JEPPESEN
JeppView for Windows

List of pages in this Trip Kit

General Information

Location: YAROSLAVL RUS
ICAO/IATA: UUDL / IAR
Lat/Long: N57° 33.63', E040° 09.45'
Elevation: 305 ft

Airport Use: Public
Daylight Savings: Not Observed
UTC Conversion: -3:00 = UTC
Magnetic Variation: 12.0° E

Fuel Types: Jet A-1
Repair Types: Minor Airframe, Minor Engine
Customs: Yes
Airport Type: IFR
Landing Fee: Yes
Control Tower: Yes
Jet Start Unit: No
LLWS Alert: No
Beacon: No

Sunrise: 0121 Z
Sunset: 1712 Z

Runway Information

Runway: 05
Length x Width: 9875 ft x 144 ft
Surface Type: asphalt
TDZ-Elev: 292 ft
Lighting: Edge, ALS

Runway: 23
Length x Width: 9875 ft x 144 ft
Surface Type: asphalt
TDZ-Elev: 305 ft
Lighting: Edge, ALS

Communication Information

ATIS: 127.350
Yaroslavl Tower: 124.000 Secondary
Yaroslavl Tower: 120.300
Yaroslavl Tower: 120.000
Yaroslavl Start Tower: 120.800

1. GENERAL

1.1. ATIS

ATIS 127.35

1.2. COMMUNICATION FAILURE PROCEDURES

In case of radio communication failure, follow radio communication failure procedures set forth in ICAO Annex 2 and the State Rules and Procedures of Russia for Emergency in the Airway Manual.

1.3. NOISE ABATEMENT PROCEDURES

Noise abatement procedures during take-off, climb and approach shall be carried by all ACFT, but not at the expanse of flight safety.

Maintain the assigned SID and STAR and in case of deviation - join the assigned track immediately.

Compliance with the required noise abatement procedures shall not be carried out:

- If there is ice, slush, water or mud on the RWY and the friction coefficient is 0.4 or less.
- Under meteorological conditions when ceiling is lower than 150m or the horizontal visibility is less than 1800m.
- When crosswind component on RWY (including gusts) exceeds 7m/s.
- When tailwind component on RWY exceeds 2.5 m/s.
- When wind shear is reported or forecasted, or when adverse weather conditions (e.g. thunderstorms) can affect the approach and landing of ACFT.

Heights of training flights performed by A, B, C class ACFT and testbed ACFT flight shall not be less the circle height. Circle of flights is RIGHT for landing heading 051° MAG and LEFT for landing heading 231° MAG.

1.3.1. USE OF RWY SYSTEM IN DAYTIME

The RWY is used according to the schedule of ACFT movement at the APT.

RWY 23 is the main (preferred) RWY that is used, if possible, to the maximum extent for ACFT take-off and landing.

1.3.2. USE OF RWY SYSTEM AT NIGHT

The RWY is used according to the schedule of ACFT movement at the APT, minimizing the performance of flights of the noisiest types of ACFT at NIGHT.

RWY 23 is the main (preferred) RWY that is used, if possible, to the maximum extent for ACFT take-off and landing.

Daily from 2300-0700LT, restrictions have been introduced for take-off and landing of the following ACFT types: Tu-134, Tu-154, II-86, Il-76, An-12 and An-26, which do not meet noise level requirements of ICAO Annex 16, except special, medical and emergency rescue flights.

1.4. LOW VISIBILITY PROCEDURES (LVP)

LVP are applied, when RVR is 550 m or less.

Flight crews are informed about LVP implementation via ATIS or by ATS unit by following phrase: ″Low visibility procedures in progress″.

When RVR is 550m or less, TWR controller informs the flight crews: ″Low visibility procedures in progress″.

ACFT shall taxi strictly along the TWY centerline and taxi routes on the apron.

Flight crew shall report RWY vacation to TWR controller only after the ACFT crosses RWY holding position on TWY B and E.

The responsibility for RWY incursion and non-adherence of the assigned taxi routes on the maneuvering area is imposed on the flight crew.

When LVP are in progress, it is prohibited:

- to take off not from the RWY beginning;
- to take off without stop at line-up position after taxiing onto the RWY.

1. GENERAL

1.5. TAXIING PROCEDURES

Taxiing and towing shall be carried out by the clearance of TWR controller strictly along the marking of the MAIN TWY, RWY, apron in accordance with taxi patterns.

ACFT with MTOM of 100 tons or greater shall carry out turns on RWY turn pads only.

