REPUBLIC OF KAZAKHSTAN

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AIRAC AMDT 008/2026

Effective Date: **06 Aug 2026**

1. Amendment content:

GEN
GEN 0.2 Information updated
GEN 0.4 Information updated

ENR
ENR 1.6 Information updated
ENR 1.10 Information updated
ENR 1.11 Information updated
ENR 2.1 ATZ name changed from KHLEBODAROVKA ATZ to AIBYN ATZ.
ENR 2.2 KHLEBODAROVKA ATZ renamed to AIBYN ATZ.
ENR 3.2 Information updated
ENR 4.4 waypoint GURGI withdrawn
ENR 6 Changes in aeronautical charts

AD
AD 1.5 Aerodrome certification data for Urdzhar (UASU) updated.
UAAA AD 2.8, 2.20, 2.22 Information updated
UAUR AD 2.12 Information updated
UACP AD 2.16 Helicopter Landing Area added
UAII AD 2.4 Information updated
UAAT AD 2.16 Helicopter Landing Area added
UADD AD 2.2 Reference temperature updated, 2.8 Information updated, 2.12 Information updated, 2.13 Information updated, 2.23 Information updated
UAKD AD 2.23 Information updated
AD 2.24 Changes in aeronautical charts

2. Hand corrections to the following pages:

Nil

3. Record entry of amendment in GEN 0.2.

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

NOTAM series K:
K1271/26
NOTAM series A:
A2096/26, A2978/26
NOTAM series C:
C3056/26
NOTAM incorporated to this AMDT will be cancelled by NOTAMC on the 21 AUG 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	
GEN 0.2 - 1/2	06 AUG 2026	GEN 0.2 - 1/2	23 FEB 2023
GEN 0.4 - 1/2	06 AUG 2026	GEN 0.4 - 1/2	09 JUL 2026
GEN 0.4 - 3/4	06 AUG 2026	GEN 0.4 - 3/4	09 JUL 2026
GEN 0.4 - 5/6	06 AUG 2026	GEN 0.4 - 5/6	09 JUL 2026
GEN 0.4 - 7/8	06 AUG 2026	GEN 0.4 - 7/8	09 JUL 2026
GEN 0.4 - 9/10	06 AUG 2026	GEN 0.4 - 9/10	09 JUL 2026
GEN 0.4 - 11/12	06 AUG 2026	GEN 0.4 - 11/12	09 JUL 2026
ENR 1.6 - 7/8	06 AUG 2026	ENR 1.6 - 7/8	04 SEP 2025
ENR 1.10 - 1/2	06 AUG 2026	ENR 1.10 - 1/2	11 JUL 2024
ENR 1.10 - 3/4	06 AUG 2026		
ENR 1.11 - 1/2	06 AUG 2026	ENR 1.11 - 1/2	26 JAN 2023
ENR 2.1 - 21/22	06 AUG 2026	ENR 2.1 - 21/22	09 JUL 2026
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ENR 3.2 3 - 33/34	06 AUG 2026	ENR 3.2 3 - 33/34	09 JUL 2026
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ENR 3.2 4 - 5/6	06 AUG 2026	ENR 3.2 4 - 5/6	09 JUL 2026
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ENR 4.4 - 5/6	06 AUG 2026	ENR 4.4 - 5/6	09 JUL 2026
ENR 4.4 - 7/8	06 AUG 2026	ENR 4.4 - 7/8	09 JUL 2026
ENR 4.4 - 9/10	06 AUG 2026	ENR 4.4 - 9/10	09 JUL 2026
ENR 4.4 - 11/12	06 AUG 2026	ENR 4.4 - 11/12	09 JUL 2026
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ENR 4.4 - 25/26	06 AUG 2026	ENR 4.4 - 25/26	09 JUL 2026
ENR 4.4 - 27/28	06 AUG 2026	ENR 4.4 - 27/28	09 JUL 2026
ENR 4.4 - 29/30	06 AUG 2026	ENR 4.4 - 29/30	09 JUL 2026
ENR 4.4 - 31/32	06 AUG 2026	ENR 4.4 - 31/32	09 JUL 2026
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AD 2 UAAA - 5/6	06 AUG 2026	AD 2 UAAA - 5/6	14 MAY 2026
AD 2 UAAA - 11/12	06 AUG 2026	AD 2 UAAA - 11/12	16 APR 2026
AD 2 UAAA - 13/14	06 AUG 2026	AD 2 UAAA - 13/14	16 APR 2026
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AD 2 UAAA - 17/18	06 AUG 2026	AD 2 UAAA - 17/18	11 JUN 2026
AD 2 UAAA - 19/20	06 AUG 2026	AD 2 UAAA - 19/20	11 JUN 2026
AD 2 UAAA - 21/22	06 AUG 2026	AD 2 UAAA - 21/22	11 JUN 2026
AD 2 UAAA ADC 2 24 1 - 1/2	06 AUG 2026	AD 2 UAAA ADC 2 24 1 - 1/2	16 APR 2026
AD 2 UAAA ADC 2 24 3 - 1/2	06 AUG 2026	AD 2 UAAA ADC 2 24 3 - 1/2	16 APR 2026
AD 2 UAAA ADC 2 24 9 9 - 1/2	06 AUG 2026	AD 2 UAAA ADC 2 24 9 9 - 1/2	11 JUN 2026
AD 2 UAAA ADC 2 24 9 10 - 1/2	06 AUG 2026	AD 2 UAAA ADC 2 24 9 10 - 1/2	11 JUN 2026
AD 2 UAAA ADC 2 24 9 11 - 1/2	06 AUG 2026	AD 2 UAAA ADC 2 24 9 11 - 1/2	11 JUN 2026
AD 2 UAAA ADC 2 24 9 12 - 1/2	06 AUG 2026	AD 2 UAAA ADC 2 24 9 12 - 1/2	11 JUN 2026
AD 2 UAAA ADC 2 24 9 13 - 1/2	06 AUG 2026	AD 2 UAAA ADC 2 24 9 13 - 1/2	11 JUN 2026
AD 2 UAAA ADC 2 24 9 14 - 1/2	06 AUG 2026	AD 2 UAAA ADC 2 24 9 14 - 1/2	11 JUN 2026
AD 2 UAAA ADC 2 24 9 15 - 1/2	06 AUG 2026	AD 2 UAAA ADC 2 24 9 15 - 1/2	11 JUN 2026
AD 2 UAUR - 3/4	06 AUG 2026	AD 2 UAUR - 3/4	09 JUL 2026
AD 2 UAUR - 7/8	06 AUG 2026	AD 2 UAUR - 7/8	09 JUL 2026
AD 2 UAUR ADC 2 24 1 - 1/2	06 AUG 2026	AD 2 UAUR ADC 2 24 1 - 1/2	09 JUL 2026
AD 2 UAUR ADC 2 24 3 - 1/2	06 AUG 2026	AD 2 UAUR ADC 2 24 3 - 1/2	09 JUL 2026
AD 2 UAUR ADC 2 24 6 - 1/2	06 AUG 2026	AD 2 UAUR ADC 2 24 6 - 1/2	09 JUL 2026
AD 2 UAUR ADC 2 24 7 1 - 1/2	06 AUG 2026	AD 2 UAUR ADC 2 24 7 1 - 1/2	09 JUL 2026
AD 2 UAUR ADC 2 24 7 2 - 1/2	06 AUG 2026	AD 2 UAUR ADC 2 24 7 2 - 1/2	09 JUL 2026
AD 2 UAUR ADC 2 24 7 3 - 1/2	06 AUG 2026	AD 2 UAUR ADC 2 24 7 3 - 1/2	09 JUL 2026
AD 2 UAUR ADC 2 24 7 4 - 1/2	06 AUG 2026	AD 2 UAUR ADC 2 24 7 4 - 1/2	09 JUL 2026
AD 2 UAUR ADC 2 24 9 1 - 1/2	06 AUG 2026	AD 2 UAUR ADC 2 24 9 1 - 1/2	09 JUL 2026
AD 2 UAUR ADC 2 24 9 2 - 1/2	06 AUG 2026	AD 2 UAUR ADC 2 24 9 2 - 1/2	09 JUL 2026
AD 2 UAUR ADC 2 24 9 3 - 1/2	06 AUG 2026	AD 2 UAUR ADC 2 24 9 3 - 1/2	09 JUL 2026
AD 2 UAUR ADC 2 24 9 4 - 1/2	06 AUG 2026	AD 2 UAUR ADC 2 24 9 4 - 1/2	09 JUL 2026
AD 2 UAUR ADC 2 24 9 5 - 1/2	06 AUG 2026	AD 2 UAUR ADC 2 24 9 5 - 1/2	09 JUL 2026
AD 2 UAUR ADC 2 24 9 6 - 1/2	06 AUG 2026	AD 2 UAUR ADC 2 24 9 6 - 1/2	09 JUL 2026
AD 2 UAUR ADC 2 24 11 1 - 1/2	06 AUG 2026	AD 2 UAUR ADC 2 24 11 1 - 1/2	09 JUL 2026
AD 2 UAUR ADC 2 24 11 2 - 1/2	06 AUG 2026	AD 2 UAUR ADC 2 24 11 2 - 1/2	09 JUL 2026
		AD 2 UAUR ADC 2 24 11 3 - 1/2	09 JUL 2026
		AD 2 UAUR ADC 2 24 11 4 - 1/2	09 JUL 2026
AD 2 UAUR ADC 2 24 11 5 - 1/2	06 AUG 2026	AD 2 UAUR ADC 2 24 11 5 - 1/2	09 JUL 2026
AD 2 UAUR ADC 2 24 11 6 - 1/2	06 AUG 2026	AD 2 UAUR ADC 2 24 11 6 - 1/2	09 JUL 2026
AD 2 UAUR ADC 2 24 11 7 - 1/2	06 AUG 2026	AD 2 UAUR ADC 2 24 11 7 - 1/2	09 JUL 2026
AD 2 UAUR ADC 2 24 11 8 - 1/2	06 AUG 2026	AD 2 UAUR ADC 2 24 11 8 - 1/2	09 JUL 2026
AD 2 UAUR ADC 2 24 12 - 1/2	06 AUG 2026	AD 2 UAUR ADC 2 24 12 - 1/2	09 JUL 2026
AD 2 UACC ADC 2 24 9 3 - 1/2	06 AUG 2026	AD 2 UACC ADC 2 24 9 3 - 1/2	09 JUL 2026
AD 2 UACC ADC 2 24 9 4 - 1/2	06 AUG 2026	AD 2 UACC ADC 2 24 9 4 - 1/2	09 JUL 2026
AD 2 UACC ADC 2 24 9 5 - 1/2	06 AUG 2026	AD 2 UACC ADC 2 24 9 5 - 1/2	09 JUL 2026

Insert the following pages		Remove the following pages	
AD 2 UACC ADC 2 24 9 6 - 1/2	06 AUG 2026	AD 2 UACC ADC 2 24 9 6 - 1/2	09 JUL 2026
AD 2 UACC ADC 2 24 11 7 - 1/2	06 AUG 2026	AD 2 UACC ADC 2 24 11 7 - 1/2	09 JUL 2026
AD 2 UACC ADC 2 24 11 8 - 1/2	06 AUG 2026	AD 2 UACC ADC 2 24 11 8 - 1/2	09 JUL 2026
AD 2 UAAH ADC 2 24 9 3 - 1/2	06 AUG 2026	AD 2 UAAH ADC 2 24 9 3 - 1/2	27 NOV 2025
AD 2 UAAH ADC 2 24 9 4 - 1/2	06 AUG 2026	AD 2 UAAH ADC 2 24 9 4 - 1/2	27 NOV 2025
AD 2 UAAH ADC 2 24 11 3 - 1/2	06 AUG 2026	AD 2 UAAH ADC 2 24 11 3 - 1/2	14 MAY 2026
AD 2 UAAH ADC 2 24 11 4 - 1/2	06 AUG 2026	AD 2 UAAH ADC 2 24 11 4 - 1/2	14 MAY 2026
AD 2 UAIK ADC 2 24 9 1 - 1/2	06 AUG 2026	AD 2 UAIK ADC 2 24 9 1 - 1/2	27 NOV 2025
AD 2 UAIK ADC 2 24 9 2 - 1/2	06 AUG 2026	AD 2 UAIK ADC 2 24 9 2 - 1/2	27 NOV 2025
AD 2 UAIK ADC 2 24 11 1 - 1/2	06 AUG 2026	AD 2 UAIK ADC 2 24 11 1 - 1/2	27 NOV 2025
AD 2 UAIK ADC 2 24 11 2 - 1/2	06 AUG 2026	AD 2 UAIK ADC 2 24 11 2 - 1/2	30 OCT 2025
AD 2 UACP - 5/6	06 AUG 2026	AD 2 UACP - 5/6	15 MAY 2025
AD 2 UASI ADC 2 24 7 1 - 1/2	06 AUG 2026	AD 2 UASI ADC 2 24 7 1 - 1/2	11 JUN 2026
AD 2 UASI ADC 2 24 7 2 - 1/2	06 AUG 2026	AD 2 UASI ADC 2 24 7 2 - 1/2	11 JUN 2026
AD 2 UASI ADC 2 24 7 3 - 1/2	06 AUG 2026	AD 2 UASI ADC 2 24 7 3 - 1/2	11 JUN 2026
AD 2 UASI ADC 2 24 7 4 - 1/2	06 AUG 2026	AD 2 UASI ADC 2 24 7 4 - 1/2	11 JUN 2026
AD 2 UASI ADC 2 24 9 3 - 1/2	06 AUG 2026	AD 2 UASI ADC 2 24 9 3 - 1/2	11 JUN 2026
AD 2 UASI ADC 2 24 9 4 - 1/2	06 AUG 2026	AD 2 UASI ADC 2 24 9 4 - 1/2	11 JUN 2026
AD 2 UASI ADC 2 24 11 3 - 1/2	06 AUG 2026	AD 2 UASI ADC 2 24 11 3 - 1/2	11 JUN 2026
AD 2 UASI ADC 2 24 11 4 - 1/2	06 AUG 2026	AD 2 UASI ADC 2 24 11 4 - 1/2	11 JUN 2026
AD 2 UAII - 1/2	06 AUG 2026	AD 2 UAII - 1/2	14 MAY 2026
AD 2 UAII ADC 2 24 9 3 - 1/2	06 AUG 2026	AD 2 UAII ADC 2 24 9 3 - 1/2	19 MAR 2026
AD 2 UAII ADC 2 24 9 4 - 1/2	06 AUG 2026	AD 2 UAII ADC 2 24 9 4 - 1/2	19 MAR 2026
AD 2 UAII ADC 2 24 9 5 - 1/2	06 AUG 2026	AD 2 UAII ADC 2 24 9 5 - 1/2	19 MAR 2026
AD 2 UAII ADC 2 24 9 6 - 1/2	06 AUG 2026	AD 2 UAII ADC 2 24 9 6 - 1/2	19 MAR 2026
AD 2 UAAT - 1/2	06 AUG 2026	AD 2 UAAT - 1/2	08 AUG 2024
AD 2 UAAT - 5/6	06 AUG 2026	AD 2 UAAT - 5/6	27 NOV 2025
AD 2 UAAT - 7/8	06 AUG 2026	AD 2 UAAT - 7/8	27 NOV 2025
AD 2 UAAT - 9/10	06 AUG 2026	AD 2 UAAT - 9/10	27 NOV 2025
AD 2 UADD - 1/2	06 AUG 2026	AD 2 UADD - 1/2	14 MAY 2026
AD 2 UADD - 3/4	06 AUG 2026	AD 2 UADD - 3/4	14 MAY 2026
AD 2 UADD - 5/6	06 AUG 2026	AD 2 UADD - 5/6	22 JAN 2026
AD 2 UADD - 11/12	06 AUG 2026	AD 2 UADD - 11/12	16 APR 2026
AD 2 UADD ADC 2 24 1 - 1/2	06 AUG 2026	AD 2 UADD ADC 2 24 1 - 1/2	14 MAY 2026
AD 2 UADD ADC 2 24 3 - 1/2	06 AUG 2026	AD 2 UADD ADC 2 24 3 - 1/2	14 MAY 2026
AD 2 UAIT ADC 2 24 11 1 - 1/2	06 AUG 2026	AD 2 UAIT ADC 2 24 11 1 - 1/2	14 MAY 2026
AD 2 UASK ADC 2 24 9 4 - 1/2	06 AUG 2026	AD 2 UASK ADC 2 24 9 4 - 1/2	31 OCT 2024
AD 2 UASK ADC 2 24 9 5 - 1/2	06 AUG 2026	AD 2 UASK ADC 2 24 9 5 - 1/2	23 JAN 2025
AD 2 UASK ADC 2 24 9 6 - 1/2	06 AUG 2026	AD 2 UASK ADC 2 24 9 6 - 1/2	31 OCT 2024
AD 2 UASK ADC 2 24 9 7 - 1/2	06 AUG 2026	AD 2 UASK ADC 2 24 9 7 - 1/2	31 OCT 2024
AD 2 UAKD - 9/10	06 AUG 2026	AD 2 UAKD - 9/10	15 MAY 2025
AD 2 UAKD ADC 2 24 9 3 - 1/2	06 AUG 2026	AD 2 UAKD ADC 2 24 9 3 - 1/2	22 JAN 2026
AD 2 UAKD ADC 2 24 9 4 - 1/2	06 AUG 2026	AD 2 UAKD ADC 2 24 9 4 - 1/2	22 JAN 2026
AD 2 UAKD ADC 2 24 9 5 - 1/2	06 AUG 2026	AD 2 UAKD ADC 2 24 9 5 - 1/2	22 JAN 2026
AD 2 UAKD ADC 2 24 11 6 - 1/2	06 AUG 2026	AD 2 UAKD ADC 2 24 11 6 - 1/2	22 JAN 2026
AD 2 UAKD ADC 2 24 11 7 - 1/2	06 AUG 2026	AD 2 UAKD ADC 2 24 11 7 - 1/2	22 JAN 2026

GEN 0.2 RECORD OF AIP AMENDMENTS

AIRAC AIP AMENDMENT			
NR/Year	*Publication date*	*Effective date*	*Inserted by*
001/2017	16-Feb-2017	30-Mar-2017	
002/2017	13-Apr-2017	25-May-2017	
003/2017	08-Jun-2017	20-Jul-2017	
004/2017	03-Aug-2017	14-Sep-2017	
005/2017	28-Sep-2017	09-Nov-2017	
001/2018	21-Dec-2017	01-Feb-2018	
002/2018	15-Mar-2018	26-Apr-2018	
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004/2018	05-Jul-2018	16-Aug-2018	
005/2018	27-Sep-2018	08-Nov-2018	
001/2019	20-Dec-2018	31-Jan-2019	
002/2019	17-Jan-2019	28-Feb-2019	
003/2019	14-Feb-2019	28-Mar-2019	
004/2019	11-Apr-2019	23-May-2019	
005/2019	06-Jun-2019	18-Jul-2019	
006/2019	12-Sep-2019	07-Nov-2019	
007/2019	24-Oct-2019	05-Dec-2019	
001/2020	05-Dec-2019	30-Jan-2020	
002/2020	12-Mar-2020	23-Apr-2020	
003/2020	04-Jun-2020	16-Jul-2020	
004/2020	16-Jul-2020	10-Sep-2020	
005/2020	08-Oct-2020	03-Dec-2020	
001/2021	14-Jan-2021	25-Feb-2021	
002/2021	08-Apr-2021	20-May-2021	
003/2021	03-Jun-2021	15-Jul-2021	
004/2021	01-Jul-2021	12-Aug-2021	
005/2021	23-Sep-2021	04-Nov-2021	
006/2021	21-Oct-2021	02-Dec-2021	
001/2022	13-Jan-2022	24-Feb-2022	
002/2022	07-Apr-2022	19-May-2022	
003/2022	30-Jun-2022	11-Aug-2022	
004/2022	25-Aug-2022	06-Oct-2022	
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001/2023	15-Dec-2022	26-Jan-2023	
002/2023	12-Jan-2023	23-Feb-2023	

AIRAC AIP AMENDMENT			
NR/Year	*Publication date*	*Effective date*	*Inserted by*
003/2023	09-Mar-2023	20-Apr-2023	
004/2023	04-May-2023	15-Jun-2023	
005/2023	29-Jun-2023	10-Aug-2023	
006/2023	24-Aug-2023	05-Oct-2023	
007/2023	21-Sep-2023	02-Nov-2023	
008/2023	19-Oct-2023	30-Nov-2023	
001/2024	14-Dec-2023	25-Jan-2024	
002/2024	08-Feb-2024	21-Mar-2024	
003/2024	04-Apr-2024	16-May-2024	
004/2024	30-May-2024	11-Jul-2024	
005/2024	27-Jun-2024	08-Aug-2024	
006/2024	25-Jul-2024	05-Sep-2024	
007/2024	19-Sep-2024	31-Oct-2024	
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009/2025	24-Jul-2025	04-Sep-2025	
010/2025	04-Sep-2025	30-Oct-2025	
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002/2026	25-Dec-2025	19-Feb-2026	
003/2026	05-Feb-2026	19-Mar-2026	
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GEN 0.4 CHECKLIST OF AIP PAGES

PART 1 - GENERAL (GEN)

GEN 0

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GEN-0.1 - 3	30 JAN 2020	GEN-0.4 - 3	06 AUG 2026	GEN-0.4 - 11	06 AUG 2026
GEN-0.1 - 4	30 MAR 2017	GEN-0.4 - 4	06 AUG 2026	GEN-0.4 - 12	06 AUG 2026
GEN-0.2 - 1	23 FEB 2023	GEN-0.4 - 5	06 AUG 2026	GEN-0.5 - 1	30 MAR 2017
GEN-0.2 - 2	06 AUG 2026	GEN-0.4 - 6	06 AUG 2026	GEN-0.5 - 2	30 MAR 2017
GEN-0.3 - 1	19 FEB 2026	GEN-0.4 - 7	06 AUG 2026	GEN-0.6 - 1	10 SEP 2020
GEN-0.3 - 2	30 MAR 2017	GEN-0.4 - 8	06 AUG 2026	GEN-0.6 - 2	10 SEP 2020

GEN 1 NATIONAL REGULATIONS AND REQUIREMENTS

GEN-1.1 - 1	26 JAN 2023	GEN-1.3 - 1	07 NOV 2019	GEN-1.7 - 3	12 AUG 2021
GEN-1.1 - 2	26 JAN 2023	GEN-1.3 - 2	07 NOV 2019	GEN-1.7 - 4	12 AUG 2021
GEN-1.2 - 1	16 MAY 2024	GEN-1.4 - 1	25 FEB 2021	GEN-1.7 - 5	12 AUG 2021
GEN-1.2 - 2	20 FEB 2025	GEN-1.4 - 2	25 FEB 2021	GEN-1.7 - 6	12 AUG 2021
GEN-1.2 - 3	20 FEB 2025	GEN-1.5 - 1	07 NOV 2019	GEN-1.7 - 7	12 AUG 2021
GEN-1.2 - 4	20 FEB 2025	GEN-1.5 - 2	07 NOV 2019	GEN-1.7 - 8	12 JUN 2025
GEN-1.2 - 5	20 FEB 2025	GEN-1.6 - 1	07 NOV 2019	GEN-1.7 - 9	14 MAY 2026
GEN-1.2 - 6	11 JUL 2024	GEN-1.6 - 2	07 NOV 2019	GEN-1.7 - 10	14 MAY 2026
GEN-1.2 - 7	11 JUL 2024	GEN-1.7 - 1	12 AUG 2021		
GEN-1.2 - 8	25 FEB 2021	GEN-1.7 - 2	12 AUG 2021		

GEN 2 TABLES AND CODES

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GEN-2.1 - 2	11 JUL 2024	GEN-2.5 - 2	09 JUL 2026	GEN-2.7 - 14	09 JUL 2026
GEN-2.1 - 3	16 MAY 2024	GEN-2.5 - 3	09 JUL 2026	GEN-2.7 - 15	09 JUL 2026
GEN-2.1 - 4	25 FEB 2021	GEN-2.5 - 4	23 FEB 2023	GEN-2.7 - 16	09 JUL 2026
GEN-2.2 - 1	04 SEP 2025	GEN-2.6 - 1	21 JUN 2018	GEN-2.7 - 17	09 JUL 2026
GEN-2.2 - 2	04 SEP 2025	GEN-2.6 - 2	30 MAR 2017	GEN-2.7 - 18	09 JUL 2026
GEN-2.2 - 3	04 SEP 2025	GEN-2.7 - 1	09 JUL 2026	GEN-2.7 - 19	09 JUL 2026
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GEN-2.2 - 5	04 SEP 2025	GEN-2.7 - 3	09 JUL 2026	GEN-2.7 - 21	09 JUL 2026
GEN-2.2 - 6	04 SEP 2025	GEN-2.7 - 4	09 JUL 2026	GEN-2.7 - 22	09 JUL 2026
GEN-2.2 - 7	04 SEP 2025	GEN-2.7 - 5	09 JUL 2026	GEN-2.7 - 23	09 JUL 2026
GEN-2.2 - 8	04 SEP 2025	GEN-2.7 - 6	09 JUL 2026	GEN-2.7 - 24	09 JUL 2026
GEN-2.3 - 1	16 JUL 2020	GEN-2.7 - 7	09 JUL 2026	GEN-2.7 - 25	09 JUL 2026
GEN-2.3 - 2	30 MAR 2017	GEN-2.7 - 8	09 JUL 2026	GEN-2.7 - 26	09 JUL 2026
GEN-2.3 - 3	16 JUL 2020	GEN-2.7 - 9	09 JUL 2026	GEN-2.7 - 27	09 JUL 2026
GEN-2.3 - 4	16 AUG 2018	GEN-2.7 - 10	09 JUL 2026	GEN-2.7 - 28	09 JUL 2026
GEN-2.4 - 1	09 JUL 2026	GEN-2.7 - 11	09 JUL 2026		
GEN-2.4 - 2	11 JUN 2026	GEN-2.7 - 12	09 JUL 2026		

GEN 3 SERVICES

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GEN-3.1 - 4	20 MAR 2025	GEN-3.4 - 2	22 JAN 2026	GEN-3.5 - 10	14 MAY 2026
GEN-3.1 - 5	15 MAY 2025	GEN-3.4 - 3	04 SEP 2025	GEN-3.5 - 11	14 MAY 2026
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GEN-3.2 - 3	15 JUN 2023	GEN-3.5 - 3	08 AUG 2024	GEN-3.6 - 3	01 DEC 2022
GEN-3.2 - 4	18 JUL 2019	GEN-3.5 - 4	30 OCT 2025	GEN-3.6 - 4	01 DEC 2022
GEN-3.3 - 1	16 MAY 2024	GEN-3.5 - 5	30 OCT 2025		
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ENR-4.4 - 4	06 AUG 2026	ENR-4.4 - 20	06 AUG 2026	ENR-4.4 - 36	06 AUG 2026
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UATT AD 2.24.7-2 - 1	19 FEB 2026	UAAA AD 2.24.7-5 - 2	15 JUN 2023	UAAA AD 2.24.11-6 - 1	11 JUN 2026
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AD-2-UAKD - 4	15 MAY 2025				
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	06 AUG 2026				
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	06 AUG 2026				
UAKD AD 2.24.9-4 - 1	22 JAN 2026				
UAKD AD 2.24.9-4 - 2	06 AUG 2026				
UAKD AD 2.24.9-5 - 1	22 JAN 2026				
UAKD AD 2.24.9-5 - 2	06 AUG 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				

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Table 6: SSR COVERAGE OPERATING IN RANGE OF INTERNATIONAL FREQUENCIES

SSR Points	SSR Type	Maximum Radius of coverage (NM)	Upper Limit (ft)	Coordinates	Remarks
Aralsk	En-route, mono-impulse	215	65000	N464937 E0613720	
Arkalyk	En-route, mono-impulse	215	65000	N501905 E0670131	
Astana	En-route, mono-impulse	215	65000	N510254 E0712848	
Astana	En-route and aerodrome mono-impulse	215	65000	N510106 E0712736	
Ayaguz	En-route, mono-impulse	215	65000	N475557 E0802649	
Balkhash	En-route	195	40000	N465313 E0750137	
Balkhash	En-route and aerodrome mono-impulse	215	65000	N465254 E0745940	
Beineu	En-route, mono-impulse	215	65000	N452011 E0550734	
Karaganda	En-route and aerodrome mono-impulse	215	65000	N494002 E0732002	
Karaganda	Aerodrome	108	33000	N494008 E0732001	
Kokshetau	En-route and aerodrome mono-impulse	215	65000	N531938 E0693555	
Kokshetau	En-route, mono-impulse	215	65000	N531940 E0693557	
Kyzylorda	En-route, mono-impulse	215	65000	N444141 E0653623	
Kostanay	En-route, mono-impulse	215	65000	N531136 E0633202	
Pavlodar	En-route and aerodrome mono-impulse	215	65000	N521136 E0770437	
Petropavlovsk	En-route and aerodrome mono-impulse	215	65000	N544618 E0691109	
Taldykorgan	Aerodrome	205	32808	N450730 E0782626	
Taraz	En-route and aerodrome mono-impulse	215	65000	N425112 E0711746	

Table 6: SSR COVERAGE OPERATING IN RANGE OF INTERNATIONAL FREQUENCIES

SSR Points	SSR Type	Maximum Radius of coverage (NM)	Upper Limit (ft)	Coordinates	Remarks
Taraz	En-route and aerodrome mono-impulse	215	65000	N425114 E0711741	
Turkistan	En-route and aerodrome mono-impulse	215	65000	N431833 E0683321	
Uralsk	En-route, mono-impulse	215	65000	N510951 E0513344	
Uralsk	En-route and aerodrome mono-impulse	215	65000	N510858 E0513252	
Ust-Kamenogorsk	Aerodrome	108	33000	N500205 E0823012	
Semey	En-route, mono-impulse	215	65000	N501855 E0801146	
Semey	En-route, mono-impulse	257	65000	N501858 E0801142	
Shymkent	En-route and aerodrome	195	40000	N422200 E0692848	
Zhezkazgan	En-route, mono-impulse	215	65000	N474222 E0674429	
Zhezkazgan	En-route and aerodrome mono-impulse	215	65000	N474224 E0674429	
Control center Zharkent	En-route, mono-impulse	226	65616	N441400 E0795720	

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

Installed at the aerodromes:
Aktau, Aktobe, Almaty, Aralsk, Arkalyk, Astana, Atyrau, Ayagoz, Beineu, Boroldai, Balkhash, Zhezkazgan, Zharkent, Zaisan, Karaganda, Kokshetau, Kostanay, Kyzylorda, Pavlodar, Petropavlovsk, Semey, Taldykorgan, Taraz, Turkistan, Uralsk, Urdzhar, Ust-Kamenogorsk, Shymkent.

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

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

4. OTHER RELEVANT INFORMATION AND PROCEDURES

Nil

ENR 1.10 FLIGHT PLANNING

1. PROCEDURES FOR THE SUBMISSION OF A FLIGHT PLAN

1.1 General provisions

The Main Center for Air Traffic Planning of the Republic of Kazakhstan (hereinafter – MC Planning) is responsible for the planning, control and coordination of airspace use in the Republic of Kazakhstan. The MC Planning receives and processes the following messages: FPL, CHG, CNL, DEP, ARR, CPL, DLA, RQP, CPL, RPL.

1.2 Location of unit

The MC ATM may be contacted at the following addresses:

Building 15, E522 street,

District Esil,
010016 Astana
Republic of Kazakhstan

Phone:+7 (7172) 704349, 704348

Fax:+7 (7172) 320038

AFS:UAAKZDZK

Phone:+7 (7172) 773589, 773498

AFS:UAAKZDZI

Hours of operation: H24

1.3 Submission of a flight plan

A flight plan shall be submitted prior operating any flight in the airspace of the Republic of Kazakhstan in the form and according to provisions of ICAO Annex 2 and ICAO Doc 4444 PANS/ATM.

Flight plan can either be filed as:

- individual flight plan (FPL ICAO), or
- repetitive flight plan (RPL ICAO).

1.4 Time of submission

Except for repetitive flight plans, a flight plan shall be submitted at least 1 hour prior to Estimated Off – Block Time (EOBT) but not more than 120 hours (5 days) before EOBT by means of inserting DOF/in item 18, in the format DOF/yymmdd where “yy” is the year indicator, “mm” is the month and “dd” is the date.

If the flight is delayed by 30 minutes or more, compared to the departure time specified in the RPL, the ATS authority operating the departure aerodrome shall be notified immediately.

1.5 Place of submission

For flights departing from aerodromes of the Republic of Kazakhstan, aircraft operators themselves or via ATS Briefing at the aerodrome of departure (or via ATS Briefing at the nearest aerodrome in the case of absence of ATS Briefing at the aerodrome of departure) should submit flight plans and messages relating to flight plans.

1.6 Contents and form of a flight plan

Contents and form of FPL conform to ICAO Doc. 4444 PANS/ATM. In the event of changing at least one of the fields (or all of them) listed below:

- Aircraft Identification (ARCID);
- Aerodrome of Departure (ADEP);
- Aerodrome of Destination (ADES) and \or delay of departure time for 30 minutes the flight plan modification message (CHG) must not be sent. To change one of the above fields it will be necessary to cancel the original flight plan i.e. CNL message shall be sent followed five minutes later by a new flight plan containing the corrected data.

2. REPETITIVE FLIGHT PLAN SYSTEM

2.1 General

The procedures concerning the use of Repetitive Flight Plans (RPL) conform to ICAO Doc 4444 PANS-ATM. RPL lists relating to flights with landing at aerodromes of the Republic of Kazakhstan and to flights overflying the FIRs of the Republic of Kazakhstan shall be submitted to MC ATM at least 15 working days in advance, and changes to them of long-term character - at least 7 working days in advance before the commencement of its operations to the following address:

Building 15, E522 street,

District Esil,
010000 Astana
Republic of Kazakhstan

Phone: +7 (7172) 704336
AFS: UAAKZDZR
Email: iras@ans.kz

2.2 Changes, delay and cancellations of RPL

The information on delays, cancellations or other changes of the non-permanent, one-time nature must be reported in the form of relevant ICAO messages (CHG, DLA, CNL) at least 30 minutes before the Estimated Off – Block Time (EOBT).

RPL lists shall be replaced by completely new lists prior to the introduction of summer- winter schedules.

2.3 Arrival report

A report of arrival shall be made at the earliest possible moment after landing to the ATS unit of the arrival aerodrome by any flight for which a flight plan has been submitted.

After landing at an aerodrome which is not the destination aerodrome (diversionary landing), the local ATS unit shall be specifically informed accordingly.

In the absence of a local ATS unit at the aerodrome of diversionary landing, the pilot is responsible for passing the arrival report to the destination aerodrome.

Arrival reports shall contain the following elements of information:

a. aircraft identification;

b. departure aerodrome;

c. destination aerodrome;

d. time of arrival.

3. CHANGES TO THE SUBMITTED FLIGHT PLAN

All changes to the flight plan submitted for flight in a controlled airspace shall be immediately reported by the aircraft crew to the air traffic services authority or air traffic control authority in whose area of responsibility the aircraft is located.

In the event of a delay of 30 minutes after the estimated off-block time for a controlled flight or for one hour for an uncontrolled flight, for which a flight plan is presented, this flight plan shall be changed accordingly

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ENR 1.11 ADDRESSING OF FLIGHT PLAN MESSAGES

1. GENERAL

Messages concerning the information of filed flight plan (FPL) and changes to it shall be addressed in accordance with the recommendations given in ICAO Doc 4444 PANS/ATM, Part XI, PARAS 11.2.1 and requirements published in ENR-1.10 - ENR-1.11 sections of the present AIP.

Messages related to transit flights in the airspace of the Republic of Kazakhstan and flights with landings at airfields of the Republic of Kazakhstan are addressed in accordance with the instructions below in order to ensure proper transmission and delivery.

Note. In this context, messages comprise filed flight plans, delays, modifications, departures, and arrivals, as well as flight plan cancellation messages (refer to PANS-ATM, Section 11.4.2.2).

2. ADDRESSING OF MESSAGES

Movement messages relating to transit flights via Kazakhstan airspace shall be addressed to Main Centre for Air Traffic Planning – UAAKZDZI and additionally to ACC (regional ATS unit) as stated below in order to warrant correct transmission and delivery:

- Via ALMATY FIR – UAAAZRZX
- Via ASTANA FIR – UACNZRZX
- Via AKTOBE FIR – UATTZRZX
- Via SHYMKENT FIR – UAIIZRZX

Movement messages relating to flights with landing at aerodromes shall be addressed to Main Centre for Air Traffic Planning – UAAKZDZK, UAAKZDZI, ACC (regional ATS unit) and additionally to aerodrome ATS unit as stated below in order to warrant correct transmission and delivery:

****ZTZX (where **** four-letter aerodrome location indicator)

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Name Lateral limits Vertical limits Class of airspace	Unit providing service	Call sign Languages Area and conditions of use Hours of service	Frequency/Purpose	Remarks
1	2	3	4	5
BORALDAY CTR 432621N 0765114E - 432715N 0765631E - 432102N 0765419E - 431853N 0765356E - 431659N 0764807E - 431729N 0764725E then a clockwise arc radius 5.4 NM centered on 432105N 0765257E - 432621N 0765114E 4000 FT ALT / GND Class of airspace: D	BORALDAY TWR	BORALDAY TOWER EN, RU NOTAM	118.9 MHZ Primary FREQ	Dispatch service
D ISLAND CTR 470132N 0521834E - 461827N 0524636E - 460519N 0520434E - 465304N 0512521E then a clockwise arc radius 22 NM centered on 470838N 0514805E - 470132N 0521834E 3000 FT ALT / GND Class of airspace: C (3000 FT ALT is not used for flights within Atyrau TMA)	D ISLAND TWR	D ISLAND TOWER EN, RU According to the regulations: 02:00 - 14:00 UTC	131.175 MHZ Primary FREQ 127.925 MHZ Secondary FREQ	Air traffic control service. When planning flights to CTR D ISLAND outside of the work regulations, Air traffic control service is provided upon a preliminary request sent by AFTN to UATGYKYD, UATGYKYX
AIBYN1 ATZ 503141N 0571037E - 502657N 0570235E - 501901N 0564315E - 503110N 0565449E - 503141N 0571037E 2000 FT ALT / GND Class of airspace: C	Flight operations management group of Air Defense Force Military Institute	RU NOTAM	Training flights	
AIBYN ATZ 505733N 0564705E - 505800N 0571800E - 504700N 0572800E - 504300N 0573000E - 503141N 0571037E - 503110N 0565449E - 501901N 0564315E - 501232N 0562740E - 503042N 0561237E - 505733N 0564705E 10000 FT ALT / GND Class of airspace: C	Flight operations management group of Air Defense Force Military Institute	RU NOTAM	Training flights	

Name Lateral limits Vertical limits Class of airspace	Unit providing service	Call sign Languages Area and conditions of use Hours of service	Frequency/Purpose	Remarks
1	2	3	4	5
ZHOLAMAN ATZ 511506N 0712100E - 512835N 0711239E - 513035N 0712629E - 512355N 0714219E - 511359N 0713317E - 511506N 0712100E 1300 FT QFE / GND Class of airspace: G				See Aeronautical Information concerning other aerodromes/ heliports/ landing sites

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

FIC Call sign FREQ Phone Hours of operation	ATS region	Lateral limits	Vertical limits	Remark
1	2	3	4	5
AKTAU “Aktau vyshka” HF – 5536 kHz VHF – 120.7 MHz Phone: +7 (7292) 463118, 463153, 421178 H24	Aktobe FIR	N452130 E0534647 - N445034 E0541914 - N435141 E0555948 - along border KAZAKHSTAN_UZBEKISTAN – N411900 E0560000 – along border KAZAKHSTAN_TURKMENISTAN - N414700 E0522800 - N420000 E0513000 - N423800 E0500000 - N425000 E0493000 - N455500 E0493000 - N452130 E0534647	GND – 10000 FT ALT	Excluding the TMA and CTR Aktau.
* - When planning flights at another time Flight information service provided on preliminary request sent AFTN UATEZAZX.				
AKTOBE “Aktobe Tower” HF – 4656 kHz VHF – 128.0 MHz Phone: +7(7132)931118 H24*	Aktobe FIR	N505800 E0613000 - N502331 E0622455 - N500137 E0622819 - N483738 E0624054 - N471135 E0643220 - N461214 E0614508 - N460903 E0613915 - N445159 E0600655 - along border KAZAKHSTAN_UZBEKISTAN - N452307 E0574000 - N454418 E0574000 - N463851 E0564100 - N465000 E0570000 - N485000 E0551000 - N485930 E0522738 - N504318 E0551552 - along border KAZAKHSTAN_RUSSIA - N505800 E0613000	GND – 10000 FT ALT	Excluding the CTR and TMA Aktobe, part of airspace delegated to Orsk APP, Aibyn ATZ, Aibyn1 ATZ during flight operations.
* - When planning flights at night time, flight information services (FIS) are provided only upon prior request sent via AFTN to the address UATTZRZX and UATTZTZX.				

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

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 (100 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. Radar coverage limited at FL120. {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 ↓	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**
	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 (100 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. Radar coverage limited at FL120. {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. Radar coverage limited at FL120. {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**
△ 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 ↓	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**
	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}

Route designator	[Route Usage Notes]					
Significant Point Name	Significant 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**
△ 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 (100 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)						
▲ 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)					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant 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**
△ 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 ↓	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 ↓	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 (100 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 ↓	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° 115°	47.3 NM	FL 510 FL 250	Even	Odd	ALMATY ACC 132.1 MHZ {C}
△ UGMON	492619N 0770343E SEM 240.1° 135.0 NM (700 FT)					
	295° 114°	40.6 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 ↓	FL series ↑	**Controlling unit** **{Airspace class}** **Remarks**
N996 (RNAV 5)						

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	**Controlling unit** **{Airspace class}** **Remarks**
▲ 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}
▲ NOGBU	435220N 0510352E AKT 360.0° 0.0 NM (100 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 ↓	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 ↓	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 ↓	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 ↓	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 ↓	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** **(100 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}

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** **(100 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)**					

Route designator	[Route Usage Notes]					
Significant Point Name	Significant point coordinates Reference VOR/DME ID Bearing and distance DME Elevation					Remarks
(RNAV / RNP Type)	Track MAG	Dist	Upper limit Lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
	039° 219°	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 ↓	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 (100 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 ↓	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}

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	
ADLIL	475940N 0841509E	Z208, Z727	TMA UASI
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

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
ADRIM	461940N 0805137E	N993	
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	
AGLAL	491642N 0615044E	L985, M993	
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

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
AGUSA	471400N 0820338E	M166	
AKALI	440829N 0611937E	L165, L985	
AKASA	491819N 0773455E	M993, P984	
AKAZU	404218N 0683815E	L170	
AKELI	494707N 0681322E	L86	
AKIBU	465522N 0515013E		TMA UATG
AKIMU	444353N 0731255E	N147	
AKIRA	454323N 0771829E	L143, Z160	
AKITU	483624N 0681921E	L26, N37, N990	
AKOSO	534140N 0650940E	N60, W355	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

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
ALZIS	474317N 0674542E	L51, L145, M75, M168, M993, N161, N987, N990, Z164	
AMABU	445737N 0781952E		TMA UAAT
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

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
ARGER	493808N 0725855E		TMA UAKK
ARHIG	501904N 0670118E	M166, M168, N987, N996, T522	
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

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
ASTIK	502734N 0691434E	L998, P574	
ASTAS	510006N 0712600E	L988, L994, M75, N170, N996, P574, Z586	
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

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
BAGUT	502745N 0803139E		TMA UASS
BAKID	462633N 0622354E	N167	
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

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
BARUR	443207N 0791739E	N126	
BASAN	433420N 0735429E	L147	
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	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
BESOL	502254N 0610548E	M166, T586	
BETIK	480807N 0665309E	L86, Z164	TMA UAKD
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	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
BOLSU	511507N 0725620E	L988, N996, W358, Z553	TMA UACC
BOMKA	420232N 0691624E	P178	TMA UAII
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	TMA UAUR
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

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
DETAK	434823N 0765029E	L855, L998	
DETOV	501555N 0731235E	Z553	TMA UAKK
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	L165, 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

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
DITSO	470443N 0671637E	N990, W332	TMA UAKD
DITSU	441934N 0743855E	N143	
DIVNO	454418N 0574000E	M610, N161	RR-2
DODEM	484212N 0773614E	M166, N102, P984, W348	
DODID	520353N 0765234E		TMA UASP
DODOK	451420N 0760011E	L998, N143	
DODOL	423536N 0712617E		TMA UADD
DODUR	412300N 0684800E	L163, M168, P178, Z554, Z578, Z580	
DOGEL	442430N 0525059E	N37, N73	
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

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
EDANO	510858N 0725804E	L994, Z553, Z746	TMA UACC
EDETO	495808N 0670732E	M168, N987, P574, W332	
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	
EKNIZ	442452N 0612711E	L165, M875	
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

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
EMBEK	502333N 0625947E	M166	
ENETO	494223N 0591154E	L147, T586	
ENONA	480316N 0763820E	N102	
EPOLI	472234N 0541316E	L51, N996	
ERKIS	484421N 0572756E	L163, L988	
ERMEK	441245N 0661954E	Z380	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	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
FORMO	470534N 0813933E	Z208, Z243, Z370	
FULSA	453758N 0784751E	L135	TMA UAAT
GAGSU	522335N 0771018E		TMA UASP
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

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

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
GOMIR	501042N 0844206E	N143, M618, M993	
GONEL	483912N 0735912E	M993, N170	
GORBO	490316N 0761100E	M166, M993, W348	
GORIM	484905N 0672456E	L26, L86, M168, N987	
GORVA	462455N 0664655E	N990, W332	
GOSLU	431413N 0764830E		TMA UAAA
GOSPA	485256N 0633233E	M993, N167, P574	
GULDO	495223N 0562651E	N60	TMA UATT
GUMGA	510752N 0630806E	T586	
GURPI	495618N 0711236E	M166, Z586, Z624	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	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
INLIG	441743N 0701919E	T916, L145	
INLUL	463730N 0803449E	Z370	
INPAD	432106N 0685105E		TMA UAIT
INREL	424136N 0713019E		TMA UADD
INRIK	500744N 0692030E	N990, M166	
INRIS	512800N 0521856E	A122, M158	
INRUG	420425N 0672311E	N987	TMA UAIK
INRUM	524302N 0740047E	Z584	
INTAL	484345N 0702839E	W351	
INTER	491433N 0595813E	L162, L988	
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	TMA UAUR
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

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
KIZMI	425214N 0711654E	L145, N143, Z580, Z817	
KEDUL	511959N 0514052E		TMA UARR
KEKAM	512300N 0771529E	P984	TMA UASP
KEKUN	492143N 0581653E	M199, T586	
KERUL	415128N 0520821E	Z581	
KESOS	433713N 0512713E		TMA UATE
KESOT	500111N 0600343E	L26, T586	
KEZUT	452811N 0790448E	N993	TMA UAAT
KODOL	511638N 0695651E	T523	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

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
KUGIR	440625N 0705906E	L855, N147	
KUGUN	493139N 0685550E	N990	
KULHI	431211N 0730422E	Z817	
KUNAS	430923N 0560000E	N193	
KURAB	442311N 0610344E	N167	
KUROL	475900N 0704800E	L26, M993	
KURUL	485059N 0554051E	M161, Z210	
KUSOT	502128N 0655110E	L145, M166	TMA UAUR
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

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
LAROZ	451010N 0521956E	M610	
LARPI	501721N 0560345E	M166	TMA UATT
LASDO	462443N 0755651E	Z160	TMA UAAH
LASMU	490432N 0624534E	L165, M993	
LASNA	492602N 0815315E	L135	TMA UASK
LASPA	534852N 0684219E	N170	TMA UACK
LATKO	522508N 0664427E	L994, T522, T586	
LATNU	445345N 0612553E	L985, M161, N167	
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	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
LIPSI	461808N 0784001E	M618, Z584	
LIRMO	530945N 0692524E		TMA UACK
LIRNA	501159N 0812203E	L994, W361	TMA UASS, TMA UASK
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	
LUMEZ	470537N 0582647E	M161, P574	
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

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
LURUM	494127N 0564322E	N73	TMA UATT
LUSAM	511128N 0515127E		TMA UARR
LUSIR	510229N 0511911E		TMA UARR
LUSUT	474510N 0680213E		TMA UAKD
LUTEK	482853N 0730459E	M993, Z624	
LUZMI	422426N 0681456E	M168	
MADEV	471857N 0770328E	N161, W336, Z243	
MAGOL	425338N 0685144E	L139, P178	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

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
MIMKA	502620N 0693328E	N990	
MIMRI	433808N 0634822E	L86, M75, P184	
MIRGA	452416N 0693051E	L145	
MISPU	435002N 0512237E		TMA UATE
MOGTU	485209N 0543832E	N60	
MOMUL	411524N 0664024E	P180	
MONEG	523627N 0671849E	N993, T586	
MULTA	510442N 0565042E	A360, M199, M875	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

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
NEPIL	434133N 0522455E	N73, N193, Z102	TMA UATE
NEPLA	470920N 0740031E	L26	TMA UAAH
NESDO	454926N 0544739E	L992	
NESUN	460123N 0801738E	N993	TMA UAAL
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	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
NONRI	493111N 0785223E	N102, M993	
OBAMA	460212N 0690233E	L145, L147	
OBAPI	472530N 0773700E	Z243, P984	
OBARU	472917N 0751312E	M34	TMA UAAH
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

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
OGOLI	412858N 0663632E	N143, N193	
OGRIP	405454N 0680500E	P178, P180, Z580	
OGTOL	424905N 0733002E	L728, Z580	
OGUDU	501516N 0795419E		TMA UASS
OKESO	411051N 0673608E	Z554	
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

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
PEKIR	433539N 0770931E	M610, P984	
PEMOL	464841N 0551720E	L139, L992	
PETEM	480656N 0553022E	N73, N996	
PETEP	544703N 0691309E	N60, N987, P179	
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

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
REGPI	485632N 0650629E	M741, Z164	
REKRU	531530N 0701102E		TMA UACK
RELGE	435304N 0530630E	N154, N161	
RELGO	500234N 0701730E	M75, M166	
RELRU	424925N 0681812E	M168, Z380	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	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
RIMUN	502651N 0570524E		TMA UATT
RINET	443026N 0663402E	M610	TMA UAOO
RINIT	435305N 0535549E	L992, N154	
RINUR	482255N 0681040E	N990	TMA UAKD
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

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
ROPEL	544155N 0685416E		TMA UACP
ROPIM	505038N 0711120E		TMA UACC
ROSID	483440N 0762005E	M149	
ROSIM	423415N 0672453E	L163, N987	
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	

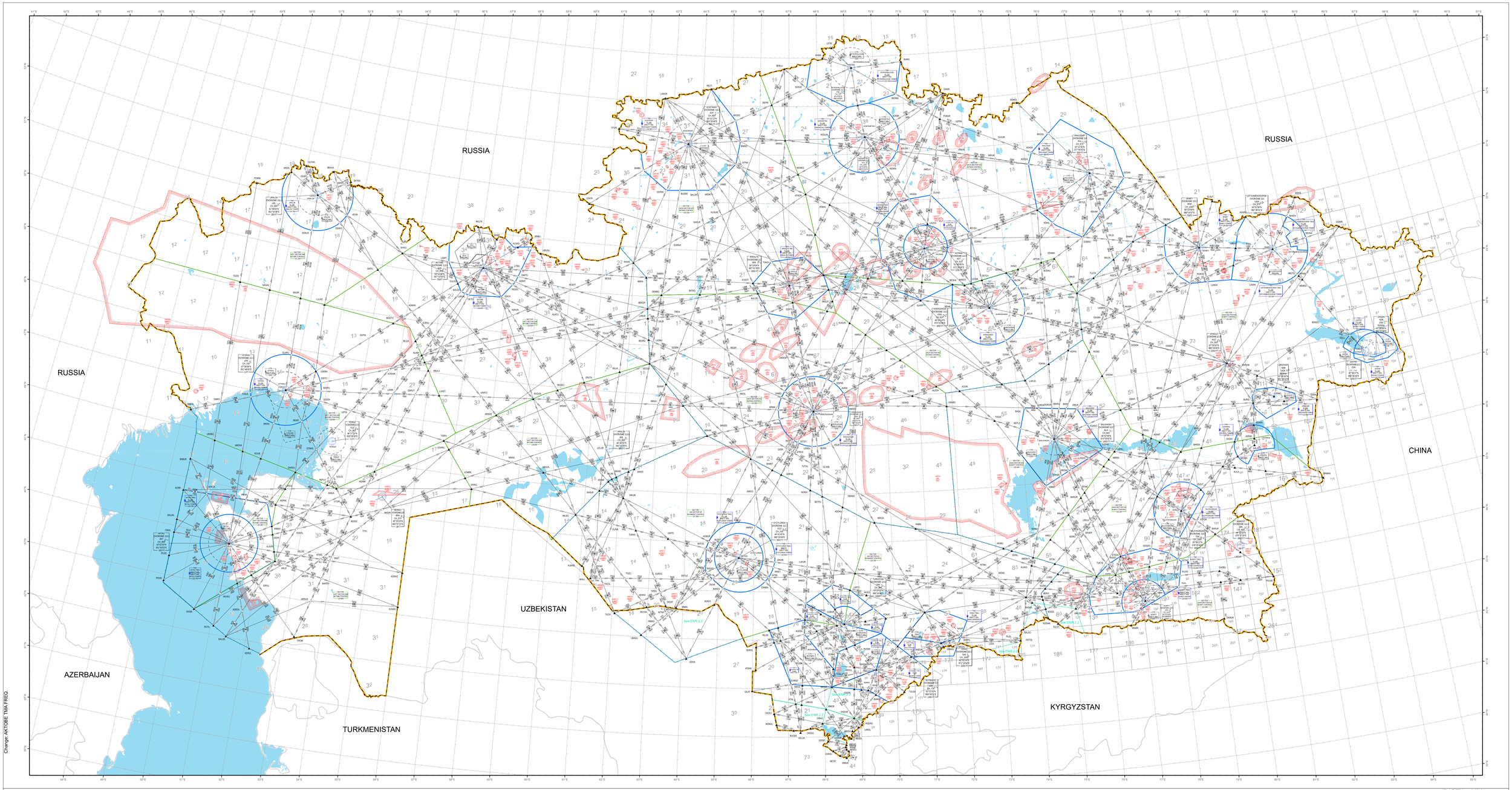
Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
SUGUM	432507N 0771027E		TMA UAAA
SUKUR	494431N 0661957E	L145, P574	TMA UAUR
SULET	430602N 0743503E	L143	
SULIB	494914N 0742808E	N37, W352	TMA UAKK
SURAR	481318N 0631317E	N167	
SUTUR	501837N 0711714E	Z586	TMA 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	
TIMZO	494630N 0593634E	L162, M993	
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	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
TITUR	532406N 0610924E	G111, L994, N985	TMA UAUU RR-3
TOGDI	472143N 0731457E	L26, Z583	
TOKNA	482525N 0750316E	Z160	
TOLAZ	490416N 0611752E	L147, N55	
TOLKI	473415N 0811640E	M166, Z208	
TOMGO	434146N 0734454E	L147, L855, M34, M610, N143, Z370	RR-2
TOMZU	504824N 0662645E	W332	TMA UAUR
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
TUNZA	473654N 0843414E	Z208, Z727	TMA UASI
TURIK	423108N 0700422E	N143	TMA UAII
TUROK	442214N 0685447E	L728, L855	
TUSEP	503136N 0680751E	L988, L993, N126, N996, W358, Z583, Z746	TMA UAUR
TUTUL	463825N 0674057E	L147, N987	

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
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	
UGMON	492619N 0770343E	M149, N993	
ULKAP	490729N 0755332E	M34, M166	
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

Name-code designator	Geographical Coordinates	ATS route or other route	Terminal area
1	2	3	4
URABU	455108N 0500407E	L864	
URUSU	504142N 0585724E	L162	
USUGA	433600N 0761934E	M610, T524, Z583, Z589	TMA UAAA
UTEMU	493757N 0671237E	N987, M168	TMA UAUR
UTORI	451248N 0535555E	P574	
UVASU	404236N 0681306E	L143	
UVTOK	493924N 0794524E	L143, M993	TMA UASS
UZLOR	464915N 0613205E	L162, L985	
VAGEM	520159N 0710114E	Z588	TMA UACC
VAKES	433230N 0510000E		TMA UATE
VAMRI	501330N 0681645E	M166, P574	TMA UAUR
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



Change: AKTOBE TMA FREQ.

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
L147	GEDSA : TOLAZ	1900 FT
L147	TOLAZ : MANAD	1800 FT
L162	ERUTA : INTER	2000 FT
L162	INTER : AGATU	2100 FT
L162	AGATU : TIMZO	2200 FT
L162	TIMZO : URUSU	2400 FT
L165	AKALI : EKNIZ	1300 FT
L165	EKNIZ : OLINA	1300 FT
L165	GEDSA : LASMU	1700 FT
L165	LASMU : DILIR	1500 FT
L165	DILIR : GEMBO	1600 FT
L985	ADLIK : AGLAL	1700 FT
L985	AGLAL : RAVNI	1900 FT
L988	ERKIS : INTER	3500 FT
L988	INTER : BEKOR	1900 FT
M149	ESUMA : UGMON	5000 FT
M149	UGMON : ADETA	4700 FT

ROUTE	SEGMENT	MOCA
M161	ABDUN : LUMEZ	2200 FT
M161	LUMEZ : ARKER	2000 FT
M168	GORIM : UTEMU	3800 FT
M168	UTEMU : EDETO	2800 FT
M875	FAZUL : EKNIZ	1300 FT
M875	EKNIZ : MILSO	1300 FT
M993	GOSPA : LASMU	1600 FT
M993	LASMU : BEDRU	1500 FT
M993	BEDRU : AGLAL	1700 FT
M993	AGLAL : TIMZO	2200 FT
M993	TIMZO : ADRAT	2400 FT
N55	ARKER : TOLAZ	2000 FT
N55	TOLAZ : BEKOR	1800 FT
N993	GITUD : UGMON	6300 FT
N993	UGMON : AGINU	5300 FT
P574	OGANU : LUMEZ	2400 FT
P574	LUMEZ : ARSAN	1900 FT

*more information in AIP ENR 3 ATS ROUTES.

Add new aerodrome(1):
UAUR ARKALYK.

Add new designated points(8):
AGLAL, EKNIZ, INTER, LASMU, LUMEZ,
TIMZO, TOLAZ, UGMON.

Add new airspaces(2):
ARKALYK TMA, ARKALYK CTR.

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	28.04.2026	30.04.2027	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	23.04.2026	27.04.2029	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	03.06.2026	09.06.2028	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.

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	101 - 104	CONC+ASPH	PCN 55/F/C/W/T
			105A/B,106,106A/B		PCN 70/R/B/X/T
		2	201,202,203	CONC	PCN 56/R/B/W/T
			204/204L/204R 205/205L/205R		PCN 71/R/B/W/T
		3	29-31, 31A	CONC+ASPH	PCN 24/R/B/X/T
			32A, 32-36		PCN 26/R/B/X/T
			26-28		PCN 33/R/B/X/T
		4	1-2	CONC+ASPH	PCN 21/F/C/W/T
			42A, 42-43A		PCN 12/F/C/X/T
		5	47-50	CONC+ASPH	PCN 66/F/C/X/T
			51-56		PCN 51/F/C/X/T
			59,60, 59A, 60A		PCN 55/R/B/W/U
		6	606,607,607A/B	CONC+ASPH	PCN 56/R/A/X/T
			603,603A/B,604,604A/B,605,605A/B		PCN 69/F/C/X/T
			601, 602	CONC	PCN 75/R/A/X/T
			601 A/B, 602 A/B	CONC+ASPH	PCN 92/F/C/X/T
2	**Taxiway width, surface and strengthД**	**TWY**	**WIDTH (M)**	**SURFACE**	**STRENGTH**
		A	22.5 M	CONC+ASPH	PCN 63/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 68/F/C/X/T
		E	24 M	CONC+ASPH	PCN 68/F/C/X/T
		F	23 M	CONC+ASPH	PCN 62/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 79/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) 2573280 Phone: +7 (727) 2573803
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, DEL
10	**Additional information**	Nil

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

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 shall be conducted either under own power or by means of towing with tow tractors. Taxiing and towing shall be performed strictly along the established markings. Entry onto a runway for taxiing (towing) or takeoff shall only be permitted with the authorization of the “Almaty Tower” controller.

Engine start and engine run-up at aircraft stands on the apron are permitted at idle thrust (“idle power”) upon request to “Almaty Ground”, subject to the implementation of necessary safety measures.

Engine start at contact stands equipped with passenger boarding bridges is prohibited. In case of APU (Auxiliary Power Unit) failure, starting one engine prior to towing to the start-up position shall be permitted only with the authorization of “Almaty Ground”.

Engine run-up above idle power shall be conducted at stand 603 only.

The flight crew may perform engine start during towing if such procedure is provided for in the Aircraft Flight Manual (AFM) for the specific aircraft type and is coordinated with the towing team.

Towing of aircraft with engines running (or engine start during towing) is prohibited on snow-covered, icy or slippery apron surfaces.

Wheel replacement using jacks shall be performed only on hard surfaces (concrete or reinforced concrete slabs).

If de-icing is required, the flight crew shall inform “Almaty Ground” when requesting towing or engine start clearance. Coordination of de-icing operations shall be carried out by “Almaty Transit” on frequency 131.900 MHz, as well as by the de-icing coordination unit on frequency 120.300 MHz.

Aircraft de-icing shall be performed

- at the aircraft de-icing pad (stands 105A, 105B, 106, 106A, 106B on Apron 1);
- at stands on Apron 6

At the de-icing pad (stands 105A, 105B, 106, 106A, 106B on Apron 1), de-icing operations with engines running are permitted

The stand assignment, parking position, and start-up location shall be determined by “Almaty Transit” coordination, based on actual apron conditions and any temporary restrictions or prohibitions on parking and aircraft movement on the maneuvering area.

Simultaneous parking (taxi-in) of Code F cargo aircraft is permitted at stands 601–603.

2. Taxiing to/from aircraft stands

Towing, engine start and taxiing to and from aircraft stands shall be performed with the permission of the “Almaty Ground” controller.

Prior to flight commencement, the flight crew shall monitor ATIS information. Between 5 and 25 minutes prior to scheduled departure time, the flight crew shall establish communication with “Almaty Delivery” on frequency 120.800 MHz, report the current ATIS information code, and obtain ATC clearance for departure. Prior to engine start, the flight crew shall establish communication with “Almaty Ground” on frequency 121.700 MHz, report the current ATIS information code, stand number, and request towing and engine start clearance.

Depending on surface and air traffic conditions and the active runway direction, ATC may implement a “start-up clearance hold procedure”, assigning start-up time and sequence for aircraft.

When the aerodrome is operating with RWY 23R or RWY 23L as the active direction, departure clearance with heading 051° shall be issued at the time of the flight crew’s request for towing.

Aircraft escort (follow-me service) shall be provided at any time of day during low visibility operations, when taxiway markings are not visible, or upon flight crew request.

Transfer to “Almaty Tower” shall be performed upon instruction from “Almaty Ground”.

Taxiing to stands 102–104 equipped with aircraft positioning systems may be performed independently or under follow-me guidance until the aircraft enters system coverage. Parking shall be performed using system indications. In case of system failure, parking shall be guided by marshalling signals.

Taxiing to stands 201–205, 204L/204R, 205L/205R equipped with VDGS (Visual Docking Guidance System) may be performed independently or under follow-me guidance until entering system coverage. Parking shall be performed using VDGS indications. In case of system failure, parking shall be guided by marshalling signals.

Taxiing to stands not equipped with parking systems shall be performed using marshalling signals

Taxi-in and taxi-out procedures:

- •Taxi-in to stands adjacent to the South VIP building and taxi-out shall be performed under follow-me vehicle guidance. Taxi-in to stands 1–2, nose-in towards the South VIP building, shall be performed under own power; taxi-out shall be performed by towing.
- •Taxi-in to stands 101–104 and 32A–34 shall be performed under own power; taxi-out shall be performed by towing to the towing position.
- Taxi-in and taxi-out at stands 48–56 shall be performed under own power as instructed by ATC.
- Taxi-in and taxi-out at stand 47 shall be performed by towing.
- Taxi-in to stands 59A and 60A (nose north) shall be performed under towing when stands 59 and 60 are vacant;
- Taxi-in to stands 59–60 shall be performed under own power when stands 59A–60A are vacant; taxi-out shall be performed under own power when stands 59A–60A are vacant.
- Taxi-in to stands 26–28 shall be performed by towing; taxi-out shall be performed under own power.
- Taxi-in to stands 601A–607B shall be performed under own power; taxi-out shall be performed by towing.
- Taxi-in and taxi-out at stand 79 shall be performed under own power under follow-me vehicle guidance.
- Taxi-in to stands 201–205, 204L/204R, 205L/205R shall be performed under own power; taxi-out shall be performed by towing to the towing position.
- Taxi-in and taxi-out at stands 105A, 105B, 106, 106A, 106B shall be performed under own power.

Restriction on towing operations on Apron 6:

- Aircraft towing from stands 601, 601A, 601B, 602, 602A and 602B shall be conducted via taxiway L1 up to the abeam position of stand 602A. Engine start shall be performed only at the abeam position of 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.

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

Table 1: Visual reference of VFR flights within Almaty CTR

№	Waypoint name	Type	Visual reference	Geographical coordinates	Radial and distance from DVOR/DME «ATA»
6	PAPA	Entry/exit	Eastern outskirts of Kyzyltu	432504N 0770450E	350° / 2,6 NM
7	MIKE	Entry/exit	warehouse of “Metro” hypermarket	431853N 0765356E	241° / 8,9 NM
8	JULIETT	Holding	southern outskirts of Zhana Kuat cottage town	432318N 0770147E	284° / 2,6 NM
9	YANKEE	Entry/exit	Y-shaped road intersection (Burundaiskaya Street and Highway)	432102N 0765419E	255° / 8 NM
10	ZULU	Entry/exit	separate structure of utility building (south of the intersection of the Esentai and Baskarasu rivers)	432302N 0765829E	271° / 4,9 NM

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

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

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

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

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

5. Radio contact loss (failure)

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

When radio communication loss the crew must:

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

6. The emergency landing procedure

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

7. Continuous Descent Operation

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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.

9. Take-off and landing

Upon reaching the designated holding position at the runway, the flight crew shall report this to the “Almaty Tower” controller and confirm readiness for takeoff.

After receiving the readiness report from the flight crew, the “Almaty Tower” controller, depending on the traffic situation, may authorize line-up and immediate takeoff. The flight crew must inform the “Almaty Tower”

controller if they are unable to perform an immediate takeoff.

If the runway is occupied or acceptable separation cannot be ensured, the “Almaty Tower” controller shall authorize only line-up.

A flight crew requiring backtrack on RWY 05R or RWY 05L to line up on RWY 23R or RWY 23L from TWY A, TWY K, TWY D or TWY E must obtain clearance from the “Almaty Tower” controller for taxiing on RWY 05R or RWY 05L.

