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AIRAC AMDT 004/2026

Effective Date: **16 Apr 2026**

1. Amendment content:

GEN
GEN 0.2 Information updated
GEN 0.4 Information updated
GEN 2.5 Information updated
GEN 2.7 Information updated
GEN 4.2 Information updated

ENR
ENR 3.1 Information updated
ENR 3.2 Information updated
ENR 4.4 Added new Designated Points

AD
AD 1.5 Information updated
UATE AD 2.16 Helicopter Landing Area added
UAAA AD 2.8, 2.20 Information updated, AD 2.16 Helicopter Landing Area added
UACC AD 2.8 Information updated
UAUU AD Information updated
UASS AD 2.16 Helicopter Landing Area added
UAII AD 2.14, 2.15, 2.20 Information updated, AD 2,10 Aerodrome Obstacles added
UADD AD 2.16 Helicopter Landing Area added
UASK AD 2.16 Helicopter Landing Area added
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:
K0274/26

NOTAM series A:
Nil

NOTAM series C:
C0723/26
NOTAM incorporated to this AMDT will be cancelled by NOTAMC on the 01 MAY 2026

SUP:
Nil

AIC:
Nil

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

Insert the following pages		Remove the following pages	
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GEN 2.7 - 5/6	16 APR 2026	GEN 2.7 - 5/6	11 JUL 2024
GEN 2.7 - 25/26	16 APR 2026	GEN 2.7 - 25/26	08 AUG 2024
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ENR 3.2 4 - 5/6	16 APR 2026	ENR 3.2 4 - 5/6	22 JAN 2026
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AD 2 UAAA - 9/10	16 APR 2026	AD 2 UAAA - 9/10	04 SEP 2025
AD 2 UAAA - 11/12	16 APR 2026	AD 2 UAAA - 11/12	19 MAR 2026
AD 2 UAAA - 13/14	16 APR 2026	AD 2 UAAA - 13/14	19 MAR 2026
AD 2 UAAA - 15/16	16 APR 2026	AD 2 UAAA - 15/16	19 MAR 2026
AD 2 UAAA - 17/18	16 APR 2026	AD 2 UAAA - 17/18	19 MAR 2026
AD 2 UAAA - 19/20	16 APR 2026	AD 2 UAAA - 19/20	19 MAR 2026
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AD 2 UACC ADC 2 24 3 - 1/2	16 APR 2026	AD 2 UACC ADC 2 24 3 - 1/2	19 MAR 2026
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AD 2 UAUU ADC 2 24 9 2 - 1/2	16 APR 2026	AD 2 UAUU ADC 2 24 9 2 - 1/2	11 JUL 2024
AD 2 UAUU ADC 2 24 11 1 - 1/2	16 APR 2026	AD 2 UAUU ADC 2 24 11 1 - 1/2	08 AUG 2024
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AD 2 UAUU ADC 2 24 11 5 - 1/2	16 APR 2026		
		AD 2 UAUU ADC 2 24 11 7 - 1/2	11 JUL 2024
AD 2 UASS - 1/2	16 APR 2026	AD 2 UASS - 1/2	22 JAN 2026
AD 2 UASS - 5/6	16 APR 2026	AD 2 UASS - 5/6	27 NOV 2025
AD 2 UASS - 7/8	16 APR 2026	AD 2 UASS - 7/8	22 JAN 2026
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AD 2 UASS - 11/12	16 APR 2026	AD 2 UASS - 11/12	22 JAN 2026
AD 2 UAII - 1/2	16 APR 2026	AD 2 UAII - 1/2	19 MAR 2026
AD 2 UAII - 3/4	16 APR 2026	AD 2 UAII - 3/4	22 JAN 2026
AD 2 UAII - 5/6	16 APR 2026	AD 2 UAII - 5/6	04 SEP 2025
AD 2 UAII - 7/8	16 APR 2026	AD 2 UAII - 7/8	19 MAR 2026
AD 2 UAII - 9/10	16 APR 2026	AD 2 UAII - 9/10	19 MAR 2026
AD 2 UAII - 11/12	16 APR 2026	AD 2 UAII - 11/12	19 MAR 2026
AD 2 UAII - 13/14	16 APR 2026	AD 2 UAII - 13/14	19 MAR 2026
AD 2 UAII ADC 2 24 1 - 1/2	16 APR 2026	AD 2 UAII ADC 2 24 1 - 1/2	04 SEP 2025
AD 2 UAII ADC 2 24 3 - 1/2	16 APR 2026	AD 2 UAII ADC 2 24 3 - 1/2	15 MAY 2025
AD 2 UADD - 1/2	16 APR 2026	AD 2 UADD - 1/2	22 JAN 2026
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AD 2 UADD - 7/8	16 APR 2026	AD 2 UADD - 7/8	19 MAR 2026
AD 2 UADD - 9/10	16 APR 2026	AD 2 UADD - 9/10	19 FEB 2026
AD 2 UADD - 11/12	16 APR 2026	AD 2 UADD - 11/12	19 FEB 2026
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AD 2 UASU ADC 2 24 7 4 - 1/2	16 APR 2026	AD 2 UASU ADC 2 24 7 4 - 1/2	27 NOV 2025
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GEN 0.2 RECORD OF AIP AMENDMENTS

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001/2017	16-Feb-2017	30-Mar-2017	
002/2017	13-Apr-2017	25-May-2017	
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	
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006/2023	24-Aug-2023	05-Oct-2023	
007/2023	21-Sep-2023	02-Nov-2023	
008/2023	19-Oct-2023	30-Nov-2023	
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007/2024	19-Sep-2024	31-Oct-2024	
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ENR 5 NAVIGATION WARNINGS

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ENR-5.1 - 2	02 DEC 2021	ENR-5.1 - 6	26 JAN 2023	ENR-5.1 - 10	04 NOV 2021
ENR-5.1 - 3	11 AUG 2022	ENR-5.1 - 7	11 AUG 2022	ENR-5.1 - 11	23 APR 2020
ENR-5.1 - 4	11 AUG 2022	ENR-5.1 - 8	11 AUG 2022	ENR-5.1 - 12	23 APR 2020

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ENR-5.1 - 13	23 APR 2020	ENR-5.1 - 21	23 FEB 2023	ENR-5.4 - 1	08 AUG 2024
ENR-5.1 - 14	23 APR 2020	ENR-5.1 - 22	23 FEB 2023	ENR-5.4 - 2	30 MAR 2017
ENR-5.1 - 15	23 APR 2020	ENR-5.1 - 23	23 FEB 2023	ENR-5.5 - 1	30 MAR 2017
ENR-5.1 - 16	04 NOV 2021	ENR-5.1 - 24	23 FEB 2023	ENR-5.5 - 2	30 MAR 2017
ENR-5.1 - 17	04 NOV 2021	ENR-5.2 - 1	07 NOV 2019	ENR-5.6 - 1	10 SEP 2020
ENR-5.1 - 18	23 APR 2020	ENR-5.2 - 2	07 NOV 2019	ENR-5.6 - 2	10 SEP 2020
ENR-5.1 - 19	23 FEB 2023	ENR-5.3 - 1	11 AUG 2022		
ENR-5.1 - 20	23 FEB 2023	ENR-5.3 - 2	30 MAR 2017		

ENR 6 EN-ROUTE CHART

ENR-6 - 1	15 JUL 2021	ENR-6.1 - 1	16 APR 2026
ENR-6 - 2	30 MAR 2017	ENR-6.1 - 2	16 APR 2026

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	19 FEB 2026	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	16 APR 2026
AD-1.2 - 2	31 OCT 2024	AD-1.2 - 8	31 OCT 2024	AD-1.5 - 2	16 APR 2026
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	16 APR 2026	UATE AD 2.24.9-2 - 2	23 FEB 2023	UATE AD 2.24.14 - 1	23 FEB 2023
AD-2-UATE - 2	22 JAN 2026	UATE AD 2.24.9-3 - 1	05 SEP 2024	UATE AD 2.24.14 - 2	15 JUL 2021
AD-2-UATE - 3	19 MAR 2026	UATE AD 2.24.9-3 - 2	23 FEB 2023	AD-2-UATT - 1	08 AUG 2024
AD-2-UATE - 4	19 MAR 2026	UATE AD 2.24.9-4 - 1	05 SEP 2024	AD-2-UATT - 2	26 JAN 2023
AD-2-UATE - 5	19 MAR 2026	UATE AD 2.24.9-4 - 2	23 FEB 2023	AD-2-UATT - 3	16 MAY 2024
AD-2-UATE - 6	16 APR 2026	UATE AD 2.24.9-5 - 1	05 SEP 2024	AD-2-UATT - 4	19 MAR 2026
AD-2-UATE - 7	16 APR 2026	UATE AD 2.24.9-5 - 2	11 JUL 2024	AD-2-UATT - 5	22 JAN 2026
AD-2-UATE - 8	16 APR 2026	UATE AD 2.24.9-6 - 1	05 SEP 2024	AD-2-UATT - 6	19 FEB 2026
AD-2-UATE - 9	16 APR 2026	UATE AD 2.24.9-6 - 2	16 MAY 2024	AD-2-UATT - 7	10 JUL 2025
AD-2-UATE - 10	16 APR 2026	UATE AD 2.24.10 - 1	05 SEP 2024	AD-2-UATT - 8	12 JUN 2025
AD-2-UATE - 11	16 APR 2026	UATE AD 2.24.10 - 2	30 MAR 2017	AD-2-UATT - 9	12 JUN 2025
AD-2-UATE - 12	16 APR 2026	UATE AD 2.24.11-1 - 1	27 NOV 2025	AD-2-UATT - 10	12 JUN 2025
AD-2-UATE - 13	16 APR 2026	UATE AD 2.24.11-1 - 2	22 JAN 2026	AD-2-UATT - 11	12 JUN 2025
AD-2-UATE - 14	16 APR 2026	UATE AD 2.24.11-2 - 1	05 SEP 2024	AD-2-UATT - 12	04 SEP 2025
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UATE AD 2.24.3 - 2	22 JAN 2026	UATE AD 2.24.11-4 - 1	05 SEP 2024	UATT AD 2.24.3 - 2	12 AUG 2021
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UATE AD 2.24.7-3 - 2	23 FEB 2023	UATE AD 2.24.11-8 - 1	15 JUN 2023	UATT AD 2.24.9-1 - 2	25 FEB 2021
UATE AD 2.24.7-4 - 1	05 SEP 2024	UATE AD 2.24.11-8 - 2	23 FEB 2023	UATT AD 2.24.9-2 - 1	19 FEB 2026
UATE AD 2.24.7-4 - 2	16 MAY 2024	UATE AD 2.24.11-9 - 1	05 SEP 2024	UATT AD 2.24.9-2 - 2	25 FEB 2021
UATE AD 2.24.7-5 - 1	05 SEP 2024	UATE AD 2.24.11-9 - 2	08 AUG 2024	UATT AD 2.24.10 - 1	19 FEB 2026
UATE AD 2.24.7-5 - 2	23 JAN 2025	UATE AD 2.24.11-10 - 1	05 SEP 2024	UATT AD 2.24.10 - 2	30 MAR 2017
UATE AD 2.24.9-1 - 1	05 SEP 2024	UATE AD 2.24.11-10 - 2	08 AUG 2024	UATT AD 2.24.11-1 - 1	19 FEB 2026
UATE AD 2.24.9-1 - 2	23 FEB 2023	UATE AD 2.24.12 - 1	23 FEB 2023	UATT AD 2.24.11-1 - 2	25 FEB 2021
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UATT AD 2.24.11-3 - 1	19 FEB 2026	UAAA AD 2.24.7-11 - 2	15 JUN 2023	UAAA AD 2.24.11-12 - 1	23 JAN 2025
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UATT AD 2.24.11-4 - 2	25 FEB 2021	UAAA AD 2.24.7-13 - 1	11 JUL 2024	UAAA AD 2.24.11-13 - 2	04 NOV 2021
UATT AD 2.24.11-5 - 1	19 FEB 2026	UAAA AD 2.24.7-13 - 2	11 JUL 2024	UAAA AD 2.24.11-14 - 1	23 JAN 2025
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UATT AD 2.24.12 - 1	19 FEB 2026	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 - 9	16 APR 2026	UAAA AD 2.24.9-7 - 2	22 JAN 2026	AD-2-UACC - 9	30 OCT 2025
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AD-2-UAAA - 15	16 APR 2026	UAAA AD 2.24.9-12 - 2	15 JUN 2023	AD-2-UACC - 15	27 NOV 2025
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AD-2-UAAA - 17	16 APR 2026	UAAA AD 2.24.9-13 - 2	15 JUN 2023	UACC AD 2.24.1 - 1	22 JAN 2026
AD-2-UAAA - 18	16 APR 2026	UAAA AD 2.24.9-15 - 1	11 JUL 2024	UACC AD 2.24.1 - 2	30 MAR 2017
AD-2-UAAA - 19	16 APR 2026	UAAA AD 2.24.9-15 - 2	15 JUN 2023	UACC AD 2.24.3 - 1	16 APR 2026
AD-2-UAAA - 20	16 APR 2026	UAAA AD 2.24.9-16 - 1	11 JUL 2024	UACC AD 2.24.3 - 2	05 SEP 2024
AD-2-UAAA - 21	16 APR 2026	UAAA AD 2.24.9-16 - 2	10 AUG 2023	UACC AD 2.24.4 - 1	25 JAN 2024
AD-2-UAAA - 22	16 APR 2026	UAAA AD 2.24.9-17 - 1	11 JUL 2024	UACC AD 2.24.4 - 2	23 FEB 2023
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AD-2-UAAA - 24	16 APR 2026	UAAA AD 2.24.9-18 - 1	11 JUL 2024	UACC AD 2.24.5-1 - 2	30 MAR 2017
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UACC AD 2.24.9-9 - 1	12 JUN 2025
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AD-2-UATG - 8	19 FEB 2026
AD-2-UATG - 9	19 FEB 2026
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UATG AD 2.24.9-2 - 1	05 SEP 2024
UATG AD 2.24.9-2 - 2	23 APR 2020
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AD-2-UASZ - 3	05 SEP 2024
AD-2-UASZ - 4	05 SEP 2024
AD-2-UASZ - 5	05 SEP 2024
AD-2-UASZ - 6	23 JAN 2025
AD-2-UASZ - 7	04 SEP 2025
AD-2-UASZ - 8	16 MAY 2024
UASZ AD 2.24.1 - 1	05 SEP 2024
UASZ AD 2.24.1 - 2	01 FEB 2018
UASZ AD 2.24.3 - 1	05 SEP 2024
UASZ AD 2.24.3 - 2	04 NOV 2021
UASZ AD 2.24.6 - 1	11 AUG 2022
UASZ AD 2.24.6 - 2	11 AUG 2022
UASZ AD 2.24.7-1 - 1	11 AUG 2022
UASZ AD 2.24.7-1 - 2	01 FEB 2018
UASZ AD 2.24.7-2 - 1	11 AUG 2022
UASZ AD 2.24.7-2 - 2	01 FEB 2018
UASZ AD 2.24.9-1 - 1	11 AUG 2022
UASZ AD 2.24.9-1 - 2	01 FEB 2018
UASZ AD 2.24.11-1 - 1	11 AUG 2022
UASZ AD 2.24.11-1 - 2	11 AUG 2022
UASZ AD 2.24.12 - 1	11 AUG 2022
UASZ AD 2.24.12 - 2	01 FEB 2018
UASZ AD 2.24.14 - 1	23 FEB 2023
UASZ AD 2.24.14 - 2	11 AUG 2022
AD-2-UAKD - 1	27 NOV 2025
AD-2-UAKD - 2	20 MAR 2025
AD-2-UAKD - 3	22 JAN 2026
AD-2-UAKD - 4	15 MAY 2025

Page	Date
AD-2-UAKD - 5	05 SEP 2024
AD-2-UAKD - 6	22 JAN 2026
AD-2-UAKD - 7	15 MAY 2025
AD-2-UAKD - 8	15 MAY 2025
AD-2-UAKD - 9	15 MAY 2025
AD-2-UAKD - 10	15 MAY 2025
AD-2-UAKD - 11	22 JAN 2026
AD-2-UAKD - 12	15 MAY 2025
UAKD AD 2.24.1 - 1	22 JAN 2026
UAKD AD 2.24.1 - 2	30 MAR 2017
UAKD AD 2.24.3 - 1	27 NOV 2025
UAKD AD 2.24.3 - 2	25 FEB 2021
UAKD AD 2.24.4 - 1	27 NOV 2025
UAKD AD 2.24.4 - 2	20 MAR 2025
UAKD AD 2.24.7-1 - 1	22 JAN 2026
UAKD AD 2.24.7-1 - 2	27 NOV 2025
UAKD AD 2.24.7-2 - 1	27 NOV 2025
UAKD AD 2.24.7-2 - 2	27 NOV 2025
UAKD AD 2.24.7-3 - 1	22 JAN 2026
UAKD AD 2.24.7-3 - 2	22 JAN 2026
UAKD AD 2.24.7-4 - 1	22 JAN 2026
UAKD AD 2.24.7-4 - 2	22 JAN 2026
UAKD AD 2.24.9-1 - 1	27 NOV 2025
UAKD AD 2.24.9-1 - 2	27 NOV 2025
UAKD AD 2.24.9-2 - 1	27 NOV 2025
UAKD AD 2.24.9-2 - 2	27 NOV 2025
UAKD AD 2.24.9-3 - 1	22 JAN 2026
UAKD AD 2.24.9-3 - 2	22 JAN 2026
UAKD AD 2.24.9-4 - 1	22 JAN 2026
UAKD AD 2.24.9-4 - 2	22 JAN 2026
UAKD AD 2.24.9-5 - 1	22 JAN 2026
UAKD AD 2.24.9-5 - 2	22 JAN 2026
UAKD AD 2.24.10 - 1	27 NOV 2025
UAKD AD 2.24.10 - 2	30 MAR 2017
UAKD AD 2.24.11-1 - 1	22 JAN 2026
UAKD AD 2.24.11-1 - 2	31 OCT 2024
UAKD AD 2.24.11-2 - 1	22 JAN 2026
UAKD AD 2.24.11-2 - 2	25 FEB 2021
UAKD AD 2.24.11-3 - 1	22 JAN 2026
UAKD AD 2.24.11-3 - 2	25 FEB 2021
UAKD AD 2.24.11-4 - 1	27 NOV 2025
UAKD AD 2.24.11-4 - 2	25 FEB 2021
UAKD AD 2.24.11-5 - 1	27 NOV 2025
UAKD AD 2.24.11-5 - 2	25 FEB 2021
UAKD AD 2.24.11-6 - 1	22 JAN 2026
UAKD AD 2.24.11-6 - 2	22 JAN 2026
UAKD AD 2.24.11-7 - 1	22 JAN 2026
UAKD AD 2.24.11-7 - 2	22 JAN 2026
UAKD AD 2.24.12 - 1	22 JAN 2026
UAKD AD 2.24.12 - 2	30 MAR 2017
UAKD AD 2.24.14 - 1	27 NOV 2025
UAKD AD 2.24.14 - 2	15 JUL 2021

GEN 2.5 LIST OF RADIO NAVIGATION AIDS

Decode				Encode			
ID	Station name	Aid	Purpose	Station name	Aid	ID	Purpose
AKT	AKTAU	DVOR/DME	AE	AKTAU	DVOR/DME	AKT	AE
T	AKTAU	NDB	A	AKTAU	NDB	T	A
IAU	AKTAU	ILS/DME	A	AKTAU	ILS/DME	IAU	A
ITA	AKTAU	ILS/DME	A	AKTAU	ILS/DME	ITA	A
AKB	AKTOBE	DVOR/DME	AE	AKTOBE	DVOR/DME	AKB	AE
ITU	AKTOBE	ILS/DME	A	AKTOBE	ILS/DME	ITU	A
IAT	AKTOBE	ILS/DME	A	AKTOBE	ILS/DME	IAT	A
ATA	ALMATY	DVOR/DME	AE	ALMATY	DVOR/DME	ATA	AE
IAA	ALMATY	ILS/DME	A	ALMATY	ILS/DME	IAA	A
IMA	ALMATY	ILS/DME	A	ALMATY	ILS/DME	IMA	A
ILM	ALMATY	ILS/DME	A	ALMATY	ILS/DME	ILM	A
IAL	ALMATY	ILS/DME	A	ALMATY	ILS/DME	IAL	A
ARL	ARALSK	DVOR/DME	E	ARALSK	DVOR/DME	ARL	E
ARK	ARKALYK	DVOR/DME	E	ARKALYK	DVOR/DME	ARK	E
AST	ASTANA	DVOR/DME	AE	ASTANA	DVOR/DME	AST	AE
M	ASTANA	NDB	A	ASTANA	NDB	M	A
IAK	ASTANA	ILS/DME	A	ASTANA	ILS/DME	IAK	A
IMO	ASTANA	ILS/DME	A	ASTANA	ILS/DME	IMO	A
ATR	ATYRAU	DVOR/DME	AE	ATYRAU	DVOR/DME	ATR	AE
ITY	ATYRAU	ILS/DME	A	ATYRAU	ILS/DME	ITY	A
IAY	ATYRAU	ILS/DME	A	ATYRAU	ILS/DME	IAY	A
AGZ	AYAGUZ	VOR/DME	E	AYAGUZ	VOR/DME	AGZ	E
BLH	BALKHASH	DVOR/DME	AE	BALKHASH	DVOR/DME	BLH	AE
BNU	BEINEU	VOR/DME	E	BEINEU	VOR/DME	BNU	E
JRK	JARKENT	VOR/DME	E	JARKENT	VOR/DME	JRK	E
KRG	KARAGANDA	DVOR/DME	AE	KARAGANDA	DVOR/DME	KRG	AE
IKA	KARAGANDA	ILS/DME	A	KARAGANDA	ILS/DME	IKA	A
IRG	KARAGANDA	ILS/DME	A	KARAGANDA	ILS/DME	IRG	A
KTU	KOKSHETAU	VOR/DME	AE	KOKSHETAU	VOR/DME	KTU	AE
IOT	KOKSHETAU	ILS/DME	A	KOKSHETAU	ILS/DME	IOT	A
IKW	KOKSHETAU	ILS/DME	A	KOKSHETAU	ILS/DME	IKW	A
KST	KOSTANAY	DVOR/DME	AE	KOSTANAY	DVOR/DME	KST	AE
IKT	KOSTANAY	ILS/DME	A	KOSTANAY	ILS/DME	IKT	A
INA	KOSTANAY	ILS/DME	A	KOSTANAY	ILS/DME	INA	A

Decode			
ID	Station name	Aid	Purpose
KZO	KYZYLORDA	DVOR/DME	AE
IKZ	KYZYLORDA	ILS/DME	A
PVL	PAVLODAR	DVOR/DME	AE
IPW	PAVLODAR	ILS/DME	A
IPT	PETROPAVLOVSK	ILS/DME	A
PSK	PETROPAVLOVSK	DVOR/DME	AE
SEM	SEMEY	DVOR/DME	AE
ISP	SEMEY	ILS/DME	A
SMK	SHYMKENT	DVOR/DME	A
SKN	SHYMKENT	NDB	A
IIM	SHYMKENT	ILS/DME	A
IEN	SHYMKENT	ILS/DME	A
TDK	TALDYKORGAN	DVOR/DME	A
TAR	TARAZ	DVOR/DME	A
IMB	TARAZ	ILS/DME	A
IYL	TARAZ	ILS/DME	A
TGZ	TENGIZ	VOR/DME	A
KI	TENGIZ	NDB	A
TRK	TURKISTAN	DVOR/DME	A
ITR	TURKISTAN	ILS/DME	A
ITK	TURKISTAN	ILS/DME	A
URL	URALSK	DVOR/DME	AE
IUR	URALSK	ILS/DME	A
ISK	URALSK	ILS/DME	A
UGN	URDZHAR	NDB	A
SH	USHARAL	NDB	A
R	USHARAL	NDB	A
UKM	UST-KAMENOGORSK	DVOR/DME	AE
ISI	UST-KAMENOGORSK	ILS/DME	A
IUS	UST-KAMENOGORSK	ILS/DME	A
ZSN	ZAISAN	NDB	A
DZG	ZHEZKAZGAN	DVOR/DME	AE
IGN	ZHEZKAZGAN	ILS/DME	A

Encode			
Station name	Aid	ID	Purpose
KYZYLORDA	DVOR/DME	KZO	AE
KYZYLORDA	ILS/DME	IKZ	A
PAVLODAR	DVOR/DME	PVL	AE
PAVLODAR	ILS/DME	IPW	A
PETROPAVLOVSK	ILS/DME	IPT	A
PETROPAVLOVSK	DVOR/DME	PSK	AE
SEMEY	DVOR/DME	SEM	AE
SEMEY	ILS/DME	ISP	A
SHYMKENT	DVOR/DME	SMK	A
SHYMKENT	NDB	SKN	A
SHYMKENT	ILS/DME	IIM	A
SHYMKENT	ILS/DME	IEN	A
TALDYKORGAN	DVOR/DME	TDK	A
TARAZ	DVOR/DME	TAR	A
TARAZ	ILS/DME	IMB	A
TARAZ	ILS/DME	IYL	A
TENGIZ	VOR/DME	TGZ	A
TENGIZ	NDB	KI	A
TURKISTAN	DVOR/DME	TRK	A
TURKISTAN	ILS/DME	ITR	A
TURKISTAN	ILS/DME	ITK	A
URALSK	DVOR/DME	URL	AE
URALSK	ILS/DME	IUR	A
URALSK	ILS/DME	ISK	A
URDZHAR	NDB	UGN	A
USHARAL	NDB	SH	A
USHARAL	NDB	R	A
UST-KAMENOGORSK	DVOR/DME	UKM	AE
UST-KAMENOGORSK	ILS/DME	ISI	A
UST-KAMENOGORSK	ILS/DME	IUS	A
ZAISAN	NDB	ZSN	A
ZHEZKAZGAN	DVOR/DME	DZG	AE
ZHEZKAZGAN	ILS/DME	IGN	A

ASTANA
UACC
510121N 0712758E

MONTH DAY		CTS	SR	SS	CTE
JAN	1	0240	0319	1117	1157
	5	0239	0319	1122	1101
	9	0238	0317	1127	1105
	13	0236	0315	1132	1111
	17	0233	0311	1138	1116
	21	0230	0308	1145	1122
	25	0226	0303	1151	1128
	29	0221	0258	1158	1135
FEB	2	0216	0252	1205	1141
	6	0210	0246	1213	1248
	10	0204	0239	1220	1255
	14	0157	0232	1227	1302
	18	0150	0224	1234	1309
	22	0142	0216	1242	1315
	26	0134	0208	1249	1322
MAR	2	0126	0159	1256	1329
	6	0118	0151	1303	1336
	10	0109	0142	1309	1343
	14	0100	0133	1316	1349
	18	0051	0124	1323	1356
	22	0042	0115	1330	1403
	26	0032	0106	1336	1409
	30	0023	0057	1343	1416
APR	3	0014	0048	1349	1423
	7	0004	0039	1356	1430
	11	2355	0030	1402	1437
	15	2346	0021	1409	1444
	19	2337	0013	1416	1451
	23	2328	0004	1422	1459
	27	2320	2357	1429	1506

ASTANA
UACC
510121N 0712758E

MONTH DAY		CTS	SR	SS	CTE
MAY	1	2311	2349	1435	1513
	5	2303	2342	1442	1520
	9	2255	2335	1448	1528
	13	2248	2329	1454	1535
	17	2241	2323	1501	1542
	21	2235	2317	1506	1549
	25	2229	2313	1512	1555
	29	2224	2308	1517	1601
JUN	2	2220	2305	1521	1606
	6	2217	2302	1525	1611
	10	2214	2300	1529	1615
	14	2213	2259	1531	1618
	18	2212	2259	1533	1620
	22	2212	2259	1534	1621
	26	2214	2301	1535	1622
	30	2216	2303	1534	1621
JUL	4	2219	2305	1533	1619
	8	2223	2309	1531	1616
	12	2228	2313	1528	1613
	16	2233	2317	1524	1608
	20	2239	2322	1520	1603
	24	2245	2328	1515	1557
	28	2252	2333	1510	1551
AUG	1	2259	2339	1504	1544
	5	2306	2345	1457	1537
	9	2313	2351	1450	1529
	13	2320	2357	1443	1521
	17	2327	0004	1435	1512
	21	2334	0010	1427	1503
	25	2341	0016	1419	1454
	29	2348	0023	1410	1445

ASTANA
UACC
510121N 0712758E

MONTH DAY		CTS	SR	SS	CTE
SEP	2	2354	0029	1401	1436
	6	0001	0035	1353	1424
	10	0008	0041	1344	1417
	14	0014	0048	1334	1408
	18	0021	0054	1325	1359
	22	0027	0100	1316	1349
	26	0033	0106	1307	1340
	30	0040	0113	1258	1331
OCT	4	0046	0119	1249	1322
	8	0053	0126	1240	1313
	12	0059	0132	1231	1304
	16	0105	0139	1222	1256
	20	0112	0146	1214	1248
	24	0119	0152	1206	1240
	28	0125	0200	1158	1233
NOV	1	0132	0207	1151	1226
	5	0138	0214	1144	1219
	9	0145	0221	1137	1213
	13	0151	0228	1131	1207
	17	0158	0234	1126	1203
	21	0204	0241	1121	1158
	25	0210	0247	1117	1155
	29	0215	0253	1113	1152
DEC	3	0220	0259	1111	1149
	7	0225	0304	1109	1148
	11	0229	0309	1108	1147
	15	0233	0312	1108	1147
	19	0235	0315	1108	1148
	23	0238	0318	1110	1150
	27	0239	0319	1113	1153
	31	0240	0319	1116	1156

ATYRAU
UATG
470719N 0514912E

MONTH DAY		CTS	SR	SS	CTE
JAN	1	0344	0420	1253	1329
	5	0344	0419	1257	1332
	9	0343	0418	1302	1337
	13	0342	0417	1307	1341
	17	0340	0414	1312	1346
	21	0337	0411	1317	1351
	25	0334	0407	1323	1357
	29	0330	0403	1329	1402
FEB	2	0325	0358	1336	1408
	6	0321	0353	1342	1414
	10	0315	0347	1348	1420
	14	0309	0341	1354	1426
	18	0303	0334	1400	1432
	22	0256	0327	1407	1438
	26	0249	0320	1413	1443
MAR	2	0242	0313	1419	1449
	6	0235	0305	1424	1455
	10	0227	0257	1430	1501
	14	0219	0250	1436	1506
	18	0211	0242	1441	1512
	22	0203	0234	1447	1518
	26	0155	0225	1453	1523
	30	0147	0217	1458	1529
APR	3	0138	0209	1504	1535
	7	0130	0202	1509	1540
	11	0122	0154	1515	1546
	15	0114	0146	1520	1552
	19	0106	0139	1526	1558
	23	0059	0132	1531	1604
	27	0051	0125	1537	1610

ATYRAU
UATG
470719N 0514912E

MONTH DAY		CTS	SR	SS	CTE
MAY	1	0044	0118	1542	1616
	5	0038	0112	1548	1622
	9	0031	0106	1553	1628
	13	0025	0101	1558	1634
	17	0019	0056	1604	1640
	21	0014	0051	1608	1645
	25	0010	0048	1613	1651
	29	0006	0044	1617	1656
JUN	2	0003	0042	1621	1700
	6	0000	0039	1625	1704
	10	2358	0038	1627	1707
	14	2357	0037	1630	1710
	18	2357	0037	1631	1711
	22	2356	0038	1633	1713
	26	2359	0039	1633	1713
	30	0001	0041	1633	1713
JUL	4	0003	0043	1632	1711
	8	0007	0046	1630	1709
	12	0011	0049	1628	1707
	16	0015	0053	1625	1703
	20	0020	0057	1621	1659
	24	0025	0102	1617	1654
	28	0030	0106	1613	1649
AUG	1	0036	0111	1608	1643
	5	0041	0116	1602	1637
	9	0047	0122	1556	1631
	13	0053	0127	1550	1624
	17	0059	0132	1543	1616
	21	0105	0137	1536	1609
	25	0110	0143	1529	1601
	29	0116	0148	1521	1553

ATYRAU
UATG
470719N 0514912E

MONTH DAY		CTS	SR	SS	CTE
SEP	2	0122	0153	1514	1545
	6	0127	0158	1506	1537
	10	0133	0204	1458	1529
	14	0138	0209	1450	1520
	18	0143	0214	1441	1512
	22	0149	0219	1433	1504
	26	0154	0224	1425	1456
	30	0159	0230	1417	1447
OCT	4	0205	0235	1409	1439
	8	0210	0241	1401	1432
	12	0215	0246	1353	1424
	16	0221	0252	1346	1417
	20	0226	0257	1339	1410
	24	0232	0303	1331	1403
	28	0238	0309	1325	1356
NOV	1	0243	0315	1318	1350
	5	0249	0321	1312	1345
	9	0255	0327	1307	1340
	13	0300	0333	1302	1335
	17	0306	0339	1257	1331
	21	0311	0345	1253	1327
	25	0316	0350	1250	1324
	29	0321	0356	1247	1322
DEC	3	0326	0401	1245	1320
	7	0330	0405	1244	1319
	11	0334	0409	1244	1319
	15	0337	0412	1244	1319
	19	0340	0415	1245	1321
	23	0342	0417	1247	1322
	27	0343	0419	1249	1325
	31	0344	0420	1252	1328

ZAISAN
UASZ
472915N 0845316E

MONTH DAY		CTS	SR	SS	CTE
JAN	1	0133	0209	1040	1116
	5	0133	0209	1044	1119
	9	0132	0208	1048	1123
	13	0131	0206	1053	1128
	17	0129	0203	1059	1133
	21	0126	0200	1104	1138
	25	0123	0157	1110	1144
	29	0119	0152	1116	1150
FEB	2	0114	1147	1123	1155
	6	0109	0142	1129	1201
	10	0104	0136	1135	1207
	14	0058	0130	1142	1213
	18	0052	0123	1148	1219
	22	0045	0116	1154	1225
	26	0038	0109	1200	1231
MAR	2	0031	0101	1206	1237
	6	0023	0054	1212	1243
	10	0015	0046	1218	1249
	14	0007	0038	1224	1254
	18	2359	0030	1229	1300
	22	2351	0022	1235	1306
	26	2343	0014	1241	1312
	30	2334	0005	1246	1317
APR	3	2326	2357	1252	1323
	7	2318	2349	1257	1329
	11	2310	2342	1303	1335
	15	2302	2334	1309	1341
	19	2254	2326	1314	1347
	23	2246	2319	1320	1353
	27	2239	2312	1326	1359

ZAISAN
UASZ
472915N 0845316E

MONTH DAY		CTS	SR	SS	CTE
MAY	1	2231	2306	1331	1405
	5	2224	2259	1337	1412
	9	2218	2253	1342	1418
	13	2212	2248	1348	1424
	17	2206	2243	1353	1429
	21	2201	2238	1358	1435
	25	2156	2234	1402	1440
	29	2152	2231	1407	1445
JUN	2	2149	2228	1411	1450
	6	2146	2226	1414	1454
	10	2145	2225	1417	1457
	14	2143	2224	1419	1500
	18	2143	2224	1421	1502
	22	2144	2224	1422	1503
	26	2145	2225	1423	1503
	30	2147	2227	1422	1503
JUL	4	2149	2230	1421	1501
	8	2153	2232	1420	1459
	12	2157	2236	1417	1457
	16	2201	2240	1415	1453
	20	2206	2244	1411	1449
	24	2211	2248	1407	1444
	28	2217	2253	1402	1439
AUG	1	2222	2258	1357	1433
	5	2228	2303	1351	1427
	9	2234	2309	1345	1420
	13	2240	2314	1339	1413
	17	2246	2319	1332	1406
	21	2251	2325	1325	1358
	25	2257	2330	1318	1350
	29	2303	2335	1310	1342

ZAISAN
UASZ
472915N 0845316E

MONTH DAY		CTS	SR	SS	CTE
SEP	2	2309	2341	1302	1334
	6	2314	2346	1254	1326
	10	2320	2351	1246	1318
	14	2325	2356	1238	1309
	18	2331	0002	1230	1301
	22	2336	0007	1222	1252
	26	2342	0012	1213	1244
	30	2347	0018	1205	1236
OCT	4	2353	0023	1157	1228
	8	2358	0029	1149	1220
	12	0004	0034	1141	1212
	16	0009	0040	1134	1205
	20	0015	0046	1126	1157
	24	0020	0052	1119	1151
	28	0026	0058	1112	1144
NOV	1	0032	0104	1106	1138
	5	0038	0110	1100	1132
	9	0043	0116	1054	1127
	13	0049	0122	1049	1122
	17	0054	0128	1044	1118
	21	0100	0134	1040	1115
	25	0105	0140	1037	1112
	29	0110	0145	1034	1109
DEC	3	0115	0150	1032	1107
	7	0119	0154	1031	1106
	11	0123	0158	1030	1106
	15	0126	0202	1031	1106
	19	0129	0205	1032	1107
	23	0131	0207	1033	1109
	27	0132	0208	1036	1112
	31	0133	0209	1039	1115

ZHEZKAZGAN
UAKD
474233N 0674418E

MONTH DAY		CTS	SR	SS	CTE
JAN	1	0243	0319	1147	1223
	5	0243	0319	1151	1227
	9	0242	0318	1156	1231
	13	0241	0316	1201	1236
	17	0238	0313	1206	1241
	21	0236	0310	1212	1246
	25	0232	0306	1218	1252
	29	0228	0302	1224	1258
FEB	2	0224	0257	1230	1304
	6	0219	0251	1237	1310
	10	0213	0245	1243	1316
	14	0207	0239	1250	1322
	18	0201	0232	1256	1328
	22	0154	0225	1302	1334
	26	0147	0218	1308	1340
MAR	2	0139	0210	1314	1346
	6	0132	0203	1321	1351
	10	0124	0155	1326	1357
	14	0116	0147	1332	1403
	18	0108	0138	1338	1409
	22	0059	0130	1344	1415
	26	0051	0122	1350	1421
	30	0043	0114	1355	1426
APR	3	0034	0106	1401	1432
	7	0026	0058	1407	1438
	11	0018	0050	1412	1444
	15	0009	0042	1418	1450
	19	0001	0034	1424	1457
	23	2354	0027	1429	1503
	27	2346	0020	1435	1509

ZHEZKAZGAN
UAKD
474233N 0674418E

MONTH DAY		CTS	SR	SS	CTE
MAY	1	2339	0013	1441	1515
	5	2332	0007	1446	1522
	9	2325	0001	1452	1528
	13	2319	2355	1457	1534
	17	2313	2350	1503	1540
	21	2308	2346	1508	1545
	25	2303	2342	1512	1551
	29	2259	2338	1517	1556
JUN	2	2256	2335	1521	1600
	6	2253	2333	1524	1604
	10	2251	2332	1527	1608
	14	2250	2331	1529	1610
	18	2250	2331	1531	1612
	22	2250	2331	1532	1613
	26	2252	2333	1533	1614
	30	2254	2334	1532	1613
JUL	4	2256	2337	1531	1612
	8	2300	2340	1530	1610
	12	2304	2343	1527	1607
	16	2308	2347	1524	1603
	20	2313	2351	1521	1559
	24	2318	2356	1517	1554
	28	2324	0001	1512	1549
AUG	1	2329	0006	1507	1543
	5	2335	0011	1501	1537
	9	2341	0016	1455	1530
	13	2347	0022	1448	1523
	17	2353	0027	1441	1515
	21	2359	0033	1434	1508
	25	0005	0038	1427	1500
	29	0011	0043	1419	1452

ZHEZKAZGAN
UAKD
474233N 0674418E

MONTH DAY		CTS	SR	SS	CTE
SEP	2	0017	0049	1411	1443
	6	0023	0054	1403	1435
	10	0028	0100	1355	1427
	14	0034	0105	1347	1418
	18	0039	0110	1339	1410
	22	0045	0116	1330	1401
	26	0050	0121	1322	1351
	30	0056	0127	1314	1344
OCT	4	0101	0132	1305	1336
	8	0107	0138	1257	1328
	12	0112	0143	1249	1320
	16	0118	0149	1242	1313
	20	0124	0155	1234	1306
	24	0129	0201	1227	1259
	28	0135	0207	1220	1252
NOV	1	0141	0213	1214	1246
	5	0147	0219	1208	1240
	9	0153	0226	1202	1235
	13	0158	0232	1157	1230
	17	0204	0238	1152	1226
	21	0209	0244	1148	1222
	25	0215	0249	1145	1219
	29	0220	0255	1142	1217
DEC	3	0224	0300	1140	1215
	7	0229	0304	1138	1214
	11	0232	0308	1138	1214
	15	0236	0312	1138	1214
	19	0239	0315	1139	1215
	23	0241	0317	1141	1217
	27	0242	0318	1143	1219
	31	0243	0319	1146	1222

GEN 4.2 AIR NAVIGATION SERVICES CHARGES

1. GENERAL

The charges for the air navigation services for aircraft flying en-route and in the terminal area of the Republic of Kazakhstan are collected by Republic State Enterprise on to rights of economic activity “Kazaeronagivatsia” of the Civil Aviation Committee of Ministry of industry and infrastructural development of the Republic of Kazakhstan (RSE “Kazaeronavigatsia”).

Legal and postal address:

010014, Astana city, Esil district,
E522 street, 15 building
BIN 130940015918
TIN 620500027274
Phone: +7 (717) 2773404
Fax: +7 (717) 2773566
AFS: UAAKDDXX

The charges for the air navigation services (ANS) are collected from all users of the airspace of the Republic of Kazakhstan, regardless of its state ownership, the type of property and subordination.

2. CHARGES FOR EN-ROUTE AIR NAVIGATION SERVICES AND IN TERMINAL AREA.

Tariffs for air navigation services for foreign users of the airspace of the Republic of Kazakhstan operating international flights en-route and in the terminal area:

Tariffs and rate of charges for air navigation services	MTOW, tons	Tariffs (rate of charges) per 100 km of the great circle distance, USD
En –route	up to 50,0	64
	50,1 – 100,0	86
	100,1 – 200,0	106
	200,1 – 300,0	115
	above 300,0	120
Terminal area	Per 1 ton of maximum take-off weight	7

Charges for air navigation services for aircraft flying en-route within FIRs depend on the maximum take-off weight (MTOW) and distance travelled by aircraft and are calculated by the following formula:
P=Tx(S:100)
Where:
P - amount of charges;
T - rate for 100 km of distance travelled
S – the flight distance is assembled from the segments of AWYs of the Republic of Kazakhstan, the length of which is calculated by orthodromy.
Flight distance on AWY segments is rounded to the whole tens within the FIR of the Republic of Kazakhstan.
The calculation of distance for flights executed outside of the AWYs is made by the following formula:
S= V x t
where:
S – flight distance. The distance is rounded to the whole tens within the FIR of the Republic of Kazakhstan.
V – flight execution speed (km/h)
t – flight execution time – flying hours (h).
The rounding of flight distance to the whole tens is made by the following:
Less than 5 km – rounded to the less side,
5 km and more – rounded to the larger side.

When landing at ADs of the Republic of Kazakhstan where air traffic service is provided by the ATS units of

RSE “Kazaeronavigatsia” branches, the distance travelled on the route segments to/from the AD is reduced by 20 km for each take-off and landing.

The amount of the charge for air navigation services for aircraft in the terminal area (in the take-off and landing zone) depends on the maximum take-off weight (MTOW) and is calculated by the following formula:
P=TxW
where:
P – amount of charges;
T – rate of charges per 1 ton of maximum take-off weight (MTOW) of an aircraft
W – MTOW in tons to be rounded off to decimals.

For the charging purpose for air navigation services en-route and in the terminal area, the MTOW is rounded to the tenth of a ton in the following order: less than 50 kg - rounded down (to zero), 50 kg or more - rounded up (up to 0.1 ton).

Information about the fleet in operation, including registration marks and MTOW, is required to be submitted by users of the airspace of the Republic of Kazakhstan in advance to the RSE "Kazaeronavigatsia".

MTOW for each type of aircraft is taken into account, in the case the airspace user does not submit a real MTOW for a particular aircraft flying in the airspace of the Republic of Kazakhstan.

Tariffs and rates for the air navigation services en-route and in the terminal area of the Republic of Kazakhstan, except for international flights are approved by the authorized state body in the sphere of the natural monopoly.

3. EXEMPTIONS/REDUCTIONS

The following categories of flights in the airspace of the Republic of Kazakhstan is exempted from payment of air navigation facility charges:

a. aircraft suffering or having suffered a distress, as well as aircraft whose routes have been changed due to an emergency on board, failure or malfunction of the equipment on board, from the moment of determining the location of the aircraft;

b. aircraft on search and rescue operations, as well as aircraft involved in the search and rescue exercises, according to the contract with ANS provider;

c. aircraft on medical and (or) humanitarian aid to the population in natural disasters;

d. aircraft of State Aviation of the Republic of Kazakhstan;

e. aircraft carrying the President of the Republic of Kazakhstan, the Prime Minister of the Republic of Kazakhstan, royalty, heads of states and government of foreign states.

f. in accordance with international treaties ratified by the Republic of Kazakhstan, if exemption of payment for the air navigation services provided by the clauses;

g. Light and ultralight aircraft (aircraft - up to 5 700 kg, helicopters - up to 3 180 kg).

4. METHODS OF PAYMENT

Invoices with a statement of the executed flights for the air navigation services provided to the foreign users of the airspace of the Republic of Kazakhstan are billed in US dollars twice a month on the 15th and the last date of the month. Payment for the air navigation services is made by transferring to RSE Kazaeronavigatsia bank account the fee in US dollars or tenge (KZT) according to the official exchange rate of National Bank of the Republic of Kazakhstan and fixed on a date of payment.

Scheduled flights in the airspace of the Republic of Kazakhstan is carried on terms of payment upon the execution of flights, in accordance with the invoices provided by RSE “Kazaeronavigatsia”. Payment must be made within 10 banking days from the date of the invoice receipt.

Non- scheduled (charter) flights in the airspace of the Republic of Kazakhstan are carried under the conditions of 100% advance payment on the basis of the invoice issued by the RSE "Kazaeronavigatsia" for preliminary payment.

In accordance with limited terms of storage of control facilities, on which statements and credit notes for the

ENR 3 ATS ROUTES

ENR 3.1 CONVENTIONAL NAVIGATION ROUTES

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓/↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
A80									
▲ PIKAN (FIR BDRY)	425300N 0493000E								Before, see AIP Russia
	042° 222°	90.6 NM		10000 FT ALT / 6000 FT ALT	1300 FT ALT		Odd	Even	AKTAU TWR 120.7 MHZ {C}
▲ AKTAU DVOR/ DME (AKT)	435220N 0510352E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓/↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
A87									
▲ AKTAU DVOR/ DME (AKT)	435220N 0510352E								
	301° 119°	85.2 NM		10000 FT ALT / 6000 FT ALT	1300 FT ALT		Even	Odd	AKTAU TWR 120.7 MHZ {C}
▲ AZABI (FIR BDRY)	444424N 0493000E								For continuation, see AIP Russia

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓/↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
A122									
▲ URALSK DVOR/DME (URL)	510855N 0513238E								
	046° 226°	34.8 NM		10000 FT ALT / 5000 FT ALT	1700 FT ALT		Odd	Even	URALSK TWR 119.7 MHZ {C}

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓ / ↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
△ INRIS	512800N 0521856E								
	046° 226°	8.6 NM		10000 FT ALT / 5000 FT ALT	1300 FT ALT		Odd	Even	URALSK TWR 119.7 MHZ {C}
▲ EKTEN (FIR BDRY)	513242N 0523030E								For continuation, see AIP Russia

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓ / ↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
A303									
▲ PETROPAVLOVSK DVOR/DME (PSK)	544703N 0691309E								
	304° 123°	34.5 NM		10000 FT ALT / 5000 FT ALT	2100 FT ALT		Even	Odd	PETROPAVLOVSK TWR 123.7 MHZ {C}
▲ LETIK (FIR BDRY)	551200N 0683200E								For continuation, see AIP Russia

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓ / ↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
A357									
▲ GASBI (FIR BDRY)	422611N 0502811E								Before, see AIP Azerbaijan
	010° 190°	90.0 NM		10000 FT ALT / 6000 FT ALT	1400 FT ALT		Odd	Even	AKTAU TWR 120.7 MHZ {C}
▲ AKTAU DVOR/DME (AKT)	435220N 0510352E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓ / ↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
A357									
▲ AKTOBE DVOR/DME (AKB)	501548N 0571055E								
	041° 222°	49.5 NM		10000 FT ALT / 5000 FT ALT	2700 FT ALT		Odd	Even	AKTOBE TWR 128.0 MHZ {C}
▲ ALGAS	504613N 0581203E								
	041° 222°	19.1 NM		10000 FT ALT / 5000 FT ALT	3700 FT ALT		Odd	Even	AKTOBE TWR 128.0 MHZ {C}
▲ NINBU (FIR BDRY)	505748N 0583554E								For continuation, see AIP Russia

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓ / ↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
A357									
▲ PETROPAVLOVSK DVOR/ DME (PSK)	544703N 0691309E								
	072° 254°	62.0 NM		10000 FT ALT / 5000 FT ALT	1600 FT ALT		Odd	Even	PETROPAVLOVSK TWR 123.7 MHZ {C}
▲ BARKI (FIR BDRY)	545153N 0710000E								For continuation, see AIP Russia

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓ / ↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
A359									
▲ PETROPAVLOVSK DVOR/ DME (PSK)	544703N 0691309E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓/↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
	277° 096°	37.4 NM		10000 FT ALT / 5000 FT ALT	2100 FT ALT		Even	Odd	PETROPAVLOVSK TWR 123.7 MHZ {C}
▲ IKANA (FIR BDRY)	545924N 0681200E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓/↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
A360									
▲ AKTOBE DVOR/DME (AKB)	501548N 0571055E								
	335° 154°	50.6 NM		10000 FT ALT / 5000 FT ALT	3500 FT ALT		Even	Odd	AKTOBE TWR 128.0 MHZ {C}
▲ MULTA (FIR BDRY)	510442N 0565042E								For continuation, see AIP Russia

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓/↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
A368									
▲ URALSK DVOR/DME (URL)	510855N 0513238E								
	316° 135°	21.5 NM		10000 FT ALT / 5000 FT ALT	1700 FT ALT		Even	Odd	URALSK TWR 119.7 MHZ {C}
△ OGAPI	512648N 0511336E								
	316° 135°	16.3 NM		10000 FT ALT / 5000 FT ALT	1600 FT ALT		Even	Odd	URALSK TWR 119.7 MHZ {C}
▲ GUTAN (FIR BDRY)	514024N 0505912E								For continuation, see AIP Russia

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓ / ↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓ / ↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
A924									
▲ AKTAU DVOR/ DME (AKT)	435220N 0510352E								
	277° 095°	69.6 NM		10000 FT ALT / 6000 FT ALT	1300 FT ALT		Even	Odd	AKTAU TWR 120.7 MHZ {C}
▲ RALAN (FIR BDRY)	440812N 0493000E								For continuation, see AIP Russia

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓ / ↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
B833									
▲ UST-KAMENOGOR SKDVOR/DME (UKM)	500158N 0823031E								
	326° 145°	51.2 NM		10000 FT ALT / 6000 FT ALT	4400 FT ALT		Even	Odd	UST-KAMENOGORSK TOWER 130.1 MHZ {C}
▲ ADARO (FIR BDRY)	504706N 0815242E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓/↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
G3	(2) [illegible]								
▲ URALSK DVOR/DME (URL)	510855N 0513238E								
	288° 107°	42.7 NM		10000 FT ALT / 5000 FT ALT	1700 FT ALT		Even	Odd	URALSK TWR 119.7 MHZ {C}
▲ ARISA (FIR BDRY)	512924N 0503254E								For continuation, see AIP Russia

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓/↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
G96	(2) [illegible]								
▲ IPLED (FIR BDRY)	432348N 0493000E								Before, see AIP Russia
	060° 241°	73.9 NM		10000 FT ALT / 6000 FT ALT	1300 FT ALT		Odd	Even	AKTAU TWR 120.7 MHZ {C}
▲ AKTAU DVOR/ DME (AKT)	435220N 0510352E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓/↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
G96	(2) For continuation, see AIP Russia								
▲ SEMEY DVOR/DME (SEM)	502059N 0801438E								
	060° 241°	67.8 NM		10000 FT ALT / 5000 FT ALT			Odd	Even	
▲ ADARO (FIR BDRY)	504706N 0815242E								For continuation, see AIP Russia

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓ / ↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
G111	(R) [illegible]								
▲ KOSTANAY DVOR/DME (KST)	531113N 0633346E								
	268° 086°	38.7 NM		10000 FT ALT / 5000 FT ALT	3200 FT ALT		Even	Odd	KOSTANAY TWR 129.3 MHZ {C}
△ LODEZ	531715N 0623004E								
	266° 085°	48.8 NM		10000 FT ALT / 5000 FT ALT	1900 FT ALT		Even	Odd	KOSTANAY TWR 129.3 MHZ {C}
▲ TITUR (FIR BDRY)	532406N 0610924E								For continuation, see AIP Russia

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓ / ↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
G121	(R) For continuation, see AIP Russia								
▲ SEMEY DVOR/DME (SEM)	502059N 0801438E								
	019° 199°	58.7 NM		10000 FT ALT / 5000 FT ALT			Odd	Even	
▲ ELSUT	511342N 0805506E								For continuation, see AIP Russia

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓ / ↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
G552	(R) [illegible]								
▲ AKTOBE DVOR/DME (AKB)	501548N 0571055E								
	008° 187°	38.6 NM		10000 FT ALT / 5000 FT ALT	3500 FT ALT		Odd	Even	AKTOBE TWR 128.0 MHZ {C}

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓/↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
▲ SANIR (FIR BDRY)	505230N 0572942E								For continuation, see AIP Russia

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓/↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
R227									
▲ AKTAU DVOR/ DME (AKT)	435220N 0510352E								
	263° 082°	67.9 NM		10000 FT ALT / 6000 FT ALT	2300 FT ALT		Even	Odd	AKTAU TWR 120.7 MHZ {C}
▲ ITAKA (FIR BDRY)	435224N 0493000E								For continuation, see AIP Russia

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓/↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
R482									
▲ KOSTANAY DVOR/DME (KST)	531113N 0633346E								
	318° 137°	63.0 NM		10000 FT ALT / 5000 FT ALT	3100 FT ALT		Even	Odd	KOSTANAY TWR 129.3 MHZ {C}
▲ LANOR (FIR BDRY)	540536N 0624042E								For continuation, see AIP Russia

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓ / ↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
W324									
▲ AKTAU DVOR/DME (AKT)	435220N 0510352E								
	003° 182°	56.7 NM		FL 510 / FL 120	2900 FT ALT		Odd	Even	AKTOBE ACC 134,3 MHZ AKTAU TOWER 120.7 MHZ {C}
△ PIRIM	444808N 0511741E								
	001° 180°	53.2 NM		FL 510 / FL 120	1100 FT ALT		Odd	Even	AKTOBE ACC 134,3 MHZ {C}
▲ KOLIB	454047N 0512848E								
	360° 180°	45.7 NM		FL 510 / FL 120	1000 FT ALT		Odd	Even	AKTOBE ACC 130,9 MHZ {C}
△ NIKNA	462557N 0513838E								
	360° 180°	43.2 NM		FL 510 / FL 120	1400 FT ALT		Odd	Even	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	1600 FT ALT		Even	Odd	AKTOBE ACC 130,9 MHZ ATYRAU TOWER 118.1 MHZ {C}
△ OLAPU	475146N 0514531E								
	348° 168°	69.9 NM		FL 510 / FL 120	1700 FT ALT		Even	Odd	AKTOBE ACC 130,9 MHZ {C}
▲ BAGIR	490131N 0514106E								
	348° 167°	84.3 NM		FL 510 / FL 120	1400 FT ALT		Even	Odd	AKTOBE ACC 131.4 MHZ {C}
△ DOKUS	502539N 0513528E								
	347° 167°	43.4 NM		FL 510 / FL 120	1400 FT ALT		Even	Odd	AKTOBE ACC 131.4 MHZ URALSK TOWER 119.7 MHZ {C}
▲ URALSK DVOR/DME (URL)	510855N 0513238E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓ / ↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
W332									

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓/↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
▲ KYZYLORDA DVOR/DME (KZO)	444145N 0653349E								
	020° 200°	44.3 NM		FL 510 / FL 120			Odd	Even	SHYMKENT ACC 127,3MHZ KYZYLORDA TOWER 120.9 {C}
△ AMREK	452109N 0660226E								
	018° 198°	70.9 NM		FL 510 / FL 120			Odd	Even	SHYMKENT ACC 127,3MHZ {C}
▲ GORVA (FIR BDRY)	462455N 0664655E								
	019° 199°	44.7 NM		FL 510 / FL 120			Odd	Even	ASTANA ACC 132.5MHZ {C}
△ DITSO	470443N 0671637E								
	019° 199°	43.4 NM		FL 510 / FL 120			Odd	Even	ASTANA ACC 132.5MHZ 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 132.5MHZ ZHEZKAZGAN TOWER 127.1 MHZ {C}
△ BEDOR	482529N 0673251E								
	341° 160°	94.2 NM		FL 510 / FL 120			Even	Odd	ASTANA ACC 132.5MHZ {C}
▲ EDETO	495808N 0670732E								
	339° 159°	21.3 NM		FL 510 / FL 120			Even	Odd	ASTANA ACC 133.1MHZ {C}
▲ ARKALYK DVOR/DME (ARK)	501904N 0670118E								
	314° 132°	36.7 NM		FL 510 / FL 120			Even	Odd	ASTANA ACC 133.1MHZ {C}
△ TOMZU	504824N 0662645E								
	314° 131°	118.0 NM		FL 510 / FL 120			Even	Odd	ASTANA ACC 133.1MHZ {C}
△ UNIBE	522328N 0643445E								
	311° 130°	60.5 NM		FL 510 / FL 120			Even	Odd	ASTANA ACC 133.1MHZ KOSTANAY TOWER 129.3 MHZ {C}
▲ KOSTANAY DVOR/DME (KST)	531113N 0633346E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓/↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
W333									
▲ ALMATY DVOR/DME (ATA)	432229N 0770507E								
	333° 152°	41.1 NM		FL 510 / FL 120	9000 FT ALT		Even	Odd	ALMATY ACC 131,4MHZ ALMATY APPROACH 124.8 MHZ {C}
▲ BAKIS	440031N 0764333E								
	332° 152°	21.5 NM		FL 510 / FL 120	4500 FT ALT		Even	Odd	ALMATY ACC 133.1MHZ ALMATY APPROACH 124.8 MHZ {C}
▲ ETEDA	442024N 0763206E								
	332° 150°	89.9 NM		FL 510 / FL 140	4000 FT ALT		Even	Odd	ALMATY ACC 133.1MHZ {C}
▲ RITAB	454308N 0754239E								
	330° 150°	32.9 NM		FL 510 / FL 120	3000 FT ALT		Even	Odd	ALMATY ACC 125,5MHZ {C}
△ TULPI	461318N 0752358E								
	330° 150°	43.3 NM		FL 510 / FL 120	3000 FT ALT		Even	Odd	ALMATY ACC 125,5MHZ BALKHASH TOWER 128.0 MHZ {C}
▲ BALKHASH DVOR/DME (BLH)	465259N 0745902E								
	333° 152°	42.1 NM		FL 510 / FL 120	6400 FT ALT		Even	Odd	ALMATY ACC 125,5MHZ BALKHASH TOWER 128.0 MHZ {C}
△ GIREM	473219N 0743709E								
	332° 151°	38.2 NM		FL 510 / FL 120	5000 FT ALT		Even	Odd	ALMATY ACC 125,5MHZ {C}
▲ LUKUS (FIR BDRY)	480759N 0741658E								
	332° 151°	54.7 NM		FL 510 / FL 150	5800 FT ALT		Even	Odd	ASTANA ACC 124.1MHZ {C}
△ NEMKU	485904N 0734736E								
	331° 150°	45.3 NM		FL 510 / FL 120	5200 FT ALT		Even	Odd	ASTANA ACC 124.1MHZ KARAGANDA TOWER 122.0 MHZ {C}
▲ KARAGANDA DVOR/DME (KRG)	494114N 0732226E								
	309° 127°	41.2 NM		FL 510 / FL 120	5100 FT ALT		Even	Odd	ASTANA ACC 124.1MHZ KARAGANDA TOWER 122.0 MHZ {C}
▲ BANOS	501116N 0723844E								
	308° 127°	67.4 NM		FL 510 / FL 120	4300 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ ASTANA APPROACH 124.6 MHZ {C}

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓/↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
▲ ASTANA DVOR/DME (AST)	510006N 0712600E								
	325° 144°	65.3 NM		FL 510 / FL 120	2900 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ ASTANA APPROACH 124.6 MHZ {C}
△ KOLUR	515901N 0704103E								
	324° 143°	46.9 NM		FL 510 / FL 120	2700 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ {C}
△ LULEK	524106N 0700733E								
	324° 144°	44.0 NM		FL 510 / FL 120	4800 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ KOKSHETAU TOWER 127.9 MHZ {C}
▲ KOKSHETAU VOR/DME (KTU)	532103N 0693701E								
	338° 157°	40.1 NM		FL 510 / FL 120	3100 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ KOKSHETAU TOWER 127.9 MHZ {C}
▲ TETKI	540020N 0692425E								
	340° 160°	47.3 NM		FL 510 / FL 120	2100 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ PETROPAVLOVSK TOWER 123.7 MHZ {C}
▲ PETROPAVLOVSK DVOR/DME (PSK)	544703N 0691309E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓/↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
W336									
▲ BALKHASH DVOR/DME (BLH)	465259N 0745902E								
	066° 246°	44.2 NM		FL 510 / FL 120	4000 FT ALT		Odd	Even	ALMATY ACC 125,5MHZ BALKHASH TOWER 128.0 MHZ {C}
△ ESADO	470607N 0760037E								
	066° 247°	44.7 NM		FL 510 / FL 120	5000 FT ALT		Odd	Even	ALMATY ACC 125,5MHZ {C}
▲ MADEV	471857N 0770328E								
	067° 250°	142.5 NM		FL 510 / FL 200	6000 FT ALT		Odd	Even	ALMATY ACC 132,1MHZ {C}