1.6. PARKING INFORMATION

Taxiing and towing into stands by TWR controller's permission and managed by person in charge of ground support service.

Taxiing out of stands managed by person in charge of ground support service.

De-icing is performed on stands.

Stands 1 thru 4, 6 thru 12, 15 and 16 are designated for helicopters.

1.7. OTHER INFORMATION

RWY width is less than the required standard.

Birds in vicinity of APT.

2. ARRIVAL

2.1. COMMUNICATION FAILURE PROCEDURES

Continue the flight maintaining flight route and profile of the RNAV STAR (the shortest STAR) to the maximum extent.

Execute approach in accordance with the established procedure (the shortest STAR).

If deviation from the specified procedure is required, set transponder to code 7700.

In case a decision to land at the departure aerodrome was taken, execute approach in accordance with the established procedure.

In case a decision to proceed to an alternate aerodrome was taken, enter SID which is the nearest in the direction of the alternate aerodrome and continue the flight maintaining flight route and profile of the RNAV SID.

After joining AWY, continue climbing to flight level specially established for flight without radio communication (FL140, FL150, FL240, FL250).

2.1.1. AFTER MISSED APPROACH

Continue the flight maintaining flight route and profile of the missed approach procedure to the maximum extent to the nearest holding area.

At the entrance to the holding area, reach published lower altitude, burn out fuel, if necessary.

2.2. NOISE ABATEMENT PROCEDURES

When executing approach, flight crews shall apply procedures envisaged in the ACFT Flight Manual provided that approach to RWY is carried out with a clean wing and subsequent extension of the landing gear and flaps (to the intermediate angle) before intercepting the GP and further extension of flaps on the GP.

Special attention should be paid to the requirement of the necessity to maintain the same operation mode of all engines during approach which leads to noticeable noise reduction.

When executing instrument and visual approach, flying below the ILS GP is PROHIBITED.

No noise abatement procedures must envisage exceeding of the indicated speed of descent.

A displaced RWY THR shall not be used as a noise abatement measure.

Reverse thrust after landing shall not be used at NIGHT if possible.

3. DEPARTURE

3.1. START-UP PROCEDURES

ACFT take-off shall normally be carried out from the RWY beginning.

It is permitted to carry out take-off from TWY B on take-off heading 050° MAG or TWY E on take-off heading 230° MAG, if the declared distances of the RWY from the start of roll position comply with distances required for the actual take-off mass of ACFT and take-off instructions.

Engines start-up shall be carried out upon request and clearance of TWR controller and managed by person in charge of ground support service.

3.2. NOISE ABATEMENT PROCEDURES

Noise abatement procedures shall not be applied in case of one of the ACFTs engines failure.

During take-off noise abatement procedures must be applied:

- Take-off shall be performed according to the Aeroplane Flight Manual, for the specified type of ACFT, for noise abatement over terrain.
- After take-off follow the established SID unless otherwise instructed by ATC. The initial turn shall be performed at a distance prescribed by SID route.
- In case of incomplete loading of ACFT, take-off is recommended to be performed at rated engine operation mode.
- NADP 1 is applied.

3.3. COMMUNICATION FAILURE PROCEDURES

Continue the flight maintaining flight route and profile of RNAV SID to the maximum extent.

In case a decision to return to the aerodrome of departure was taken:

- Proceed to SID termination fix, then turn left to the nearest holding area at height published for SID termination.
- At the entrance to the holding area, reach published lower altitude, burn out fuel, if necessary.
- Execute approach in accordance with the established procedure.

In case a decision to proceed to the destination aerodrome was taken, after joining AWY from SID, continue climbing to the flight level indicated in the flight plan.

In case a decision to proceed to the alternate aerodrome was taken:

- Continue the flight maintaining flight route and profile of RNAV SID to the maximum extent.
- After joining AWY, continue climbing to flight level specially established for flight without radio communication (FL140, FL150, FL240, FL250).
- If deviation from the specified procedure is required, flight crew must set transponder to code 7700.