A runway used for taxiing purposes, including for line-up or runway vacating, shall be considered as a taxiway or multiple-use taxiway. In such cases, flight crews must comply with all taxi procedures in accordance with the Aircraft Flight Manual (AFM) and other applicable regulations, including taxi speeds:

- •under normal environmental and runway surface conditions — 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;
- •under low visibility procedures and meteorological conditions that may degrade runway conditions — not more than 10 knots (18 km/h).

Pre-flight cockpit checks shall be completed prior to line-up. Any checks required while on the runway shall be minimized.

The flight crew shall commence takeoff immediately after receiving takeoff clearance. If unable to comply, the crew must inform the “Almaty Tower” controller before entering the runway and advise the expected delay time.

Takeoff from an intersection of a taxiway with the runway may be authorized, depending on the air or ground traffic situation, upon request of the flight crew or at the initiative of the “Almaty Tower” controller. The takeoff shall be performed from a point on the runway where the available runway performance from the start of the takeoff roll meets the required performance for the actual takeoff mass of the aircraft and the prevailing conditions. The final decision to perform an intersection takeoff rests with the aircraft commander.

Engine warm-up and engine run-up prior to takeoff shall be carried out on the runway or on a taxiway with the permission of the “Almaty Tower” controller following a request from the flight crew.

Takeoff and landing with a tailwind may be authorized in order to expedite traffic flow, upon request of the flight crew or at the initiative of the ATS unit. Responsibility for the decision to perform such takeoff or landing rests with the aircraft commander (AC).

In order to reduce runway occupancy time, the “Almaty Tower” controller may issue an instruction to perform landing beyond the touchdown zone of the runway (except for “Heavy” and “Super Heavy” aircraft categories) or to expedite runway vacating. If unable to comply, the flight crew shall immediately inform the controller.

The final decision to perform takeoff or landing in meteorological conditions below the aerodrome operating minima rests with the AC. In such cases, an ATC clearance for takeoff or landing shall not be considered as an instruction to proceed, and the responsibility for the decision and the outcome of the takeoff or landing rests with the AC.

Runway assignment shall be determined by the ATS unit with consideration for operations into the wind, unless safety considerations, runway configuration, meteorological conditions, established approach procedures, or traffic conditions make another direction preferable. To increase runway capacity, aircraft operations in opposite directions (simultaneous takeoff and landing in opposite directions) may be authorized, provided the following conditions are met:

- radar control is available;
- until the departing aircraft climbs to 3200 ft and establishes communication with the Departure controller, arriving aircraft shall not descend below 8000 ft;
- departures are carried out with the permission of the supervisor and after prior coordination between ATS units (ADC).

On RWY 05R/23L, at a distance of 2,730 m from threshold 05, there is an aircraft turning pad with markings, having a width of 75 m.

When the runway surface condition code for RWY 05R/23L is “3” or lower, takeoff and landing operations are prohibited.

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

Both runways are used for departures and arrivals.

Note: Due to the distance between the runway centerlines being 209 m, bearing and distance limitations do not allow for diverging departure procedures. Therefore, minimum time-based and distance-based separation for all takeoff and landing operations shall be the same as for a single runway, i.e. simultaneous takeoffs and landings on parallel runways are not performed under any conditions.

The supervisor shall decide on runway utilization based on the analysis of air traffic and meteorological conditions, pavement condition, and the operational status of radio navigation aids, lighting systems, and meteorological equipment.

When an aircraft is holding on TWY C, TWY D, TWY E or TWY F, the runway located behind the aircraft shall be considered occupied and shall not be used for takeoff or landing.

Additional departure procedures:

- simultaneous line-up on each runway is permitted; however, the aircraft that will depart second shall be informed of the expected delay;
- takeoff clearance shall not be issued simultaneously for both runways;
- in order to prevent loss of separation in case of a missed approach, takeoff clearance from the parallel runway shall not be issued if the distance between the arriving aircraft and the departing aircraft is 2.2 NM or less.

Additional arriving procedures:

- pilots should be prepared for approach to either active runway when both runways are in use for arrivals;
- if an ILS approach is conducted to one runway, approaches to the other runway may be conducted using DVOR/DME, RNP or visual approach (simultaneous ILS operations on parallel runways are prohibited);
- transfer of an aircraft to a parallel runway shall not be carried out during ILS, DVOR/DME or RNP approach under IFR after the turn onto final approach has been initiated; and during visual approach or instrument approach in VMC — after passing 3 NM from the threshold of the intended landing runway;
- transfer of an aircraft to a parallel runway in all cases shall be carried out only after the flight crew confirms readiness to conduct an approach to the other runway.

11. Training, Practice, Test and Check Flights (Calibration Flights)

Training, practice, test and check (calibration) flights shall be conducted in accordance with the applicable Civil Aviation Flight Operations Rules.

Flights under IFR shall be conducted in accordance with established instrument departure and approach procedures. After takeoff, the flight crew shall comply with the conditions assigned by ATC for integration into the approach pattern. Flights under VFR shall be conducted along routes coordinated with the ATS unit.

The number of aircraft conducting training, practice, test and check (calibration) flights within TMA 1, TMA 2 and the CTR of Almaty aerodrome shall be determined by the supervisor, taking into account restricted and prohibited areas, as well as traffic and meteorological conditions.

Depending on traffic intensity and imposed restrictions, the supervisor is authorized to limit the number of training aircraft, suspend or prohibit training flights.

Aircraft test flights shall be conducted during daytime with visibility not less than 2000 m and a cloud base not lower than 650 ft for all aircraft types.

12. Fuel Dumping

Fuel dumping shall be carried out only in emergency situations where reducing the aircraft landing mass by fuel consumption is not possible.

Fuel dumping shall be conducted along routes assigned by the ATS unit at altitudes coordinated with the flight crew:

- Route 1: USUGA – ADABA – TIPSA – USUGA (not below an altitude of 8000 ft);
- Route 2: DESOK – TIRBA – BAGNA – DESOK (not below an altitude of 10,000 ft).

In emergency situations, the flight crew is authorized to perform fuel dumping outside the assigned routes.

If the flight crew requires radio silence during fuel dumping, its duration shall be coordinated between the crew and ATC.

Aircraft separation during fuel dumping shall be provided in accordance with the Procedures for Air Navigation Services — Air Traffic Management (PANS-ATM, Doc 4444, ATM/501).

13. Low Visibility Procedures (LVP)

LVP shall be implemented when RVR is less than 550 m.

The commencement of LVP shall be promulgated via ATIS or by ATC with the message: “Low Visibility Procedures in force”.

RWY 05R, RWY 05L, RWY 23R and RWY 23L are approved for takeoff operations under LVP conditions.

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

Crossing of illuminated STOP bars is prohibited.

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

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

In Category II and III conditions, ATC shall apply additional horizontal separation between aircraft.

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

- 180° turns at the runway ends of 23R and 23L and in the “A” widening area are **prohibited**.

When RVR is 300 m or more:

- taxiing on aprons and taxiways (except TWY C, TWY E, TWY D, TWY F) shall be conducted only under follow-me vehicle guidance with a maximum taxi speed of 5 kt;
- RWY 23L shall be used for Category II precision approach and landing.

When **RVR is less than 300 m**

- TWY B, TWY H and TWY E, not equipped with taxiway centerline lighting (RCL), shall not be used for aircraft taxiing;
- RWY 23L shall be used for Category IIIA precision approach and landing;.
- taxiing on aprons shall be conducted only under follow-me vehicle guidance with a maximum taxi speed of 5 kt.
- taxiing on taxi route L1 shall be conducted only under follow-me vehicle guidance at a maximum speed of 5 kt.
- Aircraft Engine Operations under Low Visibility Conditions (Airbus Aircraft)

1. Ice shedding procedure

Engine ice shedding shall be performed when engine icing conditions are present, which may occur when:

- (a) (a) outside air temperature is below 3°C; and;
- (b) precipitation is present or visibility is less than 1600 m.

2. Operational Limitations

- (a) ice shedding shall be performed for 30 seconds every 30 minutes.
- (b) departure is prohibited if meteorological visibility is less than 150 m

3. Procedures for engine ice shedding at Almaty Airport (taking into account jet blast effects):

Taking into account jet blast impact:

- (a) engine ice shedding on aprons is strictly prohibited.
- (b) on arrival taxi: the procedure shall be performed at holding points on TWY A, TWY C, TWY K and TWY L.
- (c) on departure taxi: the procedure shall be performed on the runway and connecting taxiways TWY C, TWY D, TWY E and TWY F.

14. Helicopter Operations

Helicopter taxiing shall be conducted in accordance with wind limitations specified in the Aircraft Flight Manual (AFM), maintaining continuous visual reference with surface markers ahead.

Air taxiing of helicopters equipped with skid-type landing gear from the parking stand to the takeoff position and back shall be performed along a route assigned by “Almaty Ground” under follow-me vehicle guidance and under the responsibility of the helicopter commander.

Engine start, hover checks, and helicopter takeoff/landing (“helicopter mode”) are permitted during daytime from/to Apron No. 4 and TWY B junction, as well as on TWY N between TWY K and TWY L, provided that established separation between takeoffs and landings is maintained and meteorological conditions meet the VFR (special VFR) minima. Responsibility for such operations rests with the helicopter commander.

Helicopter takeoff from the aerodrome shall be conducted after:

- request by the flight crew for hover check and receipt of clearance from “Tower”;
- completion of hover check by the flight crew;
- report by the flight crew of readiness for takeoff (fixed-wing mode or helicopter mode) and receipt of takeoff clearance from “Tower”.

For helicopter-mode takeoff, touchdown after hover check is not required. The hover height shall be determined by the helicopter commander; however, the helicopter performing the hover check shall not create obstacles to other arriving or departing aircraft.

If meteorological phenomena or smoke affect part of the runway and reduce visibility below the established VFR (special VFR) minima, landing may be performed on the portion of the runway where meteorological conditions meet the required minima (beginning, middle, or end of the runway). Responsibility for such landing rests with the helicopter commander.

Rolling takeoff and landing, as well as night operations and IFR flights, shall be conducted from/to the runway.

AERODROME CHART - ICAO

AD ELEV 2238FT (*682m*)

ARP 432120N 0770238E

TWR	119.4
GROUND	121.7
DELIVERY	120.8

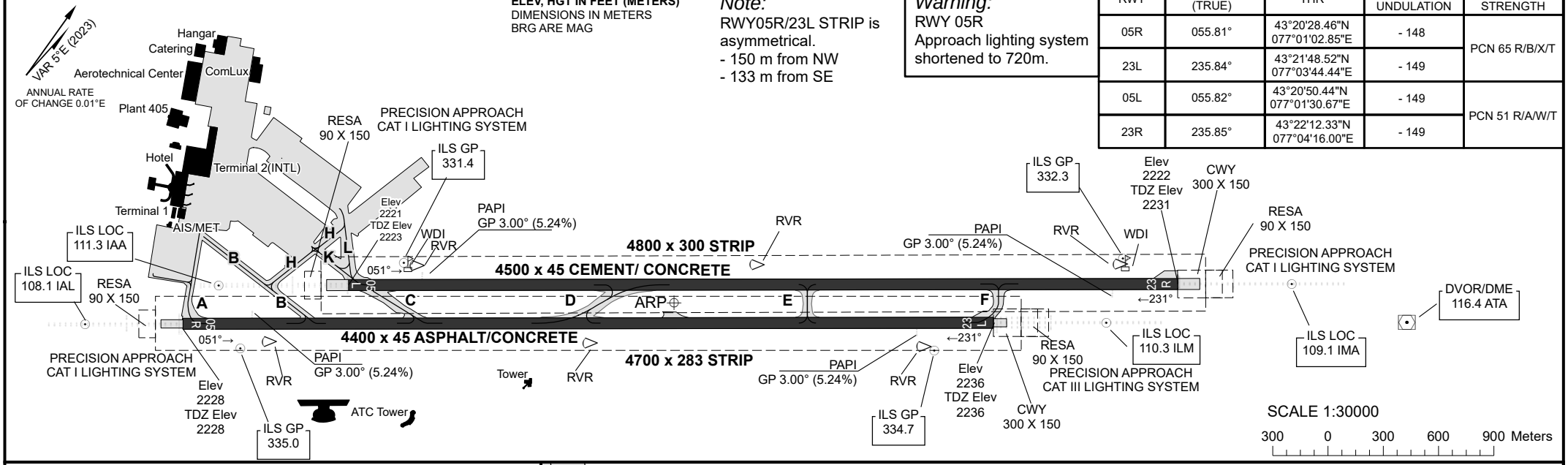
ALMATY

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

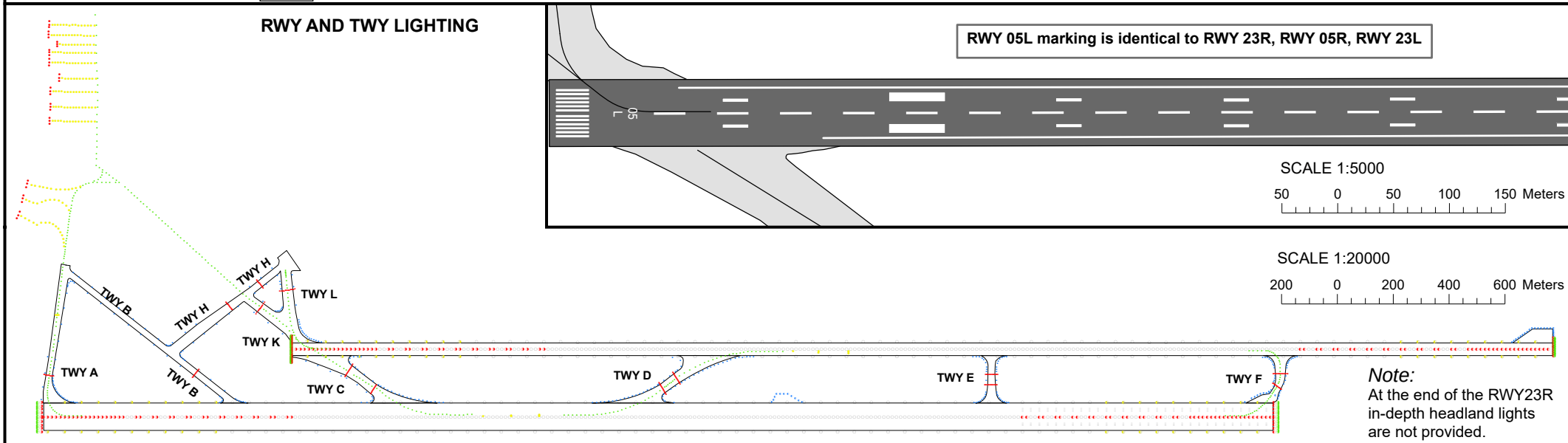
Note:
RWY05R/23L STRIP is asymmetrical.
- 150 m from NW
- 133 m from SE

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

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



RWY AND TWY LIGHTING



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

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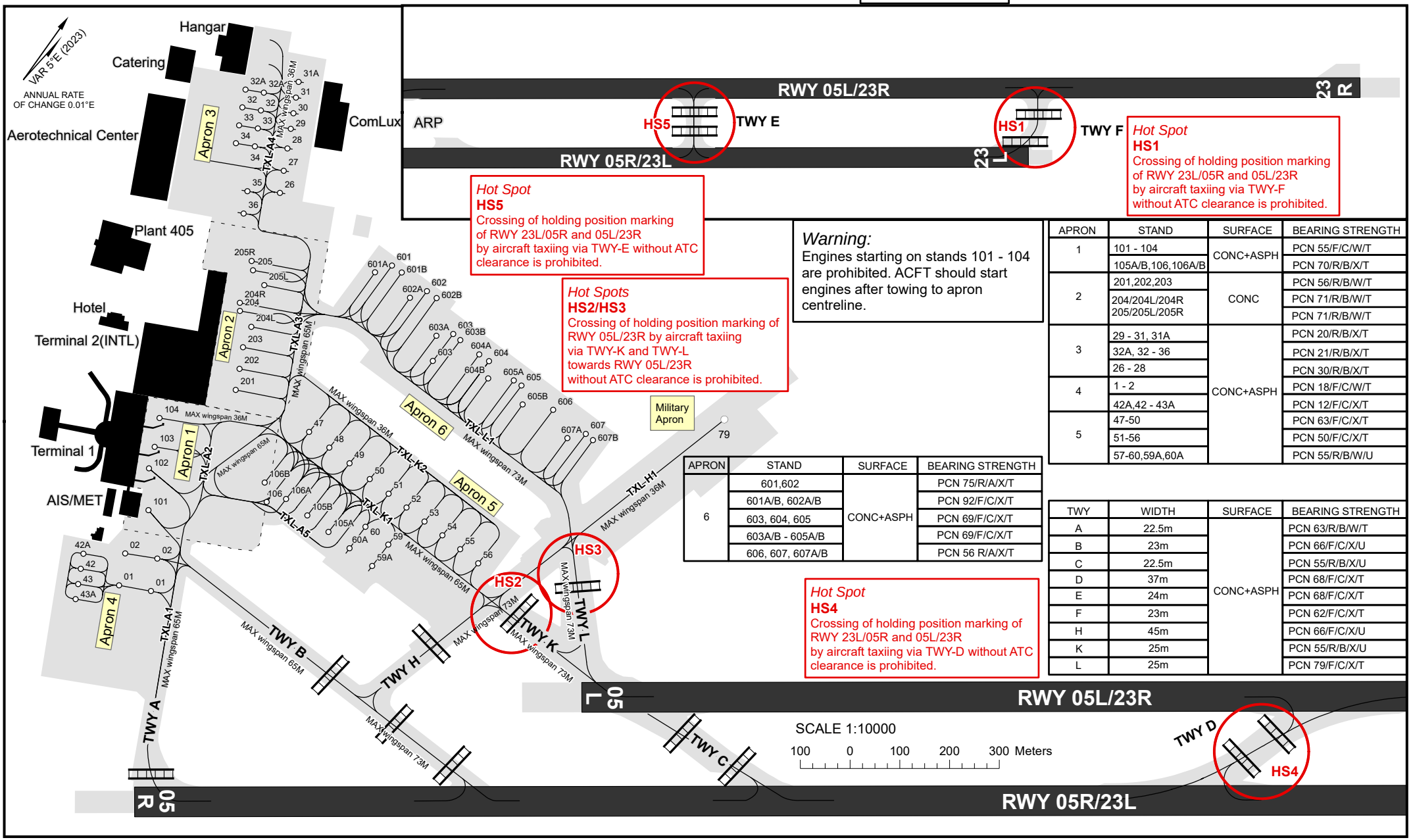
AERODROME GROUND MOVEMENT AND PARKING CHART - ICAO

APRON 1 ELEV 2218FT **APRON 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

CHANGE: Stands: On APN1 03-06 renamed to 101-104;On APN5 101-102 renamed to 105-106;12,44-46,57,58,61-64, 71-73 DEL.



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 101 - 104 are prohibited. ACFT should start engines after towing to apron centreline.

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	101 - 104	CONC+ASPH	PCN 55/F/C/W/T
	105A/B,106,106A/B		PCN 70/R/B/X/T
2	201,202,203	CONC	PCN 56/R/B/W/T
	204/204L/204R 205/205L/205R		PCN 71/R/B/W/T
			PCN 71/R/B/W/T
3	29 - 31, 31A	CONC+ASPH	PCN 20/R/B/X/T
	32A, 32 - 36		PCN 21/R/B/X/T
	26 - 28		PCN 30/R/B/X/T
4	1 - 2		PCN 18/F/C/W/T
	42A,42 - 43A		PCN 12/F/C/X/T
5	47-50		PCN 63/F/C/X/T
	51-56		PCN 50/F/C/X/T
	57-60,59A,60A		PCN 55/R/B/W/U

APRON	STAND	SURFACE	BEARING STRENGTH
6	601,602	CONC+ASPH	PCN 75/R/A/X/T
	601A/B, 602A/B		PCN 92/F/C/X/T
	603, 604, 605		PCN 69/F/C/X/T
	603A/B - 605A/B		PCN 69/F/C/X/T
	606, 607, 607A/B		PCN 56 R/A/X/T

TWY	WIDTH	SURFACE	BEARING STRENGTH
A	22.5m	CONC+ASPH	PCN 63/R/B/W/T
B	23m		PCN 66/F/C/X/U
C	22.5m		PCN 55/R/B/X/U
D	37m		PCN 68/F/C/X/T
E	24m		PCN 68/F/C/X/T
F	23m		PCN 62/F/C/X/T
H	45m		PCN 66/F/C/X/U
K	25m		PCN 55/R/B/X/U
L	25m		PCN 79/F/C/X/T

ALMATY **STANDS CHARACTERISTICS**

Apron	Stand	Coordinates	
		Latitude	Longitude
4	01	43 20 39.58 N	077 00 50.87 E
4	01	43 20 40.44 N	077 00 53.51 E
4	02	43 20 41.52 N	077 00 49.72 E
4	02	43 20 42.42 N	077 00 52.35 E
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
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	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
1	101	43 20 44.71 N	077 00 49.27 E
1	102	43 20 46.98 N	077 00 47.22 E
1	103	43 20 48.35 N	077 00 46.56 E
1	104	43 20 50.08 N	077 00 45.48 E
5	105A	43 20 50.11 N	077 01 03.67 E
5	105B	43 20 50.23 N	077 01 01.28 E
5	106	43 20 49.47 N	077 00 57.60 E
5	106A	43 20 50.34 N	077 00 58.88 E
5	106B	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

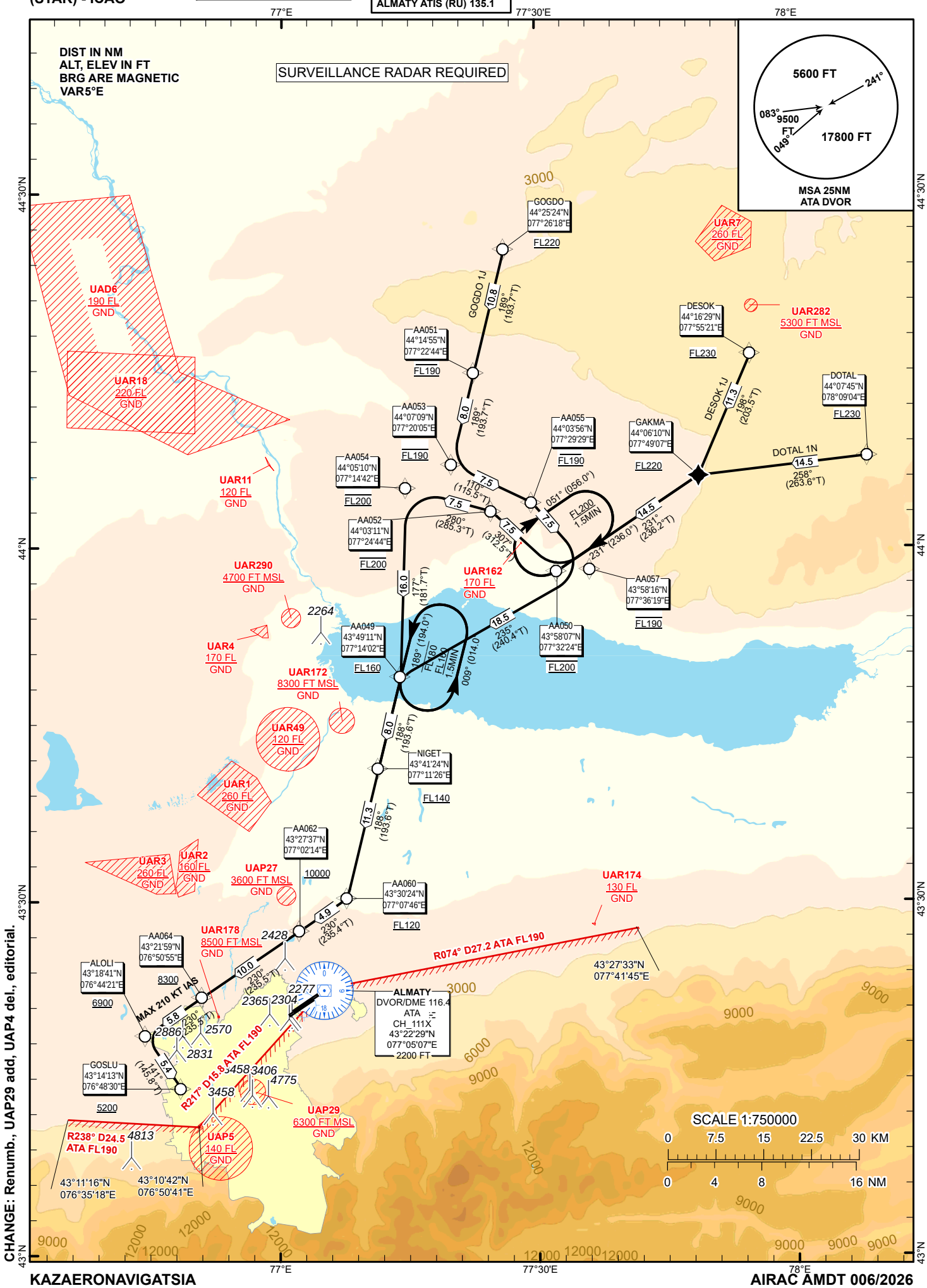
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALT
10000 FT

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

(RNAV 1 STAR BASED ON GNSS)
DESOK 1J, DOTAL 1N, GOGDO 1J

ALMATY
RWY 05L/05R



CHANGE: Renumb., UAP29 add, UAP4 del., editorial.

TABULAR DESCRIPTION

DESOK 1J											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	DESOK	-		5.12	0	-	+FL230	-280	-	RNAV1
20	TF	GAKMA	-	198(203.5)	5.12	11.3	-	+FL220	-280	-	RNAV1
30	TF	AA050	-	231(236.2)	5.12	14.5	R	@FL200	-280	-	RNAV1
40	TF	AA052	-	307(312.5)	5.12	7.5	R	@FL200	-280	-	RNAV1
50	TF	AA054	-	280(285.3)	5.12	7.5	L	@FL200	-280	-	RNAV1
60	TF	AA049	-	177(181.7)	5.12	16	L	+FL160	-280	-	RNAV1
70	TF	NIGET	-	188(193.6)	5.12	8	R	+FL140	-280	-	RNAV1
80	TF	AA060	-	188(193.6)	5.12	11.3	R	+FL120	-250	-	RNAV1
90	TF	AA062	-	230(235.4)	5.12	4.9	R	+10000	-250	-	RNAV1
100	TF	AA064	-	230(235.5)	5.12	10	R	+8300	-210	-	RNAV1
110	TF	ALOLI	-	230(235.5)	5.12	5.8	-	+6900	-210	-	RNAV1
120	TF	GOSLU	-	141(145.8)	5.12	5.4	L	+5200	-210	-	RNAV1

WAYPOINT LIST

DESOK 1J		
Waypoint Identifier	**Coordinates**	
DESOK	441629.00N	0775521.00E
GAKMA	440610.00N	0774907.00E
AA050	435806.55N	0773223.50E
AA052	440310.99N	0772444.28E
AA054	440510.17N	0771442.40E
AA049	434910.54N	0771402.03E
NIGET	434124.00N	0771126.00E
AA060	433024.02N	0770746.34E
AA062	432737.38N	0770213.73E
AA064	432158.53N	0765054.64E
ALOLI	431840.90N	0764420.60E
GOSLU	431413.06N	0764829.77E

TABULAR DESCRIPTION

DOTAL 1N											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	DOTAL	-		5.12	0	-	+FL230	-280	-	RNAV1
20	TF	GAKMA	-	258(263.6)	5.12	14.5	R	+FL220	-280	-	RNAV1
30	TF	AA050	-	231(236.2)	5.12	14.5	L	@FL200	-280	-	RNAV1
40	TF	AA052	-	307(312.5)	5.12	7.5	R	@FL200	-280	-	RNAV1
50	TF	AA054	-	280(285.3)	5.12	7.5	L	@FL200	-280	-	RNAV1
60	TF	AA049	-	177(181.7)	5.12	16	L	+FL160	-280	-	RNAV1
70	TF	NIGET	-	188(193.6)	5.12	8	R	+FL140	-280	-	RNAV1
80	TF	AA060	-	188(193.6)	5.12	11.3	R	+FL120	-250	-	RNAV1
90	TF	AA062	-	230(235.4)	5.12	4.9	R	+10000	-250	-	RNAV1
100	TF	AA064	-	230(235.5)	5.12	10	R	+8300	-210	-	RNAV1
110	TF	ALOLI	-	230(235.5)	5.12	5.8	-	+6900	-210	-	RNAV1
120	TF	GOSLU	-	141(145.8)	5.12	5.4	L	+5200	-210	-	RNAV1

WAYPOINT LIST

DOTAL 1N		
Waypoint Identifier	**Coordinates**	
DOTAL	440745.00N	0780904.00E
GAKMA	440610.00N	0774907.00E
AA050	435806.55N	0773223.50E
AA052	440310.99N	0772444.28E
AA054	440510.17N	0771442.40E
AA049	434910.54N	0771402.03E
NIGET	434124.00N	0771126.00E
AA060	433024.02N	0770746.34E
AA062	432737.38N	0770213.73E
AA064	432158.53N	0765054.64E
ALOLI	431840.90N	0764420.60E
GOSLU	431413.06N	0764829.77E

WAYPOINT LIST

GOGDO 1J		
Waypoint Identifier	**Coordinates**	
GOGDO	442524.00N	0772618.00E
AA051	441455.47N	0772243.64E
AA053	440709.15N	0772005.44E
AA055	440355.69N	0772929.21E
AA057	435816.33N	0773618.80E
AA049	434910.54N	0771402.03E
NIGET	434124.00N	0771126.00E
AA060	433024.02N	0770746.34E
AA062	432737.38N	0770213.73E
AA064	432158.53N	0765054.64E
ALOLI	431840.90N	0764420.60E
GOSLU	431413.06N	0764829.77E

TABULAR DESCRIPTION

GOGDO 1J											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	GOGDO	-		5.12	0	-	+FL220	-280	-	RNAV1
20	TF	AA051	-	189(193.7)	5.12	10.8	R	@FL190	-280	-	RNAV1
30	TF	AA053	-	189(193.7)	5.12	8	R	@FL190	-280	-	RNAV1
40	TF	AA055	-	110(115.5)	5.12	7.5	L	@FL190	-280	-	RNAV1
50	TF	AA057	-	134(139.0)	5.12	7.5	R	@FL190	-280	-	RNAV1
60	TF	AA049	-	235(240.4)	5.12	18.5	R	+FL160	-280	-	RNAV1
70	TF	NIGET	-	188(193.6)	5.12	8	L	+FL140	-280	-	RNAV1
80	TF	AA060	-	188(193.6)	5.12	11.3	R	+FL120	-250	-	RNAV1
90	TF	AA062	-	230(235.4)	5.12	4.9	R	+10000	-250	-	RNAV1
100	TF	AA064	-	230(235.5)	5.12	10	R	+8300	-210	-	RNAV1
110	TF	ALOLI	-	230(235.5)	5.12	5.8	-	+6900	-210	-	RNAV1
120	TF	GOSLU	-	141(145.8)	5.12	5.4	L	+5200	-210	-	RNAV1

HOLDINGS

Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	AA050	231(236.0)	1.5	R	FL200	-	-	RNAV1
Hold	AA049	189(194.0)	1.5	L	FL160	FL180	-	RNAV1

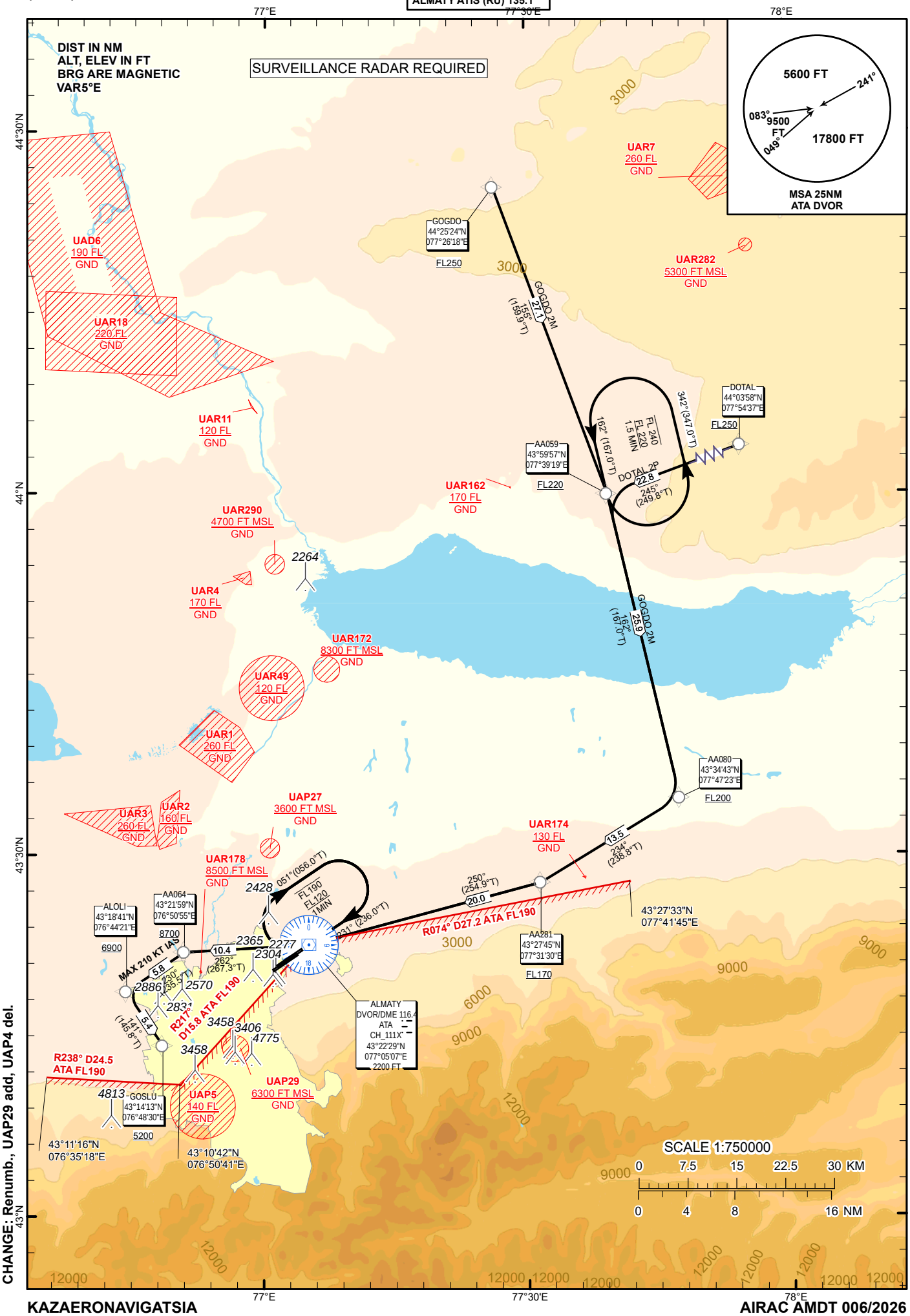
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALT
10000 FT

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

(RNAV 1 STAR BASED ON GNSS)
DOTAL 2P, GOGDO 2M

ALMATY
RWY 05L/05R



CHANGE: Renumb., UAP29 add, UAP4 del.

TABULAR DESCRIPTION

DOTAL 2P

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	DOTAL	-		5.12	0	-	+FL250	-315	-	RNAV1
20	TF	AA059	-	245(249.8)	5.12	22.8	-	+FL220	-280	-	RNAV1
30	TF	AA080	-	162(167.0)	5.12	25.9	L	+FL200	-280	-	RNAV1
40	TF	AA281	-	234(238.8)	5.12	13.5	R	+FL170	-280	-	RNAV1
50	TF	ATA	-	250(254.9)	5.12	20	R	+FL120	-280	-	RNAV1
60	TF	AA064	-	262(267.3)	5.12	10.4	R	+8700	-210	-	RNAV1
70	TF	ALOLI	-	230(235.5)	5.12	5.8	L	+6900	-210	-	RNAV1
80	TF	GOSLU	-	141(145.8)	5.12	5.4	L	+5200	-210	-	RNAV1

WAYPOINT LIST

DOTAL 2P

Waypoint Identifier	Coordinates	
DOTAL	440745.00N	0780904.00E
AA059	435956.93N	0773919.06E
AA080	433443.05N	0774723.42E
AA281	432744.74N	0773130.04E
ATA	432229.35N	0770506.95E
AA064	432158.53N	0765054.64E
ALOLI	431840.90N	0764420.60E
GOSLU	431413.06N	0764829.77E

WAYPOINT LIST

GOGDO 2M

Waypoint Identifier	Coordinates	
GOGDO	442524.00N	0772618.00E
AA059	435956.93N	0773919.06E
AA080	433443.05N	0774723.42E
AA281	432744.74N	0773130.04E
ATA	432229.35N	0770506.95E
AA064	432158.53N	0765054.64E
ALOLI	431840.90N	0764420.60E
GOSLU	431413.06N	0764829.77E

TABULAR DESCRIPTION

GOGDO 2M

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	GOGDO	-		5.12	0	-	+FL250	-315	-	RNAV1
20	TF	AA059	-	155(159.9)	5.12	27.1	L	+FL220	-280	-	RNAV1
30	TF	AA080	-	162(167.0)	5.12	25.9	R	+FL200	-280	-	RNAV1
40	TF	AA281	-	234(238.8)	5.12	13.5	R	+FL170	-280	-	RNAV1
50	TF	ATA	-	250(254.9)	5.12	20	R	+FL120	-280	-	RNAV1
60	TF	AA064	-	262(267.3)	5.12	10.4	R	+8700	-210	-	RNAV1
70	TF	ALOLI	-	230(235.5)	5.12	5.8	L	+6900	-210	-	RNAV1
80	TF	GOSLU	-	141(145.8)	5.12	5.4	L	+5200	-210	-	RNAV1

HOLDINGS

Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	AA059	162(167.0)	1.5	L	FL220	FL240	-	RNAV1
Hold	ALMATY	231(236.0)	1.5	R	FL120	FL190	-	RNAV1

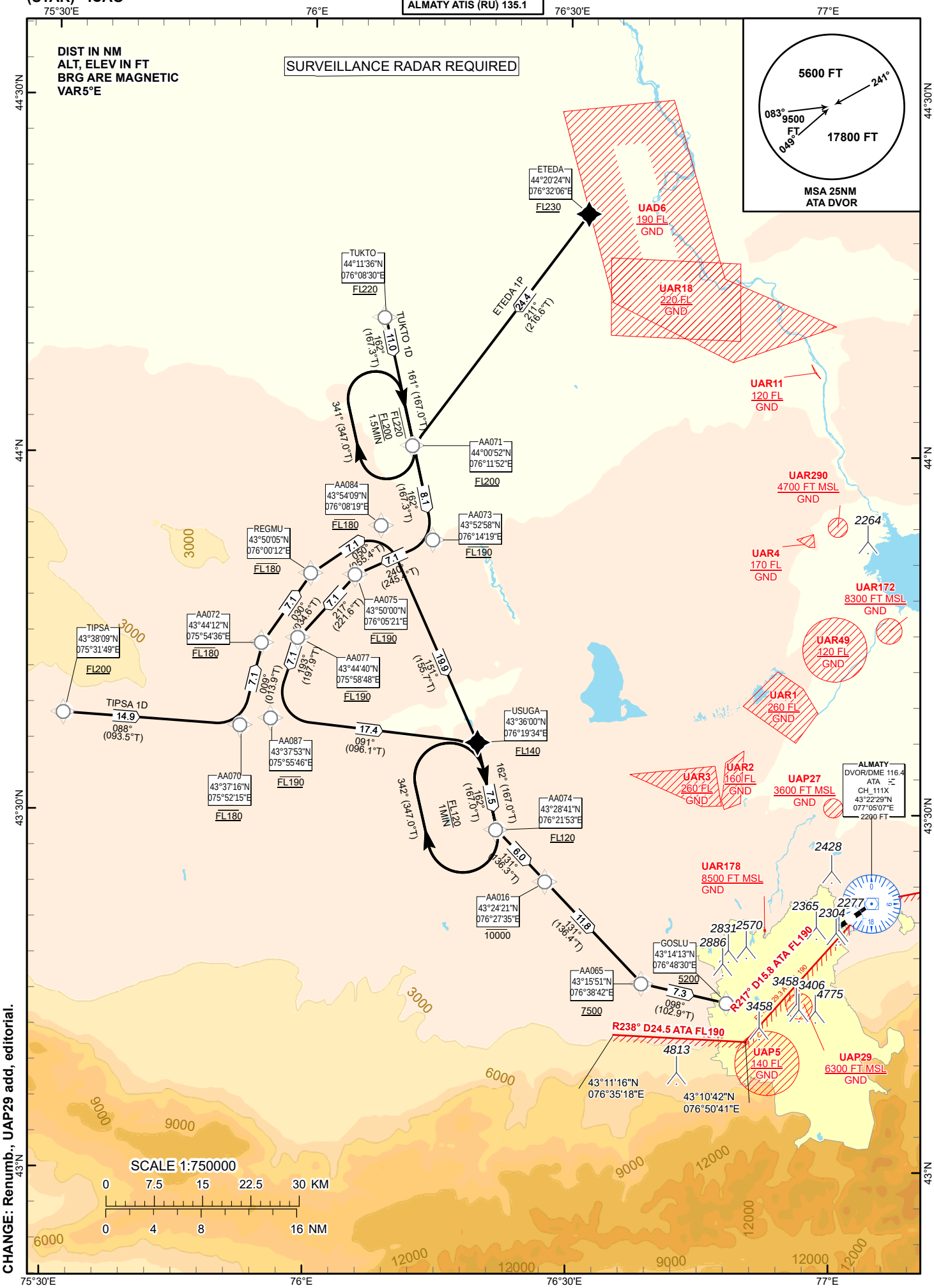
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALT
10000 FT

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

(RNAV 1 STAR BASED ON GNSS)
ETEDA 1P, TIPSA 1D, TUKTO 1D

ALMATY
RWY 05L/05R



CHANGE: Renumb., UAP29 add, editorial.

TABULAR DESCRIPTION

ETEDA 1P

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	ETEDA	-		5.12	0	-	+FL230	-315	-	RNAV1
20	TF	AA071	-	211(216.6)	5.12	24.4	-	+FL200	-280	-	RNAV1
30	TF	AA073	-	162(167.3)	5.12	8.1	L	@FL190	-280	-	RNAV1
40	TF	AA075	-	240(245.4)	5.12	7.1	R	@FL190	-280	-	RNAV1
50	TF	AA077	-	217(221.6)	5.12	7.1	L	@FL190	-280	-	RNAV1
60	TF	AA087	-	193(197.9)	5.12	7.1	L	@FL190	-280	-	RNAV1
70	TF	USUGA	-	091(096.1)	5.12	17.4	L	+FL140	-280	-	RNAV1
80	TF	AA074	-	162(167.0)	5.12	7.5	R	+FL120	-280	-	RNAV1
90	TF	AA016	-	131(136.3)	5.12	6	L	-10000	-250	-	RNAV1
100	TF	AA065	-	131(136.4)	5.12	11.8	R	+7500	-230	-	RNAV1
110	TF	GOSLU	-	098(102.9)	5.12	7.3	L	+5200	-210	-	RNAV1

WAYPOINT LIST

ETEDA 1P

Waypoint Identifier	Coordinates	
ETEDA	442024.00N	0763206.00E
AA071	440052.21N	0761151.55E
AA073	435258.16N	0761419.19E
AA075	435000.20N	0760520.94E
AA077	434440.34N	0755847.95E
AA087	433753.07N	0755546.26E
USUGA	433600.00N	0761934.00E
AA074	432841.45N	0762153.05E
AA016	432421.37N	0762734.78E
AA065	431550.67N	0763842.35E
GOSLU	431413.06N	0764829.77E

TABULAR DESCRIPTION

TIPSA 1D

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	TIPSA	-		5.12	0	-	+FL200	-315	-	RNAV1
20	TF	AA070	-	088(093.5)	5.12	14.9	L	@FL180	-280	-	RNAV1
30	TF	AA072	-	009(013.9)	5.12	7.1	L	@FL180	-280	-	RNAV1
40	TF	REGMU	-	030(034.6)	5.12	7.1	R	@FL180	-280	-	RNAV1
50	TF	AA084	-	050(055.4)	5.12	7.1	R	@FL180	-280	-	RNAV1
60	TF	USUGA	-	151(155.7)	5.12	19.9	R	+FL140	-280	-	RNAV1
70	TF	AA074	-	162(167.0)	5.12	7.5	R	+FL120	-280	-	RNAV1
80	TF	AA016	-	131(136.3)	5.12	6	L	-10000	-250	-	RNAV1
90	TF	AA065	-	131(136.4)	5.12	11.8	R	+7500	-230	-	RNAV1
100	TF	GOSLU	-	098(102.9)	5.12	7.3	L	+5200	-210	-	RNAV1

WAYPOINT LIST

TIPSA 1D

Waypoint Identifier	Coordinates	
TIPSA	433809.00N	0753149.00E
AA070	433716.27N	0755214.81E
AA072	434412.27N	0755436.25E
REGMU	435005.00N	0760012.00E
AA084	435408.54N	0760819.02E
USUGA	433600.00N	0761934.00E
AA074	432841.45N	0762153.05E
AA016	432421.37N	0762734.78E
AA065	431550.67N	0763842.35E
GOSLU	431413.06N	0764829.77E

TABULAR DESCRIPTION

TUKTO 1D

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	TUKTO	-		5.12	0	-	+FL220	-315	-	RNAV1
20	TF	AA071	-	162(167.3)	5.12	11	-	+FL200	-280	-	RNAV1
30	TF	AA073	-	162(167.3)	5.12	8.1	-	@FL190	-280	-	RNAV1
40	TF	AA075	-	240(245.4)	5.12	7.1	R	@FL190	-280	-	RNAV1
50	TF	AA077	-	217(221.6)	5.12	7.1	L	@FL190	-280	-	RNAV1
60	TF	AA087	-	193(197.9)	5.12	7.1	L	@FL190	-280	-	RNAV1
70	TF	USUGA	-	091(096.1)	5.12	17.4	L	+FL140	-280	-	RNAV1
80	TF	AA074	-	162(167.0)	5.12	7.5	R	+FL120	-280	-	RNAV1
90	TF	AA016	-	131(136.3)	5.12	6	L	-10000	-250	-	RNAV1
100	TF	AA065	-	131(136.4)	5.12	11.8	R	+7500	-230	-	RNAV1
110	TF	GOSLU	-	098(102.9)	5.12	7.3	L	+5200	-210	-	RNAV1

WAYPOINT LIST

TUKTO 1D

Waypoint Identifier	Coordinates	
TUKTO	441136.00N	0760830.00E
AA071	440052.21N	0761151.55E
AA073	435258.16N	0761419.19E
AA075	435000.20N	0760520.94E
AA077	434440.34N	0755847.95E
AA087	433753.07N	0755546.26E
USUGA	433600.00N	0761934.00E
AA074	432841.45N	0762153.05E
AA016	432421.37N	0762734.78E
AA065	431550.67N	0763842.35E
GOSLU	431413.06N	0764829.77E

HOLDINGS

Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	AA071	161(167.0)	1.5	R	FL200	FL220	-	RNAV1
Hold	AA074	162(167.0)	1.5	R	FL120	-	-	RNAV1

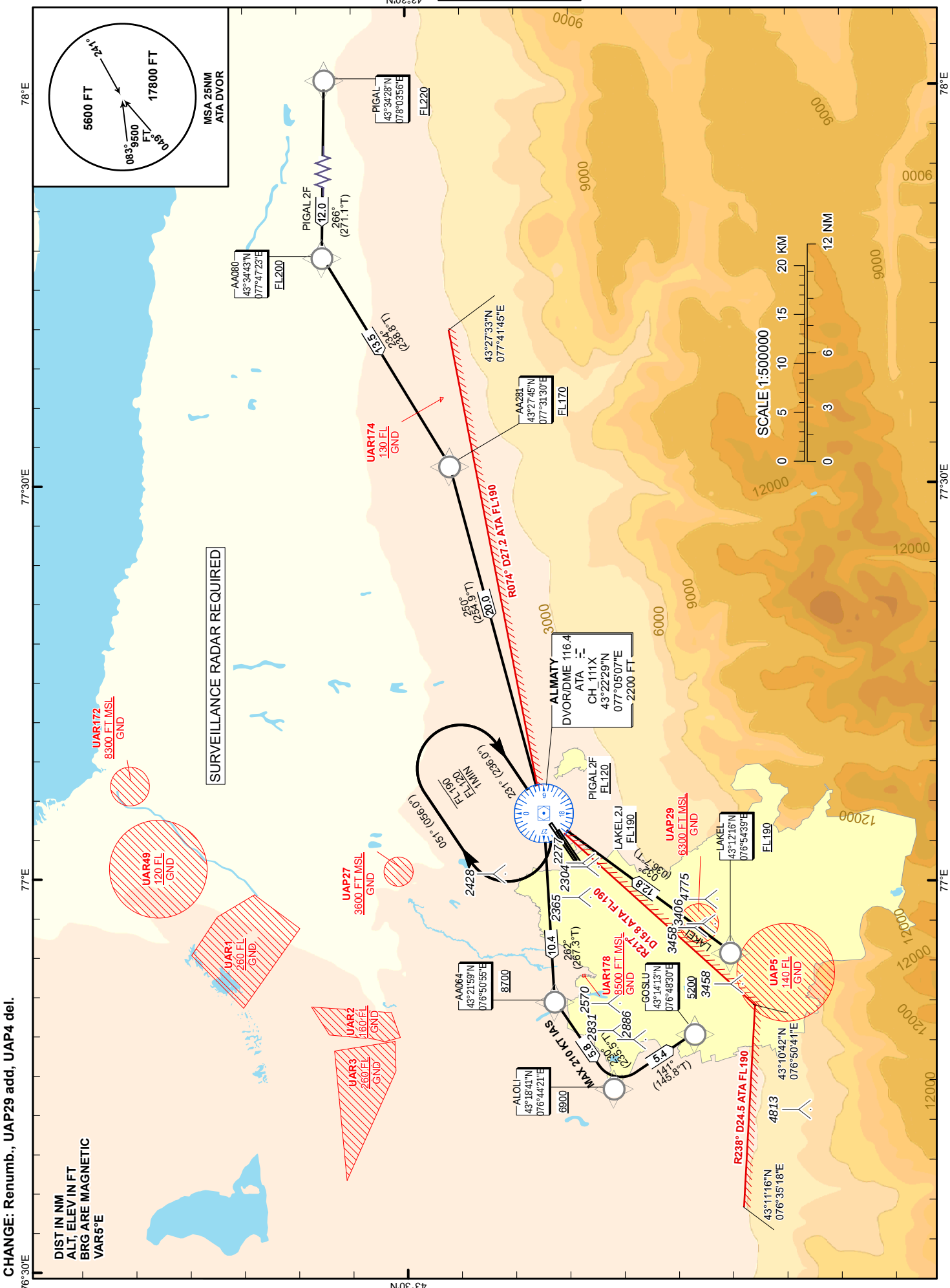
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE 10000 FT

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

LAKEL 2J, PIGAL 2F
(RNAV 1 STAR BASED ON GNSS)

ALMATY
RWY 05L/05R



CHANGE: Renumb., UAP29 add, UAP4 del.

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

TABULAR DESCRIPTION

LAKEL 2J

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	LAKEL	-		5.12	0	-	+FL190	-315	-	RNAV1
20	TF	ATA	-	032(036.7)	5.12	12.8	-	+FL190	-280	-	RNAV1
30	HM	ATA	+	231(236)	5.12	-	R	+FL120	-250	-	RNAV1
10	IF	ATA	-	-	5.12	-	-	+FL120	-250	-	RNAV1
20	TF	AA064	-	262(267.3)	5.12	10.4	R	+8700	-210	-	RNAV1
30	TF	ALOLI	-	230(235.5)	5.12	5.8	L	+6900	-210	-	RNAV1
40	TF	GOSLU	-	141(145.8)	5.12	5.4	L	+5200	-210	-	RNAV1

WAYPOINT LIST

LAKEL 2J

Waypoint Identifier	Coordinates	
LAKEL	431216.00N	0765439.00E
ATA	432229.35N	0770506.95E
AA064	432158.53N	0765054.64E
ALOLI	431840.90N	0764420.60E
GOSLU	431413.06N	0764829.77E

WAYPOINT LIST

PIGAL 2F

Waypoint Identifier	Coordinates	
PIGAL	433428.00N	0780356.00E
AA080	433443.05N	0774723.42E
AA281	432744.74N	0773130.04E
ATA	432229.35N	0770506.95E
AA064	432158.53N	0765054.64E
ALOLI	431840.90N	0764420.60E
GOSLU	431413.06N	0764829.77E

TABULAR DESCRIPTION

PIGAL 2F

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	PIGAL	-		5.12	0	-	+FL220	-315	-	RNAV1
20	TF	AA080	-	266(271.1)	5.12	12	-	+FL200	-280	-	RNAV1
30	TF	AA281	-	234(238.8)	5.12	13.5	L	+FL170	-280	-	RNAV1
40	TF	ATA	-	250(254.9)	5.12	20	R	+FL120	-250	-	RNAV1
50	TF	AA064	-	262(267.3)	5.12	10.4	R	+8700	-210	-	RNAV1
60	TF	ALOLI	-	230(235.5)	5.12	5.8	L	+6900	-210	-	RNAV1
70	TF	GOSLU	-	141(145.8)	5.12	5.4	L	+5200	-210	-	RNAV1

HOLDINGS

Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	ALMATY	231(236.0)	1.5	R	FL120	FL190	-	RNAV1

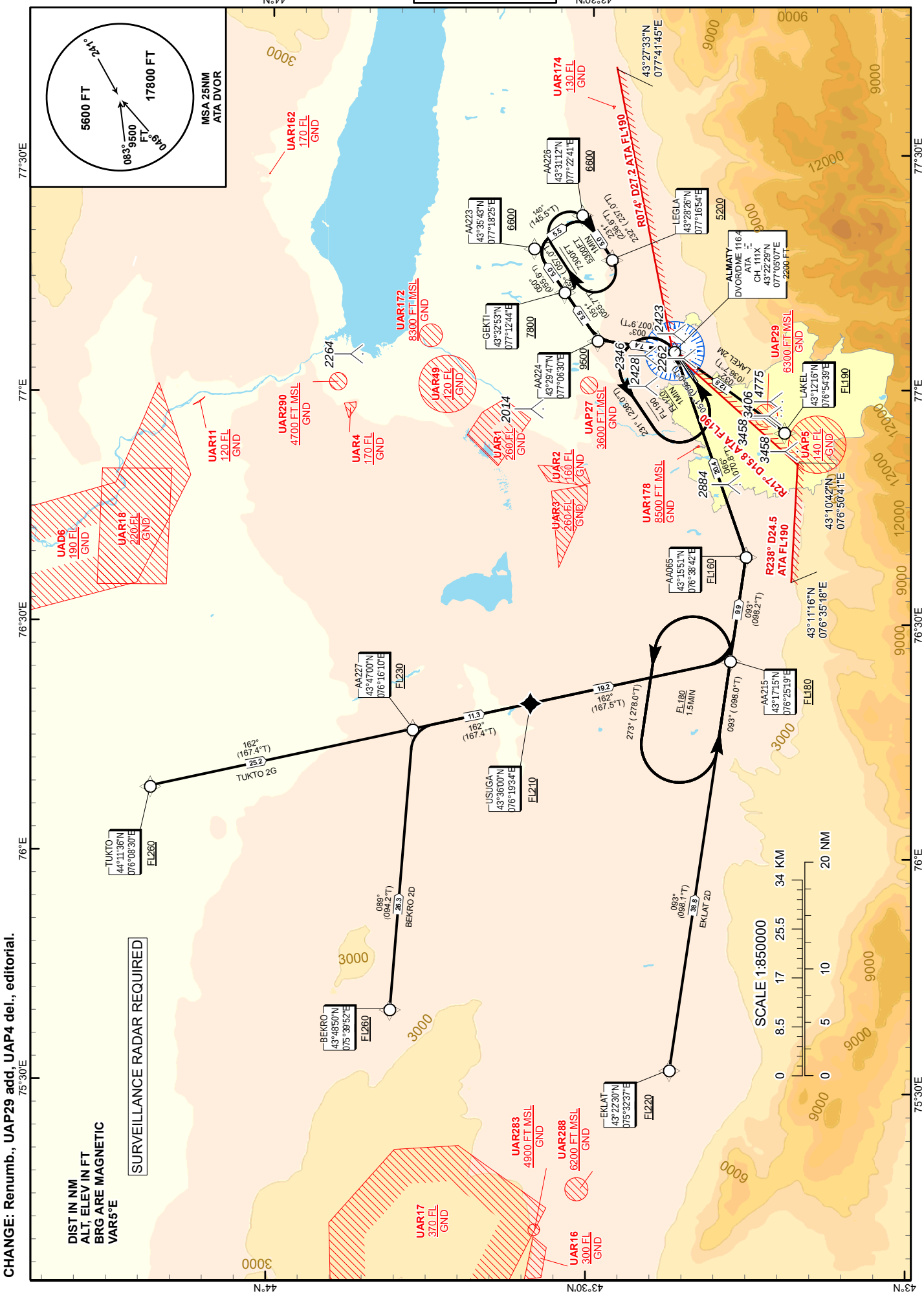
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

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

(RNAV 1 STAR BASED ON GNSS)
BEKRO 2D, EKLAT 2D, LAKEL 2M, TUKTO 2G

ALMATY
RWY 23R/ 23L



CHANGE: Renumb., UAP29 add, UAP4 del., editorial.

TABULAR DESCRIPTION

EKLAT 2D

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	EKLAT	-		5.12	0	-	+FL220	-315	-	RNAV1
20	TF	AA215	-	093(098.1)	5.12	38.8	-	+FL180	-280	-	RNAV1
30	TF	AA065	-	093(098.2)	5.12	9.9	-	+FL160	-280	-	RNAV1
40	TF	ATA	-	066(070.8)	5.12	20.4	L	+FL120	-250	-	RNAV1
50	TF	AA224	-	003(007.9)	5.12	7.4	L	+9500	-250	-	RNAV1
60	TF	GEKTI	-	051(055.7)	5.12	5.5	R	+7800	-250	-	RNAV1
70	TF	AA223	-	050(055.6)	5.12	5	-	+6600	-230	-	RNAV1
80	TF	AA226	-	140(145.5)	5.12	5.5	R	+6600	-230	-	RNAV1
90	TF	LEGLA	-	231(236.6)	5.12	5	R	+5200	-230	-	RNAV1

WAYPOINT LIST

EKLAT 2D

Waypoint Identifier	Coordinates	
EKLAT	432230.00N	0753237.00E
AA215	431714.83N	0762518.51E
AA065	431550.67N	0763842.35E
ATA	432229.35N	0770506.95E
AA224	432947.20N	0770629.91E
GEKTI	433253.40N	0771244.40E
AA223	433543.23N	0771824.60E
AA226	433111.67N	0772241.01E
LEGLA	432825.52N	0771654.27E

WAYPOINT LIST

LAKEL 2M

Waypoint Identifier	Coordinates	
LAKEL	431216.00N	0765439.00E
ATA	432229.35N	0770506.95E
AA224	432947.20N	0770629.91E
GEKTI	433253.40N	0771244.40E
AA223	433543.23N	0771824.60E
AA226	433111.67N	0772241.01E
LEGLA	432825.52N	0771654.27E

TABULAR DESCRIPTION

LAKEL 2M

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	LAKEL	-		5.12	0	-	+FL190	-315	-	RNAV1
20	TF	ATA	-	032(036.7)	5.12	12.8	-	+FL190	-250	-	RNAV1
30	HM	ATA	+	051(056.0)	5.12	-	L	+FL120	-250		RNAV1
10	IF	ATA	-		5.12	-	-	+FL120	-250	-	RNAV1
20	TF	AA224	-	003(007.9)	5.12	7.4	L	+9500	-250	-	RNAV1
30	TF	GEKTI	-	051(055.7)	5.12	5.5	R	+7800	-250	-	RNAV1
40	TF	AA223	-	050(055.6)	5.12	5	-	+6600	-230	-	RNAV1
50	TF	AA226	-	140(145.5)	5.12	5.5	R	+6600	-230	-	RNAV1
60	TF	LEGLA	-	231(236.6)	5.12	5	R	+5200	-230	-	RNAV1

TABULAR DESCRIPTION

TUKTO 2G

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	TUKTO	-		5.12	0	-	+FL260	-315	-	RNAV1
20	TF	AA227	-	162(167.4)	5.12	25.2	-	+FL230	-280	-	RNAV1
30	TF	USUGA	-	162(167.4)	5.12	11.3	-	+FL210	-280	-	RNAV1
40	TF	AA215	-	162(167.5)	5.12	19.2	-	+FL180	-280	-	RNAV1
50	TF	AA065	-	093(098.2)	5.12	9.9	-	+FL160	-280	-	RNAV1
60	TF	ATA	-	066(070.8)	5.12	20.4	L	+FL120	-250	-	RNAV1
70	TF	AA224	-	003(007.9)	5.12	7.4	L	+9500	-250	-	RNAV1
80	TF	GEKTI	-	051(055.7)	5.12	5.5	R	+7800	-250	-	RNAV1
90	TF	AA223	-	050(055.6)	5.12	5	-	+6600	-230	-	RNAV1
100	TF	AA226	-	140(145.5)	5.12	5.5	R	+6600	-230	-	RNAV1
110	TF	LEGLA	-	231(236.6)	5.12	5	R	+5200	-230	-	RNAV1

WAYPOINT LIST

TUKTO 2G

Waypoint Identifier	Coordinates	
TUKTO	441136.00N	0760830.00E
AA227	434700.39N	0761610.10E
USUGA	433600.00N	0761934.00E
AA215	431714.83N	0762518.51E
AA065	431550.67N	0763842.35E
ATA	432229.35N	0770506.95E
AA224	432947.20N	0770629.91E
GEKTI	433253.40N	0771244.40E
AA223	433543.23N	0771824.60E
AA226	433111.67N	0772241.01E
LEGLA	432825.52N	0771654.27E

WAYPOINT LIST

BEKRO 2D

Waypoint Identifier	Coordinates	
BEKRO	434850.00N	0753952.00E
AA227	434700.39N	0761610.10E
USUGA	433600.00N	0761934.00E
AA215	431714.83N	0762518.51E
AA065	431550.67N	0763842.35E
ATA	432229.35N	0770506.95E
AA224	432947.20N	0770629.91E
GEKTI	433253.40N	0771244.40E
AA223	433543.23N	0771824.60E
AA226	433111.67N	0772241.01E
LEGLA	432825.52N	0771654.27E

TABULAR DESCRIPTION

BEKRO 2D

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	BEKRO	-		5.12	0	-	+FL260	-315	-	RNAV1
20	TF	AA227	-	089(094.2)	5.12	26.3	-	+FL230	-280	-	RNAV1
30	TF	USUGA	-	162(167.4)	5.12	11.3	R	+FL210	-280	-	RNAV1
40	TF	AA215	-	162(167.5)	5.12	19.2	-	+FL180	-280	-	RNAV1
50	TF	AA065	-	093(098.2)	5.12	9.9	-	+FL160	-280	-	RNAV1
60	TF	ATA	-	066(070.8)	5.12	20.4	L	+FL120	-250	-	RNAV1
70	TF	AA224	-	003(007.9)	5.12	7.4	L	+9500	-250	-	RNAV1
80	TF	GEKTI	-	051(055.7)	5.12	5.5	R	+7800	-250	-	RNAV1
90	TF	AA223	-	050(055.6)	5.12	5	-	+6600	-230	-	RNAV1
100	TF	AA226	-	140(145.5)	5.12	5.5	R	+6600	-230	-	RNAV1
110	TF	LEGLA	-	231(236.6)	5.12	5	R	+5200	-230	-	RNAV1

HOLDINGS

Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	AA215	093(098.0)	1.5	L	FL180	-	-	RNAV1
Hold	ALMATY	051(056.0)	1.5	L	FL120	FL190	-	RNAV1
Hold	LEGLA	232(237.0)	1	R	5300FT	7300FT	-	RNAV1

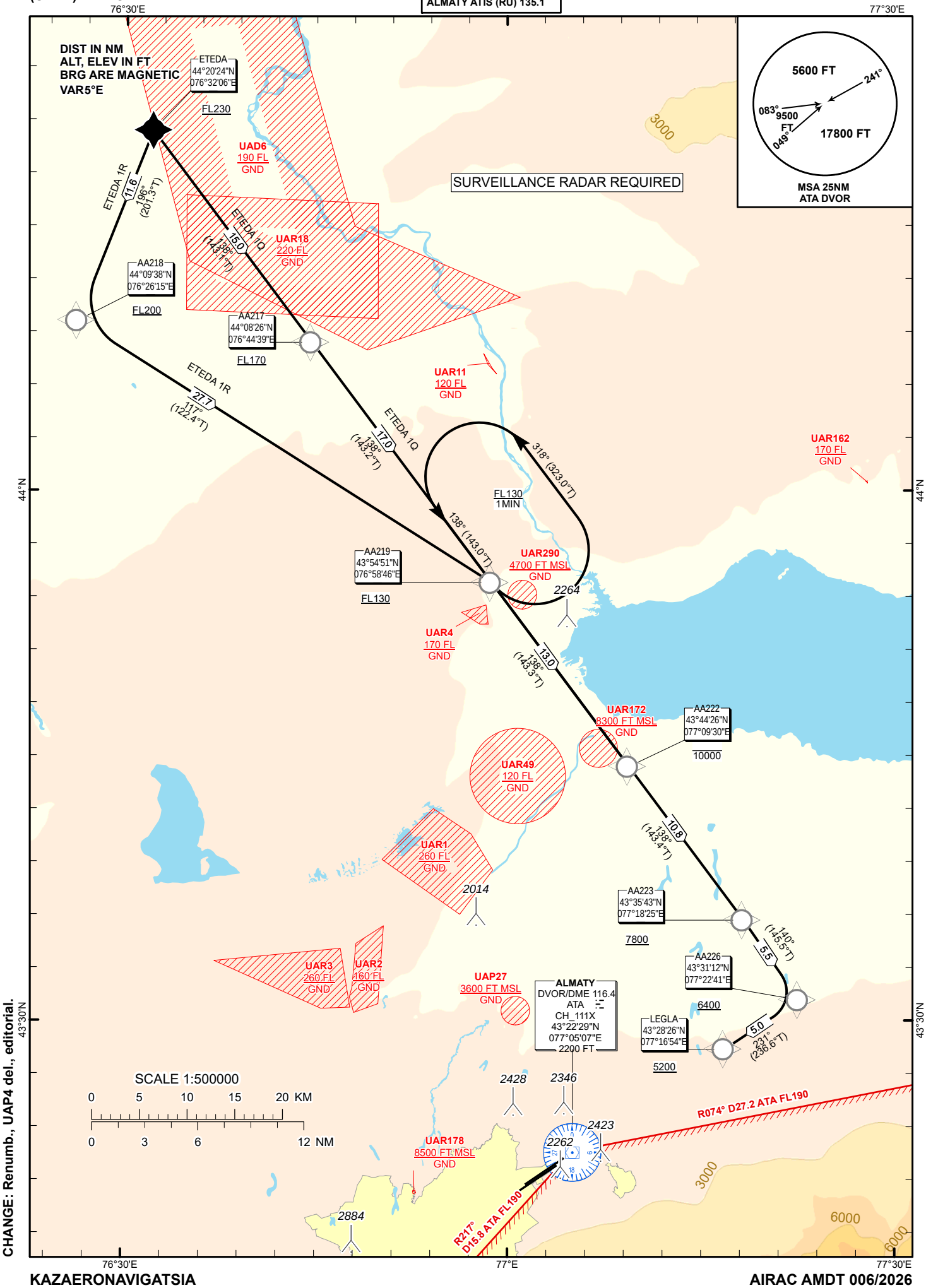
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALT
10000 FT

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

(RNAV 1 STAR BASED ON GNSS)
ETEDA 1Q, ETEDA 1R

ALMATY
RWY 23L/23R



CHANGE: Renumb., UAP4 del., editorial.