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓ / ↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
▲ AYAGUZ VOR/DME (AGZ)	475552N 0802659E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓ / ↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
W348									
▲ KARAGANDA DVOR/DME (KRG)	494114N 0732226E								
	100° 280°	43.9 NM		FL 510 / FL 120	4900 FT ALT		Odd	Even	ASTANA ACC 124.1MHZ KARAGANDA TOWER 122.0 MHZ {C}
△ ARLIH	492724N 0742621E								
	100° 282°	72.7 NM		FL 510 / FL 200	8200 FT ALT		Odd	Even	ASTANA ACC 124.1MHZ {C}
▲ GORBO (FIR BDRY)	490316N 0761100E								
	102° 284°	60.1 NM		FL 510 / FL 270	8200 FT ALT		Odd	Even	ALMATY ACC 132,1MHZ {C}
△ DODEM	484212N 0773614E								
	104° 287°	123.0 NM		FL 510 / FL 200	7200 FT ALT		Odd	Even	ALMATY ACC 132,1MHZ {C}
▲ AYAGUZ VOR/ DME (AGZ)	475552N 0802659E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓ / ↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
W351									
▲ ZHEZKAZGAN DVOR/DME (DZG)	474317N 0674542E								
	052° 232°	43.0 NM		FL 510 / FL 120	3000 FT ALT		Odd	Even	ASTANA ACC 132.5MHZ ZHEZKAZGAN TOWER 127.1 MHZ {C}
△ ADRIK	480432N 0684119E								
	052° 233°	81.6 NM		FL 510 / FL 180	4100 FT ALT		Odd	Even	ASTANA ACC 132.5MHZ {C}

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓/↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
▲ INTAL	484345N 0702839E								
	053° 235°	80.9 NM		FL 510 / FL 180	4700 FT ALT		Odd	Even	ASTANA ACC 124.1MHZ {C}
△ DOZIN	492040N 0721800E								
	055° 236°	46.8 NM		FL 510 / FL 120	5500 FT ALT		Odd	Even	ASTANA ACC 124.1MHZ KARAGANDA TOWER 122.0 MHZ {C}
▲ KARAGANDA DVOR/DME (KRG)	494114N 0732226E								
	033° 213°	44.6 NM		FL 510 / FL 120	4500 FT ALT		Odd	Even	ASTANA ACC 124.1MHZ KARAGANDA TOWER 122.0 MHZ {C}
△ UNLOM	501425N 0740834E								
	033° 213°	14.4 NM		FL 510 / FL 120	4500 FT ALT		Odd	Even	ASTANA ACC 124.1MHZ {C}
▲ KANZI	502504N 0742336E								
	033° 214°	71.7 NM		FL 510 / FL 120	5600 FT ALT		Odd	Even	ASTANA ACC 132.8MHZ {C}
△ ROHIL	511738N 0754034E								
	034° 215°	76.3 NM		FL 510 / FL 120	2400 FT ALT		Odd	Even	ASTANA ACC 132.8MHZ PAVLODAR TOWER 119.8 MHZ {C}
▲ PAVLODAR DVOR/DME (PVL)	521235N 0770542E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓/↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
W352									
▲ KARAGANDA DVOR/DME (KRG)	494114N 0732226E								
	070° 251°	43.4 NM		FL 510 / FL 120	4500 FT ALT		Odd	Even	ASTANA ACC 124.1MHZ KARAGANDA TOWER 122.0 MHZ {C}
△ SULIB	494914N 0742808E								
	071° 253°	61.6 NM		FL 510 / FL 160	5100 FT ALT		Odd	Even	ASTANA ACC 124.1MHZ {C}
▲ LUMUD	495933N 0760202E								
	073° 253°	28.5 NM		FL 510 / FL 200	7500 FT ALT		Odd	Even	ASTANA ACC 132.8MHZ {C}

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓/↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
▲ TULFA (FIR BDRY)	500354N 0764539E								
	073° 256°	92.4 NM		FL 510 / FL 220	6600 FT ALT		Odd	Even	ALMATY ACC 132,1MHZ {C}
△ LUREL	501613N 0790803E								
	076° 257°	42.9 NM		FL 510 / FL 120	4000 FT ALT		Odd	Even	ALMATY ACC 132,1MHZ SEMEY TOWER 128.0 MHZ {C}
▲ SEMEY DVOR/ DME (SEM)	502058.7N 0801437.5E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓/↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
W355									
▲ KOSTANAY DVOR/DME (KST)	531113N 0633346E								
	050° 230°	65.0 NM		FL 510 / FL 120	2200 FT ALT		Odd	Even	ASTANA ACC 133.1MHZ KOSTANAY TOWER 129.3 MHZ {C}
△ AKOSO	534140N 0650940E								
	052° 233°	48.6 NM		FL 510 / FL 150	1800 FT ALT		Odd	Even	ASTANA ACC 133.1MHZ {C}
▲ DEPIR	540211N 0662405E								
	052° 232°	47.8 NM		FL 510 / FL 150	1700 FT ALT		Odd	Even	ASTANA ACC 132.8MHZ {C}
△ KOKAV	542244N 0673738E								
	053° 235°	60.7 NM		FL 510 / FL 120	1700 FT ALT		Odd	Even	ASTANA ACC 132.8MHZ PETROPAVLOVSK TOWER 123.7 MHZ {C}
▲ PETROPAVLOVSK DVOR/ DME (PSK)	544703N 0691309E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓/↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
W358									

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓/↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
▲ PAVLODAR DVOR/DME (PVL)	521235N 0770542E								
	234° 052°	79.0 NM		FL 510 / FL 120	3400 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ PAVLODAR TOWER 119.8 MHZ {C}
▲ ABELI	513524N 0751312E								
	248° 066°	88.0 NM		FL 510 / FL 140	5000 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ {C}
△ BOLSU	511507N 0725620E								
	246° 065°	58.9 NM		FL 510 / FL 120	4400 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ ASTANA APPROACH 124.6 MHZ {C}
▲ ASTANA DVOR/DME (AST)	510006N 0712600E								
	249° 067°	55.0 NM		FL 510 / FL 120	2500 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ ASTANA APPROACH 124.6 MHZ {C}
△ OSROL	504818N 0700112E								
	248° 066°	74.0 NM		FL 510 / FL 120	2400 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ {C}
▲ TUSEP	503136N 0680751E								
	244° 063°	44.4 NM		FL 510 / FL 120	2400 FT ALT		Even	Odd	ASTANA ACC 133.1MHZ {C}
▲ ARKALYK DVOR/DME (ARK)	501904N 0670118E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓/↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
W360									
▲ SEMEY DVOR/ DME (SEM)	502058.7N 0801437.5E								
	170° 350°	43.1 NM		FL 510 / FL 120	3800 FT ALT		Odd	Even	ALMATY ACC 132,1MHZ SEMEY TOWER 128.0 MHZ {C}
△ LUNOV	493800N 0801801E								
	170° 351°	102.4 NM		FL 510 / FL 150	6400 FT ALT		Odd	Even	ALMATY ACC 132,1MHZ {C}
▲ AYAGUZ VOR/ DME (AGZ)	475552N 0802659E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓/↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
W361									
▲ UST-KAMENOGORSK DVOR/DME (UKM)	500158N 0823031E								
	277° 095°	45.2 NM		FL 510 / FL 120	4800 FT ALT		Even	Odd	ALMATY ACC 132,1MHZ UST-KAMENOGORSK TOWER 130.1 MHZ {C}
▲ LIRNA	501159N 0812203E								
	275° 094°	44.2 NM		FL 510 / FL 120	4800 FT ALT		Even	Odd	ALMATY ACC 132,1MHZ SEMEY TOWER 128.0 MHZ {C}
▲ SEMEY DVOR/DME (SEM)	502058.7N 0801437.5E								
	307° 125°	49.7 NM		FL 510 / FL 120	3400 FT ALT		Even	Odd	ALMATY ACC 132,1MHZ SEMEY TOWER 128.0 MHZ {C}
▲ OBUNA (FIR BDRY)	505513N 0791803E								
	305° 123°	74.5 NM		FL 510 / FL 120	2100 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ {C}
△ PIVAL	514549N 0775050E								
	305° 125°	38.7 NM		FL 510 / FL 120	2400 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ PAVLODAR TOWER 119.8 MHZ {C}
▲ PAVLODAR DVOR/DME (PVL)	521235N 0770542E								
	277° 094°	76.1 NM		FL 510 / FL 120	2400 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ PAVLODAR TOWER 119.8 MHZ {C}
△ ADODA	523230N 0750554E								
	275° 092°	114.8 NM		FL 510 / FL 200	2000 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ {C}
△ ULSET	530027N 0720230E								
	273° 091°	47.2 NM		FL 510 / FL 120	3200 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ {C}
△ BALMI	531107N 0704613E								
	273° 092°	42.7 NM		FL 510 / FL 120	4200 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ KOKSHETAU TOWER 127.9 MHZ {C}
▲ KOKSHETAU VOR/DME (KTU)	532103N 0693701E								
	257° 076°	44.0 NM		FL 510 / FL 120	3500 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ KOKSHETAU TOWER 127.9 MHZ {C}
△ ROGUN	531944N 0682341E								

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓/↑	Dist	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
	257° 076°	54.7 NM		FL 510 / FL 120	3400 FT ALT		Even	Odd	ASTANA ACC 132.8MHZ {C}
▲ BAVAG	531819N 0665235E								
	257° 075°	55.2 NM		FL 510 / FL 140	1900 FT ALT		Even	Odd	ASTANA ACC 133.1MHZ {C}
△ BIMSO	531631N 0652038E								
	254° 073°	64.4 NM		FL 510 / FL 120	2200 FT ALT		Even	Odd	ASTANA ACC 133.1MHZ KOSTANAY TOWER 129.3 MHZ {C}
▲ KOSTANAY DVOR/DME (KST)	531113N 0633346E								

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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
L26 (RNAV 5)	(2) For continuation, see AP China					
▲ EKTOB	501548N 0571055E **AKB** **360.0° 0.0 NM** **(700 FT)**					
	086° 267°	44.1 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 128.0 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 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}
△ ARBIM	492045N 0645739E **ARK** **223.0° 99.1 NM** **(1300 FT)**					
	098° 279°	79.9 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ UMDEM	485611N 0665322E **DZG** **325.0° 80.9 NM** **(1300 FT)**					
	099° 280°	22.0 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ GORIM	484905N 0672456E **DZG** **339.0° 67.3 NM** **(1300 FT)**					
	100° 281°	38.2 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ AKITU	483624N 0681921E **DZG** **014.0° 57.7 NM** **(1300 FT)**					
	101° 281°	12.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ MAKUT	483217N 0683632E **DZG** **026.0° 59.7 NM** **(1300 FT)**					
	101° 282°	33.9 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ DITKI	482034N 0692417E **DZG** **052.0° 76.0 NM** **(1300 FT)**					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
	102° 283°	60.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
▲ KUROL	475900N 0704800E **DZG** **075.0° 123.8 NM** **(1300 FT)**					
	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 **KRG** **198.0° 132.6 NM** **(1800 FT)**					
	102° 284°	61.9 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ {C}
▲ TOGDI	472143N 0731457E **BLH** **284.0° 76.7 NM** **(1400 FT)**					
	104° 285°	33.4 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ {C}
△ NEPLA	470920N 0740031E **BLH** **285.0° 43.2 NM** **(1400 FT)**					
	105° 286°	43.3 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ BALKHASH TOWER 128.0 MHZ {C}
▲ OGLAB	465259N 0745902E **BLH** **360.0° 0.0 NM** **(1400 FT)**					
	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 **BLH** **102.0° 61.4 NM** **(1400 FT)**					

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

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
▲ LOKOZ	470838N 0514805E **ATR** **360.0° 0.0 NM** **(0 FT)**					
	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 **ATR** **073.0° 43.2 NM** **(0 FT)**					
	073° 254°	56.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
△ EPOLI	472234N 0541316E **ATR** **074.0° 99.9 NM** **(0 FT)**					
	073° 253°	31.8 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
△ LANIN	472659N 0545937E **BNU** **349.0° 126.8 NM** **(0 FT)**					
	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 Tower” 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 **BNU** **001.0° 131.5 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
	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 Tower” 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 **DZG** **262.0° 115.5 NM** **(1300 FT)**					
	082° 264°	72.3 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ ARMIK	474512N 0664137E **DZG** **263.0° 43.3 NM** **(1300 FT)**					
	084° 265°	43.3 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ ZHEZKAZGAN TOWER 127.1 MHZ {C}
▲ ALZIS	474317N 0674542E **DZG** **360.0° 0.0 NM** **(1300 FT)**					
	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 **DZG** **051.8° 43.0 NM** **(1300 FT)**					
	052° 232°	32.9 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ DITKI	482034N 0692417E **DZG** **052.0° 76.0 NM** **(1300 FT)**					
	053° 233°	48.7 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
▲ INTAL	484345N 0702839E **DZG** **053.0° 124.6 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
	053° 235°	80.9 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ {C}
△ DOZIN	492040N 0721800E **KRG** **235.0° 46.8 NM** **(1800 FT)**					
	055° 236°	46.8 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ KARAGANDA TOWER 122.0 MHZ {C}
▲ ARNIR	494114N 0732226E **KRG** **360.0° 0.0 NM** **(1800 FT)**					
	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 **KRG** **033.2° 44.6 NM** **(1800 FT)**					
	033° 213°	14.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ {C}
▲ KANZI	502504N 0742336E **KRG** **034.0° 59.0 NM** **(1800 FT)**					
	033° 214°	71.7 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
△ ROHIL	511738N 0754034E **PVL** **215.6° 76.3 NM** **(500 FT)**					
	034° 215°	76.3 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ PAVLODAR TOWER 119.8 MHZ {C}
▲ KANET	521235N 0770542E **PVL** **360.0° 0.0 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
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 **KZO** **222.0° 99.0 NM** **(500 FT)**					
	017° 197°	38.4 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
△ ERTUZ	441307N 0641019E **KZO** **238.0° 66.3 NM** **(500 FT)**					
	017° 197°	52.6 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
△ AGMUR	450056N 0644106E **KZO** **289.0° 42.1 NM** **(500 FT)**					
	018° 198°	114.8 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
▲ LUGER (FIR BDRY)	464426N 0655200E **DZG** **223.0° 97.3 NM** **(1300 FT)**					
	018° 198°	93.5 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ BETIK	480807N 0665309E **DZG** **296.0° 43.2 NM** **(1300 FT)**					
	018° 198°	46.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ GORIM	484905N 0672456E **DZG** **339.0° 67.3 NM** **(1300 FT)**					
	019° 199°	66.2 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
▲ AKELI	494707N 0681322E **ARK** **115.0° 56.4 NM** **(1300 FT)**					
	019° 199°	13.8 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 133.1 MHZ {C}
▲ ABULA	495910N 0682343E **ARK** **101.0° 56.6 NM** **(1300 FT)**					
	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 **ARK** **072.0° 70.2 NM** **(1300 FT)**					
	019° 201°	256.8 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
▲ DAKIN (FIR BDRY)	540930N 0722418E **KTU** **053.0° 110.5 NM** **(900 FT)**					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
L135 (RNAV 5)	(2) For continuation, see AIP Russia					
▲ MAMIR (FIR BDRY)	425438N 0763642E **ATA** **211.8° 34.8 NM** **(2200 FT)**					
	032° 212°	22.0 NM	FL 510 FL 200	Odd	Even	ALMATY ACC 131.4 MHZ {C}
△ LAKEL	431216N 0765439E **ATA** **211.7° 12.8 NM** **(2200 FT)**					
	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 **ATA** **332.2° 0.1 NM** **(2200 FT)**					
	051° 231°	22.3 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ TIRBA	433456N 0773031E **ATA** **050.8° 22.3 NM** **(2200 FT)**					
	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 ↓	↑	Controlling unit {Airspace class} Remarks
▲ GAKMA	440610N 0774907E **ATA** **030.8° 54.0 NM** **(2200 FT)**					
	018° 198°	11.3 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ DESOK	441629N 0775521E **TDK** **198.0° 54.4 NM** **(2000 FT)**					
	018° 198°	21.4 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
△ IDILI	443608N 0780716E **TDK** **198.0° 33.0 NM** **(2000 FT)**					
	018° 198°	33.0 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ TALDYKORGAN TOWER 127.3 MHZ {C}
▲ KOKZA	450622N 0782548E **TDK** **360.0° 0.0 NM** **(2000 FT)**					
	021° 201°	35.2 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ TALDYKORGAN TOWER 127.3 MHZ {C}
△ FULSA	453758N 0784751E **TDK** **021.0° 35.2 NM** **(2000 FT)**					
	021° 201°	45.7 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
▲ MAKEK	461854N 0791700E **TDK** **021.0° 80.9 NM** **(2000 FT)**					
	020° 200°	54.8 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ GOMAL	470809N 0795150E **AGZ** **200.0° 53.4 NM** **(2200 FT)**					
	020° 201°	53.4 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ KABIZ	475552N 0802659E **AGZ** **360.0° 0.0 NM** **(2200 FT)**					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
	026° 206°	106.8 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ LASNA	492602N 0815315E **UKM** **207.0° 43.3 NM** **(1000 FT)**					
	027° 208°	43.3 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ UST-KAMENOGORSK TOWER 130.1 MHZ {C}
▲ RIMPU	500158N 0823031E **UKM** **360.0° 0.0 NM** **(1000 FT)**					
	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 **UKM** **029.0° 43.0 NM** **(1000 FT)**					
	030° 210°	25.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ BOKIS (FIR BDRY)	505736N 0833312E **UKM** **030.0° 68.6 NM** **(1000 FT)**					**For continuation, see AIP Russia**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
L138 (RNAV 5)						
▲ OKMUR (FIR BDRY)	424815N 0791158E **JRK** **197.0° 91.6 NM** **(2600 FT)**					
	358° 178°	44.7 NM	FL 510 FL 120	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}

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
▲ BASPI	433257N 0791501E **JRK** **212.0° 51.0 NM** **(2600 FT)**					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
L139 (RNAV 5)	(2) Before, see AIP Uzbekistan					
▲ TULGA (FIR BDRY)	415347N 0701204E **SMK** **124.0° 44.3 NM** **(1400 FT)**					**Before, see AIP Uzbekistan**
	307° 127°	23.5 NM	FL 510 FL 160	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
△ ADESA	420940N 0694854E **SMK** **121.0° 20.9 NM** **(1400 FT)**					
	302° 122°	20.9 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
▲ FODIK	422220N 0692631E **SMK** **360.0° 0.0 NM** **(1400 FT)**					
	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 **SMK** **316.0° 30.0 NM** **(1400 FT)**					
	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 **TRK** **148.0° 28.7 NM** **(1000 FT)**					
	312° 132°	32.7 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
▲ GENDI	431800N 0682200E **TRK** **254.0° 9.4 NM** **(1000 FT)**					
	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 **TRK** **287.0° 31.7 NM** **(1000 FT)**					
	299° 119°	22.7 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ TURKISTAN TOWER 131.3 MHZ {C}
△ GIMRI	434530N 0672931E **TRK** **292.0° 54.1 NM** **(1000 FT)**					
	299° 118°	56.3 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ GITIM	441752N 0662540E **KZO** **116.0° 44.1 NM** **(500 FT)**					
	296° 116°	44.1 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ KYZYLORDA TOWER 120.9 {C}
▲ ORTEG	444145N 0653349E **KZO** **360.0° 0.0 NM** **(500 FT)**					
	291° 110°	28.5 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ KYZYLORDA TOWER 120.9 {C}
△ BUDET	445507N 0645824E **KZO** **290.0° 28.5 NM** **(500 FT)**					
	288° 108°	13.6 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ KYZYLORDA TOWER 120.9 {C}
△ AGMUR	450056N 0644106E **KZO** **289.0° 42.1 NM** **(500 FT)**					
	288° 105°	118.6 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
▲ INKUM	454952N 0620739E **ARL** **151.0° 63.3 NM** **(300 FT)**					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
	276° 096°	30.9 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
▲ SANUR (FIR BDRY)	455717N 0612446E **ARL** **180.0° 53.0 NM** **(300 FT)**					
	276° 094°	72.5 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119 MHZ {C}
▲ ABDUN	461337N 0594316E **ARL** **236.0° 86.4 NM** **(300 FT)**					
	274° 093°	40.7 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119 MHZ {C}
△ NINAG	462208N 0584556E **ARL** **249.0° 121.4 NM** **(300 FT)**					
	273° 092°	87.9 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119 MHZ {C}
▲ TISRA	463851N 0564100E **BNU** **032.0° 102.1 NM** **(0 FT)**					
	272° 090°	58.4 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 130.9 MHZ {C}
△ PEMOL	464841N 0551720E **BNU** **356.0° 88.6 NM** **(0 FT)**					
	270° 090°	29.8 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 130.9 MHZ {C}
△ RIKRI	465319N 0543423E **BNU** **338.0° 95.7 NM** **(0 FT)**					
	270° 089°	30.9 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 130.9 MHZ {C}
△ LEPSI	465750N 0534950E **ATR** **089.0° 83.9 NM** **(0 FT)**					
	269° 089°	40.7 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 130.9 MHZ {C}
△ GOGDI	470320N 0525055E **ATR** **088.0° 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
	269° 088°	43.3 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 130.9 MHZ ATYRAU TOWER 118.1 MHZ {C}
▲ LOKOZ	470838N 0514805E **ATR** **360.0° 0.0 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
L143 (RNAV 5)						
▲ SULET (FIR BDRY)	430602N 0743503E **ATA** **257.2° 110.9 NM** **(2200 FT)**					**Before, see AIP Kyrgyzstan**
	050° 230°	28.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ {C}
▲ UMLOD	432218N 0750715E **ATA** **265.4° 85.9 NM** **(2200 FT)**					
	043° 223°	5.8 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ {C}
△ BINRI	432607N 0751309E **ATA** **268.1° 81.7 NM** **(2200 FT)**					
	043° 223°	18.1 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ {C}
△ TIPSA	433809N 0753149E **ATA** **278.4° 69.7 NM** **(2200 FT)**					
	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 **ATA** **295.6° 54.6 NM** **(2200 FT)**					
	055° 235°	16.6 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
▲ ADABA	435820N 0762009E **ATA** **312.8° 48.5 NM** **(2200 FT)**					
	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 **ATA** **332.6° 62.6 NM** **(2200 FT)**					
	016° 196°	89.3 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
△ AKIRA	454323N 0771829E **TDK** **302.0° 60.2 NM** **(2000 FT)**					
	016° 196°	35.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
▲ GENGA	461625N 0773739E **TDK** **328.0° 77.8 NM** **(2000 FT)**					
	016° 196°	24.9 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
▲ AGNAT	463927N 0775115E **TDK** **340.0° 96.2 NM** **(2000 FT)**					
	016° 196°	59.3 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ IBDAS	473412N 0782432E **AGZ** **248.0° 85.4 NM** **(2200 FT)**					
	016° 196°	51.2 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ OSNER	482119N 0785409E **AGZ** **286.0° 67.2 NM** **(2200 FT)**					
	016° 197°	85.1 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ UVTOK	493924N 0794524E **SEM** **197.0° 45.7 NM** **(700 FT)**					
	017° 197°	45.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ SEMEY TOWER 128.0 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
▲ SOMIP	502106N 0801402E **SEM** **281.0° 0.4 NM** **(700 FT)**					
	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 **SEM** **018.0° 58.7 NM** **(700 FT)**					**For continuation, see AIP Russia**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
L143 **(RNAV 5)**						
▲ UVASU	404236N 0681306E **SMK** **203.0° 113.9 NM** **(1400 FT)**					**Before, see AIP Uzbekistan**
	068° 248°	16.2 NM	FL 510 8000 FT ALT	Odd	Even	TASHKENT ACC {C}
▲ RAVOB	404718N 0683330E **SMK** **196.0° 103.0 NM** **(1400 FT)**					**For continuation, see AIP Uzbekistan**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
L145 (RNAV 5)	(2) Before, see AIP Kyrgyzstan (3) For continuation, see AIP Russia					
▲ DEMAS (FIR BDRY)	424732N 0712008E **TAR** **147.0° 5.3 NM** **(2200 FT)**					**Before, see AIP Kyrgyzstan**
	327° 147°	5.3 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ TARAZ APPROACH 122.1 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
▲ KIZMI	425214N 0711654E **TAR** **360.0° 0.0 NM** **(2200 FT)**					
	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 **TAR** **329.0° 42.9 NM** **(2200 FT)**					
	328° 147°	44.9 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
△ GAMBU	441106N 0702401E **TAR** **328.0° 87.7 NM** **(2200 FT)**					
	327° 146°	7.4 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
△ INLIG	441743N 0701919E **TAR** **328.0° 94.9 NM** **(2200 FT)**					
	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 **TRK** **012.0° 131.1 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
	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 **DZG** **144.0° 114.0 NM** **(1300 FT)**					
	326° 144°	70.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ ASLIK	470509N 0681542E **DZG** **143.0° 43.3 NM** **(1300 FT)**					
	324° 143°	43.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ ZHEZKAZGAN TOWER 127.1 MHZ {C}
▲ ALZIS	474317N 0674542E **DZG** **360.0° 0.0 NM** **(1300 FT)**					
	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 **DZG** **326.0° 43.1 NM** **(1300 FT)**					
	325° 144°	37.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ UMDEM	485611N 0665322E **DZG** **325.0° 80.9 NM** **(1300 FT)**					
	327° 146°	53.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ SUKUR	494431N 0661957E **ARK** **207.0° 43.7 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
	323° 143°	27.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
▲ BULOG	500854N 0660036E **ARK** **245.0° 40.3 NM** **(1300 FT)**					
	324° 144°	14.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
▲ KUSOT	502128N 0655110E **ARK** **262.0° 45.0 NM** **(1300 FT)**					
	324° 142°	92.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ KUSUM	514420N 0644639E **KST** **141.0° 97.8 NM** **(600 FT)**					
	323° 142°	34.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ ARDIK	521459N 0642204E **KST** **140.0° 63.5 NM** **(600 FT)**					
	321° 140°	63.5 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ KOSTANAY TOWER 129.3 MHZ {C}
▲ EKSOZ	531113N 0633346E **KST** **360.0° 0.0 NM** **(600 FT)**					
	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 **KST** **318.0° 63.0 NM** **(600 FT)**					**For continuation, see AIP Russia**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
L147 (RNAV 5)	(2) Before, see AIP Kyrgyzstan					

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
▲ RODAM (FIR BDRY)	431348N 0741934E **ATA** **261.7° 121.2 NM** **(2200 FT)**					**Before, see AIP Kyrgyzstan**
	313° 132°	27.5 NM	FL 510 FL 70	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
▲ BASAN	433420N 0735429E **TAR** **065.0° 122.7 NM** **(2200 FT)**					
	311° 131°	10.2 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
▲ TOMGO	434146N 0734454E **TAR** **060.0° 118.9 NM** **(2200 FT)**					
	301° 120°	41.9 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
△ INDAG	440635N 0725812E **TAR** **038.0° 104.8 NM** **(2200 FT)**					
	300° 120°	19.7 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
△ RITMU	441806N 0723603E **TAR** **028.0° 103.3 NM** **(2200 FT)**					
	300° 118°	98.8 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
▲ PABRI (FIR BDRY)	451455N 0704239E **TAR** **344.0° 144.8 NM** **(2200 FT)**					
	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 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}

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
△ OBAMA	460212N 0690233E **DZG** **144.0° 114.0 NM** **(1300 FT)**					
	296° 115°	56.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ ELSEB	463234N 0675439E **DZG** **166.0° 71.0 NM** **(1300 FT)**					
	294° 114°	11.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ TUTUL	463825N 0674057E **DZG** **174.0° 65.0 NM** **(1300 FT)**					
	295° 114°	27.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ ATRUS	465302N 0670715E **DZG** **199.0° 56.7 NM** **(1300 FT)**					
	293° 113°	7.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ GISIR	465704N 0665732E **DZG** **206.0° 56.7 NM** **(1300 FT)**					
	294° 112°	53.5 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ TIROK	472456N 0655037E **DZG** **247.0° 80.1 NM** **(1300 FT)**					
	292° 111°	44.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ SUBOL	474716N 0645433E **DZG** **262.0° 115.5 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
	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 **ARL** **013.0° 116.4 NM** **(300 FT)**					
	287° 105°	84.2 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
△ MANAD	491421N 0604601E **ARL** **338.0° 148.9 NM** **(300 FT)**					
	285° 104°	42.9 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
△ AGATU	493220N 0594622E **AKB** **104.0° 109.5 NM** **(700 FT)**					
	284° 104°	24.6 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
△ ENETO	494223N 0591154E **AKB** **103.0° 84.9 NM** **(700 FT)**					
	284° 103°	43.1 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
△ RIGDO	495937N 0581049E **AKB** **102.0° 41.8 NM** **(700 FT)**					
	283° 102°	41.8 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 128.0 MHZ {C}
▲ EKTOB	501548N 0571055E **AKB** **360.0° 0.0 NM** **(700 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
L162 (RNAV 5)						
▲ ODIVA (FIR BDRY)	423530N 0640848E **KZO** **198.0° 140.5 NM** **(500 FT)**					**Before, see AIP Uzbekistan**
	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 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}
△ NITNA	433032N 0633601E **KZO** **222.0° 110.8 NM** **(500 FT)**					
	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 **KZO** **227.0° 108.3 NM** **(500 FT)**					
	329° 149°	17.3 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ TIPEN	435532N 0632045E **KZO** **236.0° 106.1 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
	329° 149°	18.6 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ ZURGO	441233N 0631012E **KZO** **248.0° 106.9 NM** **(500 FT)**					
	329° 148°	64.1 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
▲ TUKNA	451058N 0623308E **ARL** **150.0° 106.1 NM** **(300 FT)**					
	327° 147°	42.8 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
▲ INKUM	454952N 0620739E **ARL** **151.0° 63.3 NM** **(300 FT)**					
	329° 149°	27.3 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
▲ NIRAN (FIR BDRY)	461504N 0615245E **ARL** **154.0° 36.1 NM** **(300 FT)**					
	329° 148°	37.1 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119 MHZ {C}
△ UZLOR	464915N 0613205E **ARL** **257.0° 3.4 NM** **(300 FT)**					
	328° 147°	86.3 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119 MHZ {C}
▲ ERUTA	480837N 0604210E **ARL** **326.0° 87.5 NM** **(300 FT)**					
	327° 146°	91.5 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
△ AGATU	493220N 0594622E **AKB** **104.0° 109.5 NM** **(700 FT)**					
	326° 144°	76.3 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
▲ URUSU (FIR BDRY)	504142N 0585724E **AKB** **059.0° 72.8 NM** **(700 FT)**					**For continuation, see AIP Russia**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
L163 (RNAV 5)	(2) Before, see AIP Uzbekistan (3) For continuation, see AIP Russia					
▲ RODRO	411433N 0690034E **SMK** **190.0° 70.5 NM** **(1400 FT)**					**Before, see AIP Uzbekistan**
	306° 126°	12.7 NM	FL 510 7000 FT ALT	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
▲ DODUR (FIR BDRY)	412300N 0684800E **SMK** **200.0° 65.9 NM** **(1400 FT)**					
	320° 139°	47.4 NM	FL 510 7000 FT ALT	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
▲ MIKNO	420200N 0681200E **SMK** **243.0° 59.0 NM** **(1400 FT)**					
	307° 125°	47.6 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
△ ROSIM	423415N 0672453E **TRK** **222.0° 68.4 NM** **(1000 FT)**					
	306° 126°	38.0 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
▲ PAVEL	425947N 0664642E **TRK** **249.0° 81.5 NM** **(1000 FT)**					
	306° 125°	18.9 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
▲ RILOK	431224N 0662729E **TRK** **258.0° 93.3 NM** **(1000 FT)**					
	305° 124°	94.8 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ DILNA	441450N 0644911E **KZO** **222.0° 41.8 NM** **(500 FT)**					
	304° 123°	11.6 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ BADAS	442221N 0643656E **KZO** **237.0° 45.1 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
	303° 123°	5.3 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ ADREM	442548N 0643118E **KZO** **243.0° 47.5 NM** **(500 FT)**					
	303° 122°	57.2 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
▲ UNITO	450238N 0632952E **KZO** **275.0° 90.6 NM** **(500 FT)**					
	302° 120°	74.7 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
▲ INKUM	454952N 0620739E **ARL** **151.0° 63.3 NM** **(300 FT)**					
	306° 126°	27.6 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
▲ ADUMI (FIR BDRY)	460903N 0613915E **ARL** **169.0° 40.5 NM** **(300 FT)**					
	306° 123°	137.6 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119 MHZ {C}
▲ RUGUS	474250N 0591219E **ARL** **289.0° 112.1 NM** **(300 FT)**					
	303° 121°	93.0 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
△ ERKIS	484421N 0572756E **AKB** **162.0° 92.0 NM** **(700 FT)**					
	301° 118°	147.4 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
▲ SIVKO	501827N 0543349E **AKB** **260.0° 100.8 NM** **(700 FT)**					
	300° 117°	130.4 NM	FL 510 FL 210	Even	Odd	AKTOBE ACC 131.4 MHZ {C}
▲ BEKAS (FIR BDRY)	514029N 0515327E **URL** **011.0° 34.2 NM** **(200 FT)**					**For continuation, see AIP Russia**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
L165 (RNAV 5)	(2) Before, see AIP Uzbekistan (3) For continuation, see AIP Uzbekistan					
▲ AKALI (FIR BDRY)	440829N 0611937E **ARL** **175.0° 161.5 NM** **(300 FT)**					**Before, see AIP Uzbekistan**
	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 **ARL** **165.0° 93.4 NM** **(300 FT)**					
	011° 190°	35.0 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
▲ INKUM	454952N 0620739E **ARL** **151.0° 63.3 NM** **(300 FT)**					
	359° 179°	33.4 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
▲ RESBA (FIR BDRY)	462255N 0621359E **ARL** **128.0° 36.8 NM** **(300 FT)**					
	359° 178°	136.0 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119 MHZ {C}
▲ GEDSA (FIR BDRY)	483738N 0624054E **ARL** **013.0° 116.4 NM** **(300 FT)**					
	357° 176°	86.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
▲ GEMBO	500256N 0625600E **ARK** **252.0° 158.5 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
	356° 176°	20.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ EMBEK	502333N 0625947E **ARK** **263.0° 154.8 NM** **(1300 FT)**					
	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 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}
△ GUMGA	510752N 0630806E **KST** **175.0° 124.7 NM** **(600 FT)**					
	356° 175°	65.9 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ BUDER	521310N 0632052E **KST** **176.0° 58.6 NM** **(600 FT)**					
	356° 176°	58.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ KOSTANAY TOWER 129.3 MHZ {C}
▲ EKSOZ	531113N 0633346E **KST** **360.0° 0.0 NM** **(600 FT)**					
	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 **KST** **008.0° 73.1 NM** **(600 FT)**					**For continuation, see AIP Uzbekistan**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
L170 **(RNAV 5)**						
▲ VAMUK (FIR BDRY)	403400.0N 0683430.0E **SMK** **194.0° 115.1 NM** **(1400 FT)**					**Before, see AIP Uzbekistan**
	014° 194°	8.8 NM	FL 510 4000 FT ALT	Odd	Even	TASHKENT ACC {C}
▲ AKAZU (FIR BDRY)	404218N 0683815E **SMK** **194.0° 106.4 NM** **(1400 FT)**					**For continuation, see AIP Uzbekistan**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
L728 (RNAV 5)						
▲ OGTOL (FIR BDRY)	424905N 0733002E **TAR** **087.0° 98.0 NM** **(2200 FT)**					
	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 **TAR** **085.0° 85.9 NM** **(2200 FT)**					
	271° 090°	62.0 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
△ GERPU	425739N 0714951E **TAR** **072.0° 24.8 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
	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 **TAR** **329.0° 42.9 NM** **(2200 FT)**					
	296° 114°	98.8 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
▲ TUROK	442214N 0685447E **TRK** **007.0° 64.3 NM** **(1000 FT)**					
	312° 129°	191.6 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
▲ LUGER (FIR BDRY)	464426N 0655200E **DZG** **223.0° 97.3 NM** **(1300 FT)**					
	304° 123°	47.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ BAGED	471628N 0650016E **DZG** **249° 115.2 NM** **(1300 FT)**					
	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 **ARL** **013.0° 116.4 NM** **(300 FT)**					
	281° 097°	200.9 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
△ ODILA	494259N 0575122E **AKB** **131.0° 41.9 NM** **(700 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
	276° 093°	132.3 NM	FL 510 FL 160	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
▲ SIVKO	501827N 0543349E **AKB** **260.0° 100.8 NM** **(700 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
L736 (RNAV 5)	(1) H24					
▲ NOGBU	435220N 0510352E					
	112.9 NM	FL 510 FL 220		Even		AKTOBE ACC 134.3 MHZ {C}
▲ AMOHA	454502N 0505523E					
	66.8 NM	FL 510 FL 220		Even		AKTOBE ACC 130.9 MHZ {C}
△ TUGLA	465142N 0505006E					
	132.1 NM	FL 510 FL 220		Even		AKTOBE ACC 130.9 MHZ {C}
▲ NAGAZ	490336N 0504220E					
	146.1 NM	FL 510 FL 220		Even		AKTOBE ACC 131.4 MHZ {C}
▲ ARISA (FIR BDRY)	512924N 0503254E					

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)	(2) For continuation, see AP Uzbekistan					
△ TIPSA	433809N 0753149E **ATA** **278.4° 69.7 NM** **(2200 FT)**					
	278° 097°	54.4 NM	FL 510 FL 150	Even	Odd	ALMATY ACC 131.4 MHZ {C}

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
▲ ELENU (FIR BDRY)	435017N 0741838E **ATA** **278.8° 124.1 NM** **(2200 FT)**					
	270° 087°	105.8 NM	FL 510 FL 150	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
△ RISAS	435854N 0715247E **TAR** **016.0° 71.6 NM** **(2200 FT)**					
	275° 094°	39.4 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
△ KUGIR	440625N 0705906E **TAR** **344.0° 75.3 NM** **(2200 FT)**					
	274° 094°	25.7 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
△ GAMBU	441106N 0702401E **TAR** **328.0° 87.7 NM** **(2200 FT)**					
	274° 093°	65.1 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
▲ TUROK	442214N 0685447E **TRK** **007.0° 64.3 NM** **(1000 FT)**					
	273° 092°	30.6 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ REMOL	442704N 0681238E **TRK** **340.0° 69.4 NM** **(1000 FT)**					
	272° 091°	29.1 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ LUKUR	443112N 0673226E **TRK** **321.0° 84.6 NM** **(1000 FT)**					
	271° 091°	40.8 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ DIKAM	443650N 0663555E **KZO** **089.0° 44.6 NM** **(500 FT)**					
	270° 089°	44.6 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ KYZYLORDA TOWER 120.9 {C}

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
▲ ORTEG	444145N 0653349E **KZO** **360.0° 0.0 NM** **(500 FT)**					
	238° 057°	45.1 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ KYZYLORDA TOWER 120.9 {C}
△ BADAS	442221N 0643656E **KZO** **237.0° 45.1 NM** **(500 FT)**					
	237° 057°	21.2 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ ERTUZ	441307N 0641019E **KZO** **238.0° 66.3 NM** **(500 FT)**					
	237° 056°	39.8 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ TIPEN	435532N 0632045E **KZO** **236.0° 106.1 NM** **(500 FT)**					
	236° 056°	25.0 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ ADAKA	434416N 0624955E **KZO** **236.0° 131.1 NM** **(500 FT)**					
	236° 056°	36.9 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ 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}
▲ TIGTA (FIR BDRY)	432728N 0620446E **KZO** **235.0° 168.0 NM** **(500 FT)**					**For continuation, see AIP Uzbekistan**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
L864 (RNAV 5)						
▲ ITAKA (FIR BDRY)	435224N 0493000E **AKT** **262.0° 67.9 NM** **(100 FT)**					
	020°	60.7 NM	FL 510 FL 210	Odd		AKTOBE ACC 134.3 MHZ {C}
△ ATNUR	444559N 0500948E **AKT** **316.0° 66.2 NM** **(100 FT)**					
	349°	65.3 NM	FL 510 FL 220	Even		AKTOBE ACC 134.3 MHZ {C}
▲ URABU	455108N 0500407E **ATR** **214.4° 105.7 NM** **(0 FT)**					
	348°	45.5 NM	FL 510 FL 220	Even		AKTOBE ACC 130.9 MHZ {C}
△ DIMPA	463633N 0495959E **ATR** **238.2° 80.8 NM** **(0 FT)**					
	347°	149.0 NM	FL 510 FL 220	Even		AKTOBE ACC 130.9 MHZ {C}
▲ TOZIS	490511N 0494538E **URL** **198.7° 141.7 NM** **(200 FT)**					
	346°	121.9 NM	FL 510 FL 220	Even		AKTOBE ACC 131.4 MHZ {C}
▲ POMNI (FIR BDRY)	510638N 0493240E **URL** **258.0° 75.6 NM** **(200 FT)**					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
L985 **(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
AKALI (FIR BDRY) ▲	440829N 0611937E **ARL** **175.0° 161.5 NM** **(300 FT)**					**Before, see AIP Uzbekistan**
	358° 178°	45.5 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ 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 **ARL** **175.0° 116.1 NM** **(300 FT)**					
	352° 171°	63.5 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
SANUR (FIR BDRY) ▲	455717N 0612446E **ARL** **180.0° 53.0 NM** **(300 FT)**					
	357° 177°	52.2 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119 MHZ {C}
△ UZLOR	464915N 0613205E **ARL** **257.0° 3.4 NM** **(300 FT)**					
	357° 176°	96.2 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119 MHZ {C}
ADLIK ▲	482457N 0614611E **ARL** **355.0° 95.7 NM** **(300 FT)**					
	354° 173°	135.9 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
RAVNI (FIR BDRY) ▲	504030N 0615807E **KST** **188.0° 162.1 NM** **(600 FT)**					
	356° 175°	158.2 NM	FL 510 FL 210	Even	Odd	ASTANA ACC 133.1 MHZ {C}

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
LODEZ △	531715N 0623004E **KST** **268.0° 38.7 NM** **(600 FT)**					
	355° 175°	48.8 NM	FL 510 FL 210	Even	Odd	ASTANA ACC 133.1 MHZ {C}
LANOR (FIR BDRY) ▲	540536N 0624042E **KST** **318.0° 63.0 NM** **(600 FT)**					**For continuation, see AIP Russia**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
L988 (RNAV 5)	(2) Before, see AIP Russia (3) For continuation, see AIP Russia					
▲ OBATA (FIR BDRY)	462130N 0491148E **ATR** **236.0° 117.4 NM** **(0 FT)**					**Before, see AIP Russia**
	057° 237°	36.5 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
△ DIMPA	463633N 0495959E **ATR** **238.2° 80.8 NM** **(0 FT)**					
	057° 238°	37.7 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
△ TUGLA	465142N 0505006E **ATR** **237.0° 43.2 NM** **(0 FT)**					
	058° 239°	43.2 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ ATYRAU TOWER 118.1 MHZ {C}
▲ LOKOZ	470838N 0514805E **ATR** **360.0° 0.0 NM** **(0 FT)**					
	059° 239°	43.2 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ ATYRAU TOWER 118.1 MHZ {C}

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
△ GISTO	472457N 0524654E **ATR** **059.0° 43.2 NM** **(0 FT)**					
	059° 240°	86.0 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
△ KODUM	475556N 0544537E **ATR** **061.0° 129.2 NM** **(0 FT)**					
	048° 229°	42.8 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ 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 Tower” 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}
▲ ALABA	481845N 0553938E **AKB** **196.0° 131.5 NM** **(700 FT)**					
	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 FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Aktobe Tower” 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 **AKB** **162.0° 92.0 NM** **(700 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
	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 FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Aktobe Tower” 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 **ARK** **247.0° 177.6 NM** **(1300 FT)**					
	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 **ARK** **251.0° 90.3 NM** **(1300 FT)**					
	068° 251°	134.3 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 133.1 MHZ {C}
▲ TUSEP	503136N 0680751E **ARK** **064.0° 44.4 NM** **(1300 FT)**					
	066° 248°	74.0 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
△ OSROL	504818N 0700112E **AST** **248.0° 55.0 NM** **(1200 FT)**					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
	065° 245°	29.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
△ APTUS	505558N 0704601E **AST** **251.0° 25.6 NM** **(1200 FT)**					
	071° 251°	25.6 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
▲ ASTAS	510006N 0712600E **AST** **360.0° 0.0 NM** **(1200 FT)**					
	065° 246°	58.9 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
△ BOLSU	511507N 0725620E **AST** **066.0° 58.9 NM** **(1200 FT)**					
	066° 248°	88.0 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
▲ ABELI	513524N 0751312E **PVL** **232.0° 79.0 NM** **(500 FT)**					
	074° 255°	62.6 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ PAVLODAR TOWER 119.8 MHZ {C}
△ EKTUS	514225N 0765305E **PVL** **185.0° 31.2 NM** **(500 FT)**					
	075° 256°	11.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ PAVLODAR TOWER 119.8 MHZ {C}
△ ABRAS	514331N 0771053E **PVL** **165.0° 29.3 NM** **(500 FT)**					
	076° 256°	24.9 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ PAVLODAR TOWER 119.8 MHZ {C}
△ PIVAL	514549N 0775050E **PVL** **125.0° 38.7 NM** **(500 FT)**					
	076° 258°	52.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}

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
▲ LAGMO (FIR BDRY)	514954N 0791500E **PVL** **098.0° 83.0 NM** **(500 FT)**					**For continuation, see AIP Russia**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
L992 (RNAV 5)	(2) Before, see AIP Russia and CIS (3) For continuation, see AIP Russia					
▲ TIROM (FIR BDRY)	421434N 0531720E **AKT** **128.0° 138.3 NM** **(100 FT)**					**Before, see AIP Russia and CIS**
	009° 189°	48.1 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ ARNUS	430052N 0533509E **AKT** **107.0° 121.6 NM** **(100 FT)**					
	009° 189°	30.5 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ BAPER	433011N 0534642E **AKT** **094.0° 120.2 NM** **(100 FT)**					
	009° 189°	23.8 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ RINIT	435305N 0535549E **BNU** **202.0° 101.2 NM** **(0 FT)**					
	009° 189°	59.9 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
▲ BODSI	445034N 0541914E **BNU** **220.0° 45.3 NM** **(0 FT)**					
	011° 191°	44.1 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ AGNIM	453221N 0543918E **BNU** **293.0° 23.1 NM** **(0 FT)**					

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°	18.1 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
▲ NESDO	454926N 0544739E **BNU** **326.0° 32.2 NM** **(0 FT)**					
	011° 191°	62.7 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
△ PEMOL	464841N 0551720E **BNU** **356.0° 88.6 NM** **(0 FT)**					
	011° 191°	43.9 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
△ ODPUT	473004N 0553846E **BNU** **001.0° 131.5 NM** **(0 FT)**					
	011° 190°	33.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ 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 Tower” 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 **AKB** **189.0° 143.1 NM** **(700 FT)**					
	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 FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Aktobe Tower” 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
△ LOGTO	483204N 0561202E **AKB** **189.0° 110.7 NM** **(700 FT)**					
	010° 190°	72.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
△ TIKTO	494006N 0565014E **AKB** **190.0° 38.2 NM** **(700 FT)**					
	010° 190°	38.2 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 128.0 MHZ {C}
▲ EKTOB	501548N 0571055E **AKB** **360.0° 0.0 NM** **(700 FT)**					
	007° 187°	38.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 120.9 MHZ {C}
▲ SANIR (FIR BDRY)	505230N 0572942E **AKB** **007.0° 38.6 NM** **(700 FT)**					**For continuation, see AIP Russia**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
L993 (RNAV 5)	(2) For continuation, see AIP Russia					
▲ ARNIR	494114N 0732226E **KRG** **360.0° 0.0 NM** **(1800 FT)**					
	278° 092°	208.7 NM	FL 510 FL 250	Even	Odd	ASTANA ACC 124.1 MHZ {C}
▲ TUSEP	503136N 0680751E **ARK** **064.0° 44.4 NM** **(1300 FT)**					
	278° 090°	302.7 NM	FL 510 FL 250	Even	Odd	ASTANA ACC 133.1 MHZ {C}
▲ LENTA (FIR BDRY)	514854N 0602236E **KST** **221.0° 143.0 NM** **(600 FT)**					**For continuation, see AIP Russia**

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

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
L994 (RNAV 5)						
▲ RIMPU	500158N 0823031E **UKM** **360.0° 0.0 NM** **(1000 FT)**					
	277° 095°	45.2 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ UST-KAMENOGORSK TOWER 130.1 MHZ {C}
▲ LIRNA	501159N 0812203E **SEM** **094.0° 44.2 NM** **(700 FT)**					
	275° 094°	44.6 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ SEMEY TOWER 128.0 MHZ {C}
▲ SOMIP	502106N 0801402E **SEM** **281.0° 0.4 NM** **(700 FT)**					
	278° 097°	43.2 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ SEMEY TOWER 128.0 MHZ {C}
△ ETORI	503208N 0790845E **SEM** **277.0° 43.6 NM** **(700 FT)**					
	277° 096°	38.3 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
▲ BAMAT (FIR BDRY)	504125N 0781025E **SEM** **276.0° 81.9 NM** **(700 FT)**					
	276° 095°	30.9 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ DILGI	504833N 0772303E **PVL** **164.0° 84.8 NM** **(500 FT)**					
	275° 094°	31.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
△ GOBSO	505523N 0763521E **PVL** **184.0° 79.6 NM** **(500 FT)**					
	268° 085°	137.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ EDANO	510858N 0725804E **AST** **072.0° 58.7 NM** **(1200 FT)**					
	252° 071°	58.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
▲ ASTAS	510006N 0712600E **AST** **360.0° 0.0 NM** **(1200 FT)**					
	288° 106°	64.2 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
△ DIDAL	512908N 0695453E **AST** **286.0° 64.2 NM** **(1200 FT)**					
	287° 105°	64.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
▲ ATBAN	515824N 0682152E **KTU** **197.0° 94.6 NM** **(900 FT)**					
	284° 103°	32.5 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
▲ ATNON	521149N 0673350E **KTU** **215.0° 102.0 NM** **(900 FT)**					
	283° 102°	33.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ LATKO	522508N 0664427E **KTU** **229.0° 118.6 NM** **(900 FT)**					
	282° 100°	52.2 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ GITNA	524459N 0652518E **KST** **100.0° 72.4 NM** **(600 FT)**					
	281° 101°	8.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}

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
△ DOKUT	524814N 0651230E **KST** **099.0° 63.9 NM** **(600 FT)**					
	280° 099°	64.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ KOSTANAY TOWER 129.3 MHZ {C}
▲ EKSOZ	531113N 0633346E **KST** **360.0° 0.0 NM** **(600 FT)**					
	268° 086°	38.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ KOSTANAY TOWER 129.3 MHZ {C}
△ LODEZ	531715N 0623004E **KST** **268.0° 38.7 NM** **(600 FT)**					
	266° 085°	48.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ KOSTANAY TOWER 129.3 MHZ {C}
▲ TITUR (FIR BDRY)	532406N 0610924E **KST** **268.0° 87.6 NM** **(600 FT)**					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
L998						
△ IZIMA	432236N 0770503E **ATA** **332.2° 0.1 NM** **(2200 FT)**					
	333° 152°	14.2 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ BEDUR	433546N 0765739E **ATA** **332.7° 14.3 NM** **(2200 FT)**					
	332° 152°	13.6 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
△ DETAK	434823N 0765029E **ATA** **332.6° 28.0 NM** **(2200 FT)**					
	332° 152°	13.1 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
▲ BAKIS	440031N 0764333E **ATA** **332.6° 41.1 NM** **(2200 FT)**					
	332° 152°	15.0 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ UMIRO	441421N 0763537E **ATA** **332.7° 56.1 NM** **(2200 FT)**					
	332° 152°	6.6 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ ALMATY APPROACH 124.8 MHZ {C}
▲ ETEDA	442024N 0763206E **ATA** **332.6° 62.6 NM** **(2200 FT)**					
	332° 151°	58.5 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ {C}
△ DODOK	451420N 0760011E **TDK** **268.0° 103.3 NM** **(2000 FT)**					
	331° 150°	31.3 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ {C}
▲ RITAB	454308N 0754239E **BLH** **150.0° 76.1 NM** **(1400 FT)**					
	330° 150°	32.9 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ {C}
△ TULPI	461318N 0752358E **BLH** **150.0° 43.3 NM** **(1400 FT)**					
	330° 150°	43.3 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ BALKHASH TOWER 128.0 MHZ {C}
▲ OGLAB	465259N 0745902E **BLH** **360.0° 0.0 NM** **(1400 FT)**					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
	315° 134°	52.9 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ BALKHASH TOWER 128.0 MHZ {C}
△ BAGIL	473425N 0741044E **BLH** **314.0° 52.9 NM** **(1400 FT)**					
	314° 134°	40.3 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ {C}
▲ AGADI (FIR BDRY)	480559N 0733338E **BLH** **314.0° 93.2 NM** **(1400 FT)**					
	304° 118°	221.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
△ ASTIK	502734N 0691434E **ARK** **075.0° 85.7 NM** **(1300 FT)**					
	307° 125°	75.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
▲ RUDAL	512154N 0675222E **ARK** **017.0° 70.7 NM** **(1300 FT)**					
	302° 118°	131.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ DOKUT	524814N 0651230E **KST** **099.0° 63.9 NM** **(600 FT)**					
	300° 117°	119.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ KOSTANAY TOWER 129.3 MHZ {C}
▲ LANOR (FIR BDRY)	540536N 0624042E **KST** **318.0° 63.0 NM** **(600 FT)**					

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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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
M34 (RNAV 5)	(2) Before, see AIP Russia and CIS					
▲ 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 **ATA** **293.0° 148.0 NM** **(2200 FT)**					
	009° 189°	31.0 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ {C}
△ TENRO	445953N 0741408E **BLH** **188.0° 117.4 NM** **(1400 FT)**					
	009° 189°	58.5 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ {C}
△ ABMIK	455616N 0743604E **BLH** **189.0° 58.9 NM** **(1400 FT)**					
	009° 189°	58.9 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ BALKHASH TOWER 128.0 MHZ {C}
▲ OGLAB	465259N 0745902E **BLH** **360.0° 0.0 NM** **(1400 FT)**					
	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 **BLH** **008.0° 37.6 NM** **(1400 FT)**					
	008° 188°	72.8 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ {C}
▲ AGPIN (FIR BDRY)	483931N 0754146E **KRG** **116.0° 110.3 NM** **(1800 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
	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 **KRG** **105.0° 105.2 NM** **(1800 FT)**					
	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 **KRG** **101.0° 104.3 NM** **(1800 FT)**					
	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}

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
▲ AGINU (FIR BDRY)	494800N 0761100E **KRG** **077.0° 109.5 NM** **(1800 FT)**					
	005° 185°	69.2 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
△ GOBSO	505523N 0763521E **PVL** **184.0° 79.6 NM** **(500 FT)**					
	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 **PVL** **185.0° 31.2 NM** **(500 FT)**					
	005° 186°	31.2 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ PAVLODAR TOWER 119.8 MHZ {C}
▲ KANET	521235N 0770542E **PVL** **360.0° 0.0 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
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}

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
▲ 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)	(2) Before, see AIP Uzbekistan (3) For continuation, see AIP Russia					
▲ UBAGU (FIR BDRY)	430228N 0625120E **KZO** **221.0° 153.8 NM** **(500 FT)**					**Before, see AIP Uzbekistan**
	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 **KZO** **222.0° 127.5 NM** **(500 FT)**					
	043° 223°	16.7 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
△ NITNA	433032N 0633601E **KZO** **222.0° 110.8 NM** **(500 FT)**					
	043° 223°	11.8 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
▲ MIMRI	433808N 0634822E **KZO** **222.0° 99.0 NM** **(500 FT)**					
	026° 206°	56.8 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
△ ADREM	442548N 0643118E **KZO** **243.0° 47.5 NM** **(500 FT)**					
	026° 206°	28.2 NM	FL 510 FL 150	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
△ GIGUR	444920N 0645300E **KZO** **277.0° 30.1 NM** **(500 FT)**					
	026° 206°	6.9 NM	FL 510 FL 150	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
△ BUDET	445507N 0645824E **KZO** **290.0° 28.5 NM** **(500 FT)**					
	026° 207°	80.3 NM	FL 510 FL 150	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
△ ANIGO	460143N 0660207E **KZO** **007.0° 82.4 NM** **(500 FT)**					
	027° 207°	35.2 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
▲ BAMET (FIR BDRY)	463042N 0663051E **DZG** **206.0° 88.8 NM** **(1300 FT)**					
	027° 207°	32.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ GISIR	465704N 0665732E **DZG** **206.0° 56.7 NM** **(1300 FT)**					
	027° 207°	13.3 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ REMTI	470757N 0670843E **DZG** **206.0° 43.4 NM** **(1300 FT)**					
	027° 207°	43.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ ZHEZKAZGAN TOWER 127.1 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
▲ ALZIS	474317N 0674542E **DZG** **360.0° 0.0 NM** **(1300 FT)**					
	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 **DZG** **027.0° 43.0 NM** **(1300 FT)**					
	025° 205°	16.7 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ MAKUT	483217N 0683632E **DZG** **026.0° 59.7 NM** **(1300 FT)**					
	027° 207°	54.9 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
▲ AMIGU	491645N 0692517E **ARK** **114.0° 112.2 NM** **(1300 FT)**					
	027° 207°	57.0 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ {C}
△ RELGO	500234N 0701730E **AST** **207.0° 72.3 NM** **(1200 FT)**					
	027° 208°	9.3 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ {C}
△ KOKON	500958N 0702609E **AST** **207.0° 63.0 NM** **(1200 FT)**					
	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 **AST** **208.0° 48.3 NM** **(1200 FT)**					
	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 **AST** **207.0° 18.2 NM** **(1200 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
	027° 208°	18.2 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
▲ ASTAS	510006N 0712600E **AST** **360.0° 0.0 NM** **(1200 FT)**					
	360° 180°	30.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
△ LADOG	512959N 0713440E **AST** **000.4° 30.4 NM** **(1200 FT)**					
	360° 180°	35.8 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
△ OLGAS	520510N 0714507E **AST** **001.0° 66.2 NM** **(1200 FT)**					
	001° 181°	34.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
△ AMOLA	523853N 0715604E **KTU** **106.0° 94.0 NM** **(900 FT)**					
	359° 179°	22.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ ULSET	530027N 0720230E **KTU** **093.0° 89.9 NM** **(900 FT)**					
	359° 179°	38.2 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
▲ POBUR	533800N 0721400E **KTU** **069.0° 95.3 NM** **(900 FT)**					
	360° 179°	32.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
▲ DAKIN (FIR BDRY)	540930N 0722418E **KTU** **053.0° 110.5 NM** **(900 FT)**					**For continuation, see AIP Russia**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
M149 (RNAV 5)	(i) For continuation, see AIP Route					
▲ AGUNA	435906N 0754739E **ATA** **298.4° 67.1 NM** **(2200 FT)**					
	336° 156°	53.8 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ {C}
△ ADIRO	445011N 0752356E **ATA** **315.7° 114.0 NM** **(2200 FT)**					
	335° 155°	29.6 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ {C}
▲ MALOD	451812N 0751037E **BLH** **168.0° 95.2 NM** **(1400 FT)**					
	349° 168°	48.5 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ {C}
△ KONEK	460631N 0750443E **BLH** **168.0° 46.7 NM** **(1400 FT)**					
	349° 168°	46.7 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ BALKHASH TOWER 128.0 MHZ {C}
▲ OGLAB	465259N 0745902E **BLH** **360.0° 0.0 NM** **(1400 FT)**					
	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 **BLH** **021.0° 39.9 NM** **(1400 FT)**					
	021° 201°	75.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ {C}
▲ ROSID	483440N 0762005E **BLH** **022.0° 115.5 NM** **(1400 FT)**					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
	021° 201°	25.1 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}
△ TAGAL	485638N 0763825E **KRG** **102.0° 135.8 NM** **(1800 FT)**					
	021° 202°	15.8 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}
△ ESUMA	491025N 0765006E **KRG** **095.0° 139.0 NM** **(1800 FT)**					
	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}

