 12	04 SEP 2025	AD-2-UASZ - 3	05 SEP 2024	UAKD AD 2.24.11-1 - 2	31 OCT 2024
AD-2-UASK - 13	04 SEP 2025	AD-2-UASZ - 4	05 SEP 2024	UAKD AD 2.24.11-2 - 1	27 NOV 2025
AD-2-UASK - 14	04 SEP 2025	AD-2-UASZ - 5	05 SEP 2024	UAKD AD 2.24.11-2 - 2	25 FEB 2021
UASK AD 2.24.1 - 1	15 MAY 2025	AD-2-UASZ - 6	23 JAN 2025	UAKD AD 2.24.11-3 - 1	27 NOV 2025
UASK AD 2.24.1 - 2	30 MAR 2017	AD-2-UASZ - 7	04 SEP 2025	UAKD AD 2.24.11-3 - 2	25 FEB 2021
UASK AD 2.24.3 - 1	05 SEP 2024	AD-2-UASZ - 8	16 MAY 2024	UAKD AD 2.24.11-4 - 1	27 NOV 2025
UASK AD 2.24.3 - 2	01 DEC 2022	UASZ AD 2.24.1 - 1	05 SEP 2024	UAKD AD 2.24.11-4 - 2	25 FEB 2021
UASK AD 2.24.4 - 1	24 FEB 2022	UASZ AD 2.24.1 - 2	01 FEB 2018	UAKD AD 2.24.11-5 - 1	27 NOV 2025
UASK AD 2.24.4 - 2	30 MAR 2017	UASZ AD 2.24.3 - 1	05 SEP 2024	UAKD AD 2.24.11-5 - 2	25 FEB 2021
UASK AD 2.24.6 - 1	31 OCT 2024	UASZ AD 2.24.3 - 2	04 NOV 2021	UAKD AD 2.24.11-6 - 1	27 NOV 2025
UASK AD 2.24.6 - 2	11 AUG 2022	UASZ AD 2.24.6 - 1	11 AUG 2022	UAKD AD 2.24.11-6 - 2	11 AUG 2022
UASK AD 2.24.7-1 - 1	31 OCT 2024	UASZ AD 2.24.6 - 2	11 AUG 2022	UAKD AD 2.24.11-7 - 1	27 NOV 2025
UASK AD 2.24.7-1 - 2	11 AUG 2022	UASZ AD 2.24.7-1 - 1	11 AUG 2022	UAKD AD 2.24.11-7 - 2	11 AUG 2022
UASK AD 2.24.7-2 - 1	31 OCT 2024	UASZ AD 2.24.7-1 - 2	01 FEB 2018	UAKD AD 2.24.11-8 - 1	27 NOV 2025
UASK AD 2.24.7-2 - 2	11 AUG 2022	UASZ AD 2.24.7-2 - 1	11 AUG 2022	UAKD AD 2.24.11-8 - 2	11 AUG 2022
UASK AD 2.24.7-3 - 1	31 OCT 2024	UASZ AD 2.24.7-2 - 2	01 FEB 2018	UAKD AD 2.24.11-9 - 1	27 NOV 2025
UASK AD 2.24.7-3 - 2	11 AUG 2022	UASZ AD 2.24.9-1 - 1	11 AUG 2022	UAKD AD 2.24.11-9 - 2	27 NOV 2025
UASK AD 2.24.7-4 - 1	31 OCT 2024	UASZ AD 2.24.9-1 - 2	01 FEB 2018	UAKD AD 2.24.11-10 - 1	27 NOV 2025
UASK AD 2.24.7-4 - 2	11 AUG 2022	UASZ AD 2.24.11-1 - 1	11 AUG 2022	UAKD AD 2.24.11-10 - 2	27 NOV 2025
UASK AD 2.24.7-5 - 1	31 OCT 2024	UASZ AD 2.24.11-1 - 2	11 AUG 2022	UAKD AD 2.24.12 - 1	27 NOV 2025
UASK AD 2.24.7-5 - 2	16 MAY 2024	UASZ AD 2.24.12 - 1	11 AUG 2022	UAKD AD 2.24.12 - 2	30 MAR 2017
UASK AD 2.24.7-6 - 1	31 OCT 2024	UASZ AD 2.24.12 - 2	01 FEB 2018	UAKD AD 2.24.14 - 1	27 NOV 2025
UASK AD 2.24.7-6 - 2	11 JUL 2024	UASZ AD 2.24.14 - 1	23 FEB 2023	UAKD AD 2.24.14 - 2	15 JUL 2021
UASK AD 2.24.7-7 - 1	31 OCT 2024	UASZ AD 2.24.14 - 2	11 AUG 2022		
UASK AD 2.24.7-7 - 2	11 JUL 2024	AD-2-UAKD - 1	27 NOV 2025		
UASK AD 2.24.7-8 - 1	31 OCT 2024	AD-2-UAKD - 2	20 MAR 2025		
UASK AD 2.24.7-8 - 2	08 AUG 2024	AD-2-UAKD - 3	20 MAR 2025		
UASK AD 2.24.9-2 - 1	31 OCT 2024	AD-2-UAKD - 4	15 MAY 2025		
UASK AD 2.24.9-2 - 2	11 AUG 2022	AD-2-UAKD - 5	05 SEP 2024		
UASK AD 2.24.9-3 - 1	31 OCT 2024	AD-2-UAKD - 6	27 NOV 2025		
UASK AD 2.24.9-3 - 2	11 AUG 2022	AD-2-UAKD - 7	15 MAY 2025		
UASK AD 2.24.9-4 - 1	31 OCT 2024	AD-2-UAKD - 8	15 MAY 2025		
UASK AD 2.24.9-4 - 2	11 JUL 2024	AD-2-UAKD - 9	15 MAY 2025		

**GEN 2.7 SUNRISE/SUNSET****1. GENERAL**

The tables include 25 public airports and aerodromes.

The times in the tables are given in UTC for beginning of civil morning twilight (TWIL FROM), sunrise (SR), sunset (SS), and end of civil evening twilight (TWIL TO).

The times given for the beginning of civil morning twilight and end of civil evening twilight are calculated for an altitude of the Sun 6° below the horizon as commonly used.

**2. ALPHABETICAL INDEX**

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AKTOBE	<a href="#">GEN-2.7-3</a>
ALMATY	<a href="#">GEN-2.7-4</a>
ASTANA	<a href="#">GEN-2.7-5</a>
ATYRAU	<a href="#">GEN-2.7-6</a>
BALKHASH	<a href="#">GEN-2.7-7</a>
BOZHBAN	<a href="#">GEN-2.7-8</a>
KARAGANDA	<a href="#">GEN-2.7-9</a>
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TURKISTAN	<a href="#">GEN-2.7-20</a>
URALSK	<a href="#">GEN-2.7-21</a>
URDZHAR	<a href="#">GEN-2.7-22</a>
USHARAL	<a href="#">GEN-2.7-23</a>
UST-KAMENOGORSK	<a href="#">GEN-2.7-24</a>
ZAISAN	<a href="#">GEN-2.7-25</a>
ZHEZKAZGAN	<a href="#">GEN-2.7-26</a>

3. SUNRISE/SUNSET TABLES

AKTAU  
UATE  
435136N 0510527E

AKTAU  
UATE  
435136N 0510527E

AKTAU  
UATE  
435136N 0510527E

MONTH DAY	CTS	SR	SS	CTE	MONTH DAY	CTS	SR	SS	CTE	MONTH DAY	CTS	SR	SS	CTE
JAN 1	0337	0410	1309	1342	MAY 1	0058	0129	1537	1608	SEP 2	0131	0200	1512	1542
5	0337	0410	1312	1345	5	0052	0124	1542	1614	6	0135	0205	1505	1534
9	0337	0409	1316	1349	9	0046	0119	1546	1619	10	0140	0209	1458	1527
13	0336	0408	1321	1353	13	0041	0114	1551	1624	14	0145	0214	1450	1519
17	0334	0406	1326	1358	17	0036	0110	1555	1629	18	0149	0218	1443	1512
21	0332	0403	1331	1402	21	0032	0106	1600	1633	22	0154	0222	1435	1504
25	0329	0400	1336	1407	25	0028	0102	1604	1638	26	0158	0227	1428	1457
29	0326	0356	1341	1412	29	0025	0100	1607	1642	30	0203	0232	1421	1449
FEB 2	0322	0352	1347	1417	JUN 2	0022	0057	1611	1646	OCT 4	0207	0236	1413	1442
6	0317	0348	1352	1423	6	0020	0056	1614	1649	8	0212	0241	1406	1435
10	0313	0343	1358	1428	10	0019	0054	1616	1652	12	0217	0246	1359	1428
14	0308	0337	1403	1433	14	0018	0054	1618	1654	16	0222	0250	1353	1422
18	0302	0331	1409	1438	18	0018	0054	1620	1656	20	0226	0255	1346	1415
22	0256	0325	1414	1443	22	0018	0055	1621	1657	24	0231	0300	1340	1409
26	0250	0319	1420	1448	26	0020	0056	1622	1658	28	0236	0306	1334	1403
					30	0021	0057	1621	1657					
MAR 2	0243	0312	1425	1453	JUL 4	0024	0059	1621	1656	NOV 1	0241	0311	1328	1358
6	0237	0305	1430	1458	8	0027	0102	1619	1655	5	0246	0316	1323	1353
10	0230	0258	1435	1503	12	0030	0105	1618	1653	9	0251	0321	1318	1349
14	0223	0251	1440	1508	16	0034	0108	1615	1650	13	0256	0327	1314	1345
18	0215	0244	1445	1513	20	0038	0112	1612	1646	17	0301	0332	1310	1341
22	0208	0237	1449	1518	24	0042	0116	1609	1642	21	0306	0337	1307	1338
26	0201	0229	1454	1523	28	0047	0120	1605	1638	25	0310	0342	1304	1336
30	0153	0222	1459	1528						29	0315	0347	1302	1334
APR 3	0146	0215	1504	1533	AUG 1	0052	0124	1600	1633	DEC 3	0319	0351	1300	1333
7	0139	0208	1508	1538	5	0056	0129	1555	1628	7	0323	0355	1259	1332
11	0131	0201	1513	1543	9	0101	0133	1550	1622	11	0326	0359	1259	1332
15	0124	0154	1518	1548	13	0106	0138	1544	1616	15	0329	0402	1300	1332
19	0117	0147	1523	1553	17	0111	0142	1538	1609	19	0332	0405	1301	1334
23	0111	0141	1527	1558	21	0116	0147	1532	1603	23	0334	0407	1302	1335
27	0104	0135	1532	1603	25	0121	0151	1526	1556	27	0336	0409	1305	1338
					29	0126	0156	1519	1549	31	0337	0409	1308	1341

## GEN 3.3 AIR TRAFFIC SERVICES

### 1. RESPONSIBLE SERVICE

**Republican State Enterprise “Kazaeronavigatsia”** is the responsible authority for the provision of air traffic services within the airspace of the Republic of Kazakhstan.

Building 15, E522 street,

District Esil,

010010 Astana

Republic of Kazakhstan

Phone: +7 (7172) 773404

Fax: +7 (7172) 773566

AFS: UAAKDDXX

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

The services are provided in accordance with the provisions contained in the following ICAO documents:

- Annex 2 — Rules of the Air;
- Annex 11 — Air Traffic Services;
- Doc 4444 — Procedures for Air Navigation Services — Air Traffic Management (PANS-ATM);
- Doc 8168 — Procedures for Air Navigation Services — Aircraft Operations (PANS-OPS).

### 2. AREA OF RESPONSIBILITY

Air traffic services are provided for the entire territory of the Republic of Kazakhstan, including its territorial waters, and as specified in the following paragraphs.

In accordance with the regional air navigation agreement, air traffic services are provided, under the delegated authority, in the airspace within another bordering FIR. Details are provided in section ENR 2.

The coordinates of boundaries for FIRs, CTAs, TMAs and CTRs are published in [ENR-2.1](#).

### 3. TYPE OF SERVICES

The following types of services are provided:

- a. Flight information Service (FIS);
- b. Alerting Service (ALRS);
- c. Air Traffic Service (ATC):
  - Area Control (ACC);
  - Approach Control (APP);
  - Aerodrome Control (TWR).
- d. Radar Service.

### 4. COORDINATION BETWEEN THE OPERATOR AND AIR TRAFFIC SERVICES

Air traffic services units, in carrying out their objectives, shall have due regard for the requirements of the operators relating to traffic information provision. They provide such information according to national Rules of airspace management.

When so requested by an operator, messages (including position reports) received by air traffic services units and relating to the operation of the aircraft shall be made available to the operator or a designated representative.

## 5. MINIMUM FLIGHT ALTITUDE

The minimum flight altitudes on the ATS routes, as presented in section ENR 3, have been determined to ensure a minimum vertical clearance above the controlling obstacle in the area concerned.

The minimum obstacle clearance altitudes (MOCA) of area navigation route segments are published on the Enroute chart ENR 6.1

## 6. ATS UNITS ADDRESS LIST

Unit name	Postal address	Phone	Fax	E-mail	AFS address
Aktau ATS Unit	Aktau, Airport, 130000, Republic of Kazakhstan	+7 (7292) 463006	+7 (7292) 463019	ussynin@ans.kz	UATEKNAD
Aktobe ATS Unit	Aktobe, micro-district Aviagorodok, 1 «G», ATC tower bldg., 030003, Republic of Kazakhstan	+7 (7132) 931006 +7 (7132) 931106 +7 (7132) 931034	+7 (7132) 931157 +7 (7132) 931140	aktobesovd@ans.kz akbsovd@ans.kz aktobe-pib@ans.kz	UATTKNAD UATTZRZX UATTZXAR UATTZTZX
Almaty ATS Unit	Almaty, 38A Mailin str., 050039, Republic of Kazakhstan	+7 (727) 2573570	+7 (727) 2573340	rdc@ans.kz adc@ans.kz mdp@ans.kz	UAAAZRZX UAAAZFZX UAAAZAZX
Astana ATS Unit	Astana, 119E, Kabanbay Batyr ave., district Esil, 010014, Republic of Kazakhstan	+7 (7172) 773406	+7 (7172) 773557	syrymbetov@ans.kz	UACCKNAD
		+7 (7172) 773409		znaichenko@ans.kz	
				astrp@ans.kz	UACNZRZX
				supervisor_ast@ans.kz	UACCZTZX
Atyrau ATS Unit	Atyrau, 6 Abul Khair Khan ave., Airport, 060011, Republic of Kazakhstan	+7 (7122) 209405 +7 (7122) 983106	+7 (7122) 209403	aidenov@ans.kz	UATGKNAD
		+7 (7122) 209403 +7 (7122) 983141		atr-briffing@ans.kz	UATGZTZX UATGZTZA
		+7 (7122) 983153 +7 (7122) 983133		atr-rp@ans.kz atr-mdp@ans.kz	UATGZXAR UATGZFZX
Balkhash ATS Unit	Balkhash, airport, 100301, Republic of Kazakhstan	+7 (71036) 40720		golovin@ans.kz	UAAHKNAD UAAHZAZX UAAHZTZX
Boralday ATS Unit	Almaty, 38A Mailin str., 050039, Republic of Kazakhstan	+7 (727) 2573317	+7 (727) 2573314	vyshka-brd@ans.kz	UAARZAZX

Unit name	Postal address	Phone	Fax	E-mail	AFS address
Karaganda ATS Unit	Airport "Sary-Arka", Bukhar Zhyrau district, Botakara, 100400, Republic of Kazakhstan	+7 (7212) 496506 +7 (7212) 496641		kkatc@ans.kz	UAKKKNAD UAKKZAZX UAKKZTZX
Kokshetau ATS Unit	Kokshetau, Airport, 020000, Republic of Kazakhstan	+7 (7162) 298206	+7 (7162) 253323	mukhamedov.a@ans.kz	UACKZTZX
Kostanay ATS Unit	Kostanay, airport, 110007, Republic of Kazakhstan	+7 (7142) 270106	+7 (7142) 576069	kim.e@ans.kz	UAUUKNAD
Kyzylorda ATS Unit	Kyzylorda, airport, 120008, Republic of Kazakhstan	+7 (7242) 270734		kz-rp@ans.kz tlegenov@ans.kz	UAOOKNAD UAOOYOYX UAOOZTZX
Pavlodar ATS Unit	Pavlodar airport, building 83, 140001, Republic of Kazakhstan.	+7 (7182) 301436 +7 (7182) 491341	+7 (7182) 491357	pvl-brifing@ans.kz bekenov@ans.kz	UASPZTZX
Petropavlovsk ATS Unit	Petropavlovsk, Kyzylzhar district, Bishkul town, Airport, 150700, Republic of Kazakhstan	+7 (7152) 461213	+7 (7152) 461942	tulihovs@ans.kz	UACPKNAD
Semey ATS Unit	Semey, Airport, 7 bldg., 071417, Republic of Kazakhstan	+7 (7222) 569034 +7 (7222) 569134	+7 (7222) 569134	semeydisp@ans.kz	UASSZAZX UASSZTZX
Shymkent ATS Unit	Shymkent, airport, 160020, Republic of Kazakhstan	+7 (7252) 945153 +7 (7252) 945006	+7 (7252) 945141	luzhin@ans.kz	UAIKNAD UAIIZTZX
Taraz ATS Unit	Taraz, airport, 080000, Republic of Kazakhstan	+7 (7262) 434995	+7 (7262) 431914	taraz_ovd@ans.kz	UADDKNAD
Taldykorgan ATS Unit	Almaty, 38A Mailin str., 050039, Republic of Kazakhstan	+7 (7282) 714106		vyshka-taldyk@ans.kz	UAATZAZX

Unit name	Postal address	Phone	Fax	E-mail	AFS address
Uralsk ATS Unit	Uralsk, airport, 17 bldg., 091112, Republic of Kazakhstan	+7 (7112) 505222		akizhanov@ans.kz	UARRKNAD
Urdzhar ATS Unit	Urdzhar country, Urdzhar Airport, 071700	+7 (72230) 55061	+7 (72230) 33231	urdjar@ans.kz	UASUZAZX UASKZTZX UASKKNAD
Ust-Kamenogorsk ATS Unit	Ust-Kamenogorsk, 566 Bazhova str., 070009, airport, Republic of Kazakhstan	+7 (7232) 293406	+7 (7232) 293426	lyutovskiy@ans.kz	UASKKNAD
Usharal ATS Unit	Almaty, 38A Mailin str., 050039, Republic of Kazakhstan	+7 (7283) 321381			UAALZAZX
Zaisan ATS Unit	Zaisan country, Zaisan airport 070700 Republic of Kazakhstan	+7 (72340) 26885	+7 (72340) 26885	zaysan@ans.kz	UASZZAZX UASKZTZX UASKKNAD
Zhezkazgan ATS Unit	Zhezkazgan, airport, 100600, Republic of Kazakhstan	+7 (7102) 762784	+7 (7102) 764248	zhez_ovd@ans.kz	UAKDKNAD

**ENR 2.2 OTHER REGULATED AIRSPACE****1. DELEGATION OF THE RESPONSIBILITY FOR PROVISION OF ATS**

<b>Delegated airspace within Aktobe FIR to Orsk APP:</b>	<b>Delegated airspace within Almaty FIR to Bishkek APP:</b>
N504842 E0583936 - N504530 E0580418 - N505530 E0574500 - then along the state BDRY with Russia to - N504842 E0583936	N431348 E0741934 - N433103 E0741440 - N432218 E0750715 - N425000 E0751800 - then along the state BDRY with Kyrgyzstan to - N431348 E0741934
<b>FL 130 GND</b>	<b>FL 195 GND</b>

<b>Delegated airspace within Shymkent FIR to Tashkent ACC:</b>	<b>Delegated airspace within Shymkent FIR to Tashkent APP:</b>
N411942 E0690118 - then along the state BDRY with Uzbekistan to - N414636 E0663312 - N413436 E0680213 - N412300 E0684800 - N411942 E0690118	N414210 E0694430 then along the state BDRY with Uzbekistan to - N405117 E0683451 - N405900 E0681400 - N411700 E0675600 - N420200 E0681200 - N415707 E0691127 - N414210 E0694430
<b>UNL GND</b>	<b>FL 140 GND</b>

<b>Delegated airspace within Bishkek FIR to Taraz APP:</b>	<b>Delegated airspace within Uzbekistan to Shymkent FIR:</b>
N424904 E0714443 - N423515 E0713630 - N423614 E0710515 - then along the state BDRY with Kyrgyzstan to - N424904 E0714443	N430221 E0654313 - N423000 E0635000 - N433000 E0620000 - then along the state BDRY with Uzbekistan to - N430221 E0654313
<b>FL 140 GND</b>	<b>UNL GND</b>

<b>Delegated airspace within Shymkent FIR to Bishkek APP:</b>	<b>Delegated airspace within Shymkent FIR to Bishkek ACC:</b>
N430234 E0733602 - N433420 E0735429 - N433103 E0741440 - N431348 E0741934 - then along the state BDRY with Kyrgyzstan to - N430234 E0733602	N424000 E0723500 - N424749 E0733030 - then along the state BDRY with Kyrgyzstan to - N424000 E0723500 Within this delegated airspace, the ATS route of the domestic airway of the 1st category of the Kyrgyz Republic, route V-15 (segment AGTAZ – ZODLE), is crossing the area. Air traffic services for this route segment are provided by Bishkek ACC (Kyrgyz Republic) in accordance with the Letter of Agreement (LoA). Detailed information on the domestic airways of the Kyrgyz Republic is published on the official website of SE “Kyrgyzaeronavigatsia” in the AIS section under “List of ATS routes and domestic airways of the Kyrgyz Republic.
<b>FL 195 GND</b>	<b>FL 410 GND</b>

2. BORDERS OF RESPONSIBILITY AREAS OF LOCAL ATC UNIT

Local ATC Unit Call sign FREQ Phone Hours of operation	ATS region	Lateral limits	Vertical limits	Remark
1	2	3	4	5
<b>AKTOBE</b> "Ambarchik" HF – 4656 kHz "Aktobe rayon" VHF – 128.0 MHz Phone: +7 (7132) 931134 from 03:30 to 14:30 UTC*	Aktobe FIR	N505800 E0613000 - N502331 E0622455 - N500137 E0622819 - N483738 E0624054 - N471135 E0643220 - N461214 E0614508 - N460903 E0613915 - N445159 E0600655 - along border KAZAKHSTAN_UZBEKISTAN - N452307 E0574000 - N454418 E0574000 - N463851 E0564100 - N465000 E0570000 - N485000 E0551000 - N485930 E0522738 - N504318 E0551552 - along border KAZAKHSTAN_RUSSIA - N505800 E0613000	FL 120 - FL 130	Excluding the TMA Aktobe and part of airspace delegated to Orsk APP.
* - Outside the regulation of the Local ATC unit "Aktobe", air traffic service at FL120 - FL130 is provided by Aktobe ACC "A1B" and "A3B" sector ATC, within their lateral limits.				
<b>ALMATY</b> "Almaty rayon" HF – 4736 kHz HF alter. – 6607 kHz VHF – 134.3 MHz Phone: +7 (727) 2573474, 2573764, 2573774 (alter.) H24	Almaty FIR	431105N 0762805E then a clockwise arc radius 27,2 NM centered on 432120N 0770238E до 432647N 0773915E – 433428N 0780356E – 434745N 0780816E – 440442N 0781350E – 440745N 0780904E – 441629N 0775521E – 442524N 0772618E – 442024N 0763206E – 441324N 0761312E – 441136N 0760830E – 435906N 0754739E – 434850N 0753952E – 433809N 0753149E – 432230N 0753237E – 431227N 0753730E – 431105N 0762805E	6000 FT ALT – 8000 FT ALT	Excluding the prohibited and restricted areas. Class of airspace: D
<b>ATYRAU</b> "Atyrau rayon" HF – 4688 kHz HF alter. – 4830 kHz "Atyrau rayon" VHF – 132.3 MHz VHF alter. – 124.6 MHz Phone: +7 (7122) 983133, 983153 - Air Traffic Manager from 03:30 to 14:30 UTC*	Aktobe FIR	N485930 E0522738 - N485000 E0551000 - N465000 E0570000 - N463851 E0564100 - N454418 E0574000 - N452307 E0574000 - along border KAZAKHSTAN_UZBEKISTAN - N435141 E0555948 - N445034 E0541914 - N452130 E0534647 - N455500 E0493000 - N460800 E0492600 - N461400 E0492600 - N461800 E0491600 - N462130 E0491148 - N462224 E0491112 - along border KAZAKHSTAN_RUSSIA - N490704 E0470207 - N485930 E0522738	FL 120 - FL 130	Excluding the TMA Atyrau.
* - Outside the regulation of the Local ATC unit "Atyrau", air traffic service at FL120 - FL130 is provided by Aktobe ACC "A2B" and "A6B" or "A6BU" (in case of combine the "A5B" and "A6B" sectors into a single "A6BU" sector) sector ATC, within their lateral limits				

Local ATC Unit Call sign FREQ Phone Hours of operation	ATS region	Lateral limits	Vertical limits	Remark
1	2	3	4	5
<b>KOSTANAY</b> "Kostanay rayon" HF – 4680 kHz HF alter. – 4815 kHz VHF – 135.1 MHz Phone: +7 (7142) 270133, +7 (777) 9008606 from 03:00 to 13:00 UTC	Astana FIR	543735N 0660017E - 532806N 0664618E - 522006N 0672830E - 521149N 0673350E - 503136N 0680751E - 494400N 0683100E - 493036N 0670430E - 491230N 0663936E - 485848N 0654236E - 483738N 0624054E - 502331N 0622455E - 505800N 0613000E along border KAZAKHSTAN_RUSSIA - 543735N 0660017E	FL 120 - FL 130	Excluding the TMA Kostanay.

3. BORDERS OF RESPONSIBILITY AREAS OF FLIGHT INFORMATION CENTERS (FIC)

FIC Call sign FREQ Phone Hours of operation	ATS region	Lateral limits	Vertical limits	Remark
1	2	3	4	5
<b>AKTAU</b> "Aktau vyshka" HF – 5536 kHz VHF – 120.7 MHz Phone: +7 (7292) 463118, 463153, 421178 H24	Aktobe FIR	N452130 E0534647 - N445034 E0541914 - N435141 E0555948 - along border KAZAKHSTAN_UZBEKISTAN - N411900 E0560000 – along border KAZAKHSTAN_TURKMENISTAN - N414700 E0522800 - N420000 E0513000 - N423800 E0500000 - N425000 E0493000 - N455500 E0493000 - N452130 E0534647	GND – 10000 FT ALT	Excluding the TMA and CTR Aktau.
<b>AKTOBE</b> "Ambarchik" HF – 4656 kHz "Aktobe rayon" VHF – 128.0 MHz Phone: +7(7132)931134 According to the regulations*	Aktobe FIR	N505800 E0613000 - N502331 E0622455 - N500137 E0622819 - N483738 E0624054 - N471135 E0643220 - N461214 E0614508 - N460903 E0613915 - N445159 E0600655 - along border KAZAKHSTAN_UZBEKISTAN - N452307 E0574000 - N454418 E0574000 - N463851 E0564100 - N465000 E0570000 - N485000 E0551000 - N485930 E0522738 - N504318 E0551552 - along border KAZAKHSTAN_RUSSIA - N505800 E0613000	GND – 10000 FT ALT	Excluding the CTR and TMA Aktobe, part of airspace delegated to Orsk APP and KHLEBODAROV KA ATZ during flight operations. Flight information service within the horizontal boundaries of the TMA Aktobe from the ground till altitude 3000 feet is provided by AKTOBE TWR on FREQ 120.9 MHz. Class of airspace: G
* - When planning flights outside the work schedule, flight information services (FIS) are provided only upon prior request sent via AFTN to the address UATTZRZX and UATTZTZX.				

FIC Call sign FREQ Phone Hours of operation	ATS region	Lateral limits	Vertical limits	Remark
1	2	3	4	5
<b>ALMATY</b> "Almaty rayon" HF – 4736 kHz HF alter. – 6607 kHz VHF – 134.3 MHz Phone: +7 (727) 2573474, 2573764, 2573774 (reserve) H24	Almaty FIR	HF - 4736 kHz: 453205N 0821649E along border KAZAKHSTAN_CHINA - 421239N 0801028E along border KAZAKHSTAN_KYRGYZSTAN - 431248N 0741934E - 434446N 0741052E - 441502N 0745425E - 450440N 0715506E - 480000N 0714900E - 480759N 0741658E - 485000N 0761100E - 465357N 0771718E - 461808N 0784001E - 462000N 0812000E - 453205N 0821649E  VHF - 134.3 MHz, HF - 4736 kHz: 435614N 0780645E - 442125N 0802300E - 433953N 0803700E - 432843N 0781244E - 435614N 0780645E	GND – 10000 FT ALT  In the areas with AMA higher than 10000 FT ALT (3050m) – upper limit of FIC is equal to AMA value.	Within the borders of Almaty local ATC unit outside of the area around the Zhetygen aerodrome (a circle with a radius of 15 kilometers centered on 434411N 0770717E, CTR Boralday, CTR, TMA 1 and TMA 2 Almaty, CTR and TMA Balkhash, CTR and TMA Taldykorgan, CTR and TMA Usharal, airspace delegated to Bishkek APP, prohibited and restricted areas. Class of airspace: G
<b>ASTANA</b> "Astana control" HF – 5724 kHz HF alter. – 4494 kHz VHF – 132.8 MHz Phone: +7 (7172) 773533 H24	Astana FIR	522006N 0672830E - 522724N 0681000E - 523100N 0684500E - 523730N 0702500E - 524548N 0713006E - 524630N 0715024E - 524724N 0723406E - 523548N 0734324E - 513148N 0734848E - 511706N 0734530E - 510200N 0740200E - 505342N 0741748E - 504948N 0743606E - 504730N 0745900E - 503331N 0753513E - 501116N 0723844E - 503136N 0680751E - 521149N 0673350E - 522006N 0672830E	GND – 10000 FT ALT	Excluding the CTR Astana, TMA1 and TMA2 Astana, Zholaman ATZ. Class of airspace: G  Flight Information Service within radius of 27 NM from APR of Astana aerodrome below 3500 FT AMSL is assigned to Astana radar 120.7 MHz FREQ

FIC Call sign FREQ Phone Hours of operation	ATS region	Lateral limits	Vertical limits	Remark
1	2	3	4	5
<b>ATYRAU</b> "Atyrau rayon" HF – 4688 kHz HF alter. – 4830 kHz "Atyrau rayon" VHF – 132.3 MHz VHF alter. – 124.6 MHz Phone: +7 (7122) 983133, 983153 - Air Traffic Manager from 03.30 to 14.30 UTC*	Aktobe FIR	N485930 E0522738 - N485000 E0551000 - N465000 E0570000 - N463851 E0564100 - N454418 E0574000 - N452307 E0574000 - along border KAZAKHSTAN_UZBEKISTAN - N435141 E0555948 - N445034 E0541914 - N452130 E0534647 - N455500 E0493000 - N460800 E0492600 - N461400 E0492600 - N461800 E0491600 - N462130 E0491148 - N462224 E0491112 - along border KAZAKHSTAN_RUSSIA - N490704 E0470207 - N485930 E0522738	GND – 10000 FT ALT	Excluding the TMA, CTR Atyrau and the CTR Tengiz.Astana
* - When planning flights at another time within Atyrau FIC borders Flight information service (FIS) provided on preliminary request sent AFTN UATGZTZA, UATGZTZX				
<b>KARAGANDA</b> "Karaganda vyshka" HF – 4728 kHz VHF – 122.0 MHz Phone: +7 (7212) 496633, 771178 H24	Astana FIR	503331N 0753513E - 494800N 0761100E - 485000N 0761100E - 480759N 0741658E - 480000N 0714900E - 483700N 0704200E - 494100N 0693200E - 494400N 0683100E - 503136N 0680751E - 501116N 0723844E - 503331N 0753513E	GND – 10000 FT ALT	Excluding the TMA and CTR Karaganda. Excluding the TMA Astana.
<b>KOKSHETAU</b> "Kokshetau vyshka" HF – 4760 kHz HF alter. – 6528 kHz VHF – 127.9 MHz Phone: +7 (7162) 723253 According to the regulations	Astana FIR	540653N 0710841E along border KAZAKHSTAN_RUSSIA - 532838N 0733027E - 524612N 0734430E - 524218N 0734248E - 523548N 0734324E - 524724N 0723406E - 524630N 0715024E - 524548N 0713006E - 523730N 0702500E - 523100N 0684500E - 522724N 0681000E - 522006N 0672830E - 532806N 0664618E - 540306N 0690830E - 540500N 0704712E - 540653N 0710841E	GND – 10000 FT ALT	Excluding the TMA and CTR Kokshetau.
<b>KOSTANAY</b> "Kostanay rayon" HF – 4680 kHz HF alter. – 4815 kHz VHF – 135.1 MHz Phone: +7 (7142) 270133, +7 (777) 9008606 from 03:00 to 13:00 UTC	Astana FIR	543735N 0660017E - 532806N 0664618E - 522006N 0672830E - 521149N 0673350E - 503136N 0680751E - 494400N 0683100E - 493036N 0670430E - 491230N 0663936E - 485848N 0654236E - 483738N 0624054E - 502331N 0622455E - 505800N 0613000E along border KAZAKHSTAN_RUSSIA - 543735N 0660017E	GND – 10000 FT ALT	Excluding the TMA and CTR Kostanay.

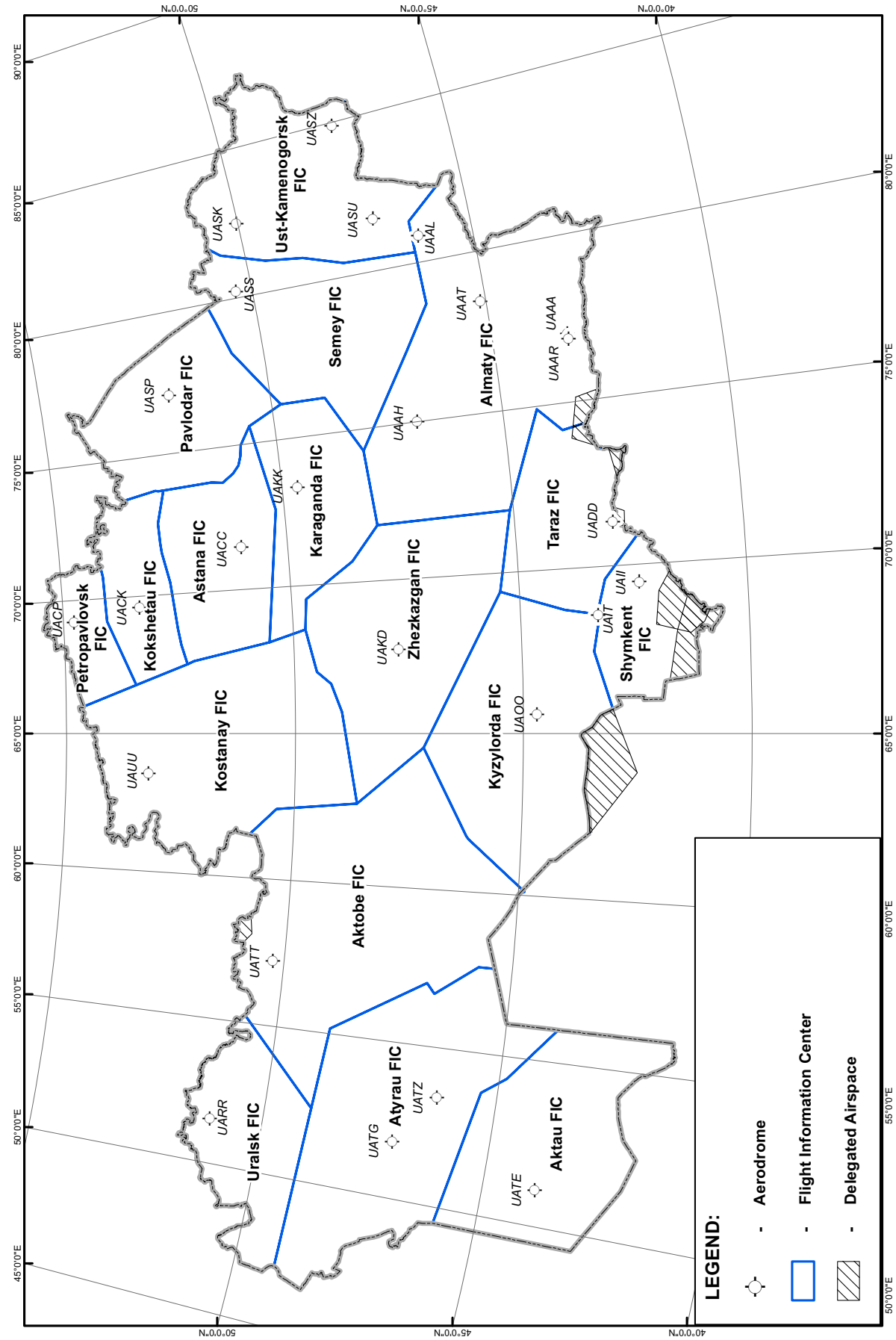
FIC Call sign FREQ Phone Hours of operation	ATS region	Lateral limits	Vertical limits	Remark
1	2	3	4	5
<b>KYZYLORDA</b> "Kyzylorda vyshka" HF – 5335 kHz HF alter. - 6672 kHz VHF – 120.9 MHz VHF alter. – 129.0 MHz Phone: +7 (7242) 272204 According to the regulations	Shymkent FIR	471135N 0643220E - 452504N 0692427E - 440138N 0684518E - 431932N 0683446E - 431800N 0682200E - 432534N 0672754E - 430221N 0654313E - along border KAZAKHSTAN_UZBEKISTAN - 445159N 0600655E - 460903N 0613915E - 461214N 0614508E - 471135N 0643220E	GND – 10000 FT ALT	Excluding the part of Uzbekistan airspace delegated to Shymkent FIR. Excluding the CTR and TMA Kyzylorda, CTR and TMA Turkistan.
<b>PAVLODAR</b> "Pavlodar vyshka" HF – 5720 kHz HF alter. – 5632 kHz VHF – 119.8 MHz Phone: +7 (7182) 491318, 491354 – "Tower", 491353 - Air Traffic Manager According to the regulations	Astana FIR	532838N 0733027E along border KAZAKHSTAN_RUSSIA - 510142N 0795110E - 505513N 0791803E - 504125N 0781025E - 494800N 0761100E - 503331N 0753513E - 504730N 0745900E - 504948N 0743606E - 505342N 0741748E - 510200N 0740200E - 511706N 0734530E - 513148N 0734848E - 523548N 0734324E - 524218N 0734248E - 524612N 0734430E - 532838N 0733027E	GND – 10000 FT ALT	Excluding the TMA and CTR Pavlodar.
<b>PETROPAVLOVSK</b> "Petropavlovsk vyshka" HF – 4772 kHz HF alter. – 5552 kHz VHF – 123.7 MHz Phone: +7 (7152) 461213 According to the regulations	Astana FIR	543735N 0660017E along border KAZAKHSTAN_RUSSIA - 540653N 0710841E - 540500N 0704712E - 540306N 0690830E - 532806N 0664618E - 543735N 0660017E	GND – 10000 FT ALT	Excluding the TMA and CTR Petropavlovsk.
<b>SEMEY</b> "Semey vyshka" HF – 6645 kHz VHF – 128.0 MHz Phone: +7 (7222) 569034, 717118, 717153 According to the regulations	Almaty FIR	510142N 0795110E along border KAZAKHSTAN_RUSSIA - 504706N 0815242E - 503130N 0813218E - 493500N 0810300E - 484600N 0805300E - 475508N 0802710E - 461942N 0802000E - 461808N 0784001E - 465357N 0771718E - 485000N 0761100E - 494800N 0761100E - 504125N 0781025E - 505513N 0791803E - 510142N 0795110E	GND – 10000 FT ALT	Excluding the TMA and CTR Semey.

FIC Call sign FREQ Phone Hours of operation	ATS region	Lateral limits	Vertical limits	Remark
1	2	3	4	5
<b>SHYMKENT</b> "Shymkent vyshka" HF – 4696 kHz HF alter. – 3060 kHz VHF – 125.9 MHz Phone: +7 (7252) 945118 – Tower, 945153 – Air Traffic Manager, 945141 – Briefing office H24	Shymkent FIR	432534N 0672754E - 431800N 0682200E - 431932N 0683446E - 430659N 0693632E - 422000N 0705300E along border KAZAKHSTAN_KYRGYZSTAN - 421548N 0705642E along border KAZAKHSTAN_UZBEKISTAN - 430221N 0654313E - 432534N 0672754E	GND – 10000 FT ALT	Excluding the part of Shymkent FIR airspace, delegated to Tashkent APP, Tashkent ACC. Excluding the CTR and TMA Shymkent, CTR and TMA Turkistan.
<b>TARAZ</b> "Podkhod" HF – 4744 kHz HF alter. - 4664 kHz VHF – 122.1 MHz Phone: +7 (7262) 434995 H24	Shymkent FIR	452504N 0692427E - 450440N 0715506E - 441502N 0745425E - 434446N 0741052E - 431248N 0741934E along border KAZAKHSTAN_KYRGYZSTAN - 422000N 0705300E - 430659N 0693632E - 431932N 0683446E - 440138N 0684518E - 452504N 0692427E	GND – 10000 FT ALT	Excluding the part of Shymkent FIR airspace, delegated to Bishkek APP, Bishkek ACC. Including the part of Bishkek FIR airspace delegated to Taraz APP. Excluding the CTR and TMA Taraz, CTR and TMA Turkistan.
<b>URALSK</b> "Uralsk vyshka" VHF – 119.7 MHz VHF alter. - 124.6 MHz HF - 5520 kHz Phone: +7 (7112) 509455 According to the regulations*	Aktobe FIR	N504318 E0551552 - N485930 E0522738 - N490704 E0470207 - along border KAZAKHSTAN_RUSSIA - N504318 E0551552	GND – 10000 FT ALT	Excluding the TMA and CTR Uralsk.
* - When planning flights outside the work schedule, flight information services (FIS) are provided only upon prior request sent via AFTN to the address UATTZRZX and UATTZTZX.				

FIC Call sign FREQ Phone Hours of operation	ATS region	Lateral limits	Vertical limits	Remark
1	2	3	4	5
<b>UST-KAMENOGORSK</b> "Ust-Kamenogorsk vyshka" HF – 4672 kHz HF alter. – 4800 kHz VHF – 130.1 MHz Phone: +7 (7232) 293418 - Tower, 778595 - Air Traffic Manager According to the regulations	Almaty FIR	490654N 0871718E along border KAZAKHSTAN_CHINA - 453205N 0821649E - 462000N 0812000E - 461942N 0802000E - 475508N 0802710E - 484600N 0805300E - 493500N 0810300E - 503130N 0813218E - 504706N 0815242E along border KAZAKHSTAN_RUSSIA - 490654N 0871718E	GND – 10000 FT ALT  In the areas with terrain higher than 10000 FT ALT – upper limit of FIC is equal to AMA value.	Excluding the TMA1, TMA2 and CTR of Ust- Kamenogorsk aerodrome. Excluding the TMA and CTR of Zaisan aerodrome. Excluding the TMA and CTR of Urdzhar aerodrome. Excluding the TMA of Usharal aerodrome. For aerodrome Ayaguz take information from the briefing.
<b>ZHEZKAZGAN</b> "Zhezkazgan vyshka" HF – 4850 kHz VHF – 127.1 MHz Phone: +7 (7102) 725118, 764248 According to the regulations	Astana FIR	494400N 0683100E - 494100N 0693200E - 483700N 0704200E - 480000N 0714900E - 450440N 0715506E - 452504N 0692427E - 471135N 0643220E - 483738N 0624054E - 485848N 0654236E - 491230N 0663936E - 493036N 0670430E - 494400N 0683100E	GND – 10000 FT ALT	Excluding the TMA and CTR Zhezkazgan.

Map of Flight information centers (FIC) of the Republic of Kazakhstan

Map of Flight information centers (FIC) of the Republic of Kazakhstan



## ENR-3.2.1 "L" ROUTES

## 1. NAVIGATION SPECIFICATION

RNAV routes in Republic of Kazakhstan require RNAV 5 capability. Supported sensors are VOR/DME, INS/IRS, GNSS or their combination.

Route designator		[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
L26 (RNAV 5)						
▲ AKTOBE DVOR/ DME (AKB)	501548N 0571055E					
	086° 267°	44.1 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 120.9 MHZ {C}
△ OMITO	501033N 0581909E					
	AKB 086.0° 44.1 NM (700 FT)					
	086° 268°	68.0 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
△ KESOT	500111N 0600343E					
	AKB 088.0° 112.1 NM (700 FT)					
	088° 270°	96.5 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)					
	090° 271°	38.5 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ In case of possible VHF radio communication failure at FL120– FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Kostanay Sector” on frequencies 4680 kHz and 4815 kHz (as a backup), in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ TIBDA	493800N 0632900E					
	ARK 242.0° 143.1 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		Controlling unit {Airspace class} Remarks
				↓	↑	
	096° 278°	60.3 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ In case of possible VHF radio communication failure at FL 120–FL 190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Kostanay Sector” on frequencies 4680 kHz and 4815 kHz (as a backup), in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ ARBIM	492045N 0645739E <b>ARK</b> <b>223.0° 99.1 NM</b> <b>(1300 FT)</b>					
	098° 279°	79.9 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ UMDEM	485611N 0665322E <b>DZG</b> <b>325.0° 80.9 NM</b> <b>(1300 FT)</b>					
	099° 280°	22.0 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ GORIM	484905N 0672456E <b>DZG</b> <b>339.0° 67.3 NM</b> <b>(1300 FT)</b>					
	100° 281°	38.2 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ AKITU	483624N 0681921E <b>DZG</b> <b>014.0° 57.7 NM</b> <b>(1300 FT)</b>					
	101° 281°	12.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ MAKUT	483217N 0683632E <b>DZG</b> <b>026.0° 59.7 NM</b> <b>(1300 FT)</b>					
	101° 282°	33.9 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ DITKI	482034N 0692417E <b>DZG</b> <b>052.0° 76.0 NM</b> <b>(1300 FT)</b>					

Route designator		[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	102° 283°	60.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
▲ KUROL	475900N 0704800E <b>DZG</b> <b>075.0° 123.8 NM</b> <b>(1300 FT)</b>					
	101° 282°	44.2 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Zhezkazgan Tower” on frequencies 4850 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
▲ UNABO (FIR BDRY)	474352N 0714935E <b>KRG</b> <b>198.0° 132.6 NM</b> <b>(1800 FT)</b>					
	102° 284°	61.9 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ {C}
▲ TOGDI	472143N 0731457E <b>BLH</b> <b>284.0° 76.7 NM</b> <b>(1400 FT)</b>					
	104° 285°	33.4 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ {C}
△ NEPLA	470920N 0740031E <b>BLH</b> <b>285.0° 43.2 NM</b> <b>(1400 FT)</b>					
	105° 286°	43.3 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ BALKHASH TOWER 128.0 MHZ {C}
▲ BALKHASH DVOR/DME (BLH)	465259N 0745902E					
	101° 282°	61.4 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ BALKHASH TOWER 128.0 MHZ {C}
△ SUBAN	463355N 0762353E <b>BLH</b> <b>102.0° 61.4 NM</b> <b>(1400 FT)</b>					

Route designator		[Route Usage Notes]				
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	102° 282°	14.4 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ {C}
▲ NIPAL	462919N 0764342E <b>BLH</b> <b>102.0° 75.8 NM</b> <b>(1400 FT)</b>					
	102° 283°	39.5 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
▲ GENGA	461625N 0773739E <b>TDK</b> <b>328.0° 77.8 NM</b> <b>(2000 FT)</b>					
	098° 280°	94.7 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
▲ RIKPI	455225N 0794910E <b>TDK</b> <b>047.0° 74.6 NM</b> <b>(2000 FT)</b>					
	100° 280°	14.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
▲ ALILA	454830N 0800916E <b>TDK</b> <b>055.0° 84.1 NM</b> <b>(2000 FT)</b>					
	100° 281°	37.8 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
▲ OGADO	453804N 0810107E <b>JRK</b> <b>024.0° 95.7 NM</b> <b>(2600 FT)</b>					
	102° 283°	70.7 NM	FL 510 FL 160	Odd	Even	ALMATY ACC 133.1 MHZ {C}
▲ BAMAN (FIR BDRY)	451700N 0823700E <b>JRK</b> <b>057.0° 130.2 NM</b> <b>(2600 FT)</b>					For continuation, see AIP China

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
L51 (RNAV 5)						
▲ ATYRAU DVOR/ DME (ATR)	470838N 0514805E					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	072° 253°	43.3 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ ATYRAU TOWER 118.1 MHZ {C}
△ BASPU	471514N 0525046E <b>ATR</b> <b>073.0° 43.2 NM</b> <b>(0 FT)</b>					
	073° 254°	56.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
△ EPOLI	472234N 0541316E <b>ATR</b> <b>074.0° 99.9 NM</b> <b>(0 FT)</b>					
	073° 253°	31.8 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
△ LANIN	472659N 0545937E <b>BNU</b> <b>349.0° 126.8 NM</b> <b>(0 FT)</b>					
	074° 255°	26.7 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Atyrau Sector” on frequencies 4688 kHz and 4830 kHz (as a backup), in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ ODPUT	473004N 0553846E <b>BNU</b> <b>001.0° 131.5 NM</b> <b>(0 FT)</b>					

Route designator		[Route Usage Notes]				
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	075° 255°	29.2 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Atyrau Sector” on frequencies 4688 kHz and 4830 kHz (as a backup), in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
▲ LUKET	473310N 0562135E BNU 013.0° 142.4 NM (0 FT)					
	075° 256°	51.9 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
△ UDATO	473801N 0573755E AKB 163.0° 158.9 NM (700 FT)					
	076° 257°	64.0 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
▲ RUGUS	474250N 0591219E ARL 289.0° 112.1 NM (300 FT)					
	078° 259°	37.4 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119 MHZ {C}
△ ARSAN	474436N 0600738E ARL 303.0° 82.1 NM (300 FT)					
	078° 260°	117.1 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119 MHZ {C}
△ ABIGU	474742N 0630108E ARL 036.0° 81.6 NM (300 FT)					
	081° 261°	30.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119 MHZ {C}
▲ ULRIP (FIR BDRY)	474743N 0634635E ARL 049.0° 105.6 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		Controlling unit {Airspace class} Remarks
				↓	↑	
	081° 262°	45.8 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Zhezkazgan Tower” on frequencies 4850 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ SUBOL	474716N 0645433E <b>DZG</b> <b>262.0° 115.5 NM</b> <b>(1300 FT)</b>					
	082° 264°	72.3 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ ARMIK	474512N 0664137E <b>DZG</b> <b>263.0° 43.3 NM</b> <b>(1300 FT)</b>					
	084° 265°	43.3 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ ZHEZKAZGAN TOWER 127.1 MHZ {C}
▲ ZHEZKAZGAN DVOR/DME (DZG)	474317N 0674542E					
	052° 232°	43.0 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ ZHEZKAZGAN TOWER 127.1 MHZ {C}
△ ADRIK	480432N 0684119E <b>DZG</b> <b>051.8° 43.0 NM</b> <b>(1300 FT)</b>					
	052° 232°	32.9 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ DITKI	482034N 0692417E <b>DZG</b> <b>052.0° 76.0 NM</b> <b>(1300 FT)</b>					
	053° 233°	48.7 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
▲ INTAL	484345N 0702839E <b>DZG</b> <b>053.0° 124.6 NM</b> <b>(1300 FT)</b>					

Route designator		[Route Usage Notes]					
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks	
				↓	↑		
	053° 235°	80.9 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ {C}	
△ DOZIN	492040N 0721800E <b>KRG</b> <b>235.0° 46.8 NM</b> <b>(1800 FT)</b>						
	055° 236°	46.8 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ KARAGANDA TOWER 122.0 MHZ {C}	
▲ KARAGANDA DVOR/DME (KRG)	494114N 0732226E						
	033° 213°	44.6 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ KARAGANDA TOWER 122.0 MHZ {C}	
△ UNLOM	501425N 0740834E <b>KRG</b> <b>033.2° 44.6 NM</b> <b>(1800 FT)</b>						
	033° 213°	14.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ {C}	
▲ KANZI	502504N 0742336E <b>KRG</b> <b>034.0° 59.0 NM</b> <b>(1800 FT)</b>						
	033° 214°	71.7 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}	
△ ROHIL	511738N 0754034E <b>PVL</b> <b>215.6° 76.3 NM</b> <b>(500 FT)</b>						
	034° 215°	76.3 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ PAVLODAR TOWER 119.8 MHZ {C}	
▲ PAVLODAR DVOR/DME (PVL)	521235N 0770542E						

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
L86 (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		Controlling unit {Airspace class} Remarks
				↓	↑	
▲ MIMRI	433808N 0634822E <b>KZO</b> <b>222.0° 99.0 NM</b> <b>(500 FT)</b>					
	017° 197°	38.4 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
△ ERTUZ	441307N 0641019E <b>KZO</b> <b>238.0° 66.3 NM</b> <b>(500 FT)</b>					
	017° 197°	52.6 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
△ AGMUR	450056N 0644106E <b>KZO</b> <b>289.0° 42.1 NM</b> <b>(500 FT)</b>					
	018° 198°	114.8 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
▲ LUGER (FIR BDRY)	464426N 0655200E <b>DZG</b> <b>223.0° 97.3 NM</b> <b>(1300 FT)</b>					
	018° 198°	93.5 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ BETIK	480807N 0665309E <b>DZG</b> <b>296.0° 43.2 NM</b> <b>(1300 FT)</b>					
	018° 198°	46.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ GORIM	484905N 0672456E <b>DZG</b> <b>339.0° 67.3 NM</b> <b>(1300 FT)</b>					
	019° 199°	66.2 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
▲ AKELI	494707N 0681322E <b>ARK</b> <b>115.0° 56.4 NM</b> <b>(1300 FT)</b>					
	019° 199°	13.8 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 133.1 MHZ {C}
▲ ABULA	495910N 0682343E <b>ARK</b> <b>101.0° 56.6 NM</b> <b>(1300 FT)</b>					
	019° 199°	34.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 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 ↓   ↑	Controlling unit {Airspace class} Remarks
▲ ABENU	502909N 0684952E <b>ARK</b> <b>072.0° 70.2 NM</b> <b>(1300 FT)</b>				
	019° 201°	256.8 NM	FL 510 FL 120	Odd   Even	ASTANA ACC 132.8 MHZ {C}
▲ DAKIN (FIR BDRY)	540930N 0722418E <b>KTU</b> <b>053.0° 110.5 NM</b> <b>(900 FT)</b>				

Route designator	[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓   ↑	Controlling unit {Airspace class} Remarks
<b>L135</b> (RNAV 5)					
▲ MAMIR (FIR BDRY)	425438N 0763642E <b>ATA</b> <b>211.8° 34.8 NM</b> <b>(2200 FT)</b>				
	032° 212°	22.0 NM	FL 510 FL 200	Odd   Even	ALMATY ACC 131.4 MHZ {C}
△ LAKEL	431216N 0765439E <b>ATA</b> <b>211.7° 12.8 NM</b> <b>(2200 FT)</b>				
	031° 211°	12.8 NM	FL 510 FL 190	Odd   Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ IZIMA	432236N 0770503E <b>ATA</b> <b>332.2° 0.1 NM</b> <b>(2200 FT)</b>				
	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 <b>ATA</b> <b>050.8° 22.3 NM</b> <b>(2200 FT)</b>				
	018° 198°	34.0 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 ↓      ↑	
▲ GAKMA	440610N 0774907E <b>ATA</b> <b>030.8° 54.0 NM</b> <b>(2200 FT)</b>				
	018° 198°	11.3 NM	FL 510 FL 120	Odd	Even
△ DESOK	441629N 0775521E <b>TDK</b> <b>198.0° 54.4 NM</b> <b>(2000 FT)</b>				
	018° 198°	21.4 NM	FL 510 FL 120	Odd	Even
△ IDILI	443608N 0780716E <b>TDK</b> <b>198.0° 33.0 NM</b> <b>(2000 FT)</b>				
	018° 198°	33.0 NM	FL 510 FL 120	Odd	Even
▲ TALDYKORGAN DVOR/DME (TDK)	450622N 0782548E				
	021° 201°	35.2 NM	FL 510 FL 120	Odd	Even
△ FULSA	453758N 0784751E <b>TDK</b> <b>021.0° 35.2 NM</b> <b>(2000 FT)</b>				
	021° 201°	45.7 NM	FL 510 FL 120	Odd	Even
▲ MAKEK	461854N 0791700E <b>TDK</b> <b>021.0° 80.9 NM</b> <b>(2000 FT)</b>				
	020° 200°	54.8 NM	FL 510 FL 120	Odd	Even
△ GOMAL	470809N 0795150E <b>AGZ</b> <b>200.0° 53.4 NM</b> <b>(2200 FT)</b>				
	020° 201°	53.4 NM	FL 510 FL 120	Odd	Even
▲ AYAGUZ VOR/ DME (AGZ)	475552N 0802659E				
	026° 206°	106.8 NM	FL 510 FL 120	Odd	Even

Route designator		[Route Usage Notes]				
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
△ LASNA	492602N 081531E <b>UKM</b> <b>207.0° 43.3 NM</b> <b>(1000 FT)</b>					
	027° 208°	43.3 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ UST-KAMENOGORSK TOWER 130.1 MHZ {C}
▲ UST-KAMENOGORSK DVOR/DME (UKM)	500158N 0823031E					
	029° 209°	43.0 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ UST-KAMENOGORSK TOWER 130.1 MHZ {C}
△ BANOV	503704N 0830918E <b>UKM</b> <b>029.0° 43.0 NM</b> <b>(1000 FT)</b>					
	030° 210°	25.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ BOKIS (FIR BDRY)	505736N 0833312E <b>UKM</b> <b>030.0° 68.6 NM</b> <b>(1000 FT)</b>					<b>For continuation, see AIP Russia</b>

Route designator		[Route Usage Notes]					
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks	
				↓	↑		
L138 (RNAV 5)							
▲ OKMUR (FIR BDRY)		424815N 0791158E <b>JRK</b> <b>197.0° 91.6 NM</b> <b>(2600 FT)</b>					
	358° 178°	44.7 NM	<div>FL 510</div> <div>FL 120</div>	Even	Odd	ALMATY ACC 131.4 MHZ The use of this airspace segment by aircraft unable to reach the AMA (FL170) is permitted only under VMC and VFR during daytime. {C}	
▲ BASPI		433257N 0791501E <b>JRK</b> <b>212.0° 51.0 NM</b> <b>(2600 FT)</b>					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
<b>L139</b> (RNAV 5)	<small>(2) Before, see AIP Uzbekistan</small>					
▲ TULGA (FIR BDRY)	415347N 0701204E <b>SMK</b> <b>124.0° 44.3 NM</b> <b>(1400 FT)</b>					<b>Before, see AIP Uzbekistan</b>
	307° 127°	23.5 NM	FL 510 FL 160	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
△ ADESA	420940N 0694854E <b>SMK</b> <b>121.0° 20.9 NM</b> <b>(1400 FT)</b>					
	302° 122°	20.9 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
▲ SHYMKENT DVOR/DME (SMK)	422220N 0692631E					
	316° 135°	30.0 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
△ RUSEK	424549N 0690116E <b>SMK</b> <b>316.0° 30.0 NM</b> <b>(1400 FT)</b>					
	312° 132°	10.5 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
▲ MAGOL	425338N 0685144E <b>TRK</b> <b>148.0° 28.7 NM</b> <b>(1000 FT)</b>					
	312° 132°	32.7 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
▲ GENDI	431800N 0682200E <b>TRK</b> <b>254.0° 9.4 NM</b> <b>(1000 FT)</b>					
	300° 119°	24.3 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ TURKISTAN TOWER 131.3 MHZ {C}
▲ KUDUG	433216N 0675457E <b>TRK</b> <b>287.0° 31.7 NM</b> <b>(1000 FT)</b>					
	299° 119°	22.7 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ TURKISTAN TOWER 131.3 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 ↓      ↑		Controlling unit {Airspace class} Remarks
△ GIMRI	434530N 0672931E <b>TRK</b> <b>292.0° 54.1 NM</b> <b>(1000 FT)</b>					
	299° 118°	56.3 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ GITIM	441752N 0662540E <b>KZO</b> <b>116.0° 44.1 NM</b> <b>(500 FT)</b>					
	296° 116°	44.1 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ KYZYLORDA TOWER 120.9 {C}
▲ KYZYLORDA DVOR/DME (KZO)	444145N 0653349E					
	291° 110°	28.5 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ KYZYLORDA TOWER 120.9 {C}
△ BUDET	445507N 0645824E <b>KZO</b> <b>290.0° 28.5 NM</b> <b>(500 FT)</b>					
	288° 108°	13.6 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ KYZYLORDA TOWER 120.9 {C}
△ AGMUR	450056N 0644106E <b>KZO</b> <b>289.0° 42.1 NM</b> <b>(500 FT)</b>					
	288° 105°	118.6 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
▲ INKUM	454952N 0620739E <b>ARL</b> <b>151.0° 63.3 NM</b> <b>(300 FT)</b>					
	276° 096°	30.9 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
▲ SANUR (FIR BDRY)	455717N 0612446E <b>ARL</b> <b>180.0° 53.0 NM</b> <b>(300 FT)</b>					
	276° 094°	72.5 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119 MHZ {C}
▲ ABDUN	461337N 0594316E <b>ARL</b> <b>236.0° 86.4 NM</b> <b>(300 FT)</b>					
	274° 093°	40.7 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119 MHZ {C}

Route designator	[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓   ↑	Controlling unit {Airspace class} Remarks
△ NINAG	462208N 0584556E <b>ARL</b> <b>249.0° 121.4 NM</b> <b>(300 FT)</b>				
	273° 092°	87.9 NM	FL 510 FL 120	Even   Odd	AKTOBE ACC 119 MHZ {C}
▲ TISRA	463851N 0564100E <b>BNU</b> <b>032.0° 102.1 NM</b> <b>(0 FT)</b>				
	272° 090°	58.4 NM	FL 510 FL 120	Even   Odd	AKTOBE ACC 130.9 MHZ {C}
△ PEMOL	464841N 0551720E <b>BNU</b> <b>356.0° 88.6 NM</b> <b>(0 FT)</b>				
	270° 090°	29.8 NM	FL 510 FL 120	Even   Odd	AKTOBE ACC 130.9 MHZ {C}
△ RIKRI	465319N 0543423E <b>BNU</b> <b>338.0° 95.7 NM</b> <b>(0 FT)</b>				
	270° 089°	30.9 NM	FL 510 FL 120	Even   Odd	AKTOBE ACC 130.9 MHZ {C}
△ LEPSI	465750N 0534950E <b>ATR</b> <b>089.0° 83.9 NM</b> <b>(0 FT)</b>				
	269° 089°	40.7 NM	FL 510 FL 120	Even   Odd	AKTOBE ACC 130.9 MHZ {C}
△ GOGDI	470320N 0525055E <b>ATR</b> <b>088.0° 43.2 NM</b> <b>(0 FT)</b>				
	269° 088°	43.3 NM	FL 510 FL 120	Even   Odd	AKTOBE ACC 130.9 MHZ ATYRAU TOWER 118.1 MHZ {C}
▲ ATYRAU DVOR/ DME (ATR)	470838N 0514805E				

Route designator	[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓   ↑	Controlling unit {Airspace class} Remarks
<b>L143</b> (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 ↓      ↑		Controlling unit {Airspace class} Remarks
▲ SULET (FIR BDRY)	430602N 0743503E <b>ATA</b> <b>257.2° 110.9 NM</b> <b>(2200 FT)</b>					<b>Before, see AIP Kyrgyzstan</b>
	050° 230°	28.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ {C}
▲ UML0D	432218N 0750715E <b>ATA</b> <b>265.4° 85.9 NM</b> <b>(2200 FT)</b>					
	043° 223°	5.8 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ {C}
△ BINRI	432607N 0751309E <b>ATA</b> <b>268.1° 81.7 NM</b> <b>(2200 FT)</b>					
	043° 223°	18.1 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ {C}
△ TIPSA	433809N 0753149E <b>ATA</b> <b>278.4° 69.7 NM</b> <b>(2200 FT)</b>					
	054° 235°	23.8 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ REGMU	435005N 0760012E <b>ATA</b> <b>295.6° 54.6 NM</b> <b>(2200 FT)</b>					
	055° 235°	16.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
▲ ADABA	435820N 0762009E <b>ATA</b> <b>312.8° 48.5 NM</b> <b>(2200 FT)</b>					
	016° 196°	23.7 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ ALMATY APPROACH 124.8 MHZ {C}
▲ ETEDA	442024N 0763206E <b>ATA</b> <b>332.6° 62.6 NM</b> <b>(2200 FT)</b>					
	016° 196°	89.3 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
△ AKIRA	454323N 0771829E <b>TDK</b> <b>302.0° 60.2 NM</b> <b>(2000 FT)</b>					

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	FL series		Controlling unit {Airspace class} Remarks
			Lower limit	↓	↑	
	016° 196°	35.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
▲ GENGA	461625N 0773739E <b>TDK</b> <b>328.0° 77.8 NM</b> <b>(2000 FT)</b>					
	016° 196°	24.9 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
▲ AGNAT	463927N 0775115E <b>TDK</b> <b>340.0° 96.2 NM</b> <b>(2000 FT)</b>					
	016° 196°	59.3 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ IBDAS	473412N 0782432E <b>AGZ</b> <b>248.0° 85.4 NM</b> <b>(2200 FT)</b>					
	016° 196°	51.2 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ OSNER	482119N 0785409E <b>AGZ</b> <b>286.0° 67.2 NM</b> <b>(2200 FT)</b>					
	016° 197°	85.1 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ UVTOK	493924N 0794524E <b>SEM</b> <b>197.0° 45.7 NM</b> <b>(700 FT)</b>					
	017° 197°	45.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ SEMEY TOWER 128.0 MHZ {C}
▲ SOMIP	502106N 0801402E <b>SEM</b> <b>281.0° 0.4 NM</b> <b>(700 FT)</b>					
	019° 199°	58.8 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ SEMEY TOWER 128.0 MHZ {C}
▲ ELSUT (FIR BDRY)	511342N 0805506E <b>SEM</b> <b>018.0° 58.7 NM</b> <b>(700 FT)</b>					<b>For continuation, see AIP Russia</b>

Route designator		[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
L143 (RNAV 5)						
▲ UVASU		404236N 0681306E <b>SMK</b> <b>203.0° 113.9 NM</b> <b>(1400 FT)</b>				Before, see AIP Uzbekistan
	068° 248°	16.2 NM	FL 510 FL 80	Odd	Even	TASHKENT ACC {C}
▲ RAVOB		404718N 0683330E <b>SMK</b> <b>196.0° 103.0 NM</b> <b>(1400 FT)</b>				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		Controlling unit {Airspace class} Remarks
				↓	↑	
L145 (RNAV 5)	(1) Before, see AIP Kyrgyzstan (2) For continuation, see AIP Russia					
▲ DEMAS (FIR BDRY)	424732N 0712008E <b>TAR</b> <b>147.0° 5.3 NM</b> <b>(2200 FT)</b>					<b>Before, see AIP Kyrgyzstan</b>
	327° 147°	5.3 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ TARAZ APPROACH 122.1 MHZ {C}
▲ TARAZ DVOR/ DME (TAR)	425214N 0711654E					
	329° 148°	42.9 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ TARAZ APPROACH 122.1 MHZ {C}
▲ ARBOL	433055N 0705137E <b>TAR</b> <b>329.0° 42.9 NM</b> <b>(2200 FT)</b>					
	328° 147°	44.9 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
△ GAMBU	441106N 0702401E <b>TAR</b> <b>328.0° 87.7 NM</b> <b>(2200 FT)</b>					
	327° 146°	7.4 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		Controlling unit {Airspace class} Remarks
				↓	↑	
△ INLIG	441743N 0701919E <b>TAR</b> <b>328.0° 94.9 NM</b> <b>(2200 FT)</b>					
	326° 145°	75.0 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Approach” on frequencies 4744 kHz. - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
▲ MIRGA (FIR BDRY)	452416N 0693051E <b>TRK</b> <b>012.0° 131.1 NM</b> <b>(1000 FT)</b>					
	325° 145°	42.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Zhezkazgan Tower” on frequencies 4850 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ OBAMA	460212N 0690233E <b>DZG</b> <b>144.0° 114.0 NM</b> <b>(1300 FT)</b>					
	326° 144°	70.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ ASLIK	470509N 0681542E <b>DZG</b> <b>143.0° 43.3 NM</b> <b>(1300 FT)</b>					
	324° 143°	43.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ ZHEZKAZGAN TOWER 127.1 MHZ {C}
▲ ZHEZKAZGAN DVOR/DME (DZG)	474317N 0674542E					

Route designator		[Route Usage Notes]				
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	327° 146°	43.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ ZHEZKAZGAN TOWER 127.1 MHZ {C}
△ ADOKA	482224N 0671842E <b>DZG</b> <b>326.0° 43.1 NM</b> <b>(1300 FT)</b>					
	325° 144°	37.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ UMDEM	485611N 0665322E <b>DZG</b> <b>325.0° 80.9 NM</b> <b>(1300 FT)</b>					
	327° 146°	53.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ SUKUR	494431N 0661957E <b>ARK</b> <b>207.0° 43.7 NM</b> <b>(1300 FT)</b>					
	323° 143°	27.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
▲ BULOG	500854N 0660036E <b>ARK</b> <b>245.0° 40.3 NM</b> <b>(1300 FT)</b>					
	324° 144°	14.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
▲ KUSOT	502128N 0655110E <b>ARK</b> <b>262.0° 45.0 NM</b> <b>(1300 FT)</b>					
	324° 142°	92.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ KUSUM	514420N 0644639E <b>KST</b> <b>141.0° 97.8 NM</b> <b>(600 FT)</b>					
	323° 142°	34.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ ARDIK	521459N 0642204E <b>KST</b> <b>140.0° 63.5 NM</b> <b>(600 FT)</b>					
	321° 140°	63.5 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ KOSTANAY TOWER 129.3 MHZ {C}
▲ KOSTANAY DVOR/DME (KST)	531113N 0633346E					

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 ↓      ↑	
	318° 137°	63.0 NM	FL 510 FL 120	Even	Odd
▲ LANOR (FIR BDRY)	540536N 0624042E <b>KST</b> <b>318.0° 63.0 NM</b> <b>(600 FT)</b>				ASTANA ACC 133.1 MHZ KOSTANAY TOWER 129.3 MHZ {C} <b>For continuation, see AIP Russia</b>

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	FL series		Controlling unit {Airspace class} Remarks
			Lower limit	↓	↑	
L147 (RNAV 5)	(2) Before, see AIP Kyrgyzstan					
▲ RODAM (FIR BDRY)	431348N 0741934E <b>ATA</b> <b>261.7° 121.2 NM</b> <b>(2200 FT)</b>					<b>Before, see AIP Kyrgyzstan</b>
	313° 132°	27.5 NM	FL 510 FL 70	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
▲ BASAN	433420N 0735429E <b>TAR</b> <b>065.0° 122.7 NM</b> <b>(2200 FT)</b>					
	311° 131°	10.2 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
▲ TOMGO	434146N 0734454E <b>TAR</b> <b>060.0° 118.9 NM</b> <b>(2200 FT)</b>					
	301° 120°	41.9 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
△ INDAG	440635N 0725812E <b>TAR</b> <b>038.0° 104.8 NM</b> <b>(2200 FT)</b>					
	300° 120°	19.7 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
△ RITMU	441806N 0723603E <b>TAR</b> <b>028.0° 103.3 NM</b> <b>(2200 FT)</b>					
	300° 118°	98.8 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 ↓      ↑		Controlling unit {Airspace class} Remarks
▲ PABRI (FIR BDRY)	451455N 0704239E <b>TAR</b> <b>344.0° 144.8 NM</b> <b>(2200 FT)</b>					
	298° 116°	84.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ In case of possible VHF radio communication failure at FL 120–FL 190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Zhezkazgan Tower” on frequencies 4850 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ OBAMA	460212N 0690233E <b>DZG</b> <b>144.0° 114.0 NM</b> <b>(1300 FT)</b>					
	296° 115°	56.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ ELSEB	463234N 0675439E <b>DZG</b> <b>166.0° 71.0 NM</b> <b>(1300 FT)</b>					
	294° 114°	11.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ TUTUL	463825N 0674057E <b>DZG</b> <b>174.0° 65.0 NM</b> <b>(1300 FT)</b>					
	295° 114°	27.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ ATRUS	465302N 0670715E <b>DZG</b> <b>199.0° 56.7 NM</b> <b>(1300 FT)</b>					
	293° 113°	7.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ GISIR	465704N 0665732E <b>DZG</b> <b>206.0° 56.7 NM</b> <b>(1300 FT)</b>					
	294° 112°	53.5 NM	FL 510 FL 120	Even	Odd	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 ↓      ↑		Controlling unit {Airspace class} Remarks
△ TIROK	472456N 0655037E <b>DZG</b> <b>247.0° 80.1 NM</b> <b>(1300 FT)</b>					
	292° 111°	44.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ SUBOL	474716N 0645433E <b>DZG</b> <b>262.0° 115.5 NM</b> <b>(1300 FT)</b>					
	291° 109°	102.6 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Zhezkazgan Tower” on frequencies 4850 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
▲ GEDSA (FIR BDRY)	483738N 0624054E <b>ARL</b> <b>013.0° 116.4 NM</b> <b>(300 FT)</b>					
	287° 105°	84.2 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
△ MANAD	491421N 0604601E <b>ARL</b> <b>338.0° 148.9 NM</b> <b>(300 FT)</b>					
	285° 104°	42.9 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
△ AGATU	493220N 0594622E <b>AKB</b> <b>104.0° 109.5 NM</b> <b>(700 FT)</b>					
	284° 104°	24.6 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
△ ENETO	494223N 0591154E <b>AKB</b> <b>103.0° 84.9 NM</b> <b>(700 FT)</b>					
	284° 103°	43.1 NM	FL 510 FL 120	Even	Odd	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 ↓   ↑	Controlling unit {Airspace class} Remarks
△ RIGDO	495937N 0581049E <b>AKB</b> <b>102.0° 41.8 NM</b> <b>(700 FT)</b>				
	283° 102°	41.8 NM	FL 510 FL 120	Even   Odd	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 120.9 MHZ {C}
▲ AKTOBE DVOR/ DME (AKB)	501548N 0571055E				

Route designator	[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓   ↑	Controlling unit {Airspace class} Remarks
<b>L162</b> (RNAV 5)					
▲ ODIVA (FIR BDRY)	423530N 0640848E <b>KZO</b> <b>198.0° 140.5 NM</b> <b>(500 FT)</b>				<b>Before, see AIP Uzbekistan</b>
	330° 149°	60.0 NM	FL 510 FL 120	Even   Odd	SHYMKENT ACC 127.3 MHZ In case of possible VHF radio communication failure at FL 120–FL 190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Kyzylorda Tower” on frequencies 5335 kHz and 6672 kHz (as a backup), in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ NITNA	433032N 0633601E <b>KZO</b> <b>222.0° 110.8 NM</b> <b>(500 FT)</b>				

Route designator		[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	329° 149°	10.0 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Kyzylorda Tower” on frequencies 5335 kHz and 6672 kHz (as a backup), in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
▲ DIDOP	433941N 0633027E <b>KZO</b> <b>227.0° 108.3 NM</b> <b>(500 FT)</b>					
	329° 149°	17.3 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ TIPEN	435532N 0632045E <b>KZO</b> <b>236.0° 106.1 NM</b> <b>(500 FT)</b>					
	329° 149°	18.6 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ ZURGO	441233N 0631012E <b>KZO</b> <b>248.0° 106.9 NM</b> <b>(500 FT)</b>					
	329° 148°	64.1 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
▲ TUKNA	451058N 0623308E <b>ARL</b> <b>150.0° 106.1 NM</b> <b>(300 FT)</b>					
	327° 147°	42.8 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
▲ INKUM	454952N 0620739E <b>ARL</b> <b>151.0° 63.3 NM</b> <b>(300 FT)</b>					
	329° 149°	27.3 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
▲ NIRAN (FIR BDRY)	461504N 0615245E <b>ARL</b> <b>154.0° 36.1 NM</b> <b>(300 FT)</b>					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓   ↑		Controlling unit {Airspace class} Remarks
	329° 148°	37.1 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119 MHZ {C}
△ UZLOR	464915N 0613205E <b>ARL</b> <b>257.0° 3.4 NM</b> <b>(300 FT)</b>					
	328° 147°	86.3 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119 MHZ {C}
▲ ERUTA	480837N 0604210E <b>ARL</b> <b>326.0° 87.5 NM</b> <b>(300 FT)</b>					
	327° 146°	91.5 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
△ AGATU	493220N 0594622E <b>AKB</b> <b>104.0° 109.5 NM</b> <b>(700 FT)</b>					
	326° 144°	76.3 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
▲ URUSU (FIR BDRY)	504142N 0585724E <b>AKB</b> <b>059.0° 72.8 NM</b> <b>(700 FT)</b>					<b>For continuation, see AIP Russia</b>

Route designator		[Route Usage Notes]					
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks	
				↓	↑		
L163 (RNAV 5)		(1) Before, see AIP Uzbekistan (2) For continuation, see AIP Russia					
▲ RODRO		411433N 0690034E <b>SMK</b> <b>190.0° 70.5 NM</b> <b>(1400 FT)</b>					Before, see AIP Uzbekistan
	306° 126°	12.7 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}	
▲ DODUR (FIR BDRY)		412300N 0684800E <b>SMK</b> <b>200.0° 65.9 NM</b> <b>(1400 FT)</b>					
	320° 139°	47.4 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 ↓      ↑		Controlling unit {Airspace class} Remarks
▲ MIKNO	420200N 0681200E <b>SMK</b> <b>243.0° 59.0 NM</b> <b>(1400 FT)</b>					
	307° 125°	47.6 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
△ ROSIM	423415N 0672453E <b>TRK</b> <b>222.0° 68.4 NM</b> <b>(1000 FT)</b>					
	306° 126°	38.0 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
▲ PAVEL	425947N 0664642E <b>TRK</b> <b>249.0° 81.5 NM</b> <b>(1000 FT)</b>					
	306° 125°	18.9 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
▲ RILOK	431224N 0662729E <b>TRK</b> <b>258.0° 93.3 NM</b> <b>(1000 FT)</b>					
	305° 124°	94.8 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ DILNA	441450N 0644911E <b>KZO</b> <b>222.0° 41.8 NM</b> <b>(500 FT)</b>					
	304° 123°	11.6 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ BADAS	442221N 0643656E <b>KZO</b> <b>237.0° 45.1 NM</b> <b>(500 FT)</b>					
	303° 123°	5.3 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ ADREM	442548N 0643118E <b>KZO</b> <b>243.0° 47.5 NM</b> <b>(500 FT)</b>					
	303° 122°	57.2 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
▲ UNITO	450238N 0632952E <b>KZO</b> <b>275.0° 90.6 NM</b> <b>(500 FT)</b>					
	302° 120°	74.7 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 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		Controlling unit {Airspace class} Remarks
				↓	↑	
▲ INKUM	454952N 0620739E <b>ARL</b> <b>151.0° 63.3 NM</b> <b>(300 FT)</b>					
	306° 126°	27.6 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
▲ ADUMI (FIR BDRY)	460903N 0613915E <b>ARL</b> <b>169.0° 40.5 NM</b> <b>(300 FT)</b>					
	306° 123°	137.6 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119 MHZ {C}
▲ RUGUS	474250N 0591219E <b>ARL</b> <b>289.0° 112.1 NM</b> <b>(300 FT)</b>					
	303° 121°	93.0 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
△ ERKIS	484421N 0572756E <b>AKB</b> <b>162.0° 92.0 NM</b> <b>(700 FT)</b>					
	301° 118°	147.4 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
▲ SIVKO	501827N 0543349E <b>AKB</b> <b>260.0° 100.8 NM</b> <b>(700 FT)</b>					
	300° 117°	130.4 NM	FL 510 FL 210	Even	Odd	AKTOBE ACC 131.4 MHZ {C}
▲ BEKAS (FIR BDRY)	514029N 0515327E <b>URL</b> <b>011.0° 34.2 NM</b> <b>(200 FT)</b>					<b>For continuation, see AIP Russia</b>

Route designator		[Route Usage Notes]				
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
L165 (RNAV 5)		<small>(1) Before, see AIP Uzbekistan (2) For continuation, see AIP Russia</small>				
▲ AKALI (FIR BDRY)		440829N 0611937E  ARL 175.0° 161.5 NM (300 FT)				Before, 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		Controlling unit {Airspace class} Remarks
				↓	↑	
	011° 191°	72.0 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Kyzylorda Tower” on frequencies 5335 kHz and 6672 kHz (as a backup), in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ OLINA	451645N 0615140E <b>ARL</b> <b>165.0° 93.4 NM</b> <b>(300 FT)</b>					
	011° 190°	35.0 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
▲ INKUM	454952N 0620739E <b>ARL</b> <b>151.0° 63.3 NM</b> <b>(300 FT)</b>					
	359° 179°	33.4 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
▲ RESBA (FIR BDRY)	462255N 0621359E <b>ARL</b> <b>128.0° 36.8 NM</b> <b>(300 FT)</b>					
	359° 178°	136.0 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119 MHZ {C}
▲ GEDSA (FIR BDRY)	483738N 0624054E <b>ARL</b> <b>013.0° 116.4 NM</b> <b>(300 FT)</b>					
	357° 176°	86.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
▲ GEMBO	500256N 0625600E <b>ARK</b> <b>252.0° 158.5 NM</b> <b>(1300 FT)</b>					
	356° 176°	20.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ EMBEK	502333N 0625947E <b>ARK</b> <b>263.0° 154.8 NM</b> <b>(1300 FT)</b>					

Route designator		[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	356° 176°	44.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ In case of possible VHF radio communication failure at FL 120–FL 190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Kostanay Sector” on frequencies 4680 kHz and 4815 kHz (as a backup), in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ GUMGA	510752N 063080E <b>KST</b> <b>175.0° 124.7 NM</b> <b>(600 FT)</b>					
	356° 175°	65.9 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ BUDER	521310N 063205E <b>KST</b> <b>176.0° 58.6 NM</b> <b>(600 FT)</b>					
	356° 176°	58.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ KOSTANAY TOWER 129.3 MHZ {C}
▲ KOSTANAY DVOR/DME (KST)	531113N 063334E					
	008° 189°	73.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 133.1 MHZ KOSTANAY TOWER 129.3 MHZ {C}
▲ NELTI (FIR BDRY)	541942N 0641630E <b>KST</b> <b>008.0° 73.1 NM</b> <b>(600 FT)</b>					<b>For continuation, see AIP Russia</b>

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
L170 (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 ↓   ↑	Controlling unit {Airspace class} Remarks
▲ VAMUK (FIR BDRY)	403400.0N 0683430.0E <b>SMK</b> <b>194.0° 115.1 NM</b> <b>(1400 FT)</b>				<b>Before, see AIP Uzbekistan</b>
	014° 194°	8.8 NM	FL 510 FL 30	Odd   Even	TASHKENT ACC {C}
▲ AKAZU (FIR BDRY)	404218N 0683815E <b>SMK</b> <b>194.0° 106.4 NM</b> <b>(1400 FT)</b>				<b>For continuation, see AIP Uzbekistan</b>

Route designator	[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓   ↑	Controlling unit {Airspace class} Remarks
<b>L728</b> (RNAV 5)					
▲ OGTOL (FIR BDRY)	424905N 0733002E <b>TAR</b> <b>087.0° 98.0 NM</b> <b>(2200 FT)</b>				
	272° 091°	12.2 NM	FL 510 FL 120	Even   Odd	SHYMKENT ACC 132.7 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Approach” on frequencies 4744 kHz. - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ PILEL	425035N 0731336E <b>TAR</b> <b>085.0° 85.9 NM</b> <b>(2200 FT)</b>				
	271° 090°	62.0 NM	FL 510 FL 120	Even   Odd	SHYMKENT ACC 132.7 MHZ {C}
△ GERPU	425739N 0714951E <b>TAR</b> <b>072.0° 24.8 NM</b> <b>(2200 FT)</b>				

Route designator		[Route Usage Notes]				
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	303° 122°	54.0 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ TARAZ APPROACH 122.1 MHZ {C}
▲ ARBOL	433055N 0705137E <b>TAR</b> <b>329.0° 42.9 NM</b> <b>(2200 FT)</b>					
	296° 114°	98.8 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
▲ TUROK	442214N 0685447E <b>TRK</b> <b>007.0° 64.3 NM</b> <b>(1000 FT)</b>					
	312° 129°	191.6 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
▲ LUGER (FIR BDRY)	464426N 0655200E <b>DZG</b> <b>223.0° 97.3 NM</b> <b>(1300 FT)</b>					
	304° 123°	47.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ BAGED	471628N 0650016E <b>DZG</b> <b>249° 115.2 NM</b> <b>(1300 FT)</b>					
	303° 121°	124.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Zhezkazgan Tower” on frequencies 4850 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
▲ GEDSA (FIR BDRY)	483738N 0624054E <b>ARL</b> <b>013.0° 116.4 NM</b> <b>(300 FT)</b>					
	281° 097°	200.9 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
△ ODILA	494259N 0575122E <b>AKB</b> <b>131.0° 41.9 NM</b> <b>(700 FT)</b>					

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 ↓      ↑	
	276° 093°	132.3 NM	FL 510 FL 160	Even	Odd
▲ SIVKO	501827N 0543349E <b>AKB</b> <b>260.0° 100.8 NM</b> <b>(700 FT)</b>				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	FL series		Controlling unit {Airspace class} Remarks
			Lower limit	↓	↑	
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 <b>ATR</b> <b>195.0° 91.2 NM</b> <b>(0 FT)</b>					
	348° ◡	66.8 NM	FL 510 FL 220	Even	AKTOBE ACC 130.9 MHZ {C}	
△ TUGLA	465142N 0505006E <b>ATR</b> <b>237.0° 43.2 NM</b> <b>(0 FT)</b>					
	349° ◡	132.1 NM	FL 510 FL 220	Even	AKTOBE ACC 130.9 MHZ {C}	
▲ NAGAZ	490336N 0504220E <b>ATR</b> <b>330.0° 123.2 NM</b> <b>(0 FT)</b>					
	348° ◡	146.1 NM	FL 510 FL 220	Even	AKTOBE ACC 131.4 MHZ {C}	
▲ ARISA (FIR BDRY)	512924N 0503254E <b>URL</b> <b>288.0° 42.7 NM</b> <b>(200 FT)</b>					

Route designator		[Route Usage Notes]					
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks	
				↓	↑		
L855 (RNAV 5)							
△ TIPSA	433809N 0753149E <b>ATA</b> <b>278.4° 69.7 NM</b> <b>(2200 FT)</b>						
	278° 097°	54.4 NM	FL 510 FL 150	Even	Odd	ALMATY ACC 131.4 MHZ {C}	
▲ ELENU (FIR BDRY)	435017N 0741838E <b>ATA</b> <b>278.8° 124.1 NM</b> <b>(2200 FT)</b>						
	270° 087°	105.8 NM	FL 510 FL 150	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}	
△ RISAS	435854N 0715247E <b>TAR</b> <b>016.0° 71.6 NM</b> <b>(2200 FT)</b>						
	275° 094°	39.4 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}	
△ KUGIR	440625N 0705906E <b>TAR</b> <b>344.0° 75.3 NM</b> <b>(2200 FT)</b>						
	274° 094°	25.7 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}	
△ GAMBU	441106N 0702401E <b>TAR</b> <b>328.0° 87.7 NM</b> <b>(2200 FT)</b>						
	274° 093°	65.1 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}	
▲ TUROK	442214N 0685447E <b>TRK</b> <b>007.0° 64.3 NM</b> <b>(1000 FT)</b>						
	273° 092°	30.6 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}	
△ REMOL	442704N 0681238E <b>TRK</b> <b>340.0° 69.4 NM</b> <b>(1000 FT)</b>						
	272° 091°	29.1 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}	
△ LUKUR	443112N 0673226E <b>TRK</b> <b>321.0° 84.6 NM</b> <b>(1000 FT)</b>						

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 ↓      ↑	
	271° 091°	40.8 NM	FL 510 FL 120	Even	Odd
△ DIKAM	443650N 0663555E <b>KZO</b> <b>089.0° 44.6 NM</b> <b>(500 FT)</b>				SHYMKENT ACC 127.3 MHZ {C}
	270° 089°	44.6 NM	FL 510 FL 120	Even	Odd
▲ KYZYLORDA DVOR/DME (KZO)	444145N 0653349E				SHYMKENT ACC 127.3 MHZ KYZYLORDA TOWER 120.9 {C}
	238° 057°	45.1 NM	FL 510 FL 120	Even	Odd
△ BADAS	442221N 0643656E <b>KZO</b> <b>237.0° 45.1 NM</b> <b>(500 FT)</b>				SHYMKENT ACC 127.3 MHZ {C}
	237° 057°	21.2 NM	FL 510 FL 120	Even	Odd
△ ERTUZ	441307N 0641019E <b>KZO</b> <b>238.0° 66.3 NM</b> <b>(500 FT)</b>				SHYMKENT ACC 127.3 MHZ {C}
	237° 056°	39.8 NM	FL 510 FL 120	Even	Odd
△ TIPEN	435532N 0632045E <b>KZO</b> <b>236.0° 106.1 NM</b> <b>(500 FT)</b>				SHYMKENT ACC 127.3 MHZ {C}
	236° 056°	25.0 NM	FL 510 FL 120	Even	Odd
△ ADAKA	434416N 0624955E <b>KZO</b> <b>236.0° 131.1 NM</b> <b>(500 FT)</b>				

Route designator		[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	236° 056°	36.9 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ In case of possible VHF radio communication failure at FL 120–FL 190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Kyzylorda Tower” on frequencies 5335 kHz and 6672 kHz (as a backup), in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
▲ TIGTA (FIR BDRY)	432728N 062044E <b>KZO</b> <b>235.0° 168.0 NM</b> <b>(500 FT)</b>					<b>For continuation, see AIP Uzbekistan</b>

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
L864 (RNAV 5)						
▲ ITAKA (FIR BDRY)	435224N 0493000E <b>AKT</b> <b>262.0° 67.9 NM</b> <b>(100 FT)</b>					
	020°	60.7 NM	FL 510 FL 210	Odd		AKTOBE ACC 134.3 MHZ {C}
△ ATNUR	444559N 0500948E <b>AKT</b> <b>316.0° 66.2 NM</b> <b>(100 FT)</b>					
	349°	65.3 NM	FL 510 FL 220	Even		AKTOBE ACC 134.3 MHZ {C}
▲ URABU	455108N 0500407E <b>ATR</b> <b>214.4° 105.7 NM</b> <b>(0 FT)</b>					
	348°	45.5 NM	FL 510 FL 220	Even		AKTOBE ACC 130.9 MHZ {C}

Route designator	[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓   ↑	Controlling unit {Airspace class} Remarks
△ DIMPA	463633N 0495959E <b>ATR</b> <b>238.2° 80.8 NM</b> <b>(0 FT)</b>				
	347°	149.0 NM	FL 510 FL 220	Even	AKTOBE ACC 130.9 MHz {C}
▲ TOZIS	490511N 0494538E <b>URL</b> <b>198.7° 141.7 NM</b> <b>(200 FT)</b>				
	346°	121.9 NM	FL 510 FL 220	Even	AKTOBE ACC 131.4 MHz {C}
▲ POMNI (FIR BDRY)	510638N 0493240E <b>URL</b> <b>258.0° 75.6 NM</b> <b>(200 FT)</b>				

Route designator	[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓   ↑	Controlling unit {Airspace class} Remarks
<b>L985</b> <b>(RNAV 5)</b>					
▲ AKALI (FIR BDRY)	440829N 0611937E <b>ARL</b> <b>175.0° 161.5 NM</b> <b>(300 FT)</b>				<b>Before, see AIP Uzbekistan</b>
	358° 178°	45.5 NM	FL 510 FL 120	Even   Odd	SHYMKENT ACC 127.3 MHz In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Kyzylorda Tower” on frequencies 5335 kHz and 6672 kHz (as a backup), in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ LATNU	445345N 0612553E <b>ARL</b> <b>175.0° 116.1 NM</b> <b>(300 FT)</b>				

Route designator		[Route Usage Notes]				
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	352° 171°	63.5 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
▲ SANUR (FIR BDRY)	455717N 0612446E <b>ARL</b> <b>180.0° 53.0 NM</b> <b>(300 FT)</b>					
	357° 177°	52.2 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119 MHZ {C}
△ UZLOR	464915N 0613205E <b>ARL</b> <b>257.0° 3.4 NM</b> <b>(300 FT)</b>					
	357° 176°	96.2 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119 MHZ {C}
▲ ADLIK	482457N 0614611E <b>ARL</b> <b>355.0° 95.7 NM</b> <b>(300 FT)</b>					
	354° 173°	135.9 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
▲ RAVNI (FIR BDRY)	504030N 0615807E <b>KST</b> <b>188.0° 162.1 NM</b> <b>(600 FT)</b>					
	356° 175°	158.2 NM	FL 510 FL 210	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ LODEZ	531715N 0623004E <b>KST</b> <b>268.0° 38.7 NM</b> <b>(600 FT)</b>					
	355° 175°	48.8 NM	FL 510 FL 210	Even	Odd	ASTANA ACC 133.1 MHZ {C}
▲ LANOR (FIR BDRY)	540536N 0624042E <b>KST</b> <b>318.0° 63.0 NM</b> <b>(600 FT)</b>					<b>For continuation, see AIP Russia</b>

Route designator		[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
↓				↑		
L988 (RNAV 5)	<small>(1) Below, see AIP Russia (2) For continuation, see AIP Russia</small>					

Route designator		[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks	
				↓	↑		
▲ OBATA (FIR BDRY)	462130N 0491148E <b>ATR</b> <b>236.0° 117.4 NM</b> <b>(0 FT)</b>					<b>Before, see AIP Russia</b>	
	057° 237°	36.5 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}	
△ DIMPA	463633N 0495959E <b>ATR</b> <b>238.2° 80.8 NM</b> <b>(0 FT)</b>						
	057° 238°	37.7 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}	
△ TUGLA	465142N 0505006E <b>ATR</b> <b>237.0° 43.2 NM</b> <b>(0 FT)</b>						
	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 <b>ATR</b> <b>059.0° 43.2 NM</b> <b>(0 FT)</b>						
	059° 240°	86.0 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}	
△ KODUM	475556N 0544537E <b>ATR</b> <b>061.0° 129.2 NM</b> <b>(0 FT)</b>						
	048° 229°	42.8 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Atyrau Sector” on frequencies 4688 kHz and 4830 kHz (as a backup), in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {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 ↓      ↑	
▲ ALABA	481845N 0553938E <b>AKB</b> <b>196.0° 131.5 NM</b> <b>(700 FT)</b>				
	060° 241°	76.4 NM	FL 510 FL 120	Odd	Even
AKTOBE ACC 129.6 MHZ In case of possible VHF radio communication failure at FL 120–FL 190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Ambarchik” on frequencies 4656 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}					
△ ERKIS	484421N 0572756E <b>AKB</b> <b>162.0° 92.0 NM</b> <b>(700 FT)</b>				
	061° 245°	207.6 NM	FL 510 FL 120	Odd	Even
AKTOBE ACC 129.6 MHZ In case of possible VHF radio communication failure at FL 120–FL 190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Ambarchik” on frequencies 4656 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}					
▲ BEKOR (FIR BDRY)	494513N 0623050E <b>ARK</b> <b>247.0° 177.6 NM</b> <b>(1300 FT)</b>				

Route designator		[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	065° 246°	87.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Kostanay Sector” on frequencies 4680 kHz and 4815 kHz (as a backup), in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
▲ LAMGI	500657N 0644154E <b>ARK</b> <b>251.0° 90.3 NM</b> <b>(1300 FT)</b>					
	068° 251°	134.3 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 133.1 MHZ {C}
▲ TUSEP	503136N 0680751E <b>ARK</b> <b>064.0° 44.4 NM</b> <b>(1300 FT)</b>					
	066° 248°	74.0 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
△ OSROL	504818N 0700112E <b>AST</b> <b>248.0° 55.0 NM</b> <b>(1200 FT)</b>					
	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 <b>AST</b> <b>251.0° 25.6 NM</b> <b>(1200 FT)</b>					
	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 <b>AST</b> <b>066.0° 58.9 NM</b> <b>(1200 FT)</b>					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	066° 248°	88.0 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
▲ ABELI	513524N 0751312E <b>PVL</b> <b>232.0° 79.0 NM</b> <b>(500 FT)</b>					
	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 <b>PVL</b> <b>185.0° 31.2 NM</b> <b>(500 FT)</b>					
	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 <b>PVL</b> <b>165.0° 29.3 NM</b> <b>(500 FT)</b>					
	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 <b>PVL</b> <b>125.0° 38.7 NM</b> <b>(500 FT)</b>					
	076° 258°	52.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
▲ LAGMO (FIR BDRY)	514954N 0791500E <b>PVL</b> <b>098.0° 83.0 NM</b> <b>(500 FT)</b>					<b>For continuation, see AIP Russia</b>

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
<b>L992</b> (RNAV 5)						
▲ TIROM (FIR BDRY)	421434N 0531720E <b>AKT</b> <b>128.0° 138.3 NM</b> <b>(100 FT)</b>					<b>Before, see AIP Russia and CIS</b>
	009° 189°	48.1 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		Controlling unit {Airspace class} Remarks	
				↓	↑		
△ ARNUS	430052N 0533509E <b>AKT</b> <b>107.0° 121.6 NM</b> <b>(100 FT)</b>						
	009° 189°	30.5 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}	
△ BAPER	433011N 0534642E <b>AKT</b> <b>094.0° 120.2 NM</b> <b>(100 FT)</b>						
	009° 189°	23.8 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}	
△ RINIT	435305N 0535549E <b>BNU</b> <b>202.0° 101.2 NM</b> <b>(0 FT)</b>						
	009° 189°	59.9 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}	
▲ BODSI	445034N 0541914E <b>BNU</b> <b>220.0° 45.3 NM</b> <b>(0 FT)</b>						
	011° 191°	44.1 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}	
△ AGNIM	453221N 0543918E <b>BNU</b> <b>293.0° 23.1 NM</b> <b>(0 FT)</b>						
	011° 191°	18.1 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}	
▲ NESDO	454926N 0544739E <b>BNU</b> <b>326.0° 32.2 NM</b> <b>(0 FT)</b>						
	011° 191°	62.7 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}	
△ PEMOL	464841N 0551720E <b>BNU</b> <b>356.0° 88.6 NM</b> <b>(0 FT)</b>						
	011° 191°	43.9 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}	
△ ODPUT	473004N 0553846E <b>BNU</b> <b>001.0° 131.5 NM</b> <b>(0 FT)</b>						

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	011° 190°	33.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ In case of possible VHF radio communication failure at FL 120–FL 190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Atyrau Sector” on frequencies 4688 kHz and 4830 kHz (as a backup), in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
▲ ABULU	480139N 0555532E <b>AKB</b> <b>189.0° 143.1 NM</b> <b>(700 FT)</b>					
	010° 190°	32.4 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ In case of possible VHF radio communication failure at FL 120–FL 190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Ambarchik” on frequencies 4656 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ LOGTO	483204N 0561202E <b>AKB</b> <b>189.0° 110.7 NM</b> <b>(700 FT)</b>					
	010° 190°	72.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
△ TIKTO	494006N 0565014E <b>AKB</b> <b>190.0° 38.2 NM</b> <b>(700 FT)</b>					
	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}

Route designator	[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓   ↑	Controlling unit {Airspace class} Remarks
▲ SANIR (FIR BDRY)	505230N 0572942E <b>AKB</b> <b>007.0° 38.6 NM</b> <b>(700 FT)</b>				<b>For continuation, see AIP Russia</b>

Route designator	[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓   ↑	Controlling unit {Airspace class} Remarks
<b>L993</b> <b>(RNAV 5)</b>					
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 <b>ARK</b> <b>064.0° 44.4 NM</b> <b>(1300 FT)</b>				
	278° 090°	302.7 NM	FL 510 FL 250	Even   Odd	ASTANA ACC 133.1 MHZ {C}
LENTA ▲ (FIR BDRY)	514854N 0602236E <b>KST</b> <b>221.0° 143.0 NM</b> <b>(600 FT)</b>				<b>For continuation, see AIP Russia</b>

Route designator	[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓   ↑	Controlling unit {Airspace class} Remarks
<b>L994</b> <b>(RNAV 5)</b>					
▲ UST- KAMENOGORS K 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}

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓   ↑		Controlling unit {Airspace class} Remarks
▲ LIRNA	501159N 0812203E <b>SEM</b> <b>094.0° 44.2 NM</b> <b>(700 FT)</b>					
	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 <b>SEM</b> <b>281.0° 0.4 NM</b> <b>(700 FT)</b>					
	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 <b>SEM</b> <b>277.0° 43.6 NM</b> <b>(700 FT)</b>					
	277° 096°	38.3 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
▲ BAMAT (FIR BDRY)	504125N 0781025E <b>SEM</b> <b>276.0° 81.9 NM</b> <b>(700 FT)</b>					
	276° 095°	30.9 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ DILGI	504833N 0772303E <b>PVL</b> <b>164.0° 84.8 NM</b> <b>(500 FT)</b>					
	275° 094°	31.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ GOBSO	505523N 0763521E <b>PVL</b> <b>184.0° 79.6 NM</b> <b>(500 FT)</b>					
	268° 085°	137.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ EDANO	510858N 0725804E <b>AST</b> <b>072.0° 58.7 NM</b> <b>(1200 FT)</b>					
	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}

Route designator		[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
△ DIDAL	512908N 0695453E <b>AST</b> <b>286.0° 64.2 NM</b> <b>(1200 FT)</b>					
	287° 105°	64.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
▲ ATBAN	515824N 0682152E <b>KTU</b> <b>197.0° 94.6 NM</b> <b>(900 FT)</b>					
	284° 103°	32.5 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
▲ ATNON	521149N 0673350E <b>KTU</b> <b>215.0° 102.0 NM</b> <b>(900 FT)</b>					
	283° 102°	33.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ LATKO	522508N 0664427E <b>KTU</b> <b>229.0° 118.6 NM</b> <b>(900 FT)</b>					
	282° 100°	52.2 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ GITNA	524459N 0652518E <b>KST</b> <b>100.0° 72.4 NM</b> <b>(600 FT)</b>					
	281° 101°	8.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ DOKUT	524814N 0651230E <b>KST</b> <b>099.0° 63.9 NM</b> <b>(600 FT)</b>					
	280° 099°	64.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ KOSTANAY TOWER 129.3 MHZ {C}
▲ 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 <b>KST</b> <b>268.0° 38.7 NM</b> <b>(600 FT)</b>					
	266° 085°	48.8 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 ↓   ↑	Controlling unit {Airspace class} Remarks
▲ TITUR (FIR BDRY)	532406N 0610924E <b>KST</b> <b>268.0° 87.6 NM</b> <b>(600 FT)</b>				

Route designator	[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓   ↑	Controlling unit {Airspace class} Remarks
<b>L998</b> <b>(RNAV 5)</b>					
△ IZIMA	432236N 0770503E <b>ATA</b> <b>332.2° 0.1 NM</b> <b>(2200 FT)</b>				
	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 <b>ATA</b> <b>332.7° 14.3 NM</b> <b>(2200 FT)</b>				
	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 <b>ATA</b> <b>332.6° 28 NM</b> <b>(2200 FT)</b>				
	332° 152°	13.1 NM	FL 510 FL 120	Even   Odd	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
▲ BAKIS	440031N 0764333E <b>ATA</b> <b>332.6° 41.1 NM</b> <b>(2200 FT)</b>				
	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 <b>ATA</b> <b>332.7° 56.1 NM</b> <b>(2200 FT)</b>				
	332° 152°	6.6 NM	FL 510 FL 120	Even   Odd	ALMATY ACC 133.1 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		Controlling unit {Airspace class} Remarks		
				↓	↑			
▲ ETEDA	442024N 0763206E <b>ATA</b> <b>332.6° 62.6 NM</b> <b>(2200 FT)</b>							
	332° 151°	58.5 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ {C}		
△ DODOK	451420N 0760011E <b>TDK</b> <b>268.0° 103.3 NM</b> <b>(2000 FT)</b>							
	331° 150°	31.3 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ {C}		
▲ RITAB	454308N 0754239E <b>BLH</b> <b>150.0° 76.1 NM</b> <b>(1400 FT)</b>							
	330° 150°	32.9 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ {C}		
△ TULPI	461318N 0752358E <b>BLH</b> <b>150.0° 43.3 NM</b> <b>(1400 FT)</b>							
	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 <b>BLH</b> <b>314.0° 52.9 NM</b> <b>(1400 FT)</b>							
	314° 134°	40.3 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ {C}		
▲ AGADI (FIR BDRY)	480559N 0733338E <b>BLH</b> <b>314.0° 93.2 NM</b> <b>(1400 FT)</b>							
	304° 118°	221.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}		
△ ASTIK	502734N 0691434E <b>ARK</b> <b>075.0° 85.7 NM</b> <b>(1300 FT)</b>							
	307° 125°	75.3 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		Controlling unit {Airspace class} Remarks	
				↓	↑		
▲ RUDAL	512154N 0675222E <b>ARK</b> <b>017.0° 70.7 NM</b> <b>(1300 FT)</b>						
	302° 118°	131.1 NM	<div>FL 510 FL 120</div>	Even	Odd	ASTANA ACC 133.1 MHZ {C}	
△ DOKUT	524814N 0651230E <b>KST</b> <b>099.0° 63.9 NM</b> <b>(600 FT)</b>						
	300° 117°	119.3 NM	<div>FL 510 FL 120</div>	Even	Odd	ASTANA ACC 133.1 MHZ KOSTANAY TOWER 129.3 MHZ {C}	
▲ LANOR (FIR BDRY)	540536N 0624042E <b>KST</b> <b>318.0° 63.0 NM</b> <b>(600 FT)</b>						

## ENR-3.2.2 “M” ROUTES

## 1. NAVIGATION SPECIFICATION

RNAV routes in Republic of Kazakhstan require RNAV 5 capability. Supported sensors are VOR/DME, INS/IRS, GNSS or their combination.