TABULAR DESCRIPTION

ETEDA 1Q

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	ETEDA	-		5.12	0	-	+FL230	-315	-	RNAV1
20	TF	AA217	-	138(143.1)	5.12	15	-	+FL170	-280	-	RNAV1
30	TF	AA219	-	138(143.2)	5.12	17	-	+FL130	-280	-	RNAV1
40	TF	AA222	-	138(143.3)	5.12	13	-	-10000	-280	-	RNAV1
50	TF	AA223	-	138(143.4)	5.12	10.8	-	+7800	-250	-	RNAV1
60	TF	AA226	-	140(145.5)	5.12	5.5	-	+6400	-230	-	RNAV1
70	TF	LEGLA	-	231(236.6)	5.12	5	R	+5200	-230	-	RNAV1

WAYPOINT LIST

ETEDA 1Q

Waypoint Identifier	Coordinates	
ETEDA	442024.00N	0763206.00E
AA217	440826.12N	0764438.87E
AA219	435450.97N	0765845.88E
AA222	434425.91N	0770929.80E
AA223	433543.23N	0771824.60E
AA226	433111.67N	0772241.01E
LEGLA	432825.52N	0771654.27E

WAYPOINT LIST

ETEDA 1R

Waypoint Identifier	Coordinates	
ETEDA	442024.00N	0763206.00E
AA218	440937.50N	0762614.69E
AA219	435450.97N	0765845.88E
AA222	434425.91N	0770929.80E
AA223	433543.23N	0771824.60E
AA226	433111.67N	0772241.01E
LEGLA	432825.52N	0771654.27E

TABULAR DESCRIPTION

ETEDA 1R

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	ETEDA	-		5.12	0	-	+FL230	-320	-	RNAV1
20	TF	AA218	-	196(201.3)	5.12	11.6	-	+FL200	-280	-	RNAV1
30	TF	AA219	-	117(122.4)	5.12	27.7	L	+FL130	-280	-	RNAV1
40	TF	AA222	-	138(143.3)	5.12	13	R	-10000	-280	-	RNAV1
50	TF	AA223	-	138(143.4)	5.12	10.8	-	+7800	-250	-	RNAV1
60	TF	AA226	-	140(145.5)	5.12	5.5	-	+6400	-230	-	RNAV1
70	TF	LEGLA	-	231(236.6)	5.12	5	R	+5200	-230	-	RNAV1

HOLDINGS

Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	AA219	138(143.0)	1	L	FL130	-	-	RNAV1

STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

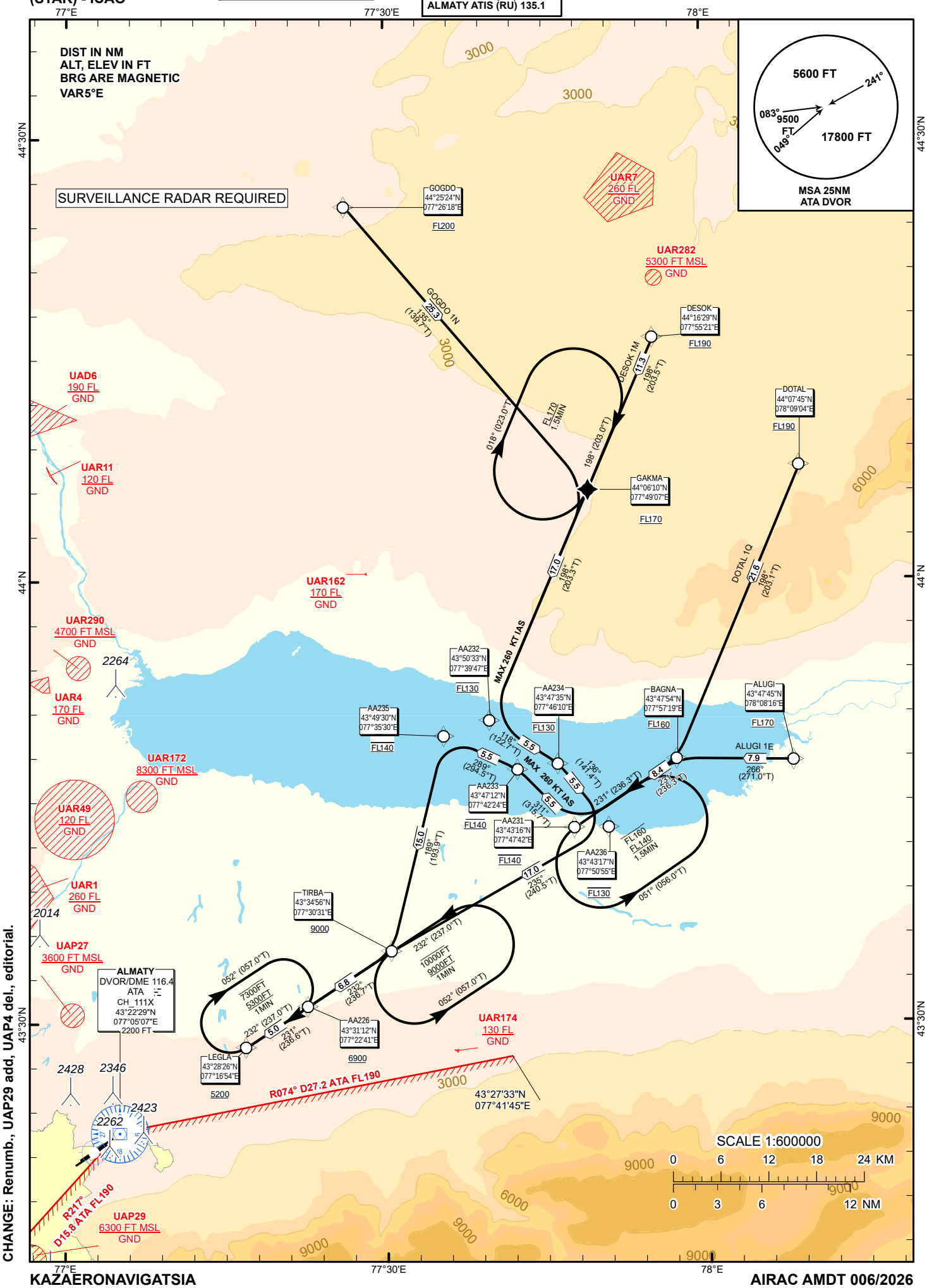
TRANSITION ALT
10000 FT

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

(RNAV 1 STAR BASED ON GNSS)

ALUGI 1E, DESOK 1M, DOTAL 1Q, GOGDO 1N

ALMATY
RWY 23L/23R



CHANGE: Renumb., UAP29 add, UAP4 del., editorial.

TABULAR DESCRIPTION

ALUGI 1E

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	ALUGI	-		5.12	0	-	+FL170	-280	-	RNAV1
20	TF	BAGNA	-	266(271.0)	5.12	7.9	-	+FL160	-280	-	RNAV1
30	TF	AA231	-	231(236.3)	5.12	8.4	L	@FL140	-260	-	RNAV1
40	TF	AA233	-	311(315.7)	5.12	5.5	R	@FL140	-260	-	RNAV1
50	TF	AA235	-	289(294.5)	5.12	5.5	L	@FL140	-260	-	RNAV1
60	TF	TIRBA	-	189(193.9)	5.12	15	L	+9000	-250	-	RNAV1
70	TF	AA226	-	232(236.7)	5.12	6.8	R	+6900	-230	-	RNAV1
80	TF	LEGLA	-	231(236.6)	5.12	5	R	+5200	-230	-	RNAV1

WAYPOINT LIST

ALUGI 1E

Waypoint Identifier	Coordinates	
ALUGI	434745.00N	0780816.00E
BAGNA	434754.00N	0775719.00E
AA231	434316.07N	0774741.74E
AA233	434712.50N	0774224.06E
AA235	434929.66N	0773529.57E
TIRBA	433456.00N	0773031.00E
AA226	433111.67N	0772241.01E
LEGLA	432825.52N	0771654.27E

TABULAR DESCRIPTION

DESOK 1M

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	DESOK	-		5.12	0	-	+FL190	-280	-	RNAV1
20	TF	GAKMA	-	198(203.5)	5.12	11.3	-	+FL170	-280	-	RNAV1
30	TF	AA232	-	198(203.3)	5.12	17	-	@FL130	-260	-	RNAV1
40	TF	AA234	-	118(122.7)	5.12	5.5	L	@FL130	-260	-	RNAV1
50	TF	AA236	-	136(141.4)	5.12	5.5	R	@FL130	-260	-	RNAV1
60	TF	TIRBA	-	235(240.5)	5.12	17	R	+9000	-250	-	RNAV1
70	TF	AA226	-	232(236.7)	5.12	6.8	L	+6900	-230	-	RNAV1
80	TF	LEGLA	-	231(236.6)	5.12	5	R	+5200	-230	-	RNAV1

WAYPOINT LIST

DESOK 1M

Waypoint Identifier	Coordinates	
DESOK	441629.00N	0775521.00E
GAKMA	440610.00N	0774907.00E
AA232	435033.13N	0773946.65E
AA234	434734.97N	0774610.33E
AA236	434317.20N	0775054.69E
TIRBA	433456.00N	0773031.00E
AA226	433111.67N	0772241.01E
LEGLA	432825.52N	0771654.27E

TABULAR DESCRIPTION

DOTAL 1Q

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	DOTAL	-		5.12	0	-	+FL190	-280	-	RNAV1
20	TF	BAGNA	-	198(203.1)	5.12	21.6	-	+FL160	-280	-	RNAV1
30	TF	AA231	-	231(236.3)	5.12	8.4	R	@FL140	-260	-	RNAV1
40	TF	AA233	-	311(315.7)	5.12	5.5	R	@FL140	-260	-	RNAV1
50	TF	AA235	-	289(294.5)	5.12	5.5	L	@FL140	-260	-	RNAV1
60	TF	TIRBA	-	189(193.9)	5.12	15	L	+9000	-250	-	RNAV1
70	TF	AA226	-	232(236.7)	5.12	6.8	R	+6900	-230	-	RNAV1
80	TF	LEGLA	-	231(236.6)	5.12	5	R	+5200	-230	-	RNAV1

WAYPOINT LIST

DOTAL 1Q

Waypoint Identifier	Coordinates	
DOTAL	440745.00N	0780904.00E
BAGNA	434754.00N	0775719.00E
AA231	434316.07N	0774741.74E
AA233	434712.50N	0774224.06E
AA235	434929.66N	0773529.57E
TIRBA	433456.00N	0773031.00E
AA226	433111.67N	0772241.01E
LEGLA	432825.52N	0771654.27E

TABULAR DESCRIPTION

GOGDO 1N

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	GOGDO	-		5.12	0	-	+FL200	-280	-	RNAV1
20	TF	GAKMA	-	135(139.7)	5.12	25.3	-	+FL170	-280	-	RNAV1
30	TF	AA232	-	198(203.3)	5.12	17	R	@FL130	-260	-	RNAV1
40	TF	AA234	-	118(122.7)	5.12	5.5	L	@FL130	-260	-	RNAV1
50	TF	AA236	-	136(141.4)	5.12	5.5	R	@FL130	-260	-	RNAV1
60	TF	TIRBA	-	235(240.5)	5.12	17	R	+9000	-250	-	RNAV1
70	TF	AA226	-	232(236.7)	5.12	6.8	L	+6900	-230	-	RNAV1
80	TF	LEGLA	-	231(236.6)	5.12	5	R	+5200	-230	-	RNAV1

WAYPOINT LIST

GOGDO 1N

Waypoint Identifier	Coordinates	
GOGDO	442524.00N	0772618.00E
GAKMA	440610.00N	0774907.00E
AA232	435033.13N	0773946.65E
AA234	434734.97N	0774610.33E
AA236	434317.20N	0775054.69E
TIRBA	433456.00N	0773031.00E
AA226	433111.67N	0772241.01E
LEGLA	432825.52N	0771654.27E

HOLDINGS

Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	GAKMA	198(203.0)	1.5	R	FL170	-	-	RNAV1
Hold	AA231	231(236.0)	1.5	L	FL140	FL160	-	RNAV1
Hold	TIRBA	232(237.0)	1	L	9000FT	10000FT	-	RNAV1
Hold	LEGLA	232(237.0)	1	R	5300FT	7300FT	-	RNAV1

UAUR AD 2.7 Seasonal Availability - Clearing

1	Types of clearing equipment	KAMAZ snowplough-sweeper and washing vehicle – 2 units; Belarus 82.1 tractor – 2 units; Ural SSR-1 rotary snow blower – 1 unit.
2	Clearance priorities	Clearance priorities: 1. RWY 2. TWY 3. Stands 4. Apron 2, 2A,1
3	Remarks	Cleaning of access roads to radio navigation and communication facilities, internal aerodrome roads and other works.

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

1	**Apron surface and strength**	**STANDS**		**SURFACE**	**STRENGTH**
		1-2		CONC+ASPH	PCN 25/F/C/W/T
2	**Taxiway width, surface and strength**	**TWY**	**WIDTH (M)**	**SURFACE**	**STRENGTH**
		A	16	CONC+ASPH	PCN 25/F/C/W/T
3	**Altimeter checkpoint location and elevation**	Nil			
4	**VOR checkpoints**	Nil			
5	**INS checkpoints**	Nil			
6	**Remarks**	Nil			

UAUR 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	Runway entry signs and taxiway designation signs.
2	RWY and TWY markings and LGT	Runway threshold, touchdown zone, centre line, runway edge, runway designation, taxi-holding position and taxiway centre line markings.
3	**Stop bars**	Nil
4	**Other runway protection measures**	Nil
5	Remarks	Nil

UAUR AD 2.10 Aerodrome Obstacles

NIL

UAUR AD 2.11 Meteorological Information Provided

1	**Associated MET Office**	Meteorological service at Arkalyk aerodrome.
2	**Hours of service MET Office outside hour**	H24
3	**Office responsible for TAF preparation: Periods of validity**	Meteorological service at Arkalyk aerodrome, 09 HR (0009, 0312, 0615, 0918, 1221, 1524, 1803, 2106)
4	**Trend forecast Interval of issuance**	TREND 30 min

5	**Briefing/consultation provided**	Personal consultation (Russian)
6	**Flight documentation/languages used**	TAF, METAR, SPECI, SIGMET, GAMET, AIRMET English
7	**Charts and other information AVBL for briefing or consultation**	Surface analysis; AT850, AT700, AT500, AT400, AT300, AT250, AT200; prognostic charts of wind and temperature at flight levels (FL); maximum wind; tropopause; prognostic charts P850, P700, P500, P400, P300, P250, P200; SWH, SWM WAFC, SWL Kazakhstan.
8	**Supplementary equipment AVBL for providing information**	Nil
9	**ATS units provided with information**	Briefing, TWR
10	**Additional information**	Nil

UAUR 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**
08	090.80	2500 X 45	PCN 25/F/C/ W/T CONC+ASPH	501907.92N 0665605.39E -38.0 FT	THR 1272 FT	1.2%
26	270.80	2500 X 45	PCN 25/F/C/ W/T CONC+ASPH	501906.84N 0665811.77E -38.0 FT	THR 1268 FT	1.2%

SWY dimensions (M)	CWY dimensions (M)	Strip dimensions (M)	RESA dimensions (M)	Location and description of arresting system	OFZ	Remarks
8	**9**	**10**	**11**	**12**	**13**	**14**
Nil	240 X 150	2800 X 300	90 X 150	Nil	AVBL	Turn pad length – 116.65 m; total width of the runway turn pad – 77.7 m. See AIP section AD 2.24.1..
Nil	240 X 150	2800 X 300	90 X 150	Nil	AVBL	Turn pad length – 116.65 m; total width of the runway turn pad – 77.7 m. See AIP section AD 2.24.1.

UAUR AD 2.24 Charts Related To An Aerodrome

UAUR AD 2.25 Visual segment surface (VSS) penetrations

No penetrations

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AERODROME CHART - ICAO

AD ELEV 1273 FT

ARP 501907N 0665709E

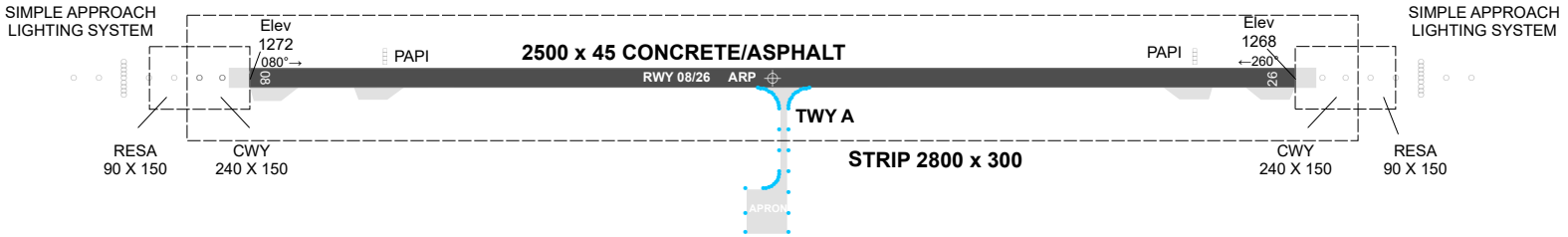
TWR 134.3

ARKALYK

VAR 10°E (2024)
ANNUAL RATE OF CHANGE 0.05°E

ELEV, HGT IN FEET
DIMENSIONS IN METERS
BRG ARE MAG

RWY	DIRECTION (TRUE)	THR	GEOID UNDULATION	BEARING STRENGTH
08	090.8°	50°19'07.92"N 066°56'05.39"E	- 38	25 F/C/W/T
26	270.8°	50°19'06.84"N 066°58'11.77"E		



SCALE 1:18000

180 0 180 360 540 M

MARKING, LIGHTING RWY 08/26

To be developed

CHANGE: TWR FREQ.

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AERODROME GROUND MOVEMENT AND PARKING CHART - ICAO

APRON ELEV *1273 FT*

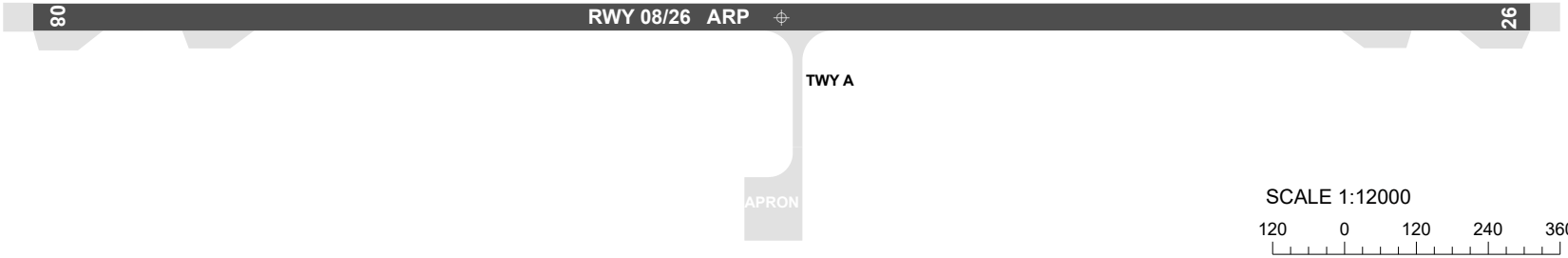
TWR 134.3

ARKALYK

ANNUAL RATE
OF CHANGE 0.05°E

ELEV, HGT IN FEET
DIMENSIONS IN METERS
BRG ARE MAG

RWY	DIRECTION (TRUE)	THR	GEOID UNDULATION	BEARING STRENGTH
08	090.8°	50°19'07.92"N 066°56'05.39"E	- 38	25 F/C/W/T
26	270.8°	50°19'06.84"N 066°58'11.77"E		



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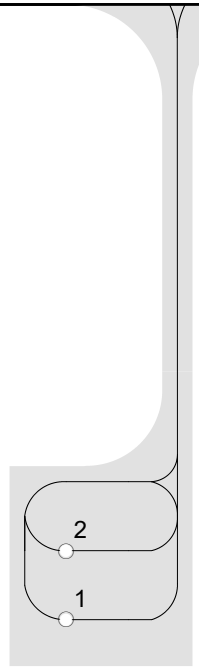
120 0 120 240 360 Meters



SCALE 1:4000

40 0 40 80 120 Meters

APRON	STAND	SURFACE	BEARING STRENGTH
	1 - 1	CONC+ASPH	PCN 25/F/C/W/T

TWY	WIDTH	SURFACE	BEARING STRENGTH
A	16m	CONC+ASPH	PCN 25/F/C/W/T

CHANGE: TWR FREQ.

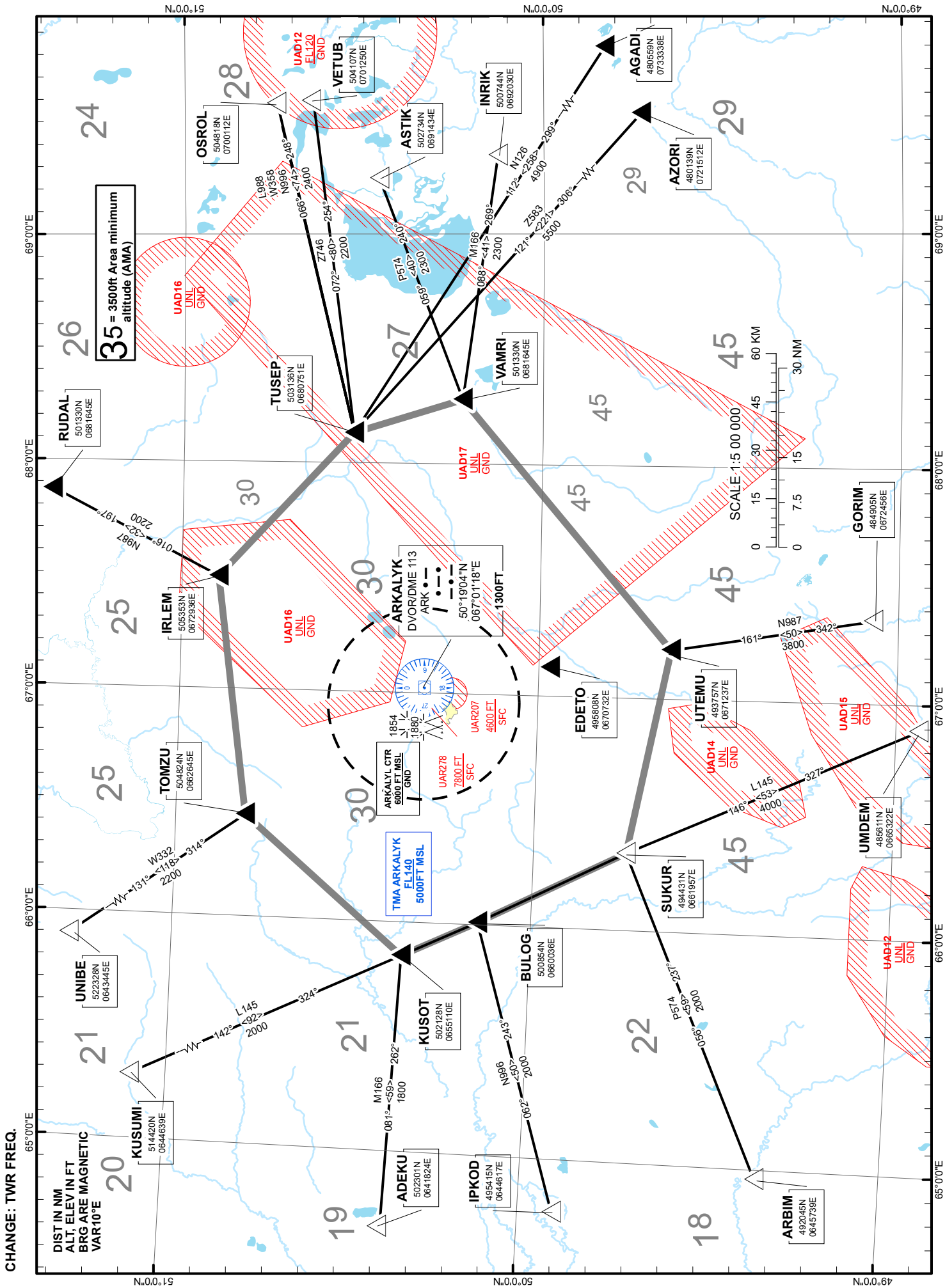
ARKALYK **STANDS CHARACTERISTICS**

To be developed

AREA
CHART - ICAO

ARKALYK TOWER 134.3
ARKALYK ATIS (EN) 126.8
ARKALYK ATIS (RU) 126.8

TMA ARKALYK



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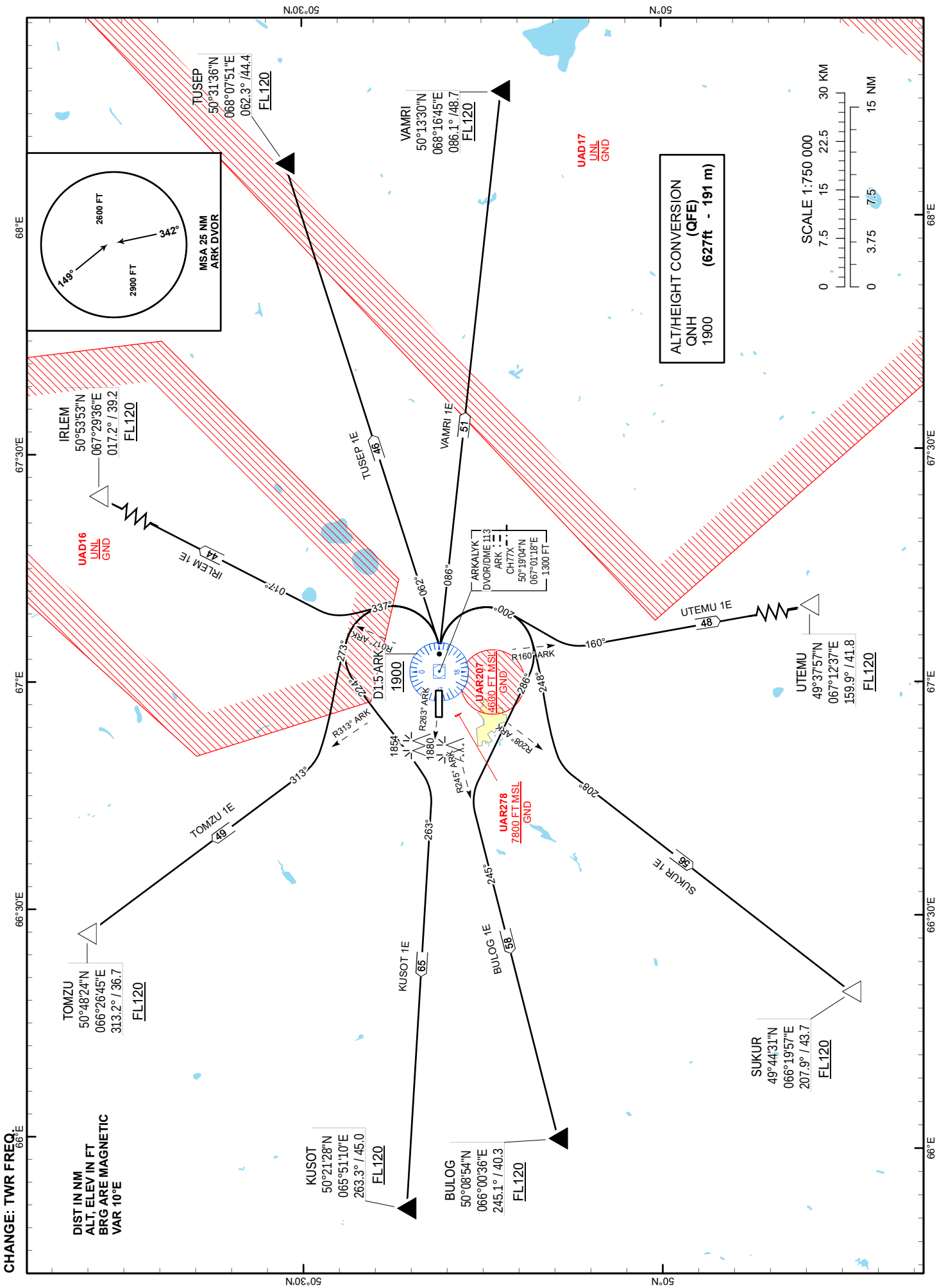
STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE
10000 FT

ARKALYK TOWER 134.3
ARKALYK ATIS (EN) 126.8
ARKALYK ATIS (RU) 126.8

BULOG1E, IRLEM1E, KUSOT1E, SUKUR1E, TOMZU1E, TUSEP1E, UTEMU1E, VAMRI1E

ARKALYK
RWY 08



Standard Departure Routes - Instrument (SID) RWY 08
IRLEM 1E After take-off climb straight ahead to 1900FT or above. At 1.5NM ARK, LEFT on track 337° until intercept R017°ARK, then proceed on track 017° to IRLEM (R017.2° D39.2NM ARK). Cross IRLEM at FL120 or above.
TUSEP 1E After take-off climb straight ahead to 1900FT or above. At 1.5NM ARK, LEFT on track 062° to TUSEP (R062.3° D44.4NM ARK). Cross TUSEP at FL120 or above.
VAMRI 1E After take-off climb straight ahead to 1900FT or above. At 1.5NM ARK, RIGHT on track 086° to VAMRI (R086.1° D48.7NM ARK). Cross VAMRI at FL120 or above.
UTEMU 1E After take-off climb straight ahead to 1900FT or above. At 1.5NM ARK, RIGHT on track 200° until intercept R160°ARK, then proceed on track 160° to UTEMU (R159.9° D41.8NM ARK). Cross UTEMU at FL120 or above.
SUKUR 1E After take-off climb straight ahead to 1900FT or above. At 1.5NM ARK, RIGHT on track 248° until intercept R208°ARK, then proceed on track 208° to SUKUR (R207.9° D43.7NM ARK). Cross SUKUR at FL120 or above.
BULOG 1E After take-off climb straight ahead to 1900FT or above. At 1.5NM ARK, RIGHT on track 286° until intercept R245°ARK, then proceed on track 245° to TUSEP (R245.1° D40.3NM ARK). Cross BULOG at FL120 or above.
KUSOT 1E After take-off climb straight ahead to 1900FT or above. At 1.5NM ARK, LEFT on track 224° until intercept R263°ARK, then proceed on track 263° to KUSOT (R263.3° D45.0NM ARK). Cross KUSOT at FL120 or above.
TOMZU 1E After take-off climb straight ahead to 1900FT or above. At 1.5NM ARK, LEFT on track 273° until intercept R313°ARK, then proceed on track 313° to TOMZU (R313.2° D36.7NM ARK). Cross TOMZU at FL120 or above.

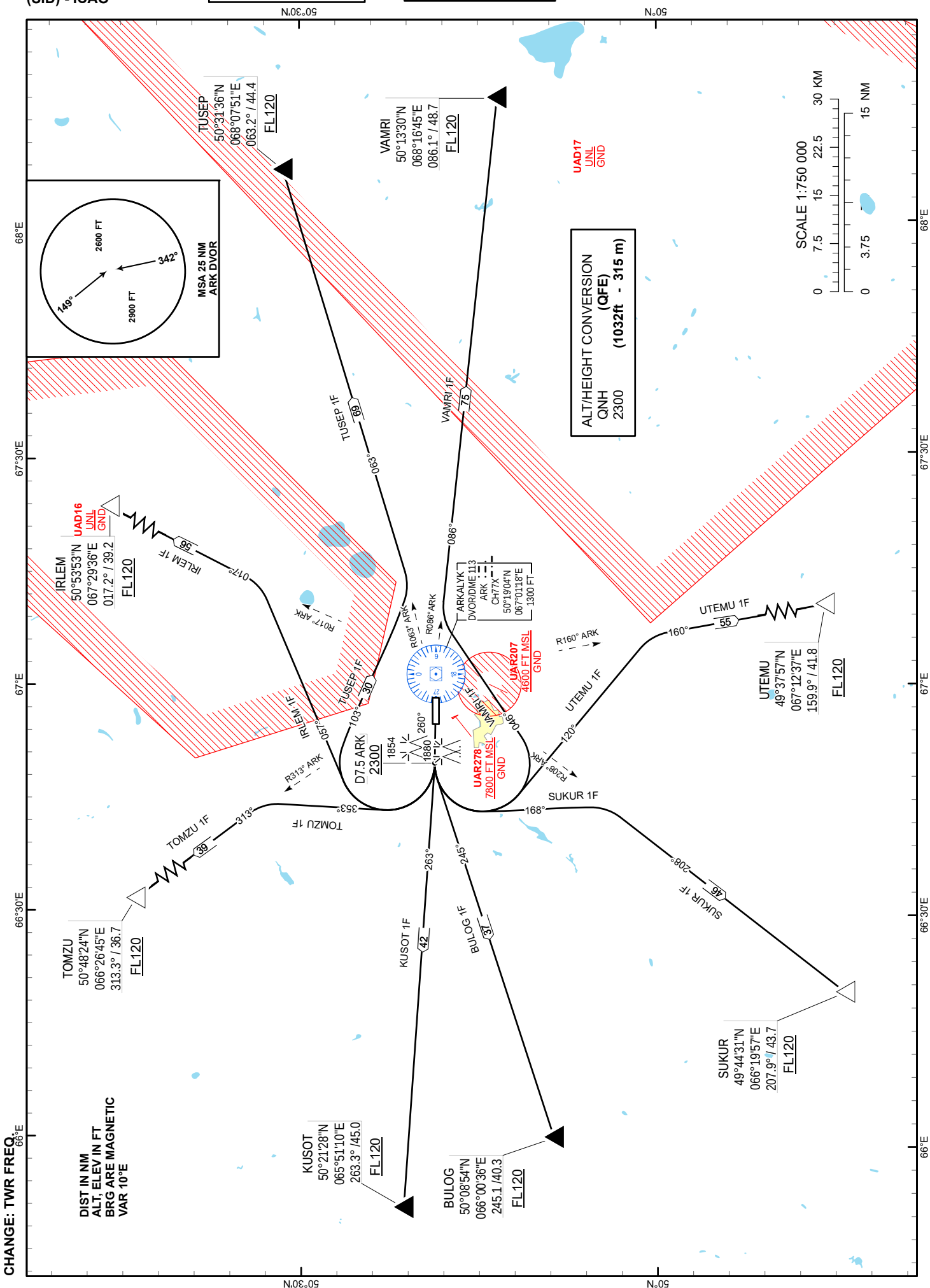
STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE
10000 FT

ARKALYK TOWER 134.3
ARKALYK ATIS (EN) 126.8
ARKALYK ATIS (RU) 126.8

BULOG1F, IRLEM1F, KUSOT1F, SUKUR1F, TOMZU1F, TUSEP1F, UTEMU1F, VAMRI1F

ARKALYK
RWY 26



Standard Departure Routes - Instrument (SID) RWY 26
IRLEM 1F After take-off climb straight ahead to 2300FT or above. At 7.5NM ARK, turn RIGHT on track 057° until intercept R017°ARK, then proceed on track 017° to IRLEM (R017.2° D39.2NM ARK). Cross IRLEM at FL120 or above.
TUSEP 1F After take-off climb straight ahead to 2300FT or above. At 7.5NM ARK, turn RIGHT on track 103° until intercept R063°ARK, then proceed on track 063° to TUSEP (R063.2° D44.4NM ARK). Cross TUSEP at FL120 or above.
VAMRI 1F After take-off climb straight ahead to 2300FT or above. At 7.5NM ARK, turn LEFT on track 046° until intercept R086°ARK, then proceed on track 086° to VAMRI (R086.1° D48.7NM ARK). Cross VAMRI at FL120 or above.
UTEMU 1F After take-off climb straight ahead to 2300FT or above. At 7.5NM ARK, turn LEFT on track 120° until intercept R160°ARK, then proceed on track 160° to UTEMU (R159.9° D41.8NM ARK). Cross UTEMU at FL120 or above.
SUKUR 1F After take-off climb straight ahead to 2300FT or above. At 7.5NM ARK, turn LEFT on track 168° until intercept R208°ARK, then proceed on track 208° to SUKUR (R207.9° D43.7NM ARK). Cross SUKUR at FL120 or above.
BULOG 1F After take-off climb straight ahead to 2300FT or above. At 7.5NM ARK, turn LEFT on track 245° to BULOG (R245.1° D40.3NM ARK). Cross BULOG at FL120 or above.
KUSOT 1F After take-off climb straight ahead to 2300FT or above. At 7.5NM ARK, turn RIGHT on track 263° to KUSOT (R263.3° D45.0NM ARK). Cross KUSOT at FL120 or above.
TOMZU 1F After take-off climb straight ahead to 2300FT or above. At 7.5NM ARK, turn RIGHT on track 353° until intercept R313°ARK, then proceed on track 313° to TOMZU (R313.3° D36.7NM ARK). Cross TOMZU at FL120 or above.

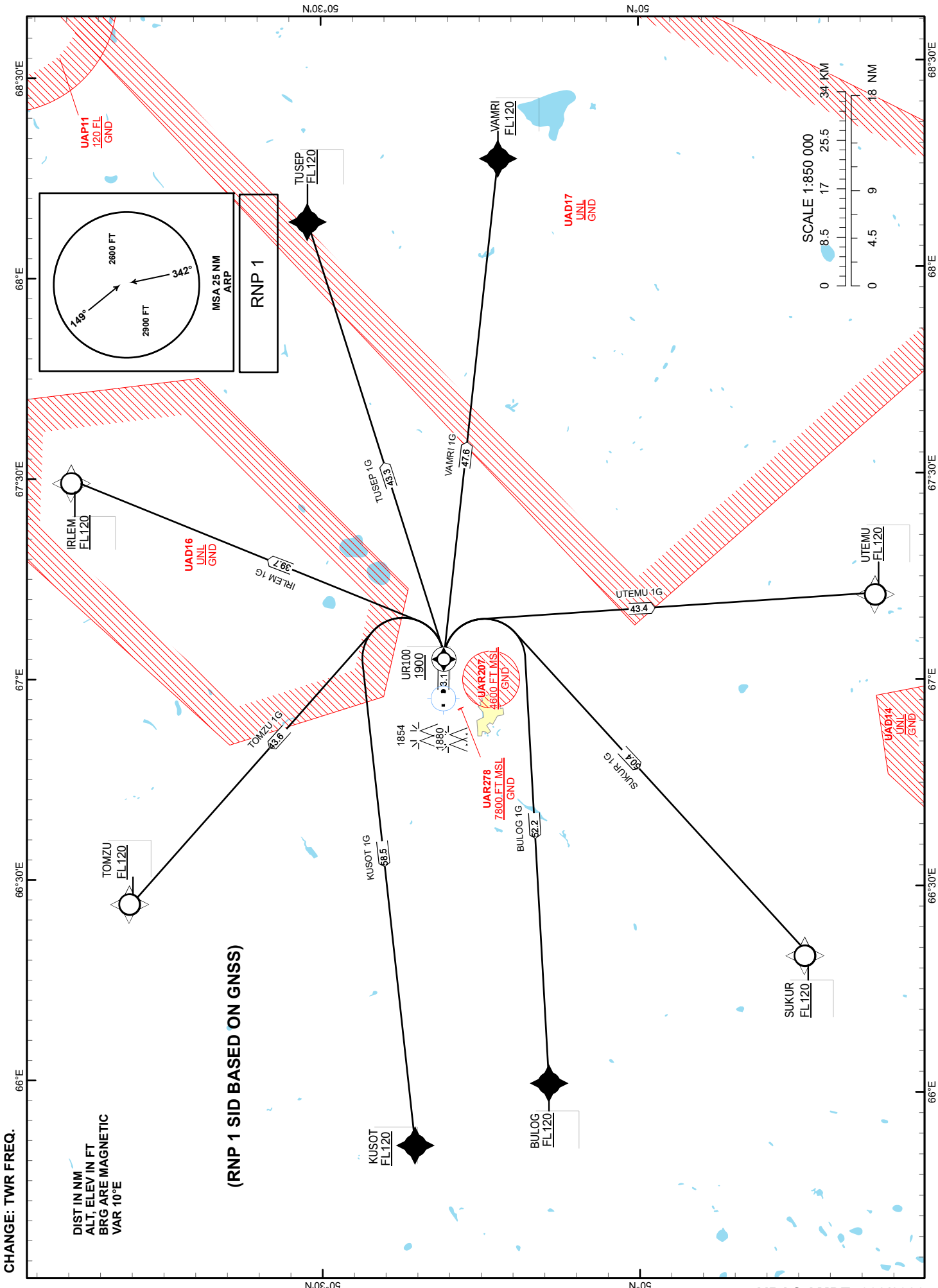
STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE 10000 FT

ARKALYK TOWER 134.3
ARKALYK ATIS (EN) 126.8
ARKALYK ATIS (RU) 126.8

BULOG1G, IRLEM1G, KUSOT1G, SUKUR1G, TOMZU1G, TUSEP1G, UTEMU1G, VAMRI1G

ARKALYK RWY 08



(RNP 1 SID BASED ON GNSS)

DIST IN NM
ALT, ELEV IN FT
BRG ARE MAGNETIC
VAR 10°E

CHANGE: TWR FREQ.

TABULAR DESCRIPTION RWY08

BULOG 1G											
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	UR100	Y	080(090.8)	+10.4	3.1	-	+1900	-	1.9	RNP 1
020	DF	BULOG	-	-	+10.4	-	R	+FL120	-	1.9	RNP 1
IRLEM 1G											
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	UR100	Y	080(090.8)	+10.4	3.1	-	+1900	-	1.9	RNP 1
020	DF	IRLEM	-	-	+10.4	-	L	+FL120	-	1.9	RNP 1
KUSOT 1G											
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	UR100	Y	080(090.8)	+10.4	3.1	-	+1900	-	1.9	RNP 1
020	DF	KUSOT	-	-	+10.4	-	L	+FL120	-	1.9	RNP 1
SUKUR 1G											
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	UR100	Y	080(090.8)	+10.4	3.1	-	+1900	-	1.9	RNP 1
020	DF	SUKUR	-	-	+10.4	-	R	+FL120	-	1.9	RNP 1
TOMZU 1G											
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	UR100	Y	080(090.8)	+10.4	3.1	-	+1900	-	1.9	RNP 1
020	DF	TOMZU	-	-	+10.4	-	L	+FL120	-	1.9	RNP 1
TUSEP 1G											
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	UR100	Y	080(090.8)	+10.4	3.1	-	+1900	-	1.9	RNP 1
020	DF	TUSEP	-	-	+10.4	-	L	+FL120	-	1.9	RNP 1
UTEMU_1G											
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	UR100	Y	080(090.8)	+10.4	3.1	-	+1900	-	1.9	RNP 1
020	DF	UTEMU	-	-	+10.4	-	R	+FL120	-	1.9	RNP 1
VAMRI 1G											
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	UR100	Y	080(090.8)	+10.4	3.1	-	+1900	-	1.9	RNP 1
020	DF	VAMRI	-	-	+10.4	-	R	+FL120	-	1.9	RNP 1

WAYPOINT COORDINATES

WPT	COORD	
BULOG	500854.00N	0660036.00E
DER	501906.84N	0665811.75E
IRLEM	505353.00N	0672936.00E
KUSOT	502128.00N	0655110.00E
SUKUR	494431.00N	0661957.00E
TOMZU	504824.00N	0662645.00E
TUSEP	503136.00N	0680751.00E
UR100	501904.32N	0670259.19E
UTEMU	493757.00N	0671237.00E
VAMRI	501330.00N	0681645.00E

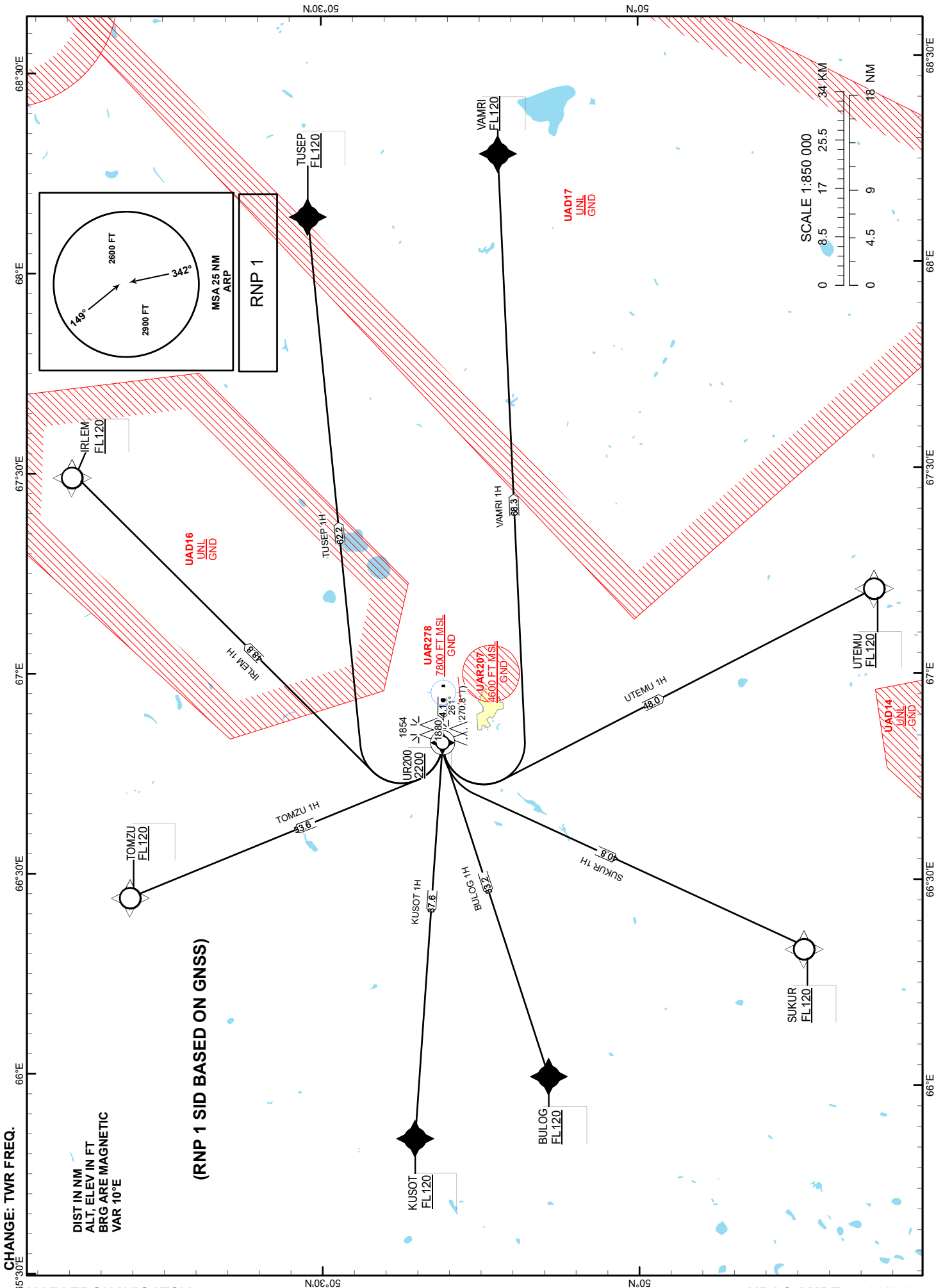
STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE 10000 FT

ARKALYK TOWER 134.3
ARKALYK ATIS (EN) 126.8
ARKALYK ATIS (RU) 126.8

BULOG1H, IRLEM1H, KUSOT1H, SUKUR1H, TOMZU1H, TUSEP1H, UTEMU1H, VAMRI1H

ARKALYK RWY 26



TABULAR DESCRIPTION RWY26

BULOG 1H											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA (°)	Navigation Specification
010	CF	UR200	Y	260(270.8)	+10.4	4.1	-	+2200	-	2.1	RNP 1
020	DF	BULOG	-	-	+10.4	-	L	+FL120	-	1.9	RNP 1
IRLEM 1H											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA (°)	Navigation Specification
010	CF	UR200	Y	260(270.8)	+10.4	4.1	-	+2200	-	2.1	RNP 1
020	DF	IRLEM	-	-	+10.4	-	R	+FL120	-	1.9	RNP 1

KUSOT 1H											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA (°)	Navigation Specification
010	CF	UR200	Y	260(270.8)	+10.4	4.1	-	+2200	-	2.1	RNP 1
020	DF	KUSOT	-	-	+10.4	-	-	+FL120	-	1.9	RNP 1

SUKUR 1H											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA (°)	Navigation Specification
010	CF	UR200	Y	260(270.8)	+10.4	4.1	-	+2200	-	2.1	RNP 1
020	DF	SUKUR	-	-	+10.4	-	L	+FL120	-	1.9	RNP 1
TOMZU 1H											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA (°)	Navigation Specification
010	CF	UR200	Y	260(270.8)	+10.4	4.1	-	+2200	-	2.1	RNP 1
020	DF	TOMZU	-	-	+10.4	-	R	+FL120	-	1.9	RNP 1

TUSEP 1H											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA (°)	Navigation Specification
010	CF	UR200	Y	260(270.8)	+10.4	4.1	-	+2200	-	2.1	RNP 1
020	DF	TUSEP	-	-	+10.4	-	R	+FL120	-	1.9	RNP 1
UTEMU 1H											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA (°)	Navigation Specification
010	CF	UR200	Y	260(270.8)	+10.4	4.1	-	+2200	-	2.1	RNP 1
020	DF	UTEMU	-	-	+10.4	-	L	+FL120	-	1.9	RNP 1
VAMRI 1H											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA (°)	Navigation Specification
010	CF	UR200	Y	260(270.8)	+10.4	4.1	-	+2200	-	2.1	RNP 1
020	DF	VAMRI	-	-	+10.4	-	L	+FL120	-	1.9	RNP 1

WAYPOINT COORDINATES

WPT	COORD	
BULOG	500854.00N	0660036.00E
DER	501907.92N	0665605.41E
IRLEM	505353.00N	0672936.00E
KUSOT	502128.00N	0655110.00E
SUKUR	494431.00N	0661957.00E
TOMZU	504824.00N	0662645.00E
TUSEP	503136.00N	0680751.00E
UR200	501911.06N	0664945.81E
UTEMU	493757.00N	0671237.00E
VAMRI	501330.00N	0681645.00E

STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

ARKALYK TOWER 134.3
ARKALYK ATIS (EN) 126.8
ARKALYK ATIS (RU) 126.8

BULOG1A, IRLEM1A, KUSOT1A, SUKUR1A, TOMZU1A, TUSEP1A, UTEMU1A, VAMRI1A

ARKALYK
RWY 08

66°30'E 67°E 67°30'E

51°N 50°30'N 50°N 49°30'N

DIST IN NM
ALT, ELEV IN FT
BRG ARE MAGNETIC
VAR 10°E

ALT/HEIGHT CONVERSION
QNH (QFE)
5000 (3727ft - 1136 m)

MSA 25 NM
ARK DVOR
149°
2600 FT
2900 FT
342°

IRLEM
50°53'53"N
067°29'36"E
017.2° / 39.2
FL120

TOMZU
50°48'24"N
066°26'45"E
313.3° / 36.7
FL120

TUSEP
50°31'36"N
068°07'51"E
063.2° / 44.4
FL120

KUSOT
50°21'28"N
065°51'10"E
263.3° / 44.9
FL120

VAMRI
50°13'30"N
068°16'45"E
086.1° / 48.7
FL120

BULOG
50°08'54"N
066°00'36"E
245.1° / 40.3
FL120

SUKUR
49°44'31"N
066°19'57"E
207.9° / 43.7
FL120

UTEMU
49°37'57"N
067°12'37"E
159.9° / 41.8
FL120

UAD16
UNL
GND

UAD17
UNL
GND

UAD14
UNL
GND

UAR278
7800 FT MSL
GND

UAR207
4600 FT MSL
GND

1854
1880

Holding
MNM 5000
1MIN

(IAF)
5000

ARKALYK
DVOR/DME 113
ARK
CH77X
50°19'04"N
067°01'18"E
1300 FT

TOMZU 1A
133°

IRLEM 1A
197°

TUSEP 1A
243°

KUSOT 1A
083°

VAMRI 1A
266°

BULOG 1A
065°

SUKUR 1A
027°

UTEMU 1A
339°

080°
260°

SCALE 1:750 000

0 7.5 15 22.5 30 KM
0 2 4 8 12 16 NM

CHANGE: TWR FREQ.

Standard Arrival Routes - Instrument (STAR) RWY 08
IRLEM 1A After crossing IRLEM (R017.2° D39.2NM ARK), proceed on track 197° to DVOR/DME ARK. Cross IRLEM at FL120 or above.
TUSEP 1A After crossing TUSEP (R063.2° D44.4NM ARK), proceed on track 243° to DVOR/DME ARK. Cross TUSEP at FL120 or above.
VAMRI 1A After crossing VAMRI (R086.1° D48.7NM ARK), proceed on track 266° to DVOR/DME ARK. Cross VAMRI at FL120 or above.
UTEMU 1A After crossing UTEMU (R159.9° D41.8NM ARK), proceed on track 339° to DVOR/DME ARK. Cross UTEMU at FL120 or above.
SUKUR 1A After crossing SUKUR (R207.9° D43.7NM ARK), proceed on track 027° to DVOR/DME ARK. Cross SUKUR at FL120 or above.
BULOG 1A After crossing BULOG (R245.1° D40.3NM ARK), proceed on track 065° to DVOR/DME ARK. Cross BULOG at FL120 or above.
KUSOT 1A After crossing KUSOT (R263.3° D44.9NM ARK), proceed on track 083° to DVOR/DME ARK. Cross KUSOT at FL120 or above.
TOMZU 1A After crossing TOMZU (R313.3° D36.7NM ARK), proceed on track 133° to DVOR/DME ARK. Cross TOMZU at FL120 or above.

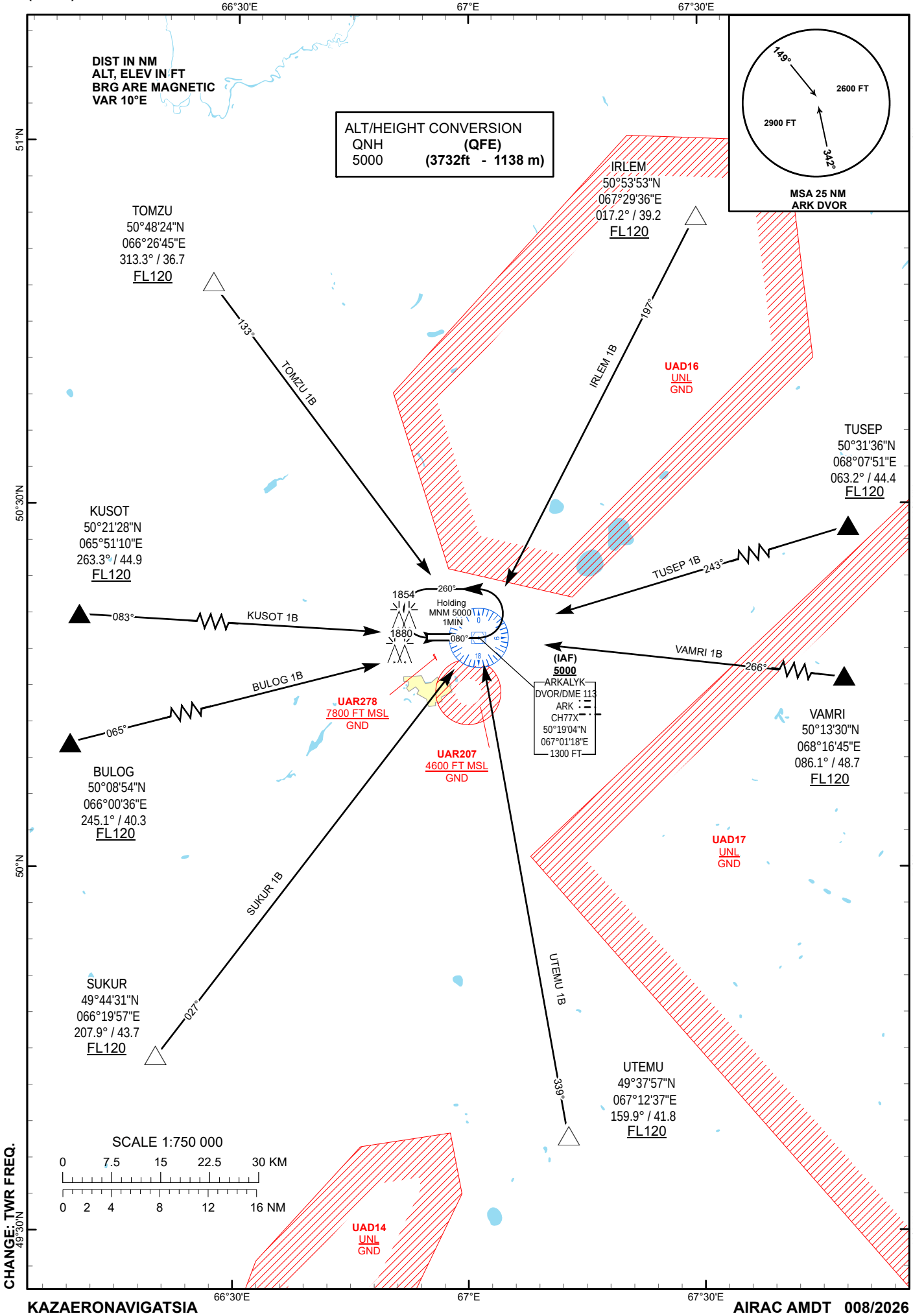
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

ARKALYK TOWER 134.3
ARKALYK ATIS (EN) 126.8
ARKALYK ATIS (RU) 126.8

BULOG1B, IRLEM1B, KUSOT1B, SUKUR1B, TOMZU1B, TUSEP1B, UTEMU1B, VAMRI1B

ARKALYK
RWY 26



CHANGE: TWR FREQ.

Standard Arrival Routes - Instrument (STAR) RWY 26
IRLEM 1B After crossing IRLEM (R017.2° D39.2NM ARK), proceed on track 197° to DVOR/DME ARK. Cross IRLEM at FL120 or above.
TUSEP 1B After crossing TUSEP (R063.2° D44.4NM ARK), proceed on track 243° to DVOR/DME ARK. Cross TUSEP at FL120 or above.
VAMRI 1B After crossing VAMRI (R086.1° D48.7NM ARK), proceed on track 266° to DVOR/DME ARK. Cross VAMRI at FL120 or above.
UTEMU 1B After crossing UTEMU (R159.9° D41.8NM ARK), proceed on track 339° to DVOR/DME ARK. Cross UTEMU at FL120 or above.
SUKUR 1B After crossing SUKUR (R207.9° D43.7NM ARK), proceed on track 027° to DVOR/DME ARK. Cross SUKUR at FL120 or above.
BULOG 1B After crossing BULOG (R245.1° D40.3NM ARK), proceed on track 065° to DVOR/DME ARK. Cross BULOG at FL120 or above.
KUSOT 1B After crossing KUSOT (R263.3° D44.9NM ARK), proceed on track 083° to DVOR/DME ARK. Cross KUSOT at FL120 or above.
TOMZU 1B After crossing TOMZU (R313.3° D36.7NM ARK), proceed on track 133° to DVOR/DME ARK. Cross TOMZU at FL120 or above.

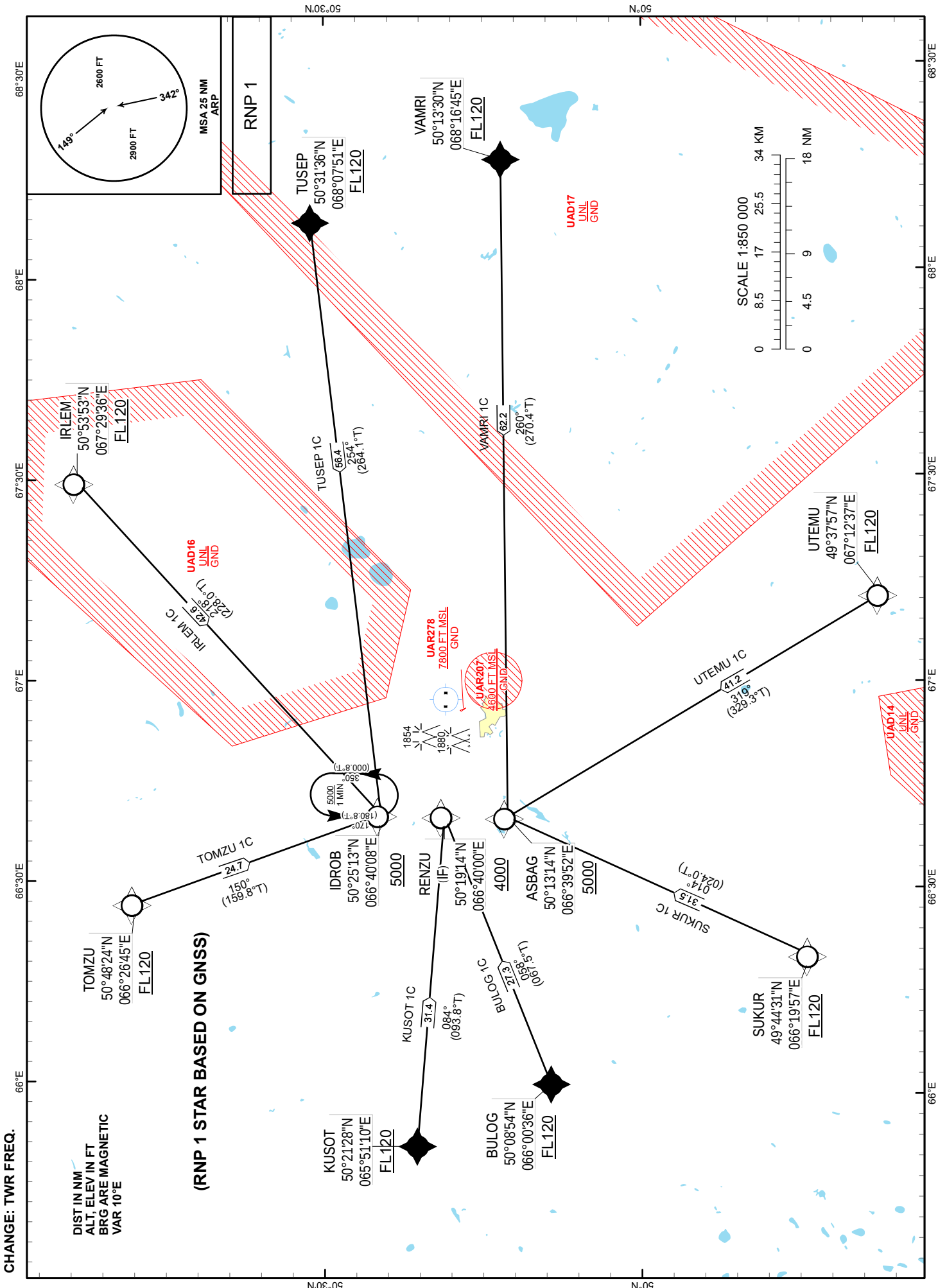
RNAV
STANDARD ARRIVAL CHART
INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

ARKALYK TOWER 134.3
ARKALYK ATIS (EN) 126.8
ARKALYK ATIS (RU) 126.8

BULOG 1C, IRLEM 1C, KUSOT 1C,
SUKUR 1C, TOMZU 1C, TUSEP 1C,
UTEMU 1C, VAMRI 1C

ARKALYK
RWY 08



(RNP 1 STAR BASED ON GNSS)

DIST IN NM
ALT, ELEV IN FT
BRG ARE MAGNETIC
VAR 10°E

CHANGE: TWR FREQ.