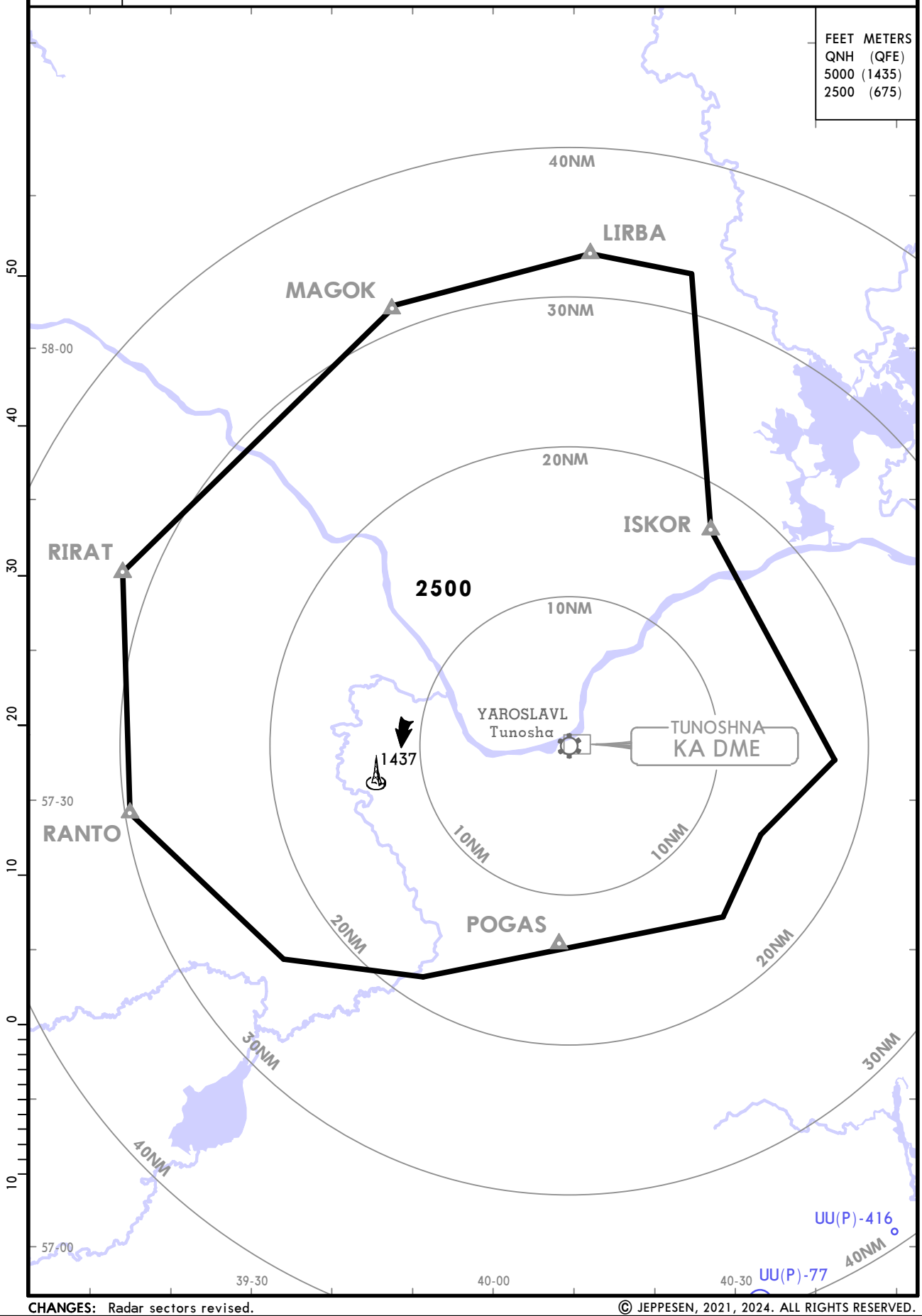
UUDL/IAR
TUNOSHNA

JEPPESEN
25 OCT 24 (10-1R) Eff 31 Oct

YAROSLAVL, ~~RUSSIA~~
RADAR MINIMUM ALTITUDES

Apt Elev
305

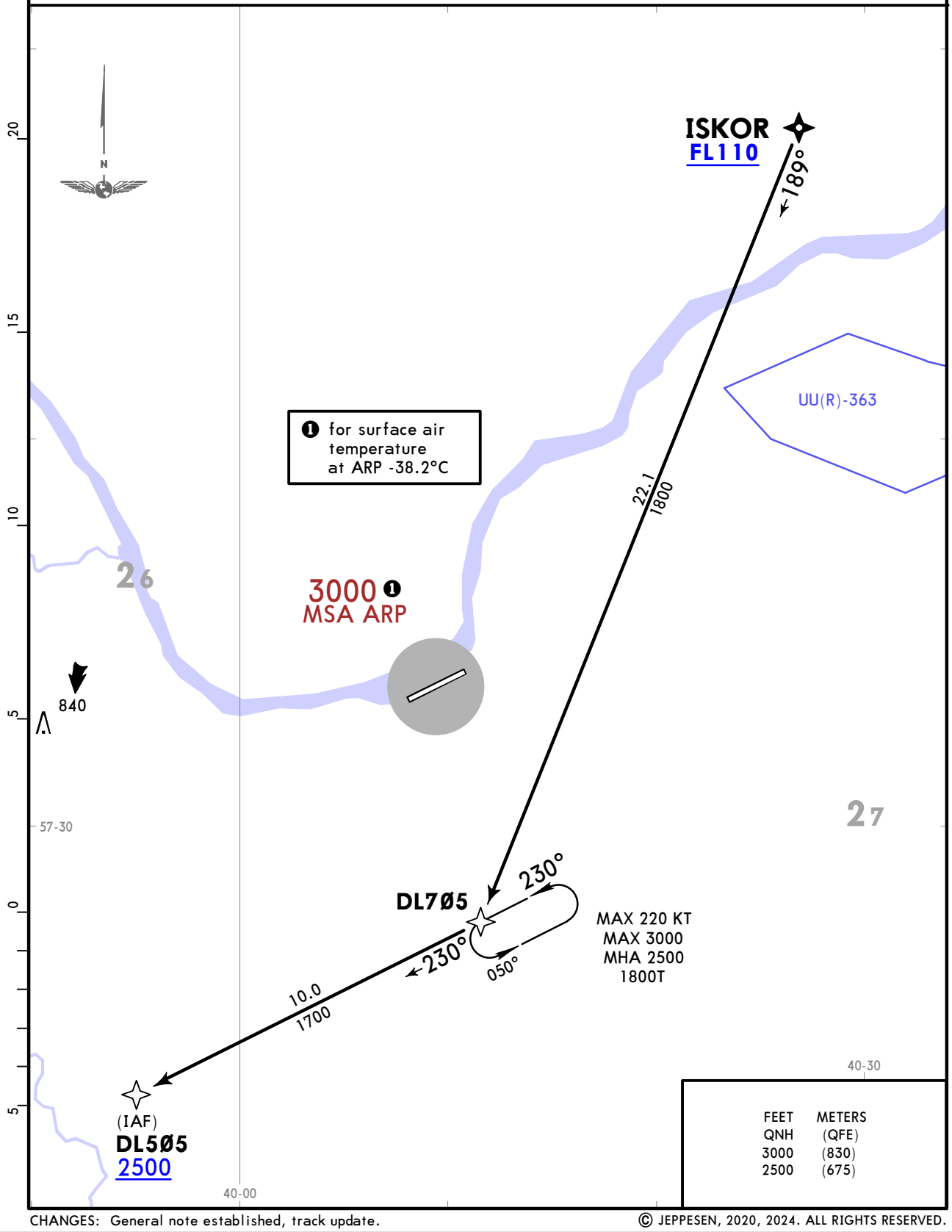
Alt Set: hPa (MM on request)
Trans level: FL060
FL070 if pressure is less than 1013 hPa (760 mm)
FL080 if pressure is less than 977 hPa (733 mm)
Trans alt: 5000
1. The chart may only be used for cross-checking of altitudes assigned while the acft is identified under RADAR control.
2. Flight levels assigned by ATC include a correction for low temperature effect, if required.



CHANGES: Radar sectors revised.

ATIS	Apt Elev	
127.350	305	Alt Set: hPa (MM on request) Trans level: FL060 FL070 if pressure is less than 1013 hPa (760 mm) FL080 if pressure is less than 977 hPa (733 mm)
		RNAV 1 GNSS required
		UU(R)-363 may affect RNAV STAR.