Route designator		[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
M34 (RNAV 5)						
▲ BALGO (FIR BDRY)		430234N 0733602E  TAR 079.0° 102.7 NM (2200 FT)				Before, see AIP Russia and CIS
	004° 184°	39.7 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Approach” on frequencies 4744 kHz. - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
▲ TOMGO		434146N 0734454E  TAR 060.0° 118.9 NM (2200 FT)				
	009° 189°	39.5 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Approach” on frequencies 4744 kHz. - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
▲ ALAKO		441958N 0735903E  ATA 289.1° 146.4 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		Controlling unit {Airspace class} Remarks
				↓	↑	
	009° 189°	10.3 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Approach” on frequencies 4744 kHz. - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
▲ ABEBA (FIR BDRY)	442957N 0740248E <b>ATA</b> <b>293.0° 148 NM</b> <b>(2200 FT)</b>					
	009° 189°	31.0 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ {C}
△ TENRO	445953N 0741408E <b>BLH</b> <b>188.0° 117.4 NM</b> <b>(1400 FT)</b>					
	009° 189°	58.5 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ {C}
△ ABMIK	455616N 0743604E <b>BLH</b> <b>189.0° 58.9 NM</b> <b>(1400 FT)</b>					
	009° 189°	58.9 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ BALKHASH TOWER 128.0 MHZ {C}
▲ BALKHASH DVOR/DME (BLH)	465259N 0745902E					
	008° 188°	37.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ BALKHASH TOWER 128.0 MHZ {C}
△ OBARU	472917N 0751312E <b>BLH</b> <b>008.0° 37.6 NM</b> <b>(1400 FT)</b>					
	008° 188°	72.8 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 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		Controlling unit {Airspace class} Remarks
				↓	↑	
▲ AGPIN (FIR BDRY)	483931N 0754146E <b>KRG</b> <b>116.0° 110.3 NM</b> <b>(1800 FT)</b>					
	008° 188°	20.9 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Karaganda Tower” on frequencies 4728 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ LALAS	485941N 0755014E <b>KRG</b> <b>105.0° 105.2 NM</b> <b>(1800 FT)</b>					
	008° 188°	8.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Karaganda Tower” on frequencies 4728 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ ULKAP	490729N 0755332E <b>KRG</b> <b>101.0° 104.3 NM</b> <b>(1800 FT)</b>					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	008° 188°	42.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Karaganda Tower” on frequencies 4728 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
▲ AGINU (FIR BDRY)	494800N 0761100E <b>KRG</b> <b>077.0° 109.5 NM</b> <b>(1800 FT)</b>					
	005° 185°	69.2 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
△ GOBSO	505523N 0763521E <b>PVL</b> <b>184.0° 79.6 NM</b> <b>(500 FT)</b>					
	005° 184°	48.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ PAVLODAR TOWER 119.8 MHZ {C}
△ EKTUS	514225N 0765305E <b>PVL</b> <b>185.0° 31.2 NM</b> <b>(500 FT)</b>					
	005° 186°	31.2 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ PAVLODAR TOWER 119.8 MHZ {C}
▲ PAVLODAR DVOR/DME (PVL)	521235N 0770542E					

Route designator		[Route Usage Notes]					
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks	
				↓	↑		
M56 (RNAV 5)							
▲ GERLI		495334N 0535254E  URL 120.0° 117.1 NM (200 FT)					
	310° 128°	76.7 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 131.4 MHZ {C}	
△ VEVIK		505201N 0523529E  URL 102.0° 43.1 NM (200 FT)					
	321° 140°	55.2 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 131.4 MHZ URALSK TOWER 119.7 MHZ {C}	
▲ BEKAS (FIR BDRY)		514029N 0515327E  URL 011.0° 34.2 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		Controlling unit {Airspace class} Remarks
				↓	↑	
M75 (RNAV 5)						
▲ UBAGU (FIR BDRY)	430228N 0625120E <b>KZO</b> <b>221.0° 153.8 NM</b> <b>(500 FT)</b>					<b>Before, see AIP Uzbekistan</b>

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	042° 223°	26.4 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Kyzylorda Tower” on frequencies 5335 kHz and 6672 kHz (as a backup), in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ RIMDO	431940N 0631837E <b>KZO</b> <b>222.0° 127.5 NM</b> <b>(500 FT)</b>					
	043° 223°	16.7 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
△ NITNA	433032N 0633601E <b>KZO</b> <b>222.0° 110.8 NM</b> <b>(500 FT)</b>					
	043° 223°	11.8 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
▲ MIMRI	433808N 0634822E <b>KZO</b> <b>222.0° 99.0 NM</b> <b>(500 FT)</b>					
	026° 206°	56.8 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
△ ADREM	442548N 0643118E <b>KZO</b> <b>243.0° 47.5 NM</b> <b>(500 FT)</b>					
	026° 206°	28.2 NM	FL 510 FL 150	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
△ GIGUR	444920N 0645300E <b>KZO</b> <b>277.0° 30.1 NM</b> <b>(500 FT)</b>					
	026° 206°	6.9 NM	FL 510 FL 150	Odd	Even	SHYMKENT ACC 127.3 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		Controlling unit {Airspace class} Remarks
				↓	↑	
△ BUDET	445507N 0645824E <b>KZO</b> <b>290.0° 28.5 NM</b> <b>(500 FT)</b>					
	026° 207°	80.3 NM	FL 510 FL 150	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
△ ANIGO	460143N 0660207E <b>KZO</b> <b>007.0° 82.4 NM</b> <b>(500 FT)</b>					
	027° 207°	35.2 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
▲ BAMET (FIR BDRY)	463042N 0663051E <b>DZG</b> <b>206.0° 88.8 NM</b> <b>(1300 FT)</b>					
	027° 207°	32.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ GISIR	465704N 0665732E <b>DZG</b> <b>206.0° 56.7 NM</b> <b>(1300 FT)</b>					
	027° 207°	13.3 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ REMTI	470757N 0670843E <b>DZG</b> <b>206.0° 43.4 NM</b> <b>(1300 FT)</b>					
	027° 207°	43.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ ZHEZKAZGAN TOWER 127.1 MHZ {C}
▲ ZHEZKAZGAN DVOR/DME (DZG)	474317N 0674542E					
	027° 207°	43.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ ZHEZKAZGAN TOWER 127.1 MHZ {C}
△ DOPAR	481831N 0682229E <b>DZG</b> <b>027.0° 43.0 NM</b> <b>(1300 FT)</b>					
	025° 205°	16.7 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		Controlling unit {Airspace class} Remarks
				↓	↑	
△ MAKUT	483217N 0683632E <b>DZG</b> <b>026.0° 59.7 NM</b> <b>(1300 FT)</b>					
	027° 207°	54.9 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
▲ AMIGU	491645N 0692517E <b>ARK</b> <b>114.0° 112.2 NM</b> <b>(1300 FT)</b>					
	027° 207°	57.0 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ {C}
△ RELGO	500234N 0701730E <b>AST</b> <b>207.0° 72.3 NM</b> <b>(1200 FT)</b>					
	027° 208°	9.3 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ {C}
△ KOKON	500958N 0702609E <b>AST</b> <b>207.0° 63.0 NM</b> <b>(1200 FT)</b>					
	027° 208°	14.8 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ ASTANA APPROACH 124.6 MHZ {C}
▲ BASPA	502144N 0704001E <b>AST</b> <b>208.0° 48.3 NM</b> <b>(1200 FT)</b>					
	028° 208°	30.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
△ LIGMO	504539N 0710837E <b>AST</b> <b>207.0° 18.2 NM</b> <b>(1200 FT)</b>					
	027° 208°	18.2 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
▲ ASTANA DVOR/ DME (AST)	510006N 0712600E					
	360° 180°	66.2 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 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		Controlling unit {Airspace class} Remarks	
				↓	↑		
△ OLGAS		520510N 0714507E <b>AST</b> <b>001.0° 66.2 NM</b> <b>(1200 FT)</b>					
	001° 181°	34.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}	
△ AMOLA		523853N 0715604E <b>KTU</b> <b>106.0° 94.0 NM</b> <b>(900 FT)</b>					
	359° 179°	22.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}	
△ ULSET		530027N 0720230E <b>KTU</b> <b>093.0° 89.9 NM</b> <b>(900 FT)</b>					
	359° 179°	38.2 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}	
▲ POBUR		533800N 0721400E <b>KTU</b> <b>069.0° 95.3 NM</b> <b>(900 FT)</b>					
	360° 179°	32.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}	
▲ DAKIN (FIR BDRY)		540930N 0722418E <b>KTU</b> <b>053.0° 110.5 NM</b> <b>(900 FT)</b>				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		Controlling unit {Airspace class} Remarks
				↓	↑	
M149 (RNAV 5)						
▲ AGUNA	435906N 0754739E  ATA 298.4° 67.1 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		Controlling unit {Airspace class} Remarks
				↓	↑	
	336° 156°	53.8 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ {C}
△ ADIRO	445011N 0752356E <b>ATA</b> <b>315.7° 114 NM</b> <b>(2200 FT)</b>					
	335° 155°	29.6 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ {C}
▲ MALOD	451812N 0751037E <b>BLH</b> <b>168.0° 95.2 NM</b> <b>(1400 FT)</b>					
	349° 168°	48.5 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ {C}
△ KONEK	460631N 0750443E <b>BLH</b> <b>168.0° 46.7 NM</b> <b>(1400 FT)</b>					
	349° 168°	46.7 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ BALKHASH TOWER 128.0 MHZ {C}
▲ BALKHASH DVOR/DME (BLH)	465259N 0745902E					
	021° 201°	39.9 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ BALKHASH TOWER 128.0 MHZ {C}
△ BIKRI	472814N 0752625E <b>BLH</b> <b>021.0° 39.9 NM</b> <b>(1400 FT)</b>					
	021° 201°	75.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ {C}
▲ ROSID	483440N 0762005E <b>BLH</b> <b>022.0° 115.5 NM</b> <b>(1400 FT)</b>					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	021° 201°	25.1 NM	<div>FL 510</div> <div>FL 120</div>	Odd	Even	ALMATY ACC 132.1 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Semey Tower” on frequencies 6645 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ TAGAL	485638N 0763825E <b>KRG</b> <b>102.0° 135.8 NM</b> <b>(1800 FT)</b>					
	021° 202°	15.8 NM	<div>FL 510</div> <div>FL 120</div>	Odd	Even	ALMATY ACC 132.1 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Semey Tower” on frequencies 6645 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ ESUMA	491025N 0765006E <b>KRG</b> <b>095.0° 139.0 NM</b> <b>(1800 FT)</b>					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	021° 202°	57.3 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Semey Tower” on frequencies 6645 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ ADETA	500015N 0773321E <b>SEM</b> <b>250.0° 105.7 NM</b> <b>(700 FT)</b>					
	022° 202°	47.6 NM	FL 510 FL 220	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ BAMAT (FIR BDRY)	504125N 0781025E <b>SEM</b> <b>276.0° 81.9 NM</b> <b>(700 FT)</b>					
	022° 202°	40.3 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
△ MIKSA	511608N 0784241E <b>SEM</b> <b>306.0° 80.3 NM</b> <b>(700 FT)</b>					
	022° 203°	39.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
▲ LAGMO (FIR BDRY)	514954N 0791500E <b>PVL</b> <b>098.0° 83.0 NM</b> <b>(500 FT)</b>					<b>For continuation, see AIP Russia</b>

Route designator		[Route Usage Notes]					
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks	
				↓	↑		
M158 (RNAV 5)							
▲ BODSI		445034N 0541914E  BNU 220.0° 45.3 NM (0 FT)					
	316° 135°	38.5 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119.8 MHZ {C}	
▲ ANIGA		452130N 0534647E  BNU 262.0° 56.8 NM (0 FT)					
	315° 135°	13.0 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 130.9 MHZ {C}	
△ GOLGI		453153N 0533543E  BNU 271.0° 65.5 NM (0 FT)					
	315° 134°	40.7 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 130.9 MHZ {C}	
△ OTMAS		460419N 0530034E  ATR 134.0° 81.5 NM (0 FT)					
	314° 134°	38.2 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 130.9 MHZ {C}	
△ RENPI		463437N 0522656E  ATR 133.0° 43.2 NM (0 FT)					
	314° 133°	43.2 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 130.9 MHZ ATYRAU TOWER 118.1 MHZ {C}	
▲ ATYRAU DVOR/ DME (ATR)		470838N 0514805E					
	349° 168°	43.2 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 130.9 MHZ ATYRAU TOWER 118.1 MHZ {C}	
△ OLAPU		475146N 0514531E  ATR 349.0° 43.2 NM (0 FT)					

Route designator		[Route Usage Notes]				
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	348° 168°	69.9 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 130.9 MHZ {C}
▲ BAGIR	490131N 0514106E <b>ATR</b> <b>348.0° 113.1 NM</b> <b>(0 FT)</b>					
	348° 167°	84.3 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 131.4 MHZ {C}
△ DOKUS	502539N 0513528E <b>URL</b> <b>166.0° 43.4 NM</b> <b>(200 FT)</b>					
	347° 167°	43.4 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 131.4 MHZ URALSK TOWER 119.7 MHZ {C}
▲ URALSK DVOR/ DME (URL)	510855N 0513238E					
	046° 226°	34.8 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 131.4 MHZ URALSK TOWER 119.7 MHZ {C}
△ INRIS	512800N 0521856E <b>URL</b> <b>046.0° 34.8 NM</b> <b>(200 FT)</b>					
	046° 226°	8.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 131.4 MHZ URALSK TOWER 119.7 MHZ {C}
▲ EKTEN (FIR BDRY)	513242N 0523030E <b>URL</b> <b>046.0° 43.4 NM</b> <b>(200 FT)</b>					<b>For continuation, see AIP Russia</b>

Route designator		[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
M161 (RNAV 5)	<small>(1) Before, see AIP Uzbekistan (2) For continuation, see AIP Russia</small>					
▲ ODIVA (FIR BDRY)	423530N 0640848E <b>KZO</b> <b>198.0° 140.5 NM</b> <b>(500 FT)</b>					<b>Before, see AIP Uzbekistan</b>

Route designator		[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	314° 133°	57.5 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Kyzylorda Tower” on frequencies 5335 kHz and 6672 kHz (as a backup), in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ RIMDO	431940N 0631837E <b>KZO</b> 222.0° 127.5 NM (500 FT)					
	313° 132°	23.0 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Kyzylorda Tower” on frequencies 5335 kHz and 6672 kHz (as a backup), in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
▲ BOLNA	433712N 0625812E <b>KZO</b> 232.0° 129.3 NM (500 FT)					

Route designator		[Route Usage Notes]				
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	312° 132°	9.3 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Kyzylorda Tower” on frequencies 5335 kHz and 6672 kHz (as a backup), in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ ADAKA	434416N 0624955E <b>KZO</b> <b>236.0° 131.1 NM</b> <b>(500 FT)</b>					
	312° 132°	35.1 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Kyzylorda Tower” on frequencies 5335 kHz and 6672 kHz (as a backup), in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ TOZLI	441054N 0621817E <b>KZO</b> <b>251.0° 143.4 NM</b> <b>(500 FT)</b>					

Route designator		[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	312° 131°	56.9 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Kyzylorda Tower” on frequencies 5335 kHz and 6672 kHz (as a backup), in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ LATNU	445345N 0612553E <b>ARL</b> <b>175.0° 116.1 NM</b> <b>(300 FT)</b>					
	311° 130°	42.3 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
▲ MILSO (FIR BDRY)	452519N 0604609E <b>ARL</b> <b>194.0° 91.4 NM</b> <b>(300 FT)</b>					
	310° 129°	65.3 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119 MHZ {C}
▲ ABDUN	461337N 0594316E <b>ARL</b> <b>236.0° 86.4 NM</b> <b>(300 FT)</b>					
	307° 125°	91.5 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119 MHZ {C}
▲ ARKER	471757N 0580839E <b>ARL</b> <b>271.0° 145.3 NM</b> <b>(300 FT)</b>					
	305° 125°	28.9 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
△ UDATO	473801N 0573755E <b>AKB</b> <b>163.0° 158.9 NM</b> <b>(700 FT)</b>					
	305° 124°	62.7 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
△ EKDAD	482100N 0562959E <b>AKB</b> <b>183.0° 117.7 NM</b> <b>(700 FT)</b>					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	304° 123°	16.3 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ In case of possible VHF radio communication failure at FL 120–FL 190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Ambarchik” on frequencies 4656 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ LOGTO	483204N 0561202E <b>AKB</b> <b>189.0° 110.7 NM</b> <b>(700 FT)</b>					
	303° 123°	13.8 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ In case of possible VHF radio communication failure at FL 120–FL 190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Ambarchik” on frequencies 4656 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ UGLUK	484125N 0555642E <b>AKB</b> <b>196.0° 106.1 NM</b> <b>(700 FT)</b>					
	303° 123°	14.2 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ In case of possible VHF radio communication failure at FL 120–FL 190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Ambarchik” on frequencies 4656 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}

Route designator		[Route Usage Notes]					
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks	
				↓	↑		
△ KURUL		485059N 0554051E <b>AKB</b> <b>203.0° 103.2 NM</b> <b>(700 FT)</b>					
	303° 122°	28.0 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Ambarchik” on frequencies 4656 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}	
△ AGMAN		490942N 0550920E <b>AKB</b> <b>218.0° 103.0 NM</b> <b>(700 FT)</b>					
	302° 121°	66.4 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Ambarchik” on frequencies 4656 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}	
▲ GERLI		495334N 0535254E <b>URL</b> <b>120.0° 117.1 NM</b> <b>(200 FT)</b>					
	301° 119°	73.8 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 131.4 MHZ {C}	
△ EDAKO		504120N 0522510E <b>URL</b> <b>119.0° 43.2 NM</b> <b>(200 FT)</b>					
	299° 119°	43.2 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 131.4 MHZ URALSK TOWER 119.7 MHZ {C}	
▲ URALSK DVOR/ DME (URL)		510855N 0513238E					

Route designator		[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	316° 135°	21.5 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 131.4 MHZ URALSK TOWER 119.7 MHZ {C}
△ OGAPI	512648N 0511336E <b>URL</b> <b>315.0° 21.5 NM</b> <b>(200 FT)</b>					
	316° 135°	16.3 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 131.4 MHZ URALSK TOWER 119.7 MHZ {C}
▲ GUTAN (FIR BDRY)	514024N 0505912E <b>URL</b> <b>316.0° 37.8 NM</b> <b>(200 FT)</b>					<b>For continuation, see AIP Russia</b>

Route designator		[Route Usage Notes]				
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
M166 (RNAV 5)		(1) Before, see AIP China (2) For continuation, see AIP Russia				
▲ SARIN (FIR BDRY)		465156N 0825317E <b>AGZ</b> <b>118.0° 118.2 NM</b> <b>(2200 FT)</b>				<b>Before, see AIP China</b>
	298° 117°	40.5 NM	FL 510 FL 150	Even	Odd	ALMATY ACC 132.1 MHZ {C}
▲ AGUSA		471400N 0820338E <b>AGZ</b> <b>117.0° 77.7 NM</b> <b>(2200 FT)</b>				
	297° 116°	37.8 NM	FL 510 FL 150	Even	Odd	ALMATY ACC 132.1 MHZ {C}
▲ TOLKI		473415N 0811640E <b>AGZ</b> <b>117.0° 39.9 NM</b> <b>(2200 FT)</b>				
	297° 117°	22.5 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
△ BANUM		474633N 0804834E <b>AGZ</b> <b>296.3° 17.3 NM</b> <b>(2200 FT)</b>				
	296° 116°	17.3 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
▲ AYAGUZ VOR/ DME (AGZ)		475552N 0802659E				

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	287° 105°	67.2 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
△ OSNER	482119N 0785409E <b>AGZ</b> <b>286.0° 67.2 NM</b> <b>(2200 FT)</b>					
	286° 104°	55.9 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
△ DODEM	484212N 0773614E <b>AGZ</b> <b>285.0° 123.0 NM</b> <b>(2200 FT)</b>					
	284° 103°	40.9 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Semey Tower” on frequencies 6645 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ TAGAL	485638N 0763825E <b>KRG</b> <b>102.0° 135.8 NM</b> <b>(1800 FT)</b>					
	283° 102°	19.2 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Semey Tower” on frequencies 6645 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
▲ GORBO (FIR BDRY)	490316N 0761100E <b>KRG</b> <b>099.0° 116.9 NM</b> <b>(1800 FT)</b>					

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 ↓      ↑	
	283° 102°	12.2 NM	FL 510 FL 120	Even	Odd
					ASTANA ACC 124.1 MHZ In case of possible VHF radio communication failure at FL 120–FL 190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Karaganda Tower” on frequencies 4728 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ ULKAP	490729N 0755332E <b>KRG</b> <b>101.0° 104.3 NM</b> <b>(1800 FT)</b>				
	282° 100°	60.5 NM	FL 510 FL 120	Even	Odd
△ ARLIH	492724N 0742621E <b>KRG</b> <b>100.0° 43.9 NM</b> <b>(1800 FT)</b>				
	280° 100°	43.9 NM	FL 510 FL 120	Even	Odd
▲ KARAGANDA DVOR/DME (KRG)	494114N 0732226E				
	273° 091°	46.3 NM	FL 510 FL 120	Even	Odd
△ SEHAL	494940N 0721215E <b>KRG</b> <b>271.0° 46.3 NM</b> <b>(1800 FT)</b>				
	271° 090°	39.2 NM	FL 510 FL 120	Even	Odd
▲ GURPI	495618N 0711236E <b>AST</b> <b>178.0° 64.4 NM</b> <b>(1200 FT)</b>				
	271° 090°	36.1 NM	FL 510 FL 120	Even	Odd
△ RELGO	500234N 0701730E <b>AST</b> <b>207.0° 72.3 NM</b> <b>(1200 FT)</b>				

Route designator		[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	269° 088°	37.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
△ INRIK	500744N 0692030E <b>ARK</b> <b>088.0° 90.1 NM</b> <b>(1300 FT)</b>					
	269° 088°	41.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
▲ VAMRI	501330N 0681645E <b>ARK</b> <b>087.0° 48.7 NM</b> <b>(1300 FT)</b>					
	267° 086°	48.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
▲ ARKALYK DVOR/DME (ARK)	501904N 0670118E					
	263° 082°	45.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
▲ KUSOT	502128N 0655110E <b>ARK</b> <b>262.0° 45.0 NM</b> <b>(1300 FT)</b>					
	262° 081°	59.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ ADEKU	502301N 0641824E <b>ARK</b> <b>261.0° 104.4 NM</b> <b>(1300 FT)</b>					
	261° 080°	50.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Kostanay Sector” on frequencies 4680 kHz and 4815 kHz (as a backup), in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ EMBEK	502333N 0625947E <b>ARK</b> <b>263.0° 154.8 NM</b> <b>(1300 FT)</b>					
	260° 079°	22.3 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		Controlling unit {Airspace class} Remarks		
				↓	↑			
▲ ABIRA (FIR BDRY)	502331N 062245E <b>KST</b> <b>181.0° 173.3 NM</b> <b>(600 FT)</b>							
	259° 078°	50.6 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}		
△ BESOL	502254N 0610548E <b>AKB</b> <b>078.0° 150.7 NM</b> <b>(700 FT)</b>							
	258° 076°	104.0 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}		
△ LITBA	501849N 0582332E <b>AKB</b> <b>076.0° 46.7 NM</b> <b>(700 FT)</b>							
	256° 075°	46.7 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 120.9 MHZ {C}		
▲ AKTOBE DVOR/ DME (AKB)	501548N 0571055E							
	262° 081°	43.1 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 120.9 MHZ {C}		
△ LARPI	501721N 0560345E <b>AKB</b> <b>261.0° 43.1 NM</b> <b>(700 FT)</b>							
	261° 080°	57.7 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}		
▲ SIVKO	501827N 0543349E <b>AKB</b> <b>260.0° 100.8 NM</b> <b>(700 FT)</b>							
	284° 102°	82.6 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 131.4 MHZ {C}		
△ VEVIK	505201N 0523529E <b>URL</b> <b>102.0° 43.1 NM</b> <b>(200 FT)</b>							
	283° 102°	43.2 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 131.4 MHZ URALSK TOWER 119.7 MHZ {C}		
▲ URALSK DVOR/ DME (URL)	510855N 0513238E							
	288° 107°	42.7 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 131.4 MHZ URALSK TOWER 119.7 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 ↓      ↑	Controlling unit {Airspace class} Remarks
▲ ARISA (FIR BDRY)	512924N 0503254E <b>URL</b> <b>288.0° 42.7 NM</b> <b>(200 FT)</b>				<b>For continuation, see AIP Russia</b>

Route designator	[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓      ↑	Controlling unit {Airspace class} Remarks
<b>M168 (RNAV 5)</b>					
▲ NETAT	403653N 0682413E <b>SMK</b> <b>198.0° 115.3 NM</b> <b>(1400 FT)</b>				<b>Before, see AIP Uzbekistan</b>
	041° 221°	11.1 NM	FL 510 FL 30	Odd      Even	TASHKENT ACC {C}
▲ IPRAR	404431N 0683447E <b>SMK</b> <b>195.0° 105.2 NM</b> <b>(1400 FT)</b>				<b>For continuation, see AIP Uzbekistan</b>

Route designator	[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓      ↑	Controlling unit {Airspace class} Remarks
<b>M168 (RNAV 5)</b>					
▲ ABGEN	405742N 0684248E <b>SMK</b> <b>195.0° 90.7 NM</b> <b>(1400 FT)</b>				<b>Before, see AIP Uzbekistan</b>
	003° 183°	9.5 NM	FL 510 FL 60	Odd      Even	TASHKENT ACC {C}
▲ ABEKA	410705N 0684442E <b>SMK</b> <b>196.0° 81.5 NM</b> <b>(1400 FT)</b>				

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	003° 183°	16.1 NM	FL 510 FL 70	Odd	Even	TASHKENT ACC {C}
▲ DODUR (FIR BDRY)	412300N 0684800E <b>SMK</b> <b>200.0° 65.9 NM</b> <b>(1400 FT)</b>					
	320° 139°	47.4 NM	FL 510 FL 70	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
▲ MIKNO	420200N 0681200E <b>SMK</b> <b>243.0° 59.0 NM</b> <b>(1400 FT)</b>					
	360° 180°	22.5 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
▲ LUZMI	422426N 0681456E <b>SMK</b> <b>266.0° 53.1 NM</b> <b>(1400 FT)</b>					
	360° 179°	25.1 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
△ RELRU	424925N 0681812E <b>TRK</b> <b>195.0° 32.5 NM</b> <b>(1000 FT)</b>					
	359° 179°	28.7 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
▲ GENDI	431800N 0682200E <b>TRK</b> <b>254.0° 9.4 NM</b> <b>(1000 FT)</b>					
	348° 168°	20.3 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ TURKISTAN TOWER 131.3 MHZ {C}
▲ GOBOR	433811N 0681918E <b>TRK</b> <b>323.0° 21.8 NM</b> <b>(1000 FT)</b>					
	348° 168°	30.5 NM	FL 510 9000 FT ALT	Even	Odd	SHYMKENT ACC 127.3 MHZ TURKISTAN TOWER 131.3 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		Controlling unit {Airspace class} Remarks	
				↓	↑		
△ TIMKA	440832N 0681511E <b>TRK</b> <b>337.0° 51.0 NM</b> <b>(1000 FT)</b>						
	348° 168°	18.6 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}	
△ REMOL	442704N 0681238E <b>TRK</b> <b>340.0° 69.4 NM</b> <b>(1000 FT)</b>						
	348° 167°	91.4 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}	
▲ BETPU (FIR BDRY)	455758N 0675945E <b>DZG</b> <b>166.0° 105.8 NM</b> <b>(1300 FT)</b>						
	347° 166°	34.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}	
△ ELSEB	463234N 0675439E <b>DZG</b> <b>166.0° 71.0 NM</b> <b>(1300 FT)</b>						
	348° 168°	27.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}	
△ BURIK	470012N 0675152E <b>DZG</b> <b>166.0° 43.3 NM</b> <b>(1300 FT)</b>						
	346° 166°	43.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ ZHEZKAZGAN TOWER 127.1 MHZ {C}	
▲ ZHEZKAZGAN DVOR/DME (DZG)	474317N 0674542E						
	340° 160°	43.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ ZHEZKAZGAN TOWER 127.1 MHZ {C}	
△ BEDOR	482529N 0673251E <b>DZG</b> <b>340.0° 43.1 NM</b> <b>(1300 FT)</b>						
	339° 158°	24.2 NM	FL 510 FL 120	Even	Odd	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		Controlling unit {Airspace class} Remarks
				↓	↑	
△ GORIM		484905N 0672456E				
		<b>DZG</b> <b>339.0° 67.3 NM</b> <b>(1300 FT)</b>				
	342° 161°	70.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
▲ EDETO		495808N 0670732E				
		<b>ARK</b> <b>159.0° 21.3 NM</b> <b>(1300 FT)</b>				
	339° 159°	21.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
▲ ARKALYK DVOR/ DME (ARK)		501904N 0670118E				
	329° 145°	157.9 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ GITNA		524459N 0652518E				
		<b>KST</b> <b>100.0° 72.4 NM</b> <b>(600 FT)</b>				
	325° 143°	103.4 NM	FL 510 FL 210	Even	Odd	ASTANA ACC 133.1 MHZ {C}
▲ NELTI (FIR BDRY)		541942N 0641630E				<b>For continuation, see AIP Russia</b>
		<b>KST</b> <b>008.0° 73.1 NM</b> <b>(600 FT)</b>				

Route designator		[Route Usage Notes]				
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
<b>M199</b> (RNAV 5)						
▲ MULTA (FIR BDRY)		510442N 0565042E				<b>Before, see AIP Russia</b>
		<b>AKB</b> <b>335.0° 50.6 NM</b> <b>(700 FT)</b>				
	154° 335°	50.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 120.9 MHZ {C}
▲ AKTOBE DVOR/ DME (AKB)		501548N 0571055E				

Route designator		[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	131° 312°	42.0 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 120.9 MHZ {C}
△ ODILA	494259N 0575122E <b>AKB</b> <b>131.0° 41.9 NM</b> <b>(700 FT)</b>					
	132° 312°	27.0 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
△ KEKUN	492143N 0581653E <b>AKB</b> <b>131.0° 69.0 NM</b> <b>(700 FT)</b>					
	132° 313°	37.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
△ RILBA	485158N 0585148E <b>AKB</b> <b>132.0° 106.6 NM</b> <b>(700 FT)</b>					
	133° 314°	69.7 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
▲ RESDO	475618N 0595446E <b>ARL</b> <b>304.0° 96.4 NM</b> <b>(300 FT)</b>					
	134° 314°	14.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119 MHZ {C}
△ ARSAN	474436N 0600738E <b>ARL</b> <b>303.0° 82.1 NM</b> <b>(300 FT)</b>					
	134° 317°	114.0 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119 MHZ {C}
▲ AVLAK (FIR BDRY)	461214N 0614508E <b>ARL</b> <b>163.0° 37.7 NM</b> <b>(300 FT)</b>					
	137° 317°	27.3 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
▲ INKUM	454952N 0620739E <b>ARL</b> <b>151.0° 63.3 NM</b> <b>(300 FT)</b>					

Route designator		[Route Usage Notes]					
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks	
				↓	↑		
M610 (RNAV 5)							
▲ AZABI (FIR BDRY)		444424N 0493000E <b>AKT</b> <b>301.0° 85.2 NM</b> <b>(100 FT)</b>					<b>Before, see AIP Russia</b>
	069° 251°	123.4 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 134.3 MHZ {C}	
▲ LAROS		451010N 0521956E <b>AKT</b> <b>027.0° 95.0 NM</b> <b>(100 FT)</b>					
	071° 252°	62.4 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}	
▲ ANIGA		452130N 0534647E <b>BNU</b> <b>262.0° 56.8 NM</b> <b>(0 FT)</b>					
	073° 255°	165.5 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}	
▲ DIVNO		454418N 0574000E <b>BNU</b> <b>070.0° 109.9 NM</b> <b>(0 FT)</b>					
	089° 271°	132.1 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119 MHZ In case of possible VHF radio communication failure at FL 120–FL 190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Ambarchik” on frequencies 4656 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}	
▲ MILSO (FIR BDRY)		452519N 0604609E <b>ARL</b> <b>194.0° 91.4 NM</b> <b>(300 FT)</b>					
	092° 273°	47.0 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}	
△ OLINA		451645N 0615140E <b>ARL</b> <b>165.0° 93.4 NM</b> <b>(300 FT)</b>					
	093° 274°	29.9 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 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		Controlling unit {Airspace class} Remarks
				↓	↑	
▲ TUKNA	451058N 0623308E <b>ARL</b> <b>150.0° 106.1 NM</b> <b>(300 FT)</b>					
	094° 275°	41.0 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
▲ UNITO	450238N 0632952E <b>KZO</b> <b>275.0° 90.6 NM</b> <b>(500 FT)</b>					
	095° 275°	48.7 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
△ NATUS	445208N 0643650E <b>KZO</b> <b>277.0° 41.9 NM</b> <b>(500 FT)</b>					
	096° 276°	11.8 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ KYZYLORDA TOWER 120.9 {C}
△ GIGUR	444920N 0645300E <b>KZO</b> <b>277.0° 30.1 NM</b> <b>(500 FT)</b>					
	097° 278°	30.1 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ KYZYLORDA TOWER 120.9 {C}
▲ KYZYLORDA DVOR/DME (KZO)	444145N 0653349E					
	097° 278°	44.5 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ KYZYLORDA TOWER 120.9 {C}
△ RINET	443026N 0663402E <b>KZO</b> <b>098.0° 44.5 NM</b> <b>(500 FT)</b>					
	099° 280°	43.1 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
△ BIMDO	441809N 0673135E <b>TRK</b> <b>315.0° 74.3 NM</b> <b>(1000 FT)</b>					
	100° 281°	32.8 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
△ TIMKA	440832N 0681511E <b>TRK</b> <b>337.0° 51.0 NM</b> <b>(1000 FT)</b>					
	101° 281°	22.8 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 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 ↓      ↑		Controlling unit {Airspace class} Remarks
▲ LIMTO	440138N 0684518E <b>TRK</b> <b>004.0° 42.8 NM</b> <b>(1000 FT)</b>					
	101° 283°	96.5 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
▲ ARBOL	433055N 0705137E <b>TAR</b> <b>329.0° 42.9 NM</b> <b>(2200 FT)</b>					
	078° 260°	126.4 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
▲ TOMGO	434146N 0734454E <b>TAR</b> <b>060.0° 118.9 NM</b> <b>(2200 FT)</b>					
	086° 267°	19.6 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ In case of possible VHF radio communication failure at FL 120–FL 190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Approach” on frequencies 4744 kHz. - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
▲ BERV (FIR BDRY)	434059N 0741156E <b>ATA</b> <b>274.2° 127.3 NM</b> <b>(2200 FT)</b>					
	087° 268°	58.1 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ {C}
△ TIPSA	433809N 0753149E <b>ATA</b> <b>278.4° 69.7 NM</b> <b>(2200 FT)</b>					
	088° 268°	34.8 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
▲ USUGA	433600N 0761934E <b>ATA</b> <b>287.3° 35.8 NM</b> <b>(2200 FT)</b>					
	085° 265°	21.0 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		Controlling unit {Airspace class} Remarks
				↓	↑	
△ UNADA	433551N 0764831E <b>ATA</b> <b>312.8° 18.0 NM</b> <b>(2200 FT)</b>					
	085° 266°	6.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ BEDUR	433546N 0765739E <b>ATA</b> <b>332.7° 14.3 NM</b> <b>(2200 FT)</b>					
	085° 266°	8.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ PEKIR	433539N 0770931E <b>ATA</b> <b>008.5° 13.5 NM</b> <b>(2200 FT)</b>					
	087° 268°	15.3 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ TIRBA	433456N 0773031E <b>ATA</b> <b>050.8° 22.3 NM</b> <b>(2200 FT)</b>					
	086° 266°	24.3 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ PIGAL	433428N 0780356E <b>ATA</b> <b>068.9° 44.5 NM</b> <b>(2200 FT)</b>					
	086° 267°	51.7 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ {C}
▲ BASPI	433257N 0791501E <b>JRK</b> <b>212.0° 51.0 NM</b> <b>(2600 FT)</b>					
	087° 268°	24.3 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ {C}
▲ BERTO	433159N 0794824E <b>JRK</b> <b>184.0° 42.2 NM</b> <b>(2600 FT)</b>					
	088° 269°	40.5 NM	FL 510 FL 140	Odd	Even	ALMATY ACC 131.4 MHZ {C}
▲ RULAD (FIR BDRY)	433001N 0804359E <b>JRK</b> <b>138.0° 55.2 NM</b> <b>(2600 FT)</b>					<b>For continuation, see AIP China</b>

Route designator		[Route Usage Notes]					
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks	
				↓	↑		
M618 (RNAV 5)		For Continuation, see AIP Russia					
▲ UML0D		432218N 0750715E <b>ATA</b> <b>265.4° 85.9 NM</b> <b>(2200 FT)</b>					
	033° 213°	47.0 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ {C}	
▲ AGUNA		435906N 0754739E <b>ATA</b> <b>298.4° 67.1 NM</b> <b>(2200 FT)</b>					
	035° 216°	185.0 NM	FL 510 FL 210	Odd	Even	ALMATY ACC 133.1 MHZ {C}	
▲ LIPSI		461808N 0784001E <b>TDK</b> <b>002.0° 72.5 NM</b> <b>(2000 FT)</b>					
	038° 219°	70.3 NM	FL 510 FL 210	Odd	Even	ALMATY ACC 132.1 MHZ {C}	
△ GOMAL		470809N 0795150E <b>AGZ</b> <b>200.0° 53.4 NM</b> <b>(2200 FT)</b>					
	039° 220°	54.3 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}	
△ BANUM		474633N 0804834E <b>AGZ</b> <b>296.3° 17.3 NM</b> <b>(2200 FT)</b>					
	039° 221°	132.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}	
▲ NEMEG		491804N 0831242E <b>UKM</b> <b>332.4° 51.4 NM</b> <b>(1000 FT)</b>					
	042° 223°	78.3 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}	
▲ GOMIR (FIR BDRY)		501042N 0844206E <b>UKM</b> <b>079.0° 85.2 NM</b> <b>(1000 FT)</b>				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		Controlling unit {Airspace class} Remarks	
				↓	↑		
M741 (RNAV 5)		(2) Before, see AIP Uzbekistan (3) For continuation, see AIP Russia					
▲ ASLOK		410548N 0671954E <b>SMK</b> <b>224.0° 121.8 NM</b> <b>(1400 FT)</b>					<b>Before, see AIP Uzbekistan</b>
	345° 165°	36.2 NM	FL 510 FL 210	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}	
▲ RITAL (FIR BDRY)		414130N 0671206E <b>SMK</b> <b>241.0° 108.2 NM</b> <b>(1400 FT)</b>					
	341° 160°	24.5 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}	
△ ESKIZ		420521N 0670429E <b>TRK</b> <b>216.0° 99.6 NM</b> <b>(1000 FT)</b>					
	340° 160°	55.9 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}	
▲ PAVEL		425947N 0664642E <b>TRK</b> <b>249.0° 81.5 NM</b> <b>(1000 FT)</b>					
	343° 163°	16.2 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}	
▲ GEKSO		431544N 0664228E <b>TRK</b> <b>260.0° 82.1 NM</b> <b>(1000 FT)</b>					
	343° 162°	63.3 NM	FL 510 FL 150	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}	
△ GITIM		441752N 0662540E <b>KZO</b> <b>116.0° 44.1 NM</b> <b>(500 FT)</b>					
	344° 163°	105.2 NM	FL 510 FL 150	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}	
△ ANIGO		460143N 0660207E <b>KZO</b> <b>007.0° 82.4 NM</b> <b>(500 FT)</b>					
	343° 162°	43.3 NM	FL 510 FL 150	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}	
▲ LUGER (FIR BDRY)		464426N 0655200E <b>DZG</b> <b>223.0° 97.3 NM</b> <b>(1300 FT)</b>					

Route designator		[Route Usage Notes]				
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	339° 158°	84.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ INKOL	480633N 0652413E <b>DZG</b> <b>276.0° 97.8 NM</b> <b>(1300 FT)</b>					
	338° 157°	19.5 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ EKLOP	482530N 0651734E <b>DZG</b> <b>285.0° 107.9 NM</b> <b>(1300 FT)</b>					
	337° 157°	31.9 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ REGPI	485632N 0650629E <b>ARK</b> <b>213.0° 111.5 NM</b> <b>(1300 FT)</b>					
	337° 157°	24.9 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ ARBIM	492045N 0645739E <b>ARK</b> <b>223.0° 99.1 NM</b> <b>(1300 FT)</b>					
	338° 157°	34.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ IPKOD	495415N 0644617E <b>ARK</b> <b>245.0° 90.4 NM</b> <b>(1300 FT)</b>					
	337° 157°	13.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ LAMGI	500657N 0644154E <b>ARK</b> <b>251.0° 90.3 NM</b> <b>(1300 FT)</b>					
	337° 156°	42.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ ERNEN	504754N 0642731E <b>ARK</b> <b>277.0° 102.2 NM</b> <b>(1300 FT)</b>					
	336° 156°	45.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ NARUR	513200N 0641130E <b>KST</b> <b>155.0° 102.0 NM</b> <b>(600 FT)</b>					

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	FL series		Controlling unit {Airspace class} Remarks
			Lower limit	↓	↑	
	336° 155°	43.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ BALOK	521416N 0635540E <b>KST</b> <b>155.0° 58.6 NM</b> <b>(600 FT)</b>					
	335° 155°	58.6 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ KOSTANAY TOWER 129.3 MHZ {C}
▲ KOSTANAY DVOR/DME (KST)	531113N 0633346E					
	318° 137°	63.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ KOSTANAY TOWER 129.3 MHZ {C}
▲ LANOR (FIR BDRY)	540536N 0624042E <b>KST</b> <b>318.0° 63.0 NM</b> <b>(600 FT)</b>					<b>For continuation, see AIP Russia</b>

Route designator		[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
M875 (RNAV 5)						
▲ TIGTA (FIR BDRY)		432728N 0620446E  KZO 235.0° 168.0 NM (500 FT)				
	328° 147°	46.2 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Kyzylorda Tower” on frequencies 5335 kHz and 6672 kHz (as a backup), in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}

Route designator		[Route Usage Notes]						
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks		
				↓	↑			
△ FAZUL	440916N 0613731E <b>ARL</b> <b>171.0° 160.3 NM</b> <b>(300 FT)</b>							
	327° 146°	84.4 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}		
▲ MILSO (FIR BDRY)	452519N 0604609E <b>ARL</b> <b>194.0° 91.4 NM</b> <b>(300 FT)</b>							
	327° 145°	152.0 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119 MHZ {C}		
▲ RUGUS	474250N 0591219E <b>ARL</b> <b>289.0° 112.1 NM</b> <b>(300 FT)</b>							
	327° 145°	131.6 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}		
△ ODILA	494259N 0575122E <b>AKB</b> <b>131.0° 41.9 NM</b> <b>(700 FT)</b>							
	325° 143°	90.5 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 120.9 MHZ {C}		
▲ MULTA (FIR BDRY)	510442N 0565042E <b>AKB</b> <b>335.0° 50.6 NM</b> <b>(700 FT)</b>							

Route designator		[Route Usage Notes]				
Significant Point Name		Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation			Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
M993 (RNAV 5)		(1) Before, see AIP Russia				
▲ GOMIR (FIR BDRY)		501042N 0844206E  UKM 079.0° 85.2 NM (1000 FT)				Before, see AIP Russia
	259° 078°	42.5 NM	FL 510 FL 130	Even	Odd	ALMATY ACC 132.1 MHZ {C}
△ DEVNA		500647N 0833619E  UKM 078.0° 42.7 NM (1000 FT)				

Route designator		[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	258° 077°	42.7 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ UST-KAMENOGORSK TOWER 130.1 MHZ {C}
▲ UST-KAMENOGORSK DVOR/DME (UKM)	500158N 0823031E					
	253° 071°	51.9 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ UST-KAMENOGORSK TOWER 130.1 MHZ {C}
▲ NOKNA	495154N 0811139E <b>SEM</b> <b>122.0° 46.9 NM</b> <b>(700 FT)</b>					
	251° 070°	36.1 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ SEMEY TOWER 128.0 MHZ {C}
△ ROKOD	494408N 0801719E <b>SEM</b> <b>170.0° 36.9 NM</b> <b>(700 FT)</b>					
	250° 070°	21.3 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ SEMEY TOWER 128.0 MHZ {C}
△ UVTOK	493924N 0794524E <b>SEM</b> <b>197.0° 45.7 NM</b> <b>(700 FT)</b>					
	250° 069°	35.5 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
△ NONRI	493111N 0785223E <b>SEM</b> <b>219.0° 72.9 NM</b> <b>(700 FT)</b>					
	249° 068°	52.2 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
△ AKASA	491819N 0773455E <b>SEM</b> <b>231.0° 120.9 NM</b> <b>(700 FT)</b>					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	248° 067°	30.4 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ In case of possible VHF radio communication failure at FL 120–FL 190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Semey Tower” on frequencies 6645 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ ESUMA	491025N 0765006E <b>KRG</b> <b>095.0° 139.0 NM</b> <b>(1800 FT)</b>					
	247° 066°	26.7 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ In case of possible VHF radio communication failure at FL 120–FL 190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Semey Tower” on frequencies 6645 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
▲ GORBO (FIR BDRY)	490316N 0761100E <b>KRG</b> <b>099.0° 116.9 NM</b> <b>(1800 FT)</b>					
	248° 067°	14.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ In case of possible VHF radio communication failure at FL 120–FL 190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Karaganda Tower” on frequencies 4728 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓      ↑		Controlling unit {Airspace class} Remarks
△ LALAS	485941N 0755014E <b>KRG</b> <b>105.0° 105.2 NM</b> <b>(1800 FT)</b>					
	249° 068°	31.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
△ IRGIT	485220N 0750436E <b>KRG</b> <b>118.0° 82.9 NM</b> <b>(1800 FT)</b>					
	246° 065°	45.2 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
△ GONEL	483912N 0735912E <b>KRG</b> <b>150.0° 66.6 NM</b> <b>(1800 FT)</b>					
	246° 066°	37.5 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
△ LUTEK	482853N 0730459E <b>KRG</b> <b>180.0° 73.3 NM</b> <b>(1800 FT)</b>					
	245° 063°	64.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Karaganda Tower” on frequencies 4728 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
▲ ALEGA	480900N 0713249E <b>KRG</b> <b>209.0° 117.2 NM</b> <b>(1800 FT)</b>					

Route designator		[Route Usage Notes]				
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	244° 063°	31.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ In case of possible VHF radio communication failure at FL 120–FL 190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Zhezkazgan Tower” on frequencies 4850 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
▲ KUROL	475900N 0704800E <b>DZG</b> <b>075.0° 123.8 NM</b> <b>(1300 FT)</b>					
	256° 074°	80.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ AMASO	474914N 0684857E <b>DZG</b> <b>074.0° 43.1 NM</b> <b>(1300 FT)</b>					
	254° 073°	43.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ ZHEZKAZGAN TOWER 127.1 MHZ {C}
▲ ZHEZKAZGAN DVOR/DME (DZG)	474317N 0674542E					
	286° 104°	43.2 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ ZHEZKAZGAN TOWER 127.1 MHZ {C}
△ DINBO	480029N 0664647E <b>DZG</b> <b>284.0° 43.2 NM</b> <b>(1300 FT)</b>					
	285° 103°	64.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ EKLOP	482530N 0651734E <b>DZG</b> <b>285.0° 107.9 NM</b> <b>(1300 FT)</b>					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation				Remarks	
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series		Controlling unit {Airspace class} Remarks
				↓	↑	
	283° 101°	74.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Zhezkazgan Tower” on frequencies 4850 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ GOSPA	485256N 0633233E <b>ARL</b> <b>024.0° 145.9 NM</b> <b>(300 FT)</b>					
	281° 100°	39.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ In case of possible VHF radio communication failure at FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Kostanay Sector” on frequencies 4680 kHz and 4815 kHz (as a backup), in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
▲ BEDRU (FIR BDRY)	490642N 0623638E <b>ARL</b> <b>008.0° 143.0 NM</b> <b>(300 FT)</b>					
	280° 096°	179.2 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
△ ADRAT	500334N 0581528E <b>AKB</b> <b>096.0° 43.3 NM</b> <b>(700 FT)</b>					
	276° 096°	43.3 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 120.9 MHZ {C}
▲ AKTOBE DVOR/ DME (AKB)	501548N 0571055E					

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**ENR 4 RADIO NAVIGATION AIDS/SYSTEMS****ENR 4.1 RADIO NAVIGATION AIDS — EN-ROUTE**

Name of station (VAR) (VOR: Declination)	ID	Frequency (CH)	Hours of operation	Coordinates	ELEV DME antenna	Remarks
1	2	3	4	5	6	7
AKTAU DVOR/DME (8E/2021)	AKT	113.3 MHZ CH 80X	H24	435220N 0510352E	100 FT	
AKTOBE DVOR/DME (11E/2020)	AKB	113,4 MHZ CH 81X	H24	501548N 0571055E	700 FT	
ALMATY DVOR/DME (5E/2023)	ATA	116.4 MHZ CH 111X	H24	432229N 0770507E	2200 FT	
ARALSK DVOR/DME (9E/2020)	ARL	113.6 MHZ CH 83X	H24	464932N 0613705E	300 FT	
ARKALYK DVOR/DME (10E/2014)	ARK	113 MHZ CH 77X	H24	501904N 0670118E	1300 FT	
ASTANA DVOR/DME (10E/2013)	AST	114.4 MHZ CH 91X	H24	510006N 0712600E	1200 FT	
ATYRAU DVOR/DME (9E/2013)	ATR	112,3 MHZ CH 70X	H24	470838N 0514805E	0 FT	
AYAGUZ VOR/DME (6E/2014)	AGZ	113.6 MHZ CH 83X	H24	475552N 0802659E	2200 FT	
BALKHASH DVOR/DME (7E/2020)	BLH	113.7 MHZ CH 84X	H24	465259N 0745902E	1400 FT	
BEINEU VOR/DME (7E/1999)	BNU	115 MHZ CH 97X	H24	452023N 0550721E	0 FT	
JARKENT DVOR/DME	JRK	114,8 MHZ CH 95X	H24	441344N 0795719E	2600 FT	
KARAGANDA DVOR/DME (8E/2013)	KRG	113.4 MHZ CH 81X	H24	494114N 0732226E	1800 FT	
KOKSHETAU VOR/DME (11E/2013)	KTU	115,5 MHZ CH 102X	H24	532103N 0693701E	900 FT	
KOSTANAY DVOR/DME (13E/2022)	KST	114.8 MHZ CH 95X	H24	531113N 0633346E	600 FT	
KYZYLORDA DVOR/DME (7E/2022)	KZO	112.7 MHZ CH 74X	H24	444145N 0653349E	500 FT	

Name of station (VAR) (VOR: Declination)	ID	Frequency (CH)	Hours of operation	Coordinates	ELEV DME antenna	Remarks
1	2	3	4	5	6	7
PAVLODAR DVOR/DME (9E/2013)	PVL	114 MHZ CH 87X	H24	521235N 0770542E	500 FT	
PETROPAVLOVSK DVOR/DME (12E/2017)	PSK	112,5 MHZ CH 72X	H24	544703N 0691309E	500 FT	
SEMEY DVOR/DME (7E/2014)	SEM	115,3 MHZ CH 100X	H24	502059N 0801438E	700 FT	
SHYMKENT DVOR/DME (6E/2013)	SMK	113 MHZ CH 77X	H24	422220N 0692631E	1400 FT	
TALDYKORGAN DVOR/DME (5E/2014)	TDK	116,1 MHZ CH 108X	H24	450622N 0782548E	2000 FT	
TARAZ DVOR/DME (6E/2013)	TAR	115,9 MHZ CH 106X	H24	425214N 0711654E	2200 FT	
TURKISTAN DVOR/DME (6E/2019)	TRK	114,6 MHZ CH 93X	H24	431932N 0683446E	1000 FT	
URALSK DVOR/DME (11E/2015)	URL	114,2 MHZ CH 89X	H24	510855N 0513238E	200 FT	
URDZHAR NDB (5E/2017)	UGN	460 KHZ	HO	470534N 0813933E		
UST-KAMENOGORSK DVOR/DME (6E/2021)	UKM	115 MHZ CH 97X	H24	500158N 0823031E	1000 FT	
ZAISAN NDB (5E/2017)	ZSN	552 KHZ	HO	472906N 0845308E		
ZHEZKAZGAN DVOR/DME (9E/2023)	DZG	113,3 MHZ CH 80X	H24	474317N 0674542E	1300 FT	

**ENR 4.4 NAME CODE DESIGNATORS FOR SIGNIFICANT POINTS**

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
ABDAM	513051N 0781707E	T649, Z584	
ABDIB	435743N 0505211E		TMA UATE
ABDUN	461337N 0594316E	L139, M161, N161	
ABEBA	442957N 0740248E	M34	
ABEKA	410705N 0684442E	M168	
ABELI	513524N 0751312E	L988, N996, W358, Z160, Z746	
ABENU	502909N 0684952E	L86	
ABEVO	405000N 0683442E	P180	
ABGEN	405742N 0684248E	M168	
ABIGU	474742N 0630108E	L51, N167	
ABIRA	502331N 0622455E	M166	
ABMIK	455616N 0743604E	M34, N102, Z583	
ABONA	461133N 0751857E	N170	
ABOTO	492544N 0830521E	Z727	
ABRAS	514331N 0771053E	L988, P984	
ABREK	462025N 0763143E	N126	
ABULA	495910N 0682343E	L86	
ABULU	480139N 0555532E	L992	
ABURA	473345N 0664312E	N161	
ADABA	435820N 0762009E	L143, L855, N170, Z583, Z584	
ADAKA	434416N 0624955E	L855, M161	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
ADARO	504706N 0815242E	B833, G96, N37, Z727	
ADASA	524618N 0751436E	P179	
ADAZA	434304N 0645326E	N990	
ADEBA	533925N 0704004E	T586	
ADEDA	423438N 0514628E	N73, Z581	
ADEKU	502301N 0641824E	M166, N167	
ADESA	420940N 0694854E	L139, Z580	
ADETA	500015N 0773321E	M149, N37, P984	
ADIRO	445011N 0752356E	M149, N143	
ADLAN	495132N 0792510E	N102	
ADLIK	482457N 0614611E	L985	
ADLIM	443715N 0652222E		TMA UA00
ADLON	530129N 0704047E	N985, Z160	
ADODA	523230N 0750554E	N985, W361, Z584	
ADOKA	482224N 0671842E	L145	
ADOLU	502039N 0795401E		TMA UASS
ADONU	454418N 0683532E	P178	
ADPAK	444919N 0520844E	N102, Q198	
ADRAT	500334N 0581528E	M993	
ADREM	442548N 0643118E	L163, M75	
ADRIK	480432N 0684119E	L51, W351	
ADRIIM	461940N 0805137E	N993	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
ADUMI	460903N 0613915E	L163	
AGADI	480559N 0733338E	L998, N126, Z624	
AGAKA	463544N 0805503E	N993	
UNABO	474352N 0714935E	L26, N161	
AGATU	493220N 0594622E	L147, L162	
AGEBO	474010N 0672652E		TMA UAKD
AGERA	430738N 0672650E	N147, N987	
AGILA	444901N 0515422E	N996, Q198	
AGINU	494800N 0761100E	M34, N37, N993	
AGLEK	433045N 0744744E	Z370, Z817	
AGMAN	490942N 0550920E	M161, N60	
AGMEN	471352N 0513428E		TMA UATG
AGMUR	450056N 0644106E	L86, L139	
AGNAT	463927N 0775115E	L143	
AGNIM	453221N 0543918E	L992, P574	
AGPIN	483931N 0754146E	M34	
AGTAZ	423211N 0725439E		See route V-15 in the list of airways of the Kyrgyz Republic - KAN.KG/EN/AIS
AGUNA	435906N 0754739E	M149, M618, Z589	
AGURO	511525N 0715011E		TMA UACC
AGURU	532928N 0694548E		TMA UACK
AGUSA	471400N 0820338E	M166	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
AKALI	440829N 0611937E	L165, L985	
AKASA	491819N 0773455E	M993, P984	
AKAZU	404218N 0683815E	L170	
AKELI	494707N 0681322E	L86	
AKIBU	465522N 0515013E		TMA UATG
AKIMU	444353N 0731255E	N147	
AKIRA	454323N 0771829E	L143, Z160	
AKITU	483624N 0681921E	L26, N37, N990	
AKOSO	534140N 0650940E	N60, W355	
AKUKU	425036N 0510509E	P574	
ALABA	481845N 0553938E	L988, N73, T586	
ALAKO	441958N 0735903E	M34, T524	
ALDAZ	464232N 0523825E		TMA UATG
ALEGA	480900N 0713249E	M993	
ALFIL	485654N 0700340E	N37	
ALGAS	504613N 0581203E	A357, N60	
ALILA	454830N 0800916E	L26	
ALOLI	431841N 0764421E		TMA UAAA
ALOTO	445010N 0530653E	N73, P574, Q198	
ALUGI	434745N 0780816E	Z315	TMA UAAA
AMABU	445737N 0781952E		TMA UAAT
AMASO	474914N 0684857E	M993, N161	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
AMIGU	491645N 0692517E	M75, P178, Z586	
AMIKA	432238N 0761952E		TMA UAAA
AMOHA	454502N 0505523E	L736	
AMOLA	523853N 0715604E	M75, Z160	
AMREK	452109N 0660226E	N990, W332	
AMUTU	504649N 0711721E		TMA UACC
ANELI	444956N 0743510E	Z589	
ANESA	424006N 0703654E	N143, Z580	
ANIDU	451707N 0783318E		TMA UAAT
ANIGA	452130N 0534647E	M158, M610	
ANIGO	460143N 0660207E	M75, M741	
ANTOH	530853N 0685629E		RR-3, RR-7
APSEN	440338N 0771854E	P984	
APTOG	422520N 0691235E		TMA UAI
APTOK	503035N 0750940E	Z160	
APTUS	505558N 0704601E	L988, N996, T523	
ARBIM	492045N 0645739E	L26, M741, P574	
ARBOL	433055N 0705137E	L145, L728, M610, N102, Z621	RR-2
ARDIK	521459N 0642204E	L145	
ARGER	493808N 0725855E		TMA UAKK
ARHIM	492317N 0830743E	N143, Z727	
ARISA	512924N 0503254E	G3, L736, M166	RR-1, RR-5, RR-8

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
ARKAM	471135N 0643220E	N161	
ARKER	471757N 0580839E	M161, N55	
ARLIF	433927N 0524039E	N161, N193	
ARLIH	492724N 0742621E	M166, W348	
ARMIK	474512N 0664137E	L51	
ARNUS	430052N 0533509E	L992, T916	
ARSAN	474436N 0600738E	L51, M199, P574	
ARSUL	422600N 0685000E	Z380, Z578, Z632	
ARTOT	425650N 0710100E		TMA UADD
ARVAR	432233N 0691027E	Z621	
ASDET	511633N 0713946E		TMA UACC
ASDIB	511544N 0514610E		TMA UARR
ASDON	532134N 0631638E		TMA UAUU
ASDUK	520012N 0765857E		TMA UASP
ASLIK	470509N 0681542E	L145	
ASLOK	410548N 0671954E	M741, N987	RR-6
ASNAP	502302N 0565926E		TMA UATT
ASTIK	502734N 0691434E	L998, P574	
ATBAN	515824N 0682152E	L994, N987, Z624, T523	
ATBER	530311N 0634911E		TMA UAUU
ATNAL	435307N 0533948E	N55, N154	
ATNON	521149N 0673350E	L994, N55	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
ATNUR	444559N 0500948E	L864, N193, Q198	
ATPOR	445123N 0784955E	N126, Z370	
ATRAN	422321N 0660522E	Z621	
ATRUS	465302N 0670715E	L147, N990	
AVLAK	461214N 0614508E	M199	
AZABI	444424N 0493000E	A87, M610, Q161, Q198	RR-4
AZITI	433936N 0764351E		RR-2, RR-7
AZORI	480139N 0721512E	Z583	
BABUR	452312N 0493000E	N102, N193	
BADAS	442221N 0643656E	L163, L855	
BAGED	471628N 0650016E	L728, N161	
BAGIL	473425N 0741044E	L998	
BAGIR	490131N 0514106E	M158, W324	
BAGNA	434754N 0775719E	Z315, Z370	
BAGNU	530720N 0755304E	P984	
BAGOB	495029N 0823755E		TMA UASK
BAGUT	502745N 0803139E		TMA UASS
BAKID	462633N 0622354E	N167	
BAKIS	440031N 0764333E	L998, W333	
BALGO	430234N 0733602E	M34	
BALIG	431944N 0515018E	Q161	RR-2, RR-4
BALMI	531107N 0704613E	W361, Z584	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
BALOK	521416N 0635540E	M741	TMA UAUU
BALOL	502308N 0772831E	P984	
BALUN	420100N 0512742E	N55, N73	
BAMAN	451700N 0823700E	L26	
BAMAT	504125N 0781025E	L994, M149	
BAMET	463042N 0663051E	M75	
BAMIK	523517N 0620524E	N60	
BAMOM	505814N 0512427E		TMA UARR
BAMUT	415121N 0692445E	Z554, Z580	
BANOS	501116N 0723844E	N170, W333	
BANOV	503704N 0830918E	L135	
BANUM	474633N 0804834E	M166, M618	
BAPER	433011N 0534642E	L992, N193	
BARAR	425030N 0700344E	N102	
BARKI	545153N 0710000E	A357, N60	
BARSI	530153N 0695555E		TMA UACK
BARUR	443207N 0791739E	N126	
BASAN	433420N 0735429E	L147	
BASPA	502144N 0704001E	M75, Z624	
BASPI	433257N 0791501E	L138, M610	
BASPU	471514N 0525046E	L51	
BASUN	440216N 0505614E		TMA UATE

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
BATAD	500554N 0640927E	N167	
BATEG	445958N 0781301E		TMA UAAT
BAVAG	531819N 0665235E	N985, T522, W361, Z584	
BEBLU	544630N 0665030E	N167, N170, T522	RR-7
BEDIT	500537N 0821029E		TMA UASK
BEDKA	501318N 0721545E	T523	
BEDMU	541215N 0704523E	P179	
BEDNU	420007N 0692621E	Z554	
BEDOR	482529N 0673251E	M168, N987, W332	
BEDRU	490642N 0623638E	M993	
BEDUR	433546N 0765739E	L998, M610	
BEKAS	514029N 0515327E	L163, M56	
BEKOR	494513N 0623050E	L26, L988, N55	
BEKRO	434850N 0753952E	T524	
BERTO	433159N 0794824E	M610, Z315	
BERVI	434059N 0741156E	M610	
BESOL	502254N 0610548E	M166, T586	
BETIK	480807N 0665309E	L86, Z164	
BETPU	455758N 0675945E	M168	
BIKLU	532548N 0633314E		TMA UAUU
BIKRI	472814N 0752625E	M149	
BIKTO	531235N 0691745E		TMA UACK

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
BILGA	483452N 0552426E	Z210	
BILMO	430414N 0711143E		TMA UADD
BIMDO	441809N 0673135E	M610, N987	
BIMSO	531631N 0652038E	W361, Z584	
BINBU	530105N 0634057E		TMA UAUU
BINRI	432607N 0751309E	L143, Z370	
BIOTA	442124N 0764224E	Z584	
BIPSO	521614N 0772311E		TMA UASP
BITNU	520734N 0764609E		TMA UASP
BOBRO	440648N 0744228E	T524	
BODNU	502346N 0750918E	T649, Z160	
BODSI	445034N 0541914E	L992, M158, N37, Q198	RR-2
BOGDI	432517N 0741622E	Z817	
BOKIS	505736N 0833312E	L135	
BOLGO	494300N 0563525E	Z210	
BOLNA	433712N 0625812E	M161	
BOLSU	511507N 0725620E	L988, N996, W358, Z553	
BOMKA	420232N 0691624E	P178	
BONZU	481815N 0833043E	Z208	
BORIS	425127N 0660533E	N147	
BUDER	521310N 0632052E	L165	TMA UAUU
BUDET	445507N 0645824E	L139, M75	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
BUDUL	471917N 0514811E		TMA UATG
BUGEB	410824N 0670836E	P180	
BUKEN	440406N 0650744E	N990	
BULOG	500854N 0660036E	L145, N996	
BURID	470234N 0810051E	N161, N993, Z370	
BURIK	470012N 0675152E	M168	
BUSAB	444159N 0651844E		TMA UAOO
DAKIN	540930N 0722418E	L86, M75, N55, N990, T586	
DEKED	433653N 0741306E	Z370	
DEMAS	424732N 0712008E	L145	
DEPIR	540211N 0662405E	N60, N167, W355	
DERAD	474634N 0703805E	N161	
DEREG	431138N 0681857E		TMA UAIT
DESER	445502N 0753100E	N143, Z583	
DESOK	441629N 0775521E	L135	
DETAK	434823N 0765029E	L855, L998	
DETOV	501555N 0731235E	Z553	
DEVNA	500647N 0833619E	M993	
DIBAD	411700N 0675600E	N193, Z554	
DIBUK	472631N 0754536E	N102	
DIDAL	512908N 0695453E	L994	
DIDOB	544558N 0693143E		TMA UACP

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
DIDOP	433941N 0633027E	L162	
DIKAM	443650N 0663555E	L855	
DILGI	504833N 0772303E	L994, P984	
DILIR	493452N 0625056E	N996	
DILNA	441450N 0644911E	L163, P184	
DILOL	433936N 0512339E		TMA UATE
DILVA	533219N 0693807E		TMA UACK
DIMPA	463633N 0495959E	L864, L988	
DINBO	480029N 0664647E	M993	
DIPSU	475340N 0675220E		TMA UAKD
DIPUD	500238N 0571914E		TMA UATT
DIRIN	501352N 0822119E		TMA UASK
DISAD	434529N 0511835E		TMA UATE
DITKI	482034N 0692417E	L26, L51	
DITLO	431708N 0765420E		TMA UAAA
DITSO	470443N 0671637E	N990, W332	
DITSU	441934N 0743855E	N143	
DIVNO	454418N 0574000E	M610, N161	RR-2
DODEM	484212N 0773614E	M166, N102, P984, W348	
DODID	520353N 0765234E		TMA UASP
DODOK	451420N 0760011E	L998, N143	
DODOL	423536N 0712617E		TMA UADD

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
DODUR	412300N 0684800E	L163, M168, P178, Z554, Z578, Z580	
DOGEL	442430N 0525059E	N37, N73	
DOKUS	502539N 0513528E	M158, W324	
DOKUT	524814N 0651230E	L994, L998	
DOLEP	470047N 0520352E		TMA UATG
DONUP	423759N 0694912E	N102	
DONUR	473022N 0750038E	Z160	
DOPAN	521213N 0625401E	Z582	
DOPAR	481831N 0682229E	M75	
DOSAK	520044N 0781212E	P179, N985	
DOSOR	415702N 0691225E	P178	
DOTAL	440745N 0780904E	Z160, Z370	
DOZIN	492040N 0721800E	L51, N37, W351	
EDADU	430032N 0710621E		TMA UADD
EDAKO	504120N 0522510E	M161	
EDANO	510858N 0725804E	L994, Z553, Z746	
EDETO	495808N 0670732E	M168, N987, P574, W332	
EDIBA	424519N 0682349E	Z380	
EDOLO	465805N 0515702E		TMA UATG
EDOSA	521955N 0771645E		TMA UASP
EKDAD	482100N 0562959E	N996, M161	
EKLAT	432230N 0753237E	Z370	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
EKLOP	482530N 0651734E	M741, M993	
EKNIL	444003N 0732651E	N102	
EKNOD	494703N 0733707E		TMA UAKK
EKPIN	482805N 0535721E	N60	
EKTAB	494555N 0750718E	N37, Z160	
EKTEN	513242N 0523030E	A122, M158, Z102	
EKTUN	422343N 0694857E		TMA UAI
EKTUS	514225N 0765305E	L988, M34	
ELENU	435017N 0741838E	L855	
ELSEB	463234N 0675439E	L147, M168	
ELSUT	511342N 0805506E	G121, L143	
EMBEK	502333N 0625947E	M166	
ENETO	494223N 0591154E	L147, T586	
ENONA	480316N 0763820E	N102	
EPOLI	472234N 0541316E	L51, N996	
ERKIS	484421N 0572756E	L163, L988	
ERMEK	441245N 0661954E	Z380	
ERNEN	504754N 0642731E	M741, N55	
EROMI	461234N 0762117E	Z160	
ERSAS	532341N 0632455E		TMA UAUU
ERTUZ	441307N 0641019E	L86, L855, T916	
ERUTA	480837N 0604210E	L162	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
ESADO	470607N 0760037E	W336, Z243	
ESKIZ	420521N 0670429E	M741, N102	
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
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	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
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
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 UA00
GISIR	465704N 0665732E	L147, M75	
GISTO	472457N 0524654E	L988	
GITIM	441752N 0662540E	M741, L139	
GITNA	524459N 0652518E	L994, M168	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
GITUD	490032N 0780418E	N102, N993	
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	
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

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
IBMOB	413436N 0680213E	Z753	
IBROZ	430710N 0682307E		TMA UAIT
IDILI	443608N 0780716E	L135	TMA UAAT
IDMIS	444251N 0655218E		TMA UAOO
IKANA	545924N 0681200E	A359, P179	
INDAG	440635N 0725812E	L147, T916	
INGEG	433001N 0684244E		TMA UAIT
INKOL	480633N 0652413E	M741, N37	
INKUM	454952N 0620739E	L139, L162, L163, L165, M199, N167	
INLIG	441743N 0701919E	T916, L145	
INLUL	463730N 0803449E	Z370	
INPAD	432106N 0685105E		TMA UAIT
INREL	424136N 0713019E		TMA UADD
INRIK	500744N 0692030E	N990, M166	
INRIS	512800N 0521856E	A122, M158	
INRUM	524302N 0740047E	Z584	
INTAL	484345N 0702839E	W351	
IPKOD	495415N 0644617E	N996, M741	
IPLED	432348N 0493000E	G96, N37	RR-8
IPNIL	505034N 0643305E	N55, N167	
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	
LEPRA	532811N 0725005E	P179	
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	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
LIPSI	461808N 0784001E	M618, Z584	
LIRMO	530945N 0692524E		TMA UACK
LIRNA	501159N 0812203E	L994, W361	
LITBA	501849N 0582332E	M166	
LITNO	492856N 0730737E		TMA UAKK
LODEZ	531715N 0623004E	G111, L985, L994	
LOGTO	483204N 0561202E	L992, M161, T586	
LOLBI	501913N 0565328E		TMA UATT
LONSI	435826N 0743022E	T916	
LUGER	464426N 0655200E	L86, L728, M741	
LUKET	473310N 0562135E	L51	
LUKUR	443112N 0673226E	L855, N987	
LUKUS	480759N 0741658E	N170, W333	
LULEK	524106N 0700733E	N170, W333	
LULKE	485932N 0522700E	Z102	
LUMUD	495933N 0760202E	W352	
LUMUR	430639N 0512953E	Z581	
LUNOV	493800N 0801801E	W360, Z584	
LUREL	501613N 0790803E	N37, W352	
LURIT	432931N 0761943E		TMA UAAA
LURUM	494127N 0564322E	N73	
LUSAM	511128N 0515127E		TMA UARR

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
LUSIR	510229N 0511911E		TMA UARR
LUSUT	474510N 0680213E		TMA UAKD
LUTEK	482853N 0730459E	M993, Z624	
LUZMI	422426N 0681456E	M168	
MADEV	471857N 0770328E	N161, W336, Z243	
MAGOL	425338N 0685144E	L139, P178	
MAKEK	461854N 0791700E	L135	
MAKUT	483217N 0683632E	L26, M75	
MALOD	451812N 0751037E	M149, N147, Z583	
MAMIR	425438N 0763642E	L135, P984	RR-7
MANAD	491421N 0604601E	L147, N996	
MAROR	453720N 0753509E	N170	
MASAV	450507N 0551053E	N37, N55, N161	
MASED	510644N 0511355E		TMA UARR
MEDOL	433425N 0531659E	N55, N193	
MIHOS	441332N 0712336E	N147, T916	
MIKDO	425058N 0714551E	Z580	
MIKNO	420200N 0681200E	L163, M168, N143, Z579	
MIKSA	511608N 0784241E	M149, Z584	
MILSO	452519N 0604609E	M161, M610	RR-2, RR-5
MIMKA	502620N 0693328E	N990	
MIMRI	433808N 0634822E	L86, M75, P184	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
MIRGA	452416N 0693051E	L145	
MISPU	435002N 0512237E		TMA UATE
MOGTU	485209N 0543832E	N60	
MOMUL	411524N 0664024E	P180	
MONEG	523627N 0671849E	N993, T586	
MULTA	510442N 0565042E	A360, M199, M875	
MUZEL	433756N 0692447E	N147	
NAGAZ	490336N 0504220E	L736	
NARUR	513200N 0641130E	M741, T586	
NASAB	435310N 0504810E		TMA UATE
NASIP	430347N 0715332E	N143	
NASMO	451929N 0782626E		TMA UAAT
NATUS	445208N 0643650E	M610	
NEBSO	474925N 0675717E		TMA UAKD
NEGEZ	421758N 0694640E		TMA UAI
NEGMI	511245N 0714553E		TMA UACC
NELOL	462733N 0530638E		CTR UATZ
NELTI	541942N 0641630E	L165, M168	
NEMEG	491804N 0831242E	M618, Z727	
NEMKU	485904N 0734736E	N170, W333	
NEPIL	434133N 0522455E	N73, N193, Z102	
NEPLA	470920N 0740031E	L26	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
NESDO	454926N 0544739E	L992	
NESUN	460123N 0801738E	N993	
NETAT	403653N 0682413E	M168	
NIGET	434124N 0771126E	L855, P984	
NIKNA	462557N 0513838E	N60, W324	
NIKVI	473555N 0673148E		TMA UAKD
NIMAD	495842N 0824844E		TMA UASK
NIMAG	415801N 0690101E	Z632	
NINAG	462208N 0584556E	N37, L139	
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	
OBAPI	472530N 0773700E	Z243, P984	
OBARU	472917N 0751312E	M34	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
OBATA	462130N 0491148E	L988	
OBIBU	445219N 0654502E		TMA UAOO
OBUNA	505513N 0791803E	W361, Z584	
ODAMA	503331N 0753513E	T649	
ODATU	505427N 0710518E		TMA UACC
ODILA	494259N 0575122E	M199, M875, L728	
ODIVA	423530N 0640848E	L162, M161, N990	RR-5
ODLUR	432532N 0771101E		TMA UAAA
ODORI	415901N 0684908E	Z578	
ODPUT	473004N 0553846E	L51, L992	
OGADO	453804N 0810107E	L26	
OGANU	462857N 0565153E	N55, P574	
OGAPI	512648N 0511336E	A368, M161	
OGBEZ	431605N 0681447E		TMA UAIT
OGIRU	433336N 0765119E		TMA UAAA
OGLUP	510857N 0715158E		TMA UACC
OGOKI	502245N 0643432E		RR-1, RR-6
OGOLI	412858N 0663632E	N143, N193	
OGRIP	405454N 0680500E	P178, P180, Z580	
OGTOL	424905N 0733002E	L728, Z580	
OGUDU	501516N 0795419E		TMA UASS
OKESO	411051N 0673608E	Z554	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
OKMUR	424815N 0791158E	L138	
OKRAT	433034N 0765506E		TMA UAAA
OKSOL	495436N 0824319E		TMA UASK
OLAPU	475146N 0514531E	M158, W324	
OLGAS	520510N 0714507E	M75	
OLINA	451645N 0615140E	L165, M610	
OLKUM	530441N 0741300E	P179	
OMITO	501033N 0581909E	L26	
OSBOR	410054N 0683059E	Z753	
OSMOG	473140N 0673643E		TMA UAKD
OSNER	482119N 0785409E	M166, L143	
OSROL	504818N 0700112E	L988, N996, W358, Z624	
OSTAG	502223N 0803234E		TMA UASS
OTMAS	460419N 0530034E	M158, N996	
PABRI	451455N 0704239E	L147, T524	
PAVEL	425947N 0664642E	L163, M741, N147, Z753	
PEKIR	433539N 0770931E	M610, P984	
PEMOL	464841N 0551720E	L139, L992	
PETEM	480656N 0553022E	N73, N996	
PETOR	535420N 0713136E	P179, T586	
PIGAL	433428N 0780356E	M610	
PIKAN	425300N 0493000E	A80, N996	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
PILEL	425035N 0731336E	L728	
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	
RABEN	502602N 0795343E		TMA UASS
RALAN	440812N 0493000E	A924, Z581	
RAVNI	504030N 0615807E	L985, T586, Z582	
RAVOB	404718N 0683330E	L143	
RAZBI	425954N 0673533E	Z621	
REBDA	414708N 0690515E	P178, Z632	
REGMU	435005N 0760012E	L143, Z589	
REGPI	485632N 0650629E	M741, Z164	
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	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
RENPA	524400N 0701548E	Z588	
RENPI	463437N 0522656E	M158, Z102	
REPLA	452358N 0533011E	N73	
RESBA	462255N 0621359E	L165	
RESDO	475618N 0595446E	M199	
REZEK	421933N 0691021E		TMA UAI
RIBMO	442238N 0520908E	P574	TMA UATE
RIGDO	495937N 0581049E	L147	
RIKPI	455225N 0794910E	L26, N993, Z370	
RIKRI	465319N 0543423E	L139, N73	
RILBA	485158N 0585148E	M199, N996	
RILOK	431224N 0662729E	L163	
RIMDO	431940N 0631837E	M75, M161	
RIMIR	524153N 0690123E	N987	
RIMUN	502651N 0570524E		TMA UATT
RINET	443026N 0663402E	M610	
RINIT	435305N 0535549E	L992, N154	
RINUR	482255N 0681040E	N990	
RISAD	441324N 0761312E	N170	
RISAS	435854N 0715247E	L855, N102	
RISUL	464525N 0773723E	P984	
RITAB	454308N 0754239E	L998, W333	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
RITAL	414130N 0671206E	N143, M741	
RITET	464937N 0623417E	N161, N167	
RITMU	441806N 0723603E	L147, N102	
RITUF	432533N 0684654E		TMA UAIT
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
ROPEL	544155N 0685416E		TMA UACP
ROPIM	505038N 0711120E		TMA UACC
ROSID	483440N 0762005E	M149	
ROSIM	423415N 0672453E	L163, N987	
ROTEP	423106N 0691449E		TMA UAI
RUDAL	512154N 0675222E	L998, N987	
RUDIZ	471122N 0790856E	N143, N161	
RUGUS	474250N 0591219E	L51, L163, M875	

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

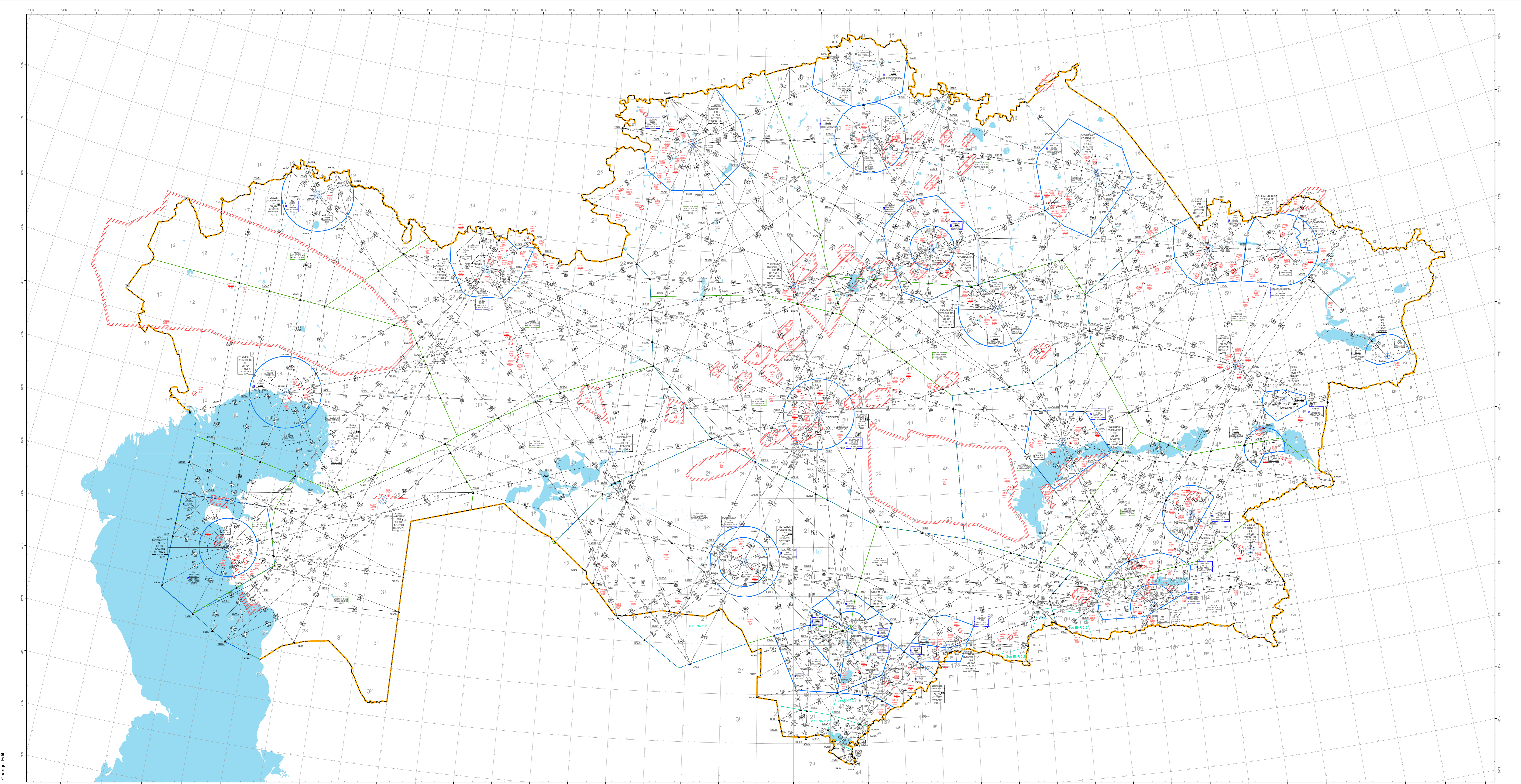
Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
TENRO	445953N 0741408E	M34, N102, N147	
TETKI	540020N 0692425E	N987, W333	
TIBDA	493800N 0632900E	L26, N996, Z164	
TIGTA	432728N 0620446E	L855, M875	
TIKTO	494006N 0565014E	L992	TMA UATT
TIMKA	440832N 0681511E	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
TISRA	463851N 0564100E	L139	
TITIL	443944N 0543810E	N55, N161	
TITUR	532406N 0610924E	G111, L994, N985	RR-3
TOGDI	472143N 0731457E	L26, Z583	
TOKNA	482525N 0750316E	Z160	
TOLKI	473415N 0811640E	M166, Z208	
TOMGO	434146N 0734454E	L147, L855, M34, M610, N143, Z370	RR-2
TONLA	421334N 0681508E	N102	
TOZIS	490511N 0494538E	L864	
TOZLI	441054N 0621817E	M161, T916	
TUGLA	465142N 0505006E	L736, L988	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
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	
TUOK	442214N 0685447E	L728, L855	
TUSEP	503136N 0680751E	L988, L993, N126, N996, W358, Z583, Z746	
TUTUL	463825N 0674057E	L147, N987	
TUXOK	543701N 0685814E		TMA UACP
UBAGU	430228N 0625120E	M75	
UDATO	473801N 0573755E	L51, M161	
UDEBA	473802N 0523443E	N60, Z102	
UDEKA	455252N 0770006E	N143, Z160	
UGLUK	484125N 0555642E	M161, N73	
ULKAP	490729N 0755332E	M34, M166	
ULRIP	474743N 0634635E	L51, N37	
ULSET	530027N 0720230E	M75, W361, Z584	
ULSON	435244N 0522039E	N154	
UMDEM	485611N 0665322E	L26, L145	
UMIRO	441421N 0763537E	L998, Z584	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
UMKAS	414012N 0672149E	N987	
UML0D	432218N 0750715E	L143, M618	
UNABO	474352N 0714935E	N161, L26	
UNADA	433551N 0764831E	M610, N170	
UNIBE	522328N 0643445E	W332	
UNITO	450238N 0632952E	L163, M610	
UNKAB	525439N 0724332E	Z584	
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	
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

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
VEVIK	505201N 0523529E	M56, M166, Z102	
ZAZBU	532352N 0630332E		RR-3, RR-6
ZODLE	424402N 0732817E		See route V-15 in the list of airways of the Kyrgyz Republic - KAN.KG/EN/AIS
ZURGO	441233N 0631012E	L162, T916	
ZUSLA	423838N 0675917E	Z579	

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0 15 30 60 90 120 150 180 210 240 270 300 NM

0 30 60 90 120 150 180 210 240 270 300 KM

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<sup>6</sup>

DIST in NM

ALT and ELEV in FT

BRG are MAG

WGS84

Lambert Conformal Conic Projection

The chart is True North orientated

KAZAERONAVIGATSIA

AIRAC AMDT 011/2025

**CHANGES:**

ROUTE	SEGMENT	MOCA
A357	VOR AKB : ALGAS	3200 FT
L139	ABDUN : NINAG	2000 FT
L139	NINAG : TISRA	1700 FT
L145	GAMBU : INLIG	2200 FT
L145	INLIG : MIRGA	2400 FT
L147	INDAG : RITMU	2300 FT
L147	TOMGO : INDAG	2600 FT
L163	ERKIS : SIVKO	2100 FT
L163	RUGUS : ERKIS	3000 FT
L165	EMBEK : GUMGA	2000 FT
L165	GEMBO : EMBEK	1700 FT
L165	GUMGA : BUDER	2000 FT
L728	BAGED : GEDSA	1800 FT
L728	LUGER : BAGED	2000 FT
L728	OGTOL : PILEL	7000 FT
L728	PILEL : GERPU	7500 FT
L988	ALABA : ERKIS	2000 FT
L988	ERKIS : BEKOR	3600 FT
M161	EKIDAD : LOGTO	1900 FT
M161	UDATO : EKIDAD	2100 FT
M741	ARBIM : IPKOD	1700 FT
M741	EKLOP : REGPI	2000 FT
M741	ERNEN : NARUR	1800 FT
M741	INKOL : EKLOP	1900 FT
M741	IPKOD : LAMGI	1500 FT
M741	LAMGI : ERNEN	1700 FT
M741	LUGER : INKOL	2000 FT
M741	REGPI : ARBIM	1900 FT
M993	DINBO : EKLOP	3800 FT
M993	EKLOP : GOSPA	1900 FT
N102	DODEM : GITUD	4700 FT
N102	GITUD : NONRI	5700 FT
N161	AMASO : DERAD	3700 FT
N161	ARKAM : BAGED	1600 FT
N161	BAGED : TIROK	2000 FT
N161	DERAD : UNABO	4300 FT
N167	ADEKU : IPNIL	1600 FT
N167	IPNIL : DEPIR	2000 FT
N37	INKOL : AKITU	3700 FT
N37	KOMRE : NINAG	1700 FT
N37	NINAG : ULRIP	2600 FT
N37	ULRIP : INKOL	1700 FT

ROUTE	SEGMENT	MOCA
N55	ERNEN : IPNIL	1700 FT
N55	GEMBO : ERNEN	1800 FT
N55	IPNIL : ATNON	2400 FT
N60	VOR AKB : ALGAS	3200 FT
N60	EKPIN : MOGTU	1400 FT
N60	UDEBA : EKPIN	1300 FT
N993	VOR AGZ : GITUD	6300 FT
N993	GITUD : AGINU	6300 FT
N996	EKIDAD : RILBA	3300 FT
N996	ETELA : EKIDAD	1900 FT
N996	IPKOD : BULOG	2000 FT
N996	TIBDA : IPKOD	1600 FT
P179	ADASA : OLKUM	1500 FT
P179	LEPRA : POBUR	2100 FT
P179	OLKUM : LEPRA	1500 FT
P984	OBAPI : DODEM	4500 FT
P984	RISUL : OBAPI	4000 FT
T916	INDAG : LONSI	5200 FT
T916	INLIG : MIHOS	2300 FT
T916	MIHOS : INDAG	2300 FT
T916	TUOK : INLIG	2400 FT
Z164	BETIK : REGPI	3700 FT
Z164	REGPI : TIBDA	1900 FT
Z243	MADEV : OBAPI	4000 FT
Z243	OBAPI : IBDAS	4100 FT
Z584	ADODA : INRUM	1500 FT
Z584	INRUM : UNKAB	1700 FT
Z584	UNKAB : ULSET	1800 FT

**Add new designated points(21):**

BAGED, DERAD, EKIDAD, EKLOP, EKPIN, ERKIS, ERNEN, GITUD, INDAG, INKOL, INLIG, INRUM, IPKOD, IPNIL, LEPRA, NINAG, OBAPI, OLKUM, PILEL, REGPI, UNKAB.

**Renamed designated point:**

AGAKO →UNABO.