TABULAR DESCRIPTION RWY08

BULOG 1C											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA (°)	Navigation Specification
010	IF	BULOG	-		+10.4	-	-	+FL120	-	-	RNP 1
020	TF	RENZU	-	058(067.5)	+10.4	27.3	-	+4000	-	-	RNP 1
IRLEM 1C											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA (°)	Navigation Specification
010	IF	IRLEM	-		+10.4	-	-	+FL120	-	-	RNP 1
020	TF	IDROB	-	218(228.0)	+10.4	42.6	-	+5000	-	-	RNP 1
KUSOT 1C											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA (°)	Navigation Specification
010	IF	KUSOT	-		+10.4	-	-	+FL120	-	-	RNP 1
020	TF	RENZU	-	084(093.8)	+10.4	31.4	-	+4000	-	-	RNP 1
SUKUR 1C											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA (°)	Navigation Specification
010	IF	SUKUR	-		+10.4	-	-	+FL120	-	-	RNP 1
020	TF	ASBAG	-	014(024.0)	+10.4	31.5	-	+5000	-	-	RNP 1
TOMZU 1C											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA (°)	Navigation Specification
010	IF	TOMZU	-		+10.4	-	-	+FL120	-	-	RNP 1
020	TF	IDROB	-	150(159.8)	+10.4	24.7	-	+5000	-	-	RNP 1
TUSEP 1C											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA (°)	Navigation Specification
010	IF	TUSEP	-		+10.4	-	-	+FL120	-	-	RNP 1
020	TF	IDROB	-	254(264.1)	+10.4	56.4	-	+5000	-	-	RNP 1
UTEMU 1C											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA (°)	Navigation Specification
010	IF	UTEMU	-		+10.4	-	-	+FL120	-	-	RNP 1
020	TF	ASBAG	-	319(329.3)	+10.4	41.2	-	+5000	-	-	RNP 1
VAMRI 1C											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA (°)	Navigation Specification
010	IF	VAMRI	-		+10.4	-	-	+FL120	-	-	RNP 1
020	CF	ASBAG	-	260(270.4)	+10.4	62.2	-	+5000	-	-	RNP 1

WAYPOINT COORDINATES

WPT	COORD	
IDROB	502513.30N	0664007.50E
ASBAG	501314.10N	0663951.80E
BULOG	500854.00N	0660036.00E
RENZU	501913.66N	0663959.61E
IRLEM	505353.00N	0672936.00E
KUSOT	502128.00N	0655110.00E
SUKUR	494431.00N	0661957.00E
TOMZU	504824.00N	0662645.00E
TUSEP	503136.00N	0680751.00E
UTEMU	493757.00N	0671237.00E
VAMRI	501330.00N	0681645.00E

HOLDINGS

Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	IDROB	170 (180.8T)	1	L	5000FT	-	-	RNP 1

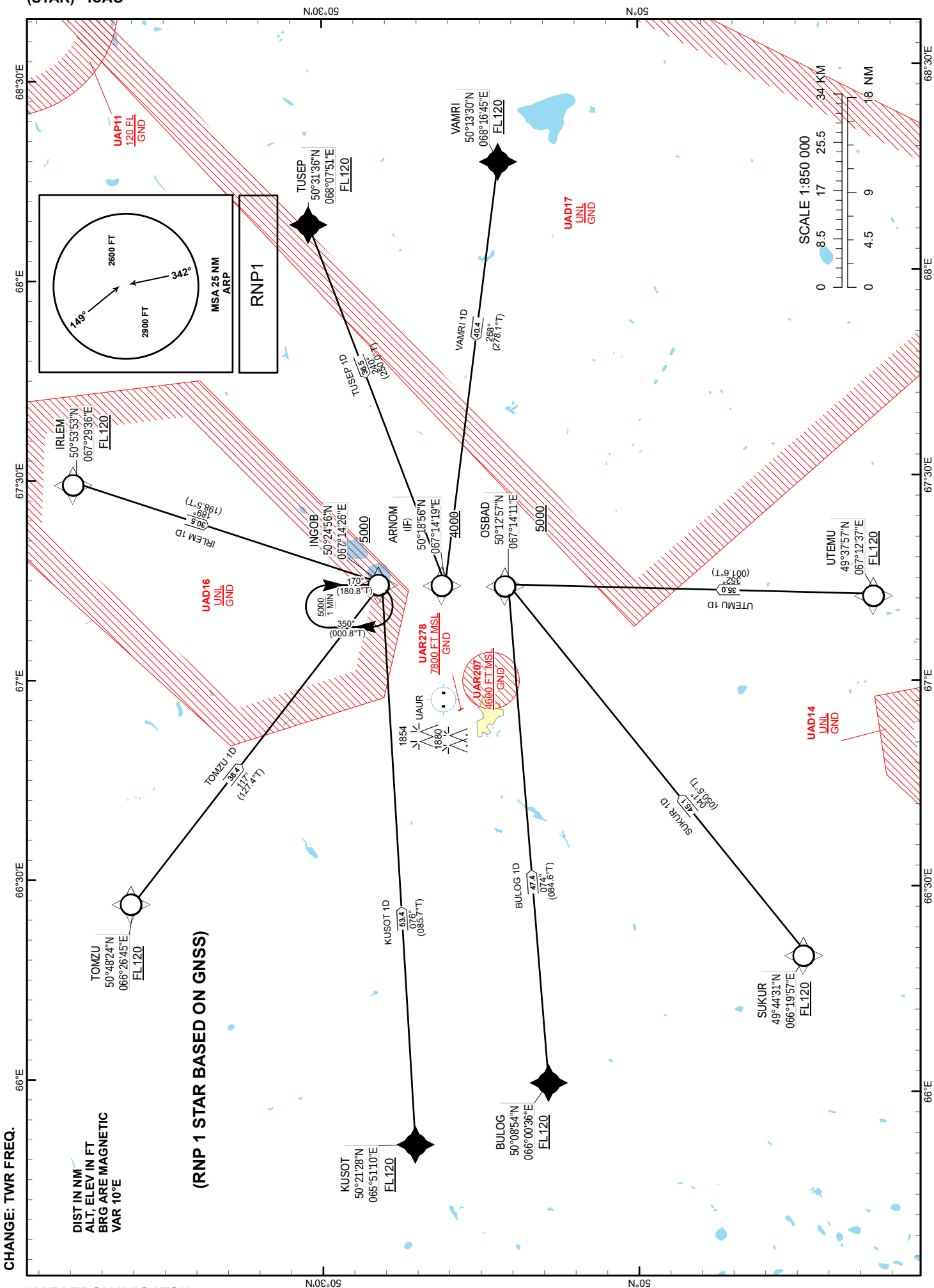
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

ARKALYK TOWER 134.3
ARKALYK ATIS (EN) 126.8
ARKALYK ATIS (RU) 126.8

BULOG 1D, IRLEM 1D, KUSOT 1D, SUKUR 1D, TOMZU 1D, TUSEP 1D, UTEMU 1D, VAMRI 1D

ARKALYK RWY 26



(RNP 1 STAR BASED ON GNSS)

DIST IN NM
ALT, ELEV IN FT
BRG ARE MAGNETIC
VAR 10°E

CHANGE: TWR FREQ.

TABULAR DESCRIPTION RWY26

BULOG 1D											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA (°)	Navigation Specification
010	IF	BULOG	-		+10.4	-	-	+FL120	-	-	RNP 1
020	TF	OSBAD	-	074(084.6)	+10.4	47.4	-	+5000	-	-	RNP 1
IRLEM 1D											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA (°)	Navigation Specification
010	IF	IRLEM	-		+10.4	-	-	+FL120	-	-	RNP 1
020	TF	INGOB	-	189(198.5)	+10.4	30.5	-	+5000	-	-	RNP 1
KUSOT 1D											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA (°)	Navigation Specification
010	IF	KUSOT	-		+10.4	-	-	+FL120	-	-	RNP 1
020	TF	INGOB	-	076(085.7)	+10.4	53.4	-	+5000	-	-	RNP 1
SUKUR 1D											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA (°)	Navigation Specification
010	IF	SUKUR	-		+10.4	-	-	+FL120	-	-	RNP 1
020	TF	OSBAD	-	041(050.5)	+10.4	45.0	-	+5000	-	-	RNP 1
TOMZU 1D											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA (°)	Navigation Specification
010	IF	TOMZU	-		+10.4	-	-	+FL120	-	-	RNP 1
020	TF	INGOB	-	117(127.4)	+10.4	38.3	-	+5000	-	-	RNP 1
TUSEP 1D											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA (°)	Navigation Specification
010	IF	TUSEP	-		+10.4	-	-	+FL120	-	-	RNP 1
020	TF	ARNOM	-	240(250.0)	+10.4	36.5	-	+4000	-	-	RNP 1
UTEMU 1D											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA (°)	Navigation Specification
010	IF	UTEMU	-		+10.4	-	-	+FL120	-	-	RNP 1
020	TF	OSBAD	-	352(001.6)	+10.4	35.0	-	+5000	-	-	RNP 1
VAMRI 1D											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA (°)	Navigation Specification
010	IF	VAMRI	-		+10.4	-	-	+FL120	-	-	RNP 1
020	TF	ARNOM	-	268(278.1)	+10.4	40.4	-	+4000	-	-	RNP 1

WAYPOINT COORDINATES

WPT	COORD	
BULOG	500854.00N	0660036.00E
INGOB	502456.10N	0671426.50E
OSBAD	501256.90N	0671410.80E
ARNOM	501856.47N	0671418.62E
IRLEM	505353.00N	0672936.00E
KUSOT	502128.00N	0655110.00E
SUKUR	494431.00N	0661957.00E
TOMZU	504824.00N	0662645.00E
TUSEP	503136.00N	0680751.00E
UTEMU	493757.00N	0671237.00E
VAMRI	501330.00N	0681645.00E

HOLDINGS

Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	IDGOB	170 (180.8T)	1	R	5000FT	-	-	RNP 1

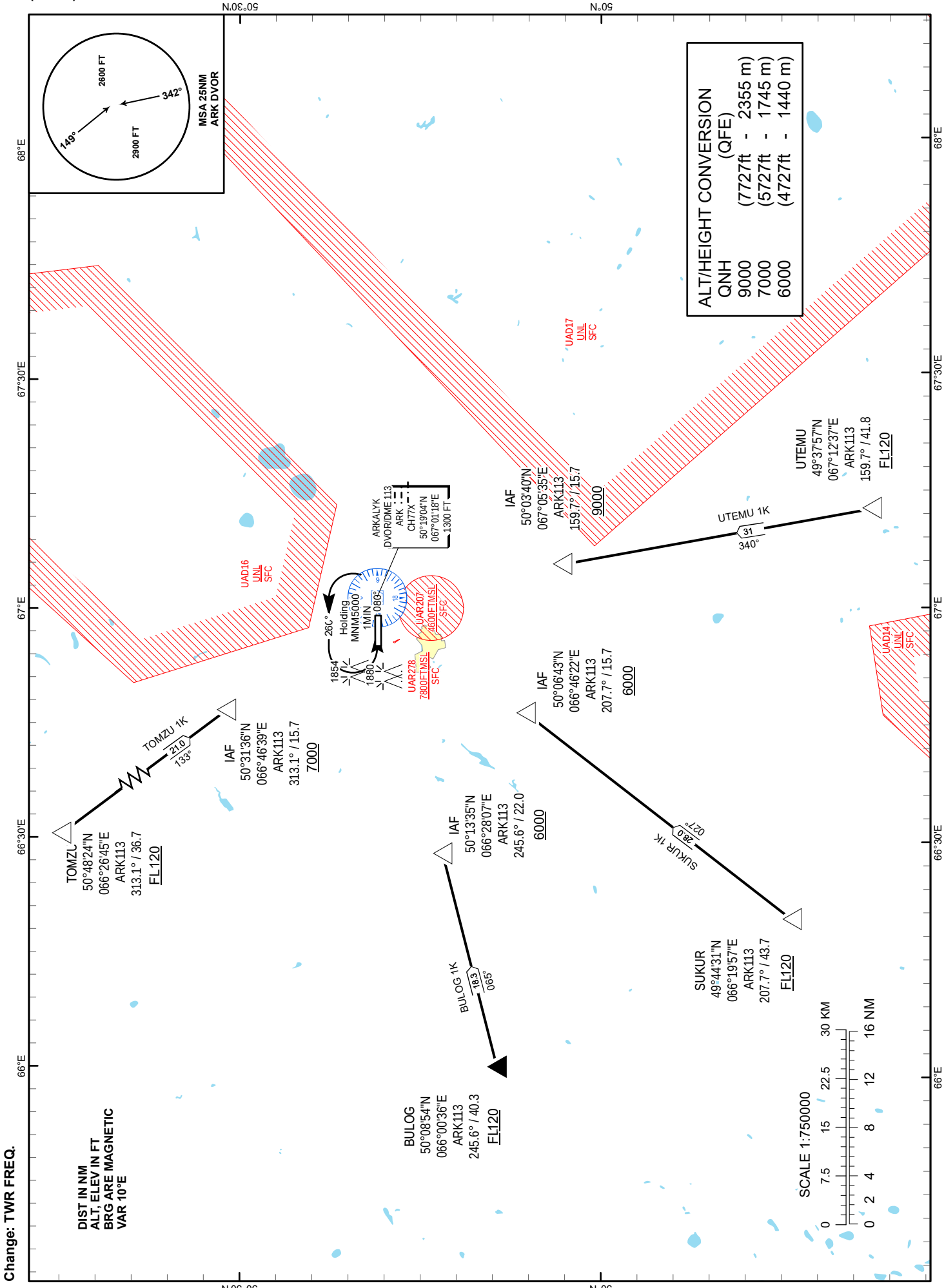
STANDARD ARRIVAL CHART- INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

ARKALYK TOWER 134.3
ARKALYK ATIS (EN) 126.8
ARKALYK ATIS (RU) 126.8

BULOG 1K, SUKUR 1K,
TOMZU 1K, UTEMU 1K

ARKALYK
RWY 08



Change: TWR FREQ.

Standard Arrival Routes Instrument (STAR) RWY 08
BULOG1K After crossing BULOG (R245.6° D40.3NM ARK), proceed on track 245.6° to IAF. Cross BULOG at FL120 or above. Cross IAF at 6000 FT.
SUKUR1K After crossing SUKUR (R207.7° D43.7NM ARK), proceed on track 207.7° to IAF. Cross SUKUR at FL120 or above. Cross IAF at 6000 FT.
UTEMU1K After crossing UTEMU (R159.7° D41.8NM ARK), proceed on track 159.7° to IAF. Cross UTEMU at FL120 or above. Cross IAF at 9000 FT.
TOMZU1K After crossing TOMZU (R313.1° D36.7NM ARK), proceed on track 313.1° to IAF. Cross TOMZU at FL120 or above. Cross IAF at 7000 FT or above.
KUSOT1K After crossing KUSOT (R260.6° D45.0NM ARK), proceed on track 260.6° to IF. Cross KUSOT at FL120 or above. Cross IF at 4000 FT or above.

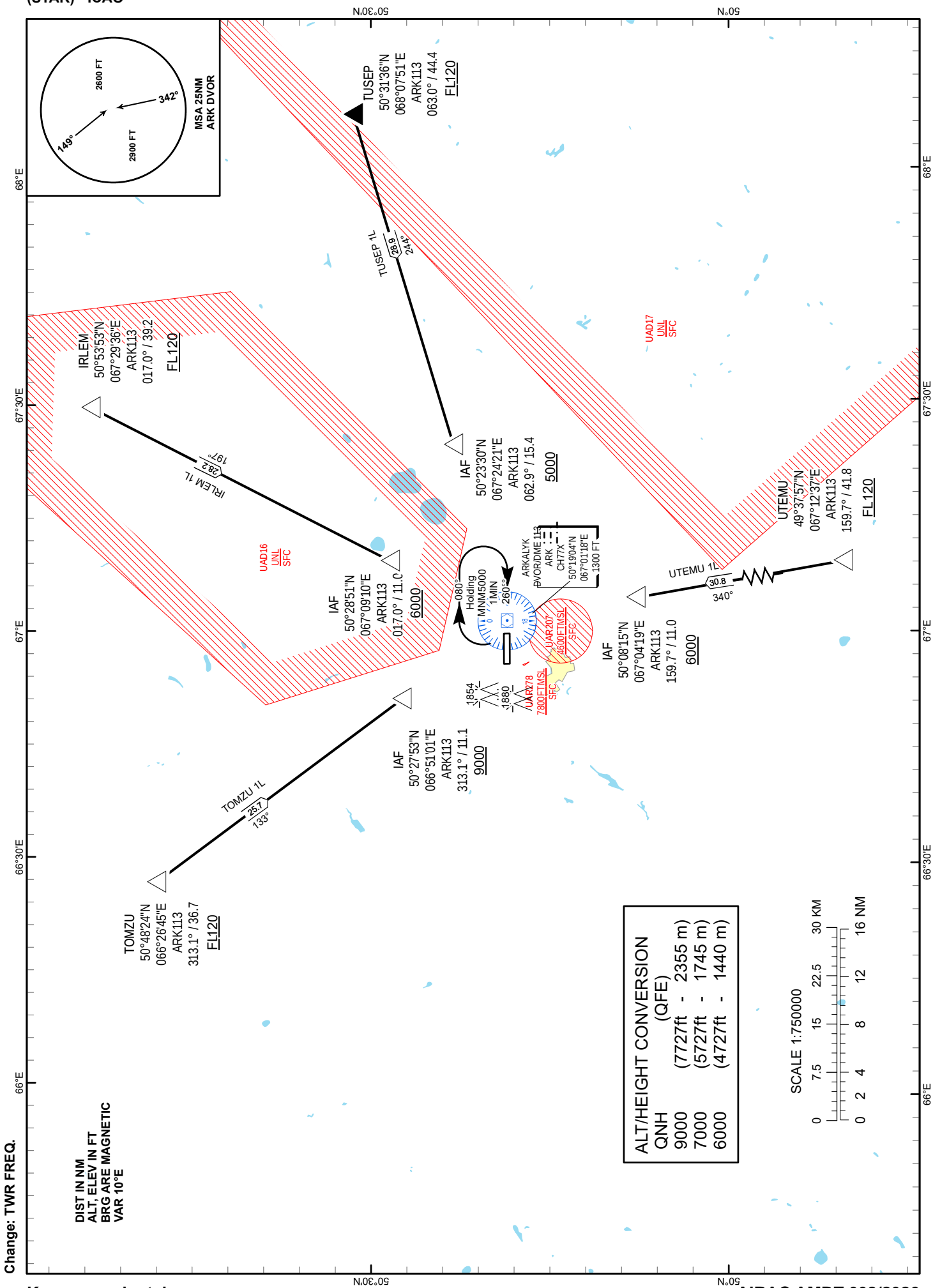
STANDARD ARRIVAL CHART- INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE 10000 FT

ARKALYK TOWER 134.3
ARKALYK ATIS (EN) 126.8
ARKALYK ATIS (RU) 126.8

IRLEM 1L, TUSEP 1L, TOMZU 1L, UTEMU 1L

ARKALYK RWY 26



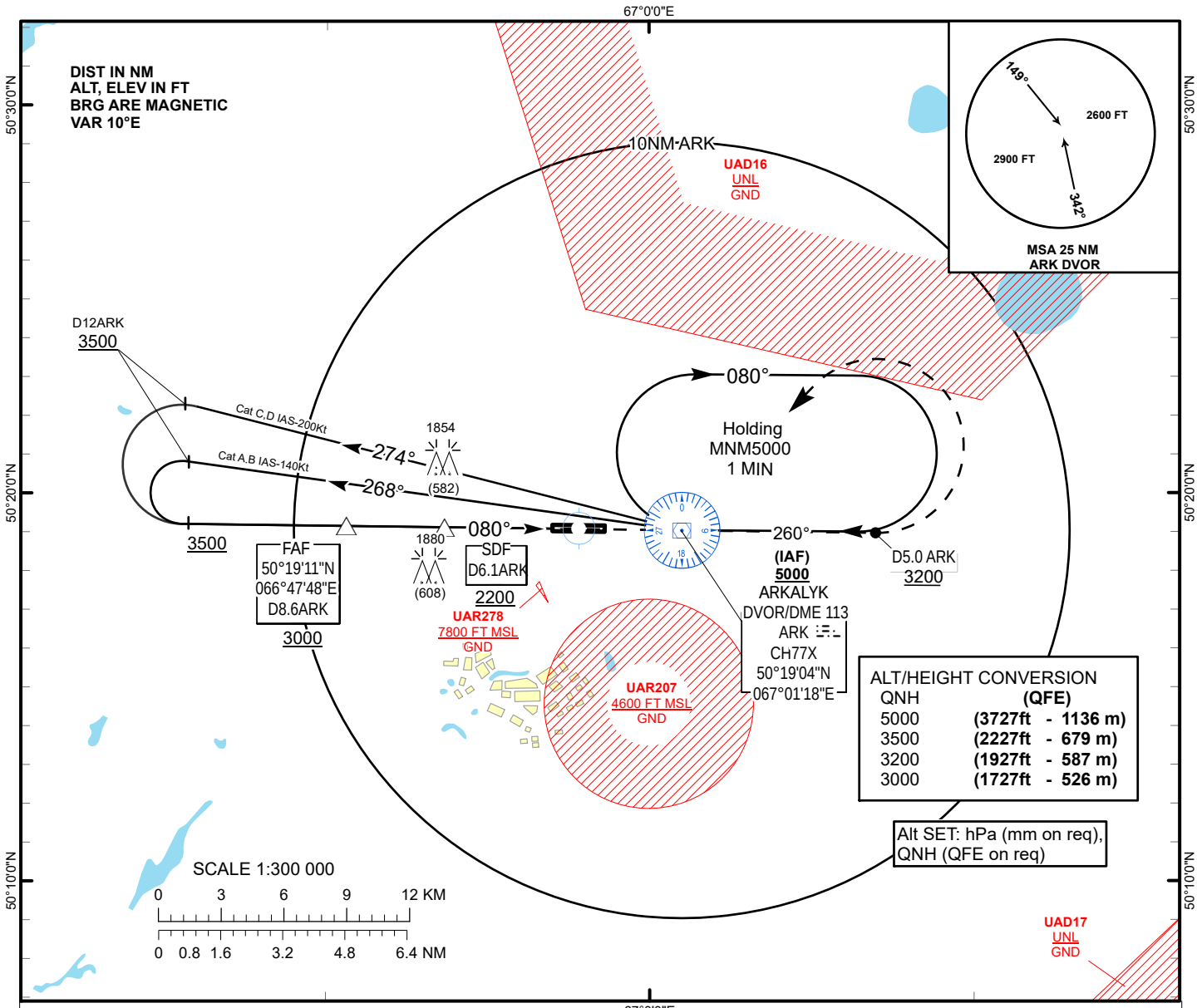
Standard Arrival Routes Instrument (STAR) RWY 26
UTEMU1L After crossing UTEMU (R159.7° D41.8NM ARK), proceed on track 159.7° to IAF. Cross UTEMU at FL120 or above. Cross IAF at 6000.
TUSEP1L After crossing TUSEP (R063.0° D44.4NM ARK), proceed on track 062.9° to IAF. Cross TUSEP at FL120 or above. Cross IAF at 5000.
IRLEM1L After crossing IRLEM (R017.0° D39.2NM ARK), proceed on track 017.0° to IAF. Cross IRLEM at FL120 or above. Cross IAF at 6000.
TOMZU1L After crossing TOMZU (R313.1° D36.7NM ARK), proceed on track 313.1° to IAF. Cross TOMZU at FL120 or above. Cross IAF at 9000.
VAMRI1L After crossing VAMRI (R080.6° D48.7NM ARK), proceed on track 080.6° to IF. Cross VAMRI at FL120 or above. Cross IF at 4000.

INSTRUMENT APPROACH CHART - ICAO

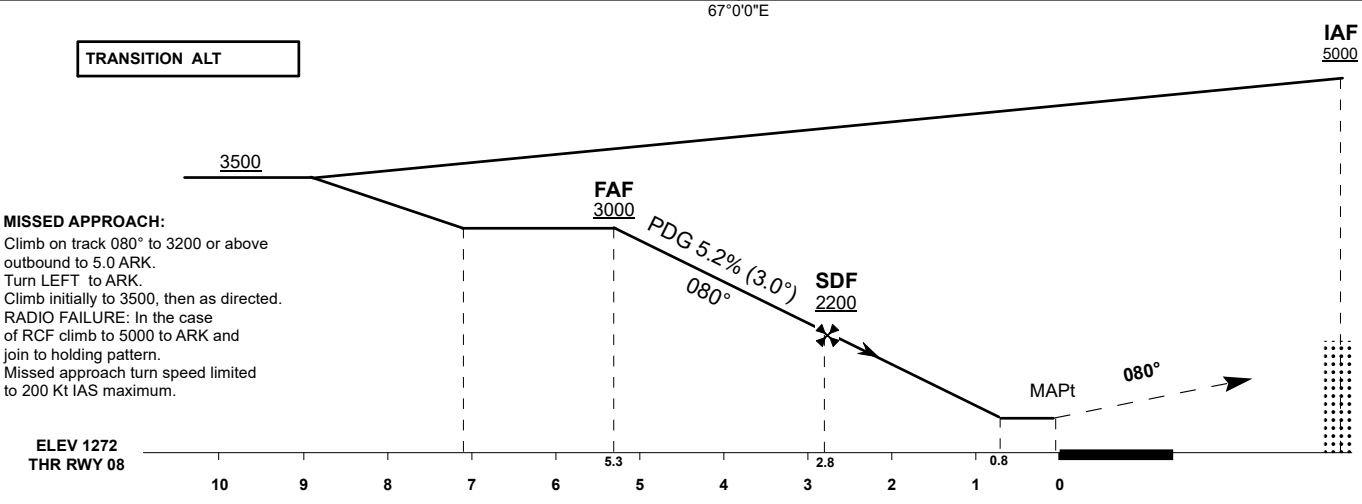
AERODROME ELEV 1273 FT
HEIGHTS RELATED TO
AD ELEV

ARKALYK TOWER 134.3
ARKALYK ATIS (EN) 126.8
ARKALYK ATIS (RU) 126.8

ARKALYK VOR/DME Z RWY 08



TRANSITION ALT



MISSED APPROACH:
Climb on track 080° to 3200 or above outbound to 5.0 ARK.
Turn LEFT to ARK.
Climb initially to 3500, then as directed.
RADIO FAILURE: In the case of RCF climb to 5000 to ARK and join to holding pattern.
Missed approach turn speed limited to 200 Kt IAS maximum.

OCA (OCH)		A	B	C	D
Straight-in Approach OCA/H	VOR/DME	1573(300)			

DIST THR	5.3	5	4	3	2	1
DME ARK	8.6	8.3	7.3	6.3	5.3	4.3
ALTITUDE	3000	2915	2595	2275	1955	1641
HEIGHT	(1727)	(1642)	(1322)	(1002)	(682)	(368)

GS	Kt	80	100	120	140	160	180
Rate of descent (5.2%)	ft/min	420	530	640	740	850	950
FAF-MAPT (5.3 NM)	min:sec	3:58	3:11	2:39	2:16	1:59	1:46

CHANGE: TWR FREQ.

VOR/DME Z **AERONAUTICAL DATA TABULATION**

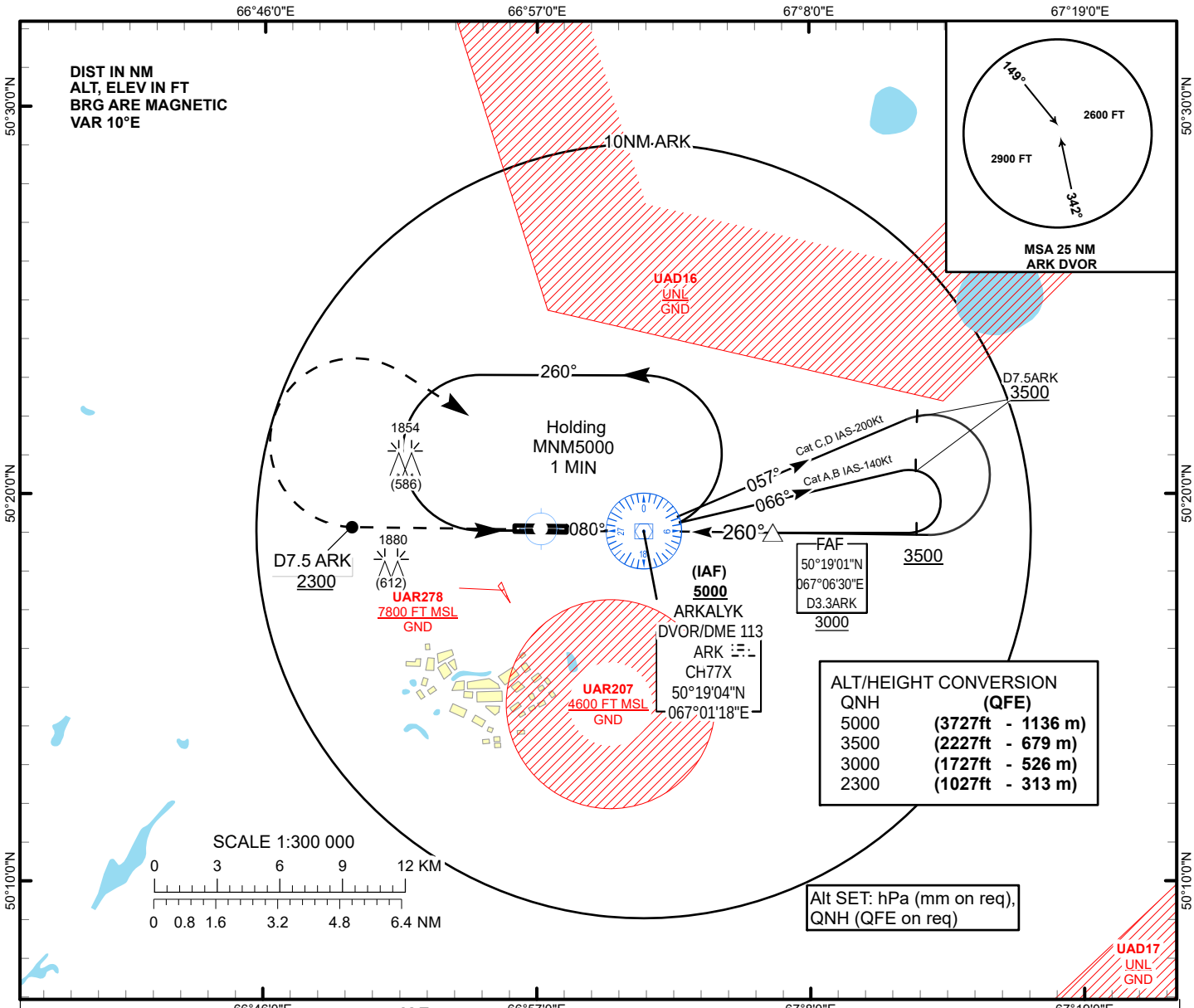
VOR/DME approach to RWY08 from ARK DVOR/DME	
Fix/point	Coordinates
ARK DVOR/DME (IAF)	50° 19’ 04.18”N 067° 01’ 17.93”E
(SDF) D6.1 ARK	50° 19’ 08.91”N 066° 51’ 44.99”E
(FAF) D 8.6 ARK	50° 19' 10.64”N 066° 47' 47.89”E
THR RWY 08	50° 19' 07.92”N 66° 56' 05.39”E
Final approach descent angle is 3°	

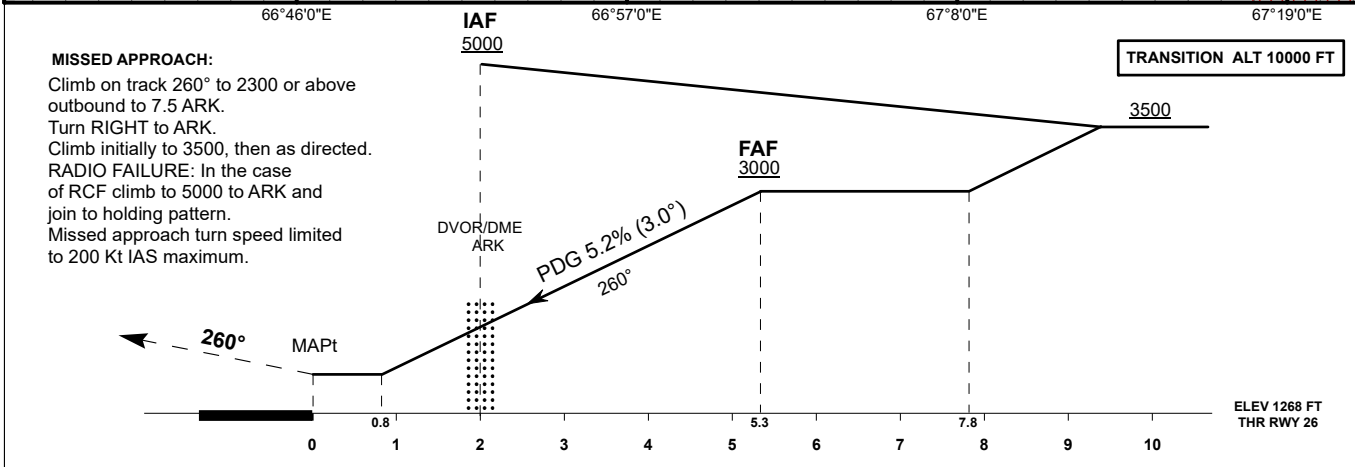
INSTRUMENT APPROACH CHART - ICAO

AERODROME ELEV 1273 FT
HEIGHTS RELATED TO
AD ELEV

ARKALYK TOWER 134.3
ARKALYK ATIS (EN) 126.8
ARKALYK ATIS (RU) 126.8

ARKALYK VOR/DME Z RWY 26





MISSED APPROACH:
Climb on track 260° to 2300 or above outbound to 7.5 ARK.
Turn RIGHT to ARK.
Climb initially to 3500, then as directed.
RADIO FAILURE: In the case of RCF climb to 5000 to ARK and join to holding pattern.
Missed approach turn speed limited to 200 Kt IAS maximum.

OCA (OCH)		A	B	C	D
Straight-in Approach OCA/H	VOR/DME	1573(300)			

DIST THR	5.3	5	4	3	2	1
DME ARK	3.3	3	2	1	0	1
ALTITUDE	3000	2915	2595	2275	1955	1641
HEIGHT	(1727)	(1642)	(1322)	(1002)	(682)	(368)

GS	Kt	80	100	120	140	160	180
Rate of descent (5.2%)	ft/min	420	530	640	740	850	950
FAF-MAPT (5.3 NM)	min:sec	3:58	3:11	2:39	2:16	1:59	1:46

CHANGE: TWR FREQ.

VOR/DME Z **AERONAUTICAL DATA TABULATION**

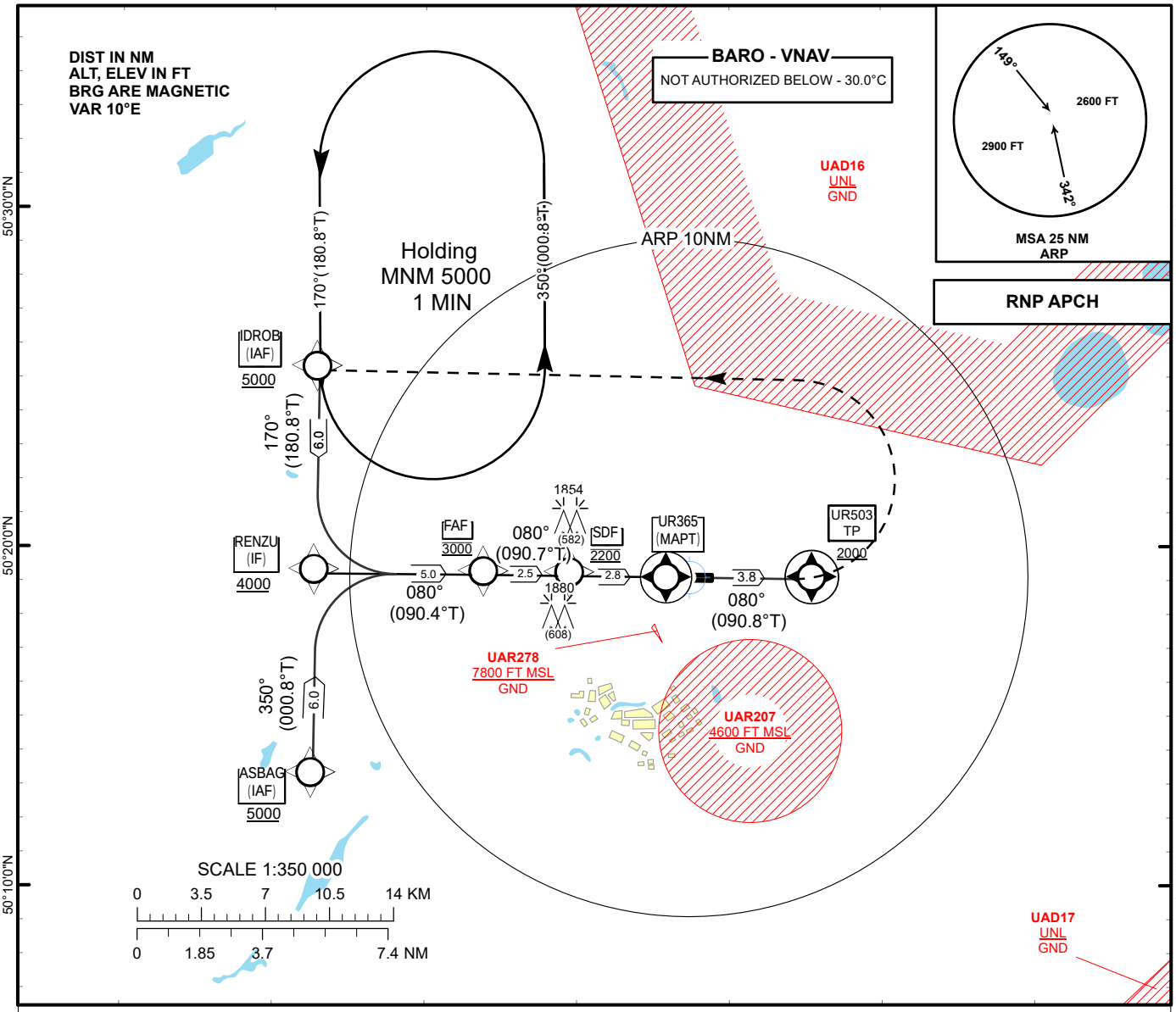
VOR/DME approach to RWY26 from ARK DVOR/DME	
Fix/point	Coordinates
ARK DVOR/DME (IAF)	50° 19’ 04.18”N 067° 01’ 17.93”E
(FAF) D3.3ARK	50° 19' 01.27"N 067° 06' 30.43"E
THR RWY 26	43° 52’ 03.01”N 051° 04’ 29.51”E
Final approach descent angle is 3°	

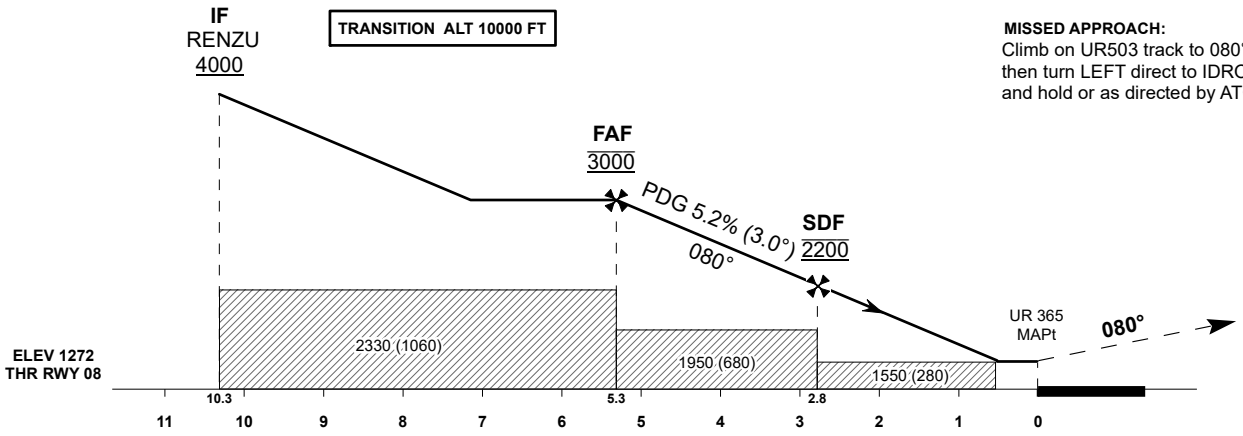
INSTRUMENT APPROACH CHART
ICAO

AERODROME ELEV 1273 FT
HEIGHTS RELATED TO AD ELEV

ARKALYK TOWER 134.3
ARKALYK ATIS (EN) 126.8
ARKALYK ATIS (RU) 126.8

ARKALYK
RNP RWY 08





MISSED APPROACH:
Climb on UR503 track to 080°
then turn LEFT direct to IDROB
and hold or as directed by ATC

Aircraft Category		A	B	C	D
Straight-in Approach	LNAV	1550(280)			
	LNAV/VNAV	1433(160)	1446(173)	1465(192)	1486(213)

DIST THR	5.3	5	4	3	2	1
ALTITUDE	3000	2915	2595	2275	1955	1641
HEIGHT	(1727)	(1642)	(1322)	(1002)	(682)	(368)

GS	Kt	80	100	120	140	160	180
Rate of descent (5.2%)	ft/min	420	530	640	740	850	950
FAF-MAPT (5.3 NM)	min:sec	3:58	3:11	2:39	2:16	1:59	1:46

CHANGE: TWR FREQ.

TABULAR DESCRIPTION

RNP RWY08											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
010	IF	ASBAG	-	-	+10.41	-	-	+5000	-	-	RNP APCH
020	TF	RENZU	-	350(000.8)	+10.41	6.0	-	+4000	-	-	RNP APCH
010	IF	IDROB	-	-	+10.41	-	-	+5000	-	-	RNP APCH
020	CF	RENZU	-	170(180.8)	+10.41	6.0	-	+4000	-	-	RNP APCH
010	IF	RENZU	-	-	+10.41	-	-	+4000	-	-	RNP APCH
020	TF	FAF	-	080(090.4)	+10.41	5.0	-	+3000	-	-	RNP APCH
030	TF	SDF	-	080(090.7)	+10.41	2.5	-	+2200	-	-3	RNP APCH
040	TF	UR365	Y	080(090.8)	+10.41	2.8	-	@1300	-	-3	RNP APCH
050	CA	UR503	Y	080(090.8)	+10.41	3.8	-	+2000	-	+1.4	RNP APCH
060	DF	IDROB	-		+10.41	23.3	L	+5000	-	+1.4	RNP APCH

WAYPOINT LIST

Waypoints Identifier	Coordinates	
IDROB	502513.30N	0664007.50E
ASBAG	501314.10N	0663951.80E
FAF	501911.79N	0664747.91E
RENZU	501913.66N	0663959.61E
SDF	501910.02N	0665145.02E
UR365	501907.92N	0665605.39E
UR503	501904.82N	0670157.90E

HOLDINGS

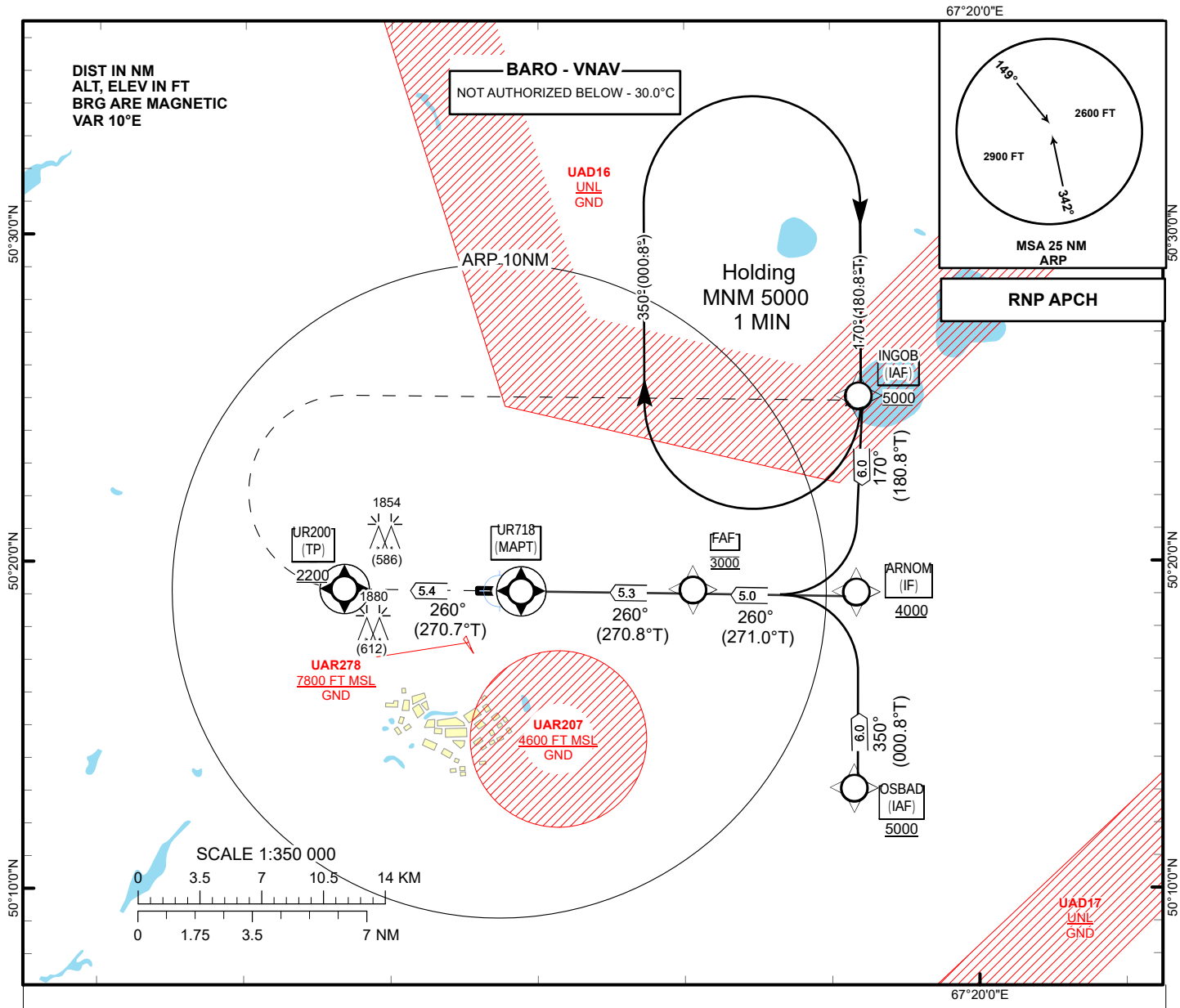
Path De-scriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Di-rection	Minimum Altitude	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	IDROB	170 (180.8T)	1	L	5000FT	-	-	RNP 1

INSTRUMENT APPROACH CHART - ICAO

AERODROME ELEV 1273 FT
HEIGHTS RELATED TO
AD ELEV

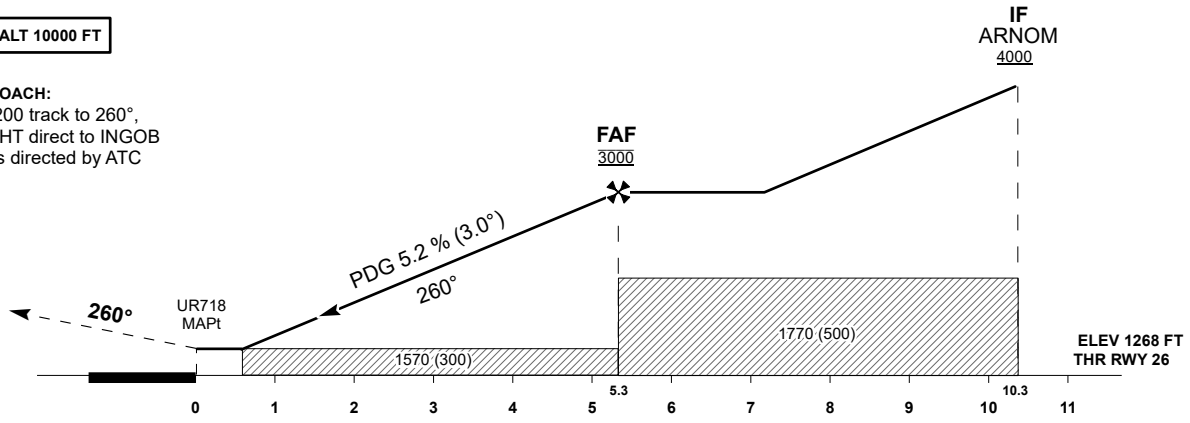
ARKALYK TOWER 134.3
ARKALYK ATIS (EN) 126.8
ARKALYK ATIS (RU) 126.8

ARKALYK
RNP RWY 26



TRANSITION ALT 10000 FT

MISSED APPROACH:
Climb on UR200 track to 260°,
then turn RIGHT direct to INGOB
and hold or as directed by ATC



Aircraft Category		A	B	C	D
Straight	LNAV	1570(300)			
	LNAV/VNAV	1438(165)	1450(177)	1468(195)	1483(210)

DIST THR	5.3	5	4	3	2	1
ALTITUDE	3000	2915	2595	2275	1955	1641
HEIGHT	(1727)	(1642)	(1322)	(1002)	(682)	(368)

GS	Kt	80	100	120	140	160	180
Rate of descent (5.2%)	ft/min	420	530	640	740	850	950
FAF-MAPT (5.3 NM)	min:sec	3:58	3:11	2:39	2:16	1:59	1:46

CHANGE: TWR FREQ.

TABULAR DESCRIPTION

RNP RWY26											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
010	IF	INGOB	-		+10.41	-	-	+5000	-	-	RNP APCH
020	TF	ARNOM	-	170(180.8)	+10.41	6.0	-	+4000	-	-	RNP APCH
010	IF	OSBAD	-		+10.41	-	-	+5000	-	-	RNP APCH
020	TF	ARNOM	-	350(000.8)	+10.41	6.0	-	+4000	-	-	RNP APCH
010	IF	ARNOM	-		+10.41	-	-	+4000	-	-	RNP APCH
020	TF	FAF	-	260(271.0)	+10.41	5.0	-	+3000	-	-	RNP APCH
030	TF	UR718	Y	260(270.8)	+10.41	5.3	-	@1300	-	-3	RNP APCH
040	CF	UR200	Y	260(270.7)	+10.41	5.4	-	+2200	-	+1.4	RNP APCH
050	DF	INGOB	-		+10.41	25.0	R	+5000	-	+1.4	RNP APCH

WAYPOIN LIST

Waypoints Identifier	Coordinates	
INGOB	502456.10N	0671426.50E
OSBAD	501256.90N	0671410.80E
FAF	501902.19N	0670630.46E
ARNOM	501856.47N	0671418.62E
UR200	501911.06N	0664945.81E
UR718	501906.84N	0665811.77E

HOLDINGS

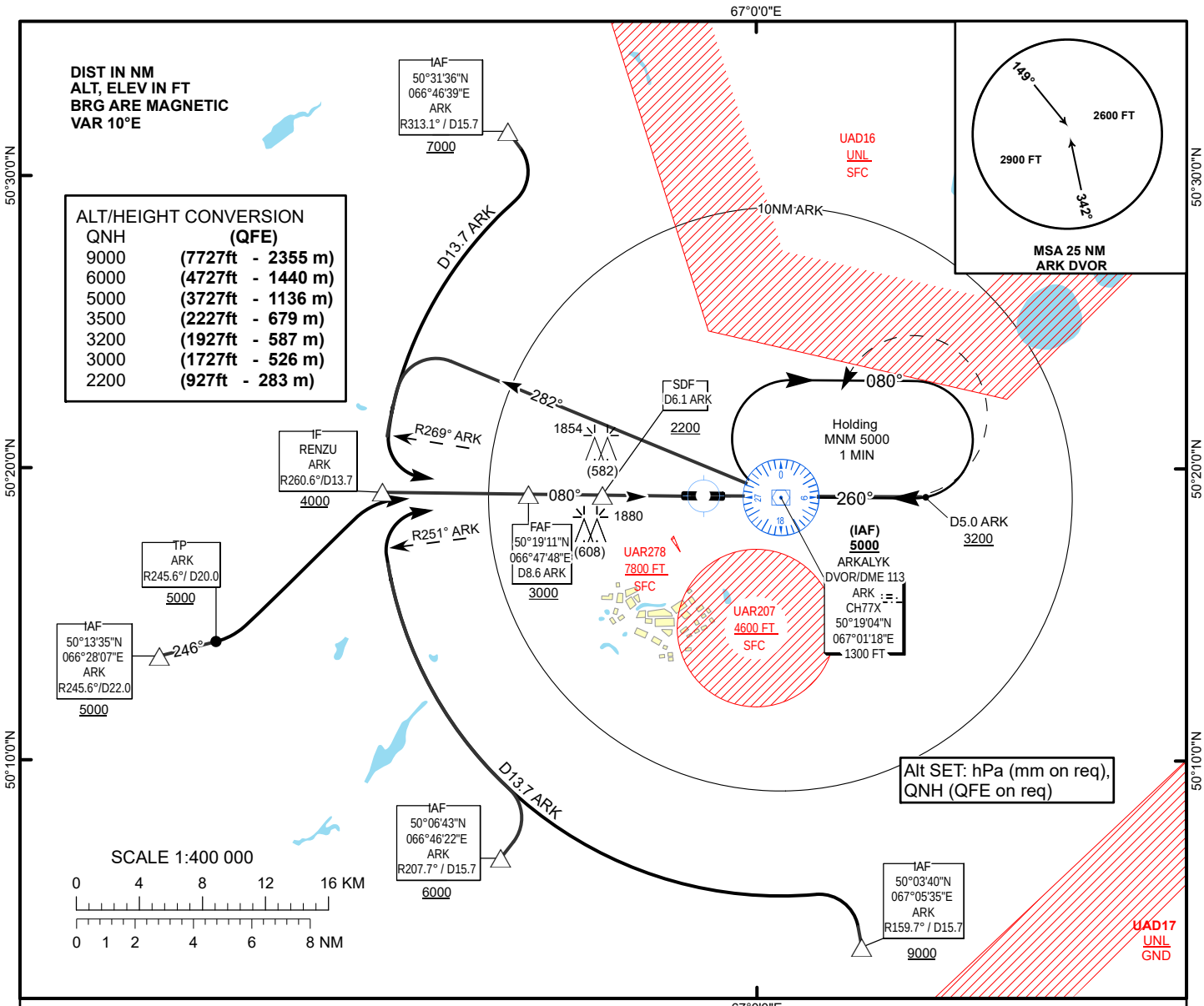
Path De-scriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Di-rection	Minimum Altitude	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	IDGOB	170 (180.8T)	1	R	5000FT	-	-	RNP 1

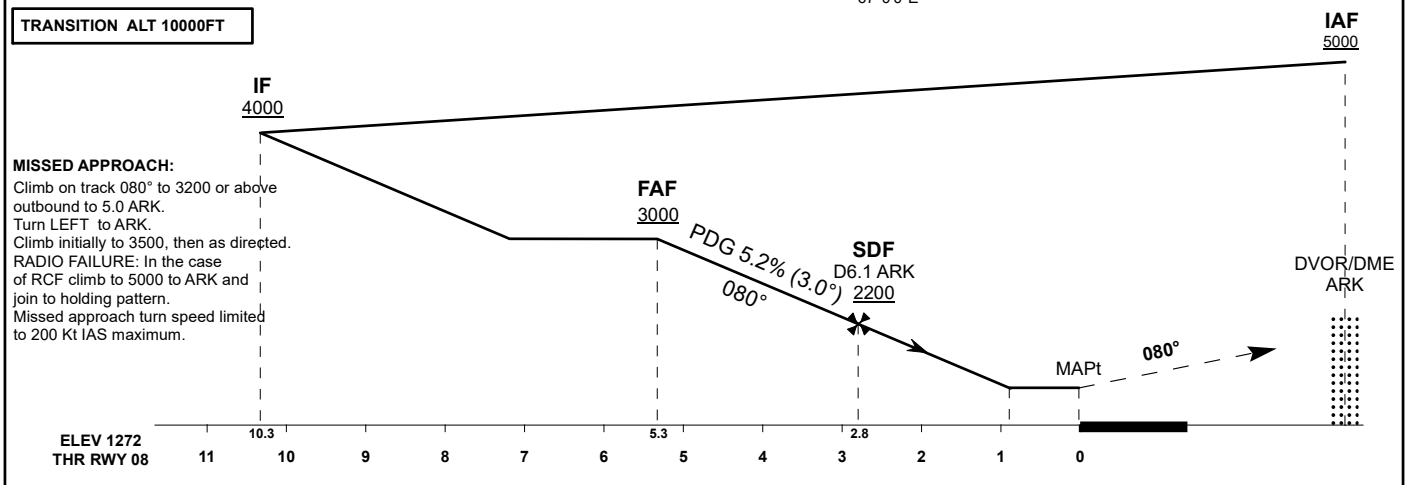
INSTRUMENT APPROACH CHART - ICAO

AERODROME ELEV 1273 FT
HEIGHTS RELATED TO AD ELEV

ARKALYK TOWER 134.3
ARKALYK ATIS (EN) 126.8
ARKALYK ATIS (RU) 126.8

ARKALYK VOR/DME RWY 08





OCA (OCH)		A	B	C	D
Straight-in Approach OCA/H	VOR/DME	1573(300)			

DIST THR	5.3	5	4	3	2	1
DME ARK	8.6	8.3	7.3	6.3	5.3	4.3
ALTITUDE	3000	2915	2595	2275	1955	1641
HEIGHT	(1727)	(1642)	(1322)	(1002)	(682)	(368)

GS	Kt	80	100	120	140	160	180
Rate of descent (5.2%)	ft/min	420	530	640	740	850	950
FAF-MAPT (5.3 NM)	min:sec	3:58	3:11	2:39	2:16	1:59	1:46

CHANGE: TWR FREQ.

VOR/DME **AERONAUTICAL DATA TABULATION**

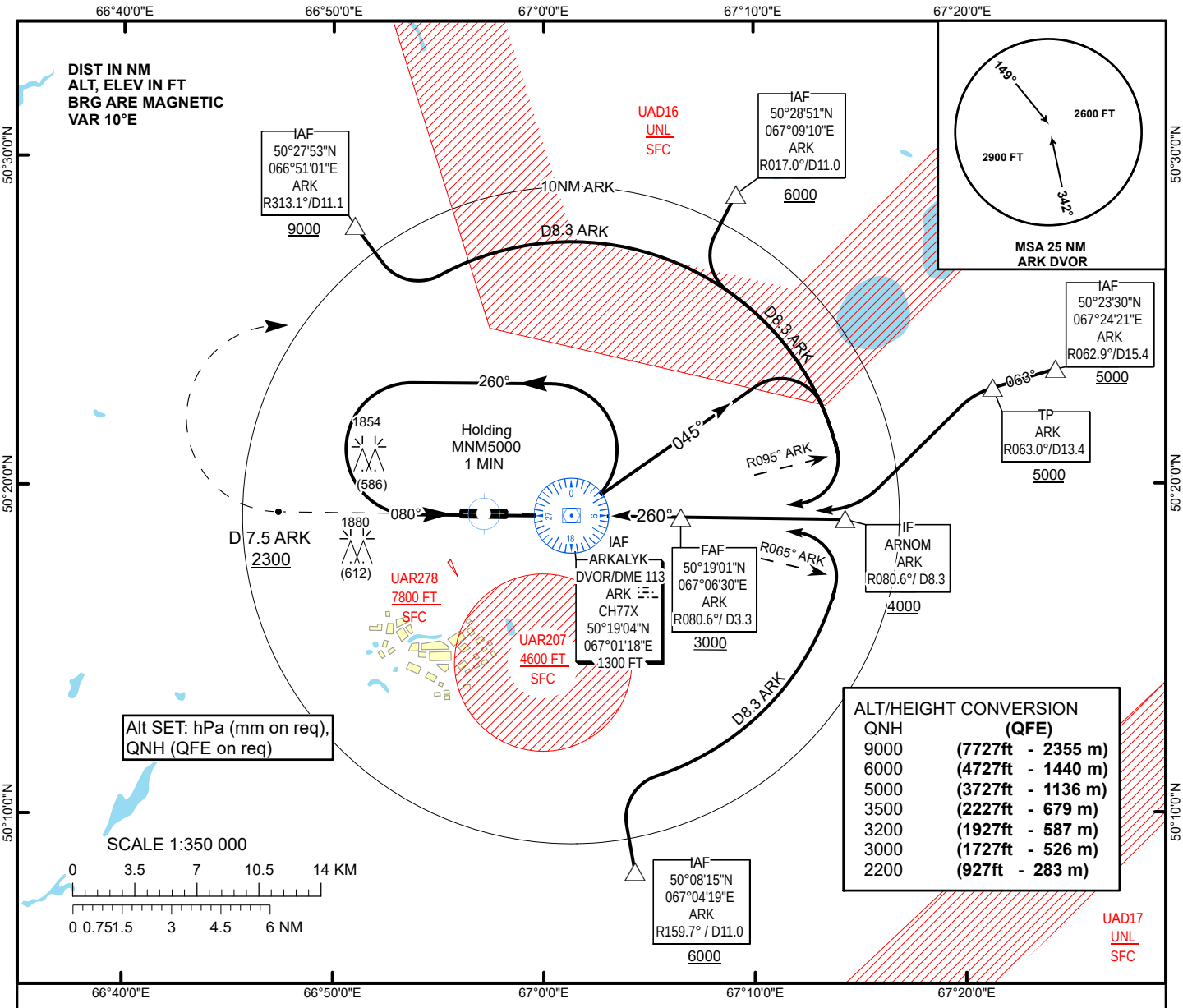
VOR/DME approach to RWY08 from ARK DVOR/DME	
Fix/point	Coordinates
ARK DVOR/DME	50° 19’ 04.18”N 067° 01’ 17.93”E
(FAF) D 8.6NM ARK	50° 19’ 10.64”N 066° 47’ 47.89”E
(SDF) D6.1NM ARK	50° 19’ 10.02”N 066° 51’ 45.02”E
RENZU (IF) D13.7NM ARK	50° 19’ 13.66”N 066° 39’ 59.61”E
THR RWY 08	50° 19’ 07.92”N 066° 56’ 05.39”E
Final approach descent angle is 3°	

INSTRUMENT APPROACH CHART - ICAO

AERODROME ELEV 1273 FT
HEIGHTS RELATED TO
AD ELEV

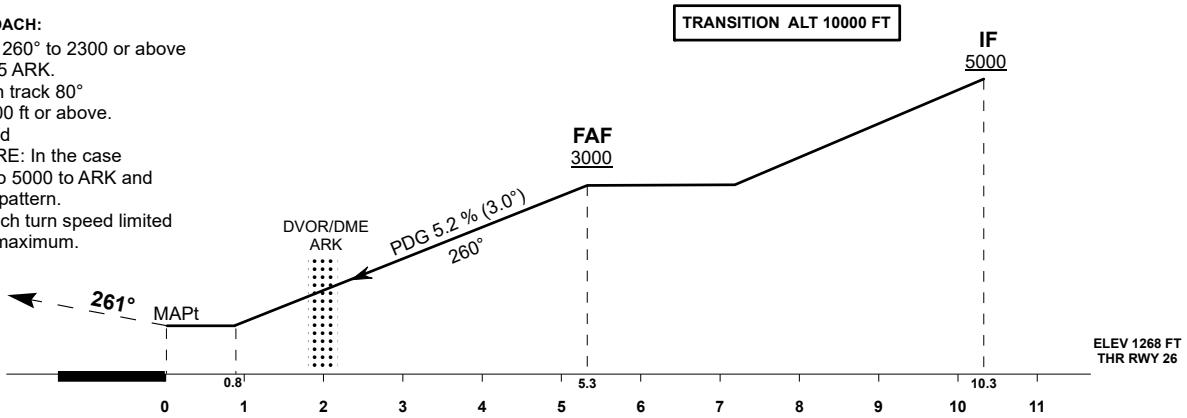
ARKALYK TOWER 134.3
ARKALYK ATIS (EN) 126.8
ARKALYK ATIS (RU) 126.8

ARKALYK VOR/DME RWY 26



MISSED APPROACH:
Climb on track 260° to 2300 or above outbound to 7.5 ARK.
Turn RIGHT on track 80° climbing to 5000 ft or above.
then as directed
RADIO FAILURE: In the case of RCF climb to 5000 to ARK and join to holding pattern.
Missed approach turn speed limited to 200 Kt IAS maximum.

TRANSITION ALT 10000 FT



OCA (OCH)		A	B	C	D
Straight-in Approach OCA/H	VOR/DME	1573(300)			

DIST THR	5.3	5	4	3	2	1
DME ARK	3.3	3	2	1	0	1
ALTITUDE	3000	2915	2595	2275	1955	1641
HEIGHT	(1727)	(1642)	(1322)	(1002)	(682)	(368)

GS	Kt	80	100	120	140	160	180
Rate of descent (5.2%)	ft/min	420	530	640	740	850	950
FAF-MAPT (5.3 NM)	min:sec	3:58	3:11	2:39	2:16	1:59	1:46

CHANGE: TWR FREQ.