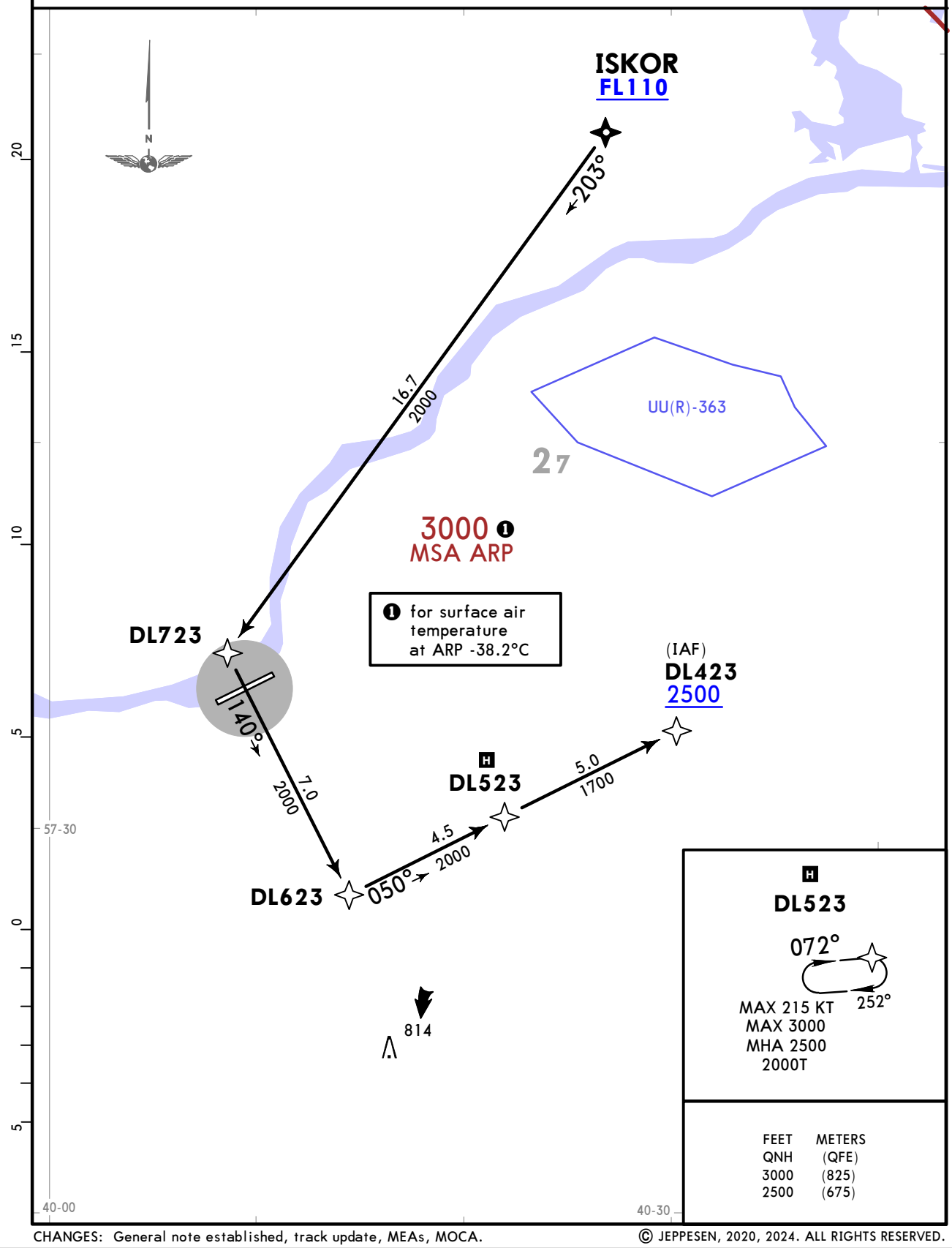
ISKOR 2N [ISKO2N]
RNAV ARRIVAL
(RWY 05)



CHANGES: General note established, track update.

ATIS	Apt Elev	
127.350	305	Alt Set: hPa (MM on request) Trans level: FL060 FL070 if pressure is less than 1013 hPa (760 mm) FL080 if pressure is less than 977 hPa (733 mm)
		RNAV 1 GNSS required
		UU(R)-363 may affect RNAV STAR.

ISKOR 2P [ISKO2P]
RNAV ARRIVAL
(RWY 23)



CHANGES: General note established, track update, MEAs, MOCA.