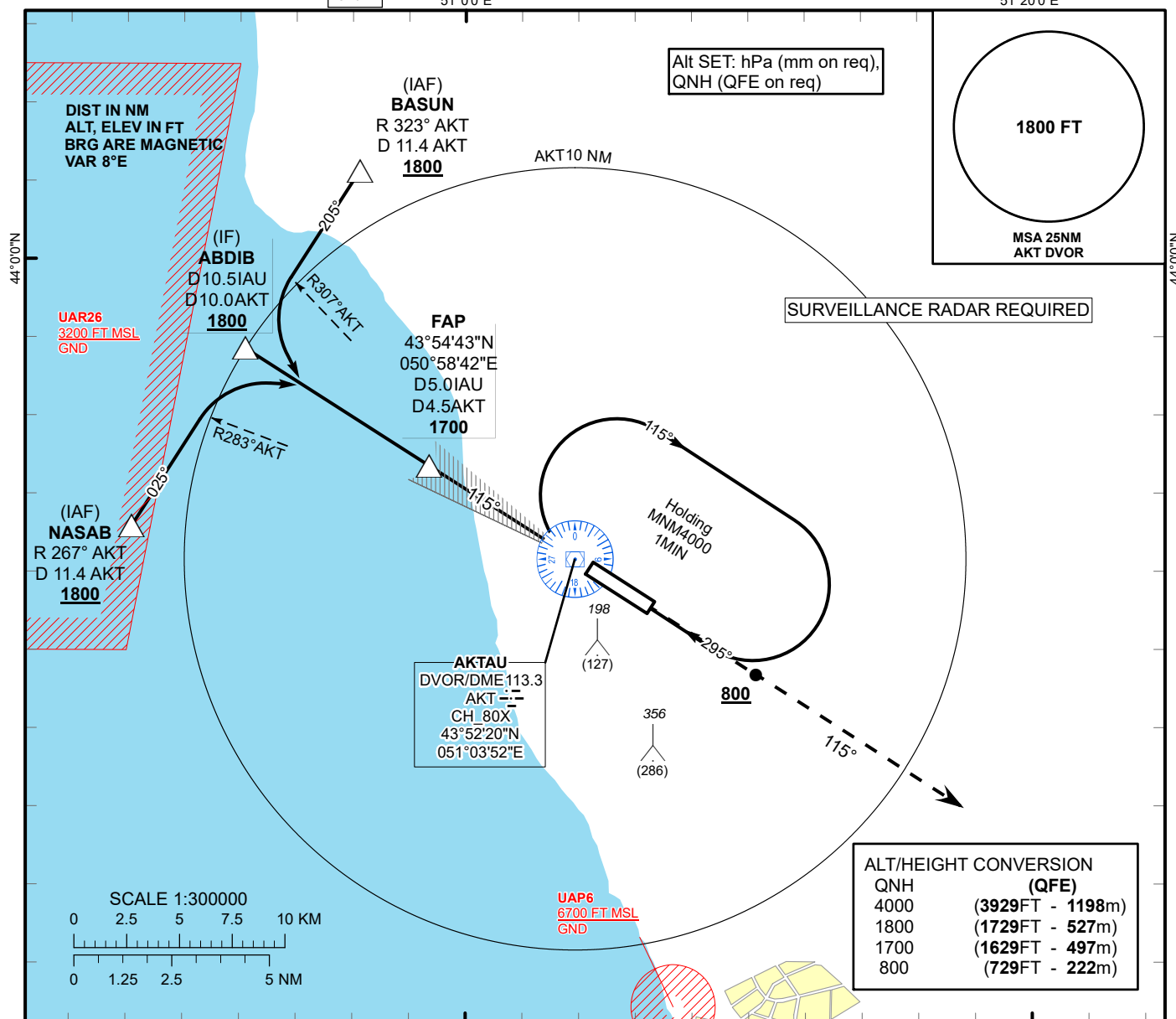
INSTRUMENT  
APPROACH  
CHART - ICAO

ILS  
LLZ 109.5  
IAU  
GP 332.6  
CH 32X

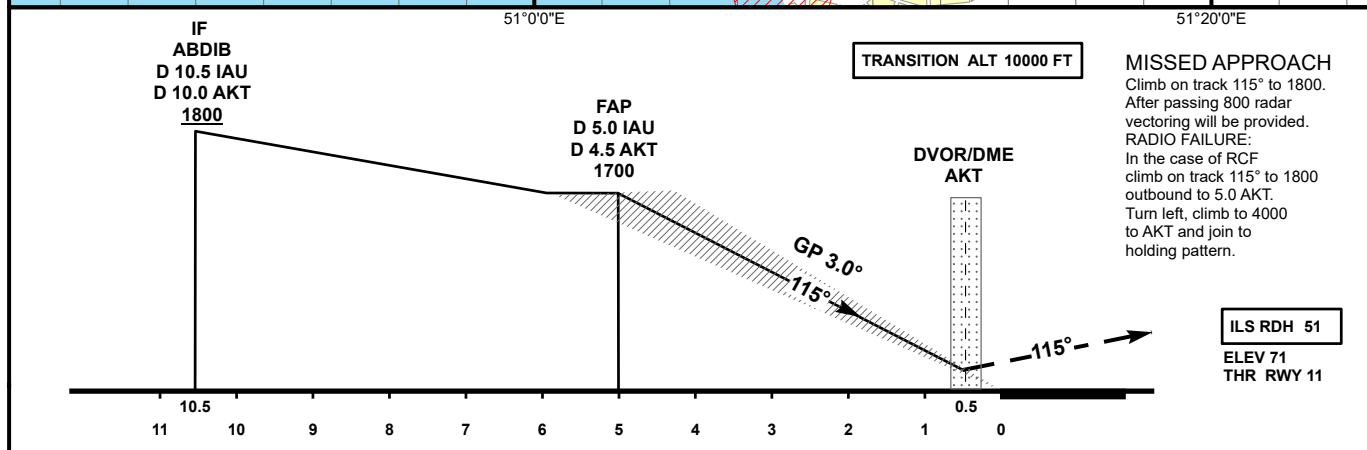
AERODROME ELEV **75 FT**  
HEIGHTS RELATED TO  
THR RWY 11 - ELEV **71 FT**

AKTAU TOWER 120.7  
AKTAU ATIS (EN) 130.1  
AKTAU ATIS (RU) 126.2

AKTAU  
ILS/DME  
RWY 11



ALT/HEIGHT CONVERSION	
QNH	(QFE)
4000	(3929FT - 1198m)
1800	(1729FT - 527m)
1700	(1629FT - 497m)
800	(729FT - 222m)



Aircraft Category		A	B	C	D	DIST to THR DME IAU	NM	5	4	3	2	1	
Straight-in Approach OCA/H						DME AKT	NM	4.5	3.5	2.5	1.5	0.5	
	CAT I	271(200)	271(200)	278(207)	288(217)	ALTITUDE	FT	1700	1409	1085	762	441	
						HEIGHT	FT	1629	1338	1014	691	370	
DME IAU ZERO RANGED TO THR RWY 11													
Aerodrome Operating Minima DH ft x RVR(CMV)	CAT I												
						GS	Kt	80	100	120	140	160	180
						Desc.Rate (5.2%)	ft/min	420	530	630	740	840	950

AKTAU  
ILS/DME Y

AERONAUTICAL DATA TABULATION

ILS approach to RWY11 from NASAB, ABDIB, BASUN	
Fix/point	Coordinates
AKT DVOR/DME	43° 52' 20.3"N 051° 03' 51.9"E
IAU D5.0 AKT D4.5 (FAP)	43° 54' 43.4"N 050° 58' 42.3"E
NASAB (IAF) R267° AKT D11.4	43° 53' 10.2"N 050° 48' 10.1"E
ABDIB (IF) AKT D10.0	43° 57' 43.2"N 050° 52' 11.4"E
BASUN (IAF) R323° AKT D11.4	44° 02' 16.0"N 050° 56' 13.9"E
THR RWY 11	43° 52' 03.01"N 051° 04' 29.51"E
IAU LOC	43° 50' 53.5"N 051° 06' 59.5"E

## UATT AD 2.13 Declared Distances

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
12	3202	3602	3202	3202	Nil
30	3202	3602	3202	3202	Nil

## UATT 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
12	CAT I (PALS) 900 M LIH	GRN Nil	PAPI LEFT/3°	Nil	Nil	3202m, spacing 60m, 0-2602m white, last 600m yellow LIH	RED Nil	Nil	Turn pad: yellow
30	CAT I (PALS) 870 M LIH	GRN Nil	PAPI LEFT/3°	Nil	Nil	3202m, spacing 60m, 0-2602m white, last 600m yellow LIH	RED Nil	Nil	Turn pad: blue

## UATT 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: from THR 30 - 350m, THR 12 - 430m
3	TWY edge and centre line lighting	TWY B EDGE: BLU TWY A, C Nil
4	Secondary power supply/switch-over time	Nil
5	Remarks	Nil

## UATT AD 2.16 Helicopter Landing Area

NIL

## UATT AD 2.17 ATS Airspace

1	Designation and lateral limits	AKTOBE CTR 503212N 0572618E - 501736N 0573954E - 500204N 0574243E - 495345N 0571844E - 500221N 0565157E - 501500N 0563927E - 503110N 0565449E - 503212N 0572618E
2	Vertical limits	4000 FT ALT / GND

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

#### UATT AD 2.18 ATS Communication Facilities

Service designation	Call sign	Frequency	SATVOICE number(s)	Logon address	Hours of operation	Remarks
1	2	3	4	5	6	7
ATIS	AKTOBE ATIS (EN) AKTOBE ATIS (RU)	126 MHZ 127,8 MHZ	Nil	Nil	H24	Nil
TWR	AKTOBE TOWER (EN) AKTOBE VYSHKA (RU)	120,9 MHZ	Nil	Nil	H24	Nil

#### UATT AD 2.19 Radio Navigation And Landing Aids

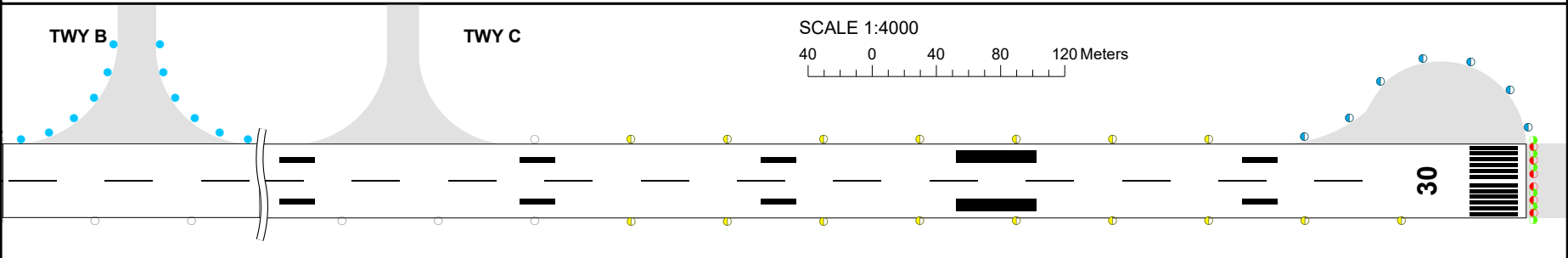
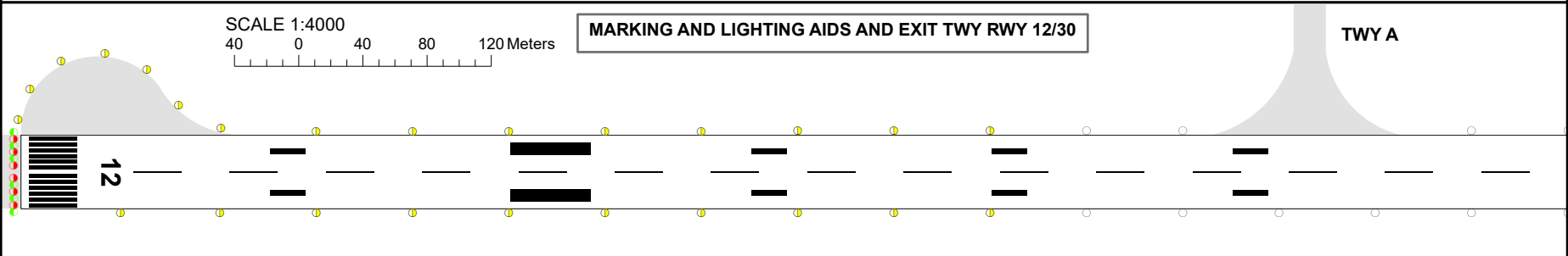
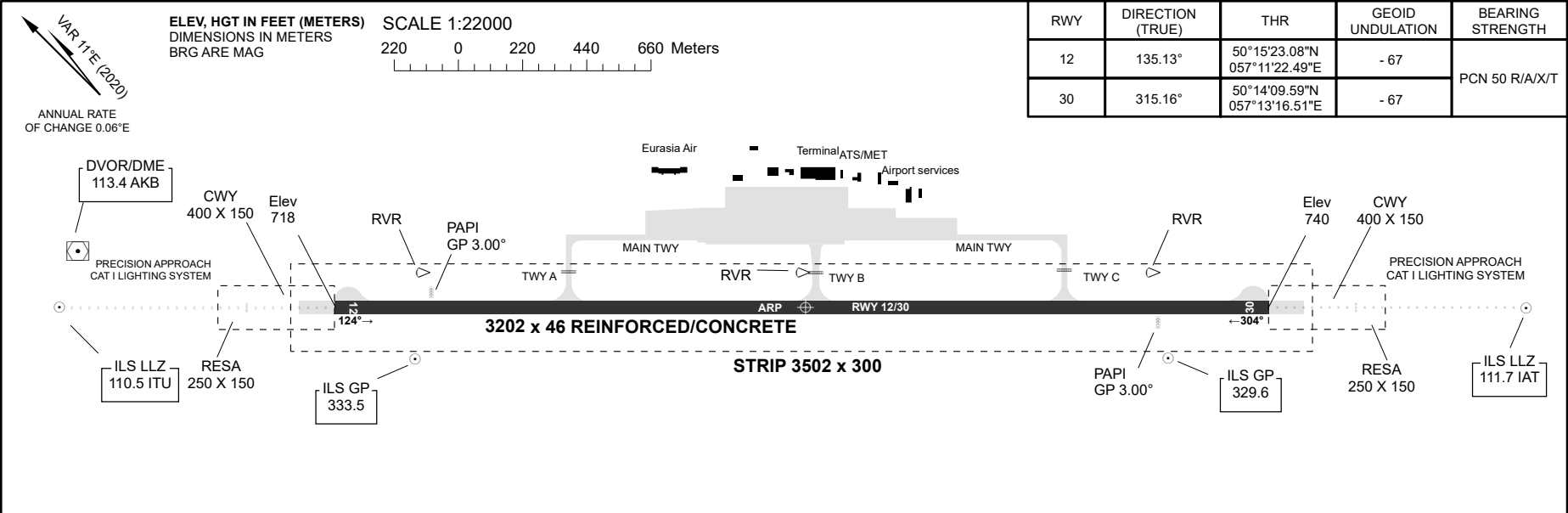
Type of aid, MAG VAR, ILS Classification, Type of supported OP (for VOR/ILS/MLS, give declination)	ID	Frequency , Channel number	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Service volume radius from the GBAS reference point	Remarks
1	2	3	4	5	6	7	8
DVOR/DME (11°E/2020)	AKB	113,4 MHZ CH 81X	H24	501548.3N 0571054.8E	700 FT	Nil	Nil
ILS LOC 12 I/D/2	IAT	111,7 MHZ	H24	501349.3N 0571347.9E		Nil	Nil
GP 12 I/C/2		333,5 MHZ		501512.7N 0571126.0E			
DME12	IAT	CH 54X		501512.7N 0571126.0E	700 FT		
ILS LOC 30 I/D/2	ITU	110,5 MHZ	H24	501544.7N 0571049.0E		Nil	Nil
GP 30 I/C/2		329,6 MHZ		501413.5N 0571258.0E			
DME 30	ITU	CH 42X		501413.5N 0571258.0E	700 FT		

#### UATT AD 2.20 Local Aerodrome Regulations

##### 1. Airport regulations

Movement of aircraft about the aerodrome shall be carried out under its power or by towing with special vehicles.  
Taxiing and towing shall be carried out strictly along taxi center lines.  
Distributing of stands shall be carried out by shift deputy head of production and dispatcher service according to apron load and availability of vacant stands.

TWR 120.9
ATIS 126.0, 127.8



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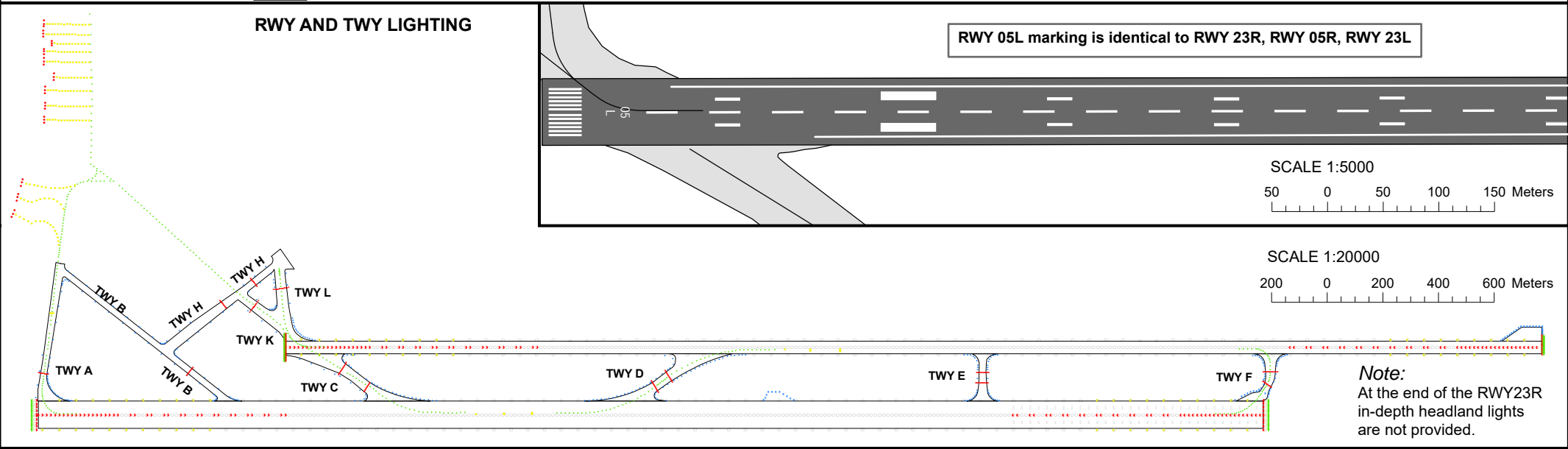
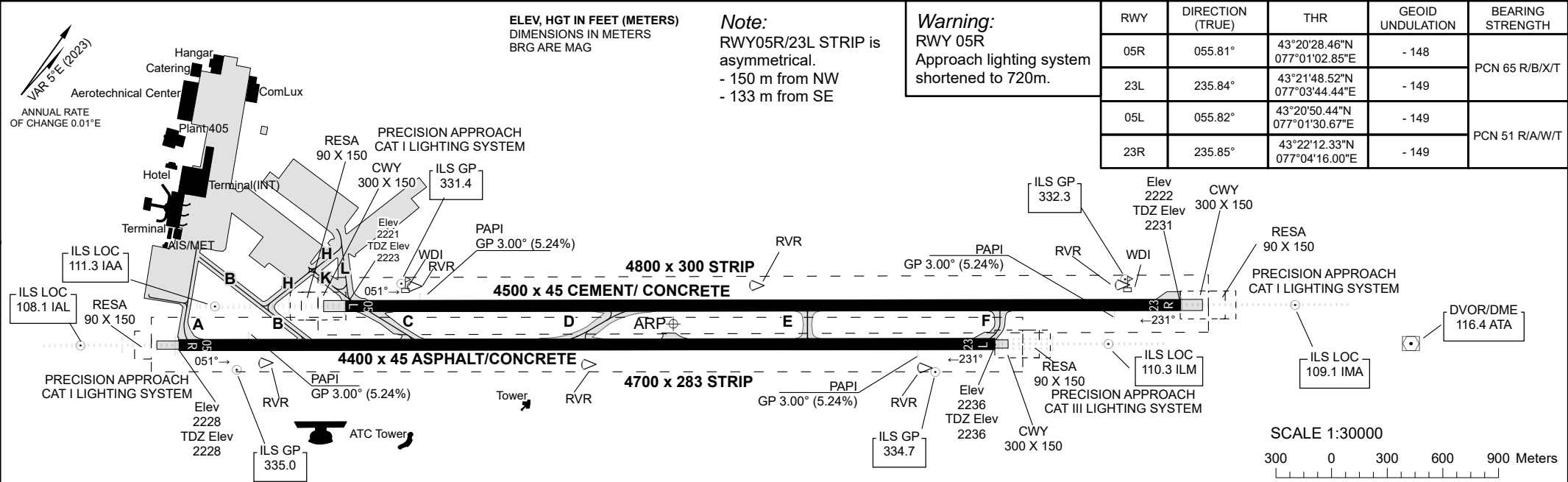
AERODROME  
CHART - ICAO

AD ELEV  
2238FT (682m)

ARP 432120N  
0770238E

TWR	119.4
GROUND	121.7
DELIVERY	120.8

ALMATY



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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)	135.5 MHZ	Nil	Nil	H24	Nil
ATIS	ASTANA ATIS (EN) ASTANA ATIS (RU)	129.5 MHZ 128.3 MHZ	Nil	Nil	H24	EN RU
DELIVERY	ASTANA DELIVERY (EN) ASTANA DELIVERY (RU)	129,8	Nil	Nil	H24	Nil

**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.

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

- TURN PAD 95M AVAILABLE AT THR RWY 04;
- TURN PAD 97M AVAILABLE AT THR RWY 22;
- TURN PAD 75M AVAILABLE 2500M FROM THR RWY 22;
- TURN PAD 75M AVAILABLE 1000M FROM THR RWY 04.

Taxiing on taxiway "C" on the Parking lot-9 for aircraft with a wingspan of more than 50m behind the escort vehicle.

There is no aircraft anchorage point in the aircraft parking area.

Starting the engine on the Parking lot - 17 traverse is prohibited.

Lifting of an aircraft by a lifting mechanism is prohibited in aircraft parking lots, with the exception of parking lots 2, 3, 7, 8, 17, 18.

Parking lot №12 is closed.

Before the flight, the crew must listen to the ATIS information, in the period of 5 minutes to 25 minutes before the departure time establish contact with the "ASTANA DELIVERY" on a frequency of 129.800 MHz, report the current ATIS information index and receive ATC clearance. Before tow/start engines establish contact with the "ASTANA GROUND" on a frequency of 119.600 MHz, report the current ATIS information index, the parking stand number, request permission to tow/start engines. If unable to establish contact with the "ASTANA DELIVERY" on a frequency of 129.800 MHz, establish contact with the "ASTANA GROUND" on a frequency of 119.600 MHz.

Engine ground run on parking position 1-9 prohibited.

Aircraft taxiing and service vehicles on the maneuvering area shall not cross the prescribed holding lines established for CAT II and CAT III operations, as well as stop bars, without clearance from Air Traffic Control, and the stop bars must be switched off.

## 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.

Taxiing 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 to be 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
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

- 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.
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.

## 7. Continuous Climb Operation

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

## 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	Nil	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 scavenging, removal of green plantations and ground covering, termination of agricultural activity within the airport area.

### UACC AD 2.24 Charts Related To An Aerodrome

Name	Page
Aerodrome Chart ICAO	UACC AD 2.24.1-1
Aerodrome Ground Movement and Parking Chart ICAO	UACC AD 2.24.3-1
Aerodrome Obstacle Chart – ICAO Type A RWY 04/22	UACC AD 2.24.4-1
Precision Approach Terrain Chart – RWY 04 ICAO	UACC AD 2.24.5-1-1
Precision Approach Terrain Chart – RWY 22 ICAO	UACC AD 2.24.5-2-1
Area Chart ICAO	UACC AD 2.24.6-1
Standard Departure Chart Instrument (SID) RWY 04 ICAO	UACC AD 2.24.7-1-1
Standard Departure Chart Instrument (SID) RWY 22 ICAO	UACC AD 2.24.7-2-1
Standard Departure Chart Instrument (SID) RNAV RWY 04 ICAO	UACC AD 2.24.7-3-1
Standard Departure Chart Instrument (SID) RNAV RWY 04 ICAO	UACC AD 2.24.7-4-1
Standard Departure Chart Instrument (SID) RNAV RWY 04 ICAO	UACC AD 2.24.7-5-1
Standard Departure Chart Instrument (SID) RNAV RWY 22 ICAO	UACC AD 2.24.7-6-1
Standard Departure Chart Instrument (SID) RNAV RWY 22 ICAO	UACC AD 2.24.7-7-1
Standard Departure Chart Instrument (SID) RNAV RWY 22 ICAO	UACC AD 2.24.7-8-1
Standard Arrival Chart Instrument (STAR) RWY 04 ICAO	UACC AD 2.24.9-1-1
Standard Arrival Chart Instrument (STAR) RWY 22 ICAO	UACC AD 2.24.9-2-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 04 ICAO	UACC AD 2.24.9-3-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 04 ICAO	UACC AD 2.24.9-4-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 22 ICAO	UACC AD 2.24.9-5-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 22 ICAO	UACC AD 2.24.9-6-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 04 ICAO	UACC AD 2.24.9-7-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 04 ICAO	UACC AD 2.24.9-8-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 22 ICAO	UACC AD 2.24.9-9-1

Name	Page
Standard Arrival Chart Instrument (STAR) RNAV RWY 22 ICAO	UACC AD 2.24.9-10-1
ATC Surveillance Minimum Altitude Chart ICAO	UACC AD 2.24.10-1
Instrument Approach Chart – ILS/DME - Y CAT II & III, RWY 22 ICAO	UACC AD 2.24.11-1-1
Instrument Approach Chart – ILS/DME - Z CAT II & III, RWY 22 ICAO	UACC AD 2.24.11-2-1
Instrument Approach Chart – ILS/DME - Y CAT II & III, RWY 04 ICAO	UACC AD 2.24.11-3-1
Instrument Approach Chart – ILS/DME - Z CAT II & III, RWY 04 ICAO	UACC AD 2.24.11-4-1
Instrument Approach Chart – VOR/DME RWY 22 ICAO	UACC AD 2.24.11-5-1
Instrument Approach Chart – VOR/DME RWY 04 ICAO	UACC AD 2.24.11-6-1
Instrument Approach Chart – RNP RWY 04 ICAO	UACC AD 2.24.11-7-1
Instrument Approach Chart – RNP RWY 22 ICAO	UACC AD 2.24.11-8-1
Visual Approach chart – ICAO	UACC AD 2.24.12-1
Instrument Approach Chart – ILS/DME RWY 22	UACC AD 2.24.13-1-1
Instrument Approach Chart – ILS/DME RWY 04	UACC AD 2.24.13-2-1
Instrument Approach Chart – VOR/DME RWY 22	UACC AD 2.24.13-3-1
Instrument Approach Chart – VOR/DME RWY 04	UACC AD 2.24.13-4-1
Instrument Approach Chart – BC NDB RWY 22	UACC AD 2.24.13-5-1
Instrument Approach Chart – NDB RWY 04	UACC AD 2.24.13-6-1
VFR Departure/Arrival Chart	UACC AD 2.24.14-1

**UACC AD 2.25 Visual segment surface (VSS) penetrations**

No penetrations

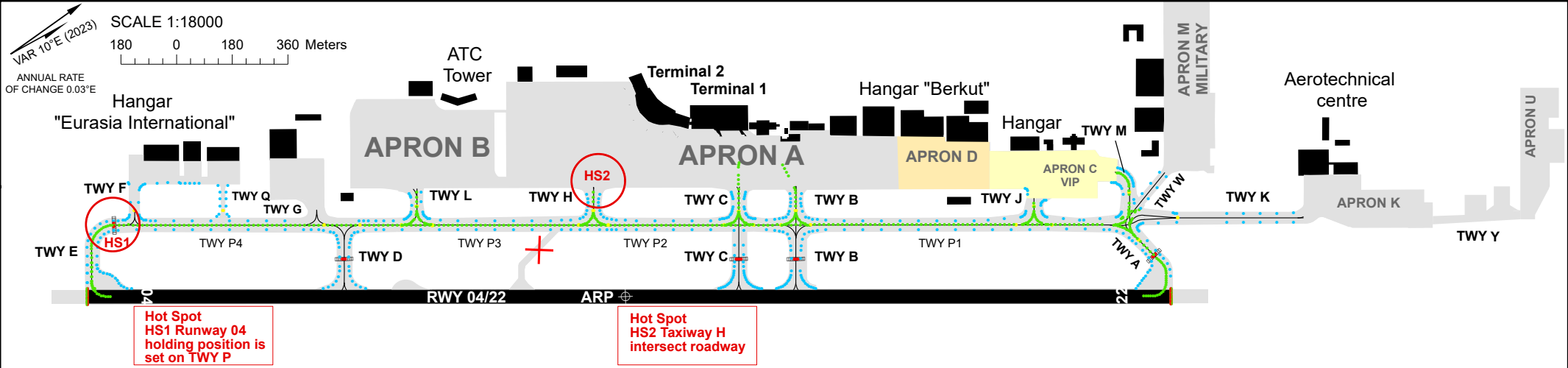
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AERODROME GROUND MOVEMENT  
AND PARKING CHART - ICAO

APRON A ELEV 1165FT    APRON B 1164FT  
APRON C, APRON K ELEV 1158FT  
APRON D ELEV 1155FT  
APRON M MILITARY ELEV 1158FT

TWR	135.5
GROUND	119.6
DELIVERY	129.8

ASTANA  
NURSULTAN NAZARBAYEV  
INTERNATIONAL AIRPORT

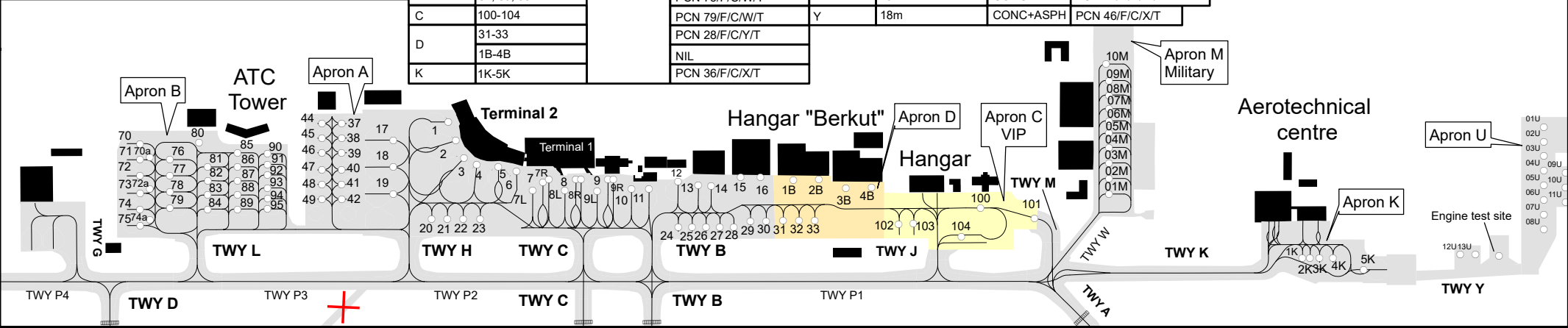
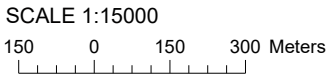


Warning:  
1. Exit from stands 1-11, 20-23 - by towing.  
2. Entrance to stands 17-19, 24-49, 70-75,  
101 - 104 - by towing.  
3. Use of AD by ACFIT MD-11 with a full  
weight is limited to twenty departures  
per 20 hours.

VISUAL DOCKING GUIDANCE SYSTEM (VDGS)  
AT STANDS 7L, 7R, 8L, 8R, 9L, 9R

AIRCRAFT TAXIING VIA APRON D BY ATC CLEARANCE ONLY.  
PRIOR PERMISSION REQUIRED

APRON	STAND	SURFACE	BEARING STRENGTH	TWY	WIDTH	SURFACE	BEARING STRENGTH
A	1,4,5,6,19	CONC+ASPH	PCN 66/F/C/W/T	A, P1-P4	23m	CONC+ASPH	PCN 66/F/C/X/T
	2,3,17,18	REINF/CONC	PCN 66/R/B/W/T	B	5m		PCN 60/F/C/W/T
	7L,7R,8L,8R,9L,9R		PCN 69/R/B/W/T		18m		PCN 45/R/B/X/U
	10,11		PCN 17/R/B/X/T	C,D,H,L	23m		PCN 60/F/C/X/T
	12-16		PCN 60/F/C/W/T	E	23m		PCN 66/F/C/X/T
	20-23	CONC+ASPH	PCN 93/F/C/W/T	F	20m		PCN 60/F/C/X/T
	24-28		PCN 14/R/B/X/T	G	32m		PCN 22/R/A/X/T
	29,30		PCN 28/F/C/Y/T	J, M	23m		PCN 79/F/C/W/T
	37-42, 44-49		PCN 53/F/C/Y/T	K	23m		PCN 36/F/C/X/T
	70-83, 85-88, 90-94		PCN 60/F/C/X/T	Q	11m		PCN 46/R/B/X/T
B	84, 89, 95		PCN 73/F/C/W/T	W	23m	CONC	PCN 12/R/B/W/T
C	100-104		PCN 79/F/C/W/T	Y	18m	CONC+ASPH	PCN 46/F/C/X/T
D	31-33		PCN 28/F/C/Y/T				
	1B-4B		NIL				
K	1K-5K		PCN 36/F/C/X/T				

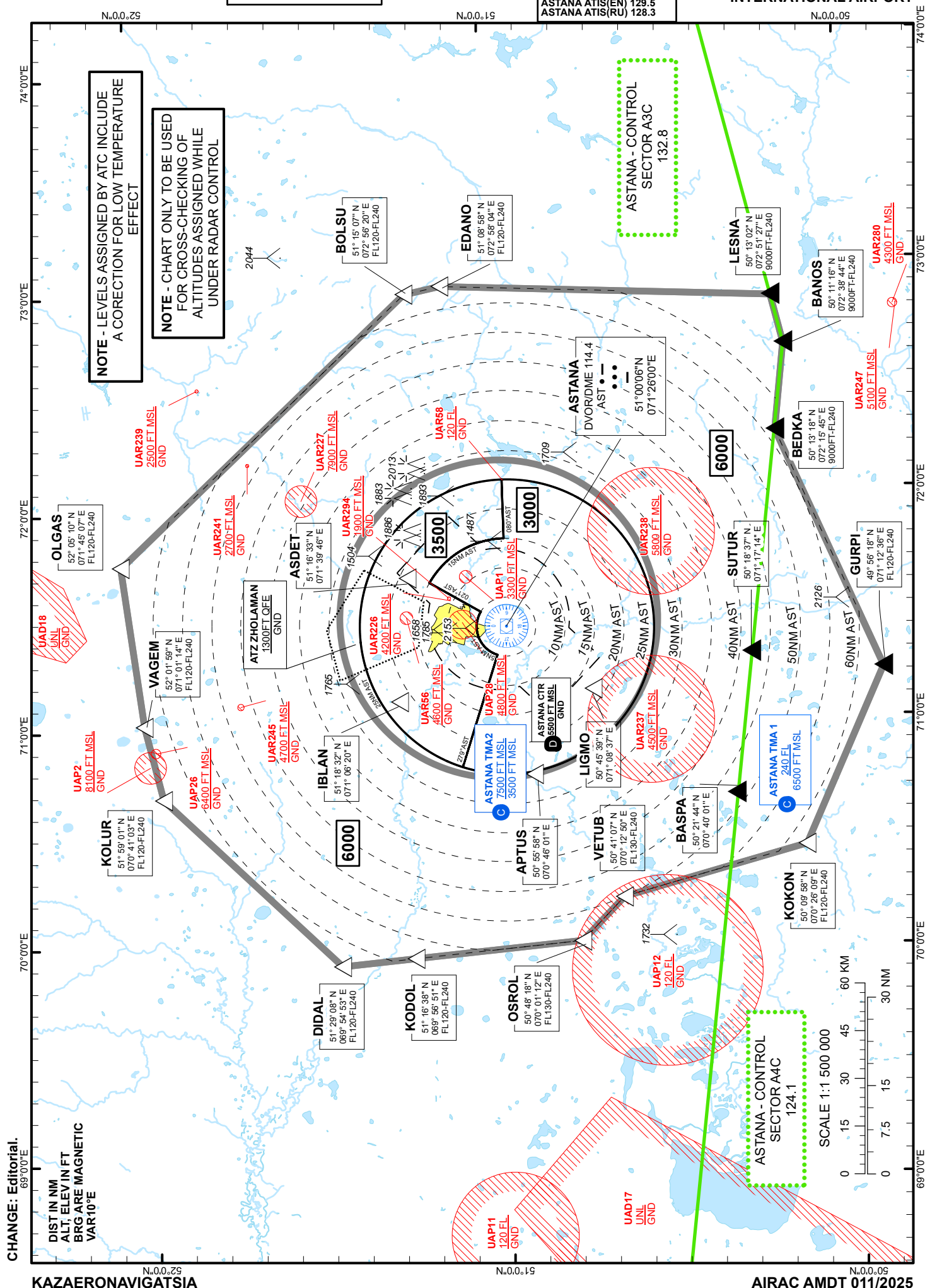


NURSULTAN NAZARBAYEV

STANDS CHARACTERISTICS

Apron	Stand	Coordinates	
		Latitude	Longitude
A	1	51 01 36.10 N	071 27 33.89 E
A	2	51 01 35.42 N	071 27 36.47 E
A	3	51 01 34.86 N	071 27 38.97 E
A	4	51 01 35.28 N	071 27 40.83 E
A	5	51 01 36.48 N	071 27 43.15 E
A	6	51 01 37.32 N	071 27 45.38 E
A	7	51 01 38.30 N	071 27 48.99 E
A	7L	51 01 37.17 N	071 27 48.80 E
A	7R	51 01 38.86 N	071 27 49.26 E
A	8	51 01 40.55 N	071 27 51.91 E
A	8L	51 01 39.17 N	071 27 51.94 E
A	8R	51 01 40.86 N	071 27 52.40 E
A	9	51 01 42.53 N	071 27 55.02 E
A	9L	51 01 41.13 N	071 27 55.15 E
A	9R	51 01 42.86 N	071 27 55.54 E
A	10	51 01 43.38 N	071 27 58.29 E
A	11	51 01 44.47 N	071 28 00.00 E
A	12	51 01 46.75 N	071 28 02.07 E
A	13	51 01 47.76 N	071 28 04.44 E
A	14	51 01 48.55 N	071 28 05.71 E
A	15	51 01 50.91 N	071 28 07.72 E
A	17	51 01 31.56 N	071 27 30.34 E
A	18	51 01 29.91 N	071 27 33.00 E
A	19	51 01 28.27 N	071 27 35.65 E
A	20	51 01 29.12 N	071 27 41.84 E
A	21	51 01 30.10 N	071 27 43.37 E
A	22	51 01 31.09 N	071 27 44.90 E
A	23	51 01 32.15 N	071 27 46.55 E
A	24	51 01 43.97 N	071 28 06.58 E
A	25	51 01 44.84 N	071 28 07.93 E
A	26	51 01 45.70 N	071 28 09.28 E
A	27	51 01 46.56 N	071 28 10.63 E
A	28	51 01 47.43 N	071 28 11.98 E
A	29	51 01 48.84 N	071 28 12.99 E
A	30	51 01 49.82 N	071 28 14.51 E
A	37	51 01 29.38 N	071 27 23.70 E
A	38	51 01 28.48 N	071 27 25.15 E
A	39	51 01 27.58 N	071 27 26.59 E
A	40	51 01 26.54 N	071 27 28.27 E
A	41	51 01 25.64 N	071 27 29.72 E
A	42	51 01 24.75 N	071 27 31.16 E
A	44	51 01 28.15 N	071 27 21.79 E
A	45	51 01 27.25 N	071 27 23.23 E
A	46	51 01 26.36 N	071 27 24.67 E
A	47	51 01 25.31 N	071 27 26.36 E
A	48	51 01 24.42 N	071 27 27.80 E
A	49	51 01 23.52 N	071 27 29.25 E
B	70	51 01 15.59 N	071 27 06.11 E
B	70a	51 01 15.38 N	071 27 08.38 E
B	71	51 01 14.61 N	071 27 07.70 E
B	72	51 01 13.62 N	071 27 09.30 E
B	72a	51 01 13.41 N	071 27 11.55 E
B	73	51 01 12.56 N	071 27 11.02 E
B	74	51 01 11.57 N	071 27 12.61 E
B	74a	51 01 11.57 N	071 27 14.56 E
B	75	51 01 10.59 N	071 27 14.21 E
B	76	51 01 16.47 N	071 27 10.59 E
B	77	51 01 15.48 N	071 27 12.18 E
B	78	51 01 14.50 N	071 27 13.78 E
B	79	51 01 13.51 N	071 27 15.38 E
B	80	51 01 19.36 N	071 27 11.72 E
B	81	51 01 18.37 N	071 27 14.96 E
B	82	51 01 17.57 N	071 27 16.34 E

Apron	Stand	Coordinates	
		Latitude	Longitude
B	83	51 01 16.65 N	071 27 17.75 E
B	84	51 01 15.80 N	071 27 19.13 E
B	85	51 01 21.09 N	071 27 16.47 E
B	86	51 01 20.23 N	071 27 17.85 E
B	87	51 01 19.37 N	071 27 19.24 E
B	88	51 01 18.51 N	071 27 20.64 E
B	89	51 01 17.65 N	071 27 22.02 E
B	90	51 01 22.91 N	071 27 19.49 E
B	91	51 01 22.26 N	071 27 20.54 E
B	92	51 01 21.61 N	071 27 21.59 E
B	93	51 01 20.82 N	071 27 22.87 E
B	94	51 01 20.18 N	071 27 23.93 E
B	95	51 01 19.53 N	071 27 24.94 E
C	100	51 02 03.94 N	071 28 34.06 E
C	101	51 02 06.68 N	071 28 40.30 E
C	102	51 01 57.87 N	071 28 27.66 E
C	103	51 01 58.80 N	071 28 29.07 E
C	104	51 02 01.19 N	071 28 35.01 E
D	31	51 01 50.89 N	071 28 16.15 E
D	32	51 01 51.88 N	071 28 17.67 E
D	33	51 01 52.87 N	071 28 19.19 E
D	1B	51 01 54.03 N	071 28 13.08 E
D	2B	51 01 55.63 N	071 28 15.56 E
D	3B	51 01 56.80 N	071 28 19.00 E
D	4B	51 01 58.43 N	071 28 21.42 E
M	01M	51 02 12.79 N	071 28 45.16 E
M	02M	51 02 13.74 N	071 28 43.63 E
M	03M	51 02 14.69 N	071 28 42.09 E
M	04M	51 02 15.64 N	071 28 40.56 E
M	05M	51 02 16.51 N	071 28 39.15 E
M	06M	51 02 17.27 N	071 28 37.94 E
M	07M	51 02 18.02 N	071 28 36.73 E
M	08M	51 02 18.85 N	071 28 35.39 E
M	09M	51 02 19.75 N	071 28 33.95 E
M	10M	51 02 20.57 N	071 28 32.02 E
K	1K	51 02 20.89 N	071 29 10.27 E
K	2K	51 02 21.36 N	071 29 11.01 E
K	3K	51 02 21.96 N	071 29 11.91 E
K	4K	51 02 22.80 N	071 29 13.21 E
K	5K	51 02 23.99 N	071 29 17.36 E
U	01U	51 02 43.95 N	071 29 20.77 E
U	02U	51 02 43.05 N	071 29 22.22 E
U	03U	51 02 42.16 N	071 29 23.66 E
U	04U	51 02 41.26 N	071 29 25.10 E
U	05U	51 02 40.36 N	071 29 26.55 E
U	06U	51 02 39.46 N	071 29 27.99 E
U	07U	51 02 38.57 N	071 29 29.43 E
U	08U	51 02 37.67 N	071 29 30.88 E
U	09U	51 02 42.51 N	071 29 27.38 E
U	10U	51 02 41.58 N	071 29 28.86 E
U	11U	51 02 40.67 N	071 29 30.34 E
U	12U	51 02 30.93 N	071 29 25.26 E
U	13U	51 02 31.87 N	071 29 26.72 E



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

1	Apron surface and strength	STANDS		SURFACE	STRENGTH
		1-7		CONC	PCN 51/R/B/X/T
2	Taxiway width, surface and strength	TWY	WIDTH (M)	SURFACE	STRENGTH
		1	23 M	CONC	PCN 45/R/A/X/T
		2	23 M	CONC	PCN 51/R/B/X/T
		3	20 M	CONC	PCN 45/R/A/X/T
		4	20 M	CONC	PCN 45/R/A/X/T
		MAIN from TWY 1 to TWY 2	23 M	CONC	PCN 45/R/A/X/T
		MAIN from TWY 2 to TWY 4	20 M	CONC	PCN 45/R/A/X/T
3	Altimeter checkpoint location and elevation	Nil			
4	VOR checkpoints	Nil			
5	INS checkpoints	Nil			
6	Remarks	Nil			

**UAAH AD 2.9 Surface Movement Guidance And Control System And Markings**

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

**UAAH AD 2.10 Aerodrome Obstacles**

NIL

**UAAH AD 2.11 Meteorological Information Provided**

1	Associated MET Office	Meteorological service Balkhash Phone: +7 (71036) 40401
2	Hours of service MET Office outside hour	HO
3	Office responsible for TAF preparation: Periods of validity	Meteorological service Balkhash, 9 HR (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	Nil
9	ATS units provided with information	Briefing, TWR
10	Additional information	Nil

## UAAH AD 2.12 Runway Physical Characteristics

Designation s RWY NR	TRUE BRG	Dimension s of RWY (M)	Strength (PCN) and surface of RWY and SWY	THR coordinates RWY end coordinates THR geoid undulation	THR elevation and highest elevation of TDZ of precision APP RWY	Slope of RWY-SWY
1	2	3	4	5	6	7
04	51.82°	2503 X 42	45/R/A/X/T/ CONC	465314.28N 0745929.84E - -149.3 FT	THR 1384.8 FT	Nil
22	231.84°	2503 X 42	45/R/A/X/T/ CONC	465404.38N 0750102.81E - -149.3 FT	THR 1446.5 FT	Nil

SWY dimensions (M)	CWY dimension s (M)	Strip dimensions (M)	RESA dimensions (M)	Location and description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
Nil	400 X 160	2803 X 300	250 X 150	Nil	Nil	No runway turn pads available
Nil	400 X 160	2803 X 300	210 X 150	Nil	Nil	No runway turn pads available

## UAAH AD 2.13 Declared Distances

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
04	2503	2903	2503	2503	Nil
22	2503	2903	2503	2503	Nil

**UAAH AD 2.24 Charts Related To An Aerodromem**

Name	Page
Aerodrome Chart ICAO	UAAH AD 2.24.1-1
Aerodrome Ground Movement and Parking Chart ICAO	UAAH AD 2.24.3-1
Aerodrome Obstacle Chart – ICAO – Type A	UAAH AD 2.24.4-1
Standard Departure Chart Instrument (SID) RWY 04 ICAO	UAAH AD 2.24.7-1-1
Standard Departure Chart Instrument (SID) RWY 22 ICAO	UAAH AD 2.24.7-2-1
Standard Departure Chart Instrument (SID) RNAV RWY 04 ICAO	UAAH AD 2.24.7-3-1
Standard Departure Chart Instrument (SID) RNAV RWY 22 ICAO	UAAH AD 2.24.7-4-1
Standard Arrival Chart Instrument (STAR) RWY 04 ICAO	UAAH AD 2.24.9-1-1
Standard Arrival Chart Instrument (STAR) RWY 22 ICAO	UAAH AD 2.24.9-2-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 04 ICAO	UAAH AD 2.24.9-3-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 22 ICAO	UAAH AD 2.24.9-4-1
ATC Surveillance Minimum Altitude Chart ICAO	UAAH AD 2.24.10-1
Instrument Approach Chart – VOR/DME RWY 04 ICAO	UAAH AD 2.24.11-1-1
Instrument Approach Chart – VOR/DME RWY 22 ICAO	UAAH AD 2.24.11-2-1
Instrument Approach Chart – RNP RWY 04 ICAO	UAAH AD 2.24.11-3-1
Instrument Approach Chart – RNP RWY 22 ICAO	UAAH AD 2.24.11-4-1
Visual Approach chart – ICAO	UAAH AD 2.24.12-1
VFR Departure/Arrival Chart	UAAH AD 2.24.14-1

**UAAH AD 2.25 Visual segment surface (VSS) penetrations**

No penetrations

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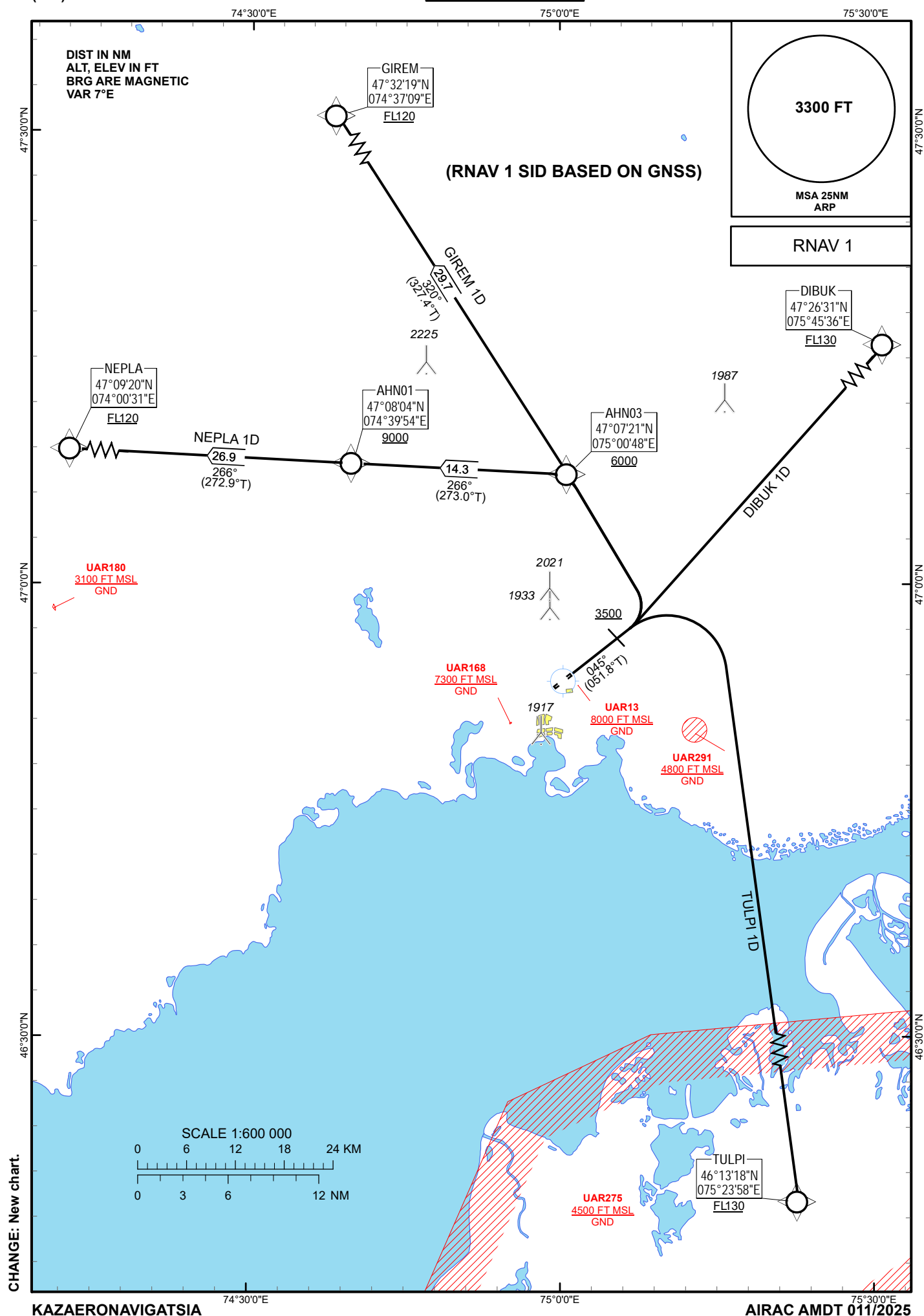
STANDARD DEPARTURE  
CHART - INSTRUMENT  
(SID) - ICAO

TRANSITION ALTITUDE  
10000 FT

BALKASH TOWER 128.0  
BALKASH ATIS (EN) 126.6  
BALKASH ATIS (RU) 126.2

DIBUK 1D, GIREM 1D,  
NEPLA 1D, TULPI 1D

BALKHASH  
RWY 04



TABULAR DESCRIPTION

DIBUK 1D RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	CA	-	-	045(051.8)	+7.1	-	-	+3500	-	1.9	RNAV 1
020	DF	DIBUK	-	-	+7.1	-	L	+FL130	-	2.1	RNAV 1

GIREM 1D RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	CA	-	-	045(051.8)	+7.1	-	-	+3500	-	1.9	RNAV 1
020	DF	AHN03	-	-	+7.1	-	L	+6000	-	2	RNAV 1
030	TF	GIREM	-	320(327.4)	+7.1	29.7	-	+FL120	-	1.9	RNAV 1

NEPLA 1D RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	CA	-	-	045(051.8)	+7.1	-	-	+3500	-	1.9	RNAV 1
020	DF	AHN03	-	-	+7.1	-	L	+6000	-	2	RNAV 1
030	TF	AHN01	-	266(273.0)	+7.1	14.3	L	+9000	-	2	RNAV 1
040	TF	NEPLA	-	266(272.9)	+7.1	26.9	-	+FL120	-	1.9	RNAV 1

TULPI 1D RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	CA	-	-	045(051.8)	+7.1	-	-	+3500	-	1.9	RNAV 1
020	DF	TULPI	-	-	+7.1	-	R	+FL130	-	1.9	RNAV 1

WAYPOINT COORDINATES

Waypoint Identifier	Coordinates	
AHN01	470804.00N	0743954.00E
AHN03	470721.00N	0750048.00E
DIBUK	472631.00N	0754536.00E
GIREM	473219.00N	0743709.00E
NEPLA	470920.00N	0740031.00E
TULPI	461318.00N	0752358.00E

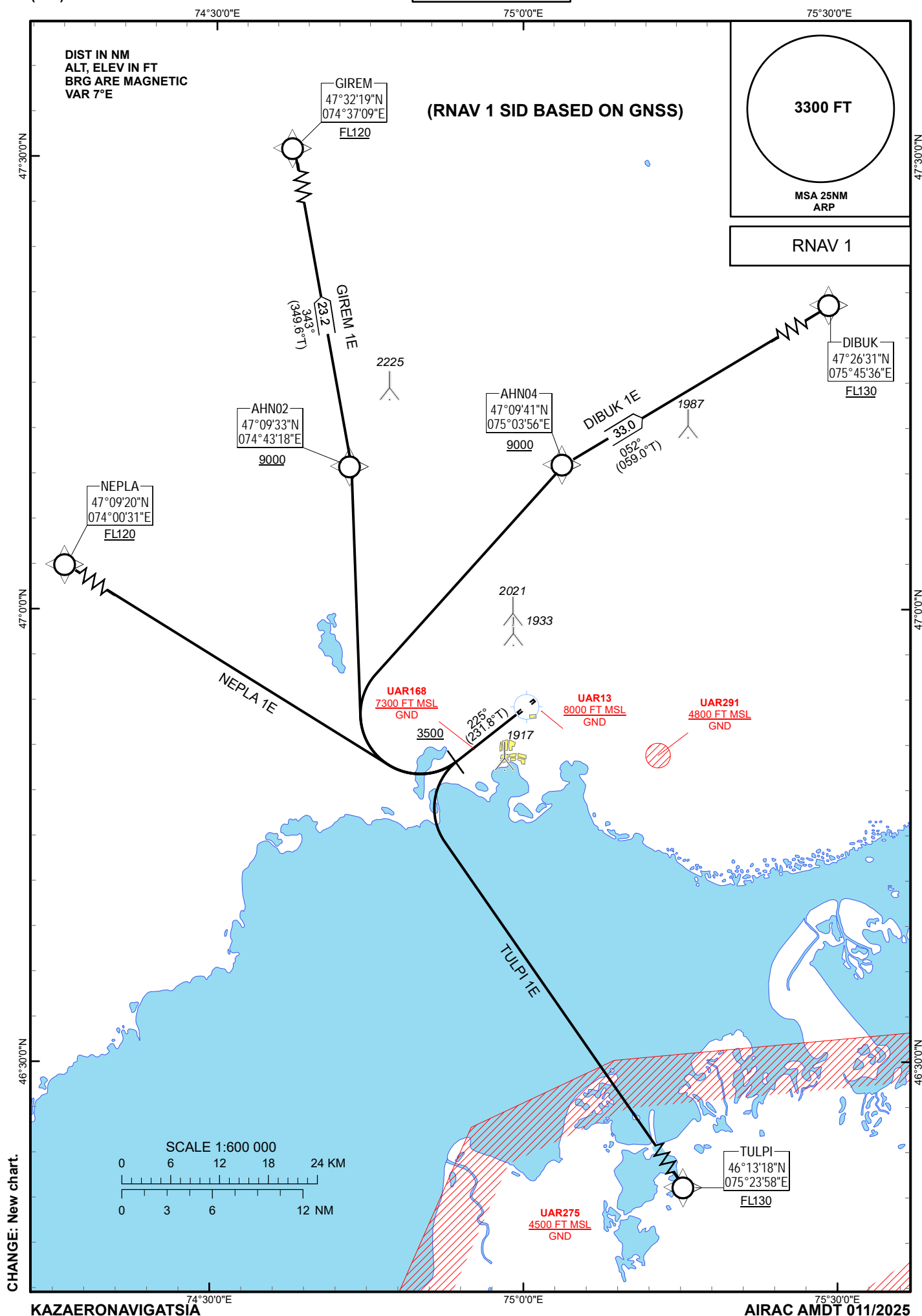
STANDARD DEPARTURE  
CHART - INSTRUMENT  
(SID) - ICAO

TRANSITION ALTITUDE  
10000 FT

BALKASH TOWER 128.0  
BALKASH ATIS (EN) 126.6  
BALKASH ATIS (RU) 126.2

DIBUK 1E, GIREM 1E,  
NEPLA 1E, TULPI 1E

BALKHASH  
RWY 22



TABULAR DESCRIPTION

DIBUK 1E RWY22											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	CA	-	-	225(231.8)	+7.1	-	-	+3500	-	1.9	RNAV 1
020	DF	AHN04	-	-	+7.1	-	R	+9000	-	1.9	RNAV 1
030	TF	DIBUK	-	052(059.0)	+7.1	33.0	R	+FL130	-	1.9	RNAV 1

GIREM 1E RWY22											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	CA	-	-	225(231.8)	+7.1	-	-	+3500	-	1.9	RNAV 1
020	DF	AHN02	-	-	+7.1	-	R	+9000	-	2.1	RNAV 1
030	TF	GIREM	-	343(349.6)	+7.1	23.2	-	+FL120	-	1.9	RNAV 1

NEPLA 1E RWY22											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	CA	-	-	225(231.8)	+7.1	-	-	+3500	-	1.9	RNAV 1
020	DF	NEPLA	-	-	+7.1	-	R	+FL120	-	1.9	RNAV 1

TULPI 1E RWY22											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	CA	-	-	225(231.8)	+7.1	-	-	+3500	-	1.9	RNAV 1
020	DF	TULPI	-	-	+7.1	-	L	+FL130	-	2	RNAV 1

WAYPOINT COORDINATES

Waypoint Identifier	Coordinates	
AHN02	470933.00N	0744318.00E
AHN04	470941.00N	0750356.00E
DIBUK	472631.00N	0754536.00E
GIREM	473219.00N	0743709.00E
NEPLA	470920.00N	0740031.00E
TULPI	461318.00N	0752358.00E

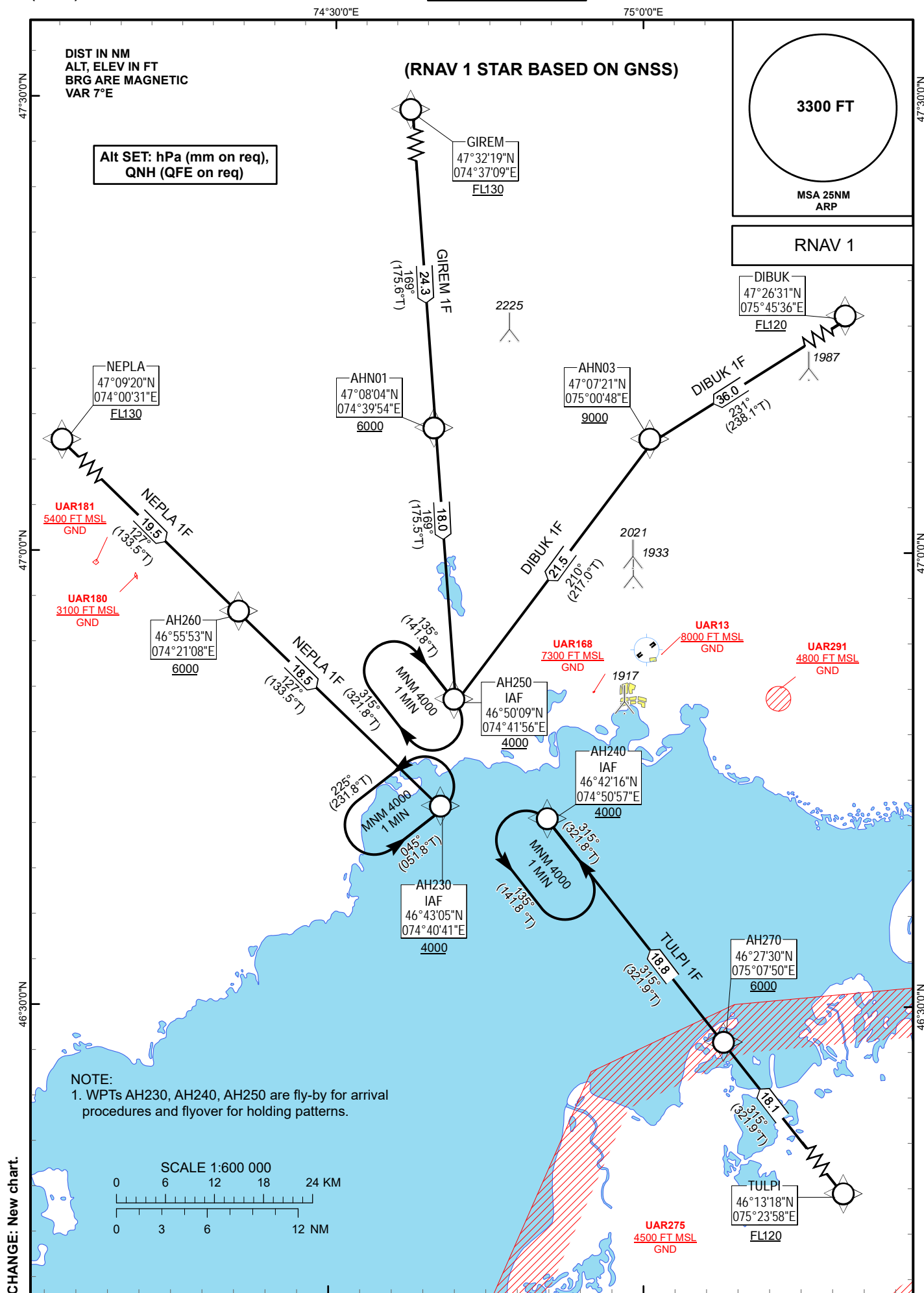
STANDARD ARRIVAL  
CHART - INSTRUMENT  
(STAR) - ICAO

TRANSITION ALTITUDE  
10000 FT

BALKASH TOWER 128.0  
BALKASH ATIS (EN) 126.6  
BALKASH ATIS (RU) 126.2

DIBUK 1F, GIREM 1F,  
NEPLA 1F, TULPI 1F

BALKHASH  
RWY 04



**TABULAR DESCRIPTION**

DIBUK 1F RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	DIBUK	-	-	+7.1	-	-	+FL120	-	-	RNAV 1
020	TF	AHN03	-	231(238.1)	+7.1	36.0	-	+9000	-	-0.8	RNAV 1
030	TF	AH250	-	210(217.0)	+7.1	21.5	L	+4000	-	-2.2	RNAV 1

GIREM 1F RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	GIREM	-	-	+7.1	-	-	+FL130	-	-	RNAV 1
020	TF	AHN01	-	169(175.6)	+7.1	24.3	-	+6000	-	-2.7	RNAV 1
030	TF	AH250	-	169(175.5)	+7.1	18.0	-	+4000	-	-1	RNAV 1

NEPLA 1F RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	NEPLA	-	-	+7.1	-	-	+FL130	-	-	RNAV 1
020	TF	AH260	-	127(133.5)	+7.1	19.5	-	+6000	-	-3.4	RNAV 1
030	TF	AH230	-	127(133.5)	+7.1	18.5	-	+4000	-	-1	RNAV 1

TULPI 1F RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	TULPI	-	-	+7.1	-	-	+FL120	-	-	RNAV 1
020	TF	AH270	-	315(321.9)	+7.1	18.1	-	+6000	-	-3.1	RNAV 1
030	TF	AH240	-	315(321.9)	+7.1	18.8	-	+4000	-	-1	RNAV 1

**WAYPOINT COORDINATES**

Waypoint Identifier	Coordinates	
AH230	464305.00N	0744041.00E
AH240	464216.00N	0745057.00E
AH250	465009.00N	0744156.00E
AH260	465553.00N	0742108.00E
AH270	462730.00N	0750750.00E
AHN01	470804.00N	0743954.00E
AHN03	470721.00N	0750048.00E
DIBUK	472631.00N	0754536.00E
GIREM	473219.00N	0743709.00E
NEPLA	470920.00N	0740031.00E
TULPI	461318.00N	0752358.00E

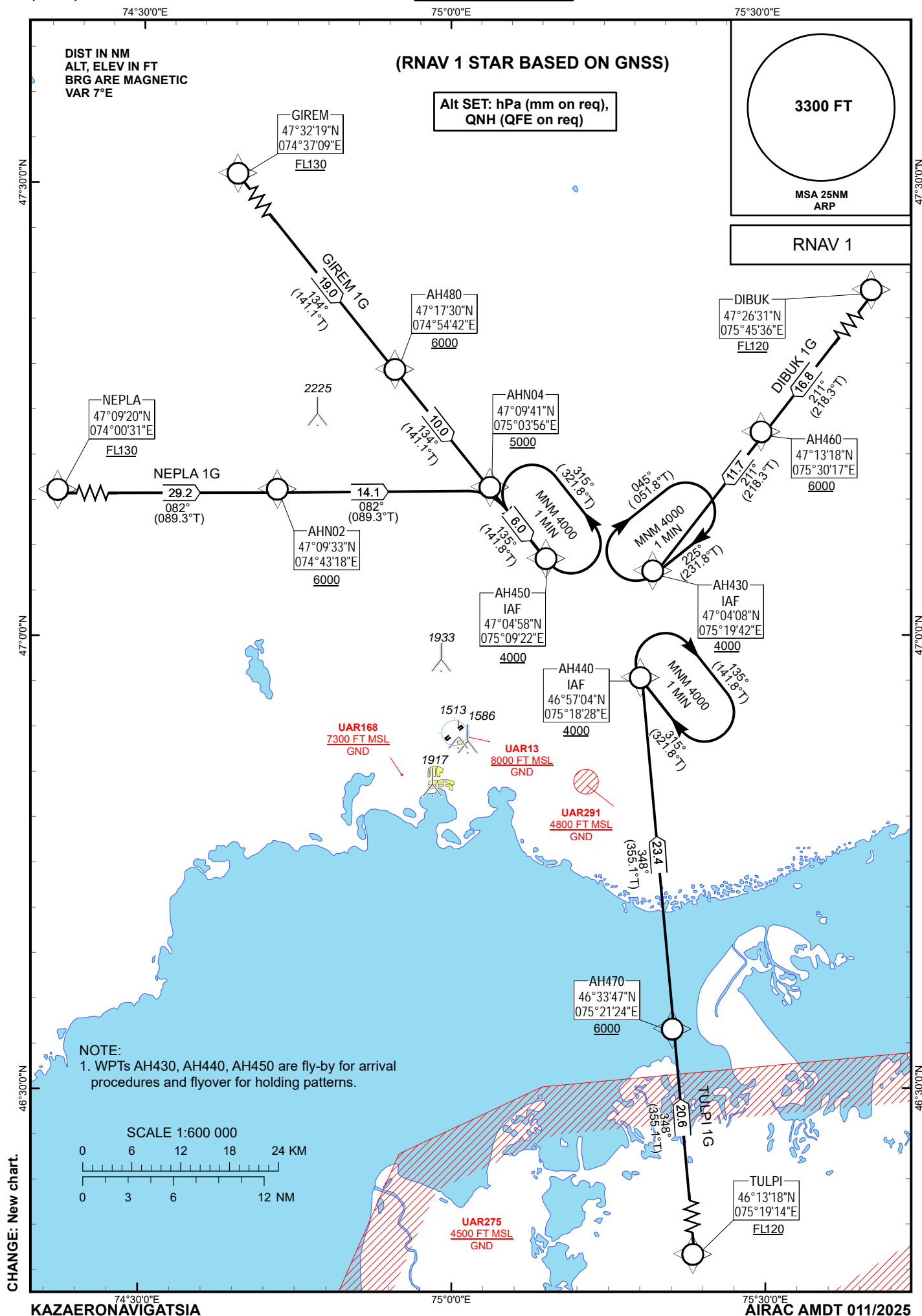
STANDARD ARRIVAL  
CHART - INSTRUMENT  
(STAR) - ICAO

TRANSITION ALTITUDE  
10000 FT

BALKASH TOWER 128.0  
BALKASH ATIS (EN) 126.6  
BALKASH ATIS (RU) 126.2

DIBUK 1G, GIREM 1G,  
NEPLA 1G, TULPI 1G

BALKHASH  
RWY 22



**TABULAR DESCRIPTION**

DIBUK 1G 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	DIBUK	-	-	+7.1	-	-	+FL120	-	-	RNAV 1
020	TF	AH460	-	211(218.3)	+7.1	16.8	-	+6000	-	-3.4	RNAV 1
030	TF	AH430	-	211(218.3)	+7.1	11.7	-	+4000	-	-1.6	RNAV 1

GIREM 1G 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	GIREM	-	-	+7.1	-	-	+FL130	-	-	RNAV 1
020	TF	AH480	-	134(141.1)	+7.1	19.0	-	+6000	-	-3.5	RNAV 1
030	TF	AHN04	-	134(141.1)	+7.1	10.0	-	+5000	-	-0.9	RNAV 1
040	TF	AH450	-	135(141.8)	+7.1	6.0	-	+4000	-	-1.6	RNAV 1

NEPLA 1G 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	NEPLA	-	-	+7.1	-	-	+FL130	-	-	RNAV 1
020	TF	AHN02	-	082(089.3)	+7.1	29.2	-	+6000	-	-2.3	RNAV 1
030	TF	AHN04	-	082(089.3)	+7.1	14.1	-	+5000	-	-0.7	RNAV 1
040	TF	AH450	-	135(141.8)	+7.1	6.0	R	+4000	-	-1.6	RNAV 1

TULPI 1G 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	TULPI	-	-	+7.1	-	-	+FL120	-	-	RNAV 1
020	TF	AH470	-	348(355.1)	+7.1	20.6	-	+6000	-	-2.7	RNAV 1
030	TF	AH440	-	348(355.1)	+7.1	23.4	-	+4000	-	-0.8	RNAV 1

**WAYPOINT COORDINATES**

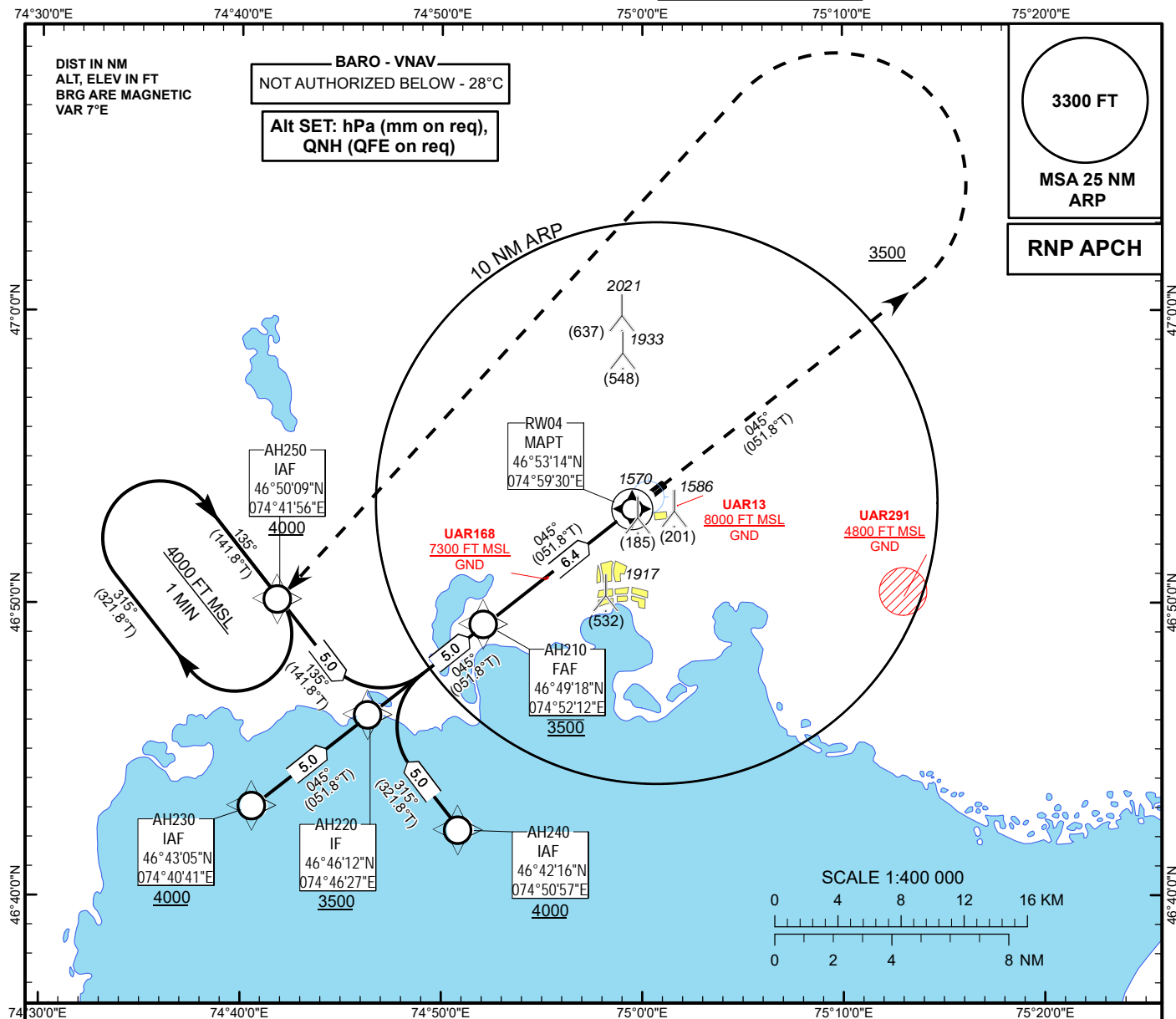
Waypoint Identifier	Coordinates	
AH430	470408.00N	0751942.00E
AH440	465704.00N	0751828.00E
AH450	470458.00N	0750922.00E
AH460	471318.00N	0753017.00E
AH470	463347.00N	0752124.00E
AH480	471730.00N	0745442.00E
AHN02	470933.00N	0744318.00E
AHN04	470941.00N	0750356.00E
DIBUK	472631.00N	0754536.00E
GIREM	473219.00N	0743709.00E
NEPLA	470920.00N	0740031.00E
TULPI	461318.00N	0752358.00E

INSTRUMENT  
APPROACH  
CHART - ICAO

AERODROME ELEV **1447FT**  
HEIGHTS RELATED TO  
THR RWY 04 - ELEV **1385FT**

BALKASH TOWER 128.0  
BALKASH ATIS (EN) 126.6  
BALKASH ATIS (RU) 126.2

BALKHASH  
RNP RWY 04



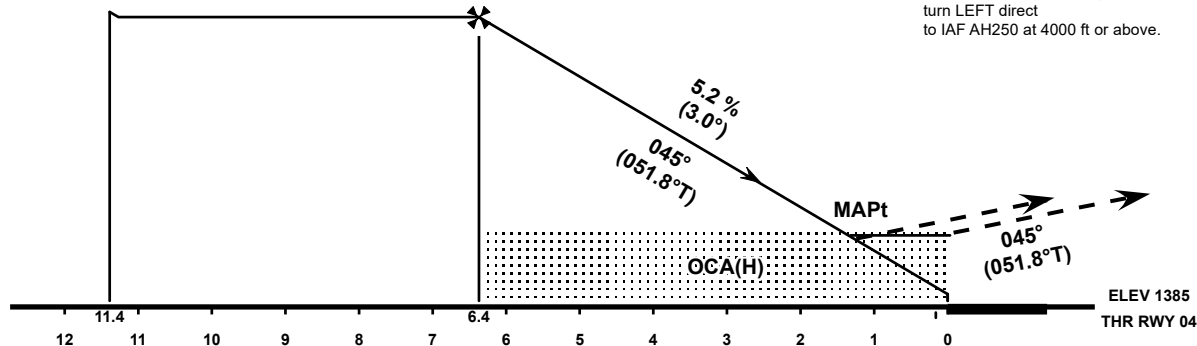
IF  
AH220  
3500

FAF  
AH210  
3500

TRANSITION ALT 10000 FT

MISSED APPROACH:

On course 045° M  
climb to 3500 ft or above,  
turn LEFT direct  
to IAF AH250 at 4000 ft or above.



OCA(OCH)		A	B	C	D
Straight	LNAV	1820(440)			
	LNAV/VNAV	1701(316)	1711(326)	1721(336)	1730(346)

DIST THR	6	5	4	3	2
ALTITUDE	3340	3030	2710	2390	2070
HEIGHT	1960	1640	1320	1000	690

GS	kt	80	100	120	140	160	180
Rate of descent	ft/min	420	530	640	740	850	960
FAF/FAP - THR (6.4 NM)	min:s	4:47	3:49	3:11	2:44	2:23	2:07

TABULAR DESCRIPTION

RNP RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	AH230	-	-	+7.1	-	-	+4000	-	-	RNP APCH
020	TF	AH220	-	045(051.8)	+7.1	5.0	-	+3500	-	-	RNP APCH
010	IF	AH240	-	-	+7.1	-	-	+4000	-	-	RNP APCH
020	TF	AH220	-	315(321.8)	+7.1	5.0	-	+3500	-	-	RNP APCH
010	IF	AH250	-	-	+7.1	-	-	+4000	-	-	RNP APCH
020	TF	AH220	-	135(141.8)	+7.1	5.0	-	+3500	-	-	RNP APCH
010	IF	AH220	-	-	+7.1	-	-	+3500	-	-	RNP APCH
020	TF	AH210	-	045(051.8)	+7.1	5.0	-	@3500	-	-	RNP APCH
030	TF	RW04	Y	045(051.8)	+7.1	6.4	-	@1435	-	-3.0	RNP APCH
040	CA	-	-	045(051.8)	+7.1	-	-	+3500	-	-	RNP APCH
050	DF	AH250	-	-	+7.1	-	L	+4000	-	-	RNP APCH

WAYPOINT COORDINATES

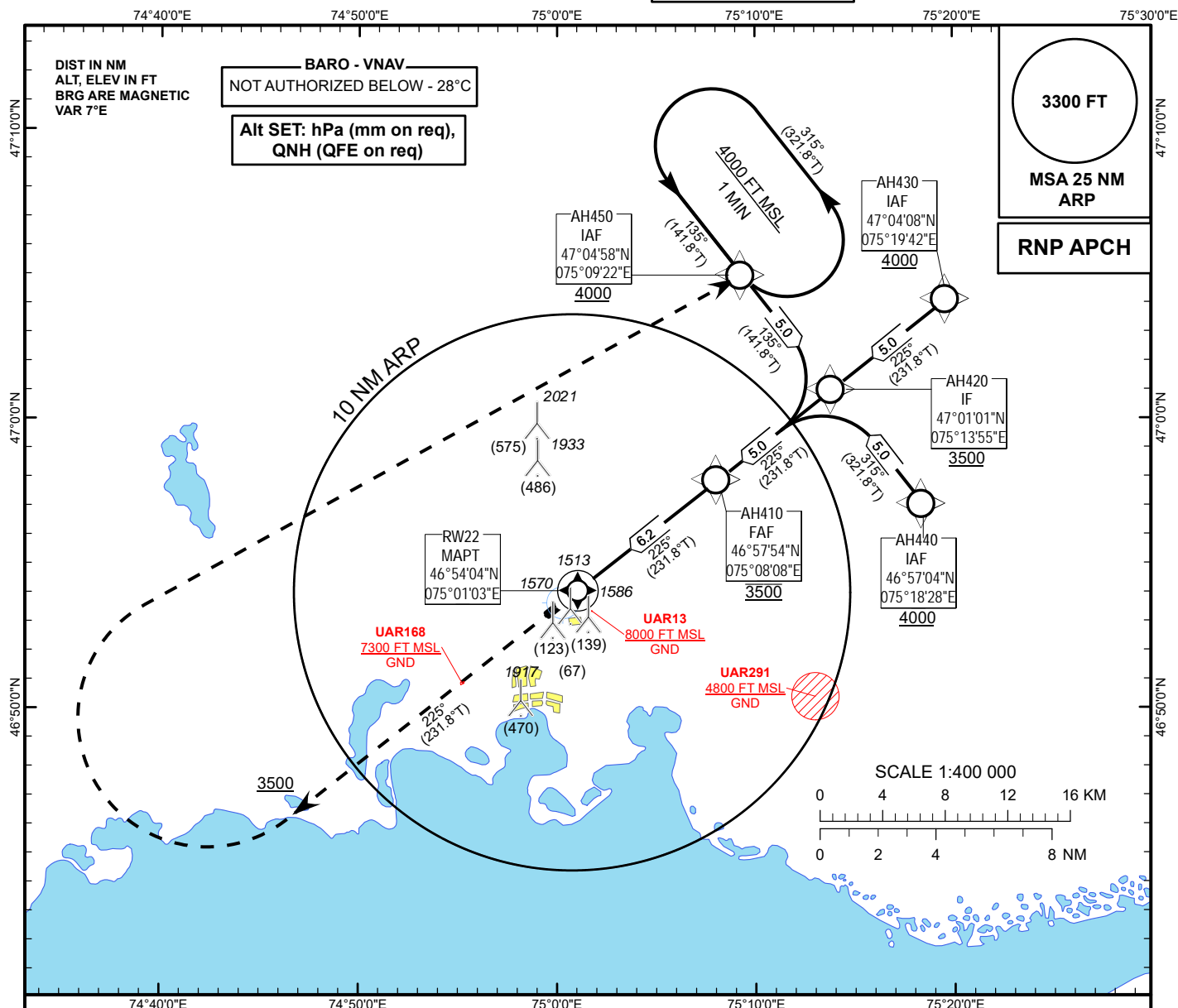
RNP RWY04		
Waypoint Identifier		
Coordinates		
AH210	464918.00N	0745212.00E
AH220	464612.00N	0744627.00E
AH230	464305.00N	0744041.00E
AH240	464216.00N	0745057.00E
AH250	465009.00N	0744156.00E
RW04	465314.28N	0745929.84E

INSTRUMENT  
APPROACH  
CHART - ICAO

AERODROME ELEV **1447FT**  
HEIGHTS RELATED TO  
AD ELEV

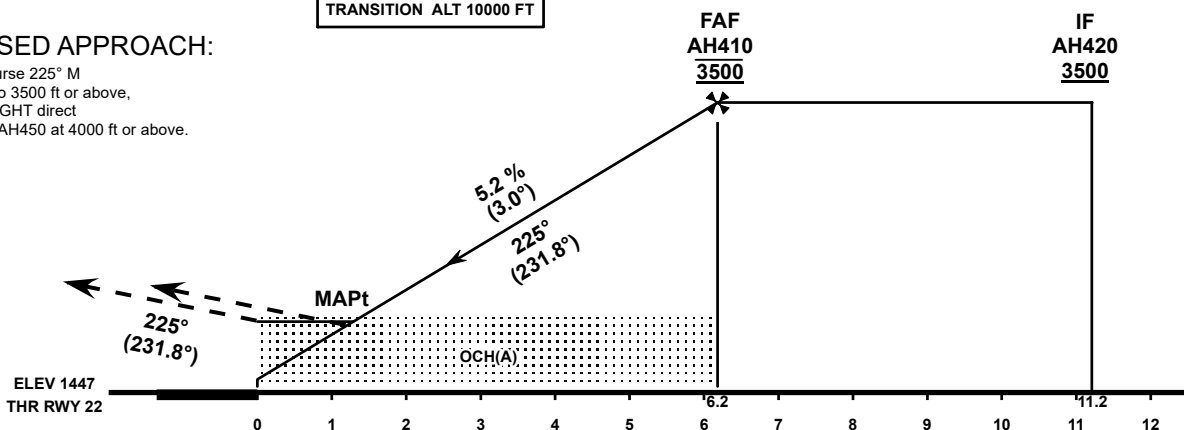
BALKASH TOWER 128.0  
BALKASH ATIS (EN) 126.6  
BALKASH ATIS (RU) 126.2

BALKHASH  
RNP RWY 22



MISSED APPROACH:

On course 225° M  
climb to 3500 ft or above,  
turn RIGHT direct  
to IAF AH450 at 4000 ft or above.



OCA(OCH)		A	B	C	D
Straight	LNAV	1760(320)			
	LNAV/VNAV	1644(198)	1654(208)	1664(217)	1674(274)

DIST THR	6	5	4	3	2	1
ALTITUDE	3410	3090	2770	2450	2130	1810
HEIGHT	1960	1640	1320	1000	690	370

GS	kt	80	100	120	140	160	180
Rate of descent	ft/min	420	530	640	740	850	960
FAF/FAP - THR (6.2 NM)	min:s	4:38	3:43	3:05	2:39	2:19	2:04

CHANGE: New chart.

TABULAR DESCRIPTION

RNP 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	AH430	-	-	+7.1	-	-	+4000	-	-	RNP APCH
020	TF	AH420	-	225(231.8)	+7.1	5.0	-	+3500	-	-	RNP APCH
010	IF	AH440	-	-	+7.1	-	-	+4000	-	-	RNP APCH
020	TF	AH420	-	315(321.8)	+7.1	5.0	-	+3500	-	-	RNP APCH
010	IF	AH450	-	-	+7.1	-	-	+4000	-	-	RNP APCH
020	TF	AH420	-	135(141.8)	+7.1	5.0	-	+3500	-	-	RNP APCH
010	IF	AH420	-	-	+7.1	-	-	+3500	-	-	RNP APCH
020	TF	AH410	-	225(231.8)	+7.1	5.0	-	@3500	-	-	RNP APCH
030	TF	RW22	Y	225(231.8)	+7.1	6.2	-	@1497	-	-3.0	RNP APCH
040	CA	-	-	225(231.8)	+7.1	-	-	+3500	-	-	RNP APCH
050	DF	AH450	-	-	+7.1	-	R	+4000	-	-	RNP APCH

WAYPOINT COORDINATES

RNP RWY22		
Waypoint Identifier		
Coordinates		
AH410	465754.00N	0750808.00E
AH420	470101.00N	0751355.00E
AH430	470408.00N	0751942.00E
AH440	465704.00N	0751828.00E
AH450	470458.00N	0750922.00E
RW22	465404.38N	0750102.81E

**UAIK AD 2**

Note: The following sections in this chapter are intentionally left blank: AD-2.10, AD-2.16, AD-2.19

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

UAIK - BOZHBAN

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

1	ARP coordinates and site at AD	424537N 0672929E At the centre of RWY
2	Direction and distance from (city)	55 km NW of Kok-Saray, Turkestan Region
3	Elevation/Reference temperature	637 FT/34° C
4	Geoid undulation at AD ELEV PSN	-141 FT
5	MAG VAR/Annual Change	7° (2024)/0.05°
6	AD Administration, address, telephone, telefax, telex, e-mail address, AFS, website address	POST Authority of Airport 160003 Shymkent, JSC "Shymkent Airport" Republic of Kazakhstan "  PHONE +7 (7252) 455033 (ext 10-15) PHONE +7 (7252) 455033 (ext 11-15) EMAIL reception@airserver.kz AFS UAIAPDU
7	Types of traffic permitted (IFR/VFR)	IFR-VFR/SVFR
8	Remarks	Nil

**UAIK AD 2.3 Operational Hours**

1	AD Administration	HO
2	Customs and immigration	As AD
3	Health and sanitation	As AD Phone: +7 (7252) 455033 (ext 10-32)
4	AIS Briefing Office	As AD
5	ATS Reporting Office (ARO)	As AD Phone: +7 (7252) 945141 Email: shadp@ans.kz
6	MET Briefing Office	As AD Phone: +7 (7252) 945168
7	ATS	See NOTAM
8	Fuelling	As AD
9	Handling	As AD Phone: +7 (7252) 945097 Email: pdsp@airserver.kz
10	Security	As AD Phone: +7 (7252) 945101 Email: sab@airserver.kz
11	De-icing	As AD

12	Remarks	Aerodrome operational period: from 01 September to 25 November. The aerodrome is closed during the remaining period..
----	---------	---

#### UAIK AD 2.4 Handling Services And Facilities

1	Cargo-handling facilities	As AD
2	Fuel/oil types	As AD
3	Fuelling facilities/capacity	As AD
4	De-icing facilities	As AD
5	Hangar space for visiting aircraft	Nil
6	Repair facilities for visiting aircraft	Nil
7	Remarks	Nil

#### UAIK AD 2.5 Passenger Facilities

1	Hotels	Nil
2	Restaurants	Nil
3	Transportation	Nil
4	Medical facilities	As AD
5	Bank and Post Office	Nil
6	Tourist Office	Nil
7	Remarks	Nil

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

1	AD category for fire fighting	CAT A8
2	Rescue equipment	4 fire vehicles, total extinguishing capacity: 33,150 L, including 3,450 kg of foam concentrate
3	Capability for removal of disabled aircraft	HO
4	Remarks	The quantity and delivery means of extinguishing agents correspond to CAT 8. Upgrade of RFFS CAT from 8 to 9 is possible upon prior request.

#### UAIK AD 2.7 Seasonal Availability - Clearing

1	Types of clearing equipment	2 combined watering machine
2	Clearance priorities	1. RWY 02R/20L 2. TWY 3. Stands
3	Remarks	HO

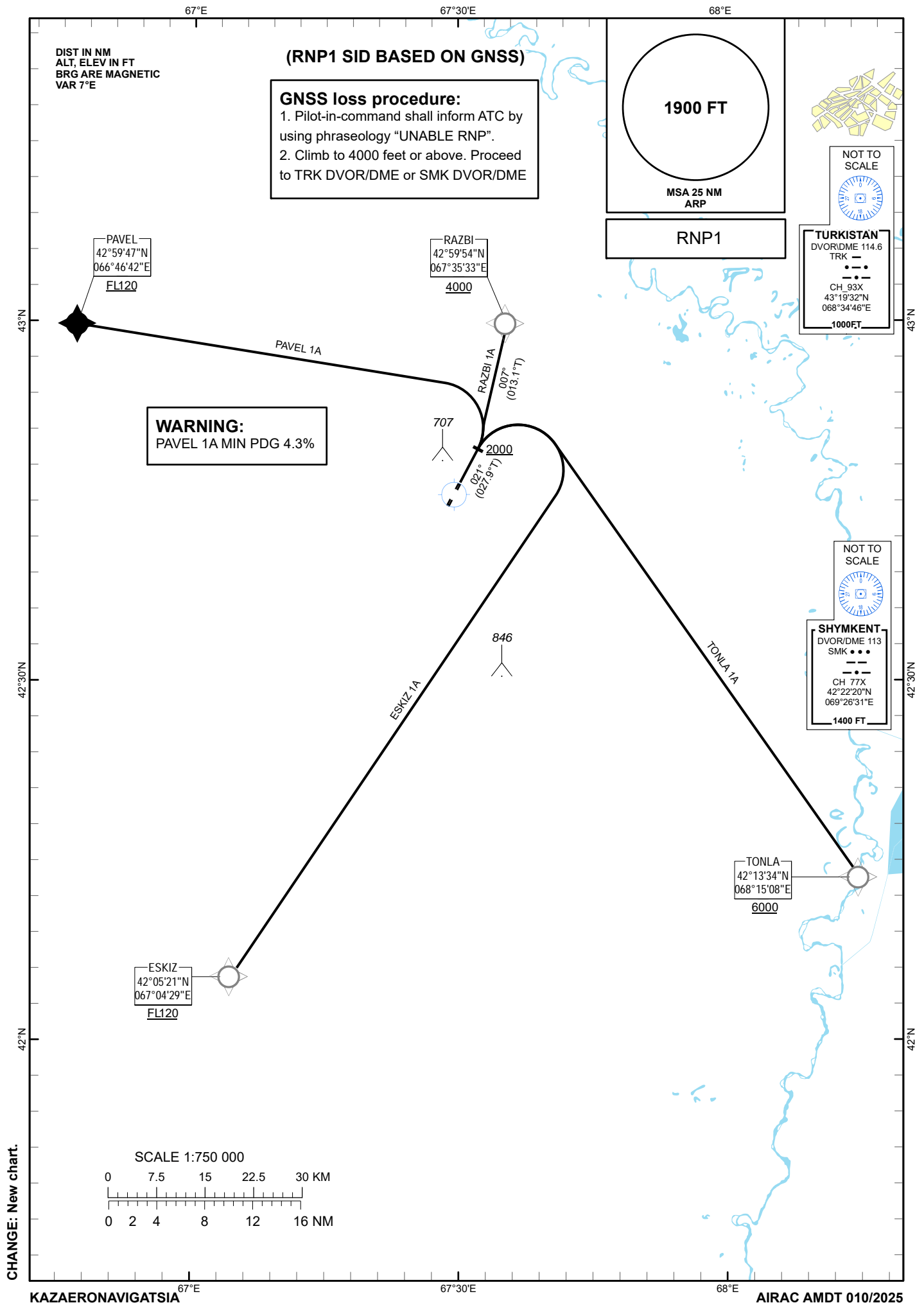
STANDARD DEPARTURE  
CHART - INSTRUMENT  
(SID) - ICAO

TRANSITION ALTITUDE  
10000 FT

TOWER FREQ  
SEE NOTAM

ESKIZ 1A, PAVEL 1A,  
RAZBI 1A, TONLA 1A

BOZHBAN  
RWY 02R



TABULAR  
DESCRIPTION

ESKIZ 1A RWY02R											
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	CA	-	-	021(027.9)	+6.54	6.7	-	+2000	-	1.9	RNP 1
020	DF	ESKIZ	-	-	+6.54	-	R	+FL 120	-	1.9	RNP 1

TABULAR  
DESCRIPTION

PAVEL 1A RWY02R											
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	CA	-	-	021(027.9)	+6.54	6.7	-	+2000	-	1.9	RNP 1
020	DF	PAVEL	-	-	+6.54	-	L	+FL 120	-	2.4	RNP 1

TABULAR  
DESCRIPTION

RAZBI 1A RWY02R											
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	CA	-	-	021(027.9)	+6.54	6.7	-	+2000	-	1.9	RNP 1
020	CF	RAZBI	-	007(013.1)	+6.54	-	L	+4000	-	1.9	RNP 1

TABULAR  
DESCRIPTION

TONLA 1A RWY02R											
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	CA	-	-	021(027.9)	+6.54	6.7	-	+2000	-	1.9	RNP 1
020	DF	TONLA	-	-	+6.54	-	R	+6000	-	1.9	RNP 1

WAYPOINT COORDINATES

WPT	COORD	
DER	42°46'38.28"N	067°30'13.11"E
ESKIZ	42°05'21.00"N	067°04'29.00"E
PAVEL	42°59'47.00"N	066°46'42.00"E
RAZBI	42°59'54.00"N	067°35'33.00"E
TONLA	42°13'34.00"N	068°15'08.00"E

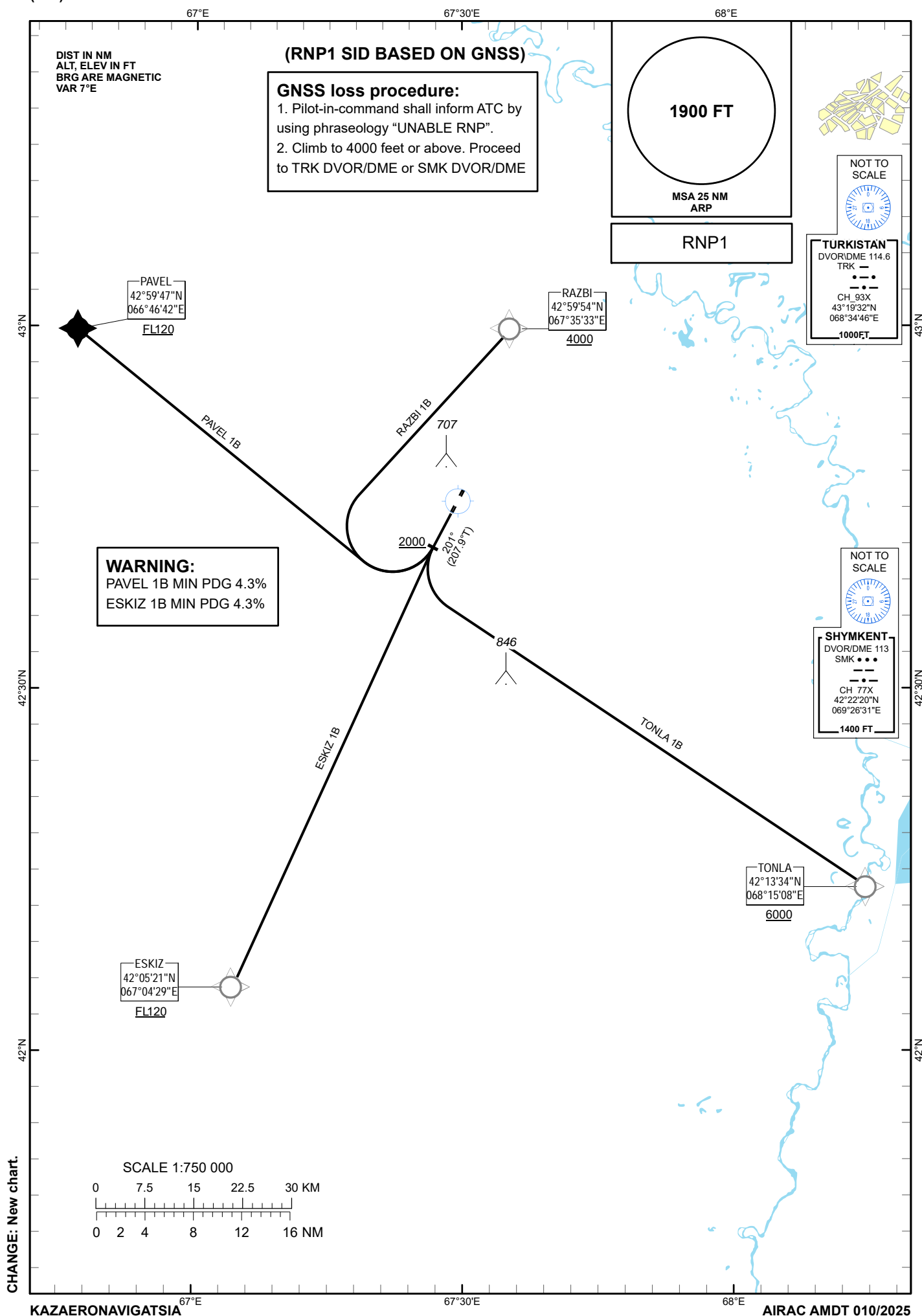
STANDARD DEPARTURE  
CHART - INSTRUMENT  
(SID) - ICAO

TRANSITION ALTITUDE  
10000 FT

TOWER FREQ  
SEE NOTAM

ESKIZ 1B, PAVEL 1B,  
RAZBI 1B, TONLA 1B

BOZHBAN  
RWY 20L



TABULAR  
DESCRIPTION

ESKIZ 1B RWY20L											
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	CA	-	-	201(207.9)	+6.54	6.7	-	+2000	-	1.9	RNP 1
020	DF	ESKIZ	-	-	+6.54	-	-	+FL 120	-	2.3	RNP 1

TABULAR  
DESCRIPTION

PAVEL 1B RWY20L											
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	CA	-	-	201(207.9)	+6.54	6.7	-	+2000	-	1.9	RNP 1
020	DF	PAVEL	-	-	+6.54	-	R	+FL 120	-	2.5	RNP 1

TABULAR  
DESCRIPTION

RAZBI 1B RWY20L											
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	CA	-	-	201(207.9)	+6.54	6.7	-	+2000	-	1.9	RNP 1
020	DF	RAZBI	-	-	+6.54	-	R	+4000	-	1.9	RNP 1

TABULAR  
DESCRIPTION

TONLA 1B RWY20L											
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	CA	-	-	201(207.9)	+6.54	6.7	-	+2000	-	1.9	RNP 1
020	DF	TONLA	-	-	+6.54	-	L	+6000	-	1.9	RNP 1

WAYPOINT COORDINATES

WPT	COORD	
DER	42°44'35.89"N	067°28'45.10"E
ESKIZ	42°05'21.00"N	067°04'29.00"E
PAVEL	42°59'47.00"N	066°46'42.00"E
RAZBI	42°59'54.00"N	067°35'33.00"E
TONLA	42°13'34.00"N	068°15'08.00"E

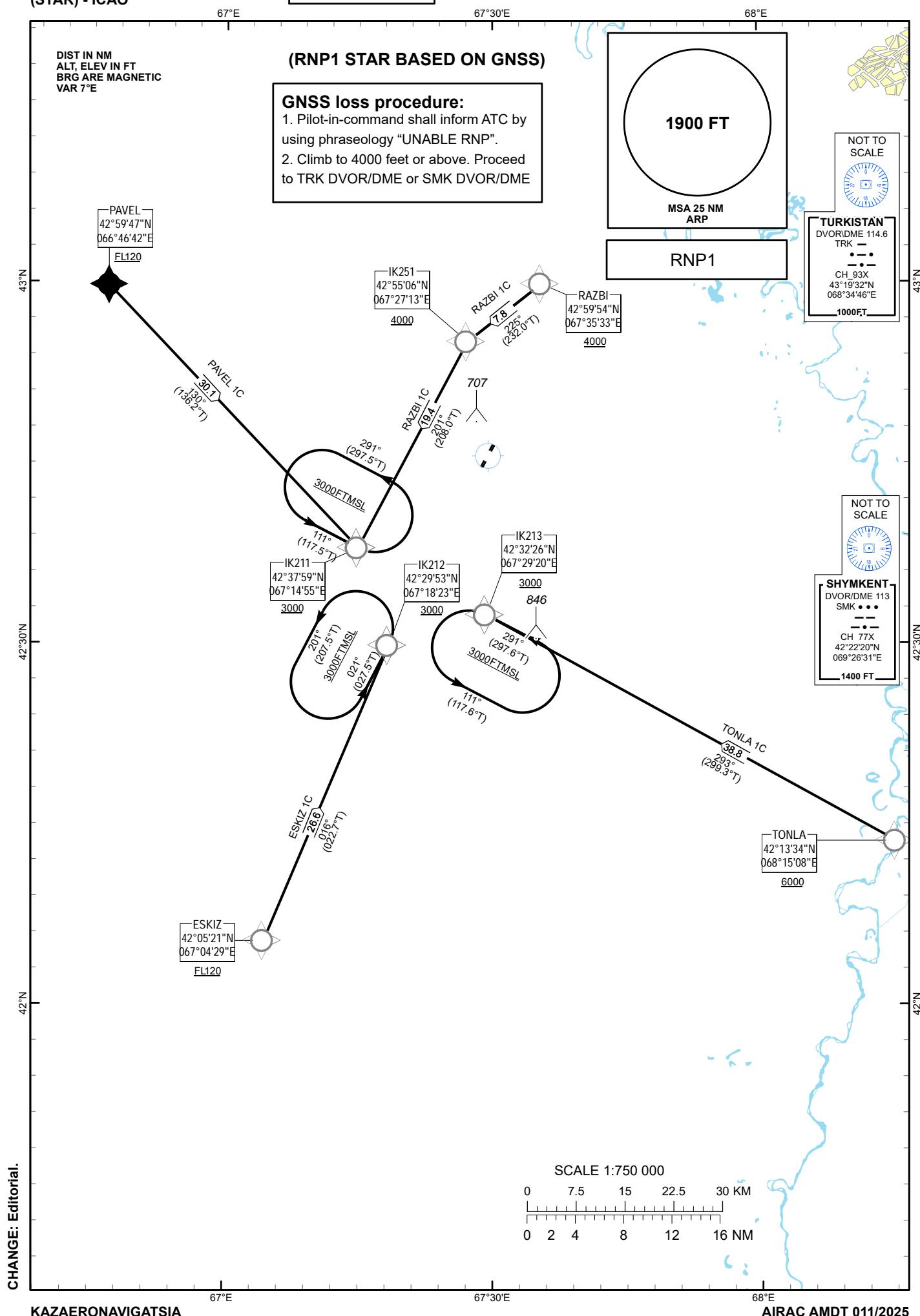
STANDARD ARRIVAL  
CHART - INSTRUMENT  
(STAR) - ICAO

TRANSITION ALTITUDE  
10000 FT

TOWER FREQ  
SEE NOTAM

ESKIZ 1C, PAVEL 1C,  
RAZBI 1C, TONLA 1C

BOZHBAN  
RWY 02R



TABULAR  
DESCRIPTION

ESKIZ 1C RWY02R											
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	ESKIZ	-		+6.54	-	-	+FL 120	-	-	RNP 1
020	TF	IK212	-	016(022.7)	+6.54	26.6	-	+3000	-	-	RNP 1

TABULAR  
DESCRIPTION

PAVEL 1C RWY02R											
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	PAVEL	-		+6.54	-	-	+FL 120	-	-	RNP 1
020	CF	IK211	-	130(136.2)	+6.54	30.1	-	+3000	-	-	RNP 1

TABULAR  
DESCRIPTION

RAZBI 1C RWY02R											
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	RAZBI	-		+6.54	-	-	+4000	-	-	RNP 1
020	TF	IK251	-	225(232.0)	+6.54	7.8	-	+4000	-	-	RNP 1
030	TF	IK211	-	201(208.0)	+6.54	19.4	L	+3000	-	-	RNP 1

TABULAR  
DESCRIPTION

TONLA 1C RWY02R											
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	TONLA	-		+6.54	-	-	+6000	-	-	RNP 1
020	TF	IK213	-	293(299.3)	+6.54	38.8	-	+3000	-	-	RNP 1

WAYPOINT COORDINATES

WPT	COORD		WPT	COORD	
ESKIZ	42°05'21.00"N	067°04'29.00"E	PAVEL	42°59'47.00"N	066°46'42.00"E
IK211	42°37'58.76"N	067°14'55.21"E	RAZBI	42°59'54.00"N	067°35'33.00"E
IK212	42°29'52.95"N	067°18'22.96"E	TONLA	42°13'34.00"N	068°15'08.00"E
IK213	42°32'25.74"N	067°29'19.63"E			
IK251	42°55'06.38"N	067°27'13.32"E			

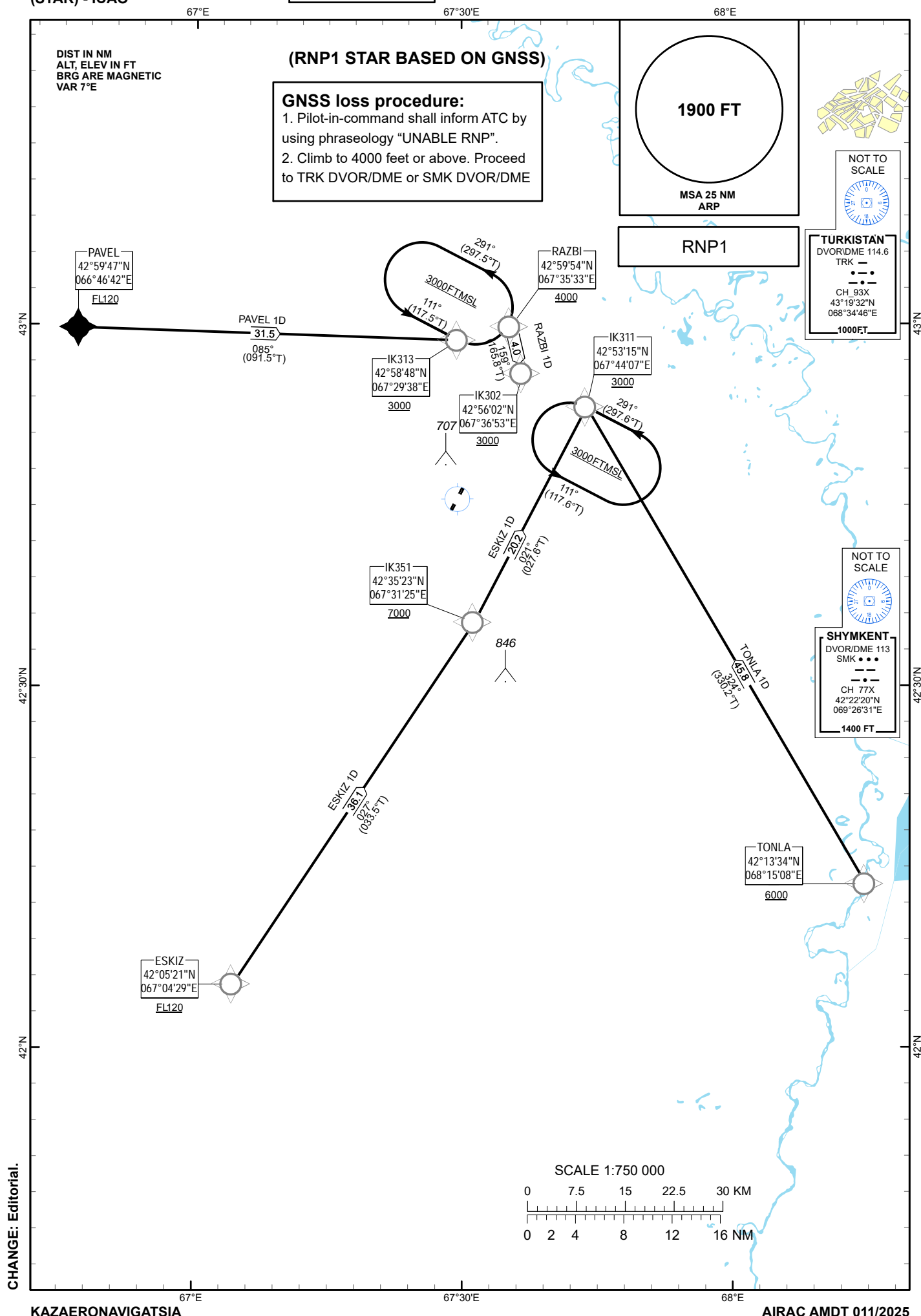
STANDARD ARRIVAL  
CHART - INSTRUMENT  
(STAR) - ICAO

TRANSITION ALTITUDE  
10000 FT

TOWER FREQ  
SEE NOTAM

ESKIZ 1D, PAVEL 1D,  
RAZBI 1D, TONLA 1D

BOZHBBAN  
RWY 20L



**TABULAR  
DESCRIPTION**

ESKIZ 1D RWY20L											
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	ESKIZ	-		+6.54	-	-	+FL 120	-	-	RNP 1
020	TF	IK351	-	027(033.5)	+6.54	36.1	-	+7000	-	-	RNP 1
030	TF	IK311	-	021(027.6)	+6.54	20.2	L	+3000	-	-	RNP 1

**TABULAR  
DESCRIPTION**

PAVEL 1D RWY20L											
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	PAVEL	-		+6.54	-	-	+FL 120	-	-	RNP 1
020	TF	IK313	-	085(091.5)	+6.54	31.5	-	+3000	-	-	RNP 1

**TABULAR  
DESCRIPTION**

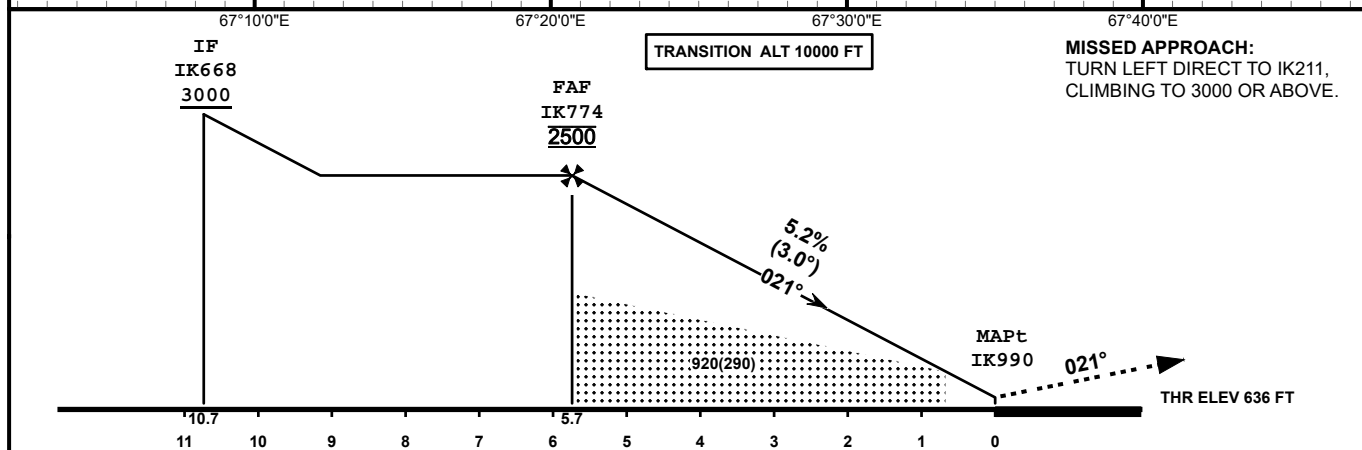
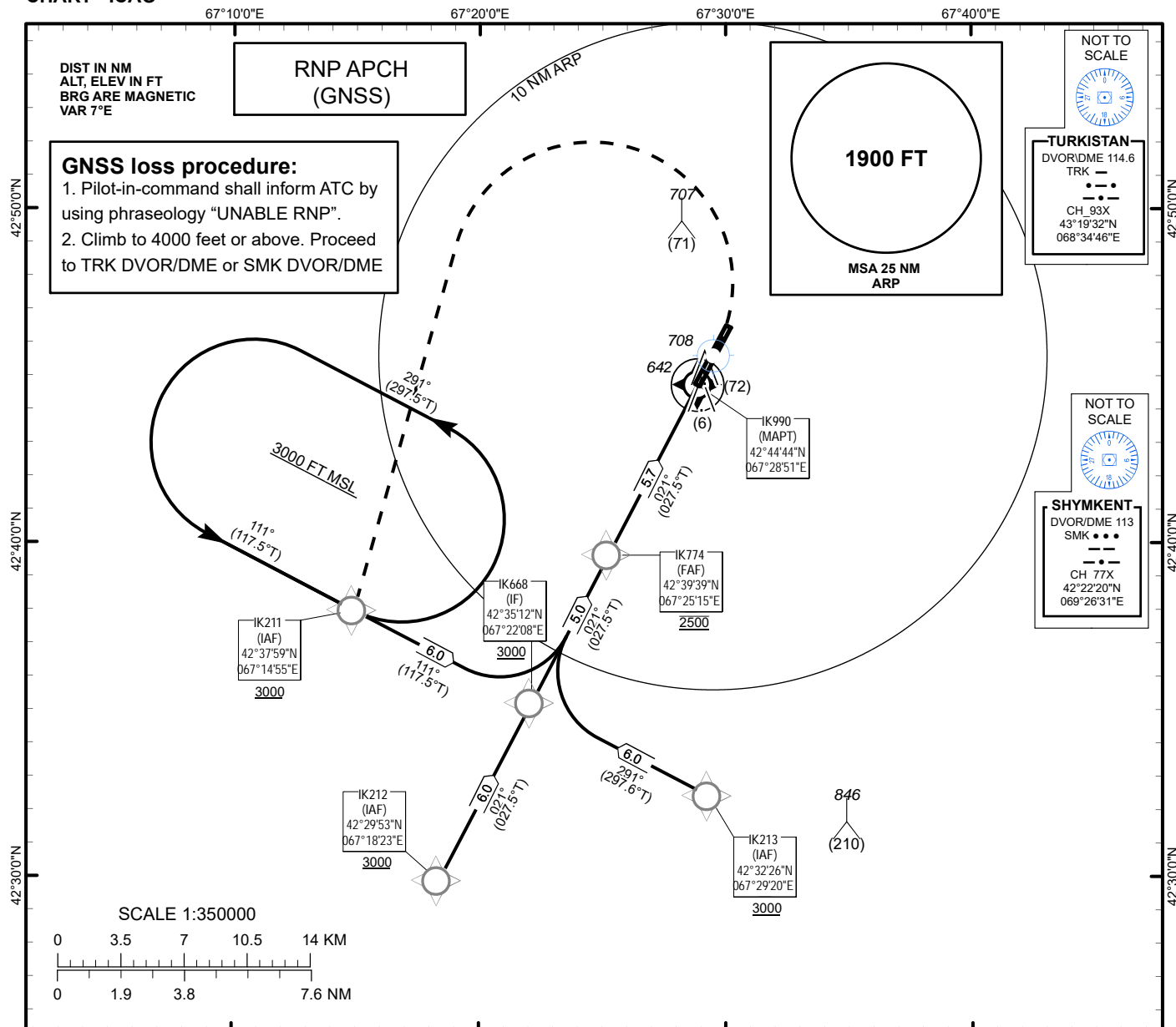
RAZBI 1D RWY20L											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
010	IF	RAZBI	-		+6.54	-	-	+4000	-	-	RNP 1
020	CF	IK302	-	159(165.8)	+6.54	4.0	-	+3000	-	-	RNP 1

**TABULAR  
DESCRIPTION**

TONLA 1D RWY20L											
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	TONLA	-		+6.54	-	-	+6000	-	-	RNP 1
020	TF	IK311	-	324(330.2)	+6.54	45.8	-	+3000	-	-	RNP 1

**WAYPOINT COORDINATES**

WPT	COORD		WPT	COORD	
ESKIZ	42°05'21.00"N	067°04'29.00"E	PAVEL	42°59'47.00"N	066°46'42.00"E
IK302	42°56'01.68"N	067°36'52.96"E	RAZBI	42°59'54.00"N	067°35'33.00"E
IK311	42°53'14.78"N	067°44'07.19"E	TONLA	42°13'34.00"N	068°15'08.00"E
IK313	42°58'48.11"N	067°29'38.09"E			
IK351	42°35'23.43"N	067°31'25.23"E			

INSTRUMENT  
APPROACH  
CHART - ICAOAERODROME ELEV **636 FT**  
HEIGHTS RELATED TO  
AD ELEVTOWER FREQ  
SEE NOTAMBOZHBBAN  
RNP RWY 02R

OCA(OCH)	A	B	C	D
Straight	LNAV	920(290)		

DIST THR	5	4	3	2	1
ALTITUDE	2270	1950	1640	1320	1010
HEIGHT	(1634)	(1314)	(1004)	(684)	(374)

GS	Kt	80	100	120	140	160	180
Rate of descent	ft/min	490	610	730	850	970	1090
FAF-MAPT(5.7NM)	min:sec	4:17	3:25	2:51	2:27	2:08	1:54

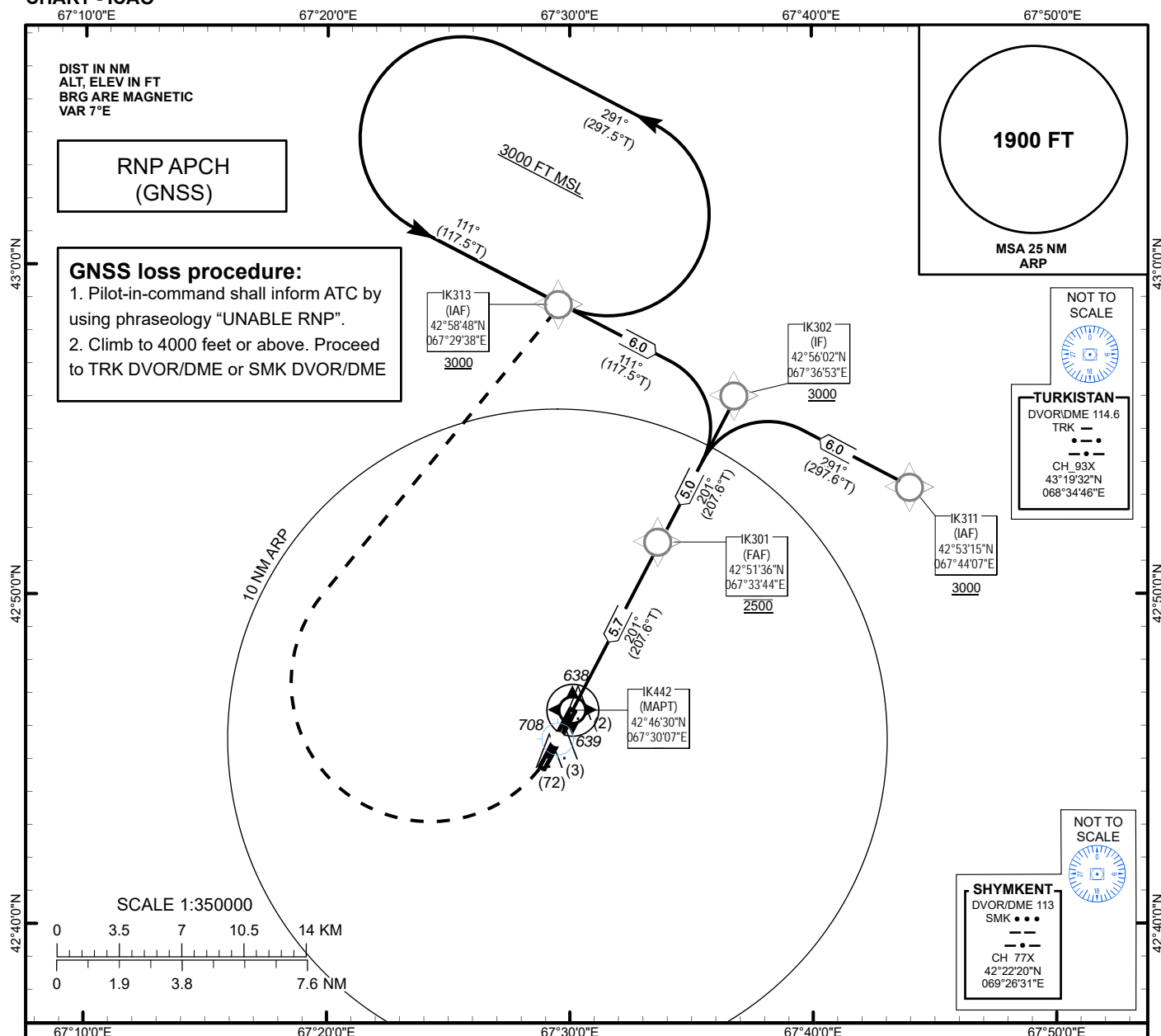
CHANGE: Edit.