VOR/DME **AERONAUTICAL DATA TABULATION**

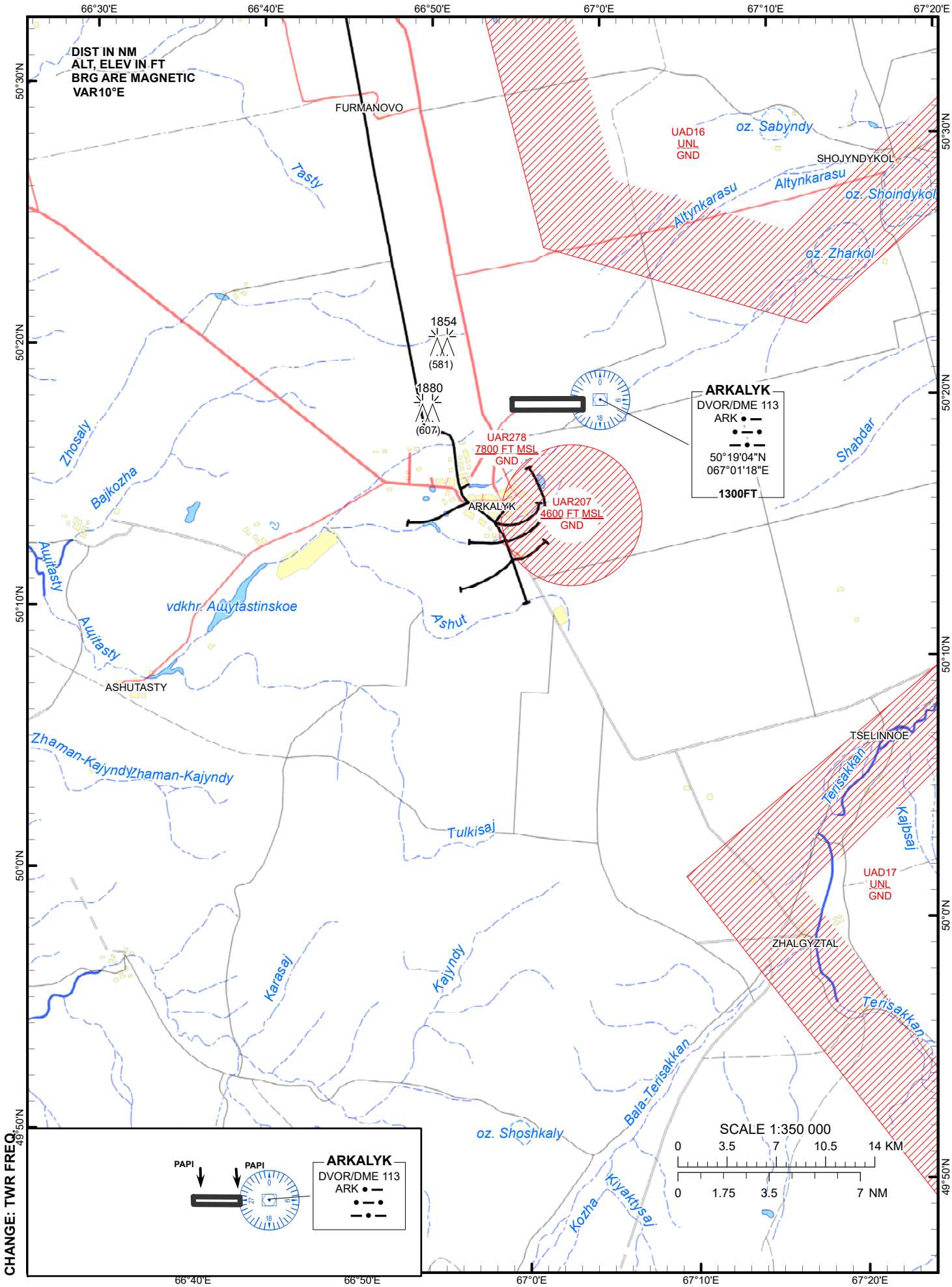
VOR/DME approach to RWY26 from ARK DVOR/DME	
Fix/point	Coordinates
ARK DVOR/DME	50° 19’ 04.18”N 067° 01’ 17.93”E
ARNOM (IF) D8.3NM ARK	50° 18’ 56.47”N 067° 14’ 18.62”E
(FAF) D3.3NM ARK	50° 19' 01.27"N 067° 06' 30.43"E
THR RWY 26	43° 52’ 03.01”N 051° 04’ 29.51”E
Final approach descent angle is 3°	

VISUAL APPROACH CHART - ICAO

AERODROME ELEV 1273 FT
HEIGHTS RELATED TO
AD ELEV

ARKALYK TOWER 134.3
ARKALYK ATIS (EN) 126.8
ARKALYK ATIS (RU) 126.8

ARKALYK



CHANGE: TWR FREQ

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STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALT
10000 FT

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

(RNAV 1 STAR BASED ON GNSS)
BEDKA 1C, EDANO 1C, GURPI 1C

ASTANA
NURSULTAN NAZARBAYEV
INTERNATIONAL AIRPORT
RWY 04

71°30'E 72°E 72°30'E

DIST IN NM
ALT, ELEV IN FT
BRG ARE MAGNETIC
VAR10°E

SURVEILLANCE RADAR REQUIRED

3200 FT
MSA 25NM
ARP

1504 1883 1886 2013 1658 2153 1487 1709

UAR56
4600 FT MSL
GND

UAR226
4200 FT MSL
GND

UAR294
1900 FT MSL
GND

UAP28
4800 FT MSL
GND

UAP1
3300 FT MSL
GND

UAP30
1800 FT MSL
GND

UAR58
120 FL
GND

UAR237
4500 FT MSL
GND

UAR238
5800 FT MSL
GND

UAR280
4300 FT MSL
GND

UAR247
5100 FT MSL
GND

EDANO
51°08'58"N
072°58'04"E
FL220

CC450
50°59'36"N
072°12'54"E
FL160

CC240
50°57'16"N
072°01'53"E
FL150

ROPIM
50°50'38"N
071°11'20"E
5100

CC452
50°45'42"N
071°42'08"E
FL 150

CC462
50°40'23"N
071°19'45"E
7900
7200

CC454
50°40'29"N
071°46'47"E
FL 150

CC460
50°36'51"N
071°27'10"E
9800

CC456
50°34'30"N
071°47'14"E
FL 150

CC458
50°29'01"N
071°43'26"E
FL 150

CC442
50°27'50"N
071°45'57"E
FL 140

CC444
50°23'52"N
071°38'55"E
FL 140

CC446
50°21'58"N
071°30'01"E
FL 140

CC448
50°22'27"N
071°20'41"E
FL 140

CC443
50°20'18"N
071°21'10"E
FL 130

CC445
50°20'00"N
071°30'32"E
FL 130

CC447
50°21'47"N
071°39'28"E
FL 130

CC449
50°25'26"N
071°46'54"E
FL 130

CC440
50°21'48"N
071°58'24"E
FL160

CC441
50°12'31"N
071°18'23"E
FL150

BEDKA
50°13'18"N
072°15'45"E
FL180

GURPI
49°56'18"N
071°12'36"E
FL180

EDANO 1C 30.0 241° (251.5T)
241° (251.0°T)
FL200 FL160 1.5MIN
061° (071.0°T)
EDANO 1C 7.4 241° (251.3T)
EDANO 1C 17.0 217° (227.1T)
EDANO 1C 6.0 141° (150.5T)
EDANO 1C 6.0 167° (177.2T)
EDANO 1C 6.0 194° (203.8T)
EDANO 1C 13.0 117° (127.0°T)
GURPI 1C 17.0 307° (317.1T)
BEDKA 1C 10.0 297° (307.1T)
297° (307.0°T)
BEDKA 1C 14.0 297° (307.3T)
117° (127°T)
FL180 FL160 1.5MIN
EDANO 1C 16.6 003° (013.0T)
183° (193.0°T)
FL170 FL150 1.5MIN
003° (013.0°T)
GURPI 1C 8.0 003° (013.0T)
GURPI 1C 6.0 063° (072.7T)
BEDKA 1C 6.0 264° (274.5T)
BEDKA 1C 6.0 242° (251.5T)
GURPI 1C 6.0 042° (052.5T)
BEDKA 1C 6.0 216° (226.6T)
BEDKA 1C 15.0 006° (016.1T)
112° (127.0°T)
FL120 9800 1MIN
297° (307.0°T)
EDANO 1C 5.9 297° (306.8T)
EDANO 1C 11.6 322° (332.5T)
GURPI 1C 6.0 083° (092.9T)

SCALE 1:500 000
0 5 10 15 20 KM
0 2.5 5 10 NM

50°30'N 50°N 51°N

CHANGE: UAP30 add.

TABULAR DESCRIPTION

BEDKA 1C											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	BEDKA	-		10	0	-	+FL180	-315	-	RNAV1
20	TF	CC440	-	297(307.3)	10	14	-	+FL160	-280	-	RNAV1
30	TF	CC442	-	297(307.1)	10	10	-	@FL140	-280	-	RNAV1
40	TF	CC444	-	219(228.6)	10	6	L	@FL140	-280	-	RNAV1
50	TF	CC446	-	242(251.5)	10	6	R	@FL140	-280	-	RNAV1
60	TF	CC448	-	264(274.5)	10	6	R	@FL140	-280	-	RNAV1
70	TF	CC460	-	006(016.1)	10	15	R	+9800	-250	-	RNAV1
80	TF	CC462	-	297(306.8)	10	5.9	L	+7200 -7900	-250	-	RNAV1
90	TF	ROPIM	-	322(332.5)	10	11.6	R	+5100	-230	-	RNAV1

WAYPOINT LIST

BEDKA 1C		
Waypoint Identifier	**Coordinates**	
BEDKA	501318.00N	0721545.00E
CC440	502147.51N	0715824.23E
CC442	502749.84N	0714557.03E
CC444	502352.05N	0713854.67E
CC446	502158.41N	0713001.07E
CC448	502226.84N	0712040.54E
CC460	503650.82N	0712710.28E
CC462	504022.77N	0711945.13E
ROPIM	505037.85N	0711120.41E

TABULAR DESCRIPTION

EDANO 1C											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	EDANO	-		10	0	-	+FL220	-315	-	RNAV1
20	TF	CC450	-	241(251.5)	10	30	-	+FL160	-280	-	RNAV1
30	TF	CC240	-	241(251.3)	10	7.4	-	+FL150	-280	-	RNAV1
40	TF	CC452	-	217(227.1)	10	17	L	@FL150	-280	-	RNAV1
50	TF	CC454	-	141(150.5)	10	6	L	@FL150	-280	-	RNAV1
60	TF	CC456	-	167(177.2)	10	6	R	@FL150	-280	-	RNAV1
70	TF	CC458	-	194(203.8)	10	6	R	@FL150	-280	-	RNAV1
80	TF	CC460	-	297(307.0)	10	13	R	+9800	-250	-	RNAV1
90	TF	CC462	-	297(306.8)	10	5.9	L	+7200 -7900	-250	-	RNAV1
100	TF	ROPIM	-	322(332.5)	10	11.6	R	+5100	-230	-	RNAV1

WAYPOINT LIST

EDANO 1C		
Waypoint Identifier	**Coordinates**	
EDANO	510858.00N	0725804.00E
CC450	505936.08N	0721254.38E
CC240	505715.58N	0720152.69E
CC452	504542.01N	0714207.56E
CC454	504029.06N	0714646.59E
CC456	503429.88N	0714714.16E
CC458	502901.03N	0714325.88E
CC460	503650.82N	0712710.28E
CC462	504022.77N	0711945.13E
ROPIM	505037.85N	0711120.41E

TABULAR DESCRIPTION

GURPI 1C											
Serial Number	Path Descripto r	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	GURPI	-		10	0	-	+FL180	-315	-	RNAV1
20	TF	CC441	-	003(013.0)	10	16.6	-	+FL150	-280	-	RNAV1
30	TF	CC443	-	003(013.0)	10	8	-	@FL130	-280	-	RNAV1
40	TF	CC445	-	083(092.9)	10	6	R	@FL130	-280	-	RNAV1
50	TF	CC447	-	063(072.7)	10	6	L	@FL130	-280	-	RNAV1
60	TF	CC449	-	042(052.5)	10	6	L	@FL130	-280	-	RNAV1
70	TF	CC460	-	302(312.1)	10	17	L	+9800	-250	-	RNAV1
80	TF	CC462	-	297(306.8)	10	5.9	L	+72007900	-250	-	RNAV1
90	TF	ROPIM	-	322(332.5)	10	11.6	R	+5100	-230	-	RNAV1

WAYPOINT LIST

GURPI 1C		
Waypoint Identifier	**Coordinates**	
GURPI	495618.00N	0711236.00E
CC441	501230.84N	0711822.55E
CC443	502018.11N	0712110.45E
CC445	502000.04N	0713031.62E
CC447	502147.16N	0713928.13E
CC449	502526.34N	0714654.12E
CC460	503650.82N	0712710.28E
CC462	504022.77N	0711945.13E
ROPIM	505037.85N	0711120.41E

HOLDINGS

Path De-scriptor	Waypoint Identi-fier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude	Maximum Altitude	Speed limit (KT)	Navigation Spec-ification
Hold	CC441	003(013.0)	1.5	L	FL150	FL170	-	RNAV 1
Hold	CC440	297(307.0)	1.5	L	FL160	FL180	-	RNAV 1
Hold	CC450	241(251.0)	1.5	L	FL160	FL200	-	RNAV 1
Hold	CC460	297(307.0)	1	L	9800FT	FL120	-	RNAV 1

STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALT
10000 FT

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

(RNAV 1 STAR BASED ON GNSS)
KODOL 1C, OSROL 1C, VAGEM 1C

**ASTANA
NURSULTAN NAZARBAYEV
INTERNATIONAL AIRPORT
RWY 04**

DIST IN NM
ALT, ELEV IN FT
BRG ARE MAGNETIC
VAR10°E

SURVEILLANCE RADAR REQUIRED

3200 FT
MSA 25NM
ARP

70°E 70°30'E 71°E 71°30'E
52°N 51°30'N 51°N

UAP2
8100 FT MSL
GND

UAP26
6400 FT MSL
GND

VAGEM
52°01'59"N
071°01'14"E
FL220

VAGEM 1C 25.9 173° (183.4T)

353° (003.0°T)
FL200
FL180
1.5MIN
173° (183.0°T)

UAR245
4700 FT MSL
GND

CC410
51°36'09"N
070°58'46"E
FL180

VAGEM 1C 10.9 173° (183.4T)

1765

CC412
51°25'17"N
070°57'45"E
FL 160

11.4 173° (183.3T)

KODOL
51°16'38"N
069°56'51"E
FL190

283° (293.0°T)
FL180
FL160
1.5MIN

KODOL 1C 15.1 103° (112.9T)

103° (113.0°T)

CC421
51°10'47"N
070°19'01"E
FL 160

KODOL 1C 10.0 103° (113.1T)

CC438
51°12'06"N
070°35'07"E
FL 130

CC418
51°09'17"N
070°39'39"E
FL 150

CC416
51°12'53"N
070°47'17"E
FL 150

CC414
51°13'56"N
070°56'41"E
FL 150

VAGEM 1C 6.0 250° (259.9T)

OSROL 1C 17.0 121° (131.1T)

VAGEM 1C 6.0 223° (233.1T)

UAR56
4600 FT MSL
GND

1658

UAP28
4800 FT MSL
GND

2153

CC423
51°06'53"N
070°33'38"E
FL 140

CC436
51°06'56"N
070°30'15"E
FL 130

OSROL 1C 6.0 021° (030.7T)

VAGEM 1C 6.0 196° (206.4T)

CC420
51°03'55"N
070°35'26"E
FL 150

UAP30
1800 FT MSL
GND

CC422
51°00'58"N
070°55'29"E
10000

CC434
51°01'02"N
070°28'34"E
FL 130

OSROL 1C 6.0 000° (010.3T)

KODOL 1C 6.0 182° (191.6T)

VAGEM 1C 13.0 093° (103.3T)

CC425
51°01'01"N
070°31'44"E
FL 140

OSROL 1C 6.0 340° (349.6T)

307° (317.0°T)
9000
7000
1MIN

8.4 127° (137.1T)

127° (137.0°T)

CC427
50°55'08"N
070°33'37"E
FL 140

KODOL 1C 6.0 159° (168.5T)

KODOL 1C 15.0 034° (044.2T)

CC424
50°54'49"N
071°04'34"E
7000

6.0 124° (134.3T)

240° (250.0°T)
FL160
FL150
1.5MIN

CC430
50°52'22"N
070°18'22"E
FL 150

OSROL 1C 8.0 060° (069.8T)

OSROL
50°48'18"N
070°01'12"E
FL170

060° (070.0°T)

OSROL 1C 11.6 060° (069.6T)

CC432
50°55'08"N
070°30'13"E
FL 130

CC429
50°50'12"N
070°39'00"E
FL 140

ROPIM
50°50'38"N
071°11'20"E
5100

UAP12
120 FL
GND

UAR237
4500 FT MSL
GND

SCALE 1:450 000
0 4.5 9 13.5 18 KM
0 2.25 4.5 9 NM

CHANGE: UAP30 add.

TABULAR DESCRIPTION

KODOL 1C RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	KODOL	-		10	0	-	+FL190	-315	-	RNAV1
20	TF	CC421	-	103(112.9)	10	15.1	-	+FL160	-280	-	RNAV1
30	TF	CC423	-	103(113.1)	10	10	-	@FL140	-280	-	RNAV1
40	TF	CC425	-	182(191.6)	10	6	R	@FL140	-280	-	RNAV1
50	TF	CC427	-	159(168.5)	10	6	L	@FL140	-280	-	RNAV1
60	TF	CC429	-	136(145.5)	10	6	L	@FL140	-280	-	RNAV1
70	TF	CC422	-	034(044.2)	10	15	L	+10000	-250	-	RNAV1
80	TF	CC424	-	127(137.1)	10	8.4	R	+7000	-250	-	RNAV1
90	TF	ROPIM	-	124(134.3)	10	6	L	+5100	-230	-	RNAV1

WAYPOINT LIST

KODOL 1C		
Waypoint Identifier	**Coordinates**	
KODOL	511638.00N	0695651.00E
CC421	511047.16N	0701901.37E
CC423	510652.79N	0703338.28E
CC425	510100.51N	0703143.85E
CC427	505508.15N	0703337.44E
CC429	505011.92N	0703859.64E
CC422	510057.81N	0705529.01E
CC424	505448.62N	0710433.59E
ROPIM	505037.85N	0711120.41E

TABULAR DESCRIPTION

OSROL 1C RWY04											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	OSROL	-		10	0	-	+FL170	-315	-	RNAV1
20	TF	CC430	-	060(069.6)	10	11.6	-	+FL150	-280	-2.3	RNAV1
30	TF	CC432	-	060(069.8)	10	8	-	@FL130	-280	-2.3	RNAV1
40	TF	CC434	-	340(349.9)	10	6	L	@FL130	-280	-	RNAV1
50	TF	CC436	-	000(010.3)	10	6	R	@FL130	-280	-	RNAV1
60	TF	CC438	-	021(030.7)	10	6	R	@FL130	-280	-	RNAV1
70	TF	CC422	-	121(131.1)	10	17	R	+10000	-250	-1.5	RNAV1
80	TF	CC424	-	127(137.1)	10	8.4	R	+7000	-250	-2.2	RNAV1
90	TF	ROPIM	-	124(134.3)	10	6	L	+5100	-230	-1.5	RNAV1

WAYPOINT LIST

OSROL1C		
Waypoint Identifier	**Coordinates**	
OSROL	504818.00N	0700112.00E
CC430	505221.86N	0701822.45E
CC432	505508.25N	0703013.46E
CC434	510102.29N	0702833.83E
CC436	510656.13N	0703015.40E
CC438	511205.55N	0703506.68E
CC422	510057.81N	0705529.01E
CC424	505448.62N	0710433.59E
ROPIM	505037.85N	0711120.41E

TABULAR DESCRIPTION

VAGEM 1C RWY04											
Serial Number	Path De-scriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	VAGEM	-		10	0	-	+FL220	-315	-	RNAV1
20	TF	CC410	-	173(183.4)	10	25.9	-	+FL180	-280	-	RNAV1
30	TF	CC412	-	173(183.4)	10	10.9	-	-FL160	-280	-	RNAV1
40	TF	CC414	-	173(183.3)	10	11.4	-	@FL150	-280	-	RNAV1
50	TF	CC416	-	250(259.9)	10	6	R	@FL150	-280	-	RNAV1
60	TF	CC418	-	223(233.1)	10	6	L	@FL150	-280	-	RNAV1
70	TF	CC420	-	196(206.4)	10	6	L	@FL150	-280	-	RNAV1
80	TF	CC422	-	093(103.3)	10	13	L	+10000	-250	-	RNAV1
90	TF	CC424	-	127(137.1)	10	8.4	R	+7000	-250	-	RNAV1
100	TF	ROPIM	-	124(134.3)	10	6	L	+5100	-230	-	RNAV1

WAYPOINT LIST

VAGEM 1C		
Waypoint Identifier	**Coordinates**	
VAGEM	520159.00N	0710114.00E
CC410	513608.50N	0705845.92E
CC412	512517.29N	0705744.56E
CC414	511355.58N	0705641.01E
CC416	511252.76N	0704717.20E
CC418	510917.08N	0703939.41E
CC420	510354.95N	0703525.59E
CC422	510057.81N	0705529.01E
CC424	505448.62N	0710433.59E
ROPIM	505037.85N	0711120.41E

HOLDINGS

Path De-scriptor	Waypoint Identi-fier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude	Maximum Altitude	Speed limit (KT)	Navigation Spec-ification
Hold	CC410	173(183.0)	1.5	R	FL180	FL200	-	RNAV 1
Hold	CC421	103(113.0)	1.5	L	FL160	FL180	-	RNAV 1
Hold	CC430	060(070.0)	1.5	L	FL150	FL160	-	RNAV 1
Hold	CC424	127(137.0)	1	L	7000FT	9000FT	-	RNAV 1

STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALT
10000 FT

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

(RNAV 1 STAR BASED ON GNSS)
BANOS 1D, EDANO 1D, GURPI 1D

ASTANA
NURSULTAN NAZARBAYEV
INTERNATIONAL AIRPORT
RWY 22

SURVEILLANCE RADAR REQUIRED

3200 FT
MSA 25NM
ARP

DIST IN NM
ALT, ELEV IN FT
BRG ARE MAGNETIC
VAR10°E

UAR56 4600 FT MSL GND
UAR226 4200 FT MSL GND
UAR294 1900 FT MSL GND
UAP28 4800 FT MSL GND
UAP1 3300 FT MSL GND
UAP30 1800 FT MSL GND
UAR58 120 FL GND
UAR237 4500 FT MSL GND
UAR238 5800 FT MSL GND
UAR280 4300 FT MSL GND
UAR247 5100 FT MSL GND

NEGMI 51°12'45"N 071°45'53"E 5200
OGLUX 51°08'32"N 071°52'38"E 6700
CC242 51°03'12"N 071°57'01"E 8200 7200
CC240 50°57'16"N 072°01'53"E 9800
CC232 51°01'23"N 072°21'23"E FL150
CC234 50°55'25"N 072°22'13"E FL150
CC236 50°49'49"N 072°18'43"E FL150
EDANO 51°08'58"N 072°58'04"E FL190
CC228 50°46'06"N 071°46'05"E FL140
CC226 50°43'05"N 071°54'15"E FL140
CC224 50°42'19"N 072°03'36"E FL140
CC238 50°45'51"N 072°11'41"E FL150
CC222 50°43'56"N 072°12'42"E FL140
CC221 50°43'04"N 072°16'35"E FL130
CC215 50°42'12"N 071°48'29"E FL130
CC217 50°40'25"N 071°58'29"E FL130
CC219 50°40'43"N 072°07'54"E FL130
CC220 50°35'02"N 072°19'51"E FL170
CC213 50°30'58"N 071°40'20"E FL140
CC211 50°22'59"N 071°33'53"E FL160
BANOS 50°11'16"N 072°38'44"E FL210
GURPI 49°56'18"N 071°12'36"E FL230

BANOS 1D 15.0 032° (042.0T) 143° (153.0°T)
BANOS 1D 13.0 327° (331.4T) 323° (333.0°T) FL120 9800 1MIN
BANOS 1D 6.0 290° (300.7T)
BANOS 1D 6.0 267° (277.2T)
BANOS 1D 6.0 244° (254.3T)
BANOS 1D 10.0 323° (332.9T) 143° (153.0°T) FL200 FL170 1.5MIN
BANOS 1D 28.7 323° (333.0T)
GURPI 1D 6.0 097° (107.4T)
GURPI 1D 6.0 077° (087.2T)
GURPI 1D 6.0 057° (067.0T)
GURPI 1D 12.7 017° (027.5T)
GURPI 1D 9.0 017° (027.3T)
GURPI 1D 30.0 017° (027.3T)
EDANO 1D 24.4 242° (251.6T)
EDANO 1D 6.0 155° (174.9T)
EDANO 1D 6.0 032° (201.6T)
EDANO 1D 6.0 218° (228.3T)
GURPI 1D 17.0 327° (326.6T)
242° (252.0°T) FL180 FL150 1.5MIN 062° 072.0°T)
197° (207.0°T) FL180 FL160 1.5MIN 017° (027.0°T)

1765 1504 1883 1886 2013 1658 2153 1487 1709

SCALE 1:500 000
0 5 10 15 20 KM
0 2.5 5 10 NM

71°30'E 72°E 72°30'E 73°E
51°30'N 51°N 50°30'N 50°N

CHANGE: UAP30 add.

TABULAR DESCRIPTION

BANOS 1D RWY22											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	BANOS	-		10	0	-	+FL210	-315	-	RNAV1
20	TF	CC220	-	323(333.0)	10	26.7	-	+FL170	-280	-	RNAV1
30	TF	CC222	-	323(332.9)	10	10	-	@FL140	-280	-	RNAV1
40	TF	CC224	-	244(254.3)	10	6	L	@FL140	-280	-	RNAV1
50	TF	CC226	-	267(277.2)	10	6	R	@FL140	-280	-	RNAV1
60	TF	CC228	-	290(300.2)	10	6	R	@FL140	-280	-	RNAV1
70	TF	CC240	-	032(042.0)	10	15	R	+9800	-250	-	RNAV1
80	TF	CC242	-	323(332.7)	10	6.7	L	+7200 -8200	-250	-	RNAV1
90	TF	OGLUX	-	323(332.6)	10	6	L	+6700	-250	-	RNAV1
100	TF	NEGMI	-	305(314.8)	10	6	L	+5200	-230	-	RNAV1

WAYPOINT LIST

BANOS1D		
Waypoint Identifier	**Coordinates**	
BANOS	501116.00N	0723844.00E
CC220	503502.43N	0721951.13E
CC222	504356.03N	0721241.80E
CC224	504218.99N	0720336.37E
CC226	504304.68N	0715414.60E
CC228	504605.89N	0714605.08E
CC240	505715.58N	0720152.69E
CC242	510312.43N	0715700.84E
OGLUX	510831.82N	0715238.33E
NEGMI	511245.30N	0714552.60E

TABULAR DESCRIPTION

EDANO 1D RWY22											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	EDANO	-		10	-	-	+FL190	-315	-	RNAV1
20	TF	CC232	-	242(251.6)	10	24.4	-	@FL150	-280	-	RNAV1
30	TF	CC234	-	165(174.9)	10	6	L	@FL150	-280	-	RNAV1
40	TF	CC236	-	192(201.6)	10	6	R	@FL150	-280	-	RNAV1
50	TF	CC238	-	218(228.3)	10	6	R	@FL150	-280	-	RNAV1
60	TF	CC240	-	321(331.4)	10	13	R	+9800	-250	-	RNAV1
70	TF	CC242	-	323(332.7)	10	6.7	R	+7200 -8200	-250	-	RNAV1
80	TF	OGLUX	-	323(332.6)	10	6	L	+6700	-250	-	RNAV1
90	TF	NEGMI	-	305(314.8)	10	6	L	+5200	-230	-	RNAV1

WAYPOINT LIST

EDANO 1D		
Waypoint Identifier	**Coordinates**	
EDANO	510858.00N	0725804.00E
CC232	510123.17N	0722123.11E
CC234	505524.99N	0722213.30E
CC236	504949.27N	0721843.08E
CC238	504551.12N	0721140.77E
CC240	505715.58N	0720152.69E
CC242	510312.43N	0715700.84E
OGLUX	510831.82N	0715238.33E
NEGMI	511245.30N	0714552.60E

TABULAR DESCRIPTION

GURPI 1D RWY22											
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	GURPI	-		10	0	-	+FL230	-315	-	RNAV1
20	TF	CC211	-	017(027.3)	10	30	-	+FL160	-280	-	RNAV1
30	TF	CC213	-	017(027.3)	10	9	-	-FL140	-280	-	RNAV1
40	TF	CC215	-	017(027.5)	10	12.7	-	@FL130	-280	-	RNAV1
50	TF	CC217	-	097(107.4)	10	6	R	@FL130	-280	-	RNAV1
60	TF	CC219	-	077(087.2)	10	6	L	@FL130	-280	-	RNAV1
70	TF	CC221	-	057(067.0)	10	6	L	@FL130	-280	-	RNAV1
80	TF	CC240	-	317(326.6)	10	17	L	+9800	-250	-	RNAV1
90	TF	CC242	-	323(332.7)	10	6.7	R	+7200 - 8200	-250	-	RNAV1
100	TF	OGLUX	-	323(332.6)	10	6	L	+6700	-250	-	RNAV1
110	TF	NEGMI	-	305(314.8)	10	6	L	+5200	-230	-	RNAV1

WAYPOINT LIST

GURPI 1D		
Waypoint Identifier	**Coordinates**	
GURPI	495618.00N	0711236.00E
CC211	502259.17N	0713352.65E
CC213	503057.99N	0714019.71E
CC215	504212.17N	0714928.90E
CC217	504024.91N	0715829.21E
CC219	504042.83N	0720754.44E
CC221	504303.73N	0721635.37E
CC240	505715.58N	0720152.69E
CC242	510312.43N	0715700.84E
OGLUX	510831.82N	0715238.33E
NEGMI	511245.30N	0714552.60E

HOLDINGS

Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	CC211	017(027.0)	1.5	L	FL160	FL180	-	RNAV 1
Hold	CC220	323(333.0)	1.5	R	FL170	FL200	-	RNAV 1
Hold	CC232	242(252.0)	1.5	L	FL150	FL180	-	RNAV 1
Hold	CC240	323(333.0)	1	L	9800FT	FL120	-	RNAV 1

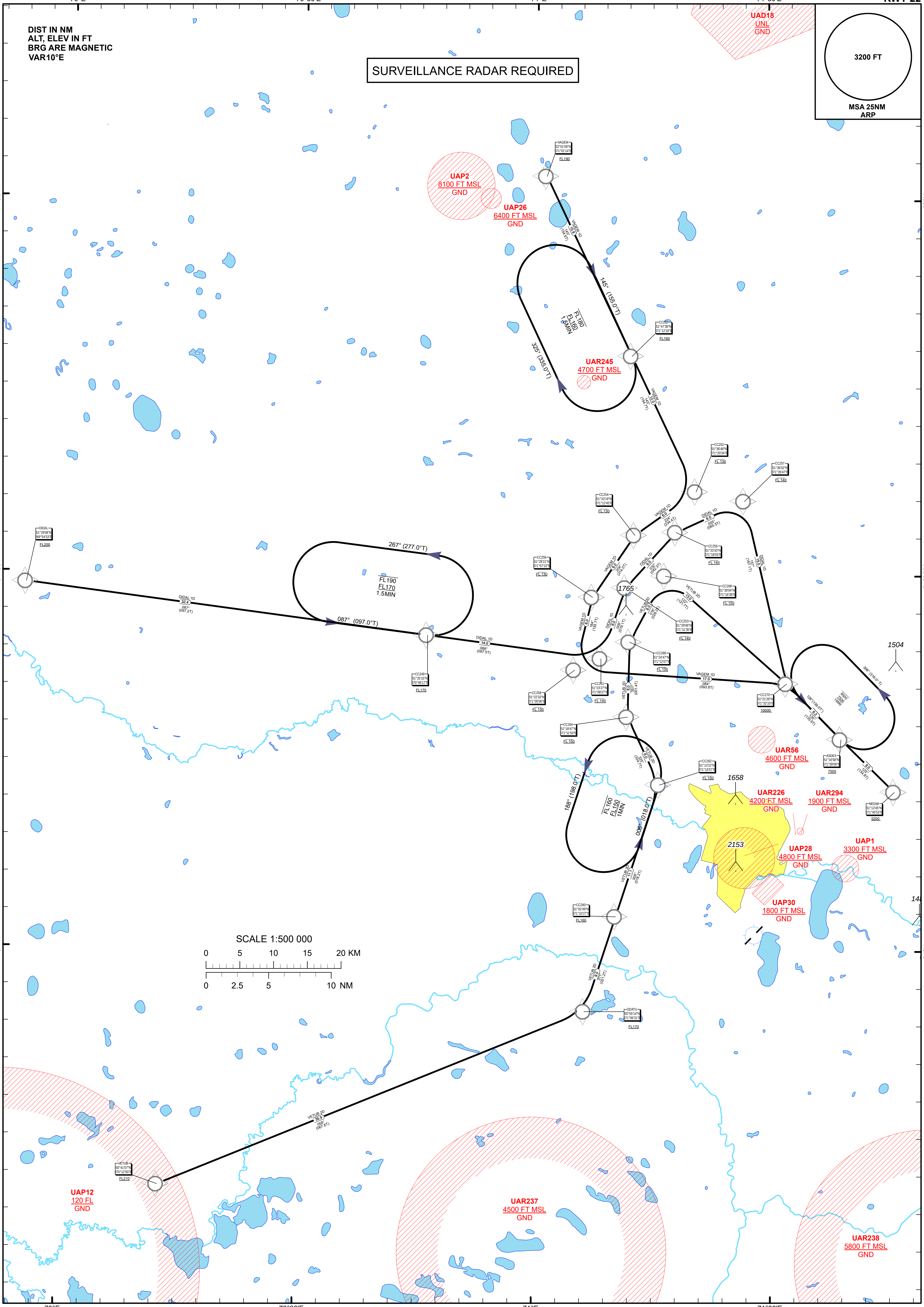
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALT
10000 FT

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

(RNAV 1 STAR BASED ON GNSS)
DIDAL 1D, VAGEM 1D, VETUB 2D

ASTANA NURSULTAN NAZARBAYEV INTERNATIONAL AIRPORT RWY 22


70°E
70°30'E
71°E
71°30'E
52°N
51°30'N
51°N
DIST IN NM
ALT, ELEV IN FT
BRG ARE MAGNETIC
VAR10°E
SURVEILLANCE RADAR REQUIRED
3200 FT
MSA 25NM
ARP
UAD18
UNL
GND
UAP2
8100 FT MSL
GND
UAP26
6400 FT MSL
GND
VAGEM
52°01'59"N
071°01'14"E
FL190
VAGEM 1D
15.9
145°
(154.6T)
145° (155.0°T)
325° (335.0°T)
FL180
FL160
1.5MIN
CC250
51°47'38"N
071°12'18"E
FL160
UAR245
4700 FT MSL
GND
VAGEM 1D
12.0
145°
(154.7T)
CC252
51°36'48"N
071°20'34"E
FL 130
CC257
51°36'02"N
071°26'47"E
FL 140
CC254
51°33'19"N
071°12'45"E
FL 130
VAGEM 1D
6.0
224°
(234.4T)
DIDAL 1D
6.0
055°
(065.5T)
CC255
51°33'33"N
071°18'03"E
FL 140
DIDAL 1D
15.0
157°
(167.1T)
DIDAL
51°29'08"N
069°54'53"E
FL200
DIDAL 1D
32.4
087°
(097.2T)
267° (277.0°T)
087° (097.0°T)
FL190
FL170
1.5MIN
CC249
51°25'15"N
070°46'17"E
FL170
DIDAL 1D
14.0
088°
(097.5T)
CC256
51°28'21"N
071°07'22"E
FL 130
VAGEM 1D
6.0
204°
(214.0T)
DIDAL 1D
6.0
032°
(042.3T)
1765
CC268
51°30'04"N
071°16'38"E
FL 150
VETUB 2D
13.0
122°
(131.7T)
VETUB 2D
6.0
018°
(028.2T)
VAGEM 1D
6.0
184°
(193.7T)
DIDAL 1D
6.0
009°
(019.1T)
CC253
51°29'06"N
071°11'35"E
FL 140
CC266
51°24'47"N
071°12'07"E
FL 150
1504
306° (316.0° T)
VAGEM 1D
17.0
084°
(093.8T)
CC258
51°22'32"N
071°05'06"E
FL 130
CC251
51°23'27"N
071°08'27"E
FL 140
VETUB 2D
6.0
351°
(001.4T)
CC270
51°21'26"N
071°32'10"E
10000
126°(136.0T)
6.2
126°
(135.9T)
8500
7500
1MIN
CC264
51°18'47"N
071°11'53"E
FL 150
VETUB 2D
6.0
325°
(334.7T)
ASDEX
51°16'58"N
071°39'06"E
7500
6.0
125°
(134.8T)
UAR56
4600 FT MSL
GND
CC262
51°13'22"N
071°15'57"E
FL 150
1658
UAR226
4200 FT MSL
GND
UAR294
1900 FT MSL
GND
NEGMI
51°12'45"N
071°45'53"E
5200
188° (198.0°T)
008° (018.0°T)
FL160
FL150
1MIN
2153
UAP28
4800 FT MSL
GND
UAP1
3300 FT MSL
GND
UAP30
1800 FT MSL
GND
VETUB 2D
11.1
008°
(018.2T)
CC260
51°02'49"N
071°10'27"E
FL160
SCALE 1:500 000
0 5 10 15 20 KM
0 2.5 5 10 NM
VETUB 2D
9.0
011°
(021.2T)
ODATU
50°55'14"N
071°06'31"E
FL170
VETUB 2D
35.9
058°
(067.8T)
VETUB
50°41'07"N
070°12'50"E
FL210
UAP12
120 FL
GND
UAR237
4500 FT MSL
GND
UAR238
5800 FT MSL
GND

CHANGE: UAP30 add.

TABULAR DESCRIPTION

DIDAL 1D

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	DIDAL	-		10	0	-	+FL200	-315	-	RNAV1
20	TF	CC249	-	087(097.2)	10	32.4	-	+FL170	-280	-	RNAV1
30	TF	CC251	-	088(097.5)	10	14	-	@FL140	-280	-	RNAV1
40	TF	CC253	-	009(019.1)	10	6	L	@FL140	-280	-	RNAV1
50	TF	CC255	-	032(042.3)	10	6	R	@FL140	-280	-	RNAV1
60	TF	CC257	-	055(065.5)	10	6	R	@FL140	-280	-	RNAV1
70	TF	CC270	-	157(167.1)	10	15	R	+10000	-250	-	RNAV1
80	TF	ASDEX	-	126(135.9)	10	6.2	L	+7500	-250	-	RNAV1
90	TF	NEGMI	-	125(134.8)	10	6	L	+5200	-230	-	RNAV1

WAYPOINT LIST

DIDAL 1D

Waypoint Identifier	Coordinates	
DIDAL	512908.00N	0695453.00E
CC249	512514.52N	0704616.73E
CC251	512326.63N	0710827.01E
CC253	512906.41N	0711135.16E
CC255	513332.66N	0711802.51E
CC257	513602.33N	0712647.22E
CC270	512126.38N	0713210.34E
ASDEX	511658.39N	0713905.63E
NEGMI	511245.30N	0714552.60E

TABULAR DESCRIPTION

VAGEM 1D

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	VAGEM	-		10	0	-	+FL190	-315	-	RNAV1
20	TF	CC250	-	145(154.6)	10	15.9	-	+FL160	-280	-	RNAV1
30	TF	CC252	-	145(154.7)	10	12	-	@FL130	-280	-	RNAV1
40	TF	CC254	-	224(234.4)	10	6	R	@FL130	-280	-	RNAV1
50	TF	CC256	-	204(214)	10	6	L	@FL130	-280	-	RNAV1
60	TF	CC258	-	184(193.7)	10	6	L	@FL130	-280	-	RNAV1
70	TF	CC270	-	084(093.8)	10	17	L	+10000	-250	-	RNAV1
80	TF	ASDEX	-	126(135.9)	10	6.2	R	+7500	-250	-	RNAV1
90	TF	NEGMI	-	125(134.8)	10	6	L	+5200	-230	-	RNAV1

WAYPOINT LIST

VAGEM 1D

Waypoint Identifier	Coordinates	
VAGEM	520159.00N	0710114.00E
CC250	514737.53N	0711218.47E
CC252	513647.82N	0712034.43E
CC254	513318.85N	0711244.78E
CC256	512820.94N	0710722.13E
CC258	512231.57N	0710506.20E
CC270	512126.38N	0713210.34E
ASDEX	511658.39N	0713905.63E
NEGMI	511245.30N	0714552.60E

TABULAR DESCRIPTION

VETUB 2D

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	VETUB	-		10	0	-	+FL210	-315	-	RNAV1
20	TF	ODATU	-	058(067.8)	10	35.9	-	+FL170	-280	-	RNAV1
30	TF	CC260	-	011(021.2)	10	9	L	+FL160	-280	-	RNAV1
40	TF	CC262	-	008(018.1)	10	11.1	-	@FL150	-280	-	RNAV1
50	TF	CC264	-	325(334.7)	10	6	L	@FL150	-280	-	RNAV1
60	TF	CC266	-	351 (001.4)	10	6	R	@FL150	-280	-	RNAV1
70	TF	CC268	-	018(028.2)	10	6	R	@FL150	-280	-	RNAV1
80	TF	CC270	-	122(131.7)	10	13	R	+10000	-250	-	RNAV1
90	TF	ASDEX	-	126(135.9)	10	6.2	R	+7500	-250	-	RNAV1
100	TF	NEGMI	-	125(134.8)	10	6	L	+5200	-230	-	RNAV1

WAYPOINT LIST

VETUB 2D

Waypoint Identifier	Coordinates	
VETUB	504107.00N	0701250.00E
ODATU	505426.70N	0710518.10E
CC260	510249.33N	0711027.06E
CC262	511321.91N	0711557.33E
CC264	511847.14N	0711152.91E
CC266	512446.59N	0711207.11E
CC268	513003.67N	0711638.49E
CC270	512126.38N	0713210.34E
ASDEX	511658.39N	0713905.63E
NEGMI	511245.30N	0714552.60E

HOLDINGS

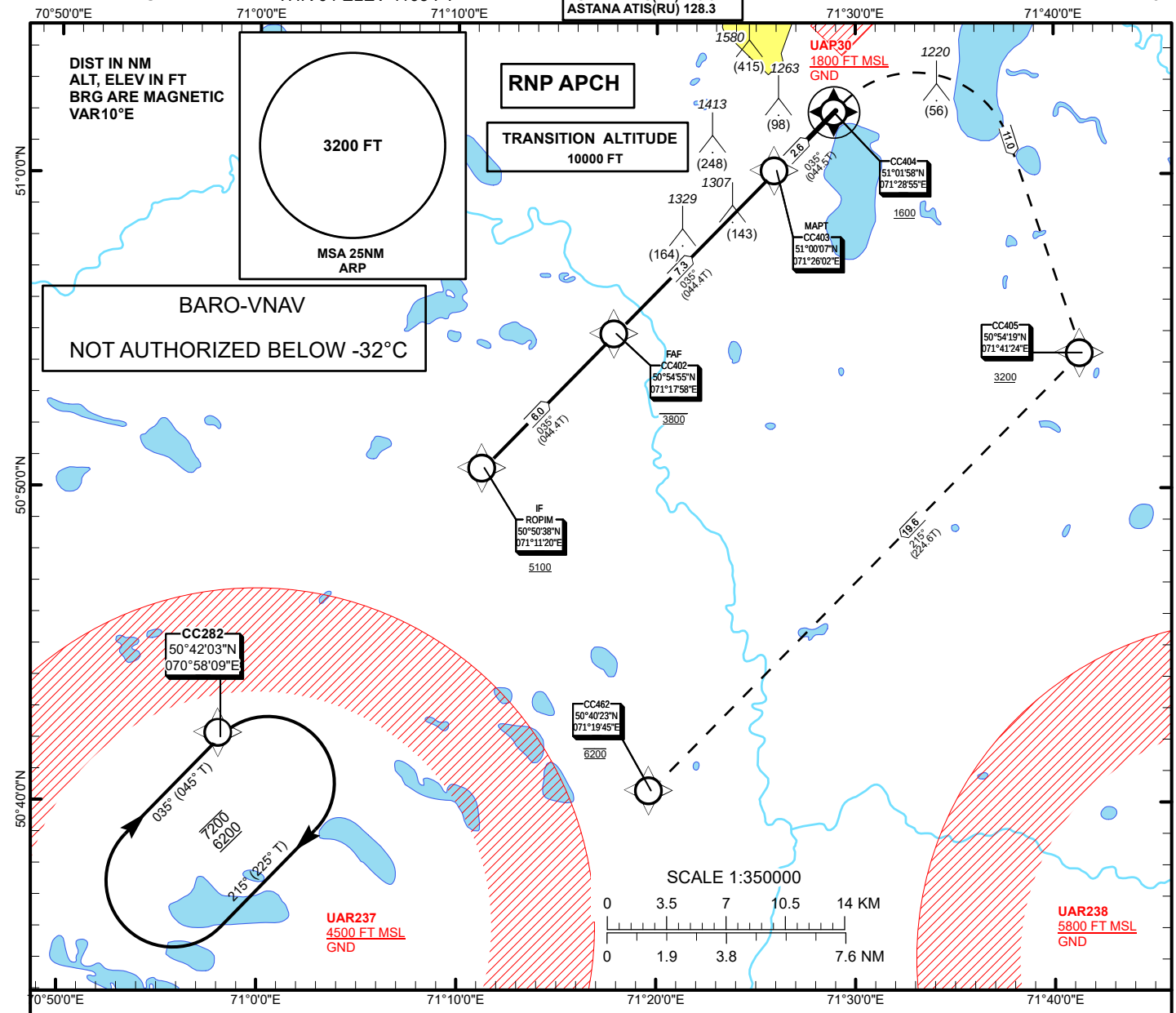
Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	CC250	145(155.0)	1.5	R	FL160	FL180	-	RNAV 1
Hold	CC249	087(097.0)	1.5	L	FL170	FL190	-	RNAV 1
Hold	CC262	008(018.0)	1	L	FL150	FL160	-	RNAV 1
Hold	ASDEX	126(136.0)	1	L	7500FT	8500FT	-	RNAV 1

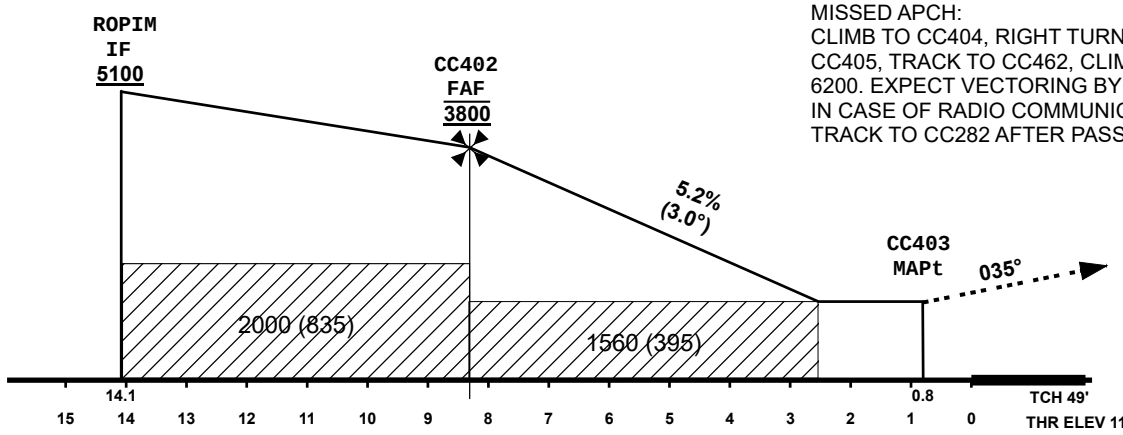
INSTRUMENT APPROACH CHART - ICAO

AERODROME ELEV *1166 FT*
HEIGHTS RELATED TO
THR 04 ELEV 1165 FT

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

ASTANA/NURSULTAN NAZARBAYEV INTERNATIONAL AIRPORT
RNP RWY 04





MISSED APCH:
CLIMB TO CC404, RIGHT TURN DIRECT TO CC405, TRACK TO CC462, CLIMBING TO 6200. EXPECT VECTORING BY ASTANA APP.
IN CASE OF RADIO COMMUNICATION FAILURE TRACK TO CC282 AFTER PASSING CC462 AND HOLD

OCA (OCH)		A	B	C	D
Straight	LNAV	1560 (395)			
	LNAV/VNAV	1380 (215)	1390 (225)	1410 (245)	1480 (315)

For data tabulation see verso

GS	Kt	80	100	120	140	160	180
Rate of descent	ft/min	420	530	640	740	850	950
PFAF-MAPT 7.3 NM	min:sec	05:27	04:21	03:38	03:07	02:43	02:25

CHANGE: UAP30 add.

TABULAR DESCRIPTION

RWY04

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
010	IF	ROPIM	-	-	10	-	-	+5100	-230		RNP APCH
020	TF	CC402	-	035(044.4)	10	6	-	@3800	-185		RNP APCH
030	TF	CC403	-	035(044.4)	10	7.3	-	@1420	-185	-3.0	RNP APCH
040	CF	CC404	Y	035(044.5)	10	2.6	-	+ 1600	-210	+ 1.4	RNP APCH
050	DF	CC405	-	-	10	11	R	+3200		+ 1.4	RNP APCH
060	TF	CC462	-	215(224.6)	10	19.6	R	@6200		+ 1.4	RNP APCH

WAYPOINT LIST

Waypoints Identifier	Coordinates	
ROPIM	505037.85N	0711120.41E
CC402	505454.87N	0711757.73E
CC403	510006.69N	0712602.14E
CC404	510157.78N	0712855.38E
CC405	505418.51N	0714124.46E
CC462	504022.77N	0711945.13E

HOLDINGS

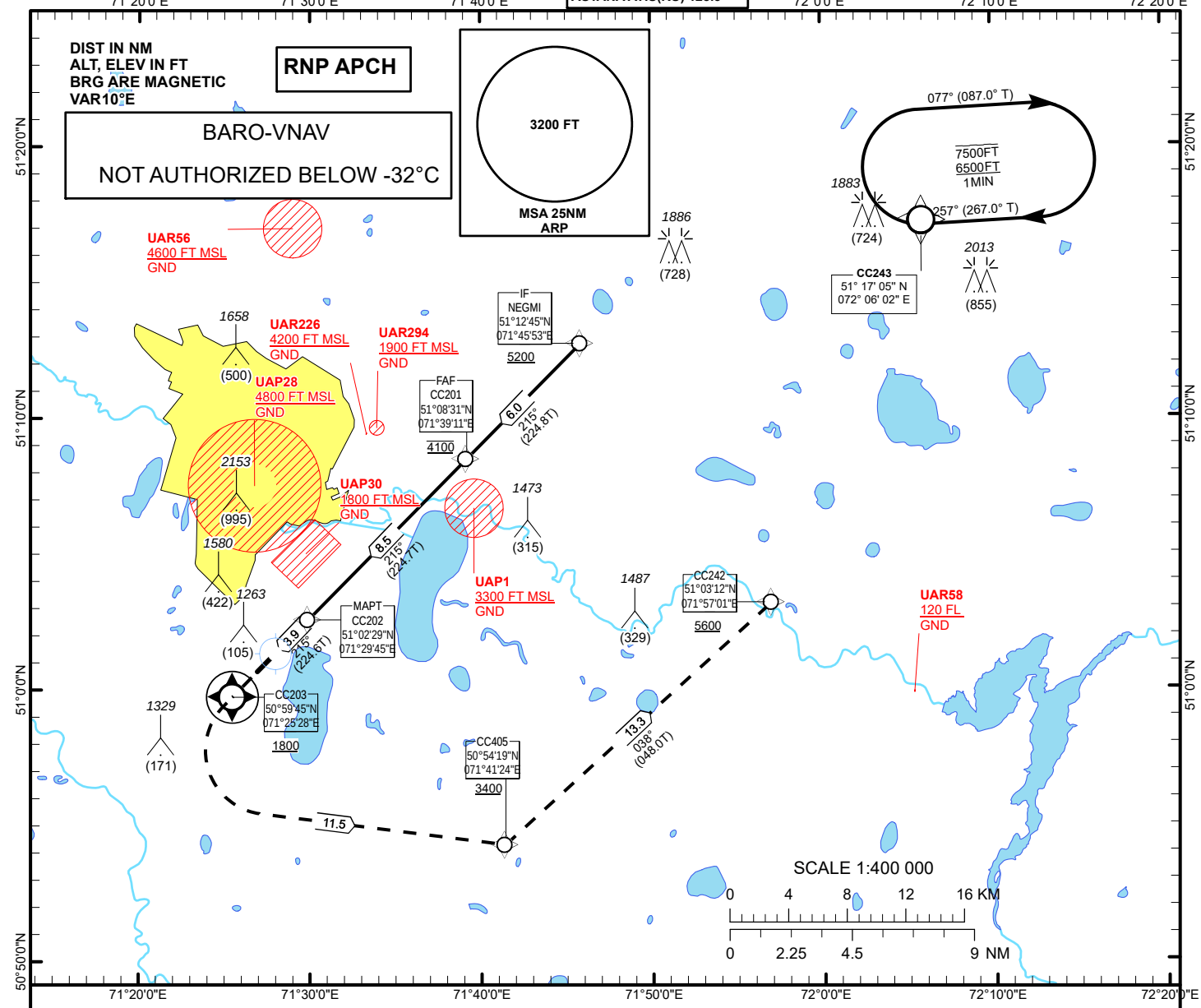
Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	CC282	035 (045.0T)	1	R	6200FT	7200FT	-	RNAV 1

INSTRUMENT APPROACH CHART - ICAO

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

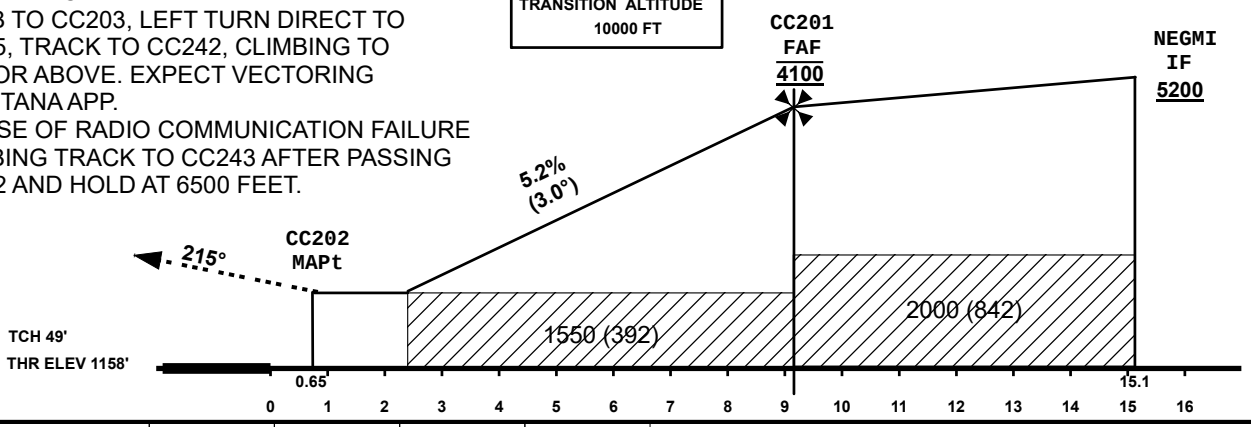
ASTANA TOWER 135.5
ASTANA APPROACH 124.6
ASTANA RADAR 120.7
ASTANA GROUND 119.6
ASTANA ATIS(EN) 129.5
ASTANA ATIS(RU) 128.3

ASTANA/NURSULTAN NAZARBAYEV INTERNATIONAL AIRPORT
RNP RWY 22



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

TRANSITION ALTITUDE
10000 FT



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

For data tabulation see verso

GS	Kt	80	100	120	140	160	180
Rate of descent	ft/min	420	530	640	740	850	950
PFAF-MAPT 8.5 NM	min:sec	05:27	04:21	03:38	03:07	02:43	02:25

CHANGE: UAP30 add.

TABULAR DESCRIPTION

RWY22

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
010	IF	NEGMI	-	-	10			+5200	-230		RNP APCH
020	TF	CC201	-	215(224.8)	10	6	-	@4100	-180		RNP APCH
030	TF	CC202	-	215(224.7)	10	8.5	-	@1414		-3.0	RNP APCH
040	CF	CC203	Y	215(224.6)	10	3.9	-	+1800	-210	+1.4	RNP APCH
050	DF	CC405	-		10	11.5	L	+3400		+1.4	RNP APCH
060	TF	CC242	-	038(048.01)	10	13.3	L	+5600	-230	+1.4	RNP APCH

WAYPOINT LIST

Waypoints Identifier	Coordinates	
NEGMI	511245.30N	0714553.00E
CC201	510830.68N	0713910.95E
CC202	510229.41N	0712944.80E
CC203	505944.92N	0712528.24E
CC405	505418.51N	0714124.46E
CC242	510312.43N	0715700.84E

HOLDINGS

Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	CC243	257 (267.0T)	1	R	6500FT	7500FT	-	RNAV 1

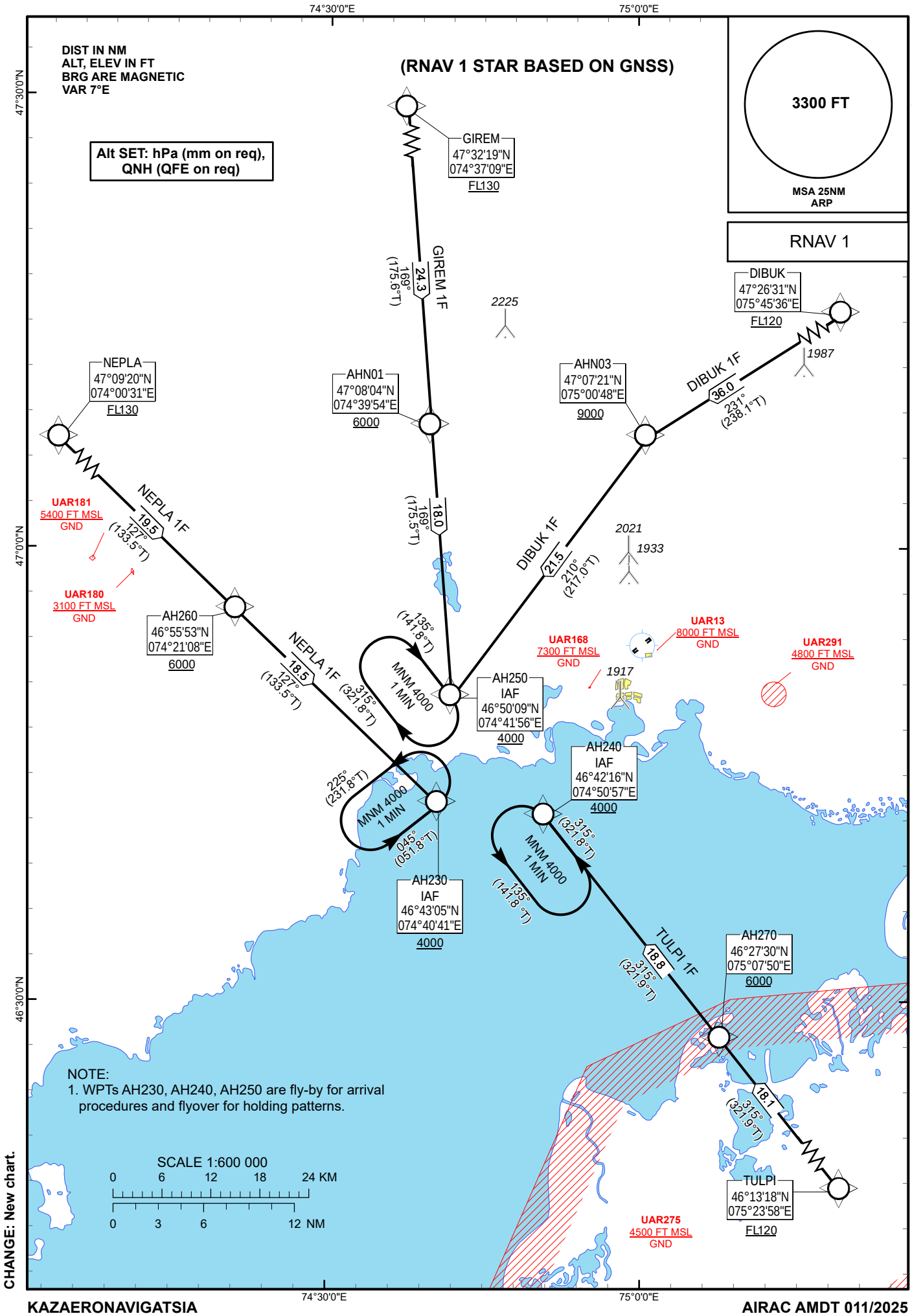
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

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

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

BALKHASH RWY 04



CHANGE: New chart.

TABULAR DESCRIPTION

DIBUK 1F RWY04

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

GIREM 1F RWY04

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

NEPLA 1F RWY04

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

TULPI 1F RWY04

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

WAYPOINT COORDINATES

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

HOLDINGS

Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FT)	Speed limit (KT)	Navigation Specification
Hold	AH230	045 (051.8T)	1	L	+4000	-	-	RNAV 1
Hold	AH240	315(321.8T)	1	L	+4000	-	-	RNAV 1
Hold	AH250	135(141.8T)	1	R	+4000	-	-	RNAV 1

STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

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

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

BALKHASH RWY 22

74°30'0"E 75°0'0"E 75°30'0"E

47°30'0"N 47°0'0"N 46°30'0"N

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

(RNAV 1 STAR BASED ON GNSS)

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

3300 FT

MSA 25NM ARP

RNAV 1

GIREM
47°32'19"N
074°37'09"E
FL130

GIREM 1G
19.0
134° (141.1°T)

AH480
47°17'30"N
074°54'42"E
6000

10.0
134° (141.1°T)

AHN04
47°09'41"N
075°03'56"E
5000

NEPLA
47°09'20"N
074°00'31"E
FL130

NEPLA 1G
29.2
082° (089.3°T)

14.1
082° (089.3°T)

AHN02
47°09'33"N
074°43'18"E
6000

2225

315° (321.8°T)
MNM 4000 1 MIN
6.0
135° (141.8°T)

AH450
IAF
47°04'58"N
075°09'22"E
4000

1933

045° (051.8°T)
MNM 4000 1 MIN
225° (231.8°T)

DIBUK
47°26'31"N
075°45'36"E
FL120

DIBUK 1G
16.8
211° (218.3°T)

11.7
211° (218.3°T)

AH460
47°13'18"N
075°30'17"E
6000

AH430
IAF
47°04'08"N
075°19'42"E
4000

AH440
IAF
46°57'04"N
075°18'28"E
4000

MNM 4000 1 MIN
135° (141.8°T)
315° (321.8°T)

1513
1586
1917

UAR168
7300 FT MSL
GND

UAR13
8000 FT MSL
GND

UAR291
4800 FT MSL
GND

23.4
348° (355.1°T)

AH470
46°33'47"N
075°21'24"E
6000

TULPI 1G
20.6
348° (355.1°T)

TULPI
46°13'18"N
075°19'14"E
FL120

UAR275
4500 FT MSL
GND

NOTE:
1. WPTs AH430, AH440, AH450 are fly-by for arrival procedures and flyover for holding patterns.

SCALE 1:600 000
0 6 12 18 24 KM
0 3 6 12 NM

CHANGE: New chart.

TABULAR DESCRIPTION

DIBUK 1G RWY22

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	DIBUK	-	-	+7.1	-	-	+FL120	-	-	RNAV 1
020	TF	AH460	-	211(218.3)	+7.1	16.8	-	+6000	-	-3.4	RNAV 1
030	TF	AH430	-	211(218.3)	+7.1	11.7	-	+4000	-	-1.6	RNAV 1

GIREM 1G RWY22

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	GIREM	-	-	+7.1	-	-	+FL130	-	-	RNAV 1
020	TF	AH480	-	134(141.1)	+7.1	19.0	-	+6000	-	-3.5	RNAV 1
030	TF	AHN04	-	134(141.1)	+7.1	10.0	-	+5000	-	-0.9	RNAV 1
040	TF	AH450	-	135(141.8)	+7.1	6.0	-	+4000	-	-1.6	RNAV 1

NEPLA 1G RWY22

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	NEPLA	-	-	+7.1	-	-	+FL130	-	-	RNAV 1
020	TF	AHN02	-	082(089.3)	+7.1	29.2	-	+6000	-	-2.3	RNAV 1
030	TF	AHN04	-	082(089.3)	+7.1	14.1	-	+5000	-	-0.7	RNAV 1
040	TF	AH450	-	135(141.8)	+7.1	6.0	R	+4000	-	-1.6	RNAV 1

TULPI 1G RWY22

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	TULPI	-	-	+7.1	-	-	+FL120	-	-	RNAV 1
020	TF	AH470	-	348(355.1)	+7.1	20.6	-	+6000	-	-2.7	RNAV 1
030	TF	AH440	-	348(355.1)	+7.1	23.4	-	+4000	-	-0.8	RNAV 1

WAYPOINT COORDINATES

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

HOLDINGS

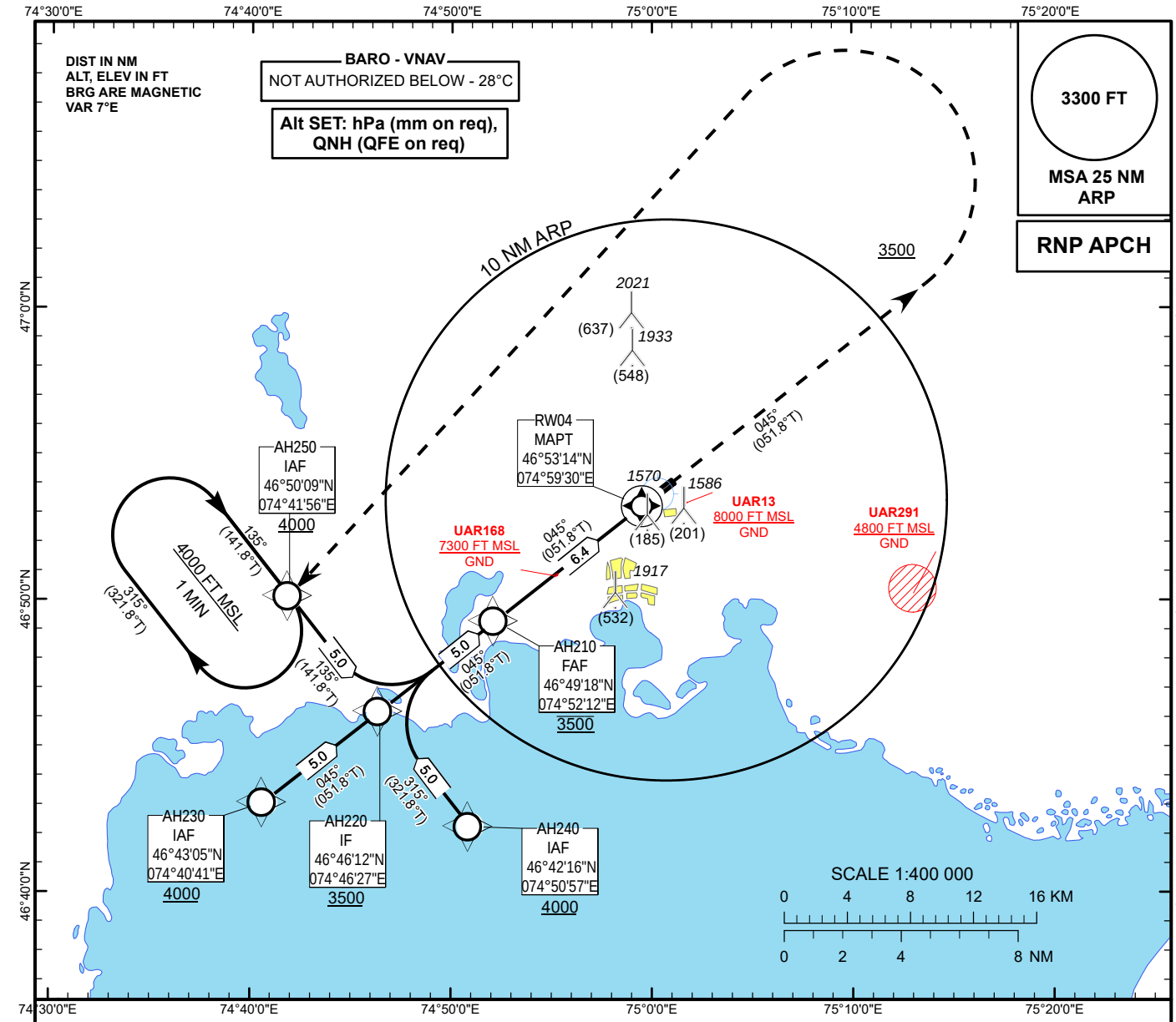
Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FT)	Speed limit (KT)	Navigation Specification
Hold	AH440	315(321.8T)	1	R	+4000	-	-	RNAV 1
Hold	AH430	225(231.8T)	1	R	+4000	-	-	RNAV 1
Hold	AH450	135(141.8T)	1	L	+4000	-	-	RNAV 1

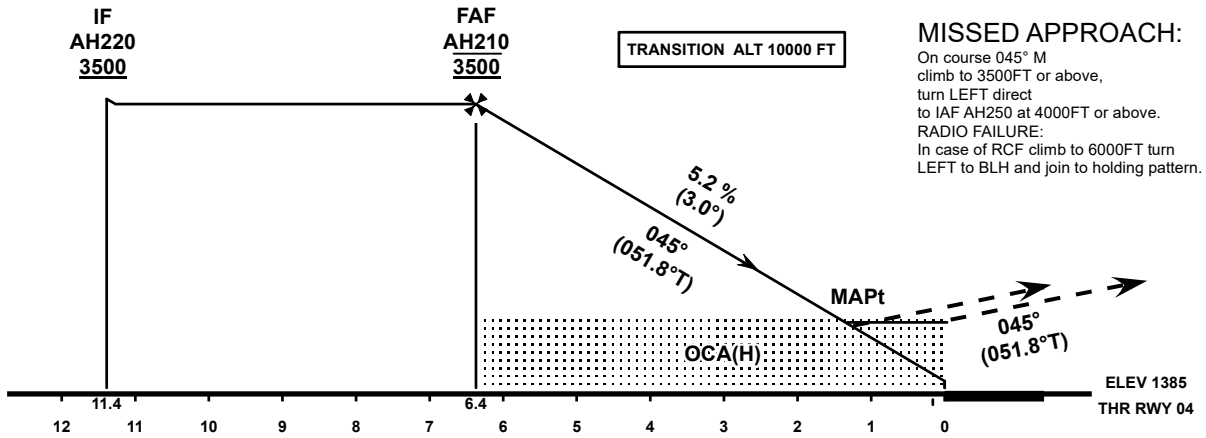
INSTRUMENT APPROACH CHART - ICAO

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

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

BALKHASH
RNP RWY 04





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

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

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

CHANGE: Missed approach description

TABULAR DESCRIPTION

RNP RWY04

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

WAYPOINT COORDINATES

RNP RWY04

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

HOLDINGS

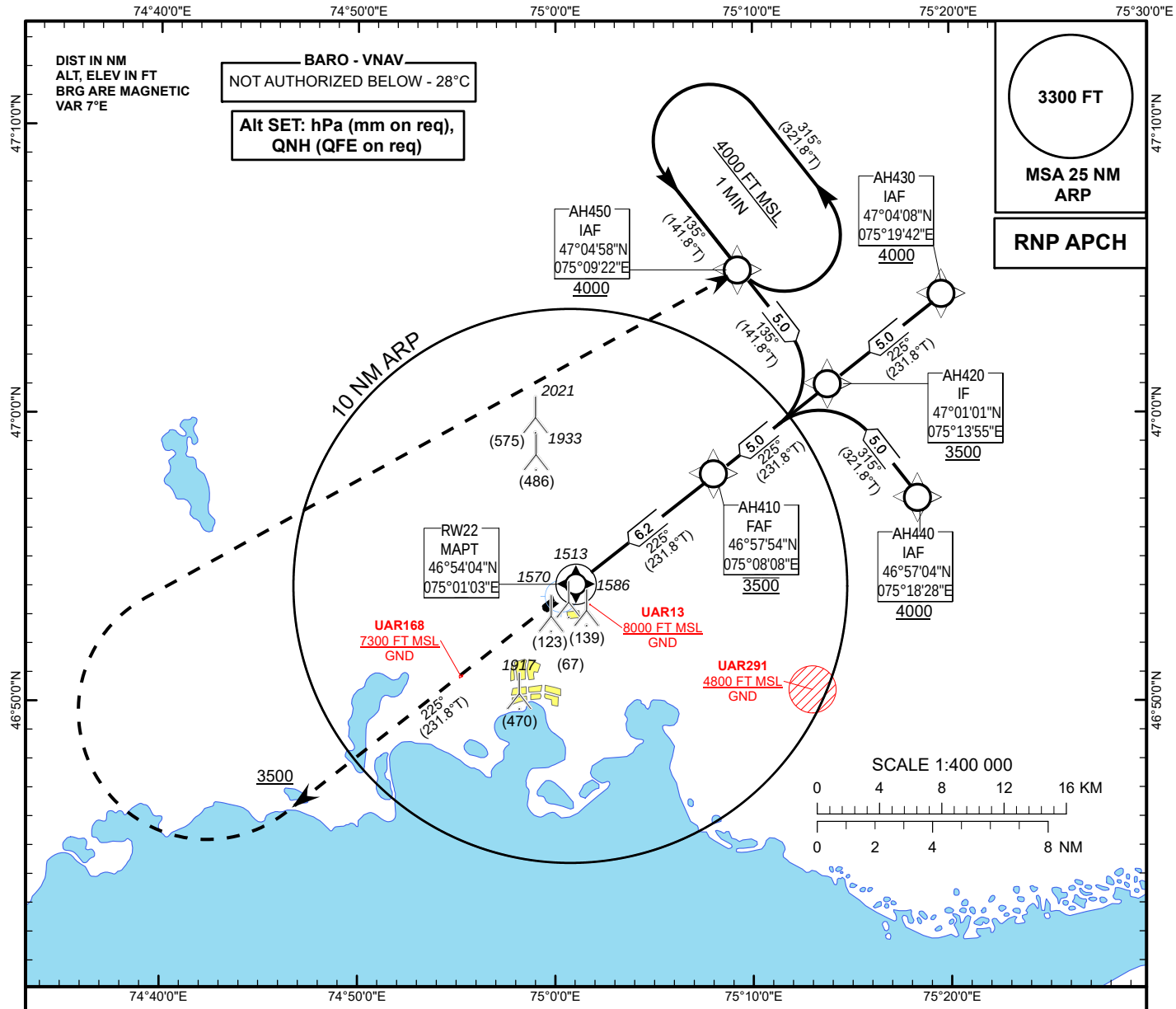
Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FT)	Speed limit (KT)	Navigation Specification
Hold	AH250	135 (141.8T)	1	R	+4000	-	-	RNAV 1

INSTRUMENT APPROACH CHART - ICAO

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

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

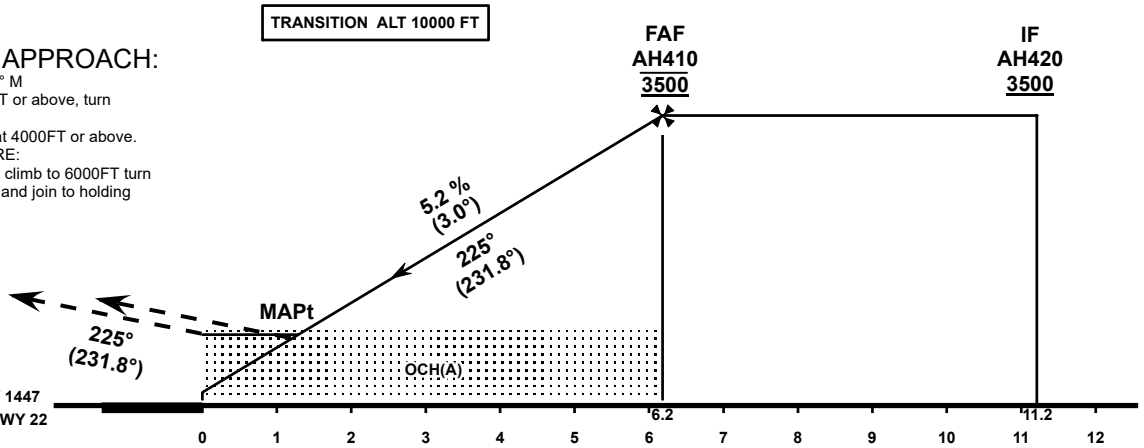
BALKHASH RNP RWY 22



TRANSITION ALT 10000 FT

MISSED APPROACH:

On course 225° M
climb to 3500FT or above, turn
RIGHT direct
to IAF AH450 at 4000FT or above.
RADIO FAILURE:
In case of RCF climb to 6000FT turn
RIGHT to BLH and join to holding pattern.