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
△ ADETA	500015N 0773321E **SEM** **250.0° 105.7 NM** **(700 FT)**					
	022° 202°	47.6 NM	FL 510 FL 220	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ BAMAT (FIR BDRY)	504125N 0781025E **SEM** **276.0° 81.9 NM** **(700 FT)**					
	022° 202°	40.3 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
△ MIKSA	511608N 0784241E **SEM** **306.0° 80.3 NM** **(700 FT)**					
	022° 203°	39.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
▲ LAGMO (FIR BDRY)	514954N 0791500E **PVL** **098.0° 83.0 NM** **(500 FT)**					**For continuation, see AIP Russia**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
M158 (RNAV 5)	(2) For continuation, see AIP Russia					
▲ 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)**					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
	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}
▲ LOKOZ	470838N 0514805E **ATR** **360.0° 0.0 NM** **(0 FT)**					
	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)**					
	348° 168°	69.9 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 130.9 MHZ {C}
▲ BAGIR	490131N 0514106E **ATR** **348.0° 113.1 NM** **(0 FT)**					
	348° 167°	84.3 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 131.4 MHZ {C}
△ DOKUS	502539N 0513528E **URL** **166.0° 43.4 NM** **(200 FT)**					
	347° 167°	43.4 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 131.4 MHZ URALSK TOWER 119.7 MHZ {C}
▲ LEDGI	510855N 0513238E **URL** **360.0° 0.0 NM** **(200 FT)**					
	046° 226°	34.8 NM	FL 510 FL 120	Odd	Even	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
△ INRIS	512800N 0521856E **URL** **046.0° 34.8 NM** **(200 FT)**					
	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 **URL** **046.0° 43.4 NM** **(200 FT)**					**For continuation, see AIP Russia**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
M161 (RNAV 5)	(1) Before, see AIP Uzbekistan (2) For continuation, see AIP Russia					
▲ ODIVA (FIR BDRY)	423530N 0640848E **KZO** **198.0° 140.5 NM** **(500 FT)**					**Before, see AIP Uzbekistan**
	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 **KZO** **222.0° 127.5 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
	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 **KZO** **232.0° 129.3 NM** **(500 FT)**					
	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 **KZO** **236.0° 131.1 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°	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 **KZO** **251.0° 143.4 NM** **(500 FT)**					
	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 **ARL** **175.0° 116.1 NM** **(300 FT)**					
	311° 130°	42.3 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
▲ MILSO (FIR BDRY)	452519N 0604609E **ARL** **194.0° 91.4 NM** **(300 FT)**					
	310° 129°	65.3 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119 MHZ {C}
▲ ABDUN	461337N 0594316E **ARL** **236.0° 86.4 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
	307° 125°	91.5 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119 MHZ {C}
▲ ARKER	471757N 0580839E **ARL** **271.0° 145.3 NM** **(300 FT)**					
	305° 125°	28.9 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
△ UDATO	473801N 0573755E **AKB** **163.0° 158.9 NM** **(700 FT)**					
	305° 124°	62.7 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
△ EKDAD	482100N 0562959E **AKB** **183.0° 117.7 NM** **(700 FT)**					
	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 FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Aktobe Tower” 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 **AKB** **189.0° 110.7 NM** **(700 FT)**					
	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 FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Aktobe Tower” 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
△ UGLUK	484125N 0555642E **AKB** **196.0° 106.1 NM** **(700 FT)**					
	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 FL120–FL190, the aircraft crew is recommended to: - establish communication via other aircraft; - use HF radio to relay messages through “Aktobe Tower” 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}
△ KURUL	485059N 0554051E **AKB** **203.0° 103.2 NM** **(700 FT)**					
	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 “Aktobe Tower” 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 **AKB** **218.0° 103.0 NM** **(700 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
	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 “Aktobe Tower” 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 **URL** **120.0° 117.1 NM** **(200 FT)**					
	301° 119°	73.8 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 131.4 MHZ {C}
△ EDAKO	504120N 0522510E **URL** **119.0° 43.2 NM** **(200 FT)**					
	299° 119°	43.2 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 131.4 MHZ URALSK TOWER 119.7 MHZ {C}
▲ LEDGI	510855N 0513238E **URL** **360.0° 0.0 NM** **(200 FT)**					
	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 **URL** **315.0° 21.5 NM** **(200 FT)**					
	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 **URL** **316.0° 37.8 NM** **(200 FT)**					**For continuation, see AIP Russia**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
M166 (RNAV 5)	(2) Before, see AIP China (3) For continuation, see AIP Russia					
▲ SARIN (FIR BDRY)	465156N 0825317E **AGZ** **118.0° 118.2 NM** **(2200 FT)**					**Before, see AIP China**
	298° 117°	40.5 NM	FL 510 FL 150	Even	Odd	ALMATY ACC 132.1 MHZ {C}
▲ AGUSA	471400N 0820338E **AGZ** **117.0° 77.7 NM** **(2200 FT)**					
	297° 116°	37.8 NM	FL 510 FL 150	Even	Odd	ALMATY ACC 132.1 MHZ {C}
▲ TOLKI	473415N 0811640E **AGZ** **117.0° 39.9 NM** **(2200 FT)**					
	297° 117°	22.5 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
△ BANUM	474633N 0804834E **AGZ** **296.3° 17.3 NM** **(2200 FT)**					
	296° 116°	17.3 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
▲ KABIZ	475552N 0802659E **AGZ** **360.0° 0.0 NM** **(2200 FT)**					
	287° 105°	67.2 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
△ OSNER	482119N 0785409E **AGZ** **286.0° 67.2 NM** **(2200 FT)**					
	286° 104°	55.9 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
△ DODEM	484212N 0773614E **AGZ** **285.0° 123.0 NM** **(2200 FT)**					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
	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 **KRG** **102.0° 135.8 NM** **(1800 FT)**					
	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 **KRG** **099.0° 116.9 NM** **(1800 FT)**					
	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 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}

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
△ ULKAP	490729N 0755332E **KRG** **101.0° 104.3 NM** **(1800 FT)**					
	282° 100°	60.5 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
△ ARLIH	492724N 0742621E **KRG** **100.0° 43.9 NM** **(1800 FT)**					
	280° 100°	43.9 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ KARAGANDA TOWER 122.0 MHZ {C}
▲ ARNIR	494114N 0732226E **KRG** **360.0° 0.0 NM** **(1800 FT)**					
	273° 091°	46.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ KARAGANDA TOWER 122.0 MHZ {C}
△ SEHAL	494940N 0721215E **KRG** **271.0° 46.3 NM** **(1800 FT)**					
	271° 090°	39.2 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
▲ GURPI	495618N 0711236E **AST** **178.0° 64.4 NM** **(1200 FT)**					
	271° 090°	36.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
△ RELGO	500234N 0701730E **AST** **207.0° 72.3 NM** **(1200 FT)**					
	269° 088°	37.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
△ INRIK	500744N 0692030E **ARK** **088.0° 90.1 NM** **(1300 FT)**					
	269° 088°	41.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
▲ VAMRI	501330N 0681645E **ARK** **087.0° 48.7 NM** **(1300 FT)**					
	267° 086°	48.7 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
▲ ARHIG	501904N 0670118E **ARK** **360.0° 0.0 NM** **(1300 FT)**					
	263° 082°	45.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
▲ KUSOT	502128N 0655110E **ARK** **262.0° 45.0 NM** **(1300 FT)**					
	262° 081°	59.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ ADEKU	502301N 0641824E **ARK** **261.0° 104.4 NM** **(1300 FT)**					
	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 **ARK** **263.0° 154.8 NM** **(1300 FT)**					
	260° 079°	22.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
▲ ABIRA (FIR BDRY)	502331N 0622455E **KST** **181.0° 173.3 NM** **(600 FT)**					
	259° 078°	50.6 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
△ BESOL	502254N 0610548E **AKB** **078.0° 150.7 NM** **(700 FT)**					
	258° 076°	104.0 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
△ LITBA	501849N 0582332E **AKB** **076.0° 46.7 NM** **(700 FT)**					
	256° 075°	46.7 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 128.0 MHZ {C}
▲ EKTOB	501548N 0571055E **AKB** **360.0° 0.0 NM** **(700 FT)**					
	262° 081°	43.1 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 128.0 MHZ {C}
△ LARPI	501721N 0560345E **AKB** **261.0° 43.1 NM** **(700 FT)**					
	261° 080°	57.7 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
▲ SIVKO	501827N 0543349E **AKB** **260.0° 100.8 NM** **(700 FT)**					
	284° 102°	82.6 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 131.4 MHZ {C}
△ VEVIK	505201N 0523529E **URL** **102.0° 43.1 NM** **(200 FT)**					
	283° 102°	43.2 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 131.4 MHZ URALSK TOWER 119.7 MHZ {C}
▲ LEDGI	510855N 0513238E **URL** **360.0° 0.0 NM** **(200 FT)**					
	288° 107°	42.7 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 131.4 MHZ URALSK TOWER 119.7 MHZ {C}
▲ ARISA (FIR BDRY)	512924N 0503254E **URL** **288.0° 42.7 NM** **(200 FT)**					**For continuation, see AIP Russia**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
M168 **(RNAV 5)**						
▲ NETAT	403653N 0682413E **SMK** **198.0° 115.3 NM** **(1400 FT)**					**Before, see AIP Uzbekistan**
	041° 221°	11.1 NM	FL 510 3000 FT ALT	Odd	Even	TASHKENT ACC {C}
▲ IPRAR	404431N 0683447E **SMK** **195.0° 105.2 NM** **(1400 FT)**					**For continuation, see AIP Uzbekistan**

Обозначение маршрута	[Замечания по использованию маршрута]					
Названия основных точек	Координаты точек VOR/DME ID Пеленг и расстояние Превышение DME					Примечания
{Тип RNP/RNAV}	МПУ	Расстояние	Верхняя граница Нижняя граница	Направление крейсерских эшелонов ↓	↑	Орган управления {Класс воздушного пространства} Примечания
M168 (RNAV 5)	(2) Before, see AIP Uzbekistan (3) For continuation, see AIP Russia					
▲ ABGEN	405742N 0684248E **SMK** **195.0° 90.7 NM** **(1400 FT)**					**Before, see AIP Uzbekistan**
	003° 183°	9.5 NM	FL 510 6000 FT ALT	Odd	Even	TASHKENT ACC {C}
▲ ABEKA	410705N 0684442E **SMK** **196.0° 81.5 NM** **(1400 FT)**					
	003° 183°	16.1 NM	FL 510 7000 FT ALT	Odd	Even	TASHKENT ACC {C}
▲ DODUR (FIR BDRY)	412300N 0684800E **SMK** **200.0° 65.9 NM** **(1400 FT)**					
	320° 139°	47.4 NM	FL 510 7000 FT ALT	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
▲ MIKNO	420200N 0681200E **SMK** **243.0° 59.0 NM** **(1400 FT)**					

Обозначение маршрута	[Замечания по использованию маршрута]					
Названия основных точек	Координаты точек VOR/DME ID Пеленг и расстояние Превышение DME					Примечания
{Тип RNP/RNAV}	МПУ	Расстояние	Верхняя граница Нижняя граница	Направление крейсерских эшелонов ↓	↑	Орган управления {Класс воздушного пространства} Примечания
	360° 180°	22.5 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
▲ LUZMI	422426N 0681456E **SMK** **266.0° 53.1 NM** **(1400 FT)**					
	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 **TRK** **195.0° 32.5 NM** **(1000 FT)**					
	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 **TRK** **254.0° 9.4 NM** **(1000 FT)**					
	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 **TRK** **323.0° 21.8 NM** **(1000 FT)**					
	348° 168°	30.5 NM	FL 510 9000 FT ALT	Even	Odd	SHYMKENT ACC 127.3 MHZ TURKISTAN TOWER 131.3 MHZ {C}
△ TIMKA	440832N 0681511E **TRK** **337.0° 51.0 NM** **(1000 FT)**					
	348° 168°	18.6 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ REMOL	442704N 0681238E **TRK** **340.0° 69.4 NM** **(1000 FT)**					
	348° 167°	91.4 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
▲ BETPU (FIR BDRY)	455758N 0675945E **DZG** **166.0° 105.8 NM** **(1300 FT)**					
	347° 166°	34.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}

Обозначение маршрута	[Замечания по использованию маршрута]					
Названия основных точек	Координаты точек VOR/DME ID Пеленг и расстояние Превышение DME					Примечания
{Тип RNP/RNAV}	МПУ	Расстояние	Верхняя граница Нижняя граница	Направление крейсерских эшелонов ↓	Направление крейсерских эшелонов ↑	Орган управления {Класс воздушного пространства} Примечания
△ ELSEB	463234N 0675439E **DZG** **166.0° 71.0 NM** **(1300 FT)**					
	348° 168°	27.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ BURIK	470012N 0675152E **DZG** **166.0° 43.3 NM** **(1300 FT)**					
	346° 166°	43.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ ZHEZKAZGAN TOWER 127.1 MHZ {C}
▲ ALZIS	474317N 0674542E **DZG** **360.0° 0.0 NM** **(1300 FT)**					
	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 **DZG** **340.0° 43.1 NM** **(1300 FT)**					
	339° 158°	24.2 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ GORIM	484905N 0672456E **DZG** **339.0° 67.3 NM** **(1300 FT)**					
	342° 161°	70.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
▲ EDETO	495808N 0670732E **ARK** **159.0° 21.3 NM** **(1300 FT)**					
	339° 159°	21.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
▲ ARHIG	501904N 0670118E **ARK** **360.0° 0.0 NM** **(1300 FT)**					
	329° 145°	157.9 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}

Обозначение маршрута	[Замечания по использованию маршрута]					
Названия основных точек	Координаты точек VOR/DME ID Пеленг и расстояние Превышение DME					Примечания
{Тип RNP/RNAV}	МПУ	Расстояние	Верхняя граница Нижняя граница	Направление крейсерских эшелонов ↓	↑	Орган управления {Класс воздушного пространства} Примечания
△ GITNA	524459N 0652518E **KST** **100.0° 72.4 NM** **(600 FT)**					
	325° 143°	103.4 NM	FL 510 FL 210	Even	Odd	ASTANA ACC 133.1 MHZ {C}
▲ NELTI (FIR BDRY)	541942N 0641630E **KST** **008.0° 73.1 NM** **(600 FT)**					**For continuation, see AIP Russia**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
M199 (RNAV 5)	(2) Before, see AIP Russia					
▲ MULTA (FIR BDRY)	510442N 0565042E **AKB** **335.0° 50.6 NM** **(700 FT)**					**Before, see AIP Russia**
	154° 335°	50.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 128.0 MHZ {C}
▲ EKTOB	501548N 0571055E **AKB** **360.0° 0.0 NM** **(700 FT)**					
	131° 312°	42.0 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 128.0 MHZ {C}
△ ODILA	494259N 0575122E **AKB** **131.0° 41.9 NM** **(700 FT)**					
	132° 312°	27.0 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
△ KEKUN	492143N 0581653E **AKB** **131.0° 69.0 NM** **(700 FT)**					
	132° 313°	37.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
△ RILBA	485158N 0585148E **AKB** **132.0° 106.6 NM** **(700 FT)**					
	133° 314°	69.7 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
▲ RESDO	475618N 0595446E **ARL** **304.0° 96.4 NM** **(300 FT)**					
	134° 314°	14.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119 MHZ {C}
△ ARSAN	474436N 0600738E **ARL** **303.0° 82.1 NM** **(300 FT)**					
	134° 317°	114.0 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119 MHZ {C}
▲ AVLAK (FIR BDRY)	461214N 0614508E **ARL** **163.0° 37.7 NM** **(300 FT)**					
	137° 317°	27.3 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
▲ INKUM	454952N 0620739E **ARL** **151.0° 63.3 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
M610 (RNAV 5)	(2) Before, see AIP Russia (3) For continuation, see AIP China					
▲ AZABI (FIR BDRY)	444424N 0493000E **AKT** **301.0° 85.2 NM** **(100 FT)**					**Before, see AIP Russia**
	069° 251°	123.4 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 134.3 MHZ {C}
▲ LAROZ	451010N 0521956E **AKT** **027.0° 95.0 NM** **(100 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
	071° 252°	62.4 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
▲ ANIGA	452130N 0534647E **BNU** **262.0° 56.8 NM** **(0 FT)**					
	073° 255°	165.5 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
▲ DIVNO	454418N 0574000E **BNU** **070.0° 109.9 NM** **(0 FT)**					
	089° 271°	132.1 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119 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 “Aktobe Tower” 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 **ARL** **194.0° 91.4 NM** **(300 FT)**					
	092° 273°	47.0 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
△ OLINA	451645N 0615140E **ARL** **165.0° 93.4 NM** **(300 FT)**					
	093° 274°	29.9 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
▲ TUKNA	451058N 0623308E **ARL** **150.0° 106.1 NM** **(300 FT)**					
	094° 275°	41.0 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
▲ UNITO	450238N 0632952E **KZO** **275.0° 90.6 NM** **(500 FT)**					
	095° 275°	48.7 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
△ NATUS	445208N 0643650E **KZO** **277.0° 41.9 NM** **(500 FT)**					
	096° 276°	11.8 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ KYZYLORDA TOWER 120.9 {C}
△ GIGUR	444920N 0645300E **KZO** **277.0° 30.1 NM** **(500 FT)**					
	097° 278°	30.1 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ KYZYLORDA TOWER 120.9 {C}
▲ ORTEG	444145N 0653349E **KZO** **360.0° 0.0 NM** **(500 FT)**					
	097° 278°	44.5 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ KYZYLORDA TOWER 120.9 {C}
△ RINET	443026N 0663402E **KZO** **098.0° 44.5 NM** **(500 FT)**					
	099° 280°	43.1 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
△ BIMDO	441809N 0673135E **TRK** **315.0° 74.3 NM** **(1000 FT)**					
	100° 281°	32.8 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
△ TIMKA	440832N 0681511E **TRK** **337.0° 51.0 NM** **(1000 FT)**					
	101° 281°	22.8 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
▲ LIMTO	440138N 0684518E **TRK** **004.0° 42.8 NM** **(1000 FT)**					
	102° 282°	21.4 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
▲ AKSOZ	435449N 0691321E **TRK** **031.8° 45.1 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
	101° 283°	75.2 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
▲ ARBOL	433055N 0705137E **TAR** **329.0° 42.9 NM** **(2200 FT)**					
	078° 260°	126.4 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
▲ TOMGO	434146N 0734454E **TAR** **060.0° 118.9 NM** **(2200 FT)**					
	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 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}
▲ BERVI (FIR BDRY)	434059N 0741156E **ATA** **274.2° 127.3 NM** **(2200 FT)**					
	087° 268°	58.1 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ {C}
△ TIPSA	433809N 0753149E **ATA** **278.4° 69.7 NM** **(2200 FT)**					
	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 **ATA** **287.3° 35.8 NM** **(2200 FT)**					
	085° 265°	21.0 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ UNADA	433551N 0764831E **ATA** **312.8° 18.0 NM** **(2200 FT)**					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
	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 **ATA** **332.7° 14.3 NM** **(2200 FT)**					
	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 **ATA** **008.5° 13.5 NM** **(2200 FT)**					
	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 **ATA** **050.8° 22.3 NM** **(2200 FT)**					
	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 **ATA** **068.9° 44.5 NM** **(2200 FT)**					
	086° 267°	51.7 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ {C}
▲ BASPI	433257N 0791501E **JRK** **212.0° 51.0 NM** **(2600 FT)**					
	087° 268°	24.3 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ {C}
▲ BERTO	433159N 0794824E **JRK** **184.0° 42.2 NM** **(2600 FT)**					
	088° 269°	40.5 NM	FL 510 FL 140	Odd	Even	ALMATY ACC 131.4 MHZ {C}
▲ RULAD (FIR BDRY)	433001N 0804359E **JRK** **138.0° 55.2 NM** **(2600 FT)**					**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
M618 (RNAV 5)	(5) For Continuation, see AIP Russia					
▲ UMLOD	432218N 0750715E **ATA** **265.4° 85.9 NM** **(2200 FT)**					
	033° 213°	47.0 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ {C}
▲ AGUNA	435906N 0754739E **ATA** **298.4° 67.1 NM** **(2200 FT)**					
	035° 216°	185.0 NM	FL 510 FL 210	Odd	Even	ALMATY ACC 133.1 MHZ {C}
▲ LIPSI	461808N 0784001E **TDK** **002.0° 72.5 NM** **(2000 FT)**					
	038° 219°	70.3 NM	FL 510 FL 210	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ GOMAL	470809N 0795150E **AGZ** **200.0° 53.4 NM** **(2200 FT)**					
	039° 220°	54.3 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ BANUM	474633N 0804834E **AGZ** **296.3° 17.3 NM** **(2200 FT)**					
	039° 221°	132.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ NEMEG	491804N 0831242E **UKM** **332.4° 51.4 NM** **(1000 FT)**					
	042° 223°	78.3 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ GOMIR (FIR BDRY)	501042N 0844206E **UKM** **079.0° 85.2 NM** **(1000 FT)**					**For Continuation, see AIP Russia**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
M741 (RNAV 5)	(2) Before, see AIP Uzbekistan (3) For continuation, see AIP Russia					
▲ ASLOK	410548N 0671954E **SMK** **224.0° 121.8 NM** **(1400 FT)**					**Before, see AIP Uzbekistan**
	345° 165°	36.2 NM	FL 510 7000 FT ALT	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
▲ RITAL (FIR BDRY)	414130N 0671206E **SMK** **241.0° 108.2 NM** **(1400 FT)**					
	341° 160°	24.5 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
△ ESKIZ	420521N 0670429E **TRK** **216.0° 99.6 NM** **(1000 FT)**					
	340° 160°	55.9 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
▲ PAVEL	425947N 0664642E **TRK** **249.0° 81.5 NM** **(1000 FT)**					
	343° 163°	16.2 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
▲ GEKSO	431544N 0664228E **TRK** **260.0° 82.1 NM** **(1000 FT)**					
	343° 162°	63.3 NM	FL 510 FL 150	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ GITIM	441752N 0662540E **KZO** **116.0° 44.1 NM** **(500 FT)**					
	344° 163°	105.2 NM	FL 510 FL 150	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ ANIGO	460143N 0660207E **KZO** **007.0° 82.4 NM** **(500 FT)**					
	343° 162°	43.3 NM	FL 510 FL 150	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
▲ LUGER (FIR BDRY)	464426N 0655200E **DZG** **223.0° 97.3 NM** **(1300 FT)**					

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

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
	336° 155°	43.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ BALOK	521416N 0635540E **KST** **155.0° 58.6 NM** **(600 FT)**					
	335° 155°	58.6 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ KOSTANAY TOWER 129.3 MHZ {C}
▲ EKSOZ	531113N 0633346E **KST** **360.0° 0.0 NM** **(600 FT)**					
	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 **KST** **318.0° 63.0 NM** **(600 FT)**					**For continuation, see AIP Russia**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	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 **ARL** **171.0° 160.3 NM** **(300 FT)**					
	327° 146°	84.4 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
▲ MILSO (FIR BDRY)	452519N 0604609E **ARL** **194.0° 91.4 NM** **(300 FT)**					
	327° 145°	152.0 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119 MHZ {C}
▲ RUGUS	474250N 0591219E **ARL** **289.0° 112.1 NM** **(300 FT)**					
	327° 145°	131.6 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
△ ODILA	494259N 0575122E **AKB** **131.0° 41.9 NM** **(700 FT)**					
	325° 143°	90.5 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 128.0 MHZ {C}
▲ MULTA (FIR BDRY)	510442N 0565042E **AKB** **335.0° 50.6 NM** **(700 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
M993 (RNAV 5)	(2) 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}
▲ RIMPU	500158N 0823031E **UKM** **360.0° 0.0 NM** **(1000 FT)**					
	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 **SEM** **122.0° 46.9 NM** **(700 FT)**					
	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 **SEM** **170.0° 36.9 NM** **(700 FT)**					
	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 **SEM** **197.0° 45.7 NM** **(700 FT)**					
	250° 069°	35.5 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
△ NONRI	493111N 0785223E **SEM** **219.0° 72.9 NM** **(700 FT)**					
	249° 068°	52.2 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
△ AKASA	491819N 0773455E **SEM** **231.0° 120.9 NM** **(700 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
	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 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 **KRG** **095.0° 139.0 NM** **(1800 FT)**					
	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 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 **KRG** **099.0° 116.9 NM** **(1800 FT)**					
	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 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}

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 **KRG** **105.0° 105.2 NM** **(1800 FT)**					
	249° 068°	31.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
△ IRGIT	485220N 0750436E **KRG** **118.0° 82.9 NM** **(1800 FT)**					
	246° 065°	45.2 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
△ GONEL	483912N 0735912E **KRG** **150.0° 66.6 NM** **(1800 FT)**					
	246° 066°	37.5 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
△ LUTEK	482853N 0730459E **KRG** **180.0° 73.3 NM** **(1800 FT)**					
	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 **KRG** **209.0° 117.2 NM** **(1800 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
	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 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}
▲ KUROL	475900N 0704800E **DZG** **075.0° 123.8 NM** **(1300 FT)**					
	256° 074°	80.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ AMASO	474914N 0684857E **DZG** **074.0° 43.1 NM** **(1300 FT)**					
	254° 073°	43.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ ZHEZKAZGAN TOWER 127.1 MHZ {C}
▲ ALZIS	474317N 0674542E **DZG** **360.0° 0.0 NM** **(1300 FT)**					
	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 **DZG** **284.0° 43.2 NM** **(1300 FT)**					
	285° 103°	64.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ EKLOP	482530N 0651734E **DZG** **285.0° 107.9 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
	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 **ARL** **024.0° 145.9 NM** **(300 FT)**					
	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 **ARL** **008.0° 143.0 NM** **(300 FT)**					
	280° 096°	179.2 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ {C}
△ ADRAT	500334N 0581528E **AKB** **096.0° 43.3 NM** **(700 FT)**					
	276° 096°	43.3 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 128.0 MHZ {C}
▲ EKTOB	501548N 0571055E **AKB** **360.0° 0.0 NM** **(700 FT)**					

ENR-3.2.3 "N" 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 ↓	FL series ↑	**Controlling unit** **{Airspace class}** **Remarks**
N37 (RNAV 5)						
▲ IPLED (FIR BDRY)	432348N 0493000E AKT 241.0° 73.9 NM (100 FT)					
	060° 241°	73.9 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 134.3 MHZ AKTAU TOWER 120.7 MHZ {C}
▲ NOGBU	435220N 0510352E AKT 360.0° 0.0 NM (35 FT)					
	060° 241°	53.9 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 134.3 MHZ AKTAU TOWER 120.7 MHZ {C}
▲ GIGRI	441248N 0521256E AKT 060.0° 53.9 NM (100 FT)					
	059° 239°	29.7 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ DOGEL	442430N 0525059E AKT 060.0° 83.6 NM (100 FT)					
	059° 240°	68.2 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
▲ BODSI	445034N 0541914E BNU 220.0° 45.3 NM (0 FT)					
	060° 240°	39.5 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ MASAV	450507N 0551053E BNU 162.0° 15.5 NM (0 FT)					
	053° 234°	108.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
▲ KOMRE	455641N 0572649E BNU 061.0° 104.4 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**
	056° 237°	60.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119 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 “Aktobe Tower” 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}
△ NINAG	462208N 0584556E ARL 249.0° 121.4 NM (300 FT)					
	057° 240°	222.5 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119 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 “Aktobe Tower” 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}
▲ ULRIP (FIR BDRY)	474743N 0634635E ARL 049.0° 105.6 NM (300 FT)					
	064° 245°	68.3 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}

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**
△ INKOL	480633N 0652413E DZG 276.0° 97.8 NM (1300 FT)					
	065° 248°	120.5 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ AKITU	483624N 0681921E DZG 014.0° 57.7 NM (1300 FT)					
	064° 245°	72.0 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
▲ ALFIL	485654N 0700340E DZG 042.0° 117.9 NM (1300 FT)					
	065° 247°	91.3 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ {C}
△ DOZIN	492040N 0721800E KRG 235.0° 46.8 NM (1800 FT)					
	055° 236°	46.8 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ KARAGANDA TOWER 122.0 MHZ {C}
▲ ARNIR	494114N 0732226E KRG 360.0° 0.0 NM (1800 FT)					
	070° 251°	43.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ KARAGANDA TOWER 122.0 MHZ {C}
△ SULIB	494914N 0742808E KRG 071.0° 43.4 NM (1800 FT)					
	089° 269°	25.6 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ {C}
△ EKTAB	494555N 0750718E KRG 078.0° 68.2 NM (1800 FT)					
	078° 259°	41.3 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ {C}
▲ AGINU (FIR BDRY)	494800N 0761100E KRG 077.0° 109.5 NM (1800 FT)					
	068° 250°	54.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 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**
△ ADETA	500015N 0773321E SEM 250.0° 105.7 NM (700 FT)					
	067° 248°	63.0 NM	FL 510 FL 220	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ LUREL	501613N 0790803E SEM 257.0° 42.9 NM (700 FT)					
	075° 257°	42.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ SEMEY TOWER 128.0 MHZ {C}
▲ SOMIP	502106N 0801402E SEM 281.0° 0.4 NM (700 FT)					
	060° 241°	68.1 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ SEMEY TOWER 128.0 MHZ {C}
▲ ADARO (FIR BDRY)	504706N 0815242E UKM 325.0° 51.2 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**
N55 (RNAV 5)						
▲ BALUN (FIR BDRY)	420100N 0512742E AKT 163.0° 112.7 NM (100 FT)					**Before, see AIP Azerbaijan**
	033° 214°	123.3 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ MEDOL	433425N 0531659E AKT 094.0° 98.2 NM (100 FT)					
	034° 214°	25.0 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ ATNAL	435307N 0533948E BNU 207.0° 107.4 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**
	034° 215°	62.7 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ TITIL	443944N 0543810E BNU 199.0° 45.6 NM (0 FT)					
	034° 214°	34.4 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119,8 MHZ {C}
△ MASAV	450507N 0551053E BNU 162.0° 15.5 NM (0 FT)					
	032° 212°	109.7 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8MHZ {C}
▲ OGANU	462857N 0565153E BNU 039.0° 100.2 NM (0 FT)					
	038° 219°	71.9 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119 MHZ {C}
▲ ARKER	471757N 0580839E ARL 271.0° 145.3 NM (300 FT)					
	039° 221°	228.2 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)					
	032° 212°	24.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
▲ GEMBO	500256N 0625600E ARK 252.0° 158.5 NM (1300 FT)					
	042° 222°	73.8 NM	FL 510 FL 120	Odd	Even	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}

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**
△ ERNEN	504754N 0642731E ARK 277.0° 102.2 NM (1300 FT)					
	042° 222°	4.4 NM	FL 510 FL 120	Odd	Even	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}
△ IPNIL	505034N 0643305E ARK 279.0° 99.5 NM (1300 FT)					
	042° 224°	139.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 133.1 MHZ {C}
▲ ATNON	521149N 0673350E KTU 215.0° 102.0 NM (900 FT)					
	043° 226°	210.7 NM	FL 510 FL 150	Odd	Even	ASTANA ACC 132.8 MHZ {C}
▲ DAKIN (FIR BDRY)	540930N 0722418E KTU 053.0° 110.5 NM (900 FT)					**For continuation, see AIP Russia**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	**Controlling unit** **{Airspace class}** **Remarks**
N60 (RNAV 5)						
▲ GASBI (FIR BDRY)	422611N 0502811E AKT 190.0° 90.0 NM (100 FT)					**Before, see AIP Azerbaijan**

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**
	010° 190°	90.0 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 134.3 MHZ AKTAU TOWER 120.7 MHZ {C}
▲ NOGBU	435220N 0510352E AKT 360.0° 0.0 NM (35 FT)					
	003° 182°	56.7 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 134.3 MHZ AKTAU TOWER 120.7 MHZ {C}
△ PIRIM	444808N 0511741E AKT 002.0° 56.7 NM (100 FT)					
	001° 180°	53.2 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 134.3 MHZ {C}
▲ KOLIB	454047N 0512848E ATR 179.0° 88.9 NM (0 FT)					
	360° 180°	45.7 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
△ NIKNA	462557N 0513838E ATR 179.0° 43.2 NM (0 FT)					
	360° 180°	43.2 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ ATYRAU TOWER 118.1 MHZ {C}
▲ LOKOZ	470838N 0514805E ATR 360.0° 0.0 NM (0 FT)					
	038° 218°	43.2 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ ATYRAU TOWER 118.1 MHZ {C}
▲ UDEBA	473802N 0523443E ATR 038.0° 43.2 NM (0 FT)					
	038° 218°	74.7 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
△ EKPIN	482805N 0535721E ATR 038.0° 118.0 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**
	038° 219°	36.4 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 Tower” 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}
▲ MOGTU	485209N 0543832E AKB 218.0° 129.8 NM (700 FT)					
	039° 219°	26.8 NM	FL 510 FL 120	Odd	Even	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 “Aktobe Tower” 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 AKB 218.0° 103.0 NM (700 FT)					
	039° 220°	66.2 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
▲ GULDO	495223N 0562651E AKB 219.0° 36.8 NM (700 FT)					
	040° 221°	36.8 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 120.9 MHZ {C}
▲ EKTOB	501548N 0571055E AKB 360.0° 0.0 NM (700 FT)					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	**Controlling unit** **{Airspace class}** **Remarks**
	041° 222°	49.5 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 120.9 MHZ {C}
▲ ALGAS	504613N 0581203E AKB 042.0° 49.5 NM (700 FT)					
	041° 222°	19.1 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
▲ NINBU (FIR BDRY)	505748N 0583554E AKB 042.0° 68.5 NM (700 FT)					**For continuation, see AIP Russia**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	**Controlling unit** **{Airspace class}** **Remarks**
N60 (RNAV 5)						
▲ LENTA (FIR BDRY)	514854N 0602236E KST 221.0° 143.0 NM (600 FT)					**Before, see AIP Russia**
	042° 223°	78.5 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 133.1 MHZ {C}
△ BAMIK	523517N 0620524E KST 223.0° 64.5 NM (600 FT)					
	044° 225°	64.5 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 133.1 MHZ KOSTANAY TOWER 129.3 MHZ {C}
▲ EKSOZ	531113N 0633346E KST 360.0° 0.0 NM (600 FT)					
	050° 230°	65.0 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 133.1 MHZ KOSTANAY TOWER 129.3 MHZ {C}
△ AKOSO	534140N 0650940E KST 050.0° 65.0 NM (600 FT)					
	052° 233°	48.6 NM	FL 510 FL 120	Odd	Even	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**
▲ DEPIR	540211N 0662405E PSK 232.0° 108.5 NM (500 FT)					
	052° 232°	47.8 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
△ KOKAV	542244N 0673738E PSK 233.0° 60.7 NM (500 FT)					
	053° 235°	60.7 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ PETROPAVLOVSK TOWER 123.7 MHZ {C}
▲ PETEP	544703N 0691309E PSK 360.0° 0.0 NM (500 FT)					
	072° 254°	62.0 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ PETROPAVLOVSK TOWER 123.7 MHZ {C}
▲ BARKI (FIR BDRY)	545153N 0710000E PSK 073.0° 62.0 NM (500 FT)					**For continuation, see AIP Russia**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	**Controlling unit** **{Airspace class}** **Remarks**
N73 (RNAV 5)						
▲ BALUN (FIR BDRY)	420100N 0512742E AKT 163.0° 112.7 NM (100 FT)					**Before, see AIP Russia**
	016° 196°	36.4 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ ADEDA	423438N 0514628E AKT 151.0° 83.7 NM (100 FT)					
	016° 196°	36.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ GIRUL	430826N 0520542E AKT 127.0° 62.9 NM (100 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**
	016° 196°	36.0 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
▲ NEPIL	434133N 0522455E AKT 093.0° 59.7 NM (100 FT)					
	016° 196°	46.9 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ DOGEL	442430N 0525059E AKT 060.0° 83.6 NM (100 FT)					
	016° 196°	28.1 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ ALOTO	445010N 0530653E BNU 241.0° 90.5 NM (0 FT)					
	018° 198°	37.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
▲ REPLA	452358N 0533011E BNU 264.0° 68.6 NM (0 FT)					
	018° 198°	8.8 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
△ GOLGI	453153N 0533543E BNU 271.0° 65.5 NM (0 FT)					
	018° 198°	91.1 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
△ RIKRI	465319N 0543423E BNU 338.0° 95.7 NM (0 FT)					
	018° 198°	37.8 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
△ LANIN	472659N 0545937E BNU 349.0° 126.8 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**
	018° 198°	45.0 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 Tower” 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}
△ PETEM	480656N 0553022E AKB 196.0° 144.9 NM (700 FT)					
	018° 198°	13.4 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 Tower” 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}
▲ ALABA	481845N 0553938E AKB 196.0° 131.5 NM (700 FT)					
	017° 197°	25.4 NM	FL 510 FL 120	Odd	Even	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 “Aktobe Tower” 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**
△ UGLUK	484125N 0555642E AKB 196.0° 106.1 NM (700 FT)					
	017° 197°	67.4 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
△ LURUM	494127N 0564322E AKB 196.0° 38.7 NM (700 FT)					
	017° 197°	38.7 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 128.0 MHZ {C}
▲ EKTOB	501548N 0571055E AKB 360.0° 0.0 NM (700 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**
N102 (RNAV 5)						
▲ BABUR (FIR BDRY)	452312N 0493000E AKT 315.0° 112.9 NM (100 FT)					**Before, see AIP Russia**
	097° 279°	117.4 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 134.3 MHZ {C}
▲ ADPAK	444919N 0520844E AKT 031.0° 73.6 NM (100 FT)					
	100° 283°	175.7 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
▲ KORAG (FIR BDRY)	435134N 0560000E BNU 149.0° 96.5 NM (0 FT)					**For continuation, see AIP Uzbekistan**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	**Controlling unit** **{Airspace class}** **Remarks**
N102 (RNAV 5)						
▲ GILAT (FIR BDRY)	415707N 0660000E TRK 227.0° 140.8 NM (1000 FT)					**Before, see AIP Uzbekistan**
	074° 254°	48.8 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
△ ESKIZ	420521N 0670429E TRK 216.0° 99.6 NM (1000 FT)					
	075° 256°	53.2 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
△ TONLA	421334N 0681508E SMK 254.0° 53.7 NM (1400 FT)					
	074° 255°	53.7 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
▲ FODIK	422220N 0692631E SMK 360.0° 0.0 NM (1400 FT)					
	041° 222°	22.9 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
△ DONUP	423759N 0694912E SMK 041.0° 22.9 NM (1400 FT)					
	035° 215°	16.5 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
▲ BARAR	425030N 0700344E SMK 039.0° 39.3 NM (1400 FT)					
	035° 215°	53.5 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
▲ ARBOL	433055N 0705137E TAR 329.0° 42.9 NM (2200 FT)					
	051° 232°	52.4 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
△ RISAS	435854N 0715247E TAR 016.0° 71.6 NM (2200 FT)					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	**Controlling unit** **{Airspace class}** **Remarks**
	052° 232°	36.6 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
△ RITMU	441806N 0723603E TAR 028.0° 103.3 NM (2200 FT)					
	052° 234°	42.5 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
▲ EKNIL (FIR BDRY)	444003N 0732651E TAR 036.0° 143.1 NM (2200 FT)					
	053° 233°	39.1 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ {C}
△ TENRO	445953N 0741408E BLH 188.0° 117.4 NM (1400 FT)					
	009° 189°	58.5 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ {C}
△ ABMIK	455616N 0743604E BLH 189.0° 58.9 NM (1400 FT)					
	009° 189°	58.9 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ BALKHASH TOWER 128.0 MHZ {C}
▲ OGLAB	465259N 0745902E BLH 360.0° 0.0 NM (1400 FT)					
	036° 217°	46.2 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ BALKHASH TOWER 128.0 MHZ {C}
△ DIBUK	472631N 0754536E BLH 037.0° 46.2 NM (1400 FT)					
	037° 217°	51.2 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ {C}
▲ ENONA	480316N 0763820E BLH 037.0° 97.4 NM (1400 FT)					
	037° 218°	54.8 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ DODEM	484212N 0773614E AGZ 285.0° 123.0 NM (2200 FT)					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	**Controlling unit** **{Airspace class}** **Remarks**
	038° 218°	26.0 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}
△ GITUD	490032N 0780418E AGZ 299.0° 114.8 NM (2200 FT)					
	038° 219°	44.0 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ NONRI	493111N 0785223E SEM 219.0° 72.9 NM (700 FT)					
	039° 219°	29.5 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ ADLAN	495132N 0792510E SEM 220.0° 43.4 NM (700 FT)					
	039° 220°	43.2 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ SEMEY TOWER 128.0 MHZ {C}
▲ SOMIP	502106N 0801402E SEM 281.0° 0.4 NM (700 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**
N126 (RNAV 5)						
▲ RULAD (FIR BDRY)	433001N 0804359E JRK 138.0° 55.2 NM (2600 FT)					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	**Controlling unit** **{Airspace class}** **Remarks**
	311° 130°	50.0 NM	FL 510 FL 210	Even	Odd	ALMATY ACC 131.4 MHZ {C}
▲ LAGUK	440528N 0795517E JRK 185.0° 8.4 NM (2600 FT)					
	310° 129°	38.0 NM	FL 510 FL 210	Even	Odd	ALMATY ACC 131.4 MHZ {C}
▲ BARUR	443207N 0791739E JRK 298.0° 33.9 NM (2600 FT)					
	309° 129°	27.6 NM	FL 510 FL 210	Even	Odd	ALMATY ACC 133.1 MHZ {C}
△ ATPOR	445123N 0784955E TDK 126.0° 22.8 NM (2000 FT)					
	306° 126°	22.8 NM	FL 510 FL 210	Even	Odd	ALMATY ACC 133.1 MHZ {C}
▲ KOKZA	450622N 0782548E TDK 360.0° 0.0 NM (2000 FT)					
	308° 126°	109.0 NM	FL 510 FL 210	Even	Odd	ALMATY ACC 133.1 MHZ {C}
▲ ABREK	462025N 0763143E BLH 111.0° 71.7 NM (1400 FT)					
	306° 122°	160.9 NM	FL 510 FL 210	Even	Odd	ALMATY ACC 125.5 MHZ {C}
▲ AGADI (FIR BDRY)	480559N 0733338E BLH 314.0° 93.2 NM (1400 FT)					
	299° 112°	258.1 NM	FL 510 FL 210	Even	Odd	ASTANA ACC 124.1 MHZ {C}
▲ TUSEP	503136N 0680751E ARK 064.0° 44.4 NM (1300 FT)					
	305° 120°	233.2 NM	FL 510 FL 210	Even	Odd	ASTANA ACC 133.1 MHZ {C}
▲ EKSOZ	531113N 0633346E KST 360.0° 0.0 NM (600 FT)					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	**Controlling unit** **{Airspace class}** **Remarks**
N143 (RNAV 5)						
▲ OGOLI	412858N 0663632E SMK 240.0° 137.6 NM (1400 FT)					**Before, see AIP Uzbekistan**
	059° 239°	29.5 NM	FL 510 4000 FT ALT	Odd	Even	TASHKENT ACC {C}
▲ RITAL (FIR BDRY)	414130N 0671206E SMK 241.0° 108.2 NM (1400 FT)					
	059° 240°	49.2 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
▲ MIKNO	420200N 0681200E SMK 243.0° 59.0 NM (1400 FT)					
	064° 245°	59.0 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
▲ FODIK	422220N 0692631E SMK 360.0° 0.0 NM (1400 FT)					
	067° 247°	29.4 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
△ TURIK	423108N 0700422E SMK 067.0° 29.4 NM (1400 FT)					
	064° 244°	16.8 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
▲ KOLAM	423702N 0702540E TAR 242.0° 40.7 NM (2200 FT)					
	064° 244°	8.8 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ TARAZ APPROACH 122.1 MHZ {C}
△ ANESA	424006N 0703654E TAR 241.0° 31.9 NM (2200 FT)					
	062° 242°	31.9 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ TARAZ APPROACH 122.1 MHZ {C}

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**
▲ KIZMI	425214N 0711654E TAR 360.0° 0.0 NM (2200 FT)					
	061° 241°	29.3 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ TARAZ APPROACH 122.1 MHZ {C}
△ NASIP	430347N 0715332E TAR 061.0° 29.3 NM (2200 FT)					
	059° 240°	89.7 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
▲ TOMGO	434146N 0734454E TAR 060.0° 118.9 NM (2200 FT)					
	040° 220°	54.3 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}
▲ DITSU (FIR BDRY)	441934N 0743855E ATA 294.1° 120.2 NM (2200 FT)					
	040° 221°	44.4 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
△ ADIRO	445011N 0752356E ATA 315.7° 114.0 NM (2200 FT)					
	040° 220°	7.0 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
△ DESER	445502N 0753100E ATA 319.2° 114.7 NM (2200 FT)					
	041° 221°	17.5 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
△ LEKLU	450701N 0754903E TDK 264.0° 111.0 NM (2000 FT)					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	**Controlling unit** **{Airspace class}** **Remarks**
	041° 221°	10.8 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
△ DODOK	451420N 0760011E TDK 268.0° 103.3 NM (2000 FT)					
	041° 222°	57.1 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
△ UDEKA	455252N 0770006E TDK 302.0° 76.1 NM (2000 FT)					
	042° 222°	35.2 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
▲ GENGA	461625N 0773739E TDK 328.0° 77.8 NM (2000 FT)					
	042° 223°	25.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
▲ ETRAN	463321N 0780521E TDK 345.0° 88.2 NM (2000 FT)					
	042° 223°	57.9 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ RUDIZ	471122N 0790856E AGZ 223.0° 69.1 NM (2200 FT)					
	043° 224°	69.1 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ KABIZ	475552N 0802659E AGZ 360.0° 0.0 NM (2200 FT)					
	044° 224°	138.0 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ ARHIM	492317N 0830743E UKM 322.3° 45.3 NM (1000 FT)					
	046° 227°	77.4 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ GOMIR (FIR BDRY)	501042N 0844206E UKM 079.0° 85.2 NM (1000 FT)					**For Continuation, see AIP Russia**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	**Controlling unit** **{Airspace class}** **Remarks**
N147 (RNAV 5)						
▲ BORIS (FIR BDRY)	425127N 0660533E KZO 161.0° 112.7 NM (500 FT)					**Before, see AIP Uzbekistan**
	068° 248°	22.9 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
△ NEZRA	425733N 0663541E TRK 250.1° 89.9 NM (1000 FT)					
	068° 248°	8.4 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
△ PAVEL	425947N 0664642E TRK 249.0° 81.5 NM (1000 FT)					
	069° 249°	30.5 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
△ AGERA	430738N 0672650E TRK 250.0° 51.1 NM (1000 FT)					
	069° 249°	15.7 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
▲ KARIM	431136N 0674737E TRK 250.0° 35.4 NM (1000 FT)					
	069° 250°	25.9 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
▲ GENDI	431800N 0682200E TRK 254.0° 9.4 NM (1000 FT)					
	074° 254°	9.5 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
▲ ELAHA	431932N 0683446E TRK 360.0° 0.0 NM (1000 FT)					
	057° 237°	40.8 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
△ MUZEL	433756N 0692447E TRK 057.0° 40.8 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**
	060° 242°	73.9 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
△ KUGIR	440625N 0705906E TAR 344.0° 75.3 NM (2200 FT)					
	061° 242°	19.0 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
△ MIHOS	441332N 0712336E TAR 358.0° 81.4 NM (2200 FT)					
	062° 243°	83.9 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
▲ AKIMU (FIR BDRY)	444353N 0731255E TAR 032.0° 139.7 NM (2200 FT)					
	063° 244°	46.4 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ {C}
△ TENRO	445953N 0741408E BLH 188.0° 117.4 NM (1400 FT)					
	059° 239°	44.0 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ {C}
▲ MALOD	451812N 0751037E BLH 168.0° 95.2 NM (1400 FT)					
	053° 235°	118.2 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
▲ GENGA	461625N 0773739E TDK 328.0° 77.8 NM (2000 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**
N154 (RNAV 5)						
▲ KORAG (FIR BDRY)	435134N 0560000E BNU 149.0° 96.5 NM (0 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 ↓	FL series ↑	**Controlling unit** **{Airspace class}** **Remarks**
	264° 083°	89.8 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119.8 MHZ {C}
△ RINIT	435305N 0535549E BNU 202.0° 101.2 NM (0 FT)					
	263° 083°	11.6 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119.8 MHZ {C}
△ ATNAL	435307N 0533948E BNU 207.0° 107.4 NM (0 FT)					
	262° 082°	24.1 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119.8 MHZ {C}
△ RELGE	435304N 0530630E AKT 081.0° 88.7 NM (100 FT)					
	262° 081°	33.2 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119.8 MHZ {C}
▲ ULSON	435244N 0522039E AKT 082.0° 55.5 NM (100 FT)					
	263° 082°	55.5 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 134.3 MHZ AKTAU TOWER 120.7 MHZ {C}
▲ NOGBU	435220N 0510352E AKT 360.0° 0.0 NM (35 FT)					
	263° 082°	67.9 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 134.3 MHZ AKTAU TOWER 120.7 MHZ {C}
▲ ITAKA (FIR BDRY)	435224N 0493000E AKT 262.0° 67.9 NM (100 FT)					**For continuation, see AIP Russia**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	**Controlling unit** **{Airspace class}** **Remarks**
N161 (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**
▲ GASBI (FIR BDRY)	422611N 0502811E AKT 190.0° 90.0 NM (100 FT)					**Before, see AIP Azerbaijan**
	045° 226°	121.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ ARLIF	433927N 0524039E AKT 092.0° 71.3 NM (100 FT)					
	046° 226°	23.2 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ RELGE	435304N 0530630E AKT 081.0° 88.7 NM (100 FT)					
	046° 227°	80.7 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ TITIL	443944N 0543810E BNU 199.0° 45.6 NM (0 FT)					
	034° 214°	34.4 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ MASAV	450507N 0551053E BNU 162.0° 15.5 NM (0 FT)					
	061° 242°	112.1 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
▲ DIVNO	454418N 0574000E BNU 070.0° 109.9 NM (0 FT)					
	062° 244°	90.8 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119 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 “Aktobe Tower” 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**
▲ ABDUN	461337N 0594316E ARL 236.0° 86.4 NM (300 FT)					
	064° 246°	123.4 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119 MHZ {C}
△ RITET	464937N 0623417E ARL 081.0° 39.3 NM (300 FT)					
	066° 247°	83.7 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119 MHZ {C}
▲ ARKAM (FIR BDRY)	471135N 0643220E ARL 072.0° 121.9 NM (300 FT)					
	067° 247°	19.7 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ BAGED	471628N 0650016E DZG 249.0° 115.2 NM (1300 FT)					
	067° 248°	35.3 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ TIROK	472456N 0655037E DZG 247.0° 80.1 NM (1300 FT)					
	067° 248°	36.7 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ ABURA	473345N 0664312E DZG 249.4° 43.3 NM (1300 FT)					
	068° 249°	43.3 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ ZHEZKAZGAN TOWER 127.1 MHZ {C}
▲ ALZIS	474317N 0674542E DZG 360.0° 0.0 NM (1300 FT)					
	073° 254°	43.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ ZHEZKAZGAN TOWER 127.1 MHZ {C}
△ AMASO	474914N 0684857E DZG 074.0° 43.1 NM (1300 FT)					
	083° 264°	73.6 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**
△ DERAD	474634N 0703805E DZG 079.0° 116.5 NM (1300 FT)					
	084° 266°	48.3 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 KRG 198.0° 132.6 NM (1800 FT)					
	087° 272°	214.1 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ {C}
▲ MADEV	471857N 0770328E BLH 067.0° 88.9 NM (1400 FT)					
	088° 270°	85.8 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ RUDIZ	471122N 0790856E AGZ 223.0° 69.1 NM (2200 FT)					
	090° 271°	29.4 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ GOMAL	470809N 0795150E AGZ 200.0° 53.4 NM (2200 FT)					
	090° 272°	47.5 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ BURID	470234N 0810051E AGZ 151.0° 58.1 NM (2200 FT)					
	091° 272°	37.8 NM	FL 510 FL 150	Odd	Even	ALMATY ACC 132.1 MHZ {C}

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	**Controlling unit** **{Airspace class}** **Remarks**
▲ GILAK	465738N 0815536E AGZ 129.0° 83.7 NM (2200 FT)					
	092° 273°	40.0 NM	FL 510 FL 150	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ SARIN (FIR BDRY)	465156N 0825317E AGZ 118.0° 118.2 NM (2200 FT)					**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 ↓	FL series ↑	**Controlling unit** **{Airspace class}** **Remarks**
N167 (RNAV 5)						
▲ KURAB (FIR BDRY)	442311N 0610344E ARL 180.0° 148.2 NM (300 FT)					**Before, see AIP Uzbekistan**
	020° 200°	34.4 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
△ LATNU	445345N 0612553E ARL 175.0° 116.1 NM (300 FT)					
	020° 200°	63.4 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
▲ INKUM	454952N 0620739E ARL 151.0° 63.3 NM (300 FT)					
	009° 189°	38.4 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
▲ BAKID (FIR BDRY)	462633N 0622354E ARL 117.0° 39.6 NM (300 FT)					
	009° 189°	24.2 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119 MHZ {C}
△ RITET	464937N 0623417E ARL 081.0° 39.3 NM (300 FT)					
	009° 189°	60.9 NM	FL 510 FL 120	Odd	Even	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**
△ ABIGU	474742N 0630108E ARL 036.0° 81.6 NM (300 FT)					
	009° 189°	26.9 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119 MHZ {C}
▲ SURAR (FIR BDRY)	481318N 0631317E ARL 030.0° 106.2 NM (300 FT)					
	009° 188°	41.7 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}
△ GOSPA	485256N 0633233E ARL 024.0° 145.9 NM (300 FT)					
	008° 188°	76.9 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}
▲ BATAD	500554N 0640927E ARK 252.0° 111.2 NM (1300 FT)					
	008° 188°	18.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 133.1 MHZ {C}

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	**Controlling unit** **{Airspace class}** **Remarks**
△ ADEKU	502301N 0641824E ARK 261.0° 104.4 NM (1300 FT)					
	008° 188°	29.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 133.1 MHZ {C}
△ IPNIL	505034N 0643305E ARK 279.0° 99.5 NM (1300 FT)					
	008° 188°	203.5 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 133.1 MHZ {C}
▲ DEPIR	540211N 0662405E PSK 232.0° 108.5 NM (500 FT)					
	006° 186°	47.0 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
▲ BEBLU (FIR BDRY)	544630N 0665030E PSK 256.0° 82.6 NM (500 FT)					**For continuation, see AIP Russia**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	**Controlling unit** **{Airspace class}** **Remarks**
N170 (RNAV 5)						
△ IZIMA	432236N 0770503E ATA 332.2° 0.1 NM (2200 FT)					
	313° 132°	17.9 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ UNADA	433551N 0764831E ATA 312.8° 18.0 NM (2200 FT)					
	312° 132°	30.5 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
▲ ADABA	435820N 0762009E ATA 312.8° 48.5 NM (2200 FT)					

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°	15.9 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ RISAD	441324N 0761312E ATA 318.7° 63.3 NM (2200 FT)					
	336° 156°	56.3 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ {C}
△ LEKLU	450701N 0754903E TDK 264.0° 111.0 NM (2000 FT)					
	336° 156°	31.9 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ {C}
▲ MAROR	453720N 0753509E BLH 155.0° 79.7 NM (1400 FT)					
	336° 155°	36.1 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ {C}
△ ABONA	461133N 0751857E BLH 155.0° 43.7 NM (1400 FT)					
	335° 155°	43.7 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ BALKHASH TOWER 128.0 MHZ {C}
▲ OGLAB	465259N 0745902E BLH 360.0° 0.0 NM (1400 FT)					
	333° 152°	42.1 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ BALKHASH TOWER 128.0 MHZ {C}
△ GIREM	473219N 0743709E BLH 332.0° 42.1 NM (1400 FT)					
	332° 151°	38.2 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ {C}
▲ LUKUS (FIR BDRY)	480759N 0741658E BLH 332.0° 80.3 NM (1400 FT)					
	332° 151°	33.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
△ GONEL	483912N 0735912E KRG 150.0° 66.6 NM (1800 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**
	331° 151°	21.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
△ NEMKU	485904N 0734736E KRG 150.0° 45.3 NM (1800 FT)					
	331° 150°	45.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ KARAGANDA TOWER 122.0 MHZ {C}
▲ ARNIR	494114N 0732226E KRG 360.0° 0.0 NM (1800 FT)					
	309° 127°	41.2 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ KARAGANDA TOWER 122.0 MHZ {C}
▲ BANOS	501116N 0723844E KRG 309.0° 40.9 NM (1800 FT)					
	308° 127°	67.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
▲ ASTAS	510006N 0712600E AST 360.0° 0.0 NM (1200 FT)					
	325° 144°	65.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
△ KOLUR	515901N 0704103E AST 325.0° 65.3 NM (1200 FT)					
	324° 143°	46.9 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ LULEK	524106N 0700733E KTU 144.0° 44.0 NM (900 FT)					
	324° 144°	44.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ KOKSHETAU TOWER 127.9 MHZ {C}
▲ DAKOZ	532103N 0693701E KTU 360.0° 0.0 NM (900 FT)					
	300° 118°	42.9 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ KOKSHETAU TOWER 127.9 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**
△ LASPA	534852N 0684219E KTU 298.0° 42.9 NM (900 FT)					
	300° 119°	51.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ KOKAV	542244N 0673738E PSK 233.0° 60.7 NM (500 FT)					
	299° 118°	36.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
▲ BEBLU (FIR BDRY)	544630N 0665030E PSK 256.0° 82.6 NM (500 FT)					**For continuation, see AIP Russia**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	**Controlling unit** **{Airspace class}** **Remarks**
N193 **(RNAV 5)**						
▲ LANOL	411133N 0685506E SMK 192.0° 74.6 NM (1400 FT)					
	272° 091°	44.9 NM	FL 510 4000 FT ALT	Even	Odd	TASHKENT ACC {C}
▲ DIBAD	411700N 0675600E SMK 220.0° 94.0 NM (1400 FT)					
	276° 095°	61.0 NM	FL 510 4000 FT ALT	Even	Odd	TASHKENT ACC {C}
▲ OGOLI	412858N 0663632E SMK 240.0° 137.6 NM (1400 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**
N193 (RNAV 5)						
▲ KUNAS (FIR BDRY)	430923N 0560000E BNU 156.0° 136.4 NM (0 FT)					**Before, see AIP Uzbekistan**
	276° 094°	99.5 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119.8 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 “Aktau Tower” on frequencies 5536 kHz in accordance with ATC unit operational procedures; - if HF radio equipment is not available on board, plan the flight using alternative routes. {C}
△ BAPER	433011N 0534642E AKT 094.0° 120.2 NM (100 FT)					
	274° 094°	22.0 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119.8 MHZ {C}
△ MEDOL	433425N 0531659E AKT 094.0° 98.2 NM (100 FT)					
	273° 093°	26.9 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119.8 MHZ {C}
△ ARLIF	433927N 0524039E AKT 092.0° 71.3 NM (100 FT)					
	273° 093°	11.6 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119.8 MHZ {C}
▲ NEPIL	434133N 0522455E AKT 093.0° 59.7 NM (100 FT)					
	274° 093°	59.7 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 134.3 MHZ AKTAU TOWER 120.7 MHZ {C}
▲ NOGBU	435220N 0510352E AKT 360.0° 0.0 NM (35 FT)					
	317° 136°	66.2 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 134.3 MHZ AKTAU TOWER 120.7 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**
△ ATNUR	444559N 0500948E AKT 316.0° 66.2 NM (100 FT)					
	315° 135°	46.7 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 134.3 MHZ {C}
▲ BABUR (FIR BDRY)	452312N 0493000E AKT 315.0° 112.9 NM (100 FT)					**For continuation, see AIP Russia**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	**Controlling unit** **{Airspace class}** **Remarks**
N985 (RNAV 5)						
▲ LAGMO (FIR BDRY)	514954N 0791500E PVL 098.0° 83.0 NM (500 FT)					**Before, see AIP Russia**
	278° 096°	40.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ DOSAK	520044N 0781212E PVL 097.0° 42.7 NM (500 FT)					
	278° 097°	42.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ PAVLODAR TWR 119.8 MHZ {C}
▲ KANET	521235N 0770542E PVL 360.0° 0.0 NM (500 FT)					
	277° 094°	76.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ PAVLODAR TOWER 119.8 MHZ {C}
△ ADODA	523230N 0750554E PVL 277.0° 76.1 NM (500 FT)					
	272° 087°	163.5 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ ADLON	530129N 0704047E KTU 105.0° 43.1 NM (900 FT)					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	**Controlling unit** **{Airspace class}** **Remarks**
	267° 084°	138.4 NM	FL 510 FL 150	Even	Odd	ASTANA ACC 132.8 MHZ {C}
▲ BAVAG	531819N 0665235E KTU 256.0° 98.6 NM (900 FT)					
	262° 077°	205.7 NM	FL 510 FL 210	Even	Odd	ASTANA ACC 133.1 MHZ {C}
▲ TITUR (FIR BDRY)	532406N 0610924E KST 268.0° 87.6 NM (600 FT)					**For continuation, see AIP Russia**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	**Controlling unit** **{Airspace class}** **Remarks**
N987 (RNAV 5)						
▲ ASLOK	410548N 0671954E SMK 224.0° 121.8 NM (1400 FT)					**Before, see AIP Uzbekistan**
	357° 177°	34.4 NM	FL 510 4000 FT ALT	Even	Odd	TASHKENT ACC {C}
▲ UMKAS (FIR BDRY)	414012N 0672149E SMK 239.0° 102.0 NM (1400 FT)					
	357° 176°	24.2 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
△ INRUG	420425N 0672311E TRK 209.1° 91.8 NM (1000 FT)					
	356° 176°	29.8 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
△ ROSIM	423415N 0672453E TRK 222.0° 68.4 NM (1000 FT)					
	356° 176°	33.4 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
△ AGERA	430738N 0672650E TRK 250.0° 51.1 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**
	356° 176°	18.0 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
▲ POBEK	432534N 0672754E TRK 270.0° 49.1 NM (1000 FT)					
	357° 177°	20.0 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ GIMRI	434530N 0672931E TRK 292.0° 54.1 NM (1000 FT)					
	356° 176°	32.7 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ BIMDO	441809N 0673135E TRK 315.0° 74.3 NM (1000 FT)					
	356° 176°	13.1 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ LUKUR	443112N 0673226E TRK 321.0° 84.6 NM (1000 FT)					
	356° 175°	94.8 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
▲ NONDI (FIR BDRY)	460552N 0673842E DZG 174.0° 97.6 NM (1300 FT)					
	355° 175°	32.6 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ TUTUL	463825N 0674057E DZG 174.0° 65.0 NM (1300 FT)					
	355° 175°	21.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ LEMDU	470002N 0674228E DZG 174.0° 43.3 NM (1300 FT)					
	355° 175°	43.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ ZHEZKAZGAN TOWER 127.1 MHZ {C}
▲ ALZIS	474317N 0674542E DZG 360.0° 0.0 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**
	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 DZG 340.0° 43.1 NM (1300 FT)					
	339° 158°	24.2 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ GORIM	484905N 0672456E DZG 339.0° 67.3 NM (1300 FT)					
	342° 161°	49.6 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ UTEMU	493757N 0671237E ARK 159.7° 41.8 NM (1300 FT)					
	341° 161°	20.5 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
▲ EDETO	495808N 0670732E ARK 159.0° 21.3 NM (1300 FT)					
	339° 159°	21.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
▲ ARHIG	501904N 0670118E ARK 360.0° 0.0 NM (1300 FT)					
	017° 197°	39.2 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 133.1 MHZ {C}
△ IRLEM	505353N 0672936E ARK 017.0° 39.2 NM (1300 FT)					
	016° 197°	31.5 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 133.1 MHZ {C}
▲ RUDAL	512154N 0675222E ARK 017.0° 70.7 NM (1300 FT)					
	016° 196°	40.9 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
▲ ATBAN	515824N 0682152E KTU 197.0° 94.6 NM (900 FT)					
	018° 198°	49.8 NM	FL 510 FL 120	Odd	Even	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**
△ RIMIR	524153N 0690123E KTU 197.0° 44.7 NM (900 FT)					
	017° 198°	44.7 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ KOKSHETAU TOWER 127.9 MHZ {C}
▲ DAKOZ	532103N 0693701E KTU 360.0° 0.0 NM (900 FT)					
	338° 157°	40.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ KOKSHETAU TOWER 127.9 MHZ {C}
▲ TETKI	540020N 0692425E KTU 337.0° 40.1 NM (900 FT)					
	340° 160°	47.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ PETROPAVLOVSK TOWER 123.7 MHZ {C}
▲ PETEP	544703N 0691309E PSK 360.0° 0.0 NM (500 FT)					
	304° 123°	34.5 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ PETROPAVLOVSK TOWER 123.7 MHZ {C}
▲ LETIK (FIR BDRY)	551200N 0683200E PSK 303.0° 34.4 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**
N990 (RNAV 5)						
▲ ODIVA (FIR BDRY)	423530N 0640848E KZO 198.0° 140.5 NM (500 FT)					
	019° 199°	75.0 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**
▲ ADAZA	434304N 0645326E KZO 199.0° 65.5 NM (500 FT)					
	019° 199°	23.4 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
△ BUKEN	440406N 0650744E KZO 200.0° 42.0 NM (500 FT)					
	019° 200°	42.0 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ KYZYLORDA TOWER 120.9 {C}
▲ ORTEG	444145N 0653349E KZO 360.0° 0.0 NM (500 FT)					
	020° 200°	44.3 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ KYZYLORDA TOWER 120.9 {C}
△ AMREK	452109N 0660226E KZO 020.0° 44.3 NM (500 FT)					
	018° 198°	70.9 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
▲ GORVA (FIR BDRY)	462455N 0664655E DZG 198.0° 88.1 NM (1300 FT)					
	018° 198°	31.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ ATRUS	465302N 0670715E DZG 199.0° 56.7 NM (1300 FT)					
	021° 201°	13.3 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ DITSO	470443N 0671637E DZG 198.0° 43.4 NM (1300 FT)					
	019° 199°	43.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ ZHEZKAZGAN TOWER 127.1 MHZ {C}
▲ ALZIS	474317N 0674542E DZG 360.0° 0.0 NM (1300 FT)					
	015° 194°	43.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ ZHEZKAZGAN TOWER 127.1 MHZ {C}