TABULAR DESCRIPTION  
RNP APCH IAP  
RWY 02R

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	IK211	-		+6.54	-	-	+3000	-	-	RNP APCH
020	TF	IK668	-	111(117.5)	+6.54	6.0	-	+3000	-	-	RNP APCH
010	IF	IK212	-		+6.54	-	-	+3000	-	-	RNP APCH
020	TF	IK668	-	021(27.5)	+6.54	6.0	-	+3000	-	-	RNP APCH
010	IF	IK213	-		+6.54	-	-	+3000	-	-	RNP APCH
020	TF	IK668	-	291(297.6)	+6.54	6.0	-	+3000	-	-	RNP APCH
010	IF	IK668	-		+6.54	-	-	+3000	-	-	RNP APCH
020	TF	IK774	-	021(27.5)	+6.54	5.0	-	@2500	-	-	RNP APCH
030	TF	IK990	Y	021(27.5)	+6.54	5.7	-	@686	-	-3	RNP APCH
040	DF	IK211	-		+6.54	25.5	L	+3000	-	+1.4	RNP APCH

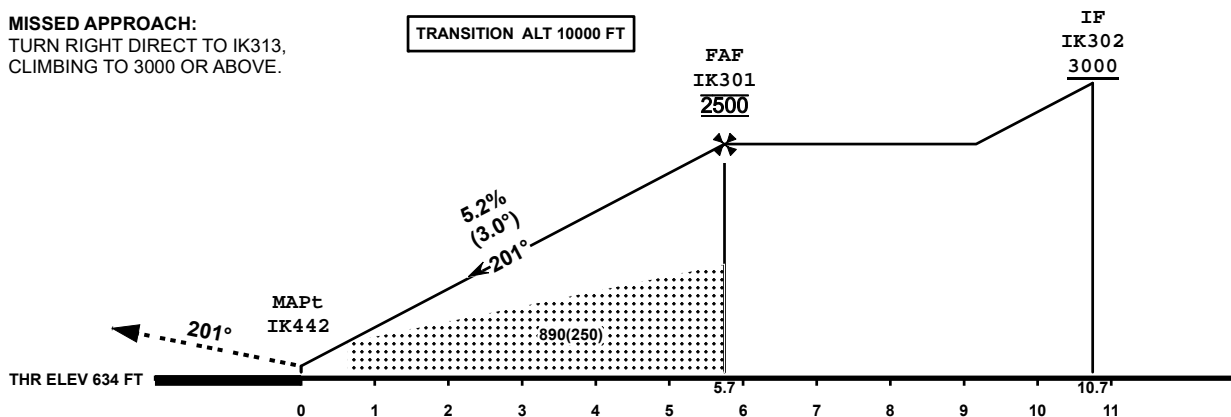
WAYPOINT LIST

RNP APCH IAP RWY 02R		
Waypoint Identifier	Coordinates	
IK668	42°35'12.48"N	067°22'07.74"E
IK774	42°39'38.76"N	067°25'15.30"E
IK211	42°37'58.76"N	067°14'55.21"E
IK212	42°29'52.95"N	067°18'22.96"E
IK213	42°32'25.74"N	067°29'19.63"E
IK990	42°44'44.46"N	067°28'51.26"E

INSTRUMENT  
APPROACH  
CHART - ICAOAERODROME ELEV **636 FT**  
HEIGHTS RELATED TO  
AD ELEVTOWER FREQ  
SEE NOTAMBOZHBAN  
RNP RWY 20L

**MISSED APPROACH:**  
TURN RIGHT DIRECT TO IK313,  
CLIMBING TO 3000 OR ABOVE.

TRANSITION ALT 10000 FT



OCA(OCH)		A	B	C	D
Straight	LNAV	890(250)			
	LNAV/VNAV				

DIST THR	1	2	3	4	5
ALTITUDE	1000	1320	1640	1950	2270
HEIGHT	(364)	(684)	(1004)	(1314)	(1634)

GS	Kt	80	100	120	140	160	180
Rate of descent	ft/min	490	610	730	850	970	1090
FAF-MAPT(5.7NM)	min:sec	4:17	3:25	2:51	2:27	2:08	1:54

TABULAR DESCRIPTION  
RNP APCH IAP  
RWY 20L

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	IK311	-		+6.54	-	-	+3000	-	-	RNP APCH
020	TF	IK302	-	291(297.6)	+6.54	6.0	-	+3000	-	-	RNP APCH
010	IF	IK313	-		+6.54	-	-	+3000	-	-	RNP APCH
020	TF	IK302	-	111(117.5)	+6.54	6.0	-	+3000	-	-	RNP APCH
010	IF	IK302	-		+6.54	-	-	+3000	-	-	RNP APCH
020	TF	IK301	-	201(207.6)	+6.54	5.0	-	@2500	-	-	RNP APCH
030	TF	IK442	Y	201(207.6)	+6.54	5.7	-	@686	-	-3	RNP APCH
040	DF	IK313	-		+6.54	25.5	R	+3000	-	+1.4	RNP APCH

WAYPOINT LIST

RNP APCH IAP RWY 20L		
Waypoint Identifier	Coordinates	
IK301	42°51'35.68"N	067°33'43.85"E
IK302	42°56'01.68"N	067°36'52.96"E
IK311	42°53'14.78"N	067°44'07.19"E
IK313	42°58'48.11"N	067°29'38.09"E
IK442	42°46'29.72"N	067°30'06.94"E

SWY dimensions (M)	CWY dimensions (M)	Strip dimensions (M)	RESA dimensions (M)	Location and description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
Nil	300 X 150	3901 X 300	90 X 150	Nil	AVBL	Turn Pad LEN 120 m, the total width of the turn pad and runway 95 m.
Nil	250 X 150	3901 X 300	90 X 150	Nil	AVBL	Turn Pad LEN 120 m, the total width of the turn pad and runway 95 m. REF.AD 2.24.1

**UAKK AD 2.13 Declared Distances**

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
05	3601	3901	3601	3601	Nil
23	3601	3851	3601	3601	Nil
TWY A - 05	2062	2362	2062	Nil	Nil
TWY A - 23	1562	1812	1562	Nil	Nil
TWY B - 05	1668	1968	1668	Nil	Nil
TWY B - 23	1956	2206	1956	Nil	Nil
TWY 4 - 05	800	1100	800	Nil	Nil
TWY 4 - 23	2819	3069	2819	Nil	Nil
Turning Bay 2 - 23	3301	3551	3301	Nil	Nil

**UAKK AD 2.14 Approach And Runway Lighting**

RWY Designator	APCH LGT type, LEN, INTST	THR LGT colour, WBAR	VASIS, (MEHT), PAPI	TDZ, LGT LEN	RWY Centre Line LGT Length, spacing, colour, INTST	RWY edge LGT LEN, spacing, colour, INTST	RWY End LGT colour, WBAR	SWY LGT LEN, colour	Remarks
1	2	3	4	5	6	7	8	9	10
05	CAT I (PALS) 900 M LIH	GRN Nil	PAPI LEFT/3° 15,78 M	Nil	Nil	3601m, spacing 60m, 0-3001m white, last 600m yellow LIH	RED Nil	Nil	Nil

RWY Designator	APCH LGT type, LEN, INTST	THR LGT colour, WBAR	VASIS, (MEHT), PAPI	TDZ, LGT LEN	RWY Centre Line LGT Length, spacing, colour, INTST	RWY edge LGT LEN, spacing, colour, INTST	RWY End LGT colour, WBAR	SWY LGT LEN, colour	Remarks
1	2	3	4	5	6	7	8	9	10
23	CAT I (PALS) 870 M LIH	GRN Nil	PAPI LEFT/3° 15,52 M	Nil	Nil	3601m, spacing 60m, 0-3001m white, last 600m yellow LIH	RED Nil	Nil	Nil

#### UAKK 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: From THR 05 – 400m, THR 23 – 700m, LGT
3	TWY edge and centre line lighting	TWY A EDGE: BLU TWY B EDGE: BLU
4	Secondary power supply/switch-over time	AVBL, 15 SEC Secondary power supply (uninterruptible power supply (UPS)) of airfield lighting absent
5	Remarks	Turning Bay Lights (U-turn) - Yellow

#### UAKK AD 2.16 Helicopter Landing Area

NIL

#### UAKK AD 2.17 ATS Airspace

1	Designation and lateral limits	KARAGANDA CTR A circle radius 27 NM centered on 494018N 0732007E
2	Vertical limits	7000 FT ALT / GND
3	Airspace classification	C
4	ATS unit call sign Language(s)	KARAGANDA TOWER EN KARAGANDA VYSHKA RU
5	Transition altitude	10000 FT
6	Hours of applicability	H24
7	Remarks	Nil

#### UAKK 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	KARAGANDA TOWER (EN) KARAGANDA VYSHKA (RU)	122 MHZ	Nil	Nil	H24	VDF AVBL

Service designation	Call sign	Frequency	SATVOICE number(s)	Logon address	Hours of operation	Remarks
1	2	3	4	5	6	7
ATIS	KARAGANDA ATIS (EN) KARAGANDA ATIS (RU)	135,8 MHZ 127,8 MHZ	Nil	Nil	H24	Nil

**UAKK AD 2.19 Radio Navigation And Landing Aids**

Type of aid, MAG VAR, ILS Classification, Type of supported OP (for VOR/ILS/MLS, give declination)	ID	Frequency, Channel number	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Service volume radius from the GBAS reference point	Remarks
1	2	3	4	5	6	7	8
ILS LOC 05 I/D/2	IRG	109,9 MHZ	H24	494103.4N 0732159.5E		Nil	Nil
GP 05 I/C/2		333,8 MHZ		493949.3N 0731908.7E			
DME05	IRG	CH 36X		493949.4N 0731908.7E	1800 FT		
ILS LOC 23 I/D/2	IKA	111,7 MHZ	H24	493937.0N 0731823.0E		Nil	Nil
GP 23 I/C/2		333,5 MHZ		494039.8N 0732115.0E			
DME23	IKA	CH 54X		494039.8N 0732115.0E	1800 FT		
DVOR/DME (8°E/2013)	KRG	113.4 MHZ CH 81X	H24	494113.9N 0732225.7E	1800 FT	Nil	Nil

**UAKK AD 2.20 Local Aerodrome Regulations****1. Movement procedure (towing, taxiing) of aircraft on the airfield.**

Aircraft movement on the aerodrome shall be carried out by taxiing or towing by special vehicles. Taxiing and towing shall be carried out only along the center lines of taxiways. U-turns for aircraft on RWY are prohibited and are carried out at the discretion of the PIC for turnaround areas located at the ends of RWY 05 and RWY 23 with an extension of 95 meters, or on the RWY (width 60 meters).

**2. Precautions during taxiing, towing, taking into account the visibility conditions and the covering state of the apron, parking places, taxiways.**

Aircraft shall be carried out after the "Follow-me" car when RVR less than 550 m. "Tower" air traffic controller managing aircraft traffic in aerodrome, informs the crews about the relative positions of aircraft, including following the same route in low visibility conditions.

The towing supervisor (the person of Aviation Engineering service, who has entitlement for these kinds of work) is responsible for towing and directs the actions of personnel involved in the towing and responsible for its safety.

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

For protection of jet blast effect:

- Taxiing into stands shall be carried out under own engines power. Aircraft shall be parked with heading to the terminal (stands 1-9), with heading to the hangar and engineering buildings (stands № 19-21). Aircraft type A320 and smaller can be parked parallel to the terminal on the aircraft stands 4, 7, 9.;
  - Jet blast effect during taxiing into/out of stands № 10-18 is non-hazardous. Taxiing into/out of stands under own engines power is allowed for the ACFT with ACN equal to or less than 19 and ACFT with overall dimensions equal or less Tu-134 (ACFT length 37 m., wingspan 29.01m.);
  - Aircraft type B747 taxiing into/out of the aircraft stand 14A is carried out by towing.
- Taxiing to the aircraft stands 19-21 for aircraft B747, AN-124 is allowed via taxiing route (taxiing route along the apron) under its own engines power, from taxiway-A when aircraft stands 5, 6, 7, 10-18 are vacant, from taxiway-B when aircraft stands 13-18 are vacant
    - In all other cases, the movement of the aircraft B747 via taxiing route on the apron should be carried out by towing only.
  - Towing of the aircraft from TWY A via TR (Taxiing route along the apron) to stands 19-21 and from TWY B to stands 1, 2, 3, 3A, 4, when B747 or similar parked on stands 6, 6A, is prohibited.
  - In this case, taxiing of B747 into the stand 3A from TWY A and to the stands 19-21 from TWY B is allowed under own engines power.
  - Taxiing into stands 2A, 3A, 6A, 13A, 20A shall be carried out after the «Follow me» car. Start up shall be carried out on stands 2A, 3A, 6A, 13A, 20A and taxiing out by own engines power.

Taxiing of aircraft with a wingspan of more than 51m onto the aircraft stands 1-5 and 2A, 3A via taxiway A is performed in the absence of aircraft on the aircraft stands 1-5, onto the aircraft stands 5-9 and 6A in the absence of aircraft on the aircraft stands 5-7.

The movement of special vehicles along the vehicles route behind stands 6-18 from the runway side is prohibited while aircraft towing or taxiing along the apron taxiing route to stands 6-21.

#### **4. Taxiing out procedure from stands under own engines power and by towing.**

- Movement of aircraft from stands № 1-9, 15-18, 19-21 to engine start-up area shall be carried out by towing.
- Taxiing out of stands 15-18 by own engines power is allowed for aircraft with ACN equal or less 19, with heading to the artificial runway and aircraft with overall dimensions equal or less Tu-134 (aircraft length 37m., wingspan 29.01 m).

Start up of engines shall be carried out in established points, placed on:

- point 1 - at the beginning of Taxiing route along the apron westward of stand 1;
- point 2 - on the Taxiing route along the apron between stands 4 and 5;
- point 3 - on the Taxiing route along the apron eastward of stand 7;
- point 4 - on the Taxiing route along the apron between stands 12 and 13;
- point 5 - on the Taxiing route along the apron between stands 15 and 16.

Engines start-up on the parking stands 4, 7, 9 is allowed, when the aircraft is parked parallel to the terminal.

#### **5. Parking area for small aircraft (general aviation), in case such stands are available**

There are 6 parking stands for An-2 aircraft.

#### **6. De-icing areas of aircraft, engine start-up areas, deviation areas.**

De-icing areas are combined with engine start-up points, placed on:

- point 1 - at the beginning of Taxiing route along the apron westward of stand 1;
- point 2 - on the Taxiing route along the apron between stands 4 and 5;

- point 3 - on the Taxiing route along the apron eastward of stand 7;
- point 4 - on the Taxiing route along the apron between stands 12 and 13;
- point 5 - on the Taxiing route along the apron between stands 15 and 16.

The deviation areas are absent.

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

Intersection of critical zones of radio beacon landing system with aircraft, vehicles and other mobile facilities shall be carried out with the clearance of the "Tower" air traffic controller.

Intersection of these areas with mentioned facilities during autoland approach from final turn till landing is 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 weight and / or traffic restrictions for aircraft with ACN exceeding the numerical values of PCN.

Operating modes of aircraft with overloads are presented in the table

**RECOMMENDED AIRCRAFT OPERATING MODES WITH RESTRICTIONS AND OVERLOADS ON RIGID SURFACES (R) at the Karaganda aerodrome**

Elements of artificial pavement structures of the aerodrome	Operation with overload						
	At full mass with limitation on the average annual traffic intensity			Mass limitation under traffic intensity constraint (average daily over a year), kg			
	Up to 10 aircraft movements per day	Up to 2 aircraft movements per day	Up to 1 aircraft movement per day	Aircraft type	Up to 1 aircraft movement per day	Up to 2 aircraft movements per day	Up to 10 aircraft movements per day
1	2	3	4	5	6	7	8
RWY, TWY A Apron (Stands 1...5, 2A, 3A), Stand 14A, TWY route on apron (from Stand 1 to Stand 5) PCN 55/R/A W/T	A 321-100 A 321-200 B 787-8 MD-11 ER	B 747-8F B 777-300ER		B 747-8F B 777-300ER	* *	* *	447 296 346 315

TWY B PCN 35/R/A X/T	A 300-B2 A 320-100 B 737-300 B 737-400 B 737-500 B 737-600 B 737-700 B 757-300 B 777-200	A 310-300 B 767- 200ER B767-300	A 300-600 B4 A 319-100 A 320-200	A 300-600 B4 A 310-300 A 319-100 A 320-200 A 320 Neo A 321-100 A 321-200 A 330-200 A 330-300 A 330-300 B 737-800 B 737 MAX 8 B 737 MAX 9 B 747-200F B 747-300 B 747-400 B 747-400F B 747-8F B 767-200ER B 767-300 B 767-300ER B 777-300 B 777-300ER B 787-8 MD-11ER	* * * * 77 482 76 196 74 636 201 774 214 305 198 996 75 930 75 047 72 054 376 810 376 854 357 326 355 695 339 091 * * 182 861 263 316 260 924 181 294 232 492	159 227 * 75 521 73 538 73 287 72 070 70 531 188 997 200 351 186 780 71 676 71 016 68 155 355 873 356 302 338 435 336 304 321 595 * * 173 075 248 615 247 117 171 712 219 572	151 595 155 250 71 616 69 806 69 585 68 429 66 910 177 723 188 039 176 001 67 923 67 460 64 715 337 399 338 169 321 767 319 194 306 159 172 805 160 970 164 441 235 644 234 935 163 257 208 172
Stands 6...9, 6A, 13A, TWY route on apron (from Stands 6 to Stands 18) PCN 32/R/A X/T	A 300-B2 An-124 B 737- 200/200C/200QC B 737-500 B 737-600 B 757-300 ERJ 195ER IL-76TD	A 320-100 B 737-300 B 777-200	A 310-300 B 737-400 B 737-700 B 767-300	A 300-600 B4 A 310-300 A 319-100 A 320-100 A 320-200 A 320 Neo A 321-100 A 321-200 A 330-200 A 330-300 A 330-300 B 737-300 B 737-400 B 737-700 B 737-800 B 737 MAX 8 B 737 MAX 9 B 747-200F B 747-300 B 747-400 B 747-400F B 747-8F B 767-200ER B 767-300 B 767-300ER B 777-200 B 777-300 B 777-300ER B 787-8 MD-11ER	156 015 * 73 877 * 71 967 71 728 70 537 69 007 184 251 195 168 182 242 * * * 70 096 69 519 66 707 348 096 348 669 331 419 329 101 315 097 178 377 * 169 440 * 243 155 241 989 168 153 214 773	148 106 151 465 69 830 * 68 100 67 892 66 765 65 254 172 569 182 411 171 073 * 63 878 68 752 66 207 65 834 63 142 328 954 329 879 314 147 311 372 299 102 168 407 157 002 160 494 * 229 714 229 366 159 392 202 961	141 128 143 895 66 260 66 239 64 688 64 508 63 436 61 943 162 262 171 154 161 218 62 963 60 492 65 093 62 775 62 583 59 997 312 063 313 299 298 908 295 729 284 988 159 610 149 067 152 600 245 814 217 855 218 228 151 662 192 538

Stands 10...12 PCN 20/R/A X/T	CRJ 900ER		ERJ 190LR	A 320-100 A 320-200 A 320 Neo B 737- 200/200C/ 200QC B 737-300 B 737-400 B 737-500 B 737-600 B 737-700 B 737-800 B 737 MAX 8 B 737 MAX 9 B 757-200 B 757-300 ERJ 190LR ERJ 195ER Fokker 100 SSJ 100-95	109 439 48 699 48 767 48 713 47 320 46 179 44 690 46 121 49 992 48 016 46 761 47 409 45 319 102 361 97 548 * 50 053 42 875 45 526	104 042 46 036 46 350 46 315 44 817 43 631 42 292 43 573 47 374 45 424 44 330 45 106 43 091 97 069 92 814 48 848 47 406 40 619 43 154	99 280 43 687 44 218 44 200 42 609 41 383 40 175 41 325 45 064 43 137 42 185 43 074 41 125 92 400 88 637 46 477 45 070 38 628 41 061
Stands 19...21, 20A PCN 52/R/A W/T	A 321-100 A 321-200 A 330-300 B 737 MAX 9 B 747-400 B 747-400F B 787-8 MD-11 ER	B 747-8F	B 777- 300ER	A 330-200 B 747-8F B 777-300 B 777-300ER	184 251 * 243 155 *	172 569 449 060 229 714 347 707	162 262 426 125 217 855 329 608
* - Indicates that operation of the aircraft at maximum weight is permitted							

**9. Taxiing in winter conditions (apron), in cases if some taxiways are not equipped with center line lights, and they may be not visible due to snow.**

Taxiing in winter conditions in case of taxiways may be invisible due to packed snow shall be carried out after the «Follow me» car.

**10. Removal of disabled aircraft from runways.**

According to UAKK AD 2.6 RESCUE AND FIRE FIGHTING SERVICES aerodrome has possibility to remove disabled aircraft less than 60 tone, without damage of landing gear.

## UAKK AD 2.21 Noise Abatement Procedures

NIL

## UAKK 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 an aircraft with a course opposite to the runway operating direction in the absence of approaching aircraft in CTR and TMA and in coordination with the flight supervisor.

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

For take-off or landing, the helicopter commander, in coordination with the ATS unit shall use any part of the runway or any other part of the airfield, as provided for by the flight operation instructions at the aerodrome

(aeronautical aerodrome passport).

Rolling takeoff and running landing, IFR takeoff and landing of helicopters (Special visual flight rules at night) are conducted only from (on) the runway.

Envisaged to take-off and land helicopters from/to the runway, as well as from/to the central fuel station stand of the military unit 50185 and on the taxiway A, B, parking stand 20, taxiway 4 in compliance with the established intervals between take-off and approaching aircraft, and distances to obstacles.

Pilot-in-command is responsible for taking-off and landing from/to taxiway A, B, parking stand 20, taxiway 4, central fuel station stand of military unit 50185 and compliance with the established distances to obstacles.

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

Taxiing 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 on runway vacation in conditions of low visibility is carried out on taxiways only after the vacation of the ILS critical zones indicated by light sign (holding position).

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

Taxiing of aircraft out of stands to 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 to flight crew by Tower ATC phrase: "LOW VISIBILITY PROCEDURES IN OPERATION".

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

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

All VFR flights within the control zone (except “Balapan” ATZ) are performed at an altitude of at least 3000 feet, unless otherwise prescribed by the “Tower” ATC.

In the sector from 080 ° to 256 °:

- from 0 to 7 miles, VFR flights are operated at an altitude of not less than 3000 feet;
- from 7 miles to the CTR boundary, VFR flights are operated at an altitude of at least 4,000 feet.

The absolute altitudes are assigned by “Tower” ATC without taking into account man-made obstacles. Flights over man-made obstacles is carried out by flight crew independently.

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

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

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

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

“Balapan” ATZ is used only for training flights of “Aviation training center” LLC. During training flights in “Balapan” ATZ other aircraft should fly over “Balapan” ATZ.

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	BOTAKARA (southern outskirts of Botakara)	N500207 E0734441	026° 25.4 nm KRG DVOR/DME (027° 27.0 nm ARP)	Entry/exit
2	MIKE	N495156 E0735740	056° 25.2 nm KRG DVOR/DME (056° 27.0 nm ARP)	Entry/exit
3	LIMA	N494526 E0740100	072° 25.4 nm KRG DVOR/DME (070° 27.0 nm ARP)	Entry/exit
4	BEREKESHI (northern outskirts of Berekeshi)	N491604 E0733821	149° 27.2 nm KRG DVOR/DME (145° 27.0 nm ARP)	Entry/exit
5	KYZYLKOI (NE outskirts of Kyzylkoi, visual reference – M-36 highway)	N491330 E0732458	168° 27.8 nm KRG DVOR/DME (165° 27.0 nm ARP)	Entry/exit
6	KOKSUN (east side of Koksun)	N493052 E0724114	241° 28.7 nm KRG DVOR/DME (241° 27.0 nm ARP)	Entry/exit
7	SHAHTINSK (eastern outskirts of Shahtinsk)	N494211 E0723838	264° 28.5 nm KRG DVOR/DME (266° 27.0 nm ARP)	Entry/exit
8	TEMIRTAU (western outskirts of Temirtau)	N500125 E0725409	309° 27.3 nm KRG DVOR/DME (313° 27.0 nm ARP)	Entry/exit
9	AKKUDUK (northern outskirts of Akkuduk)	N494734 E0734541	059° 16.4 nm KRG DVOR/DME (058° 18.1 nm ARP)	Entry/exit

№	Waypoint name (visual reference)	Geographical coordinates	Radial (mag.) and distance from NAVAID (ARP)	Remarks
10	ALPHA (northern outskirts of Togyzkuduk)	N495345 E0733525	025° 15.1 nm KRG DVOR/DME (028° 16.7 nm ARP)	Holding
11	BRAVO (abeam NDB 5.0 nm)	N493652 E0732600	144° 5.0 nm KRG DVOR/DME (123° 5.1 nm ARP)	Holding
12	DELTA (west side of Zarechnoe)	N494004 E0730220	257° 13.1 nm KRG DVOR/DME (260° 11.6 nm ARP)	Holding

## UAKK AD 2.23 Additional Information

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

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

### 2. Ornithological situation in the aerodrome area.

The ornithological situation in the aerodrome area is determined by the seasonal and daily migration of birds. The Karaganda aerodrome is surrounded by agricultural fields.

#### 2.1 Seasonal migration of birds (time)

**The period of spring migration** - activity from March to late May, the most active peak migration in April, but there may be changes when the climatic conditions change. The danger is posed by rooks, jackdaws, pigeons, kites, cranes, owls, ducks, waders, etc. Bird activity is observed in the morning hours from 00:30 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 October, also depending on the climate and sharp changes in weather conditions.

The danger is posed by rooks, jackdaws, pigeons, kites, cranes, owls, 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 1 to 5 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 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;
- seagulls - from 328 to 1640 FT;
- sparrows - from 16 to 49 FT;
- owls - from 16 to 98 FT;

## **2.4 Intensity of bird migration**

Bird migration takes place around the clock.

## **2.5 Daily migration of birds**

### **2.5.1 Daily migration of birds (time)**

From dawn to the onset of evening twilight

### **2.5.2 Direction**

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

### **2.5.3 Altitude**

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

## **2.6 Radar control over the flying of birds**

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

## **2.7 Information transmission**

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

## **UAKK AD 2.24 Charts Related To An Aerodrome**

<b>Name</b>	<b>Page</b>
Aerodrome Chart ICAO	UAKK AD 2.24.1-1
Aerodrome Ground Movement and Parking Chart ICAO	UAKK AD 2.24.3-1
Aerodrome Obstacle Chart – ICAO Type A RWY 05/23	UAKK AD 2.24.4-1
Standard Departure Chart Instrument (SID) RWY 05 ICAO	UAKK AD 2.24.7-1-1
Standard Departure Chart Instrument (SID) RWY 23 ICAO	UAKK AD 2.24.7-2-1
Standard Arrival Chart Instrument (STAR) RWY 05 ICAO	UAKK AD 2.24.9-1-1
Standard Arrival Chart Instrument (STAR) RWY 23 ICAO	UAKK AD 2.24.9-2-1
ATC Surveillance Minimum Altitude Chart ICAO	UAKK AD 2.24.10-1
Instrument Approach Chart – ILS/DME RWY 05 ICAO	UAKK AD 2.24.11-1-1
Instrument Approach Chart – ILS/DME RWY 23 ICAO	UAKK AD 2.24.11-2-1
Instrument Approach Chart – LOC/DME RWY 05 ICAO	UAKK AD 2.24.11-3-1

Name	Page
Instrument Approach Chart – LOC/DME RWY 23 ICAO	UAKK AD 2.24.11-4-1
Instrument Approach Chart – VOR/DME - Y RWY 05 ICAO	UAKK AD 2.24.11-5-1
Instrument Approach Chart – VOR/DME - Y RWY 23 ICAO	UAKK AD 2.24.11-6-1
Instrument Approach Chart – VOR/DME - Z RWY 05 ICAO	UAKK AD 2.24.11-7-1
Instrument Approach Chart – VOR/DME - Z RWY 23 ICAO	UAKK AD 2.24.11-8-1
Visual Approach chart – ICAO	UAKK AD 2.24.12-1
VFR Departure/Arrival Chart	UAKK AD 2.24.14-1

#### UAKK AD 2.25 Visual segment surface (VSS) penetrations

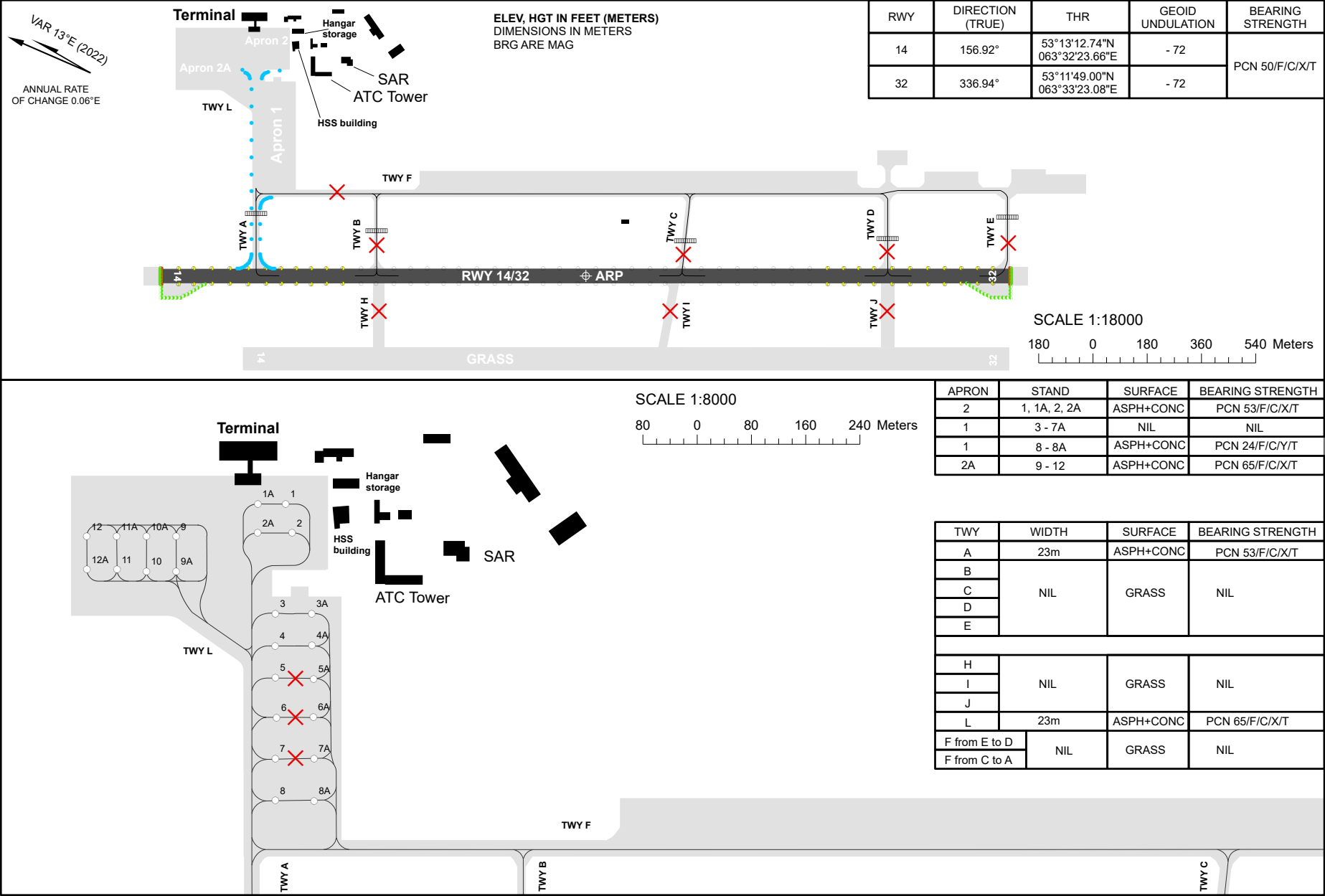
No penetrations

AERODROME GROUND MOVEMENT  
AND PARKING CHART - ICAO

APRON 1,2,2A ELEV 597FT (182m)

TWR 129.3

KOSTANAY



**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
2A	9	53 13 16.10N	063 33 04.33E
	9A	53 13 15.44N	063 33 01.78E
	10	53 13 16.75N	063 33 00.85E
	10A	53 13 17.40N	063 33 03.41E
	11	53 13 18.08N	063 33 00.08E
	11A	53 13 18.71N	063 33 02.48E
	12	53 13 20.02N	063 33 01.55E
	12A	53 13 19.40N	063 32 59.14E

**UAOO AD 2.7 Seasonal Availability - Clearing**

1	Types of clearing equipment	KAMAZ - 3 plunger brush cars, 1 tractor equipped with a brush and blade
2	Clearance priorities	1. RWY 2. TWY 3. Stands
3	Remarks	(Seasonal availability: All seasons, caution advised in winter during snow conditions) Type of anti-icing reagent: "Green Way SFU" brand A (granular)

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

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

**UAOO AD 2.9 Surface Movement Guidance And Control System And Markings**

1	Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands	Guidance sign board at entrance of RWYs, guidance sign designating taxiways and apron
2	RWY and TWY markings and LGT	Markings of threshold, touchdown zones, aiming point, undershoot area, turning line, turning line edge, centre line, RWY edges, RWY designation. Edge lights of RWY, TWY A and TWY B
3	Stop bars	Nil
4	Other runway protection measures	Nil
5	Remarks	RWY 05/23 ACFT with max TKOF mass more than 30000kg shall carry out turnings at RWY turn pad only

**UAOO AD 2.10 Aerodrome Obstacles**

NIL

## UAOO AD 2.11 Meteorological Information Provided

1	Associated MET Office	Meteorological service Kyzylorda Phone: +7 (7242) 261798
2	Hours of service MET Office outside hour	H24
3	Office responsible for TAF preparation: Periods of validity	Meteorological service Kyzylorda, 2 9 HR (0009, 0312, 0615, 0918, 1221, 1524, 1803, 2106)
4	Trend forecast Interval of issuance	TREND 30 min
5	Briefing/consultation provided	Personal consultation (Russian)
6	Flight documentation/languages used	TAF, METAR, SPECI, SIGMET, GAMET, AIRMET English
7	Charts and other information AVBL for briefing or consultation	S, U85, U70, U50, U40, U30, U25, U20, prognostic charts of wind and temperature at flight levels (FL), max wind, T, prognostic charts P85, P70, P50, P40, P30, P25, P20, SWH, SWM of WAFC, SWM+SWH, SWL of Kazakhstan;
8	Supplementary equipment AVBL for providing information	Doppler weather radar (DWR-C)
9	ATS units provided with information	Briefing, TWR
10	Additional information	Nil

## UAOO AD 2.12 Runway Physical Characteristics

Designation s RWY NR	TRUE BRG	Dimensions of RWY (M)	Strength (PCN) and surface of RWY and SWY	THR coordinates RWY end coordinates THR geoid undulation	THR elevation and highest elevation of TDZ of precision APP RWY	Slope of RWY-SWY
1	2	3	4	5	6	7
05	61,32°	2700 X 45	53/F/C/W/T CONC+ASPH	444201.89N 0653432.79E - -123 FT	THR 424.5 FT	0.2%
23	241,34°	2700 X 45	53/F/C/W/T CONC+ASPH	444243.85N 0653620.40E - -123.4 FT	THR 433.1 FT	-0.2%

SWY dimensions (M)	CWY dimensions (M)	Strip dimensions (M)	RESA dimensions (M)	Location and description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
Nil	250 X 150	3000 X 300	100 X 150	Nil	AVBL	Turn Pad LEN 130 m, the total width of the turn pad and runway 90 m.

SWY dimensions (M)	CWY dimensions (M)	Strip dimensions (M)	RESA dimensions (M)	Location and description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
Nil	250 X 150	3000 X 300	100 X 150	Nil	Nil	Turn Pad LEN 130 m, the total width of the turn pad and runway 90 m.

**UAOO AD 2.13 Declared Distances**

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

**UAOO AD 2.14 Approach And Runway Lighting**

RWY Designator	APCH LGT type, LEN, INTST	THR LGT colour, WBAR	VASIS, (MEHT), PAPI	TDZ, LGT LEN	RWY Centre Line LGT Length, spacing, colour, INTST	RWY edge LGT LEN, spacing, colour, INTST	RWY End LGT colour, WBAR	SWY LGT LEN, colour	Remarks
1	2	3	4	5	6	7	8	9	10
05	CAT I (HIALS) 900 M LIH	GRN Nil	PAPI LEFT/3° 16,2 M	Nil	Nil	2700m, 0-2100m white, spacing 60m, last 600m yellow LIH	RED Nil	Nil	Nil
23	(HIALS) 900 M LIH	GRN Nil	PAPI LEFT/3° 16,3 M	Nil	Nil	2700m, 0-2100m white, spacing 60m, last 600m yellow LIH	RED Nil	Nil	Nil

**UAOO AD 2.15 Other Lighting, Secondary Power Supply**

1	ABN/IBN location, characteristics and hours of operation	ABN: Nil IBN: Nil
2	LDI location and LGT Anemometer location and LGT	LDI : Nil Anemometer: 350m from RWY05 to ARP, 350m from RWY23 to ARP
3	TWY edge and centre line lighting	TWY A EDGE: BLU TWY B EDGE: BLU
4	Secondary power supply/switch-over time	AVBL, 1 sec
5	Remarks	Nil

## UAOO AD 2.16 Helicopter Landing Area

NIL

## UAOO AD 2.17 ATS Airspace

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

## UAOO AD 2.18 ATS Communication Facilities

Service designation	Call sign	Frequency	SATVOICE number(s)	Logon address	Hours of operation	Remarks
1	2	3	4	5	6	7
TWR	KYZYLORDA TOWER (EN) KYZYLORDA VYSHKA (RU)	120,9 MHZ	Nil	Nil	See NOTAM	Nil
Production and dispatcher service	KYZYLORDA TRANZIT (EN) KYZYLORDA TRANZIT (RU)	131.175 MHZ	Nil	Nil	As AD	Nil
ATIS	KYZYLORDA ATIS (EN) KYZYLORDA ATIS (RU)	134,9 MHZ 122.9 MHZ	Nil	Nil	As AD	ATIS information is being updated during AD working hours. Outside AD working hours ATIS information is not updated.

## UAOO AD 2.19 Radio Navigation And Landing Aids

Type of aid, MAG VAR, ILS Classification, Type of supported OP (for VOR/ILS/ MLS, give declination)	ID	Frequency, Channel number	Hours of operati on	Position of transmitting antenna coordinates	Elevation of DME transmitti ng antenna	Service volume radius from the GBAS reference point	Remark s
1	2	3	4	5	6	7	8
ILS LOC 05 I/D/2	IKZ	111,1 MHZ	H24	444258.5N 0653658.0E		Nil	Nil
GP 05 I/C/2		331,7 MHZ		444202.0N 0653447.4E			
DME 05	IKZ	CH 48X		444202.0N 0653447.4E	400 FT		
DVOR/DME (7°E/2022)	KZO	112.7 MHZ CH 74X	H24	444144.9N 0653349.3E	500 FT	Nil	Nil

## UAOO AD 2.20 Local Aerodrome Regulations

Aircraft movement on the aerodrome is carried out under its own engines power and/or towing by pushback tug. Taxiing and towing shall be carried out by established marking.

Towing shall be carried out along the taxiways (aprons, main taxiways) with paved or grass surface appropriate for aircraft of a given type.

Towing during hours of darkness shall be carried out at reduced speed with turned on aircraft lights, and when additional safety measures are applied.

Pushback tugs equipped with radio set and marker lights as well as special towing equipment (steers, wires) are used for towing.

The speed of taxiing shall be chosen by a pilot-in-command depending on condition of taxiway, presence of obstacles and visibility conditions and Flight Crew Operational Manual of the aircraft. ACFT crew or towing crew before crossing or occupying the runway or taxiway, shall be ensured in safety of the maneuver, regardless of the received instructions from the air traffic controller.

Taxiing in/out stands shall be carried out under own engines power or by towing along the taxiways.

Helicopter pad is not available. Helicopter lift-off and landing from ACFT stands is prohibited, except of helicopters equipped with skid, which are hovering from stand to lift-off area along markings. Safety distance shall be observed to exclude harmful impact of rotor downdraft on light aircraft. Pilot-in command is responsible for safe hovering.

Stands for general aviation are provided on the stands.

De-icing procedure shall be carried out on the stands. Engines start-up procedure shall be carried out on the stands without restrictions.

The deviation areas are absent.

Crossing the critical areas of the radio beacon systems by aircraft, ground vehicles and other vehicles during aerodrome operation on the minimum of ICAO I category shall be carried out by the clearance of TWR controller.

The clearance for crossing the critical areas of the radio beacon system shall be requested by driver, before the boundary of the critical area after full stop of the vehicle. The report of the vacation of the critical area shall be made only after vacation of the critical area of the radio beacon system.

Other aircraft or obstacle should not be on the final approach and within boundaries of the critical area of the radio beacon system during landing approach RWY 05 on the minimum of ICAO I category.

Aircraft taxiing to the line-up position must stop before daytime sign (holding points on the TWY A, B), which defines the critical area of the radio beacon system.

Runway 05/23 limitations:

- with weight restriction without traffic intensity: B747-400 less than 299,440t, A-340-200 less than 207,354 t, A-340-300 less than 210,155 t, IL-96M less than 218,081 t, MD-11 less than 190,278 t, A321-100 less than 82,753 t, A321-200 (85,4t) less than 84,076t, A321-200(89,4t) less than 83,0t, A321-200 (93,4t) less than 83,12t, A330-200(217,9t) less than 171,45t, A330-300 (212,9t) less than 197,823t, A330-300 (223,9t) less than 168,757t, A330-300 (230,9t) less than 169,713t, A330-300 (233,9t) less than 169,023t;
- with wet weight and traffic restriction up to 20 departures per day: IL-96M, A321-100, A321-200
- with wet weight and traffic restriction up to 5 departures per day: A340-200, A340-300, A330-200(217,9t), A330-300(212,9t);
- weight restriction and traffic restriction up to 5 departures per day: B747-400 less than 383,769t, MD-11 less than 250,156t, A330-300(223,9t) less than 223,204t, A330-300(230,9t) less than 223,157t, A330-300(233,9t) less than 221,086t;
- weight restriction and traffic restriction up to 20 departures per day: BC B747-400 less than 348,641t, MD-11 less than 225,213t, A330-200(217,9t) less than 203,842t, A330-300(212,9t) less than 197,686t, A330-300(223,9t) less than 200,524t, A330-300(230,9t) less than 200,895t, A330-300(233,9t) less than 199,723t.

Taxiing in winter conditions along the apron (in case of taxiways may be invisible due to packed snow) shall be carried out behind the "Follow me" car.

Removal of the disabled aircraft shall be carried out by crane trucks with lifting capability not less than 50 tons and long haul track as part of tow-cars with low loaders.

AN-2 and MI-8 engines start-up, taxiing under own engines power on the apron designated for AN-2 and MI-8 is prohibited.

## UAOO AD 2.21 Noise Abatement Procedures

NIL

## UAOO AD 2.22 Flight procedures

### 1. Flight and ground movement procedures.

There are no deviations from the current flight requirements and rules of Republic of Kazakhstan.

Aircraft takeoff and landing with a tailwind speed component is permitted in order to accelerate the movement of aircraft at the crew's request or at the initiative of ATS Unit. Pilot-in-command is responsible for this decision.

### 2. Low Visibility Procedures.

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

Low Visibility Procedures are initiated by ATC Supervisor (Tower ATC) during departures when RVR less 550 m.

The operation of LVP shall be reported by Tower ATC phrase: "LOW VISIBILITY PROCEDURES IN OPERATION". "KZR334, Kyzylorda Tower, the procedures in low visibility conditions".

Tower ATC:

- restricts the movement of vehicles airport services on the apron and maneuvering area during LVP procedures via Flight Operations Service of airport;
- produces control over the presence of obstacles on the runway and in the ILS critical area, on the reports of aircraft crew or reports of aerodrome service specialist.

Taxiing into the ACFT stand (apron) from RWY is cleared by follow-me car. Taxiing of aircraft from stands to holding position shall be carried out after follow-me car.

### 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 2200 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 800 feet. The air traffic controller of the "Tower" ATC unit is determine and report which flight circle is in use.

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

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

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

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

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

No	Waypoint name (visual reference)	Geographical coordinates	Radial (mag.) and distance from NAVAID (ARP)	Remarks
1	YANKEE (near Ayakkol lake)	N445352 E0654058	016° 13.1 nm KZO DVOR/DME (012° 12.2 nm ARP)	Entry/exit
2	TANGO (Birlestik village)	N444136 E0660448	083° 22.1 nm KZO DVOR/DME (085° 20.9 nm ARP)	Entry/exit
3	ROMEO (Zhetikol village)	N443117 E0653817	156° 10.9 nm KZO DVOR/DME (163° 11.3 nm ARP)	Entry/exit
4	HOTEL (Aktubek village)	N444446 E0651744	278° 11.9 nm KZO DVOR/DME (274° 12.8 nm ARP)	Entry/exit
5	MIKE (bridge over railroad)	N444822 E0653819	019° 7.4 nm KZO DVOR/DME (012° 6.2 nm ARP)	Holding
6	INDIA (Iirkol lake)	N444207 E0654543	080° 8.5 nm KZO DVOR/DME (085° 7.3 nm ARP)	Holding
7	ALPHA (Amangeldi village)	N443750 E0653636	146° 4.4 nm KZO DVOR/DME (163° 4.6 nm ARP)	Holding
8	BRAVO (Zhumash lake)	N444354 E0652417	281° 7.1 nm KZO DVOR/DME (274° 8.2 nm ARP)	Holding

## UAOO 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. Flock of birds in the vicinity of the airport.

Flights of waterfowl are observed during periods of spring and autumn migration.

As necessary, TWR informs the pilot about flight of birds.

Measures to disperse flocks of birds include periodic scaring of birds, measures to reduce bird nesting at aerodrome facilities, clearing shrubs within the aerodrome, mowing grass, chemical treatment of the territory of the aerodrome against insects that attract birds, as well as the termination of agricultural activities in the aerodrome area.

## UAOO AD 2.24 Charts Related To An Aerodrome

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

## UAOO AD 2.25 Visual segment surface (VSS) penetrations

No penetrations

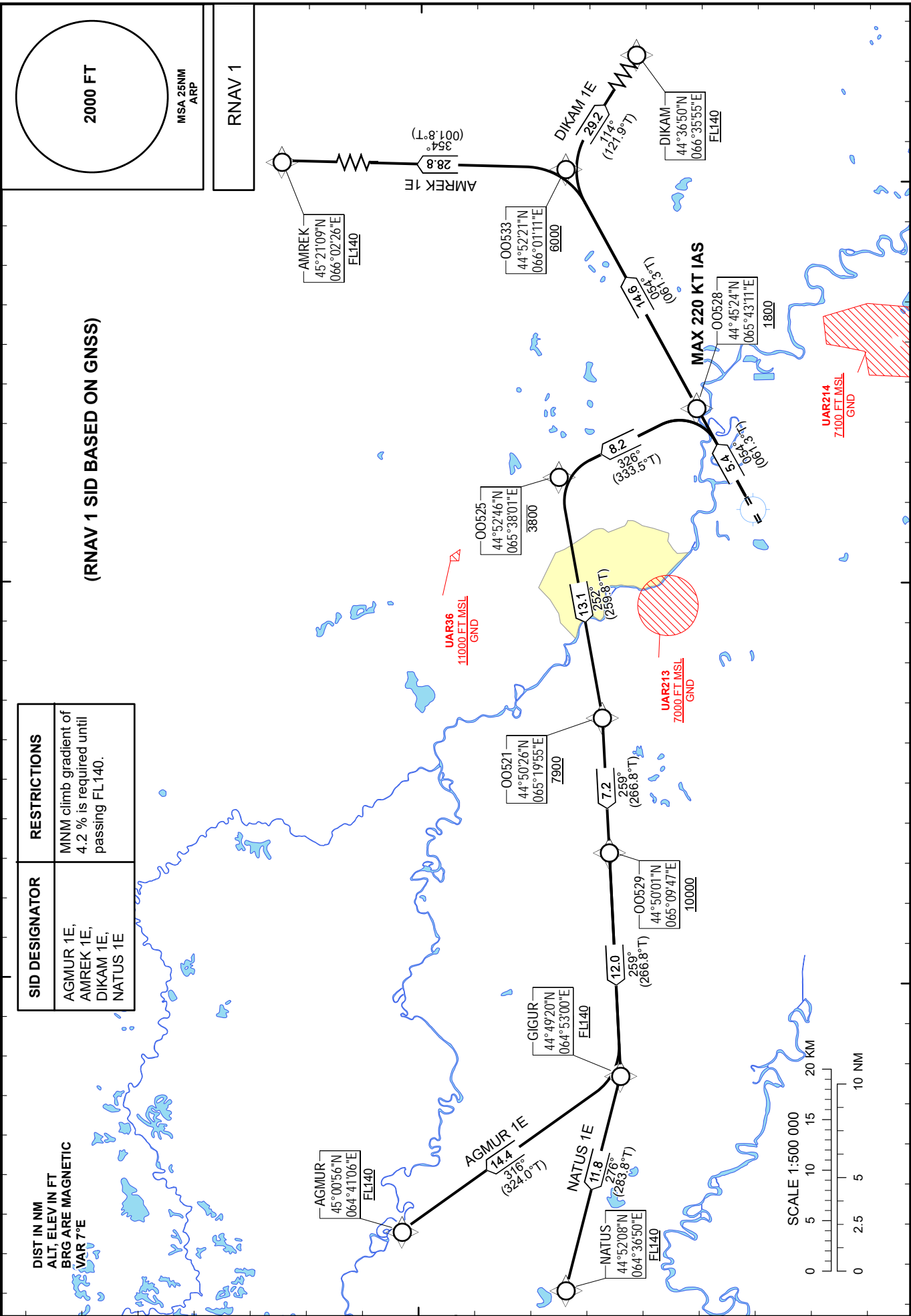
STANDARD DEPARTURE  
CHART- INSTRUMENT  
(SID) - ICAO

TRANSITION ALTITUDE  
10000 FT

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

AGMUR 1E, AMREK 1E,  
DIKAM 1E, NATUS 1E

KYZYLORDA  
RWY 05



**TABULAR DESCRIPTION**

AGMUR 1E RWY05											
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	CF	OO528	-	054(061.3)	+7.5	5.4	-	+1800	-220	2.6	RNAV 1
020	TF	OO525	-	326(333.5)	+7.5	8.2	L	-3800	-	2.5	RNAV 1
030	TF	OO521	-	252(259.8)	+7.5	13.1	L	+7900	-	3	RNAV 1
040	TF	OO529	-	259(266.8)	+7.5	7.2	R	+10000	-	3	RNAV 1
050	TF	GIGUR	-	259(266.8)	+7.5	12.0	-	+FL140	-	3	RNAV 1
060	TF	AGMUR	-	316(324.0)	+7.5	14.4	R	+FL140	-	1.9	RNAV 1

AMREK 1E RWY05											
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	CF	OO528	-	054(061.3)	+7.5	5.4	-	+1800	-	2.6	RNAV 1
020	CF	OO533	-	054(061.3)	+7.5	14.6	-	+6000	-	2.6	RNAV 1
030	TF	AMREK	-	354(001.8)	+7.5	28.8	L	+FL140	-	2.6	RNAV 1

DIKAM 1E RWY05											
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	CF	OO528	-	054(061.3)	+7.5	5.4	-	+1800	-	2.6	RNAV 1
020	CF	OO533	-	054(061.3)	+7.5	14.6	-	+6000	-	2.6	RNAV 1
030	TF	DIKAM	-	114(121.9)	+7.5	29.2	R	+FL140	-	2.6	RNAV 1

NATUS 1E RWY05											
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	CF	OO528	-	054(061.3)	+7.5	5.4	-	+1800	-220	2.6	RNAV 1
020	TF	OO525	-	326(333.5)	+7.5	8.2	L	-3800	-	2.5	RNAV 1
030	TF	OO521	-	252(259.8)	+7.5	13.1	L	+7900	-	3	RNAV 1
040	TF	OO529	-	259(266.8)	+7.5	7.2	R	+10000	-	3	RNAV 1
050	TF	GIGUR	-	259(266.8)	+7.5	12.0	-	+FL140	-	3	RNAV 1
060	TF	NATUS	-	276(283.8)	+7.5	11.8	R	+FL140	-	1.9	RNAV 1

**WAYPOINT COORDINATES**

Waypoint Identifier	Coordinates	
AGMUR	450056.00N	0644106.00E
AMREK	452109.00N	0660226.00E
DER	444247.74N	0653630.37E
DIKAM	443650.00N	0663555.00E
GIGUR	444920.00N	0645300.00E
NATUS	445208.00N	0643650.00E
OO521	445025.72N	0651955.39E
OO525	445245.55N	0653801.33E
OO528	444524.00N	0654310.79E
OO529	445001.30N	0650947.32E
OO533	445220.75N	0660110.53E

STANDARD DEPARTURE  
CHART- INSTRUMENT  
(SID) - ICAO

TRANSITION ALTITUDE  
10000 FT

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

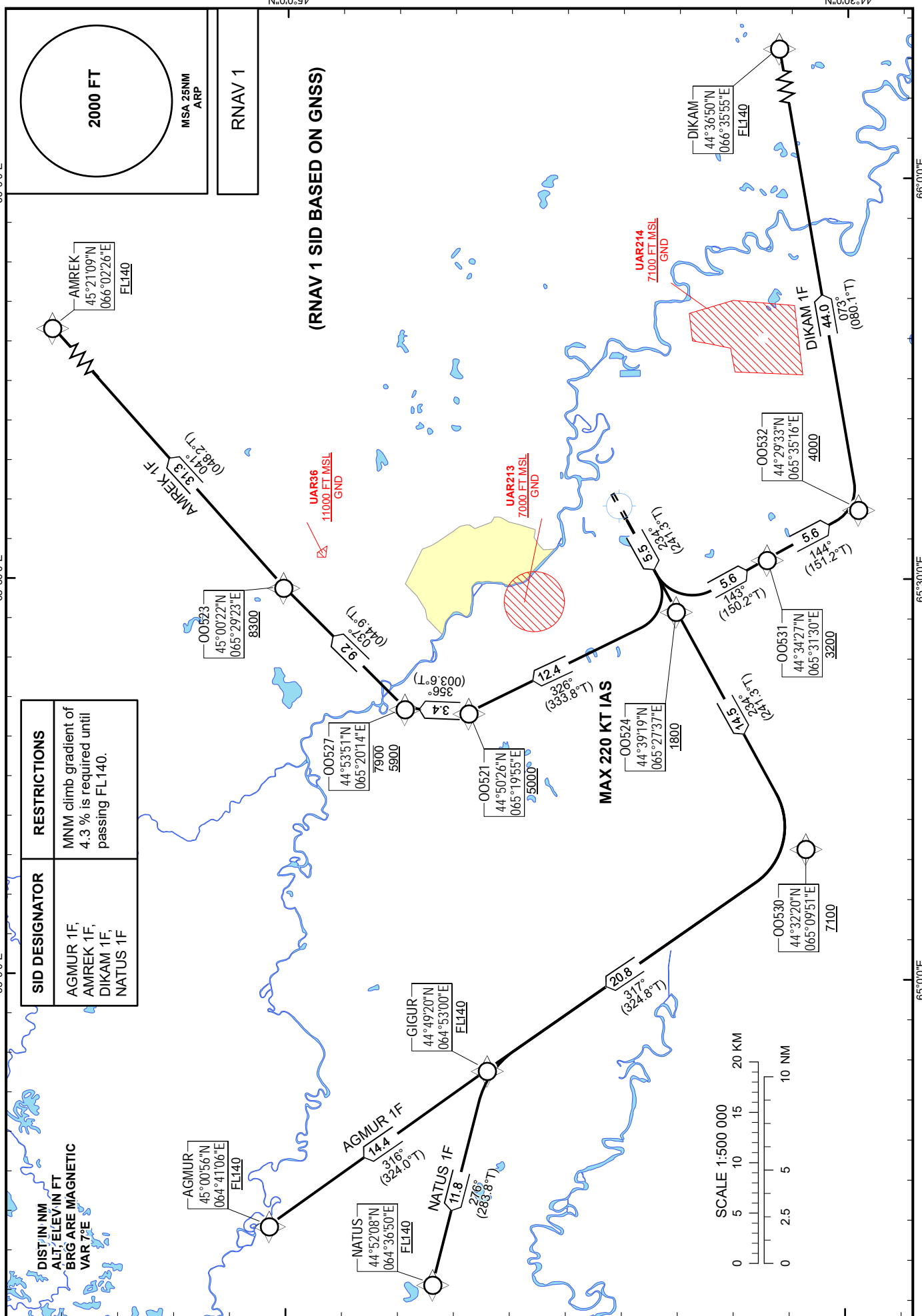
AGMUR 1F, AMREK 1F,  
DIKAM 1F, NATUS 1F

KYZYLORDA  
RWY 23

CHANGE: New chart.

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

SID DESIGNATOR	RESTRICTIONS
AGMUR 1F, AMREK 1F, DIKAM 1F, NATUS 1F	MNM climb gradient of 4.3 % is required until passing FL140.



**TABULAR DESCRIPTION**

AGMUR 1F RWY23											
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	CF	OO524	-	234(241.3)	+7.5	5.5	-	+1800	-	2.6	RNAV 1
020	TF	OO530	-	234(241.3)	+7.5	14.5	-	+7100	-	3.2	RNAV 1
030	TF	GIGUR	-	317(324.8)	+7.5	20.8	R	+FL140	-	3.2	RNAV 1
040	TF	AGMUR	-	316(324.0)	+7.5	14.4	-	+FL140	-	1.9	RNAV 1

AMREK 1F RWY23											
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	CF	OO524	-	234(241.3)	+7.5	5.5	-	+1800	-220	2.5	RNAV 1
020	TF	OO521	-	326(333.8)	+7.5	12.4	R	+5000	-	2.5	RNAV 1
030	TF	OO527	-	356(003.6)	+7.5	3.4	R	+5900 -7900	-	2.5	RNAV 1
040	TF	OO523	-	037(044.9)	+7.5	9.2	R	+8300	-	2.5	RNAV 1
050	TF	AMREK	-	041(048.2)	+7.5	31.3	-	+FL140	-	1.9	RNAV 1

DIKAM 1F RWY23											
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	CF	OO524	-	234(241.3)	+7.5	5.5	-	+1800	-220	2.6	RNAV 1
020	TF	OO531	-	143(150.2)	+7.5	5.6	L	+3200	-	2.6	RNAV 1
030	TF	OO532	-	144(151.2)	+7.5	5.6	-	+4000	-	1.9	RNAV 1
040	TF	DIKAM	-	073(080.1)	+7.5	44.0	L	+FL140	-	2.2	RNAV 1

NATUS 1F RWY23											
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	CF	OO524	-	234(241.3)	+7.5	5.5	-	+1800	-	2.6	RNAV 1
020	TF	OO530	-	234(241.3)	+7.5	14.5	-	+7100	-	3.2	RNAV 1
030	TF	GIGUR	-	317(324.8)	+7.5	20.8	R	+FL140	-	3.2	RNAV 1
040	TF	NATUS	-	276(283.8)	+7.5	11.8	L	+FL140	-	1.9	RNAV 1

**WAYPOINT COORDINATES**

Waypoint Identifier	Coordinates	
AGMUR	450056.00N	0644106.00E
AMREK	452109.00N	0660226.00E
DER	444158.74N	0653422.82E
DIKAM	443650.00N	0663555.00E
GIGUR	444920.00N	0645300.00E
NATUS	445208.00N	0643650.00E
OO521	445025.72N	0651955.39E
OO523	450022.14N	0652922.88E
OO524	443919.29N	0652736.51E
OO527	445350.80N	0652013.53E
OO530	443219.86N	0650950.67E
OO531	443427.35N	0653130.37E
OO532	442932.76N	0653516.17E

KYZYLORDA  
RWY 05



#### TABULAR DESCRIPTION

AGMUR 1G RWY05											
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	AGMUR	-	-	+7.5	-	-	-FL130	-	-	RNAV 1
020	CF	BUDET	-	108(115.2)	+7.5	13.6	-	-8500	-	-	RNAV 1
030	CF	OO529	-	115(122.1)	+7.5	9.6	R	+5300	-	-	RNAV 1
040	CF	OO519	-	115(122.2)	+7.5	3.6	-	+4200	-	-	RNAV 1
050	TF	BUSAB	-	144(151.2)	+7.5	7.0	R	+2000	-	-	RNAV 1
060	HM	BUSAB	-	144(151.2)	+7.5	5.0	R	+2000/-4000	-210	-	RNAV 1

AMREK 1G RWY05											
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	AMREK	-	-	+7.5	-	-	-FL130	-	-	RNAV 1
020	CF	OO522	-	207(214.4)	+7.5	27.7	-	-	-	-	RNAV 1
030	CF	OO526	-	235(242.7)	+7.5	10.6	R	-6300	-	-	RNAV 1
040	CF	OO521	-	233(240.1)	+7.5	6.0	-	-3500	-	-	RNAV 1
050	CF	OO519	-	234(241.4)	+7.5	4.8	-	-2500	-	-	RNAV 1
060	CF	BUSAB	-	144(151.2)	+7.5	7.0	L	+2000	-	-	RNAV 1
070	HM	BUSAB	-	144(151.2)	+7.5	5.0	R	+2000/-4000	-210	-	RNAV 1

DIKAM 1G RWY05											
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	DIKAM	-	-	+7.5	-	-	-FL130	-	-	RNAV 1
020	CF	IDMIS	-	274(281.2)	+7.5	31.7	-	-	-	-	RNAV 1
030	CF	OO531	-	233(240.6)	+7.5	17.1	L	-	-	-	RNAV 1
040	CF	GISEK	-	236(243.9)	+7.5	4.4	R	+2000	-	-	RNAV 1
050	HM	GISEK	-	324(331.4)	+7.5	5.0	L	+2000/-4000	-210	-	RNAV 1

NATUS 1G RWY05											
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	NATUS	-	-	+7.5	-	-	-FL130	-	-	RNAV 1
020	TF	BUDET	-	071(078.9)	+7.5	15.6	-	-8500	-	-	RNAV 1
030	TF	OO529	-	115(122.1)	+7.5	9.6	R	+5300	-	-	RNAV 1
040	TF	OO519	-	115(122.2)	+7.5	3.6	-	+4200	-	-	RNAV 1
050	TF	BUSAB	-	144(151.2)	+7.5	7.0	R	+2000	-	-	RNAV 1
060	HM	BUSAB	-	144(151.2)	+7.5	5.0	R	+2000/-4000	-210	-	RNAV 1

#### WAYPOINT COORDINATES

Waypoint Identifier	Coordinates	
AGMUR	450056.00N	0644106.00E
AMREK	452109.00N	0660226.00E
BUDET	445507.00N	0645824.00E
BUSAB	444159.37N	0651843.80E
DIKAM	443650.00N	0663555.00E
GISEK	443230.96N	0652559.17E
IDMIS	444250.70N	0655217.80E
NATUS	445208.00N	0643650.00E
OO519	444807.58N	0651400.35E
OO521	445025.72N	0651955.39E
OO522	445816.78N	0654025.54E
OO526	445325.44N	0652714.01E
OO529	445001.30N	0650947.32E
OO531	443427.35N	0653130.37E

STANDARD ARRIVAL  
CHART- INSTRUMENT  
(STAR) - ICAO

TRANSITION ALTITUDE  
10000 FT

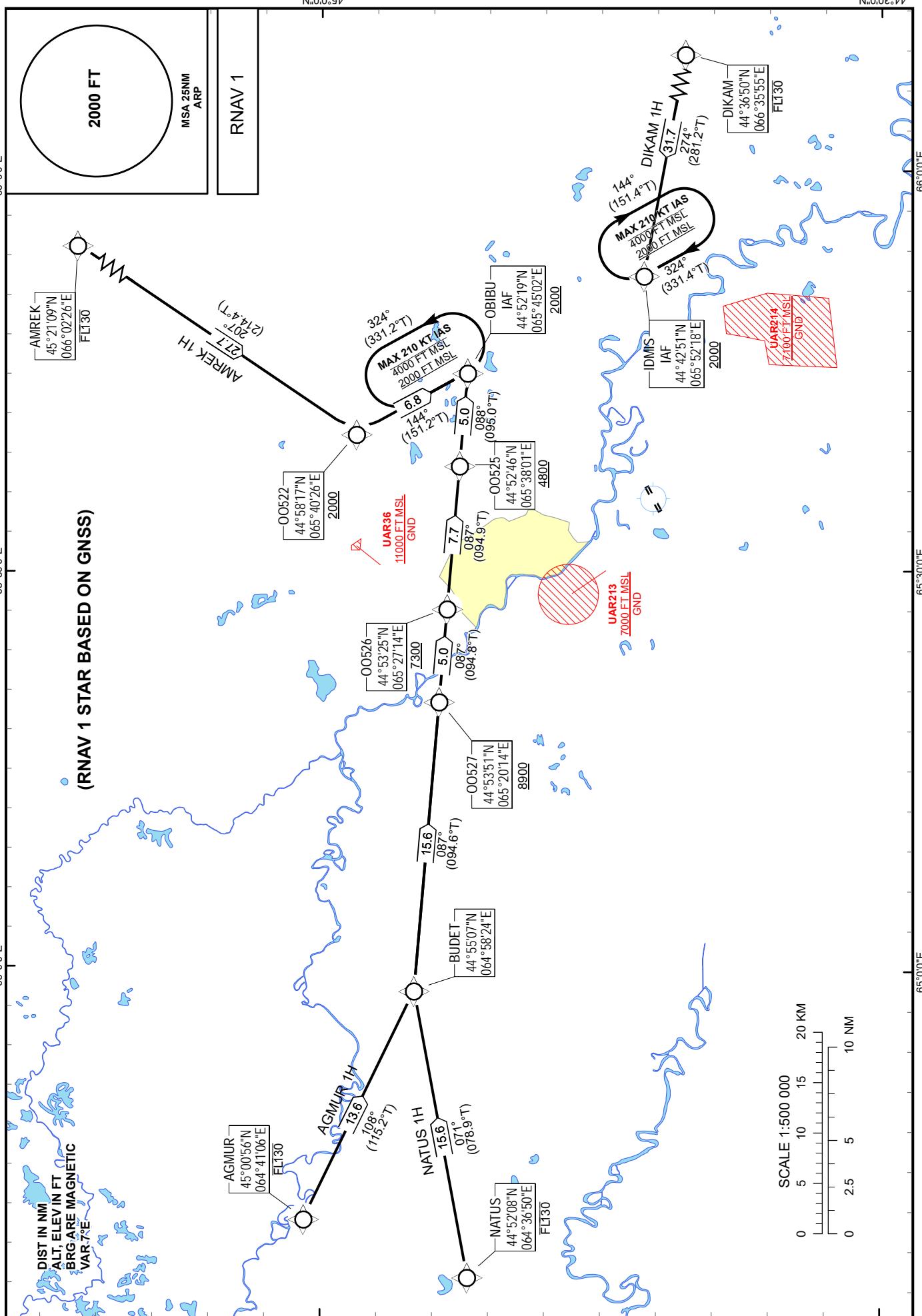
KYZYLORDA TOWER 120.9  
KYZYLORDA ATIS (EN) 134.9  
KYZYLORDA ATIS (RU) 122.9

AGMUR 1H, AMREK 1H,  
DIKAM 1H, NATUS 1H

KYZYLORDA  
RWY 23

CHANGE: New chart.

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



**TABULAR DESCRIPTION**

AGMUR 1H RWY05											
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	AGMUR	-	-	+7.5	-	-	-FL130	-	-	RNAV 1
020	TF	BUDET	-	108(115.2)	+7.5	13.6	-	-	-	-	RNAV 1
030	TF	OO527	-	087(094.6)	+7.5	15.6	L	+8900	-	-	RNAV 1
040	TF	OO526	-	087(094.8)	+7.5	5.0	-	+7300	-	-	RNAV 1
050	TF	OO525	-	087(094.9)	+7.5	7.7	-	+4800	-	-	RNAV 1
060	TF	OBIBU	-	088(095.0)	+7.5	5.0	-	+2000	-	-	RNAV 1
070	HM	OBIBU	-	144(151.2)	+7.5	5.0	L	+2000 -4000	-210	-	RNAV 1

AMREK 1H RWY05											
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	AMREK	-	-	+7.5	-	-	-FL130	-	-	RNAV 1
020	TF	OO522	-	207(214.4)	+7.5	27.7	-	+2000	-	-	RNAV 1
030	TF	OBIBU	-	144(151.2)	+7.5	6.8	L	+2000	-	-	RNAV 1
040	HM	OBIBU	-	144(151.2)	+7.5	5.0	L	+2000 -4000	-210	-	RNAV 1

DIKAM 1H RWY05											
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	DIKAM	-	-	+7.5	-	-	-FL130	-	-	RNAV 1
020	TF	IDMIS	-	274(281.2)	+7.5	31.7	-	+2000	-	-	RNAV 1
030	HM	IDMIS	-	324(331.4)	+7.5	5.0	R	+2000 -4000	-210	-	RNAV 1

NATUS 1H RWY05											
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	NATUS	-	-	+7.5	-	-	-FL130	-	-	RNAV 1
020	TF	BUDET	-	071(078.9)	+7.5	15.6	-	-	-	-	RNAV 1
030	TF	OO527	-	087(094.6)	+7.5	15.6	R	+8900	-	-	RNAV 1
040	TF	OO526	-	087(094.8)	+7.5	5.0	-	+7300	-	-	RNAV 1
050	TF	OO525	-	087(094.9)	+7.5	7.7	-	+4800	-	-	RNAV 1
060	TF	OBIBU	-	088(095.0)	+7.5	5.0	-	+2000	-	-	RNAV 1
070	HM	OBIBU	-	144(151.2)	+7.5	5.0	L	+2000 -4000	-210	-	RNAV 1

**WAYPOINT COORDINATES**

Waypoint Identifier	Coordinates	
AGMUR	450056.00N	0644106.00E
AMREK	452109.00N	0660226.00E
BUDET	445507.00N	0645824.00E
DIKAM	443650.00N	0663555.00E
IDMIS	444250.70N	0655217.80E
NATUS	445208.00N	0643650.00E
OBIBU	445219.10N	0654501.50E
OO522	445816.78N	0654025.54E
OO525	445245.55N	0653801.33E
OO526	445325.44N	0652714.01E
OO527	445350.80N	0652013.53E

KYZYLORDA  
RWY 05



**TABULAR DESCRIPTION**

AGMUR 1J RWY05											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance to THR (NM)	Distance to go (DTG) (NM)	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	AGMUR	-	-	+7.5	49.1	44.3	+11000/-FL170	-	-	RNAV 1
020	CF	BUDET	-	108(115.2)	+7.5	35.5	30.7	+8100/-FL120	-	-	RNAV 1
030	CF	OO529	-	115(122.1)	+7.5	25.9	21.1	+6000/-9400	-	-	RNAV 1
040	CF	OO519	-	115(122.2)	+7.5	22.3	17.5	+5200/-8200	-230	-	RNAV 1
050	TF	BUSAB	-	144(151.2)	+7.5	15.3	10.5	+3700/-5700	-	-	RNAV 1

AMREK 1J RWY05											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance to THR (NM)	Distance to go (DTG) (NM)	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	AMREK	-	-	+7.5	71.4	66.6	+FL160/-FL250	-	-	RNAV 1
020	CF	OO522	-	207(214.4)	+7.5	43.7	38.9	+9900/-FL150	-	-	RNAV 1
030	CF	OO526	-	235(242.7)	+7.5	33.1	28.3	+7600/-FL120	-	-	RNAV 1
040	CF	OO521	-	233(240.1)	+7.5	27.1	22.3	+6300/-9900	-	-	RNAV 1
050	CF	OO519	-	234(241.4)	+7.5	22.3	17.5	+5200/-8200	-230	-	RNAV 1
060	CF	BUSAB	-	144(151.2)	+7.5	15.3	10.5	+3700/-5700	-	-	RNAV 1

DIKAM 1J RWY05											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance to THR (NM)	Distance to go (DTG) (NM)	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	DIKAM	-	-	+7.5	68.5	63.7	+FL160/-FL240	-	-	RNAV 1
020	CF	IDMIS	-	274(281.2)	+7.5	36.8	32.0	+8400/-FL130	-	-	RNAV 1
030	CF	OO531	-	233(240.6)	+7.5	19.7	14.9	+4600/-7300	-230	-	RNAV 1
040	CF	GISEK	-	236(243.9)	+7.5	15.3	10.5	+3700/-5700	-	-	RNAV 1

NATUS 1J RWY05											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance to THR (NM)	Distance to go (DTG) (NM)	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	NATUS	-	-	+7.5	51.1	46.3	+FL130/-FL180	-	-	RNAV 1
020	TF	BUDET	-	071(078.9)	+7.5	35.5	30.7	+8100/-FL120	-	-	RNAV 1
030	TF	OO529	-	115(122.1)	+7.5	25.9	21.1	+6000/-9400	-	-	RNAV 1
040	TF	OO519	-	115(122.2)	+7.5	22.3	17.5	+5200/-8200	-230	-	RNAV 1
050	TF	BUSAB	-	144(151.2)	+7.5	15.3	10.5	+3700/-5700	-	-	RNAV 1

**WAYPOINT COORDINATES**

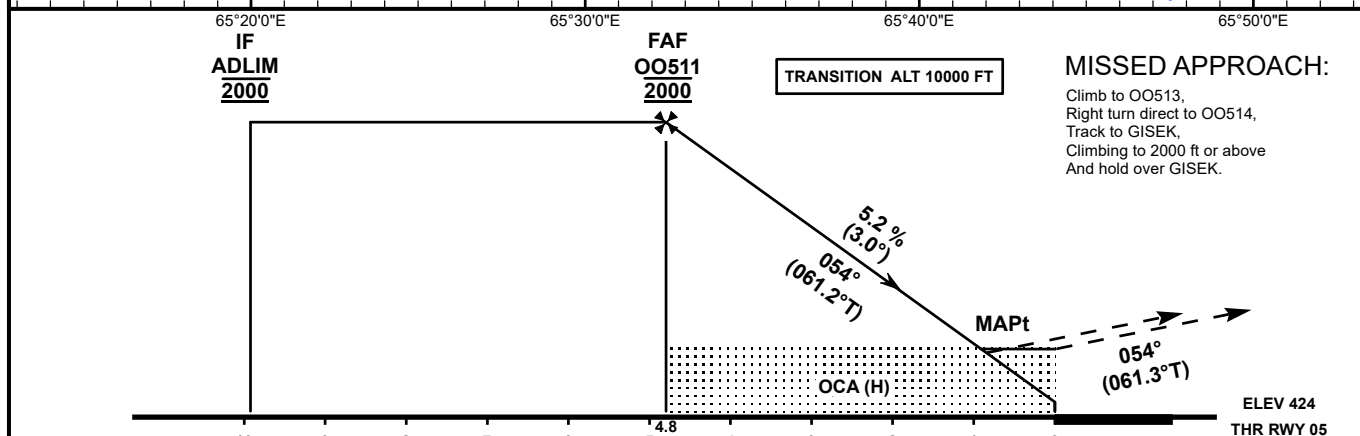
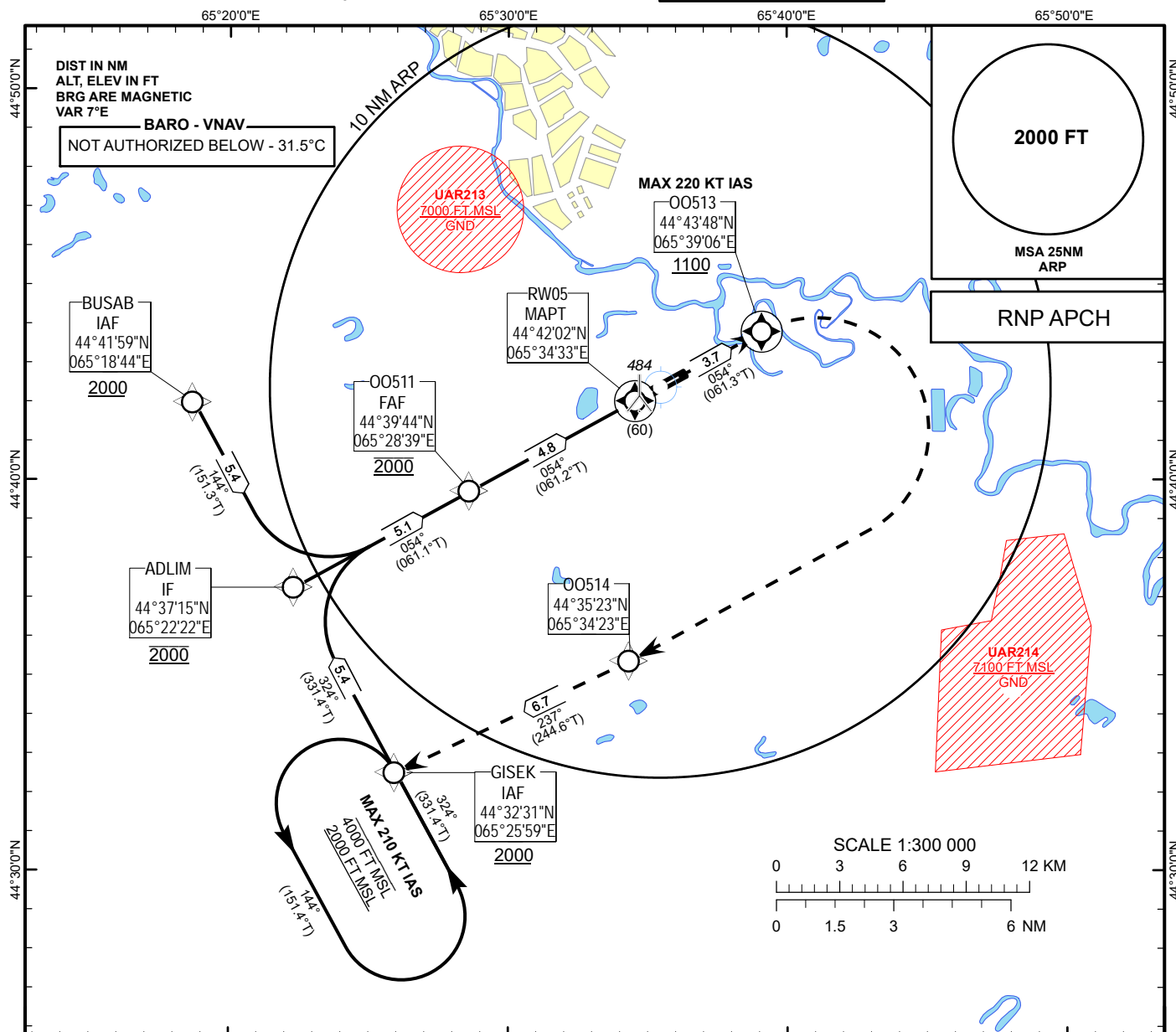
Waypoint Identifier	Coordinates	
AGMUR	450056.00N	0644106.00E
AMREK	452109.00N	0660226.00E
BUDET	445507.00N	0645824.00E
BUSAB	444159.37N	0651843.80E
DIKAM	443650.00N	0663555.00E
GISEK	443230.96N	0652559.17E
IDMIS	444250.70N	0655217.80E
NATUS	445208.00N	0643650.00E
OO519	444807.58N	0651400.35E
OO521	445025.72N	0651955.39E
OO522	445816.78N	0654025.54E
OO526	445325.44N	0652714.01E
OO529	445001.30N	0650947.32E
OO531	443427.35N	0653130.37E

INSTRUMENT  
APPROACH  
CHART - ICAO

AERODROME ELEV **433FT**  
HEIGHTS RELATED TO  
THR RWY 04 - ELEV **424FT**

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

KYZYLORDA  
RNP RWY 05



OCA(OCH)		A	B	C	D
Straight	LNAV	730(300)			
	LNAV/VNAV	620(195)	630(205)	640(215)	660(235)

DIST THR	4	3	2	1
ALTITUDE	1750	1430	1120	800
HEIGHT	1326	1006	696	376

GS	kt	80	100	120	140	160	180
Rate of descent	ft/min	420	530	640	740	850	950
FAF/FAP - THR (4.8 NM)	min:s	3:36	2:53	2:24	2:03	1:48	1:36

CHANGE: New chart.

TABULAR DESCRIPTION

RNP RWY05											
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	GISEK	-	-	+7.5	-	-	+2000	-	-	RNP APCH
020	TF	ADLIM	-	324(331.4)	+7.5	5.4	-	@2000	-	-	RNP APCH
010	IF	BUSAB	-	-	+7.5	-	-	+2000	-	-	RNP APCH
020	TF	ADLIM	-	144(151.3)	+7.5	5.4	-	@2000	-	-	RNP APCH
010	IF	ADLIM	-	-	+7.5	-	-	@2000	-	-	RNP APCH
020	TF	OO511	-	054(061.1)	+7.5	5.1	-	@2000	-	-	RNP APCH
030	TF	RW05	Y	054(061.2)	+7.5	4.8	-	@474	-	-3	RNP APCH
040	CF	OO513	Y	054(061.3)	+7.5	3.7	-	+1100	-220	+1.4	RNP APCH
050	DF	OO514	-	-	+7.5	-	R	-	-	+1.4	RNP APCH
060	TF	GISEK	-	237(244.6)	+7.5	6.7	-	+2000	-	+1.4	RNP APCH
070	HM	GISEK	-	324(331.4)	+7.5	5.0	L	+2000/-4000	-210	-	RNP APCH

WAYPOINT COORDINATES

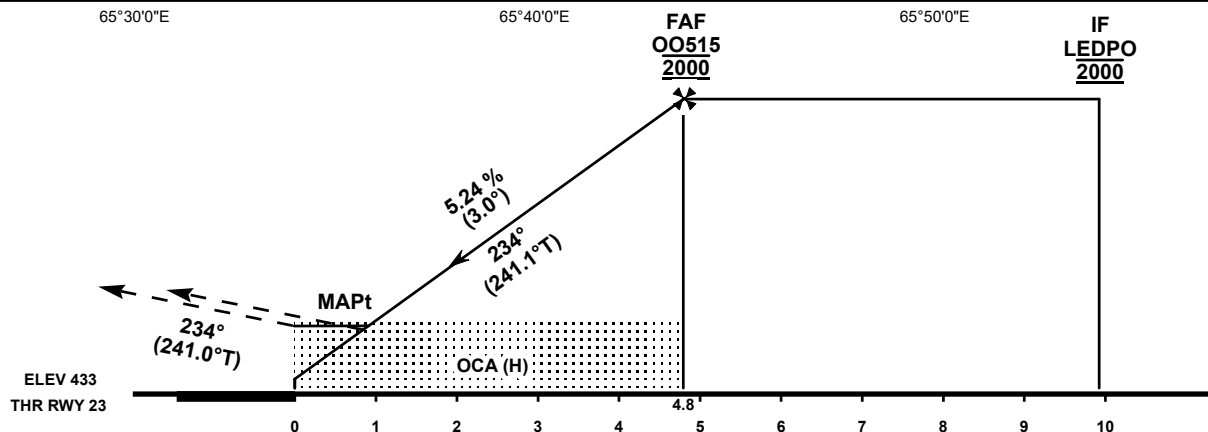
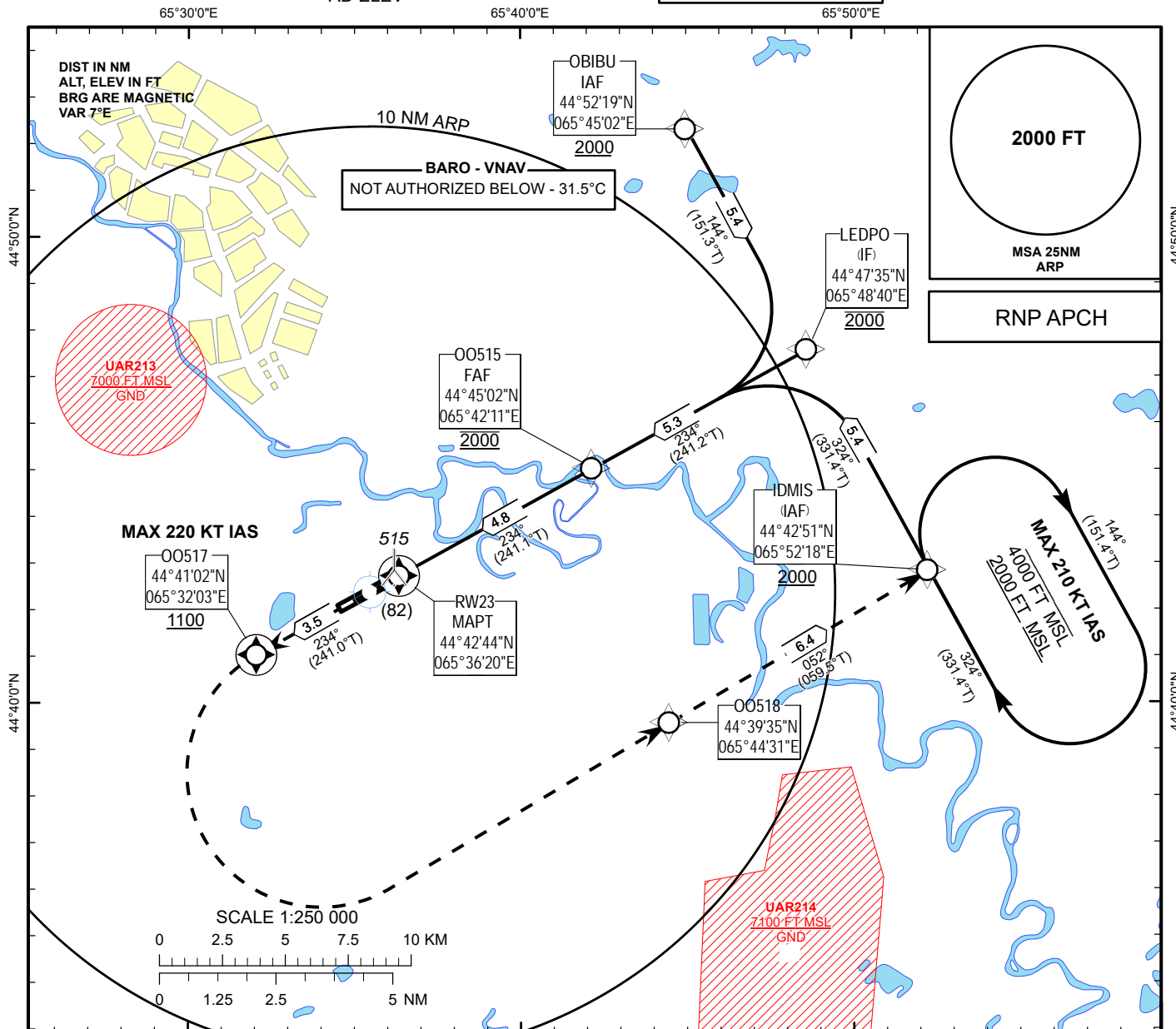
RNP RWY05		
Waypoint Identifier	Coordinates	
ADLIM	443715.22N	0652221.78E
BUSAB	444159.37N	0651843.80E
GISEK	443230.96N	0652559.17E
OO511	443943.56N	0652839.37E
RW05	444201.89N	0653432.79E
OO513	444348.44N	0653905.86E
OO514	443522.68N	0653423.15E

INSTRUMENT  
APPROACH  
CHART - ICAO

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

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

KYZYLORDA  
RNP RWY 23



OCA(OCH)		A	B	C	D
Straight	LNAV	770(340)			
	LNAV/VNAV	650(218)	660(228)	670(238)	680(248)

DIST THR	4	3	2	1
ALTITUDE	1760	1440	1120	810
HEIGHT	1327	1007	687	377

GS	kt	80	100	120	140	160	180
Rate of descent	ft/min	420	530	640	740	850	950
FAF/FAP - THR (4.8 NM)	min:s	3:35	2:52	2:23	2:03	1:47	1:35

CHANGE: New chart.