OCA(OCH)		A	B	C	D
Straight	LNAV	1760(320)			
	LNAV/VNAV	1644(198)	1654(208)	1664(217)	1674(227)

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

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

CHANGE: Missed approach description

TABULAR DESCRIPTION

RNP RWY22

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
010	IF	AH430	-	-	+7.1	-	-	+4000	-	-	RNP APCH
020	TF	AH420	-	225(231.8)	+7.1	5.0	-	+3500	-	-	RNP APCH
010	IF	AH440	-	-	+7.1	-	-	+4000	-	-	RNP APCH
020	TF	AH420	-	315(321.8)	+7.1	5.0	-	+3500	-	-	RNP APCH
010	IF	AH450	-	-	+7.1	-	-	+4000	-	-	RNP APCH
020	TF	AH420	-	135(141.8)	+7.1	5.0	-	+3500	-	-	RNP APCH
010	IF	AH420	-	-	+7.1	-	-	+3500	-	-	RNP APCH
020	TF	AH410	-	225(231.8)	+7.1	5.0	-	@3500	-	-	RNP APCH
030	TF	RW22	Y	225(231.8)	+7.1	6.2	-	@1497	-	-3.0	RNP APCH
040	CA	-	-	225(231.8)	+7.1	-	-	+3500	-	-	RNP APCH
050	DF	AH450	-	-	+7.1	-	R	+4000	-	-	RNP APCH

WAYPOINT COORDINATES

RNP RWY22

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

HOLDINGS

Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FT)	Speed limit (KT)	Navigation Specification
Hold	AH450	135 (141.8T)	1	L	+4000	-	-	RNAV 1

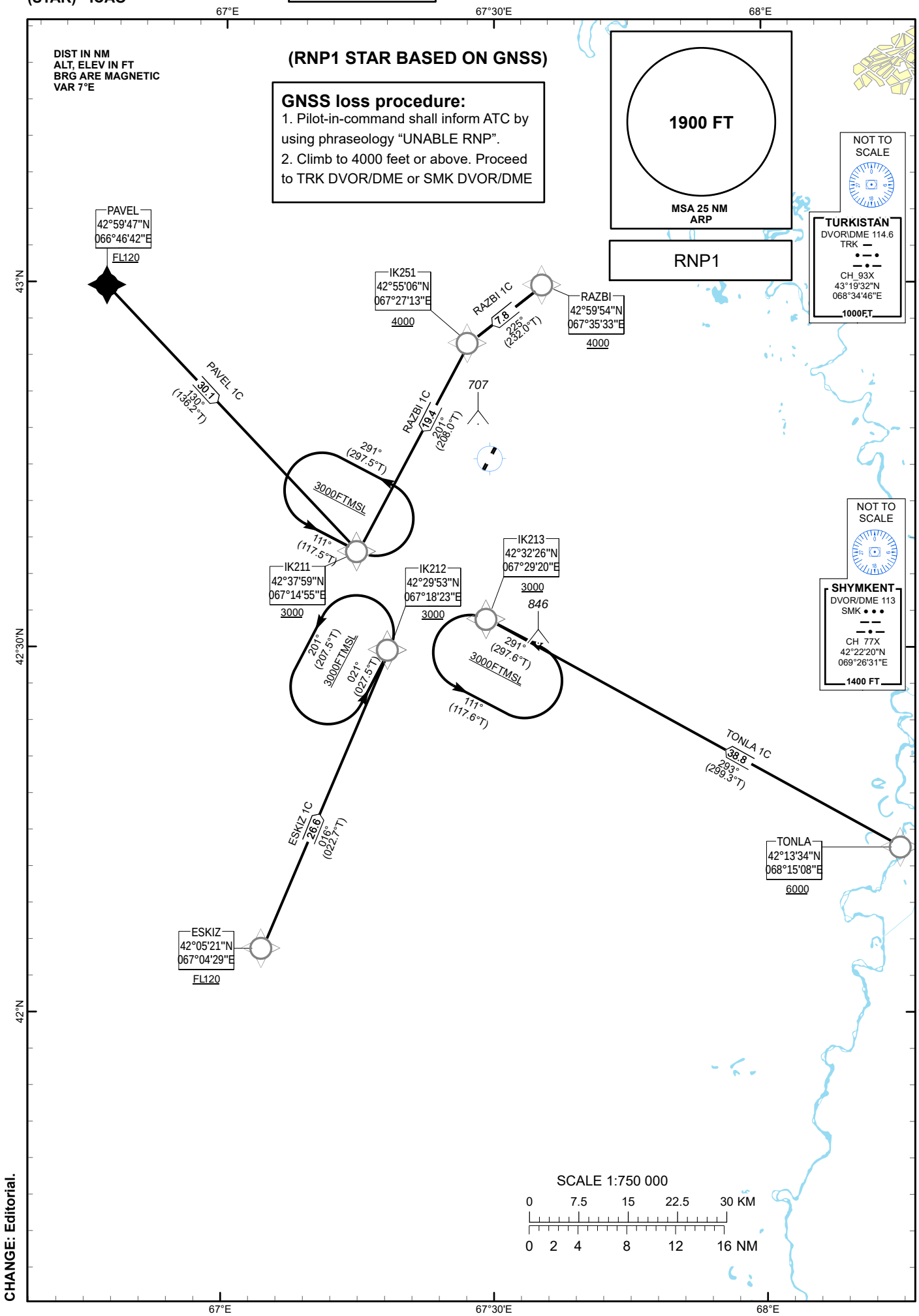
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

TOWER FREQ
SEE NOTAM

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

BOZHBAN RWY 02R



CHANGE: Editorial.

TABULAR DESCRIPTION

ESKIZ 1C RWY02R

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
010	IF	ESKIZ	-		+6.54	-	-	+FL 120	-	-	RNP 1
020	TF	IK212	-	016(022.7)	+6.54	26.6	-	+3000	-	-	RNP 1

PAVEL 1C RWY02R

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
010	IF	PAVEL	-		+6.54	-	-	+FL 120	-	-	RNP 1
020	CF	IK211	-	130(136.2)	+6.54	30.1	-	+3000	-	-	RNP 1

RAZBI 1C RWY02R

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
010	IF	RAZBI	-		+6.54	-	-	+4000	-	-	RNP 1
020	TF	IK251	-	225(232.0)	+6.54	7.8	-	+4000	-	-	RNP 1
030	TF	IK211	-	201(208.0)	+6.54	19.4	L	+3000	-	-	RNP 1

TONLA 1C RWY02R

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
010	IF	TONLA	-		+6.54	-	-	+6000	-	-	RNP 1
020	TF	IK213	-	293(299.3)	+6.54	38.8	-	+3000	-	-	RNP 1

WAYPOINT COORDINATES

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

HOLDINGS

Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	IK211	111 (117.5T)	1	L	3000FT	-	-	RNP 1
Hold	IK212	021(27.5T)	1	L	3000FT	-	-	RNP 1
Hold	IK213	291(297.6T)	1	L	3000FT	-	-	RNP 1

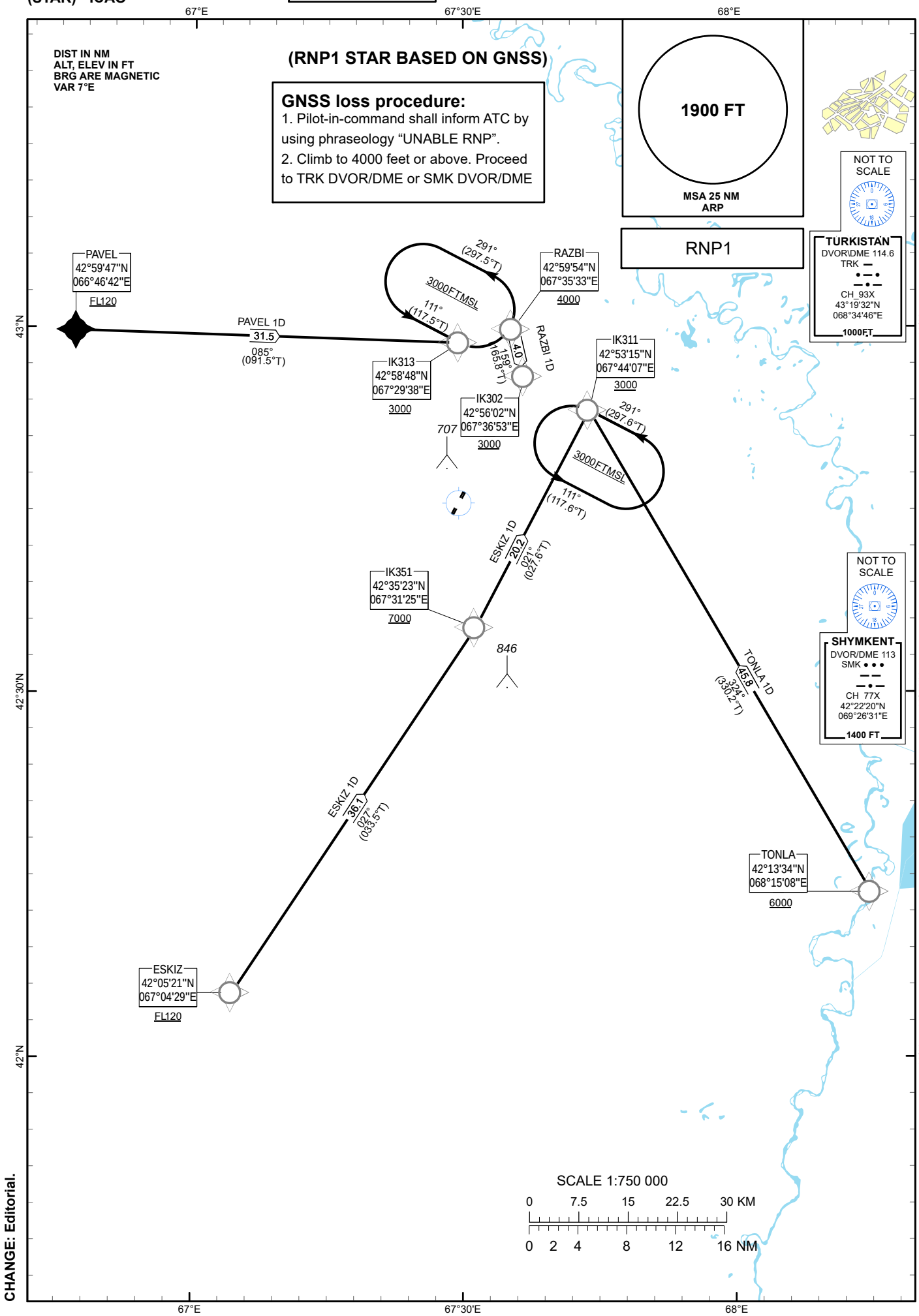
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

TOWER FREQ
SEE NOTAM

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

BOZHBAN
RWY 20L



CHANGE: Editorial.

TABULAR DESCRIPTION

ESKIZ 1D RWY20L

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
010	IF	ESKIZ	-		+6.54	-	-	+FL 120	-	-	RNP 1
020	TF	IK351	-	027(033.5)	+6.54	36.1	-	+7000	-	-	RNP 1
030	TF	IK311	-	021(027.6)	+6.54	20.2	L	+3000	-	-	RNP 1

PAVEL 1D RWY20L

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
010	IF	PAVEL	-		+6.54	-	-	+FL 120	-	-	RNP 1
020	TF	IK313	-	085(091.5)	+6.54	31.5	-	+3000	-	-	RNP 1

RAZBI 1D RWY20L

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

TONLA 1D RWY20L

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
010	IF	TONLA	-		+6.54	-	-	+6000	-	-	RNP 1
020	TF	IK311	-	324(330.2)	+6.54	45.8	-	+3000	-	-	RNP 1

WAYPOINT COORDINATES

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

HOLDINGS

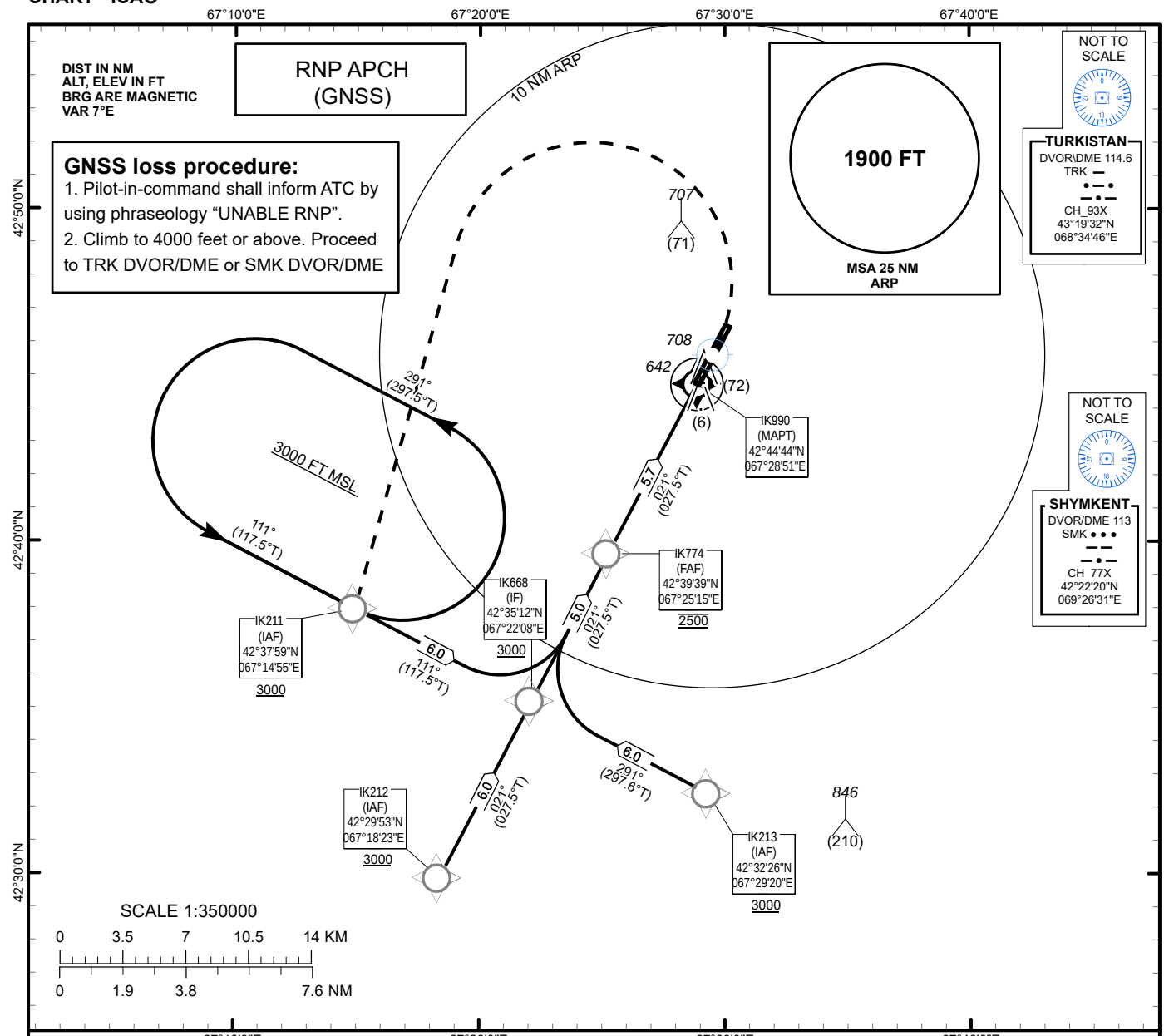
Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	IK313	111 (117.5T)	1	L	3000FT	-	-	RNP 1
Hold	IK311	291(297.6T)	1	L	3000FT	-	-	RNP 1

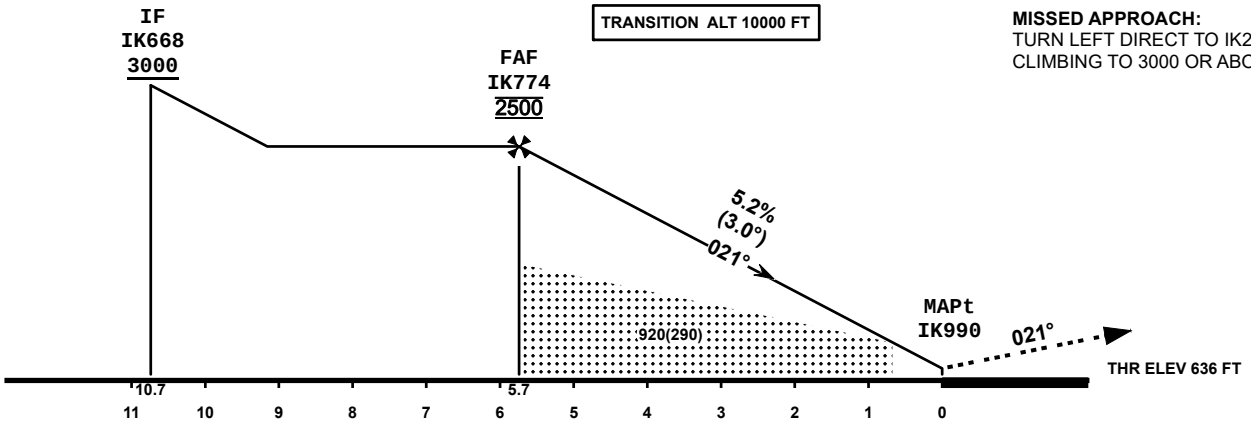
INSTRUMENT APPROACH CHART - ICAO

AERODROME ELEV ***636 FT***
HEIGHTS RELATED TO AD ELEV

TOWER FREQ SEE NOTAM

BOZHBAN RNP RWY 02R





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

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

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

CHANGE: Edit.

TABULAR DESCRIPTION

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
010	IF	IK211	-		+6.54	-	-	+3000	-	-	RNP APCH
020	TF	IK668	-	111(117.5)	+6.54	6.0	-	+3000	-	-	RNP APCH
010	IF	IK212	-		+6.54	-	-	+3000	-	-	RNP APCH
020	TF	IK668	-	021(27.5)	+6.54	6.0	-	+3000	-	-	RNP APCH
010	IF	IK213	-		+6.54	-	-	+3000	-	-	RNP APCH
020	TF	IK668	-	291(297.6)	+6.54	6.0	-	+3000	-	-	RNP APCH
010	IF	IK668	-		+6.54	-	-	+3000	-	-	RNP APCH
020	TF	IK774	-	021(27.5)	+6.54	5.0	-	@2500	-	-	RNP APCH
030	TF	IK990	Y	021(27.5)	+6.54	5.7	-	@686	-	-3	RNP APCH
040	DF	IK211	-		+6.54	25.5	L	+3000	-	+1.4	RNP APCH

WAYPOINT LIST

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

HOLDINGS

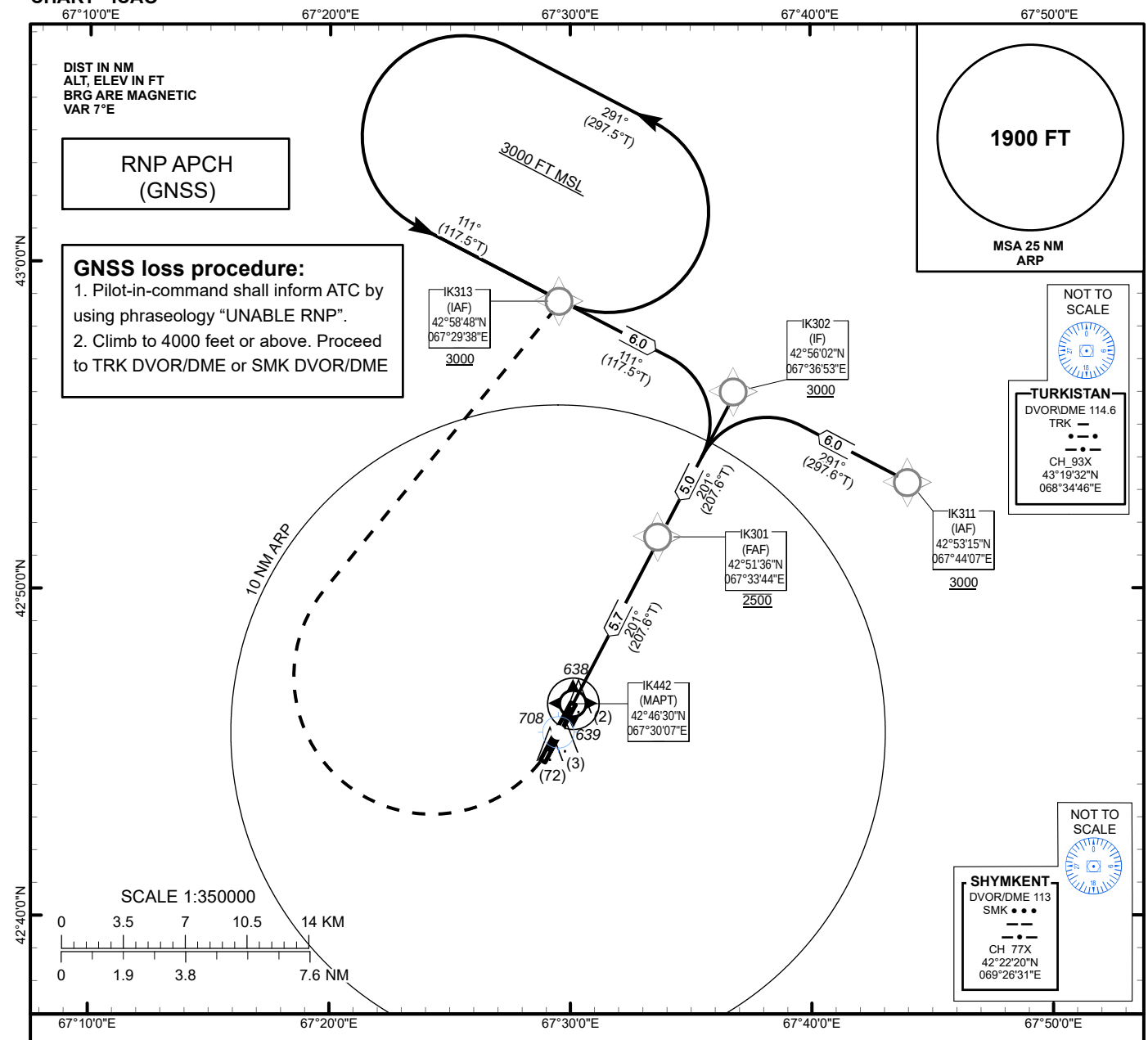
Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	IK211	111 (117.5T)	1	L	3000FT	-	-	RNP 1

INSTRUMENT APPROACH CHART - ICAO

AERODROME ELEV ***636 FT***
HEIGHTS RELATED TO AD ELEV

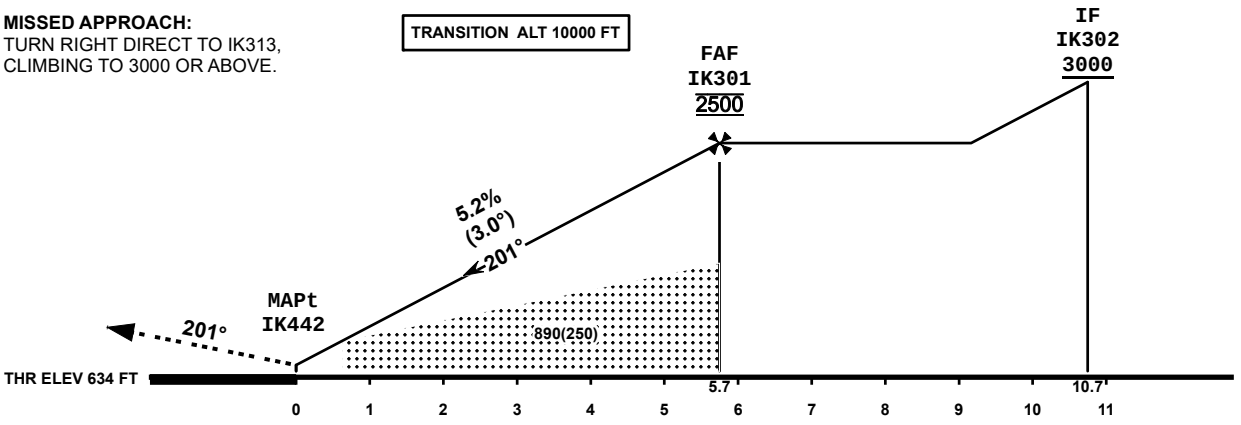
TOWER FREQ SEE NOTAM

BOZHBAN RNP RWY 20L



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

TRANSITION ALT 10000 FT



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

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

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

CHANGE: New chart.

TABULAR DESCRIPTION

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
010	IF	IK311	-		+6.54	-	-	+3000	-	-	RNP APCH
020	TF	IK302	-	291(297.6)	+6.54	6.0	-	+3000	-	-	RNP APCH
010	IF	IK313	-		+6.54	-	-	+3000	-	-	RNP APCH
020	TF	IK302	-	111(117.5)	+6.54	6.0	-	+3000	-	-	RNP APCH
010	IF	IK302	-		+6.54	-	-	+3000	-	-	RNP APCH
020	TF	IK301	-	201(207.6)	+6.54	5.0	-	@2500	-	-	RNP APCH
030	TF	IK442	Y	201(207.6)	+6.54	5.7	-	@686	-	-3	RNP APCH
040	DF	IK313	-		+6.54	25.5	R	+3000	-	+1.4	RNP APCH

WAYPOINT LIST

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

HOLDINGS

Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	IK313	111 (117.5T)	1	L	3000FT	-	-	RNP 1

SWY dimensions (M)	CWY dimensions (M)	Strip dimensions (M)	RESA dimensions (M)	Location and description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
Nil	400 X 150	3101 X 300	150 x 250	Nil	AVBL	The RWY turn pad length is 116 m, the total width of the RWY turn pad is 75 m. Refer to AIP section 2.24.1

UACP AD 2.13 Declared Distances

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

UACP AD 2.14 Approach And Runway Lighting

RWY Designator	APCH LGT type, LEN, INTST	THR LGT colour, WBAR	VASIS, (MEHT), PAPI	TDZ, LGT LEN	RWY Centre Line LGT Length, spacing, colour, INTST	RWY edge LGT LEN, spacing, colour, INTST	RWY End LGT colour, WBAR	SWY LGT LEN, colour	Remarks
1	2	3	4	5	6	7	8	9	10
05	(SALS) 420 M LIL	GRN Nil	PAPI LEFT/3°	Nil	Nil	2802m, spacing 60m, 0-2202m white, last 600m yellow LIH	RED Nil	Nil	Nil
23	CAT I (PALS) 900 M LIH	GRN Nil	PAPI LEFT/3°	Nil	Nil	2802m, spacing 60m, 0-2202m white, last 600m yellow LIH	RED Nil	Nil	Nil

UACP AD 2.15 Other Lighting, Secondary Power Supply

1	ABN/IBN location, characteristics and hours of operation	ABN: Nil IBN: Nil
2	LDI location and LGT Anemometer location and LGT	LDI: Nil
3	TWY edge and centre line lighting	TWY A EDGE: BLU

4	Secondary power supply/switch-over time	AVBL, 0 sec
5	Remarks	Nil

UACP AD 2.16 Helicopter Landing Area

1	Coordinates TLOF or THR of FATO Geoid undulation	544629N 0691100E -82 FT
2	TLOF and/or FATO elevation	458 FT
3	TLOF and FATO area dimensions, surface, strength, marking	Rectangle 25x25 M, PCN 63/F/D/X/T CONC+ASPH, no marking
4	True BRG of FATO	053°/233°
5	Declared distance available	Nil
6	APP and FATO lighting	Nil
7	Remarks	On intersection of TWY A

UACP AD 2.17 ATS Airspace

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

UACP AD 2.18 ATS Communication Facilities

Service designation	Call sign	Frequency	SATVOICE number(s)	Logon address	Hours of operation	Remarks
1	2	3	4	5	6	7
TWR	PETROPAVLOVSK TOWER (EN) PETROPAVLOVSK VYSHKA (RU)	123,7 MHZ	Nil	Nil	See NOTAM	Nil
ATIS	PETROPAVLOVSK ATIS (EN) PETROPAVLOVSK ATIS (RU)	127,4 MHZ 118,3 MHZ	Nil	Nil	As AD	ATIS information is being updated during AD working hours. Outside AD working hours ATIS information is not updated.

STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE
10000 FT

SATPAY TOWER 122.9

ADLIL 1E

SATPAY RWY 11

84°30'0"E

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

ALT/HEIGHT CONVERSION
QNH (QFE)
3000 (1582FT - 482m)

3800FT
709°
277°
10300FT
MSA 25NM
ZSN DVOR

1512
1542
1634
2241
1736
1627

ADLIL
47°59'40"N
084°15'09"E
ZSN
R324.5°/D27.1
FL120

48°0'0"N

ADLIL 1E
16

325°

ADLIL 1E
After take-off climb straight ahead to 3000FT or above, turn LEFT on track 279° until intercept R325° ZSN, then proceed on track 325° to ADLIL (R324.5° D27.1 NM ZSN).

WARNING:
Minimum climb gradient 6.5% due to airspace constraints.

R325° ZSN

ADLIL 1E
29

279°

SATPAY
DVOR/DME 112.3
ZSN
CH70X
47°36'27"N
084°35'46"E
1400FT

1683

109°

3000

3491
4209
4108
1804
4255
2910
2976
3000
6000
5722

47°30'0"N

SCALE 1:350 000
0 3.5 7 10.5 14 KM
0 1.75 3.5 7 NM

CHANGE: Climb gradient.

84°30'0"E

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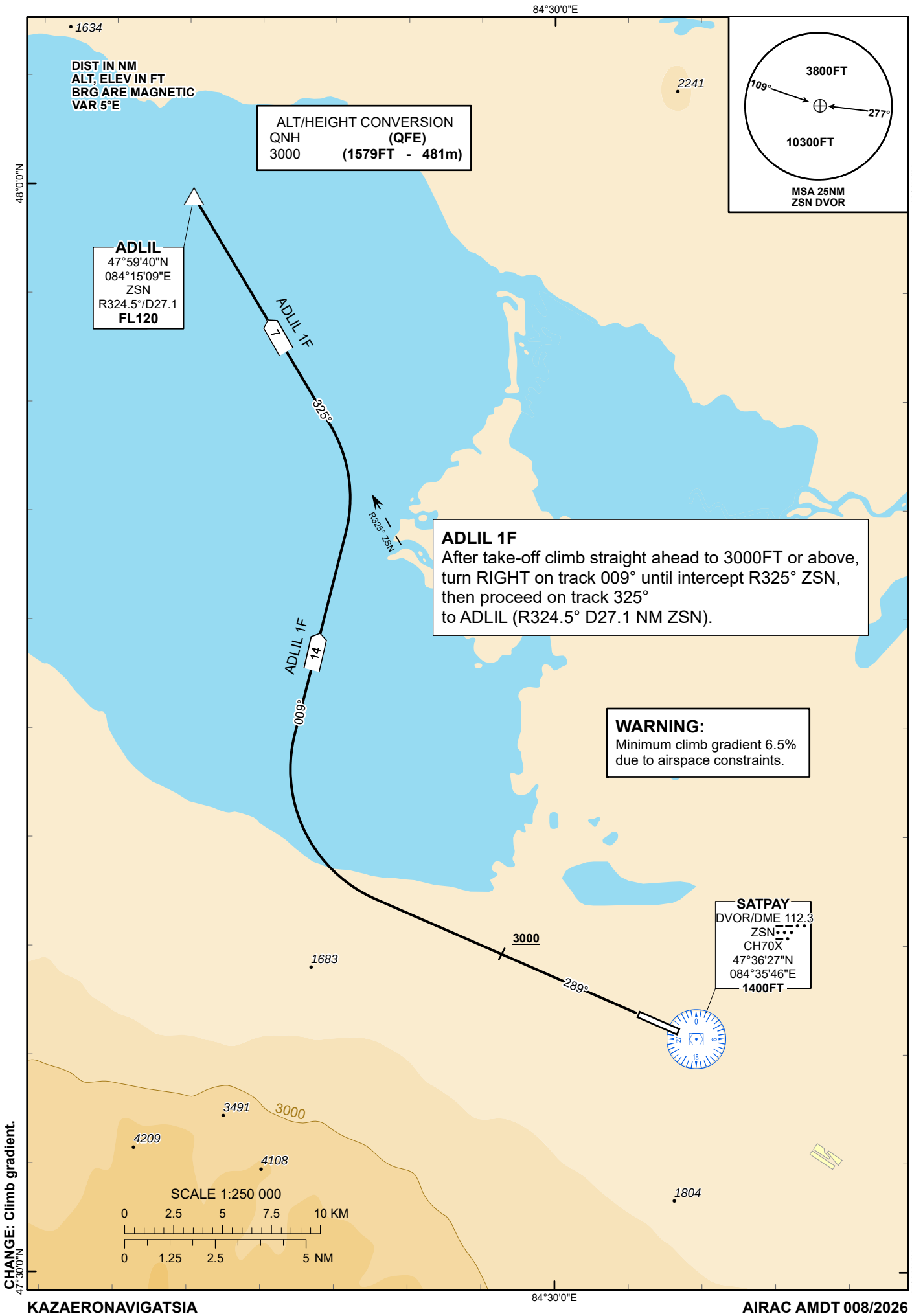
STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE
10000 FT

SATPAY TOWER 122.9

ADLIL 1F

SATPAY RWY 29



CHANGE: Climb gradient.

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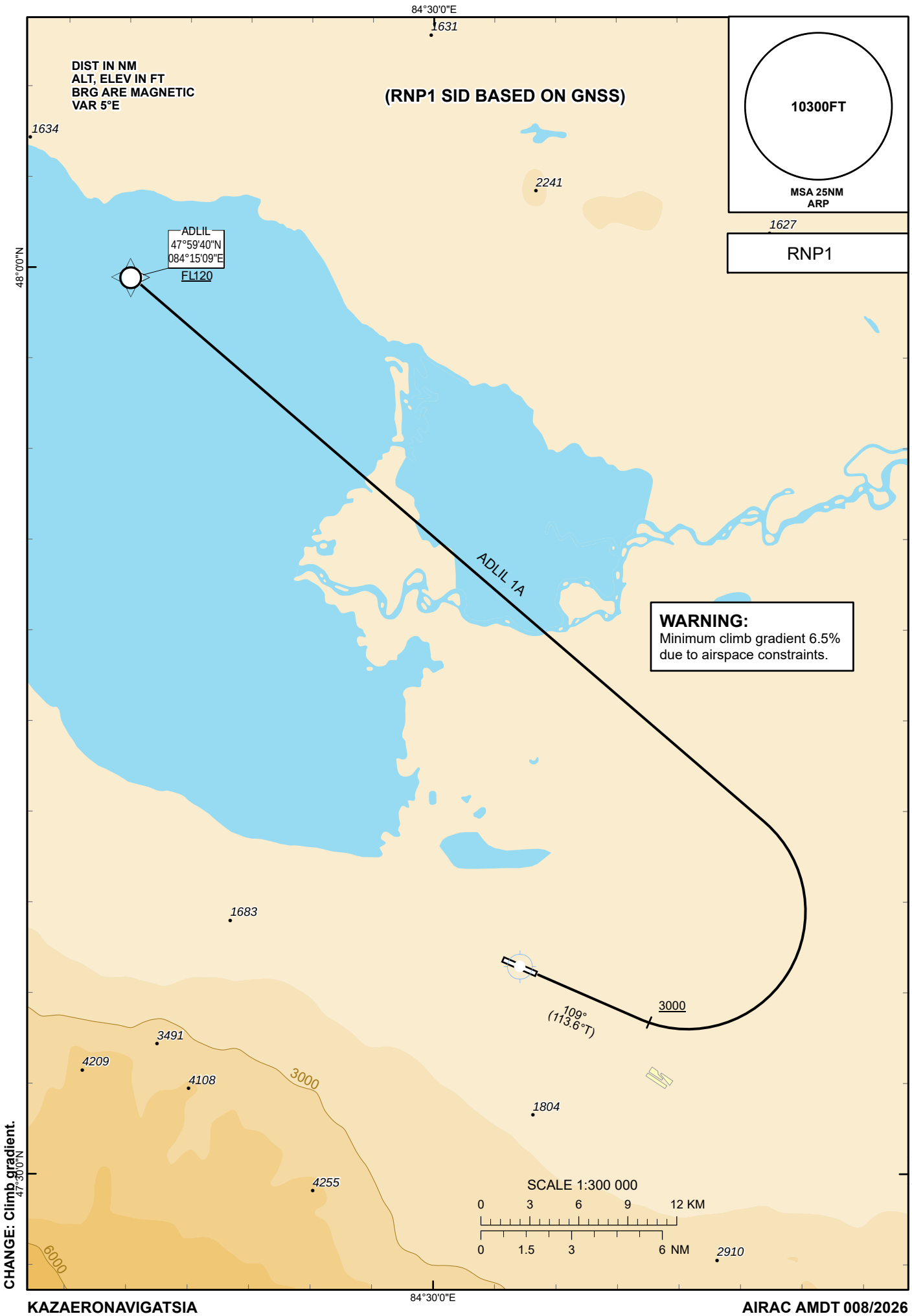
STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE
10000 FT

SATPAY TOWER 122.9

ADLIL 1A

SATPAY RWY 11



CHANGE: Climb gradient.

TABULAR DESCRIPTION

ADLIL 1A RWY11											
Serial Number	**Path Descriptor**	**Waypoint Identifier**	**Fly - over**	**Course M°(T°)**	**Magnetic Variation(°)**	**Distance (NM)**	**Turn Direction**	**Altitude (FT)**	**Speed (KT)**	**VPA (°)**	**Navigation Specification**
010	CA	-	-	109(113.6)	+4.7	-	-	+3000	-	1.9	RNP1
020	DF	ADLIL	-	-	+4.7	-	L	+FL120	-	2.1	RNP1

WAYPOINT COORDINATES

Waypoint Identifier	**Coordinates**
ADLIL	475940.00N 0841509.00E

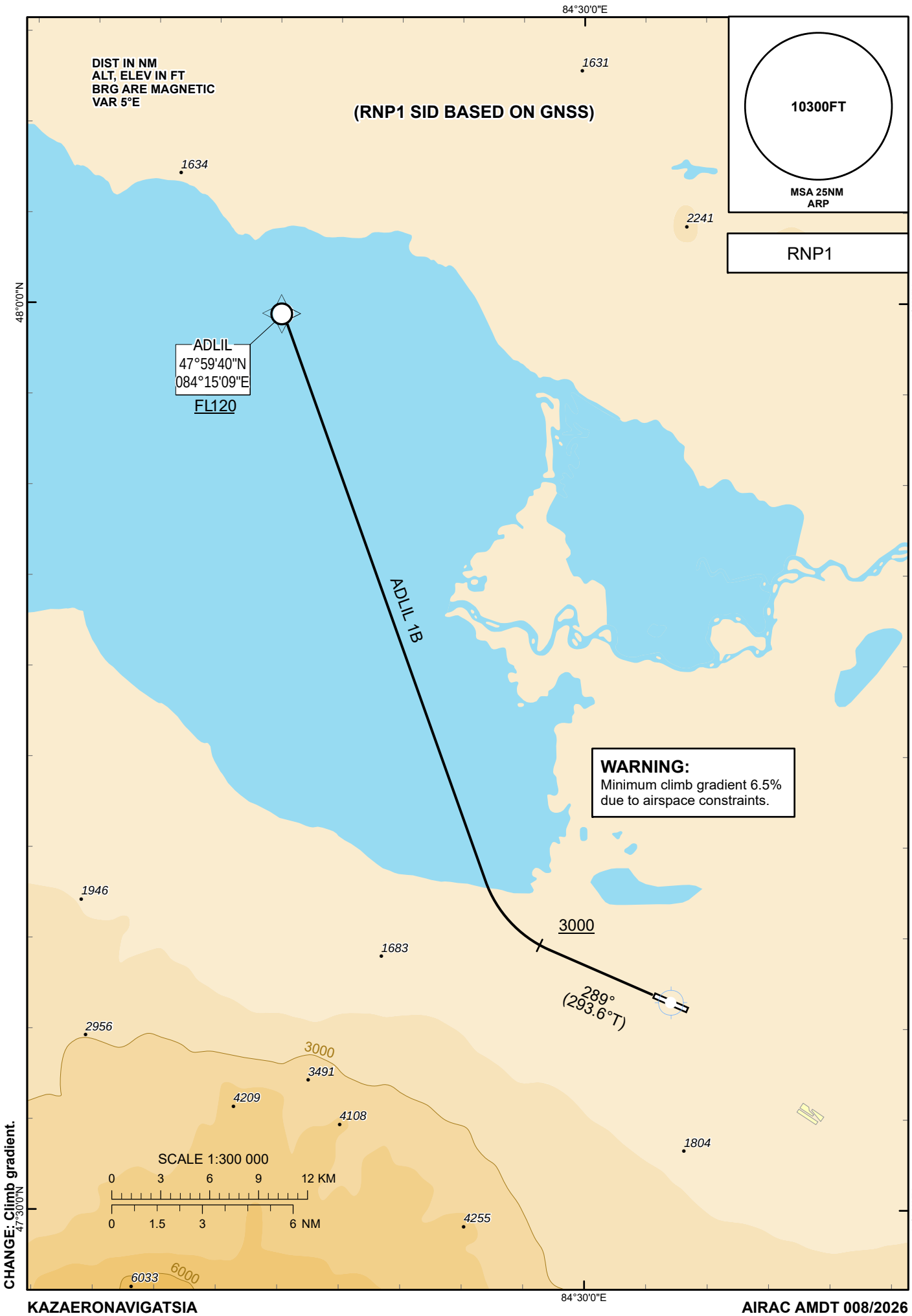
STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE
10000 FT

SATPAY TOWER 122.9

ADLIL 1B

SATPAY RWY 29



CHANGE: Climb gradient.

TABULAR DESCRIPTION

ADLIL 1B RWY29											
Serial Number	**Path Descriptor**	**Waypoint Identifier**	**Fly - over**	**Course M°(T°)**	**Magnetic Variation(°)**	**Distance (NM)**	**Turn Direction**	**Altitude (FT)**	**Speed (KT)**	**VPA (°)**	**Navigation Specification**
010	CA	-	-	289(293.6)	+4.7	-	-	+3000	-	1.9	RNP1
020	DF	ADLIL	-	-	+4.7	-	R	+FL120	-	3.5	RNP1

WAYPOINT COORDINATES

Waypoint Identifier	**Coordinates**
ADLIL	475940.00N 0841509.00E

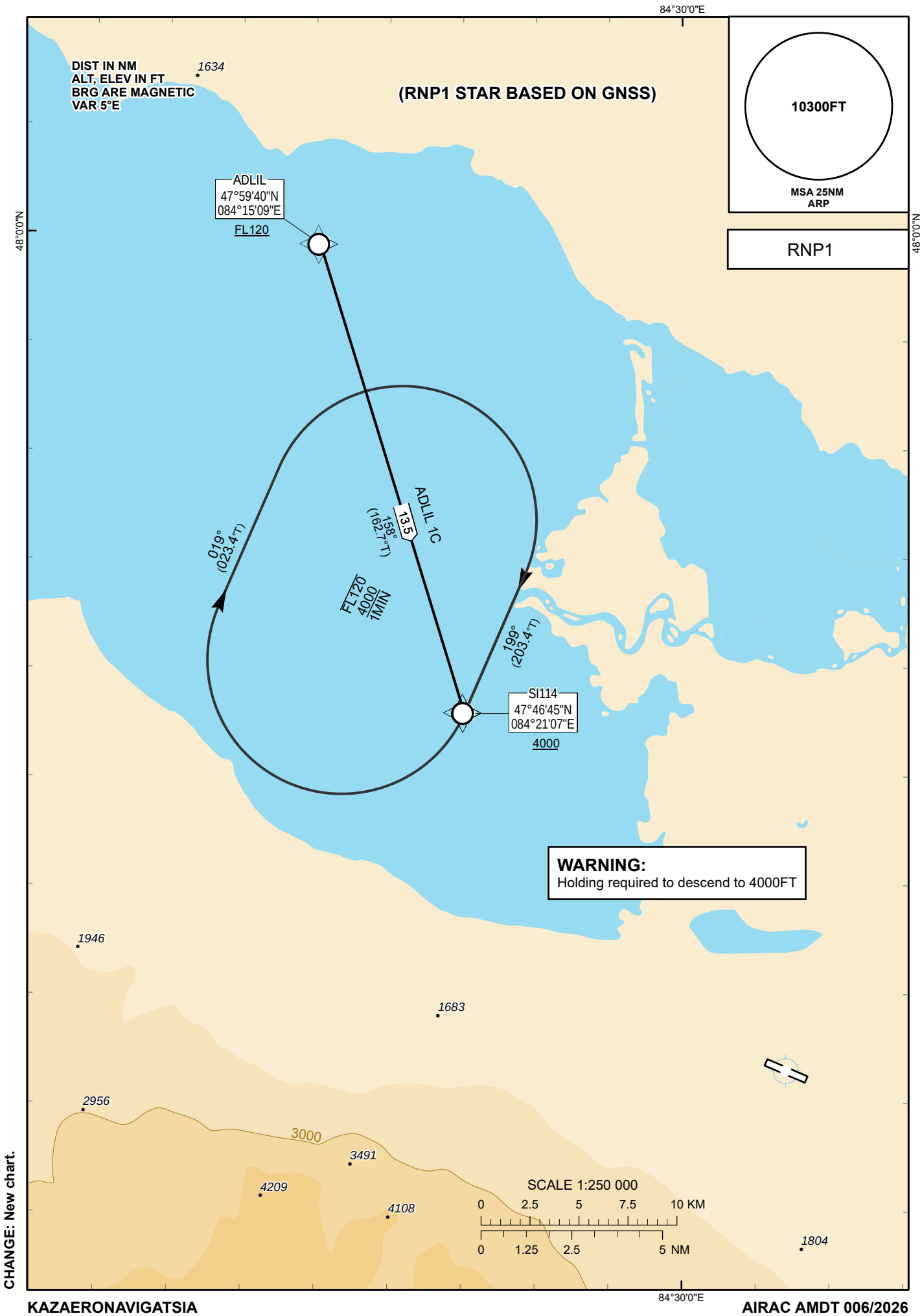
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

SATPAY TOWER 122.9

ADLIL 1C

SATPAY RWY 11



CHANGE: New chart.

TABULAR DESCRIPTION

ADLIL 1C RWY11

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	ADLIL	-	-	+4.7	-	-	+FL120	-	-	RNP1
020	TF	SI114	-	158(162.7)	+4.7	13.5	-	+4000	-	-	RNP1

WAYPOINT COORDINATES

Waypoint Identifier	Coordinates	
ADLIL	475940.00N	0841509.00E
SI114	474644.86N	0842106.52E

HOLDINGS

Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	SI114	199 (203.4T)	1	R	+4000	-FL120	-	RNP1

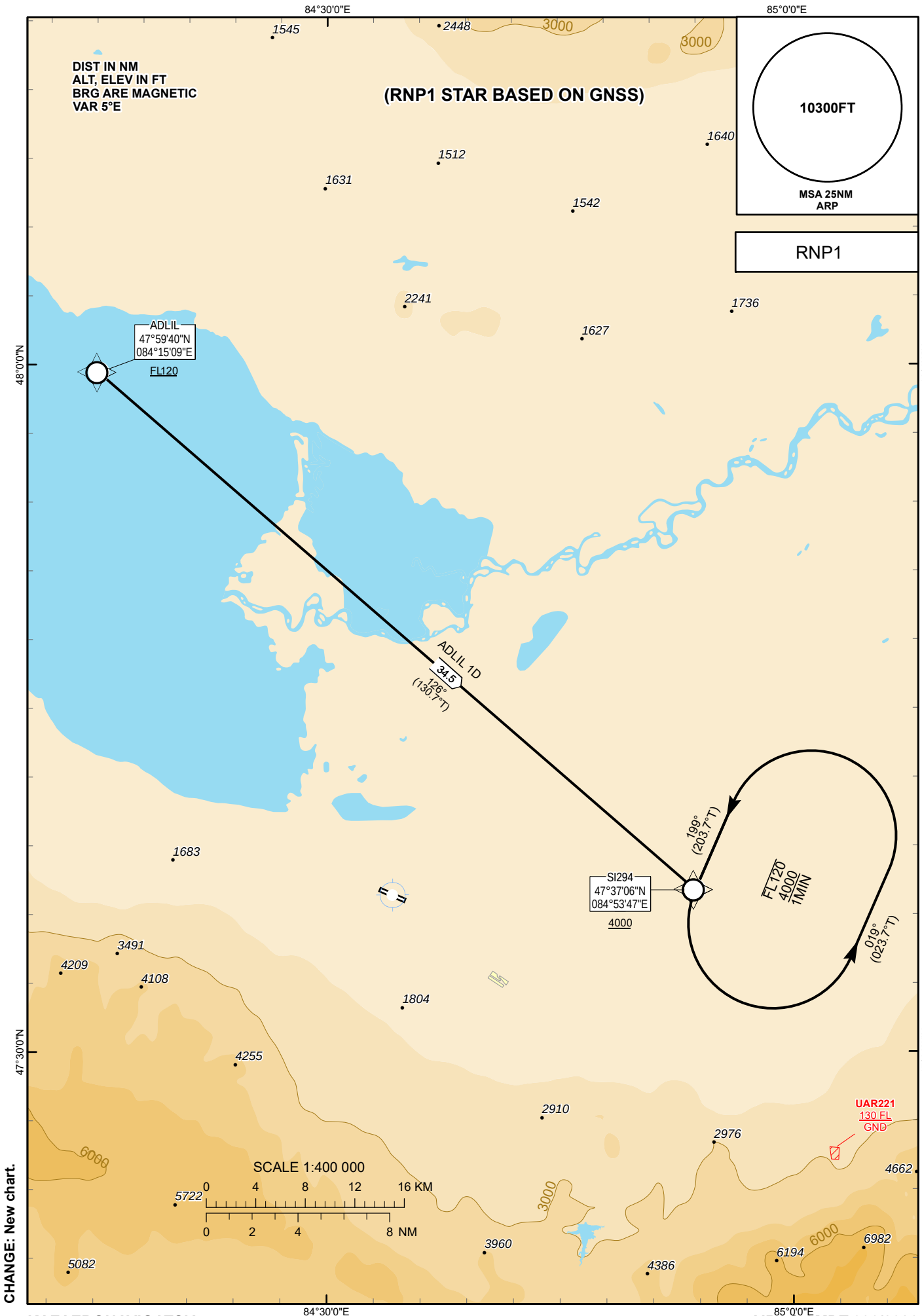
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

SATPAY TOWER 122.9

ADLIL 1D

SATPAY RWY 29



CHANGE: New chart.

TABULAR DESCRIPTION

ADLIL 1D RWY29											
Serial Number	**Path Descriptor**	**Waypoint Identifier**	**Fly - over**	**Course M°(T°)**	**Magnetic Variation(°)**	**Distance (NM)**	**Turn Direction**	**Altitude (FT)**	**Speed (KT)**	**VPA (°)**	**Navigation Specification**
010	IF	ADLIL	-	-	+4.7	-	-	+FL120	-	-	RNP1
020	TF	SI294	-	126(130.7)	+4.7	34.5	-	+4000	-	-	RNP1

WAYPOINT COORDINATES

Waypoint Identifier	**Coordinates**	
ADLIL	475940.00N	0841509.00E
SI294	473705.55N	0845347.17E

HOLDINGS

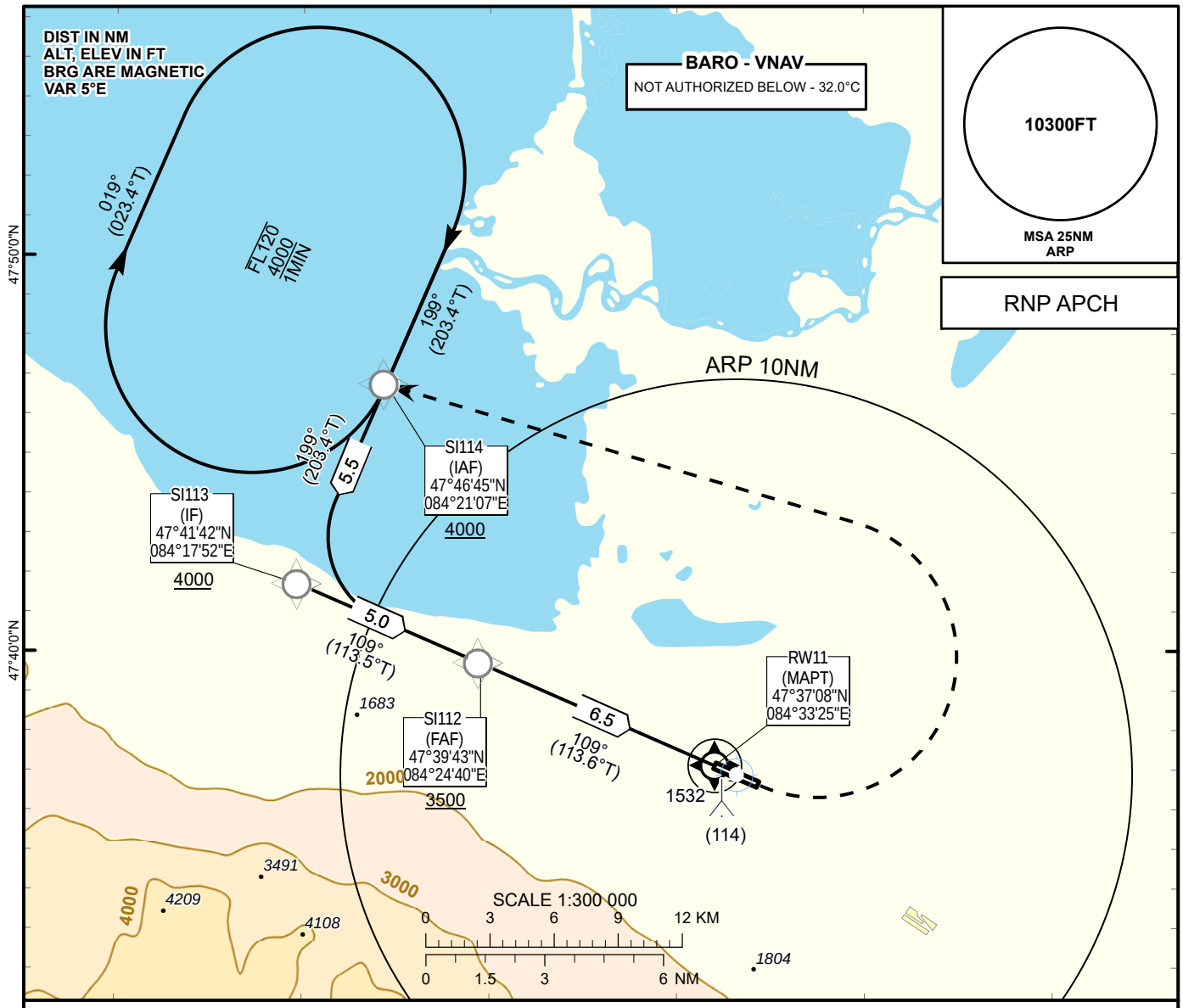
Path Descriptor	**Waypoint Identifier**	**Inbound Course °M (°T)**	**Time (MIN)**	**Turn Diretion**	**Minimum Altitude (FT)**	**Maximum Altitude**	**Speed limit (KT)**	**Navigation Specification**
Hold	SI294	199 (203.7T)	1	L	+4000	-FL120	-	RNP1

INSTRUMENT APPROACH CHART - ICAO

AERODROME ELEV ***1417FT***
HEIGHTS RELATED TO
AD ELEV

SATPAY TOWER 122.9

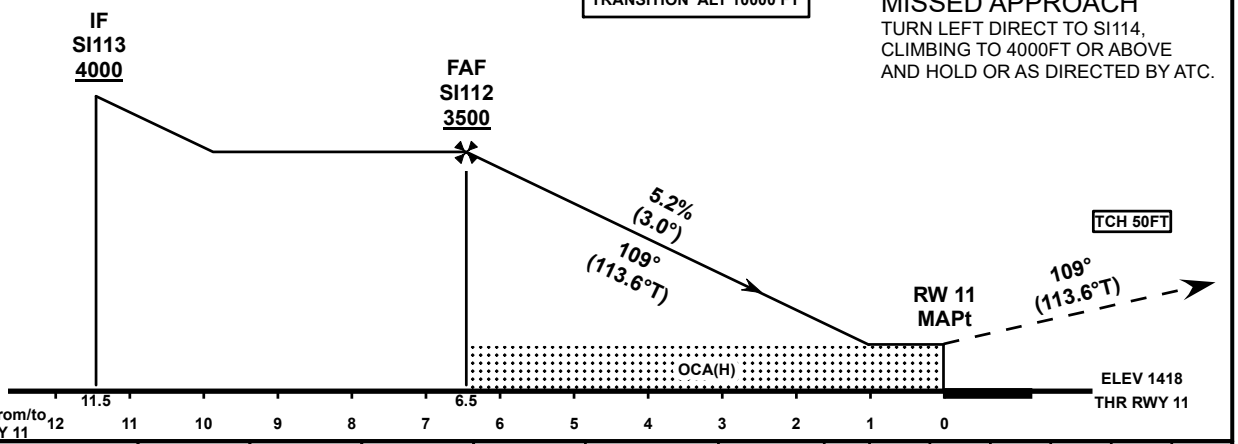
**SATPAY
RNP RWY 11**



TRANSITION ALT 10000 FT

MISSED APPROACH

TURN LEFT DIRECT TO SI114,
CLIMBING TO 4000FT OR ABOVE
AND HOLD OR AS DIRECTED BY ATC.



Aircraft Category		A	B	C	D
Straight-in Approach OCA/H	LNAV	1740(320)			
	LNAV/VNAV	1670(250)	1670(250)	1670(250)	1670(250)

DIST to THR	NM	6	5	4	3	2	1
ALTITUDE	FT	3360	3040	2730	2410	2100	1780
HEIGHT	FT	1942	1622	1312	992	682	362

GS	Kt	80	100	120	140	160	180
Desc.Rate(5.2%)	ft/min	430	530	640	740	850	960
FAF-MAPt(6.5NM)	min:sec	4:53	3:54	3:15	2:47	2:26	2:10

CHANGE: New chart.