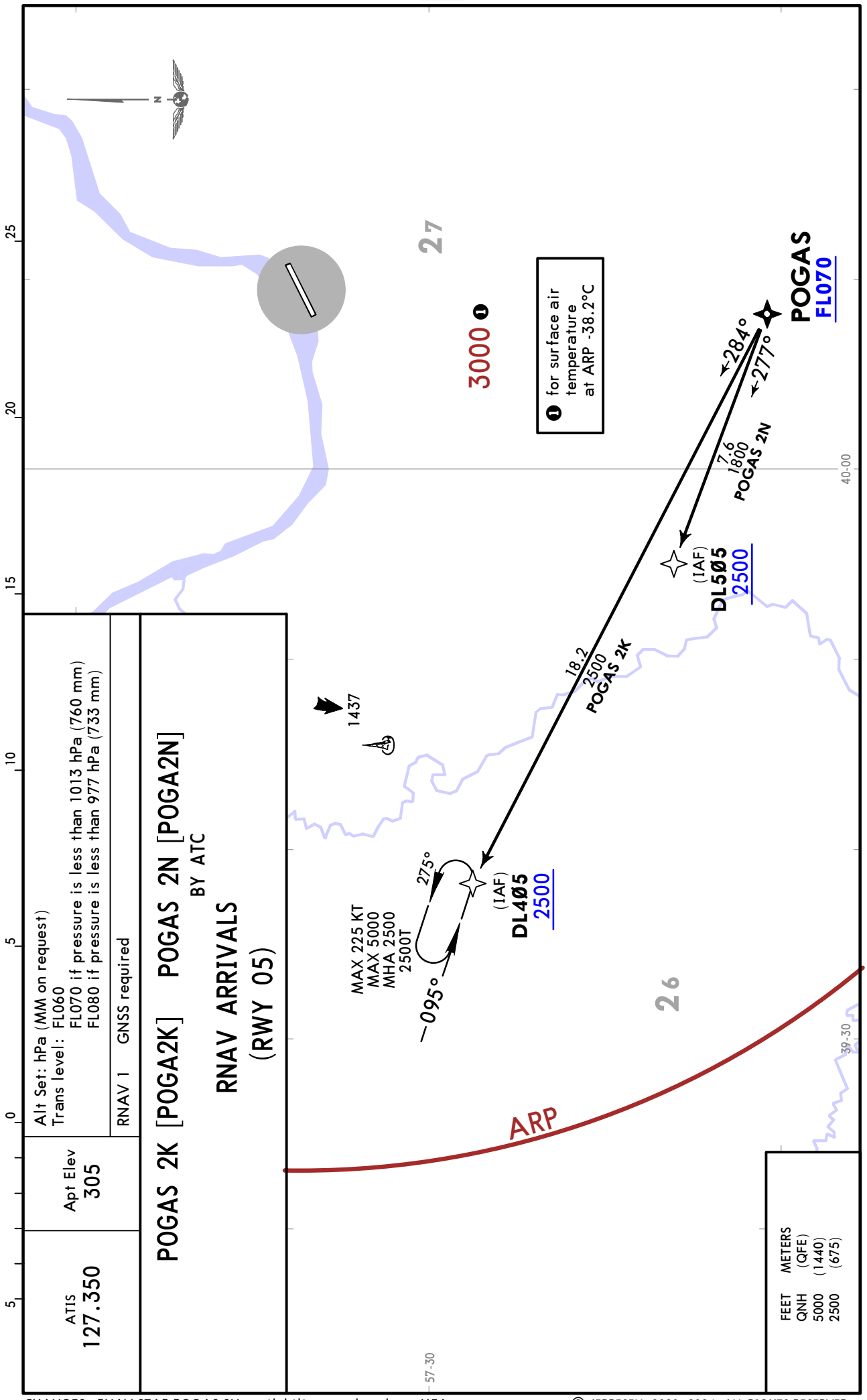
POGAS 2K [POGA2K] POGAS 2N [POGA2N]
BY ATC
RNAV ARRIVALS
(RWY 05)

Alt Set: hPa (MM on request)
Trans level: FL060
FL070 if pressure is less than 1013 hPa (760 mm)
FL080 if pressure is less than 977 hPa (733 mm)

RNAV 1 GNSS required

Apt Elev 305

ATIS 127.350



CHANGES: RNAV STAR POGAS 2N availability, track update, MEA.

UUDL/IAR
TUNOSHNA

JEPPESEN
25 OCT 24 (10-2C) Eff 31 Oct

YAROSLAVL, ~~RUSSIA~~
RNAV STAR

POGAS 2P [POGA2P], RANTO 2P [RANT2P]
RNAV ARRIVALS
(RWY 23)

ATIS 127.350

Apt Elev 305

Alt Set: hPa (MM on request)
Trans level: FL060
FL070 if pressure is less than 1013 hPa (760 mm)
FL080 if pressure is less than 977 hPa (733 mm)

RNAV 1 GNSS required

(IAF) DL423 2500

DL523

DL623

POGAS FL070

RANTO FL070

RANTO 2P
32.2
2000

1437

3000 ❶

❶ for surface air temperature at ARP -38.2°C

ARP

DL523

MAX 215 KT
MAX 3000
MHA 2500
2000T

FEET METERS
QNH (QFE)
3000 (825)
2500 (675)

RANTO 2N [RANT2N]
RNAV ARRIVAL
(RWY 05)

RNAV 1 GNSS required

Alt Set: hPa (MM on request)
Trans level: FL060
FL070 if pressure is less than 1013 hPa (760 mm)
FL080 if pressure is less than 977 hPa (733 mm)