TABULAR DESCRIPTION

RNP RWY23											
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	IDMIS	-	-	+7.5	-	-	+2000	-	-	RNP APCH
020	TF	LEDPO	-	324(331.4)	+7.5	5.4	-	@2000	-	-	RNP APCH
010	IF	OBIBU	-	-	+7.5	-	-	+2000	-	-	RNP APCH
020	TF	LEDPO	-	144(151.3)	+7.5	5.4	-	@2000	-	-	RNP APCH
010	IF	LEDPO	-	-	+7.5	-	-	@2000	-	-	RNP APCH
020	TF	OO515	-	234(241.2)	+7.5	5.3	-	@2000	-	-	RNP APCH
030	TF	RW23	Y	234(241.1)	+7.5	4.8	-	@483	-	-3	RNP APCH
040	CF	OO517	Y	234(241.0)	+7.5	3.5	-	+1100	-220	+1.4	RNP APCH
050	DF	OO518	-	-	+7.5	-	L	-	-	+1.4	RNP APCH
060	TF	IDMIS	-	052(059.5)	+7.5	6.4	-	+2000	-	+1.4	RNP APCH
070	HM	IDMIS	-	324(331.4)	+7.5	5.0	R	+2000/-4000	-210	-	RNP APCH

WAYPOINT COORDINATES

RNP RWY23		
Waypoint Identifier	Coordinates	
IDMIS	444250.70N	0655217.80E
LEDPO	444734.94N	0654839.98E
OBIBU	445219.10N	0654501.50E
OO515	444502.28N	0654211.42E
RW23	444243.85N	0653620.40E
OO517	444102.01N	0653202.96E
OO518	443934.82N	0654430.72E

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

1	Apron surface and strength	STANDS		SURFACE	STRENGTH
		1 - 2 ACFT "C"		CONC+REINF	PCN 17/R/B/X/T
		3 - 4 ACFT "D"		CONC+ASPH	PCN 47/R/B/X/T
		5 - 7 ACFT "D"		CONC+ASPH	PCN 14/F/C/Y/T
2	Taxiway width, surface and strength	TWY	WIDTH (M)	SURFACE	STRENGTH
		2	22	CONC+ASPH	PCN 19/F/C/Y/T
		A	23	CONC+ASPH	PCN 47/R/B/X/T
		8	16	CONC+ASPH	PCN 19/F/C/Y/T
		9	18	CONC+ASPH	PCN 19/F/C/Y/T
3	Altimeter checkpoint location and elevation	Nil			
4	VOR checkpoints	Nil			
5	INS checkpoints	Nil			
6	Remarks	Stand 1-2 - for ACFT with wing span not more than 32m. Stands 3-4 - for ACFT with wing span not more than 52m. Stands 5-7 - for ACFT with wing span not more than 32m TWY 8, 9 - closed. RWY 02/20 - closed Helicopters are not allowed to take off/land from/to taxiway A and parking stands 1-7; take-off/landing are performed on the runway. Taxiing on TWY A is performed on both the ground and in the air, along the center line.			

**UASS 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	Nil
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 Approach lighting system, runway edge lights, runway turning lights, taxiway edge lights.
3	Stop bars	Nil
4	Other runway protection measures	Nil
5	Remarks	Recessed approach lights are available on the displaced THR.

**UASS AD 2.10 Aerodrome Obstacles**

NIL

**UASS AD 2.11 Meteorological Information Provided**

1	Associated MET Office	Meteorological service Semey Phone: +7 (7222) 565117 Fax: +7 (7222) 565117 AFS: UASSYMYX
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2	Hours of service MET Office outside hour	HO
3	Office responsible for TAF preparation: Periods of validity	Meteorological service Semey, 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	Nil
9	ATS units provided with information	Briefing, TWR
10	Additional information	Nil

## UASS AD 2.12 Runway Physical Characteristics

Designation s RWY NR	TRUE BRG	Dimensions of RWY (M)	Strength (PCN) and surface of RWY and SWY	THR coordinates RWY end coordinates THR geoid undulation	THR elevation and highest elevation of TDZ of precision APP RWY	Slope of RWY-SWY
1	2	3	4	5	6	7
08	83,68°	3099 X 45	47/R/B/X/T CEMENT/ CONC	502100.82N 0801243.63E - -145.3 FT	THR 759.2 FT	See AOC type A
26	263,71°	3099 X 45	47/R/B/X/T CEMENT/ CONC	502111.84N 0801519.49E - -145.3 FT	THR 674.9 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 150	3399 X 300	90 X 150	Nil	AVBL	Turn Pad LEN 130 m, the total width of the turn pad and runway 100 m. REF.AD 2.12

SWY dimensions (M)	CWY dimensions (M)	Strip dimensions (M)	RESA dimensions (M)	Location and description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
Nil	150 X 150	3399 X 300	90 X 150	Nil	AVBL	Turn Pad LEN 130 m, the total width of the turn pad and runway 100 m. REF.AD 2.12 Displaced THR 372 M (DTHR 502110.52N 0801500.79E) - elev. 675,2 FT

**UASS AD 2.13 Declared Distances**

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
08	3099	3249	3099	3099	Nil
26	3099	3249	3099	2727	Nil
TWY A - 08	2504	2654	2504	Nil	Nil

**UASS 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
08	(SALS) 420 M LIL	GRN Nil	PAPI LEFT/3°	Nil	Nil	3099m, spacing 60m, 0-2499m white, last 600m yellow LIL	RED Nil	Nil	Nil
26	CAT I (PALS) 900 M LIH	GRN Nil	PAPI LEFT/3°	Nil	Nil	2727m, spacing 60m, 0-2127m white, last 600m yellow LIH	RED Nil	Nil	Nil

## UASS AD 2.15 Other Lighting, Secondary Power Supply

1	ABN/IBN location, characteristics and hours of operation	ABN: Nil IBN: Nil
2	LDI location and LGT Anemometer location and LGT	LDI: Nil
3	TWY edge and centre line lighting	TWY A Edge: blue
4	Secondary power supply/switch-over time	AVBL, 1 sec
5	Remarks	Turning bay lights - green

## UASS AD 2.16 Helicopter Landing Area

NIL

## UASS AD 2.17 ATS Airspace

1	Designation and lateral limits	SEMEY CTR A circle radius 20 NM centered on 502059N 0801438E
2	Vertical limits	4000 FT ALT / GND
3	Airspace classification	C
4	ATS unit call sign Language(s)	SEMEY TOWER EN SEMEY VYSHKA RU
5	Transition altitude	10000 FT
6	Hours of applicability	See NOTAM
7	Remarks	Nil

## UASS 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
RADAR	SEMEY TOWER (EN) SEMEY VYSHKA (RU)	128 MHZ	Nil	Nil	See NOTAM	Nil
SMC	SEMEY TOWER (EN) SEMEY VYSHKA (RU)	128 MHZ	Nil	Nil	See NOTAM	Nil
TWR	SEMEY TOWER (EN) SEMEY VYSHKA (RU)	128 MHZ	Nil	Nil	See NOTAM	Nil
Production and dispatcher service	SEMEY TRANZIT (EN) SEMEY TRANZIT (RU)	131.9 MHZ	Nil	Nil	As AD	Nil

Service designation	Call sign	Frequency	SATVOICE number(s)	Logon address	Hours of operation	Remarks
1	2	3	4	5	6	7
ATIS	SEMEY ATIS (EN) SEMEY ATIS (RU)	118,5 MHZ 122,4 MHZ	Nil	Nil	As AD	ATIS information is being updated during AD working hours. Outside AD working hours ATIS information is not updated.

**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		
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 A is designated for taxiing of Civil aviation aircraft into/out of stands.

TWY A 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.

No	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
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	STARAIK KREPOST (Northern outskirts of StaraiK Krepst)	N503013 E0800558	322° 10.8 nm SEM VOR/DME	Holding, circle and absolute altitudes by "Tower" ATC instructions

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

### 3. Ornithological situation.

Seasonal migrations:

- Spring – the beginning of the first half of April - the end of May. Morning flights are from 6:00 to 10:00. Evening flights from 17:00 to 21:00
- Autumn – the beginning of the end of August and the second half of October. Morning flights are from 6:00 to 10:00. Evenings from 16:00 to 20:00

Species of migratory birds:

- Ducks - 131 FT to 1312 FT
- geese – grey goose, whooping swan, hissing swan, pelicans – pink and curly pelicans, great cormorant, beauty crane – 229 FT and more.
- Birds of prey – eagle, common kestrel, sparrowhawk, grouse, eared owl, rooks, crows, black crow, magpie, gray crow, jackdaw, silver gull – 164 FT to 1312 FT
- Nomadic species: pink and common starlings, larks, sparrows, jyrkas etc. the period of migrations begins from the second half of June and lasts until the first middle of September, the flight altitude during

migrations ranges from 3 FT to 328 FT, mainly in the morning from 7:00 to 10:00 and evening from 16:00 to 20:00 hours.

- Sedentary species: rook, black crow, gray crow, magpie, jackdaw, blue pigeon, gray partridge – constantly located in the vicinity of the airfield, and crossing it.
- The intensity of local bird flights increases during the departure of young birds from the beginning of July to the second middle of September, the activity time is in the morning from 5:00 to 11:00 and in the evening from 16:30 to 21:00.

Migration directions:

- Massive seasonal migrations occur from the southwest to the North and northeast
- The daily flights of birds are due to their location to the west of the landfill (7.2 km from the KTA), to the east and northeast of the Irtysh River (4 km from the KTA) and to the south of Lake SOR (7 km from the KTA). The airport is an object on the way for birds to fly to the landfill in the early morning and late evening hours along the entire length of the runway. During the daytime, the common eagle is observed in the form of single circling at altitudes from 50 to 100 meters and in the form of funnels at altitudes from 50 to 450 meters, consisting of 10-50 individuals or more. The trajectory of the funnel is observed on the Irtysh River through the airfield to the MSW and back. On the island sections of the Irtysh River, there is a massive nesting of silver gulls (more than 800 individuals), with the release of young birds, the intensity of flights of flocks to the urban garbage through the airfield increases from July to mid-September. The open space above the airfield and the surrounding area is also a place for training flights of young eagles.
- Crows (rook, black crow, gray crow, jackdaw), predatory (eagle) and nomadic species (silver gull, starlings: pink, common, at dusk and at night – long-eared owls, nightjars) pose an increased danger of bird collisions with the sun.

The airfield service informs air traffic controllers about such bird flights and approximate heights above ground level, and the controllers, in turn, transmit this information to the pilots.

During the specified time periods, pilots are advised, if the design features of the on-board equipment allow, to turn on the landing lights when flying near the airfield, during takeoff, landing, as well as climbing and descending.

Measures to minimize bird concentrations include: periodic bird scaring, the prevention of unauthorized landfills and waste disposal, the removal of green spaces and ground coverings, as well as the cessation of agricultural activities at the airport.

## UASS AD 2.24 Charts Related To An Aerodrome

Name	Page
Aerodrome Chart ICAO	UASS AD 2.24.1-1
Aerodrome Ground Movement and Parking Chart ICAO	UASS AD 2.24.3-1
Aerodrome Obstacle Chart – ICAO – Type A	UASS AD 2.24.4-1
Standard Departure Chart Instrument (SID) RWY 08 ICAO	UASS AD 2.24.7-1-1
Standard Departure Chart Instrument (SID) RWY 26 ICAO	UASS AD 2.24.7-2-1
Standard Arrival Chart Instrument (STAR) RWY 08 ICAO	UASS AD 2.24.9-1-1
Standard Arrival Chart Instrument (STAR) RWY 26 ICAO	UASS AD 2.24.9-2-1
ATC Surveillance Minimum Altitude Chart ICAO	UASS AD 2.24.10-1
Instrument Approach Chart – ILS/DME RWY 26 ICAO	UASS AD 2.24.11-1-1
Instrument Approach Chart - VOR/DME - Y RWY 08 ICAO	UASS AD 2.24.11-2-1
Instrument Approach Chart – VOR/DME RWY 26 ICAO	UASS AD 2.24.11-3-1
Instrument Approach Chart - VOR/DME - Z RWY 08 ICAO	UASS AD 2.24.11-4-1
Visual Approach chart – ICAO	UASS AD 2.24.12-1

Name	Page
VFR Departure/Arrival Chart	UASS AD 2.24.14-1

**UASS AD 2.25 Visual segment surface (VSS) penetrations**

No penetrations

Taxiing shall be carried out along centerlines, taxiing into stands shall be carried out by instructions of ground personnel of Aviation Engineering Service.

**4. Taxiing out from stands under aircraft own engines power and by towing.**

Taxiing out from stands 9-16 shall be carried out by towing to the apron centerline followed by engine start-up and further taxiing under the aircraft own engines power. Stands 1-8, 17-22 are designated as pass-through, taxiing out from these stands shall be carried out under the aircraft own engines power.

**5. Aircraft de-icing areas, start-up engine areas and deviation areas.**

De-icing procedure shall be carried out on the stands. Engine start-up on stands 1-8, 17-22 is allowed. Engine start-up on stands 9-16 shall be carried out after taxiing out from the stands on the nearest apron centerline. Engine testing (run-up) on the stands 8-16 for aircraft heading to the apron is prohibited. There is no deviation areas.

**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.

**UAI AD 2.21 Noise Abatement Procedures**

NIL

**UAI 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

## UAI 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. Chapter 6. Point 77. Point 81. Standards of Aerodromes (Heliports) Operation Civil Aviation Republic Kazakhstan	Obstacle limitation	Obstacle Evaluation and Permit issued due to deviations from the requirements of the State Aerodrome Operation Manual of the Civil Aviation Administration of the Republic of Kazakhstan , caused by the presence of objects penetrating the obstacle limitation surfaces of RWY 10/28 at Shymkent aerodrome	An equivalent level of safety has been approved 09.06.2025

Regulatory reference	Requirement of regulations	Description of exceptions, exemptions and restrictions	Measures taken and validity period
Section 2. Point 459. Point 461. Standards of Aerodromes (Heliports) Operation Civil Aviation Republic Kazakhstan	Rescue and firefighting equipment, and procedures for operation and coordination under Category III conditions.	Obstacle Evaluation and Permit issued due to deviations from the requirements of the State Aerodrome Operation Manual of the Civil Aviation Administration of the Republic of Kazakhstan related to flight safety at Shymkent aerodrome.	An equivalent level of safety has been approved 20.10.2024

## 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.

## UAII AD 2.24 Charts Related To An Aerodrome

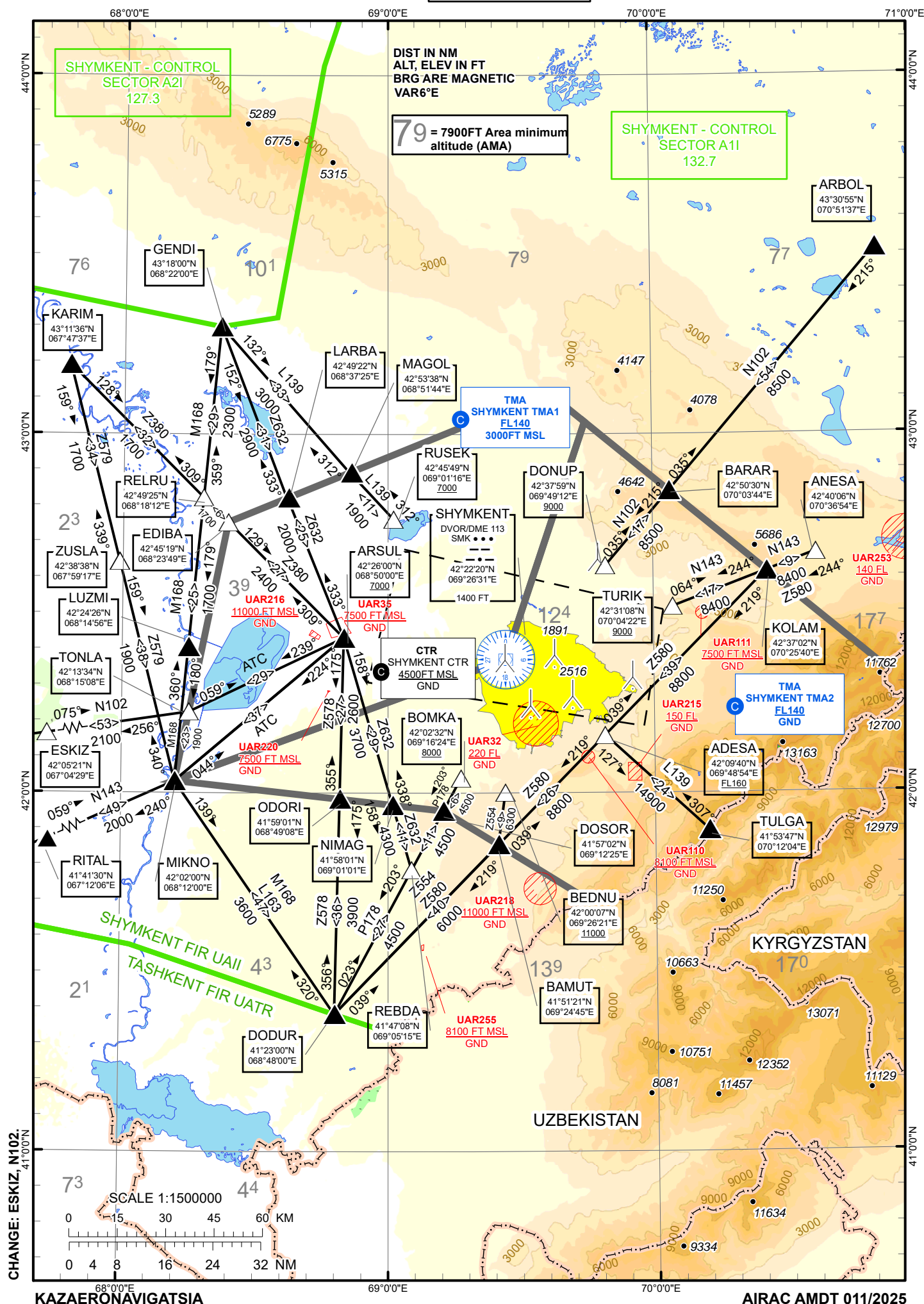
Name	Page
Aerodrome Chart ICAO	UAII AD 2.24.1-1
Aerodrome Ground Movement and Parking Chart ICAO	UAII AD 2.24.3-1
Aerodrome Obstacle Chart – ICAO – Type A	UAII AD 2.24.4-1
Area Chart ICAO	UAII AD 2.24.6-1
Standard Departure Chart Instrument (SID) RWY 10 ICAO	UAII AD 2.24.7-1-1
Standard Departure Chart Instrument (SID) RWY 28 ICAO	UAII AD 2.24.7-2-1
Standard Departure Chart Instrument (SID) RNAV RWY 10 ICAO	UAII AD 2.24.7-3-1
Standard Departure Chart Instrument (SID) RNAV RWY 10 ICAO	UAII AD 2.24.7-4-1
Standard Departure Chart Instrument (SID) RNAV RWY 28 ICAO	UAII AD 2.24.7-5-1
Standard Departure Chart Instrument (SID) RNAV RWY 28 ICAO	UAII AD 2.24.7-6-1
Standard Arrival Chart Instrument (STAR) RWY 10 ICAO	UAII AD 2.24.9-1-1
Standard Arrival Chart Instrument (STAR) RWY 28 ICAO	UAII AD 2.24.9-2-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 10 ICAO	UAII AD 2.24.9-3-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 10 ICAO	UAII AD 2.24.9-4-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 28 ICAO	UAII AD 2.24.9-5-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 28 ICAO	UAII AD 2.24.9-6-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 10 ICAO	UAII AD 2.24.9-7-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 10 ICAO	UAII AD 2.24.9-8-1
ATC Surveillance Minimum Altitude Chart ICAO	UAII AD 2.24.10-1
Instrument Approach Chart - ILS/DME RWY 10 ICAO	UAII AD 2.24.11-1-1
Instrument Approach Chart – LOC/DME RWY 28 ICAO	UAII AD 2.24.11-2-1

Name	Page
Instrument Approach Chart - VOR/DME - Z RWY 10 ICAO	UAII AD 2.24.11-3-1
Instrument Approach Chart - VOR/DME - Z RWY 28 ICAO	UAII AD 2.24.11-4-1
Instrument Approach Chart - VOR/DME - Y RWY 10 ICAO	UAII AD 2.24.11-5-1
Instrument Approach Chart - VOR/DME - Y RWY 28 ICAO	UAII AD 2.24.11-6-1
Instrument Approach Chart - RNP RWY 10 ICAO	UAII AD 2.24.11-7-1
Instrument Approach Chart - RNP RWY 28 ICAO	UAII AD 2.24.11-8-1
Visual Approach chart - ICAO	UAII AD 2.24.12-1
VFR Departure/Arrival Chart	UAII AD 2.24.14-1

**UAII AD 2.25 Visual segment surface (VSS) penetrations**

No penetrations

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



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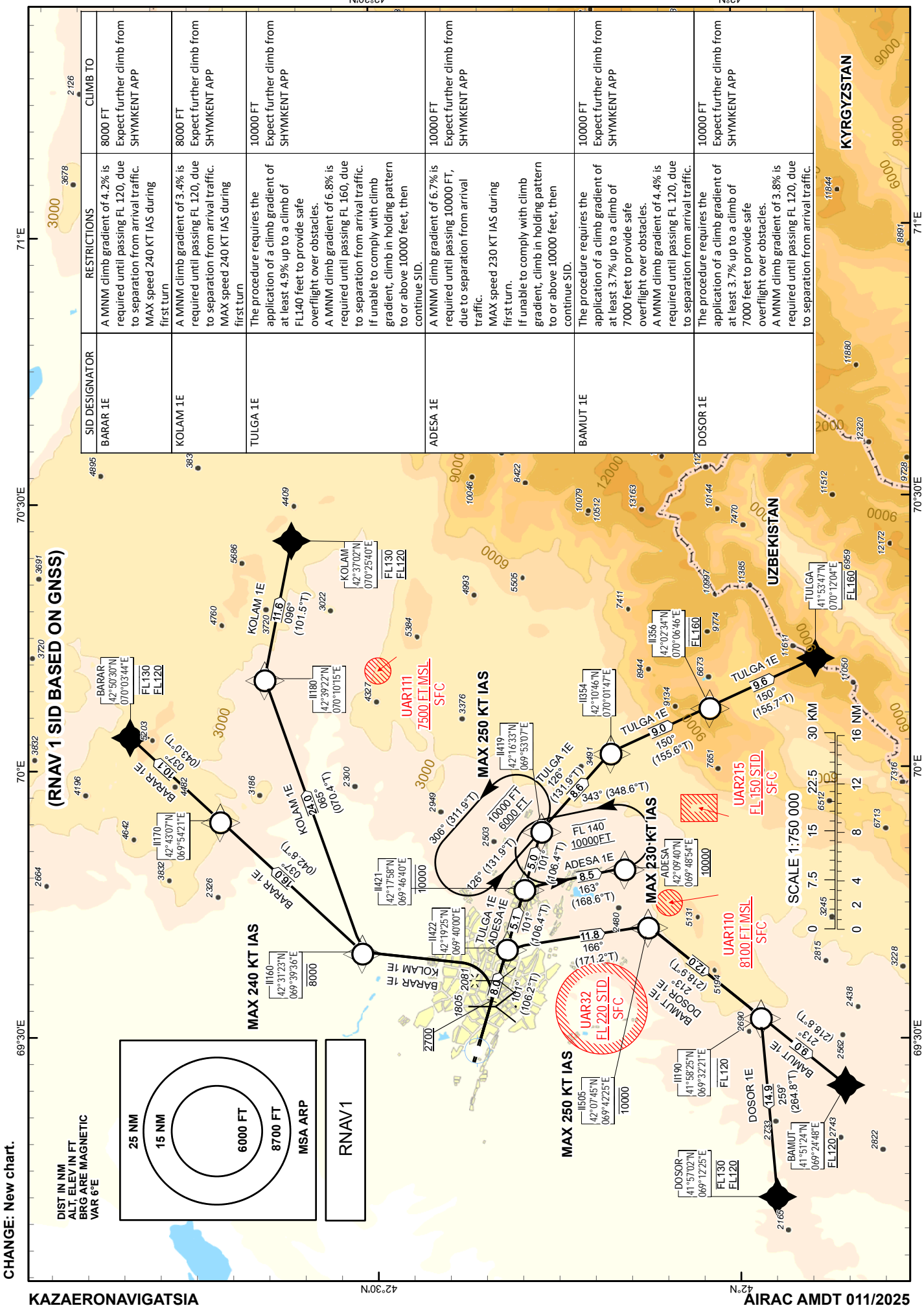
STANDARD DEPARTURE  
CHART - INSTRUMENT  
(SID) - ICAO

TRANSITION ALTITUDE  
10000 FT

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

ADESA 1E, BAMUT 1E,  
BARAR 1E, DOSOR 1E,  
KOLAM 1E, TULGA 1E.

SHYMKENT  
RWY 10



TABULAR DESCRIPTION

ADESA 1E											
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	CF	II422	-	101(106.2)	+5.5	8.0	-	-		-	RNAV 1
020	TF	II421	-	101(106.4)	+5.5	5.1	-	-10000		-	RNAV 1
030	TF	ADESA	-	163(168.6)	+5.5	8.5	R	+10000	-230	3.8	RNAV 1
BAMUT 1E											
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	CF	II422	-	101(106.2)	+5.5	8.0	-	-		-	RNAV 1
020	TF	II505	-	166(171.2)	+5.5	11.8	R	-10000	-250	-	RNAV 1
030	TF	II190	-	213(218.9)	+5.5	12.0	R	-FL120		-	RNAV 1
040	TF	BAMUT	-	213(218.8)	+5.5	9.0	-	+FL 120		2.5	RNAV 1
BARAR 1E											
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	CA	-	-	101(106.2)	+5.5	-	-	@2700		-	RNAV 1
020	DF	II160	-	-	+5.5	-	L	-8000	-240	-	RNAV 1
030	TF	II170	-	037(042.8)	+5.5	16.0	R	-		-	RNAV 1
040	TF	BARAR	-	037(043.0)	+5.5	10.1	-	+FL 120 -FL130		2.4	RNAV 1
DOSOR 1E											
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	CF	II422	-	101(106.2)	+5.5	8.0	-	-		-	RNAV 1
020	TF	II505	-	166(171.2)	+5.5	11.8	R	-10000	-250	-	RNAV 1
030	TF	II190	-	213(218.9)	+5.5	12.0	R	-FL120		-	RNAV 1
040	TF	DOSOR	-	259(264.8)	+5.5	14.9	R	+FL 120 -FL130		2.2	RNAV 1
KOLAM 1E											
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	CA	-	-	101(106.2)	+5.5	-	-	@2700		-	RNAV 1
020	DF	II160	-	-	+5.5	-	L	-8000	-240	-	RNAV 1
030	TF	II180	-	065(070.4)	+5.5	24.0	R	-		-	RNAV 1
040	TF	KOLAM	-	096(101.5)	+5.5	11.6	R	+FL 120 -FL130		1.9	RNAV 1
TULGA 1E											
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	CF	II422	-	101(106.2)	+5.5	8.0	-	-		-	RNAV 1
020	TF	II421	-	101(106.4)	+5.5	5.1	-	-10000		-	RNAV 1
030	TF	II419	-	101(106.4)	+5.5	5.0	-	-	-250	-	RNAV 1
040	TF	II354	-	126(131.9)	+5.5	8.6	R	-		-	RNAV 1
050	TF	II356	-	150(155.6)	+5.5	9.0	R	@FL 160		3.8	RNAV 1
060	TF	TULGA	-	150(155.7)	+5.5	9.6	-	@FL 160		-	RNAV 1

WAYPOINT LIST

WPT	COORD	
ADESA	420940.00N	0694854.00E
BAMUT	415124.00N	0692448.00E
BARAR	425030.00N	0700344.00E
DEP	422139.35N	0692940.74E
DOSOR	415702.00N	0691225.00E
II160	423123.34N	0693935.94E
II170	424306.51N	0695421.39E
II180	423921.61N	0701014.79E
II190	415825.28N	0693220.80E
II354	421046.05N	0700146.68E
II356	420233.83N	0700645.62E
II419	421632.68N	0695307.16E
II421	421757.76N	0694639.56E
II422	421924.93N	0694000.30E
II505	420744.57N	0694225.35E
KOLAM	423702.00N	0702540.00E
TULGA	415347.00N	0701204.00E



TABULAR DESCRIPTION

ARSUL 1P											
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	-	-	101(106.2)	+5.5	-	-	@2700	-	-	RNAV 1
20	DF	II160	-	-	+5.5	-	L	-8000	-240	-	RNAV 1
30	TF	II161	-	281(286.4)	+5.5	11.5	-	+9000	-	-	RNAV 1
40	TF	II163	-	281(286.2)	+5.5	17.7	-	+FL130	-	2.5	RNAV 1
50	TF	ARSUL	-	207(212.4)	+5.5	16.0	L	-	-	-	RNAV 1
EDIBA 1E											
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	-	-	101(106.2)	+5.5	-	-	@2700	-	-	RNAV 1
20	DF	II160	-	-	+5.5	-	L	-8000	-240	-	RNAV 1
30	TF	II161	-	281(286.4)	+5.5	11.5	-	+9000	-	-	RNAV 1
40	TF	II163	-	281(286.2)	+5.5	17.7	-	+FL130	-	2.5	RNAV 1
50	TF	II164	-	294(299.1)	+5.5	11.0	R	+FL140	-	0.9	RNAV 1
60	TF	EDIBA	-	266(271.6)	+5.5	18.2	L	-	-	-	RNAV 1
EDIBA 1P											
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	-	-	101(106.2)	+5.5	-	-	@2700	-	-	RNAV 1
20	DF	II160	-	-	+5.5	-	L	-8000	-240	-	RNAV 1
30	TF	II161	-	281(286.4)	+5.5	11.5	-	+9000	-	-	RNAV 1
40	TF	II163	-	281(286.2)	+5.5	17.7	-	+FL130	-	2.5	RNAV 1
50	TF	II167	-	235(240.6)	+5.5	16.0	L	+FL140	-	0.6	RNAV 1
60	TF	EDIBA	-	309(314.6)	+5.5	19.5	R	-	-	-	RNAV 1
LARBA 1E											
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	-	-	101(106.2)	+5.5	-	-	@2700	-	-	RNAV 1
20	DF	II160	-	-	+5.5	-	L	-8000	-240	-	RNAV 1
30	TF	II161	-	281(286.4)	+5.5	11.5	-	+9000	-	-	RNAV 1
40	TF	II163	-	281(286.2)	+5.5	17.7	-	+FL130	-	2.5	RNAV 1
50	TF	II164	-	294(299.1)	+5.5	11.0	R	+FL140	-	0.9	RNAV 1
60	TF	LARBA	-	293(298.9)	+5.5	9.3	-	-	-	-	RNAV 1
MAGOL 1E											
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	-	-	101(106.2)	+5.5	-	-	@2700	-	-	RNAV 1
20	DF	II160	-	-	+5.5	-	L	-8000	-240	-	RNAV 1
30	TF	II161	-	281(286.4)	+5.5	11.5	-	+9000	-	-	RNAV 1
40	TF	II163	-	281(286.2)	+5.5	17.7	-	+FL130	-	-	RNAV 1
50	TF	II165	-	327(332.9)	+5.5	8.0	R	+FL140	-	2.3	RNAV 1
60	TF	MAGOL	-	327(332.8)	+5.5	7.9	-	-	-	-	RNAV 1
MIKNO 1E											
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	-	-	101(106.2)	+5.5	-	-	@2700	-	-	RNAV 1
20	DF	II160	-	-	+5.5	-	L	-8000	-240	-	RNAV 1
30	TF	II161	-	281(286.4)	+5.5	11.5	-	+9000	-	-	RNAV 1
40	TF	II163	-	281(286.2)	+5.5	17.7	-	+FL130	-	2.5	RNAV 1
50	TF	II167	-	235(240.6)	+5.5	16.0	L	+FL140	-	-	RNAV 1
60	TF	II169	-	223(228.2)	+5.5	16.3	L	+FL140	-	0.3	RNAV 1
70	TF	MIKNO	-	204(209.7)	+5.5	21.6	L	-	-	-	RNAV 1
TONLA 1E											
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	-	-	101(106.2)	+5.5	-	-	@2700	-	-	RNAV 1
20	DF	II160	-	-	+5.5	-	L	-8000	-240	-	RNAV 1
30	TF	II161	-	281(286.4)	+5.5	11.5	-	+9000	-	-	RNAV 1
40	TF	II163	-	281(286.2)	+5.5	17.7	-	+FL130	-	2.5	RNAV 1
50	TF	II167	-	235(240.6)	+5.5	16.0	L	+FL140	-	-	RNAV 1
60	TF	II169	-	223(228.2)	+5.5	16.3	L	+FL140	-	0.3	RNAV 1
70	TF	TONLA	-	224(229.3)	+5.5	11.0	-	-	-	-	RNAV 1

WAYPOINT LIST

WPT	COORD	
ARSUL	422600.00N	0685000.00E
DEP	422139.35N	0692940.74E
EDIBA	424519.00N	0682349.00E
II160	423123.34N	0693935.94E
II161	423436.62N	0692440.23E
II163	423931.18N	0690134.42E
II164	424451.31N	0684831.58E
II165	424638.38N	0685637.20E
II167	423137.28N	0684241.25E
II169	422045.45N	0682621.07E
LARBA	424922.00N	0683725.00E
MAGOL	425338.00N	0685144.00E
MIKNO	420200.00N	0681200.00E
TONLA	421334.00N	0681508.00E

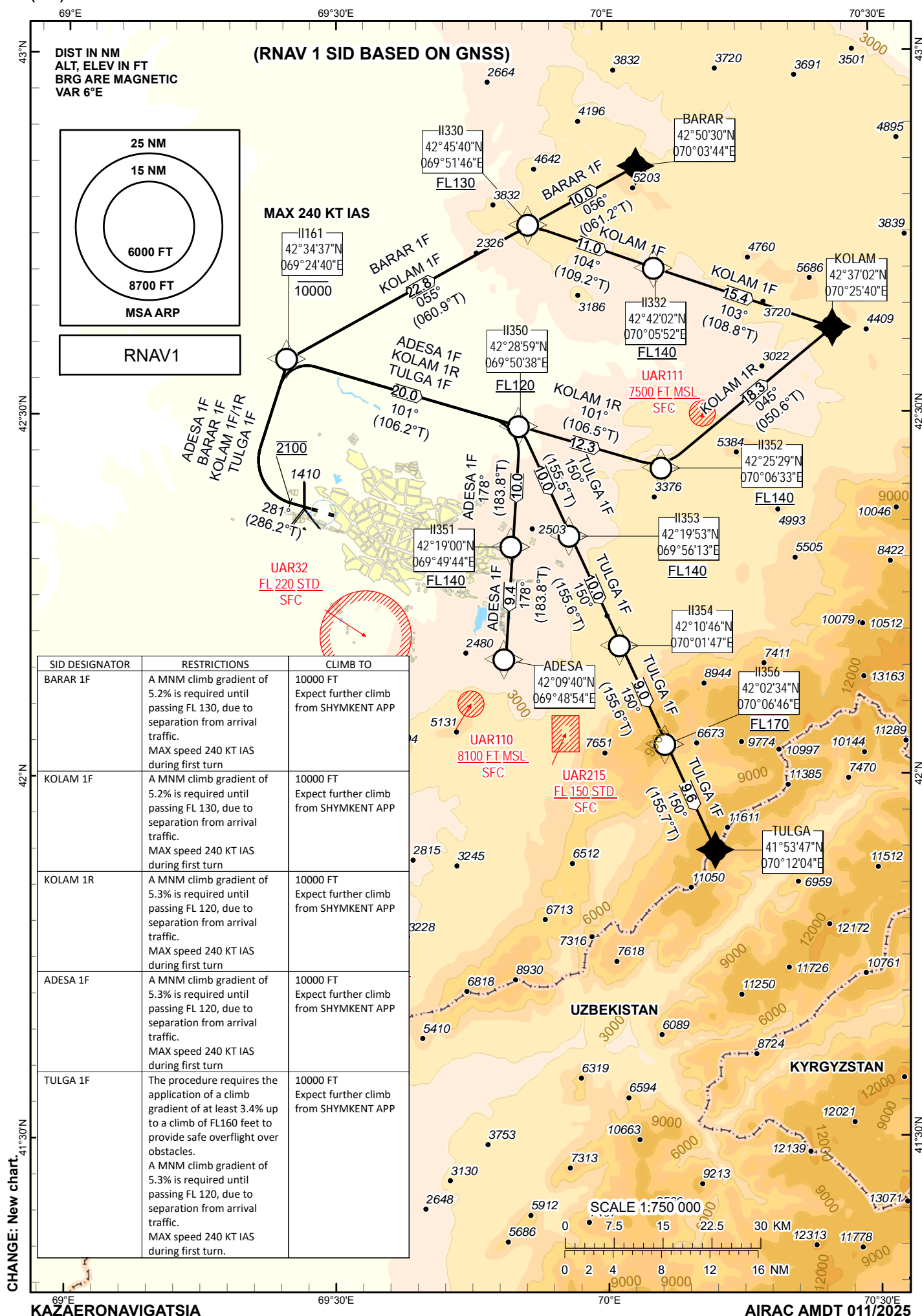
STANDARD DEPARTURE  
CHART - INSTRUMENT  
(SID) - ICAO

TRANSITION ALTITUDE  
10000 FT

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

ADESA 1F, BARAR 1F,  
KOLAM 1F/1R, TULGA 1F

SHYMKENT  
RWY 28



TABULAR DESCRIPTION

ADESA 1F											
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	-	-	281(286.2)	+5.5	-	-	@2100	-	-	RNAV 1
20	DF	II161	-	-	+5.5	-	R	-10000	-240	-	RNAV 1
30	TF	II350	-	101(106.2)	+5.5	20.0	R	+FL120	-	3	RNAV 1
40	TF	II351	-	178(183.8)	+5.5	10.0	R	+FL140	-	2	RNAV 1
50	TF	ADESA	-	178(183.8)	+5.5	9.4	-	-	-	-	RNAV 1
BARAR 1F											
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	-	-	281(286.2)	+5.5	-	-	@2100	-	-	RNAV 1
20	DF	II161	-	-	+5.5	-	R	-10000	-240	-	RNAV 1
30	TF	II330	-	055(060.9)	+5.5	22.8	R	+FL130	-	2.8	RNAV 1
40	TF	BARAR	-	056(061.2)	+5.5	10.0	-	-	-	-	RNAV 1
KOLAM 1F											
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	-	-	281(286.2)	+5.5	-	-	@2100	-	-	RNAV 1
20	DF	II161	-	-	+5.5	-	R	-10000	-240	-	RNAV 1
30	TF	II330	-	055(060.9)	+5.5	22.8	R	+FL130	-	2.8	RNAV 1
40	TF	II332	-	104(109.2)	+5.5	11.0	R	+FL140	-	0.9	RNAV 1
50	TF	KOLAM	-	103(108.8)	+5.5	15.4	-	-	-	-	RNAV 1
KOLAM 1R											
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	-	-	281(286.2)	+5.5	-	-	@2100	-	-	RNAV 1
20	DF	II161	-	-	+5.5	-	R	-10000	-240	-	RNAV 1
30	TF	II350	-	101(106.2)	+5.5	20.0	R	+FL120	-	2.9	RNAV 1
40	TF	II352	-	101(106.5)	+5.5	12.3	-	+FL140	-	-	RNAV 1
50	TF	KOLAM	-	045(050.6)	+5.5	18.3	L	-	-	-	RNAV 1
TULGA 1F											
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	-	-	281(286.2)	+5.5	-	-	@2100	-	-	RNAV 1
20	DF	II161	-	-	+5.5	-	R	-10000	-240	-	RNAV 1
30	TF	II350	-	101(106.2)	+5.5	20.0	R	+FL120	-	3	RNAV 1
40	TF	II353	-	150(155.5)	+5.5	10.0	R	+FL140	-	1.9	RNAV 1
50	TF	II354	-	150(155.6)	+5.5	10.0	-	-	-	-	RNAV 1
60	TF	II356	-	150(155.6)	+5.5	9.0	-	+FL170	-	1.5	RNAV 1
70	TF	TULGA	-	150(155.7)	+5.5	9.6	-	-	-	-	RNAV 1

WAYPOINT LIST

WPT	COORD	
ADESA	420940.00N	0694854.00E
BARAR	425030.00N	0700344.00E
DEP	422210.61N	0692715.98E
II161	423436.62N	0692440.23E
II330	424540.36N	0695146.32E
II332	424202.48N	0700551.67E
II350	422859.07N	0695037.73E
II351	421900.18N	0694944.00E
II352	422528.58N	0700633.27E
II353	421952.70N	0695613.01E
II354	421046.05N	0700146.68E
II356	420233.83N	0700645.62E
KOLAM	423702.00N	0702540.00E
TULGA	415347.00N	0701204.00E

**SHYMKENT  
RWY 28**



TABULAR DESCRIPTION

ARSUL 1F											
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	II113	-	281(286.2)	+5.5	21.3	-	+8000	-250	-	RNAV 1
20	TF	ARSUL	-	248(253.8)	+5.5	7.4	L	-FL130	-	2.2	RNAV 1

BAMUT 1F											
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	-	-	281(286.2)	+5.5	-	-	@2100	-	-	RNAV 1
20	DF	II360	-	-	+5.5	-	L	-10000	-240	-	RNAV 1
30	TF	BOMKA	-	175(180.8)	+5.5	11.4	-	-FL120	-	-	RNAV 1
40	TF	BAMUT	-	145(150.6)	+5.5	12.8	L	+FL120 - FL130	-	2.5	RNAV 1

DOSOR 1F											
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	-	-	281(286.2)	+5.5	-	-	@2100	-	-	RNAV 1
20	DF	II360	-	-	+5.5	-	L	-10000	-240	-	RNAV 1
30	TF	BOMKA	-	175(180.8)	+5.5	11.4	-	-FL120	-	-	RNAV 1
40	TF	DOSOR	-	203(208.4)	+5.5	6.2	R	+FL120 - FL130	-	3	RNAV 1

EDIBA 1F											
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	II113	-	281(286.2)	+5.5	21.3	-	+8000	-250	-	RNAV 1
20	TF	II322	-	280(285.9)	+5.5	17.0	-	-	-	-	RNAV 1
30	TF	EDIBA	-	316(321.4)	+5.5	16.1	R	+FL120 -FL130	-	1.9	RNAV 1

LARBA 1F											
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	II113	-	281(286.2)	+5.5	21.3	-	+8000	-250	-	RNAV 1
20	TF	II322	-	280(285.9)	+5.5	17.0	-	-	-	-	RNAV 1
30	TF	LARBA	-	354(359.8)	+5.5	16.7	R	+FL120 -FL130	-	1.9	RNAV 1

MAGOL 1F											
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	-	-	281(286.2)	+5.5	-	-	@2100	-	-	RNAV 1
20	DF	II161	-	-	+5.5	-	R	-10000	-240	-	RNAV 1
30	TF	II340	-	328(334.0)	+5.5	15.5	L	-	-	3.2	RNAV 1
40	TF	MAGOL	-	281(286.4)	+5.5	18.2	L	+FL120 -FL130	-	-	RNAV 1

MIKNO 1F											
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	-	-	281(286.2)	+5.5	-	-	@2100	-	-	RNAV 1
20	DF	II300	-	-	+5.5	-	L	-FL120	-	-	RNAV 1
30	TF	II304	-	255(260.7)	+5.5	23.1	-	-	-	-	RNAV 1
40	TF	MIKNO	-	219(224.6)	+5.5	18.8	L	+FL120 -FL130	-	-	RNAV 1

TONLA 1F											
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	-	-	281(286.2)	+5.5	-	-	@2100	-	-	RNAV 1
20	DF	II300	-	-	+5.5	-	L	-FL120	-	-	RNAV 1
30	TF	II304	-	255(260.7)	+5.5	23.1	-	-	-	-	RNAV 1
40	TF	TONLA	-	255(260.4)	+5.5	11.0	-	+FL120 -FL130	-	1.8	RNAV 1

WAYPOINT LIST

WPT	COORD	
ARSUL	422600.00N	0685000.00E
BAMUT	415124.00N	0692448.00E
DEP	422210.61N	0692715.98E
DOSOR	415702.00N	0691225.00E
EDIBA	424519.00N	0682349.00E
II113	422804.71N	0685935.76E
II161	423436.62N	0692440.23E
II300	421913.11N	0690022.67E
II304	421525.47N	0682943.81E
II322	423242.18N	0683728.71E
II340	424832.71N	0691526.16E
II360	421357.17N	0691636.26E
LARBA	424922.00N	0683725.00E
MAGOL	425338.00N	0685144.00E
MIKNO	420200.00N	0681200.00E
TONLA	421334.00N	0681508.00E

STANDARD ARRIVAL  
CHART - INSTRUMENT  
(STAR) - ICAO

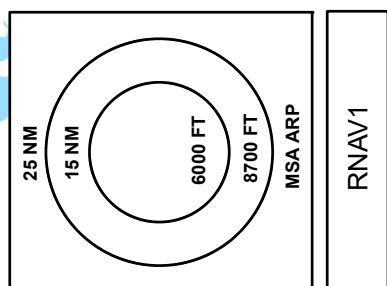
TRANSITION ALTITUDE  
10000 FT

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

ADESA 1M/1T, BAMUT 1M,  
BARAR 1M, DOSOR 1M,  
KOLAM 1M, TULGA 1M.

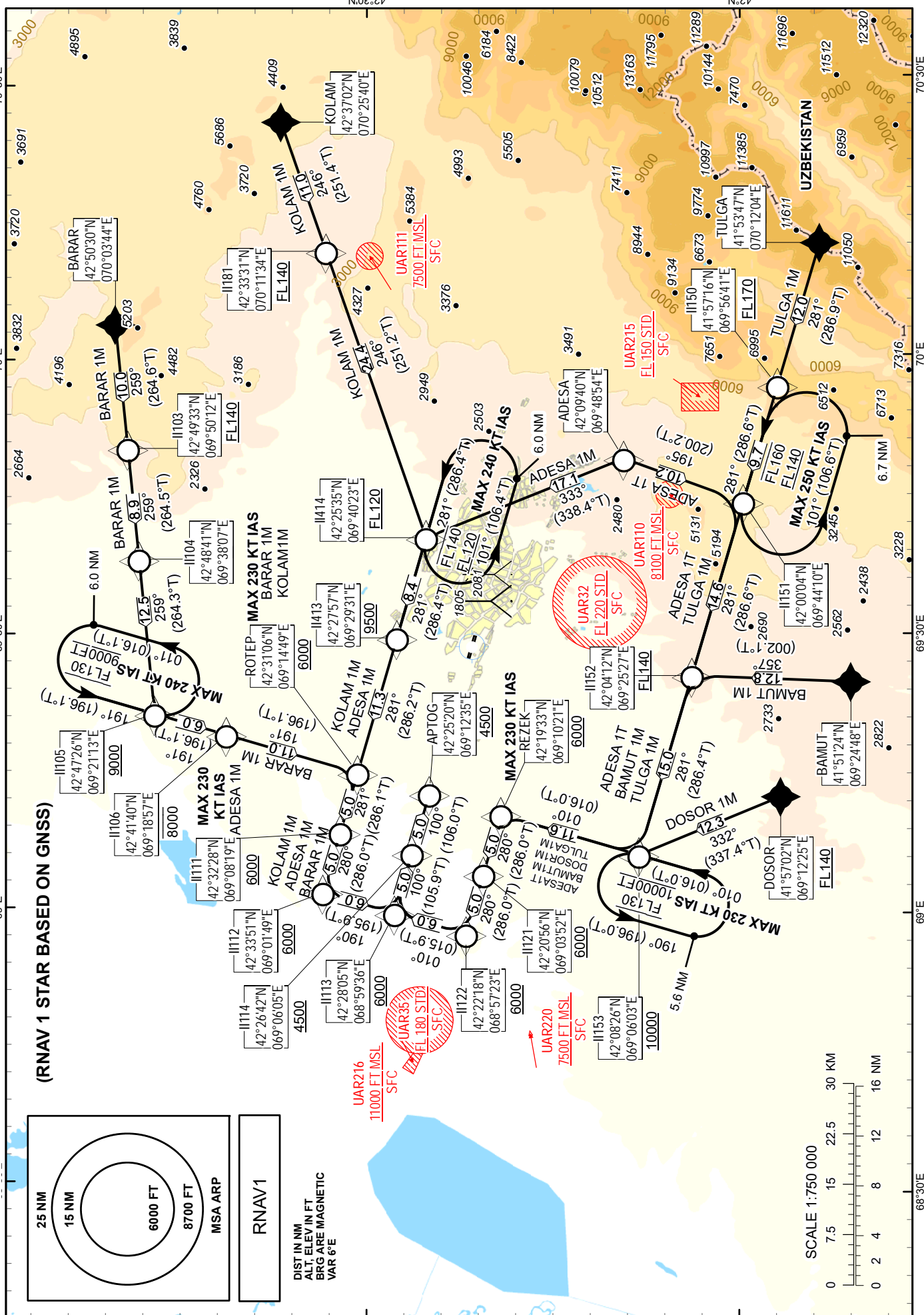
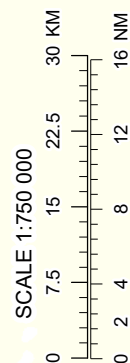
SHYMKENT  
RWY 10

CHANGE: New chart.



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

(RNAV 1 STAR BASED ON GNSS)



TABULAR DESCRIPTION

ADESA 1M											
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	ADESA	-	-	+5.5	-	-	-	-	-	RNAV 1
20	TF	II414	-	333(338.4)	+5.5	17.1	R	+FL120	-	-1.1	RNAV 1
30	TF	II413	-	281(286.4)	+5.5	8.4	L	+9500	-	-2.8	RNAV 1
40	TF	ROTEP	-	281(286.2)	+5.5	11.3	-	+6000	-250	-2.9	RNAV 1
50	TF	II111	-	281(286.1)	+5.5	5.0	-	+6000	-230	-	RNAV 1
60	TF	II112	-	280(286.0)	+5.5	5.0	-	+6000	-	-	RNAV 1
70	TF	II113	-	190(195.9)	+5.5	6.0	L	+6000	-	-	RNAV 1
80	TF	II114	-	100(105.9)	+5.5	5.0	L	+4500	-	-	RNAV 1
90	TF	APTOG	-	100(106.0)	+5.5	5.0	-	+4500	-	-2.8	RNAV 1

ADESA 1T											
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	ADESA	-	-	+5.5	-	-	-	-	-	RNAV 1
20	TF	II151	-	195(200.2)	+5.5	10.2	L	-	-	-	RNAV 1
30	TF	II152	-	281(286.6)	+5.5	14.6	R	+FL140	-	-0.6	RNAV 1
40	TF	II153	-	281(286.4)	+5.5	15.0	-	+10000	-	-1.9	RNAV 1
50	TF	REZEK	-	010(016.0)	+5.5	11.6	R	+6000	-230	-3.3	RNAV 1
60	TF	II121	-	280(286.0)	+5.5	5.0	L	+6000	-	-	RNAV 1
70	TF	II122	-	280(286.0)	+5.5	5.0	-	+6000	-	-	RNAV 1
80	TF	II113	-	010(015.9)	+5.5	6.0	R	+6000	-	-	RNAV 1
90	TF	II114	-	100(105.9)	+5.5	5.0	R	+4500	-	-	RNAV 1
100	TF	APTOG	-	100(106.0)	+5.5	5.0	-	+4500	-	-2.8	RNAV 1

BAMUT 1M											
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	BAMUT	-	-	+5.5	-	-	-	-	-	RNAV 1
20	TF	II152	-	357(002.1)	+5.5	12.8	L	+FL140	-	-	RNAV 1
30	TF	II153	-	281(286.4)	+5.5	15.0	L	+10000	-	-1.9	RNAV 1
40	TF	REZEK	-	010(016.0)	+5.5	11.6	R	+6000	-230	-3.3	RNAV 1
50	TF	II121	-	280(286.0)	+5.5	5.0	L	+6000	-	-	RNAV 1
60	TF	II122	-	280(286.0)	+5.5	5.0	-	+6000	-	-	RNAV 1
70	TF	II113	-	010(015.9)	+5.5	6.0	R	+6000	-	-	RNAV 1
80	TF	II114	-	100(105.9)	+5.5	5.0	R	+4500	-	-	RNAV 1
90	TF	APTOG	-	100(106.0)	+5.5	5.0	-	+4500	-	-2.8	RNAV 1

BARAR 1M											
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	BARAR	-	-	+5.5	-	-	-	-	-	RNAV 1
20	TF	II103	-	259(264.6)	+5.5	10.0	R	+FL140	-	-	RNAV 1
30	TF	II104	-	259(264.5)	+5.5	8.9	-	-	-	-2.1	RNAV 1
40	TF	II105	-	259(264.3)	+5.5	12.5	-	+9000	-	-1.5	RNAV 1
50	TF	II106	-	191(196.1)	+5.5	6.0	L	-8000	-	-3.1	RNAV 1
60	TF	ROTEP	-	191(196.1)	+5.5	11.0	-	+6000	-230	-1.7	RNAV 1
70	TF	II111	-	281(286.1)	+5.5	5.0	R	+6000	-	-	RNAV 1
80	TF	II112	-	280(286.0)	+5.5	5.0	-	+6000	-	-	RNAV 1
90	TF	II113	-	190(195.9)	+5.5	6.0	L	+6000	-	-	RNAV 1
100	TF	II114	-	100(105.9)	+5.5	5.0	L	+4500	-	-	RNAV 1
110	TF	APTOG	-	100(106.0)	+5.5	5.0	-	+4500	-	-2.8	RNAV 1

DOSOR 1M											
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	DOSOR	-	-	+5.5	-	-	+FL140	-	-	RNAV 1
20	TF	II153	-	332(337.4)	+5.5	12.3	L	+10000	-	-2.3	RNAV 1
30	TF	REZEK	-	010(016.0)	+5.5	11.6	R	+6000	-230	-3.3	RNAV 1
40	TF	II121	-	280(286.0)	+5.5	5.0	L	+6000	-	-	RNAV 1
50	TF	II122	-	280(286.0)	+5.5	5.0	-	+6000	-	-	RNAV 1
60	TF	II113	-	010(015.9)	+5.5	6.0	R	+6000	-	-	RNAV 1
70	TF	II114	-	100(105.9)	+5.5	5.0	R	+4500	-	-	RNAV 1
80	TF	APTOG	-	100(106.0)	+5.5	5.0	-	+4500	-	-2.8	RNAV 1

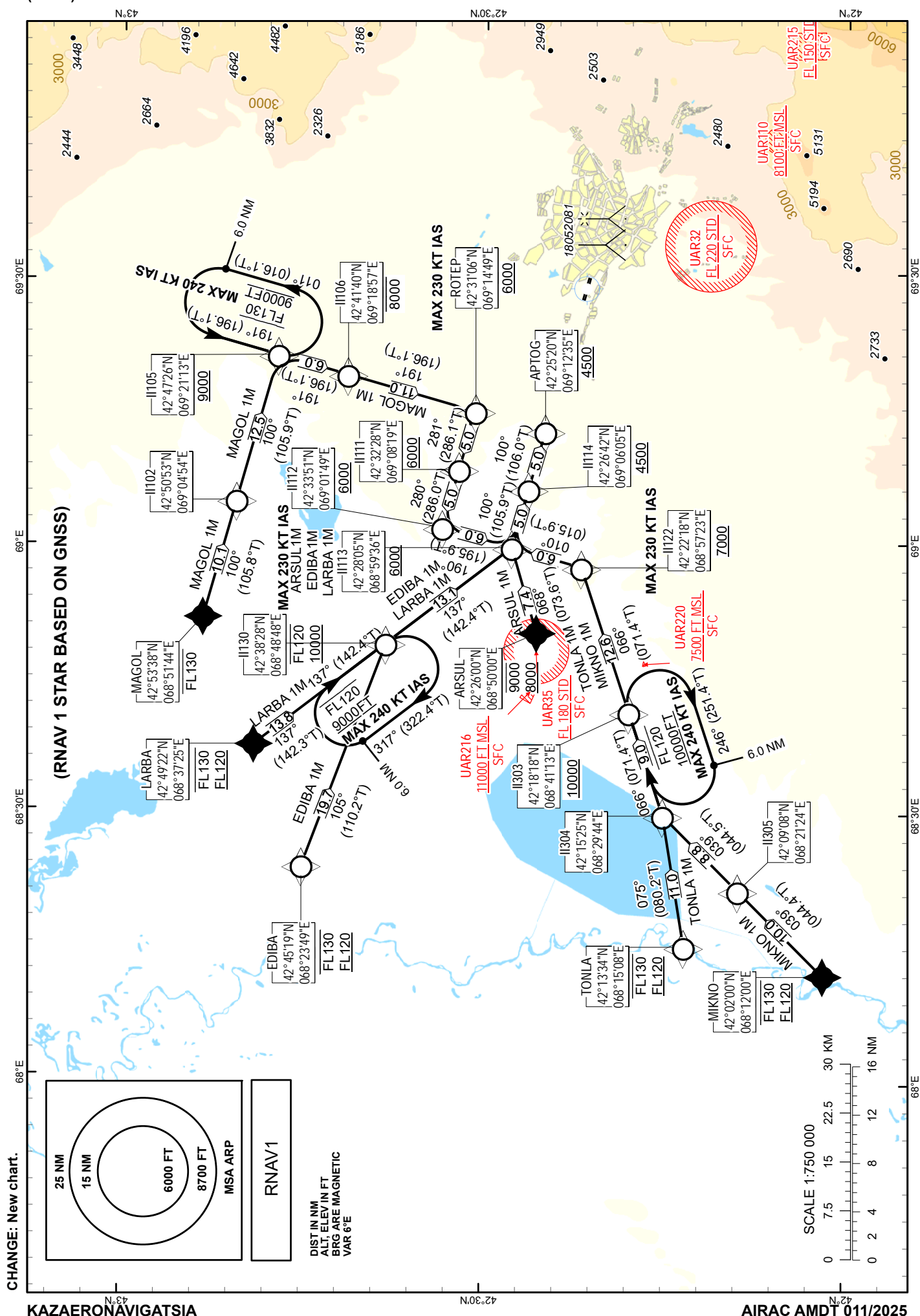
KOLAM 1M											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	KOLAM	-	-	+5.5	-	-	-	-	-	RNAV 1
20	TF	II181	-	246(251.4)	+5.5	11.0	R	+FL140	-	-	RNAV 1
30	TF	II414	-	246(251.2)	+5.5	24.4	-	+FL120	-	-0.8	RNAV 1
40	TF	II413	-	281(286.4)	+5.5	8.4	R	+9500	-	-2.8	RNAV 1
50	TF	ROTEP	-	281(286.2)	+5.5	11.3	-	+6000	-230	-2.9	RNAV 1
60	TF	II111	-	281(286.1)	+5.5	5.0	-	+6000	-	-	RNAV 1
70	TF	II112	-	280(286.0)	+5.5	5.0	-	+6000	-	-	RNAV 1
80	TF	II113	-	190(195.9)	+5.5	6.0	L	+6000	-	-	RNAV 1
90	TF	II114	-	100(105.9)	+5.5	5.0	L	+4500	-	-	RNAV 1
100	TF	APTOG	-	100(106.0)	+5.5	5.0	-	+4500	-	-2.8	RNAV 1

TULGA 1M											
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	TULGA	-	-	+5.5	-	-	-	-	-	RNAV 1
20	TF	II150	-	281(286.9)	+5.5	12.0	L	+FL170	-	-	RNAV 1
30	TF	II151	-	281(286.6)	+5.5	9.7	-	-	-	-1.9	RNAV 1
40	TF	II152	-	281(286.6)	+5.5	14.6	-	+FL140	-	-0.6	RNAV 1
50	TF	II153	-	281(286.4)	+5.5	15.0	-	+10000	-	-1.9	RNAV 1
60	TF	REZEK	-	010(016.0)	+5.5	11.6	R	+6000	-230	-3.3	RNAV 1
70	TF	II121	-	280(286.0)	+5.5	5.0	L	+6000	-	-	RNAV 1
80	TF	II122	-	280(286.0)	+5.5	5.0	-	+6000	-	-	RNAV 1
90	TF	II113	-	010(015.9)	+5.5	6.0	R	+6000	-	-	RNAV 1
100	TF	II114	-	100(105.9)	+5.5	5.0	R	+4500	-	-	RNAV 1
110	TF	APTOG	-	100(106.0)	+5.5	5.0	-	+4500	-	-2.8	RNAV 1

WAYPOINT LIST

WPT	COORD		WPT	COORD	
ADESA	420940.00N	0694854.00E	II121	422056.05N	0690351.82E
APTOG	422519.51N	0691234.86E	II122	422218.35N	0685722.68E
BAMUT	415124.00N	0692448.00E	II150	415715.78N	0695640.86E
BARAR	425030.00N	0700344.00E	II151	420003.70N	0694410.43E
DOSOR	415702.00N	0691225.00E	II152	420412.16N	0692526.61E
II103	424933.14N	0695012.33E	II153	420825.64N	0690603.02E
II104	424840.93N	0693806.67E	II181	423330.51N	0701133.62E
II105	424725.82N	0692113.01E	II413	422756.58N	0692930.83E
II106	424139.90N	0691857.25E	II414	422535.40N	0694022.65E
II111	423228.48N	0690819.49E	KOLAM	423702.00N	0702540.00E
II112	423351.02N	0690149.25E	REZEK	421933.39N	0691020.68E
II113	422804.71N	0685935.76E	ROTEP	423105.57N	0691449.44E
II114	422642.29N	0690605.45E	TULGA	415347.00N	0701204.00E

**SHYMKENT  
RWY 10**



TABULAR DESCRIPTION

ARSUL 1M											
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	ARSUL	-	-	+5.5	-	-	+8000 -9000	-	-	RNAV 1
20	TF	II113	-	068(073.6)	+5.5	7.4	R	+6000	-230	-2.5	RNAV 1
30	TF	II114	-	100(105.9)	+5.5	5.0	R	+4500	-	-	RNAV 1
40	TF	APTOG	-	100(106.0)	+5.5	5.0	-	+4500	-	-2.8	RNAV 1

EDIBA 1M											
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	EDIBA	-	-	+5.5	-	-	+FL120 -FL130	-	-	RNAV 1
20	TF	II130	-	105(110.2)	+5.5	19.7	L	+10000 -FL120	-	-1.4	RNAV 1
30	TF	II113	-	137(142.4)	+5.5	13.1	R	+6000	-230	-2.9	RNAV 1
40	TF	II114	-	100(105.9)	+5.5	5.0	L	+4500	-	-	RNAV 1
50	TF	APTOG	-	100(106.0)	+5.5	5.0	-	+4500	-	-2.8	RNAV 1

LARBA 1M											
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	LARBA	-	-	+5.5	-	-	+FL120 -FL130	-	-	RNAV 1
20	TF	II130	-	137(142.3)	+5.5	13.8	L	+10000 -FL120	-	-1.4	RNAV 1
30	TF	II113	-	137(142.4)	+5.5	13.1	-	+6000	-230	-2.9	RNAV 1
40	TF	II114	-	100(105.9)	+5.5	5.0	L	+4500	-	-	RNAV 1
50	TF	APTOG	-	100(106.0)	+5.5	5.0	-	+4500	-	-2.8	RNAV 1

MAGOL 1M											
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	MAGOL	-	-	+5.5	-	-	-FL130	-	-	RNAV 1
20	TF	II102	-	100(105.8)	+5.5	10.1	L	-	-	-0.9	RNAV 1
30	TF	II105	-	100(105.9)	+5.5	12.5	-	+9000	-	-1.5	RNAV 1
40	TF	II106	-	191(196.1)	+5.5	6.0	R	-8000	-	-3.1	RNAV 1
50	TF	ROTEP	-	191(196.1)	+5.5	11.0	-	+6000	-230	-1.7	RNAV 1
60	TF	II111	-	281(286.1)	+5.5	5.0	R	+6000	-	-	RNAV 1
70	TF	II112	-	280(286.0)	+5.5	5.0	-	+6000	-	-	RNAV 1
80	TF	II113	-	190(195.9)	+5.5	6.0	L	+6000	-	-	RNAV 1
90	TF	II114	-	100(105.9)	+5.5	5.0	L	+4500	-	-	RNAV 1
100	TF	APTOG	-	100(106.0)	+5.5	5.0	-	+4500	-	-2.8	RNAV 1

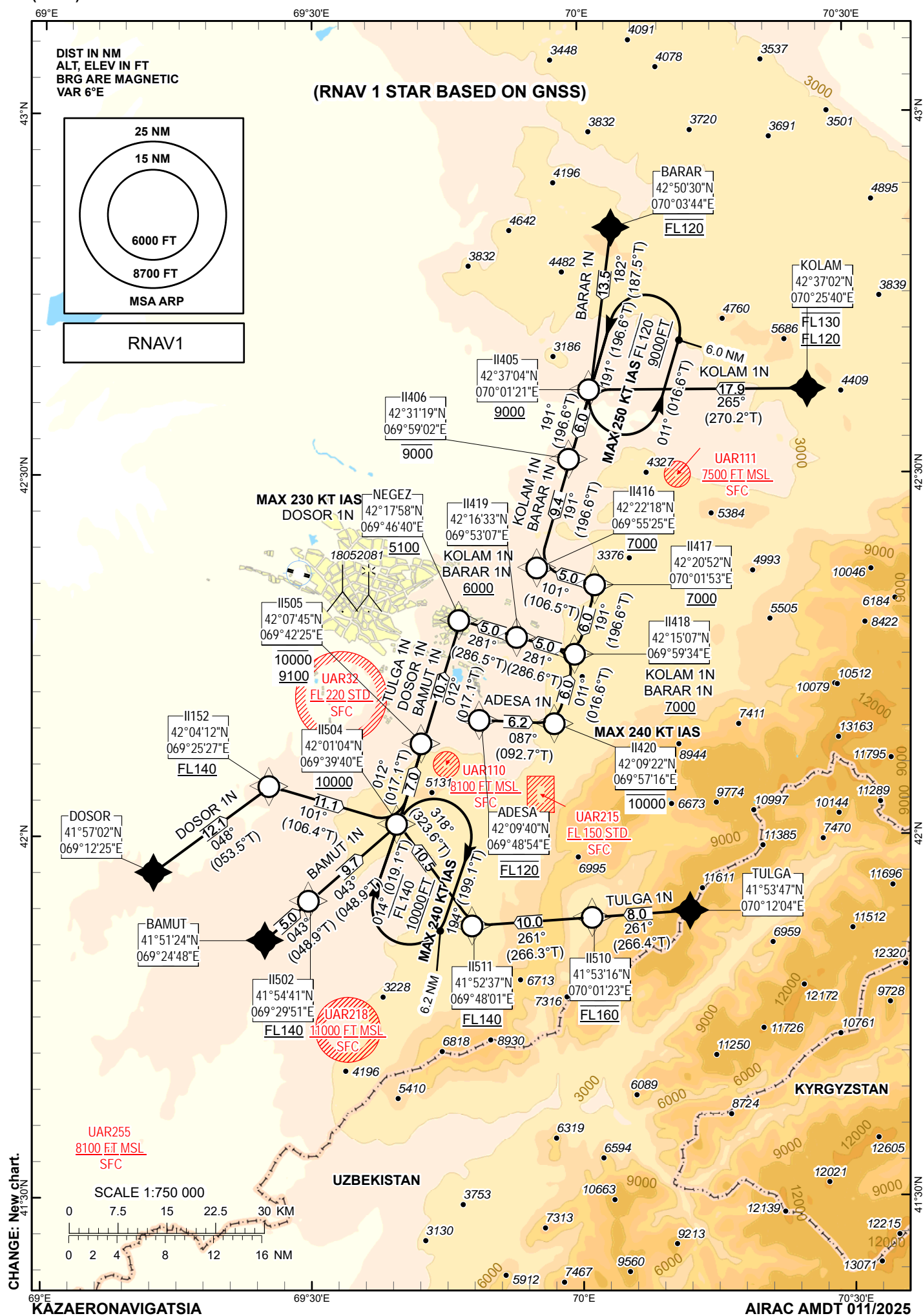
MIKNO 1M											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	MIKNO	-	-	+5.5	-	-	+FL120 -FL130	-	-	RNAV 1
20	TF	II305	-	039(044.4)	+5.5	10.0	L	-	-	-	RNAV 1
30	TF	II304	-	039(044.5)	+5.5	8.8	-	-	-	-	RNAV 1
40	TF	II303	-	066(071.4)	+5.5	9.0	R	+10000	-	-3.1	RNAV 1
50	TF	II122	-	066(071.4)	+5.5	12.6	-	+7000	-230	-2.2	RNAV 1
60	TF	II113	-	010(015.9)	+5.5	6.0	L	+6000	-	-1.6	RNAV 1
70	TF	II114	-	100(105.9)	+5.5	5.0	R	+4500	-	-	RNAV 1
80	TF	APTOG	-	100(106.0)	+5.5	5.0	-	+4500	-	-2.8	RNAV 1

TONLA 1M											
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	TONLA	-	-	+5.5	-	-	+FL120 -FL130	-	-	RNAV 1
20	TF	II304	-	075(080.2)	+5.5	11.0	-	-	-	-	RNAV 1
30	TF	II303	-	066(071.3)	+5.5	9.0	L	+10000	-	-3.1	RNAV 1
40	TF	II122	-	066(071.4)	+5.5	12.6	-	+7000	-230	-2.2	RNAV 1
50	TF	II113	-	010(015.9)	+5.5	6.0	L	+6000	-	-1.6	RNAV 1
60	TF	II114	-	100(105.9)	+5.5	5.0	R	+4500	-	-	RNAV 1
70	TF	APTOG	-	100(106.0)	+5.5	5.0	-	+4500	-	-2.8	RNAV 1

WAYPOINT LIST

WPT	COORD	
ARSUL	422600.00N	0685000.00E
APTOG	422519.51N	0691234.86E
EDIBA	424519.00N	0682349.00E
II102	425052.98N	0690453.55E
II105	424725.82N	0692113.01E
II106	424139.90N	0691857.25E
II111	423228.48N	0690819.49E
II112	423351.02N	0690149.25E
II113	422804.71N	0685935.76E
II114	422642.29N	0690605.45E
II122	422218.35N	0685722.68E
II130	423828.40N	0684848.42E
II303	421818.04N	0684113.16E
II304	421525.47N	0682943.81E
II305	420908.43N	0682124.45E
LARBA	424922.00N	0683725.00E
MAGOL	425338.00N	0685144.00E
MIKNO	420200.00N	0681200.00E
ROTEP	423105.57N	0691449.44E
TONLA	421334.00N	0681508.00E

**SHYMKENT  
RWY 28**



TABULAR DESCRIPTION

ADESA 1N											
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	ADESA	-	-	+5.5	-	-	@FL120	-	-	RNAV 1
20	TF	II420	-	087(092.7)	+5.5	6.2	R	-10000	-240	-3	RNAV 1
30	TF	II418	-	011(016.6)	+5.5	6.0	L	+7000	-	-3.1	RNAV 1
40	TF	II419	-	281(286.6)	+5.5	5.0	L	+6000	-	-2.8	RNAV 1
50	TF	NEGEZ	-	281(286.5)	+5.5	5.0	-	+5100	-	-2.6	RNAV 1

BAMUT 1N											
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	BAMUT	-	-	+5.5	-	-	-	-	-	RNAV 1
20	TF	II502	-	043(048.9)	+5.5	5.0	R	+FL140	-	-	RNAV 1
30	TF	II504	-	043(048.9)	+5.5	9.7	-	+10000	-250	-3.9	RNAV 1
40	TF	II505	-	012(017.1)	+5.5	7.0	L	+9100 -10000	-	-1.2	RNAV 1
50	TF	NEGEZ	-	012(017.1)	+5.5	10.7	-	+5100	-230	-3.5	RNAV 1

BARAR 1N											
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	BARAR	-	-	+5.5	-	-	+FL120	-	-	RNAV 1
20	TF	II405	-	182(187.5)	+5.5	13.5	L	+9000	-250	-1.4	RNAV 1
30	TF	II406	-	191(196.6)	+5.5	6.0	R	-9000	-	-1.6	RNAV 1
40	TF	II416	-	191(196.6)	+5.5	9.4	-	+7000	-	-2	RNAV 1
50	TF	II417	-	101(106.5)	+5.5	5.0	L	+7000	-	-	RNAV 1
60	TF	II418	-	191(196.6)	+5.5	6.0	R	+7000	-	-	RNAV 1
70	TF	II419	-	281(286.6)	+5.5	5.0	R	+6000	-	-	RNAV 1
80	TF	NEGEZ	-	281(286.5)	+5.5	5.0	-	+5100	-	-3.6	RNAV 1

DOSOR 1N											
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	DOSOR	-	-	+5.5	-	-	-	-	-	RNAV 1
20	TF	II152	-	048(053.5)	+5.5	12.1	R	+FL140	-	-0.8	RNAV 1
30	TF	II504	-	101(106.4)	+5.5	11.1	R	+10000	-250	-2.6	RNAV 1
40	TF	II505	-	012(017.1)	+5.5	7.0	L	+9100 -10000	-	-1.2	RNAV 1
50	TF	NEGEZ	-	012(017.1)	+5.5	10.7	-	+5100	-230	-3.5	RNAV 1

KOLAM 1N											
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	KOLAM	-	-	+5.5	-	-	+FL120 -FL130	-	-	RNAV 1
20	TF	II405	-	265(270.2)	+5.5	17.9	R	+90000	-250	-1.1	RNAV 1
30	TF	II406	-	191(196.6)	+5.5	6.0	L	-9000	-	-1.6	RNAV 1
40	TF	II416	-	191(196.6)	+5.5	9.4	-	+7000	-	-2	RNAV 1
50	TF	II417	-	101(106.5)	+5.5	5.0	L	+7000	-	-	RNAV 1
60	TF	II418	-	191(196.6)	+5.5	6.0	R	+7000	-	-	RNAV 1
70	TF	II419	-	281(286.6)	+5.5	5.0	R	+6000	-	-	RNAV 1
80	TF	NEGEZ	-	281(286.5)	+5.5	5.0	-	+5100	-	-3.6	RNAV 1

TULGA 1N											
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	TULGA	-	-	+5.5	-	-	-	-	-	RNAV 1
20	TF	II510	-	261(266.4)	+5.5	8.0	L	@FL160	-	-	RNAV 1
30	TF	II511	-	261(266.3)	+5.5	10.0	-	+FL140	-	-2.8	RNAV 1
40	TF	II504	-	318(323.6)	+5.5	10.5	R	+10000	-250	-2.7	RNAV 1
50	TF	II505	-	012(017.1)	+5.5	7.0	R	+9100 -10000	-	-1.2	RNAV 1
60	TF	NEGEZ	-	012(017.1)	+5.5	10.7	-	+5100	-230	-3.5	RNAV 1

WAYPOINT LIST

WPT	COORD	
ADESA	420940.00N	0694854.00E
BAMUT	415124.00N	0692448.00E
BARAR	425030.00N	0700344.00E
DOSOR	415702.00N	0691225.00E
II152	420412.16N	0692526.61E
II405	423703.89N	0700121.23E
II406	423118.75N	0695902.16E
II416	422217.94N	0695525.14E
II417	422052.37N	0700152.99E
II418	421507.23N	0695934.48E
II419	421632.68N	0695307.16E
II420	420922.04N	0695716.39E
II502	415441.28N	0692950.68E
II504	420103.81N	0693940.03E
II505	420744.57N	0694225.35E
II510	415316.38N	0700122.61E
II511	415236.70N	0694801.12E
KOLAM	423702.00N	0702540.00E
NEGEZ	421757.76N	0694639.56E
TULGA	415347.00N	0701204.00E

STANDARD ARRIVAL  
CHART - INSTRUMENT  
(STAR) - ICAO

TRANSITION ALTITUDE  
10000 FT

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

ARSUL 1N/1U, EDIBA 1N,  
LARBA 1N, MAGOL 1N,  
MIKNO 1N, TONLA 1N.

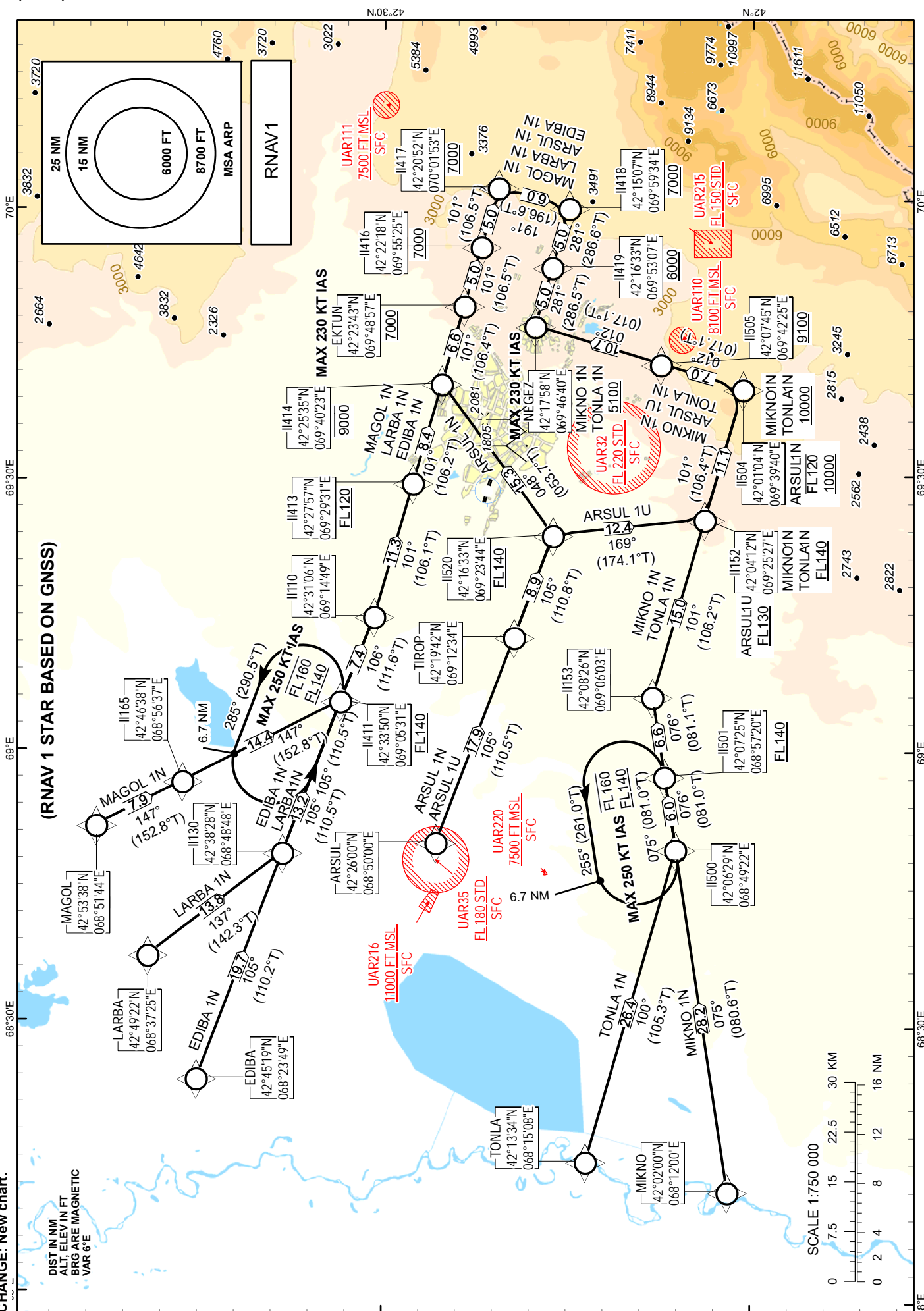
SHYMKENT  
RWY 28

CHANGE: New chart.

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

KAZAERONAVIGATSIA

AIRAC AMDT 011/2025



TABULAR DESCRIPTION

ARSUL 1N											
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	ARSUL	-	-	+5.5	-	-	-	-	-	RNAV 1
20	TF	TIROP	-	105(110.5)	+5.5	17.9	L	-	-	-	RNAV 1
30	TF	II520	-	105(110.8)	+5.5	8.9	-	+FL140	-	-	RNAV 1
40	TF	II414	-	048(053.7)	+5.5	15.3	L	-9000	-	-2.5	RNAV 1
50	TF	EKTUN	-	101(106.4)	+5.5	6.6	R	+7000	-230	-2.8	RNAV 1
60	TF	II416	-	101(106.5)	+5.5	5.0	-	+7000	-	-	RNAV 1
70	TF	II417	-	101(106.5)	+5.5	5.0	-	+7000	-	-	RNAV 1
80	TF	II418	-	191(196.6)	+5.5	6.0	R	+7000	-	-	RNAV 1
90	TF	II419	-	281(286.6)	+5.5	5.0	R	+6000	-	-	RNAV 1
100	TF	NEGEZ	-	281(286.5)	+5.5	5.0	-	+5100	-	-3.6	RNAV 1

ARSUL 1U											
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	ARSUL	-	-	+5.5	-	-	-	-	-	RNAV 1
20	TF	TIROP	-	105(110.5)	+5.5	17.9	L	-	-	-	RNAV 1
30	TF	II520	-	105(110.8)	+5.5	8.9	-	+FL140	-	-	RNAV 1
40	TF	II152	-	169(174.1)	+5.5	12.4	R	+FL130	-	-	RNAV 1
50	TF	II504	-	101(106.4)	+5.5	11.1	L	+10000 -FL120	-250	-2.6	RNAV 1
60	TF	II505	-	012(017.1)	+5.5	7.0	L	+9100	-	-1.2	RNAV 1
70	TF	NEGEZ	-	012(017.1)	+5.5	10.7	-	+5100	-230	-3.5	RNAV 1

EDIBA 1N											
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	EDIBA	-	-	+5.5	-	-	-	-	-	RNAV 1
20	TF	II130	-	105(110.2)	+5.5	19.7	L	-	-	-	RNAV 1
30	TF	II411	-	105(110.5)	+5.5	13.2	-	+FL140	-	-	RNAV 1
40	TF	II110	-	106(111.6)	+5.5	7.4	R	-	-	-1.3	RNAV 1
50	TF	II413	-	101(106.1)	+5.5	11.3	L	+FL120	-	-0.8	RNAV 1
60	TF	II414	-	101(106.2)	+5.5	8.4	-	-9000	-	-3.4	RNAV 1
70	TF	EKTUN	-	101(106.4)	+5.5	6.6	-	+7000	-230	-2.8	RNAV 1
80	TF	II416	-	101(106.5)	+5.5	5.0	-	+7000	-	-	RNAV 1
90	TF	II417	-	101(106.5)	+5.5	5.0	-	+7000	-	-	RNAV 1
100	TF	II418	-	191(196.6)	+5.5	6.0	R	+7000	-	-	RNAV 1
110	TF	II419	-	281(286.6)	+5.5	5.0	R	+6000	-	-1.9	RNAV 1
120	TF	NEGEZ	-	281(286.5)	+5.5	5.0	-	+5100	-	-1.7	RNAV 1

LARBA 1N											
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	LARBA	-	-	+5.5	-	-	-	-	-	RNAV 1
20	TF	II130	-	137(142.3)	+5.5	13.8	L	-	-	-	RNAV 1
30	TF	II411	-	105(110.5)	+5.5	13.2	L	+FL140	-	-	RNAV 1
40	TF	II110	-	106(111.6)	+5.5	7.4	R	-	-	-1.3	RNAV 1
50	TF	II413	-	101(106.1)	+5.5	11.3	L	+FL120	-	-0.8	RNAV 1
60	TF	II414	-	101(106.2)	+5.5	8.4	-	-9000	-	-3.4	RNAV 1
70	TF	EKTUN	-	101(106.4)	+5.5	6.6	-	+7000	-230	-2.8	RNAV 1
80	TF	II416	-	101(106.5)	+5.5	5.0	-	+7000	-	-	RNAV 1
90	TF	II417	-	101(106.5)	+5.5	5.0	-	+7000	-	-	RNAV 1
100	TF	II418	-	191(196.6)	+5.5	6.0	R	+7000	-	-	RNAV 1
110	TF	II419	-	281(286.6)	+5.5	5.0	R	+6000	-	-	RNAV 1
120	TF	NEGEZ	-	281(286.5)	+5.5	5.0	-	+5100	-230	-1.7	RNAV 1

MAGOL 1N											
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	MAGOL	-	-	+5.5	-	-	-	-	-	RNAV 1
20	TF	II165	-	147(152.8)	+5.5	7.9	R	-	-	-	RNAV 1
30	TF	II411	-	147(152.8)	+5.5	14.4	-	+FL140	-	-	RNAV 1
40	TF	II110	-	106(111.6)	+5.5	7.4	L	-	-	-1.3	RNAV 1
50	TF	II413	-	101(106.1)	+5.5	11.3	L	+FL120	-	-0.8	RNAV 1
60	TF	II414	-	101(106.2)	+5.5	8.4	-	-9000	-	-3.4	RNAV 1
70	TF	EKTUN	-	101(106.4)	+5.5	6.6	-	+7000	-230	-2.8	RNAV 1
80	TF	II416	-	101(106.5)	+5.5	5.0	-	+7000	-	-	RNAV 1
90	TF	II417	-	101(106.5)	+5.5	5.0	-	+7000	-	-	RNAV 1
100	TF	II418	-	191(196.6)	+5.5	6.0	R	+7000	-	-	RNAV 1
110	TF	II419	-	281(286.6)	+5.5	5.0	R	+6000	-	-	RNAV 1
120	TF	NEGEZ	-	281(286.5)	+5.5	5.0	-	+5100	-230	-1.7	RNAV 1

MIKNO 1N											
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	MIKNO	-	-	+5.5	-	-	-	-	-	RNAV 1
20	TF	II500	-	075(080.6)	+5.5	28.2	R	-	-	-	RNAV 1
30	TF	II501	-	076(081.0)	+5.5	6.0	-	+FL140	-	-	RNAV 1
40	TF	II153	-	076(081.1)	+5.5	6.6	-	-	-	-	RNAV 1
50	TF	II152	-	101(106.2)	+5.5	15.0	R	+FL140	-	-	RNAV 1
60	TF	II504	-	101(106.4)	+5.5	11.1	-	+10000	-250	-2.6	RNAV 1
70	TF	II505	-	012(017.1)	+5.5	7.0	L	+9100	-	-1.2	RNAV 1
80	TF	NEGEZ	-	012(017.1)	+5.5	10.7	-	+5100	-230	-3.5	RNAV 1

TONLA 1N											
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	TONLA	-	-	+5.5	-	-	-	-	-	RNAV 1
20	TF	II500	-	100(105.3)	+5.5	26.4	R	-	-	-	RNAV 1
30	TF	II501	-	076(081.0)	+5.5	6.0	-	+FL140	-	-	RNAV 1
40	TF	II153	-	076(081.1)	+5.5	6.6	-	-	-	-	RNAV 1
50	TF	II152	-	101(106.2)	+5.5	15.0	R	+FL140	-	-	RNAV 1
60	TF	II504	-	101(106.4)	+5.5	11.1	-	+10000	-250	-2.6	RNAV 1
70	TF	II505	-	012(017.1)	+5.5	7.0	L	+9100	-	-1.2	RNAV 1
80	TF	NEGEZ	-	012(017.1)	+5.5	10.7	-	+5100	-230	-3.5	RNAV 1

WAYPOINT LIST

WPT	COORD		WPT	COORD	
ARSUL	422600.00N	0685000.00E	II418	421507.23N	0695934.48E
EDIBA	424519.00N	0682349.00E	II419	421632.68N	0695307.16E
EKTUN	422343.15N	0694857.00E	II500	420629.49N	0684922.30E
II110	423105.57N	0691449.44E	II501	420725.27N	0685720.18E
II130	423828.40N	0684848.42E	II504	420103.81N	0693940.03E
II152	420412.16N	0692526.61E	II505	420744.57N	0694225.35E
II153	420825.64N	0690603.02E	II520	421633.11N	0692343.82E
II165	424638.38N	0685637.20E	LARBA	424922.00N	0683725.00E
II411	423349.77N	0690531.03E	MAGOL	425338.00N	0685144.00E
II413	422756.58N	0692930.83E	MIKNO	420200.00N	0681200.00E
II414	422535.40N	0694022.65E	NEGEZ	421757.76N	0694639.56E
II416	422217.94N	0695525.14E	TIROP	421942.20N	0691233.80E
II417	422052.37N	0700152.99E	TONLA	421334.00N	0681508.00E

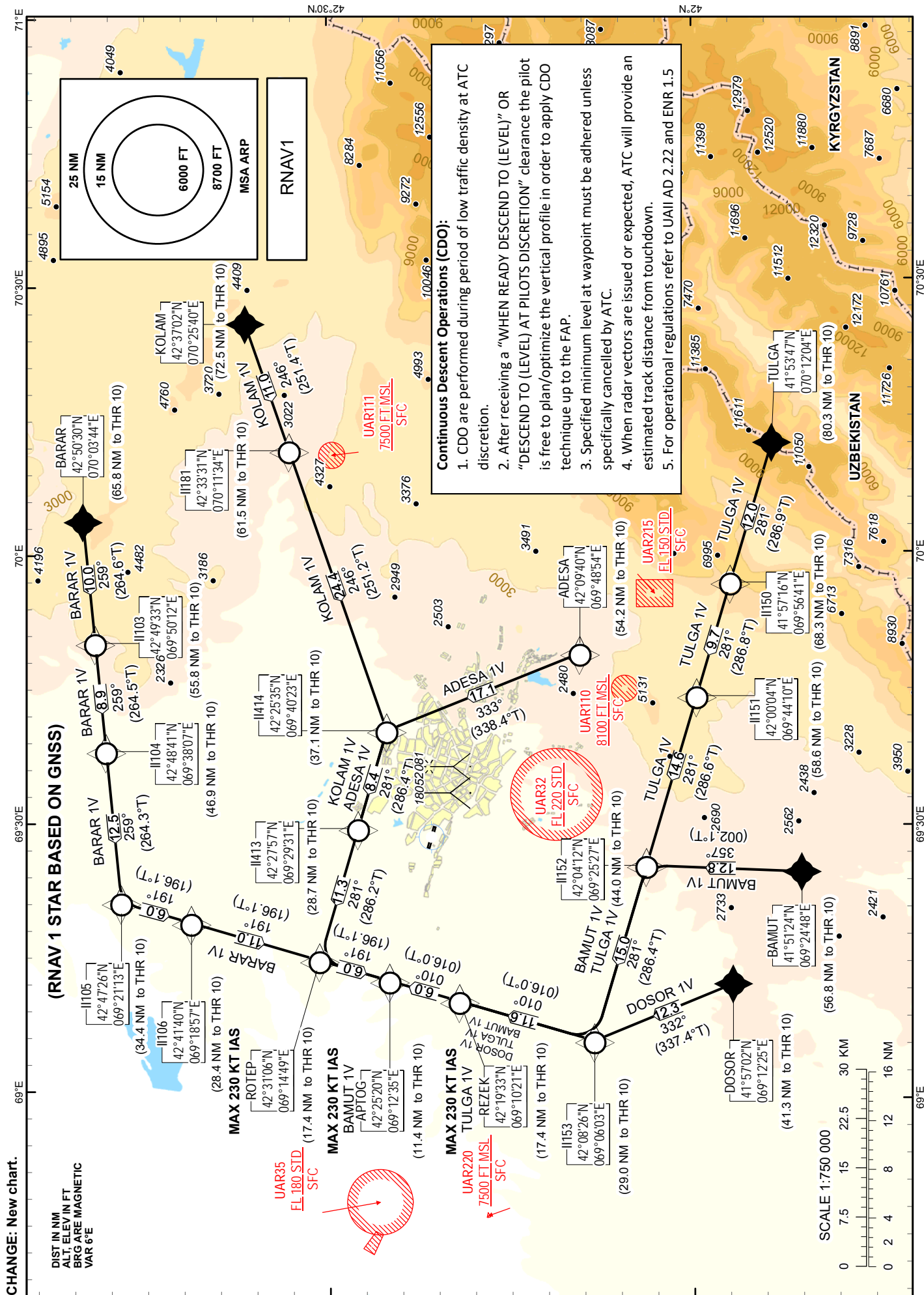
STANDARD ARRIVAL  
CHART - INSTRUMENT  
(STAR) - ICAO

TRANSITION ALTITUDE  
10000 FT

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

ADESA 1V, BAMUT 1V,  
BARAR 1V, DOSOR 1V,  
KOLAM 1V, TULGA 1V.

SHYMKENT  
RWY 10



TABULAR DESCRIPTION

ADESA 1V											
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	ADESA	-	-	+5.5	-	-	+FL120 -FL200	-	-	RNAV 1
20	TF	II414	-	333(338.4)	+5.5	17.1	R	+8500 -FL140	-	-1.1	RNAV 1
30	TF	II413	-	281(286.4)	+5.5	8.4	L	+7000 -FL120	-	-2.8	RNAV 1
40	TF	ROTEP	-	281(286.2)	+5.5	11.3	-	+5200 -7300	-230	-2.9	RNAV 1
50	TF	APTOG	-	191(196.1)	+5.5	6.0	L	+4200 -5200	-	-2.4	RNAV 1

BAMUT 1V											
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	BAMUT	-	-	+5.5	-	-	+FL130 -FL210	-	-	RNAV 1
20	TF	II152	-	357(002.1)	+5.5	12.8	L	+10000 -FL170	-	-	RNAV 1
30	TF	II153	-	281(286.4)	+5.5	15.0	L	+7000 -FL120	-	-1.9	RNAV 1
80	TF	REZEK	-	010(016.0)	+5.5	11.6	R	+5200 -7300	-	-	RNAV 1
90	TF	APTOG	-	010(016.0)	+5.5	6.0	-	+4200 -5200	-230	-2.8	RNAV 1

BARAR 1V											
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	BARAR	-	-	+5.5	-	-	+FL150 -FL240	-	-	RNAV 1
20	TF	II103	-	259(264.6)	+5.5	10.0	R	+FL130 -FL210	-	-	RNAV 1
30	TF	II104	-	259(264.5)	+5.5	8.9	-	+10000 -FL180	-	-2.1	RNAV 1
40	TF	II105	-	259(264.3)	+5.5	12.5	-	+7900 -FL130	-	-0.8	RNAV 1
50	TF	II106	-	191(196.1)	+5.5	6.0	L	+6900 -FL120	-	0	RNAV 1
60	TF	ROTEP	-	191(196.1)	+5.5	11.0	-	+5200 -7300	-230	-2.6	RNAV 1
70	TF	APTOG	-	191(196.1)	+5.5	6.0	-	+4200 -5200	-	-2.4	RNAV 1

DOSOR 1V											
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	DOSOR	-	-	+5.5	-	-	+9400 -FL160	-	-	RNAV 1
20	TF	II153	-	332(337.4)	+5.5	12.3	L	+7000 -FL120	-	-2.3	RNAV 1
30	TF	REZEK	-	010(016.0)	+5.5	11.6	R	+5200 -7300	-	-2	RNAV 1
40	TF	APTOG	-	010(016.0)	+5.5	6.0	-	+4200 -5200	-	-2.2	RNAV 1

KOLAM 1V											
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	KOLAM	-	-	+5.5	-	-	+FL160 -FL270	-	-	RNAV 1
20	TF	II181	-	246(251.4)	+5.5	11.0	R	+FL140 -FL230	-	-0.9	RNAV 1
30	TF	II414	-	246(251.2)	+5.5	24.4	-	+8500 -FL140	-	-0.4	RNAV 1
40	TF	II413	-	281(286.4)	+5.5	8.4	R	+7000 -FL120	-	-2.8	RNAV 1
50	TF	ROTEP	-	281(286.2)	+5.5	11.3	-	+5200 -7300	-230	-2.9	RNAV 1
60	TF	APTOG	-	191(196.1)	+5.5	6.0	L	+4200 -5200	-	-2.4	RNAV 1

TULGA 1M											
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	TULGA	-	-	+5.5	-	-	+FL180 -FL290	-	-	RNAV 1
20	TF	II150	-	281(286.9)	+5.5	12.0	-	+FL150 -FL250	-	-0.8	RNAV 1
30	TF	II151	-	281(286.8)	+5.5	9.7	-	+FL130 -FL220	-	-1.9	RNAV 1
40	TF	II152	-	281(286.6)	+5.5	14.6	-	+10000 -FL170	-	-1.3	RNAV 1
50	TF	II153	-	281(286.4)	+5.5	15.0	-	+7000 -FL120	-	-1.9	RNAV 1
60	TF	REZEK	-	010(016.0)	+5.5	11.6	R	+5200 -7300	-230	-2	RNAV 1
70	TF	APTOG	-	010(016.0)	+5.5	6.0	-	+4200 -5200	-	-3.1	RNAV 1

WAYPOINT LIST

WPT	COORD		WPT	COORD	
ADESA	420940.00N	0694854.00E	II151	420003.70N	0694410.43E
APTOG	422519.51N	0691234.86E	II152	420412.16N	0692526.61E
BAMUT	415124.00N	0692448.00E	II153	420825.64N	0690603.02E
BARAR	425030.00N	0700344.00E	II181	423330.51N	0701133.62E
DOSOR	415702.00N	0691225.00E	II413	422756.58N	0692930.83E
II103	424933.14N	0695012.33E	II414	422535.40N	0694022.65E
II104	424840.93N	0693806.67E	KOLAM	423702.00N	0702540.00E
II105	424725.82N	0692113.01E	REZEK	421933.39N	0691020.68E
II106	424139.90N	0691857.25E	ROTEP	423105.57N	0691449.44E
II150	415715.78N	0695640.86E	TULGA	415347.00N	0701204.00E

**SHYMKENT  
RWY 10**



TABULAR DESCRIPTION

EDIBA 1V											
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	EDIBA	-	-	+5.5	-	-	+FL120 -FL200	-	-	RNAV 1
20	TF	II130	-	105(110.2)	+5.5	19.7	L	+7900 -FL130	-	-2	RNAV 1
30	TF	II113	-	137(142.4)	+5.5	13.1	R	+5800 -8700	-230	-1.5	RNAV 1
40	TF	II114	-	100(105.9)	+5.5	5.0	L	+5000 -6900	-	-1.5	RNAV 1
50	TF	APTOG	-	100(106.0)	+5.5	5.0	-	+4200 -5200	-	-1.5	RNAV 1

LARBA 1V											
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	LARBA	-	-	+5.5	-	-	+FL120 -FL180	-	-	RNAV 1
20	TF	II130	-	137(142.3)	+5.5	13.8	L	+7900 -FL130	-	-2.8	RNAV 1
30	TF	II113	-	137(142.4)	+5.5	13.1	-	+5800 -8700	-230	-1.5	RNAV 1
40	TF	II114	-	100(105.9)	+5.5	5.0	L	+5000 -6900	-	-1.5	RNAV 1
50	TF	APTOG	-	100(106.0)	+5.5	5.0	-	+4200 -5200	-	-1.5	RNAV 1

MAGOL 1V											
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	MAGOL	-	-	+5.5	-	-	+FL130 -FL210	-	-	RNAV 1
20	TF	II102	-	100(105.8)	+5.5	10.1	L	+10000 -FL180	-	-0.9	RNAV 1
30	TF	II105	-	100(105.9)	+5.5	12.5	-	+7900 -FL130	-	-1.5	RNAV 1
40	TF	II106	-	191(196.1)	+5.5	6.0	R	+6900 -FL120	-	-1.6	RNAV 1
50	TF	ROTEP	-	191(196.1)	+5.5	11.0	-	+5200 -7300	-230	-2.6	RNAV 1
60	TF	APTOG	-	191(196.1)	+5.5	6.0	-	+4200 -5200	-	-	RNAV 1

MIKNO 1V											
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	MIKNO	-	-	+5.5	-	-	+FL150 -FL250	-	-	RNAV 1
20	TF	II305	-	039(044.4)	+5.5	10.0	L	+FL130 -FL210	-	-0.9	RNAV 1
30	TF	II304	-	039(044.5)	+5.5	8.8	-	+10000 FL180	-	-	RNAV 1
40	TF	II303	-	066(071.3)	+5.5	9.0	R	+9000 -FL150	-	-2.1	RNAV 1
50	TF	II122	-	066(071.4)	+5.5	12.6	-	+6800 -FL120	-	-1.5	RNAV 1
60	TF	II113	-	010(015.9)	+5.5	6.0	L	+5800 -8700	-230	-1.6	RNAV 1
70	TF	II114	-	100(105.9)	+5.5	5.0	R	+5000 -6900	-	-1.9	RNAV 1
80	TF	APTOG	-	100(106.0)	+5.5	5.0	-	+4200 -5200	-	-2.8	RNAV 1

TONLA 1M											
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	TONLA	-	-	+5.5	-	-	+FL130 -FL220	-	-	RNAV 1
20	TF	II304	-	075(080.2)	+5.5	11.0	-	+10000 -FL180	-	-0.9	RNAV 1
30	TF	II303	-	066(071.3)	+5.5	9.0	L	+9000 -FL150	-	-2.1	RNAV 1
40	TF	II122	-	066(071.4)	+5.5	12.6	-	+6800 -FL120	-	-1.5	RNAV 1
50	TF	II113	-	010(015.9)	+5.5	6.0	L	+5800 -8700	-230	-1.6	RNAV 1
60	TF	II114	-	100(105.9)	+5.5	5.0	R	+5000 -6900	-	-1.9	RNAV 1
70	TF	APTOG	-	100(106.0)	+5.5	5.0	-	+4200 -5200	-	-2.8	RNAV 1

WAYPOINT LIST

WPT	COORD	
APTOG	422519.51N	0691234.86E
EDIBA	424519.00N	0682349.00E
II102	425052.98N	0690453.55E
II105	424725.82N	0692113.01E
II106	424139.90N	0691857.25E
II113	422804.71N	0685935.76E
II114	422642.29N	0690605.45E
II122	422218.35N	0685722.68E
II130	423828.40N	0684848.42E
II303	421818.04N	0684113.16E
II304	421525.47N	0682943.81E
II305	420908.43N	0682124.45E
LARBA	424922.00N	0683725.00E
MAGOL	425338.00N	0685144.00E
MIKNO	420200.00N	0681200.00E
ROTEP	423105.57N	0691449.44E
TONLA	421334.00N	0681508.00E

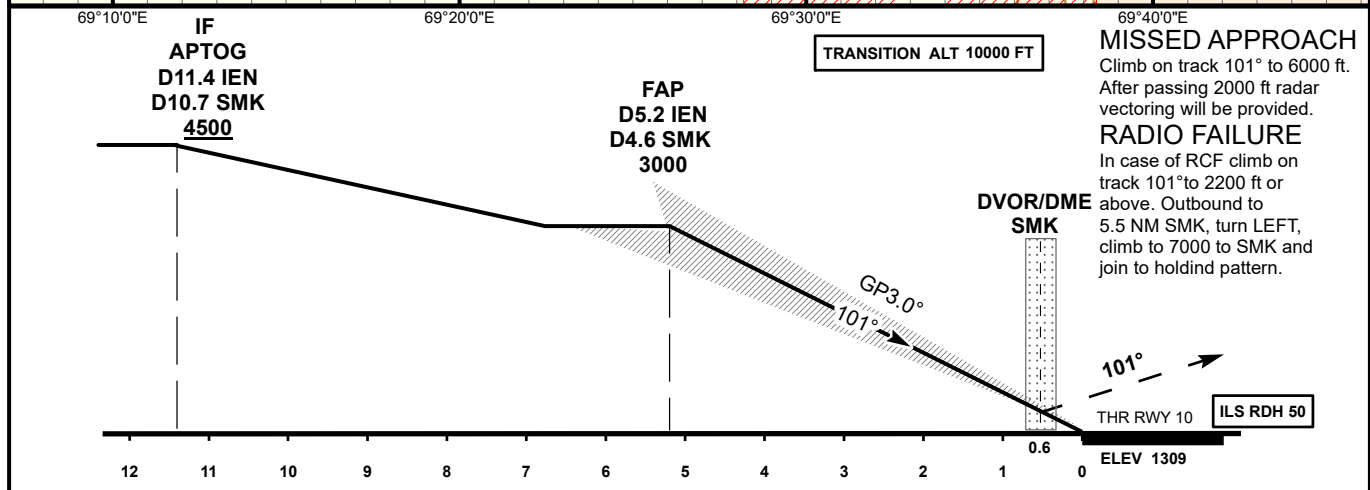
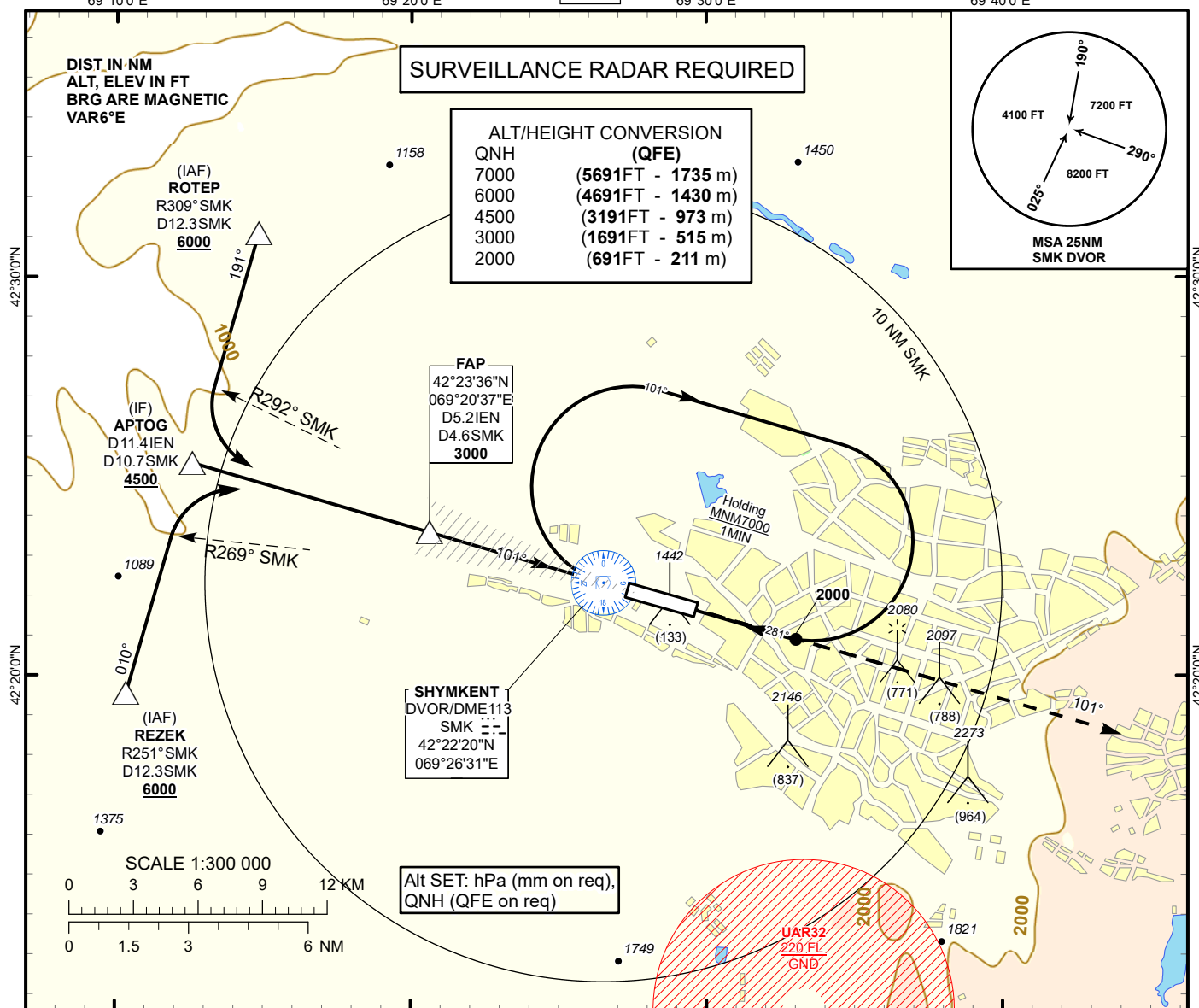
INSTRUMENT  
APPROACH  
CHART - ICAO

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

ILS  
LLZ 111.7  
IEN  
GP 333.5  
CH 54X

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

SHYMKENT  
ILS/DME  
RWY 10



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

CHANGE: Revised.