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	**Controlling unit** **{Airspace class}** **Remarks**
△ RINUR	482255N 0681040E DZG 014.0° 43.1 NM (1300 FT)					
	014° 194°	14.7 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ AKITU	483624N 0681921E DZG 014.0° 57.7 NM (1300 FT)					
	014° 194°	60.3 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
▲ KUGUN	493139N 0685550E ARK 113.0° 87.9 NM (1300 FT)					
	014° 194°	39.5 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ {C}
△ INRIK	500744N 0692030E ARK 088.0° 90.1 NM (1300 FT)					
	014° 194°	20.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ {C}
▲ MIMKA	502620N 0693328E AST 234.0° 79.1 NM (1200 FT)					
	014° 195°	102.1 NM	FL 510 FL 250	Odd	Even	ASTANA ACC 132.8 MHZ {C}
△ KOLUR	515901N 0704103E AST 325.0° 65.3 NM (1200 FT)					
	014° 195°	144.8 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
▲ DAKIN (FIR BDRY)	540930N 0722418E KTU 053.0° 110.5 NM (900 FT)					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	**Controlling unit** **{Airspace class}** **Remarks**
N993 (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**
▲ KOKZA	450622N 0782548E TDK 360.0° 0.0 NM (2000 FT)					
	046° 226°	35.1 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ TALDYKORGAN TOWER 127.3 MHZ {C}
▲ KEZUT	452811N 0790448E TDK 046.0° 35.1 NM (2000 FT)					
	046° 227°	39.4 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
▲ RIKPI	455225N 0794910E TDK 047.0° 74.6 NM (2000 FT)					
	060° 240°	21.8 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
▲ NESUN	460123N 0801738E TDK 050.0° 95.9 NM (2000 FT)					
	060° 241°	24.6 NM	FL 510 FL 150	Odd	Even	ALMATY ACC 133.1 MHZ {C}
▲ GALSU	461126N 0804952E AGZ 166.0° 105.6 NM (2200 FT)					
	003° 183°	8.3 NM	FL 510 FL 150	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ ADRIM	461940N 0805137E AGZ 163.8° 97.7 NM (2200 FT)					
	003° 183°	16.2 NM	FL 510 FL 150	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ AGAKA	463544N 0805503E AGZ 161.0° 82.4 NM (2200 FT)					
	003° 183°	27.1 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ BURID	470234N 0810051E AGZ 151.0° 58.1 NM (2200 FT)					
	331° 151°	58.1 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 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**
▲ KABIZ	475552N 0802659E AGZ 360.0° 0.0 NM (2200 FT)					
	299° 116°	114.9 NM	FL 510 FL 250	Even	Odd	ALMATY ACC 132.1 MHZ {C}
△ GITUD	490032N 0780418E AGZ 299.0° 114.8 NM (2200 FT)					
	296° 114°	87.9 NM	FL 510 FL 250	Even	Odd	ALMATY ACC 132.1 MHZ {C}
▲ AGINU (FIR BDRY)	494800N 0761100E KRG 077.0° 109.5 NM (1800 FT)					
	285° 102°	90.7 NM	FL 510 FL 250	Even	Odd	ASTANA ACC 124.1 MHZ {C}
▲ GEDNO	502211N 0740032E KRG 023.0° 48.0 NM (1800 FT)					
	292° 104°	284.7 NM	FL 510 FL 250	Even	Odd	ASTANA ACC 132.8 MHZ {C}
▲ MONEG	523627N 0671849E KTU 229.0° 94.7 NM (900 FT)					
	289° 103°	189.0 NM	FL 510 FL 250	Even	Odd	ASTANA ACC 133.1 MHZ {C}
▲ LANOR (FIR BDRY)	540536N 0624042E KST 318.0° 63.0 NM (600 FT)					**For continuation, see AIP Russia**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	**Controlling unit** **{Airspace class}** **Remarks**
N996 (RNAV 5)						
▲ PIKAN (FIR BDRY)	425300N 0493000E AKT 221.0° 90.6 NM (100 FT)					**Before, see AIP Russia**
	042° 222°	90.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 134.3 MHZ AKTAU TOWER 120.7 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**
▲ NOGBU	435220N 0510352E AKT 360.0° 0.0 NM (35 FT)					
	025° 205°	67.3 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 134.3 MHZ AKTAU TOWER 120.7 MHZ {C}
△ AGILA	444901N 0515422E AKT 025.0° 67.3 NM (100 FT)					
	024° 204°	50.8 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 134.3 MHZ {C}
▲ GARDU	453219N 0523200E ATR 154.0° 101.0 NM (0 FT)					
	024° 204°	37.7 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
△ OTMAS	460419N 0530034E ATR 134.0° 81.5 NM (0 FT)					
	024° 204°	63.4 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
△ LEPSI	465750N 0534950E ATR 089.0° 83.9 NM (0 FT)					
	024° 204°	29.5 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
△ EPOLI	472234N 0541316E ATR 074.0° 99.9 NM (0 FT)					
	024° 204°	39.9 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
△ KODUM	475556N 0544537E ATR 061.0° 129.2 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**
	060° 241°	32.0 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 Tower” 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}
△ PETEM	480656N 0553022E AKB 196.0° 144.9 NM (700 FT)					
	061° 241°	11.8 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 Tower” 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}
▲ ETELA	481055N 0554657E AKB 192.0° 136.6 NM (700 FT)					
	061° 242°	30.5 NM	FL 510 FL 120	Odd	Even	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 “Aktobe Tower” 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 ↓	FL series ↑	**Controlling unit** **{Airspace class}** **Remarks**
△ EKDAD	482100N 0562959E AKB 183.0° 117.7 NM (700 FT)					
	062° 243°	99.0 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
△ RILBA	485158N 0585148E AKB 132.0° 106.6 NM (700 FT)					
	063° 244°	78.4 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
△ MANAD	491421N 0604601E ARL 338.0° 148.9 NM (300 FT)					
	064° 245°	72.2 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
▲ LANUK (FIR BDRY)	493317N 0623239E ARL 004.0° 168.0 NM (300 FT)					
	072° 253°	12.0 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ DILIR	493452N 0625056E ARK 243.0° 167.6 NM (1300 FT)					
	073° 253°	25.0 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**
	062° 242°	52.7 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}
△ IPKOD	495415N 0644617E ARK 245.0° 90.4 NM (1300 FT)					
	062° 243°	50.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
▲ BULOG	500854N 0660036E ARK 245.0° 40.3 NM (1300 FT)					
	065° 246°	40.3 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 133.1 MHZ {C}
▲ ARHIG	501904N 0670118E ARK 360.0° 0.0 NM (1300 FT)					
	063° 244°	44.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 133.1 MHZ {C}
▲ TUSEP	503136N 0680751E ARK 064.0° 44.4 NM (1300 FT)					
	066° 248°	74.0 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
△ OSROL	504818N 0700112E AST 248.0° 55.0 NM (1200 FT)					
	065° 245°	29.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
△ APTUS	505558N 0704601E AST 251.0° 25.6 NM (1200 FT)					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	**Controlling unit** **{Airspace class}** **Remarks**
	071° 251°	25.6 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
▲ ASTAS	510006N 0712600E AST 360.0° 0.0 NM (1200 FT)					
	065° 246°	58.9 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
△ BOLSU	511507N 0725620E AST 066.0° 58.9 NM (1200 FT)					
	066° 248°	88.0 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
▲ ABELI	513524N 0751312E PVL 232.0° 79.0 NM (500 FT)					
	052° 234°	79.0 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ PAVLODAR TOWER 119.8 MHZ {C}
▲ KANET	521235N 0770542E PVL 360.0° 0.0 NM (500 FT)					

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ENR-3.2.4 "P" 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
P178 (RNAV 5)	(2) Before, see AIP Uzbekistan					
▲ OGRIP	405454N 0680500E **SMK** **209.0° 106.6 NM** **(1400 FT)**					**Before, see AIP Uzbekistan**
	044° 224°	42.9 NM	FL 510 7000 FT ALT	Odd	Even	TASHKENT ACC {C}
▲ DODUR (FIR BDRY)	412300N 0684800E **SMK** **200.0° 65.9 NM** **(1400 FT)**					
	023° 203°	27.4 NM	FL 510 7000 FT ALT	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
△ REBDA	414708N 0690515E **SMK** **198.0° 38.6 NM** **(1400 FT)**					
	023° 203°	11.3 NM	FL 510 7000 FT ALT	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
▲ DOSOR	415702N 0691225E **SMK** **196.0° 27.4 NM** **(1400 FT)**					
	023° 203°	6.3 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
△ BOMKA	420232N 0691624E **SMK** **195.0° 21.2 NM** **(1400 FT)**					
	015° 195°	21.2 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
▲ FODIK	422220N 0692631E **SMK** **360.0° 0.0 NM** **(1400 FT)**					
	316° 135°	30.0 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
△ RUSEK	424549N 0690116E **SMK** **316.0° 30.0 NM** **(1400 FT)**					
	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 **TRK** **148.0° 28.7 NM** **(1000 FT)**					
	328° 148°	28.7 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
▲ ELAHA	431932N 0683446E **TRK** **360.0° 0.0 NM** **(1000 FT)**					
	323° 142°	21.8 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ TURKISTAN TOWER 131.3 MHZ {C}
▲ GOBOR	433811N 0681918E **TRK** **323.0° 21.8 NM** **(1000 FT)**					
	348° 168°	30.5 NM	FL 510 9000 FT ALT	Even	Odd	SHYMKENT ACC 127.3 MHZ TURKISTAN TOWER 131.3 MHZ {C}
△ TIMKA	440832N 0681511E **TRK** **337.0° 51.0 NM** **(1000 FT)**					
	002° 181°	96.9 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
▲ ADONU (FIR BDRY)	454418N 0683532E **DZG** **155.0° 123.9 NM** **(1300 FT)**					
	001° 180°	215.2 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
▲ AMIGU	491645N 0692517E **ARK** **114.0° 112.2 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
P179 (RNAV 5)	(2) Before, see AIP Russia (3) For continuation, see AIP Russia					
▲ LAGMO (FIR BDRY)	514954N 0791500E **PVL** **098.0° 83.0 NM** **(500 FT)**					**Before, see AIP Russia**
	278° 096°	40.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ DOSAK	520044N 0781212E **PVL** **097.0° 42.7 NM** **(500 FT)**					
	278° 097°	42.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ PAVLODAR TOWER 119.8 MHZ {C}
▲ KANET	521235N 0770542E **PVL** **360.0° 0.0 NM** **(500 FT)**					
	288° 106°	75.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ PAVLODAR TOWER 119.8 MHZ {C}
△ ADASA	524618N 0751436E **PVL** **287.0° 75.8 NM** **(500 FT)**					
	287° 105°	41.6 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ OLKUM	530441N 0741300E **PVL** **288.0° 117.3 NM** **(500 FT)**					
	285° 104°	55.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 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 “Pavlodar Tower” on frequencies 5720 kHz or “Kokshetau Tower” on frequencies 4760 kHz and 6528 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
△ LEPRA	532811N 0725005E **KTU** **074.0° 115.7 NM** **(900 FT)**					
	284° 103°	23.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
▲ POBUR	533800N 0721400E **KTU** **069.0° 95.3 NM** **(900 FT)**					
	292° 111°	30.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ PETOR	535420N 0713136E **KTU** **053.0° 75.9 NM** **(900 FT)**					
	292° 111°	32.6 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ BEDMU	541215N 0704523E **PSK** **111.0° 64.1 NM** **(500 FT)**					
	292° 110°	64.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ PETROPAVLOVSK TOWER 123.7 MHZ {C}
▲ PETEP	544703N 0691309E **PSK** **360.0° 0.0 NM** **(500 FT)**					
	277° 096°	37.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ PETROPAVLOVSK TOWER 123.7 MHZ {C}
▲ IKANA (FIR BDRY)	545924N 0681200E **PSK** **276.0° 37.4 NM** **(500 FT)**					**For continuation, see AIP Russia**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
P180 **(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
▲ ABEVO	405000N 0683442E **SMK** **197.0° 100.1 NM** **(1400 FT)**					**Before, see AIP Uzbekistan**
	277° 097°	23.1 NM	FL 510 7000 FT ALT	Even	Odd	TASHKENT ACC {C}
▲ OGRIP	405454N 0680500E **SMK** **209.0° 106.6 NM** **(1400 FT)**					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
P180 **(RNAV 5)**						
▲ BUGEB	410824N 0670836E **SMK** **228.0° 126.9 NM** **(1400 FT)**					
	283° 102°	22.4 NM	FL 510 7000 FT ALT	Even	Odd	TASHKENT ACC {C}
▲ MOMUL	411524N 0664024E **SMK** **235.0° 141.1 NM** **(1400 FT)**					**For continuation, see AIP Uzbekistan**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
P184 (RNAV 5)						
▲ MIMRI	433808N 0634822E **KZO** **222.0° 99.0 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
	043° 223°	57.3 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ {C}
△ DILNA	441450N 0644911E **KZO** **222.0° 41.8 NM** **(500 FT)**					
	043° 223°	41.8 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 127.3 MHZ KYZYLORDA TOWER 120.9 {C}
▲ ORTEG	444145N 0653349E **KZO** **360.0° 0.0 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
P574 (RNAV 5)	(2) Before, see AIP Azerbaijan					
▲ RUTIL (FIR BDRY)	421053N 0510433E **AKT** **172.0° 101.4 NM** **(100 FT)**					**Before, see AIP Azerbaijan**
	354° 174°	39.7 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119.8 MHZ {C}
▲ AKUKU	425036N 0510509E **AKT** **171.0° 61.7 NM** **(100 FT)**					
	352° 172°	61.7 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 134.3 MHZ AKTAU TOWER 120.7 MHZ {C}
▲ NOGBU	435220N 0510352E **AKT** **360.0° 0.0 NM** **(35 FT)**					
	050° 230°	55.9 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 134.3 MHZ AKTAU TOWER 120.7 MHZ {C}
▲ RIBMO	442238N 0520908E **AKT** **050.0° 55.9 NM** **(100 FT)**					
	048° 229°	49.6 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
△ ALOTO	445010N 0530653E **BNU** **241.0° 90.5 NM** **(0 FT)**					
	049° 229°	41.5 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ UTORI	451248N 0535555E **BNU** **253.0° 51.0 NM** **(0 FT)**					
	049° 230°	36.3 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ AGNIM	453221N 0543918E **BNU** **293.0° 23.1 NM** **(0 FT)**					
	050° 231°	108.4 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
▲ OGANU	462857N 0565153E **BNU** **039.0° 100.2 NM** **(0 FT)**					
	050° 232°	153.6 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119 MHZ {C}
△ ARSAN	474436N 0600738E **ARL** **303.0° 82.1 NM** **(300 FT)**					
	053° 234°	115.5 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119 MHZ {C}
▲ GEDSA (FIR BDRY)	483738N 0624054E **ARL** **013.0° 116.4 NM** **(300 FT)**					
	056° 237°	37.5 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}

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
△ GOSPA	485256N 0633233E **ARL** **024.0° 145.9 NM** **(300 FT)**					
	053° 234°	62.5 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}
△ ARBIM	492045N 0645739E **ARK** **223.0° 99.1 NM** **(1300 FT)**					
	056° 237°	58.6 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
△ SUKUR	494431N 0661957E **ARK** **207.0° 43.7 NM** **(1300 FT)**					
	056° 237°	33.7 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.5 MHZ {C}
▲ EDETO	495808N 0670732E **ARK** **159.0° 21.3 NM** **(1300 FT)**					
	061° 242°	47.2 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 133.1 MHZ {C}
▲ VAMRI	501330N 0681645E **ARK** **087.0° 48.7 NM** **(1300 FT)**					
	059° 240°	39.6 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ {C}
△ ASTIK	502734N 0691434E **ARK** **075.0° 85.7 NM** **(1300 FT)**					
	060° 240°	39.5 NM	FL 510 FL 120	Odd	Even	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
△ VETUB	504107N 0701250E **AST** **238.0° 50.1 NM** **(1200 FT)**					
	057° 238°	50.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
▲ ASTAS	510006N 0712600E **AST** **360.0° 0.0 NM** **(1200 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
P984 (RNAV 5)	(1) For continuation, see AIP Russia and CIS					
▲ MAMIR (FIR BDRY)	425438N 0763642E **ATA** **211.8° 34.8 NM** **(2200 FT)**					
	032° 212°	22.0 NM	FL 510 FL 200	Odd	Even	ALMATY ACC 131.4 MHZ {C}
△ LAKEL	431216N 0765439E **ATA** **211.7° 12.8 NM** **(2200 FT)**					
	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 **ATA** **332.2° 0.1 NM** **(2200 FT)**					
	009° 189°	13.5 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ PEKIR	433539N 0770931E **ATA** **008.5° 13.5 NM** **(2200 FT)**					
	008° 188°	5.9 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
△ NIGET	434124N 0771126E **ATA** **008.5° 19.5 NM** **(2200 FT)**					
	008° 188°	22.9 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
▲ APSEN	440338N 0771854E **ATA** **008.4° 42.3 NM** **(2200 FT)**					
	008° 188°	22.4 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ GOGDO	442524N 0772618E **TDK** **220.0° 59.0 NM** **(2000 FT)**					
	008° 188°	37.9 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
△ FINON	450211N 0773900E **TDK** **258.0° 33.4 NM** **(2000 FT)**					
	008° 188°	26.5 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ TALDYKORGAN TOWER 127.3 MHZ {C}
▲ KONAT	452754N 0774805E **TDK** **304.0° 34.2 NM** **(2000 FT)**					
	346° 165°	49.1 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ {C}
▲ GENGA	461625N 0773739E **TDK** **328.0° 77.8 NM** **(2000 FT)**					
	353° 173°	29.0 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ {C}
▲ RISUL	464525N 0773723E **TDK** **335.0° 104.7 NM** **(2000 FT)**					
	353° 173°	40.1 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
△ OBAPI	472530N 0773700E **BLH** **065.0° 112.7 NM** **(1400 FT)**					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
	353° 172°	76.8 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}
△ DODEM	484212N 0773614E **AGZ** **285.0° 123.0 NM** **(2200 FT)**					
	351° 171°	36.2 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}
△ AKASA	491819N 0773455E **SEM** **231.0° 120.9 NM** **(700 FT)**					
	351° 171°	42.0 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}

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
△ ADETA	500015N 0773321E **SEM** **250.0° 105.7 NM** **(700 FT)**					
	344° 164°	23.1 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
▲ BALOL (FIR BDRY)	502308N 0772831E **SEM** **263.0° 106.4 NM** **(700 FT)**					
	344° 164°	25.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ DILGI	504833N 0772303E **PVL** **164.0° 84.8 NM** **(500 FT)**					
	344° 164°	22.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ GALKI	511035N 0771814E **PVL** **164.0° 62.6 NM** **(500 FT)**					
	344° 163°	12.6 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ KEKAM	512300N 0771529E **PVL** **164.0° 50.0 NM** **(500 FT)**					
	343° 163°	20.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ PAVLODAR TOWER 119.8 MHZ {C}
△ ABRAS	514331N 0771053E **PVL** **165.0° 29.3 NM** **(500 FT)**					
	345° 165°	29.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ PAVLODAR TOWER 119.8 MHZ {C}
▲ KANET	521235N 0770542E **PVL** **360.0° 0.0 NM** **(500 FT)**					
	313° 131°	70.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ PAVLODAR TOWER 119.8 MHZ {C}
△ BAGNU	530720N 0755304E **PVL** **311.0° 70.4 NM** **(500 FT)**					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
	311° 130°	53.9 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
▲ SOMOL (FIR BDRY)	534918N 0745629E **PVL** **311.0° 124.4 NM** **(500 FT)**					**For continuation, see AIP Russia and CIS**

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ENR-3.2.5 "Q" 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Q161 (RNAV 5)	(2) Before, see AIP Russia and CIS (3) For continuation, see AIP Russia					
▲ TIROM (FIR BDRY)	421434N 0531720E **AKT** **128.0° 138.3 NM** **(100 FT)**					**Before, see AIP Russia and CIS**
	309° 128°	75.4 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119.8 MHZ {C}
△ GIRUL	430826N 0520542E **AKT** **127.0° 62.9 NM** **(100 FT)**					
	308° 128°	16.0 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119.8 MHZ {C}
▲ BALIG	431944N 0515018E **AKT** **127.0° 46.9 NM** **(100 FT)**					
	307° 127°	46.9 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 134.3 MHZ AKTAU TOWER 120.7 MHZ {C}
▲ NOGBU	435220N 0510352E **AKT** **360.0° 0.0 NM** **(35 FT)**					
	301° 119°	85.2 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 134.3 MHZ AKTAU TOWER 120.7 MHZ {C}
▲ AZABI (FIR BDRY)	444424N 0493000E **AKT** **301.0° 85.2 NM** **(100 FT)**					**For continuation, see AIP Russia**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Q198 (RNAV 5)	(2)					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
▲ AZABI (FIR BDRY)	444424N 0493000E **AKT** **301.0° 85.2 NM** **(100 FT)**					**Before, see AIP Russia**
	079° 259°	28.4 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 134.3 MHZ {C}
△ ATNUR	444559N 0500948E **AKT** **316.0° 66.2 NM** **(100 FT)**					
	079° 260°	48.4 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 134.3 MHZ {C}
△ PIRIM	444808N 0511741E **AKT** **002.0° 56.7 NM** **(100 FT)**					
	080° 260°	26.1 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 134.3 MHZ {C}
△ AGILA	444901N 0515422E **AKT** **025.0° 67.3 NM** **(100 FT)**					
	080° 260°	10.2 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 134.3 MHZ {C}
▲ ADPAK	444919N 0520844E **AKT** **031.0° 73.6 NM** **(100 FT)**					
	080° 261°	41.1 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
△ ALOTO	445010N 0530653E **BNU** **241.0° 90.5 NM** **(0 FT)**					
	081° 262°	51.5 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
▲ BODSI	445034N 0541914E **BNU** **220.0° 45.3 NM** **(0 FT)**					

ENR-3.2.6 "T" 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
T522 (RNAV 5)	(2) For continuation, see AIP Russia					
▲ ARHIG	501904N 0670118E **ARK** **360.0° 0.0 NM** **(1300 FT)**					
	346° 164°	126.6 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ LATKO	522508N 0664427E **KTU** **229.0° 118.6 NM** **(900 FT)**					
	354° 173°	53.5 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
▲ BAVAG	531819N 0665235E **KTU** **256.0° 98.6 NM** **(900 FT)**					
	347° 166°	88.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
▲ BEBLU (FIR BDRY)	544630N 0665030E **PSK** **256.0° 82.6 NM** **(500 FT)**					**For continuation, see AIP Russia**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
T523 (RNAV 5)						
▲ ARNIR	494114N 0732226E **KRG** **360.0° 0.0 NM** **(1800 FT)**					
	299° 117°	53.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ KARAGANDA TOWER 122.0 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
▲ BEDKA	501318N 0721545E **KRG** **297.0° 53.7 NM** **(1800 FT)**					
	298° 117°	53.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
△ LIGMO	504539N 0710837E **AST** **207.0° 18.2 NM** **(1200 FT)**					
	296° 116°	17.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
△ APTUS	505558N 0704601E **AST** **251.0° 25.6 NM** **(1200 FT)**					
	294° 113°	37.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
△ KODOL	511638N 0695651E **AST** **276.0° 58.5 NM** **(1200 FT)**					
	296° 114°	72.5 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
▲ ATBAN	515824N 0682152E **KTU** **197.0° 94.6 NM** **(900 FT)**					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
T524 **(RNAV 5)**						
▲ USUGA	433600N 0761934E ATA **287.3° 35.8 NM** **(2200 FT)**					
	289° 108°	31.5 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
△ BEKRO	434850N 0753952E ATA **288.4° 67.3 NM** **(2200 FT)**					
	288° 107°	45.2 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 131.4 MHZ {C}
▲ BOBRO (FIR BDRY)	440648N 0744228E ATA **288.9° 112.5 NM** **(2200 FT)**					
	287° 107°	33.9 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}
▲ ALAKO	441958N 0735903E ATA **289.1° 146.4 NM** **(2200 FT)**					
	287° 103°	150.3 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
▲ PABRI (FIR BDRY)	451455N 0704239E TAR **344.0° 144.8 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
T586 (RNAV 5)	(2) For continuation, see AP 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
▲ ALABA	481845N 0553938E **AKB** **196.0° 131.5 NM** **(700 FT)**					
	049° 229°	25.4 NM	FL 510 FL 120	Odd	Even	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 “Aktobe Tower” 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 **AKB** **189.0° 110.7 NM** **(700 FT)**					
	048° 229°	96.1 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
△ KEKUN	492143N 0581653E **AKB** **131.0° 69.0 NM** **(700 FT)**					
	050° 230°	41.4 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
△ ENETO	494223N 0591154E **AKB** **103.0° 84.9 NM** **(700 FT)**					
	050° 231°	38.5 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
△ KESOT	500111N 0600343E **AKB** **088.0° 112.1 NM** **(700 FT)**					
	051° 231°	45.4 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
△ BESOL	502254N 0610548E **AKB** **078.0° 150.7 NM** **(700 FT)**					
	051° 232°	37.8 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
▲ RAVNI (FIR BDRY)	504030N 0615807E **KST** **188.0° 162.1 NM** **(600 FT)**					
	047° 228°	52.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 133.1 MHZ {C}
△ GUMGA	510752N 0630806E **KST** **175.0° 124.7 NM** **(600 FT)**					
	047° 228°	46.5 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 133.1 MHZ {C}
△ NARUR	513200N 0641130E **KST** **155.0° 102.0 NM** **(600 FT)**					
	049° 230°	25.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 133.1 MHZ {C}
△ KUSUM	514420N 0644639E **KST** **141.0° 97.8 NM** **(600 FT)**					
	049° 230°	83.4 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 133.1 MHZ {C}
△ LATKO	522508N 0664427E **KTU** **229.0° 118.6 NM** **(900 FT)**					
	050° 230°	23.9 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 133.1 MHZ {C}
▲ MONEG	523627N 0671849E **KTU** **229.0° 94.7 NM** **(900 FT)**					
	050° 231°	50.2 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
△ LALKA	530017N 0683140E **KTU** **230.0° 44.5 NM** **(900 FT)**					
	050° 231°	44.5 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ KOKSHETAU TOWER 127.9 MHZ {C}
▲ DAKOZ	532103N 0693701E **KTU** **360.0° 0.0 NM** **(900 FT)**					
	052° 233°	41.9 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ KOKSHETAU TOWER 127.9 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
△ ADEBA	533925N 0704004E **KTU** **053.0° 41.9 NM** **(900 FT)**					
	052° 233°	34.0 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
△ PETOR	535420N 0713136E **KTU** **053.0° 75.9 NM** **(900 FT)**					
	052° 233°	34.6 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
▲ DAKIN (FIR BDRY)	540930N 0722418E **KTU** **053.0° 110.5 NM** **(900 FT)**					**For continuation, see AIP Russia**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
T649 (RNAV 5)	(1) For continuation, see AIP Russia					
▲ ARNIR	494114N 0732226E **KRG** **360.0° 0.0 NM** **(1800 FT)**					
	049° 230°	43.3 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ KARAGANDA TOWER 122.0 MHZ {C}
△ GOLTU	500404N 0741911E **KRG** **050.0° 43.2 NM** **(1800 FT)**					
	049° 230°	37.7 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ {C}
△ BODNU	502346N 0750918E **KRG** **050.0° 81.0 NM** **(1800 FT)**					
	051° 231°	19.2 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ {C}
▲ ODAMA	503331N 0753513E **KRG** **051.0° 100.2 NM** **(1800 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
	051° 232°	44.0 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
△ GOBSO	505523N 0763521E **PVL** **184.0° 79.6 NM** **(500 FT)**					
	052° 232°	31.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
△ GALKI	511035N 0771814E **PVL** **164.0° 62.6 NM** **(500 FT)**					
	052° 233°	42.1 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
△ ABDAM	513051N 0781707E **PVL** **125.0° 60.9 NM** **(500 FT)**					
	053° 234°	40.8 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
▲ LAGMO (FIR BDRY)	514954N 0791500E **PVL** **098.0° 83.0 NM** **(500 FT)**					**For continuation, see AIP Russia**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
T916 (RNAV 5)						
▲ BALUN (FIR BDRY)	420100N 0512742E **AKT** **163.0° 112.7 NM** **(100 FT)**					
	050°	111.6 NM	FL 510 FL 250	Odd		AKTOBE ACC 119.8 MHZ {C}
△ ARNUS	430052N 0533509E **AKT** **107.0° 121.6 NM** **(100 FT)**					
	077°	106.5 NM	FL 510 FL 250	Odd		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
▲ KUNAS (FIR BDRY)	430923N 0560000E **BNU** **156.0° 136.4 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
T916 (RNAV 5)						
▲ AKALI (FIR BDRY)	440829N 0611937E **ARL** **175.0° 161.5 NM** **(300 FT)**					
	078°	12.9 NM	FL 510 FL 250	Odd		SHYMKENT ACC 127.3 MHZ {C}
△ FAZUL	440916N 0613731E **ARL** **171.0° 160.3 NM** **(300 FT)**					
	079°	29.4 NM	FL 510 FL 250	Odd		SHYMKENT ACC 127.3 MHZ {C}
△ TOZLI	441054N 0621817E **KZO** **251.0° 143.4 NM** **(500 FT)**					
	080°	37.4 NM	FL 510 FL 250	Odd		SHYMKENT ACC 127.3 MHZ {C}
△ ZURGO	441233N 0631012E **KZO** **248.0° 106.9 NM** **(500 FT)**					
	081°	43.2 NM	FL 510 FL 250	Odd		SHYMKENT ACC 127.3 MHZ {C}
△ ERTUZ	441307N 0641019E **KZO** **238.0° 66.3 NM** **(500 FT)**					
	079°	28.0 NM	FL 510 FL 120	Odd		SHYMKENT ACC 127.3 MHZ {C}
△ DILNA	441450N 0644911E **KZO** **222.0° 41.8 NM** **(500 FT)**					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
	080°	69.4 NM	FL 510 FL 150	Odd		SHYMKENT ACC 127.3 MHZ {C}
△ GITIM	441752N 0662540E **KZO** **116.0° 44.1 NM** **(500 FT)**					
	082°	47.3 NM	FL 510 FL 120	Odd		SHYMKENT ACC 127.3 MHZ {C}
△ BIMDO	441809N 0673135E **TRK** **315.0° 74.3 NM** **(1000 FT)**					
	078°	59.9 NM	FL 510 FL 120	Odd		SHYMKENT ACC 127.3 MHZ {C}
▲ TUROK	442214N 0685447E **TRK** **007.0° 64.3 NM** **(1000 FT)**					
	087°	60.8 NM	FL 510 FL 120	Odd		SHYMKENT ACC 132.7 MHZ {C}
△ INLIG	441743N 0701919E **TAR** **328.0° 94.9 NM** **(2200 FT)**					
	088°	46.4 NM	FL 510 FL 120	Odd		SHYMKENT ACC 132.7 MHZ {C}
△ MIHOS	441332N 0712336E **TAR** **358.0° 81.4 NM** **(2200 FT)**					
	089°	68.4 NM	FL 510 FL 120	Odd		SHYMKENT ACC 132.7 MHZ {C}
△ INDAG	440635N 0725812E **TAR** **038.0° 104.8 NM** **(2200 FT)**					
	090°	67.0 NM	FL 510 FL 120	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}

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
▲ LONSI (FIR BDRY)	435826N 0743022E **ATA** **284.0° 117.9 NM** **(2200 FT)**					
	091°	65.5 NM	FL 510 FL 250	Odd		ALMATY ACC 131.4 MHZ {C}
△ REGMU	435005N 0760012E **ATA** **295.6° 54.6 NM** **(2200 FT)**					
	094°	52.3 NM	FL 510 FL 250	Odd		ALMATY ACC 131.4 MHZ {C}
△ NIGET	434124N 0771126E **ATA** **008.5° 19.5 NM** **(2200 FT)**					
	095°	38.8 NM	FL 510 FL 250	Odd		ALMATY ACC 131.4 MHZ {C}
△ PIGAL	433428N 0780356E **ATA** **068.9° 44.5 NM** **(2200 FT)**					

ENR-3.2.7 "Z" 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Z102 (RNAV 5)						
▲ EKTEN (FIR BDRY)	513242N 0523030E URL 046.0° 43.4 NM (200 FT)					
	164° 344°	40.9 NM	FL 510 FL 210	Odd	Even	AKTOBE ACC 131.4 MHZ {C}
△ VEVIK	505201N 0523529E URL 102.0° 43.1 NM (200 FT)					
	172° 352°	112.7 NM	FL 510 FL 210	Odd	Even	AKTOBE ACC 131.4 MHZ {C}
▲ LULKE	485932N 0522700E ATR 004.0° 114.0 NM (0 FT)					
	166° 347°	81.7 NM	FL 510 FL 210	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
▲ UDEBA	473802N 0523443E ATR 038.0° 43.2 NM (0 FT)					
	175° 356°	63.7 NM	FL 510 FL 210	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
△ RENPI	463437N 0522656E ATR 133.0° 43.2 NM (0 FT)					
	168° 348°	62.4 NM	FL 510 FL 210	Odd	Even	AKTOBE ACC 130.9 MHZ {C}
▲ GARDU	453219N 0523200E ATR 154.0° 101.0 NM (0 FT)					
	174° 355°	110.9 NM	FL 510 FL 210	Odd	Even	AKTOBE ACC 119.8 MHZ {C}
▲ NEPIL	434133N 0522455E AKT 093.0° 59.7 NM (100 FT)					
	206° 026°	108.2 NM	FL 510 FL 220	Even	Odd	AKTOBE ACC 119.8 MHZ {C}

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
▲ RUTIL (FIR BDRY)	421053N 0510433E AKT 172.0° 101.4 NM (100 FT)					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Z160 (RNAV 5)						
△ DOTAL	440745N 0780904E TDK 186.0° 59.8 NM (2000 FT)					
	006° 186°	26.8 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
△ NONKE	443400N 0781634E TDK 186.0° 33.0 NM (2000 FT)					
	006° 186°	33.0 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ TALDYKORGAN TOWER 127.3 MHZ {C}
▲ KOKZA	450622N 0782548E TDK 360.0° 0.0 NM (2000 FT)					
	304° 123°	34.2 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ TALDYKORGAN TOWER 127.3 MHZ {C}
▲ KONAT	452754N 0774805E TDK 304.0° 34.2 NM (2000 FT)					
	301° 120°	25.9 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ {C}
△ AKIRA	454323N 0771829E TDK 302.0° 60.2 NM (2000 FT)					
	301° 120°	16.0 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ {C}
△ UDEKA	455252N 0770006E TDK 302.0° 76.1 NM (2000 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
	300° 119°	33.5 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ {C}
▲ EROMI	461234N 0762117E BLH 119.0° 69.7 NM (1400 FT)					
	299° 119°	20.9 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ {C}
△ LASDO	462443N 0755651E BLH 119.0° 48.9 NM (1400 FT)					
	299° 118°	48.9 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ BALKHASH TOWER 128.0 MHZ {C}
▲ OGLAB	465259N 0745902E BLH 360.0° 0.0 NM (1400 FT)					
	355° 174°	37.4 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ BALKHASH TOWER 128.0 MHZ {C}
△ DONUR	473022N 0750038E BLH 355.0° 37.4 NM (1400 FT)					
	355° 174°	55.1 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ {C}
▲ TOKNA (FIR BDRY)	482525N 0750316E BLH 355.0° 92.5 NM (1400 FT)					
	354° 174°	27.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
△ IRGIT	485220N 0750436E KRG 118.0° 82.9 NM (1800 FT)					
	354° 173°	53.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
△ EKTAB	494555N 0750718E KRG 078.0° 68.2 NM (1800 FT)					
	354° 173°	37.9 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
△ BODNU	502346N 0750918E KRG 050.0° 81.0 NM (1800 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
	353° 173°	6.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
▲ APTOK	503035N 0750940E KRG 046.0° 84.9 NM (1800 FT)					
	353° 173°	64.9 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
▲ ABELI	513524N 0751312E PVL 232.0° 79.0 NM (500 FT)					
	290° 106°	137.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ AMOLA	523853N 0715604E KTU 106.0° 94.0 NM (900 FT)					
	286° 105°	51.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ ADLON	530129N 0704047E KTU 105.0° 43.1 NM (900 FT)					
	286° 105°	43.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ KOKSHETAU TOWER 127.9 MHZ {C}
▲ DAKOZ	532103N 0693701E KTU 360.0° 0.0 NM (900 FT)					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
Z164 (RNAV 5)						
▲ ALZIS	474317N 0674542E DZG 360.0° 0.0 NM (1300 FT)					
	297° 116°	43.2 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ ZHEZKAZGAN TOWER 127.1 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
△ BETIK	480807N 0665309E DZG 296.0° 43.2 NM (1300 FT)					
	296° 114°	85.9 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.5 MHZ {C}
△ REGPI	485632N 0650629E ARK 213.0° 111.5 NM (1300 FT)					
	294° 112°	76.1 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}
△ 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
Z208 (RNAV 5)						
▲ FORMO	470534N 0813933E AGZ 129.1° 70.4 NM (2200 FT)					
	295° 114°	24.6 NM	FL 300 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ URDZHAR VYSHKA 123.0 MHZ {C}
△ NINKO	471748N 0810819E AGZ 137.3° 47.2 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
	013° 193°	17.4 NM	FL 300 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ TOLKI	473415N 0811640E AGZ 117.0° 39.9 NM (2200 FT)					
	057° 240°	100.3 NM	FL 300 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ BONZU	481815N 0833043E UKM 152.5° 111.1 NM (1000 FT)					
	116° 298°	48.9 NM	FL 300 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ LATRI	475217N 0843229E UKM 141.2° 152.7 NM (1000 FT)					
	144° 324°	27.1 NM	FL 300 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ ZAISAN VYSHKA 118.7 MHZ {C}
▲ GURGI	472906N 0845308E UKM 141.1° 179.7 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
Z210 (RNAV 5)						
△ KODUM	475556N 0544537E ATR 061.0° 129.2 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 ↓	FL series ↑	Controlling unit {Airspace class} Remarks
	024° 204°	46.8 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 Tower” 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}
▲ BILGA	483452N 0552426E AKB 203.0° 122.6 NM (700 FT)					
	024° 204°	19.5 NM	FL 510 FL 120	Odd	Even	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 “Aktobe Tower” 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}
△ KURUL	485059N 0554051E AKB 203.0° 103.2 NM (700 FT)					
	024° 204°	63.1 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ {C}
△ BOLGO	494300N 0563525E AKB 204.0° 40.0 NM (700 FT)					
	024° 205°	40.0 NM	FL 510 FL 120	Odd	Even	AKTOBE ACC 129.6 MHZ AKTOBE TOWER 128.0 MHZ {C}
▲ EKTOB	501548N 0571055E AKB 360.0° 0.0 NM (700 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
Z243 (RNAV 5)						
▲ OGLAB	465259N 0745902E BLH 360.0° 0.0 NM (1400 FT)					
	066° 246°	44.2 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ BALKHASH TOWER 128.0 MHZ {C}
△ ESADO	470607N 0760037E BLH 066.0° 44.2 NM (1400 FT)					
	066° 247°	44.7 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 125.5 MHZ {C}
▲ MADEV	471857N 0770328E BLH 067.0° 88.9 NM (1400 FT)					
	067° 248°	23.7 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ OBAPI	472530N 0773700E BLH 065.0° 112.7 NM (1400 FT)					
	068° 249°	33.4 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ IBDAS	473412N 0782432E AGZ 248.0° 85.4 NM (2200 FT)					
	068° 250°	85.4 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ KABIZ	475552N 0802659E AGZ 360.0° 0.0 NM (2200 FT)					
	137° 318°	47.2 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ NINKO	471748N 0810819E AGZ 137.3° 47.2 NM (2200 FT)					
	114° 295°	24.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ URDZHAR VYSHKA 123.0 MHZ {C}
▲ FORMO	470534N 0813933E AGZ 129.1° 70.4 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
Z315 **(RNAV 5)**						
△ IZIMA	432236N 0770503E ATA 332.2° 0.1 NM (2200 FT)					
	051° 231°	22.3 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ TIRBA	433456N 0773031E ATA 050.8° 22.3 NM (2200 FT)					
	051° 231°	23.4 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ BAGNA	434754N 0775719E ATA 050.8° 45.7 NM (2200 FT)					
	086° 266°	7.9 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ ALUGI	434745N 0780816E ATA 055.7° 52.4 NM (2200 FT)					
	086° 267°	48.7 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ {C}
▲ GASBU	434640N 0791528E JRK 223.0° 40.5 NM (2600 FT)					
	116° 297°	28.1 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ {C}
▲ BERTO	433159N 0794824E JRK 184.0° 42.2 NM (2600 FT)					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Z370 (RNAV 5)						
△ RISAS	435854N 0715247E TAR 016.0° 71.6 NM (2200 FT)					
	095° 277°	82.9 NM	FL 510 FL 150	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
▲ TOMGO	434146N 0734454E TAR 060.0° 118.9 NM (2200 FT)					
	097° 278°	21.1 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ 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}
▲ DEKED (FIR BDRY)	433653N 0741306E ATA 272.4° 126.0 NM (2200 FT)					
	098° 278°	25.9 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ {C}
△ AGLEK	433045N 0744744E ATA 270.4° 100.4 NM (2200 FT)					
	098° 279°	19.1 NM	FL 510 FL 140	Odd	Even	ALMATY ACC 131.4 MHZ {C}
△ BINRI	432607N 0751309E ATA 268.1° 81.7 NM (2200 FT)					
	099° 279°	14.6 NM	FL 510 FL 150	Odd	Even	ALMATY ACC 131.4 MHZ {C}
△ EKLAT	432230N 0753237E ATA 265.4° 67.5 NM (2200 FT)					
	084° 265°	67.4 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}

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
△ IZIMA	432236N 0770503E ATA 332.2° 0.1 NM (2200 FT)					
	051° 231°	22.3 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ TIRBA	433456N 0773031E ATA 050.8° 22.3 NM (2200 FT)					
	051° 231°	23.4 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ BAGNA	434754N 0775719E ATA 050.8° 45.7 NM (2200 FT)					
	018° 198°	21.6 NM	FL 510 FL 140	Odd	Even	ALMATY ACC 131.4 MHZ {C}
△ DOTAL	440745N 0780904E TDK 186.0° 59.8 NM (2000 FT)					
	028° 209°	52.5 NM	FL 510 FL 160	Odd	Even	ALMATY ACC 133.1 MHZ {C}
△ ATPOR	445123N 0784955E TDK 126.0° 22.8 NM (2000 FT)					
	029° 209°	74.0 NM	FL 510 FL 160	Odd	Even	ALMATY ACC 133.1 MHZ {C}
▲ RIKPI	455225N 0794910E TDK 047.0° 74.6 NM (2000 FT)					
	029° 210°	33.3 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
▲ GIGDA	461942N 0801638E AGZ 178.0° 96.5 NM (2200 FT)					
	030° 210°	21.8 NM	FL 510 FL 150	Odd	Even	ALMATY ACC 132.1 MHZ {C}
△ INLUL	463730N 0803449E AGZ 170.0° 78.6 NM (2200 FT)					
	030° 210°	30.8 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}

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
▲ BURID	470234N 0810051E AGZ 151.0° 58.1 NM (2200 FT)					
	078° 258°	26.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ URDZHAR VYSHKA 123.0 MHZ {C}
▲ FORMO	470534N 0813933E AGZ 129.1° 70.4 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
Z380 (RNAV 5)						
▲ FODIK	422220N 0692631E SMK 360.0° 0.0 NM (1400 FT)					
	272° 092°	27.3 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
▲ ARSUL	422600N 0685000E SMK 271.0° 27.3 NM (1400 FT)					
	309° 129°	27.3 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
△ EDIBA	424519N 0682349E TRK 187.0° 35.1 NM (1000 FT)					
	309° 129°	5.8 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
△ RELRU	424925N 0681812E TRK 195.0° 32.5 NM (1000 FT)					
	309° 128°	31.6 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}

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
▲ KARIM	431136N 0674737E TRK 250.0° 35.4 NM (1000 FT)					
	308° 128°	20.1 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
▲ POBEK	432534N 0672754E TRK 270.0° 49.1 NM (1000 FT)					
	308° 126°	68.2 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ {C}
△ ERMEK	441245N 0661954E KZO 124.0° 43.9 NM (500 FT)					
	305° 124°	43.9 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 127.3 MHZ KYZYLORDA TOWER 120.9 {C}
▲ ORTEG	444145N 0653349E KZO 360.0° 0.0 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
Z553 (RNAV 5)						
▲ ARNIR	494114N 0732226E KRG 360.0° 0.0 NM (1800 FT)					
	341° 161°	35.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ KARAGANDA TOWER 122.0 MHZ {C}
▲ DETOV	501555N 0731235E KRG 341.0° 35.3 NM (1800 FT)					
	341° 160°	53.9 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ EDANO	510858N 0725804E AST 072.0° 58.7 NM (1200 FT)					

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
	340° 160°	6.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ BOLSU	511507N 0725620E AST 066.0° 58.9 NM (1200 FT)					
	340° 158°	145.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
▲ POBUR	533800N 0721400E KTU 069.0° 95.3 NM (900 FT)					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
Z554 (RNAV 5)	(2) Before, see AIP Uzbekistan					
▲ OKESO	411051N 0673608E SMK 223.0° 109.2 NM (1400 FT)					**Before, see AIP Uzbekistan**
	062° 242°	16.2 NM	FL 510 4000 FT ALT	Odd	Even	TASHKENT ACC {C}
▲ DIBAD	411700N 0675600E SMK 220.0° 94.0 NM (1400 FT)					
	076° 256°	39.6 NM	FL 510 7000 FT ALT	Odd	Even	TASHKENT ACC {C}
▲ DODUR (FIR BDRY)	412300N 0684800E SMK 200.0° 65.9 NM (1400 FT)					
	039° 219°	39.6 NM	FL 510 8000 FT ALT	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
▲ BAMUT	415121N 0692445E SMK 176.0° 31.0 NM (1400 FT)					
	002° 182°	8.8 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
△ BEDNU	420007N 0692621E SMK 174.0° 22.2 NM (1400 FT)					

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
	355° 175°	22.2 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
▲ FODIK	422220N 0692631E SMK 360.0° 0.0 NM (1400 FT)					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
Z578 **(RNAV 5)**						
▲ LANOL	411133N 0685506E SMK 192.0° 74.6 NM (1400 FT)					
	330° 149°	12.6 NM	FL 510 7000 FT ALT	Even	Odd	TASHKENT ACC {C}
▲ DODUR (FIR BDRY)	412300N 0684800E SMK 200.0° 65.9 NM (1400 FT)					
	356° 175°	36.0 NM	FL 510 7000 FT ALT	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
▲ ODORI	415901N 0684908E SMK 224.0° 36.3 NM (1400 FT)					
	355° 175°	27.0 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
▲ ARSUL	422600N 0685000E SMK 271.0° 27.3 NM (1400 FT)					**For continuation, see AIP Uzbekistan**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
Z579 **(RNAV 5)**						
▲ MIKNO	420200N 0681200E SMK 243.0° 59.0 NM (1400 FT)					
	340° 159°	37.8 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
△ ZUSLA	423838N 0675917E TRK 206.0° 48.5 NM (1000 FT)					
	339° 159°	34.1 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
▲ KARIM	431136N 0674737E TRK 250.0° 35.4 NM (1000 FT)					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
Z580 (RNAV 5)						
▲ OGRIP	405454N 0680500E SMK 209.0° 106.6 NM (1400 FT)					
	044° 224°	42.9 NM	FL 510 7000 FT ALT	Odd	Even	TASHKENT ACC {C}
▲ DODUR (FIR BDRY)	412300N 0684800E SMK 200.0° 65.9 NM (1400 FT)					
	039° 219°	39.6 NM	FL 510 8000 FT ALT	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
▲ BAMUT	415121N 0692445E SMK 176.0° 31.0 NM (1400 FT)					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
	039° 219°	25.6 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
△ ADESA	420940N 0694854E SMK 121.0° 20.9 NM (1400 FT)					
	039° 219°	38.6 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
▲ KOLAM	423702N 0702540E TAR 242.0° 40.7 NM (2200 FT)					
	064° 244°	8.8 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ TARAZ APPROACH 122.1 MHZ {C}
△ ANESA	424006N 0703654E TAR 241.0° 31.9 NM (2200 FT)					
	062° 242°	31.9 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ TARAZ APPROACH 122.1 MHZ {C}
▲ KIZMI	425214N 0711654E TAR 360.0° 0.0 NM (2200 FT)					
	088° 268°	21.3 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ TARAZ APPROACH 122.1 MHZ {C}
△ MIKDO	425058N 0714551E TAR 088.0° 21.3 NM (2200 FT)					
	085° 266°	76.7 NM	FL 510 FL 150	Odd	Even	SHYMKENT ACC 132.7 MHZ In case of possible VHF radio communication failure at FL150–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}
▲ OGTOL (FIR BDRY)	424905N 0733002E TAR 087.0° 98.0 NM (2200 FT)					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
Z581 (RNAV 5)	(2) Before, see AIP Russia and CIS (3) For continuation, see AIP Russia					
▲ KERUL (FIR BDRY)	415128N 0520821E AKT 151.0° 129.8 NM (100 FT)					**Before, see AIP Russia and CIS**
	333° 152°	46.1 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119.8 MHZ {C}
△ ADEDA	423438N 0514628E AKT 151.0° 83.7 NM (100 FT)					
	332° 152°	34.3 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 119.8 MHZ {C}
▲ LUMUR	430639N 0512953E AKT 150.0° 49.5 NM (100 FT)					
	331° 150°	49.5 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 134.3 MHZ AKTAU TOWER 120.7 MHZ {C}
▲ NOGBU	435220N 0510352E AKT 360.0° 0.0 NM (35 FT)					
	277° 095°	69.6 NM	FL 510 FL 120	Even	Odd	AKTOBE ACC 134.3 MHZ AKTAU TOWER 120.7 MHZ {C}
▲ RALAN (FIR BDRY)	440812N 0493000E AKT 275.0° 69.6 NM (100 FT)					**For continuation, see AIP Russia**

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
Z582 (RNAV 5)						
▲ EKSOZ	531113N 0633346E KST 360.0° 0.0 NM (600 FT)					
	191° 010°	63.8 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
△ DOPAN	521213N 0625401E KST 190.0° 63.8 NM (600 FT)					
	190° 010°	98.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
▲ RAVNI (FIR BDRY)	504030N 0615807E KST 188.0° 162.1 NM (600 FT)					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
Z583 **(RNAV 5)**						
▲ USUGA	433600N 0761934E ATA 287.3° 35.8 NM (2200 FT)					
	356° 176°	22.3 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
▲ ADABA	435820N 0762009E ATA 312.8° 48.5 NM (2200 FT)					
	322° 142°	15.7 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ TUKTO	441136N 0760830E ATA 315.3° 64 NM (2200 FT)					
	323° 142°	51.0 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ {C}
△ DESER	445502N 0753100E ATA 319.2° 114.7 NM (2200 FT)					
	322° 142°	27.3 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ {C}

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
▲ MALOD	451812N 0751037E BLH 168.0° 95.2 NM (1400 FT)					
	321° 141°	45.1 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ {C}
△ ABMIK	455616N 0743604E BLH 189.0° 58.9 NM (1400 FT)					
	321° 139°	102.1 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ {C}
▲ TOGDI	472143N 0731457E BLH 284.0° 76.7 NM (1400 FT)					
	308° 126°	56.8 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 125.5 MHZ {C}
▲ AZORI (FIR BDRY)	480139N 0721512E KRG 196.0° 109.1 NM (1800 FT)					
	306° 121°	220.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
▲ TUSEP	503136N 0680751E ARK 064.0° 44.4 NM (1300 FT)					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
Z584 (RNAV 5)						
▲ ADABA	435820N 0762009E ATA 312.8° 48.5 NM (2200 FT)					
	029° 209°	19.5 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ ALMATY APPROACH 124.8 MHZ {C}

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
△ UMIRO	441421N 0763537E ATA 332.7° 56.1 NM (2200 FT)					
	029° 209°	8.6 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ BIOTA	442124N 0764224E ATA 339.0° 61.2 NM (2200 FT)					
	029° 210°	81.3 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
▲ KONAT	452754N 0774805E TDK 304.0° 34.2 NM (2000 FT)					
	030° 210°	62.0 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 133.1 MHZ {C}
▲ LIPSI	461808N 0784001E TDK 002.0° 72.5 NM (2000 FT)					
	030° 211°	122.0 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ KABIZ	475552N 0802659E AGZ 360.0° 0.0 NM (2200 FT)					
	351° 170°	102.4 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ {C}
△ LUNOV	493800N 0801801E SEM 170.0° 43.1 NM (700 FT)					
	349° 169°	6.2 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ SEMEY TOWER 128.0 MHZ {C}
△ ROKOD	494408N 0801719E SEM 170.0° 36.9 NM (700 FT)					
	350° 169°	37.1 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ SEMEY TOWER 128.0 MHZ {C}
▲ SOMIP	502106N 0801402E SEM 281.0° 0.4 NM (700 FT)					
	307° 126°	49.4 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 132.1 MHZ SEMEY TOWER 128.0 MHZ {C}

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
▲ OBUNA (FIR BDRY)	505513N 0791803E SEM 307.0° 49.7 NM (700 FT)					
	306° 125°	30.6 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ MIKSA	511608N 0784241E SEM 306.0° 80.3 NM (700 FT)					
	305° 124°	21.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ ABDAM	513051N 0781707E PVL 125.0° 60.9 NM (500 FT)					
	304° 124°	22.2 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ PIVAL	514549N 0775050E PVL 125.0° 38.7 NM (500 FT)					
	305° 125°	38.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ PAVLODAR TOWER 119.8 MHZ {C}
▲ KANET	521235N 0770542E PVL 360.0° 0.0 NM (500 FT)					
	277° 094°	76.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ PAVLODAR TOWER 119.8 MHZ {C}
△ ADODA	523230N 0750554E PVL 277.0° 76.1 NM (500 FT)					
	275° 094°	41.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ INRUM	524302N 0740047E PVL 277.0° 117.2 NM (500 FT)					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
	274° 093°	48.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 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 “Pavlodar Tower” on frequencies 5720 kHz or “Kokshetau Tower” on frequencies 4760 kHz and 6528 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}
△ UNKAB	525439N 0724332E KTU 090.0° 115.3 NM (900 FT)					
	273° 092°	25.5 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ ULSET	530027N 0720230E KTU 093.0° 89.9 NM (900 FT)					
	273° 091°	47.2 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ BALMI	531107N 0704613E KTU 092.0° 42.7 NM (900 FT)					
	273° 092°	42.7 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ KOKSHETAU TOWER 127.9 MHZ {C}
▲ DAKOZ	532103N 0693701E KTU 360.0° 0.0 NM (900 FT)					
	257° 076°	44.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ KOKSHETAU TOWER 127.9 MHZ {C}
△ ROGUN	531944N 0682341E KTU 257.0° 44.0 NM (900 FT)					
	257° 076°	54.7 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
▲ BAVAG	531819N 0665235E KTU 256.0° 98.6 NM (900 FT)					
	257° 075°	55.2 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ {C}
△ BIMSO	531631N 0652038E KST 073.0° 64.4 NM (600 FT)					
	254° 073°	64.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 133.1 MHZ KOSTANAY TOWER 129.3 MHZ {C}
▲ EKSOZ	531113N 0633346E KST 360.0° 0.0 NM (600 FT)					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
Z586 (RNAV 5)						
▲ AMIGU	491645N 0692517E ARK 114.0° 112.2 NM (1300 FT)					
	051° 232°	80.2 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 124.1 MHZ {C}
▲ GURPI	495618N 0711236E AST 178.0° 64.4 NM (1200 FT)					
	358° 178°	22.5 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ ASTANA APPROACH 124.6 MHZ {C}
▲ SUTUR	501837N 0711714E AST 178.0° 41.9 NM (1200 FT)					
	358° 178°	41.9 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
▲ ASTAS	510006N 0712600E AST 360.0° 0.0 NM (1200 FT)					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Z588 (RNAV 5)						
▲ ARNIR	494114N 0732226E KRG 360.0° 0.0 NM (1800 FT)					
	320° 139°	37.6 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ KARAGANDA TOWER 122.0 MHZ {C}
▲ LESNA	501302N 0725127E KRG 319.0° 37.6 NM (1800 FT)					
	319° 137°	91.1 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
△ LADOG	512959N 0713440E AST 000.4° 30.4 NM (1200 FT)					
	317° 136°	38.2 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
△ VAGEM	520159N 0710114E AST 336.0° 63.9 NM (1200 FT)					
	316° 135°	50.5 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ RENPA	524400N 0701548E KTU 136.0° 43.9 NM (900 FT)					
	317° 136°	43.9 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ KOKSHETAU TOWER 127.9 MHZ {C}
▲ DAKOZ	532103N 0693701E KTU 360.0° 0.0 NM (900 FT)					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Z589 **(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
▲ USUGA	433600N 0761934E ATA 287.3° 35.8 NM (2200 FT)					
	310° 129°	19.9 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
△ REGMU	435005N 0760012E ATA 295.6° 54.6 NM (2200 FT)					
	309° 129°	12.8 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 131.4 MHZ ALMATY APPROACH 124.8 MHZ {C}
▲ AGUNA	435906N 0754739E ATA 297° 67.1 NM (2200 FT)					
	309° 128°	72.7 NM	FL 510 FL 120	Even	Odd	ALMATY ACC 133.1 MHZ {C}
▲ ANELI	444956N 0743510E BLH 181.0° 124.2 NM (1400 FT)					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
Z621 (RNAV 5)	(2) Before, see AIP Uzbekistan					
▲ ATRAN (FIR BDRY)	422321N 0660522E TRK 236.0° 123.4 NM (1000 FT)					**Before, see AIP Uzbekistan**
	055° 235°	75.9 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
△ RAZBI	425954N 0673533E TRK 239.0° 47.6 NM (1000 FT)					
	055° 236°	38.5 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 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
▲ GENDI	431800N 0682200E TRK 254.0° 9.4 NM (1000 FT)					
	074° 254°	9.4 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
▲ ELAHA	431932N 0683446E TRK 360.0° 0.0 NM (1000 FT)					
	077° 257°	26.2 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
▲ ARVAR	432233N 0691027E TRK 077.0° 26.2 NM (1000 FT)					
	077° 257°	25.5 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
▲ POKAT	432530N 0694508E TRK 077.0° 51.7 NM (1000 FT)					
	077° 258°	48.7 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
▲ ARBOL	433055N 0705137E TAR 329.0° 42.9 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
Z624 (RNAV 5)						
▲ AGADI (FIR BDRY)	480559N 0733338E BLH 314.0° 93.2 NM (1400 FT)					
	312° 132°	29.9 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
△ LUTEK	482853N 0730459E KRG 180.0° 73.3 NM (1800 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° 130°	114.4 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 124.1 MHZ {C}
▲ GURPI	495618N 0711236E AST 178.0° 64.4 NM (1200 FT)					
	312° 131°	33.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
▲ BASPA	502144N 0704001E AST 208.0° 48.3 NM (1200 FT)					
	309° 128°	26.0 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
△ VETUB	504107N 0701250E AST 238.0° 50.1 NM (1200 FT)					
	304° 124°	10.3 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
△ OSROL	504818N 0700112E AST 248.0° 55.0 NM (1200 FT)					
	309° 127°	93.8 NM	FL 510 FL 120	Even	Odd	ASTANA ACC 132.8 MHZ {C}
▲ ATBAN	515824N 0682152E KTU 197.0° 94.6 NM (900 FT)					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
Z632 **(RNAV 5)**						
△ REBDA	414708N 0690515E SMK 198.0° 38.6 NM (1400 FT)					
	338° 158°	11.3 NM	FL 510 6000 FT ALT	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
▲ NIMAG	415801N 0690101E SMK 212° 30.8 NM (1400 FT)					
	338° 158°	29.2 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
▲ ARSUL	422600N 0685000E SMK 271.0° 27.3 NM (1400 FT)					
	333° 152°	25.1 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ SHYMKENT TOWER 125.9 MHZ {C}
▲ LARBA	424922N 0683725E TRK 170.0° 30.2 NM (1000 FT)					
	333° 152°	30.8 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ TURKISTAN TOWER 131.3 MHZ {C}
▲ GENDI	431800N 0682200E TRK 254.0° 9.4 NM (1000 FT)					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Z727 (RNAV 5)						
▲ ADARO (FIR BDRY)	504706N 0815242E UKM 325.0° 51.2 NM (1000 FT)					
	145° 326°	51.2 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ UST-KAMENOGORSK TOWER 130.1 MHZ {C}
▲ RIMPU	500158N 0823031E UKM 360.0° 0.0 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
	142° 322°	42.7 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ UST-KAMENOGORSK TOWER 130.1 MHZ {C}
△ ABOTO	492544N 0830521E UKM 142.0° 42.7 NM (1000 FT)					
	142° 322°	2.7 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ ARHIM	492317N 0830743E UKM 322.3° 45.3 NM (1000 FT)					
	142° 322°	6.0 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ NEMEG	491804N 0831242E UKM 332.4° 51.4 NM (1000 FT)					
	142° 324°	100.9 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ {C}
▲ LATRI	475217N 0843229E UKM 141.2° 152.7 NM (1000 FT)					
	144° 324°	27.1 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 132.1 MHZ ZAISAN VYSHKA 118.7 MHZ {C}
▲ GURGI	472906N 0845308E UKM 141.1° 179.7 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
Z746 **(RNAV 5)**						
▲ TUSEP	503136N 0680751E ARK 064.0° 44.4 NM (1300 FT)					
	072° 254°	80.2 NM	FL 510 FL 120	Odd	Even	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
△ VETUB	504107N 0701250E AST 238.0° 50.1 NM (1200 FT)					
	073° 253°	35.7 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
△ LIGMO	504539N 0710837E AST 207.0° 18.2 NM (1200 FT)					
	061° 242°	73.0 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ ASTANA APPROACH 124.6 MHZ {C}
△ EDANO	510858N 0725804E AST 072.0° 58.7 NM (1200 FT)					
	062° 244°	88.7 NM	FL 510 FL 120	Odd	Even	ASTANA ACC 132.8 MHZ {C}
▲ ABELI	513524N 0751312E PVL 232.0° 79.0 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
Z753 **(RNAV 5)**						
▲ OSBOR	410054N 0683059E SMK 201.0° 91.4 NM (1400 FT)					**Before, see AIP Uzbekistan**
	322° 141°	40.1 NM	FL 510 6000 FT ALT	Even	Odd	TASHKENT ACC {C}
▲ IBMOB (FIR BDRY)	413436N 0680213E SMK 226.0° 78.9 NM (1400 FT)					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
	321° 140°	101.9 NM	FL 510 FL 120	Even	Odd	SHYMKENT ACC 132.7 MHZ {C}
▲ PAVEL	425947N 0664642E TRK 249.0° 81.5 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
Z817 (RNAV 5)						
▲ KIZMI	425214N 0711654E TAR 360.0° 0.0 NM (2200 FT)					
	072° 252°	24.8 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ TARAZ APPROACH 122.1 MHZ {C}
△ GERPU	425739N 0714951E TAR 072.0° 24.8 NM (2200 FT)					
	069° 250°	56.5 NM	FL 510 FL 120	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
△ KULHI	431211N 0730422E TAR 070.0° 81.3 NM (2200 FT)					
	070° 251°	54.2 NM	FL 510 FL 210	Odd	Even	SHYMKENT ACC 132.7 MHZ {C}
▲ BOGDI (FIR BDRY)	432517N 0741622E ATA 267.1° 123.1 NM (2200 FT)					
	071° 251°	23.5 NM	FL 510 FL 210	Odd	Even	ALMATY ACC 131.4 MHZ {C}
△ AGLEK	433045N 0744744E ATA 270.4° 100.4 NM (2200 FT)					
	071° 252°	32.9 NM	FL 510 FL 120	Odd	Even	ALMATY ACC 131.4 MHZ {C}