Apt Elev 305

ATIS 127.350

FEET METERS
QNH (QFE)
5000 (1440)
2500 (675)

1 for surface air temperature at ARP -38.2°C

3000 1

27

26

1437

MAX 225 KT
MAX 5000
MHA 2500
2500T

275°

095°

(IAF)
DL4Ø5
2500

12.5
2500

079°

RANTO
FL070

ARP

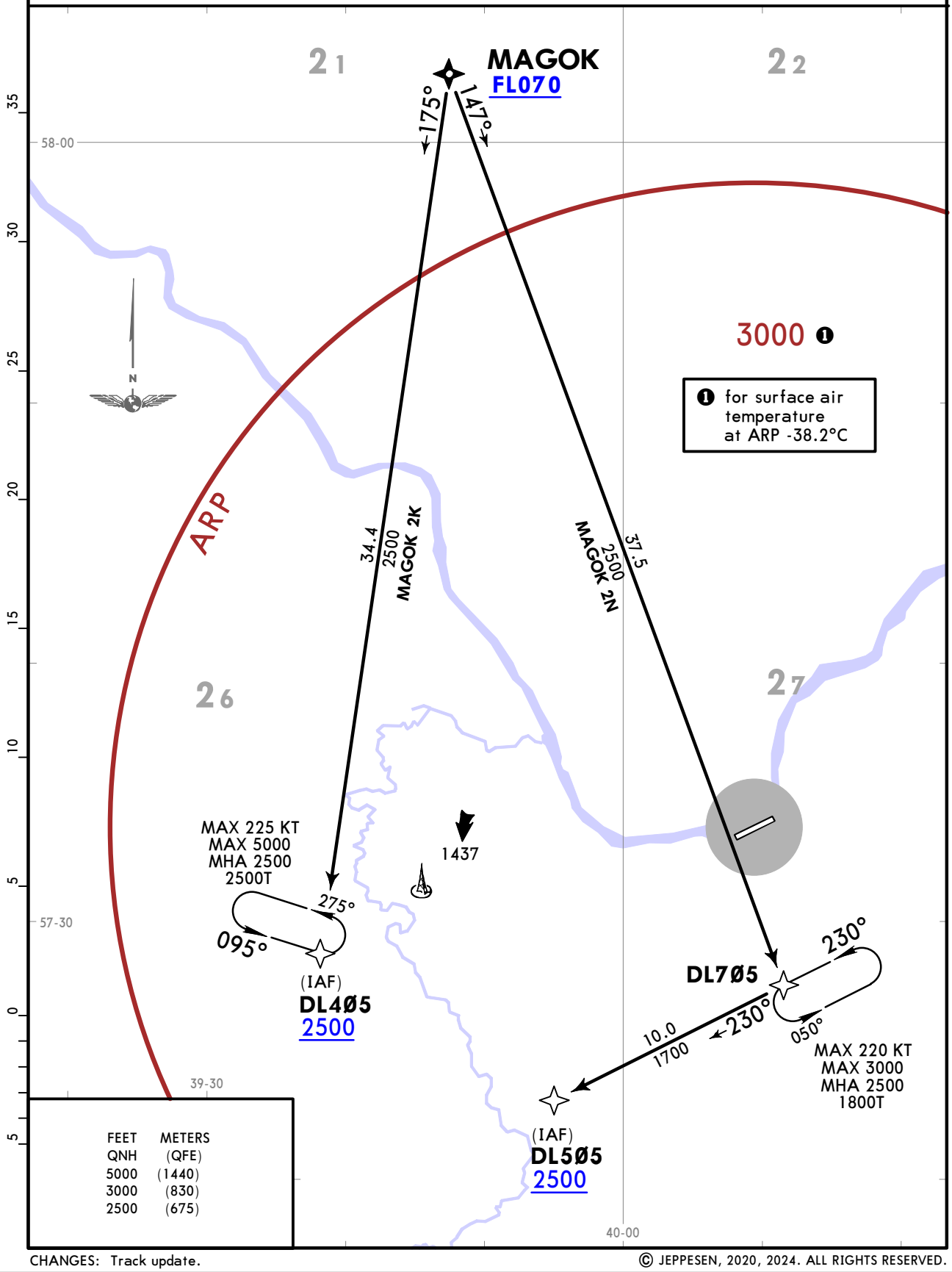
40-00

39-30

57-30

ATIS	Apt Elev	
127.350	305	Alt Set: hPa (MM on request) Trans level: FL060 FL070 if pressure is less than 1013 hPa (760 mm) FL080 if pressure is less than 977 hPa (733 mm) RNAV 1 GNSS required