TABULAR DESCRIPTION

UASI RNP RWY11											
Serial Number	**Path Descriptor**	**Waypoint Identifier**	**Fly - over**	**Course °M(°T)**	**Magnetic Variation(°)**	**Distance (NM)**	**Turn Direction**	**Altitude (FT)**	**Speed (KT)**	**VPA (°)**	**Navigation Specification**
010	IF	SI114	-	-	+4.7	-	-	+4000	-	-	RNP APCH
020	TF	SI113	-	199(203.4)	+4.7	5.5	-	+4000	-	-	RNP APCH
010	IF	SI113	-	-	+4.7	-	-	+4000	-	-	RNP APCH
020	TF	SI112	-	109(113.5)	+4.7	5.0	-	+3500	-	-	RNP APCH
030	TF	RW11	Y	109(113.6)	+4.7	6.5	-	@1468	-	-3	RNP APCH
040	DF	SI114	-	-	+4.7	-	L	+4000	-240	+1.4	RNP APCH

WAYPOINT COORDINATES

UASI RNP RWY11	
Waypoint Identifier	**Coordinates**
SI112	473942.66N 0842439.87E
SI113	474142.02N 0841752.42E
SI114	474644.86N 0842106.52E
RW11	473707.93N 0843325.25E

HOLDINGS

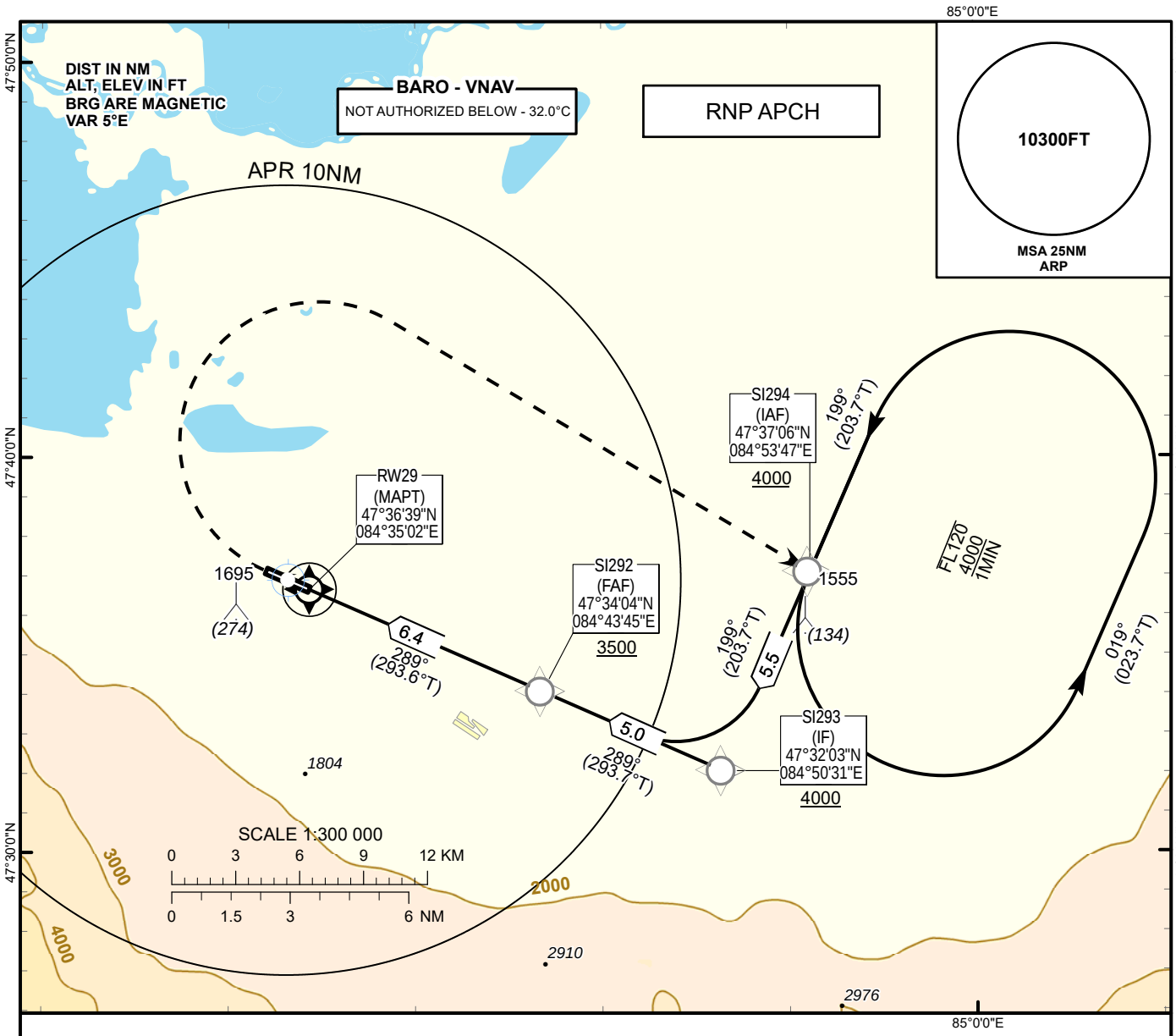
Path Descriptor	**Waypoint Identifier**	**Inbound Course °M (°T)**	**Time (MIN)**	**Turn Direction**	**Minimum Altitude (FT)**	**Maximum Altitude**	**Speed limit (KT)**	**Navigation Specification**
Hold	SI114	199(203.4T)	1	R	+4000	-FL120	-	RNP1

INSTRUMENT APPROACH CHART - ICAO

AERODROME ELEV ***1417FT***
HEIGHTS RELATED TO
AD ELEV

SATPAY TOWER 122.9

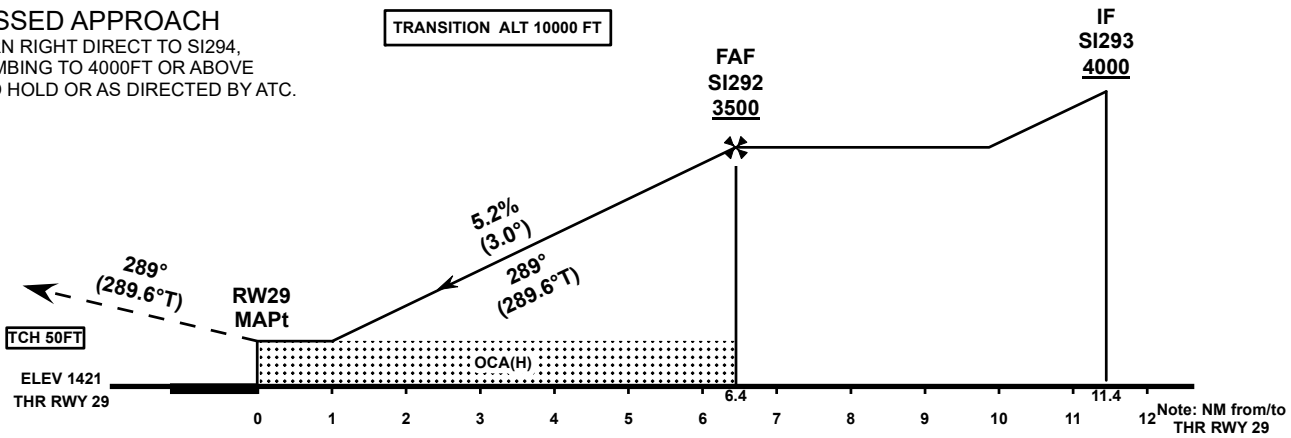
**SATPAY
RNP RWY 29**



MISSED APPROACH

TURN RIGHT DIRECT TO SI294,
CLIMBING TO 4000FT OR ABOVE
AND HOLD OR AS DIRECTED BY ATC.

TRANSITION ALT 10000 FT



Aircraft Category		A	B	C	D
Straight-in Approach OCA/H	LNAV	1750(330)			
	LNAV/VNAV	1670(250)	1670(250)	1670(250)	1670(250)

DIST to THR	NM	6	5	4	3	2	1
ALTITUDE	FT	3360	3050	2730	2420	2100	1780
HEIGHT	FT	1939	1629	1309	999	679	359

GS	Kt	80	100	120	140	160	180
Desc.Rate(5.2%)	ft/min	430	530	640	740	850	960
FAF-MAPt(6.4NM)	min:sec	4:53	3:54	3:15	2:47	2:26	2:10

CHANGE: New chart.

TABULAR DESCRIPTION

UASI RNP RWY29											
Serial Number	**Path Descriptor**	**Waypoint Identifier**	**Fly - over**	**Course °M(°T)**	**Magnetic Variation(°)**	**Distance (NM)**	**Turn Direction**	**Altitude (FT)**	**Speed (KT)**	**VPA (°)**	**Navigation Specification**
010	IF	SI294	-	-	+4.7	-	-	+4000	-	-	RNP APCH
020	TF	SI293	-	199(203.7)	+4.7	5.5	-	+4000	-	-	RNP APCH
010	IF	SI293	-	-	+4.7	-	-	+4000	-	-	RNP APCH
020	TF	SI292	-	289(293.7)	+4.7	5.0	-	+3500	-	-	RNP APCH
030	TF	RW29	Y	289(293.6)	+4.7	6.4	-	@1471	-	+3.0	RNP APCH
040	DF	SI294	-	-	+4.7	-	R	+4000	-240	+1.4	RNP APCH

WAYPOINT COORDINATES

UASI RNP RWY29	
Waypoint Identifier	**Coordinates**
RW29	473639.45N 0843501.81E
SI292	473404.30N 0844345.41E
SI293	473203.50N 0845030.95E
SI294	473705.55N 0845347.17E

HOLDINGS

Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	SI294	199(203.7T)	1	L	+4000FT	-FL120	-	RNP1

UAII AD 2

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

UAII AD 2.1 Aerodrome Location Indicator And Name

UAII - SHYMKENT

UAII AD 2.2 Aerodrome Geographical And Administrative Data

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

UAII AD 2.3 Operational Hours

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

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

UAII AD 2.4 Handling Services And Facilities

1	Cargo-handling facilities	Handling up to 7 tonnes weight: transport loading platform, loading conveyor, vehicle with a lifting body, forklift.
2	Fuel/oil types	TS-1, RT (equivalent to Jet A-1) / Nil
3	Fuelling facilities/capacity	AVBL
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

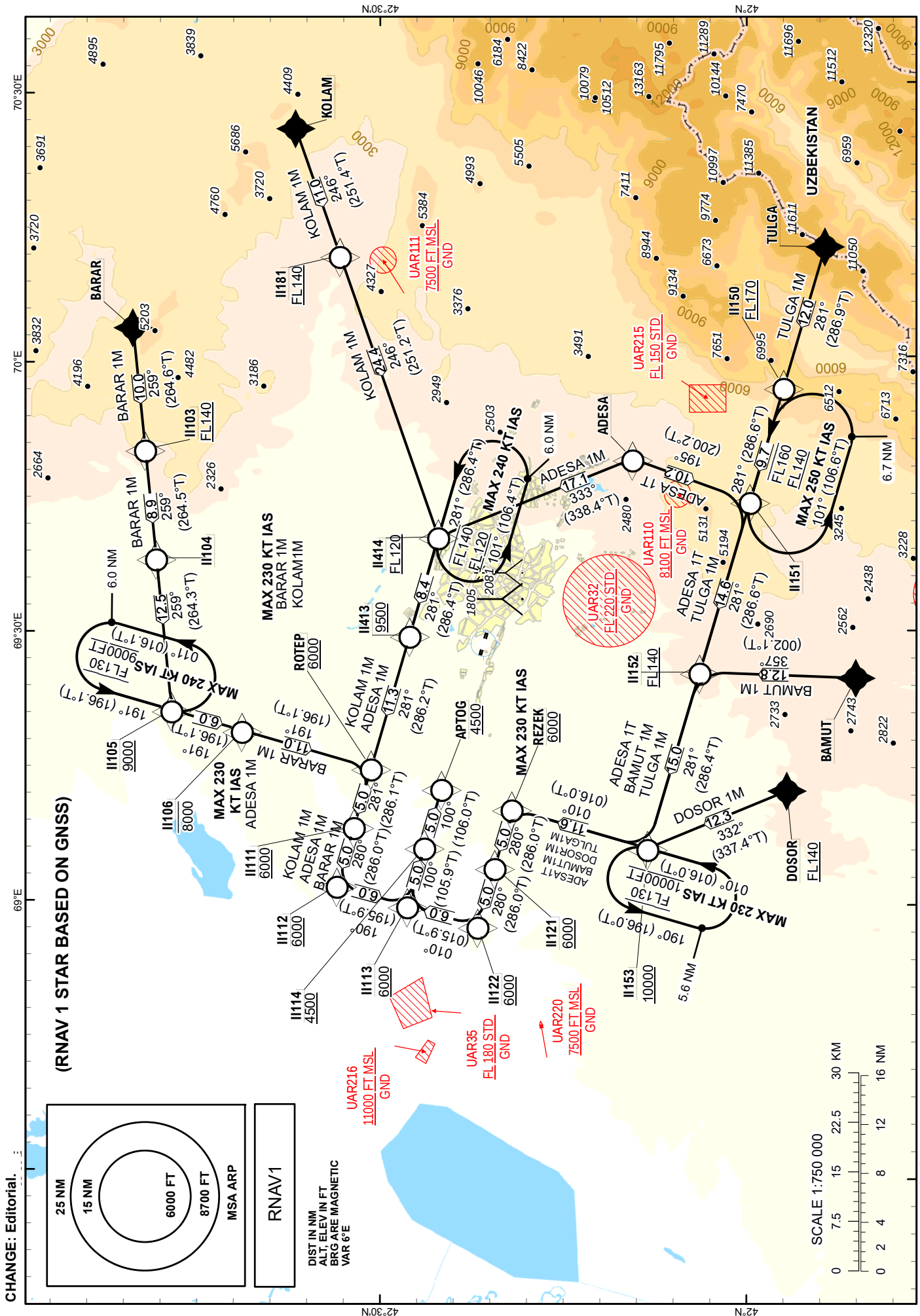
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE 10000 FT

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

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

SHYMKENT RWY 10



CHANGE: Editorial.

TABULAR DESCRIPTION

ADESA 1M

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	ADESA	-	-	+5.5	-	-	-	-	-	RNAV 1
20	TF	II414	-	333(338.4)	+5.5	17.1	R	+FL120	-	-1.1	RNAV 1
30	TF	II413	-	281(286.4)	+5.5	8.4	L	+9500	-	-2.8	RNAV 1
40	TF	ROTEP	-	281(286.2)	+5.5	11.3	-	+6000	-	-2.9	RNAV 1
50	TF	II111	-	281(286.1)	+5.5	5.0	-	+6000	-230	-	RNAV 1
60	TF	II112	-	280(286.0)	+5.5	5.0	-	+6000	-	-	RNAV 1
70	TF	II113	-	190(195.9)	+5.5	6.0	L	+6000	-	-	RNAV 1
80	TF	II114	-	100(105.9)	+5.5	5.0	L	+4500	-	-	RNAV 1
90	TF	APTOG	-	100(106.0)	+5.5	5.0	-	+4500	-	-2.8	RNAV 1

ADESA 1T

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	ADESA	-	-	+5.5	-	-	-	-	-	RNAV 1
20	TF	II151	-	195(200.2)	+5.5	10.2	L	-	-	-	RNAV 1
30	TF	II152	-	281(286.6)	+5.5	14.6	R	+FL140	-	-0.6	RNAV 1
40	TF	II153	-	281(286.4)	+5.5	15.0	-	+10000	-	-1.9	RNAV 1
50	TF	REZEK	-	010(016.0)	+5.5	11.6	R	+6000	-230	-3.3	RNAV 1
60	TF	II121	-	280(286.0)	+5.5	5.0	L	+6000	-	-	RNAV 1
70	TF	II122	-	280(286.0)	+5.5	5.0	-	+6000	-	-	RNAV 1
80	TF	II113	-	010(015.9)	+5.5	6.0	R	+6000	-	-	RNAV 1
90	TF	II114	-	100(105.9)	+5.5	5.0	R	+4500	-	-	RNAV 1
100	TF	APTOG	-	100(106.0)	+5.5	5.0	-	+4500	-	-2.8	RNAV 1

BAMUT 1M

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	BAMUT	-	-	+5.5	-	-	-	-	-	RNAV 1
20	TF	II152	-	357(002.1)	+5.5	12.8	L	+FL140	-	-	RNAV 1
30	TF	II153	-	281(286.4)	+5.5	15.0	L	+10000	-	-1.9	RNAV 1
40	TF	REZEK	-	010(016.0)	+5.5	11.6	R	+6000	-230	-3.3	RNAV 1
50	TF	II121	-	280(286.0)	+5.5	5.0	L	+6000	-	-	RNAV 1
60	TF	II122	-	280(286.0)	+5.5	5.0	-	+6000	-	-	RNAV 1
70	TF	II113	-	010(015.9)	+5.5	6.0	R	+6000	-	-	RNAV 1
80	TF	II114	-	100(105.9)	+5.5	5.0	R	+4500	-	-	RNAV 1
90	TF	APTOG	-	100(106.0)	+5.5	5.0	-	+4500	-	-2.8	RNAV 1

BARAR 1M

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	BARAR	-	-	+5.5	-	-	-	-	-	RNAV 1
20	TF	II103	-	259(264.6)	+5.5	10.0	R	+FL140	-	-	RNAV 1
30	TF	II104	-	259(264.5)	+5.5	8.9	-	-	-	-2.1	RNAV 1
40	TF	II105	-	259(264.3)	+5.5	12.5	-	+9000	-	-1.5	RNAV 1
50	TF	II106	-	191(196.1)	+5.5	6.0	L	-8000	-	-3.1	RNAV 1
60	TF	ROTEP	-	191(196.1)	+5.5	11.0	-	+6000	-230	-1.7	RNAV 1
70	TF	II111	-	281(286.1)	+5.5	5.0	R	+6000	-	-	RNAV 1
80	TF	II112	-	280(286.0)	+5.5	5.0	-	+6000	-	-	RNAV 1
90	TF	II113	-	190(195.9)	+5.5	6.0	L	+6000	-	-	RNAV 1
100	TF	II114	-	100(105.9)	+5.5	5.0	L	+4500	-	-	RNAV 1
110	TF	APTOG	-	100(106.0)	+5.5	5.0	-	+4500	-	-2.8	RNAV 1

DOSOR 1M

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	DOSOR	-	-	+5.5	-	-	+FL140	-	-	RNAV 1
20	TF	II153	-	332(337.4)	+5.5	12.3	L	+10000	-	-2.3	RNAV 1
30	TF	REZEK	-	010(016.0)	+5.5	11.6	R	+6000	-230	-3.3	RNAV 1
40	TF	II121	-	280(286.0)	+5.5	5.0	L	+6000	-	-	RNAV 1
50	TF	II122	-	280(286.0)	+5.5	5.0	-	+6000	-	-	RNAV 1
60	TF	II113	-	010(015.9)	+5.5	6.0	R	+6000	-	-	RNAV 1
70	TF	II114	-	100(105.9)	+5.5	5.0	R	+4500	-	-	RNAV 1
80	TF	APTOG	-	100(106.0)	+5.5	5.0	-	+4500	-	-2.8	RNAV 1

KOLAM 1M

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

TULGA 1M

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	TULGA	-	-	+5.5	-	-	-	-	-	RNAV 1
20	TF	II150	-	281(286.9)	+5.5	12.0	L	+FL170	-	-	RNAV 1
30	TF	II151	-	281(286.6)	+5.5	9.7	-	-	-	-1.9	RNAV 1
40	TF	II152	-	281(286.6)	+5.5	14.6	-	+FL140	-	-0.6	RNAV 1
50	TF	II153	-	281(286.4)	+5.5	15.0	-	+10000	-	-1.9	RNAV 1
60	TF	REZEK	-	010(016.0)	+5.5	11.6	R	+6000	-230	-3.3	RNAV 1
70	TF	II121	-	280(286.0)	+5.5	5.0	L	+6000	-	-	RNAV 1
80	TF	II122	-	280(286.0)	+5.5	5.0	-	+6000	-	-	RNAV 1
90	TF	II113	-	010(015.9)	+5.5	6.0	R	+6000	-	-	RNAV 1
100	TF	II114	-	100(105.9)	+5.5	5.0	R	+4500	-	-	RNAV 1
110	TF	APTOG	-	100(106.0)	+5.5	5.0	-	+4500	-	-2.8	RNAV 1

WAYPOINT LIST

WPT	COORD		WPT	COORD	
ADESA	420940.00N	0694854.00E	II121	422056.05N	0690351.82E
APTOG	422519.51N	0691234.86E	II122	422218.35N	0685722.68E
BAMUT	415121.00N	0692445.00E	II150	415715.78N	0695640.86E
BARAR	425030.00N	0700344.00E	II151	420003.70N	0694410.43E
DOSOR	415702.00N	0691225.00E	II152	420412.16N	0692526.61E
II103	424933.14N	0695012.33E	II153	420825.64N	0690603.02E
II104	424840.93N	0693806.67E	II181	423330.51N	0701133.62E
II105	424725.82N	0692113.01E	II413	422756.58N	0692930.83E
II106	424139.90N	0691857.25E	II414	422535.40N	0694022.65E
II111	423228.48N	0690819.49E	KOLAM	423702.00N	0702540.00E
II112	423351.02N	0690149.25E	REZEK	421933.39N	0691020.68E
II113	422804.71N	0685935.76E	ROTEP	423105.57N	0691449.44E
II114	422642.29N	0690605.45E	TULGA	415347.00N	0701204.00E

HOLDINGS

Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	II153	010(016.0T)	1	L	10000FT	FL130	230KT	RNAV 1
Hold	II151	281(286.6T)	1	L	FL140	FL160	250KT	RNAV 1
Hold	II414	281(286.4T)	1	L	FL120	FL140	240KT	RNAV 1
Hold	II105	191(196.1T)	1	L	9000FT	FL130	240KT	RNAV 1

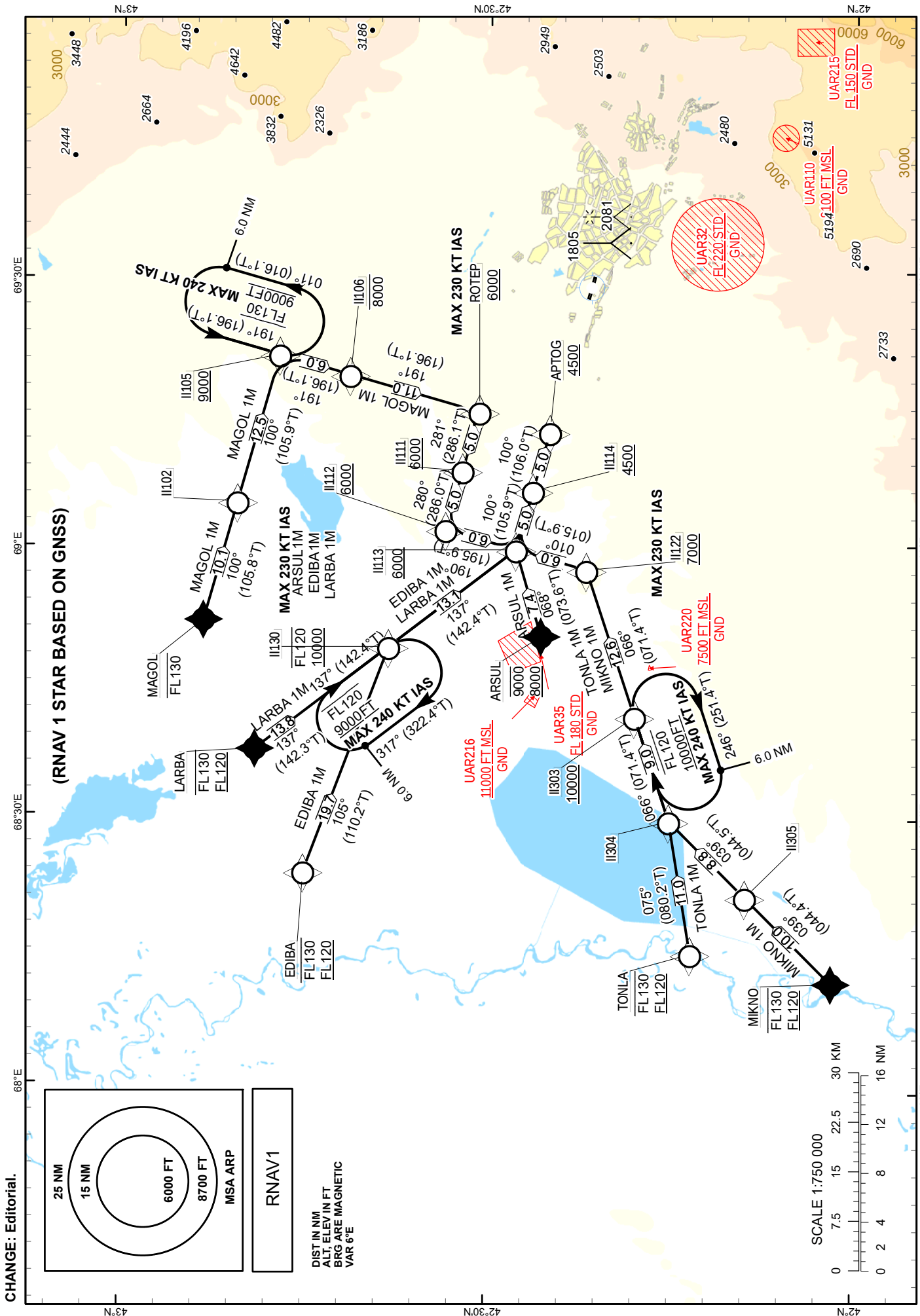
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE 10000 FT

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

ARSUL 1M, EDIBA 1M, LARBA 1M, MAGOL 1M, MIKNO 1M, TONLA 1M.

SHYMKENT RWY 10



CHANGE: Editorial.

TABULAR DESCRIPTION

ARSUL 1M

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	ARSUL	-	-	+5.5	-	-	+8000 -9000	-	-	RNAV 1
20	TF	II113	-	068(073.6)	+5.5	7.4	R	+6000	-230	-2.5	RNAV 1
30	TF	II114	-	100(105.9)	+5.5	5.0	R	+4500	-	-	RNAV 1
40	TF	APTOG	-	100(106.0)	+5.5	5.0	-	+4500	-	-2.8	RNAV 1

EDIBA 1M

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	EDIBA	-	-	+5.5	-	-	+FL120 -FL130	-	-	RNAV 1
20	TF	II130	-	105(110.2)	+5.5	19.7	L	+10000 -FL120	-	-1.4	RNAV 1
30	TF	II113	-	137(142.4)	+5.5	13.1	R	+6000	-230	-2.9	RNAV 1
40	TF	II114	-	100(105.9)	+5.5	5.0	L	+4500	-	-	RNAV 1
50	TF	APTOG	-	100(106.0)	+5.5	5.0	-	+4500	-	-2.8	RNAV 1

LARBA 1M

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	LARBA	-	-	+5.5	-	-	+FL120 -FL130	-	-	RNAV 1
20	TF	II130	-	137(142.3)	+5.5	13.8	L	+10000 -FL120	-	-1.4	RNAV 1
30	TF	II113	-	137(142.4)	+5.5	13.1	-	+6000	-230	-2.9	RNAV 1
40	TF	II114	-	100(105.9)	+5.5	5.0	L	+4500	-	-	RNAV 1
50	TF	APTOG	-	100(106.0)	+5.5	5.0	-	+4500	-	-2.8	RNAV 1

MAGOL 1M

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	MAGOL	-	-	+5.5	-	-	-FL130	-	-	RNAV 1
20	TF	II102	-	100(105.8)	+5.5	10.1	L	-	-	-0.9	RNAV 1
30	TF	II105	-	100(105.9)	+5.5	12.5	-	+9000	-	-1.5	RNAV 1
40	TF	II106	-	191(196.1)	+5.5	6.0	R	-8000	-	-3.1	RNAV 1
50	TF	ROTEP	-	191(196.1)	+5.5	11.0	-	+6000	-230	-1.7	RNAV 1
60	TF	II111	-	281(286.1)	+5.5	5.0	R	+6000	-	-	RNAV 1
70	TF	II112	-	280(286.0)	+5.5	5.0	-	+6000	-	-	RNAV 1
80	TF	II113	-	190(195.9)	+5.5	6.0	L	+6000	-	-	RNAV 1
90	TF	II114	-	100(105.9)	+5.5	5.0	L	+4500	-	-	RNAV 1
100	TF	APTOG	-	100(106.0)	+5.5	5.0	-	+4500	-	-2.8	RNAV 1

MIKNO 1M

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

TONLA 1M

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	TONLA	-	-	+5.5	-	-	+FL120 -FL130	-	-	RNAV 1
20	TF	II304	-	075(080.2)	+5.5	11.0	-	-	-	-	RNAV 1
30	TF	II303	-	066(071.3)	+5.5	9.0	L	+10000	-	-3.1	RNAV 1
40	TF	II122	-	066(071.4)	+5.5	12.6	-	+7000	-230	-2.2	RNAV 1
50	TF	II113	-	010(015.9)	+5.5	6.0	L	+6000	-	-1.6	RNAV 1
60	TF	II114	-	100(105.9)	+5.5	5.0	R	+4500	-	-	RNAV 1
70	TF	APTOG	-	100(106.0)	+5.5	5.0	-	+4500	-	-2.8	RNAV 1

WAYPOINT LIST

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

HOLDINGS

Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	II303	066(071.4T)	1	R	10000FT	FL120	240KT	RNAV 1
Hold	II130	137(142.4T)	1	R	9000FT	FL120	240KT	RNAV 1
Hold	II105	191(196.1T)	1	L	9000FT	FL130	240KT	RNAV 1

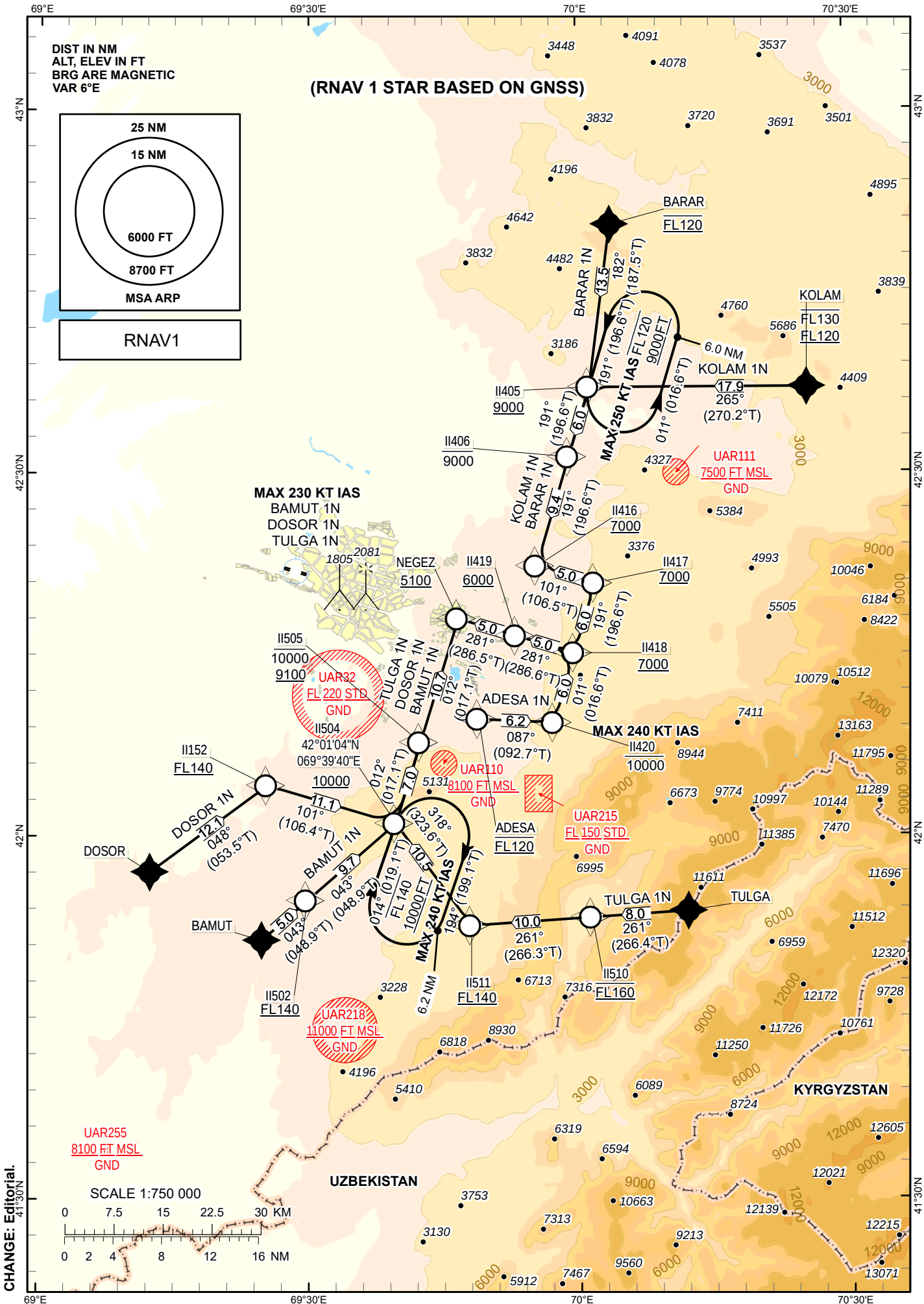
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE 10000 FT

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

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

SHYMKENT RWY 28



CHANGE: Editorial.

TABULAR DESCRIPTION

ADESA 1N

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	ADESA	-	-	+5.5	-	-	@FL120	-	-	RNAV 1
20	TF	II420	-	087(092.7)	+5.5	6.2	R	-10000	-240	-3	RNAV 1
30	TF	II418	-	011(016.6)	+5.5	6.0	L	+7000	-	-3.1	RNAV 1
40	TF	II419	-	281(286.6)	+5.5	5.0	L	+6000	-	-2.8	RNAV 1
50	TF	NEGEZ	-	281(286.5)	+5.5	5.0	-	+5100	-	-2.6	RNAV 1

BAMUT 1N

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	BAMUT	-	-	+5.5	-	-	-	-	-	RNAV 1
20	TF	II502	-	043(048.9)	+5.5	5.0	R	+FL140	-	-	RNAV 1
30	TF	II504	-	043(048.9)	+5.5	9.7	-	+10000	-	-3.9	RNAV 1
40	TF	II505	-	012(017.1)	+5.5	7.0	L	+9100 -10000	-	-1.2	RNAV 1
50	TF	NEGEZ	-	012(017.1)	+5.5	10.7	-	+5100	-230	-3.5	RNAV 1

BARAR 1N

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	BARAR	-	-	+5.5	-	-	@FL120	-	-	RNAV 1
20	TF	II405	-	182(187.5)	+5.5	13.5	L	+9000	-	-1.4	RNAV 1
30	TF	II406	-	191(196.6)	+5.5	6.0	R	-9000	-	-1.6	RNAV 1
40	TF	II416	-	191(196.6)	+5.5	9.4	-	+7000	-	-2	RNAV 1
50	TF	II417	-	101(106.5)	+5.5	5.0	L	+7000	-	-	RNAV 1
60	TF	II418	-	191(196.6)	+5.5	6.0	R	+7000	-	-	RNAV 1
70	TF	II419	-	281(286.6)	+5.5	5.0	R	+6000	-	-	RNAV 1
80	TF	NEGEZ	-	281(286.5)	+5.5	5.0	-	+5100	-	-3.6	RNAV 1

DOSOR 1N

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	DOSOR	-	-	+5.5	-	-	-	-	-	RNAV 1
20	TF	II152	-	048(053.5)	+5.5	12.1	R	+FL140	-	-0.8	RNAV 1
30	TF	II504	-	101(106.4)	+5.5	11.1	R	+10000	-	-2.6	RNAV 1
40	TF	II505	-	012(017.1)	+5.5	7.0	L	+9100 -10000	-	-1.2	RNAV 1
50	TF	NEGEZ	-	012(017.1)	+5.5	10.7	-	+5100	-230	-3.5	RNAV 1

KOLAM 1N

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	KOLAM	-	-	+5.5	-	-	+FL120 -FL130	-	-	RNAV 1
20	TF	II405	-	265(270.2)	+5.5	17.9	R	+9000	-	-1.1	RNAV 1
30	TF	II406	-	191(196.6)	+5.5	6.0	L	-9000	-	-1.6	RNAV 1
40	TF	II416	-	191(196.6)	+5.5	9.4	-	+7000	-	-2	RNAV 1
50	TF	II417	-	101(106.5)	+5.5	5.0	L	+7000	-	-	RNAV 1
60	TF	II418	-	191(196.6)	+5.5	6.0	R	+7000	-	-	RNAV 1
70	TF	II419	-	281(286.6)	+5.5	5.0	R	+6000	-	-	RNAV 1
80	TF	NEGEZ	-	281(286.5)	+5.5	5.0	-	+5100	-	-3.6	RNAV 1

TULGA 1N

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	TULGA	-	-	+5.5	-	-	-	-	-	RNAV 1
20	TF	II510	-	261(266.4)	+5.5	8.0	L	@FL160	-	-	RNAV 1
30	TF	II511	-	261(266.3)	+5.5	10.0	-	+FL140	-	-2.8	RNAV 1
40	TF	II504	-	318(323.6)	+5.5	10.5	R	+10000	-	-2.7	RNAV 1
50	TF	II505	-	012(017.1)	+5.5	7.0	R	+9100 -10000	-	-1.2	RNAV 1
60	TF	NEGEZ	-	012(017.1)	+5.5	10.7	-	+5100	-230	-3.5	RNAV 1

WAYPOINT LIST

WPT	COORD	
ADESA	420940.00N	0694854.00E
BAMUT	415121.00N	0692445.00E
BARAR	425030.00N	0700344.00E
DOSOR	415702.00N	0691225.00E
II152	420412.16N	0692526.61E
II405	423703.89N	0700121.23E
II406	423118.75N	0695902.16E
II416	422217.94N	0695525.14E
II417	422052.37N	0700152.99E
II418	421507.23N	0695934.48E
II419	421632.68N	0695307.16E
II420	420922.04N	0695716.39E
II502	415441.28N	0692950.68E
II504	420103.81N	0693940.03E
II505	420744.57N	0694225.35E
II510	415316.38N	0700122.61E
II511	415236.70N	0694801.12E
KOLAM	423702.00N	0702540.00E
NEGEZ	421757.76N	0694639.56E
TULGA	415347.00N	0701204.00E

HOLDINGS

Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	II504	014(019.1T)	1	R	10000FT	FL140	240KT	RNAV 1
Hold	II405	191(196.6T)	1	L	9000FT	FL120	250KT	RNAV 1

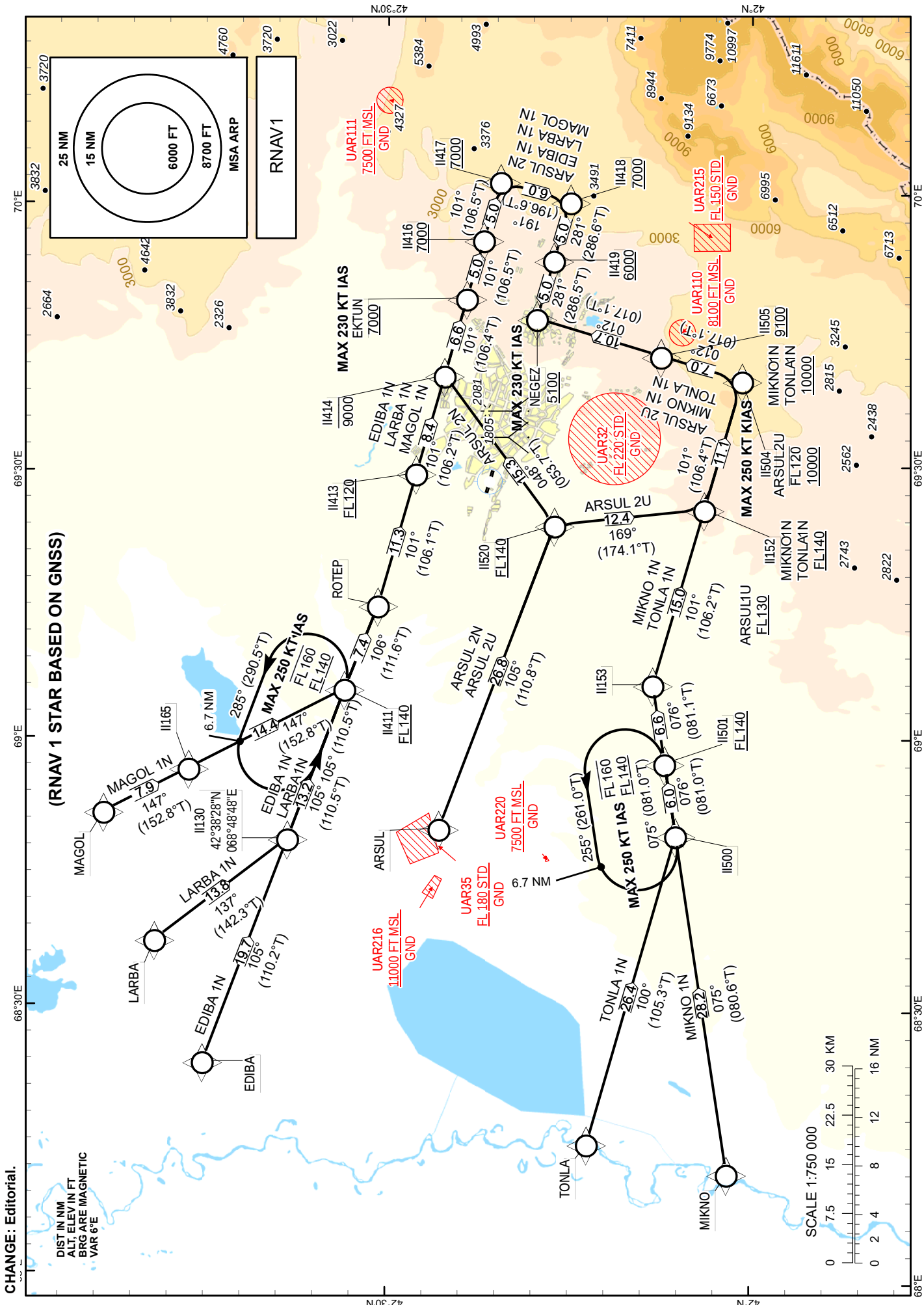
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE 10000 FT

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

ARSUL 2N/2U, EDIBA 1N, LARBA 1N, MAGOL 1N, MIKNO 1N, TONLA 1N.

SHYMKENT RWY 28



TABULAR DESCRIPTION

ARSUL 2N

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	ARSUL	-	-	+5.5	-	-	-	-	-	RNAV 1
20	TF	II520	-	105(110.8)	+5.5	26.8	-	+FL140	-	-	RNAV 1
30	TF	II414	-	048(053.7)	+5.5	15.3	L	-9000	-	-2.5	RNAV 1
40	TF	EKTUN	-	101(106.4)	+5.5	6.6	R	+7000	-230	-2.8	RNAV 1
50	TF	II416	-	101(106.5)	+5.5	5.0	-	+7000	-	-	RNAV 1
60	TF	II417	-	101(106.5)	+5.5	5.0	-	+7000	-	-	RNAV 1
70	TF	II418	-	191(196.6)	+5.5	6.0	R	+7000	-	-	RNAV 1
80	TF	II419	-	281(286.6)	+5.5	5.0	R	+6000	-	-	RNAV 1
90	TF	NEGEZ	-	281(286.5)	+5.5	5.0	-	+5100	-230	-3.6	RNAV 1

ARSUL 2U

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	ARSUL	-	-	+5.5	-	-	-	-	-	RNAV 1
20	TF	II520	-	105(110.8)	+5.5	26.8	-	+FL140	-	-	RNAV 1
30	TF	II152	-	169(174.1)	+5.5	12.4	R	+FL130	-	-	RNAV 1
40	TF	II504	-	101(106.4)	+5.5	11.1	L	+10000 -FL120	-250	-2.6	RNAV 1
50	TF	II505	-	012(017.1)	+5.5	7.0	L	+9100	-	-1.2	RNAV 1
60	TF	NEGEZ	-	012(017.1)	+5.5	10.7	-	+5100	-230	-3.5	RNAV 1

EDIBA 1N

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	EDIBA	-	-	+5.5	-	-	-	-	-	RNAV 1
20	TF	II130	-	105(110.2)	+5.5	19.7	L	-	-	-	RNAV 1
30	TF	II411	-	105(110.5)	+5.5	13.2	-	+FL140	-	-	RNAV 1
40	TF	ROTEP	-	106(111.6)	+5.5	7.4	R	-	-	-1.3	RNAV 1
50	TF	II413	-	101(106.1)	+5.5	11.3	L	+FL120	-	-0.8	RNAV 1
60	TF	II414	-	101(106.2)	+5.5	8.4	-	-9000	-	-3.4	RNAV 1
70	TF	EKTUN	-	101(106.4)	+5.5	6.6	-	+7000	-230	-2.8	RNAV 1
80	TF	II416	-	101(106.5)	+5.5	5.0	-	+7000	-	-	RNAV 1
90	TF	II417	-	101(106.5)	+5.5	5.0	-	+7000	-	-	RNAV 1
100	TF	II418	-	191(196.6)	+5.5	6.0	R	+7000	-	-	RNAV 1
110	TF	II419	-	281(286.6)	+5.5	5.0	R	+6000	-	-1.9	RNAV 1
120	TF	NEGEZ	-	281(286.5)	+5.5	5.0	-	+5100	-230	-1.7	RNAV 1

LARBA 1N

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	LARBA	-	-	+5.5	-	-	-	-	-	RNAV 1
20	TF	II130	-	137(142.3)	+5.5	13.8	L	-	-	-	RNAV 1
30	TF	II411	-	105(110.5)	+5.5	13.2	L	+FL140	-	-	RNAV 1
40	TF	ROTEP	-	106(111.6)	+5.5	7.4	R	-	-	-1.3	RNAV 1
50	TF	II413	-	101(106.1)	+5.5	11.3	L	+FL120	-	-0.8	RNAV 1
60	TF	II414	-	101(106.2)	+5.5	8.4	-	-9000	-	-3.4	RNAV 1
70	TF	EKTUN	-	101(106.4)	+5.5	6.6	-	+7000	-230	-2.8	RNAV 1
80	TF	II416	-	101(106.5)	+5.5	5.0	-	+7000	-	-	RNAV 1
90	TF	II417	-	101(106.5)	+5.5	5.0	-	+7000	-	-	RNAV 1
100	TF	II418	-	191(196.6)	+5.5	6.0	R	+7000	-	-	RNAV 1
110	TF	II419	-	281(286.6)	+5.5	5.0	R	+6000	-	-	RNAV 1
120	TF	NEGEZ	-	281(286.5)	+5.5	5.0	-	+5100	-230	-1.7	RNAV 1

MAGOL 1N

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	MAGOL	-	-	+5.5	-	-	-	-	-	RNAV 1
20	TF	II165	-	147(152.8)	+5.5	7.9	R	-	-	-	RNAV 1
30	TF	II411	-	147(152.8)	+5.5	14.4	-	+FL140	-	-	RNAV 1
40	TF	ROTEP	-	106(111.6)	+5.5	7.4	L	-	-	-1.3	RNAV 1
50	TF	II413	-	101(106.1)	+5.5	11.3	L	+FL120	-	-0.8	RNAV 1
60	TF	II414	-	101(106.2)	+5.5	8.4	-	-9000	-	-3.4	RNAV 1
70	TF	EKTUN	-	101(106.4)	+5.5	6.6	-	+7000	-230	-2.8	RNAV 1
80	TF	II416	-	101(106.5)	+5.5	5.0	-	+7000	-	-	RNAV 1
90	TF	II417	-	101(106.5)	+5.5	5.0	-	+7000	-	-	RNAV 1
100	TF	II418	-	191(196.6)	+5.5	6.0	R	+7000	-	-	RNAV 1
110	TF	II419	-	281(286.6)	+5.5	5.0	R	+6000	-	-	RNAV 1
120	TF	NEGEZ	-	281(286.5)	+5.5	5.0	-	+5100	-230	-1.7	RNAV 1

MIKNO 1N

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	MIKNO	-	-	+5.5	-	-	-	-	-	RNAV 1
20	TF	II500	-	075(080.6)	+5.5	28.2	R	-	-	-	RNAV 1
30	TF	II501	-	076(081.0)	+5.5	6.0	-	+FL140	-	-	RNAV 1
40	TF	II153	-	076(081.1)	+5.5	6.6	-	-	-	-	RNAV 1
50	TF	II152	-	101(106.2)	+5.5	15.0	R	+FL140	-	-	RNAV 1
60	TF	II504	-	101(106.4)	+5.5	11.1	-	+10000	-250	-2.6	RNAV 1
70	TF	II505	-	012(017.1)	+5.5	7.0	L	+9100	-	-1.2	RNAV 1
80	TF	NEGEZ	-	012(017.1)	+5.5	10.7	-	+5100	-230	-3.5	RNAV 1

TONLA 1N

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation(°)	Distance NM	Turn Direction	Altitude FT	Speed KT	VPA (°)	Navigation Specification
10	IF	TONLA	-	-	+5.5	-	-	-	-	-	RNAV 1
20	TF	II500	-	100(105.3)	+5.5	26.4	R	-	-	-	RNAV 1
30	TF	II501	-	076(081.0)	+5.5	6.0	-	+FL140	-	-	RNAV 1
40	TF	II153	-	076(081.1)	+5.5	6.6	-	-	-	-	RNAV 1
50	TF	II152	-	101(106.2)	+5.5	15.0	R	+FL140	-	-	RNAV 1
60	TF	II504	-	101(106.4)	+5.5	11.1	-	+10000	-250	-2.6	RNAV 1
70	TF	II505	-	012(017.1)	+5.5	7.0	L	+9100	-	-1.2	RNAV 1
80	TF	NEGEZ	-	012(017.1)	+5.5	10.7	-	+5100	-230	-3.5	RNAV 1

WAYPOINT LIST

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

HOLDINGS

Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	II411	105(110.5T)	1	L	FL140	FL160	250KT	RNAV 1
Hold	II501	076(081.0T)	1	L	FL140	FL160	250KT	RNAV 1

UAAT AD 2

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

UAAT AD 2.1 Aerodrome Location Indicator And Name

UAAT - TALDYKORGAN

UAAT AD 2.2 Aerodrome Geographical And Administrative Data

1	ARP coordinates and site at AD	450721N 0782634E At the centre of RWY
2	Direction and distance from (city)	23°, 6.5 NM from Taldykorgan center
3	Elevation/Reference temperature	1944 FT/ 32° C
4	Geoid undulation at AD ELEV PSN	-160 FT
5	MAG VAR/Annual Change	5° E (2014)/0°
6	AD Administration, address, telephone, telefax, telex, e-mail address, AFS, website address	Post: Authority of Airport 040013 Taldykorgan, Airport, JSC "Zhetysu Aircompany" Republic of Kazakhstan Phone: +7 (7282) 411819 Fax: +7 (7282) 271850 AFS: UAATJTUX Email: zhetysuavia@mail.ru
7	Types of traffic permitted (IFR/VFR)	IFR-VFR
8	Remarks	Nil

UAAT AD 2.3 Operational Hours

1	AD Operator	See NOTAM
2	Customs and immigration	Nil
3	Health and sanitation	HO Phone: +7 (7282) 411809
4	AIS Briefing Office	HO
5	ATS Reporting Office (ARO)	HO Phone: +7 (727) 2573756 Phone: +7 (7282) 411809 AFS: UAATZTZX
6	MET Briefing Office	HO Phone: +7 (7282) 240542
7	ATS	See NOTAM
8	Fuelling	HO Phone: +7 (7282) 411820
9	Handling	Phone: +7 (7282) 411809
10	Security	H24 Phone: +7 (7282) 412381
11	De-icing	Phone: +7 (7282) 411809
12	Remarks	Nil

UAAT AD 2.4 Handling Services And Facilities

1	Cargo-handling facilities	AVBL
2	Fuel/oil types	RT, TS-1
3	Fuelling facilities/capacity	2 tankers, 4 tonnes
4	De-icing facilities	Nil
5	Hangar space for visiting aircraft	Nil
6	Repair facilities for visiting aircraft	Minor repairs at aircraft repair base
7	Remarks	Nil

UAAT AD 2.5 Passenger Facilities

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

UAAT AD 2.6 Rescue And Fire Fighting Services

1	AD category for fire fighting	CAT A5
2	Rescue equipment	1 fire fighting machines - volume 8,5 t each 1 fire fighting machine - volume 7,5 t
3	Capability for removal of disabled aircraft	Crane QY-12 on request in 2 hours, tow bar, axle jack with a range from 5 up to I 0 tons, metal plate to remove aircraft types YAK-40, L-410 from RW Phone: +7 (7282) 411809
4	Remarks	Nil

UAAT AD 2.7 Seasonal Availability - Clearing

1	Types of clearing equipment	Tractor (MTZ 82) for cleaning snow with a brush and a blade - 3, Truck (KAMAZ MD 532) with a brush and a blade - 1
2	Clearance priorities	1. RWY 2. TWY 3. Stands
3	Remarks	Nil

UAAT AD 2.13 Declared Distances

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

UAAT AD 2.14 Approach And Runway Lighting

RWY Designator	APCH LGT type, LEN, INTST	THR LGT colour, WBAR	VASIS, (MEHT), PAPI	TDZ, LGT LEN	RWY Centre Line LGT Length, spacing, colour, INTST	RWY edge LGT LEN, spacing, colour, INTST	RWY End LGT colour, WBAR	SWY LGT LEN, colour	Remarks
1	2	3	4	5	6	7	8	9	10
02	(HIALS) 900 M LIH	GRN Nil	PAPI LEFT/3°	Nil	Nil	3000m, white, spacing 60m, last 600m yellow LIH	RED Nil	Nil	Nil
20	(HIALS) 900 M LIH	GRN Nil	PAPI LEFT/3°	Nil	Nil	3000m, white, spacing 60m, last 600m yellow LIH	RED Nil	Nil	Nil

UAAT AD 2.15 Other Lighting, Secondary Power Supply

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

UAAT AD 2.16 Helicopter Landing Area

1	Coordinates TLOF or THR of FATO Geoid undulation	450638N 0782632E -160 FT
2	TLOF and/or FATO elevation	1944 FT
3	TLOF and FATO area dimensions, surface, strength, marking	Rectangle 15x15 M PCN 42/R/A/X/T REINF CONC, no marking
4	True BRG of FATO	21°/201°
5	Declared distance available	Nil
6	APP and FATO lighting	Nil
7	Remarks	FATO/TLOF located on Apron

UAAT AD 2.17 ATS Airspace

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

UAAT AD 2.18 ATS Communication Facilities

Service designation	Call sign	Frequency	SATVOICE number(s)	Logon address	Hours of operation	Remarks
1	2	3	4	5	6	7
TWR	TALDYKORGAN TOWER (EN) TALDYKORGAN VYSHKA (RU)	127,3 MHZ	Nil	Nil	See NOTAM	VDF AVBL

UAAT AD 2.19 Radio Navigation And Landing Aids

Type of aid, MAG VAR, ILS Classification, Type of supported OP (for VOR/ILS/ MLS, give declination)	ID	Frequency, Channel number	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Service volume radius from the GBAS reference point	Remarks
1	2	3	4	5	6	7	8
DVOR/DME (5°E/2014)	TDK	116,1 MHZ CH 108X	H24	450622.3N 0782547.6E	2000 FT	Nil	Nil

UAAT AD 2.20 Local Aerodrome Regulations

NIL

UAAT AD 2.21 Noise Abatement Procedures

NIL

UAAT AD 2.22 Flight Procedures

1. Flight and ground movement procedures.

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

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

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

2. Aerodrome operation in conditions of limited visibility

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

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

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

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

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

Absolute flight altitudes are assigned by the air traffic controller "Tower" without taking into account artificial obstacles. Aircraft crews are responsible for avoiding artificial obstacles. At Taldykorgan aerodrome holding patterns are established at an absolute altitude to await the VFR approach order for the landing of category «A» aircraft and helicopters. The holding patterns (left/right turns) to be used are determined and reported to the aircraft crew by «TOWER» ATC unit. Exit to the final leg, crossing the runway course shall be made only with the permission of the «TOWER» ATC unit.

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

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

Visual Reference Points of VFR flights within Taldykorgan CTR

№	Name	Type	Location	Geographic coordinates	DVOR/DME «TDK» radial and distance
1	MIKE	waypoint	Intersection of a road and a river, Southwestern edge of the settlement Mukanshi	445220N 0780209E	225° / 21,9 NM
2	SIERRA	waypoint	Meander (bend) of the riverbed Karatal, Northwestern edge of the settlement Sarybulak	450525N 0780157E	262° / 16,9 NM
3	DELTA	waypoint	Meander (bend) of a riverbed, Southeastern edge of the settlement Kokdala	451330N 0780945E	297° / 13,4 NM

№	Name	Type	Location	Geographic coordinates	DVOR/DME «TDK» radial and distance
4	INDIA	waypoint	Bend of a road at the straight angle, Northwest of a pond	451950N 0781552E	328° / 15,2 NM
5	PAPA	holding	Intersection of a road and a river	450855N 0782127E	305° / 4 NM
6	YANKEE	holding	Y-shaped road intersection, East of a pond	450223N 0782808E	152° / 4,3 NM
7	ALPHA	holding	The «Almaly» reservoir	450809N 0783218E	064° / 4,9 NM
8	BRAVO	waypoint	Eastern edge of the settlement Karabulak	445502N 0783025E	159° / 11,8 NM
9	KILO	waypoint	Northern edge of the settlement Koshkental	451313N 0784808E	061° / 17,2 NM
10	TANGO	waypoint	Road bend A-3 (A-350), Eastern edge of the settlement Aktogan	452357N 0784942E	039° / 24,4 NM

UAAT AD 2.23 Additional Information

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

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

2. Ornithological situation in the aerodrome area.

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

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

The main measures for the ornithological support of flights

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

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

UAAT AD 2.24 Charts Related To An Aerodrome

UAAT AD 2.25 Visual segment surface (VSS) penetrations

No penetrations

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UADD AD 2

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

UADD AD 2.1 Aerodrome Location Indicator And Name

UADD - TARAZ

UADD AD 2.2 Aerodrome Geographical And Administrative Data

1	ARP coordinates and site at AD	425116N 0711808E From THR 13 - 1749.9m
2	Direction and distance from (city)	230°, 4.3 NM of Taraz center
3	Elevation/Reference temperature	2190 FT/29,4° 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.

UADD AD 2.7 Seasonal Availability - Clearing

1	Types of clearing equipment	3 snow plow-brush machine, 1 rotor, 2 Schmidt street sweepers with blower system based on Mercedes-Ben,MTZ-82 “Belarus” tractor equipped with brush and blade – 1 unit. 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	Aerodrome availability by season: Year-round. During winter, caution is advised in the presence of snow or ice.

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

1	**Apron surface and strength**	**STANDS**		**SURFACE**	**STRENGTH**
		1A, 1B		CONC+ASPH	PCN 47/F/B/X/T
		1 -2		CONC+ASPH	PCN 50/F/B/X/T
		3 - 6		CONC+ASPH	PCN 47/F/B/X/T
2	**Taxiway width, surface and strength**	**TWY**	**WIDTH (M)**	**SURFACE**	**STRENGTH**
		MAIN TWY P from TWY B to TWY C	19.5	CONC+ASPH	PCN 19/F/B/Y/T
		A	22	CONC+ASPH	PCN 20/F/B/X/T
		B	23	CONC+ASPH	PCN 60/F/B/X/T
3	**Altimeter checkpoint location and elevation**	STAND 1A - 652,9 m/ 2139,9 ft, STAND 1B - 652,9 m/ 2140,4 ft, STAND 1 - 652,9 m/ 2142 ft, STAND 2 - 653 m / 2142,4 ft, STAND 3 - 653,6 m / 2144,3 ft, STAND 4 - 654 m / 2145,7 ft, STAND 5 - 654,4 m / 2146,9 ft, STAND 6 - 654,9 m / 2148,6 ft.			
4	**VOR checkpoints**	Nil			
5	**INS checkpoints**	Nil			
6	**Remarks**	TWYs C, D, E, F and the section of MAIN TWY P from TWY C to TWY F are under the responsibility of the Ministry of Defence of the Republic of Kazakhstan. Taxiing is permitted for State aircraft only.			

UADD AD 2.9 Surface Movement Guidance And Control System And Markings

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

5	Remarks	Nil

UADD AD 2.10 Aerodrome Obstacles

NIL

UADD AD 2.11 Meteorological Information Provided

1	**Associated MET Office**	Meteorological service Taraz Phone: +7 (7262) 436004
2	**Hours of service MET Office outside hour**	H24
3	**Office responsible for TAF preparation: Periods of validity**	Meteorological service Taraz, 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, APP, TWR
10	**Additional information**	Nil

UADD 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**
13	136,99°	3500 X 45	60/F/B/X/T CONC+ASPH	425157.40N 0711715.14E - -132.9 FT	THR 2145.2 FT	+0.39%
31	317.00°	3500 X 45	60/F/B/X/T CONC+ASPH	425034.43N 0711900.32E - -132.9 FT	THR 2190.5 FT	-0.39%

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	AVBL	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 160	3800 X 300	90 X 160	Nil	AVBL	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				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

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
Section 7 Point 459 Point 467 of Standards of Aerodromes (Heliports) Operation Civil Aviation Republic Kazakhstan	Rescue and firefighting equipment, and procedures for operation and coordination under Category III conditions.	Obstacle Evaluation and Permit issued due to deviations from the requirements of the State Aerodrome Operation Manual of the Civil Aviation Administration of the Republic of Kazakhstan related to flight safety at Taraz aerodrome.	An equivalent level of safety has been approved 17.07.2024

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

UADD AD 2.25 Visual segment surface (VSS) penetrations

No penetrations

AERODROME CHART - ICAO | **AD ELEV 2190FT (*667m*)** | **ARP 425116N 0711808E** | **TARAZ**

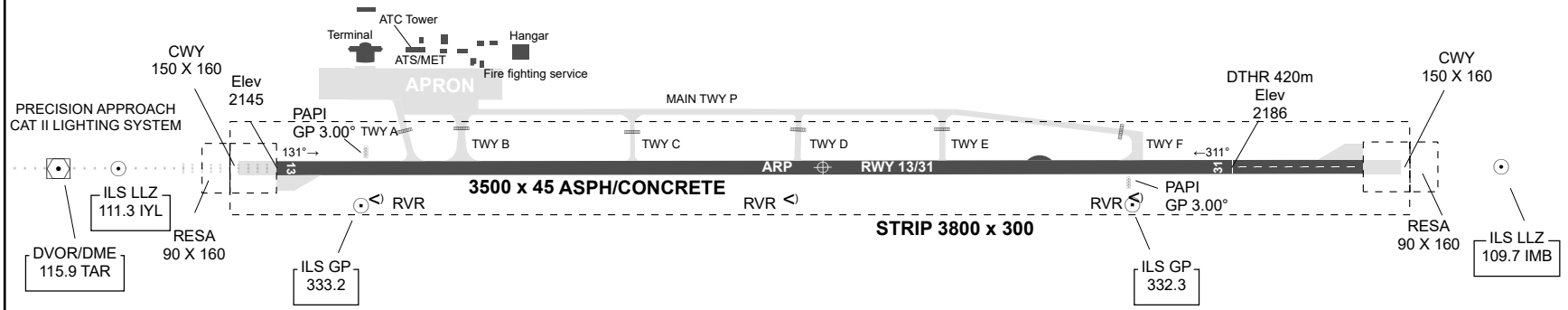
TWR 122.1

RWY	DIRECTION (TRUE)	COORDINATES	GEOID UNDULATION	BEARING STRENGTH
13	136.99°	THR 42°51'57.40"N 071°17'15.14"E	- 133	PCN 60 F/B/X/T
31	317.00°	THR 42°50'34.43"N 071°19'00.32"E	- 133	
31		DTHR 42°50'44.41"N 071°18'47.68"E		

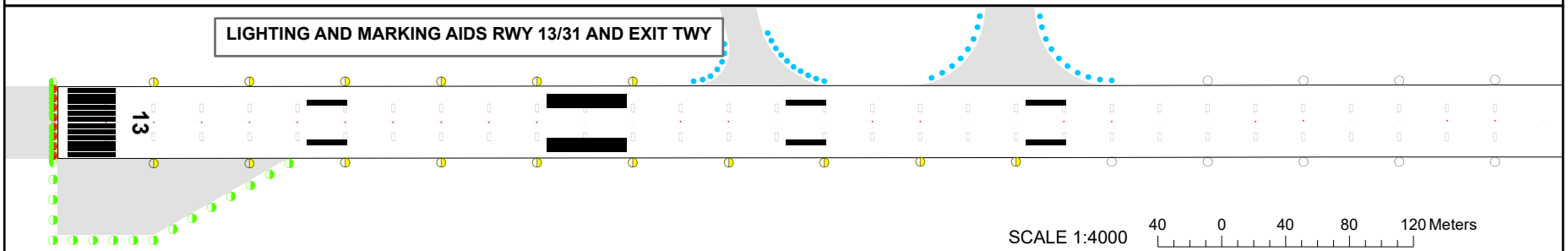
VAR 6°E (2020)
ANNUAL RATE OF CHANGE 0.03°E

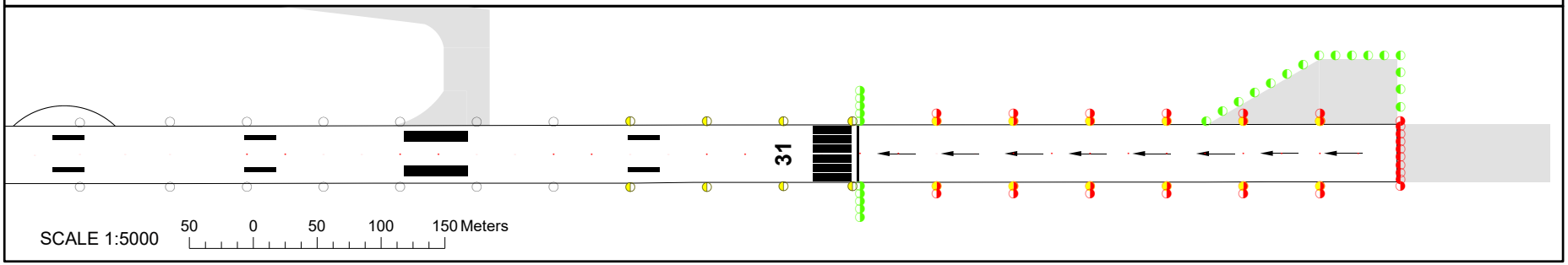
ELEV, HGT IN FEET (METERS)
DIMENSIONS IN METERS
BRG ARE MAG

SCALE 1:22000
220 0 220 440 660 Meters



LIGHTING AND MARKING AIDS RWY 13/31 AND EXIT TWY





CHANGE: Scale.

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AERODROME GROUND MOVEMENT AND PARKING CHART - ICAO

APRON ELEV 2149FT (*655m*)

TWR 122.1

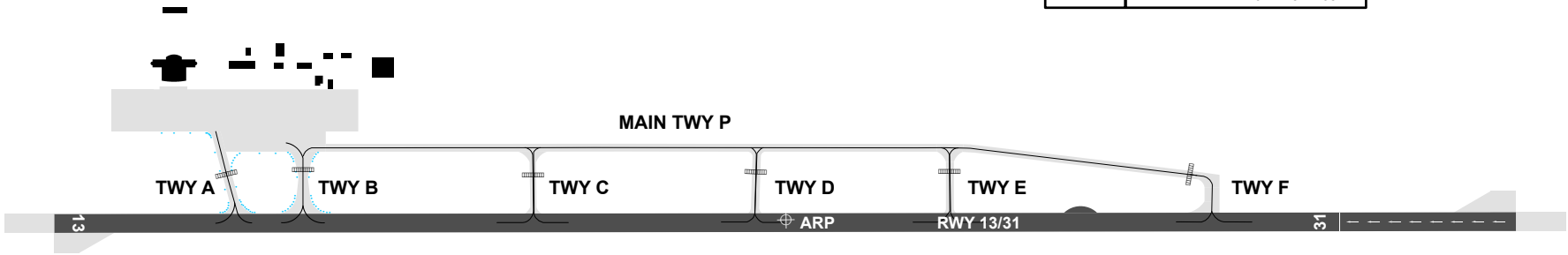
TARAZ

VAR 6°E (2020)

ANNUAL RATE OF CHANGE 0.03°E

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

RWY	DIRECTION (TRUE)	COORDINATES	GEOID UNDULATION	BEARING STRENGTH
13	136.99°	THR 42°51'57.40"N 071°17'15.14"E	- 133	PCN 60 F/B/X/T
31	317.00°	THR 42°50'34.43"N 071°19'00.32"E	- 133	
31		DTHR 42°50'44.41"N 071°18'47.68"E		



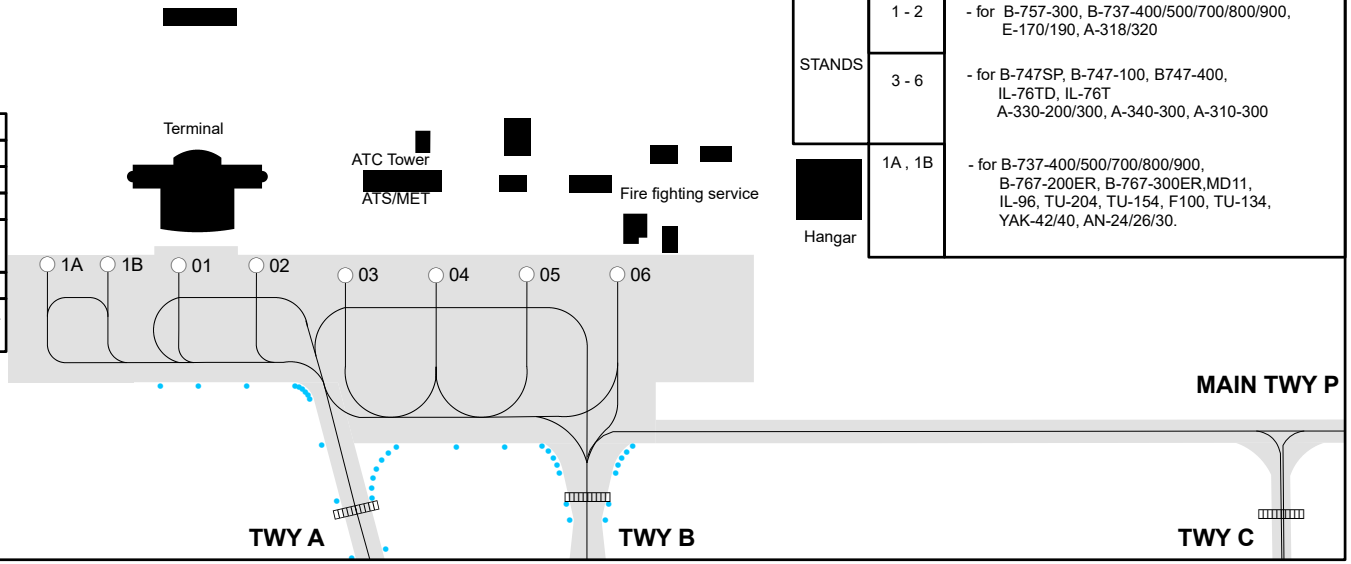
SCALE 1:16000
160 0 160 320 480 Meters

NOTE: TWY C, TWY D, TWY E, TWY F,
TWY P (from TWY C to TWY F) for military ACFT only.