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	↑	Controlling unit {Airspace class} Remarks
△ TIPSA	433809N 0753149E ATA 278.4° 69.7 NM (2200 FT)					

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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	TMA UASP
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	TMA UAAH
ABONA	461133N 0751857E	N170	TMA UAAH
ABOTO	492544N 0830521E	Z727	TMA UASK
ABRAS	514331N 0771053E	L988, P984	
ABREK	462025N 0763143E	N126	
ABULA	495910N 0682343E	L86	
ABULU	480139N 0555532E	L992	
ABURA	473345N 0664312E	N161	TMA UAKD
ADABA	435820N 0762009E	L143, N170, Z583, Z584	TMA UAAA
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	TMA UASK, TMA UASS
ADASA	524618N 0751436E	P179	TMA UASP
ADAZA	434304N 0645326E	N990	
ADEBA	533925N 0704004E	T586	TMA UACK
ADEDA	423438N 0514628E	N73, Z581	
ADEKU	502301N 0641824E	M166, N167	
ADESA	420940N 0694854E	L139, Z580	TMA UAII
ADETA	500015N 0773321E	M149, N37, P984	
ADIRO	445011N 0752356E	M149, N143	
ADLAN	495132N 0792510E	N102	TMA UASS
ADLIK	482457N 0614611E	L985	
ADLIM	443715N 0652222E		TMA UAOO
ADLON	530129N 0704047E	N985, Z160	TMA UACK
ADODA	523230N 0750554E	N985, W361, Z584	TMA UASP
ADOKA	482224N 0671842E	L145	TMA UAKD
ADOLU	502039N 0795401E		TMA UASS
ADONU	454418N 0683532E	P178	
ADPAK	444919N 0520844E	N102, Q198	
ADRAT	500334N 0581528E	M993	TMA UATT
ADREM	442548N 0643118E	L163, M75	
ADRIK	480432N 0684119E	L51, W351	TMA UAKD
ADRIM	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	TMA UAAL
AGATU	493220N 0594622E	L147, L162	
AGEBO	474010N 0672652E		TMA UAKD
AGERA	430738N 0672650E	N147, N987	
AGILA	444901N 0515422E	N996, Q198	TMA UATE
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	TMA UAOO
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/RU/AIS
AGUNA	435906N 0754739E	M149, M618, Z589	TMA UAAA
AGURO	511525N 0715011E		TMA UACC
AGURU	532928N 0694548E		TMA UACK
AGUSA	471400N 0820338E	M166	
AKALI	440829N 0611937E	L165, L985	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
AKASA	491819N 0773455E	M993, P984	
AKAZU	404218N 0683815E	L170	
AKELI	494707N 0681322E	L86	
AKIBU	465522N 0515013E		TMA UATG
AKIMU	444353N 0731255E	N147	
AKIRA	454323N 0771829E	L143, Z160	
AKITU	483624N 0681921E	L26, N37, N990	
AKOSO	534140N 0650940E	N60, W355	TMA UAUU
AKSOZ	435449N 0691321E	M610	
AKUKU	425036N 0510509E	P574	TMA UATE
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	TMA UATT
ALILA	454830N 0800916E	L26	
ALOLI	431841N 0764421E		TMA UAAA
ALOTO	445010N 0530653E	N73, P574, Q198	
ALUGI	434745N 0780816E	Z315	TMA UAAA
ALZIS	474317N 0674542E	L51, L145, M75, M168, M993, N161, N987, N990, Z164	
AMABU	445737N 0781952E		TMA UAAT

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
AMASO	474914N 0684857E	M993, N161	TMA UAKD
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	TMA UAOO
AMUTU	504649N 0711721E		TMA UACC
ANELI	444956N 0743510E	Z589	
ANESA	424006N 0703654E	N143, Z580	TMA UADD
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 UAII
APTOK	503035N 0750940E	Z160	
APTUS	505558N 0704601E	L988, N996, T523	TMA UACC
ARBIM	492045N 0645739E	L26, M741, P574	
ARBOL	433055N 0705137E	L145, L728, M610, N102, Z621	TMA UADD
ARDIK	521459N 0642204E	L145	TMA UAUU
ARGER	493808N 0725855E		TMA UAKK
ARHIG	501904N 0670118E	M166, M168, N987, N996, T522	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
ARHIM	492317N 0830743E	N143, Z727	
ARISA	512924N 0503254E	G3, L736, M166	TMA UARR RR-1, RR-5, RR-8
ARKAM	471135N 0643220E	N161	
ARKER	471757N 0580839E	M161, N55	
ARLIF	433927N 0524039E	N161, N193	
ARLIH	492724N 0742621E	M166, W348	TMA UAKK
ARMIK	474512N 0664137E	L51	TMA UAKD
ARNIR	494114N 0732226E	L51, L993, M166, N37, N170, T523, T649, Z553, Z588	
ARNUS	430052N 0533509E	L992, T916	
ARSAN	474436N 0600738E	L51, M199, P574	
ARSUL	422600N 0685000E	Z380, Z578, Z632	TMA UAII
ARTOT	425650N 0710100E		TMA UADD
ARVAR	432233N 0691027E	Z621	TMA UAIT
ASDET	511633N 0713946E		TMA UACC
ASDIB	511544N 0514610E		TMA UARR
ASDON	532134N 0631638E		TMA UAUU
ASDUK	520012N 0765857E		TMA UASP
ASLIK	470509N 0681542E	L145	TMA UAKD
ASLOK	410548N 0671954E	M741, N987	RR-6
ASNAP	502302N 0565926E		TMA UATT
ASTIK	502734N 0691434E	L998, P574	
ASTAS	510006N 0712600E	L988, L994, M75, N170, N996, P574, Z586	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
ATBAN	515824N 0682152E	L994, N987, Z624, T523	
ATBER	530311N 0634911E		TMA UAUU
ATNAL	435307N 0533948E	N55, N154	
ATNON	521149N 0673350E	L994, N55	
ATNUR	444559N 0500948E	L864, N193, Q198	TMA UATE
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	TMA UATE RR-4
AZITI	433936N 0764351E		RR-2, RR-7
AZORI	480139N 0721512E	Z583	
BABUR	452312N 0493000E	N102, N193	
BADAS	442221N 0643656E	L163, L855	TMA UAOO
BAGED	471628N 0650016E	L728, N161	
BAGIL	473425N 0741044E	L998	TMA UAAH
BAGIR	490131N 0514106E	M158, W324	
BAGNA	434754N 0775719E	Z315, Z370	TMA UAAA
BAGNU	530720N 0755304E	P984	TMA UASP
BAGOB	495029N 0823755E		TMA UASK
BAGUT	502745N 0803139E		TMA UASS
BAKID	462633N 0622354E	N167	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
BAKIS	440031N 0764333E	L998, W333	
BALGO	430234N 0733602E	M34	
BALIG	431944N 0515018E	Q161	TMA UATE RR-2, RR-4
BALMI	531107N 0704613E	W361, Z584	TMA UACK
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	TMA UAUU
BAMOM	505814N 0512427E		TMA UARR
BAMUT	415121N 0692445E	Z554, Z580	TMA UAII
BANOS	501116N 0723844E	N170, W333	TMA UACC, TMA UAKK
BANOV	503704N 0830918E	L135	TMA UASK
BANUM	474633N 0804834E	M166, M618	
BAPER	433011N 0534642E	L992, N193	
BARAR	425030N 0700344E	N102	TMA UAII
BARKI	545153N 0710000E	A357, N60	TMA UACP
BARSI	530153N 0695555E		TMA UACK
BARUR	443207N 0791739E	N126	
BASAN	433420N 0735429E	L147	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
BASPA	502144N 0704001E	M75, Z624	TMA UACC
BASPI	433257N 0791501E	L138, M610	
BASPU	471514N 0525046E	L51	TMA UATG
BASUN	440216N 0505614E		TMA UATE
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	TMA UACC, TMA UAKK
BEDMU	541215N 0704523E	P179	TMA UACP
BEDNU	420007N 0692621E	Z554	TMA UAII
BEDOR	482529N 0673251E	M168, N987, W332	TMA UAKD
BEDRU	490642N 0623638E	M993	
BEDUR	433546N 0765739E	L998, M610	
BEKAS	514029N 0515327E	L163, M56	
BEKOR	494513N 0623050E	L26, L988, N55	
BEKRO	434850N 0753952E	T524	TMA UAAA
BERTO	433159N 0794824E	M610, Z315	
BERVI	434059N 0741156E	M610	
BESOL	502254N 0610548E	M166, T586	
BETIK	480807N 0665309E	L86, Z164	TMA UAKD

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
BETPU	455758N 0675945E	M168	
BIKLU	532548N 0633314E		TMA UAUU
BIKRI	472814N 0752625E	M149	TMA UAAH
BIKTO	531235N 0691745E		TMA UACK
BILGA	483452N 0552426E	Z210	
BILMO	430414N 0711143E		TMA UADD
BIMDO	441809N 0673135E	M610, N987	
BIMSO	531631N 0652038E	W361, Z584	TMA UAUU
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	TMA UATT
BOLNA	433712N 0625812E	M161	
BOLSU	511507N 0725620E	L988, N996, W358, Z553	TMA UACC
BOMKA	420232N 0691624E	P178	TMA UAII

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
BONZU	481815N 0833043E	Z208	
BORIS	425127N 0660533E	N147	
BUDER	521310N 0632052E	L165	TMA UAUU
BUDET	445507N 0645824E	L139, M75	TMA UAOO
BUDUL	471917N 0514811E		TMA UATG
BUGEB	410824N 0670836E	P180	
BUKEN	440406N 0650744E	N990	
BULOG	500854N 0660036E	L145, N996	
BURID	470234N 0810051E	N161, N993, Z370	TMA UASU
BURIK	470012N 0675152E	M168	UAKD
BUSAB	444159N 0651844E		TMA UAOO
DAKIN	540930N 0722418E	L86, M75, N55, N990, T586	
DAKOZ	532103N 0693701E	N170, N987, T586, Z160, Z584, Z588	
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	TMA UAAA
DETAK	434823N 0765029E	L855, L998	
DETOV	501555N 0731235E	Z553	TMA UAKK

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
DEVNA	500647N 0833619E	M993	TMA UASK
DIBAD	411700N 0675600E	N193, Z554	
DIBUK	472631N 0754536E	N102	TMA UAAH
DIDAL	512908N 0695453E	L994	TMA UACC
DIDOB	544558N 0693143E		TMA UACP
DIDOP	433941N 0633027E	L162	
DIKAM	443650N 0663555E	L855	TMA UAOO
DILGI	504833N 0772303E	L994, P984	
DILIR	493452N 0625056E	N996	
DILNA	441450N 0644911E	L163, P184, T916	TMA UAOO
DILOL	433936N 0512339E		TMA UATE
DILVA	533219N 0693807E		TMA UACK
DIMPA	463633N 0495959E	L864, L988	
DINBO	480029N 0664647E	M993	TMA UAKD
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	TMA UAKD
DITSU	441934N 0743855E	N143	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
DIVNO	454418N 0574000E	M610, N161	RR-2
DODEM	484212N 0773614E	M166, N102, P984, W348	
DODID	520353N 0765234E		TMA UASP
DODOK	451420N 0760011E	L998, N143	
DODOL	423536N 0712617E		TMA UADD
DODUR	412300N 0684800E	L163, M168, P178, Z554, Z578, Z580	
DOGEL	442430N 0525059E	N37, N73	
DOKUS	502539N 0513528E	M158, W324	TMA UARR
DOKUT	524814N 0651230E	L994, L998	TMA UAUU
DOLEP	470047N 0520352E		TMA UATG
DONUP	423759N 0694912E	N102	TMA UAII
DONUR	473022N 0750038E	Z160	TMA UAAH
DOPAN	521213N 0625401E	Z582	TMA UAUU
DOPAR	481831N 0682229E	M75	TMA UAKD
DOSAK	520044N 0781212E	P179, N985	TMA UASP
DOSOR	415702N 0691225E	P178	TMA UAII
DOTAL	440745N 0780904E	Z160, Z370	TMA UAAA
DOZIN	492040N 0721800E	L51, N37, W351	TMA UAKK
EDADU	430032N 0710621E		TMA UADD
EDAKO	504120N 0522510E	M161	TMA UARR
EDANO	510858N 0725804E	L994, Z553, Z746	TMA UACC
EDETO	495808N 0670732E	M168, N987, P574, W332	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
EDIBA	424519N 0682349E	Z380	TMA UAII
EDOLO	465805N 0515702E		TMA UATG
EDOSA	521955N 0771645E		TMA UASP
EKDAD	482100N 0562959E	N996, M161	
EKLAT	432230N 0753237E	Z370	TMA UAAA
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	TMA UARR
EKTOB	501548N 0571055E	L26, L147, L992, M166, M199, M993, N60, N73, Z210	
EKSOZ	531113N 0633346E	L145, L165, L994, M741, N60, N126, Z582, Z584	
EKTUN	422343N 0694857E		TMA UAII
EKTUS	514225N 0765305E	L988, M34	
ELAHA	431932N 0683446E	N147, P178, Z761	
ELENU	435017N 0741838E	L855	
ELSEB	463234N 0675439E	L147, M168	
ELSUT	511342N 0805506E	G121, L143	TMA UASS
EMBEK	502333N 0625947E	M166	
ENETO	494223N 0591154E	L147, T586	
ENONA	480316N 0763820E	N102	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
EPOLI	472234N 0541316E	L51, N996	
ERKIS	484421N 0572756E	L163, L988	
ERMEK	441245N 0661954E	Z380	TMA UAOO
ERNEN	504754N 0642731E	M741, N55	
EROMI	461234N 0762117E	Z160	
ERSAS	532341N 0632455E		TMA UAUU
ERTUZ	441307N 0641019E	L86, L855, T916	
ERUTA	480837N 0604210E	L162	
ESADO	470607N 0760037E	W336, Z243	TMA UAAH
ESKIZ	420521N 0670429E	M741, N102	TMA UAIK
ESUMA	491025N 0765006E	M149, M993	
ETEDA	442024N 0763206E	L143, L998, W333	TMA UAAA
ETELA	481055N 0554657E	N996	
ETORI	503208N 0790845E	L994	TMA UASS
ETOTU	525858N 0633244E		TMA UAUU
ETRAN	463321N 0780521E	N143	
FAZUL	440916N 0613731E	M875, T916	
FINON	450211N 0773900E	P984	TMA UAAT
FODIK	422220N 0692631E	L139, N102, N143, P178, Z380, Z554	
FORMO	470534N 0813933E	Z208, Z243, Z370	
FULSA	453758N 0784751E	L135	TMA UAAT
GAGSU	522335N 0771018E		TMA UASP

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
GAKMA	440610N 0774907E	L135	TMA UAAA
GALKI	511035N 0771814E	P984, T649	
GALSU	461126N 0804952E	N993	TMA UAAL
GAMBU	441106N 0702401E	L145, L855	
GANGA	530026N 0695146E		TMA UACK
GARDU	453219N 0523200E	N996, Z102	
GASBI	422611N 0502811E	A357, N60, N161	TMA UATE RR-2
GASBU	434640N 0791528E	Z315	
GEDNO	502211N 0740032E	N993	
GEDSA	483738N 0624054E	L147, L165, L728, P574	
GEGSI	471634N 0514119E		TMA UATG
GEKSO	431544N 0664228E	M741	
GEKTI	433253N 0771244E		TMA UAAA
GEMBO	500256N 0625600E	L165, N55	
GENDI	431800N 0682200E	L139, M168, N147, Z621, Z632	
GENGA	461625N 0773739E	L26, L143, N143, N147, P984	
GERLI	495334N 0535254E	M56, M161	
GERPU	425739N 0714951E	L728, Z817	TMA UADD
GIGDA	461942N 0801638E	Z370	TMA UAAL
GIGRI	441248N 0521256E	N37	TMA UATE
GIGUR	444920N 0645300E	M75, M610	TMA UAOO
GIKON	531041N 0700822E		TMA UACK

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
GILAK	465738N 0815536E	N161	
GILAT	415707N 0660000E	N102	
GIMRI	434530N 0672931E	L139, N987	
GIREM	473219N 0743709E	N170, W333	TMA UAAH
GIRUL	430826N 0520542E	N73, Q161	
GISEK	443231N 0652559E		TMA UAOO
GISIR	465704N 0665732E	L147, M75	
GISTO	472457N 0524654E	L988	TMA UATG
GITIM	441752N 0662540E	M741, L139, T916	TMA UAOO
GITNA	524459N 0652518E	L994, M168	
GITUD	490032N 0780418E	N102, N993	
GOBDI	545052N 0692749E		TMA UACP
GOBOR	433811N 0681918E	M168, P178	TMA UAIT
GOBSO	505523N 0763521E	L994, M34, T649	TMA UASP
GOGDI	470320N 0525055E	L139	TMA UATG
GOGDO	442524N 0772618E	P984	TMA UAAA
GOLGI	453153N 0533543E	M158, N73	
GOLTU	500404N 0741911E	T649	TMA UAKK
GOMAL	470809N 0795150E	L135, M618, N161	
GOMIR	501042N 0844206E	N143, M618, M993	
GONEL	483912N 0735912E	M993, N170	
GORBO	490316N 0761100E	M166, M993, W348	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
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	
GURGI	472906N 0845308E	Z208, Z727	
GURPI	495618N 0711236E	M166, Z586, Z624	TMA UACC
GUTAN	514024N 0505912E	A368, M161	TMA UARR
IBDAS	473412N 0782432E	L143, Z243	
IBLAN	511832N 0710620E		TMA UACC
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	TMA UACP
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	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
INPAD	432106N 0685105E		TMA UAIT
INREL	424136N 0713019E		TMA UADD
INRIK	500744N 0692030E	N990, M166	
INRIS	512800N 0521856E	A122, M158	
INRUG	420425N 0672311E	N987	TMA UAIK
INRUM	524302N 0740047E	Z584	
INTAL	484345N 0702839E	W351	
IPKOD	495415N 0644617E	N996, M741	
IPLED	432348N 0493000E	G96, N37	TMA UATE RR-8
IPNIL	505034N 0643305E	N55, N167	
IPRAR	404431N 0683447E	M168	
IRGIT	485220N 0750436E	M993, Z160	
IRLEM	505353N 0672936E	N987	
ITAKA	435224N 0493000E	L864, N154, R227	TMA UATE
IZIMA	432236N 0770503E	L135, L998, N170, P984, Z315, Z370	
KABIZ	475552N 0802659E	L135, M166, N143, N993, Z243, Z584	
KANET	521235N 0770542E	L51, M34, N985, N996, P179, P984, Z584	
KANZI	502504N 0742336E	W351	
KARIM	431136N 0674737E	N147, Z380, Z579	TMA UAIT
KIZMI	425214N 0711654E	L145, N143, Z580, Z817	
KEDUL	511959N 0514052E		TMA UARR
KEKAM	512300N 0771529E	P984	TMA UASP

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
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	TMA UACC
KODUM	475556N 0544537E	L988, N996, Z210	
KOKAV	542244N 0673738E	N60, N170, W355	TMA UACP
KOKON	500958N 0702609E	M75	TMA UACC
KOKZA	450622N 0782548E	L135, N126, N993, Z160	
KOLAM	423702N 0702540E	N143, Z580	TMA UAII
KOLIB	454047N 0512848E	N60, W324	
KOLUR	515901N 0704103E	N170, N990, W333	TMA UACC
KOMOS	424517N 0713537E		TMA UADD
KOMRE	455641N 0572649E	N37	
KONAT	452754N 0774805E	P984, Z160, Z584	TMA UAAT
KONEK	460631N 0750443E	M149	TMA UAAH
KORAG	435134N 0560000E	N102, N154	
KUDUG	433216N 0675457E	L139	TMA UAIT
KUGIR	440625N 0705906E	L855, N147	
KUGUN	493139N 0685550E	N990	
KULHI	431211N 0730422E	Z817	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
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	
LADOG	512959N 0713440E	M75, Z588	
LAGMO	514954N 0791500E	L988, M149, N985, P179, T649	RR-3
LAGUK	440528N 0795517E	N126	
LAKEL	431216N 0765439E	L135, P984	TMA UAAA
LALAS	485941N 0755014E	M34, M993	
LALKA	530017N 0683140E	T586	TMA UACK
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	TMA UAUU RR-6
LANUK	493317N 0623239E	N996	
LARBA	424922N 0683725E	Z632	TMA UAII, TMA UAIT
LAROZ	451010N 0521956E	M610	
LARPI	501721N 0560345E	M166	TMA UATT
LASDO	462443N 0755651E	Z160	TMA UAAH

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
LASNA	492602N 0815315E	L135	TMA UASK
LASPA	534852N 0684219E	N170	TMA UACK
LATKO	522508N 0664427E	L994, T522, T586	
LATNU	445345N 0612553E	L985, M161, N167	
LATRI	475217N 0843229E	Z208, Z727	TMA UASZ
LAVLO	545546N 0692355E		TMA UACP
LEDGI	510855N 0513238E	M158, M161, M166	
LEDPO	444735N 0654840E		TMA UAOO
LEGLA	432826N 0771654E		TMA UAAA
LEKLU	450701N 0754903E	N143, N170	
LEMDU	470002N 0674228E	N987	TMA UAKD
LENTA	514854N 0602236E	L993, N60	
LEPRA	532811N 0725005E	P179	
LEPSI	465750N 0534950E	L139, N996	
LESNA	501302N 0725127E	Z588	TMA UAKK
LETIK	551200N 0683200E	A303, N987	TMA UACP
LIGMO	504539N 0710837E	M75, T523, Z746	TMA UACC
LIKRU	431730N 0765447E		TMA UAAA
LIMTO	440138N 0684518E	M610	
LIPSI	461808N 0784001E	M618, Z584	
LIRMO	530945N 0692524E		TMA UACK
LIRNA	501159N 0812203E	L994, W361	TMA UASS, TMA UASK

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
LITBA	501849N 0582332E	M166	TMA UATT
LITNO	492856N 0730737E		TMA UAKK
LODEZ	531715N 0623004E	G111, L985, L994	
LOGTO	483204N 0561202E	L992, M161, T586	
LOKOZ	470838N 0514805E	L51, L139, L988, M158, N60	
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	TMA UACK
LULKE	485932N 0522700E	Z102	
LUMUD	495933N 0760202E	W352	
LUMUR	430639N 0512953E	Z581	TMA UATE
LUNOV	493800N 0801801E	W360, Z584	TMA UASS
LUREL	501613N 0790803E	N37, W352	TMA UASS
LURIT	432931N 0761943E		TMA UAAA
LURUM	494127N 0564322E	N73	TMA UATT
LUSAM	511128N 0515127E		TMA UARR
LUSIR	510229N 0511911E		TMA UARR
LUSUT	474510N 0680213E		TMA UAKD

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
LUTEK	482853N 0730459E	M993, Z624	
LUZMI	422426N 0681456E	M168	
MADEV	471857N 0770328E	N161, W336, Z243	
MAGOL	425338N 0685144E	L139, P178	TMA UAII, TMA UAIT
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	TMA UAII
MIKSA	511608N 0784241E	M149, Z584	
MILSO	452519N 0604609E	M161, M610	RR-2, RR-5
MIMKA	502620N 0693328E	N990	
MIMRI	433808N 0634822E	L86, M75, P184	
MIRGA	452416N 0693051E	L145	
MISPU	435002N 0512237E		TMA UATE

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
MOGTU	485209N 0543832E	N60	
MOMUL	411524N 0664024E	P180	
MONEG	523627N 0671849E	N993, T586	
MULTA	510442N 0565042E	A360, M199, M875	TMA UATT
MUZEL	433756N 0692447E	N147	
NAGAZ	490336N 0504220E	L736	
NARUR	513200N 0641130E	M741, T586	
NASAB	435310N 0504810E		TMA UATE
NASIP	430347N 0715332E	N143	TMA UADD
NASMO	451929N 0782626E		TMA UAAT
NATUS	445208N 0643650E	M610	TMA UAOO
NEBSO	474925N 0675717E		TMA UAKD
NEGEZ	421758N 0694640E		TMA UAII
NEGMI	511245N 0714553E		TMA UACC
NELOL	462733N 0530638E		CTR UATZ
NELTI	541942N 0641630E	L165, M168	TMA UAUU
NEMEG	491804N 0831242E	M618, Z727	
NEMKU	485904N 0734736E	N170, W333	TMA UAKK
NEPIL	434133N 0522455E	N73, N193, Z102	TMA UATE
NEPLA	470920N 0740031E	L26	TMA UAAH
NESDO	454926N 0544739E	L992	
NESUN	460123N 0801738E	N993	TMA UAAL

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
NETAT	403653N 0682413E	M168	
NEZRA	425733N 0663541E	N147	TMA UAIK
NIGET	434124N 0771126E	P984, T916	TMA UAAA
NIKNA	462557N 0513838E	N60, W324	TMA UATG
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
NOGBU	435220N 0510352E	L736, N37, N60, N154, N193, N996, P574, Q161, Z581	
NOKNA	495154N 0811139E	M993	TMA UASK
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	TMA UAAH

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	TMA UASS
ODAMA	503331N 0753513E	T649	
ODATU	505427N 0710518E		TMA UACC
ODILA	494259N 0575122E	L728, M199, M875	TMA UATT
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
OGLAB	465259N 0745902E	L26, L998, M34, M149, N102, N170, Z160, Z243	
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

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
OKESO	411051N 0673608E	Z554	
OKMUR	424815N 0791158E	L138	
OKRAT	433034N 0765506E		TMA UAAA
OKSOL	495436N 0824319E		TMA UASK
OLAPU	475146N 0514531E	M158, W324	TMA UATG
OLGAS	520510N 0714507E	M75	TMA UACC
OLINA	451645N 0615140E	L165, M610	
OLKUM	530441N 0741300E	P179	
OMITO	501033N 0581909E	L26	TMA UATT
OSBOR	410054N 0683059E	Z753	
OSMOG	473140N 0673643E		TMA UAKD
OSNER	482119N 0785409E	M166, L143	
OSROL	504818N 0700112E	L988, N996, W358, Z624	TMA UACC
OSTAG	502223N 0803234E		TMA UASS
ORTEG	444145N 0653349E	L139, L855, M610, N990, P184, Z380	
OTMAS	460419N 0530034E	M158, N996	
PABRI	451455N 0704239E	L147, T524	
PAVEL	425947N 0664642E	L163, M741, N147, Z753	TMA UAIK
PEKIR	433539N 0770931E	M610, P984	
PEMOL	464841N 0551720E	L139, L992	
PETEM	480656N 0553022E	N73, N996	
PETEP	544703N 0691309E	N60, N987, P179	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
PETOR	535420N 0713136E	P179, T586	
PIGAL	433428N 0780356E	M610, T916	TMA UAAA
PIKAN	425300N 0493000E	A80, N996	TMA UATE
PILEL	425035N 0731336E	L728	
PIMIB	501013N 0573110E		TMA UATT
PIRIM	444808N 0511741E	N60, Q198, W324	TMA UATE
PIVAL	514549N 0775050E	L988, W361, Z584	TMA UASP
POBEK	432534N 0672754E	N987, Z380	TMA UAIK
POBUR	533800N 0721400E	M75, P179, Z553	
POKAT	432530N 0694508E	Z621	
POMNI	510638N 0493240E	L864	
RABEN	502602N 0795343E		TMA UASS
RALAN	440812N 0493000E	A924, Z581	TMA UATE
RAVNI	504030N 0615807E	L985, T586, Z582	
RAVOB	404718N 0683330E	L143	
RAZBI	425954N 0673533E	Z621	TMA UAIK
REBDA	414708N 0690515E	P178, Z632	
REGMU	435005N 0760012E	L143, T916, Z589	TMA UAAA
REGPI	485632N 0650629E	M741, Z164	
REKRU	531530N 0701102E		TMA UACK
RELGE	435304N 0530630E	N154, N161	
RELGO	500234N 0701730E	M75, M166	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
RELRU	424925N 0681812E	M168, Z380	TMA UAIT
REMOL	442704N 0681238E	L855, M168	
REMTI	470757N 0670843E	M75	TMA UAKD
RENPA	524400N 0701548E	Z588	TMA UACK
RENPI	463437N 0522656E	M158, Z102	TMA UATG
REPLA	452358N 0533011E	N73	
RESBA	462255N 0621359E	L165	
RESDO	475618N 0595446E	M199	
REZEK	421933N 0691021E		TMA UAII
RIBMO	442238N 0520908E	P574	TMA UATE
RIGDO	495937N 0581049E	L147	TMA UATT
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	TMA UACK
RIMPU	500158N 0823031E	L135, L994, M993, Z727	
RIMUN	502651N 0570524E		TMA UATT
RINET	443026N 0663402E	M610	TMA UAOO
RINIT	435305N 0535549E	L992, N154	
RINUR	482255N 0681040E	N990	TMA UAKD

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
RISAD	441324N 0761312E	N170	TMA UAAA
RISAS	435854N 0715247E	L855, N102	
RISUL	464525N 0773723E	P984	
RITAB	454308N 0754239E	L998, W333	
RITAL	414130N 0671206E	N143, M741	
RITET	464937N 0623417E	N161, N167	
RITMU	441806N 0723603E	L147, N102	
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	TMA UACK
ROHIL	511738N 0754034E	L51, W351	TMA UASP
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	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
ROTEP	423106N 0691449E		TMA UAII
RUDAL	512154N 0675222E	L998, N987	
RUDIZ	471122N 0790856E	N143, N161	
RUGUS	474250N 0591219E	L51, L163, M875	
RULAD	433001N 0804359E	M610, N126	RR-2
RUSEK	424549N 0690116E	L139, P178	TMA UAII
RUTIL	421053N 0510433E	P574, Z102	
SANIR	505230N 0572942E	G552, L992	TMA UATT
SANUR	455717N 0612446E	L139, L985	
SARIN	465156N 0825317E	M166, N161	RR-1
SEHAL	494940N 0721215E	M166	TMA UAKK
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	TMA UAAH
SUBOL	474716N 0645433E	L51, L147	
SUGUM	432507N 0771027E		TMA UAAA
SUKUR	494431N 0661957E	L145, P574	
SULET	430602N 0743503E	L143	
SULIB	494914N 0742808E	N37, W352	TMA UAKK

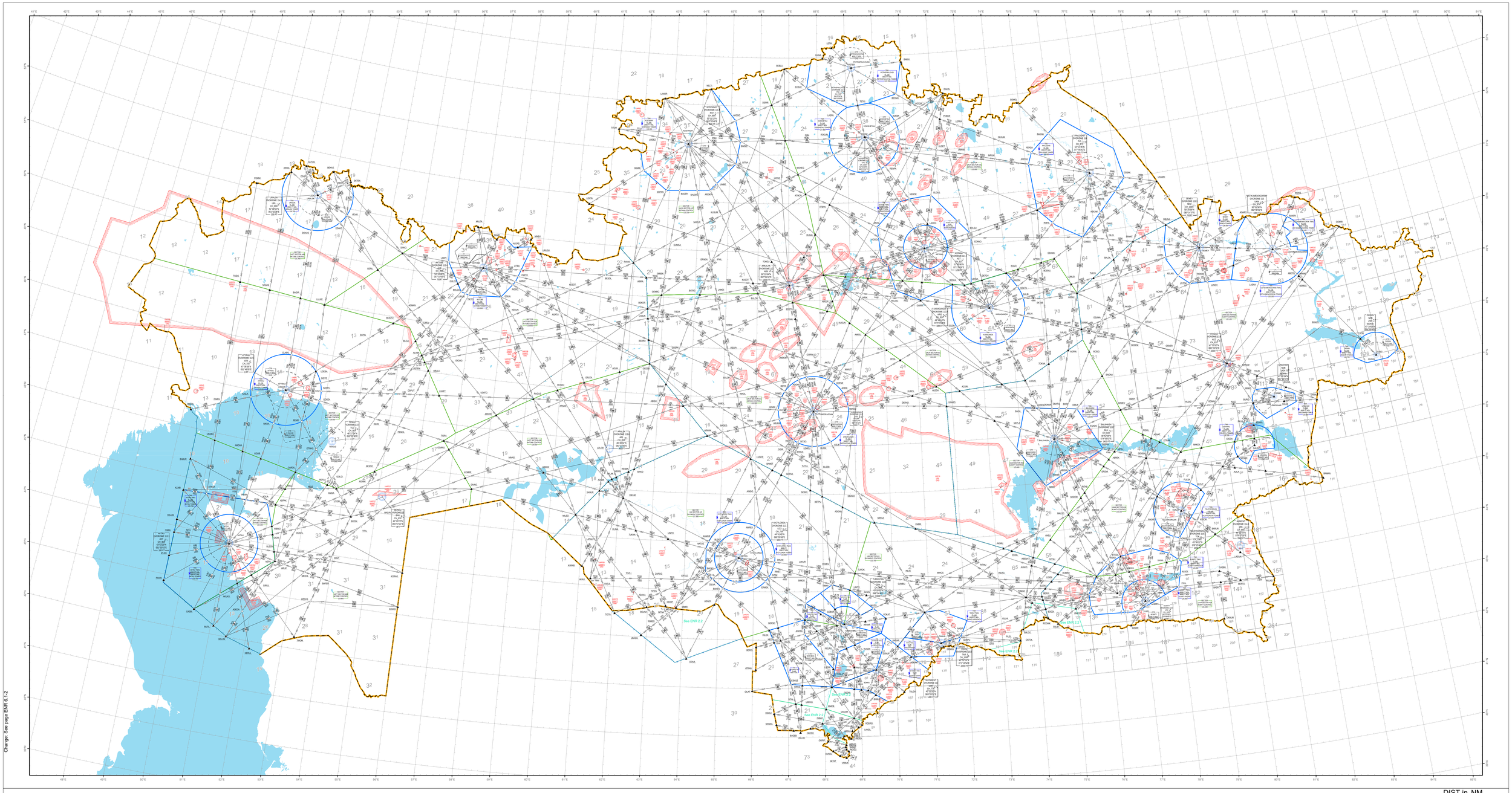
Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
SURAR	481318N 0631317E	N167	
SUTUR	501837N 0711714E	Z586	TMA UACC
TAGAL	485638N 0763825E	M149, M166	
TENLU	495139N 0733246E		TMA UAKK
TENRO	445953N 0741408E	M34, N102, N147	
TETKI	540020N 0692425E	N987, W333	TMA UACK, TMA UACP
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, L855, M610, Z817	TMA UAAA
TIRBA	433456N 0773031E	L135, M610, Z315, Z370	TMA UAAA
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	TMA UAUU 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

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
TOMZU	504824N 0662645E	W332	
TONLA	421334N 0681508E	N102	TMA UAIK, TMA UAII
TOZIS	490511N 0494538E	L864	
TOZLI	441054N 0621817E	M161, T916	
TUGLA	465142N 0505006E	L736, L988	TMA UATG
TUKNA	451058N 0623308E	L162, M610	
TUKTO	441136N 0760830E	Z583	TMA UAAA
TULFA	500354N 0764539E	W352	
TULGA	415347N 0701204E	L139	TMA UAII
TULPI	461318N 0752358E	L998, W333	TMA UAAH
TUMIN	530655N 0693301E		TMA UACK
TURIK	423108N 0700422E	N143	TMA UAII
TUROK	442214N 0685447E	L728, L855	
TUSEP	503136N 0680751E	L988, L993, N126, N996, W358, Z583, Z746	
TUTUL	463825N 0674057E	L147, N987	
TUXOK	543701N 0685814E		TMA UACP
UBAGU	430228N 0625120E	M75	
UDATO	473801N 0573755E	L51, M161	
UDEBA	473802N 0523443E	N60, Z102	TMA UATG
UDEKA	455252N 0770006E	N143, Z160	
UGLUK	484125N 0555642E	M161, N73	
ULKAP	490729N 0755332E	M34, M166	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
ULRIP	474743N 0634635E	L51, N37	
ULSET	530027N 0720230E	M75, W361, Z584	
ULSON	435244N 0522039E	N154	TMA UATE
UMDEM	485611N 0665322E	L26, L145	
UMIRO	441421N 0763537E	L998, Z584	
UMKAS	414012N 0672149E	N987	
UMLOD	432218N 0750715E	L143, M618	
UNABO	474352N 0714935E	N161, L26	
UNADA	433551N 0764831E	M610, N170	
UNIBE	522328N 0643445E	W332	TMA UAUU
UNITO	450238N 0632952E	L163, M610	
UNKAB	525439N 0724332E	Z584	
UNLOM	501425N 0740834E	L51, W351	TMA UAKK
UNREN	423755N 0712502E		TMA UADD
URABU	455108N 0500407E	L864	
URUSU	504142N 0585724E	L162	
USUGA	433600N 0761934E	M610, T524, Z583, Z589	TMA UAAA
UTEMU	493757N 0671237E	N987	
UTORI	451248N 0535555E	P574	
UVASU	404236N 0681306E	L143	
UVTOK	493924N 0794524E	L143, M993	TMA UASS
UZLOR	464915N 0613205E	L162, L985	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
VAGEM	520159N 0710114E	Z588	TMA UACC
VAKES	433230N 0510000E		TMA UATE
VAMRI	501330N 0681645E	M166, P574	
VAMUK	403400N 0683430E	L170	
VETUB	504107N 0701250E	P574, Z624, Z746	TMA UACC
VETUS	532638N 0695329E		TMA UACK
VEVIK	505201N 0523529E	M56, M166, Z102	TMA UARR
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/RU/AIS
ZURGO	441233N 0631012E	L162, T916	
ZUSLA	423838N 0675917E	Z579	

ENROUTE CHART



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

DIST in NM
ALT and ELEV in FT
BRG are MAG

Legend

Reporting point

- On Request
- Compulsory
- Aerodrome

Radionavigation aids

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

Airspace

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

Area minimum altitude (AMA)

Example: 18600 FT - 18^{6}

WGS84
Lambert Conformal Conic Projection
The chart is True North orientated

CHANGES:

ROUTE	SEGMENT	MOCA
M610	LIMTO : AKSOZ	3600 FT
M610	AKSOZ : ARBOL	3200 FT
M75	ASTAS : LADOG	3200 FT
M75	LADOG : OLGAS	2300 FT
N147	NEZRA : PAVEL	1700 FT
N987	GORIM : UTEMU	3800 FT
N987	UTEMU : EDETO	2800 FT
N987	ARHIG : IRLEM	2400 FT
N987	IRLEM: RUDAL	2200 FT
N987	INRUG : ROSIM	1900 FT
W332	ARHIG : TOMZU	2600 FT
W332	TOMZU : UNIBE	2200 FT
Z588	LESNA : LADOG	4300 FT
Z588	LADOG : VAGEM	2500 FT

Add new designated points(29):
AKSOZ, ALZIS, ARHIG, ARNIR, ASTAS, DAKOZ, EKSOZ, EKTOB, ELAHA, FODIK, FORMO, GURGI, INRUG, IRLEM, KABIZ, KANET, KIZMI, KOKZA, LADOG, LEDGI, LOKOZ, NEZRA, NOGBU, OGLAB, ORTEG, PETEP, RIMPU, TOMZU, UTEMU.

*more information in AIP ENR 3 ATS ROUTES.

AD 1.5 STATUS OF CERTIFICATION OF AERODROMES

1 The table below shows the aerodromes certificates and their validity periods.

2 Accepted exceptions, exemptions and restrictions for each aerodrome have been published in AIP AD 2.23.

Aerodrome name Location indicator	Certification date	Certificate validity	Remarks
1	2	3	4
AKTAU UATE	03.07.2024	28.08.2026	Nil
AKTOBE UATT	23.09.2025	17.09.2027	Nil
ALMATY UAAA	25.06.2025	28.10.2027	Nil
ASTANA UACC	22.12.2024	10.09.2027	Nil
ATYRAU UATG	10.10.2025	09.10.2028	Nil
BALKHASH UAAH	24.02.2025	30.04.2026	Nil
BOZHBAN UAIK	06.02.2026	30.09.2026	Nil
KARAGANDA UAKK	24.09.2025	24.09.2027	Nil
KOKSHETAU UACK	12.07.2024	24.07.2026	Nil
KOSTANAY UAUU	24.10.2024	23.10.2026	Nil
KYZYLORDA UAOO	11.10.2024	09.10.2026	Nil
PAVLODAR UASP	02.08.2023	04.08.2025	Nil
PETROPAVLOVSK UACP	13.11.2025	12.11.2027	Nil
SEMEY UASS	22.10.2025	17.11.2028	Nil
SHYMKENT UAII	29.04.2024	24.04.2026	Nil
TALDYKORGAN UAAT	16.07.2025	17.07.2026	Nil
TARAZ UADD	21.08.2025	22.10.2027	Nil

Aerodrome name Location indicator	Certification date	Certificate validity	Remarks
1	2	3	4
TENGIZ UATZ	17.07.2025	27.10.2028	Nil
TURKISTAN UAIT	02.06.2025	01.10.2027	Nil
URALSK UARR	29.10.2025	31.10.2028	Nil
URDZHAR UASU	22.11.2024	05.06.2026	Nil
USHARAL UAAL	10.10.2025	03.07.2026	Nil
UST-KAMENOGORSK UASK	11.02.2025	20.08.2027	Nil
ZAISAN UASZ	05.06.2025	04.09.2026	Nil
ZHEZKAZGAN UAKD	19.12.2023	30.06.2026	Nil

For the most up-to-date information on aerodrome certification status, including temporary extensions or changes, refer to applicable NOTAMs.

AD 2 AERODROMES

UATE AD 2

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

UATE AD 2.1 Aerodrome Location Indicator And Name

UATE - AKTAU

UATE AD 2.2 Aerodrome Geographical And Administrative Data

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

UATE AD 2.3 Operational Hours

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

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

UATE AD 2.4 Handling Services And Facilities

1	Cargo-handling facilities	Handling up to 35 tonnes weight
2	Fuel/oil types	TS-1 OIL: Nil
3	Fuelling facilities/capacity	4 Trucks (22м³)/ 400 L/min
4	De-icing facilities	Combined watering and washing machine
5	Hangar space for visiting aircraft	Not available for visiting aircraft
6	Repair facilities for visiting aircraft	Nil
7	Remarks	Nil

UATE AD 2.5 Passenger Facilities

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

UATE AD 2.6 Rescue And Fire Fighting Services

1	AD category for fire fighting	CAT A7
2	Rescue equipment	3 fire trucks Σ = 28000l. (water) + 1750l. (foamer) and medical kit
3	Capability for removal of disabled aircraft	Equipment necessary for evacuation on a contractual basis: trawl and crane, with a lifting capacity of 100 tons, capability for removal aircraft weighing up to 50 tons. Equipment delivery takes at least 3 hours Phone: +7 (7292) 609621 Phone: +7 771 3335656 Email: uate@aktau-airport.kz

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	3348 X 300	90 X 160	Nil	AVBL	Turn Pad LEN 130 m, the total width of the turn pad and runway 90 m. REF AD 2.24.1

UATE AD 2.13 Declared Distances

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

UATE AD 2.14 Approach And Runway Lighting

RWY Designator	APCH LGT type, LEN, INTST	THR LGT colour, WBAR	VASIS, (MEHT), PAPI	TDZ, LGT LEN	RWY Centre Line LGT Length, spacing, colour, INTST	RWY edge LGT LEN, spacing, colour, INTST	RWY End LGT colour, WBAR	SWY LGT LEN, colour	Remarks
1	2	3	4	5	6	7	8	9	10
11	CAT I (PALS) 900 M LIH	GRN Nil	PAPI LEFT/3°	Nil	Nil	3048m, spacing 60m, 0-2452 white, last 600m yellow	RED Nil	Nil	Nil
29	CAT I (PALS) 900 M LIH	GRN Nil	PAPI LEFT/3°	Nil	Nil	3048m, spacing 60m, 0-2452 white, last 600m yellow	RED Nil	Nil	Nil

UATE AD 2.15 Other Lighting, Secondary Power Supply

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

UATE AD 2.16 Helicopter Landing Area

1	Coordinates TLOF or THR of FATO Geoid undulation	435129N 0510540E -39 FT
2	TLOF and/or FATO elevation	TWY-B — 21 м TWY-C — 19 м
3	TLOF and FATO area dimensions, surface, strength, marking	30 × 30 м, CONC+ASPH, PCN 52/F/C/W/T, no marking
4	True BRG of FATO	115/295
5	Declared distance available	Nil
6	APP and FATO lighting	Nil
7	Remarks	Helicopter take-off and landing conducted in helicopter mode are performed on the runway at the intersection points of the centre lines of TWY B and TWY C with the runway.

UATE AD 2.17 ATS Airspace

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

UATE AD 2.18 ATS Communication Facilities

Service designation	Call sign	Frequency	SATVOICE number(s)	Logon address	Hours of operation	Remarks
1	**2**	**3**	**4**	**5**	**6**	**7**
ATIS	AKTAU ATIS (EN) AKTAU ATIS (RU)	130,1 MHZ 126,2 MHZ	Nil	Nil	H24	EN, RU

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

UATE AD 2.19 Radio Navigation And Landing Aids

Type of aid, MAG VAR, ILS Classification, Type of supported OP (for VOR/ILS/ MLS, give declination)	ID	Frequency, Channel number	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Service volume radius from the GBAS reference point	Remarks
1	2	3	4	5	6	7	8
ILS LOC 11 GP 11 DME 11	IAU IAU	109.5 MHZ 332.6 MHZ CH 32X	H24	435053.5N 0510659.5E 435201.6N 0510444.7E 435201.6N 0510444.7E	 100 FT	Nil	Nil
ILS LOC 29 I/D/2 GP 29 I/C/2 DME 29	ITA ITA	111.1 MHZ 331.7 MHZ CH 48X	H24	435218.6N 0510355.5E 435118.8N 0510616.6E 435118.8N 0510616.6E	 100 FT	Nil	Nil
NDB	T	326 KHZ	H24	435052.6N 0510701.8E	Nil	Nil	Nil
DVOR/DME (8°E /2021)	AKT	113.3 MHZ CH 80X	H24	435220.3N 0510351.9E	100 FT	Nil	Nil

UATE AD 2.20 Local Aerodrome Regulations

1. Airport regulations

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

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

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

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

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

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

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

prohibited.

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

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

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

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

- at parking stand 199A

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

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

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

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

Aircraft with index “F” are accepted upon prior request.

For aircraft with code letter F, taxiing shall be performed under own engine power.

Follow-me guidance for aircraft with code letter F is provided from the taxiway to the aircraft stand..

2. Taxiing to/from aircraft stands.

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

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

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

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

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

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

3. Limitations during taxiing

On RWY 11/29, aircraft shall perform 180° turns in accordance with the markings on the turn pads, except for aircraft of classes 3 and 4 and helicopters.

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

4. Take-off and landing

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

6. Procedures in low visibility conditions

LVP are introduced when RVR is less than 550 m.

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

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

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

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

7. Helicopter flights

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

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

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

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

Helicopters take off from the airfield after:

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

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

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

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

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

UATE AD 2.21 Noise Abatement Procedures

NIL

UATE AD 2.22 Flight Procedures

1. General

RWY 11/29 approved for CAT I operations.

2. Low Visibility Procedures.

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

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

The ATC informs flight crew about:

•any changes in the operational status of radio and lighting equipment;

•changes of surface wind;

•changes of RVR;

•changes of ceiling (vertical visibility).

3. Arriving Aircraft

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

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

4. Departing Aircraft

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

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

Air traffic service in the control zone of the aerodrome is carried out by the controller of the “Tower” ATC unit. Flight altitudes are calculated by the aircraft crew in accordance with the Civil Aviation Flight Rules of the Republic of Kazakhstan. The functions of Air traffic service does not include ground collision avoidance. The aircraft crew shall ensure that the clearance issued by the ATS unit in this regard is safe. VFR flights at altitudes below 3000 feet in the control zone are performed at the altitudes indicated in the flight plan or requested by the aircraft crew.

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

For VFR flights, the aerodrome has a flight circle (left / right) at an altitude of 500 feet. The air traffic controller of the “Tower” ATC unit is determine and report which flight circle is in use.

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

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

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

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

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

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

№	Waypoint name (visual reference)	Geographical coordinates	Radial (mag.) and distance from NAVAID (ARP)	Remarks
5	OZENI (Road SE from AKT)	N433633 E0513038	122° 25.0 nm AKT DVOR/DME	Entry/exit
6	OIMAS (Road SE from AKT)	N433227 E0512447	135° 25.0 nm AKT DVOR/DME	Entry/exit
7	ZALIV (Settling ponds SE of AKT)	N434252 E0511858	124° 14.5 nm AKT DVOR/DME	Holding
8	KARER (Quarry east of AKT)	N435039 E0512304	090° 14.0 nm AKT DVOR/DME	Holding
9	DUNGA (Oil fields north of AKT)	N440014 E0510412	355° 7.9 nm AKT DVOR/DME	Holding

6. Continuous Descent Operation

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

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

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

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

CDOs are authorized only when following conditions are respected:

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

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

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

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

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

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

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

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

As a portion of the procedure consists of vectoring, the specific distance to RWY threshold is not known to a

pilot prior to start of the CDO. In such cases, ATC will provide the pilot with an estimate of the flight track-miles to the RWY threshold as distance-to-go information. The pilot will use this information to determine the optimum descent rate to achieve a CDO.

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

7. Continuous Climb Operation

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

UATE AD 2.23 Additional Information

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

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

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

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

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

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

UATE AD 2.24 Charts Related To An Aerodrome

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

UATE AD 2.25 Visual segment surface (VSS) penetrations

No penetrations

UAAA AD 2

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

UAAA AD 2.1 Aerodrome Location Indicator And Name

UAAA - ALMATY

UAAA AD 2.2 Aerodrome Geographical And Administrative Data

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

UAAA AD 2.3 Operational Hours

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

12	Remarks	Nil

UAAA AD 2.4 Handling Services And Facilities

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

UAAA AD 2.5 Passenger Facilities

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

UAAA AD 2.6 Rescue And Fire Fighting Services

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

UAAA AD 2.7 Seasonal Availability - Clearing

1	Types of clearing equipment	10 plow-brush equipment with turbo pipes, 3 rotors, 3 wind machines, 5 spraders (reagent sprayers), 5 pushers for cleaning the snow shafts, 1 sidewalk cleaning machine per runway, 2 graders, 2 bulldozers, 1 snow rolling machine, Other modern snow removal equipment. The anti-icing granular reagent “NKMM” and the anti-icing liquid reagent NORDWEIF of the NORM brand are used to remove ice from airfield coatings.

2	Clearance priorities	1. RWY 2. TWY 3. Stands
3	Remarks	(Seasonal availability: All seasons, caution advised in winter during snow conditions) At surface condition code 3 and below: RWY 05R/23L closed

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

1	**Apron surface and strength**	**APRON**	**STANDS**	**SURFACE**	**STRENGTH**
		1	3-6	CONC+ASPH	PCN 61/F/C/W/T
			12	CONC+ASPH	PCN 55/R/B/X/T
		2	201,202,203	CONC	PCN 56/R/B/W/T
			204/204L/204R 205/205L/205R	CONC	PCN 71/R/B/W/T
		3	29-31, 31A	CONC+ASPH	PCN 24/R/B/X/T
			32A, 32-36	CONC+ASPH	PCN 26/R/B/X/T
			26-28	CONC+ASPH	PCN 33/R/B/X/T
		4	1-2	CONC+ASPH	PCN 21/F/C/W/T
			61-62	CONC+ASPH	PCN 24/F/C/X/T
			63-64	CONC+ASPH	PCN 45/F/C/X/U
			42A, 42-46A	CONC+ASPH	PCN 12/F/C/X/T
		5	47-50	CONC+ASPH	PCN 66/F/C/X/T
			51-56	CONC+ASPH	PCN 51/R/B/X/T
			57-60, 59A, 60A, 71-73	CONC+ASPH	PCN 55/R/B/W/U
			101A, 101B, 102, 102A, 102B	CONC	PCN 70/F/C/X/T
		6	601,602	CONC	PCN 75/R/A/X/T
			601A, 601B, 602A, 602B	CONC	PCN 92/F/C/X/T
			603, 604, 605	CONC+ASPH	PCN 69/F/C/X/T
			603 A/B-605 A/B	CONC+ASPH	PCN 69/F/C/X/T
			606, 607, 607A/B	CONC+ASPH	PCN 56/R/A/X/T
2	**Taxiway width, surface and strength**	**TWY**	**WIDTH (M)**	**SURFACE**	**STRENGTH**
		A	22.5 M	CONC+ASPH	PCN 69/R/B/W/T
		B	23 M	CONC+ASPH	PCN 66/F/C/X/U
		C	22.5 M	CONC+ASPH	PCN 55/R/B/X/U
		D	37 M	CONC+ASPH	PCN 71/F/C/X/T
		E	24 M	CONC+ASPH	PCN 71/F/C/X/T
		F	23 M	CONC+ASPH	PCN 66/F/C/X/T
		H	45 M	CONC+ASPH	PCN 66/F/C/X/U
		K	25 M	CONC+ASPH	PCN 55/R/B/X/U
		L	25 M	CONC+ASPH	PCN 81/F/C/X/T

3	**Altimeter checkpoint location and elevation**	THR RWY 23R - 677,3 m/2222,1ft THR RWY 23L - 681,6 m/2236,2 ft
4	**VOR checkpoints**	Nil
5	**INS checkpoints**	Nil
6	**Remarks**	Nil

UAAA AD 2.9 Surface Movement Guidance And Control System And Markings

1	Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands	Guidance sign board at entrance of RWY, guidance sign designating taxiways and apron Cat IIIB - RWY 23R: parking guidance system via TWY K at aircraft stand 6. RWY 23L: parking guidance system via TWY A at aircraft stand 4 or 5.
2	RWY and TWY markings and LGT	Markings of thresholds, touchdown zones, centre line, fixed distance markers, RWY edges, RWY designations, taxi holding positions, taxiway centre lines, stands
3	**Stop bars**	TWY: A, B, C, D, K, L, F, E, H. RED
4	**Other runway protection measures**	Nil
5	Remarks	RWY23L: centerline lights on exit from RWY to TWY A and lights on rapid exit from RWY to TWY C. Yellow / Green. RWY23R: centerline lights on exit from RWY to TWY K and TWY L and lights on rapid exit from RWY to TWY D. Yellow / Green. TWY A: Holding lights in front of ILS RWY05L zone. Yellow.

UAAA AD 2.10 Aerodrome Obstacles

NIL

UAAA AD 2.11 Meteorological Information Provided

1	**Associated MET Office**	Meteorological service Almaty Phone: +7 (727) 2572803 Phone: +7 (727) 2574029
2	**Hours of service MET Office outside hour**	H24
3	**Office responsible for TAF preparation: Periods of validity**	Meteorological service Almaty 24 HR (0024, 0606, 1212, 1818)
4	**Trend forecast Interval of issuance**	TREND 30 min
5	**Briefing/consultation provided**	Personal consultation (English, Russian)
6	**Flight documentation/languages used**	TAF, METAR, SPECI, SIGMET, GAMET, AIRMET English
7	**Charts and other information AVBL for briefing or consultation**	S, U85, U70, U50, U40, U30, U25, U20, prognostic charts of wind and temperature at flight levels (FL), max wind, T, prognostic charts P85, P70, P50, P40, P30, P25, P20, SWH, SWM of WAFC, SWM+SWH, SWL of Kazakhstan;
8	**Supplementary equipment AVBL for providing information**	Doppler weather radar (METEOR-635C)
9	**ATS units provided with information**	Briefing, TWR, APP, ACC

10	**Additional information**	AIS “MeteoBriefing” for preparation of flight documentation and for meteorological service of crews distantly

UAAA AD 2.12 Runway Physical Characteristics

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

SWY dimensions	CWY dimensions (M)	Strip dimensions (M)	RESA dimensions (M)	Location and description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
Nil	300 X 150	4700 X 283	90 X 150	Nil	AVBL	The strip RWY 05R/23L not symmetrical extend transversely axis direction RWY at a distance: 150m fm the NW side, 133m fm the SE side RWY 05R/23LTurn Pad LEN 120 m, the total width of the turn pad and TWY «A»105 m REF. AD 2.24.1 RWY 05R/23LTurn Pad LEN 110 m, the total width of the turn pad and TWY «F»75 m REF. AD 2.24.1 Turn Pad LEN 110 m, the turn pad and runway 75 m REF. AD 2.24.1 RWY 05R/23LTurn Pad LEN 120 m, the total width of the turn pad and TWY «E»65 m REF. AD 2.24.1 RWY 05L/23R end 23 R. The length of the turn pad area is 150 m, the width of the turn pad area is 95 m. AD 2.24.1
Nil	Nil	4700 X 283	90 X 150	Nil	AVBL	
Nil	300 X 150	4800 X 300	90 X 150	Nil	AVBL	
Nil	Nil	4800 X 300	90 X 150	Nil	AVBL	

UAAA AD 2.13 Declared Distances

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

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

UAAA AD 2.14 Approach And Runway Lighting

RWY Designator	APCH LGT type, LEN, INTST	THR LGT colour, WBAR	VASIS, (MEHT), PAPI	TDZ, LGT LEN	RWY Centre Line LGT Length, spacing, colour, INTST	RWY edge LGT LEN, spacing, colour, INTST	RWY End LGT colour, WBAR	SWY LGT LEN, colour	Remarks
1	2	3	4	5	6	7	8	9	10
05 R	CAT I (PALS) 720 M LIH	GRN Nil	PAPI LEFT/3°	Nil	4400m, spacing 15m, 0-3500m white, 3500-4100m red/ white, 4100-4400m red LIH	4400m, spacing 60m, 0-3798m white, last 600m yellow LIH	RED Nil	Nil	(Warning: ALS RWY 05 shortened to 720m)
23 L	CAT III (PALS) 900 M LIH	GRN Nil	PAPI LEFT/3°	900 m	4400m, spacing 15m, 0-3500m white, 3500-4100m red/ white, 4100-4400m red LIH	4400m, spacing 60m, 0-3798m white, last 600m yellow LIH	RED Nil	Nil	Running impulse lights combined with approach lights, from 900 to 300 m from the threshold

RWY Designator	APCH LGT type, LEN, INTST	THR LGT colour, WBAR	VASIS, (MEHT), PAPI	TDZ, LGT LEN	RWY Centre Line LGT Length, spacing, colour, INTST	RWY edge LGT LEN, spacing, colour, INTST	RWY End LGT colour, WBAR	SWY LGT LEN, colour	Remarks
1	2	3	4	5	6	7	8	9	10
05 L	CAT I (PALS) 870 M LIH	GRN Nil	PAPI LEFT/3°	Nil	4500m, spacing 15m, 0-3600m white, 3600-4200m R/W, 4200-4500m red LIH	4500m, spacing 60m, 0-3900 white, last 600m yellow LIH	RED Nil	Nil	Nil
23 R	CAT I (PALS) 900 M LIH	GRN Nil	PAPI LEFT/3°	Nil	4500m, spacing 15.0m, 0-3600m white, 3600-4200m R/W, 4200-4500m red LIH	4500m, spacing 60m, 0-3900m white, last 600m yellow LIH	RED Nil	Nil	Nil

UAAA AD 2.15 Other Lighting, Secondary Power Supply

1	ABN/IBN location, characteristics and hours of operation	ABN: Nil IBN: Nil
2	LDI location and LGT Anemometer location and LGT	LDI: Nil
3	TWY edge and centre line lighting	EDGE: All TWY CL: TWY A, C, D, F, K, L Parking maneuvering lights and stop lights on stands - 4, 5, 6, 201, 202, 203, 204L, 204, 204R, 205L, 205, 205R.
4	Secondary power supply/switch-over time	AVBL, 0 sec
5	Remarks	RWY 23L: Side approach lights - 270 m from the THR. Red.