SHYMKENT  
ILS/DME

AERONAUTICAL DATA TABULATION

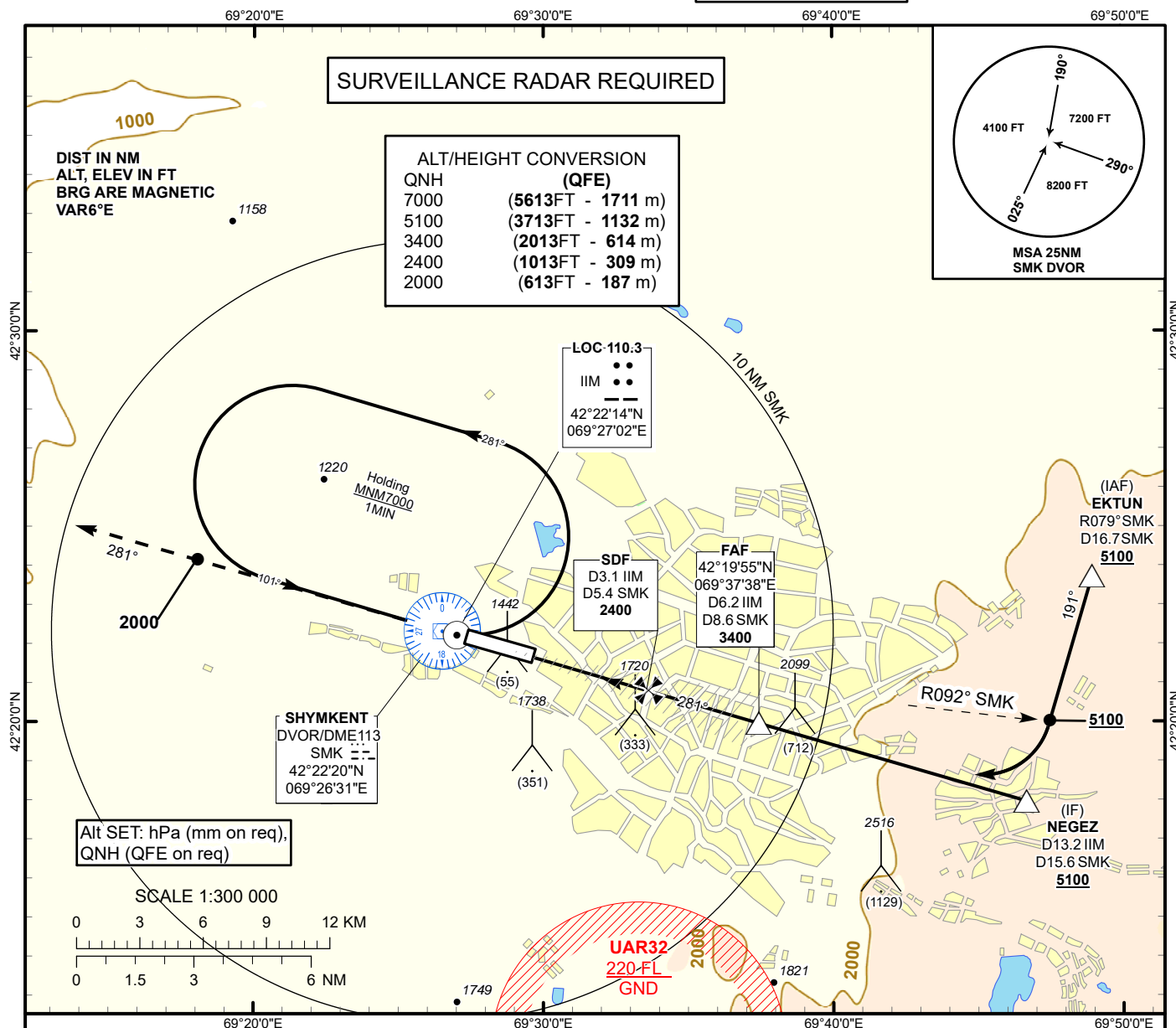
ILS approach to RWY10 from APTOG, ROTEP, REZEK	
Fix/point	Coordinates
DVOR/DME SMK	42° 22' 20.4"N 069° 26' 30.6"E
(FAP) D5.2 IEN, D4.6 SMK	42° 23' 36.3"N 069° 20' 36.9"E
APTOG (IF) D11.4 IEN, D10.7 SMK	42° 25' 19.5"N 069° 12' 34.9"E
ROTEP (IAF) R309°, D12.3 SMK	42° 31' 05.6"N 069° 14' 49.4"E
REZEK (IAF) R251°, D12.3 SMK	42° 19' 33.4"N 069° 10' 20.7"E
THR RWY 10	42° 22' 09.24"N 069° 27' 22.27"E
IEN LOC	42° 21' 34.2"N 069° 30' 04.8"E

INSTRUMENT  
APPROACH  
CHART - ICAO

AERODROME ELEV 1387 FT  
HEIGHTS RELATED TO  
AD ELEV

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

SHYMKENT  
LOC/DME  
RWY 28



### MISSED APPROACH

Climb on track 281° to 5100ft.  
After passing 2000ft radar  
vectoring will be provided.

### RADIO FAILURE

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

DTHR RWY 28  
ELEV 1384

TRANSITION ALT 10000 FT

SDF  
D3.1 IIM  
D5.4 SMK  
2400

FAF  
D6.2 IIM  
D8.6 SMK  
3400

IF  
NEGEZ  
D13.2 IIM  
D15.6 SMK  
5100

MAPt  
D0.3 IIM  
D2.7 SMK

PDG 5.2% (3.0°)  
281°

3 2 1 0 1 2 3 4 5 6 7 8 9 10 11 12 13

Aircraft Category		A	B	C	D	DIST to DTHR DME IIM	NM	1.0	2.0	3.0	4.0	5.0	6.2
Straight-in Approach OCA/H	LLZ (GP INOP) SDF	1930(540)	1930(540)	1930(540)	1930(540)	DME SMK	NM	3.4	4.4	5.4	6.4	7.4	8.6
	LLZ (GP INOP) WO SDF	2340(960)	2340(960)	2340(960)	2340(960)	ALTITUDE	FT	1754	2073	2391	2710	3028	3400
						HEIGHT	FT	(367)	(686)	(1004)	(1323)	(1641)	(2013)
DME IIM ZERO RANGED TO THR RWY 28													
Aerodrome Operating Minima MDH ft x RVR (CMV)	LLZ (GP INOP)					GS	Kt	80	100	120	140	160	180
						Desc.Rate( 5.2%)	ft/min	420	530	630	740	840	950
						FAF-MAPt(5.9NM)	min:sec	4:30	3:36	3:00	2:34	2:15	2:00

CHANGE: Revised.

SHYMKENT  
LOC/DME

AERONAUTICAL DATA TABULATION

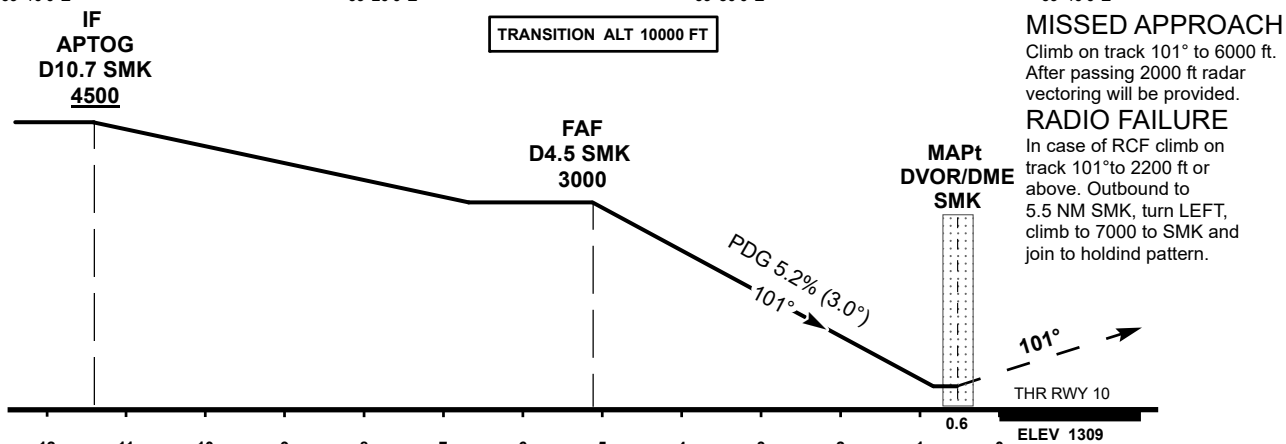
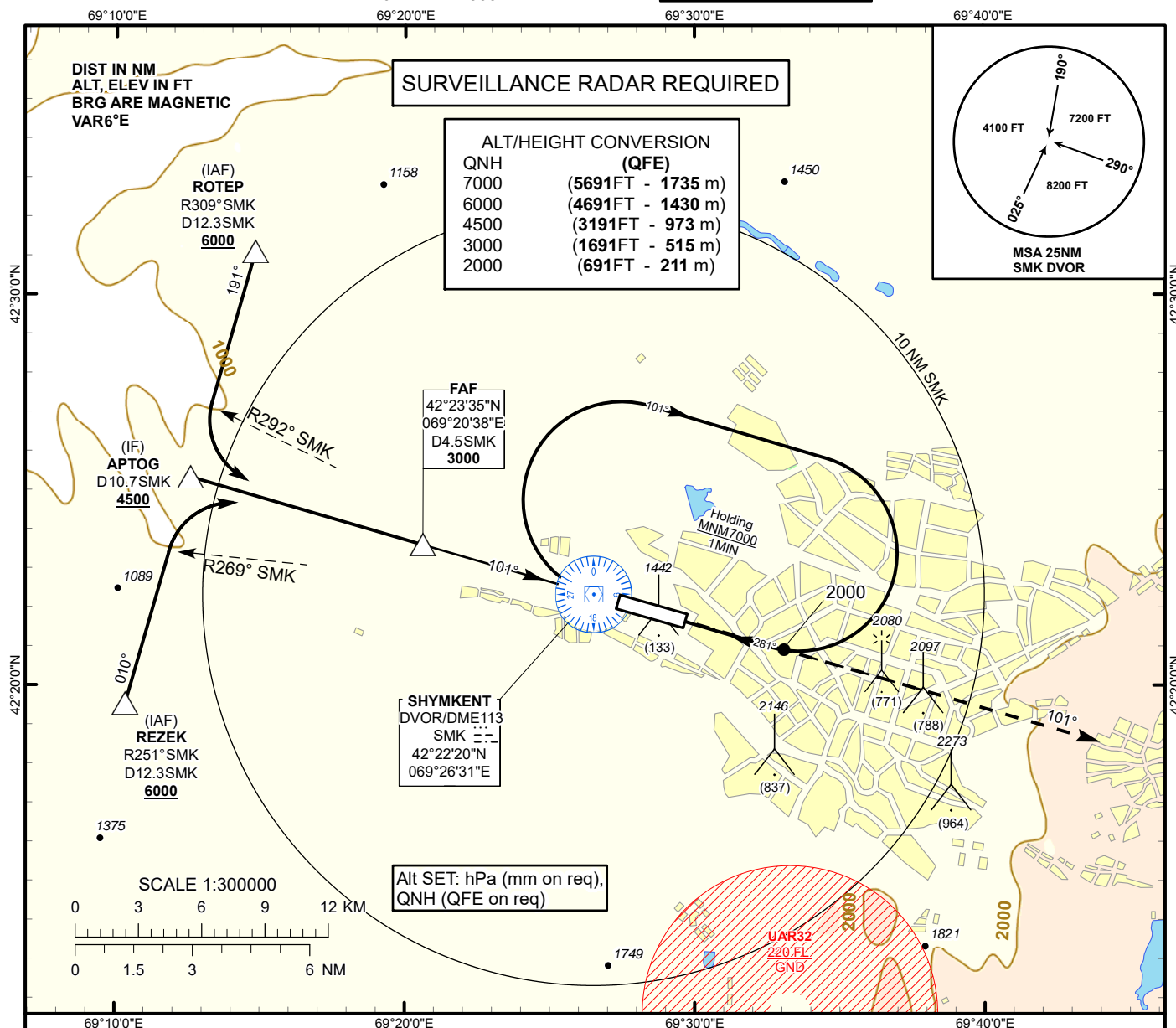
LOC/DME approach to RWY28 from EKTUN, NEGEZ	
Fix/point	Coordinates
(SDF) D3.1 IIM, D5.4 SMK	42° 20' 49.0"N 069° 33' 32.6"E
(FAF) D6.2 IIM, D8.6 SMK	42° 19' 55.4"N 069° 37' 38.4"E
NEGEZ (IF) D13.2 IIM, D15.6 SMK	42° 17' 57.8"N 069° 46' 39.6"E
EKTUN (IAF) R079°, D16.7 SMK	42° 23' 43.2"N 069° 48' 57.0"E
SMK DVOR/DME	42° 22' 20.4"N 069° 26' 30.6"E
IIM LOC	42° 22' 13.7"N 069° 27' 01.5"E
DTHR RWY 28	42° 21' 40.62"N 069° 29' 34.86"E
Final approach descent angle is 3°	

INSTRUMENT  
APPROACH  
CHART - ICAO

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

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

SHYMKENT  
VOR/DME Y  
RWY 10



CHANGE: Revised.

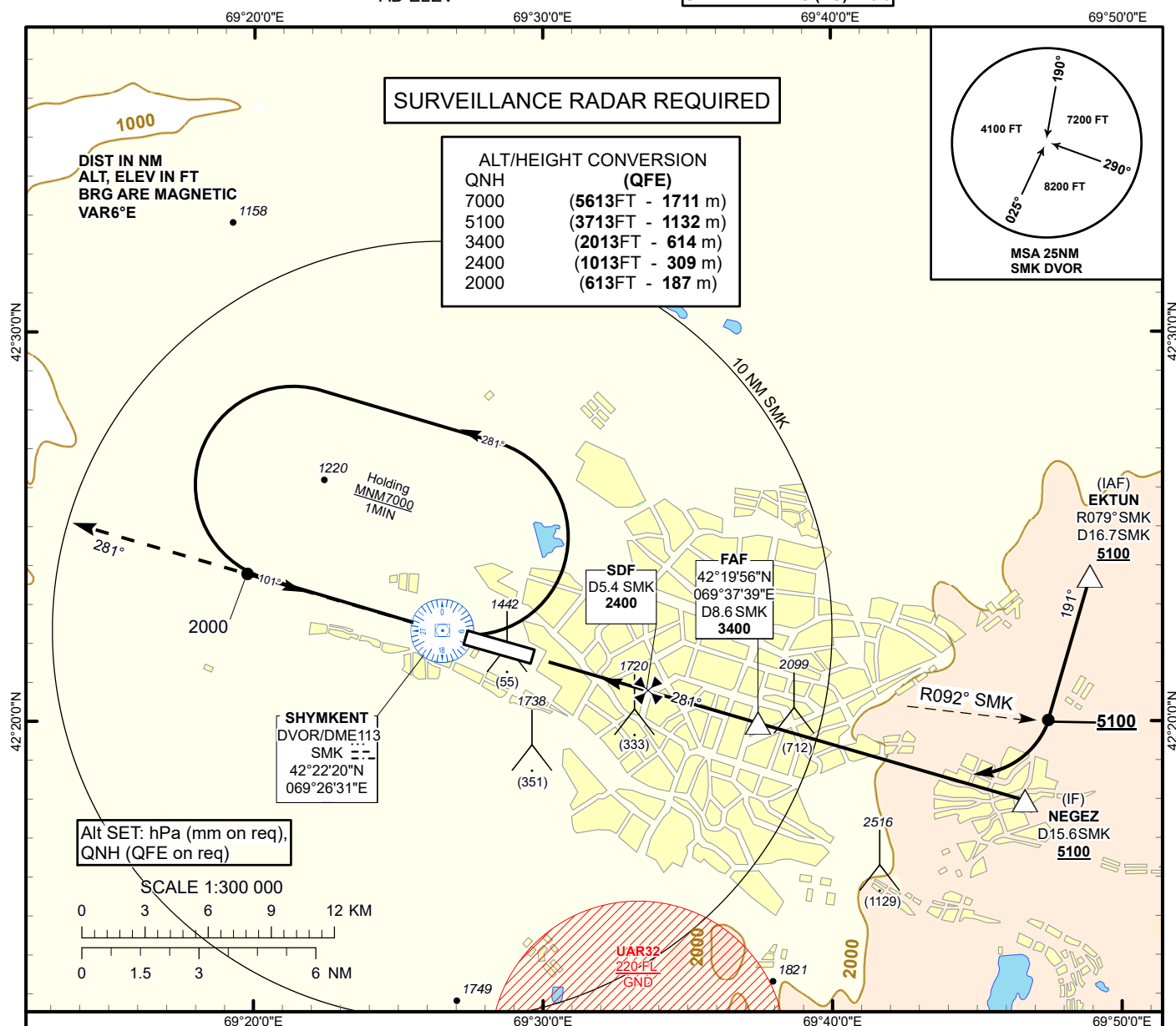
Aircraft Category		A	B	C	D	DIST to THR	NM	5.2	4	3	2	1	
Straight-in Approach OCA/H						DME SMK	NM	4.5	3.3	2.3	1.3	0.3	
	VOR/DME	1670(360)	1670(360)	1670(360)	1670(360)	ALTITUDE	FT	3000	2632	2313	1995	1676	
						HEIGHT	FT	(1691)	(1323)	(1004)	(686)	(367)	
Aerodrome Operating Minima MDH ft x RVR (CMV)	VOR/DME												
						GS	Kt	80	100	120	140	160	180
						Desc.Rate( 5.2%)	ft/min	420	530	630	740	840	950
						FAF-MAPt(4.5NM)	min:sec	3:23	2:42	2:15	1:56	1:41	1:30

SHYMKENT  
VOR/DME Y

AERONAUTICAL DATA TABULATION

VOR approach to RWY10 from APTOG, ROTEP, REZEK	
Fix/point	Coordinates
(FAF) D4.5 SMK	42° 23' 35.2"N 069° 20' 37.8"E
APTOG (IF) D10.7 SMK	42° 25' 19.5"N 069° 12' 34.9"E
ROTEP (IAF) R309°, D12.3 SMK	42° 31' 05.6"N 069° 14' 49.4"E
REZEK (IAF) R251°, D12.3 SMK	42° 19' 33.4"N 069° 10' 20.7"E
SMK DVOR/DME	42° 22' 20.4"N 069° 26' 30.6"E
THR RWY 10	42° 22' 09.24"N 069° 27' 22.27"E
Final approach descent angle is 3°	

**SHYMKENT  
VOR/DME Y  
RWY 28**

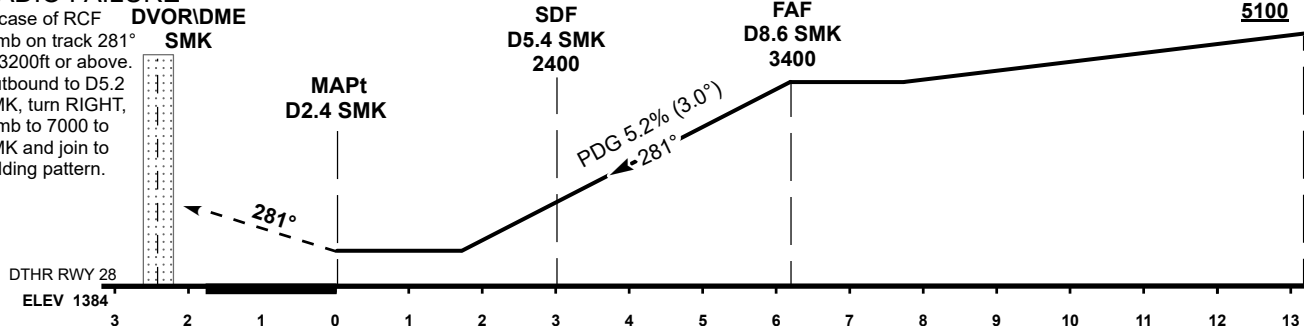


TRANSITION ALT 10000 FT

IF  
NEGEZ  
D15.6 SMK  
5100

## DVOR\DMC

DTHR RWY 28  
ELEV 1384



Aircraft Category		A	B	C	D	DIST to DTHR	NM	1.0	2.0	3.0	4.0	5.0	6.2
Straight-in Approach OCA/H						DME SMK	NM	3.4	4.4	5.4	6.4	7.4	8.6
	VOR/DME SDF	1970(590)	1970(590)	1970(590)	1970(590)	ALTITUDE	FT	1754	2073	2391	2710	3028	3400
	VOR/DME WO SDF	2370(980)	2370(980)	2370(980)	2370(980)	HEIGHT	FT	(367)	(686)	(1004)	(1323)	(1641)	(2013)

Aerodrome Operating Minima MDH ft x RVR (CMV)	VOR/DME															
						GS	Kt	80	100	120	140	160	180			
						Desc.Rate( 5.2%)	ft/min	420	530	630	740	840	950			
						FAF-MAPT(6.2NM)	min:sec	4:39	3:43	3:06	2:39	2:20	2:04			

**AIRAC AMDT 011/2025**

SHYMKENT  
VOR/DME Y

AERONAUTICAL DATA TABULATION

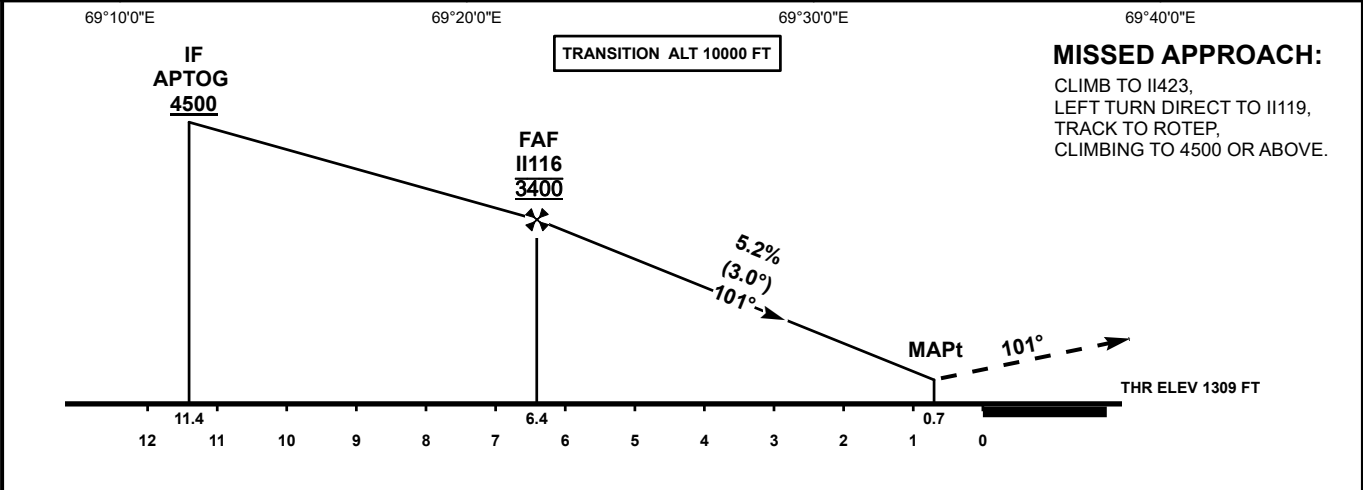
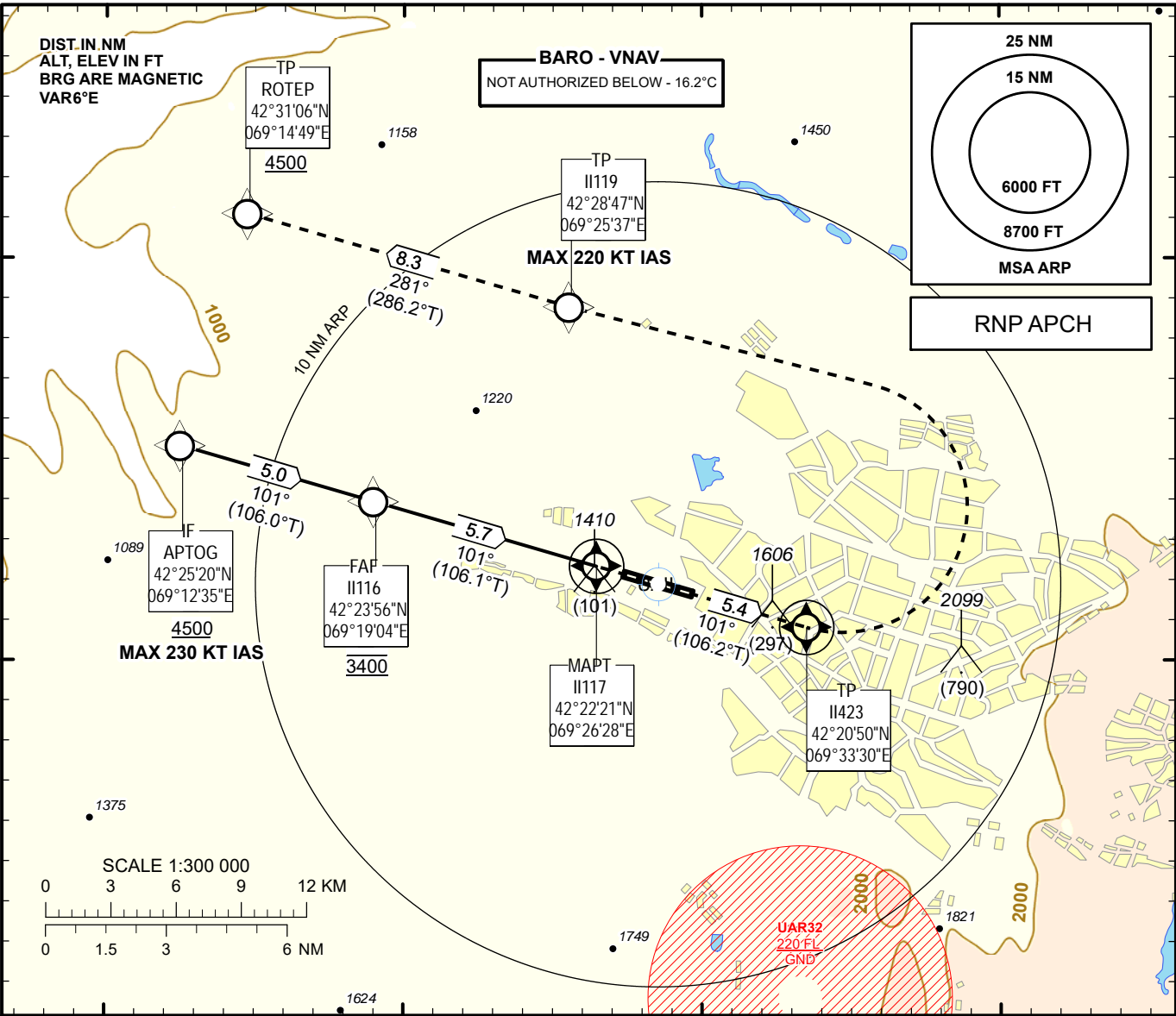
VOR approach to RWY28 from EKTUN, NEGEZ	
Fix/point	Coordinates
(SDF) D5.4 SMK	42° 20' 49.2"N 069° 33' 32.7"E
(FAF) D8.6 SMK	42° 19' 55.9"N 069° 37' 38.6"E
NEGEZ (IF) D13.2 IIM, D15.6 SMK	42° 17' 57.8"N 069° 46' 39.6"E
EKTUN (IAF) R079°, D16.7 SMK	42° 23' 43.2"N 069° 48' 57.0"E
SMK DVOR/DME	42° 22' 20.4"N 069° 26' 30.6"E
DTHR RWY 28	42° 21' 40.62"N 069° 29' 34.86"E
Final approach descent angle is 3°	

INSTRUMENT  
APPROACH  
CHART - ICAO

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

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

SHYMKENT  
RNP  
RWY 10



OCA (OCH)		A	B	C	D
Straight	LNAV	1660 (351)			
	LNAV/VNAV	1540 (231)	1560 (251)	1570 (261)	1580 (271)

CHANGES: NEW CHART.

GS	Kt	70	90	120	150	180
Rate of descent (5.2%)	ft/min	370	480	640	800	960
FAF-MAPT 5.7 NM	min:sec	04:53	03:48	02:51	02:17	01:54

TABULAR DESCRIPTION

UAI RNP RWY10											
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	APTOG	-	-	+5.5	-	-	+4500	-230	-	RNP APCH
020	TF	II116	-	101(106.0)	+5.5	5.0	-	@3400	-	-	RNP APCH
030	TF	II117	Y	101(106.1)	+5.5	5.7	-	@1580	-	-3	RNP APCH
040	CF	II423	Y	101(106.2)	+5.5	5.4	-	-	-	+1.4	RNP APCH
050	DF	II119	-	-	+5.5	-	L	-	-220	+1.4	RNP APCH
060	TF	ROTEP	-	281(286.2)	+5.5	8.3	-	+4500	-	-	RNP APCH

WAYPOINT LIST

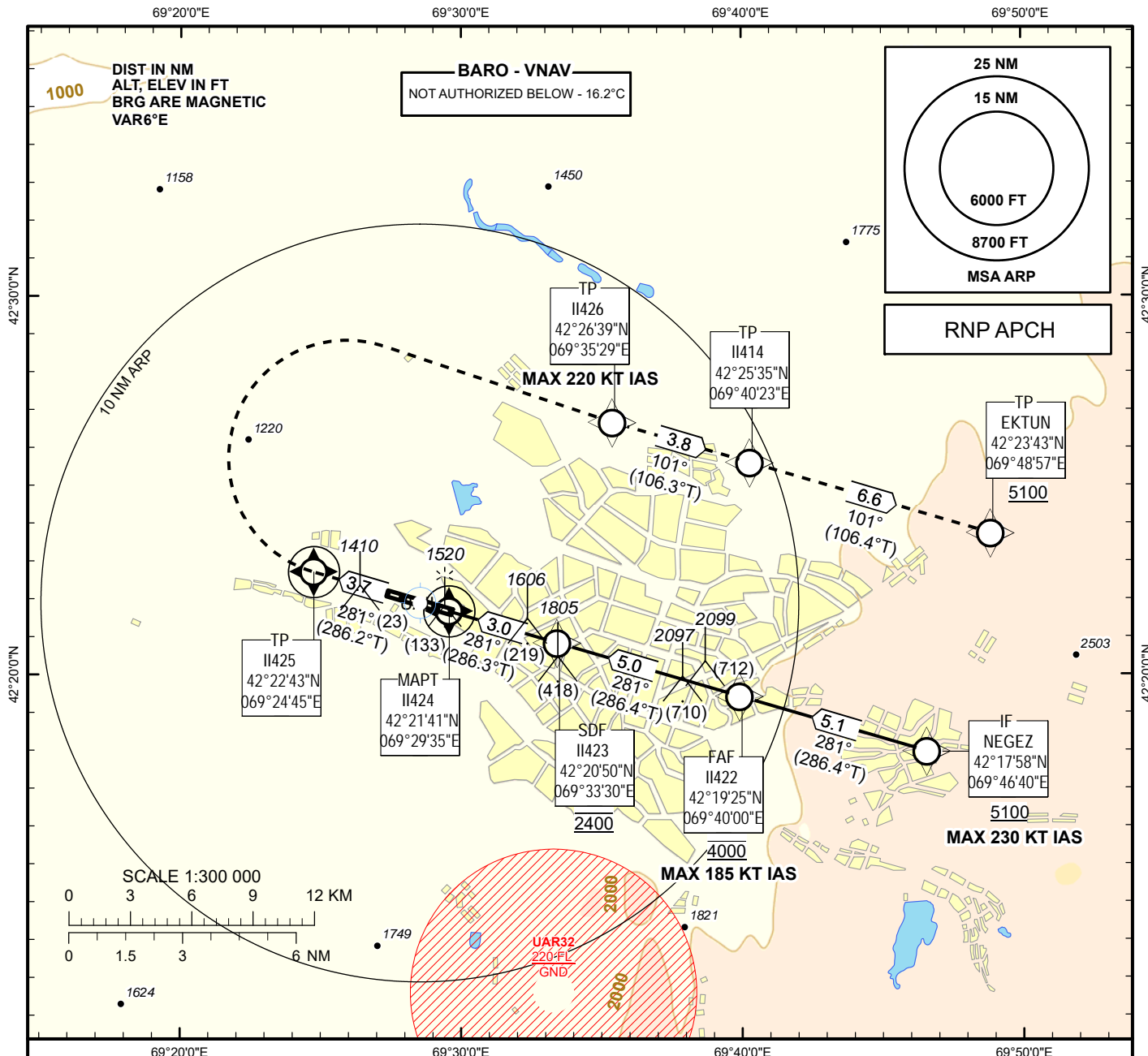
UAI RNP RWY10		
Waypoint Identifier	Coordinates	
APTOG	42 25 19.51N	069 12 34.86E
II116	42 23 56.36N	069 1903.98E
II117	42 22 20.97N	069 26 27.87E
II119	42 28 46.87N	069 25 37.28E
II423	42 20 49.65N	069 33 30.43E
ROTEP	42 31 05.57N	069 14 49.44E

INSTRUMENT  
APPROACH  
CHART - ICAO

AERODROME ELEV 1387FT  
HEIGHTS RELATED TO  
AD ELEV

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

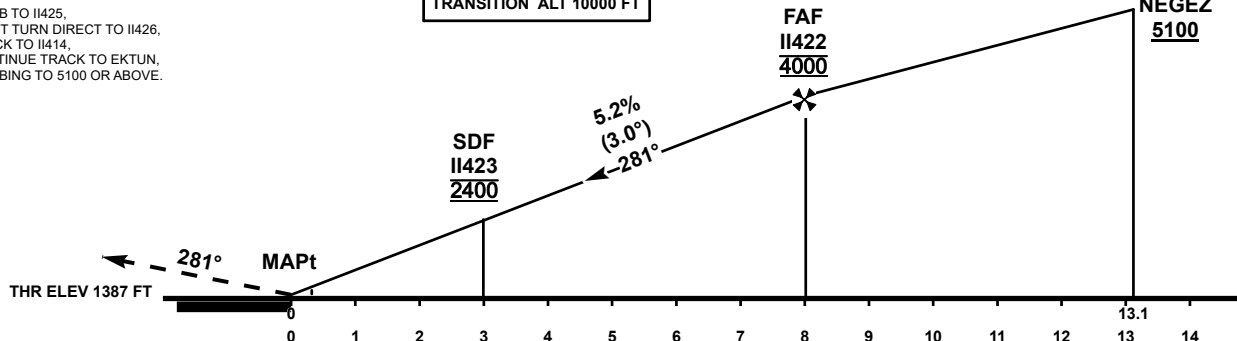
SHYMKENT  
RNP  
RWY 28



**MISSED APPROACH:**

CLIMB TO II425.  
RIGHT TURN DIRECT TO II426.  
TRACK TO II414.  
CONTINUE TRACK TO EKTUN.  
CLIMBING TO 5100 OR ABOVE.

**TRANSITION ALT 10000 FT**



OCA (OCH)		A	B	C	D
Straight	LNAV	1930 (543)			
	LNAV/VNAV	1640 (253)	1660 (273)	1670 (283)	1680 (293)

GS	Kt	70	90	120	150	180
Rate of descent (5.2%)	ft/min	370	480	640	800	960
FAF-MAPt 8.0 NM	min:sec	06:51	05:20	04:00	03:12	02:40

CHANGES: New chart.

TABULAR DESCRIPTION

UAI RNP RWY28											
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	NEGEZ	-	-	+5.5	-	-	+5100	-230	-	RNP APCH
020	TF	II422	-	281(286.4)	+5.5	5.1	-	@4000	-185	-	RNP APCH
030	TF	II423	-	281(286.4)	+5.5	5.0	-	@2400	-	-3	RNP APCH
040	TF	II424	Y	281(286.3)	+5.5	3.0	-	@1437	-	-3	RNP APCH
050	CF	II425	Y	281(286.2)	+5.5	3.7	-	-	-	+1.4	RNP APCH
060	DF	II426	-	-	+5.5	-	R	-	-220	+1.4	RNP APCH
070	TF	II414	-	101(106.3)	+5.5	3.8	-	-	-	+1.4	RNP APCH
080	TF	EKTUN	-	101(106.4)	+5.5	6.6	-	+5100	-	+1.4	RNP APCH

WAYPOINT LIST

UAI RNP RWY28		
Waypoint Identifier	Coordinates	
EKTUN	422343.15N	0694857.00E
II414	422535.40N	0694022.65E
II422	421924.93N	0694000.30E
II423	422049.65N	0693330.43E
II424	422140.61N	0692934.92E
II425	422243.05N	0692445.39E
II426	422639.21N	0693528.75E
NEGEZ	421757.76N	0694639.56E

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

1	Apron surface and strength	STANDS		SURFACE	STRENGTH
		2-4		CONC+ASPH	PCN 8/F/C/Y/T
		5, 6, 52-56		CONC+ASPH	PCN 32/F/C/X/T
2	Taxiway width, surface and strength	TWY	WIDTH (M)	SURFACE	STRENGTH
		1	20	REINF CONC	PCN 42/R/A/X/T
		2	20	REINF CONC	PCN 42/R/A/X/T
		3	20	REINF CONC	PCN 42/R/A/X/T
		4	20	REINF CONC	PCN 42/R/A/X/T
		5	20	REINF CONC	PCN 42/R/A/X/T
		12	20	CONC	PCN 42/R/A/X/T
		13	20	CONC	PCN 42/R/A/X/T
		MAIN 1	20	REINF CONC	PCN 42/R/A/X/T
3	Altimeter checkpoint location and elevation	Nil			
4	VOR checkpoints	Nil			
5	INS checkpoints	Nil			
6	Remarks	Tax of ACFT with wing span more than 24M via TWY 1 after follow-me car only. Taxiing of civil aviation aircraft only via TWY 1			

**UAAT AD 2.9 Surface Movement Guidance And Control System And Markings**

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

**UAAT AD 2.10 Aerodrome Obstacles**

NIL

**UAAT AD 2.11 Meteorological Information Provided**

1	Associated MET Office	Meteorological service Taldykorgan Phone: +7 (7282) 240542
2	Hours of service MET Office outside hour	HO (AD OPR HR: see NOTAM)
3	Office responsible for TAF preparation: Periods of validity	Meteorological service Taldykorgan, 9 HR (0209, 0312, 0615, 0918)
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

## UAAT 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	26,16°	3000 X 50	42/R/A/X/T REINF/CONC	450637.79N 0782603.77E - -159.6 FT	THR 1926.1 FT	THR 02: 0.2% THR 20: - 0.2%
20	206,17°	3000 X 50	42/R/A/X/T REINF/CONC	450804.99N 0782704.28E - -159.9 FT	THR 1944.1 FT	

SWY dimensions (M)	CWY dimensions (M)	Strip dimensions (M)	RESA dimensions (M)	Location and description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
Nil	200 X 150	3300 X 300	90 X 160	Nil	Nil	Turn Pad LEN 132 m, the total width of the turn pad and runway 100 m. REF.AD 2.12.14
Nil	200 X 150	3300 X 300	90 X 160	Nil	Nil	Turn Pad LEN 102 m, the total width of the turn pad and runway 86 m. REF.AD 2.12.14

## UAAT AD 2.13 Declared Distances

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
02	3000	3200	3000	3000	Nil
20	3000	3200	3000	3000	Nil

## UAAT 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	(HIALS) 900 M LIH	GRN Nil	PAPI LEFT/3°	Nil	Nil	3000m, white, spacing 60m, last 600m yellow LIH	RED Nil	Nil	Nil
20	(HIALS) 900 M LIH	GRN Nil	PAPI LEFT/3°	Nil	Nil	3000m, white, spacing 60m, last 600m yellow LIH	RED Nil	Nil	Nil

## UAAT AD 2.15 Other Lighting, Secondary Power Supply

1	ABN/IBN location, characteristics and hours of operation	Nil
2	LDI location and LGT Anemometer location and LGT	LDI: Nil Anemometer: 500m from RWY 02 to ARP, 290m from RWY 20 to ARP
3	TWY edge and centre line lighting	TWY 1 EDGE: BLU TWY 2 EDGE: BLU TWY 3 EDGE: BLU TWY 4 EDGE: BLU TWY 5 EDGE: BLU TWY 12 EDGE: BLU TWY 13 EDGE: BLU TWY MAIN 1 EDGE: BLU
4	Secondary power supply/switch-over time	AVBL, 15 sec
5	Remarks	Nil

## UAAT AD 2.16 Helicopter Landing Area

NIL

## UAAT AD 2.17 ATS Airspace

1	Designation and lateral limits	TALDYKORGAN CTR 453350N 0782923E - 452101N 0785544E - 444354N 0781934E - 445634N 0775324E - 453350N 0782923E
2	Vertical limits	7000 FT ALT / GND
3	Airspace classification	C
4	ATS unit call sign Language(s)	TALDYKORGAN TOWER EN TALDYKORGAN VYSHKA RU
5	Transition altitude	10000 FT
6	Hours of applicability	See NOTAM
7	Remarks	Nil

## UAAT 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	TALDYKORGAN TOWER (EN) TALDYKORGAN VYSHKA (RU)	127,3 MHZ	Nil	Nil	See NOTAM	VDF AVBL

## UAAT 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/2014)	TDK	116,1 MHZ CH 108X	H24	450622.3N 0782547.6E	2000 FT	Nil	Nil

## UAAT AD 2.20 Local Aerodrome Regulations

NIL

## UAAT AD 2.21 Noise Abatement Procedures

NIL

## UAAT AD 2.22 Flight Procedures

### 1. Flight and ground movement procedures.

For civil aviation aircraft, the stands 2, 3, 4, 5, 6, 52, 53,54, 55, 56 are used. Aircraft taxiing-in from the runway to the stands is carried out under own engines power only on taxiway 1.

The leading of aircraft is carried out by the airport aerodrome service behind the follow me car. The leading of aircraft is carried out when visibility is less than 550 m, or in cases of lack of visibility, marking lines for aircraft movement and special transport (due to snow cover or for other reasons), as well as at the request of the crew.

Taxiing with visibility 2000 m or less, as well as at night, is carried out with the aeronautical lights and headlights. Aeronautical lights must be turned on from the moment starting engines to their stop.

**2. Aerodrome operation in conditions of limited visibility**

Operations carried out in conditions of limited visibility are applied when the RVR is less than 550 meters, when the entire maneuvering area or part of it is not visually controlled from the TWR.

Aircraft taxiing-in for take off, is led by follow me car from the stands to the holding position. Taxiing-in to the apron after the release of the runway is carried out after follow me car. Aircraft taxiing-in to the stands is carried out under the instruction of the meeting person.

Movement on the aerodrome in conditions of limited visibility is carried out at a reduced speed with the maximum circumspection. When visibility is less than 50 m, if there is ice on the apron and the stands, the movement of all types of vehicles at the aerodrome is prohibited.

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

All VFR flights within the boundaries of the control zone are carried out at an absolute altitude of at least 7000 feet, unless otherwise authorized by the «TOWER» ATC unit.

Absolute flight altitudes are assigned by the air traffic controller "Tower" without taking into account artificial obstacles. Aircraft crews are responsible for avoiding artificial obstacles. At Taldykorgan 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 Taldykorgan 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 Taldykorgan CTR**

No	Name	Type	Location	Geographic coordinates	DVOR/DME «TDK» radial and distance
1	MIKE	waypoint	Intersection of a road and a river, Southwestern edge of the settlement Mukanshi	445220N 0780209E	225° / 21,9 NM
2	SIERRA	waypoint	Meander (bend) of the riverbed Karatal, Northwestern edge of the settlement Sarybulak	450525N 0780157E	262° / 16,9 NM
3	DELTA	waypoint	Meander (bend) of a riverbed, Southeastern edge of the settlement Kokdala	451330N 0780945E	297° / 13,4 NM
4	INDIA	waypoint	Bend of a road at the straight angle, Northwest of a pond	451950N 0781552E	328° / 15,2 NM
5	PAPA	holding	Intersection of a road and a river	450855N 0782127E	305° / 4 NM
6	YANKEE	holding	Y-shaped road intersection, East of a pond	450223N 0782808E	152° / 4,3 NM
7	ALPHA	holding	The «Almaly» reservoir	450809N 0783218E	064° / 4,9 NM
8	BRAVO	waypoint	Eastern edge of the settlement Karabulak	445502N 0783025E	159° / 11,8 NM
9	KILO	waypoint	Northern edge of the settlement Koshkental	451313N 0784808E	061° / 17,2 NM

№	Name	Type	Location	Geographic coordinates	DVOR/DME «TDK» radial and distance
10	TANGO	waypoint	Road bend A-3 (A-350), Eastern edge of the settlement Aktogan	452357N 0784942E	039° / 24,4 NM

## UAAT AD 2.23 Additional Information

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

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

### 2. Ornithological situation in the aerodrome area.

The flights of birds occur in flocks from several dozen to several hundred from the south-west to the north, north-east, during the period of snowmelt and plowing of fields there is a massive flight through the runway.

Periods of seasonal migrations are characterized by intensive directional round-the-clock flight of birds, usually in large numbers and at considerable altitudes. Migration mainly occurs from mid-March to mid-May and from mid-September to late November, round-the-clock.

#### The main measures for the ornithological support of flights

- Periodic bird scaring (shoot-off is done).
- During the flight period, a bioacoustic installation is activated to scare away birds.
- Take off and landing is made with the switched on headlights.

The visual observation of the bird flights is carried out by the air traffic controller of control point "Tower", simultaneously with the observations of the take-off and landing of the aircraft (only during daylight hours). In the case of a dangerous ornithological situation, the air traffic controller of control point Tower informs the crew about the presence of birds in the direction of take-off and landing.

## UAAT AD 2.24 Charts Related To An Aerodrome

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

**UAAT AD 2.25 Visual segment surface (VSS) penetrations**

No penetrations

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**UAIT AD 2.24 Charts Related To An Aerodrome**

Name	Page
Aerodrome Chart ICAO	UAIT AD 2.24.1-1
Aerodrome Ground Movement and Parking Chart ICAO	UAIT AD 2.24.3-1
Aerodrome Obstacle Chart – ICAO – Type A	UAIT AD 2.24.4-1
Area Chart ICAO	UAIT AD 2.24.6-1
Standard Departure Chart Instrument (SID) RWY 05 ICAO	UAIT AD 2.24.7-1-1
Standard Departure Chart Instrument (SID) RWY 23 ICAO	UAIT AD 2.24.7-2-1
Standard Arrival Chart Instrument (STAR) RWY 05 ICAO	UAIT AD 2.24.9-1-1
Standard Arrival Chart Instrument (STAR) RWY 23 ICAO	UAIT AD 2.24.9-2-1
ATC Surveillance Minimum Altitude Chart ICAO	UAIT AD 2.24.10-1
Instrument Approach Chart – ILS/DME Y RWY 05 ICAO	UAIT AD 2.24.11-1-1
Instrument Approach Chart – ILS/DME Z RWY 05 ICAO	UAIT AD 2.24.11-2-1
Instrument Approach Chart – ILS/DME Y RWY 23 ICAO	UAIT AD 2.24.11-3-1
Instrument Approach Chart – ILS/DME Z RWY 23 ICAO	UAIT AD 2.24.11-4-1
Instrument Approach Chart – VOR/DME Y RWY 05 ICAO	UAIT AD 2.24.11-5-1
Instrument Approach Chart – VOR/DME Z RWY 05 ICAO	UAIT AD 2.24.11-6-1
Instrument Approach Chart – VOR/DME Y RWY 23 ICAO	UAIT AD 2.24.11-7-1
Instrument Approach Chart – VOR/DME Z RWY 23 ICAO	UAIT AD 2.24.11-8-1
Instrument Approach Chart – LOC/DME Y RWY 05 ICAO	UAIT AD 2.24.11-9-1
Instrument Approach Chart – LOC/DME Z RWY 05 ICAO	UAIT AD 2.24.11-10-1
Instrument Approach Chart – LOC/DME Y RWY 23 ICAO	UAIT AD 2.24.11-11-1
Instrument Approach Chart – LOC/DME Z RWY 23 ICAO	UAIT AD 2.24.11-12-1
Visual Approach chart – ICAO	UAIT AD 2.24.12-1
VFR Departure/Arrival Chart	UAIT AD 2.24.14-1

**UAIT AD 2.25 Visual segment surface (VSS) penetrations**

No penetrations

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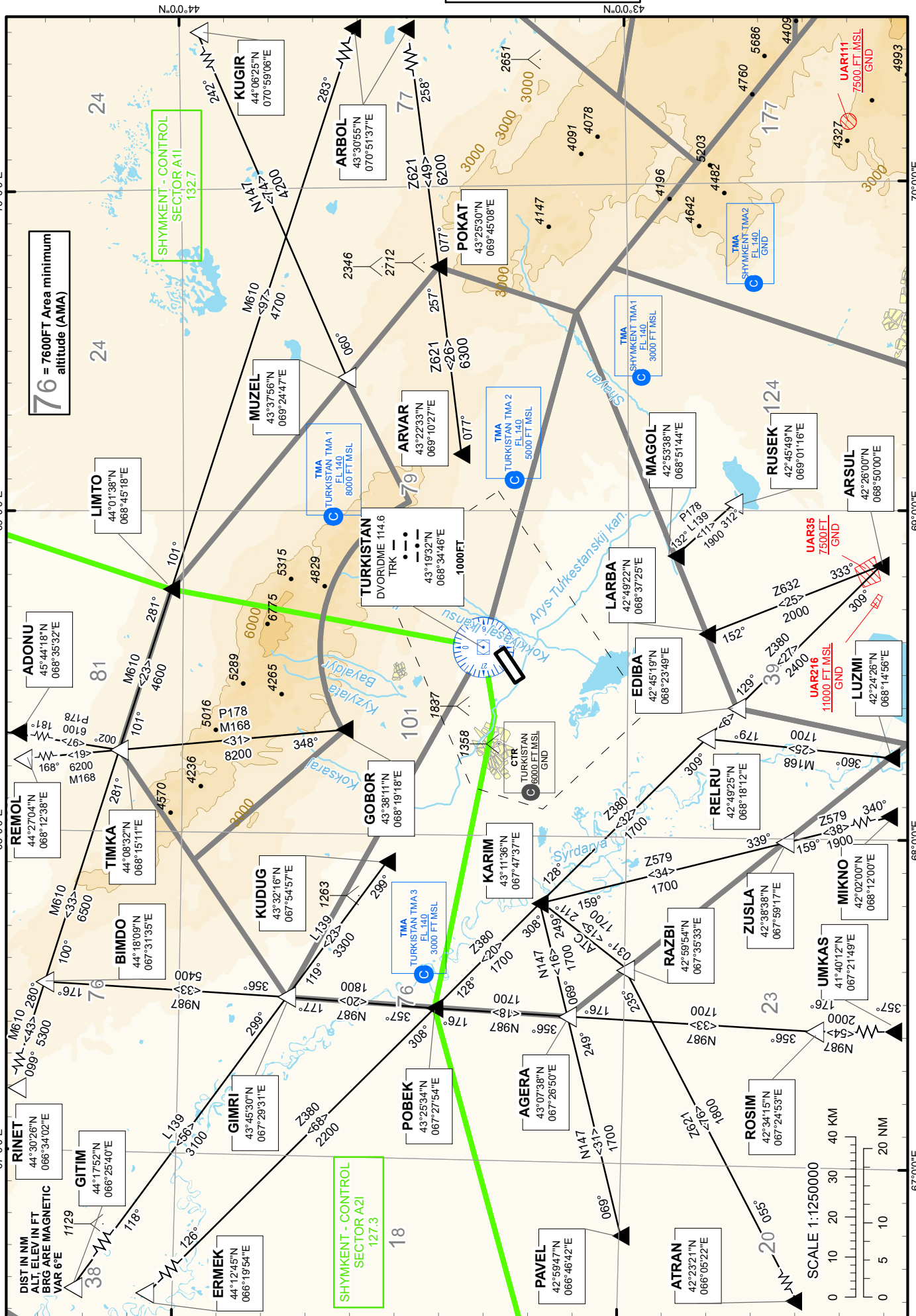
AREA CHART  
ICAO

TMA TURKISTAN

TRANSITION ALTITUDE  
10000 FT

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

CHANGE: Add ATC Route RAZBI-KARIM



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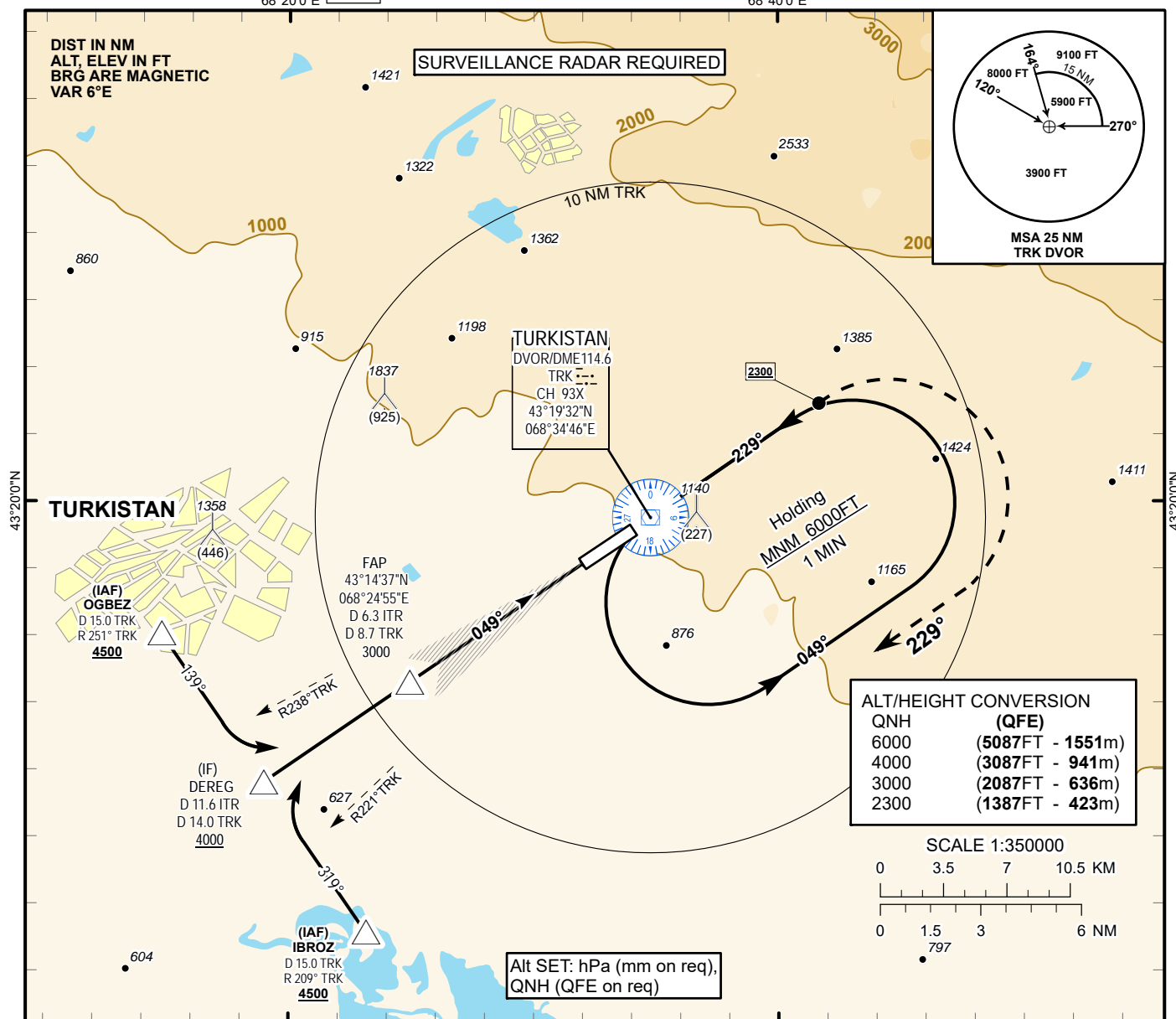
INSTRUMENT  
APPROACH  
CHART - ICAO

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 Y  
RWY 05



MISSSED APPROACH

Climb on track 049°,  
at 2300 ft or above,  
turn RIGHT on track 229°  
climbing to 4500 ft or above,  
then as directed.  
Missed approach turn  
speed limited to  
240 Kt IAS maximum.

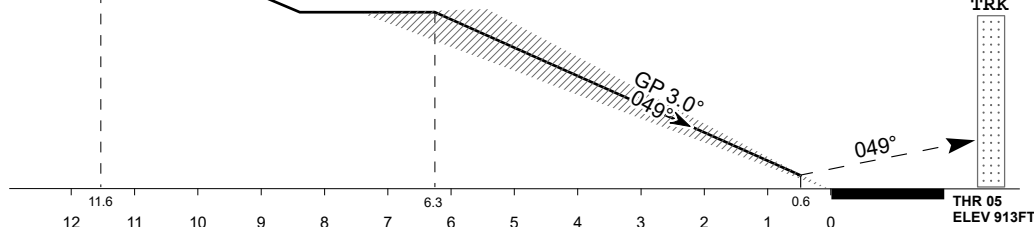
IF  
DEREG  
D 11.6 ITR  
D 14.0 TRK  
4000

TRANSITION ALT 10000 FT

FAP  
D 6.3 ITR  
D 8.7 TRK  
3000

DVOR/DME  
TRK

ILS RDH 49



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	CAT I	1113(200)	1118(205)	1128(215)	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

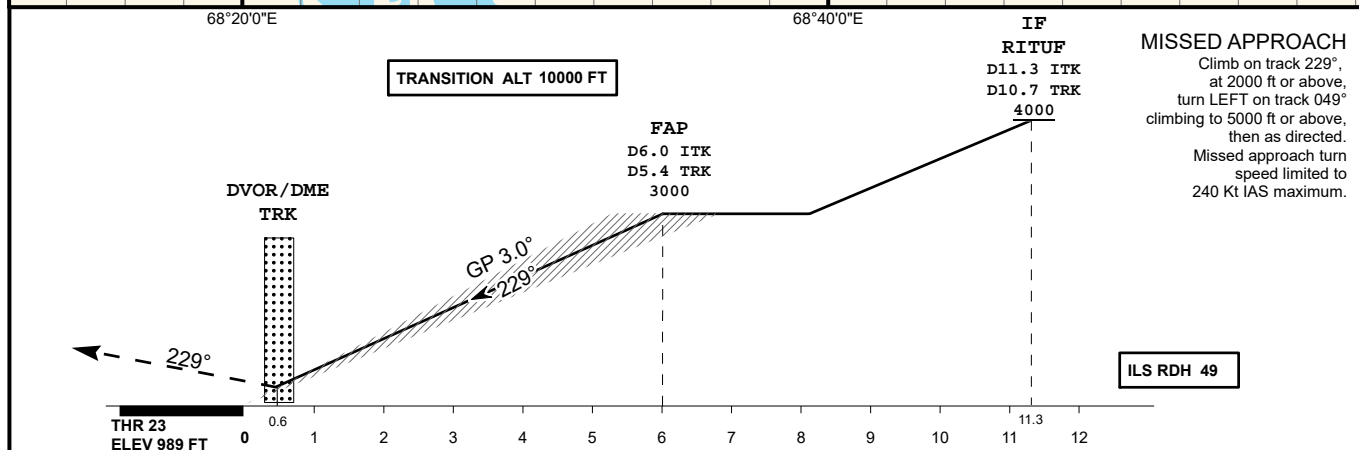
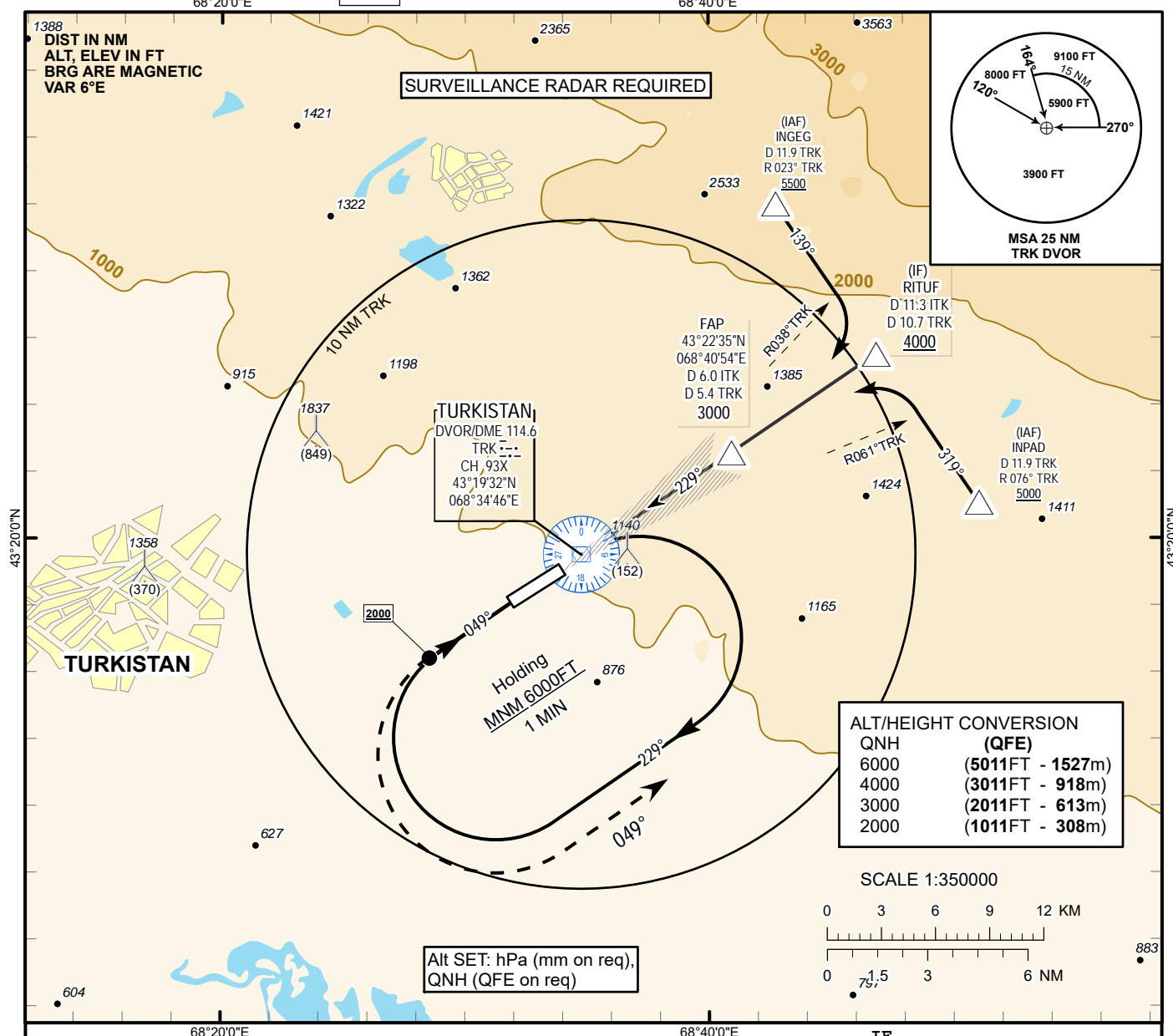
DME ITR ZERO RANGED TO THR RWY 05

Aerodrome Operating Minima DH ft x RVR(CMV)														
						GS	Kt	80	100	120	140	160	180	
						Desc.Rate(5.2%)	ft/min	420	530	640	740	840	950	

**TURKISTAN**  
**ILS/DME Y RWY05**

# AERONAUTICAL DATA TABULATION

ILS approach to RWY05 from IBROZ, DEREG, OGBEZ	
Fix/point	Coordinates
TRK DVOR/DME	43°19'32.3"N 068°34'46.1"E
DEREG (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
OGBEZ (IAF) R251°, D15.0 TRK	43°16'05.00"N 068°14'47.01"E
IBROZ (IAF) R209°, D15.0 TRK	43°7'09.8"N 068°23'06.5"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

INSTRUMENT  
APPROACH  
CHART - ICAOILS  
LLZ 111.3  
ITK  
GP 332.3  
CH 50XAERODROME ELEV **989 FT**  
HEIGHTS RELATED TO  
THR RWY 23 - ELEV **989 FT**TURKISTAN TOWER 131.3  
TURKISTAN ATIS (EN) 124.4  
TURKISTAN ATIS (RU) 118.3TURKISTAN  
ILS/DME Y  
RWY 23

Aircraft Category		A	B	C	D	DIST to THR DME ITK	NM	6.0	5.0	4.0	3.0	2.0	1.0
Straight-in Approach OCA/H	CAT I	1189(200)	1189(200)	1189(200)	1194(205)	DME TRK	NM	5.4	4.4	3.4	2.4	1.4	0.4
						ALTITUDE	FT	3000	2652	2325	2001	1678	1357
						HEIGHT	FT	2011	1663	1336	1012	689	368

DME ITK ZERO RANGED TO THR RWY 23

Aerodrome Operating Minima DH ft x RVR(CMV)						GS	Kt	80	100	120	140	160	180
						Desc.Rate(5.2%)	ft/min	420	530	640	740	840	950

CHANGE: Editorial.

TURKISTAN  
ILS/DME Y RWY23                      AERONAUTICAL DATA TABULATION

ILS approach to RWY23 from INPAD, INGEG, RITUF	
Fix/point	Coordinates
TRK DVOR/DME	43° 19' 32.3"N 068° 34' 46.1"E
RITUF (IF) D11.3 ITK, D10.7 TRK	43° 25' 33.4"N 068° 46' 54.4"E
(FAP) D6.0 ITK, D5.4 TRK	43° 22' 35.1"N 068° 40' 54.0"E
INGEG (IAF) R023°, D11.9 TRK	43° 30' 01.0"N 068° 42' 43.6"E
INPAD (IAF) R076°, D11.9 TRK	43°21'05.6"N 068°51'04.6"E
THR RWY23	43° 19' 10.27"N 068° 34' 01.98"E
ITK LLZ	43° 18' 00.6"N 068° 31' 42.1"E

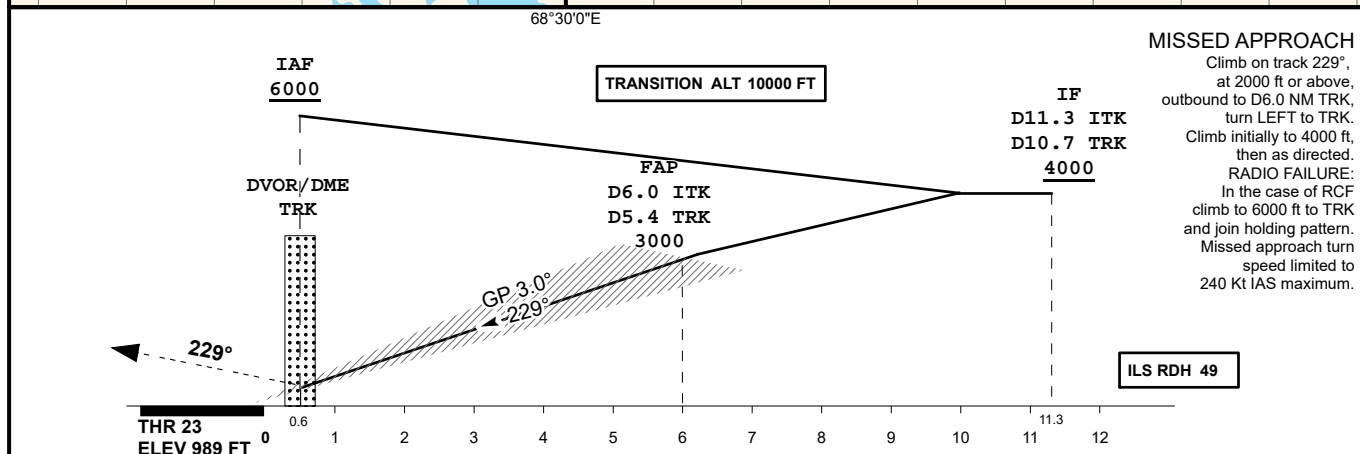
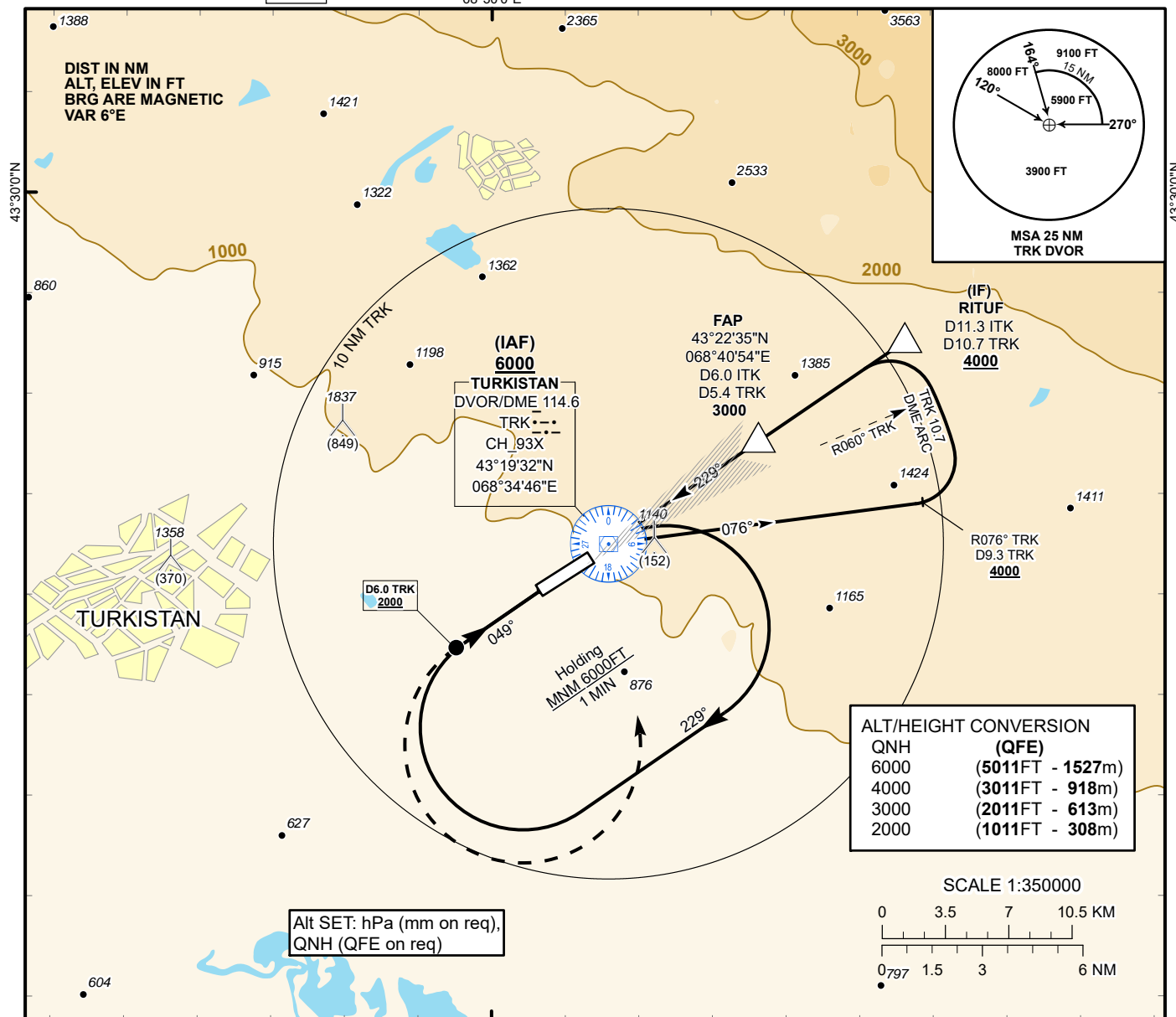
INSTRUMENT  
APPROACH  
CHART - ICAO

ILS  
LLZ 111.3  
ITK  
GP 332.3  
CH 50X

AERODROME ELEV **989 FT**  
HEIGHTS RELATED TO  
THR RWY 23 ELEV **989 FT**

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

TURKISTAN  
ILS/DME Z  
RWY 23



Aircraft Category		A	B	C	D	DIST to THR DME ITK	NM	6.0	5.0	4.0	3.0	2.0	1.0
Straight-in Approach OCA/H	CAT I	1189(200)	1189(200)	1189(200)	1194(205)	DME TRK	NM	5.4	4.4	3.4	2.4	1.4	0.4
						ALTITUDE	FT	3000	2652	2325	2001	1678	1357
						HEIGHT	FT	2011	1663	1336	1012	689	368

DME ITK ZERO RANGED TO THR RWY 23

Aerodrome Operating Minima DH ft x RVR(CMV)						GS	Kt	80	100	120	140	160	180
						Desc.Rate(5.2%)	ft/min	420	530	640	740	840	950

CHANGE: Edit.

TURKISTAN  
ILS/DME Z RWY23                      AERONAUTICAL DATA TABULATION

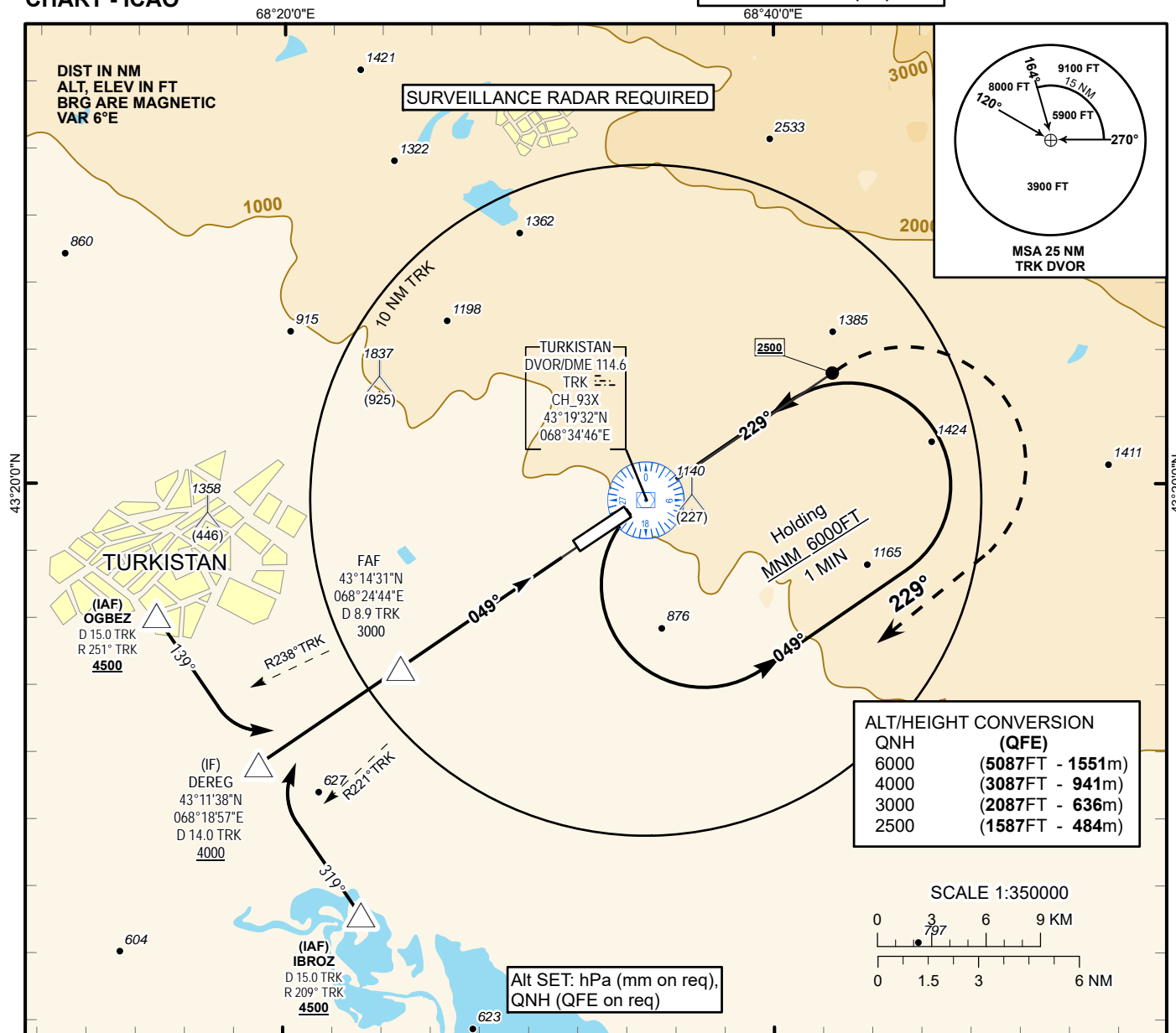
ILS approach to RWY23 from TRK DVOR/DME, RITUF	
Fix/point	Coordinates
TRK DVOR/DME	43° 19' 32.3"N 068° 34' 46.1"E
RITUF (IF) D11.3 ITK, D10.7 TRK	43° 25' 33.4"N 068° 46' 54.4"E
(FAP) D6.0 ITK, D5.4 TRK	43° 22' 35.1"N 068° 40' 54.0"E
THR RWY23	43° 19' 10.27"N 068° 34' 01.98"E
ITK LLZ	43° 18' 00.6"N 068° 31' 42.1"E

INSTRUMENT  
APPROACH  
CHART - ICAO

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  
VOR/DME Y  
RWY 05

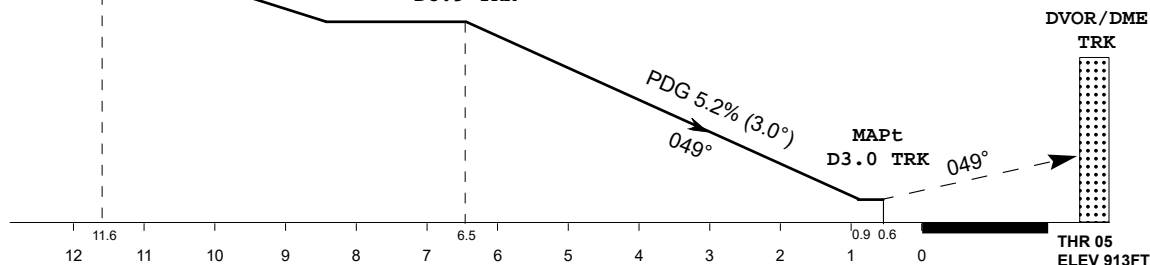


MISSED APPROACH  
Climb on track 049°,  
at 2500 ft or above,  
turn RIGHT on track 229°  
climbing to 4500 ft or above,  
then as directed.  
Missed approach turn  
speed limited to  
240 Kt IAS maximum.

IF  
DEREG  
D14.0 TRK  
**4000**

FAF  
3000  
D8.9 TRK

TRANSITION ALT 10000 FT



Aircraft Category		A	B	C	D	DIST to THR	NM	6.5	6.0	5.0	4.0	3.0	2.0	1.0
Straight-in Approach OCA/H						DME TRK	NM	8.9	8.4	7.4	6.4	5.4	4.4	3.4
	VOR/DME	1220(310)	1220(310)	1220(310)	1220(310)	ALTITUDE	FT	3000	2872	2554	2236	1917	1599	1280
						HEIGHT	FT	2087	1959	1641	1323	1004	686	367

Aerodrome Operating Minima MDH ft x RVR(CMV)					GS	Kt	80	100	120	140	160	180
					Desc Rate (5.2%)	ft/min	420	530	640	740	840	950
					FAF-MAPt	min:sec	4:25	3:32	2:57	2:31	2:12	1:58

TURKISTAN  
VOR/DME Y RWY05                      AERONAUTICAL DATA TABULATION

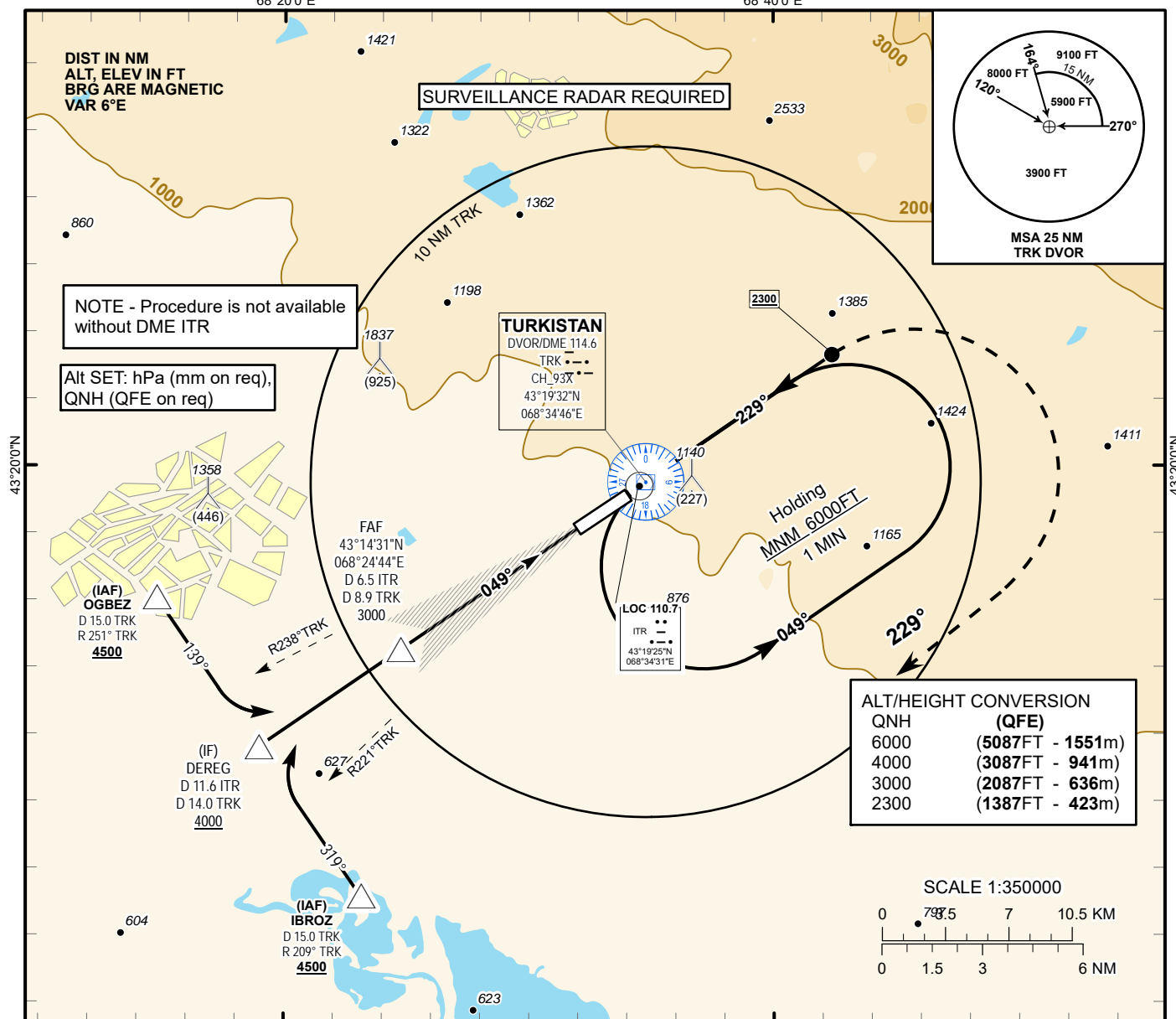
VOR approach to RWY05 from IBROZ, DEREK, OGBEZ		
Fix/point	Coordinates	
OGBEZ (IAF) R251°, D15.0 TRK	43°16'05.00"N	068°14'47.01"E
IBROZ (IAF) R209°, D15.0 TRK	43°7'09.8"N	068°23'06.5"E
DEREG (IF) D11.6 ITR, D14.0 TRK	43°11'37.5"N	068°18'57.1"E
D8.9 TRK (FAF)	43°14'31.3"N	068° 24' 43.5"E
THR RWY23	43°19'10.27"N	068° 34' 01.98"E
Final approach descent angle is 3.0°		

INSTRUMENT  
APPROACH  
CHART - ICAO

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  
LOC/DME Y  
RWY 05



**MISSED APPROACH**

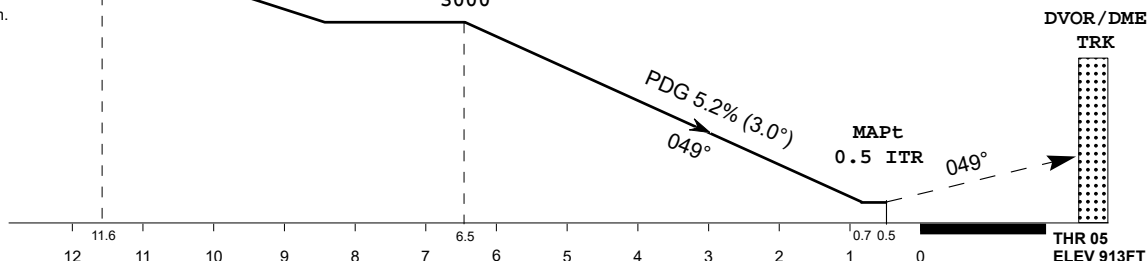
Climb on track 049°,  
at 2300 ft or above,  
turn RIGHT on track 229°  
climbing to 4500 ft or above,  
then as directed.  
Missed approach turn  
speed limited to  
240 Kt IAS maximum.

**IF**

**DEREG**  
D11.6 ITR  
D14.0 TRK  
4000

**FAF**  
D6.5 ITR  
D8.9 TRK  
3000

**TRANSITION ALT 10000 FT**

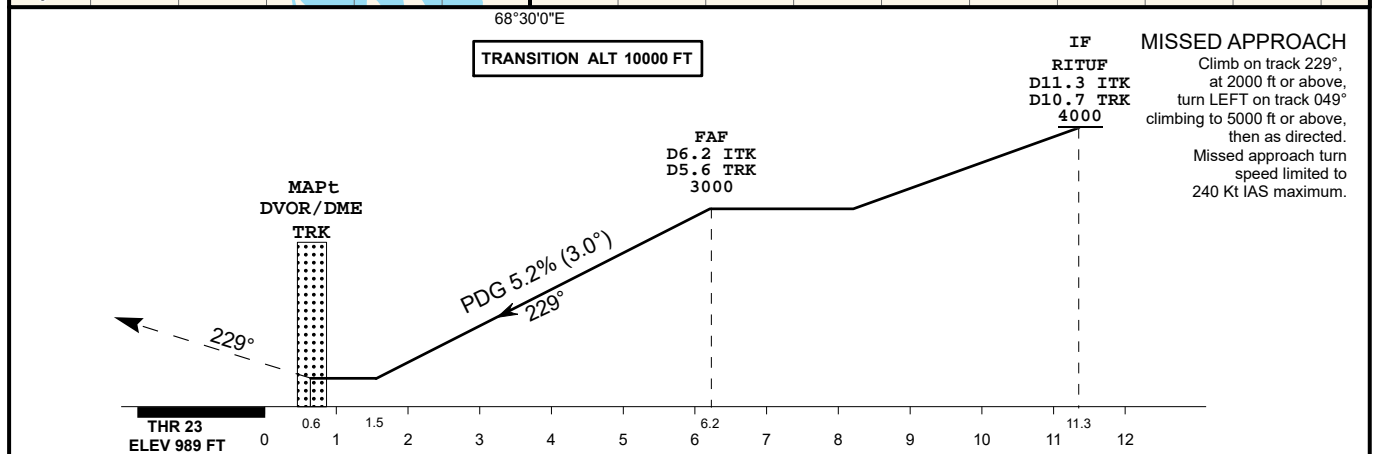
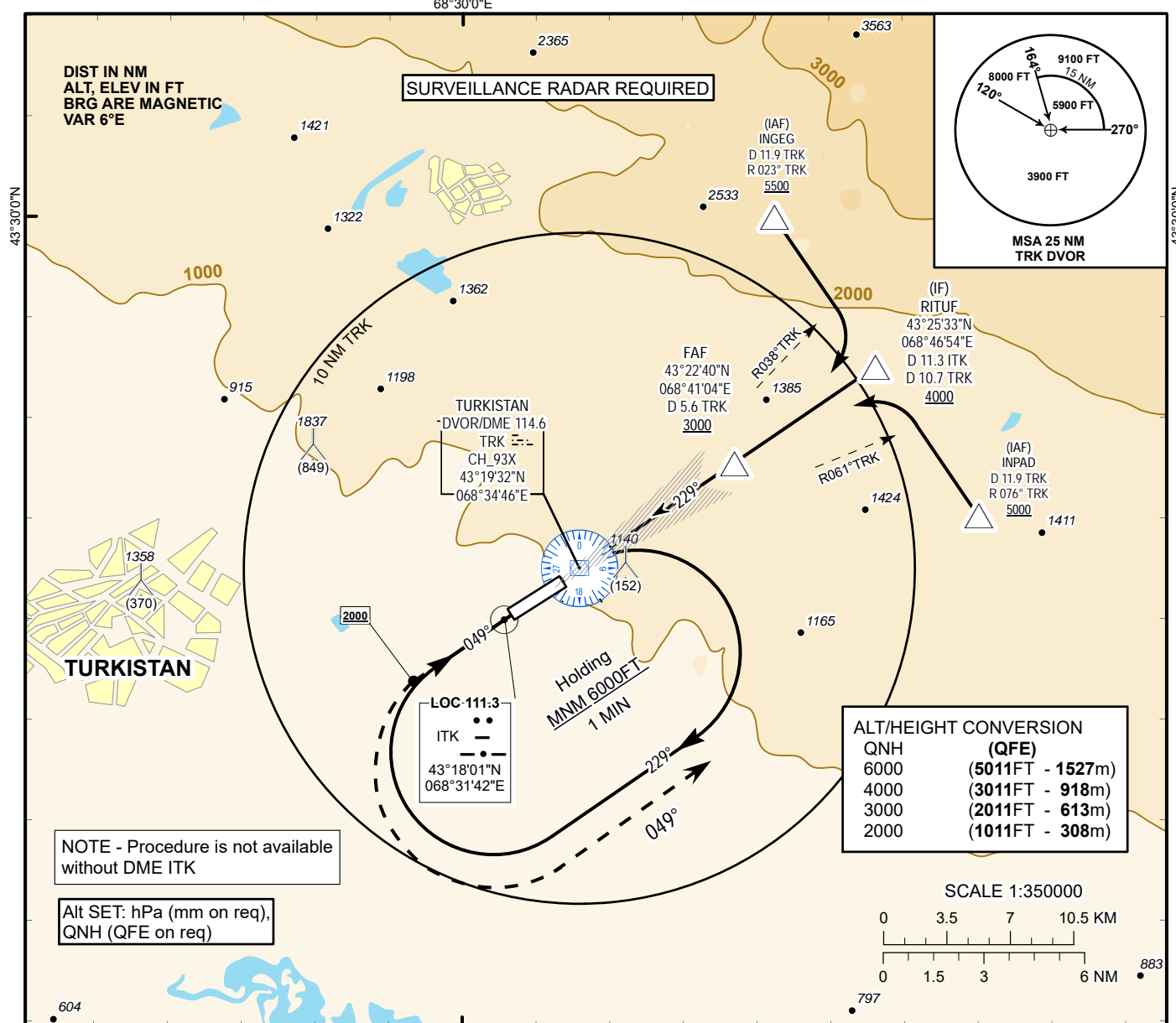


Aircraft Category		A	B	C	D	DIST to THR	NM	6.5	6.0	5.0	4.0	3.0	2.0	1.0
Straight-in Approach OCA/H						DME TRK	NM	8.9	8.4	7.4	6.4	5.4	4.4	3.4
	LLZ(GP INOP)	1180(270)				ALTITUDE	FT	3000	2872	2554	2236	1917	1599	1280
						HEIGHT	FT	2087	1959	1641	1323	1004	686	367
DME ITR ZERO RANGED TO THR RWY 05														
Aerodrome Operating Minima MDH ft x RVR(CMV)	LLZ(GP INOP)													
						GS	Kt	80	100	120	140	160	180	
						Desc.Rate (5.2%)	ft/min	420	530	640	740	840	950	
						FAF-MAPt	min:sec	4:25	3:32	2:57	2:31	2:12	1:58	

CHANGE: Editorial.

TURKISTAN  
LOC/DME Y RWY 05                      AERONAUTICAL DATA TABULATION

LOC/DME approach to RWY05 from IBROZ, DEREK, OGBEZ	
Fix/point	Coordinates
TRK DVOR/DME	43° 19' 32.3"N 068° 34' 46.1"E
OGBEZ (IAF) R251°, D15.0 TRK	43°16'05.00"N 068°14'47.01"E
IBROZ (IAF) R209°, D15.0 TRK	43°7'09.8"N 068°23'06.5"E
DEREG (IF) D11.6 ITR, D14.0 TRK	43° 11' 37.3"N 068° 18' 57.3"E
(FAF) D6.5 ITR, D8.9 TRK	43° 14' 31.2"N 068° 24' 43.7"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
Final approach descent angle is 3°	

INSTRUMENT  
APPROACH  
CHART - ICAOAERODROME ELEV **989 FT**  
HEIGHTS RELATED TO  
AD ELEVTURKISTAN TOWER 131.3  
TURKISTAN ATIS (EN) 124.4  
TURKISTAN ATIS (RU) 118.3TURKISTAN  
LOC/DME Y  
RWY 23

## MISSED APPROACH

Climb on track 229°,  
at 2000 ft or above,  
turn LEFT on track 049°  
climbing to 5000 ft or above,  
then as directed.  
Missed approach turn  
speed limited to  
240 Kt IAS maximum.

Aircraft Category		A	B	C	D	DIST to THR	NM	6.2	5.0	4.0	3.0	2.0	1.0
Straight-in Approach OCA/H						DME TRK	NM	5.6	4.4	3.4	2.4	1.4	0.4
	LLZ (GP INOP)					ALTITUDE	FT	3000	2630	2312	1993	1675	1356
						HEIGHT	FT	2011	1641	1323	1004	686	367
DME ITK ZERO RANGED TO THR RWY 23													
Aerodrome Operating Minima MDH ft x RVR(CMV)	LLZ (GP INOP)					GS	Kt	80	100	120	140	160	180
						Desc Rate (5.2%)	ft/min	420	530	640	740	840	950
						FAF-MAPt	min:sec	3:45	3:00	2:30	2:08	1:52	1:40

TURKISTAN  
LOC/DME Y RWY 23

AERONAUTICAL DATA TABULATION

LOC/DME approach to RWY23 from INGE, INPAD, RITUF	
Fix/point	Coordinates
INGE (IAF) R023°, D11.9 TRK	43° 30' 01.0"N 068° 42' 43.6"E
INPAD (IAF) R076°, D11.9 TRK	43°21'05.6"N 068°51'04.6"E
TRK DVOR/DME	43° 19' 32.3"N 068° 34' 46.1"E
RITUF (IF) D11.3 ITK, D10.7 TRK	43° 25' 33.4"N 068° 46' 54.4"E
(FAF) D6.2 ITK, D5.6 TRK	43° 22' 40.0"N 068° 41' 04.4"E
THR RWY23	43° 19' 10.27"N 068° 34' 01.98"E
ITK LLZ	43° 18' 00.6"N 068° 31' 42.1"E
Final approach descent angle is 3°	

3	Altimeter checkpoint location and elevation	Nil
4	VOR checkpoints	Nil
5	INS checkpoints	Nil
6	Remarks	Limitation of aircraft intensity ( ACN exceeds PCN) to 10 per day. MTOW, when the intensity is limited to 2 flights per day: B757 up to 102 tons; B747 up to 310 tons; B767-300 up to 145 tons; A300 up to 172,6 tons; A330 up to 212,9 tons; A321 up to 92 tons; B737 Max8 up to 85 tons When limiting intensity to 10 aircraft movements per day without weight restrictions: A-320; E190-E2. Towing of B-747, B-767, A-300, A-330, and larger aircraft using an airport tractor from the taxiway A to the main apron and back, as well as in case of exceeding the intensity specified in points 1 and 2.