STAND	SURFACE	BEARING STRENGTH
1A , 1B	CONC+ASPH	PCN 47/F/B/X/T
1 - 2	CONC+ASPH	PCN 50/F/B/X/T
3 - 6	CONC+ASPH	PCN 47/F/B/X/T

TWY	WIDTH	SURFACE	BEARING STRENGTH
A	22m	CONC+ASPH	PCN 20/F/B/X/T
B	23m		PCN 60/F/B/X/T
C	NIL	NIL	NIL
D	NIL		NIL
E	NIL		
F	NIL		NIL
P	19.5m	CONC+ASPH	(from B to C) PCN 19/F/B/Y/T

STANDS	1 - 2	- for B-757-300, B-737-400/500/700/800/900, E-170/190, A-318/320
	3 - 6	- for B-747SP, B-747-100, B747-400, IL-76TD, IL-76T A-330-200/300, A-340-300, A-310-300
Hangar	1A , 1B	- for B-737-400/500/700/800/900, B-767-200ER, B-767-300ER,MD11, IL-96, TU-204, TU-154, F100, TU-134, YAK-42/40, AN-24/26/30.



SCALE 1:6000
60 0 60 120 180 Meters

CHANGE: Edit stands info.

TARAZ **STANDS CHARACTERISTICS**

Apron	Stand	Coordinates	
		Latitude	Longitude
	1	42 51 57.87 N	071 17 33.39 E
	2	42 51 56.41 N	071 17 35.24 E
	3	42 51 54.57 N	071 17 37.12 E
	4	42 51 52.86 N	071 17 39.28 E
	5	42 51 51.16 N	071 17 41.45 E
	6	42 51 49.45 N	071 17 43.61 E
	1A	42 52 00.36 N	071 17 30.29 E
	1B	42 51 59.22 N	071 17 31.73 E

INSTRUMENT APPROACH CHART - ICAO

ILS
LLZ 110.7
ITR
GP 330.2
CH 44X

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

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

TURKISTAN
ILS/DME Y
RWY 05

68°20'0"E 68°40'0"E 43°20'0"N

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

SURVEILLANCE RADAR REQUIRED

MSA 25 NM
TRK DVOR
9100 FT
8000 FT
5900 FT
3900 FT
164°
120°
270°
15 NM

10 NM TRK

TURKISTAN
DVOR/DME114.6
TRK
CH 93X
43°19'32"N
068°34'46"E

TURKISTAN

(IAF)
OGBEZ
D 15.0 TRK
R 251° TRK
4500

139°
R238° TRK

FAP
43°14'37"N
068°24'55"E
D 6.3 ITR
D 8.7 TRK
3000

049°
229°

Holding
MNM 6000FT
1 MIN

2300

(IF)
DEREG
D 11.6 ITR
D 14.0 TRK
4000

R221° TRK
319°

(IAF)
IBROZ
D 15.0 TRK
R 209° TRK
4500

ALT/HEIGHT CONVERSION

QNH	(QFE)
6000	(**5087**FT - **1551**m)
4000	(**3087**FT - **941**m)
3000	(**2087**FT - **636**m)
2300	(**1387**FT - **423**m)

SCALE 1:350000
0 3.5 7 10.5 KM
0 1.5 3 6 NM

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

MISSED APPROACH

Climb on track 049°, at 2300FT or above, turn RIGHT on track 229° climbing to 4500FT or above, then as directed. Missed approach turn speed limited to 240 Kt IAS maximum.
RADIO FAILURE:
In the case of RCF climb to 6000 ft to TRK and join holding pattern. Missed approach turn speed limited to 240 Kt IAS maximum.

ILS RDH 49

IF
DEREG
D11.6 ITR
D14.0 TRK
4000

FAP
D6.3 ITR
D8.7 TRK
3000

TRANSITION ALT 10000 FT

DVOR/DME
TRK

GP 3.0°
049°

11.6 6.3 0.6
12 11 10 9 8 7 6 5 4 3 2 1 0

THR 05
ELEV 913FT

Aircraft Category		A	B	C	D	DIST to THR DME ITR	NM	6.3	5.0	4.0	3.0	2.0	1.0
Straight-in Approach OCA/H	CAT I	1113(200)	1118(205)	1128(215)	1138(225)	DME TRK	NM	8.7	7.4	6.4	5.4	4.4	3.4
						ALTITUDE	FT	3000	2576	2249	1925	1602	1281
						HEIGHT	FT	2087	1663	1336	1012	689	368

DME ITR ZERO RANGED TO THR RWY 05

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

CHANGE: Missed approach description.

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

ILS approach to RWY05 from IBROZ, DEREG, OGBEZ	
Fix/point	**Coordinates**
TRK DVOR/DME	43°19'32.3"N 068°34'46.1"E
DEREG (IF) D11.6 ITR, D14.0 TRK	43°11'37.5"N 068°18'57.1"E
(FAP) D6.3 ITR, D8.7 TRK	43°14'36.6"N 068°24'54.5"E
OGBEZ (IAF) R251°, D15.0 TRK	43°16'05.00"N 068°14'47.01"E
IBROZ (IAF) R209°, D15.0 TRK	43°7'09.8"N 068°23'06.5"E
THR RWY05	43°18'10.00"N 068°32'00.99"E
ITR LLZ	43°19'24.6"N 068°34'30.8"E

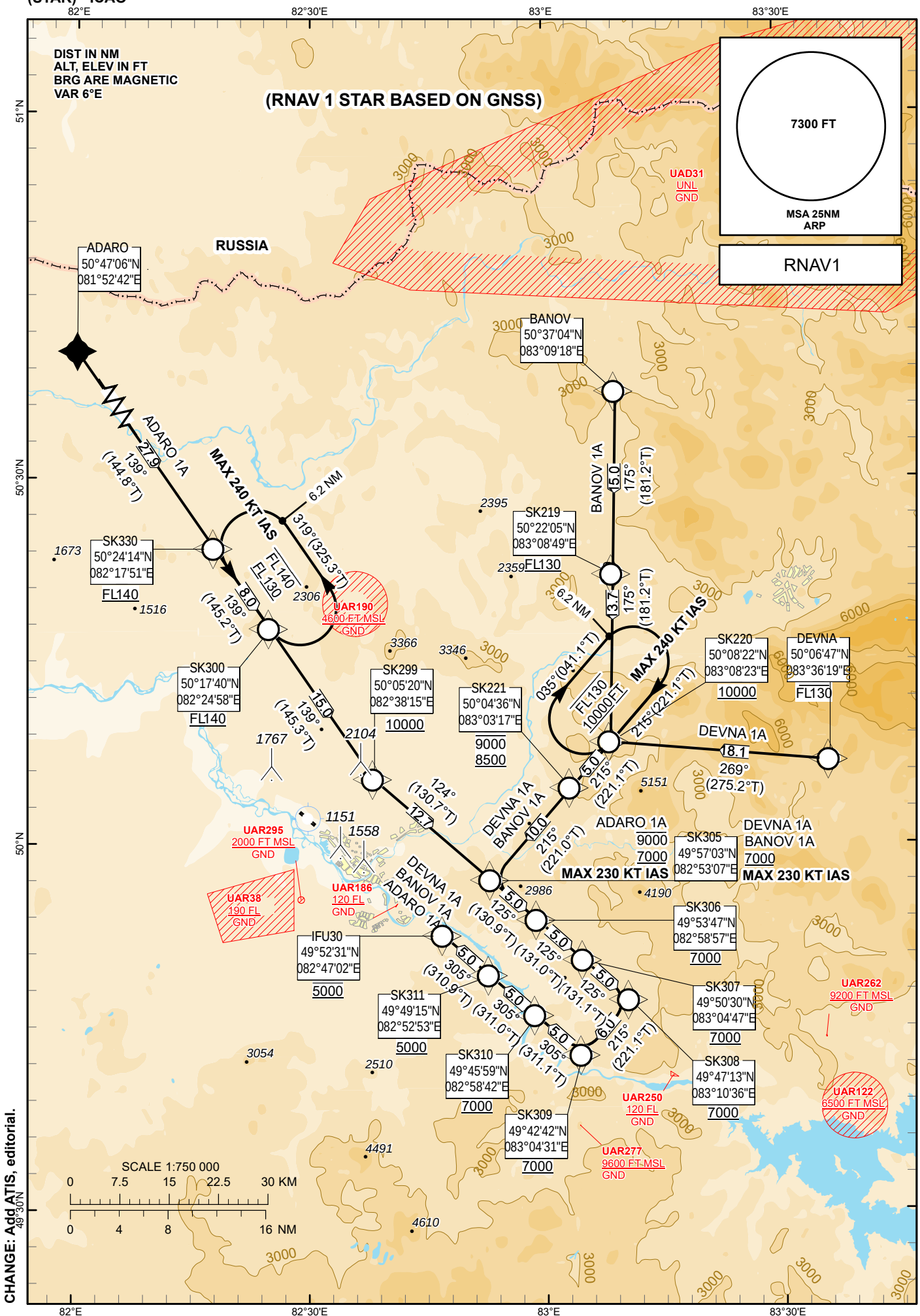
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

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

ADARO 1A, BANOV 1A, DEVNA 1A

UST-KAMENOGORSK
RWY 30



CHANGE: Add ATIS, editorial.

TABULAR DESCRIPTION

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

WAYPOINT LIST

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

HOLDINGS

Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	SK300	139(145.2)	1	L	FL130	FL140	240KT	RNAV 1
Hold	SK220	215(221.1)	1	R	10000FT	FL130	240KT	RNAV 1

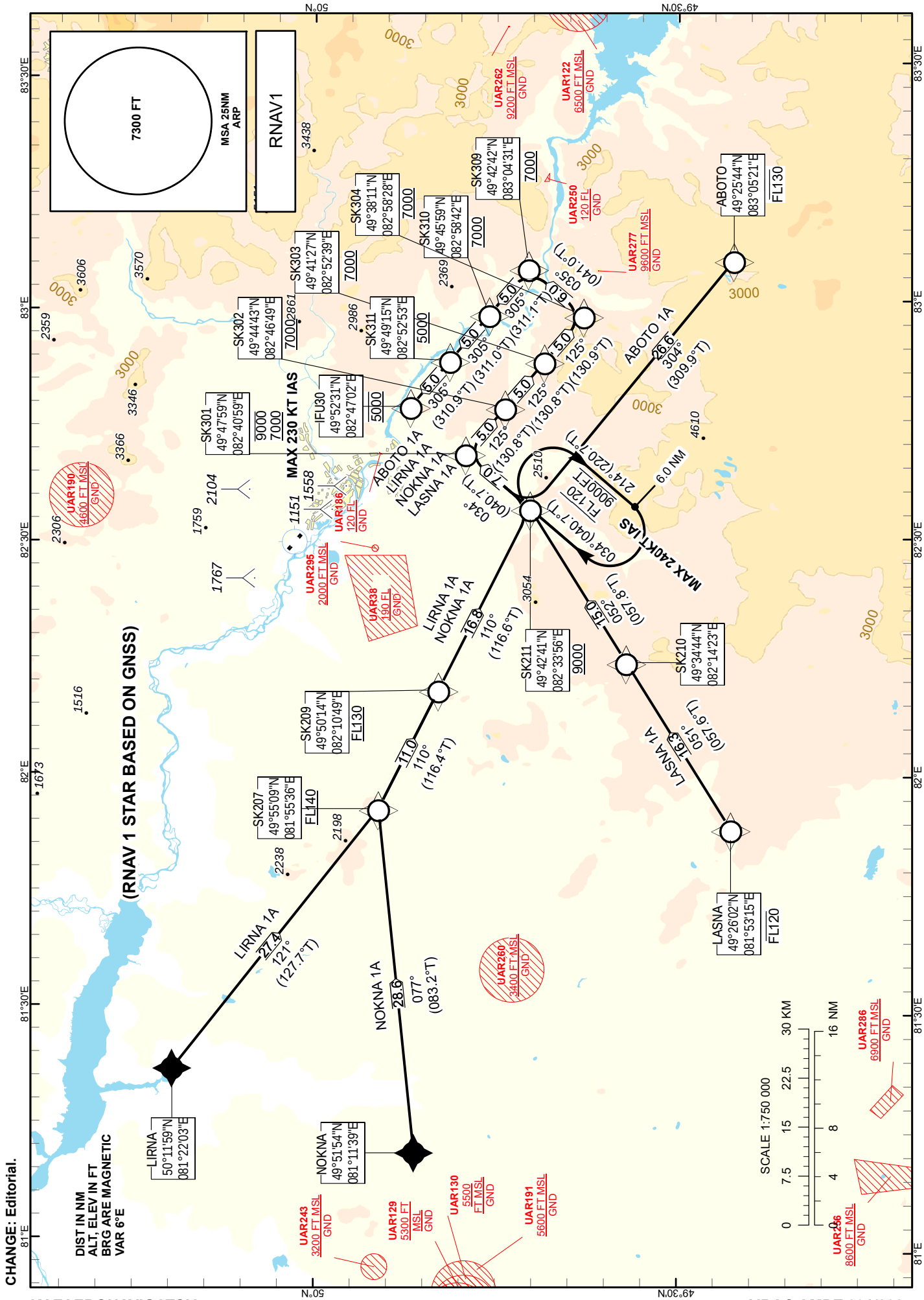
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

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

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

UST-KAMENOGORSK RWY 30



TABULAR DESCRIPTION

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

WAYPOINT LIST

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

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

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

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

HOLDINGS

Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	SK211	034(040.7)	1	R	9000FT	FL120	240KT	RNAV 1

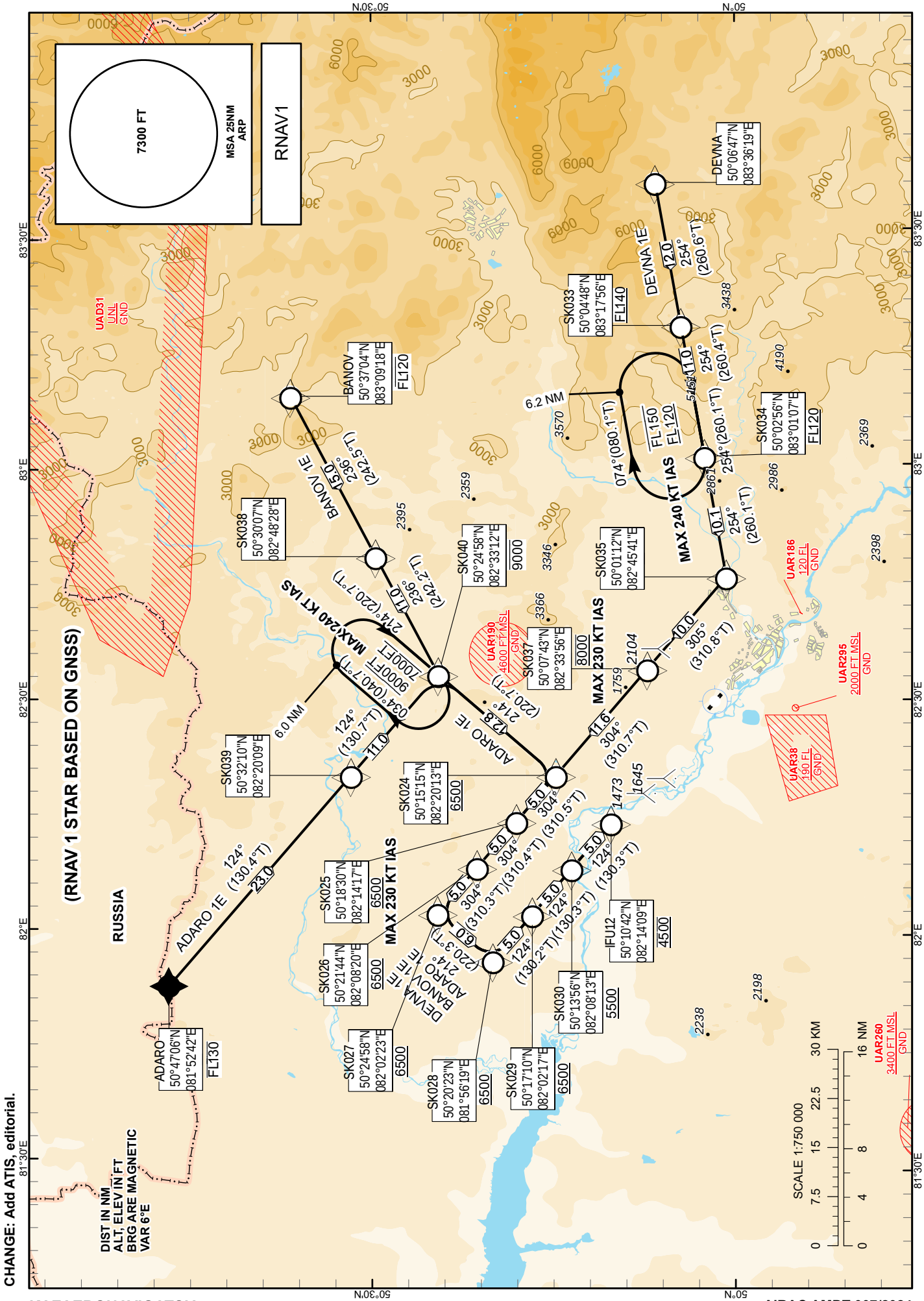
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

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

ADARO 1E, BANOV 1E, DEVNA 1E

UST-KAMENOGORSK
RWY 12



TABULAR DESCRIPTION

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

WAYPOINT LIST

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

HOLDINGS

Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	SK040	214(220.7)	1	R	7000FT	9000FT	240KT	RNAV 1
Hold	SK034	254(260.1)	1	R	FL120	FL150	240KT	RNAV 1

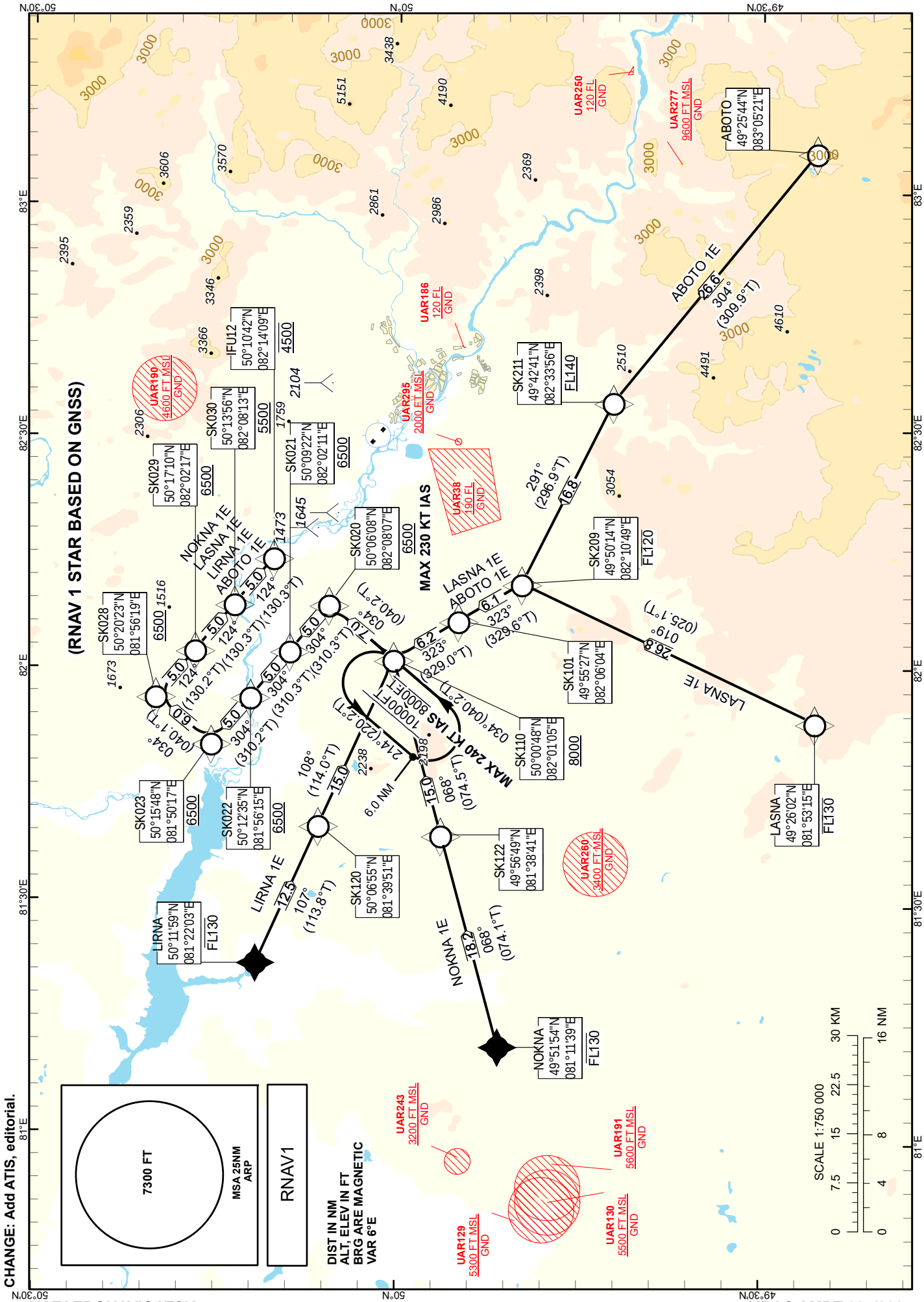
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

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

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

UST-KAMENOGORSK RWY 12



TABULAR DESCRIPTION

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

WAYPOINT LIST

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

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

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

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

HOLDINGS

Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direc-tion	Minimum Altitude	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	SK110	034(040.2)	1	L	8000FT	10000FT	240KT	RNAV 1

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

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

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

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

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

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

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

№	Waypoint name (visual reference)	Geographical coordinates	Radial (mag.) and distance from NAVAID (ARP)	Remarks
1	ALPHA (Itauz minery)	N480738 E0673715	339° 25.0 nm DZG DVOR/DME	Entry/exit
2	BRAVO	N480739 E0675358	004° 25.0 nm DZG DVOR/DME	Entry/exit
3	DELTA (abeam lake Kopa)	N480019 E0681253	039° 25.0 nm DZG DVOR/DME	Entry/exit
4	HOTEL (abeam lake Kopa)	N475137 E0682039	062° 25.0 nm DZG DVOR/DME	Entry/exit
5	TANGO (abeam junction of Sary Su –Kengir rivers)	N473123 E0681812	110° 25.0 nm DZG DVOR/DME	Entry/exit
6	OSCAR	N471818 E0674500	173° 25.0 nm DZG DVOR/DME	Entry/exit
7	ROMEO	N472554 E0671910	218° 25.0 nm DZG DVOR/DME	Entry/exit
8	OZERO (Southern coast of Zhezdinskoe water basin)	N473622 E0673915	204° 8.2 nm DZG DVOR/DME (201° 7.1 nm ARP)	Holding
9	TALAP (NE outskirts of Talap)	N474025 E0675106	120° 4.6 nm DZG DVOR/DME (107° 5.1 nm ARP)	Holding

UAKD AD 2.23 Additional Information

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

Regulatory reference	Requirement of regulations	Description of exceptions, exemptions and restrictions	Measures taken and validity period
Section 2. Point 23. Standards of Aerodromes (Heliports) Operation Civil Aviation Republic Kazakhstan	Runway width	Runway width is less than the required for the aerodrome code designation	An equivalent level of safety has been approved 18.07.2016
Section 2. Point 40. Standards of Aerodromes (Heliports) Operation Civil Aviation Republic Kazakhstan	Width of the TWY and shoulders	The total width of the TWY and shoulders is less than the required The total width of the TWY and shoulders is less than required for the installed code letter of the aircraft	An equivalent level of safety has been approved 18.07.2016

2. Ornithological situation

Bird activity in the vicinity of the aerodrome is determined by seasonal and daily migration. Primary bird attractants within a 13 km radius of the ARP include reservoirs, illegal landfills, and cottage communities, leading to concentrations of corvids, gulls, pigeons, and waterfowl.

2.1 Seasonal Bird Situation (Based on Eco-Ornithological Surveys)

During the spring period (March–April), high-intensity diurnal migration of cranes, geese, and ducks is observed between 03:00–12:00 UTC at altitudes of 500–600 m (1600–2000 FT). Mass flights of black crows (hundreds of individuals) occur at low altitudes of 10–50 m (30–160 FT) during dawn and dusk hours. During the summer period (May–August), a daily risk is posed by flocks of raptors and corvids, with peak activity between 00:00–04:00 and 11:00–14:00 UTC.

In the autumn period (September–October), migration risk increases from ducks, swans, geese, and waders (direction N/NW to S/SE) during daylight hours (03:00–12:00 UTC) at altitudes of 500–600 m (1600–2000 FT). Group flights of magpies (10–50 individuals) and crows are observed crossing the RWY along the 044° course at dusk. During the winter period (November–February), a persistent risk remains from resident populations of pigeons and crows near aerodrome facilities and maneuvering areas.

2.2 Altitudes, Directions, and Precautions

Low-altitude risk (up to 100 m / 330 FT) is posed by corvids and pigeons during flights in the NW ? SE direction between roosting and feeding sites. Medium-altitude risk (100–1500 m / 330–5000 FT) is primarily associated with migrating cranes, geese, and ducks. High-altitude risk (above 1500 m / 5000 FT) is represented by transit flocks of geese and swans. Spring migration routes are oriented from S/SW to NE, while autumn routes are from N/NW to S/SE.

2.3 Intensity and Precautions

Peak flight intensity occurs within 3–4 hours after dawn and 2–3 hours before sunset. For waterfowl (ducks, waders), increased activity may persist for several hours after dark. Pilots are recommended to use landing lights during all flight phases in the vicinity of the aerodrome, including takeoff, climb, descent, and approach, during migration periods and hours of peak bird activity.

2.4 Control and Information Transfer

Specialized radar bird detection is not provided at the aerodrome. Bird dispersal measures include bioacoustic systems, pyrotechnics, and propane cannons, alongside habitat management such as grass cutting and nesting control. Operational information regarding bird hazards is provided to crews via ATIS broadcasts (in English and Russian) and directly by ATC.

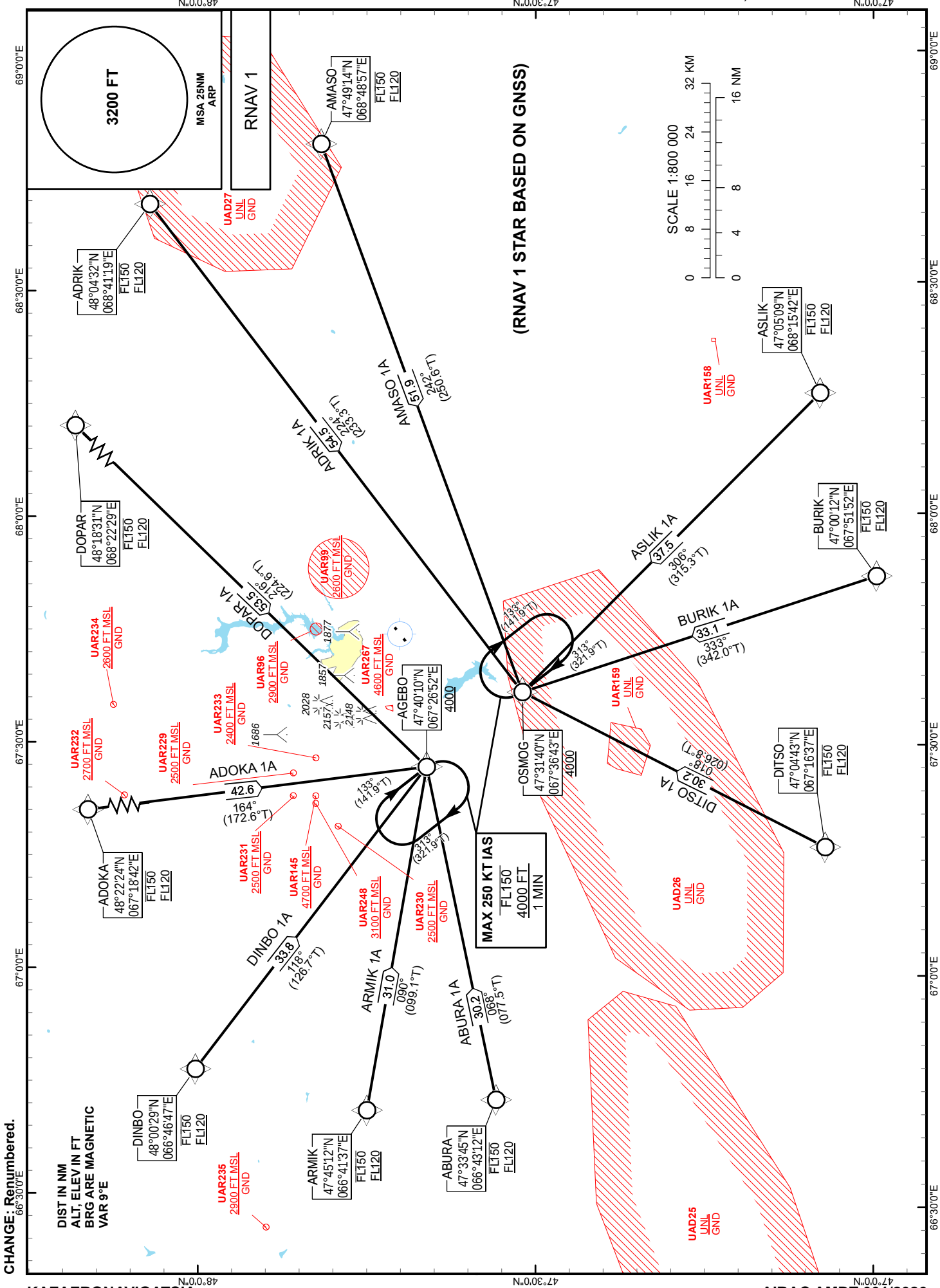
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

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

ABURA 1A, ADOKA 1A, ADRIK 1A, AMASO 1A, ARMIK 1A, ASLIK 1A, BURIK 1A, DINBO 1A, DITSO 1A, DOPAR 1A

ZHEZKAZGAN
RWY 04



TABULAR DESCRIPTION

ABURA 1A RWY04

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	ABURA	-	-	+8.8	-	-	+FL120/-FL150	-	-	RNAV 1
020	TF	AGEBO	-	068(077.5)	+8.8	30.2	-	+4000	-	-3.4	RNAV 1

ADOKA 1A RWY04

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	ADOKA	-	-	+8.8	-	-	+FL120/-FL150	-	-	RNAV 1
020	TF	AGEBO	-	164(172.6)	+8.8	42.6	-	+4000	-	-2.4	RNAV 1

ADRIK 1A RWY04

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	ADRIK	-	-	+8.8	-	-	+FL120/-FL150	-	-	RNAV 1
020	TF	OSMOG	-	224(233.3)	+8.8	54.5	-	+4000	-	-1.9	RNAV 1

AMASO 1A RWY04

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	AMASO	-	-	+8.8	-	-	+FL120/-FL150	-	-	RNAV 1
020	TF	OSMOG	-	242(250.6)	+8.8	51.9	-	+4000	-	-2	RNAV 1

ARMIK 1A RWY04

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	ARMIK	-	-	+8.8	-	-	+FL120/-FL150	-	-	RNAV 1
020	TF	AGEBO	-	090(099.1)	+8.8	31.0	-	+4000	-	-3.3	RNAV 1

ASLIK 1A RWY04

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	ASLIK	-	-	+8.8	-	-	+FL120/-FL150	-	-	RNAV 1
020	TF	OSMOG	-	306(315.3)	+8.8	37.5	-	+4000	-	-2.8	RNAV 1

BURIK 1A RWY04

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	BURIK	-	-	+8.8	-	-	+FL120/-FL150	-	-	RNAV 1
020	TF	OSMOG	-	333(342.0)	+8.8	33.1	-	+4000	-	-3.1	RNAV 1

DINBO 1A RWY04

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	DINBO	-	-	+8.8	-	-	+FL120/-FL150	-	-	RNAV 1
020	TF	AGEBO	-	118(126.7)	+8.8	33.8	-	+4000	-	-3.1	RNAV 1

DITSO 1A RWY04

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	DITSO	-	-	+8.8	-	-	+FL120/-FL150	-	-	RNAV 1
020	TF	OSMOG	-	018(026.8)	+8.8	30.2	-	+4000	-	-3.4	RNAV 1

DOPAR 1A RWY04

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	DOPAR	-	-	+8.8	-	-	+FL120/-FL150	-	-	RNAV 1
020	TF	AGEBO	-	216(224.6)	+8.8	53.5	-	+4000	-	-1.9	RNAV 1

WAYPOINT COORDINATES

Waypoint Identifier	Coordinates	
ABURA	473345.00N	0664312.00E
ADOKA	482224.00N	0671842.00E
ADRIK	480432.00N	0684119.00E
AGEBO	474009.80N	0672651.85E
AMASO	474914.00N	0684857.00E
ARMIK	474512.00N	0664137.00E
ASLIK	470509.00N	0681542.00E
BURIK	470012.00N	0675152.00E
DINBO	480029.00N	0664647.00E
DITSO	470443.00N	0671637.00E
DOPAR	481831.00N	0682229.00E
OSMOG	473140.31N	0673643.23E

HOLDINGS

Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	AGEBO	133 (141.9T)	1	R	+4000	FL150	250KT	RNAV 1
Hold	OSMOG	313(321.9T)	1	R	+4000	FL150	250KT	RNAV 1

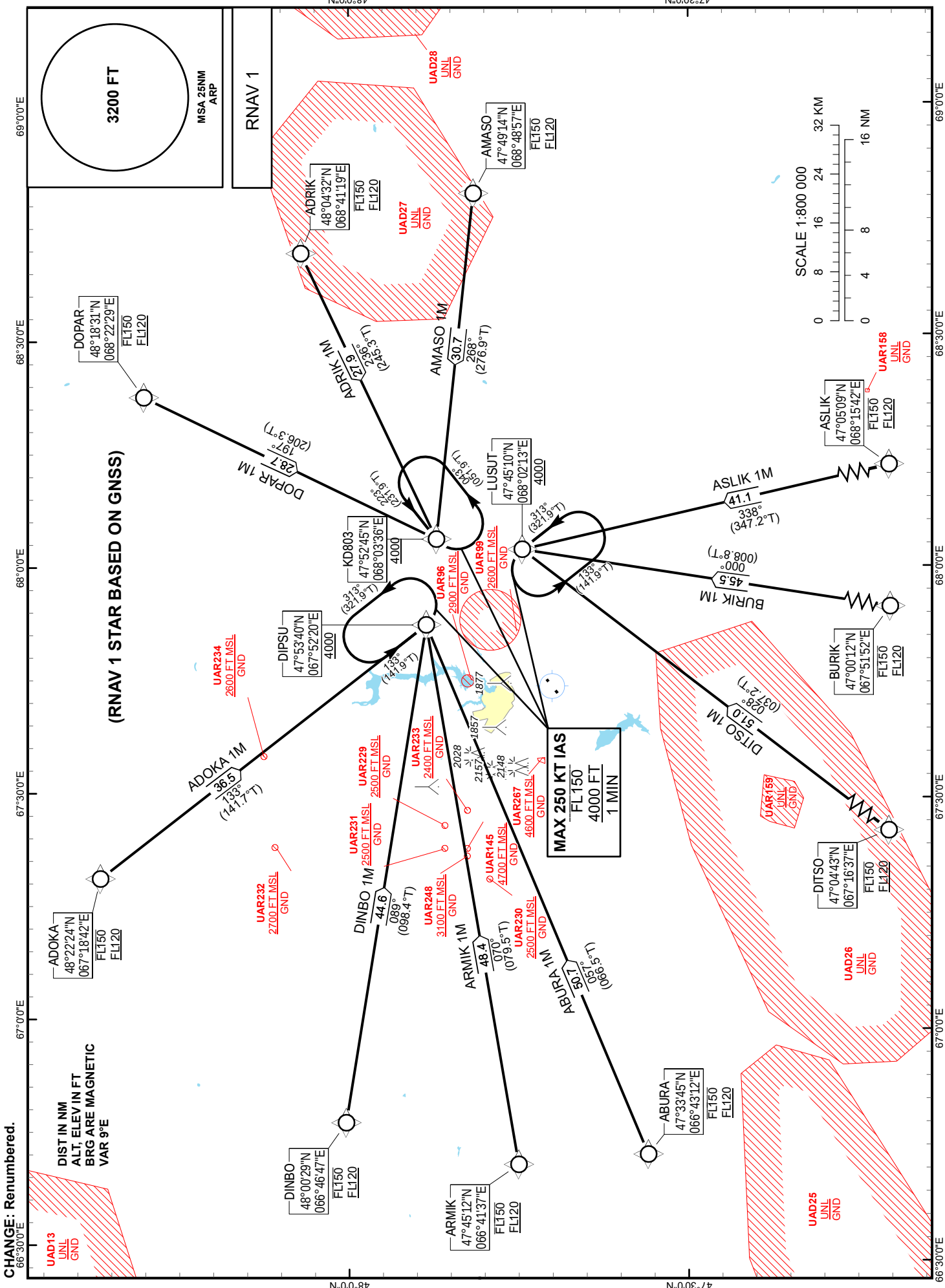
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

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

ABURA 1M, ADOKA 1M, ADRIK 1M, AMASO 1M, ARMIK 1M, ASLIK 1M, BURIK 1M, DINBO 1M, DITSO 1M, DOPAR 1M

ZHEZKAZGAN RWY 22



TABULAR DESCRIPTION

ABURA 1M RWY22

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	ABURA	-	-	+8.8	-	-	+FL 120 / -FL 150	-	-	RNAV 1
020	TF	DIPSU	-	057(066.5)	+8.8	50.7	-	+4000	-	-2	RNAV 1

ADOKA 1M RWY22

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	ADOKA	-	-	+8.8	-	-	+FL 120 / -FL 150	-	-	RNAV 1
020	TF	DIPSU	-	133(141.7)	+8.8	36.5	-	+4000	-	-2.8	RNAV 1

ADRIK 1M RWY22

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	ADRIK	-	-	+8.8	-	-	+FL 120 / -FL 150	-	-	RNAV 1
020	TF	KD803	-	236(245.3)	+8.8	27.9	-	+4000	-	-3.7	RNAV 1

AMASO 1M RWY22

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	AMASO	-	-	+8.8	-	-	+FL 120 / -FL 150	-	-	RNAV 1
020	TF	KD803	-	268(276.9)	+8.8	30.7	-	+4000	-	-3.4	RNAV 1

ARMIK 1M RWY22

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	ARMIK	-	-	+8.8	-	-	+FL 120 / -FL 150	-	-	RNAV 1
020	TF	DIPSU	-	070(079.5)	+8.8	48.4	-	+4000	-	-2.1	RNAV 1

ASLIK 1M RWY22

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	ASLIK	-	-	+8.8	-	-	+FL 120 / -FL 150	-	-	RNAV 1
020	TF	LUSUT	-	338(347.2)	+8.8	41.1	-	+4000	-	-2.5	RNAV 1

BURIK 1M RWY22

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	BURIK	-	-	+8.8	-	-	+FL 120 / -FL 150	-	-	RNAV 1
020	TF	LUSUT	-	000(008.8)	+8.8	45.5	-	+4000	-	-2.3	RNAV 1

DINBO 1M RWY22

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	DINBO	-	-	+8.8	-	-	+FL 120 / -FL 150	-	-	RNAV 1
020	TF	DIPSU	-	089(098.4)	+8.8	44.6	-	+4000	-	-2.3	RNAV 1

DITSO 1M RWY22

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	DITSO	-	-	+8.8	-	-	+FL 120 / -FL 150	-	-	RNAV 1
020	TF	LUSUT	-	028(037.2)	+8.8	51.0	-	+4000	-	-2	RNAV 1

DOPAR 1M RWY22

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	DOPAR	-	-	+8.8	-	-	+FL 120 / -FL 150	-	-	RNAV 1
020	TF	KD803	-	197(206.3)	+8.8	28.7	-	+4000	-	-3.6	RNAV 1

WAYPOINT COORDINATES

Waypoint Identifier	Coordinates	
ABURA	473345.00N	0664312.00E
ADOKA	482224.00N	0671842.00E
ADRIK	480432.00N	0684119.00E
AMASO	474914.00N	0684857.00E
ARMIK	474512.00N	0664137.00E
ASLIK	470509.00N	0681542.00E
BURIK	470012.00N	0675152.00E
DINBO	480029.00N	0664647.00E
DIPSU	475340.14N	0675220.19E
DITSO	470443.00N	0671637.00E
DOPAR	481831.00N	0682229.00E
KD803	475245.04N	0680336.06E
LUSUT	474510.22N	0680213.37E

HOLDINGS

Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	DIPSU	133(141.9T)	1	L	+4000	FL150	250KT	RNAV 1
Hold	KD803	223(231.9T)	1	L	+4000	FL150	250KT	RNAV 1
Hold	LUSUT	313(321.9T)	1	L	+4000	FL150	250KT	RNAV 1

STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
10000 FT

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

ABURA 1N, ADOKA 1N, ADRIK 1N, AMASO 1N, ARMIK 1N, ASLIK 1N, BURIK 1N, DINBO 1N, DITSO 1N, DOPAR 1N

ZHEZKAZGAN RWY 22

(RNAV 1 STAR BASED ON GNSS)

3200 FT
MSA 25NM ARP

RNAV 1

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

MAX 250 KT IAS
FL150
4000 FT
1 MIN

SCALE 1:800 000
0 8 16 24 32 KM
0 4 8 16 NM

ADOKA
48°22'24"N
067°18'42"E
(51.8 NM to THR 22)

ADOKA 1N
36.5
133°
(141.7°T)

ADRIK
48°04'32"N
069°41'19"E
(43.2 NM to THR 22)

ADRIK 1N
21.9
245°
(256.9°T)

AMASO
47°49'14"N
068°48'57"E
(46.0 NM to THR 22)

AMASO 1N
30.7
268°
(276.9°T)

ARMIK
47°45'12"N
066°41'37"E
(63.7 NM to THR 22)

ARMIK 1N
48.4
070°
(079.5°T)

ABURA
47°33'45"N
066°43'12"E
(66.0 NM to THR 22)

ABURA 1N
50.7
057°
(066.5°T)

ASLIK
47°05'09"N
068°15'42"E
(56.4 NM to THR 22)

ASLIK 1N
41.1
338°
(347.2°T)

BURIK
47°00'12"N
067°51'52"E
(60.8 NM to THR 22)

BURIK 1N
45.5
000°
(008.8°T)

DINBO
48°00'29"N
066°46'47"E
(59.9 NM to THR 22)

DINBO 1N
44.6
089°
(098.4°T)

DIPSU
47°53'40"N
067°52'20"E
(15.3 NM to THR 22)

DIPSU 1N
313°
(321.9°T)

DITSO
47°04'43"N
067°16'37"E
(66.3 NM to THR 22)

DITSO 1N
51.0
028°
(037.2°T)

DOPAR
48°18'31"N
068°22'29"E
(44.0 NM to THR 22)

DOPAR 1N
28.1
197°
(206.3°T)

KD803
47°52'45"N
068°03'36"E
(15.3 NM to THR 22)

KD803 1N
223°
(231.9°T)

LUSUT
47°45'10"N
068°02'13"E
(15.3 NM to THR 22)

LUSUT 1N
045°
(051.9°T)

133°
(141.9°T)

313°
(321.9°T)

UAD13 UNL GND
UAD25 UNL GND
UAD26 UNL GND
UAD27 UNL GND

UAR96 2900 FT MSL GND
UAR99 2600 FT MSL GND
UAR158 UNL GND
UAR159 UNL GND
UAR230 2500 FT MSL GND
UAR231 2500 FT MSL GND
UAR232 2700 FT MSL GND
UAR233 2400 FT MSL GND
UAR234 2600 FT MSL GND
UAR235 2900 FT MSL GND
UAR145 4700 FT MSL GND
UAR229 2500 FT MSL GND
UAR248 3100 FT MSL GND
UAR267 4600 FT MSL GND

1877
2028
2157
1857
2148

CHANGE: Renumbered.

DIST IN NM
ALT, ELEV IN FT
BRG ARE MAGNETIC
VAR 9°E

TABULAR DECRIPTION

ABURA 1N RWY22

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance to THR (NM)	Distance to go (DTG) (NM)	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	ABURA	-	-	+8.8	66.0	-	+FL120/-FL150	-315	-	RNAV 1
020	TF	DIPSU	-	058(066.5)	+8.8	15.3	50.7	+4000	-	-2	RNAV 1

ADOKA 1N RWY22

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance to THR (NM)	Distance to go (DTG) (NM)	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	ADOKA	-	-	+8.8	51.8	-	+FL120/-FL150	-315	-	RNAV 1
020	TF	DIPSU	-	133(141.7)	+8.8	15.3	36.5	+4000	-	-2.8	RNAV 1

ADRIK 1N RWY22

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance to THR (NM)	Distance to go (DTG) (NM)	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	ADRIK	-	-	+8.8	43.2	-	+FL120/-FL150	-315	-	RNAV 1
020	TF	KD803	-	236(245.3)	+8.8	15.3	27.9	+4000	-	-3.7	RNAV 1

AMASO 1N RWY22

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance to THR (NM)	Distance to go (DTG) (NM)	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	AMASO	-	-	+8.8	46.0	-	+FL120/-FL150	-315	-	RNAV 1
020	TF	KD803	-	268(276.9)	+8.8	15.3	30.7	+4000	-	-3.4	RNAV 1

ARMIK 1N RWY22

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance to THR (NM)	Distance to go (DTG) (NM)	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	ARMIK	-	-	+8.8	63.7	-	+FL120/-FL150	-315	-	RNAV 1
020	TF	DIPSU	-	071(079.5)	+8.8	15.3	48.4	+4000	-	-2.1	RNAV 1

ASLIK 1N RWY22

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance to THR (NM)	Distance to go (DTG) (NM)	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	ASLIK	-	-	+8.8	56.4	-	+FL120/-FL150	-315	-	RNAV 1
020	TF	LUSUT	-	338(347.2)	+8.8	15.3	41.1	+4000	-	-2.5	RNAV 1

BURIK 1N RWY22

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance to THR (NM)	Distance to go (DTG) (NM)	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	BURIK	-	-	+8.8	60.8	-	+FL120/-FL150	-315	-	RNAV 1
020	TF	LUSUT	-	000(008.8)	+8.8	15.3	45.5	+4000	-	-2.3	RNAV 1

DINBO 1N RWY22

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance to THR (NM)	Distance to go (DTG) (NM)	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	DINBO	-	-	+8.8	59.9	-	+FL120/-FL150	-315	-	RNAV 1
020	TF	DIPSU	-	090(098.4)	+8.8		44.6	+4000	-	-2.3	RNAV 1

DITSO 1N RWY22

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance to THR (NM)	Distance to go (DTG) (NM)	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	DITSO	-	-	+8.8	66.3	-	+FL120/-FL150	-315	-	RNAV 1
020	TF	LUSUT	-	028(037.2)	+8.8	15.3	51.0	+4000	-	-	RNAV 1

DOPAR 1N RWY22

Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course M°(T°)	Magnetic Variation(°)	Distance to THR (NM)	Distance to go (DTG) (NM)	Altitude (FT)	Speed (KT)	VPA (°)	Navigation Specification
010	IF	DOPAR	-	-	+8.8	44.0	-	+FL120/-FL150	-315	-	RNAV 1
020	TF	KD803	-	197(206.3)	+8.8	15.3	28.7	+4000	-	-	RNAV 1

WAYPOINT COORDINATES

Waypoint Identifier	Coordinates	
ABURA	473345.00N	0664312.00E
ADOKA	482224.00N	0671842.00E
ADRIK	480432.00N	0684119.00E
AMASO	474914.00N	0684857.00E
ARMIK	474512.00N	0664137.00E
ASLIK	470509.00N	0681542.00E
BURIK	470012.00N	0675152.00E
DINBO	480029.00N	0664647.00E
DIPSU	475340.14N	0675220.19E
DITSO	470443.00N	0671637.00E
DOPAR	481831.00N	0682229.00E
KD803	475245.04N	0680336.06E
LUSUT	474510.22N	0680213.37E

HOLDINGS

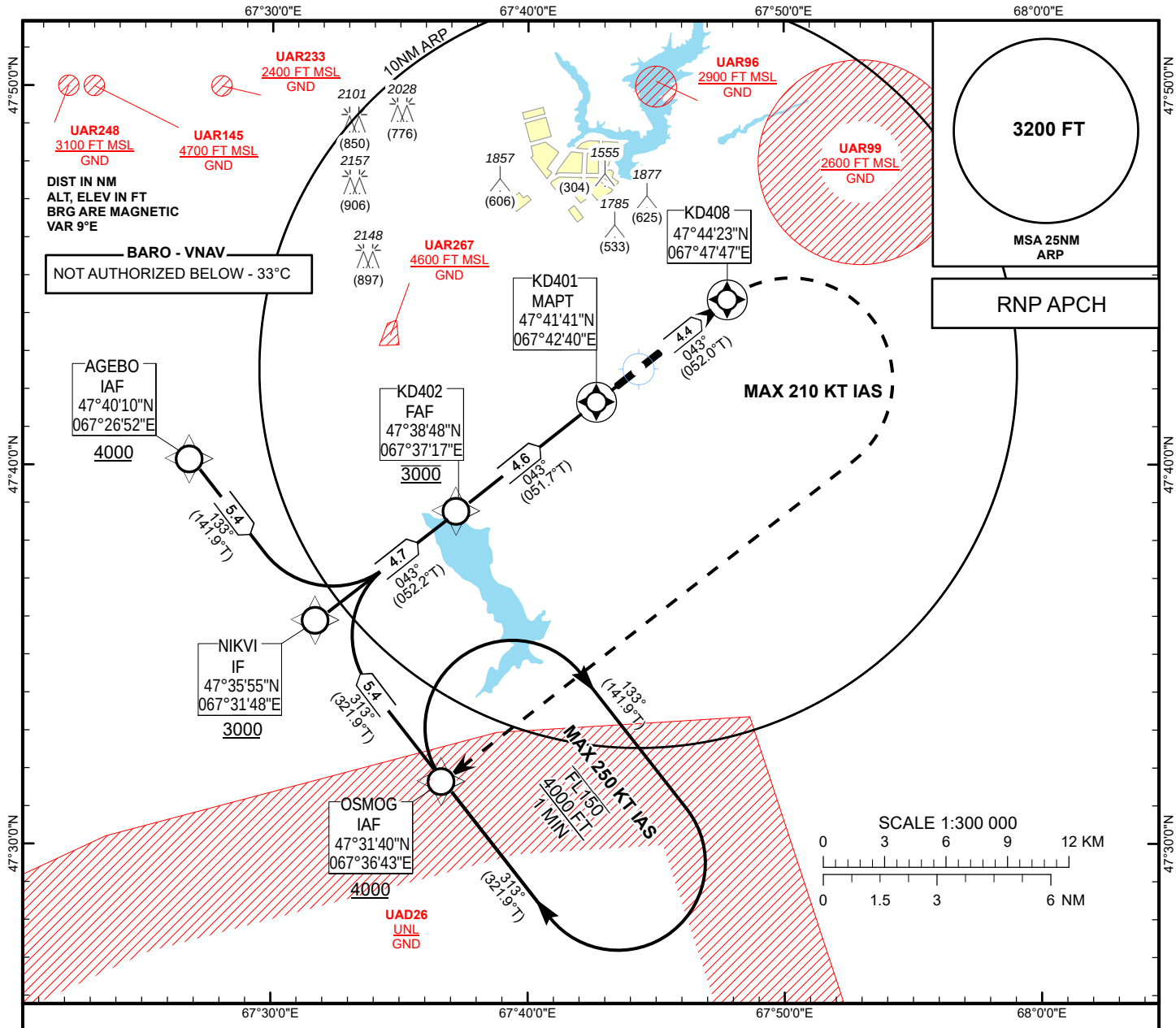
Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direc-tion	Minimum Altitude (FT)	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	DIPSU	133(141.9T)	1	L	+4000	FL150	250KT	RNAV 1
Hold	KD803	223(231.9T)	1	L	+4000	FL150	250KT	RNAV 1
Hold	LUSUT	313(321.9T)	1	L	+4000	FL150	250KT	RNAV 1

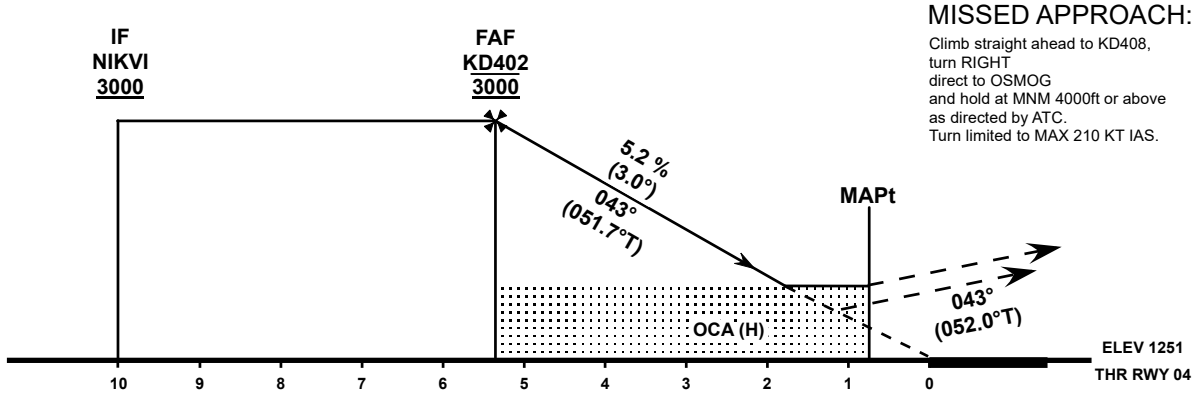
INSTRUMENT APPROACH CHART - ICAO

AERODROME ELEV ***1251FT***
HEIGHTS RELATED TO
AD ELEV

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

ZHEZKAZGAN
RNP RWY 04





MISSED APPROACH:

Climb straight ahead to KD408,
turn RIGHT
direct to OSMOG
and hold at MNM 4000ft or above
as directed by ATC.
Turn limited to MAX 210 KT IAS.

OCA(OCH)		A	B	C	D
Straight	LNAV	1530(280)			
	LNAV/VNAV	1420(169)	1429(178)	1450(199)	1477(226)

DIST to KD401	4.6	4	3	2	1
ALTITUDE	3000	2800	2480	2160	1840
HEIGHT	1749	1549	1229	909	589

GS	kt	80	100	120	140	160	180
Rate of descent	ft/min	425	531	637	743	849	955
FAF - MAPt (4.6 NM)	min:s	3:29	2:47	2:19	1:59	1:44	1:33

CHANGE: Renumbered.

TABULAR DESCRIPTION

RNP RWY04											
Serial Number	**Path Descriptor**	**Waypoint Identifier**	**Fly - over**	**Course °M(°T)**	**Magnetic Variation(°)**	**Distance (NM)**	**Turn Direction**	**Altitude (FT)**	**Speed (KT)**	**VPA (°)**	**Navigation Specification**
010	IF	AGEBO	-	-	+8.8	-	-	+4000	-	-	RNP APCH
020	TF	NIKVI	-	133(141.9)	+8.8	5.4	-	+3000	-	-	RNP APCH
010	IF	OSMOG	-	-	+8.8	-	-	+4000	-	-	RNP APCH
020	TF	NIKVI	-	313(321.9)	+8.8	5.4	-	+3000	-	-	RNP APCH
010	IF	NIKVI	-	-	+8.8	-	-	+3000	-	-	RNP APCH
020	TF	KD402	-	043(052.2)	+8.8	4.7	-	@3000	-	-	RNP APCH
030	TF	KD401	Y	043(051.7)	+8.8	4.6	-	@1523	-	-3	RNP APCH
040	CF	KD408	Y	043(052.0)	+8.8	4.4	-	-	-	+1.4	RNP APCH
050	DF	OSMOG	-	-	+8.8		R	+4000	-210	+1.4	RNP APCH
060	HM	OSMOG		313(321.9)	+8.8		R	+4000/-FL150	-250	-	RNP APCH

WAYPOINT COORDINATES

RNP RWY04		
Waypoint Identifier	**Coordinates**	
AGEBO	474009.80N	0672651.85E
KD401	474140.64N	0674240.14E
KD402	473848.04N	0673717.16E
KD408	474422.51N	0674747.20E
NIKVI	473555.16N	0673147.94E
OSMOG	473140.31N	0673643.23E

HOLDINGS

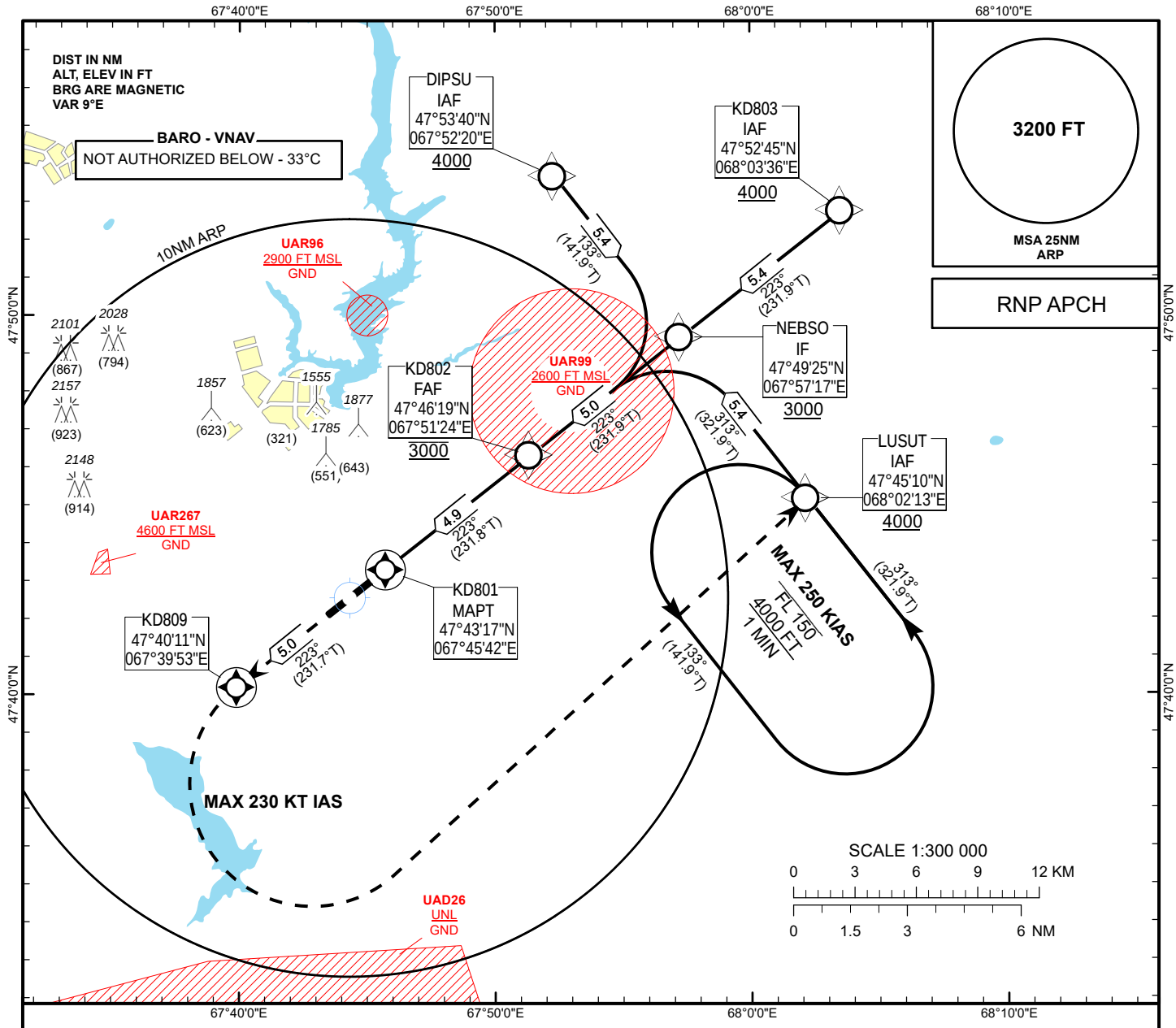
Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	OSMOG	313(321.9T)	1	R	4000FT	FL150	250KT	RNAV 1

INSTRUMENT APPROACH CHART - ICAO

AERODROME ELEV ***1251FT***
HEIGHTS RELATED TO
THR RWY 22 - ELEV ***1234FT***

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

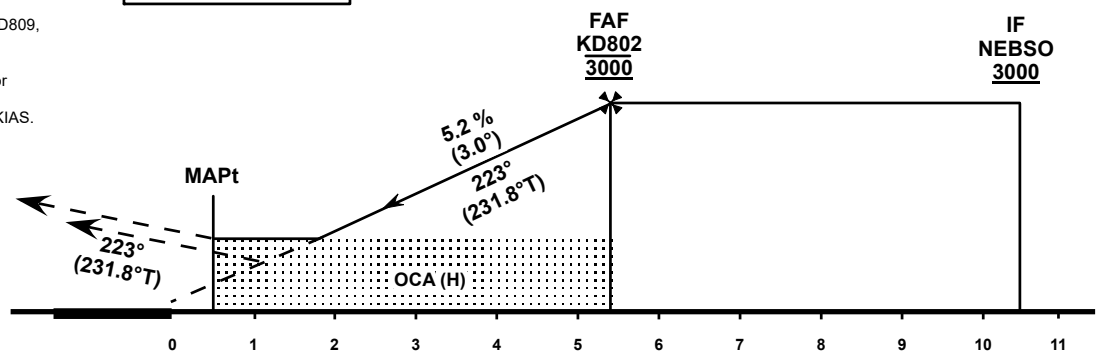
ZHEZKAZGAN
RNP RWY 22



MISSED APPROACH:

TRANSITION ALT 10000 FT

Climb straight ahead to KD809,
turn LEFT
direct to LUSUT
and hold at MNM 4000ft or
as directed by ATC.
Turn limited to MAX 230 KIAS.



OCA(OCH)		A	B	C	D
Straight	LNAV	1500(270)			
	LNAV/VNAV	1425(191)	1435(201)	1456(222)	1483(249)

DIST to KD801	4.9	4	3	2	1
ALTITUDE	3000	2720	2400	2080	1760
HEIGHT	1766	1486	1166	846	526

GS	kt	80	100	120	140	160	180
Rate of descent	ft/min	425	531	637	743	849	955
FAF - MAPt (4.9 NM)	min:s	3:40	2:56	2:27	2:06	1:50	1:38

CHANGE: Renumbered.

TABULAR DESCRIPTION

RNP RWY22											
Serial Number	**Path Descriptor**	**Waypoint Identifier**	**Fly - over**	**Course °M(°T)**	**Magnetic Variation(°)**	**Distance (NM)**	**Turn Direction**	**Altitude (FT)**	**Speed (KT)**	**VPA (°)**	**Navigation Specification**
010	IF	KD803	-	-	+8.8	-	-	+4000	-	-	RNP APCH
020	TF	NEBSO	-	223(231.9)	+8.8	5.4	-	+3000	-	-	RNP APCH
010	IF	DIPSU	-	-	+8.8	-	-	+4000	-	-	RNP APCH
020	TF	NEBSO	-	133(141.9)	+8.8	5.4	-	+3000	-	-	RNP APCH
010	IF	LUSUT	-	-	+8.8	-	-	+4000	-	-	RNP APCH
020	TF	NEBSO	-	313(321.9)	+8.8	5.4	-	+3000	-	-	RNP APCH
010	IF	NEBSO	-	-	+8.8	-	-	+3000	-	-	RNP APCH
020	TF	KD802	-	223(231.9)	+8.8	5.0	-	@3000	-	-	RNP APCH
030	TF	KD801	Y	223(231.8)	+8.8	4.9	-	@1442	-	-3	RNP APCH
040	CF	KD809	Y	223(231.7)	+8.8	5.0	-	-	-	+1.4	RNP APCH
050	DF	LUSUT	-	-	+8.8	-	L	+4000	-230	+1.4	RNP APCH
060	HM	LUSUT	-	313(321.9)	+8.8	-	L	+4000/-FL150	-250	-	RNP APCH

WAYPOINT COORDINATES

RNP RWY22	
Waypoint Identifier	**Coordinates**
DIPSU	475340.14N 0675220.19E
KD801	474317.25N 0674542.04E
KD802	474618.76N 0675123.93E
KD803	475245.04N 0680336.06E
KD809	474011.44N 0673953.28E
LUSUT	474510.22N 0680213.37E
NEBSO	474925.29N 0675717.18E

HOLDINGS

Path Descriptor	Waypoint Identifier	Inbound Course °M (°T)	Time (MIN)	Turn Direction	Minimum Altitude	Maximum Altitude	Speed limit (KT)	Navigation Specification
Hold	LUSUT	313(321.9T)	1	L	4000FT	FL150	250KT	RNAV 1