UAAA AD 2.16 Helicopter Landing Area

1	Coordinates TLOF or THR of FATO Geoid undulation	Stand №1: 432055N 0770120E, -148 FT Stand №2: 432043N 0770057E, -148 FT Stand №3: 432029N 0770106E, -148 FT Stand №4: 432051N 0770133E, -148 FT
2	TLOF and/or FATO elevation	Stand №1: 2215 FT Stand №2: 2218 FT Stand №3: 2231 FT Stand №4: 2224 FT

3	TLOF and FATO area dimensions, surface, strength, marking	Stand №1: 30 x 30, PCN 66/F/C/X/U, no marking Stand №2: 30 x 30, PCN 66/F/C/X/U, no marking Stand №3: 30 x 30, PCN 59/R/B/X/T, no marking Stand №4: 30 x 30, PCN 50/R/A/X/T, no marking
4	True BRG of FATO	051/231
5	Declared distance available	Stand №1: Nil Stand №2: Nil Stand №3: Nil Stand №4: Nil
6	APP and FATO lighting	Stand №1: Nil Stand №2: Nil Stand №3: Nil Stand №4: Nil
7	Remarks	Stand №1: On the section of TWY H between TWY K and TWY L, helicopter take-off and landing are permitted subject to compliance with the established separation intervals between aircraft departures and arrivals and provided that the applicable VFR (Special VFR) weather minima are met. Responsibility for the execution of take-off (landing) in this case rests with the helicopter pilot-in-command. Stand №2: TWY (B) Stand №3: RWY end 05R Stand №4: RWY end 05L

UAAA AD 2.17 ATS Airspace

1	**Designation and lateral limits**	ALMATY CTR 432628N 0770533E - 433119N 0771523E - 432614N 0772005E - 431119N 0765000E - 431624N 0764515E - 431729N 0764725E - 431659N 0764807E - 431853N 0765356E - 432102N 0765419E - 432507N 0770249E then a counter-clockwise arc radius 1.6 NM centered on 432640N 0770322E - 432628N 0770533E
2	**Vertical limits**	5200 FT ALT / GND
3	**Airspace classification**	D
4	**ATS unit call sign Language(s)**	ALMATY TOWER EN ALMATY VYSHKA RU
5	**Transition altitude**	10000 FT
6	**Hours of applicability**	H24
7	**Remarks**	Nil

UAAA AD 2.18 ATS Communication Facilities

Service designation	Call sign	Frequency	SATVOICE number(s)	Logon address	Hours of operation	Remarks
1	**2**	**3**	**4**	**5**	**6**	**7**
APP	ALMATY APPROACH (EN) ALMATY PODKHOD (RU)	118.3 MHZ	Nil	Nil	H24	Nil
ATIS	ALMATY ATIS (EN) ALMATY ATIS (RU)	129,8 MHZ 135,1 MHZ	Nil	Nil	H24	Nil

Service designation	Call sign	Frequency	SATVOICE number(s)	Logon address	Hours of operation	Remarks
1	2	3	4	5	6	7
RADAR	ALMATY RADAR (EN) ALMATY KRUG (RU)	126.8 MHZ	Nil	Nil	H24	Nil
SMC	ALMATY GROUND (EN) ALMATY RULENIE (RU)	121,7 MHZ	Nil	Nil	H24	Nil
TWR	ALMATY TOWER (EN) ALMATY VYSHKA (RU)	119,4 MHZ	Nil	Nil	H24	Nil
Production and dispatcher service	ALMATY TRANZIT (EN) ALMATY TRANZIT (RU)	131.900 MHZ	Nil	Nil	As AD	Nil
DELIVERY	ALMATY DELIVERY (EN) ALMATY DELIVERY (RU)	120.8 MHZ	Nil	Nil	H24	Nil

UAAA AD 2.19 Radio Navigation And Landing Aids

Type of aid, MAG VAR, ILS Classification, Type of supported OP (for VOR/ILS/ MLS, give declination)	ID	Frequency, Channel number	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Service volume radius from the GBAS reference point	Remarks
1	2	3	4	5	6	7	8
DVOR/DME (5°E/2023)	ATA	116.4 MHZ CH 111X	H24	432229.4N 0770507.0E	2200 FT	Nil	Nil
ILS LOC 05R I/D/2 GP 05R I/C/2 DME 05R	ILM ILM	110.3 MHZ 335 MHZ CH 40X	H24	432159.6N 0770406.7E 432030.9N 0770117.7E 432030.9N 0770117.7E	 2200 FT	Nil	Nil
ILS LOC 23L III/E/2 GP 23L III/T/2 DME 23L	IAL IAL	108.1 MHZ 334.7 MHZ CH 18X	H24	432018.8N 0770043.4E 432138.5N 0770335.9E 432138.5N 0770335.9E	 2300 FT	Nil	Nil
ILS LOC 05L I/D/4 GP 05L I/C/4 DME 05L	IMA IMA	109,1 MHZ 331,4 MHZ CH 28X	H24	432223.6N 0770438.8E 432059.1N 0770138.7E 432059.1N 0770138.7E	 2200 FT	Nil	Nil

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 23R III/E/4	IAA	111,3 MHZ	H24	432037.6N 0770104.8E		Nil	Nil
GP 23R III/T/4		332,3 MHZ		432210.7N 0770401.6E			
DME 23R	IAA	CH 50X		432210.7N 0770401.6E	2200 FT		

UAAA AD 2.20 Local Aerodrome Regulations

1. Airport regulations

Aircraft movement on the aerodrome is conducted via own engine power or by towing. Taxiing and towing must strictly follow the established markings. Access of runway for taxiing, towing, or take-off is permitted only with clearance from “Almaty Tower”.

Engine start-up and ground runs at "idle" power are permitted on aircraft stands upon request to "Almaty Ground,” provided all necessary safety measures are observed.

Engine start-up on contact stands (equipped with passenger boarding bridges) is prohibited. In the event of an unserviceable APU, the start-up of one engine prior to the commencement of towing to the designated engine start point is permitted only with clearance from “Almaty Ground.”

Engine ground runs at power settings exceeding "idle" must be performed at Stand 603.

The flight crew may perform engine start-up during the towing process if the procedure is stipulated in the aircraft’s Flight Manual (AFM) and coordinated with the technical staff of the towing crew.

Towing with engines running (or starting engines during towing) is prohibited on snow-covered, icy, or slippery aprons.

Aircraft wheel replacement using a jack must be performed only on hard surfaces (concrete or PAG-type reinforced concrete slabs).

The flight crew must notify “Almaty Ground” of the requirement for de-icing treatment when requesting clearance for towing or engine start-up. De-icing coordination is managed by “Almaty Transit” on frequency 131.900 MHz and by the de-icing pad coordinator on 120.300 MHz.

Aircraft de-icing treatment is performed at:

- The dedicated de-icing pads (Stands 101A, 101B, 102, 102A, 102B on Apron 1);
- Apron #6 stands.

De-icing treatment with engines running is permitted only at the dedicated de-icing pads on Apron 1 (Stands 101A, 101B, 102, 102A, 102B).

The stand number, parking procedure, and engine start-up point are assigned by the “Almaty Transit” coordinator based on the actual apron situation, short-term parking restrictions, and movement constraints within the maneuvering area.

Simultaneous taxi-in parking for Code F cargo aircraft is permitted on Stands 601–603.

2. Taxiing to/from aircraft stands

Aircraft towing, engine start-up, and taxiing to/from stands are conducted only with clearance from “Almaty Ground."

Prior to flight operations, the flight crew shall monitor ATIS. Between 5 and 25 minutes before the estimated off-block time (EOBT), the crew shall establish contact with “Almaty Delivery” on frequency 120.800 MHz, report the current ATIS designator, and obtain ATC en-route clearance. Before start-up (towing), the crew shall contact “Almaty Ground” on frequency 121.700 MHz, report the current ATIS designator and stand number, and request start-up/towing clearance.

Depending on the ground and air traffic situation and the RWY in-use, the Departure Control Unit (DPR) may implement a “Start-up Management Procedure,” assigning specific start-up times and sequences.

When the aerodrome is operating with RWY 23R or RWY 23L, departure clearance with a heading of 051° is issued at the moment the crew requests start-up (towing) clearance.

Aircraft Marshalling (Follow-me) is provided regardless of the time of day by a follow-me vehicle during Low Visibility Procedures (LVP), in the absence of visible taxiway markings, or upon flight crew request.

Transfer to “Almaty Tower” frequency shall be carried out upon instruction from “Almaty Ground.”

Taxiing to Stands 4–6, which are equipped with a docking guidance system, is performed independently or following a follow-me vehicle until the aircraft enters the system's detection zone. Parking (taxi-in) is performed according to the visual docking system indications. In the event of system failure, parking is performed according to the signals of a marshaller.

Taxiing to Stands 201–205, 204L/204R, 205L/205R, which are equipped with the “VDGS” (Visual Docking Guidance System), is performed independently or following a follow-me vehicle until the aircraft enters the system's detection zone. Parking is performed according to the system indications. In the event of system failure, parking is performed according to the signals of a marshaller..

Parking on stands not equipped with an automated docking system is carried out according to the signals of a marshaller.

Taxi-in and Taxi-out Procedures per Stand:

- VIP-South Building Stands: Taxi-in and taxi-out are performed behind a follow-me vehicle. For Stands 1–2, 63, and 64 (nose-in to the VIP-South building), taxi-in is performed under own engine power; taxi-out is performed by towing.
- Stands 3–6, 32A–34: Taxi-in is performed under own engine power; taxi-out is performed by towing to the engine start point.
- Stand 12: Taxi-in is performed by towing; taxi-out is performed under own engine power.
- Stands 48–56: Taxi-in and taxi-out are performed under own engine power as instructed by ATC.
- Stand 47: Taxi-in and taxi-out are performed by towing.
- Stands 59A, 60A (nose-in facing South): Taxi-in is performed under own engine power provided Stands 58, 59, and 60 are vacant; taxi-out is performed by towing.
- Stands 59–60: Taxi-in is performed under own engine power provided Stands 59A–60A are vacant; taxi-out is performed under own engine power provided Stands 59A–60A are vacant.
- Stands 601A–607B: Taxi-in is performed under own engine power; taxi-out is performed by towing.
- Taxiing onto aircraft stands 59A, 60A is carried out by towing, taxiing out is carried out under its own power when aircraft stands 59, 60 is free.
- Stand 79: Taxi-in and taxi-out are performed under own engine power behind a follow-me vehicle.
- Stands 201–205, 204L/204R, 205L/205R: Taxi-in is performed under own engine power; taxi-out is performed by towing to the engine start point.

Towing Restrictions on Apron 2:

- Towing from Stands 601, 601A, 601B, 602, 602A, and 602B must be carried out along RM L1 to the position abeam Stand 602A. Aircraft engine start-up must be performed only when abeam Stand 602A.

3. Taxiing Restrictions

Turns for aircraft of Code C and higher from TWY B onto RWY 05R/23L towards the threshold of RWY 05R, and from RWY 05R/23L onto TWY B from the direction of the RWY 05R threshold, are prohibited.

On all aprons except for Apron No. 3, taxiing and towing of Code E aircraft with a wingspan not exceeding that of a Boeing 747-400 are permitted.

For aircraft located on TWY F, TWY D, and TWY E, crossing the marked runway holding positions for RWY 23L/05R and RWY 05L/23R without clearance from “Almaty Tower” is prohibited.

For aircraft taxiing out from TWY K and TWY L onto RWY 05L/23R for takeoff from RWY 23L or RWY 23R, crossing the runway holding position markings for RWY 05L/23R without clearance from “Almaty Tower” is prohibited.

Taxiing of Boeing 747-800 (Boeing 747-8F and Boeing 747-8I) aircraft is permitted only on Apron No. 6 via TXL L1 and TWY L. Furthermore, taxiing of Boeing 747-800 aircraft is permitted from Apron No. 6 via TWY B and TWY H for arrival and departure; taxiing is also permitted on RWY 05L/23R, RWY 05R/23L, TWY C, TWY D, TWY E, and TWY F. Taxiing for this aircraft type is prohibited on all other aprons (Nos. 1, 2, 3, 4, and 5).

An aircraft must vacate its assigned stand no later than 1 minute after receiving towing clearance. In the event of a delay in the commencement of towing, the responsible person from the ground handling service (SPO) must re-request clearance or cancel the towing operation.

4. Take-off and landing

Upon reaching the designated runway holding position, the flight crew shall inform “Almaty Tower” and report readiness for takeoff.

After receiving the report of takeoff readiness, “Almaty Tower” may, depending on the air traffic situation, clear the flight crew for a line-up and an immediate takeoff (takeoff from a rolling start). The flight crew is obliged to inform “Almaty Tower” if they are unable to perform an immediate takeoff.

If the runway is occupied or acceptable separation intervals are absent, “Almaty Tower” shall only clear the flight crew for line-up.

Flight crews required to perform backtrack taxiing on RWY 05R or RWY 05L to line up for takeoff on RWY 23R or RWY 23L from TWY A, TWY K, TWY D, or TWY E must obtain clearance for taxiing on RWY 05R or RWY 05L from “Almaty Tower.”

An active runway used for taxiing for the purpose of lining up or vacating the runway functions as a taxiway (TWY) or main taxiway (MTWY). In such cases, flight crews must comply with all taxiing procedures in accordance with the aircraft's Flight Manual (AFM) and other regulatory documents, including taxiing speeds:

- Under normal environmental conditions and RWY surface state: Not more than 30 knots (55 km/h) on long runway distances and not more than 20 knots (37 km/h) on short runway distances.

- During Low Visibility Procedures (LVP) and meteorological conditions contributing to the degradation of the RWY state: Not more than 10 knots (18 km/h).

Pre-flight cockpit checks must be completed prior to lining up. Checks required while on the runway must be kept to a minimum.

The flight crew shall perform takeoff immediately after receiving takeoff clearance. If the crew cannot meet this requirement, they must inform “Almaty Tower” before entering the runway and provide information regarding the required delay time.

In certain conditions, takeoff from a taxiway/runway intersection may be permitted at the request of the flight crew or at the initiative of “Almaty Tower.” Takeoff shall be performed from a point on the runway where the declared runway characteristics from the start of the takeoff run meet the requirements for the actual takeoff

mass and conditions. The final decision regarding an intersection takeoff rests with the Pilot-in-Command (PIC).

Engine warm-up and testing before takeoff are performed on the runway or taxiway only with clearance from “Almaty Tower” following a crew request.

Takeoff and landing with a tailwind are permitted to expedite traffic flow at the request of the flight crew or the initiative of the ATC unit. Responsibility for the decision to perform such a takeoff or landing rests with the PIC.

To reduce runway occupancy time, “Almaty Tower” may issue clearance to land beyond the touchdown zone (except for “Heavy” and “Super” aircraft categories) or to expedite runway vacation. If unable to comply, the crew must immediately inform the controller.

The final decision to perform a takeoff or landing under weather conditions that do not meet the aerodrome operating minima rests with the PIC. In such cases, the ATC clearance for takeoff or landing does not constitute an order to the PIC, and responsibility for the decision and the outcome of the takeoff or landing rests with the PIC.

Runway assignment is made by the ATC unit, taking into account takeoff and landing into the wind, unless safety considerations or traffic situations make another direction preferable. To increase runway capacity, departures with a heading opposite to the runway-in-use are permitted under the following conditions:

- Radar control is provided.
- Until the departing aircraft reaches an altitude of 3200 FT and establishes contact with Approach (DPC), arriving aircraft are prohibited from descending below 8000 FT.
- Departures are performed with the permission of the Flight Supervisor and after prior coordination between the ATC units.

On RWY 05R/23L, at a distance of 2730 m from threshold 05, there is a runway turn pad and markings for the turn pad; the width is 75 m.

When the Runway Condition Code (RWYCC) for RWY 05R/23L is “3” or lower, takeoff and landing are prohibited.

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

Both runways are intended for departures and arrivals.

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

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

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

Additional departure procedures:

- it is permitted to line-up on each runway at the same time; the aircraft that will take-off the second in sequence shall be informed about take-off delay;
- the permission for take-off at the same time from both runways is not issued;
- to prevent the approach of the aircraft in the case of missed approach of arriving aircraft, the permission for take-off from the parallel runway is not given if the linear separation between the arriving and departing aircraft is 2.2 NM or less.

Additional arriving procedures:

- pilots should conduct preliminary preparation for landing on each of the operating runway, if both

runways are in use;

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

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

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

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

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

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

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

7. Fuel draining

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

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

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

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

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

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

8. Low Visibility Procedures (LVP)

LVP are implemented when the RVR is less than 550 m.

The commencement of LVP is announced via ATIS or by the ATC unit with the message: “Low visibility procedures in effect."

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

RWY 23L is equipped for precision approach and landing according to Category II, IIIA, and IIIB.

Crossing illuminated “STOP” bars is prohibited.

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

The flight crew shall be informed by the ATC unit of any changes in the operational status of radio navigation, lighting, and meteorological equipment.

Under Category II and III conditions, ATC units apply additional horizontal aircraft separation.

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

- Aircraft 180° turns at the thresholds of 23R, 23L and in widening “A” are **prohibited**.

When **RVR not less than 300 m**

- Aircraft taxiing on aprons and taxiways (with the exception of TWY C, TWY E, TWY D, TWY F) is carried out exclusively behind a follow-me vehicle with a taxi speed limit of not more than 5 knots;
- RWY 23L is used for precision approach and landing according to Category II.

When **RVR is less than 300 m**

- TWY B, TWY H, and TWY E, which are not equipped with RCL (Runway Centre Line lights), are not used for aircraft taxiing;
- RWY 23L are used for precise approach and landing by category IIIA.
- Aircraft taxiing on aprons is carried out exclusively behind a follow-me vehicle with a taxi speed limit of not more than 5 knots.
- Engine Operation for Airbus Aircraft in Low Visibility Conditions

1. Engine Ice Shedding Requirements

The engine ice shedding procedure is mandatory when engine icing conditions exist. These conditions are defined as:

- (a) Outside Air Temperature (OAT) is < 3°C;
- (b) AND active precipitation is present or visibility is < 1600 m.

2. Operational Limitations

- (a) The ice shedding procedure must be performed for 30 seconds every 30 minutes.
- (b) Takeoff is prohibited if the meteorological visibility is less than 150 m.

3. Engine Ice Shedding Procedures at Almaty Airport (ALA)

Taking into account jet blast impact:

- (a) Engine ice shedding on aprons/stands is strictly prohibited.
- (b) During taxi-in (after arrival): The procedure shall be performed at the holding points of Taxiways A, C, K, and L.
- (c) During taxi-out (before departure): The procedure shall be performed on the runway (RWY) and connecting Taxiways C, D, E, and F.

9. Helicopter Operations

Helicopter taxiing is carried out taking into account wind restrictions according to the AFM (Flight Manual) and provided there is constant visibility of landmarks located ahead.

Air taxiing of helicopters with skid-type landing gear from the stand to the take-off point and back is performed along the route assigned by “Almaty Ground” behind a follow-me vehicle under the responsibility of the PIC (Pilot-in-Command).

Engine start-up, hover checks, and "helicopter-style" take-off/landing are permitted during daylight hours from Apron No. 4, the TWY B junction, and the section of TWY H between TWY K and TWY L, subject to established

separation intervals between aircraft take-offs and landings and compliance with the established weather minima for VFR (Special VFR) flights. Responsibility for performing the take-off (landing) in this case rests with the PIC.

Helicopter take-off from the aerodrome is performed after:

- the crew requests a hover check and receives clearance from “Almaty Tower”;
- the helicopter crew performs the hover check;
- the crew reports readiness for take-off (“airplane-style” or “helicopter-style”) and receives take-off clearance from “Almaty Tower”.

For a “helicopter-style” take-off, landing after the hover check is not mandatory. The hover height is determined by the PIC, but the helicopter performing the hover check must not create interference for the take-off and landing of other aircraft.

In the presence of meteorological phenomena or smoke on part of the runway that degrades visibility below the established weather minima for VFR (Special VFR) flights, landing is permitted on that part of the runway where the weather conditions meet the minima (beginning/middle/end). Responsibility for performing such a landing rests with the PIC.

Take-off with a ground roll and landing with a ground run, as well as helicopter take-offs and landings at night or when performing IFR flights, are carried out to/from the runway.

UAAA AD 2.21 Noise Abatement Procedures

1. NOISE ABATEMENT DEPARTURE PROCEDURE

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

2. NOISE ABATEMENT DEPARTURE PROCEDURE

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

3. Arrival procedures

for details see UAAA AD 2.22 para 7 CONTINUOUS DESCENT OPERATION

4. Selection of RWY in use

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

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

5. Auxiliary Power Unit (APU) Usage Restrictions

There are restrictions for APU usage at all PBB stands of Terminal 2 of ALA airport. The core purpose is to minimize the aircraft's carbon footprint (emissions and noise) through the mandatory utilization of Fixed Electrical Ground Power (FEGP) and Pre-Conditioned Air (PCA).
All airport users must strictly comply with the following hierarchy of power source usage at Terminal 2 stands, where the APU is strictly a Contingency Source.

Priority	Aircraft Power Source	Cabin Conditioning (Cooling/Heating/ Ventilation)

Primary Source	Fixed Electrical Ground Power (FEGP)	Pre-Conditioned Air (PCA)
Secondary Source	Mobile GPU	Mobile PCA
Contingency Source	APU	APU

Permissible APU Usage Timeframes are as follows:

Phase	Aircraft Type	Restriction
Arrival	All aircraft	APU must be shut down 10 minutes after Actual Time of Arrival (ATA).
Departure	Narrow-body	APU start is allowed 10 minutes prior to Estimated Time of Departure (ETD).
	Wide-body	APU start is allowed within 20 minutes prior to Estimated Time of Departure (ETD).

APU use beyond standard time limits is only permitted under the following conditions:

Exemption Condition	Aircraft Type	APU Start Permission (prior to ETD)
Extreme Weather/PCA Failure	Narrow-body	30 minutes
	Wide-body	55 minutes
System Testing	All Aircraft	Requires temporary exemption from ALA Airport Manager (ADM).

Note on Extreme Weather:
When APU is used to achieve desired cabin temperature, PCA must immediately be used to maintain the temperature thereafter.

UAAA AD 2.22 Flight Procedures

1. General provisions

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

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

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

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

IFR flights take precedence over the VFR flights.

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

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

During the initial contact with the “Almaty Approach” air traffic controller at a frequency of 118.3 MHz, the crew informs an index of current ATIS information and identification index of aircraft.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

After passing the reference waypoint the air traffic controller of the “Tower” ATC unit issues permission to fly to the nearest turn of the corresponding flight circle.

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

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

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

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

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

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

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

When the aircraft departs from the runway “05 Left” / “05 Right”:

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

When the aircraft departs from the runway “23 Left” / “23 Right”:

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

Table 1: Visual reference of VFR flights within Almaty CTR

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

Table 1: Visual reference of VFR flights within Almaty CTR

№	Waypoint name	Type	Visual reference	Geographical coordinates	Radial and distance from DVOR/DME «ATA»
7	MIKE	Entry/exit	warehouse of “Metro” hypermarket	431853N 0765356E	241° / 8,9 NM
8	JULIETT	Holding	southern outskirts of Zhana Kuat cottage town	432318N 0770147E	284° / 2,6 NM
9	YANKEE	Entry/exit	Y-shaped road intersection (Burundaiskaya Street and Highway)	432102N 0765419E	255° / 8 NM
10	ZULU	Entry/exit	separate structure of utility building (south of the intersection of the Esentai and Baskarasu rivers)	432302N 0765829E	271° / 4,9 NM

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

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

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

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

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

5. Radio contact loss (failure)

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

When radio communication loss the crew must:

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

6. The emergency landing procedure

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

7. Continuous Descent Operation

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

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

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

   - ACFT is cleared to proceed to a waypoint or via a combination of waypoints in order to provide an optimum lateral flight path up to and including the FAP and thus the exact distance to the RWY is known prior to start of the continuous descent operation; or

   - the pilots of the ACFT that to be vectored to final are provided with distance-to-go information.

4. CDOs are authorized only when following conditions are respected:

   - ILS of RWY intended for landing is in operation;

   - no adverse weather conditions that may affect CDO;

   - no system degradations that may affect GNSS or ILS operation.

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

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

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

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

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

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

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

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

8. Continuous Climb Operation

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

UAAA AD 2.23 Additional Information

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

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

2. Ornithological situation in the aerodrome area.

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

2.1 Seasonal migration of birds (time)

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

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

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

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

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

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

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

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

2.2 Direction

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

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

2.3 Altitude

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

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

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

2.4 Intensity of bird migration

Bird migration takes place around the clock.

2.5 Daily migration of birds

2.5.1 Daily migration of birds (time)

From dawn to the onset of evening twilight

2.5.2 Direction

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

2.5.3 Altitude

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

2.6 Radar control over the flying of birds

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

2.7 Information transmission

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

UAAA AD 2.24 Charts Related To An Aerodrome

Name	Page
Aerodrome Chart ICAO	UAAA AD 2.24.1-1
Aerodrome Ground Movement and Parking Chart ICAO	UAAA AD 2.24.3-1
Aerodrome Obstacle Chart – ICAO – Type A RWY 05L/23R	UAAA AD 2.24.4-1-1
Aerodrome Obstacle Chart – ICAO – Type A RWY 05R/23L	UAAA AD 2.24.4-2-1
Precision Approach Terrain Chart – RWY 23L ICAO	UAAA AD 2.24.5-1-1
Precision Approach Terrain Chart – RWY 23R ICAO	UAAA AD 2.24.5-2-1
Area Chart ICAO	UAAA AD 2.24.6-1
Standard Departure Chart Instrument (SID) RWY 05R/L ICAO	UAAA AD 2.24.7-1-1
Standard Departure Chart Instrument (SID) RWY 05R/L ICAO	UAAA AD 2.24.7-2-1
Standard Departure Chart Instrument (SID) RWY 05R/L ICAO	UAAA AD 2.24.7-3-1
Standard Departure Chart Instrument (SID) RWY 23L/R ICAO	UAAA AD 2.24.7-4-1
Standard Departure Chart Instrument (SID) RWY 23L/R ICAO	UAAA AD 2.24.7-5-1
Standard Departure Chart Instrument (SID) RWY 23L/R ICAO	UAAA AD 2.24.7-6-1
Standard Departure Chart Instrument (SID) RNAV RWY 05R/L ICAO	UAAA AD 2.24.7-7-1
Standard Departure Chart Instrument (SID) RNAV RWY 05R/L ICAO	UAAA AD 2.24.7-8-1
Standard Departure Chart Instrument (SID) RNAV RWY 05R/L ICAO	UAAA AD 2.24.7-9-1
Standard Departure Chart Instrument (SID) RNAV RWY 23L/R ICAO	UAAA AD 2.24.7-10-1
Standard Departure Chart Instrument (SID) RNAV RWY 23L/R ICAO	UAAA AD 2.24.7-11-1
Standard Departure Chart Instrument (SID) RNAV RWY 23L/R ICAO	UAAA AD 2.24.7-12-1
Standard Departure Chart Instrument (SID) RNAV RWY 23L/R ICAO	UAAA AD 2.24.7-13-1
Standard Arrival Chart Instrument (STAR) RWY 05R/L ICAO	UAAA AD 2.24.9-1-1
Standard Arrival Chart Instrument (STAR) RWY 05R/L ICAO	UAAA AD 2.24.9-2-1
Standard Arrival Chart Instrument (STAR) RWY 05R/L ICAO	UAAA AD 2.24.9-3-1
Standard Arrival Chart Instrument (STAR) RWY 05R/L ICAO	UAAA AD 2.24.9-4-1
Standard Arrival Chart Instrument (STAR) RWY 23L/R ICAO	UAAA AD 2.24.9-5-1
Standard Arrival Chart Instrument (STAR) RWY 23L/R ICAO	UAAA AD 2.24.9-6-1
Standard Arrival Chart Instrument (STAR) RWY 23L/R ICAO	UAAA AD 2.24.9-7-1
Standard Arrival Chart Instrument (STAR) RWY 23L/R ICAO	UAAA AD 2.24.9-8-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 05R/L ICAO	UAAA AD 2.24.9-10-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 05R/L ICAO	UAAA AD 2.24.9-12-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 05R/L ICAO	UAAA AD 2.24.9-13-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 05R/L ICAO	UAAA AD 2.24.9-15-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 23L/R ICAO	UAAA AD 2.24.9-16-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 23L/R ICAO	UAAA AD 2.24.9-17-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 23L/R ICAO	UAAA AD 2.24.9-18-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 05R/L ICAO	UAAA AD 2.24.9-19-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 05R/L ICAO	UAAA AD 2.24.9-20-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 05R/L ICAO	UAAA AD 2.24.9-22-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 23L/R ICAO	UAAA AD 2.24.9-23-1

Name	Page
Standard Arrival Chart Instrument (STAR) RNAV RWY 23L/R ICAO	UAAA AD 2.24.9-24-1
Standard Arrival Chart Instrument (STAR) RNAV RWY 23L/R ICAO	UAAA AD 2.24.9-25-1
ATC Surveillance Minimum Altitude Chart ICAO	UAAA AD 2.24.10-1
Instrument Approach Chart – ILS/DME RWY 05R ICAO	UAAA AD 2.24.11-1-1
Instrument Approach Chart – ILS/DME - Y RWY 05L ICAO	UAAA AD 2.24.11-2-1
Instrument Approach Chart – ILS/DME - Z RWY 05L ICAO	UAAA AD 2.24.11-3-1
Instrument Approach Chart – ILS/DME - Y CAT II & III RWY 23L ICAO	UAAA AD 2.24.11-4-1
Instrument Approach Chart – ILS/DME - Y RWY 23R ICAO	UAAA AD 2.24.11-5-1
Instrument Approach Chart – ILS/DME - Z RWY 23R ICAO	UAAA AD 2.24.11-6-1
Instrument Approach Chart – LOC/DME RWY 05L ICAO	UAAA AD 2.24.11-7-1
Instrument Approach Chart – VOR/DME RWY 05L ICAO	UAAA AD 2.24.11-8-1
Instrument Approach Chart – VOR/DME RWY 05R ICAO	UAAA AD 2.24.11-9-1
Instrument Approach Chart – VOR/DME RWY 23L ICAO	UAAA AD 2.24.11-10-1
Instrument Approach Chart – RNP RWY 05L ICAO	UAAA AD 2.24.11-11-1
Instrument Approach Chart – RNP RWY 05R ICAO	UAAA AD 2.24.11-12-1
Instrument Approach Chart – RNP RWY 23L ICAO	UAAA AD 2.24.11-13-1
Instrument Approach Chart – RNP RWY 23R ICAO	UAAA AD 2.24.11-14-1
Visual Approach chart – ICAO	UAAA AD 2.24.12
VFR Departure/Arrival Chart	UAAA AD 2.24.14

UAAA AD 2.25 Visual segment surface (VSS) penetrations

No penetrations

AERODROME CHART - ICAO

AD ELEV 2238FT (*682m*)

ARP 432120N 0770238E

TWR	119.4
GROUND	121.7
DELIVERY	120.8

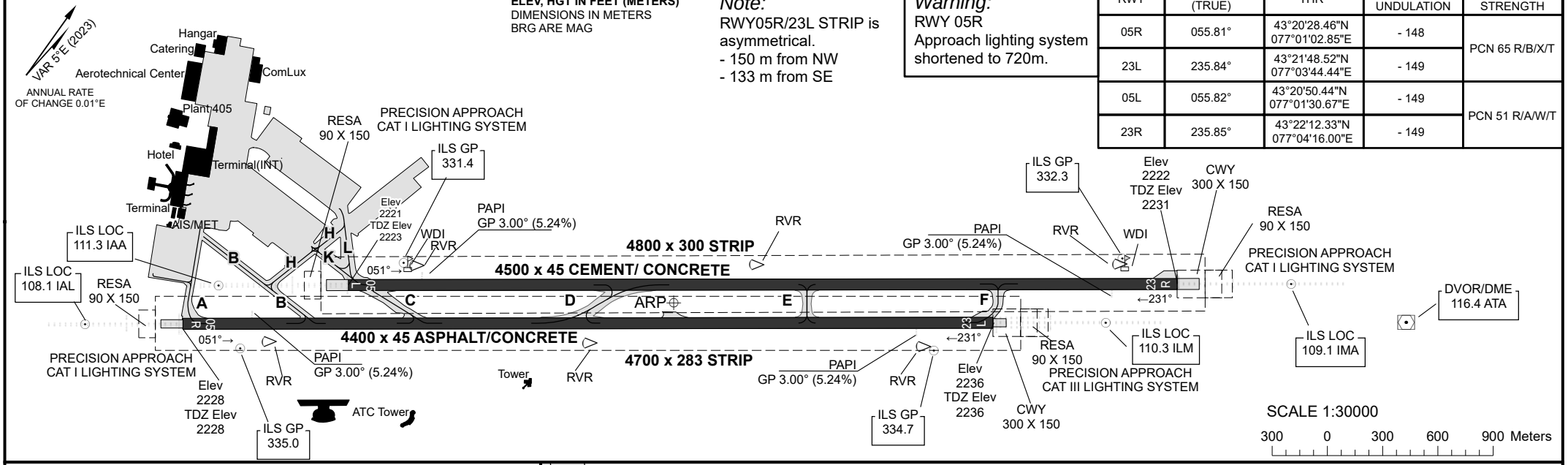
ALMATY

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

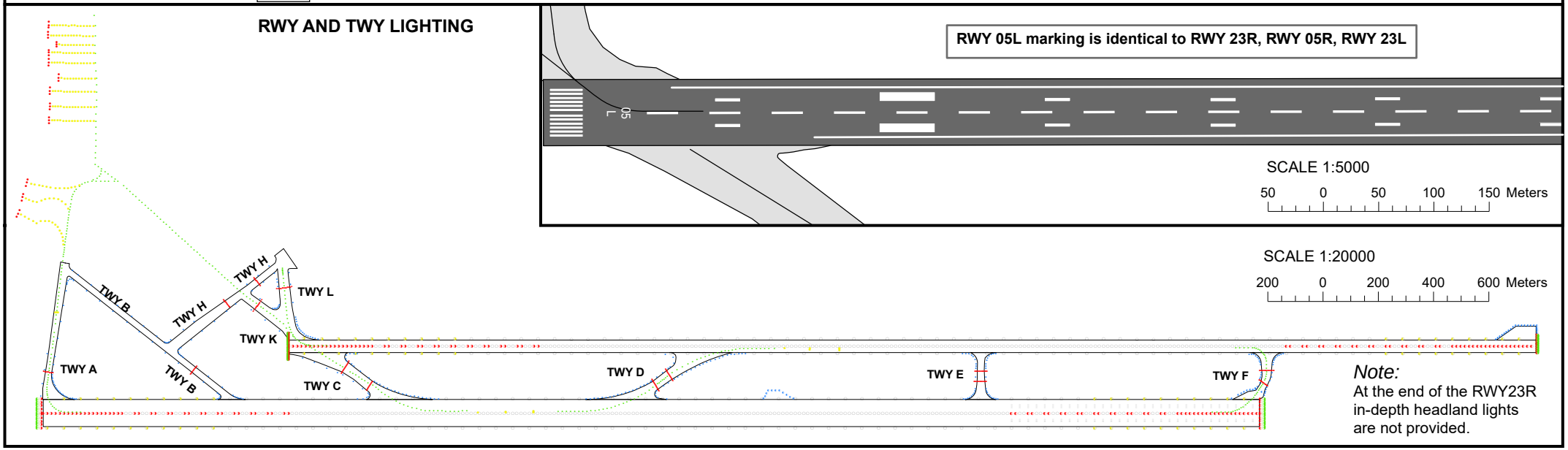
ELEV, HGT IN FEET (METERS)
DIMENSIONS IN METERS
BRG ARE MAG

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

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



RWY AND TWY LIGHTING



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

CHANGE: Edit.

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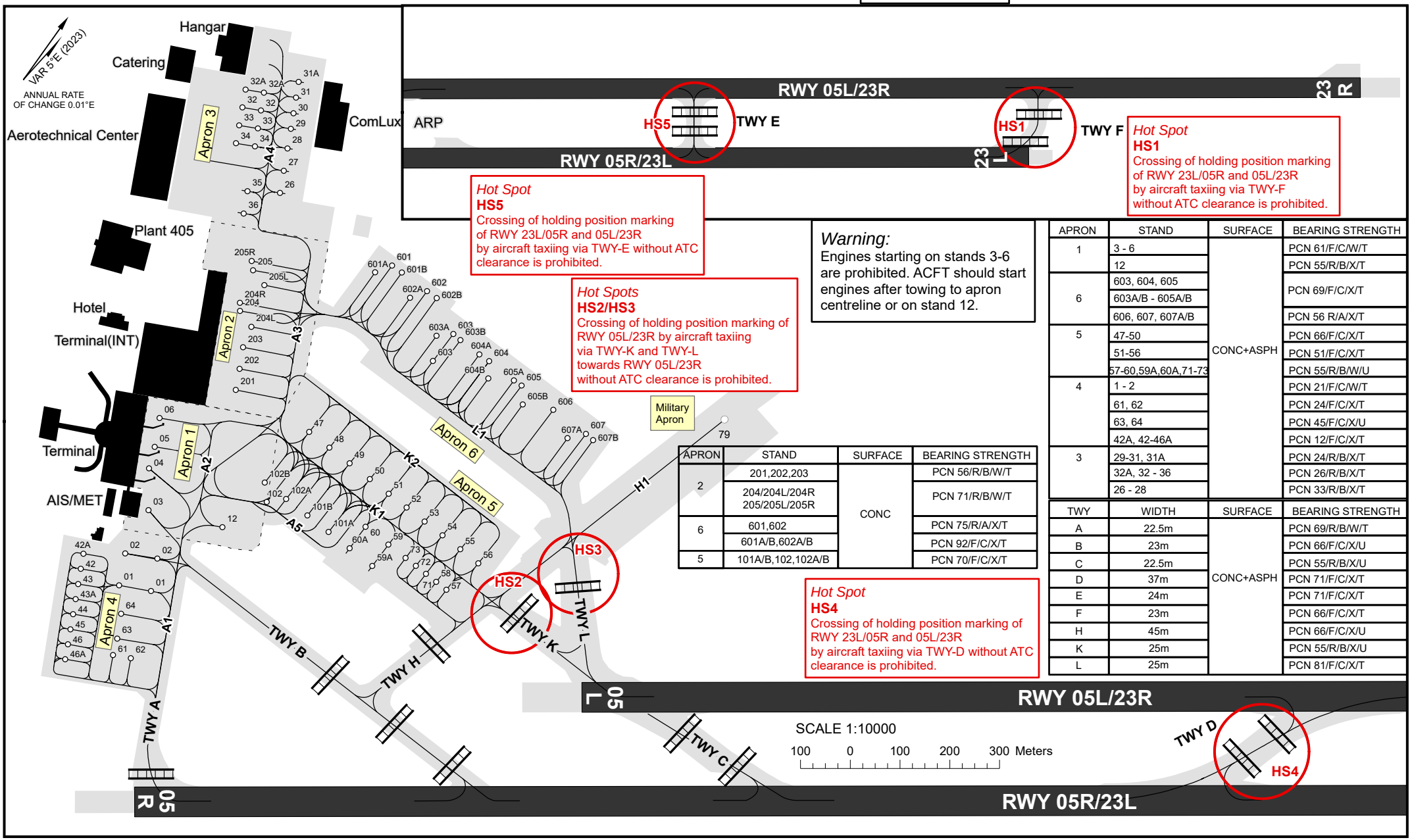
AERODROME GROUND MOVEMENT AND PARKING CHART - ICAO

APRON 1	ELEV 2218FT	APRON 4	ELEV 2221FT
APRON 2	ELEV 2205FT	APRON 5	ELEV 2215FT
APRON 3	ELEV 2208FT	APRON 6	ELEV 2205FT

TWR	119.4
GROUND	121.7
DELIVERY	120.8

ALMATY



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

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

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

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

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

APRON	STAND	SURFACE	BEARING STRENGTH
1	3 - 6	CONC+ASPH	PCN 61/F/C/W/T
	12		PCN 55/R/B/X/T
6	603, 604, 605		PCN 69/F/C/X/T
	603A/B - 605A/B		
	606, 607, 607A/B		PCN 56 R/A/X/T
5	47-50		PCN 66/F/C/X/T
	51-56		PCN 51/F/C/X/T
	57-60,59A,60A,71-73		PCN 55/R/B/W/U
4	1 - 2		PCN 21/F/C/W/T
	61, 62		PCN 24/F/C/X/T
	63, 64		PCN 45/F/C/X/U
	42A, 42-46A		PCN 12/F/C/X/T
3	29-31, 31A		PCN 24/R/B/X/T
	32A, 32 - 36		PCN 26/R/B/X/T
	26 - 28		PCN 33/R/B/X/T

APRON	STAND	SURFACE	BEARING STRENGTH
2	201,202,203	CONC	PCN 56/R/B/W/T
	204/204L/204R 205/205L/205R		PCN 71/R/B/W/T
6	601,602		PCN 75/R/A/X/T
	601A/B,602A/B		PCN 92/F/C/X/T
5	101A/B,102,102A/B		PCN 70/F/C/X/T

TWY	WIDTH	SURFACE	BEARING STRENGTH
A	22.5m	CONC+ASPH	PCN 69/R/B/W/T
B	23m		PCN 66/F/C/X/U
C	22.5m		PCN 55/R/B/X/U
D	37m		PCN 71/F/C/X/T
E	24m		PCN 71/F/C/X/T
F	23m		PCN 66/F/C/X/T
H	45m		PCN 66/F/C/X/U
K	25m		PCN 55/R/B/X/U
L	25m		PCN 81/F/C/X/T

CHANGE: Add TXL labels; Add new stands 603-607; Stands 65-69 DEL.

ALMATY **STANDS CHARACTERISTICS**

Apron	Stand	Coordinates	
		Latitude	Longitude
4	01	43 20 39.58 N	077 00 50.87 E
4	01	43 20 40.44 N	077 00 53.51 E
4	02	43 20 41.52 N	077 00 49.72 E
4	02	43 20 42.42 N	077 00 52.35 E
1	03	43 20 44.71 N	077 00 49.27 E
1	04	43 20 46.98 N	077 00 47.22 E
1	05	43 20 48.35 N	077 00 46.56 E
1	06	43 20 50.08 N	077 00 45.48 E
1	12	43 20 46.49 N	077 00 55.59 E
3	26	43 21 06.63 N	077 00 43.10 E
3	27	43 21 07.96 N	077 00 42.27 E
3	28	43 21 09.30 N	077 00 41.43 E
3	29	43 21 10.48 N	077 00 40.69 E
3	30	43 21 11.42 N	077 00 40.10 E
3	31	43 21 12.36 N	077 00 39.51 E
3	31A	43 21 13.30 N	077 00 38.92 E
3	32	43 21 10.38 N	077 00 37.56 E
3	32	43 21 09.87 N	077 00 36.04 E
3	32A	43 21 10.95 N	077 00 35.38 E
3	32A	43 21 11.45 N	077 00 36.89 E
3	33	43 21 08.78 N	077 00 36.70 E
3	33	43 21 09.30 N	077 00 38.24 E
3	34	43 21 07.70 N	077 00 37.36 E
3	34	43 21 08.22 N	077 00 38.92 E
3	35	43 21 05.53 N	077 00 40.61 E
3	36	43 21 04.19 N	077 00 41.45 E
4	42	43 20 39.07 N	077 00 47.21 E
4	42A	43 20 39.98 N	077 00 46.65 E
4	43	43 20 38.15 N	077 00 47.78 E
4	43A	43 20 37.25 N	077 00 48.34 E
4	44	43 20 36.34 N	077 00 48.91 E
4	45	43 20 35.43 N	077 00 49.47 E
4	46	43 20 34.53 N	077 00 50.03 E
4	46A	43 20 33.62 N	077 00 50.59 E
5	47	43 20 54.80 N	077 00 57.23 E
5	48	43 20 54.69 N	077 00 59.51 E
5	49	43 20 54.58 N	077 01 01.79 E
5	50	43 20 54.47 N	077 01 04.07 E
5	51	43 20 54.37 N	077 01 06.20 E
5	52	43 20 54.28 N	077 01 08.21 E
5	53	43 20 54.18 N	077 01 10.24 E
5	54	43 20 54.09 N	077 01 12.26 E
5	55	43 20 53.99 N	077 01 14.27 E
5	56	43 20 53.89 N	077 01 16.30 E
5	57	43 20 51.30 N	077 01 15.27 E
5	58	43 20 51.35 N	077 01 14.12 E
5	59	43 20 51.61 N	077 01 08.72 E
5	59A	43 20 49.87 N	077 01 08.60 E
5	60	43 20 51.74 N	077 01 06.14 E
5	60A	43 20 50.00 N	077 01 06.04 E

Apron	Stand	Coordinates	
		Latitude	Longitude
4	61	43 20 35.59 N	077 00 53.91 E
4	62	43 20 36.07 N	077 00 55.38 E
4	63	43 20 36.64 N	077 00 53.39 E
4	64	43 20 38.12 N	077 00 52.43 E
5	71	43 20 51.41 N	077 01 12.96 E
5	72	43 20 51.47 N	077 01 11.82 E
5	73	43 20 51.52 N	077 01 10.66 E
5	101A	43 20 50.11 N	077 01 03.67 E
5	101B	43 20 50.23 N	077 01 01.28 E
5	102	43 20 49.47 N	077 00 57.60 E
5	102A	43 20 50.34 N	077 00 58.88 E
5	102B	43 20 50.44 N	077 00 56.48 E
2	201	43 20 54.38 N	077 00 49.70 E
2	202	43 20 55.66 N	077 00 48.92 E
2	203	43 20 56.95 N	077 00 48.10 E
2	204L	43 20 58.36 N	077 00 47.69 E
2	204	43 20 58.80 N	077 00 46.06 E
2	204R	43 20 59.23 N	077 00 45.64 E
2	205L	43 21 01.08 N	077 00 46.56 E
2	205	43 21 01.47 N	077 00 44.98 E
2	205R	43 21 01.92 N	077 00 44.42 E
6	601	43 21 06.80 N	077 00 55.02 E
6	601A	43 21 05.82 N	077 00 54.10 E
6	601B	43 21 06.79 N	077 00 56.09 E
6	602	43 21 06.70 N	077 00 58.88 E
6	602A	43 21 05.72 N	077 00 57.96 E
6	602B	43 21 06.68 N	077 00 59.95 E
6	603A	43 21 04.64 N	077 01 01.82 E
6	603B	43 21 05.28 N	077 01 03.80 E
6	603	43 21 03.15 N	077 01 02.82 E
6	603	43 21 05.35 N	077 01 02.97 E
6	604A	43 21 05.20 N	077 01 05.92 E
6	604B	43 21 04.23 N	077 01 07.78 E
6	604	43 21 05.19 N	077 01 06.98 E
6	605A	43 21 05.06 N	077 01 09.77 E
6	605B	43 21 04.08 N	077 01 11.64 E
6	605	43 21 05.06 N	077 01 10.60 E
6	606	43 21 04.91 N	077 01 14.16 E
6	607A	43 21 03.90 N	077 01 16.63 E
6	607B	43 21 04.73 N	077 01 18.62 E
6	607	43 21 04.80 N	077 01 17.78 E

2	**Taxiway width, surface and strength**	**TWY**	**WIDTH (M)**	**SURFACE**	**STRENGTH**
		A	23	CONC+ASPH	PCN 66/F/C/X/T
		B	23	CONC+ASPH	PCN 45/R/B/X/U
		C	23	CONC+ASPH	PCN 60/F/C/X/T
		D	23	CONC+ASPH	PCN 60/F/C/X/T
		E	23	CONC+ASPH	PCN 66/F/C/X/T
		F	20	CONC+ASPH	PCN 60/F/C/X/T
		G	32	CONC+ASPH	PCN 91/F/C/W/T
		H	23	CONC+ASPH	PCN 60/F/C/X/T
		J	23	CONC+ASPH	PCN 79/F/C/W/T
		K	23	CONC+ASPH	PCN 36/F/C/X/T
		L	23	CONC+ASPH	PCN 60/F/C/X/T
		M	23	CONC+ASPH	PCN 79/F/C/W/T
		P1	23	CONC+ASPH	PCN 66/F/C/X/T
		P2	23	CONC+ASPH	PCN 66/F/C/X/T
		P3	23	CONC+ASPH	PCN 66/F/C/X/T
		P4	23	CONC+ASPH	PCN 66/F/C/X/T
		Q	11	CONC+ASPH	PCN 46/R/B/X/T
		W	23	CONC	PCN 12/R/B/W/T
		Y	18	CONC+ASPH	PCN 46/F/C/X/T
3	**Altimeter checkpoint location and elevation**	Nil			
4	**VOR checkpoints**	Nil			
5	**INS checkpoints**	Nil			
6	**Remarks**	1. When precipitation falls and during the autumn-spring periods, ground elements of the airfield are subject to disintegration 2. Aircraft taxiing via apron D by ATC clearance only. Prior permission required.			

UACC AD 2.9 Surface Movement Guidance And Control System And Markings

1	Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands	Guidance sign board at entrance of RWYs, guidance sign designating taxiways and apron Visual docking guidance system at stands 7L, 7, 7R, 8L, 8, 8R, 9L, 9, 9R
2	RWY and TWY markings and LGT	Markings of thresholds, touchdown zones, centre line, fixed distance markers, RWY edges, RWY designations, taxi holding positions, taxiway centre lines
3	**Stop bars**	TWY A, TWY B, TWY C, TWY D, TWY E
4	**Other runway protection measures**	Nil
5	Remarks	Nil

UACC AD 2.10 Aerodrome Obstacles

NIL

UACC AD 2.11 Meteorological Information Provided

1	**Associated MET Office**	Meteorological service Astana Phone: +7 (7172) 773478
2	**Hours of service MET Office outside hour**	H24
3	**Office responsible for TAF preparation: Periods of validity**	Meteorological service Astana, 24 HR (0024, 0606, 1212, 1818
4	**Trend forecast Interval of issuance**	TREND 30 min
5	**Briefing/consultation provided**	Personal consultation (English, Russian)
6	**Flight documentation/languages used**	TAF, METAR, SPECI, SIGMET, GAMET, AIRMET English
7	**Charts and other information AVBL for briefing or consultation**	S, U85, U70, U50, U40, U30, U25, U20, prognostic charts of wind and temperature at flight levels (FL), max wind, T, prognostic charts P85, P70, P50, P40, P30, P25, P20, SWH, SWM of WAFC, SWM+SWH, SWL of Kazakhstan;
8	**Supplementary equipment AVBL for providing information**	Doppler weather radar (WRM-200)
9	**ATS units provided with information**	Briefing, TWR, APP, ACC
10	**Additional information**	Nil

UACC AD 2.12 Runway Physical Characteristics

Designations RWY NR	TRUE BRG	Dimensions of RWY (M)	Strength (PCN) and surface of RWY and SWY	THR coordinates RWY end coordinates THR geoid undulation	THR elevation and highest elevation of TDZ of precision APP RWY	Slope of RWY-SWY
1	2	3	4	5	6	7
04	44.52°	3500 X 45	73/F/C/W/T CONC+ASPH	510040.87N 0712655.41E - -106.2 FT	THR 1164.7 FT TDZ 1166 FT	-0.57%
22	224.55°	3500 X 45	73/F/C/W/T CONC+ASPH	510201.65N 0712901.44E - -106.1 FT	THR 1158.1 FT TDZ 1161 FT	0.57%

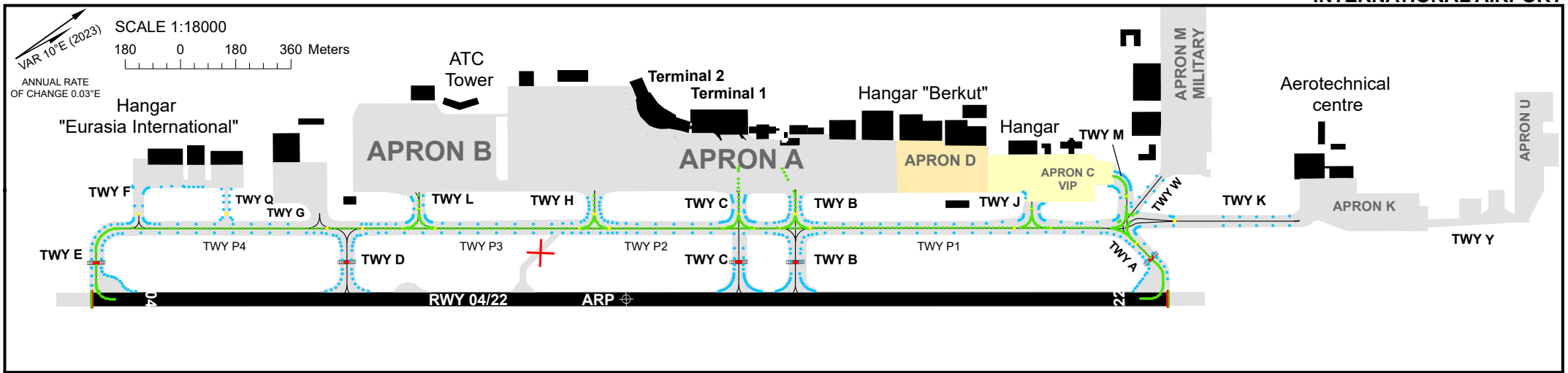
SWY dimensions (M)	CWY dimensions (M)	Strip dimensions (M)	RESA dimensions (M)	Location and description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
Nil	400 X 150	3800 X 300	90 X 160	Nil	AVBL	Nil
Nil	400 X 150	3800 X 300	90 X 160	Nil	AVBL	Nil

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 ACFT MD-11 with a full weight is limited to twenty departures per 20 hours.

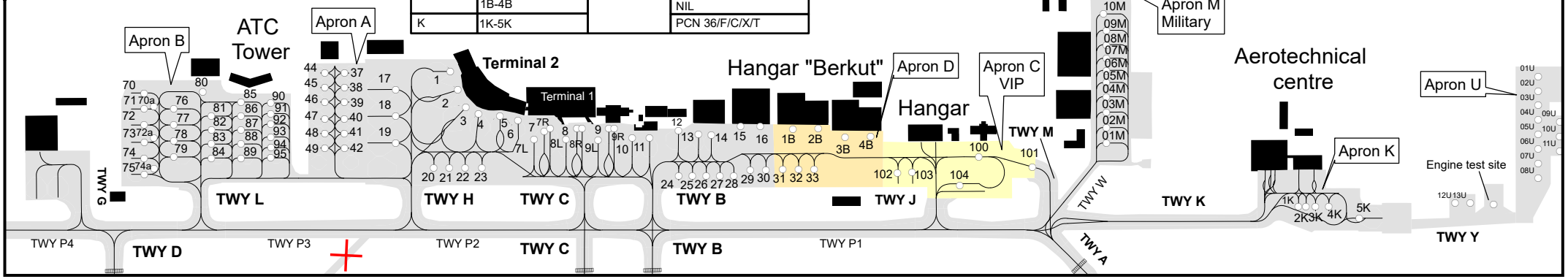
VISUAL DOCKING GUIDANCE SYSTEM (VDGS) AT STANDS 7L,7, 7R, 8L, 8, 8R, 9L, 9, 9R

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

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

TWY	WIDTH	SURFACE	BEARING STRENGTH
A, P1-P4	23m	CONC+ASPH	PCN 66/F/C/X/T
B	23m		PCN 45/R/B/X/U
C,D,H,L	23m		PCN 60/F/C/X/T
E	23m		PCN 66/F/C/X/T
F	20m		PCN 60/F/C/X/T
G	32m		PCN 91/F/C/W/T
J, M	23m		PCN 79/F/C/W/T
K	23m		PCN 36/F/C/X/T
Q	11m		PCN 46/R/B/X/T
W	23m	CONC	PCN 12/R/B/W/T
Y	18m	CONC+ASPH	PCN 46/F/C/X/T

SCALE 1:15000
150 0 150 300 Meters



CHANGE: TWY B Width/PCN Corrected.

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

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

UAUU AD 2.23 Additional Information

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

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

2. Bird concentration near airport.

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

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

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

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

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

UAUU AD 2.24 Charts Related To An Aerodrome

Name	Page
Aerodrome Chart ICAO	UAUU AD 2.24.1-1
Aerodrome Ground Movement and Parking Chart ICAO	UAUU AD 2.24.3-1
Standard Departure Chart Instrument (SID) RWY 14 ICAO	UAUU AD 2.24.7-1-1
Standard Departure Chart Instrument (SID) RWY 32 ICAO	UAUU AD 2.24.7-2-1
Standard Arrival Chart Instrument (STAR) RWY 14 ICAO	UAUU AD 2.24.9-1-1
Standard Arrival Chart Instrument (STAR) RWY 32 ICAO	UAUU AD 2.24.9-2-1
ATC Surveillance Minimum Altitude Chart ICAO	UAUU AD 2.24.10-1
Instrument Approach Chart – ILS/DME RWY 14 ICAO	UAUU AD 2.24.11-1-1
Instrument Approach Chart – ILS/DME RWY 32 ICAO	UAUU AD 2.24.11-2-1
Instrument Approach Chart – VOR/DME - Z RWY 14 ICAO	UAUU AD 2.24.11-3-1
Instrument Approach Chart – VOR/DME RWY 32 ICAO	UAUU AD 2.24.11-4-1
Instrument Approach Chart – VOR/DME - Y RWY 14 ICAO	UAUU AD 2.24.11-5-1
Visual Approach chart – ICAO	UAUU AD 2.24.12-1
VFR Departure/Arrival Chart	UAUU AD 2.24.14-1

UAUU AD 2.25 Visual segment surface (VSS) penetrations

No penetrations

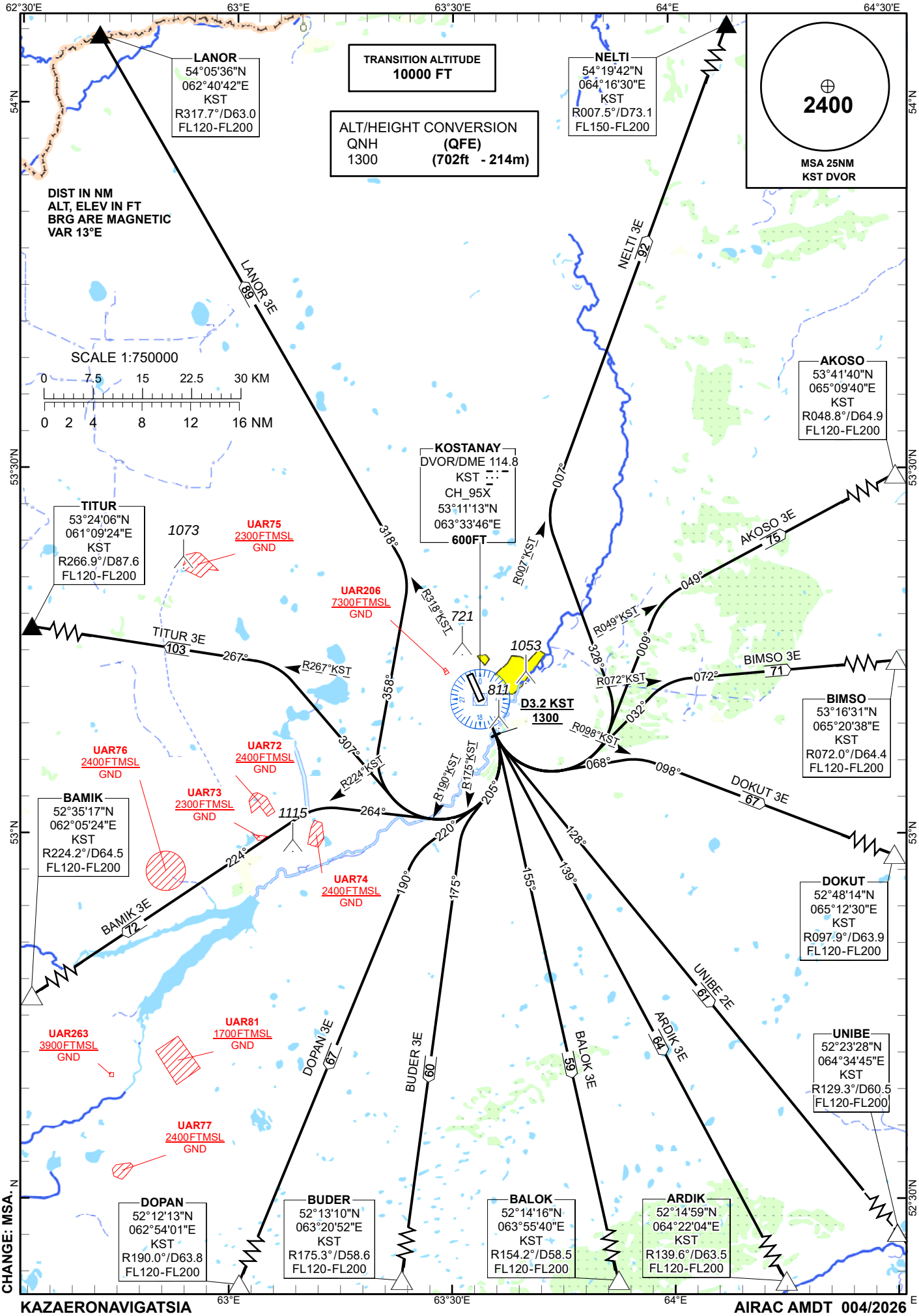
STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO

KOSTANAY TOWER 129.30
KOSTANAY ATIS (EN) 118.5
KOSTANAY ATIS (RU) 126.8

NELTI 3E, AKOSO 3E,BIMSO 3E, DOKUT 3E, ARDIK 3E, BALOK 3E, BUDER 3E, DOPAN 3E, BAMIK 3E, TITUR 3E, LANOR 3E, UNIBE 2E.