**UARR 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, taxi holding positions, taxiway centre lines
3	Stop bars	Nil
4	Other runway protection measures	Nil
5	Remarks	Nil

**UARR AD 2.10 Aerodrome Obstacles**

NIL

**UARR AD 2.11 Meteorological Information Provided**

1	Associated MET Office	Meteorological service Uralsk Phone: +7 (7112) 508649
2	Hours of service MET Office outside hour	H24
3	Office responsible for TAF preparation: Periods of validity	Meteorological service Uralsk, 9HR (0009, 0312, 0615, 0918, 1221, 1524, 1803, 2106)
4	Trend forecast Interval of issuance	TREND 30 min
5	Briefing/consultation provided	Personal consultation (Russian)
6	Flight documentation/languages used	TAF, METAR, SPECI, SIGMET, GAMET, AIRMET English
7	Charts and other information AVBL for briefing or consultation	S, U85, U70, U50, U40, U30, U25, U20, prognostic charts of wind and temperature at flight levels (FL), max wind, T, prognostic charts P85, P70, P50, P40, P30, P25, P20, SWH, SWM of WAFC, SWM+SWH, SWL of Kazakhstan;

8	Supplementary equipment AVBL for providing information	Doppler weather radar (METEOR-635C)
9	ATS units provided with information	Briefing, TWR
10	Additional information	Nil

UARR AD 2.12 Runway Physical Characteristics

Designation s RWY NR	TRUE BRG	Dimensions of RWY (M)	Strength (PCN) and surface of RWY and SWY	THR coordinates RWY end coordinates THR geoid undulation	THR elevation and highest elevation of TDZ of precision APP RWY	Slope of RWY-SWY
1	2	3	4	5	6	7
04	52,01°	2799 X 45	46/R/B/W/T CONC	510839.45N 0513141.38E - -39,4 FT	THR 122.4 FT	+0,042%
22	232,04°	2799 X 45	46/R/B/W/T CONC	510935.20N 0513334.95E - -39,4 FT	THR 128.3 FT	-0,042%

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 300	3099 X 300	90 X 150	Nil	AVBL	Turn Pad LEN 170 m, the total width of the turn pad and runway 100 m. REF. AD 2.24.1
Nil	150 X 300	3099 X 300	90 X 150	Nil	AVBL	Turn Pad LEN 170 m, the total width of the turn pad and runway 100 m. REF. AD 2.24.1

UARR AD 2.13 Declared Distances

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
04	2799	2949	2799	2799	Nil
22	2799	2949	2799	2799	Nil
Turning Bay 1 - 04	2799	2949	2799	2799	Nil
Turning Bay 2 - 04	2399	2549	2399	Nil	Nil
Turning Bay 3 - 22	2399	2549	2399	Nil	Nil

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
Turning Bay 4 - 22	2799	2949	2799	2799	Nil

**UARR AD 2.14 Approach And Runway Lighting**

RWY Designator	APCH LGT type, LEN, INTST	THR LGT colour, WBAR	VASIS, (MEHT), PAPI	TDZ, LGT LEN	RWY Centre Line LGT Length, spacing, colour, INTST	RWY edge LGT LEN, spacing, colour, INTST	RWY End LGT colour, WBAR	SWY LGT LEN, colour	Remarks
1	2	3	4	5	6	7	8	9	10
04	CAT I (PALS) 900 M LIH	GRN Nil	PAPI LEFT/3°	Nil	Nil	2799m, spacing 60m, 0-2199m - white, next 600m yellow LIH	RED Nil	Nil	Nil
22	CAT I (PALS) 900 M LIH	GRN Nil	PAPI LEFT/3°	Nil	Nil	2799m, spacing 60m, 0-2199m - white, next 600m yellow LIH	RED Nil	Nil	Nil

**UARR 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: RWY04 - 250 m to ARP, RWY22 - 256 m to ARP
3	TWY edge and centre line lighting	TWY A EDGE: BLU
4	Secondary power supply/switch-over time	AVBL, 0 sec
5	Remarks	Nil

**UARR AD 2.16 Helicopter Landing Area**

1	Coordinates TLOF or THR of FATO Geoid undulation	510903N 0513235E
2	TLOF and/or FATO elevation	121.9 FT
3	TLOF and FATO area dimensions, surface, strength, marking	Square 30 x 30m conc PCN 46/R/B/W/T, no marking
4	True BRG of FATO	Direction of TKOF zones: 52.01°/232.04°
5	Declared distance available	Nil
6	APP and FATO lighting	Nil
7	Remarks	Nil

UARR AD 2.17   ATS Airspace

1	Designation and lateral limits	URALSK CTR 513201N 0514749E then a clockwise arc radius 25 NM centered on 510855N 0513238E - 513152N 0511654E along border KAZAKHSTAN_RUSSIA - 513201N 0514749E
2	Vertical limits	3000 FT ALT / GND
3	Airspace classification	C
4	ATS unit call sign Language(s)	URALSK TOWER EN URALSK VYSHKA RU
5	Transition altitude	10000 FT
6	Hours of applicability	See NOTAM
7	Remarks	Nil

UARR 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	URALSK TOWER (EN) URALSK VYSHKA (RU)	119,7 MHZ	Nil	Nil	See NOTAM	Nil
ATIS	URALSK ATIS (EN) URALSK ATIS (RU)	124,8 MHZ 134,9 MHZ	Nil	Nil	As AD	ATIS information is being updated during AD working hours. Outside AD working hours ATIS information is not updated.

UARR 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 22 I/D/4	IUR	109,7 MHZ	H24	510824.8N 0513111.5E		Nil	Nil
GP 22 I/C/4		333,2 MHZ		510925.5N 0513325.6E			
DME 22	IUR	CH 34X		510925.5N 0513325.6E	100 FT		

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

1	Apron surface and strength	STANDS		SURFACE	STRENGTH
		1, 1A, 2, 2A		CONC+ASPH	PCN 18/F/C/Y/T
2	Taxiway width, surface and strength	TWY	WIDTH (M)	SURFACE	STRENGTH
		A	16 M	CONC+ASPH	PCN 18/F/C/Y/T
		B	16 M	CONC+ASPH	PCN 18/F/C/Y/T
3	Altimeter checkpoint location and elevation	Nil			
4	VOR checkpoints	Nil			
5	INS checkpoints	Nil			
6	Remarks	Nil			

**UASU AD 2.9 Surface Movement Guidance And Control System And Markings**

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

**UASU AD 2.10 Aerodrome Obstacles**

NIL

**UASU AD 2.11 Meteorological Information Provided**

1	Associated MET Office	Weather station Urdzhar Phone: +7 (72230) 20137
2	Hours of service MET Office outside hour	HO
3	Office responsible for TAF preparation: Periods of validity	Meteorological service Semey, 06 HR (0006, 0309, 0612, 0915)
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	Nil
8	Supplementary equipment AVBL for providing information	Nil
9	ATS units provided with information	APP "Urdzhar-TWR", ATS UASK
10	Additional information	Nil

UASU AD 2.12 Runway Physical Characteristics

Designation s RWY NR	TRUE BRG	Dimensions of RWY (M)	Strength (PCN) and surface of RWY and SWY	THR coordinates RWY end coordinates THR geoid undulation	THR elevation and highest elevation of TDZ of precision APP RWY	Slope of RWY-SWY
1	2	3	4	5	6	7
07	71.95°	2100 X 35	18/F/C/Y/T CONC+ASPH	470520.15N 0813919.04E - --160 FT	THR 1629.0 FT	THR 07 - 0.0114 THR 25 - 0.0114
25	251.97°	2100 X 35	18/F/C/Y/T CONC+ASPH	470541.22N 0814053.75E - -160 FT	THR 1702.0 FT	

SWY dimensions (M)	CWY dimensions (M)	Strip dimensions (M)	RESA dimensions (M)	Location and description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
Nil	Nil	2400 X 300	90 X 150	Nil	Nil	Turn Pad LEN 100 m, the total width of the turn pad runway 45 m. REF AD 2.12
Nil	250 X 150	2400 X 300	90 X 150	Nil	Nil	Turn Pad LEN 100 m, the total width of the turn pad runway 45 m. REF AD 2.12

UASU AD 2.13 Declared Distances

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
07	2100	2100	2100	2100	Nil
25	2100	2350	2100	2100	Nil

UASU AD 2.14 Approach And Runway Lighting

NIL

UASU AD 2.15 Other Lighting, Secondary Power Supply

NIL

**UASU AD 2.16 Helicopter Landing Area**

NIL

**UASU AD 2.17 ATS Airspace**

1	Designation and lateral limits	URDZHAR CTR 471426N 0814337E - 470321N 0815415E - 464804N 0811427E - 465859N 0810353E - 471426N 0814337E
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 surveillance is not provided in the aerodrome area. Within the area of responsibility of the Aerodrome Control Tower, only one IFR aircraft shall be permitted at any one time.

**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**

Helipad Urdzhar-Zapadny installed 400m west from THR RWY 07 and 100m south from RWY centerline for TKOF/LDG and parking helicopters for SAR support. Dimensions: 100m x 60m.

**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

**UASU 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	There is an Equivalent Flight Safety Level due to deviations from the requirements of the Civil Aviation Aerodrome (Heliport) Operating Standards at the Urdjar aerodrome regarding the Non-Governmental Fire Protection Service, approved on November 22, 2023.	Nil

**2. Ornithological situation**

The ornithological situation in the aerodrome area is conditioned by seasonal and daily bird migration. Dangers are black crow, jackdaws, doves, hawks, kites. The activity of birds is observed in the morning from 06:00 to 09:00 and in the evening from 18:00 to 21:00 (local time). In these periods pilots are recommended to switch on landing lights during a flight in the aerodrome area, during takeoff, landing approach, and when climbing and descending, taking off and landing by ATIS or from Almaty TWR.

**UASU AD 2.24 Charts Related To An Aerodrome**

Name	Page
Aerodrome Chart ICAO	UASU AD 2.24.1-1
Aerodrome Ground Movement and Parking Chart ICAO	UASU AD 2.24.3-1
Area Chart - ICAO	UASU AD 2.24.6-1
Standard Departure Chart Instrument (SID) - RWY 07 ICAO	UASU AD 2.24.7-1-1
Standard Departure Chart Instrument (SID) - RWY 25 ICAO	UASU AD 2.24.7-2-1
Standard Departure Chart Instrument (SID) - RNP RWY 07 ICAO	UASU AD 2.24.7-3-1
Standard Departure Chart Instrument (SID) - RNP RWY 25 ICAO	UASU AD 2.24.7-4-1
Standard Arrival Chart Instrument (STAR) - RWY 07 ICAO	UASU AD 2.24.9-1-1
Standard Arrival Chart Instrument (STAR) - RNP RWY 07 ICAO	UASU AD 2.24.9-3-1
Instrument Approach Chart - NDB RWY 07 ICAO	UASU AD 2.24.11-1-1
Instrument Approach Chart - RNP RWY 07 ICAO	UASU AD 2.24.11-2-1
Visual Approach chart – ICAO	UASU AD 2.24.12-1
VFR Departure/Arrival Chart	UASU AD 2.24.14-1

**UASU AD 2.25 Visual segment surface (VSS) penetrations**

No penetrations

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STANDARD DEPARTURE  
CHART- INSTRUMENT  
(SID) - ICAO

TRANSITION ALTITUDE  
10000 FT

URDZHAR TOWER 123.0

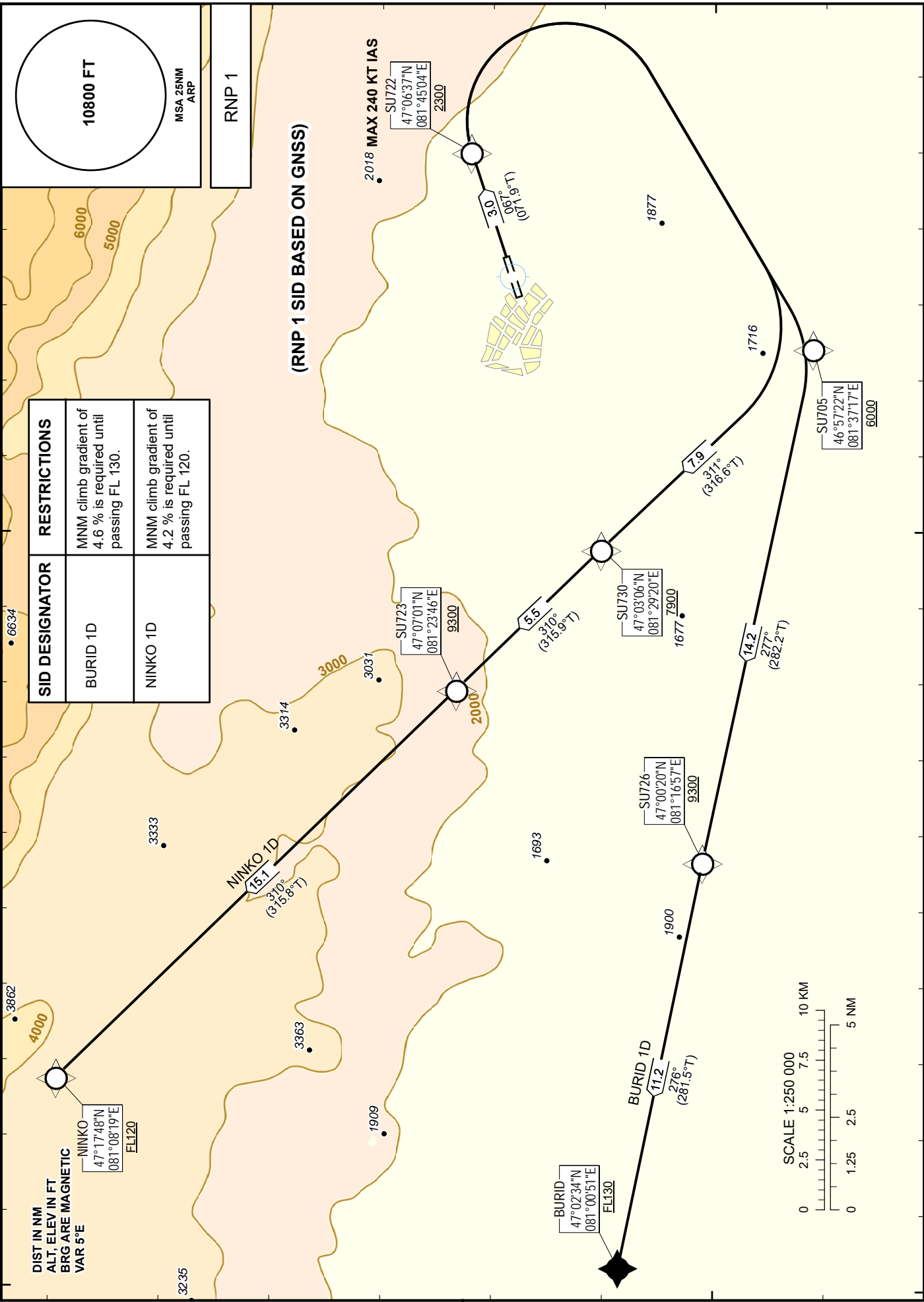
BURID 1D, NINKO 1D

URDZHAR  
RWY 07

CHANGE: New chart.

KAZAERONAVIGATSIA

AIRAC AMDT 011/2025



TABULAR DESCRIPTION

BURID 1D RWY07											
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	CF	SU722	Y	067(071.9)	+5.4	3.0	-	+2300	-240	-	RNP 1
020	DF	SU705	-	-	+5.4	-	R	+6000	-	-	RNP 1
030	TF	SU726	-	277(282.2)	+5.4	14.2	-	+9300	-	-	RNP 1
040	TF	BURID	-	276(281.5)	+5.4	11.2	-	+FL130	-	-	RNP 1

NINKO 1D RWY07											
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	CF	SU722	Y	067(071.9)	+5.4	3.0	-	+2300	-240	-	RNP 1
020	DF	SU705	-	-	+5.4	-	R	+6000	-	-	RNP 1
030	TF	SU730	-	311(316.6)	+5.4	7.9	R	+7900	-	-	RNP 1
040	TF	SU723	-	310(315.9)	+5.4	5.5	-	+9300	-	-	RNP 1
050	TF	NINKO	-	310(315.8)	+5.4	15.1	-	+FL120	-	-	RNP 1

WAYPOINT COORDINATES

Waypoint Identifier	Coordinates	
BURID	470234.00N	0810051.00E
DER	470541.21N	0814053.71E
NINKO	471748.00N	0810819.00E
SU705	465722.17N	0813716.69E
SU722	470636.91N	0814504.37E
SU723	470700.98N	0812345.88E
SU726	470020.39N	0811657.49E
SU730	470306.28N	0812919.80E

STANDARD DEPARTURE  
CHART- INSTRUMENT  
(SID) - ICAO

TRANSITION ALTITUDE  
10000 FT

URDZHAR TOWER 123.0

BURID 1E, NINKO 1E

URDZHAR  
RWY 25

CHANGE: New chart.

DIST IN NM  
ALT, ELEV IN FT  
BRG ARE MAGNETIC  
VAR 5°E

SID DESIGNATOR

RESTRICTIONS

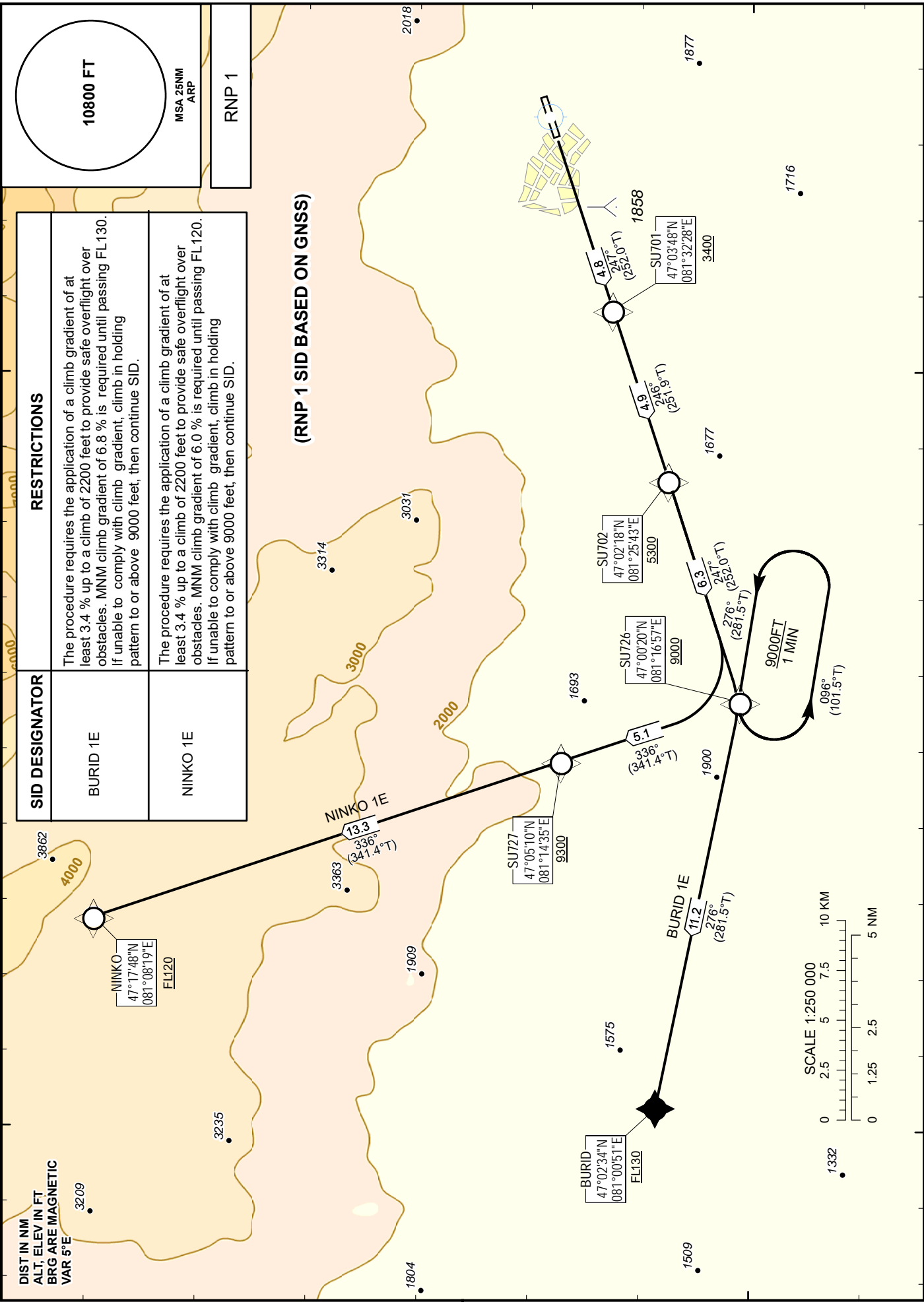
BURID 1E  
The procedure requires the application of a climb gradient of at least 3.4 % up to a climb of 2200 feet to provide safe overflight over obstacles. MNM climb gradient of 6.8 % is required until passing FL130. If unable to comply with climb gradient, climb in holding pattern to or above 9000 feet, then continue SID.

NINKO 1E  
The procedure requires the application of a climb gradient of at least 3.4 % up to a climb of 2200 feet to provide safe overflight over obstacles. MNM climb gradient of 6.0 % is required until passing FL120. If unable to comply with climb gradient, climb in holding pattern to or above 9000 feet, then continue SID.

10800 FT  
MSA 25NM  
ARP

RNP 1

(RNP 1 SID BASED ON GNSS)



TABULAR DESCRIPTION

BURID 1E RWY25											
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	CF	SU701	-	247(252.0)	+5.4	4.8	-	+3400	-	-	RNP 1
020	TF	SU702	-	246(251.9)	+5.4	4.9	-	+5300	-	-	RNP 1
030	TF	SU726	-	247(252.0)	+5.4	6.3	-	+9000	-	-	RNP 1
040	HM	SU726	-	276(281.5)	+5.4	5.0	L	+9000	-	-	RNP 1
050	TF	BURID	-	276(281.5)	+5.4	11.2	-	+FL130	-	-	RNP 1

NINKO 1E RWY25											
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	CF	SU701	-	247(252.0)	+5.4	4.8	-	+3400	-	-	RNP 1
020	TF	SU702	-	246(251.9)	+5.4	4.9	-	+5300	-	-	RNP 1
030	TF	SU726	-	247(252.0)	+5.4	6.3	-	+9000	-	-	RNP 1
040	HM	SU726	-	276(281.5)	+5.4	5.0	L	+9000	-	-	RNP 1
050	TF	SU727	-	336(341.4)	+5.4	5.1	-	+9300	-	-	RNP 1
060	TF	NINKO	-	336(341.4)	+5.4	13.3	-	+FL120	-	-	RNP 1

WAYPOINT COORDINATES

Waypoint Identifier	Coordinates	
DER	470517.65N	0813907.80E
SU701	470348.38N	0813227.89E
SU702	470217.52N	0812542.98E
SU726	470020.39N	0811657.49E
SU727	470510.34N	0811434.59E
BURID	470234.00N	0810051.00E
NINKO	471748.00N	0810819.00E

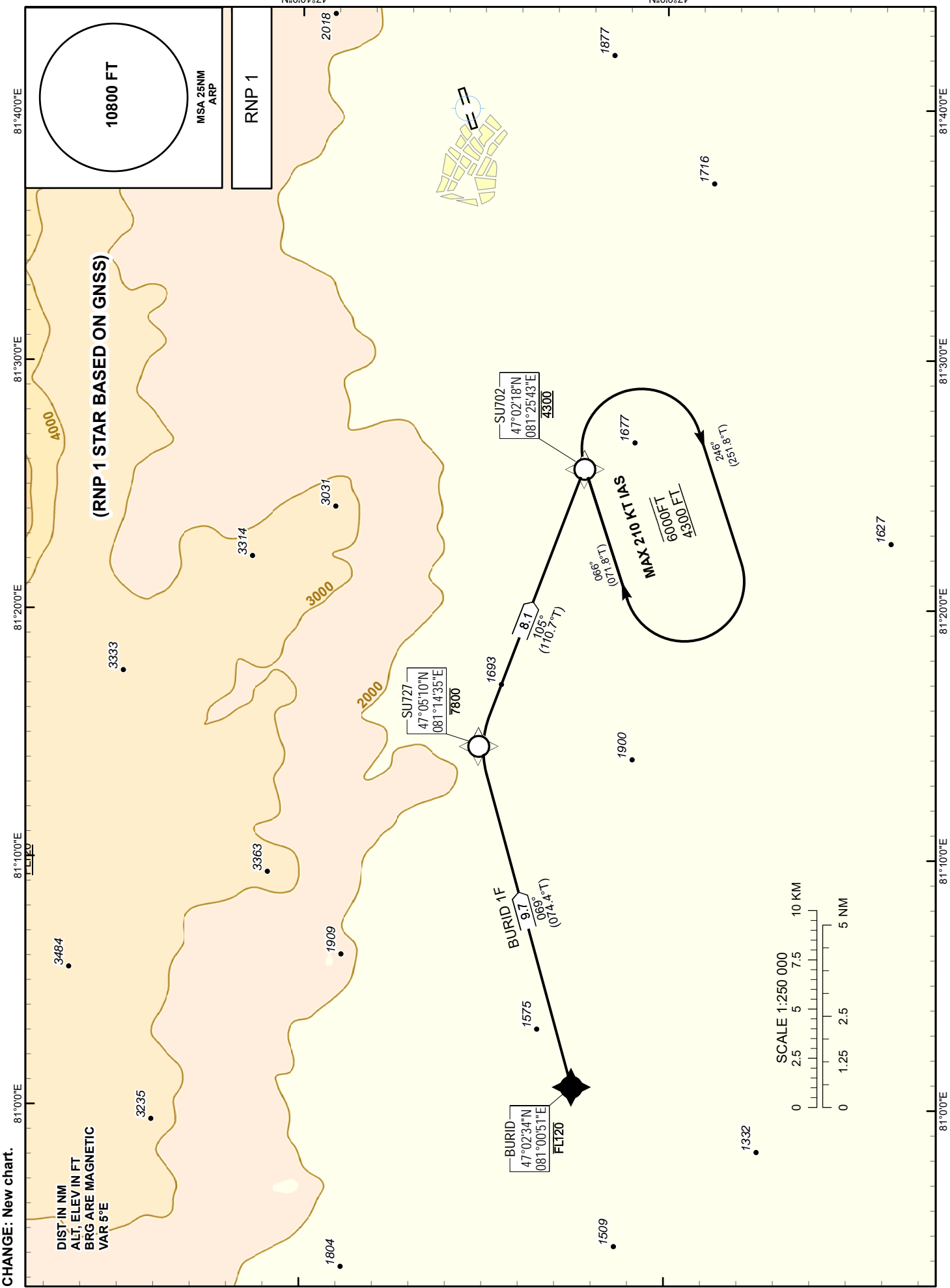
STANDARD ARRIVAL  
CHART - INSTRUMENT  
(STAR) - ICAO

TRANSITION ALTITUDE  
10000 FT

URDZHAR TOWER 123.0

BURID 1F

URDZHAR  
RWY 07



TABULAR DESCRIPTION

BURID1F RWY07											
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	BURID	-	-	+5.4	-	-	-FL120	-	-	RNP 1
020	TF	SU727	-	069(074.4)	+5.4	9.7	-	-7800	-	-	RNP 1
030	TF	SU702	-	105(110.7)	+5.4	8.1	R	@4300	-	-	RNP 1
040	HM	SU702	-	066(071.8)	+5.4	5.0	R	+4300/-6000	-210	-	RNP 1

WAYPOINT COORDINATES

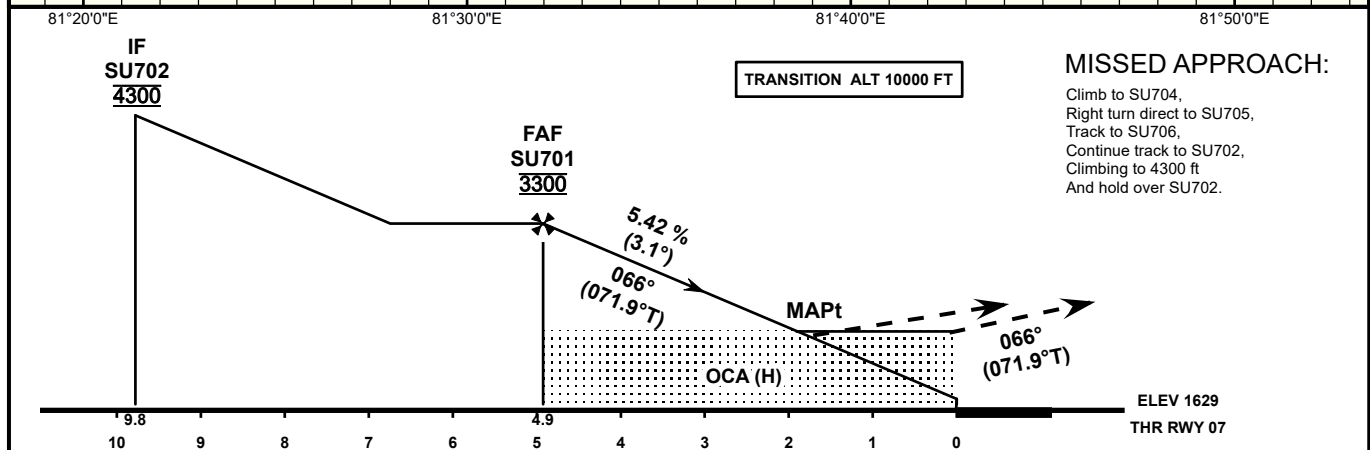
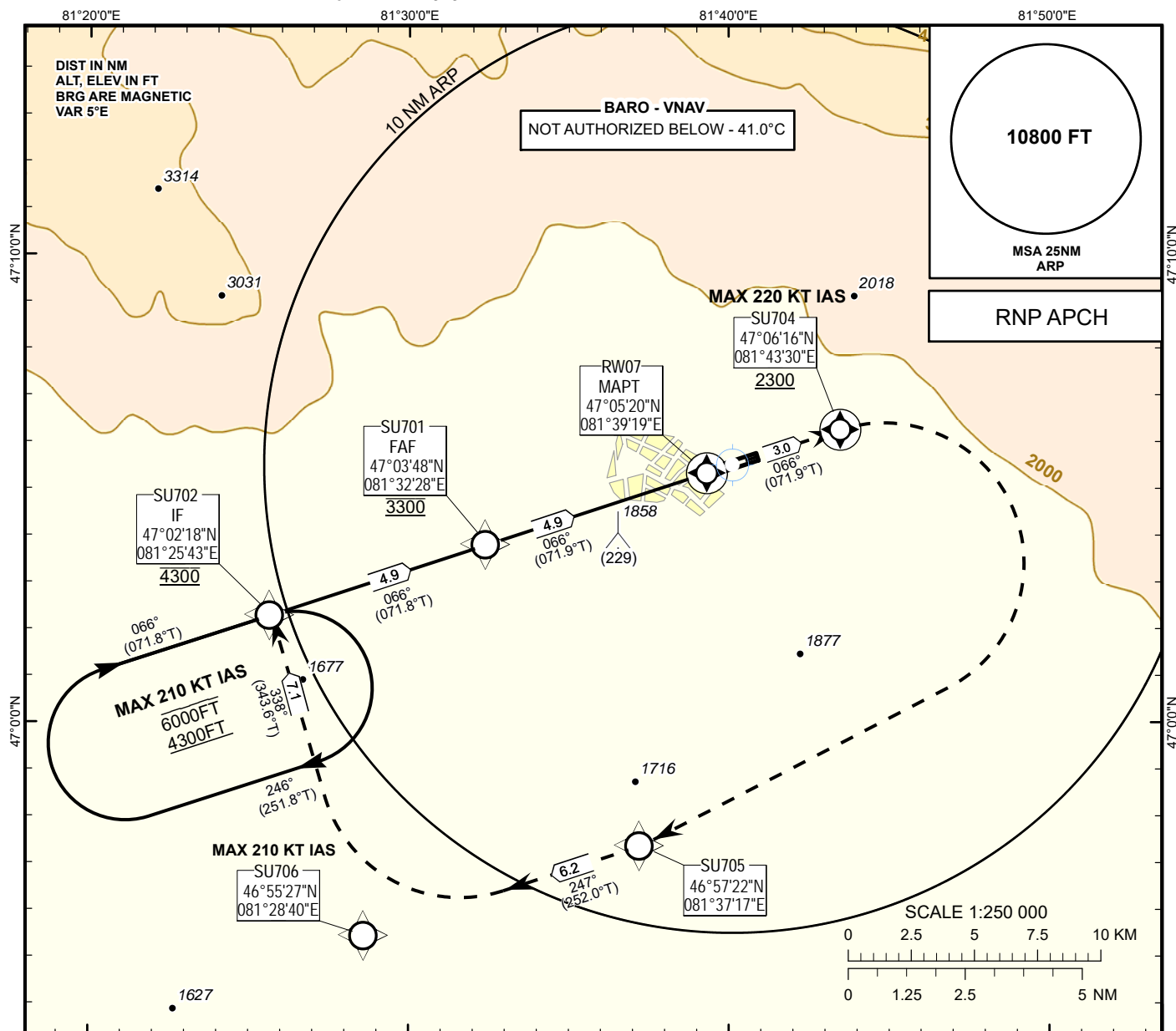
Waypoint Identifier	Coordinates	
BURID	470234.00N	0810051.00E
SU702	470217.52N	0812542.98E
SU727	470510.34N	0811434.59E

INSTRUMENT  
APPROACH  
CHART - ICAO

AERODROME ELEV **1702FT**  
HEIGHTS RELATED TO  
THR RWY 07 - ELEV **1629FT**

URDZHAR TOWER 123.0

URDZHAR  
RNP RWY 07



MISSED APPROACH:

Climb to SU704,  
Right turn direct to SU705,  
Track to SU706,  
Continue track to SU702,  
Climbing to 4300 ft  
And hold over SU702.

OCA(OCH)		A	B	C
Straight	LNAV	2110(480)		
	LNAV/VNAV	1990(361)	2000(371)	2010(381)

DIST THR	4	3	2	1
ALTITUDE	3000	2670	2340	2010
HEIGHT	1371	1041	711	381

GS	kt	80	100	120	140	160	180
Rate of descent	ft/min	440	450	660	770	880	990
FAF/FAP - THR (4.9 NM)	min:s	3:42	2:57	2:28	2:07	1:51	1:39

CHANGE: New chart.

TABULAR DESCRIPTION

RNP RWY07											
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	-	-	-	+5.4	-	-	@4300	-	-	RNP APCH
020	TF	SU701	-	066(071.8)	+5.4	4.9	-	@3300	-	-	RNP APCH
030	TF	RW07	Y	066(071.9)	+5.4	4.9	-	@1678	-	-3.1	RNP APCH
040	CF	SU704	Y	066(071.9)	+5.4	3.0	-	+2300	-220	+1.4	RNP APCH
050	DF	SU705	-	-	+5.4	-	R	-	-	+1.4	RNP APCH
060	TF	SU706	-	247(252.0)	+5.4	6.2	R	-	-210	+1.4	RNP APCH
070	TF	SU702	-	338(343.6)	+5.4	7.1	R	@4300	-210	+1.4	RNP APCH
080	HM	SU702		066(071.8)	+5.4	5.0	R	+4300/-6000	-210		RNP APCH

WAYPOINT COORDINATES

RNP RWY07			
Waypoint Identifier		Coordinates	
SU701		470348.38N	0813227.89E
SU702		470217.52N	0812542.98E
RW07		470520.15N	0813919.04E
SU704		470615.85N	0814329.66E
SU705		465722.17N	0813716.69E
SU706		465526.83N	0812839.99E

5	INS checkpoints	Nil
6	Remarks	TWY 2, 4 - Used only by state aviation

**UAAL AD 2.9 Surface Movement Guidance And Control System And Markings**

1	Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands	Guidance sign board at entrance of RWYs, guidance sign designating taxiways
2	RWY and TWY markings and LGT	RWY-09/27 Designation of threshold, touchdown, RWY designation
3	<b>Stop bars</b>	Nil
4	<b>Other runway protection measures</b>	Nil
5	Remarks	Nil

**UAAL AD 2.10 Aerodrome Obstacles**

NIL

**UAAL AD 2.11 Meteorological Information Provided**

1	Associated MET Office	Meteorological service Usharal Phone: +7 (72833) 34810
2	Hours of service MET Office outside hour	HO
3	Office responsible for TAF preparation: Periods of validity	Meteorological service Taldykorgan, 9 HR (0209, 0312, 0615, 0918)
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	Nil
8	Supplementary equipment AVBL for providing information	Nil
9	ATS units provided with information	TWR
10	Additional information	Nil

UAAL 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
09	97.52°	2700 X 45	45/R/A/X/T CONC	461132.67N 0804844.77E - -166 FT	THR 1295 FT	Nil
27	277.54°	2700 X 45	45/R/A/X/T CONC	461121.21N 0805049.65E - -166 FT	THR 1268 FT	Nil

SWY dimensions (M)	CWY dimensions (M)	Strip dimensions (M)	RESA dimensions (M)	Location and description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
400 X 49	400 X 150	3800 X 300	90 X 150	Nil	Nil	Turn Pad LEN 115 m, the total of the turn pad runway 77.5 m. REF AD 2.12.14
400 X 49	400 X 150	3800 X 300	90 X 150	Nil	Nil	The runway turn area is adjacent to taxiway 5 REF AD 2.12.14

UAAL AD 2.13 Declared Distances

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
09	2700	3100	3100	2700	Nil
27	2700	3100	3100	2700	Nil

UAAL AD 2.14 Approach And Runway Lighting  
NIL

**UAAL AD 2.15 Other Lighting, Secondary Power Supply**

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

**UAAL AD 2.16 Helicopter Landing Area**

NIL

**UAAL AD 2.17 ATS Airspace**

1	<b>Designation and lateral limits</b>	USHARAL CTR 461929N 0803034E - 461541N 0811131E - 460413N 0810915E - 460437N 0810210E - 460436N 0804815E - 460638N 0804005E - 460749N 0802823E - 461929N 0803034E
2	<b>Vertical limits</b>	5000 FT ALT / GND
3	<b>Airspace classification</b>	C
4	<b>ATS unit call sign Language(s)</b>	USHARAL TOWER (EN) USHARAL VYSHKA (RU)
5	<b>Transition altitude</b>	10000 FT
6	<b>Hours of applicability</b>	See NOTAM
7	<b>Remarks</b>	Radar service in the aerodrome area is not provided. In the CTR simultaneously must be no more than one aircraft. In the TMA for IFR flights at the same level (altitude) must be no more than one aircraft

**UAAL 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	USHARAL TOWER (EN) USHARAL VYSHKA (RU)	118.1 MHZ	Nil	Nil	See NOTAM	Nil

## UAAL 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	Frequenc y, Channel number	Hours of operatio n	Position of transmitting antenna coordinates	Elevati on of DME transmi tting antenn a	Service volume radius from the GBAS referenc e point	Re mar ks
1	2	3	4	5	6	7	8
NDB LMM 27	R	380 KHZ	H24	461117.2N 0805133.3E	Nil	Nil	Nil
NDB LMM 09	Ш	380 KHZ	H24	461135.8N 0804811.3E	Nil	Nil	Nil

## UAAL AD 2.20 Local Aerodrome Regulations

NIL

## UAAL AD 2.21 Noise Abatement Procedures

NIL

## UAAL AD 2.22 Flight Procedures

### 1. VFR procedures within the aerodrome control zone (CTR)

All VFR flights within the boundaries of the control zone carried out at an absolute altitude of not more than 5000 feet, unless otherwise authorized by the air traffic controller of the «Tower» ATC unit.

Absolute flight altitudes are assigned by the air traffic controller of the «Tower» ATC unit without taking into account artificial obstacles. Aircraft crews are responsible for avoiding artificial obstacles. At Usharal aerodrome, the flight circle (left / right) and 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, flight circle (left/right), and absolute altitude to be used are determined and reported to the aircraft crew by the air traffic controller of the «Tower» ATC unit. Access to the landing straight, crossing the runway alignment is made only with the permission of the air traffic controller of the «Tower» ATC unit

Transit flights according to VFR through the Usharal controlled zone carried out along the air route through visual reference points and at an altitude agreed with the air traffic controller of the «Tower» ATC unit.

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

### Visual Reference Points of VFR flights within Usharal CTR

№	Name	Type	Location	Geographic coordinates
1	BRAVO	waypoint	Bend of a road	461828N 0804129E
2	OSCAR	waypoint	Single building, North of the railway	461705N 0805625E
3	ALPHA	holding	Intersection of the road A-3 (A-350) and a network of riverbeds, North of the settlement Zhanama	461451N 0804938E
4	MIKE	holding	Intersection of a road and the river Tentek, North of the meander (bend)	461423N 0805444E
5	ECHO	holding	Section of the river Shinzhily, South of the settlement Enbekshi	460858N 0804256E

No	Name	Type	Location	Geographic coordinates
6	KILO	holding	Road junction, West of the settlement Karabulak	460817N 0804909E
7	DELTA	waypoint	Single non-residential building, West of the riverbed Shinzhily	460640N 0803945E
8	LIMA	waypoint	Section of a dry riverbed, East of the road A-3 (A-350)	460444N 0804742E
9	TANGO	waypoint	Section of the river Tentek, Northwest of the settlement Yntaly	460437N 0810120E

**UAAL 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

**UAAL AD 2.24 Charts Related To An Aerodrome**

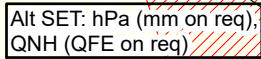
Name	Page
Aerodrome Chart ICAO	UAAL AD 2.24.1-1
Aerodrome Ground Movement and Parking Chart ICAO	UAAL AD 2.24.3-1
Area Chart ICAO	UAAL AD 2.24.6-1
Standard Departure Chart Instrument (SID) RWY 09 ICAO	UAAL AD 2.24.7-1-1
Standard Departure Chart Instrument (SID) RWY 27 ICAO	UAAL AD 2.24.7-2-1
Standard Departure Chart Instrument (SID) RNP RWY 09 ICAO	UAAL AD 2.24.7-3-1
Standard Departure Chart Instrument (SID) RNP RWY 27 ICAO	UAAL AD 2.24.7-4-1
Standard Arrival Chart Instrument (STAR) RWY 09 ICAO	UAAL AD 2.24.9-1-1
Standard Arrival Chart Instrument (STAR) RWY 27 ICAO	UAAL AD 2.24.9-2-1
Standard Arrival Chart Instrument (STAR) RNP RWY 09 ICAO	UAAL AD 2.24.9-3-1
Standard Arrival Chart Instrument (STAR) RNP RWY 27 ICAO	UAAL AD 2.24.9-4-1
Instrument Approach Chart – NDB - Y RWY 09	UAAL AD 2.24.11-1-1
Instrument Approach Chart – NDB - Y RWY 27 ICAO	UAAL AD 2.24.11-2-1
Instrument Approach Chart – NDB - Z RWY 09	UAAL AD 2.24.11-3-1
Instrument Approach Chart – NDB - Z RWY 27 ICAO	UAAL AD 2.24.11-4-1
Instrument Approach Chart – RNP RWY 09 ICAO	UAAL AD 2.24.11-5-1
Instrument Approach Chart – RNP RWY 27 ICAO	UAAL AD 2.24.11-6-1
Visual Approach chart – ICAO	UAAL AD 2.24.12-1
VFR Departure/Arrival Chart	UAAL AD 2.24.14-1

**UAAL AD 2.25 Visual segment surface (VSS) penetrations**

No penetrations

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**UST-KAMENOGORSK**  
**ILS/DME**  
**RWY 30**



ELEV 942  
THR RWY 30

DME ISI ZERO RANGED TO THR RWY 30

Aerodrome Operating Minima DH ft x RVR (CMV)	ILS CAT I					<b>WARNING</b> 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

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

**UAKD AD 2**

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

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

UAKD - ZHEZKAZGAN

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

1	ARP coordinates and site at AD	474233N 0674418E At the centre of RWY
2	Direction and distance from (city)	170°, 5.9 NM of Zhezkazgan center
3	Elevation/Reference temperature	1251 FT/30° C
4	Geoid undulation at AD ELEV PSN	-115 FT
5	MAG VAR/Annual Change	9° E ( 2023 ) / 0.03°
6	AD Administration, address, telephone, telefax, telex, AFS	Post: Authority of Airport 100600 Zhezkazgan, JSC Aircompany "Zhezkazgan Air" Republic of Kazakhstan  Phone: +7 (7102) 745750 AFS: UAKDKOXX Email: zhezair3@mail.ru
7	Types of traffic permitted (IFR/VFR)	IFR-VFR
8	Remarks	Nil

**UAKD AD 2.3 Operational Hours**

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

#### UAKD AD 2.4 Handling Services And Facilities

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

#### UAKD AD 2.5 Passenger Facilities

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

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

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

#### UAKD AD 2.7 Seasonal Availability - Clearing

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

## UAKD AD 2.14 Approach And Runway Lighting

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

## UAKD AD 2.15 Other Lighting, Secondary Power Supply

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

## UAKD AD 2.16 Helicopter Landing Area

NIL

## UAKD AD 2.17 ATS Airspace

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

UAKD AD 2.18   ATS Communication Facilities

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

UAKD AD 2.19   Radio Navigation And Landing Aids

Type of aid, MAG VAR, ILS Classification, Type of supported OP (for VOR/ILS/MLS, give declination)	ID	Frequency, Channel number	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Service volume radius from the GBAS reference point	Remarks
1	2	3	4	5	6	7	8
NDB LMM 04	ZN	355 KHZ	H24	474148.7N 0674256.9E	Nil	Nil	Nil
NDB LOM 04	ZKN	435 KHZ	H24	474048.7N 0674104.5E	Nil	Nil	Nil
DVOR/DME (9°E/2023)	DZG	113.3 MHz CH 80X	H24	474317.1N 0674541.7E	1300 FT	Nil	Nil
ILS LOC 22 I/D/2	IGN	110.7 MHz	H24	474150.6N 0674259.2E	1200 FT	Nil	Nil
GP 22 I/C/2		330.2 MHz		474248.6N 0674502.2E			
DME 22	IGN	CH 44X		474248.6N 0674502.2E			

**UAKD AD 2.24 Charts Related To An Aerodrome**

Name	Page
Aerodrome Chart ICAO	UAKD AD 2.24.1-1
Aerodrome Ground Movement and Parking Chart ICAO	UAKD AD 2.24.3-1
Aerodrome Obstacle Chart – ICAO – Type A	UAKD AD 2.24.4-1
Standard Departure Chart Instrument (SID) RWY 04 ICAO	UAKD AD 2.24.7-1-1
Standard Departure Chart Instrument (SID) RWY 22 ICAO	UAKD AD 2.24.7-2-1
Standard Departure Chart Instrument (SID) RWY 04 ICAO	UAKD AD 2.24.7-3-1
Standard Departure Chart Instrument (SID) RWY 22 ICAO	UAKD AD 2.24.7-4-1
Standard Departure Chart Instrument (SID) RNAV RWY 04 ICAO	UAKD AD 2.24.7-5-1
Standard Departure Chart Instrument (SID) RNAV RWY 22 ICAO	UAKD AD 2.24.7-6-1
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
Standard Arrival Chart Instrument (STAR) RNAV RWY 04 ICAO	UAKD AD 2.24.9-5-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 22 ICAO	UAKD AD 2.24.9-6-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 22 ICAO	UAKD AD 2.24.9-7-1
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
Instrument Approach Chart – RNP RWY 04 ICAO	UAKD AD 2.24.11-9-1
Instrument Approach Chart – RNP RWY 22 ICAO	UAKD AD 2.24.11-10-1
Visual Approach chart – ICAO	UAKD AD 2.24.12-1
VFR Departure/Arrival Chart	UAKD AD 2.24.14-1

**UAKD AD 2.25 Visual segment surface (VSS) penetrations**

No penetrations

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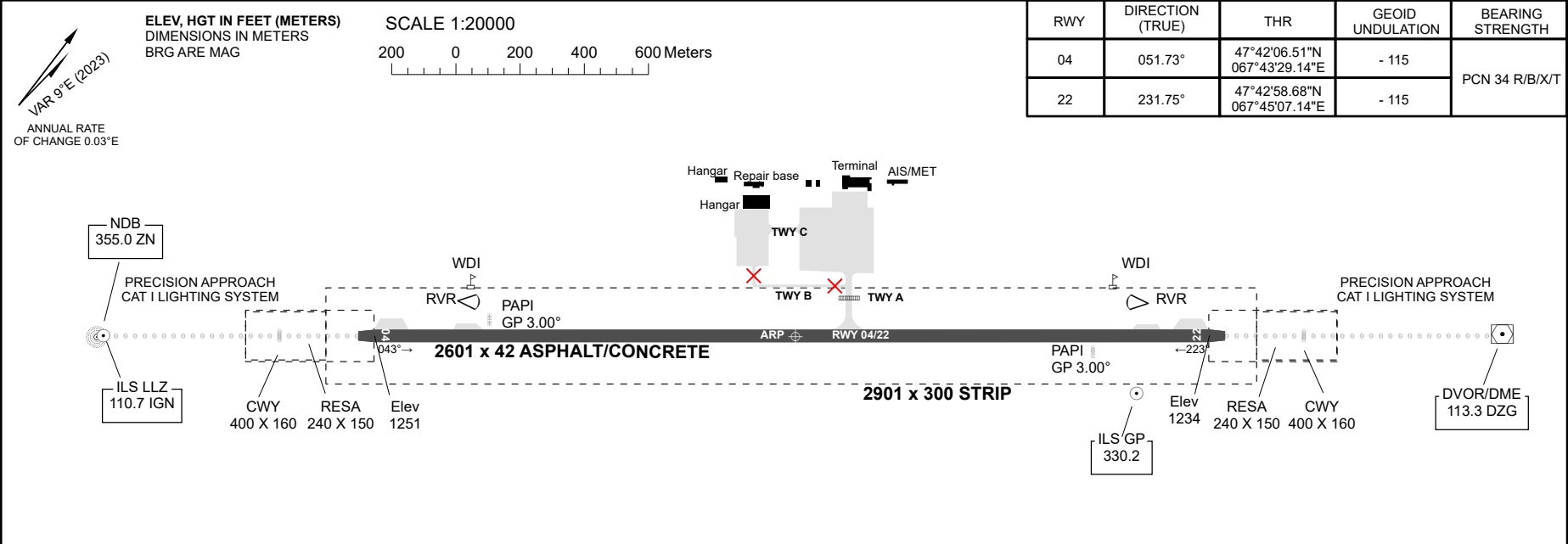
AERODROME  
CHART - ICAO

AD ELEV  
1251FT (381m)

ARP 474233N  
0674418E

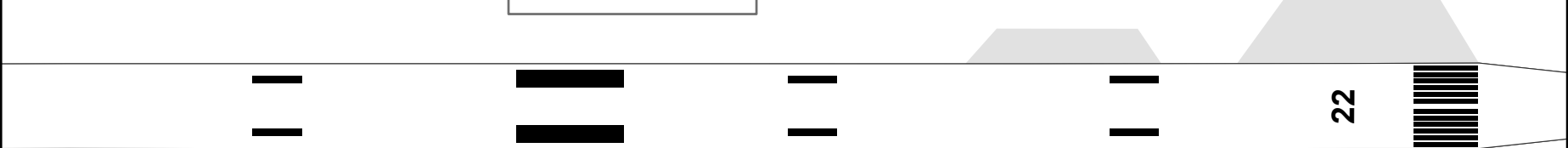
TWR 127.1

ZHEZKAZGAN



MARKING AIDS RWY 04/22

RWY 04 marking is identical to RWY 22

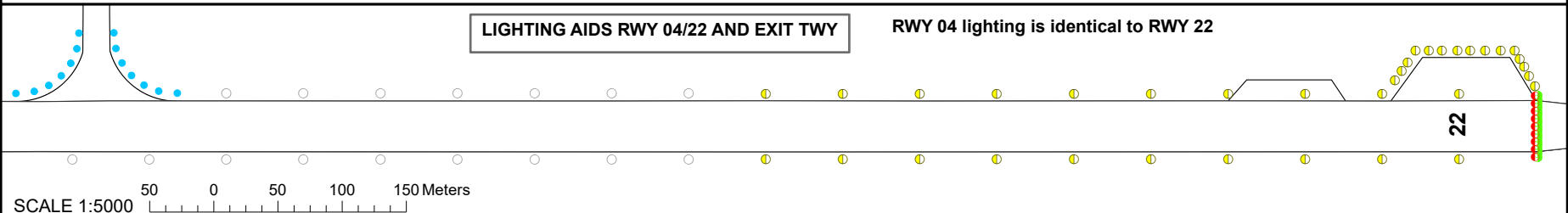


SCALE 1:3000

30 0 30 60 90 Meters

LIGHTING AIDS RWY 04/22 AND EXIT TWY

RWY 04 lighting is identical to RWY 22



SCALE 1:5000

50 0 50 100 150 Meters

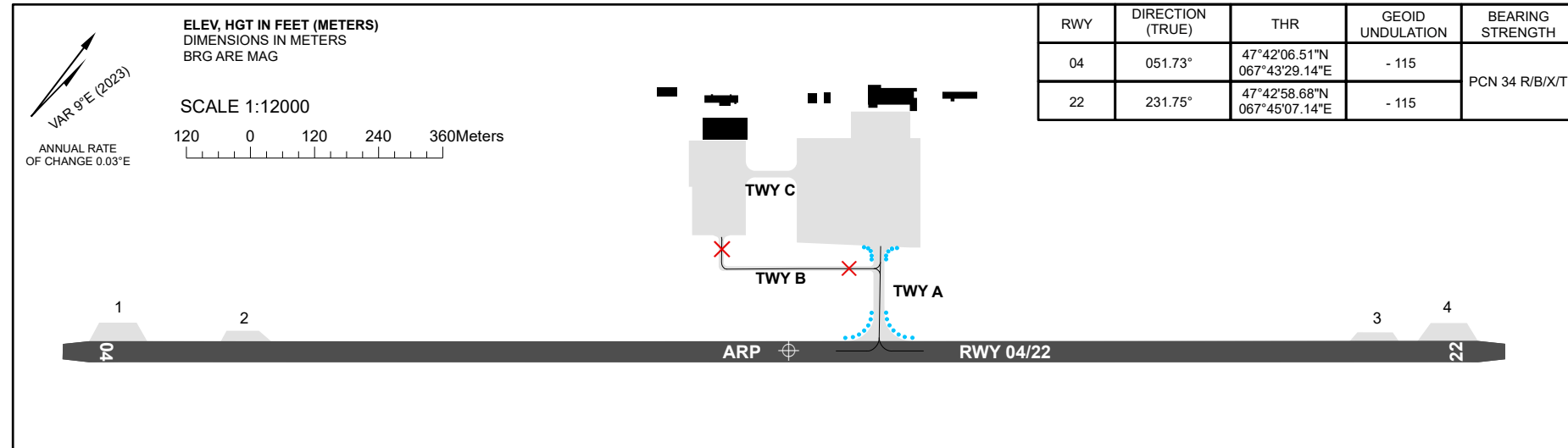
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## AERODROME GROUND MOVEMENT AND PARKING CHART - ICAO

**APRON ELEV 1250FT (381m)**

TWR 127.1

**ZHEZKAZGAN**



APRON	STAND	SURFACE	BEARING STRENGTH
APRON	1 - 2	CONC+ASPH	PCN 33/R/B/X/T
	3 - 7		PCN 22/F/C/X/T

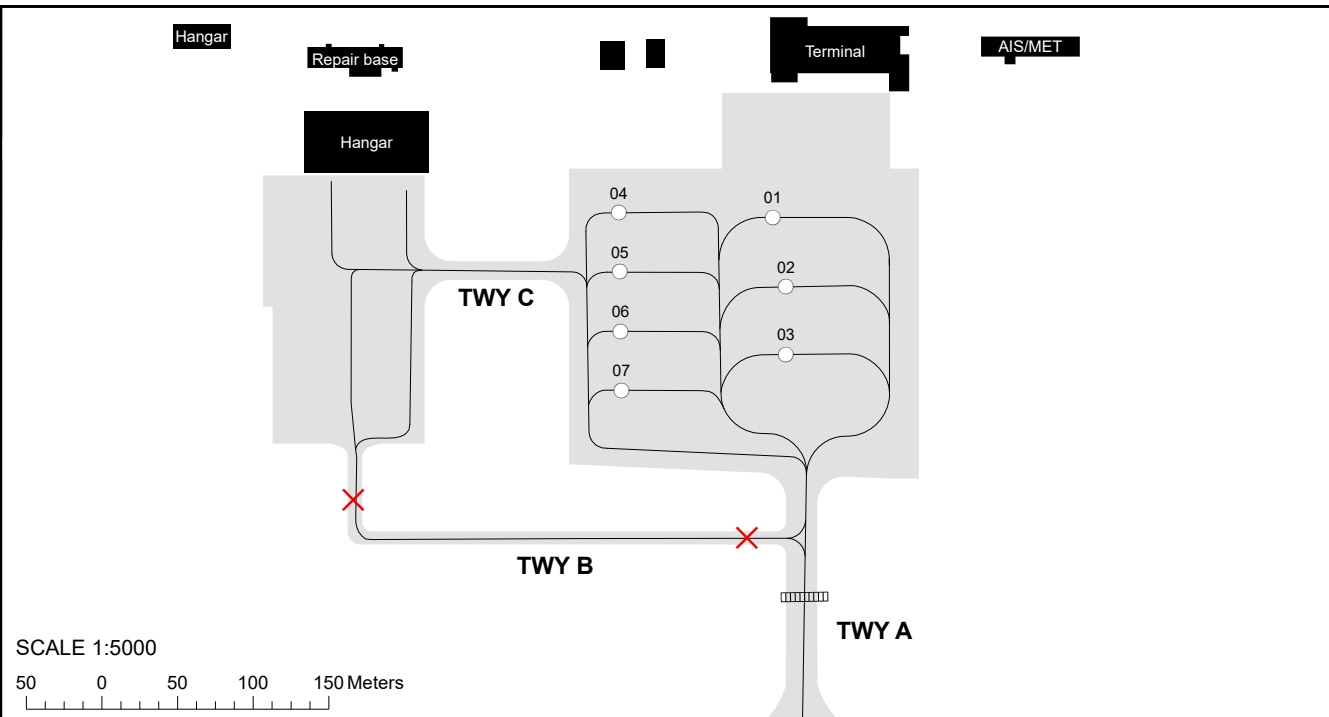
TWY	WIDTH	SURFACE	BEARING STRENGTH
A	18m	CONC+ASPH	PCN 33/R/B/X/T
C	13m	ASPH	PCN 9/F/C/Y/T

STANDS	1 - 2	- for TU-154, TU-134
	3 - 7	- for AN-24, AN-26, YAK-40

CHANGE: MAG VAR.

WARNING:

1. Turning of CAT C, D ACFT on RWY turning bays № 2, 3 is prohibited
2. CAT C, D ACFT taxiing along centerline marking at the reduced speed with the crew's good look-out.
3. TWY A taxiing for ACFT IL-76T use only inner engines.



**ZHEZKAZGAN**

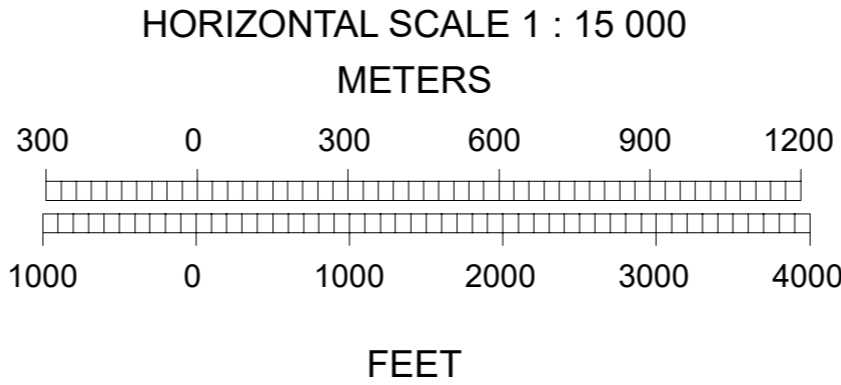
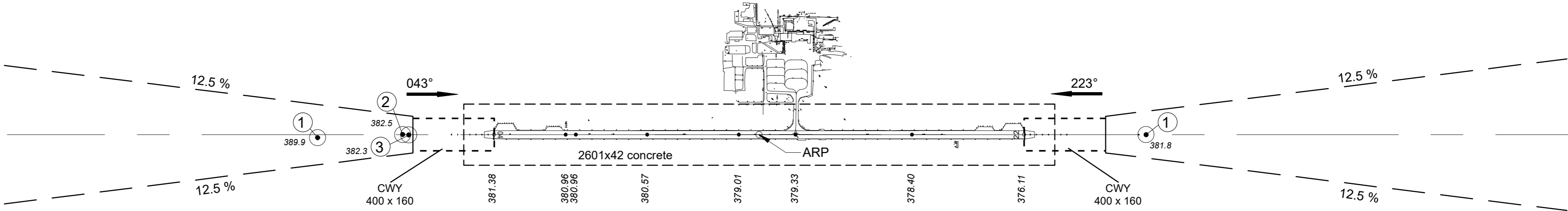
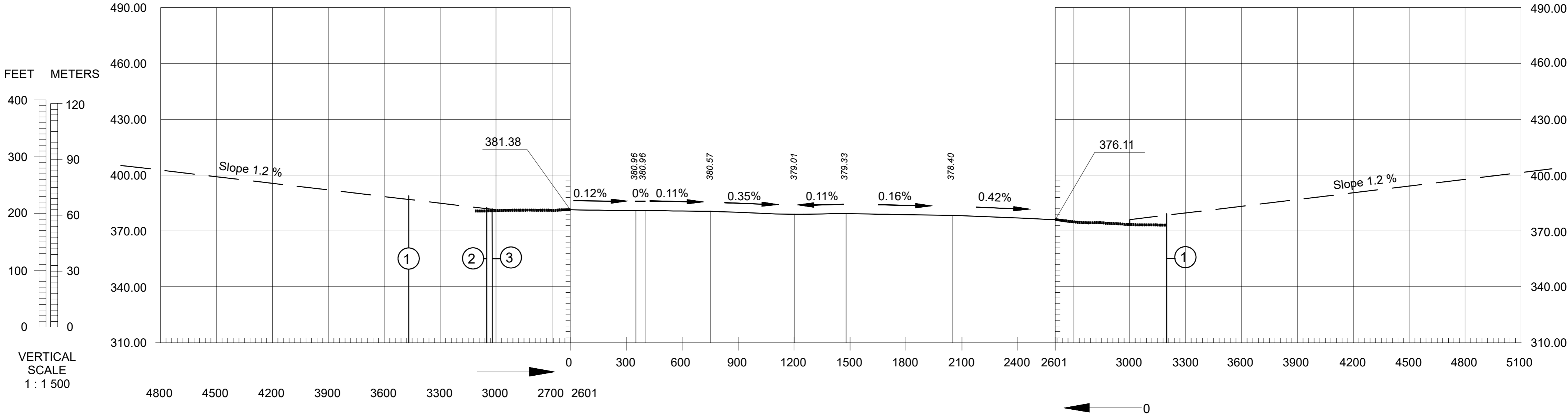
**STANDS CHARACTERISTICS**

Apron	Stand	Coordinates	
		Latitude	Longitude
	1	47 42 45.16 N	067 44 13.22 E
	2	47 42 44.16 N	067 44 14.92 E
	3	47 42 43.03 N	067 44 16.24 E
	4	47 42 43.19 N	067 44 09.30 E
	5	47 42 42.21 N	067 44 10.49 E
	6	47 42 41.22 N	067 44 11.67 E
	7	47 42 40.24 N	067 44 12.85 E

DIMENSIONS AND ELEVATIONS IN METERS      MAG VAR 9°E (2023)

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

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



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

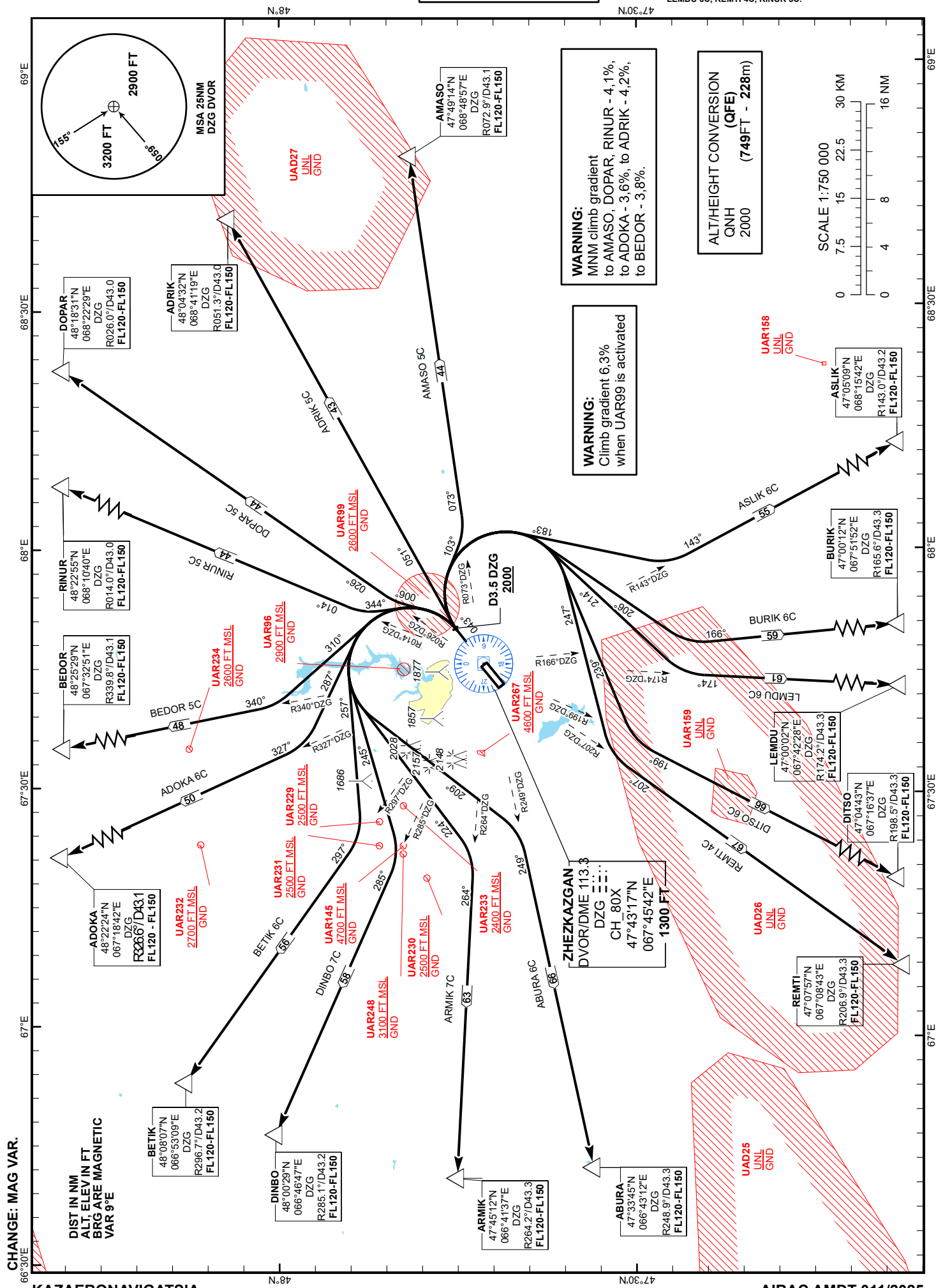
LEGEND		
	Plan	Profile
Antenna, tower, power line metal	⑥	⑥

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**ZHEZKAZGAN TOWER 127.1**  
**ZHEZKAZGAN ATIS (EN) 131.4**  
**ZHEZKAZGAN ATIS (RU) 122.4**

ABURA 6C, ADOKA 6C, ADRIK 5C.  
AMASO 5C, ARMIK 7C, ASLIK 6C.  
BEDOR 5C, BETIK 6C, BURIK 6C.  
DINBO 6C, DITSO 6C, DOPAR 5C.  
LEMDU 6C, REMTI 4C, RINUR 5C.

**ZHEZKAZGAN**  
**RWY 04**



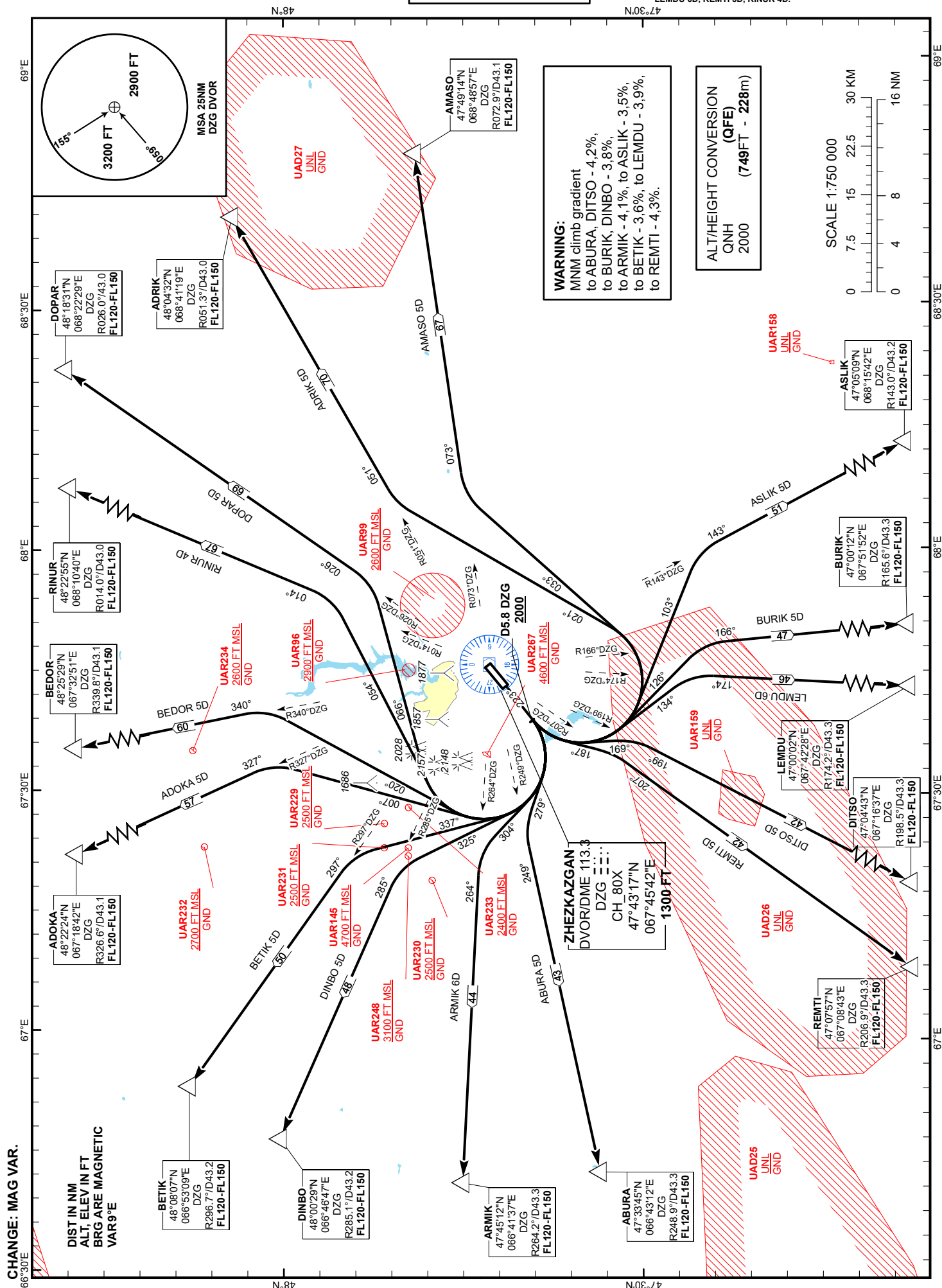
STANDARD DEPARTURE ROUTES – INSTRUMENT (SID) ZHEZKAZGAN RWY 04

<p><b>RINUR 5C</b> After take-off climb straight ahead to 2000 or above. At 3.5NM DZG, turn LEFT on track 344° until intercept R014°DZG, then proceed on track 014° to RINUR (R014.0° D43.0NM DZG). Cross RINUR at FL120 - FL150.</p>	<p><b>REMTI 4C</b> After take-off climb straight ahead to 2000 or above. At 3.5NM DZG, turn RIGHT on track 247° until intercept R207°DZG, then proceed on track 207° to REMTI (R206.9° D43.3NM DZG). Cross REMTI at FL120 - FL150.</p>
<p><b>DOPAR 5C</b> After take-off climb straight ahead to 2000 or above. At 3.5NM DZG, turn LEFT on track 006° until intercept R026°DZG, then proceed on track 026° to DOPAR (R026.0° D43.0NM DZG). Cross DOPAR at FL120 - FL150.</p>	<p><b>ABURA 6C</b> After take-off climb straight ahead to 2000 or above. At 3.5NM DZG, turn LEFT on track 209° until intercept R249°DZG, then proceed on track 249° to ABURA (R248.9° D43.3NM DZG). Cross ABURA at FL120 - FL150.</p>
<p><b>ADRIK 5C</b> After take-off climb straight ahead to 2000 or above. At 3.5NM DZG, turn RIGHT on track 051° to ADRIK (R051.3° D43.0NM DZG). Cross ADRIK at FL120 - FL150.</p>	<p><b>ARMIK 7C</b> After take-off climb straight ahead to 2000 or above. At 3.5NM DZG, turn LEFT on track 224° until intercept R264°DZG, then proceed on track 264° to ARMIK (R264.2° D43.3NM DZG). Cross ARMIK at FL120 - FL150.</p>
<p><b>AMASO 5C</b> After take-off climb straight ahead to 2000 or above. At 3.5NM DZG, turn RIGHT on track 103° until intercept R073°DZG, then proceed on track 073° to AMASO (R072.9° D43.1NM DZG). Cross AMASO at FL120 - FL150.</p>	<p><b>DINBO 6C</b> After take-off climb straight ahead to 2000 or above. At 3.5NM DZG, turn LEFT on track 245° until intercept R285°DZG, then proceed on track 285° to DINBO (R285.1° D43.2NM DZG). Cross DINBO at FL120 - FL150.</p>
<p><b>ASLIK 6C</b> After take-off climb straight ahead to 2000 or above. At 3.5NM DZG, turn RIGHT on track 183° until intercept R143°DZG, then proceed on track 143° to ASLIK (R143.0° D43.2NM DZG). Cross ASLIK at FL120 - FL150.</p>	<p><b>BETIK 6C</b> After take-off climb straight ahead to 2000 or above. At 3.5NM DZG, turn LEFT on track 257° until intercept R297°DZG, then proceed on track 297° to BETIK (R296.7° D43.2NM DZG). Cross BETIK at FL120 - FL150.</p>
<p><b>BURIK 6C</b> After take-off climb straight ahead to 2000 or above. At 3.5NM DZG, turn RIGHT on track 206° until intercept R166°DZG, then proceed on track 166° to BURIK (R165.6° D43.3NM DZG). Cross BURIK at FL120 - FL150.</p>	<p><b>ADOKA 6C</b> After take-off climb straight ahead to 2000 or above. At 3.5NM DZG, turn LEFT on track 287° until intercept R327°DZG, then proceed on track 327° to ADOKA (R326.6° D43.1NM DZG). Cross ADOKA at FL120 - FL150.</p>
<p><b>LEMDU 6C</b> After take-off climb straight ahead to 2000 or above. At 3.5NM DZG, turn RIGHT on track 214° until intercept R174°DZG, then proceed on track 174° to LEMDU (R174.2° D43.3NM DZG). Cross LEMDU at FL120 - FL150.</p>	<p><b>BEDOR 5C</b> After take-off climb straight ahead to 2000 or above. At 3.5NM DZG, turn LEFT on track 310° until intercept R340°DZG, then proceed on track 340° to BEDOR (R339.8° D43.1NM DZG). Cross BEDOR at FL120 - FL150.</p>
<p><b>DITSO 6C</b> After take-off climb straight ahead to 2000 or above. At 3.5NM DZG, turn RIGHT on track 239° until intercept R199°DZG, then proceed on track 199° to DITSO (R198.5° D43.3NM DZG). Cross DITSO at FL120 - FL150.</p>	

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

ABURA 5D, ADOKA 5D, ADRIK 5D,  
AMASO 5D, ARMIK 6D, ASLIK 5D,  
BEDOR 5D, BETIK 5D, BURIK 5D,  
DINBO 5D, DITSO 5D, DOPAR 5D,  
LEMDU 6D, REMTI 5D, RINUR 4D.

**ZHEZKAZGAN  
RWY 22**



STANDARD DEPARTURE ROUTES – INSTRUMENT (SID) ZHEZKAZGAN RWY 22	
<b>RINUR 4D</b> After take-off climb straight ahead to 2000 or above. At 5.8NM DZG, turn RIGHT on track 054° until intercept R014°DZG, then proceed on track 014° to RINUR (R014.0° D43.0NM DZG). Cross RINUR at FL120 - FL150.	<b>REMTI 5D</b> After take-off climb straight ahead to 2000 or above. At 5.8NM DZG, turn LEFT on track 187° until intercept R207°DZG, then proceed on track 207° to REMTI (R206.9° D43.3NM DZG). Cross REMTI at FL120 - FL150.
<b>DOPAR 5D</b> After take-off climb straight ahead to 2000 or above. At 5.8NM DZG, turn RIGHT on track 066° until intercept R026°DZG, then proceed on track 026° to DOPAR (R026.0° D43.0NM DZG). Cross DOPAR at FL120 - FL150.	<b>ABURA 5D</b> After take-off climb straight ahead to 2000 or above. At 5.8NM DZG, turn RIGHT on track 279° until intercept R249°DZG, then proceed on track 249° to ABURA (R248.9° D43.3NM DZG). Cross ABURA at FL120 - FL150.
<b>ADRIK 5D</b> After take-off climb straight ahead to 2000 or above. At 5.8NM DZG, turn LEFT on track 021° until intercept R051°DZG, then proceed on track 051° to ADRIK (R051.3° D43.0NM DZG). Cross ADRIK at FL120 - FL150.	<b>ARMIK 6D</b> After take-off climb straight ahead to 2000 or above. At 5.8NM DZG, turn RIGHT on track 304° until intercept R264°DZG, then proceed on track 264° to ARMIK (R264.2° D43.3NM DZG). Cross ARMIK at FL120 - FL150.
<b>AMASO 5D</b> After take-off climb straight ahead to 2000 or above. At 5.8NM DZG, turn LEFT on track 033° until intercept R073°DZG, then proceed on track 073° to AMASO (R072.9° D43.1NM DZG). Cross AMASO at FL120 - FL150.	<b>DINBO 5D</b> After take-off climb straight ahead to 2000 or above. At 5.8NM DZG, turn RIGHT on track 325° until intercept R285°DZG, then proceed on track 285° to DINBO (R285.1° D43.2NM DZG). Cross DINBO at FL120 - FL150.
<b>ASLIK 5D</b> After take-off climb straight ahead to 2000 or above. At 5.8NM DZG, turn LEFT on track 103° until intercept R143°DZG, then proceed on track 143° to ASLIK (R143.0° D43.2NM DZG). Cross ASLIK at FL120 - FL150.	<b>BETIK 5D</b> After take-off climb straight ahead to 2000 or above. At 5.8NM DZG, turn RIGHT on track 337° until intercept R297°DZG, then proceed on track 297° to BETIK (R296.7° D43.2NM DZG). Cross BETIK at FL120 - FL150.
<b>BURIK 5D</b> After take-off climb straight ahead to 2000 or above. At 5.8NM DZG, turn LEFT on track 126° until intercept R166°DZG, then proceed on track 166° to BURIK (R165.6° D43.3NM DZG). Cross BURIK at FL120 - FL150.	<b>ADOKA 5D</b> After take-off climb straight ahead to 2000 or above. At 5.8NM DZG, turn RIGHT on track 007° until intercept R327°DZG, then proceed on track 327° to ADOKA (R326.6° D43.1NM DZG). Cross ADOKA at FL120 - FL150.
<b>LEMDU 6D</b> After take-off climb straight ahead to 2000 or above. At 5.8NM DZG, turn LEFT on track 134° until intercept R174°DZG, then proceed on track 174° to LEMDU (R174.2° D43.3NM DZG). Cross LEMDU at FL120 - FL150.	<b>BEDOR 5D</b> After take-off climb straight ahead to 2000 or above. At 5.8NM DZG, turn RIGHT on track 020° until intercept R340°DZG, then proceed on track 340° to BEDOR (R339.8° D43.1NM DZG). Cross BEDOR at FL120 - FL150.
<b>DITSO 5D</b> After take-off climb straight ahead to 2000 or above. At 5.8NM DZG, turn LEFT on track 169° until intercept R199°DZG, then proceed on track 199° to DITSO (R198.5° D43.3NM DZG). Cross DITSO at FL120 - FL150.	

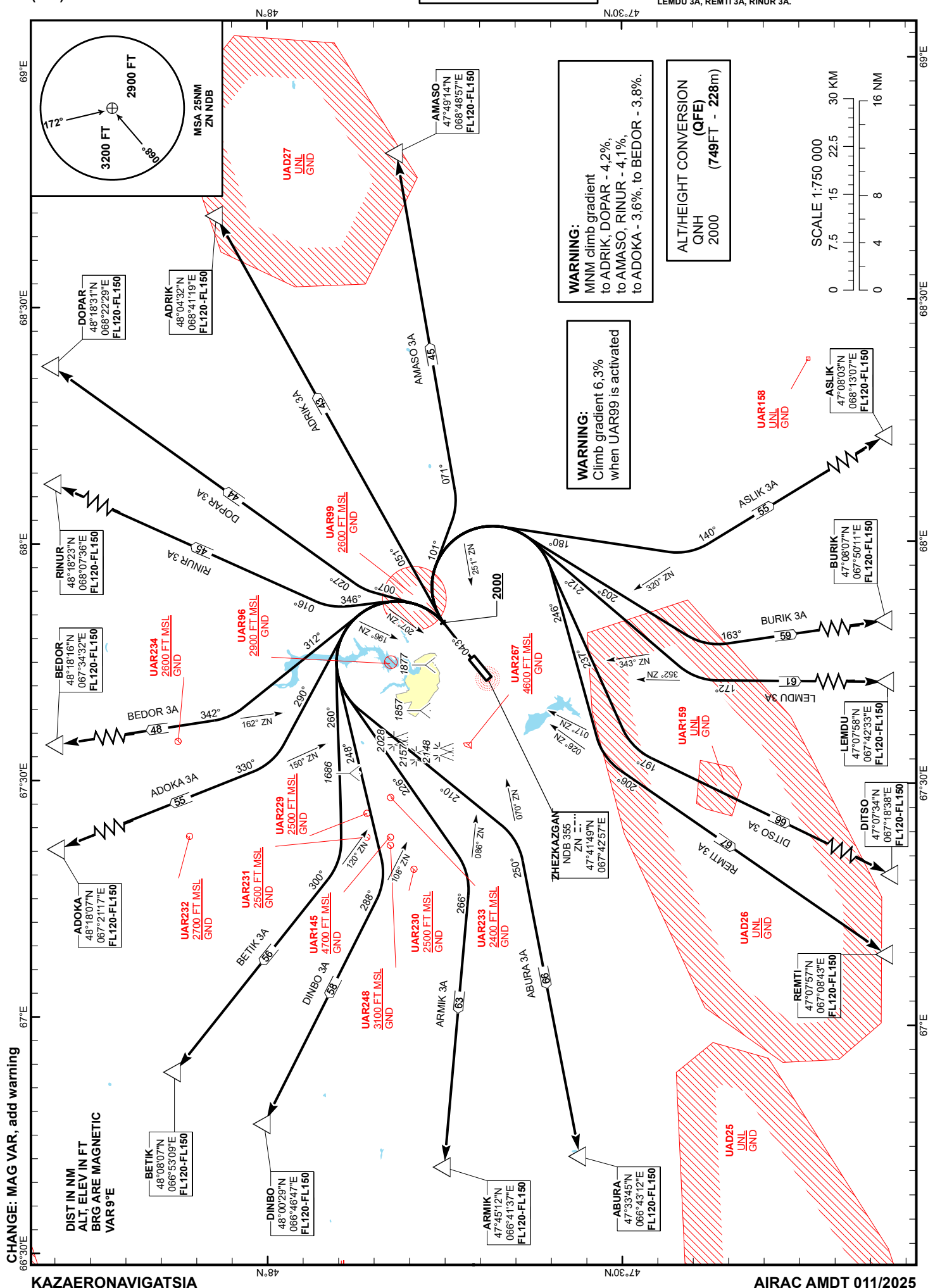
STANDARD DEPARTURE  
CHART - INSTRUMENT  
(SID) - ICAO

TRANSITION ALTITUDE  
10000 FT

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

ABURA 3A, ADOKA 3A, ADRIK 3A,  
AMASO 3A, ARMIK 3A, ASLIK 3A,  
BEDOR 3A, BETIK 3A, BURIK 3A,  
DINBO 3A, DITSO 3A, DOPAR 3A,  
LEMDO 3A, REMTI 3A, RINUR 3A.

ZHEZKAZGAN  
RWY 04



STANDARD DEPARTURE ROUTES – INSTRUMENT (SID) ZHEZKAZGAN RWY 04	
<b>RINUR 3A</b> After take-off climb straight ahead to 2000 or above. Turn LEFT on track 346° until intercept bearing 196°ZN, then proceed on track 016° to RINUR (N482255 E0681040). Cross RINUR at FL120 - FL150.	<b>REMTI 3A</b> After take-off climb straight ahead to 2000 or above. Turn RIGHT on track 246° until intercept bearing 026°ZN, then proceed on track 206° to REMTI (N470757 E0670843). Cross REMTI at FL120 - FL150.
<b>DOPAR 3A</b> After take-off climb straight ahead to 2000 or above. Turn LEFT on track 007° until intercept bearing 207°ZN, then proceed on track 027° to DOPAR (N481831 E0682229). Cross DOPAR at FL120 - FL150.	<b>ABURA 3A</b> After take-off climb straight ahead to 2000 or above. Turn LEFT on track 210° until intercept bearing 070°ZN, then proceed on track 250° to ABURA (N473345 E0664312). Cross ABURA at FL120 - FL150.
<b>ADRIK 3A</b> After take-off climb straight ahead to 2000 or above. Turn RIGHT on track 051° to ADRIK (N480432 E0684119). Cross ADRIK at FL120 - FL150.	<b>ARMIK 3A</b> After take-off climb straight ahead to 2000 or above. Turn LEFT on track 226° until intercept bearing 086°ZN, then proceed on track 266° to ARMIK (N474512 E0664137). Cross ARMIK at FL120 - FL150.
<b>AMASO 3A</b> After take-off climb straight ahead to 2000 or above. Turn RIGHT on track 101° until intercept bearing 251°ZN, then proceed on track 071° to AMASO (N474914 E0684857). Cross AMASO at FL120 - FL150.	<b>DINBO 3A</b> After take-off climb straight ahead to 2000 or above. Turn LEFT on track 248° until intercept bearing 108°ZN, then proceed on track 288° to DINBO (N480029 E0664647). Cross DINBO at FL120 - FL150.
<b>ASLIK 3A</b> After take-off climb straight ahead to 2000 or above. Turn RIGHT on track 180° until intercept bearing 320°ZN, then proceed on track 140° to ASLIK (N470509 E0681542). Cross ASLIK at FL120 - FL150.	<b>BETIK 3A</b> After take-off climb straight ahead to 2000 or above. Turn LEFT on track 260° until intercept bearing 120°ZN, then proceed on track 300° to BETIK (N480807 E0665309). Cross BETIK at FL120 - FL150.
<b>BURIK 3A</b> After take-off climb straight ahead to 2000 or above. Turn RIGHT on track 203° until intercept bearing 343°ZN, then proceed on track 163° to BURIK (N470012 E0675152). Cross BURIK at FL120 - FL150.	<b>ADOKA 3A</b> After take-off climb straight ahead to 2000 or above. Turn LEFT on track 290° until intercept bearing 150°ZN, then proceed on track 330° to ADOKA (N482224 E0671842). Cross ADOKA at FL120 - FL150.
<b>LEMDU 3A</b> After take-off climb straight ahead to 2000 or above. Turn RIGHT on track 212° until intercept bearing 352°ZN, then proceed on track 172° to LEMDU (N470002 E0674228). Cross LEMDU at FL120 - FL150.	<b>BEDOR 3A</b> After take-off climb straight ahead to 2000 or above. Turn LEFT on track 312° until intercept bearing 162°ZN, then proceed on track 342° to BEDOR (N482529 E0673251). Cross BEDOR at FL120 - FL150.
<b>DITSO 3A</b> After take-off climb straight ahead to 2000 or above. Turn RIGHT on track 237° until intercept bearing 017°ZN, then proceed on track 197° to DITSO (N470443 E0671637). Cross DITSO at FL120 - FL150.	

**ZHEZKAZGAN  
RWY 22**



**STANDARD DEPARTURE ROUTES – INSTRUMENT (SID) ZHEZKAZGAN RWY 22**

**RINUR 3B**

After take-off climb straight ahead to 2000 or above.  
Turn RIGHT on track 056° until intercept bearing 196°ZN, then proceed on track 016° to RINUR (N482255 E0681040).  
Cross RINUR at FL120 - FL150.

**REMTI 3B**

After take-off climb straight ahead to 2000 or above.  
Turn LEFT on track 186° until intercept bearing 026°ZN, then proceed on track 206° to REMTI (N470757 E0670843).  
Cross REMTI at FL120 - FL150.

**DOPAR 3B**

After take-off climb straight ahead to 2000 or above.  
Turn RIGHT on track 067° until intercept bearing 207°ZN, then proceed on track 027° to DOPAR (N481831 E0682229).  
Cross DOPAR at FL120 - FL150.

**ABURA 3B**

After take-off climb straight ahead to 2000 or above.  
Turn RIGHT on track 280° until intercept bearing 070°ZN, then proceed on track 250° to ABURA (N473345 E0664312).  
Cross ABURA at FL120 - FL150.

**ADRIK 3B**

After take-off climb straight ahead to 2000 or above.  
Turn LEFT on track 011° until intercept bearing 231°ZN, then proceed on track 051° to ADRIK (N480432 E0684119).  
Cross ADRIK at FL120 - FL150.

**ARMIK 3B**

After take-off climb straight ahead to 2000 or above.  
Turn RIGHT on track 306° until intercept bearing 086°ZN, then proceed on track 266° to ARMIK (N474512 E0664137).  
Cross ARMIK at FL120 - FL150.

**AMASO 3B**

After take-off climb straight ahead to 2000 or above.  
Turn LEFT on track 031° until intercept bearing 251°ZN, then proceed on track 071° to AMASO (N474914 E0684857).  
Cross AMASO at FL120 - FL150.

**DINBO 3B**

After take-off climb straight ahead to 2000 or above.  
Turn RIGHT on track 328° until intercept bearing 108°ZN, then proceed on track 288° to DINBO (N480029 E0664647).  
Cross DINBO at FL120 - FL150.

**ASLIK 3B**

After take-off climb straight ahead to 2000 or above.  
Turn LEFT on track 100° until intercept bearing 320°ZN, then proceed on track 140° to ASLIK (N470509 E0681542).  
Cross ASLIK at FL120 - FL150.

**BETIK 3B**

After take-off climb straight ahead to 2000 or above.  
Turn RIGHT on track 340° until intercept bearing 120°ZN, then proceed on track 300° to BETIK (N480807 E0665309).  
Cross BETIK at FL120 - FL150.

**BURIK 3B**

After take-off climb straight ahead to 2000 or above.  
Turn LEFT on track 123° until intercept bearing 343°ZN, then proceed on track 163° to BURIK (N470012 E0675152).  
Cross BURIK at FL120 - FL150.

**ADOKA 3B**

After take-off climb straight ahead to 2000 or above.  
Turn RIGHT on track 010° until intercept bearing 150°ZN, then proceed on track 330° to ADOKA (N482224 E0671842).  
Cross ADOKA at FL120 - FL150.

**LEMDU 3B**

After take-off climb straight ahead to 2000 or above.  
Turn LEFT on track 132° until intercept bearing 352°ZN, then proceed on track 172° to LEMDU (N470002 E0674228).  
Cross LEMDU at FL120 - FL150.

**BEDOR 3B**

After take-off climb straight ahead to 2000 or above.  
Turn RIGHT on track 012° until intercept bearing 162°ZN, then proceed on track 342° to BEDOR (N482529 E0673251).  
Cross BEDOR at FL120 - FL150.

**DITSO 3B**

After take-off climb straight ahead to 2000 or above.  
Turn LEFT on track 167° until intercept bearing 017°ZN, then proceed on track 197° to DITSO (N470443 E0671637).  
Cross DITSO at FL120 - FL150.

**ZHEZKAZGAN**  
**RWY 04**



## TABULAR DESCRIPTION

ABURA 1J RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	CF	KD421	Y	043(051.7)	+8.8	4.4	-	+2600	-	2.9	RNAV 1
020	DF	ABURA	-	-	+8.8	-	L	+FL120/-FL150	-	1.9	RNAV 1

ADOKA 1J RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	CF	KD421	Y	043(051.7)	+8.8	4.4	-	+2600	-	2.9	RNAV 1
020	DF	ADOKA	-	-	+8.8	-	L	+FL120/-FL150	-	2	RNAV 1

ADRIK 1J RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	CF	KD421	Y	043(051.7)	+8.8	4.4	-	+2600	-	2.9	RNAV 1
020	TF	ADRIK	-	052(061.0)	+8.8	38.9	R	+FL120/-FL150	-	2.3	RNAV 1

AMASO 1J RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	CF	KD421	Y	043(051.7)	+8.8	4.4	-	+2600	-	2.9	RNAV 1
020	TF	AMASO	-	076(084.7)	+8.8	39.5	R	+FL 120/-FL150	-	2.2	RNAV 1

ARMIK 1J RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	CF	KD421	Y	043(051.7)	+8.8	4.4	-	+2600	-	2.9	RNAV 1
020	DF	ARMIK	-	-	+8.8	-	L	+FL120/-FL150	-	1.9	RNAV 1

ASLIK 1J RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	CF	KD421	Y	043(051.7)	+8.8	4.4	-	+2600	-	2.9	RNAV 1
020	DF	ASLIK	-	-	+8.8	-	R	+FL120/-FL150	-	1.9	RNAV 1

BURIK 1J RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	CF	KD421	Y	043(051.7)	+8.8	4.4	-	+2600	-	2.9	RNAV 1
020	DF	BURIK	-	-	+8.8	-	R	+FL120/-FL150	-	1.9	RNAV 1

DINBO 1J RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	CF	KD421	Y	043(051.7)	+8.8	4.4	-	+2600	-	2.9	RNAV 1
020	DF	DINBO	-	-	+8.8	-	L	+FL120/-FL150	-	1.9	RNAV 1

DITSO 1J RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	CF	KD421	Y	043(051.7)	+8.8	4.4	-	+2600	-	2.9	RNAV 1
020	DF	DITSO	-	-	+8.8	-	R	+FL120/-FL150	-	1.9	RNAV 1

DOPAR 1J RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	CF	KD421	Y	043(051.7)	+8.8	4.4	-	+2600	-	2.9	RNAV 1
020	TF	DOPAR	-	024(033.1)	+8.8	39.1	L	+FL120/-FL150	-	2.3	RNAV 1

## WAYPOINT COORDINATES

Waypoint Identifier	Coordinates	
ABURA	473345.00N	0664312.00E
ADOKA	482224.00N	0671842.00E
ADRIK	480432.00N	0684119.00E
AMASO	474914.00N	0684857.00E
ARMIK	474512.00N	0664137.00E
ASLIK	470509.00N	0681542.00E
BURIK	470012.00N	0675152.00E
DER	474306.66N	0674522.14E
DINBO	480029.00N	0664647.00E
DITSO	470443.00N	0671637.00E
DOPAR	481831.00N	0682229.00E
KD421	474551.62N	0675032.45E

ZHEZKAZGAN  
RWY 22



## TABULAR DESCRIPTION

ABURA 1K 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	CF	KD822	Y	223(231.7)	+8.8	12.1	-	+3700	-	1.9	RNAV 1
020	TF	ABURA	-	260(269.0)	+8.8	31.1	R	+FL120/-FL150	-	2.5	RNAV 1

ADOKA 1K 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	CF	KD821	Y	223(231.7)	+8.8	10.1	-	+3300	-	1.9	RNAV 1
020	DF	ADOKA	-	-	+8.8	-	R	+FL120/-FL150	-	1.9	RNAV 1

ADRIK 1K 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	CF	KD821	Y	223(231.7)	+8.8	10.1	-	+3300	-	1.9	RNAV 1
020	DF	ADRIK	-	-	+8.8	-	L	+FL120/-FL150	-250	1.9	RNAV 1

AMASO 1K 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	CF	KD821	Y	223(231.7)	+8.8	10.1	-	+3300	-	1.9	RNAV 1
020	DF	AMASO	-	-	+8.8	-	L	+FL120/-FL150	-250	1.9	RNAV 1

ARMIK 1K 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	CF	KD822	Y	223(231.7)	+8.8	12.1	-	+3700	-	1.9	RNAV 1
020	TF	ARMIK	-	280(288.8)	+8.8	33.9	R	+FL120/-FL150	-	2.2	RNAV 1

ASLIK 1K 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	CF	KD821	Y	223(231.7)	+8.8	10.1	-	+3300	-	1.9	RNAV 1
020	DF	ASLIK	-	-	+8.8	-	L	+FL120/-FL150	-230	1.9	RNAV 1

BURIK 1K 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	CF	KD822	Y	223(231.7)	+8.8	12.1	-	+3700	-	1.9	RNAV 1
020	TF	BURIK	-	147(155.6)	+8.8	37.6	L	+FL120/-FL150	-220	2	RNAV 1

DINBO 1K 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	CF	KD822	Y	223(231.7)	+8.8	12.1	-	+3700	-	1.9	RNAV 1
020	TF	DINBO	-	304(312.6)	+8.8	38.7	R	+FL120/-FL150	-	1.9	RNAV 1

DITSO 1K 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	CF	KD822	Y	223(231.7)	+8.8	12.1	-	+3700	-	1.9	RNAV 1
020	TF	DITSO	-	187(196.1)	+8.8	30.9	L	+FL120/-FL150	-	2.5	RNAV 1

DOPAR 1K 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	CF	KD821	Y	223(231.7)	+8.8	10.1	-	+3300	-	1.9	RNAV 1
020	DF	DOPAR	-	-	+8.8	-	R	+FL120/-FL150	-	1.9	RNAV 1

## WAYPOINT COORDINATES

Waypoint Identifier	Coordinates	
ABURA	473345.00N	0664312.00E
ADOKA	482224.00N	0671842.00E
ADRIK	480432.00N	0684119.00E
AMASO	474914.00N	0684857.00E
ARMIK	474512.00N	0664137.00E
ASLIK	470509.00N	0681542.00E
BURIK	470012.00N	0675152.00E
DER	474158.52N	0674314.15E
DINBO	480029.00N	0664647.00E
DITSO	470443.00N	0671637.00E
DOPAR	481831.00N	0682229.00E
KD821	473541.48N	0673128.28E
KD822	473427.12N	0672909.68E

**ZHEZKAZGAN  
RWY 04**



STANDARD ARRIVAL ROUTES – INSTRUMENT (STAR) ZHEZKAZGAN RWY 04	
<b>RINUR 4E</b> After crossing RINUR (R014.0° D43.0NM DZG), proceed on track 194° to DVOR/DME DZG. Cross RINUR at FL120 - FL150. Cross DVOR/DME DZG at 5000FT.	<b>REMTI 4E</b> After crossing REMTI (R206.9° D43.3NM DZG), proceed on track 026° to DVOR/DME DZG. Cross REMTI at FL120 - FL150. Cross DVOR/DME DZG at 5000FT.
<b>DOPAR 4E</b> After crossing DOPAR (R026.0° D43.0NM DZG), proceed on track 206° to DVOR/DME DZG. Cross DOPAR at FL120 - FL150. Cross DVOR/DME DZG at 5000FT.	<b>ABURA 4E</b> After crossing ABURA (R248.9° D43.3NM DZG), proceed on track 068° to DVOR/DME DZG. Cross ABURA at FL120 - FL150. Cross DVOR/DME DZG at 5000FT.
<b>ADRIK 4E</b> After crossing ADRIK (R051.3° D43.0NM DZG), proceed on track 232° to DVOR/DME DZG. Cross ADRIK at FL120 - FL150. Cross DVOR/DME DZG at 5000FT.	<b>ARMIK 5E</b> After crossing ARMIK (R264.2° D43.3NM DZG), proceed on track 083° to DVOR/DME DZG. Cross ARMIK at FL120 - FL150. Cross DVOR/DME DZG at 5000FT.
<b>AMASO 4E</b> After crossing AMASO (R072.9° D43.1NM DZG), proceed on track 254° to DVOR/DME DZG. Cross AMASO at FL120 - FL150. Cross DVOR/DME DZG at 5000FT.	<b>DINBO 4E</b> After crossing DINBO (R285.1° D43.2NM DZG), proceed on track 104° to DVOR/DME DZG. Cross DINBO at FL120 - FL150. Cross DVOR/DME DZG at 5000FT.
<b>ASLIK 4E</b> After crossing ASLIK (R143.0° D43.2NM DZG), proceed on track 323° to DVOR/DME DZG. Cross ASLIK at FL120 - FL150. Cross DVOR/DME DZG at 5000FT.	<b>BETIK 4E</b> After crossing BETIK (R296.7° D43.2NM DZG), proceed on track 116° to DVOR/DME DZG. Cross BETIK at FL120 - FL150. Cross DVOR/DME DZG at 5000FT.
<b>BURIK 4E</b> After crossing BURIK (R165.6° D43.3NM DZG), proceed on track 346° to DVOR/DME DZG. Cross BURIK at FL120 - FL150. Cross DVOR/DME DZG at 5000FT.	<b>ADOKA 4E</b> After crossing ADOKA (R326.6° D43.1NM DZG), proceed on track 146° to DVOR/DME DZG. Cross ADOKA at FL120 - FL150. Cross DVOR/DME DZG at 5000FT.
<b>LEMDU 4E</b> After crossing LEMDU (R174.2° D43.3NM DZG), proceed on track 354° to DVOR/DME DZG. Cross LEMDU at FL120 - FL150. Cross DVOR/DME DZG at 5000FT.	<b>BEDOR 4E</b> After crossing BEDOR (R339.8° D43.1NM DZG), proceed on track 160° to DVOR/DME DZG. Cross BEDOR at FL120 - FL150. Cross DVOR/DME DZG at 5000FT.
<b>DITSO 4E</b> After crossing DITSO (R198.5° D43.3NM DZG), proceed on track 018° to DVOR/DME DZG. Cross DITSO at FL120 - FL150. Cross DVOR/DME DZG at 5000FT.	