KOSTANAY

RWY 14



CHANGE: MSA

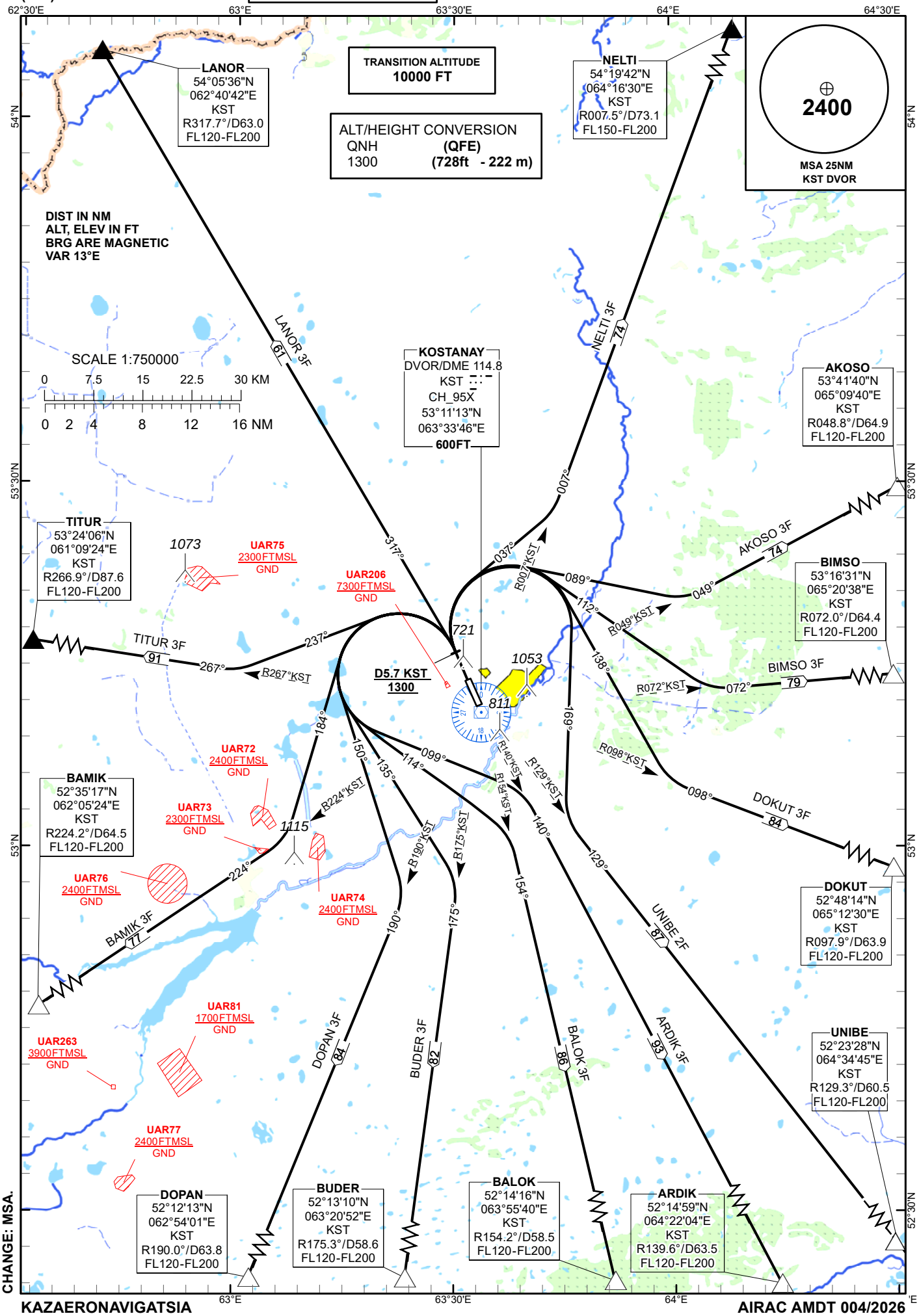
Standard Departure Routes - Instrument (SID) Kostanay RWY 14
NELTI 3E After take-off climb straight ahead to 1300FT or above. At 3.2NM KST, turn LEFT on track 328° until intercept R007°KST, then proceed on track 007° to NELTI (R007.5° D73.1NM KST). Cross NELTI at FL150 – FL200.
AKOSO 3E After take-off climb straight ahead to 1300FT or above. At 3.2NM KST, turn LEFT on track 009° until intercept R049°KST, then proceed on track 049° to AKOSO (R048.8° D64.9NM KST). Cross AKOSO at FL120 – FL200.
BIMSO 3E After take-off climb straight ahead to 1300FT or above. At 3.2NM KST, turn LEFT on track 032° until intercept R072°KST, then proceed on track 072° to BIMSO (R072.0° D64.4NM KST). Cross BIMSO at FL120 – FL200.
DOKUT 3E After take-off climb straight ahead to 1300FT or above. At 3.2NM KST, turn LEFT on track 068° until intercept R098°KST, then proceed on track 098° to DOKUT (R097.9° D63.9NM KST). Cross DOKUT at FL120 – FL200.
ARDIK 3E After take-off climb straight ahead to 1300FT or above. At 3.2NM KST, turn LEFT on track 139° to ARDIK (R139.6° D63.5NM KST). Cross ARDIK at FL120 – FL200.
BALOK 3E After take-off climb straight ahead to 1300FT or above. At 3.2NM KST, turn RIGHT on track 155° to BALOK (R154.2° D58.5NM KST). Cross BALOK at FL120 – FL200.
BUDER 3E After take-off climb straight ahead to 1300FT or above. At 3.2NM KST, turn RIGHT on track 205° until intercept R175°KST, then proceed on track 175° to BUDER (R175.3° D58.6NM KST). Cross BUDER at FL120 – FL200.
DOPAN 3E After take-off climb straight ahead to 1300FT or above. At 3.2NM KST, turn RIGHT on track 220° until intercept R190°KST, then proceed on track 190° to DOPAN (R190.0° D63.8NM KST). Cross DOPAN at FL120 – FL200.
BAMIK 3E After take-off climb straight ahead to 1300FT or above. At 3.2NM KST, turn RIGHT on track 264° until intercept R224°KST, then proceed on track 224° to BAMIK (R224.2° D64.5NM KST). Cross BAMIK at FL120 – FL200.
TITUR 3E After take-off climb straight ahead to 1300FT or above. At 3.2NM KST, turn RIGHT on track 307° until intercept R267°KST, then proceed on track 267° to TITUR (R266.9° D87.6NM KST). Cross TITUR at FL120 – FL200.
LANOR 3E After take-off climb straight ahead to 1300FT or above. At 3.2NM KST, turn RIGHT on track 358° until intercept R318°KST, then proceed on track 318° to LANOR (R317.7° D63.0NM KST). Cross LANOR at FL120 – FL200.
UNIBE 2E After take-off climb straight ahead to 1300FT or above. At 3.2NM KST, turn LEFT on track 128° to UNIBE (R129.3° D60.5NM KST). Cross UNIBE at FL120 – FL200.

STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO

KOSTANAY TOWER 129.30
KOSTANAY ATIS (EN) 118.5
KOSTANAY ATIS (RU) 126.8

NELTI 3F, AKOSO 3F, BIMSO 3F, DOKUT 3F, ARDIK 3F, BALOK 3F, BUDER 3F, DOPAN 3F, BAMIK 3F, TITUR 3F, LANOR 3F, UNIBE 2F.

KOSTANAY
RWY 32



CHANGE: MSA.

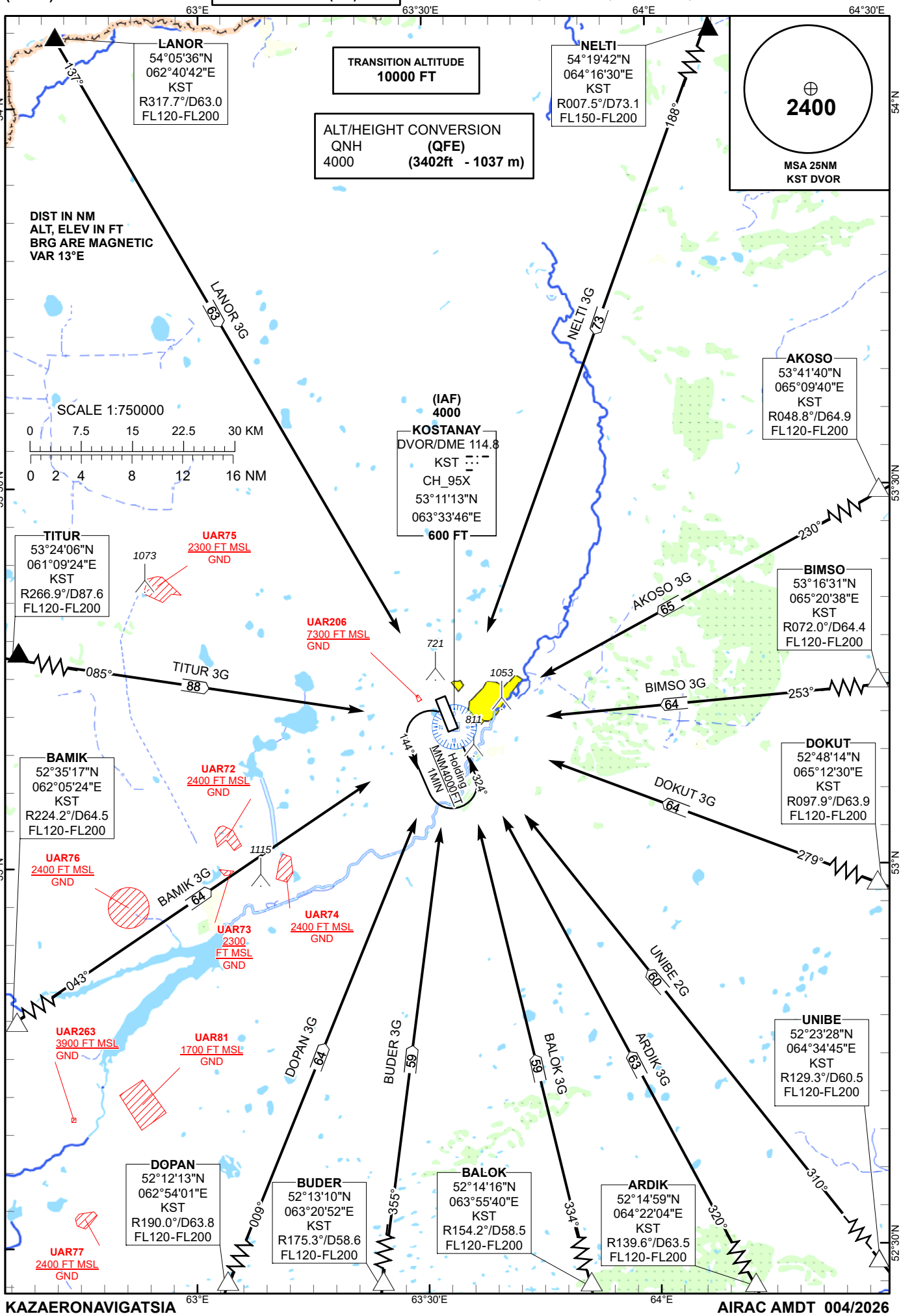
Standard Departure Routes - Instrument (SID) Kostanay RWY 32
NELTI 3F After take-off climb straight ahead to 1300FT or above. At 5.7NM KST, turn RIGHT on track 037° until intercept R007°KST, then proceed on track 007° to NELTI (R007.5° D73.1NM KST). Cross NELTI at FL150 – FL200.
AKOSO 3F After take-off climb straight ahead to 1300FT or above. At 5.7NM KST, turn RIGHT on track 089° until intercept R049°KST, then proceed on track 049° to AKOSO (R048.8° D64.9NM KST). Cross AKOSO at FL120 – FL200.
BIMSO 3F After take-off climb straight ahead to 1300FT or above. At 5.7NM KST, turn RIGHT on track 112° until intercept R072°KST, then proceed on track 072° to BIMSO (R072.0° D64.4NM KST). Cross BIMSO at FL120 – FL200.
DOKUT 3F After take-off climb straight ahead to 1300FT or above. At 5.7NM KST, turn RIGHT on track 138° until intercept R098°KST, then proceed on track 098° to DOKUT (R097.9° D63.9NM KST). Cross DOKUT at FL120 – FL200.
ARDIK 3F After take-off climb straight ahead to 1300FT or above. At 5.7NM KST, turn LEFT on track 099° until intercept R140°KST, then proceed on track 140° to ARDIK (R139.6° D63.5NM KST). Cross ARDIK at FL120 – FL200.
BALOK 3F After take-off climb straight ahead to 1300FT or above. At 5.7NM KST, turn LEFT on track 114° until intercept R154°KST, then proceed on track 154° to BALOK (R154.2° D58.5NM KST). Cross BALOK at FL120 – FL200.
BUDER 3F After take-off climb straight ahead to 1300FT or above. At 5.7NM KST, turn LEFT on track 135° until intercept R175°KST, then proceed on track 175° to BUDER (R175.3° D58.6NM KST). Cross BUDER at FL120 – FL200.
DOPAN 3F After take-off climb straight ahead to 1300FT or above. At 5.7NM KST, turn LEFT on track 150° until intercept R190°KST, then proceed on track 190° to DOPAN (R190.0° D63.8NM KST). Cross DOPAN at FL120 – FL200.
BAMIK 3F After take-off climb straight ahead to 1300FT or above. At 5.7NM KST, turn LEFT on track 184° until intercept R224°KST, then proceed on track 224° to BAMIK (R224.2° D64.5NM KST). Cross BAMIK at FL120 – FL200.
TITUR 3F After take-off climb straight ahead to 1300FT or above. At 5.7NM KST, turn LEFT on track 237° until intercept R267°KST, then proceed on track 267° to TITUR (R266.9° D87.6NM KST). Cross TITUR at FL120 – FL200.
LANOR 3F After take-off climb straight ahead to 1300FT or above. At 5.7NM KST, turn LEFT on track 317° to LANOR (R317.7° D63.0NM KST). Cross LANOR at FL120 – FL200.
UNIBE 2F After take-off climb straight ahead to 1300FT or above. At 5.7NM KST, turn RIGHT on track 169° until intercept R129°KST, then proceed on track 129° to UNIBE (R129.3° D60.5NM KST). Cross at FL120 – FL200.

STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

KOSTANAY TOWER 129.30
KOSTANAY ATIS (EN) 118.5
KOSTANAY ATIS (RU) 126.8

NELTI 3G, AKOSO 3G, BIMSO 3G, DOKUT 3G, ARDIK 3G, BALOK 3G, BUDER 3G, DOPAN 3G, BAMIK 3G, TITUR 3G, LANOR 3G, UNIBE 2G.

KOSTANAY
RWY 14



CHANGE: MSA.

Standard Arrival Routes Instrument (STAR) KOSTANAY RWY 14
NELTI 3G After crossing NELTI (R007.5° D73.1NM KST), proceed on track 188° to DVOR/DME KST. Cross NELTI at FL150 – FL200. Cross DVOR/DME KST at 4000FT.
AKOSO 3G After crossing AKOSO (R048.8° D64.9NM KST), proceed on track 230° to DVOR/DME KST. Cross AKOSO at FL120 – FL200. Cross DVOR/DME KST at 4000FT.
BIMSO 3G After crossing BIMSO (R072.0° D64.4NM KST), proceed on track 253° to DVOR/DME KST. Cross BIMSO at FL120 – FL200. Cross DVOR/DME KST at 4000FT.
DOKUT 3G After crossing DOKUT (R097.9° D63.9NM KST), proceed on track 279° to DVOR/DME KST. Cross DOKUT at FL120 – FL200. Cross DVOR/DME KST at 4000FT.
ARDIK 3G After crossing ARDIK (R139.6° D63.5NM KST), proceed on track 320° to DVOR/DME KST. Cross ARDIK at FL120 – FL200. Cross DVOR/DME KST at 4000FT.
BALOK 3G After crossing BALOK (R154.2° D58.5NM KST), proceed on track 334° to DVOR/DME KST. Cross BALOK at FL120 – FL200. Cross DVOR/DME KST at 4000FT.
BUDER 3G After crossing BUDER (R175.3° D58.6NM KST), proceed on track 355° to DVOR/DME KST. Cross BUDER at FL120 – FL200. Cross DVOR/DME KST at 4000FT.
DOPAN 3G After crossing DOPAN (R190.0° D63.8NM KST), proceed on track 009° to DVOR/DME KST. Cross DOPAN at FL120 – FL200. Cross DVOR/DME KST at 4000FT.
BAMIK 3G After crossing BAMIK (R224.2° D64.5NM KST), proceed on track 043° to DVOR/DME KST. Cross BAMIK at FL120 – FL200. Cross DVOR/DME KST at 4000FT.
TITUR 3G After crossing TITUR (R266.9° D87.6NM KST), proceed on track 085° to DVOR/DME KST. Cross TITUR at FL120 – FL200. Cross DVOR/DME KST at 4000FT.
LANOR 3G After crossing LANOR (R317.7° D63.0NM KST), proceed on track 137° to DVOR/DME KST. Cross LANOR at FL120 – FL200. Cross DVOR/DME KST at 4000FT.
UNIBE 2G After crossing UNIBE (R129.3° D60.5NM KST), proceed on track 310° to DVOR/DME KST. Cross UNIBE at FL120 – FL200. Cross DVOR/DME KST at 4000FT.

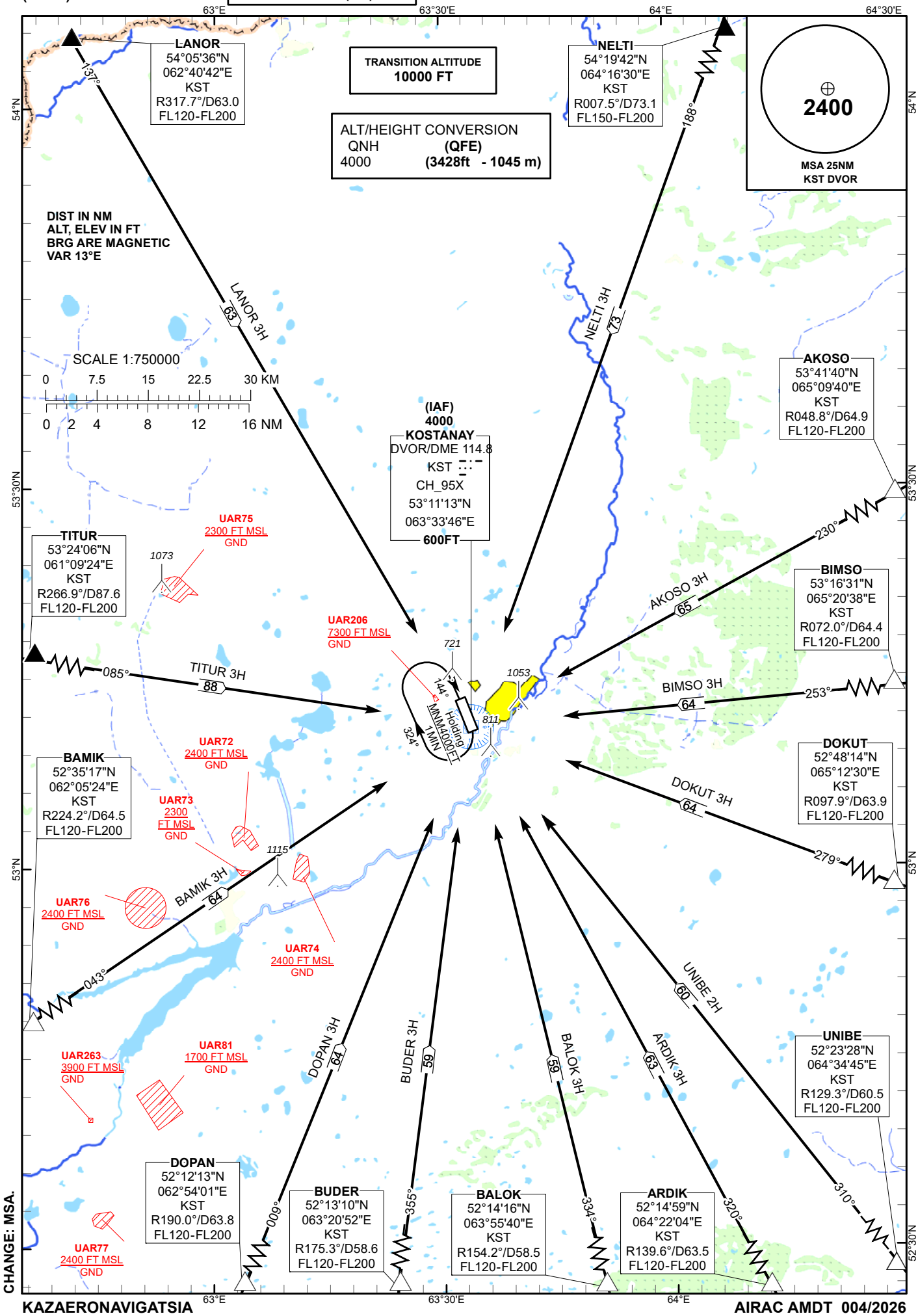
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

KOSTANAY TOWER 129.30
KOSTANAY ATIS (EN) 118.5
KOSTANAY ATIS (RU) 126.8

NELTI 3H, AKOSO 3H, BIMSO 3H, DOKUT 3H, ARDIK 3H, BALOK 3H, BUDER 3H, DOPAN 3H, BAMIK 3H, TITUR 3H, LANOR 3H, UNIBE 2H.

KOSTANAY

RWY 32



CHANGE: MSA.

Standard Arrival Routes Instrument (STAR) KOSTANAY RWY 32
NELTI 3H After crossing NELTI (R007.5° D73.1NM KST), proceed on track 188° to DVOR/DME KST. Cross NELTI at FL150 – FL200. Cross DVOR/DME KST at 4000FT.
AKOSO 3H After crossing AKOSO (R048.8° D64.9NM KST), proceed on track 230° to DVOR/DME KST. Cross AKOSO at FL120 – FL200. Cross DVOR/DME KST at 4000FT.
BIMSO 3H After crossing BIMSO (R072.0° D64.4NM KST), proceed on track 253° to DVOR/DME KST. Cross BIMSO at FL120 – FL200. Cross DVOR/DME KST at 4000FT.
DOKUT 3H After crossing DOKUT (R097.9° D63.9NM KST), proceed on track 279° to DVOR/DME KST. Cross DOKUT at FL120 – FL200. Cross DVOR/DME KST at 4000FT.
ARDIK 3H After crossing ARDIK (R139.6° D63.5NM KST), proceed on track 320° to DVOR/DME KST. Cross ARDIK at FL120 – FL200. Cross DVOR/DME KST at 4000FT.
BALOK 3H After crossing BALOK (R154.2° D58.5NM KST), proceed on track 334° to DVOR/DME KST. Cross BALOK at FL120 – FL200. Cross DVOR/DME KST at 4000FT.
BUDER 3H After crossing BUDER (R175.3° D58.6NM KST), proceed on track 355° to DVOR/DME KST. Cross BUDER at FL120 – FL200. Cross DVOR/DME KST at 4000FT.
DOPAN 3H After crossing DOPAN (R190.0° D63.8NM KST), proceed on track 009° to DVOR/DME KST. Cross DOPAN at FL120 – FL200. Cross DVOR/DME KST at 4000FT.
BAMIK 3H After crossing BAMIK (R224.2° D64.5NM KST), proceed on track 043° to DVOR/DME KST. Cross BAMIK at FL120 – FL200. Cross DVOR/DME KST at 4000FT.
TITUR 3H After crossing TITUR (R266.9° D87.6NM KST), proceed on track 085° to DVOR/DME KST. Cross TITUR at FL120 – FL200. Cross DVOR/DME KST at 4000FT.
LANOR 3H After crossing LANOR (R317.7° D63.0NM KST), proceed on track 137° to DVOR/DME KST. Cross LANOR at FL120 – FL200. Cross DVOR/DME KST at 4000FT.
UNIBE 2H After crossing UNIBE (R129.3° D60.5NM KST), proceed on track 310° to DVOR/DME KST. Cross UNIBE at FL120 – FL200. Cross DVOR/DME KST at 4000FT.

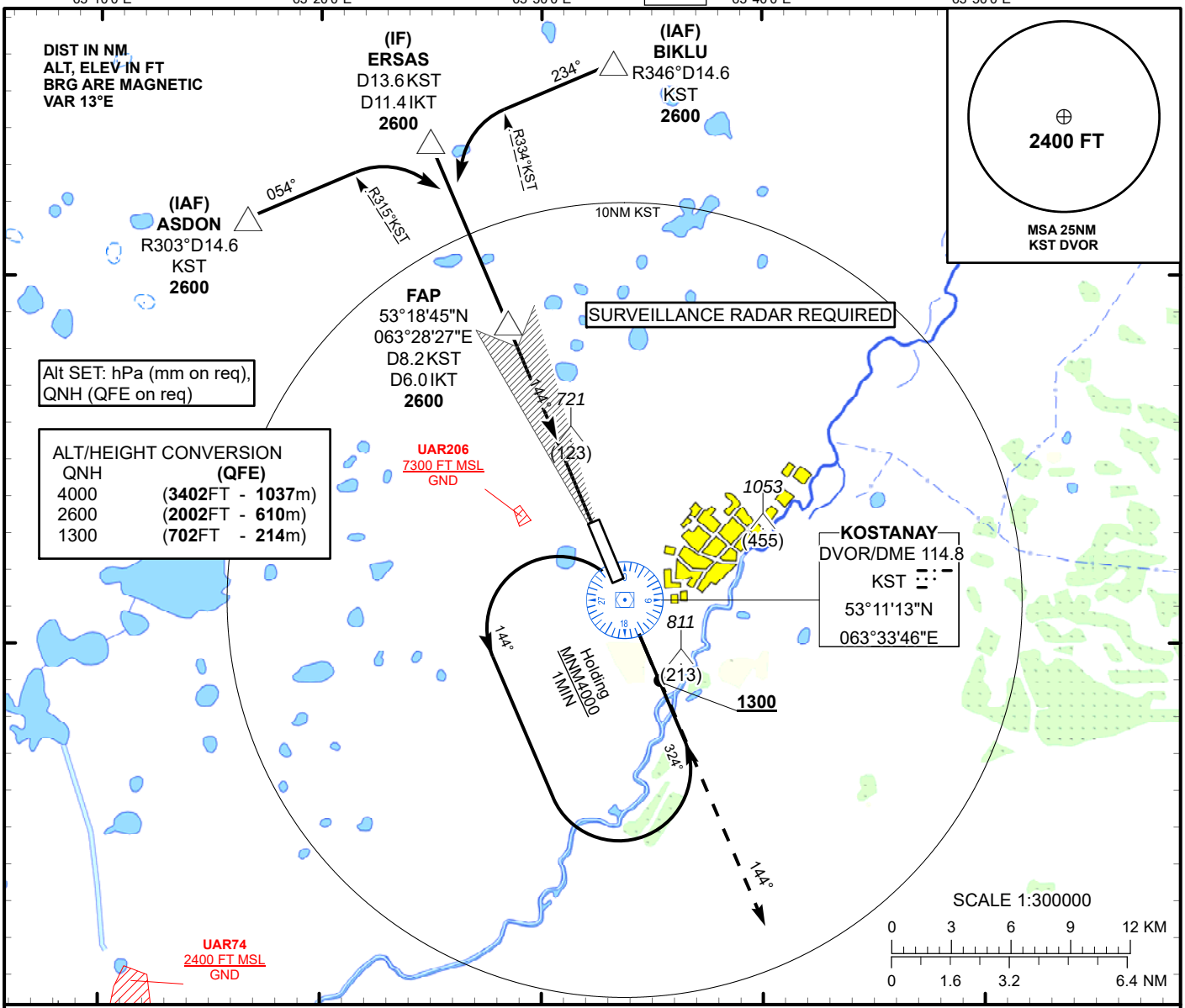
INSTRUMENT APPROACH CHART - ICAO

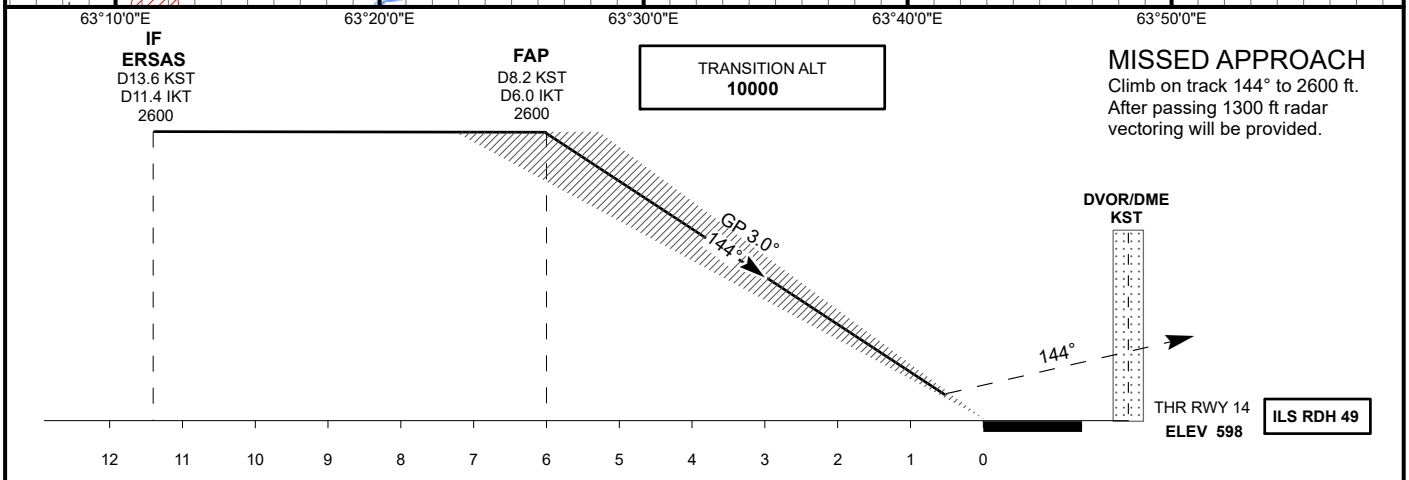
AERODROME ELEV *601 FT*
HEIGHTS RELATED TO THR 14 ELEV 598 FT

ILS
LLZ 111.7
IKT
GP 333.5
CH 54X

KOSTANAY TOWER 129.30
KOSTANAY ATIS (EN) 118.5
KOSTANAY ATIS (RU) 126.8

KOSTANAY ILS/DME RWY 14





MISSED APPROACH

Climb on track 144° to 2600 ft.
After passing 1300 ft radar vectoring will be provided.

Aircraft Category		A	B	C	D	DIST to THR DME IKT	NM	6.0	5	4	3	2	1	
Straight-in Approach OCA/H						DME KST	NM	8.2	7.2	6.2	5.2	4.2	3.2	
	ILS CAT I	798(200)	798(200)	807(209)	817(219)	ALTITUDE	FT	2600	2261	1934	1610	1287	966	
						HEIGHT	FT	2002	1663	1336	1012	689	368	

DME IKT ZERO RANGED TO THR RWY 14

Aerodrome Operating Minima DH ft x RVR(CMV)														
	ILS CAT I													
						GS	Kt	80	100	120	140	160	180	
						Desc.Rate(5.2%)	ft/min	420	530	630	740	850	960	

CHANGE: MSA.

KOSTANAY
ILS/DME

AERONAUTICAL DATA TABULATION

ILS approach to RWY14 from ERSAS, BIKLU, ASDON	
Fix/point	**Coordinates**
DVOR/DME KST	53° 11' 13.0"N 063° 33' 45.5"E
(FAP) D8.2 KST, D6.0 IKT	53° 18' 45.1"N 063° 28' 26.8"E
ERSAS (IF) D13.6 KST, D11.4 IKT	53° 23' 41.3"N 063° 24' 55.2"E
BIKLU (IAF) R346°, D14.6 KST	53° 25' 47.8"N 063° 33' 13.7"E
ASDON (IAF) R303°, D14.6 KST	53° 21' 34.2"N 063° 16' 37.5"E
THR RWY 14	53° 13' 12.74"N 063° 32' 23.66"E
IKT LOC	53° 11' 20.9"N 063° 33' 43.0"E

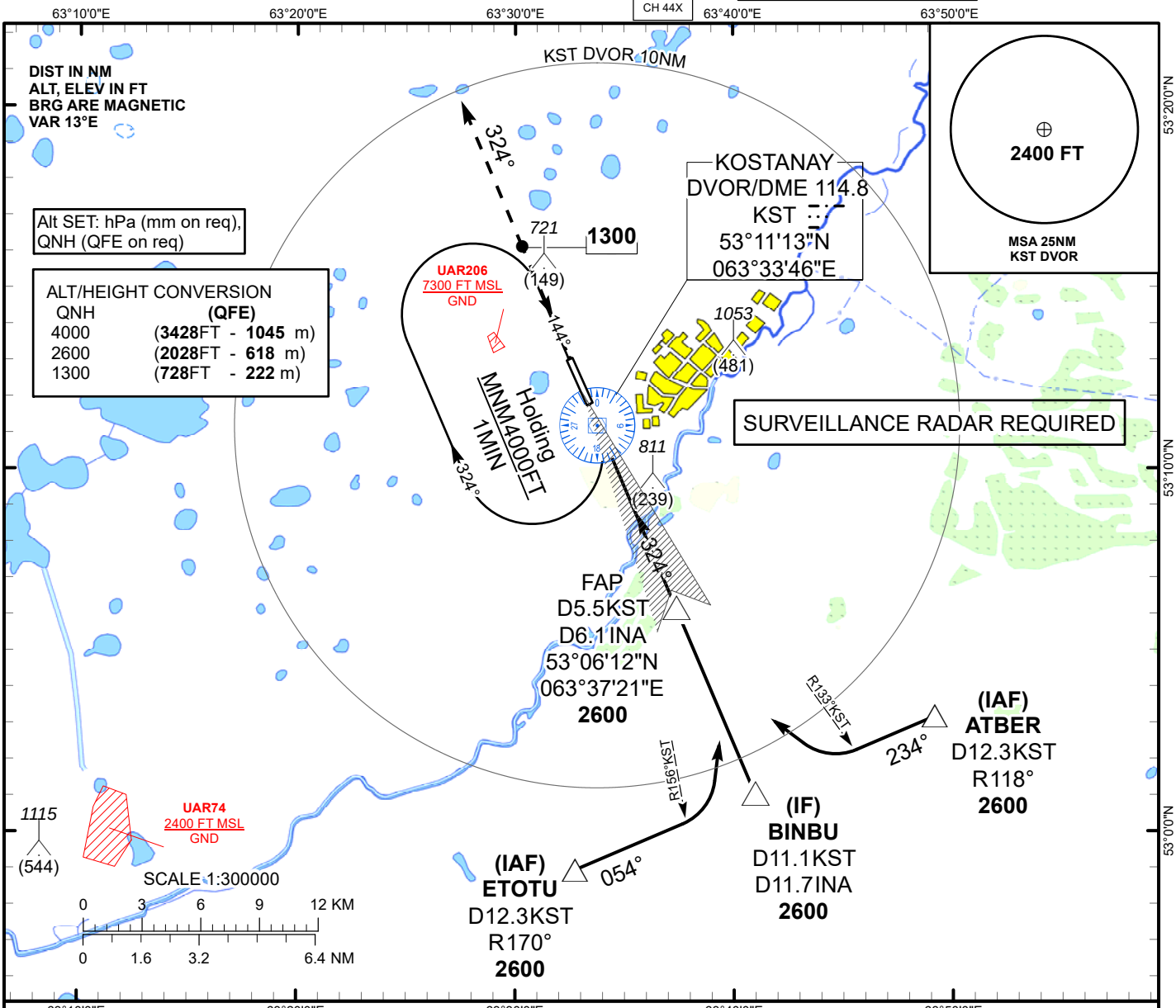
INSTRUMENT APPROACH CHART ICAO

AERODROME ELEV *601ft*
HEIGHTS RELATED TO
THR RWY 32 - ELEV *572ft*

ILS
LLZ 110.7
INA • •
— •
• —
GP 330.2
CH 44X

KOSTANAY TOWER 129.30
KOSTANAY ATIS (EN) 118.5
KOSTANAY ATIS (RU) 126.8

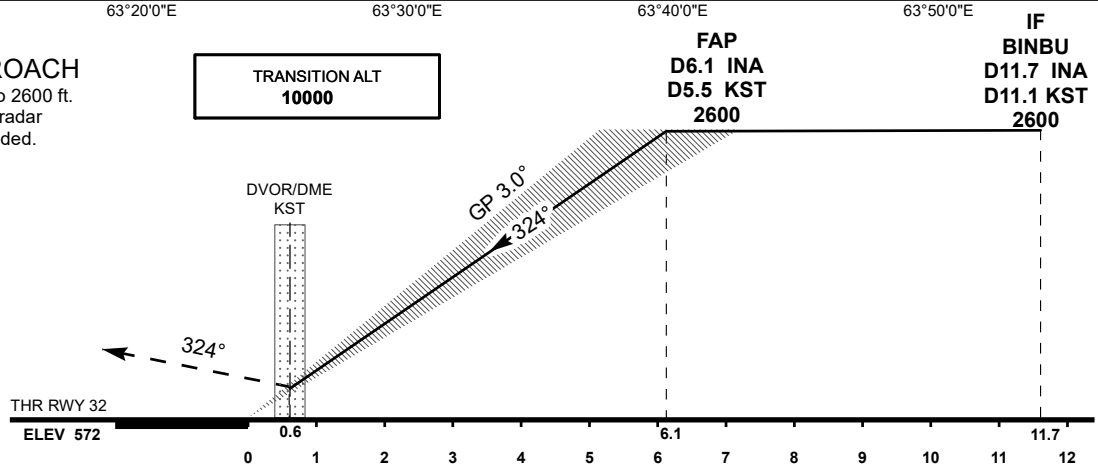
KOSTANAY ILS/DME RWY 32



MISSED APPROACH

Climb on track 324° to 2600 ft.
After passing 1300 ft radar vectoring will be provided.

TRANSITION ALT
10000



ILS RDH 49

Aircraft Category		A	B	C	D
Straight-in Approach OCA/H	ILS CAT I	772(200)	772(200)	782(210)	792(220)
Aerodrome Operating Minima DH ft x RVR(CMV)	ILS CAT I				

DIST to THR DME INA	NM	6.1	6	5	4	3	2	1
DME KST	NM	5.5	5.4	4.4	3.4	2.4	1.4	0.4
ALTITUDE	FT	2600	2563	2235	1908	1584	1261	940
HEIGHT	FT	2002	1991	1663	1336	1012	689	368

DME INA ZERO RANGED TO THR RWY 32

GS	Kt	80	100	120	140	160	180
Desc.Rate(5.2%)	ft/min	420	530	630	740	850	960

CHANGE: MSA.

KOSTANAY
ILS/DME

AERONAUTICAL DATA TABULATION

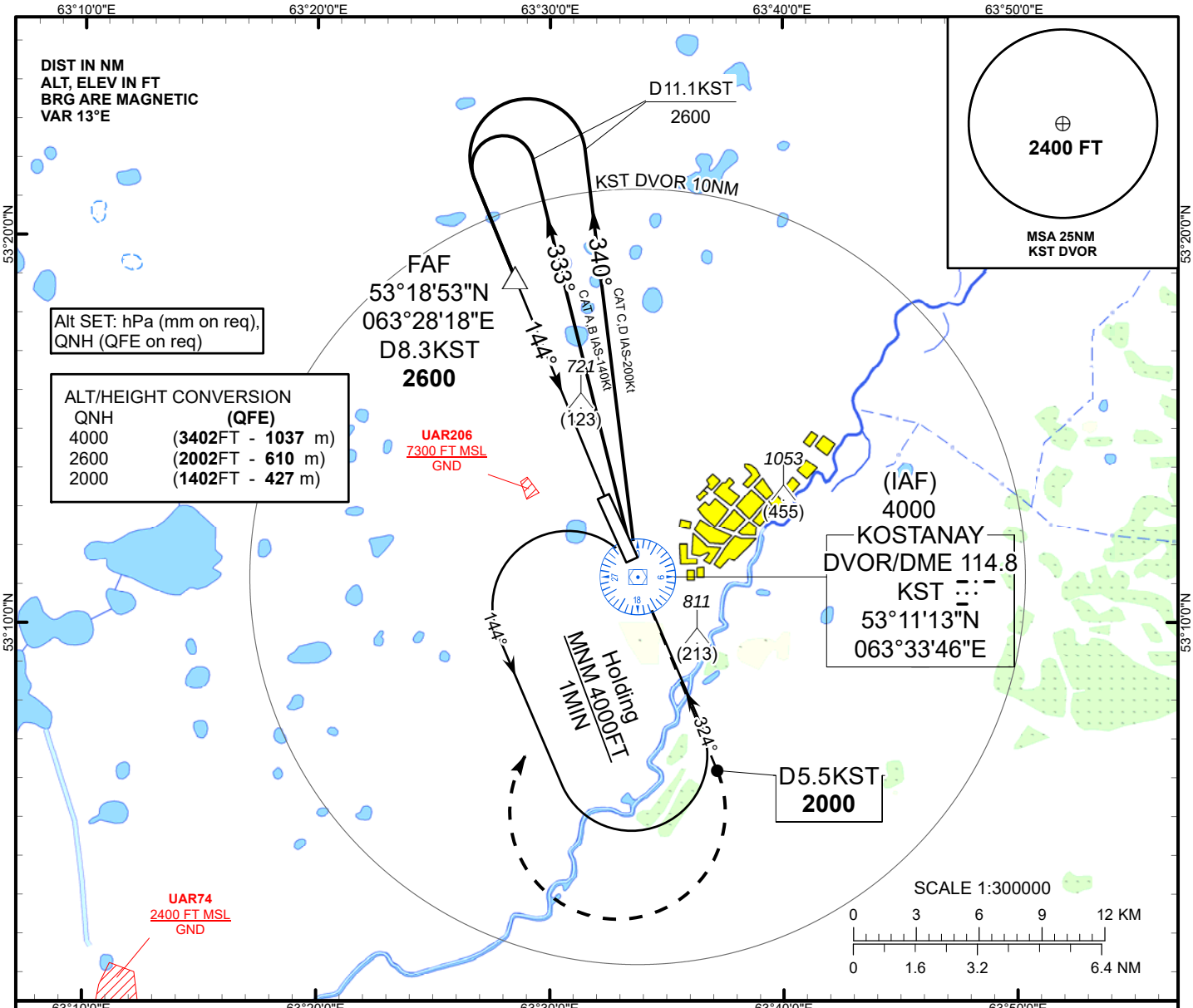
ILS approach to RWY32 from BINBU, ATBER, ETOTU	
Fix/point	**Coordinates**
DVOR/DME KST	53° 11' 13.0"N 063° 33' 45.5"E
(FAP) D5.5 KST, D6.1 INA	53° 06' 11.9"N 063° 37' 21.2"E
BINBU (IF) D11.1 KST, D11.7 INA	53° 01' 04.8"N 063° 40' 57.2"E
ATBER (IAF) R118°, D12.3 KST	53° 03' 11.3"N 063° 49' 11.4"E
ETOTU (IAF) R170°, D12.3 KST	52° 58' 57.8"N 063° 32' 43.9"E
THR RWY 32	53° 11' 49.00"N 063° 33' 23.08"E
INA LOC	53° 13' 29.9"N 063° 32' 11.5"E

INSTRUMENT APPROACH CHART ICAO

AERODROME ELEV ***601ft***
HEIGHTS RELATED TO
THR RWY 14 - ELEV ***598ft***

KOSTANAY TOWER 129.30
KOSTANAY ATIS (EN) 118.5
KOSTANAY ATIS (RU) 126.8

KOSTANAY VOR/DME Z RWY 14

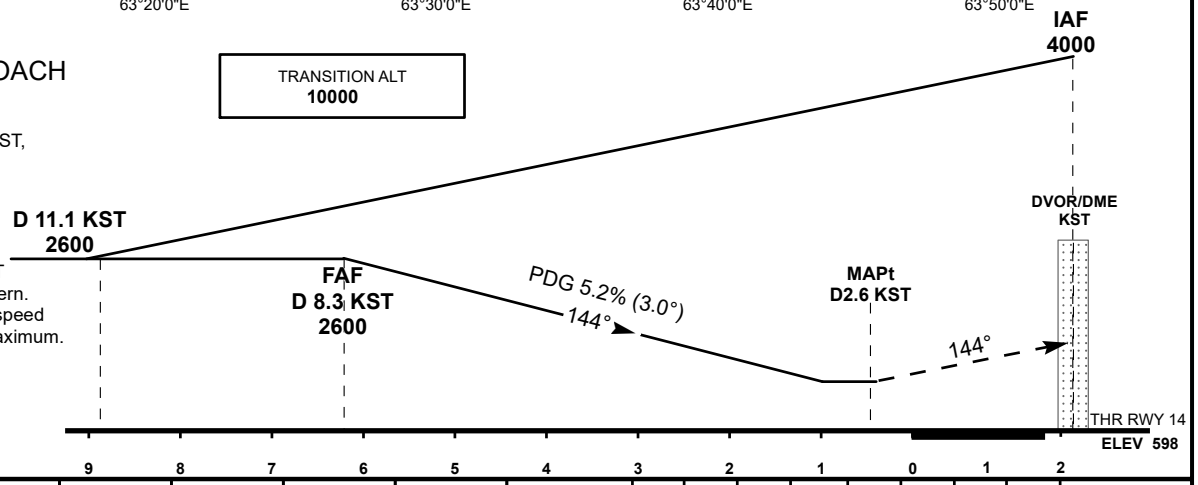


MISSED APPROACH

Climb on track 144°
to 2000 or above,
outbound to D5.5NM KST,
turn RIGHT to KST.
Climb initially to 2600,
then as directed.

RADIO FAILURE:
In the case of RCF
climb to 4000FT to KST
and join to holding pattern.
Missed approach turn speed
limited to 240Kt IAS maximum.

TRANSITION ALT
10000



Aircraft Category		A	B	C	D	DIST to THR	NM	6.2	6	5	4	3	2	1
Straight-in Approach OCA/H						DME KST	NM	8.3	8.1	7.1	6.1	5.1	4.1	3.1
	VOR/DME	980(380)	980(380)	980(380)	980(380)	ALTITUDE	FT	2600	2554	2236	1918	1599	1257	938
						HEIGHT	FT	2002	1956	1638	1320	1001	683	364

Aerodrome Operating Minima MDH ft x RVR(CMV)														
	VOR/DME					GS	Kt	80	100	120	140	160	180
						FAF-MAPt (5.7NM)	min:sec	4:17	3:25	2:51	2:26	2:08	1:54
						Desc.Rate(5.2%)	ft/min	420	530	630	740	850	960

CHANGE: MSA.

KOSTANAY
VOR/DME Z

AERONAUTICAL DATA TABULATION

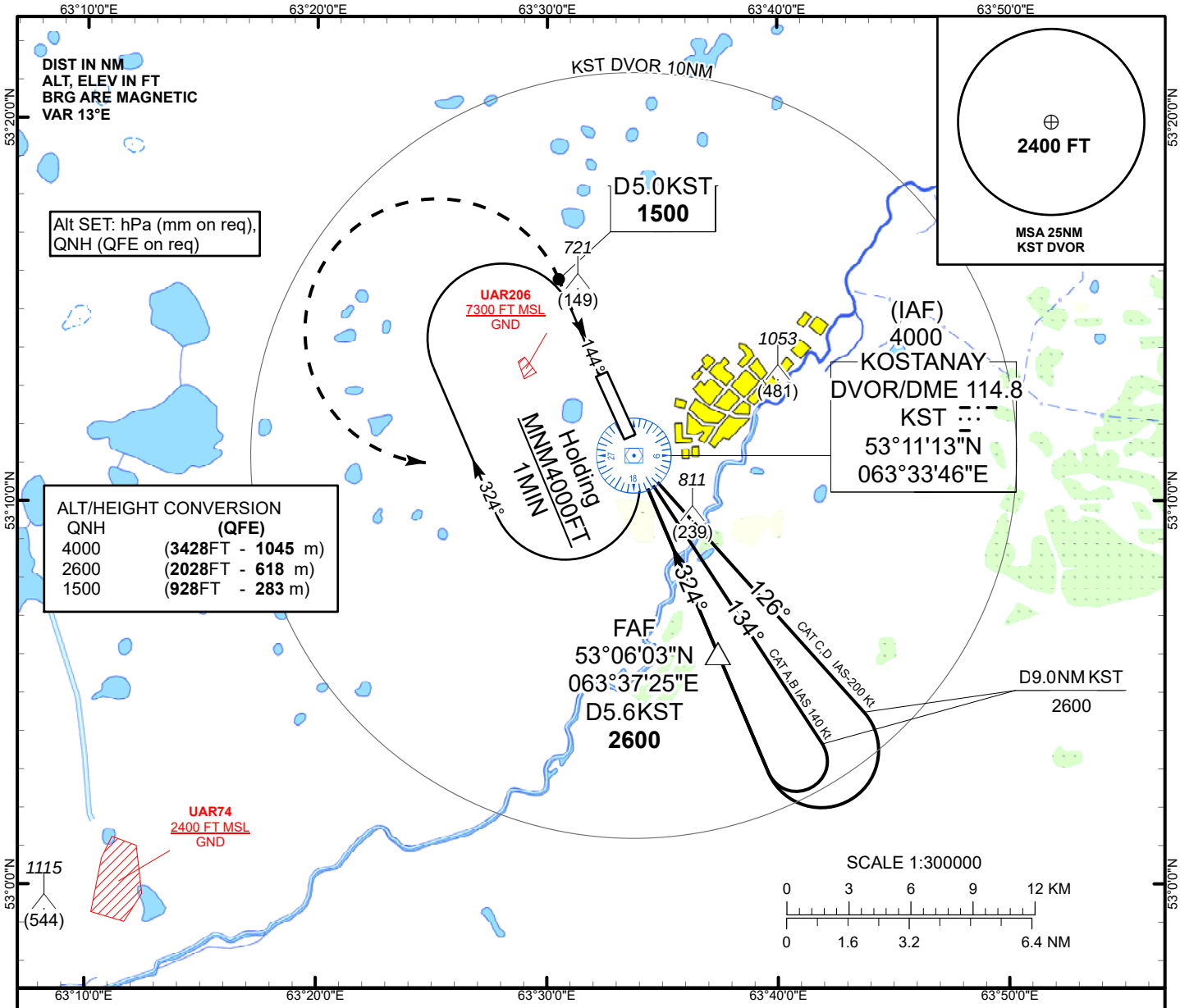
VOR approach to RWY14 from DVOR/DME KST	
Fix/point	**Coordinates**
(IAF) DVOR/DME KST	53° 11' 13.0"N 063° 33' 45.5"E
(FAF) D8.3 KST	53° 18' 52.6"N 063° 28' 18.1"E
THR RWY 14	53° 13' 12.74"N 063° 32' 23.66"E
Final approach descent angle is 3°	

INSTRUMENT APPROACH CHART ICAO

AERODROME ELEV ***601ft***
HEIGHTS RELATED TO
THR RWY 32 - ELEV ***572ft***

KOSTANAY TOWER 129.30
KOSTANAY ATIS (EN) 118.5
KOSTANAY ATIS (RU) 126.8

KOSTANAY VOR/DME RWY 32



ALT/HEIGHT CONVERSION

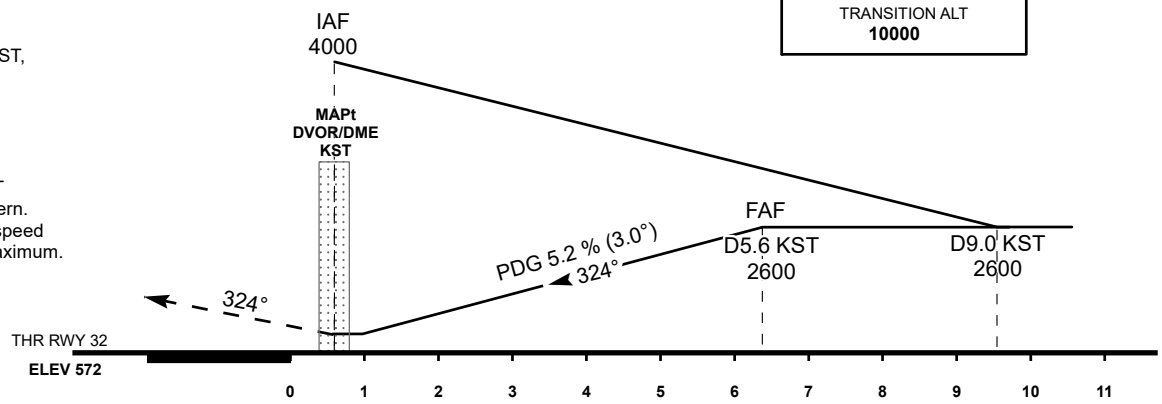
QNH	(QFE)
4000	(**3428**FT - **1045** m)
2600	(**2028**FT - **618** m)
1500	(**928**FT - **283** m)

MISSED APPROACH

Climb on track 324°
to 1500 or above,
outbound to D5.0NM KST,
turn LEFT to KST.
Climb initially to 2600,
then as directed.

RADIO FAILURE:
In the case of RCF
climb to 4000FT to KST
and join to holding pattern.
Missed approach turn speed
limited to 240Kt IAS maximum.

TRANSITION ALT
10000



Aircraft Category		A	B	C	D
Straight-in Approach OCA/H					
	VOR/DME	950(370)	950(370)	950(370)	950(370)

DIST to THR	NM	1	2	3	4	5	6	6.3
DME KST	NM	0.4	1.4	2.4	3.4	4.4	5.4	5.6
ALTITUDE	FT	939	1257	1575	1894	2212	2530	2600
HEIGHT	FT	368	686	1004	1323	1641	1959	2029

Aerodrome Operating Minima MDH ft x RVR(CMV)						
	VOR/DME					

GS	Kt	80	100	120	140	160	180
FAF-MAPt (5.6NM)	min:sec	4:12	3:22	2:48	2:24	2:06	1:56
Desc.Rate(5.2%)	ft/min	420	530	630	740	850	960

CHANGE: MSA.

KOSTANAY
VOR/DME

AERONAUTICAL DATA TABULATION

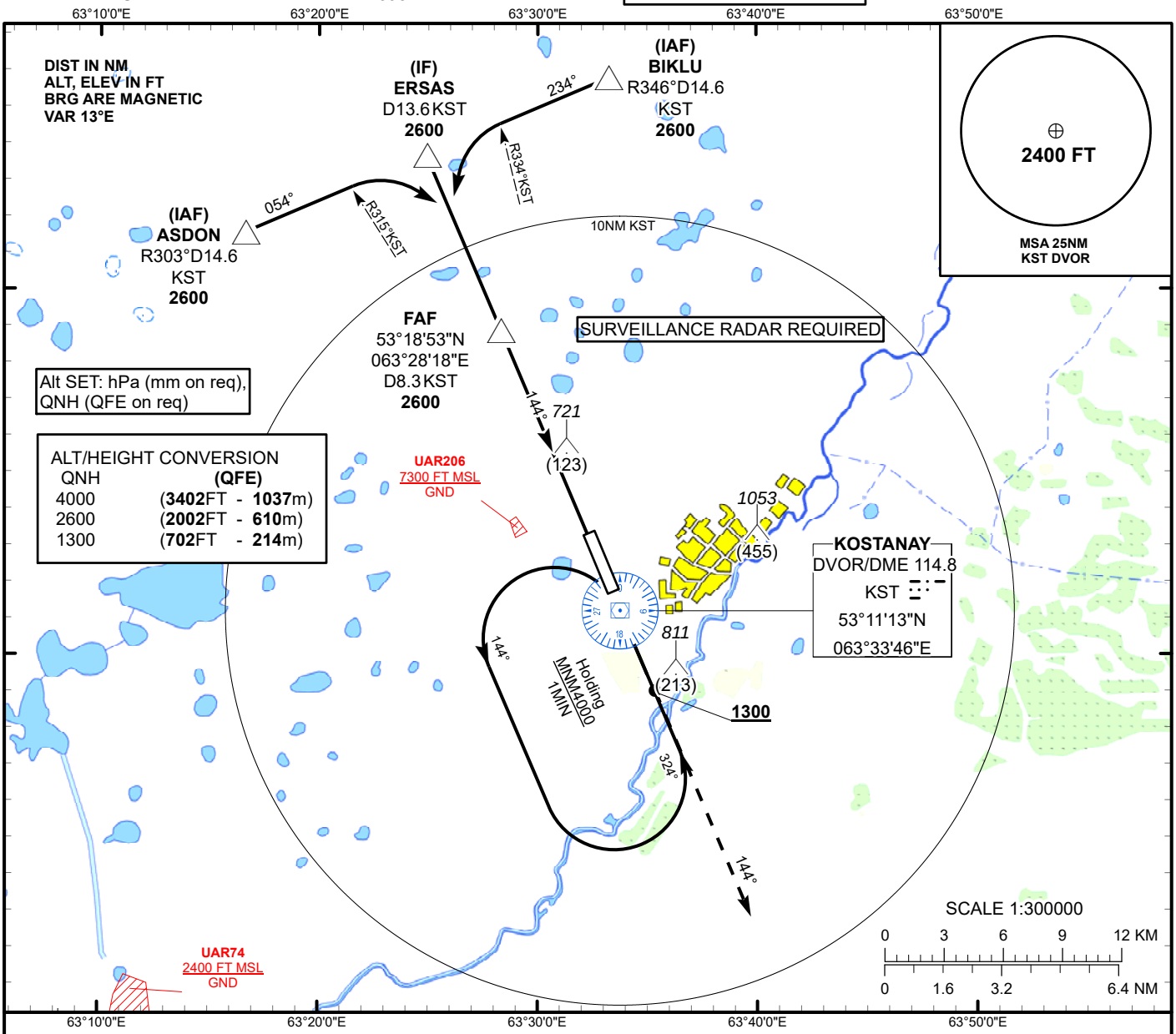
VOR approach to RWY32 from DVOR/DME KST	
Fix/point	**Coordinates**
(IAF) DVOR/DME KST	53° 11' 13.0"N 063° 33' 45.5"E
(FAF) D5.6 KST	53° 06' 03.0"N 063° 37' 25.2"E
THR RWY 32	53° 11' 49.00"N 063° 33' 23.08"E
Final approach descent angle is 3°	

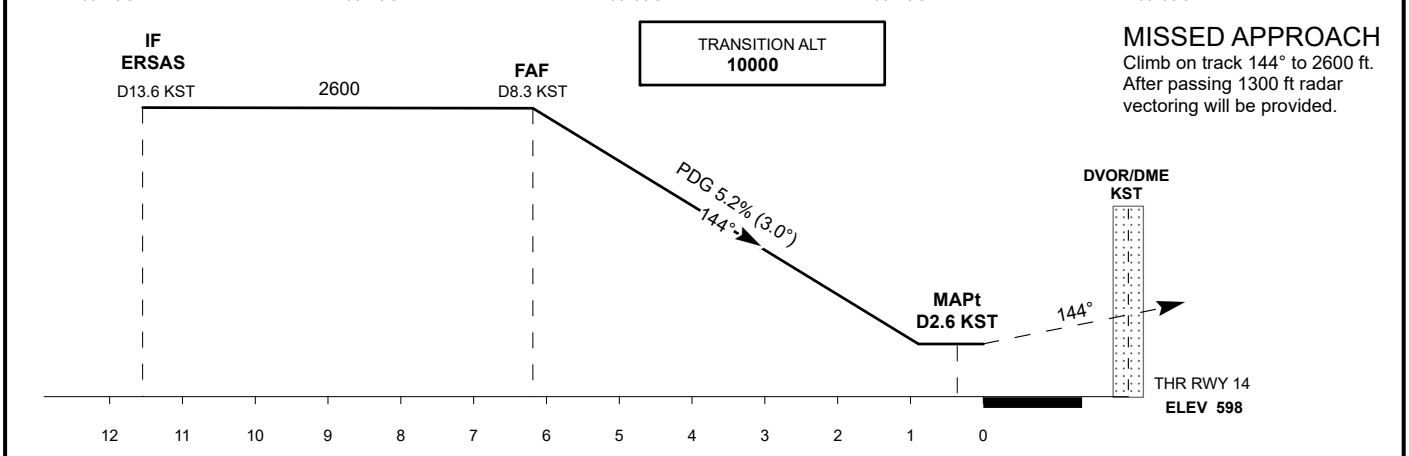
INSTRUMENT APPROACH CHART - ICAO

AERODROME ELEV *601 FT*
HEIGHTS RELATED TO THR 14 ELEV 598 FT

KOSTANAY TOWER 129.30
KOSTANAY ATIS (EN) 118.5
KOSTANAY ATIS (RU) 126.8

KOSTANAY VOR/DME Y RWY 14





MISSED APPROACH

Climb on track 144° to 2600 ft.
After passing 1300 ft radar vectoring will be provided.

Aircraft Category		A	B	C	D	DIST to THR	NM	6.2	6	5	4	3	2	1
Straight-in Approach OCA/H						DME KST	NM	8.3	8.1	7.1	6.1	5.1	4.1	3.1
	VOR/DME	980(380)	980(380)	980(380)	980(380)	ALTITUDE	FT	2600	2554	2236	1918	1599	1257	938
						HEIGHT	FT	2002	1956	1638	1320	1001	683	364

Aerodrome Operating Minima MDH ft x RVR(CMV)														
	VOR/DME					GS	Kt	80	100	120	140	160	180	
						FAF-MAPt (5.7NM)	min:sec	4:17	3:25	2:51	2:26	2:08	1:54	
						Desc.Rate(5.2%)	ft/min	420	530	630	740	850	960	

CHANGE: Renumbered, MSA.