STANDARD ARRIVAL  
CHART - INSTRUMENT  
(STAR) - ICAO

TRANSITION ALTITUDE  
10000 FT

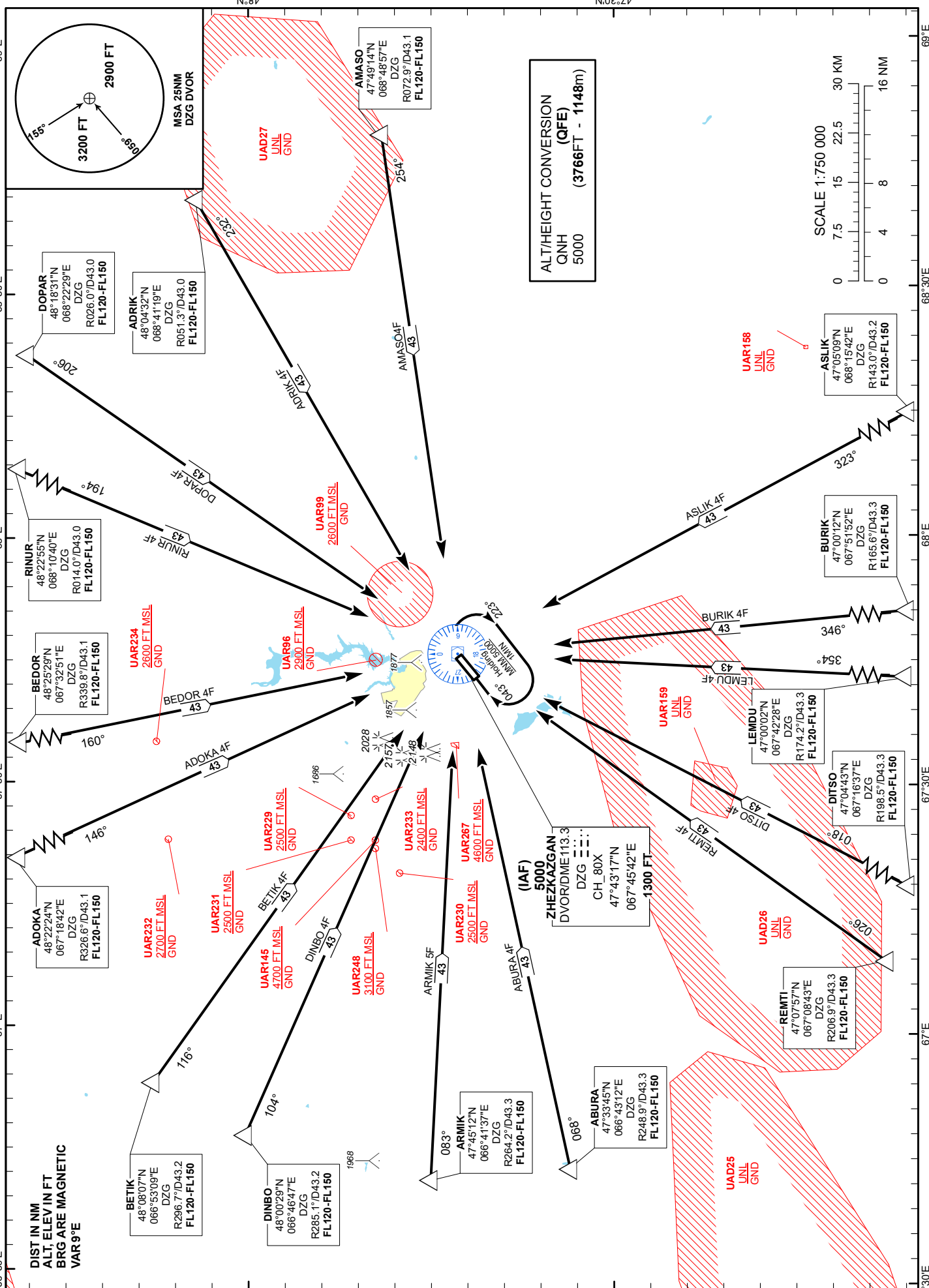
ZHEKZKAZGAN TOWER 127.1  
ZHEKZKAZGAN ATIS (EN) 131.4  
ZHEKZKAZGAN ATIS (RU) 122.4

ABURA 4F, ADOKA 4F, ADRIK 4F,  
AMASO 4F, ARMIK 5F, ASLIK 4F,  
BEDOR 4F, BETIK 4F, BURIK 4F,  
DINBO 4F, DITSO 4F, DOPAR 4F,  
LEM DU 4F, REMTI 4F, RINUR 4F.

ZHEKZKAZGAN  
RWY 22

CHANGE: MAG VAR.

DIST IN NM  
ALT. ELEV IN FT  
BRG ARE MAGNETIC  
VAR 9°E



STANDARD ARRIVAL ROUTES – INSTRUMENT (STAR) ZHEZKAZGAN RWY 22	
<b>RINUR 4F</b> After crossing RINUR (R014.0° D43.0NM DZG), proceed on track 194° to DVOR/DME DZG. Cross RINUR at FL120 - FL150. Cross DVOR/DME DZG at 5000FT.	<b>REMTI 4F</b> After crossing REMTI (R206.9° D43.3NM DZG), proceed on track 026° to DVOR/DME DZG. Cross REMTI at FL120 - FL150. Cross DVOR/DME DZG at 5000FT.
<b>DOPAR 4F</b> After crossing DOPAR (R026.0° D43.0NM DZG), proceed on track 206° to DVOR/DME DZG. Cross DOPAR at FL120 - FL150. Cross DVOR/DME DZG at 5000FT.	<b>ABURA 4F</b> After crossing ABURA (R248.9° D43.3NM DZG), proceed on track 068° to DVOR/DME DZG. Cross ABURA at FL120 - FL150. Cross DVOR/DME DZG at 5000FT.
<b>ADRIK 4F</b> After crossing ADRIK (R051.3° D43.0NM DZG), proceed on track 232° to DVOR/DME DZG. Cross ADRIK at FL120 - FL150. Cross DVOR/DME DZG at 5000FT.	<b>ARMIK 5F</b> After crossing ARMIK (R264.2° D43.3NM DZG), proceed on track 083° to DVOR/DME DZG. Cross ARMIK at FL120 - FL150. Cross DVOR/DME DZG at 5000FT.
<b>AMASO 4F</b> After crossing AMASO (R072.9° D43.1NM DZG), proceed on track 254° to DVOR/DME DZG. Cross AMASO at FL120 - FL150. Cross DVOR/DME DZG at 5000FT.	<b>DINBO 4F</b> After crossing DINBO (R285.1° D43.2NM DZG), proceed on track 104° to DVOR/DME DZG. Cross DINBO at FL120 - FL150. Cross DVOR/DME DZG at 5000FT.
<b>ASLIK 4F</b> After crossing ASLIK (R143.0° D43.2NM DZG), proceed on track 323° to DVOR/DME DZG. Cross ASLIK at FL120 - FL150. Cross DVOR/DME DZG at 5000FT.	<b>BETIK 4F</b> After crossing BETIK (R296.7° D43.2NM DZG), proceed on track 116° to DVOR/DME DZG. Cross BETIK at FL120 - FL150. Cross DVOR/DME DZG at 5000FT.
<b>BURIK 4F</b> After crossing BURIK (R165.6° D43.3NM DZG), proceed on track 346° to DVOR/DME DZG. Cross BURIK at FL120 - FL150. Cross DVOR/DME DZG at 5000FT.	<b>ADOKA 4F</b> After crossing ADOKA (R326.6° D43.1NM DZG), proceed on track 146° to DVOR/DME DZG. Cross ADOKA at FL120 - FL150. Cross DVOR/DME DZG at 5000FT.
<b>LEMDU 4F</b> After crossing LEMDU (R174.2° D43.3NM DZG), proceed on track 354° to DVOR/DME DZG. Cross LEMDU at FL120 - FL150. Cross DVOR/DME DZG at 5000FT.	<b>BEDOR 4F</b> After crossing BEDOR (R339.8° D43.1NM DZG), proceed on track 160° to DVOR/DME DZG. Cross BEDOR at FL120 - FL150. Cross DVOR/DME DZG at 5000FT.
<b>DITSO 4F</b> After crossing DITSO (R198.5° D43.3NM DZG), proceed on track 018° to DVOR/DME DZG. Cross DITSO at FL120 - FL150. Cross DVOR/DME DZG at 5000FT.	

**ZHEZKAZGAN  
RWY 04**



STANDARD ARRIVAL ROUTES – INSTRUMENT (STAR) ZHEZKAZGAN RWY 04	
<b>RINUR 2G</b> After crossing RINUR (N482255 E0681040), proceed on track 196° to NDB ZN. Cross RINUR at FL120 - FL150. Cross NDB ZN at 5000FT.	<b>REMTI 3G</b> After crossing REMTI (N470757 E0670843), proceed on track 025° to NDB ZN. Cross REMTI at FL120 - FL150. Cross NDB ZN at 5000FT.
<b>DOPAR 3G</b> After crossing DOPAR (N481831 E0682229), proceed on track 207° to NDB ZN. Cross DOPAR at FL120 - FL150. Cross NDB ZN at 5000FT.	<b>ABURA 2G</b> After crossing ABURA (N473345 E0664312), proceed on track 070° to NDB ZN. Cross ABURA at FL120 - FL150. Cross NDB ZN at 5000FT.
<b>ADRIK 2G</b> After crossing ADRIK (N480432 E0684119), proceed on track 232° to NDB ZN. Cross ADRIK at FL120 - FL150. Cross NDB ZN at 5000FT.	<b>ARMIK 2G</b> After crossing ARMIK (N474512 E0664137), proceed on track 086° to NDB ZN. Cross ARMIK at FL120 - FL150. Cross NDB ZN at 5000FT.
<b>AMASO 3G</b> After crossing AMASO (N474914 E0684857), proceed on track 252° to NDB ZN. Cross AMASO at FL120 - FL150. Cross NDB ZN at 5000FT.	<b>DINBO 3G</b> After crossing DINBO (N480029 E0664647), proceed on track 107° to NDB ZN. Cross DINBO at FL120 - FL150. Cross NDB ZN at 5000FT.
<b>ASLIK 3G</b> After crossing ASLIK (N470509 E0681542), proceed on track 320° to NDB ZN. Cross ASLIK at FL120 - FL150. Cross NDB ZN at 5000FT.	<b>BETIK 3G</b> After crossing BETIK (N480807 E0665309), proceed on track 119° to NDB ZN. Cross BETIK at FL120 - FL150. Cross NDB ZN at 5000FT.
<b>BURIK 3G</b> After crossing BURIK (N470012 E0675152), proceed on track 343° to NDB ZN. Cross BURIK at FL120 - FL150. Cross NDB ZN at 5000FT.	<b>ADOKA 3G</b> After crossing ADOKA (N482224 E0671842), proceed on track 149° to NDB ZN. Cross ADOKA at FL120 - FL150. Cross NDB ZN at 5000FT.
<b>LEMDU 2G</b> After crossing LEMDU (N470002 E0674228), proceed on track 352° to NDB ZN. Cross LEMDU at FL120 - FL150. Cross NDB ZN at 5000FT.	<b>BEDOR 3G</b> After crossing BEDOR (N482529 E0673251), proceed on track 162° to NDB ZN. Cross BEDOR at FL120 - FL150. Cross NDB ZN at 5000FT.
<b>DITSO 2G</b> After crossing DITSO (N470443 E0671637), proceed on track 017° to NDB ZN. Cross DITSO at FL120 - FL150. Cross NDB ZN at 5000FT.	

**ZHEZKAZGAN  
RWY 22**



STANDARD ARRIVAL ROUTES – INSTRUMENT (STAR) ZHEZKAZGAN RWY 22	
<b>RINUR 2H</b> After crossing RINUR (N482255 E0681040), proceed on track 196° to NDB ZN. Cross RINUR at FL120 - FL150. Cross NDB ZN at 5000FT.	<b>REMTI 3H</b> After crossing REMTI (N470757 E0670843), proceed on track 025° to NDB ZN. Cross REMTI at FL120 - FL150. Cross NDB ZN at 5000FT.
<b>DOPAR 3H</b> After crossing DOPAR (N481831 E0682229), proceed on track 207° to NDB ZN. Cross DOPAR at FL120 - FL150. Cross NDB ZN at 5000FT.	<b>ABURA 2H</b> After crossing ABURA (N473345 E0664312), proceed on track 070° to NDB ZN. Cross ABURA at FL120 - FL150. Cross NDB ZN at 5000FT.
<b>ADRIK 2H</b> After crossing ADRIK (N480432 E0684119), proceed on track 232° to NDB ZN. Cross ADRIK at FL120 - FL150. Cross NDB ZN at 5000FT.	<b>ARMIK 2H</b> After crossing ARMIK (N474512 E0664137), proceed on track 086° to NDB ZN. Cross ARMIK at FL120 - FL150. Cross NDB ZN at 5000FT.
<b>AMASO 3H</b> After crossing AMASO (N474914 E0684857), proceed on track 252° to NDB ZN. Cross AMASO at FL120 - FL150. Cross NDB ZN at 5000FT.	<b>DINBO 3H</b> After crossing DINBO (N480029 E0664647), proceed on track 107° to NDB ZN. Cross DINBO at FL120 - FL150. Cross NDB ZN at 5000FT.
<b>ASLIK 3H</b> After crossing ASLIK (N470509 E0681542), proceed on track 320° to NDB ZN. Cross ASLIK at FL120 - FL150. Cross NDB ZN at 5000FT.	<b>BETIK 3H</b> After crossing BETIK (N480807 E0665309), proceed on track 119° to NDB ZN. Cross BETIK at FL120 - FL150. Cross NDB ZN at 5000FT.
<b>BURIK 3H</b> After crossing BURIK (N470012 E0675152), proceed on track 343° to NDB ZN. Cross BURIK at FL120 - FL150. Cross NDB ZN at 5000FT.	<b>ADOKA 3H</b> After crossing ADOKA (N482224 E0671842), proceed on track 149° to NDB ZN. Cross ADOKA at FL120 - FL150. Cross NDB ZN at 5000FT.
<b>LEMDU 2H</b> After crossing LEMDU (N470002 E0674228), proceed on track 352° to NDB ZN. Cross LEMDU at FL120 - FL150. Cross NDB ZN at 5000FT.	<b>BEDOR 3H</b> After crossing BEDOR (N482529 E0673251), proceed on track 162° to NDB ZN. Cross BEDOR at FL120 - FL150. Cross NDB ZN at 5000FT.
<b>DITSO 2H</b> After crossing DITSO (N470443 E0671637), proceed on track 017° to NDB ZN. Cross DITSO at FL120 - FL150. Cross NDB ZN at 5000FT.	

**ZHEZKAZGAN**  
**RWY 04**



## TABULAR DESCRIPTION

ABURA 1A RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	ABURA	-	-	+8.8	-	-	+FL120/-FL150	-	-	RNAV 1
020	TF	AGEBO	-	068(077.5)	+8.8	30.2	-	+4000	-	-3.4	RNAV 1

ADOKA 1A RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	ADOKA	-	-	+8.8	-	-	+FL120/-FL150	-	-	RNAV 1
020	TF	AGEBO	-	164(172.6)	+8.8	42.6	-	+4000	-	-2.4	RNAV 1

ADRIK 1A RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	ADRIK	-	-	+8.8	-	-	+FL120/-FL150	-	-	RNAV 1
020	TF	OSMOG	-	224(233.3)	+8.8	54.5	-	+4000	-	-1.9	RNAV 1

AMASO 1A RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	AMASO	-	-	+8.8	-	-	+FL120/-FL150	-	-	RNAV 1
020	TF	OSMOG	-	242(250.6)	+8.8	51.9	-	+4000	-	-2	RNAV 1

ARMIK 1A RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	ARMIK	-	-	+8.8	-	-	+FL120/-FL150	-	-	RNAV 1
020	TF	AGEBO	-	090(099.1)	+8.8	31.0	-	+4000	-	-3.3	RNAV 1

ASLIK 1A RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	ASLIK	-	-	+8.8	-	-	+FL120/-FL150	-	-	RNAV 1
020	TF	OSMOG	-	306(315.3)	+8.8	37.5	-	+4000	-	-2.8	RNAV 1

BURIK 1A RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	BURIK	-	-	+8.8	-	-	+FL120/-FL150	-	-	RNAV 1
020	TF	OSMOG	-	333(342.0)	+8.8	33.1	-	+4000	-	-3.1	RNAV 1

DINBO 1A RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	DINBO	-	-	+8.8	-	-	+FL120/-FL150	-	-	RNAV 1
020	TF	AGEBO	-	118(126.7)	+8.8	33.8	-	+4000	-	-3.1	RNAV 1

DITSO 1A RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	DITSO	-	-	+8.8	-	-	+FL120/-FL150	-	-	RNAV 1
020	TF	OSMOG	-	018(026.8)	+8.8	30.2	-	+4000	-	-3.4	RNAV 1

DOPAR 1A RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	DOPAR	-	-	+8.8	-	-	+FL120/-FL150	-	-	RNAV 1
020	TF	AGEBO	-	216(224.6)	+8.8	53.5	-	+4000	-	-1.9	RNAV 1

## WAYPOINT COORDINATES

Waypoint Identifier	Coordinates	
ABURA	473345.00N	0664312.00E
ADOKA	482224.00N	0671842.00E
ADRIK	480432.00N	0684119.00E
AGEBO	474009.80N	0672651.85E
AMASO	474914.00N	0684857.00E
ARMIK	474512.00N	0664137.00E
ASLIK	470509.00N	0681542.00E
BURIK	470012.00N	0675152.00E
DINBO	480029.00N	0664647.00E
DITSO	470443.00N	0671637.00E
DOPAR	481831.00N	0682229.00E
OSMOG	473140.31N	0673643.23E

**ZHEZKAZGAN  
RWY 22**



## TABULAR DESCRIPTION

ABURA 1M 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	ABURA	-	-	+8.8	-	-	+FL 120 / -FL 150	-	-	RNAV 1
020	TF	DIPSU	-	057(066.5)	+8.8	50.7	-	+4000	-	-2	RNAV 1

ADOKA 1M 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	ADOKA	-	-	+8.8	-	-	+FL 120 / -FL 150	-	-	RNAV 1
020	TF	DIPSU	-	133(141.7)	+8.8	36.5	-	+4000	-	-2.8	RNAV 1

ADRIK 1M 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	ADRIK	-	-	+8.8	-	-	+FL 120 / -FL 150	-	-	RNAV 1
020	TF	KD803	-	236(245.3)	+8.8	27.9	-	+4000	-	-3.7	RNAV 1

AMASO 1M 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	AMASO	-	-	+8.8	-	-	+FL 120 / -FL 150	-	-	RNAV 1
020	TF	KD803	-	268(276.9)	+8.8	30.7	-	+4000	-	-3.4	RNAV 1

ARMIK 1M 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	ARMIK	-	-	+8.8	-	-	+FL 120 / -FL 150	-	-	RNAV 1
020	TF	DIPSU	-	070(079.5)	+8.8	48.4	-	+4000	-	-2.1	RNAV 1

ASLIK 1M 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	ASLIK	-	-	+8.8	-	-	+FL 120 / -FL 150	-	-	RNAV 1
020	TF	LUSUT	-	338(347.2)	+8.8	41.1	-	+4000	-	-2.5	RNAV 1

BURIK 1M 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	BURIK	-	-	+8.8	-	-	+FL 120 / -FL 150	-	-	RNAV 1
020	TF	LUSUT	-	000(008.8)	+8.8	45.5	-	+4000	-	-2.3	RNAV 1

DINBO 1M 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	DINBO	-	-	+8.8	-	-	+FL 120 / -FL 150	-	-	RNAV 1
020	TF	DIPSU	-	089(098.4)	+8.8	44.6	-	+4000	-	-2.3	RNAV 1

DITSO 1M 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	DITSO	-	-	+8.8	-	-	+FL 120 / -FL 150	-	-	RNAV 1
020	TF	LUSUT	-	028(037.2)	+8.8	51.0	-	+4000	-	-2	RNAV 1

DOPAR 1M 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	DOPAR	-	-	+8.8	-	-	+FL 120 / -FL 150	-	-	RNAV 1
020	TF	KD803	-	197(206.3)	+8.8	28.7	-	+4000	-	-3.6	RNAV 1

## WAYPOINT COORDINATES

Waypoint Identifier	Coordinates	
ABURA	473345.00N	0664312.00E
ADOKA	482224.00N	0671842.00E
ADRIK	480432.00N	0684119.00E
AMASO	474914.00N	0684857.00E
ARMIK	474512.00N	0664137.00E
ASLIK	470509.00N	0681542.00E
BURIK	470012.00N	0675152.00E
DINBO	480029.00N	0664647.00E
DIPSU	475340.14N	0675220.19E
DITSO	470443.00N	0671637.00E
DOPAR	481831.00N	0682229.00E
KD803	475245.04N	0680336.06E
LUSUT	474510.22N	0680213.37E

**ZHEZKAZGAN  
RWY 22**

 $N_{0.0304}$ 

## TABULAR DESCRIPTION

ABURA 1N RWY22											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance to THR (NM)	Distance to go (DTG) (NM)	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	ABURA	-	-	+8.8	66.0	-	+FL120/-FL150	-315	-	RNAV 1
020	TF	DIPSU	-	058(066.5)	+8.8	15.3	50.7	+4000	-	-2	RNAV 1

ADOKA 1N RWY22											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance to THR (NM)	Distance to go (DTG) (NM)	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	ADOKA	-	-	+8.8	51.8	-	+FL120/-FL150	-315	-	RNAV 1
020	TF	DIPSU	-	133(141.7)	+8.8	15.3	36.5	+4000	-	-2.8	RNAV 1

ADRIK 1N RWY22											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance to THR (NM)	Distance to go (DTG) (NM)	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	ADRIK	-	-	+8.8	43.2	-	+FL120/-FL150	-315	-	RNAV 1
020	TF	KD803	-	236(245.3)	+8.8	15.3	27.9	+4000	-	-3.7	RNAV 1

AMASO 1N RWY22											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance to THR (NM)	Distance to go (DTG) (NM)	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	AMASO	-	-	+8.8	46.0	-	+FL120/-FL150	-315	-	RNAV 1
020	TF	KD803	-	268(276.9)	+8.8	15.3	30.7	+4000	-	-3.4	RNAV 1

ARMIK 1N RWY22											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance to THR (NM)	Distance to go (DTG) (NM)	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	ARMIK	-	-	+8.8	63.7	-	+FL120/-FL150	-315	-	RNAV 1
020	TF	DIPSU	-	071(079.5)	+8.8	15.3	48.4	+4000	-	-2.1	RNAV 1

ASLIK 1N RWY22											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance to THR (NM)	Distance to go (DTG) (NM)	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	ASLIK	-	-	+8.8	56.4	-	+FL120/-FL150	-315	-	RNAV 1
020	TF	LUSUT	-	338(347.2)	+8.8	15.3	41.1	+4000	-	-2.5	RNAV 1

BURIK 1N RWY22											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance to THR (NM)	Distance to go (DTG) (NM)	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	BURIK	-	-	+8.8	60.8	-	+FL120/-FL150	-315	-	RNAV 1
020	TF	LUSUT	-	000(008.8)	+8.8	15.3	45.5	+4000	-	-2.3	RNAV 1

DINBO 1N RWY22											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance to THR (NM)	Distance to go (DTG) (NM)	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	DINBO	-	-	+8.8	59.9	-	+FL120/-FL150	-315	-	RNAV 1
020	TF	DIPSU	-	090(098.4)	+8.8		44.6	+4000	-	-2.3	RNAV 1

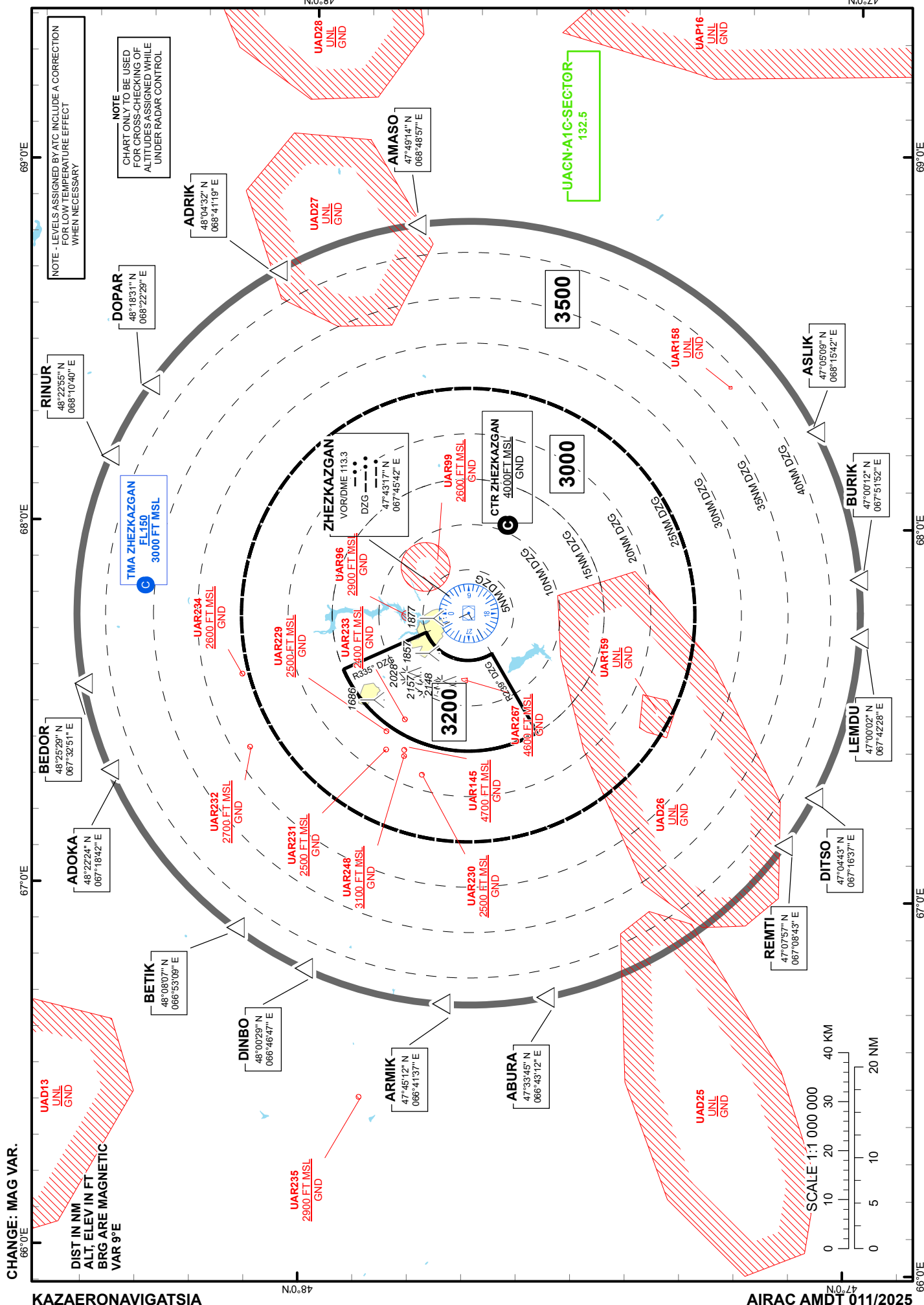
DITSO 1N RWY22											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance to THR (NM)	Distance to go (DTG) (NM)	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	DITSO	-	-	+8.8	66.3	-	+FL120/-FL150	-315	-	RNAV 1
020	TF	LUSUT	-	028(037.2)	+8.8	15.3	51.0	+4000	-	-	RNAV 1

DOPAR 1N RWY22											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance to THR (NM)	Distance to go (DTG) (NM)	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	DOPAR	-	-	+8.8	44.0	-	+FL120/-FL150	-315	-	RNAV 1
020	TF	KD803	-	197(206.3)	+8.8	15.3	28.7	+4000	-	-	RNAV 1

## WAYPOINT COORDINATES

Waypoint Identifier	Coordinates	
ABURA	473345.00N	0664312.00E
ADOKA	482224.00N	0671842.00E
ADRIK	480432.00N	0684119.00E
AMASO	474914.00N	0684857.00E
ARMIK	474512.00N	0664137.00E
ASLIK	470509.00N	0681542.00E
BURIK	470012.00N	0675152.00E
DINBO	480029.00N	0664647.00E

Waypoint Identifier	Coordinates	
DIPSU	475340.14N	0675220.19E
DITSO	470443.00N	0671637.00E
DOPAR	481831.00N	0682229.00E
KD803	475245.04N	0680336.06E
LUSUT	474510.22N	0680213.37E



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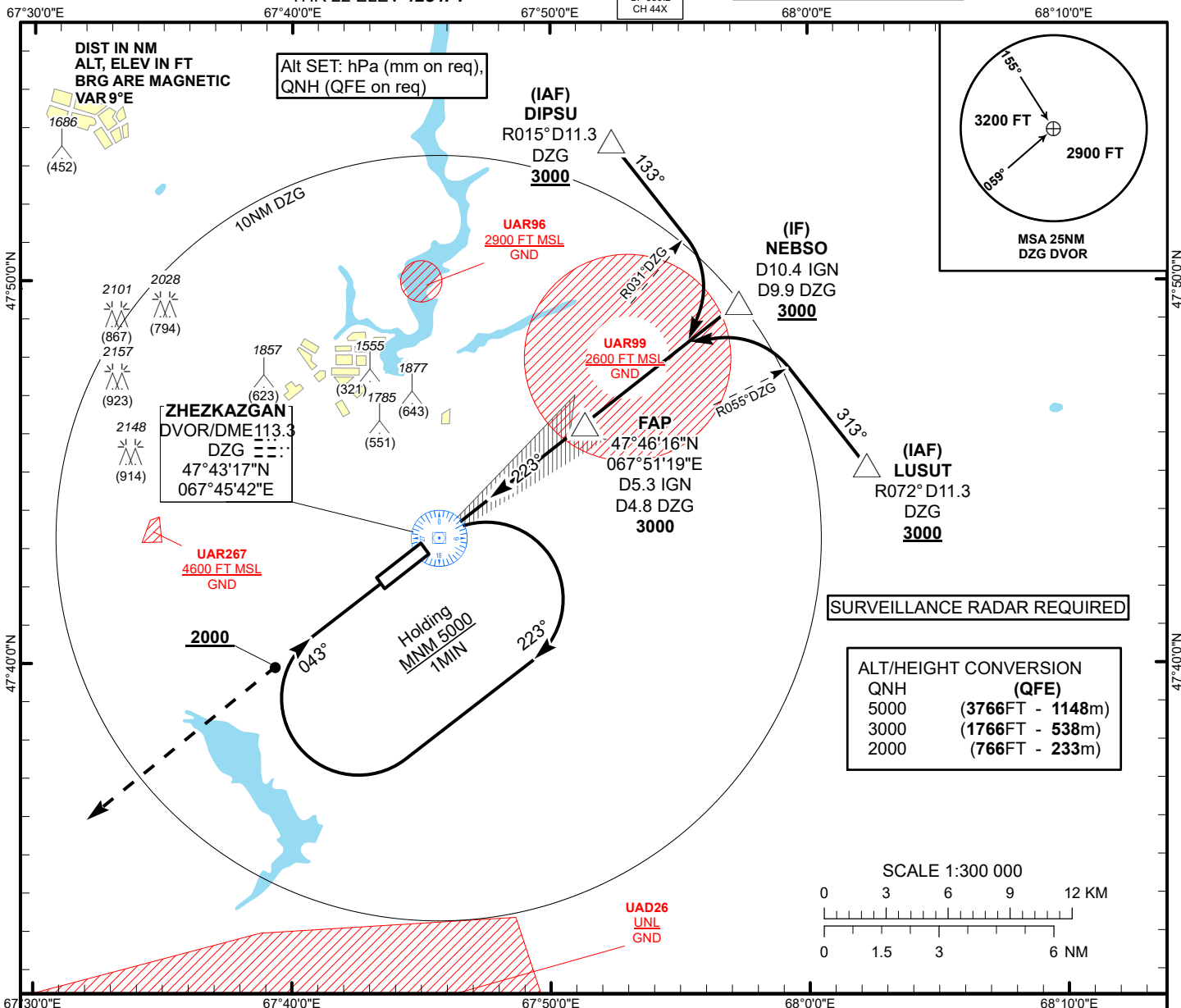
INSTRUMENT  
APPROACH  
CHART - ICAO

AERODROME ELEV **1251FT**  
HEIGHTS RELATED TO  
THR 22 ELEV **1234FT**

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 223° to 3000 ft.  
After passing 2000 ft radar  
vectoring will be provided.

RADIO FAILURE

In the case of RCF  
climb on track 223° to 3000  
outbound to 8.0NM DZG.  
Turn left, climb to 5000  
to DZG and join  
to holding pattern.

TRANSITION ALT  
**10000**

FAP  
D5.3 IGN  
D4.8 DZG

IF  
NEBSO  
D10.4 IGN  
D9.9 DZG

3000

ILS RDH 49  
ELEV 1234  
THR RWY22

DVOR/DME  
DZG

GP 3.0°

223°

223°

Aircraft Category		A	B	C	D	DME IGN - THR	NM	5.3	5	4	3	2	1
Straight-in Approach OCA/H						DME DZG	NM	4.8	4.5	3.5	2.5	1.5	0.5
	CAT I	1434(200)	1434(200)	1443(209)	1453(219)	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

ZHEZKAZGAN  
ILS/DME

AERONAUTICAL DATA TABULATION

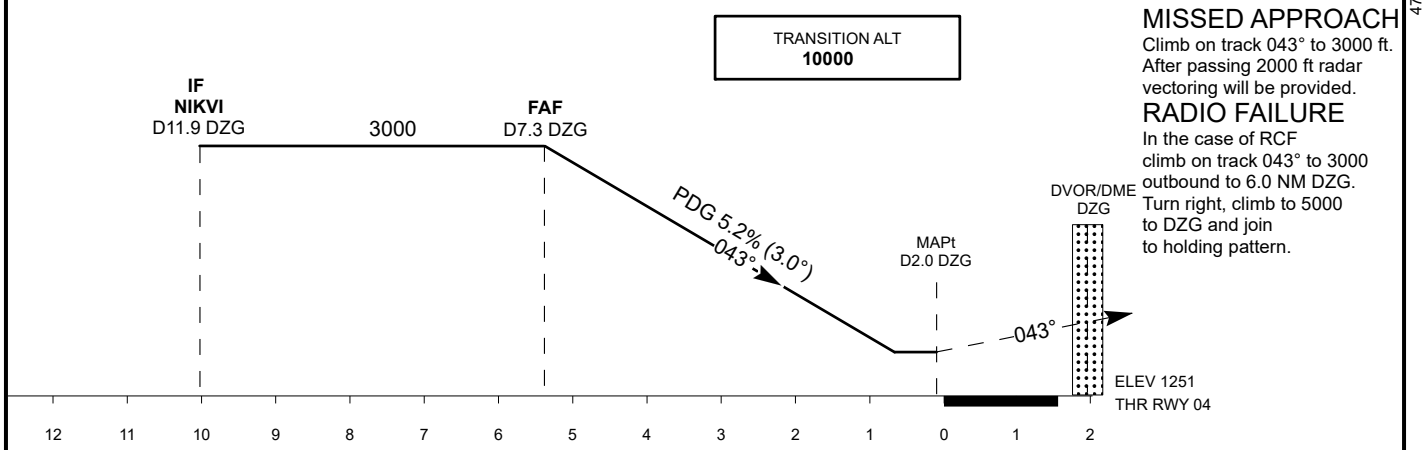
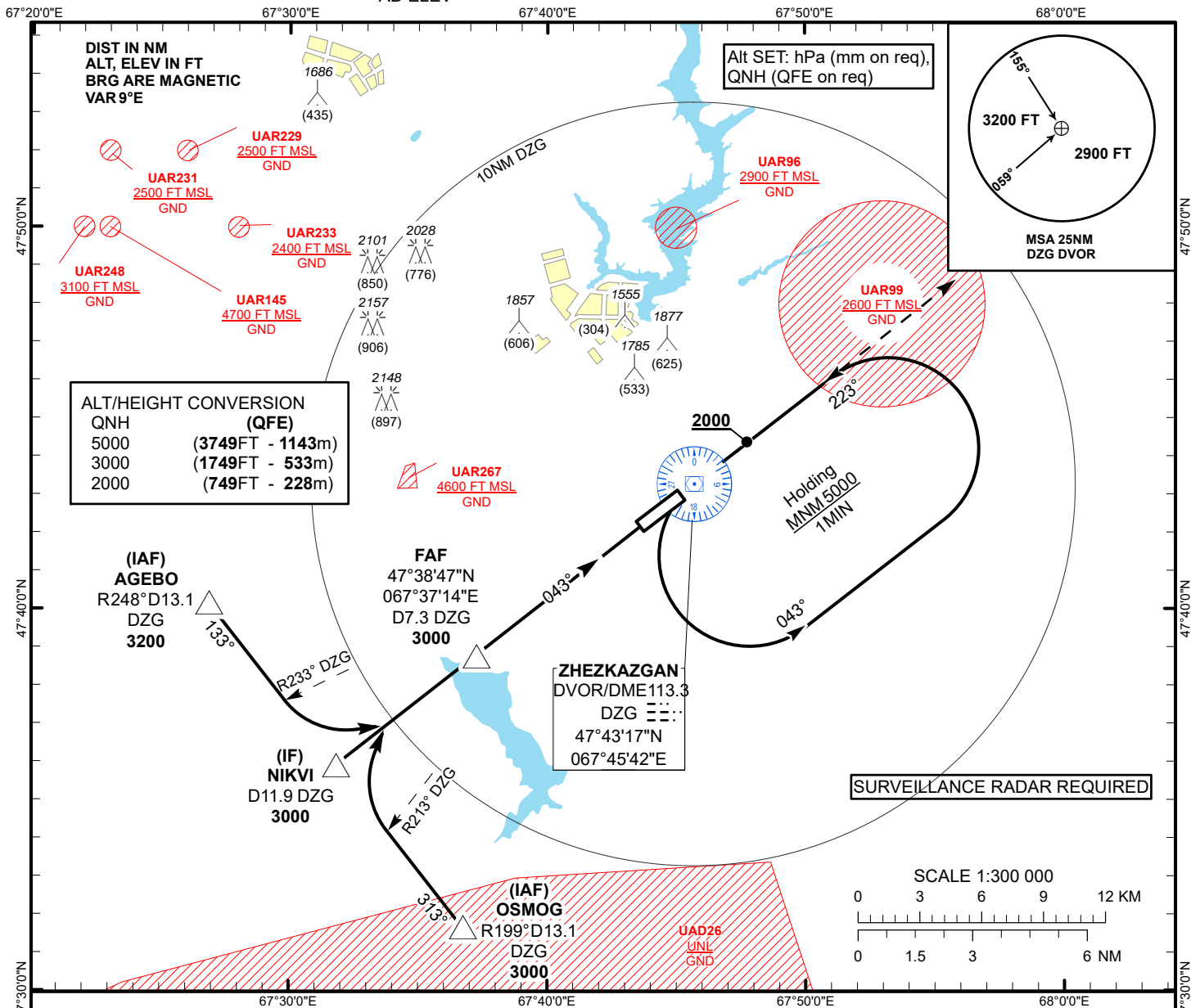
ILS approach to RWY22 from DIPSU, NEBSO, LUSUT	
Fix/point	Coordinates
DVOR/DME DZG	47° 43' 17.1"N 067° 45' 41.7"E
(FAP) D5.3 IGN D4.8 DZG	47° 46' 15.7"N 067° 51' 18.6"E
NEBSO (IF) D9.9 DZG D10.4 IGN	47° 49' 25.3"N 067° 57' 17.2"E
DIPSU (IAF) R015°,D11.3 DZG	47° 53' 40.1"N 067° 52' 20.2"E
LUSUT (IAF) 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 1251FT  
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



Aircraft Category		A	B	C	D	DIST THR	5.4	5	4	3	2	1	
Straight-in Approach OCA/H						DME DZG	7.3	6.9	5.9	4.9	3.9	2.9	
	VOR/DME	1530(280)	1530(280)	1530(280)	1530(280)	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

ZHEZKAZGAN  
VOR/DME Y

AERONAUTICAL DATA TABULATION

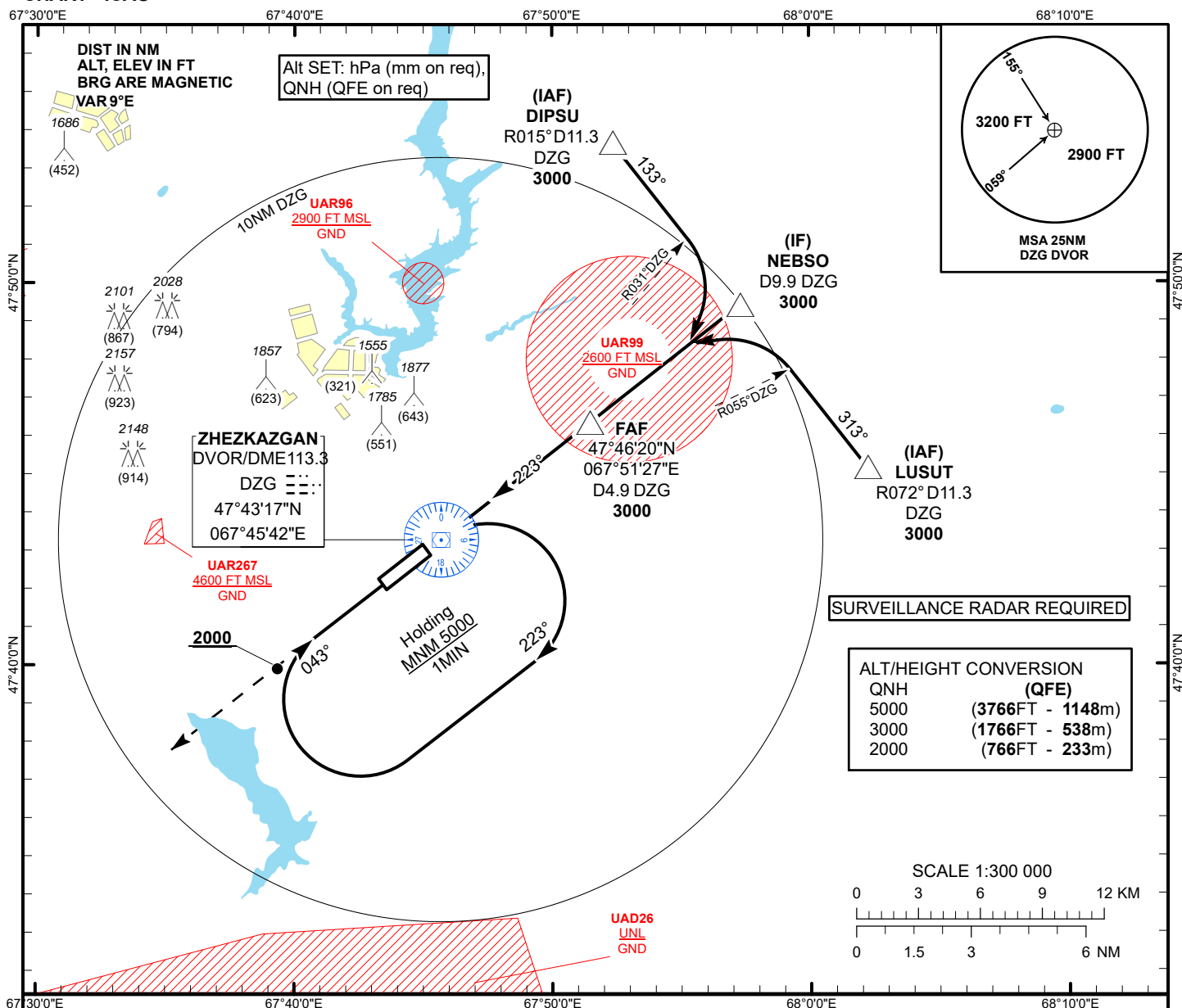
VOR approach to RWY04 from AGEBO, NIKVI, OSMOG	
Fix/point	Coordinates
DVOR/DME DZG	47° 43' 17.1"N 067° 45' 41.7"E
(FAF) D7.3 DZG	47° 38' 46.7"N 067° 37' 14.0"E
NIKVI (IF) D11.9 DZG	47° 35' 55.2"N 067° 31' 47.9"E
AGEBO (IAF) R248°, D13.1 DZG	47° 40' 09.8"N 067° 26' 51.9"E
OSMOG (IAF) R199°, D13.1 DZG	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 **1251FT**  
HEIGHTS RELATED TO  
THR RWY 22 ELEV **1234FT**

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

ZHEZKAZGAN  
VOR/DME Y  
RWY 22

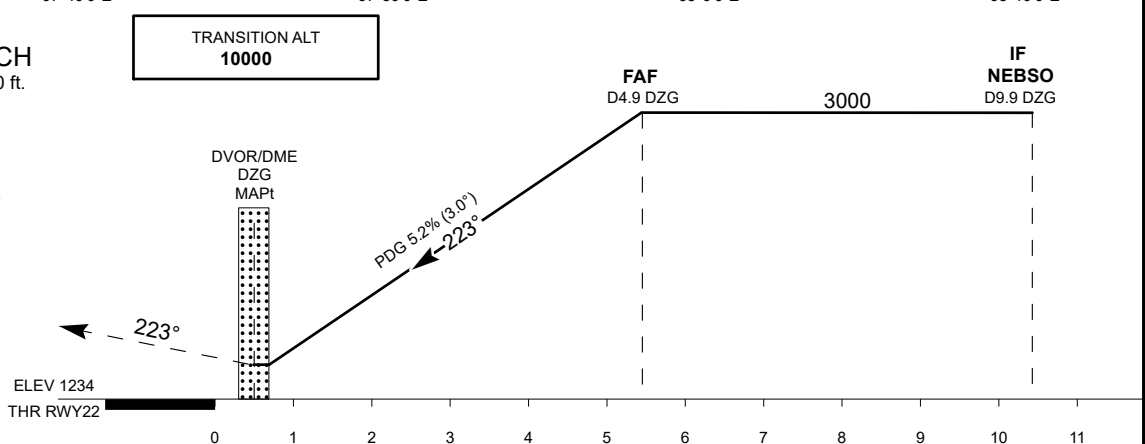


**MISSED APPROACH**

Climb on track 223° to 3000 ft.  
After passing 2000 ft radar  
vectoring will be provided.

**RADIO FAILURE**

In the case of RCF  
climb on track 223° to 3000  
outbound to 8.0 NM DZG.  
Turn left, climb to 5000  
to DZG and join  
to holding pattern.



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

ZHEZKAZGAN  
VOR/DME Y

AERONAUTICAL DATA TABULATION

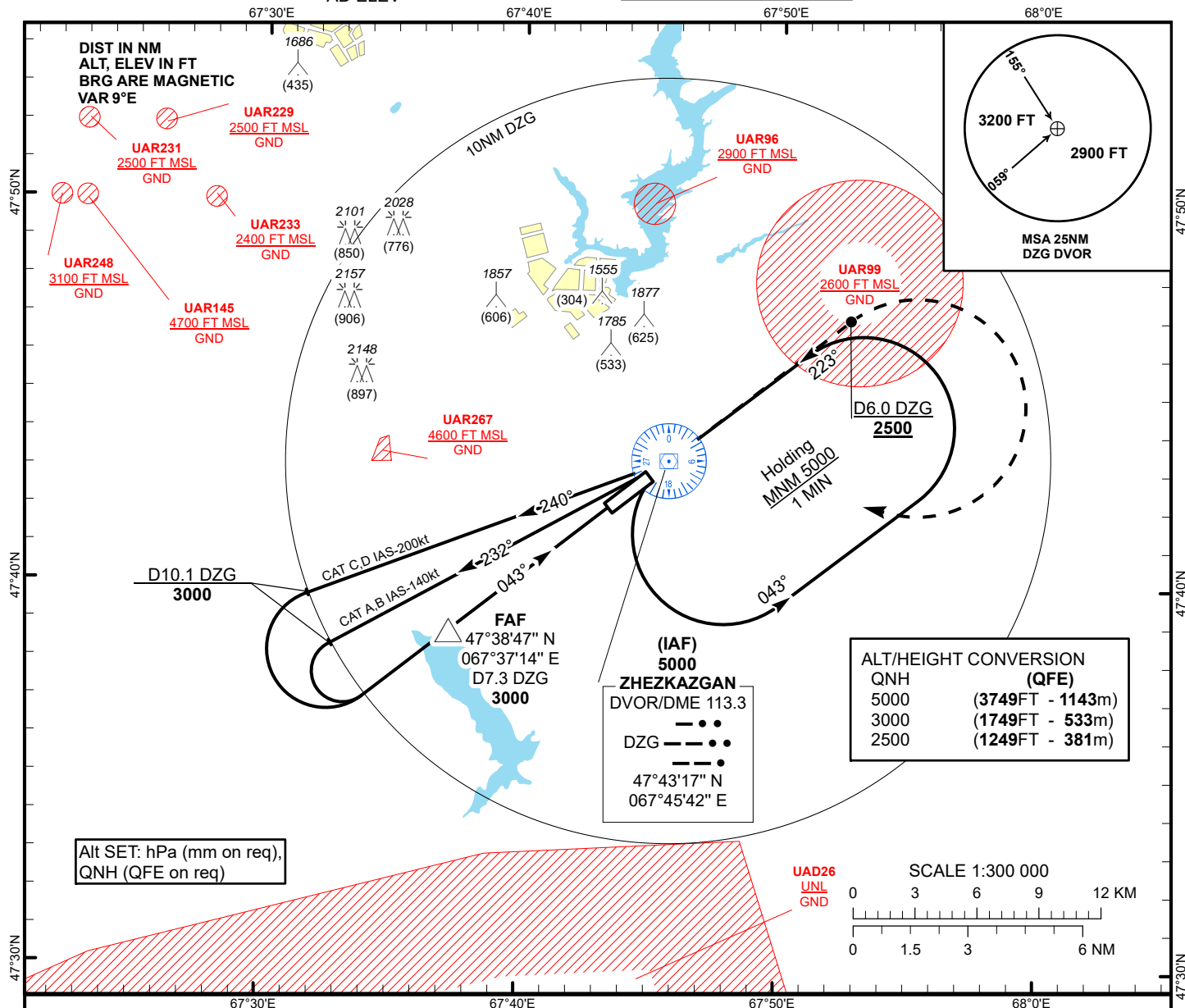
VOR approach to RWY22 from DIPSU, NEBSO, LUSUT	
Fix/point	Coordinates
DVOR/DME DZG	47° 43' 17.1"N 067° 45' 41.7"E
(FAF) D4.9 DZG	47° 46' 20.1"N 067° 51' 27.1"E
NEBSO (IF) D9.9 DZG	47° 49' 25.3"N 067° 57' 17.2"E
DIPSU (IAF) R015°,D11.3 DZG	47° 53' 40.1"N 067° 52' 20.2"E
LUSUT (IAF) R072°,D11.3 DZG	47° 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 - ICAO

AERODROME ELEV 1251 FT  
HEIGHTS RELATED TO  
AD ELEV

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

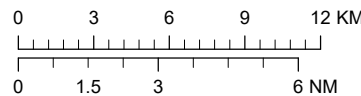
ZHEZKAZGAN  
VOR/DME Z  
RWY 04



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

ALT/HEIGHT CONVERSION	
QNH	(QFE)
5000	(3749FT - 1143m)
3000	(1749FT - 533m)
2500	(1249FT - 381m)

SCALE 1:300 000



TRANSITION ALT  
10000

3000

FAF  
D7.3 DZG

PDG 5.2% (3.0°)  
043°

MAPt  
D2.0 DZG

043°

ELEV 1251

THR RWY 04

MISSED APPROACH

Climb on track 043° to 2500 or above  
outbound to D6.0 DZG, turn RIGHT  
to DZG. Climb initially to 3000,  
then as directed.

**RADIO FAILURE:** in the  
case of RCF climb to 5000 to DZG  
and join to holding pattern. Missed  
approach turn speed limited  
to 250kt IAS maximum.

Aircraft Category		A	B	C	D	DIST THR	5.4	5	4	3	2	1
Straight-in Approach OCA/H						DME DZG	7.3	6.9	5.9	4.9	3.9	2.9
	VOR/DME	1530(280)	1530(280)	1530(280)	1530(280)	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

ZHEZKAZGAN  
VOR/DME Z

AERONAUTICAL DATA TABULATION

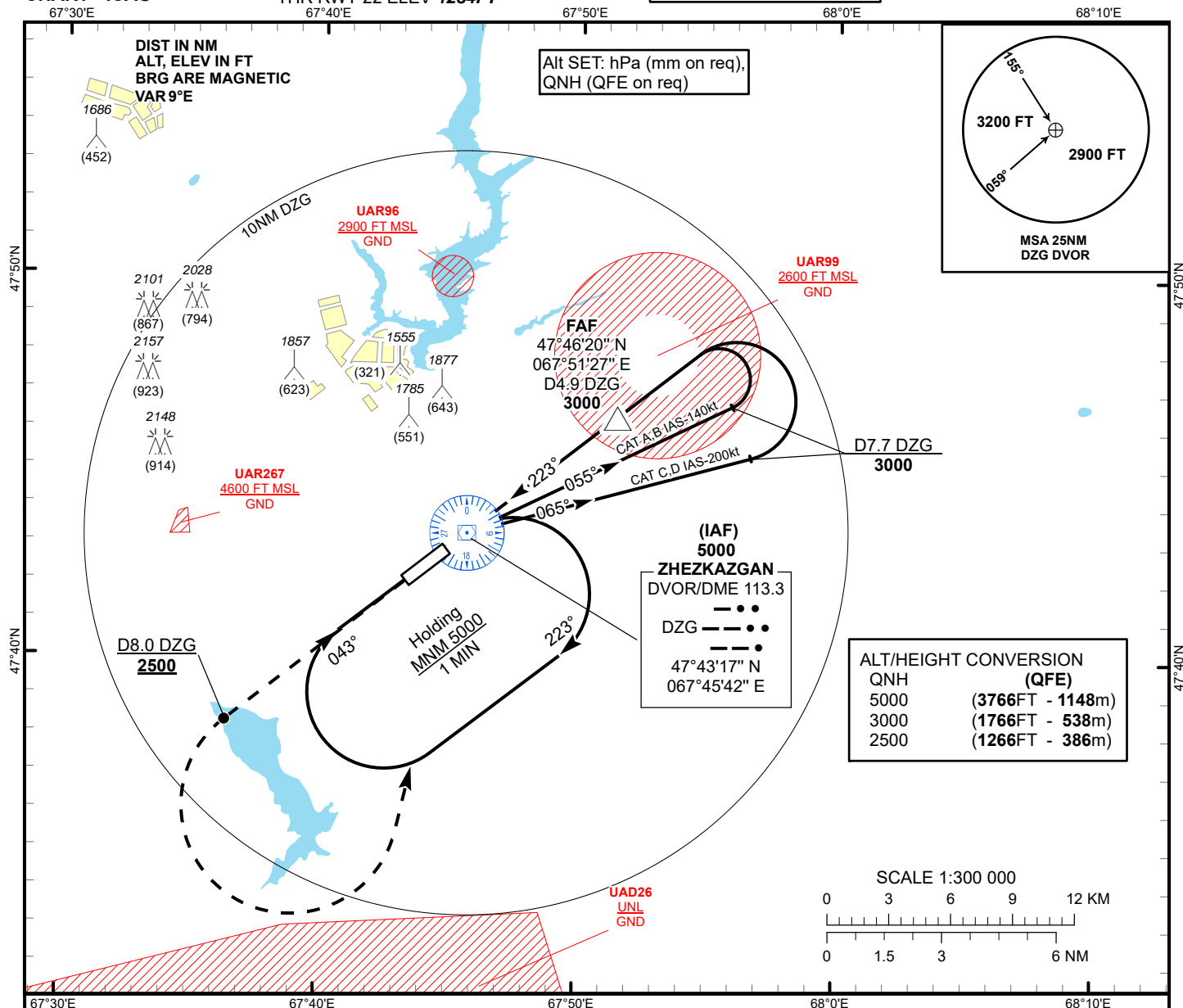
VOR approach to RWY04 from DVOR/DME DZG	
Fix/point	Coordinates
(IAF) DVOR/DME DZG	47° 43' 17.1"N 067° 45' 41.7"E
(FAF) D7.3 DZG	47° 38' 46.7"N 067° 37' 14.0"E
THR RWY 04	47° 42' 06.51"N 067° 43' 29.14"E
Final approach descent angle is 3°	

INSTRUMENT  
APPROACH  
CHART - ICAO

AERODROME ELEV **1251FT**  
HEIGHTS RELATED TO  
THR RWY 22 ELEV **1234FT**

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

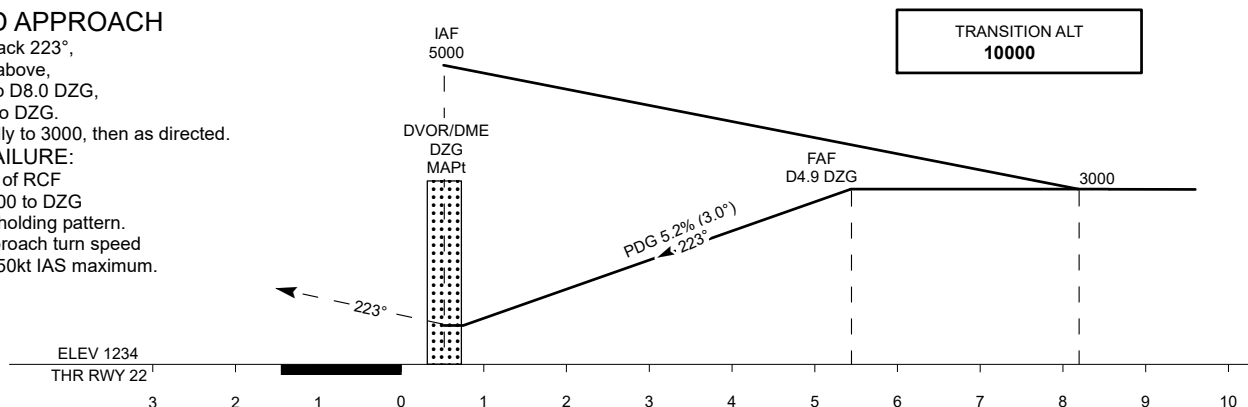
ZHEZKAZGAN  
VOR/DME Z  
RWY 22



MISSED APPROACH

Climb on track 223°,  
at 2500 or above,  
outbound to D8.0 DZG,  
turn LEFT to DZG.  
Climb initially to 3000, then as directed.

RADIO FAILURE:  
In the case of RCF  
climb to 5000 to DZG  
and join to holding pattern.  
Missed approach turn speed  
limited to 250kt IAS maximum.



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

ZHEZKAZGAN  
VOR/DME Z

AERONAUTICAL DATA TABULATION

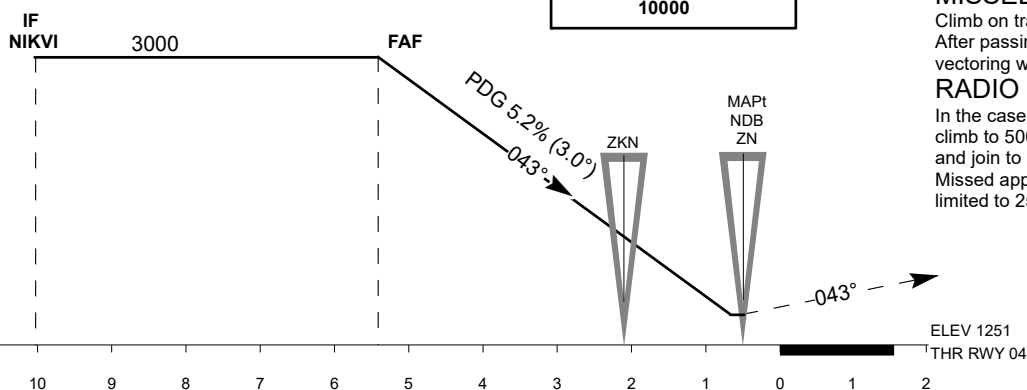
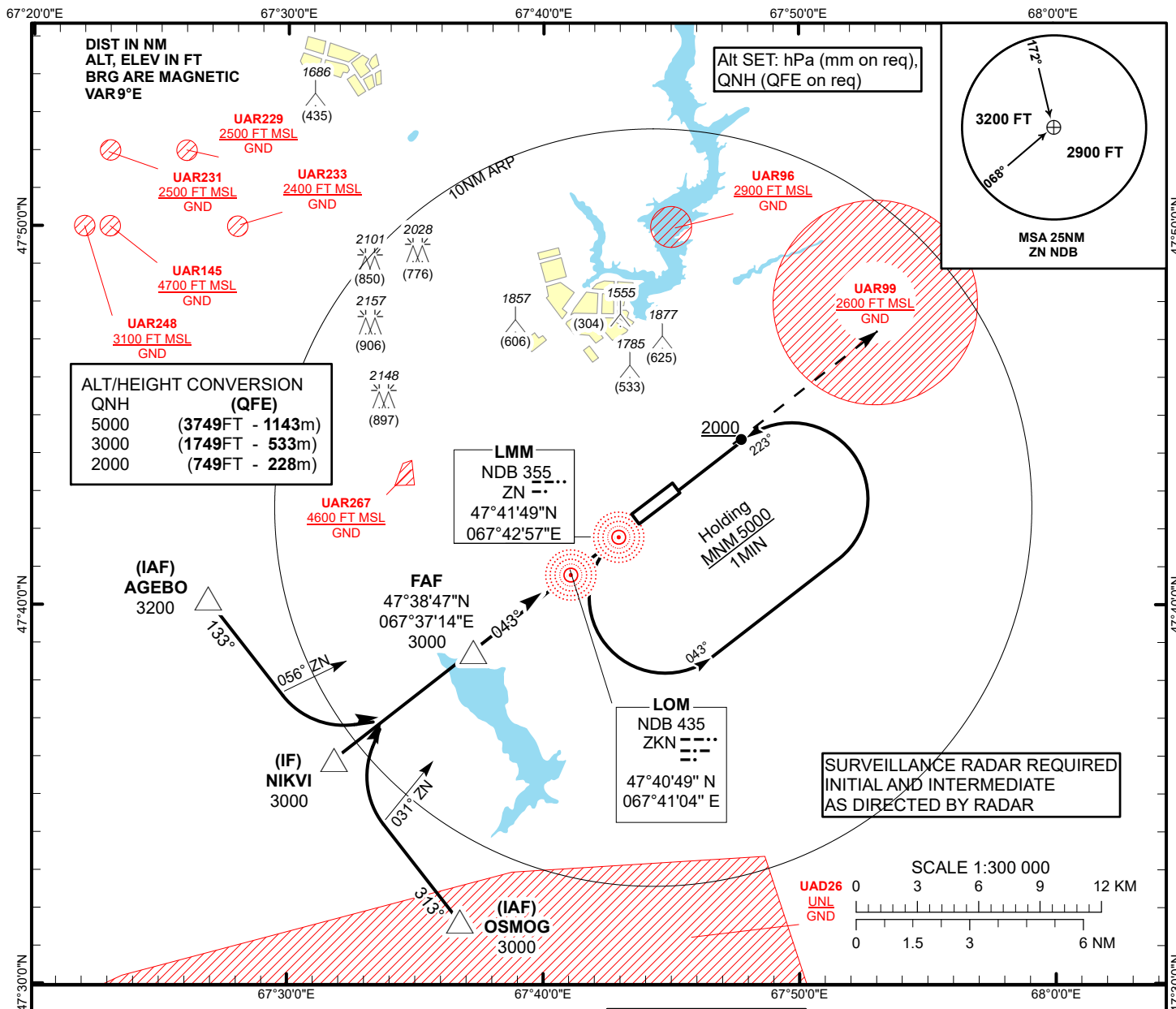
VOR approach to RWY22 from DVOR/DME DZG	
Fix/point	Coordinates
(IAF) DVOR/DME DZG	47° 43' 17.1"N 067° 45' 41.7"E
(FAF) D4.9 DZG	47° 46' 20.1"N 067° 51' 27.1"E
THR RWY 22	47° 42' 58.68"N 067° 45' 07.14"E
Final approach descent angle is 3°	

INSTRUMENT  
APPROACH  
CHART

AERODROME ELEV 1251FT  
HEIGHTS RELATED TO  
AD ELEV

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

ZHEZKAZGAN  
2NDB  
RWY 04



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

ZHEZKAZGAN  
2NDB

AERONAUTICAL DATA TABULATION

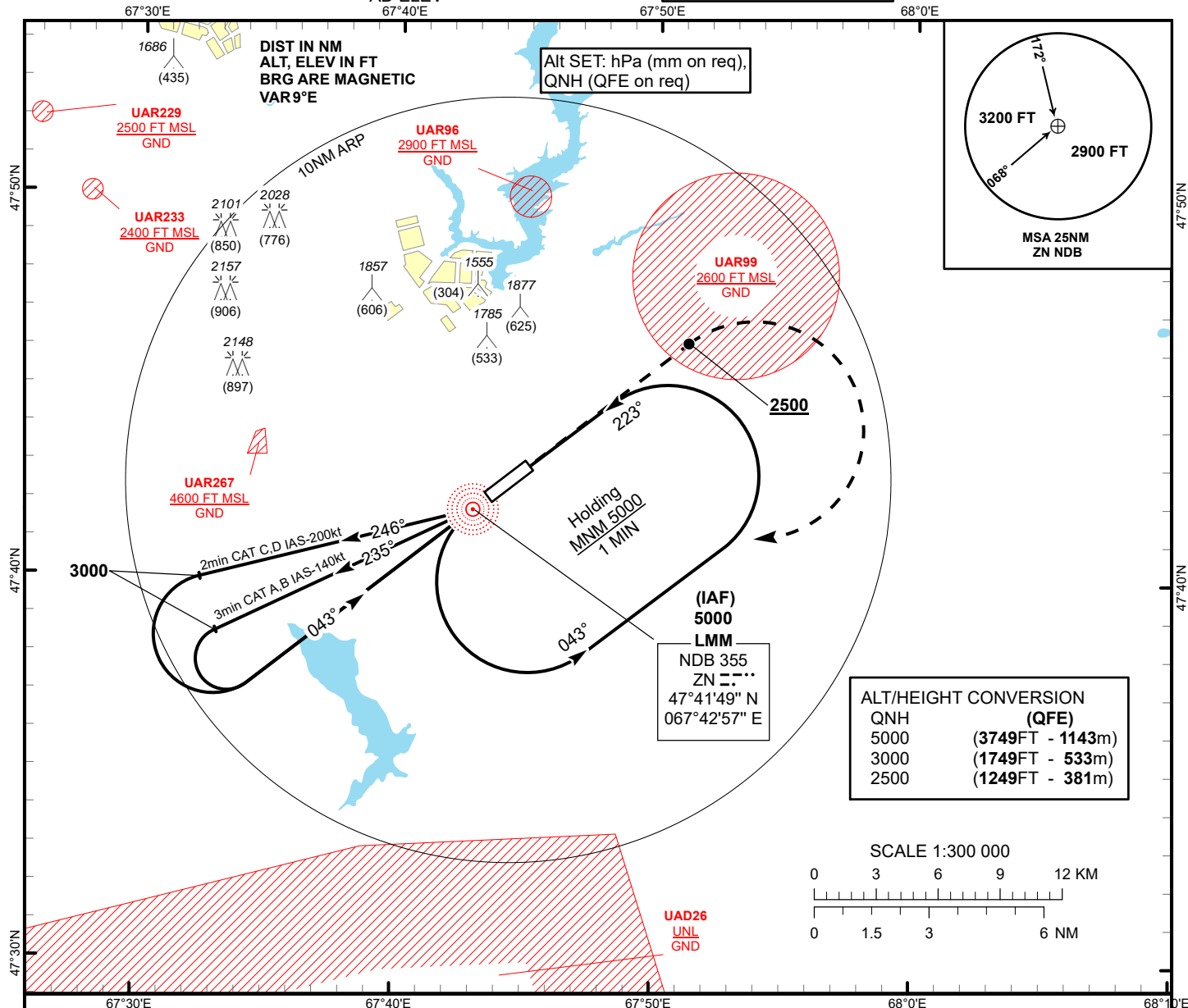
NDB approach to RWY04 from AGEBO, NIKVI, OSMOG	
Fix/point	Coordinates
LMM NDB ZN	47° 41' 48.7"N 067° 42' 56.9"E
LOM NDB ZKN	47° 40' 48.7"N 067° 41' 04.5"E
(FAF)	47° 38' 46.7"N 067° 37' 14.0"E
NIKVI (IF)	47° 35' 55.2"N 067° 31' 47.9"E
AGEBO (IAF)	47° 40' 09.8"N 067° 26' 51.9"E
OSMOG (IAF)	47° 31' 40.3"N 067° 36' 43.2"E
THR RWY04	47° 42' 06.51"N 067° 43' 29.14"E

INSTRUMENT  
APPROACH  
CHART - ICAO

AERODROME ELEV 1251FT  
HEIGHTS RELATED TO  
AD ELEV

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

ZHEZKAZGAN  
NDB  
RWY 04



TRANSITION ALT  
10000

IAF 5000

3000

043°

043°

MISSED APPROACH

Climb on track 043° to 2500 or above,  
after passing ZN maintain 043° for 1 min 20 sec,  
then turn RIGHT to ZN.

Climb initially to 3000, then as directed.

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.

ELEV 1251

THR RWY 04

CHANGE: MAG VAR.

Aircraft Category		A	B	C	D
Straight-in Approach OCA/H	NDB	1580(330)	1580(330)	1580(330)	1580(330)
Aerodrome Operating Minima MDH ft x RVR (CMV)					
NDB					

ZHEZKAZGAN  
NDB

AERONAUTICAL DATA TABULATION

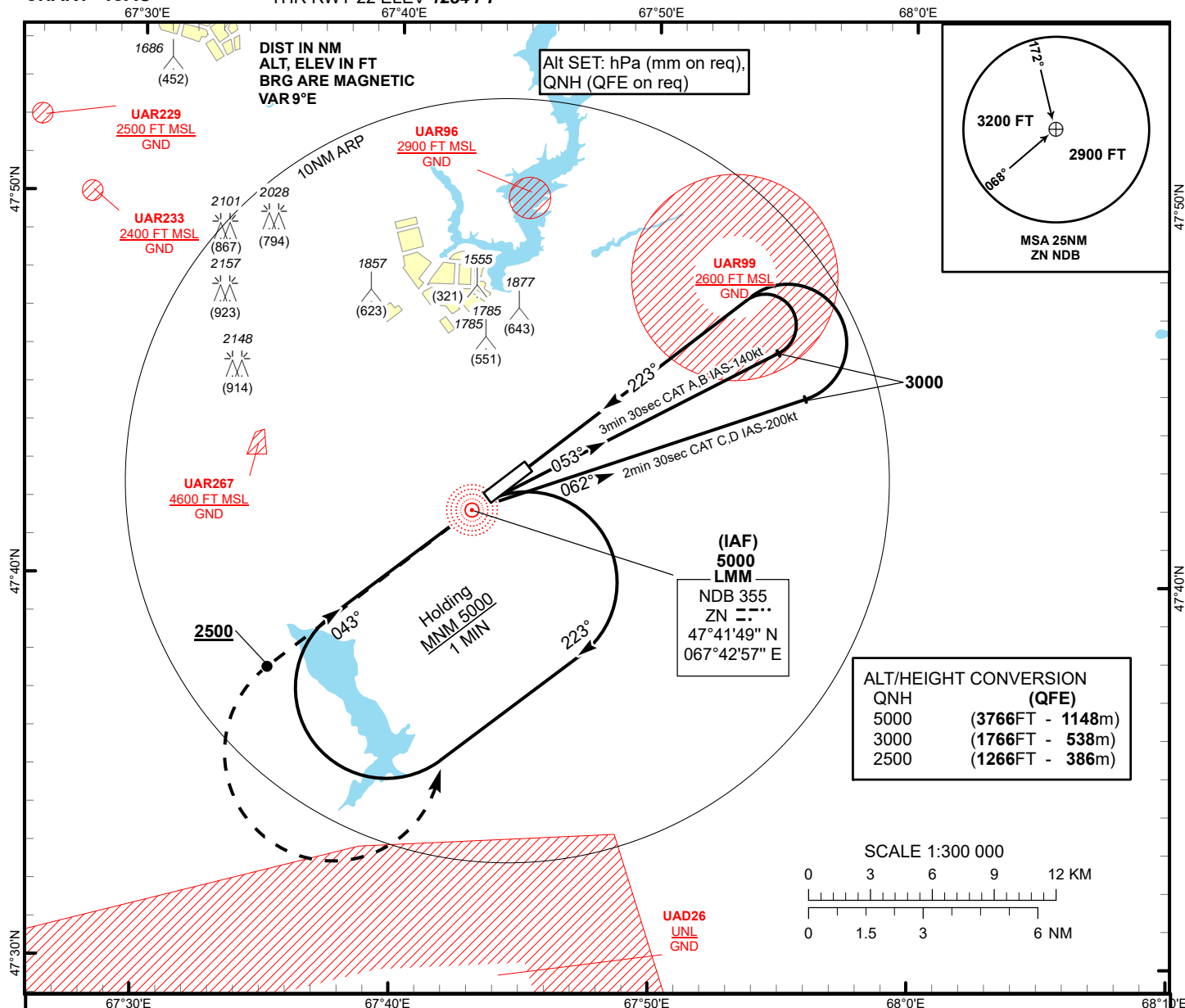
NDB approach to RWY04 from NDB ZN	
Fix/point	Coordinates
LMM NDB ZN	47° 41' 48.7"N 067° 42' 56.9"E
THR RWY04	47° 42' 06.51"N 067° 43' 29.14"E

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  
BC NDB  
RWY 22



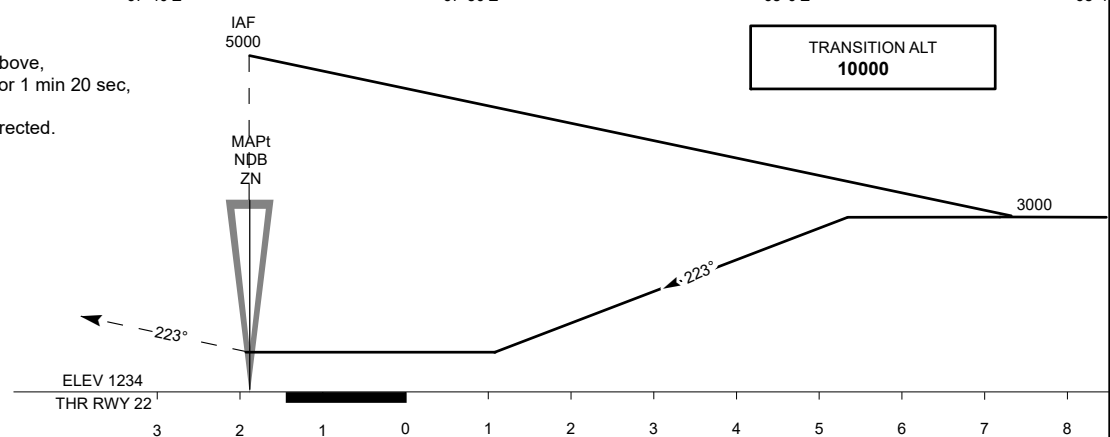
**MISSED APPROACH**

Climb on track 223° to 2500 or above,  
after passing ZN maintain 223° for 1 min 20 sec,  
then turn LEFT to ZN.

Climb initially to 3000, then as directed.

**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.



CHANGE: MAG VAR.

Aircraft Category		A	B	C	D
Straight-in Approach OCA/H	BC NDB	1640(400)	1640(400)	1640(400)	1640(400)
Aerodrome Operating Minima MDH ft x RVR (CMV)	BC NDB				

ZHEZKAZGAN  
BC NDB

AERONAUTICAL DATA TABULATION

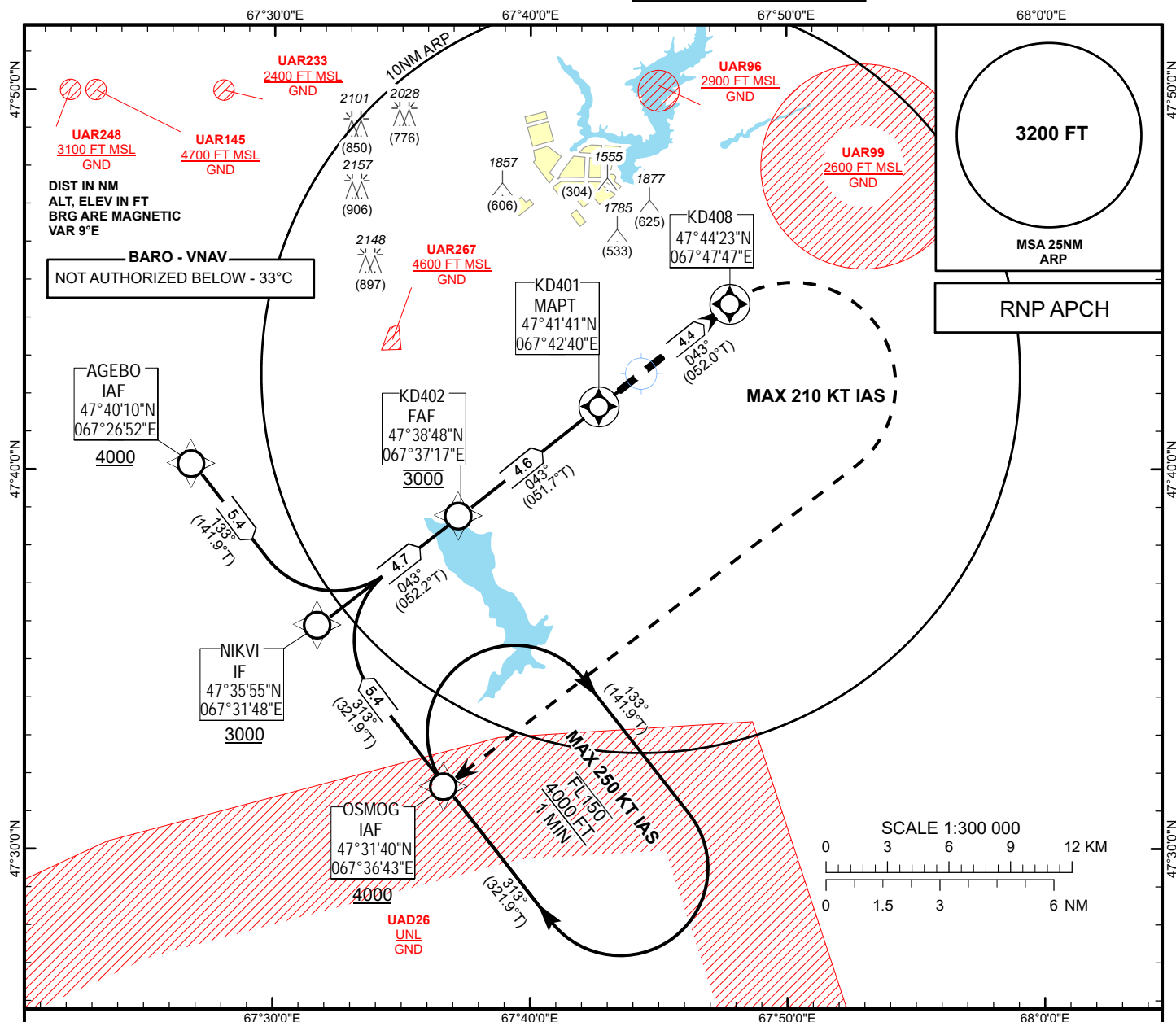
NDB approach to RWY22 from NDB ZN	
Fix/point	Coordinates
LMM NDB ZN	47° 41' 48.7"N 067° 42' 56.9"E
THR RWY22	47° 42' 58.68"N 067° 45' 07.14"E

INSTRUMENT  
APPROACH  
CHART - ICAO

AERODROME ELEV **1251FT**  
HEIGHTS RELATED TO  
AD ELEV

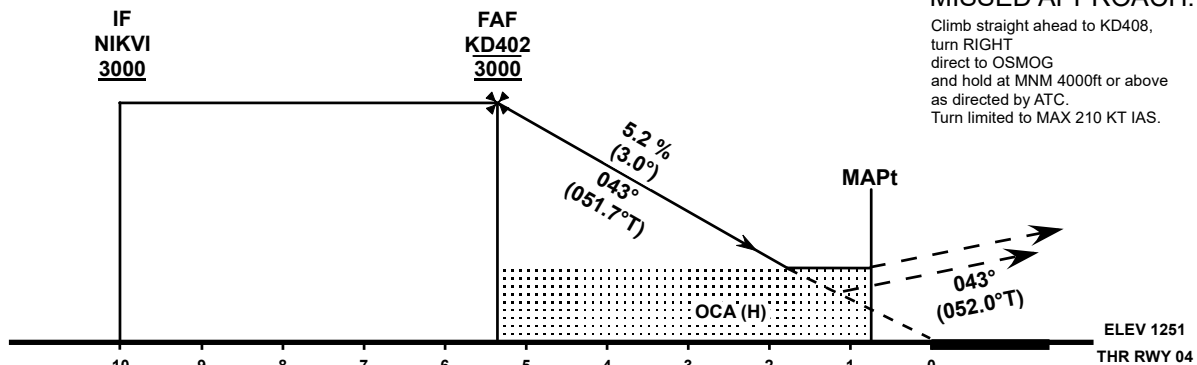
ZHEZKAZGAN TOWER 127.1  
ZHEZKAZGAN ATIS (EN) 131.4  
ZHEZKAZGAN ATIS (RU) 122.4

ZHEZKAZGAN  
RNP RWY 04



MISSED APPROACH:

Climb straight ahead to KD408,  
turn RIGHT  
direct to OSMOG  
and hold at MNM 4000ft or above  
as directed by ATC.  
Turn limited to MAX 210 KT IAS.



OCA(OCH)		A	B	C	D
Straight	LNAV	1530(280)			
	LNAV/VNAV	1420(169)	1429(178)	1450(199)	1477(226)

DIST to KD401	4.6	4	3	2	1
ALTITUDE	3000	2800	2480	2160	1840
HEIGHT	1749	1549	1229	909	589

GS	kt	80	100	120	140	160	180
Rate of descent	ft/min	425	531	637	743	849	955
FAF - MAPt (4.6 NM)	min:s	3:29	2:47	2:19	1:59	1:44	1:33

CHANGE: New chart.

TABULAR DESCRIPTION

RNP RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	AGEBO	-	-	+8.8	-	-	+4000	-	-	RNP APCH
020	TF	NIKVI	-	133(141.9)	+8.8	5.4	-	+3000	-	-	RNP APCH
010	IF	OSMOG	-	-	+8.8	-	-	+4000	-	-	RNP APCH
020	TF	NIKVI	-	313(321.9)	+8.8	5.4	-	+3000	-	-	RNP APCH
010	IF	NIKVI	-	-	+8.8	-	-	+3000	-	-	RNP APCH
020	TF	KD402	-	043(052.2)	+8.8	4.7	-	@3000	-	-	RNP APCH
030	TF	KD401	Y	043(051.7)	+8.8	4.6	-	@1523	-	-3	RNP APCH
040	CF	KD408	Y	043(052.0)	+8.8	4.4	-	-	-	+1.4	RNP APCH
050	DF	OSMOG	-	-	+8.8	-	R	+4000	-210	+1.4	RNP APCH
060	HM	OSMOG	-	313(321.9)	+8.8	-	R	+4000/-FL150	-250	-	RNP APCH

WAYPOINT COORDINATES

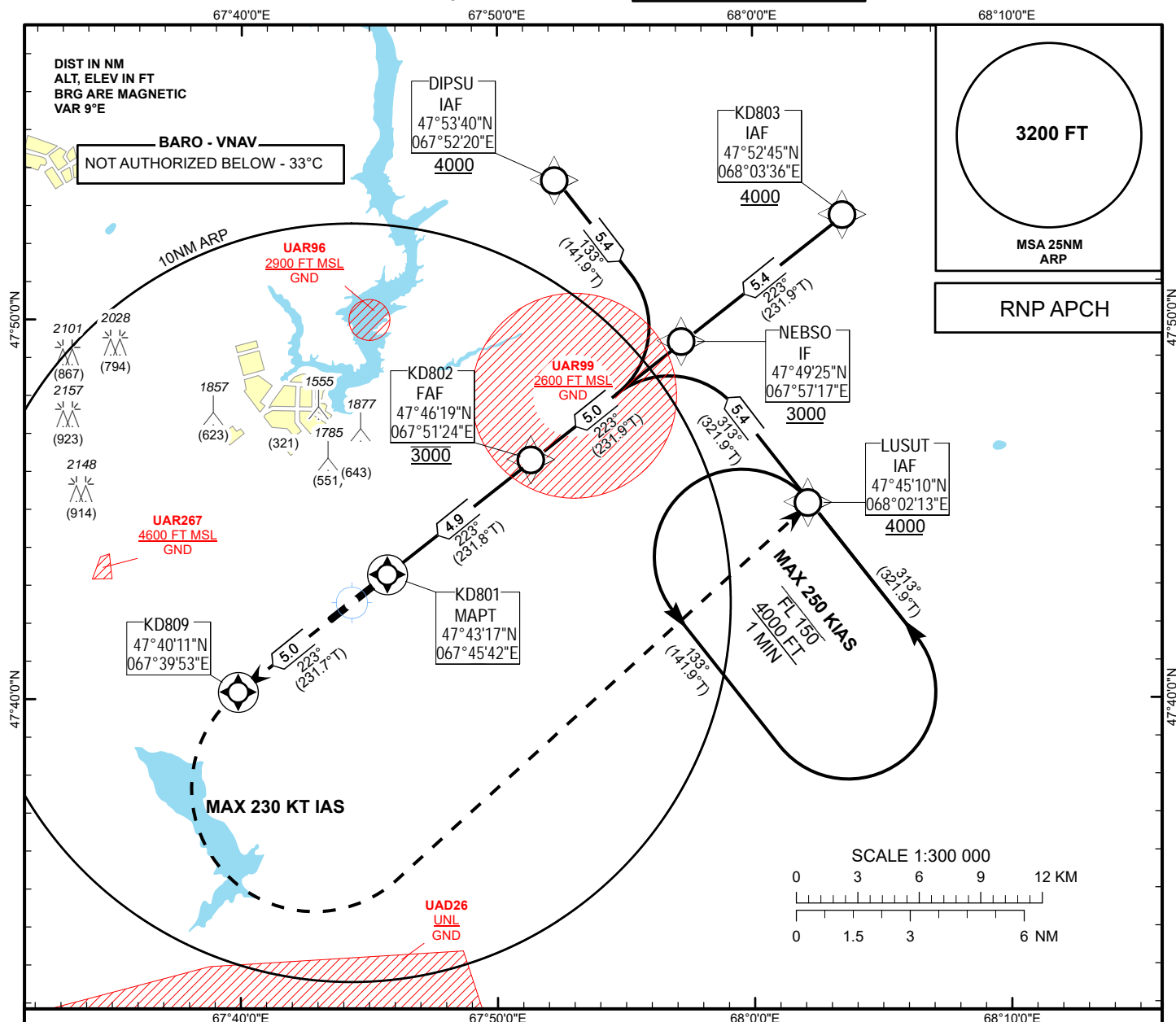
RNP RWY04		
Waypoint Identifier	Coordinates	
AGEBO	474009.80N	0672651.85E
KD401	474140.64N	0674240.14E
KD402	473848.04N	0673717.16E
KD408	474422.51N	0674747.20E
NIKVI	473555.16N	0673147.94E
OSMOG	473140.31N	0673643.23E

INSTRUMENT  
APPROACH  
CHART - ICAO

AERODROME ELEV **1251FT**  
HEIGHTS RELATED TO  
THR RWY 22 - ELEV **1234FT**

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

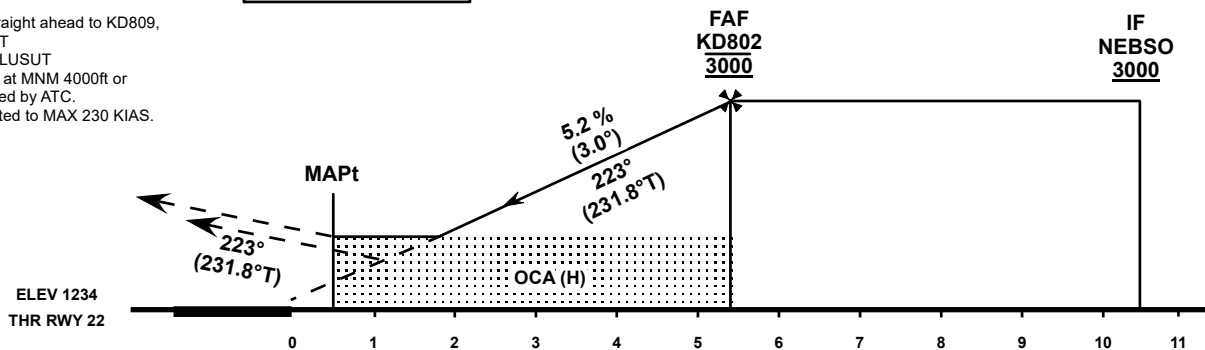
ZHEZKAZGAN  
RNP RWY 22



MISSED APPROACH:

TRANSITION ALT 10000 FT

Climb straight ahead to KD809,  
turn LEFT  
direct to LUSUT  
and hold at MNM 4000ft or  
as directed by ATC.  
Turn limited to MAX 230 KIAS.



OCA(OCH)		A	B	C	D	DIST to KD801				
Straight	LNAV	1500(270)				4.9	4	3	2	1
	LNAV/VNAV	1425(191)	1435(201)	1456(222)	1483(249)	ALTITUDE	3000	2720	2400	2080
						HEIGHT	1766	1486	1166	846

GS	kt	80	100	120	140	160	180
Rate of descent	ft/min	425	531	637	743	849	955
FAF - MAPt (4.9 NM)	min:s	3:40	2:56	2:27	2:06	1:50	1:38

CHANGE: New chart.

TABULAR DESCRIPTION

RNP 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	KD803	-	-	+8.8	-	-	+4000	-	-	RNP APCH
020	TF	NEBSO	-	223(231.9)	+8.8	5.4	-	+3000	-	-	RNP APCH
010	IF	DIPSU	-	-	+8.8	-	-	+4000	-	-	RNP APCH
020	TF	NEBSO	-	133(141.9)	+8.8	5.4	-	+3000	-	-	RNP APCH
010	IF	LUSUT	-	-	+8.8	-	-	+4000	-	-	RNP APCH
020	TF	NEBSO	-	313(321.9)	+8.8	5.4	-	+3000	-	-	RNP APCH
010	IF	NEBSO	-	-	+8.8	-	-	+3000	-	-	RNP APCH
020	TF	KD802	-	223(231.9)	+8.8	5.0	-	@3000	-	-	RNP APCH
030	TF	KD801	Y	223(231.8)	+8.8	4.9	-	@1442	-	-3	RNP APCH
040	CF	KD809	Y	223(231.7)	+8.8	5.0	-	-	-	+1.4	RNP APCH
050	DF	LUSUT	-	-	+8.8	-	L	+4000	-230	+1.4	RNP APCH
060	HM	LUSUT	-	313(321.9)	+8.8	-	L	+4000/-FL150	-250	-	RNP APCH

WAYPOINT COORDINATES

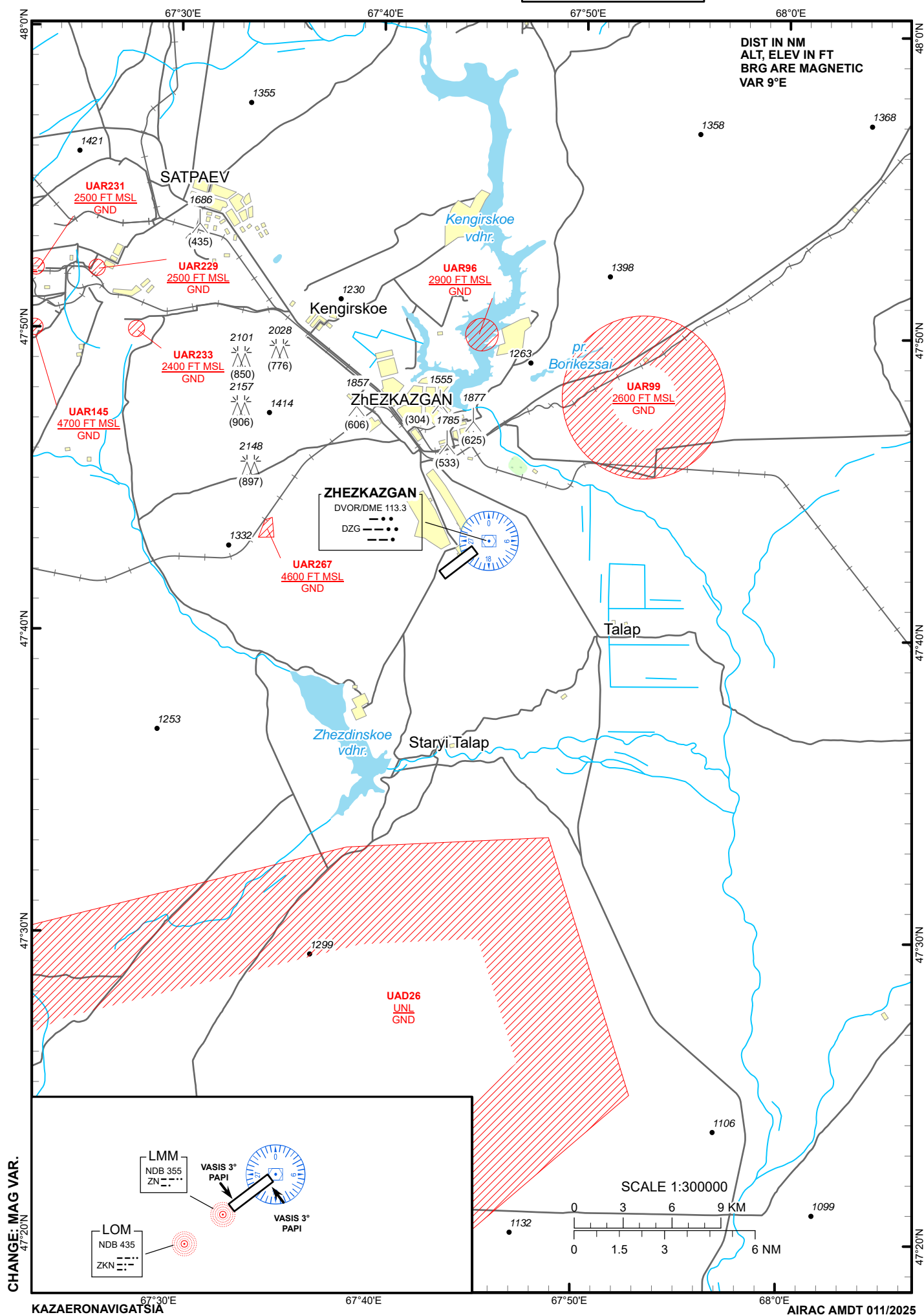
RNP RWY22			
Waypoint Identifier		Coordinates	
DIPSU		475340.14N	0675220.19E
KD801		474317.25N	0674542.04E
KD802		474618.76N	0675123.93E
KD803		475245.04N	0680336.06E
KD809		474011.44N	0673953.28E
LUSUT		474510.22N	0680213.37E
NEBSO		474925.29N	0675717.18E

VISUAL  
APPROACH  
CHART - ICAO

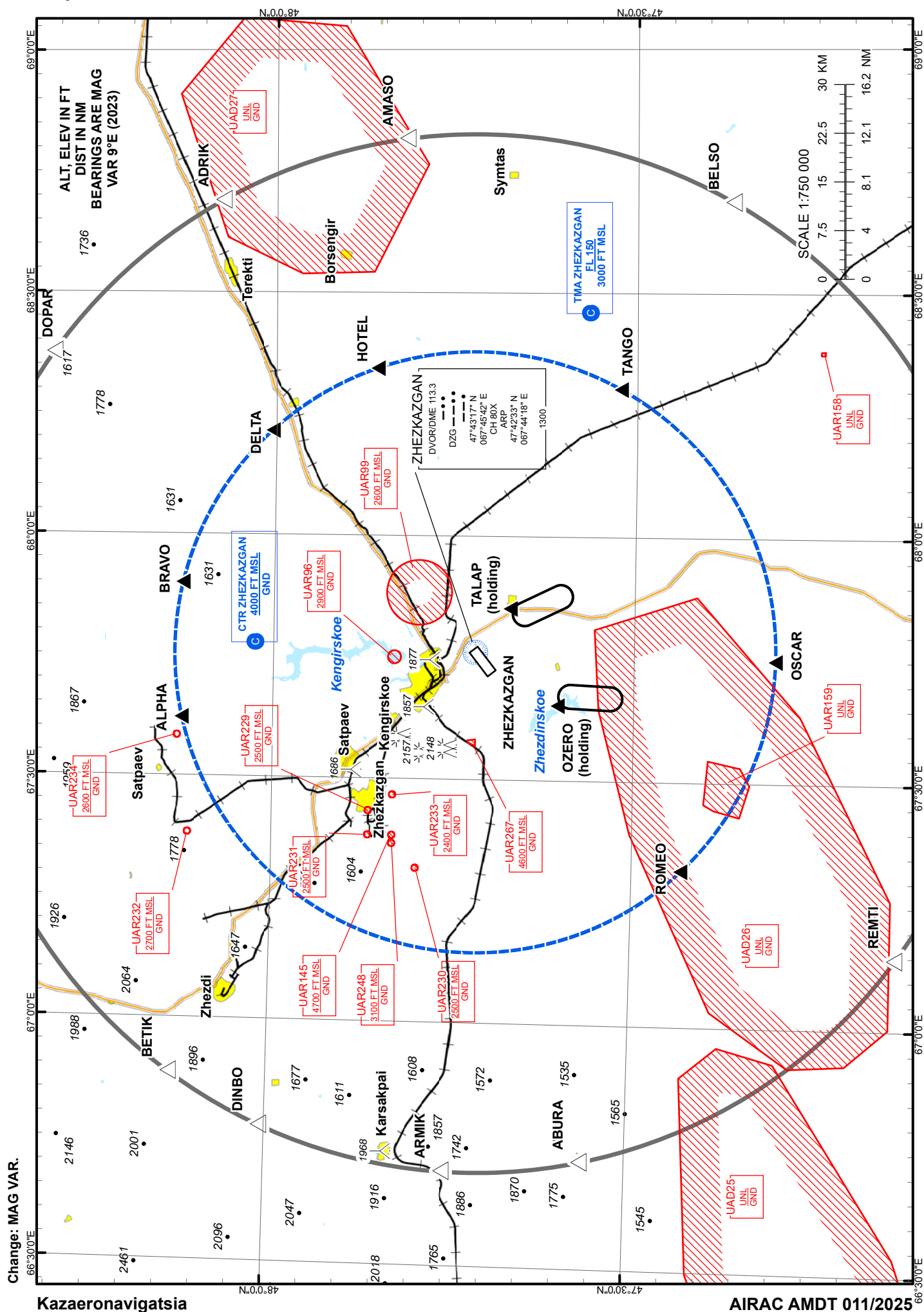
AERODROME ELEV 1251 FT  
HEIGHTS RELATED TO  
AD ELEV

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

ZHEZKAZGAN



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