KOSTANAY
VOR/DME Y

AERONAUTICAL DATA TABULATION

VOR approach to RWY14 from ERSAS, ASDON, BIKLU	
Fix/point	**Coordinates**
DVOR/DME KST	53° 11' 13.0"N 063° 33' 45.5"E
(FAF) D8.3 KST	53° 18' 52.6"N 063° 28' 18.1"E
ERSAS (IF) D13.6 KST	53° 23' 41.3"N 063° 24' 55.2"E
ASDON (IAF) R303°, D14.6 KST	53° 21' 34.2"N 063° 16' 37.5"E
BIKLU (IAF) R346°, D14.6 KST	53° 25' 47.8"N 063° 33' 13.7"E
THR RWY 14	53° 13' 12.74"N 063° 32' 23.66"E
Final approach descent angle is 3°	

UASS AD 2

Note: The following sections in this chapter are intentionally left blank: AD-2.10, AD-2.21, AD-2.25

UASS AD 2.1 Aerodrome Location Indicator And Name

UASS - SEMEY

UASS AD 2.2 Aerodrome Geographical And Administrative Data

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

UASS AD 2.3 Operational Hours

1	AD Operator	See NOTAM Phone: +7 (7222) 360033
2	Customs and immigration	AVBL
3	Health and sanitation	As AD Phone: +7 (7222) 360033
4	AIS Briefing Office	ANY 03:00 - 13:00 UTC
5	ATS Reporting Office (ARO)	ANY 00:30 - 14:00 UTC Phone: +7 (7222) 569134 AFS: UASSZTZX
6	MET Briefing Office	ANY 00:30 - 14:00 UTC Phone: +7 (7222) 565117 Fax: +7 (7222) 565117 AFS: UASSYMYX
7	ATS	See NOTAM Phone: +7 (7222) 569034
8	Fuelling	As AD Phone: +7 (7222) 443951

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

UASS AD 2.4 Handling Services And Facilities

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

UASS AD 2.5 Passenger Facilities

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

UASS AD 2.6 Rescue And Fire Fighting Services

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

UASS AD 2.7 Seasonal Availability - Clearing

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

SWY dimensions (M)	CWY dimensions (M)	Strip dimensions (M)	RESA dimensions (M)	Location and description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
Nil	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

1	Coordinates TLOF or THR of FATO Geoid undulation	502102.12N 0801312.59E -44,3
2	TLOF and/or FATO elevation	2824 FT
3	TLOF and FATO area dimensions, surface, strength, marking	Rectangle 25 × 25 м, CONC, PCN 47/R/B/X/T, no marking
4	True BRG of FATO	076/256
5	Declared distance available	Nil
6	APP and FATO lighting	Nil
7	Remarks	Intersection of RWY and TWY A

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

Service designation	Call sign	Frequency	SATVOICE number(s)	Logon address	Hours of operation	Remarks
1	2	3	4	5	6	7
Production and dispatcher service	SEMEY TRANZIT (EN) SEMEY TRANZIT (RU)	131.9 MHZ	Nil	Nil	As AD	Nil
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.

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

Taxiing of index 6 aircraft is restricted on the apron between the taxi route centre line and a fixed obstacle (passenger terminal building)

2. Low Visibility Procedures.

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

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

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

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

Air traffic service in the control zone of the aerodrome is carried out by the controller of the "Tower" ATC unit. Flight altitudes are calculated by the aircraft crew in accordance with the Civil Aviation Flight Rules of the Republic of Kazakhstan. The functions of Air traffic service does not include ground collision avoidance. The aircraft crew shall ensure that the clearance issued by the ATS unit in this regard is safe. VFR flights at altitudes below 4000 feet in the control zone are performed at the altitudes indicated in the flight plan or requested by the aircraft crew.

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

For VFR flights, the aerodrome has a flight circle (left / right) at an altitude of 2000 feet. The air traffic controller of the “Tower” ATC unit is determine and report which flight circle is in use.

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

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

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

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

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

№	Waypoint name (visual reference)	Geographical coordinates	Radial (mag.) and distance from NAVAID (ARP)	Remarks
1	ALPHA	N504042 E0801943	002° 20.0 nm SEM DVOR/DME	Exit
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

№	Waypoint name (visual reference)	Geographical coordinates	Radial (mag.) and distance from NAVAID (ARP)	Remarks
15	STARAIA KREPOST (Northern outskirts of Staraia Krepost)	N503013 E0800558	322° 10.8 nm SEM VOR/DME	Holding, circle and absolute altitudes by “Tower” ATC instructions
16	Ferma KERNEI	N501655 E0802746	109° 9.4 nm SEM DVOR/DME	Holding, circle and absolute altitudes by “Tower” ATC instructions
17	Zimovka STARIY KULTOBE	N501414 E0800601	212° 8.7 nm SEM DVOR/DME	Holding, circle and absolute altitudes by “Tower” ATC instructions

UASS AD 2.23 Additional Information

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

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

2. Bird concentration near airport.

The main migration direction in spring: from south-east to north-west; in autumn: in the counterdirection.

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

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

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

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

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
VFR Departure/Arrival Chart	UASS AD 2.24.14-1

UASS AD 2.25 Visual segment surface (VSS) penetrations

No penetrations

UAII AD 2

Note: The following sections in this chapter are intentionally left blank: AD-2.21, AD-2.25

UAII AD 2.1 Aerodrome Location Indicator And Name

UAII - SHYMKENT

UAII AD 2.2 Aerodrome Geographical And Administrative Data

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

UAII AD 2.3 Operational Hours

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

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

UAII AD 2.4 Handling Services And Facilities

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

UAII AD 2.5 Passenger Facilities

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

UAII AD 2.6 Rescue And Fire Fighting Services

1	AD category for fire fighting	CAT A8
2	Rescue equipment	AVBL for B-747-200/300/400, B-737-300/400/500, A-319/320/321, Embraer-190, TU-154, IL-18, AN-24, YAK-40 6 fire engines with a total volume 58,490 liters of extinguishing agent.
3	Capability for removal of disabled aircraft	Available equipment: 1. A device for lifting an aircraft by the forward fuselage 2. A device for lifting an aircraft by the wing Phone: +7 (7252) 455030 (ext.1148) Email: spasop@airserver.kz

4	Remarks	The number and means of delivery of the extinguishing agent correspond to category 9 To ensure the regulatory calculation, search and rescue flight support services, at the THR of RWY 10, crew duty is provided near the main TWY-P in the area of TWY-D at a distance of 47.5 m north of the center line of the main TWY-P

UAII AD 2.7 Seasonal Availability - Clearing

1	**Types of clearing equipment**	1 rotor, 6 combined watering machine, 1 shaft pusher For removal of ice from aerodrome surfaces, the liquid anti-icing agent “Green Way F65” (grade B) is used.
2	**Clearance priorities**	1. RWY 2. TWY 3. Stands
3	**Remarks**	Nil

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

1	**Apron surface and strength**	**STANDS**		**SURFACE**	**STRENGTH**
		1, 1A, 1B		CONC+ASPH	PCN 77/F/C/W/T
		2,3,19,19A		CONC+ASPH	PCN 44/F/C/W/T
		4-9, 4A, 4B, 5A, 5B, 7R, 7L, 9R, 9L		CONC+ASPH	PCN 63/F/C/X/T
		17-18		CONC+ASPH	PCN 23/F/C/W/T
		20-22		CONC+ASPH	PCN 51/F/C/W/T
		54-62		CONC+ASPH	PCN 13/F/C/W/T
2	**Taxiway width, surface and strength**	**TWY**	**WIDTH (M)**	**SURFACE**	**STRENGTH**
		MAIN P	23	REINF+CONC	PCN 50/R/A/X/T
		A	23	REINF+CONC	PCN 50/R/A/X/T
		B	21	REINF+CONC	PCN 22/R/A/X/T
		C	18	CONC+ASPH	PCN 18/F/C/Y/T
		D	23	REINF+CONC	PCN 50/R/A/X/T
		E	14	CONC+ASPH	PCN 18/F/C/Y/T
		K	14	REINF+CONC	PCN 22/R/A/X/T
		L	14	REINF+CONC	PCN 22/R/A/X/T
		H	30	CONC+ASPH	PCN 63/F/C/W/T
3	**Altimeter checkpoint location and elevation**	Stand: №1 – 419m/1374FT 422153N 0692934E			
4	**VOR checkpoints**	Nil			
5	**INS checkpoints**	Nil			
6	**Remarks**	Simultaneous tax ACFT on TWY-B and TWY-E from RWY to main TWY-P is prohibited. Tax in/out from stand 20, 21, 22 for ACFT with wingspan more than 42m via follow me car. ACFT stand 1B AVBL for ACFT types A320, A321, B737-900 allowed for ACFT wingspan less than 35,8m.			

UAII AD 2.9 Surface Movement Guidance And Control System And Markings

1	Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands	Guidance sign board at entrance of RWY, guidance sign designating taxiways and apron
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	Taxiing on TWY B and TWY E in night-time is forbidden due to absence of edge lights

UAII AD 2.10 Aerodrome Obstacles

Obstacles penetrating obstacle limitation surfaces of the aerodrome.

Obstacle identification	Type of obstacle	Location of obstacle	Elevation / Height (ft)	Marking / Type, Colour	Remarks
a	b	c	d	e	f
In Area 2					
II19AKT0090	POLE	422215.08N 0692739.54E	1394/NIL	N/NIL/NIL	
II22AKT0001	BUILDING	422142.22N 0692956.71E	1413/NIL	N/F/R	
II22AKT0003	BUILDING	422141.89N 0692958.70E	1418/29	N/F/R	
II22AKT0007	BUILDING	422140.52N 0693000.74E	1423/32	N/F/R	
II22AKT0009	BUILDING	422140.96N 0693003.73E	1425/33	N/F/R	
II22AKT0095	BUILDING	422123.23N 0693016.14E	1453/44	N/F/R	
II22AKT0102	BUILDING	422128.35N 0693002.19E	1429/29	N/F/R	
II22AKT0107	BUILDING	422129.82N 0692956.61E	1423/28	N/F/R	
II23AKT0088	ANTENNA	422210.62N 0692747.80E	1355/NIL	Y/NIL/NIL	
II23AKT0117	BUILDING	422209.64N 0692745.78E	1331/NIL	Y/F/R	
II23AKT0175	NAVAID	422209.81N 0692750.91E	1352/NIL	Y/NIL/NIL	
II23AKT0258	NAVAID	422201.78N 0692731.98E	1322/NIL	Y/F/R	
II23AKT0296	BUILDING	422139.80N 0693001.99E	1428/NIL	N/F/R	

Obstacle identification	Type of obstacle	Location of obstacle	Elevation / Height (ft)	Marking / Type, Colour	Remarks
a	b	c	d	e	f
II24AKT0022	POLE	422138.45N 0693007.06E	1426/NIL	N/F/R	
II24AKT0090	ANTENNA	422129.70N 0693003.82E	1423/23	N/F/R	
II24AKT0201	BUILDING	422044.81N 0693217.43E	1553/44	N/NIL/NIL	
II24AKT0202	BUILDING	422043.24N 0693218.80E	1560/46	N/NIL/NIL	
II24AKT0228	BUILDING	422110.41N 0693211.98E	1539/42	N/NIL/NIL	
II24AKT0379	POLE	422030.48N 0693409.29E	1844/118	N/NIL/NIL	
II24AKT0381	POLE	422032.25N 0693417.12E	1854/124	N/NIL/NIL	
II24AKT0412	BUILDING	422104.41N 0693145.40E	1563/115	N/F/R	
II24AKT0439	POLE	422029.32N 0693401.64E	1830/126	N/NIL/NIL	
II24AKT0477	FENCE	422213.41N 0692726.83E	1323/7	N/NIL/NIL	
II24AKT0478	FENCE	422209.51N 0692744.94E	1326/7	N/F/R	
II24AKT0505	BUILDING	422048.60N 0693213.72E	1544/47	N/F/R	
II24AKT0646	POLE	422132.14N 0692946.75E	1408/10	N/F/R	
II24AKT0725	POLE	422133.88N 0692947.63E	1427/9	N/NIL/NIL	
II24AKT0740	STACK	422034.06N 0693326.28E	1805/139	N/NIL/NIL	
In Area 3					
II23AKT0175	NAVAID	422209.81N 0692750.91E	1352/NIL	Y/NIL/NIL	

UAII AD 2.11 Meteorological Information Provided

1	**Associated MET Office**	Meteorological service Shymkent Phone: +7 (7252) 945168
2	**Hours of service MET Office outside hour**	H24
3	**Office responsible for TAF preparation: Periods of validity**	Meteorological service Shymkent, 24HR (0024, 0606, 1212, 1818)
4	**Trend forecast Interval of issuance**	TREND 30 min
5	**Briefing/consultation provided**	Personal consultation (Russian)

6	**Flight documentation/languages used**	TAF, METAR, SPECI, SIGMET, GAMET, AIRMET English
7	**Charts and other information AVBL for briefing or consultation**	S, U85, U70, U50, U40, U30, U25, U20, prognostic charts of wind and temperature at flight levels (FL), max wind, T, prognostic charts P85, P70, P50, P40, P30, P25, P20, SWH, SWM of WAFC, SWM+SWH, SWL of Kazakhstan;
8	**Supplementary equipment AVBL for providing information**	Nil
9	**ATS units provided with information**	Briefing, TWR, ACC
10	**Additional information**	Nil

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

SWY dimensions (M)	CWY dimensions (M)	Strip dimensions (M)	RESA dimensions (M)	Location and description of arresting system	OFZ	Remarks
8	**9**	**10**	**11**	**12**	**13**	**14**
Nil	Nil	3600 X 300	90 X 150	Nil	AVBL	RWY 10 turning bay length 102 M, width 79 M.
Nil	150 X 160	3600 X 300	90 X 150	Nil	AVBL	Displaced THR 140 M (DTHR 422140.62N 0692934.86E) - elev. 1383,9 FT RWY 28 Turning bay length 102 M, width 79 M.

UAII AD 2.13 Declared Distances

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

UAII AD 2.14 Approach And Runway Lighting

RWY Designator	APCH LGT type, LEN, INTST	THR LGT colour, WBAR	VASIS, (MEHT), PAPI	TDZ, LGT LEN	RWY Centre Line LGT Length, spacing, colour, INTST	RWY edge LGT LEN, spacing, colour, INTST	RWY End LGT colour, WBAR	SWY LGT LEN, colour	Remarks
1	2	3	4	5	6	7	8	9	10
10	CAT I (HIALS) 900 M LIH	GRN Nil	PAPI LEFT/3°	Nil	Nil	3300m, spacing 60m, 0-2700m white, last 600m yellow LIH	RED Nil	Nil	Nil
28	(HIALS) 920 M LIH	GRN Nil	PAPI LEFT/3°	Nil	Nil	3160m, spacing 60m, 0-2560m white, last 600m yellow LIH	RED Nil	Nil	Thresh old displac ed by 140 m.

UAII AD 2.15 Other Lighting, Secondary Power Supply

1	ABN/IBN location, characteristics and hours of operation	ABN: Nil IBN: Nil
2	LDI location and LGT Anemometer location and LGT	LDI: Nil

3	TWY edge and centre line lighting	MAIN P EDGE: BLU TWY H EDGE: BLU TWY A EDGE: BLU TWY C EDGE: BLU TWY D EDGE: BLU TWY K EDGE: BLU TWY L EDGE: BLU
4	Secondary power supply/switch-over time	AVBL, 1 SEC
5	Remarks	Nil

UAII AD 2.16 Helicopter Landing Area

1	Coordinates TLOF or THR of FATO Geoid undulation	422141.02N 0692932.90E -140,4 FT
2	TLOF and/or FATO elevation	1381.23 FT
3	TLOF and FATO area dimensions, surface, strength, marking	RWY magnetic bearing 100°/280° dimensions 3300-45 REINF+CONC PCN 50/R/A/X/T
4	True BRG of FATO	Nil
5	Declared distance available	Nil
6	APP and FATO lighting	Nil
7	Remarks	Helicopter take-off and landing conducted in helicopter mode are performed from/on the IFR runway (at the intersection area of taxiway A and the runway). Touchdown/aiming point marking for helicopters is not provided.

UAII AD 2.17 ATS Airspace

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

UAII 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	SHYMKENT TOWER (EN) SHYMKENT VYSHKA (RU)	125,9 MHZ	Nil	Nil	H24	Nil
Production and dispatcher service	SHYMKENT TRANZIT (EN) SHYMKENT TRANZIT (RU)	127.0 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	SHYMKENT ATIS (EN) SHYMKENT ATIS (RU)	119,2 MHZ 126,6 MHZ	Nil	Nil	H24	EN RU

UAII 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 10 I/D/2 GP 10 I/C/2 DME 10	IEN IEN	111,7 MHZ 333,5 MHZ CH 54X	H24	422134.2N 0693004.8E 422202.1N 0692731.3E 422202.1N 0692731.3E	 1300 FT	Nil	Nil
ILS LOC 28 I/D/2 GP 28 DME 28	IIM IIM	110.3 MHZ CH 40X	H24	422213.7N 0692701.5E 422137.0N 0692925.0E	 1400 FT	Nil	GP 28 is Inoperability
NDB	SKN	733 KHZ	H24	422130.3N 0693022.4E	Nil	Nil	Nil
DVOR/DME (6°E/2013)	SMK	113 MHZ CH 77X	H24	422220.4N 0692630.6E	1400 FT	Nil	Nil

UAII AD 2.20 Local Aerodrome Regulations

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

Standard taxi routes shall be carried out along taxiway and apron center lines. Towing of the aircraft shall be carried out with the clearance of “Tower” air traffic controller.

Taxiing on TWY B and TWY E in night-time is forbidden due to absence of lighting system

Taxiing at daytime with RVR 550m and less available only after follow me car.

A. Movement of the aircraft along maneuvering area (RWY, TWY).

TWY K and TWY L are not designated for Civil Aviation.

Turn 180° on RWY for aircraft Code D or higher is prohibited.

Simultaneous taxiing of aircraft along TWY B and TWY E (from RWY to MAIN TWY P) is prohibited.

Taxiing of aircraft with index 3 and lower from TWY C to RWY and from RWY to TWY C, shall be carried out at reduced speed with the increased attention of the crew and in compliance with the safety intervals between landing gear and edges.

During engine testing (run-up) on the stands 1,2,3 and taxiing of ACFT into stands 1,2,3 with the heading to the north, taxiing of other aircraft along TWY P, TWY B, TWY A is prohibited.

During taxiing out from aircraft stands 1, 2, 3 parked with the heading to the north, taxiing of other aircraft along TWY P, TWY B, TWY A is prohibited.

Taxiing of aircraft with index 4 and higher on TWY-B, TWY-C, TWY-E is prohibited.

B. Aircraft movement on the apron.

Movement of ACFT to the stands 54-62 of Aircraft maintenance facility of the “SCAT” Airline shall be carried out by towing out of stands 1-22.

When stand 19A is occupied:

•Aircraft movement along the north centerline between stands 19 and 1 is prohibited.

•Taxiing out from aircraft stand 1 parked with the heading to the north is prohibited; movement by towing is allowed.

•Taxiing into the aircraft stand 1 with the heading to the south is prohibited; movement by towing is allowed

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

Crossing of holding point line (critical ILS zone), indicated by “CAT” signs with day markings without ATC clearance is prohibited.

Crossing (occupy) the runway, taxiways during taxiing without the clearance of ATS dispatcher is prohibited.

Towing of aircraft shall be carried out with turned on aircraft lights. Flashing lights shall be switched on during the day and night from engine start-up till engine stoppage.

Taxiing shall be carried out after “Follow me” car when the centerline is invisible.

Taxiing along taxiways, apron, shall be carried out after “Follow me” car when RVR is less than 550m.

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

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 taxing 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.

UAII AD 2.21 Noise Abatement Procedures

NIL

UAII AD 2.22 Flight Procedures

1. Low Visibility Procedures.

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

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

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

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

Air traffic service in the control zone of the aerodrome is carried out by the controller of the “Tower” ATC unit. Flight altitudes are calculated by the aircraft crew in accordance with the Civil Aviation Flight Rules of the Republic of Kazakhstan. The functions of Air traffic service does not include ground collision avoidance. The aircraft crew shall ensure that the clearance issued by the ATS unit in this regard is safe. VFR flights at altitudes below 2000 feet in the control zone are performed at the altitudes indicated in the flight plan or requested by the aircraft crew.

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

For VFR flights, the aerodrome has a flight circle (left / right) at an altitude of 2000 feet. The air traffic controller of the “Tower” ATC unit is determine and report which flight circle is in use.

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

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

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

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

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

№	Waypoint name (visual reference)	Geographical coordinates	Radial (mag.) and distance from NAVAID (ARP)	Remarks
1	VICTOR (bridge over Arys riv., outskirt of Kutarys)	N423545 E0693620	023° 15.3 nm SMK DVOR/DME	Entry/exit
2	WHISKEY (SE outskirts of Sastobe, road junction)	N423152 E0700113	064° 27.4 nm SMK DVOR/DME	Entry/exit

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

3. Continuous Descent Operation

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

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

.Although these procedures are designed as a closed path, they permit distance planning for CDO, allowing the ACFT Flight Management System/Computer (FMS/FMC) to accurately execute automated optimized descents when:
-ACFT is cleared to proceed to a waypoint or via a combination of waypoints in order to provide an optimum lateral flight path up to and including the FAP and thus the exact distance to the RWY is known prior to start of the continuous descent operation; or
-the pilots of the ACFT that to be vectored to final are provided with distance-to-go information.

.CDOs are authorized only when following conditions are respected:
- ILS of RWY intended for landing is in operation;
- no adverse weather conditions that may affect CDO;
- no system degradations that may affect GNSS or ILS operation.

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

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

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

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

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

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

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

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

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

4. 4.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.

UAII AD 2.23 Additional Information

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

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

AERODROME CHART - ICAO

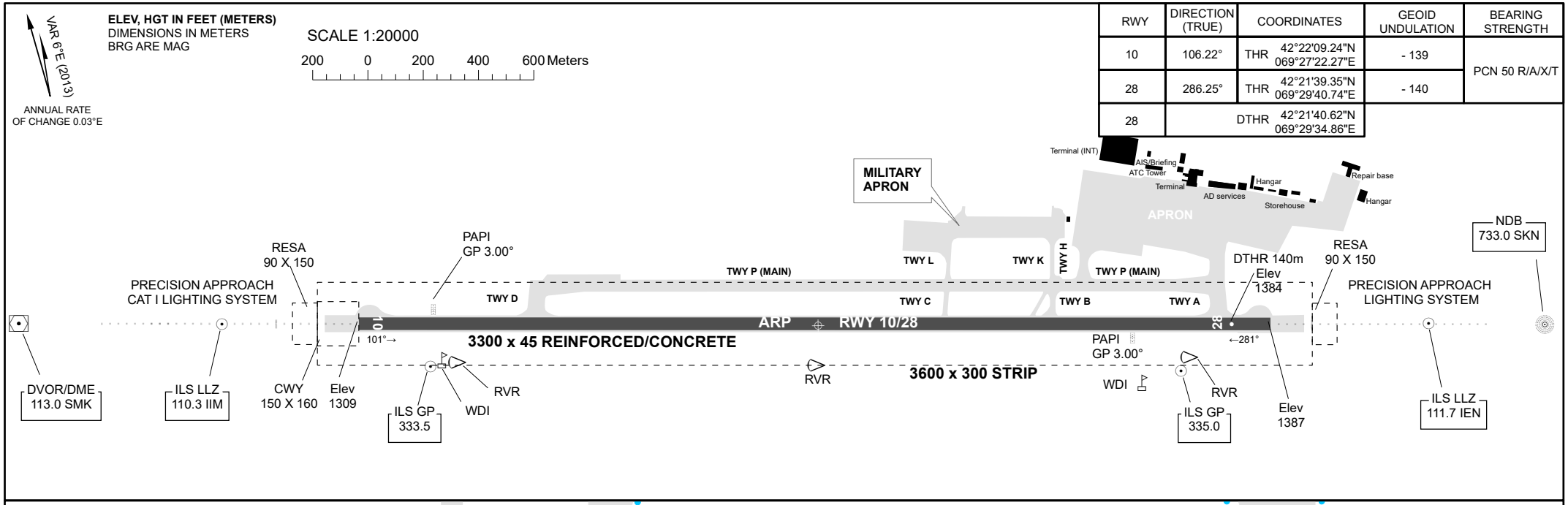
AD ELEV 1387FT (*423m*)

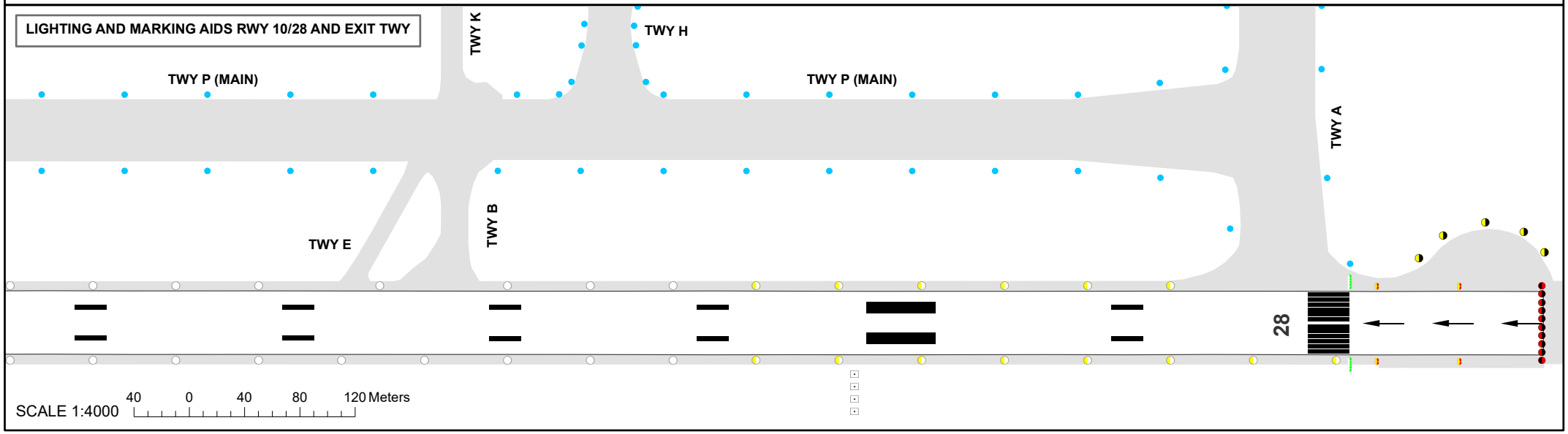
ARP 422154N 0692832E

TWR 125.9

SHYMKENT

RWY	DIRECTION (TRUE)	COORDINATES	GEOID UNDULATION	BEARING STRENGTH
10	106.22°	THR 42°22'09.24"N 069°27'22.27"E	- 139	PCN 50 R/A/X/T
28	286.25°	THR 42°21'39.35"N 069°29'40.74"E	- 140	
28		DTHR 42°21'40.62"N 069°29'34.86"E		





CHANGE : APCH LGT, add TWY H edge LGT, edit.

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AERODROME GROUND MOVEMENT AND PARKING CHART - ICAO

APRON ELEV 1385FT (*422m*)

TWR 125.9

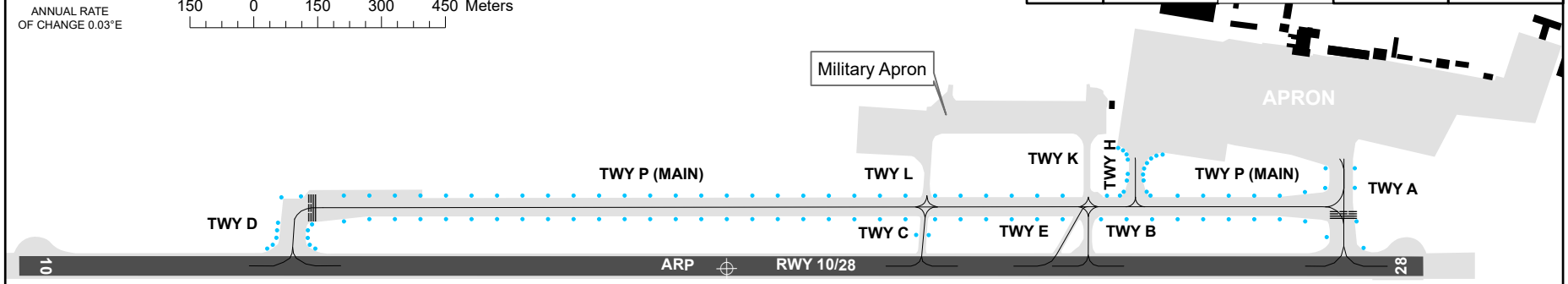
SHYMKENT

RWY	DIRECTION (TRUE)	THR	GEOID UNDULATION	BEARING STRENGTH
10	106.22°	42°22'09.24"N 069°27'22.27"E	- 139	PCN 50 R/A/X/T
28	286.25°	42°21'39.35"N 069°29'40.74"E	- 140	

VAR 6°E (2013)
ANNUAL RATE OF CHANGE 0.03°E

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

SCALE 1:15000
150 0 150 300 450 Meters

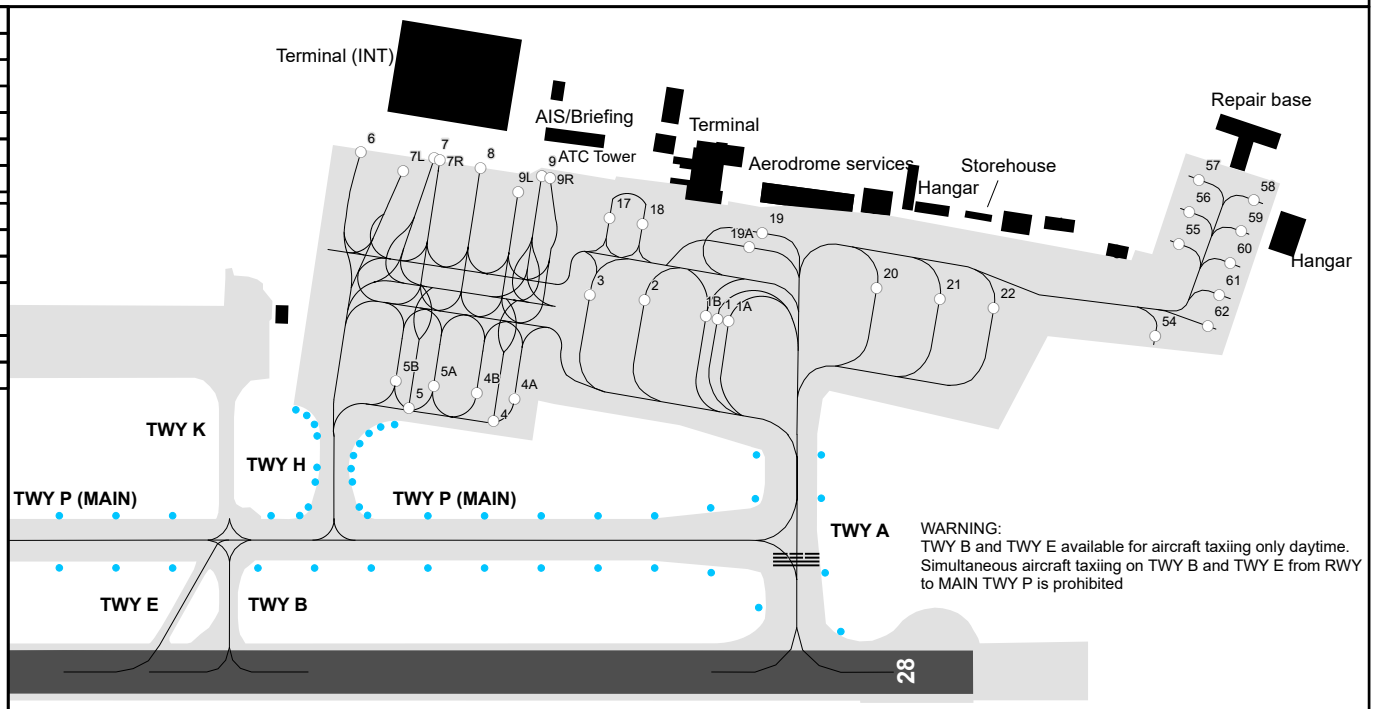


APRON	STAND	SURFACE	BEARING STRENGTH
APRON	1, 1A, 1B	CONC+ASPH	PCN 77/F/C/W/T
	2,3,19,19A		PCN 44/F/C/W/T
	4 - 9 (A/B/L/R)		PCN 63/F/C/X/T
	17,18		PCN 23/F/C/W/T
	20 - 22		PCN 51/F/C/W/T
	54-62		PCN 13/F/C/W/T

TWY	WIDTH	SURFACE	BEARING STRENGTH
A, P, D	23m	REINFORCED/CONC	PCN 50/R/A/X/T
B	21m		PCN 22/R/A/X/T
C	18m	CONC+ASPH	PCN 18/F/C/Y/T
E	14m		
K, L	14m	REINFORCED/CONC	PCN 22/R/A/X/T
H	30m	CONC+ASPH	PCN 63/F/C/Y/T

STANDS		
	1	- for AN-124,A-330,B-747,B-787
	1A, 1B	- for A-320-200, B-737-800
	2, 3	- for IL-76, B-767,A-320,A-321
	4, 5	- for B-747-400, B-767-400ER
	4A,4B,5A,5B,6 7L,7R,8,9L,9R	- for A-320-200,A-321-200,B-737-900
	7, 9	- for B-777-300ER, B-787-9
	17, 18	- for AN-24,YAK-40,E-135,CRJ-200
	19	- for AN-24,E-135,CRJ-200,DASH-8
	19A	- for B-777,B-767,A-330-200
	20,21,22	- for IL-76,B-767,B-757,A-320,A-321

SCALE 1:8000
80 0 80 160 240 Meters



CHANGE: Add TWY H edge LGT, edit.

SHYMKENT **STANDS CHARACTERISTICS**

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

UADD AD 2

Note: The following sections in this chapter are intentionally left blank: AD-2.10, AD-2.21, AD-2.25

UADD AD 2.1 Aerodrome Location Indicator And Name

UADD - TARAZ

UADD AD 2.2 Aerodrome Geographical And Administrative Data

1	ARP coordinates and site at AD	425116N 0711808E From THR 13 - 1749.9m
2	Direction and distance from (city)	230°, 4.3 NM of Taraz center
3	Elevation/Reference temperature	2190 FT/9,5° C
4	Geoid undulation at AD ELEV PSN	-132,9 FT
5	MAG VAR/Annual Change	6° E (2020) / 0,03
6	AD Administration, address, telephone, telefax, telex, AFS	Post: Authority of Airport 080000 Taraz, Airport, Aeroport residential complex, Aeroportovskaya Street, building 4/12 JSC "Aulie-ata International Airport" Republic of Kazakhstan Phone: +7 (7262) 542277 Phone: +7 (7262) 542244 Fax: +7 (7262) 542255 AFS: UADDAPBF Email: ops@dmb.aero Email: reception@dmb.aero
7	Types of traffic permitted (IFR/VFR)	IFR-VFR
8	Remarks	Nil

UADD AD 2.3 Operational Hours

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

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

UADD AD 2.4 Handling Services And Facilities

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

UADD AD 2.5 Passenger Facilities

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

UADD AD 2.6 Rescue And Fire Fighting Services

1	AD category for fire fighting	CAT A5
2	Rescue equipment	5 fire engines with a total volume fire extinguishing composition - 43 950 kg
3	Capability for removal of disabled aircraft	Lifting equipment 100 t (contract on the procedure for the removal of aircraft)
4	Remarks	Upon prior request, an upgrade of the Rescue and Fire Fighting Services (RFFS) level is available only up to RFFS Category 7 for commercial passenger flights and only up to RFFS Category 8 for cargo flights.

SWY dimensions (M)	CWY dimensions (M)	Strip dimensions (M)	RESA dimensions (M)	Location and description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
Nil	150 X 160	3800 X 300	90 X 160	Nil	Nil	Nil
Nil	150 X 160	3800 X 300	90 X 160	Nil	Nil	Displaced THR 420 M (DTHR 425044.41N 0711847.68E) - elev. 2185.7 FT

UADD AD 2.13 Declared Distances

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
13	3500	3650	3500	3500	Nil
31	3500	3650	3500	3080	Nil
TWY B - 13	2916	3066	2916	Nil	Nil
TWY F - 31	2789	2939	2789	Nil	Nil

UADD 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
13	CAT II (PALS) 879 M LIH	GRN Nil	PAPI LEFT/3°	900m	3500m, spacing 30m, 0-2600m white, 2600-3200m R/W, 3200-3500m red LIH	3500m, spacing 60m, 0-2900 white, last 600m yellow LIH	RED Nil	Nil	Running impulse lights combined with approach lights, from 900 to 300 m from the threshold

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
31	Nil	GRN Nil	PAPI LEFT/3°	Nil	3500m, spacing 30m, 0-2600m white, 2600-3200m R/W, 3200-3500m red LIH	3500m, spacing 60m, 0-2900 white, last 600m yellow LIH	RED Nil	Nil	The runway threshold is displaced by 420 metres.

UADD 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: 335 m from RWY13, 689 m from RWY31
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

UADD AD 2.16 Helicopter Landing Area

1	Coordinates TLOF or THR of FATO Geoid undulation	425144N 0711731E -133 FT
2	TLOF and/or FATO elevation	2158 FT
3	TLOF and FATO area dimensions, surface, strength, marking	30 x 30, CONC+ASPH, PCN 60 F/B/X/T
4	True BRG of FATO	137/317
5	Declared distance available	Nil
6	APP and FATO lighting	Nil
7	Remarks	The helicopter landing area is located between TWY A and TWY B

UADD AD 2.17 ATS Airspace

1	**Designation and lateral limits**	TARAZ CTR 423629N 0705032E then a clockwise arc radius 25 NM centered on 425214N 0711654E - 425757N 0715001E - 423515N 0713630E - 423629N 0705032E

2	**Vertical limits**	7000 FT ALT / GND
3	**Airspace classification**	C
4	**ATS unit call sign Language(s)**	TARAZ TOWER EN TARAZ VYSHKA RU
5	**Transition altitude**	10000 FT
6	**Hours of applicability**	H24
7	**Remarks**	Nil

UADD 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	TARAZ APPROACH (EN) TARAZ PODKHOD (RU)	122,1 MHZ	Nil	Nil	H24	Nil
TWR	TARAZ TOWER (EN) TARAZ VYSHKA (RU)	122,1 MHZ	Nil	Nil	H24	Nil
Production and dispatcher service	TARAZ TRANZIT (EN) TARAZ TRANZIT (RU)	131.8 MHZ	Nil	Nil	As AD	Nil
ATIS	TARAZ ATIS (EN) TARAZ ATIS (RU)	118,5 MHZ 127,4 MHZ	Nil	Nil	H24	EN RU

UADD 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 (6°E/2013)	TAR	115,9 MHZ CH 106X	H24	425214.0N 0711654.1E	2200 FT	Nil	Nil
ILS LOC 13 II/D/2 GP 13 II/C/2 DME 13	IMB IMB	109.7 MHZ 333.2 MHZ CH 34X	H24	425023.9N 0711913.7E 425148.3N 0711719.5E 425148.3N 0711719.5E	 2200 FT	Nil	Nil
ILS LOC 31 I/D/2 GP 31 I/C/2 DME 31	IYL IYL	111.3 MHZ 332.3 MHZ CH 50X	H24	425209.5N 0711659.8E 425049.4N 0711834.1E 425049.4N 0711834.1E	 2200 FT	Nil	Nil

UADD AD 2.20 Local Aerodrome Regulations

The helicopter landing area is designated between TWY A and TWY B.

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

The movement of aircraft on the aerodrome is conducted under its own power or towing by special vehicles. The taxiing and towing are carried out as directed by an air traffic controller “Taraz-Start” on frequency 122,100 MHz.

2. The safety precautions in the taxiing (towing) of an aircraft taking into account the visibility conditions and the state of apron covers, the parking places, the taxiways.

In winter conditions the apron and taxiway can be covered with packed snow, ice, the markings can be not visible.

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

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

The aircraft leading is provided by the crew request on/to/out the runway, taxiway and apron by follow me car.

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

At the apron the aircraft is placed at the parking stands 1-6.

The taxiing to the parking stands 1-6 is carried out under its own power.

Distributing of aircraft on stands is made by air traffic controller “Taraz-Start”.

At the parking stands the aircraft are met by Aircraft Ground Handling Service responsible person or airline representative, the aircraft placing is conducted on the parking by his signals.

4. The taxiing-out procedure to the parking place under its own power and towing.

The taxiing procedure of the aircraft to the holding position and after landing is indicated in the scheme.

The pilot-in-command can taxi out to the runway, taxi on the runway or cross it only with the clearance of air traffic start controller.

The exit from stands 1-6 is carried out by towing. At the same time, the exit from the stands 1-6 under its own power is provided by the marking of the apron.

The towing of the aircraft from the stands 1-6 for starting engines is produced at the center line of the apron or at the point of start up to the taxiway A, B up to the boundary of the critical areas of radio beacon landing system.

The specific place of start up from the above mentioned is determined by the air traffic controller “Taraz-Start”.

Without the clearance of air traffic controller “Taraz-Start” the taxiing and towing are prohibited.

During towing of aircraft start engines is prohibited.

5. The parking places for small aircraft (general aviation), if such parking places are available.

For the parking of small aircraft and helicopters the stands are provided both in the apron and in the designated areas.

The specific stands is determined by the air traffic controller “Taraz-Start”.

At the stands the aircraft are met by Aircraft Ground Handling Service responsible person or airline representative, the stands is conducted by his signals.

The movement of helicopters is carried out by taxiing or moving through the air. Selecting the type of helicopter movements is chosen by pilot-in-command with the obligatory preliminary agreement with the air traffic

controller “Taraz-Start”.

6. The deicing places of aircraft, the places of start up of the main engines, deviation areas.

For the de-icing of aircraft the specially designed stands 1-2 are intended.

The moving of aircraft to these stands is carried out by towing.

The starting engines is allowed on request aircraft crew and obtained clearance from the air traffic start controller and responsible for start up of a technician on sites of start up, in rapid exit taxiway areas, on the abeam of aircraft stands, equipped by the mobile fire-fighting equipment.

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

Deviation areas are absent.

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

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

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

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

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

In winter conditions when the markings on the apron and taxiways are not visible (covered with snow or ice), as well as on unequipped with center line lights of taxiway the taxiing on the crew request is leading by «Follow me» car.

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

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

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

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

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

The removing of aircraft (evacuation) is performed by non-nominal calculation of Aircraft Ground Handling Service.

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

11. Procedures in low visibility conditions.

Low Visibility Procedures (LVP) are initiated at the aerodrome when RVR is less than 550 m.

RWY 13 is equipped for take-off and landing ICAO CAT II in LVP conditions.

The beginning of LVP is reported by the ATIS or by the ATC with following message:”LOW VISIBILITY PROCEDURES IN PROGRESS"

ATC must ensure that the critical ILS zone is free of obstacles (movement) before the aircraft is 15 km away from the touchdown zone (TDZ).

Movement of vehicles on the apron and maneuvering area is restricted.

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

For Arriving Aircraft

- The crew does not report about the vacating runway as long as the sensitive (critical) zone is cleared by aircraft.
- Taxiing to the apron after vacating of the runway is allowed only by the follow-me-car.
- Taxiing to the parking stand is carried out by the instruction of a person who responsible for meeting the ACFT.

For Departing Aircraft

- Taxiing for take-off from stands is allowed only by the follow-me-car.
- At the runway holding point, the aircraft must stop in front of an aerodrome sign of the critical zone.

During the LVP progress, takeoff is prohibited from the intersection taxiway A and B. It is also prohibited to takeoff in the opposite direction of the runway is in use.

UADD AD 2.21 Noise Abatement Procedures

NIL

UADD AD 2.22 Flight Procedures

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

Air traffic service in the control zone of the aerodrome is carried out by the controller of the “Approach” ATC unit. Flight altitudes are calculated by the aircraft crew in accordance with the Civil Aviation Flight Rules of the Republic of Kazakhstan. The functions of Air traffic service does not include ground collision avoidance. The aircraft crew shall ensure that the clearance issued by the ATS unit in this regard is safe. VFR flights at altitudes below 3000 feet in the control zone are performed at the altitudes indicated in the flight plan or requested by the aircraft crew.

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

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

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

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

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

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

If the air situation requires the holding procedure, the air traffic controller of the “Tower” ATC unit gives the

instructions to the aircraft crew to follow to one of the holding points.

№	Waypoint name (visual reference)	Geographical coordinates	Radial (mag.) and distance from NAVAID (ARP)	Remarks
1	DELTA (SE outskirts of Kokozek)	430946N 0714111E	040° 25.0 nm TAR DVOR/DME	Entry
2	HOTEL (NE outskirts of Akchulak)	430123N 0714835E	063° 25.0 nm TAR DVOR/DME	Exit
3	ALPHA (NE outskirts of Yernazar)	430900N 0705138E	307° 25.0 nm TAR DVOR/DME	Entry
4	BRAVO	431421N 0710100E	327° 25.0 nm TAR DVOR/DME	Exit
5	OSCAR (NW outskirts of Shaikoryk)	425739N 0711950E	016° 5.8 nm TAR DVOR/DME	Holding, circle and absolute altitude by “Approach” ATC instructions
6	INDIA (Southern outskirts of Sarykemer)	425736N 0712947E	055° 10.9 nm TAR DVOR/DME	Holding, circle and absolute altitude by “Approach” ATC instructions
7	TANGO (Northern outskirts of Aisha-Bibi)	425038N 0711228E	238° 3.6 nm TAR DVOR/DME	Holding, circle and absolute altitude by “Approach” ATC instructions

UADD AD 2.23 Additional Information

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

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

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

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

The flight supervisor in the event of a dangerous ornithological situation informs the crew of the aircraft about the presence of birds in the direction of take-off and landing, if necessary, gives recommendations on how to bypass the bird aggregations.

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

UADD AD 2.24 Charts Related To An Aerodrome

Name	Page
Aerodrome Chart ICAO	UADD AD 2.24.1-1
Aerodrome Ground Movement and Parking Chart ICAO	UADD AD 2.24.3-1
Aerodrome Obstacle Chart – ICAO Type A	UADD AD 2.24.4-1
Precision Approach Terrain Chart – RWY 13 ICAO	UADD AD 2.24.5-1
Area Chart ICAO	UADD AD 2.24.6-1
Standard Departure Chart Instrument (SID) RWY 13 ICAO	UADD AD 2.24.7-1-1
Standard Departure Chart Instrument (SID) RWY 13 ICAO	UADD AD 2.24.7-2-1
Standard Departure Chart Instrument (SID) RWY 31 ICAO	UADD AD 2.24.7-3-1
Standard Departure Chart Instrument (SID) RWY 31 ICAO	UADD AD 2.24.7-4-1
Standard Arrival Chart Instrument (STAR) RWY 13 ICAO	UADD AD 2.24.9-1-1
Standard Arrival Chart Instrument (STAR) RWY 31 ICAO	UADD AD 2.24.9-2-1
ATC Surveillance Minimum Altitude Chart ICAO	UADD AD 2.24.10-1
Instrument Approach Chart – ILS/DME RWY 13 ICAO	UADD AD 2.24.11-1-1
Instrument Approach Chart – ILS/DME RWY 31 ICAO	UADD AD 2.24.11-2-1
Instrument Approach Chart – VOR/DME RWY 13 ICAO	UADD AD 2.24.11-3-1
Instrument Approach Chart – VOR/DME RWY 31 ICAO	UADD AD 2.24.11-4-1
Visual Approach chart – ICAO	UADD AD 2.24.12-1
VFR Departure/Arrival Chart	UADD AD 2.24.14-1

UADD AD 2.25 Visual segment surface (VSS) penetrations

No penetrations

AERODROME OBSTACLE CHART - ICAO
TYPE A (OPERATING LIMITATIONS)

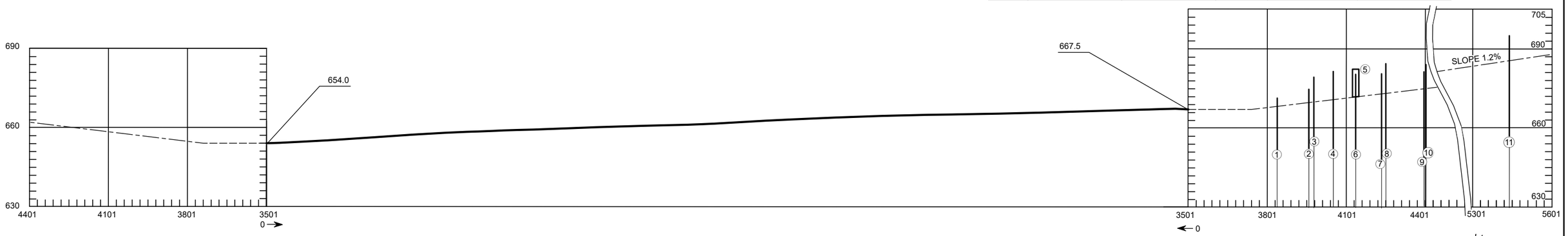
TARAZ

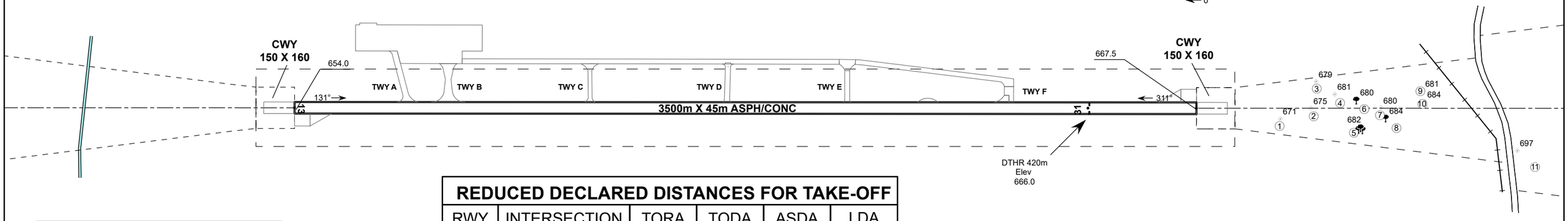
DIMENSIONS AND ELEVATIONS IN METERS
MAGNETIC VARIATION 6°E (2020)

RWY 13/31

DECLARED DISTANCES		
RWY 13		RWY 31
3500	TAKE-OFF RUN AVAILABLE	3500
3650	TAKE-OFF DISTANCE AVAILABLE	3650
3500	ACCELERATE STOP DISTANCE AVAILABLE	3500
3500	LANDING DISTANCE AVAILABLE	3080

ORDER OF ACCURACY					
№	LAT	LON	H	HORIZONTAL,m	VERTICAL, m
1	42°50'25.80" N	071°19'08.80" E	670.537	1.5	0.001
2	42°50'23.90" N	071°19'13.70" E	674.153	1.5	0.001
3	42°50'25.70" N	071°19'17.60" E	678.237	1.5	0.001
4	42°50'22.90" N	071°19'18.20" E	680.137	1.5	0.001
5	42°50'18.73" N	071°19'16.80" E	681.12	0.1	0.06
6	42°50'20.39" N	071°19'19.93" E	679.19	0.1	0.06
7	42°50'17.50" N	071°19'21.90" E	679.763	1.5	0.001
8	42°50'16.15" N	071°19'21.08" E	683.65	0.1	0.06
9	42°50'15.10" N	071°19'28.90" E	680.419	1.5	0.001
10	42°50'14.00" N	071°19'27.80" E	683.626	1.5	0.001
11	42°49'43.08" N	071°19'50.04" E	697.00	0.1	0.023





Meters 60 30 15 0 — Feet 180 120 60 30 0

VERTICAL SCALE 1:1500

REDUCED DECLARED DISTANCES FOR TAKE-OFF					
RWY	INTERSECTION	TORA	TODA	ASDA	LDA
13	TWY B - RWY	2916	3066	2916	
31	TWY F - RWY	2789	2939	2789	

LEGEND	
IDENTIFICATION NUMBER	①
ANTENNA, POLE	⊙
TREE	
RAILROAD	
ROAD	

HORIZONTAL SCALE 1:15000

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

CHANGE: Editorial.

INTENTIONALLY LEFT BLANK

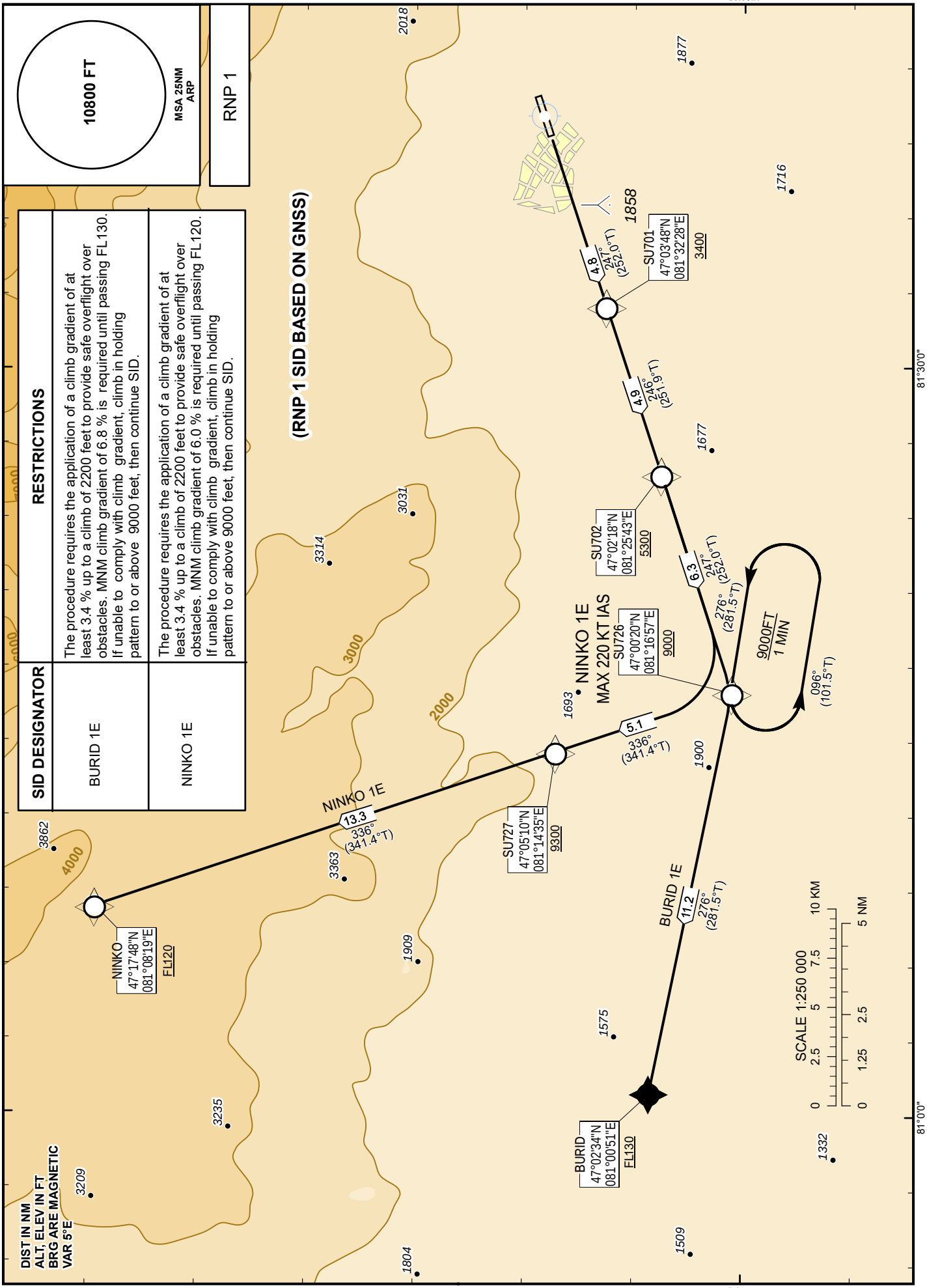
STANDARD DEPARTURE CHART- INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE
10000 FT

URDZHAR TOWER 123.0

BURID 1E, NINKO 1E

URDZHAR RWY 25



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.

CHANGE: Speed restriction

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

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	-	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	-220	-	RNP 1
040	HM	SU726	-	276(281.5)	+5.4	-	L	+9000	-220	-	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

UASK AD 2

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

UASK AD 2.1 Aerodrome Location Indicator And Name

UASK - UST-KAMENOGORSK

UASK AD 2.2 Aerodrome Geographical And Administrative Data

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

UASK AD 2.3 Operational Hours

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

UASK AD 2.4 Handling Services And Facilities

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

UASK AD 2.5 Passenger Facilities

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

UASK AD 2.6 Rescue And Fire Fighting Services

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

UASK AD 2.7 Seasonal Availability - Clearing

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

UASK AD 2.13 Declared Distances

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
12	2800	3050	2800	2800	Nil
30	2800	2800	2800	2800	Nil

UASK 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	2800m, spacing 60m, 0-2200m white, last 600m yellow LIH	RED Nil	Nil	Nil
30	CAT I (PALS) 900 M LIH	GRN Nil	PAPI RIGHT/3°	Nil	Nil	2800m, spacing 60m, 0-2200m white, last 600m yellow LIH	RED Nil	Nil	Nil

UASK 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 A wind of 295 m from the runway SE threshold 12, lit Anemometer: 320 m from RWY12, 340 m from RWY30
3	TWY edge and centre line lighting	MAIN TWY EDGE: BLU TWY A EDGE: BLU TWY B EDGE: BLU TWY C EDGE: BLU TWY D EDGE: BLU
4	Secondary power supply/switch-over time	AVBL, 1 SEC
5	Remarks	EDGE of TWY C, TWY D and MAIN TWY from TWY B to TWY D out of service

UASK AD 2.16 Helicopter Landing Area

1	Coordinates TLOF or THR of FATO Geoid undulation	500146.01N 0823024.01E -145.4
2	TLOF and/or FATO elevation	941 FT

3	TLOF and FATO area dimensions, surface, strength, marking	45 × 45 м, CONC+ASPH, PCN 50/R/B/X/T
4	True BRG of FATO	124/304
5	Declared distance available	Nil
6	APP and FATO lighting	Nil
7	Remarks	Nil

UASK AD 2.17 ATS Airspace

1	**Designation and lateral limits**	UST-KAMENOGORSK CTR 502401N 0822048E - 500858N 0824809E - 495152N 0830943E - 493450N 0823727E - 500919N 0815314E - 502401N 0822048E
2	**Vertical limits**	7000 FT ALT / GND
3	**Airspace classification**	C
4	**ATS unit call sign Language(s)**	UST-KAMENOGORSK TOWER EN UST-KAMENOGORSK VYSHKA RU
5	**Transition altitude**	10000 FT
6	**Hours of applicability**	See NOTAM
7	**Remarks**	Nil

UASK 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	UST-KAMENOGORSK TOWER (EN) UST-KAMENOGORSK VYSHKA (RU)	130,1 MHZ	Nil	Nil	See NOTAM	Nil
ATIS	UST-KAMENOGORSK ATIS (EN) UST-KAMENOGORSK ATIS (RU)	124,2 MHZ 127,7 MHZ	Nil	Nil	As AD	ATIS information is being updated during AD working hours. Outside AD working hours ATIS information is not updated.

UASK 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 (6°E/2021)	UKM	115 MHZ CH 97X	H24	500158.0N 0823031.1E	1000 FT	Nil	Nil
ILS LOC 30 I/D/2	ISI	109.7 MHZ	H24	500249.8N 0822828.4E		Nil	Nil
GP 30 I/C/2		333.2 MHZ		500150.4N 0823029.0E			
DME 30	ISI	CH 34X		500150.4N 0823029.0E	900 FT		
ILS LOC 12 I/D/2	IUS	111.7 MHZ	H24	500122.8N 0823105.8E		Nil	Nil
GP 12 I/C/2		333.5 MHZ		500235.1N 0822906.6E			
DME 12	IUS	CH 54X		500235.1N 0822906.6E	900 FT		

UASK AD 2.20 Local Aerodrome Regulations

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

UASK AD 2.21 Noise Abatement Procedures

NIL

UASK AD 2.22 Flight procedures.

1. Flight and ground movement procedures.

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

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

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

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

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

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

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

Crossing the ILS critical areas during autoland approach is prohibited.

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

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

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

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

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

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

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

Helicopter take-off shall be carried out after:

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

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

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

Helicopter take-off and landing from/to RWY 12/30 on VFR shall be carried out from any direction, except sector130°-304°, S=1.0 km, H= (120) m from apron and TWY-A intersection.Limit sector set in order to avoid the flight of helicopters over closely spaced aircraft parking and service buildings.

If there is a portion RWY12/ 30 meteorological phenomena or the production of smoke, which could affect the visibility to below the minimum take-off (the largest of the two: the minimum for takeoff the commander of the helicopter and the minimum take-off of this type of helicopter from the airport of Ust-Kamenogorsk, established by FOM of airline), the commander of the helicopter, in coordination with the Tower ATC is allowed to take off from the part of RWY12/ 30, where weather conditions match the specified minimum.

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

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

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

2. Low Visibility Procedures.

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

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

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

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

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

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

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

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

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

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

Air traffic service in the control zone (CTR) of the Ust-Kamenogorsk aerodrome is carried out by the controller of the «TOWER» ATC unit. VFR flights in the control zone (CTR) are carried out at absolute altitudes according to the QNH pressure of the aerodrome. Flights altitudes are calculated by the aircraft crew in accordance with the Civil Aviation Flight Rules of the Republic of Kazakhstan. The functions of Air traffic service does not include ground collision avoidance. Aircraft crews are responsible for avoiding artificial obstacles. VFR flights at altitudes below 3000 feet in the control zone are performed at the altitudes indicated in the flight plan or requested by the aircraft crew.

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

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

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

Visual Reference Points of VFR flights within Ust-Kamenogorsk CTR

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

№	Name	Type	Location	Geographic coordinates	DVOR / DME «UKM» radial and distance	
5	ECHO	entry / exit	visual landmark - railway / river Irtysh, west of the settlement Ognevka	494546N 0825804E	126°	24.1 NM
6	FOXTROT	entry / exit	north of the settlement Izgutty Aitykov	493712N 0824153E	157°	25.9 NM
7	GOLF	entry / exit	southeastern outskirts of the settlement Aiyrtau, visual landmark - A-3 highway	494907N 0821917E	203°	14.8 NM
8	HOTEL	entry / exit	visual landmark - the P-24 highway, to the east of the settlement. Gagarino	500925N 0815326E	281°	25.0 NM
9	INDIA	entry / exit	visual landmark - highway A-10, to the east of the settlement. Pervomaiskii	501529N 0820444E	303°	21.4 NM
10	JULIET	entry / exit	visual landmark - railway, to the north of the settlement. Verhneberezovka	501924N 0821204E	320°	21.1 NM
11	OSCAR	holding		500746N 0823249E	008°	6.0 NM
12	LIMA	holding		500457N 0823803E	052°	5.7 NM
13	PAPA	holding		495359N 0823053E	172°	8.0 NM
14	ZULU	holding		495915N 0822122E	239°	6.5 NM

4. Continuous Descent Operation

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

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

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

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

CDOs are authorized only when following conditions are respected:

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

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

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

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

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

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

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

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

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

5. Continuous Climb Operation

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

UASK AD 2.23 Additional Information

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

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

2. Bird concentration near airport.

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

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

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

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

UASK AD 2.24 Charts Related To An Aerodrome

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