MAGOK 2K [MAGO2K], MAGOK 2N [MAGO2N]
RNAV ARRIVALS
(RWY 05)



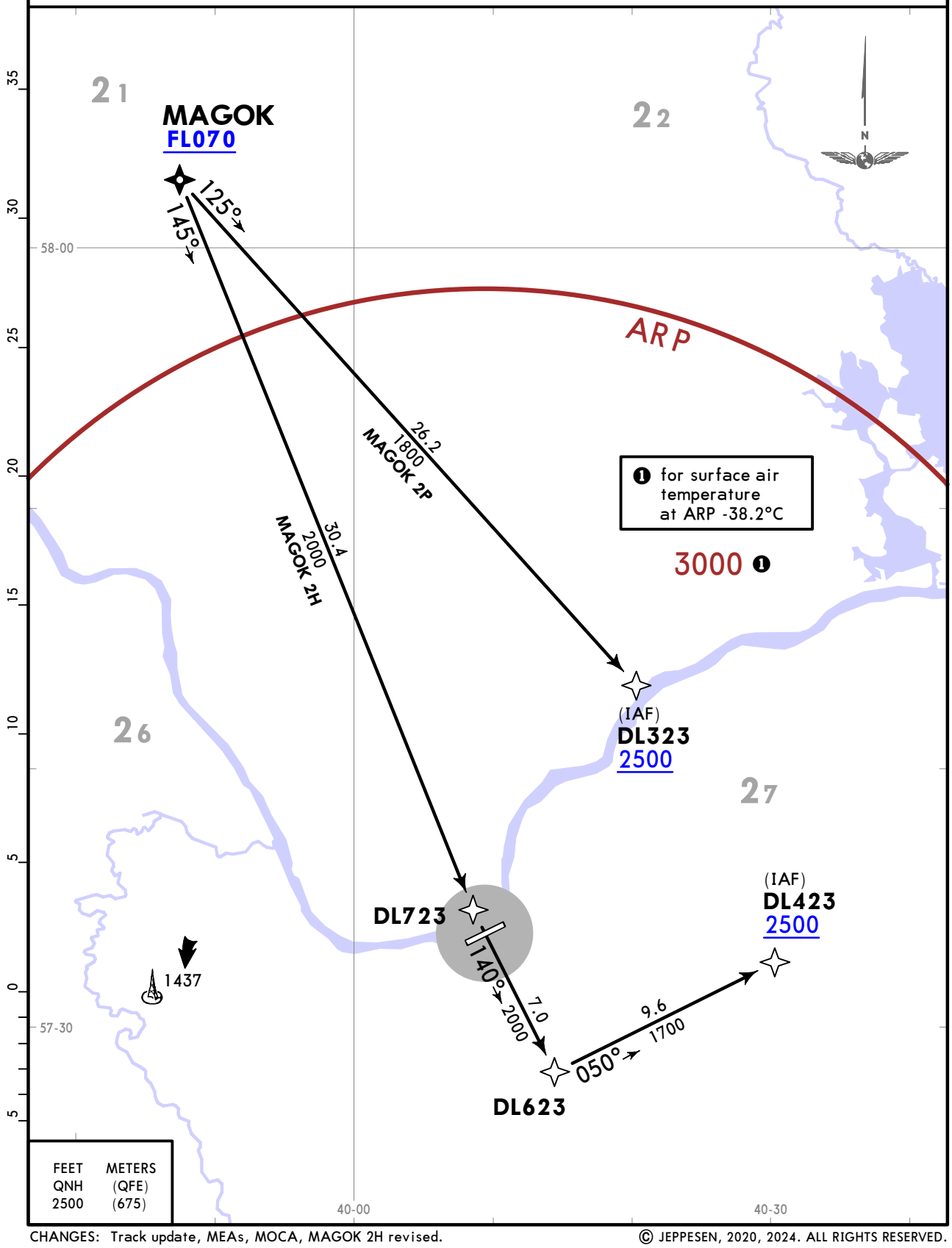
CHANGES: Track update.

ATIS	Apt Elev	
127.350	305	Alt Set: hPa (MM on request) Trans level: FL060 FL070 if pressure is less than 1013 hPa (760 mm) FL080 if pressure is less than 977 hPa (733 mm) RNAV 1 GNSS required

MAGOK 2H [MAGO2H]

MAGOK 2P [MAGO2P]
BY ATC

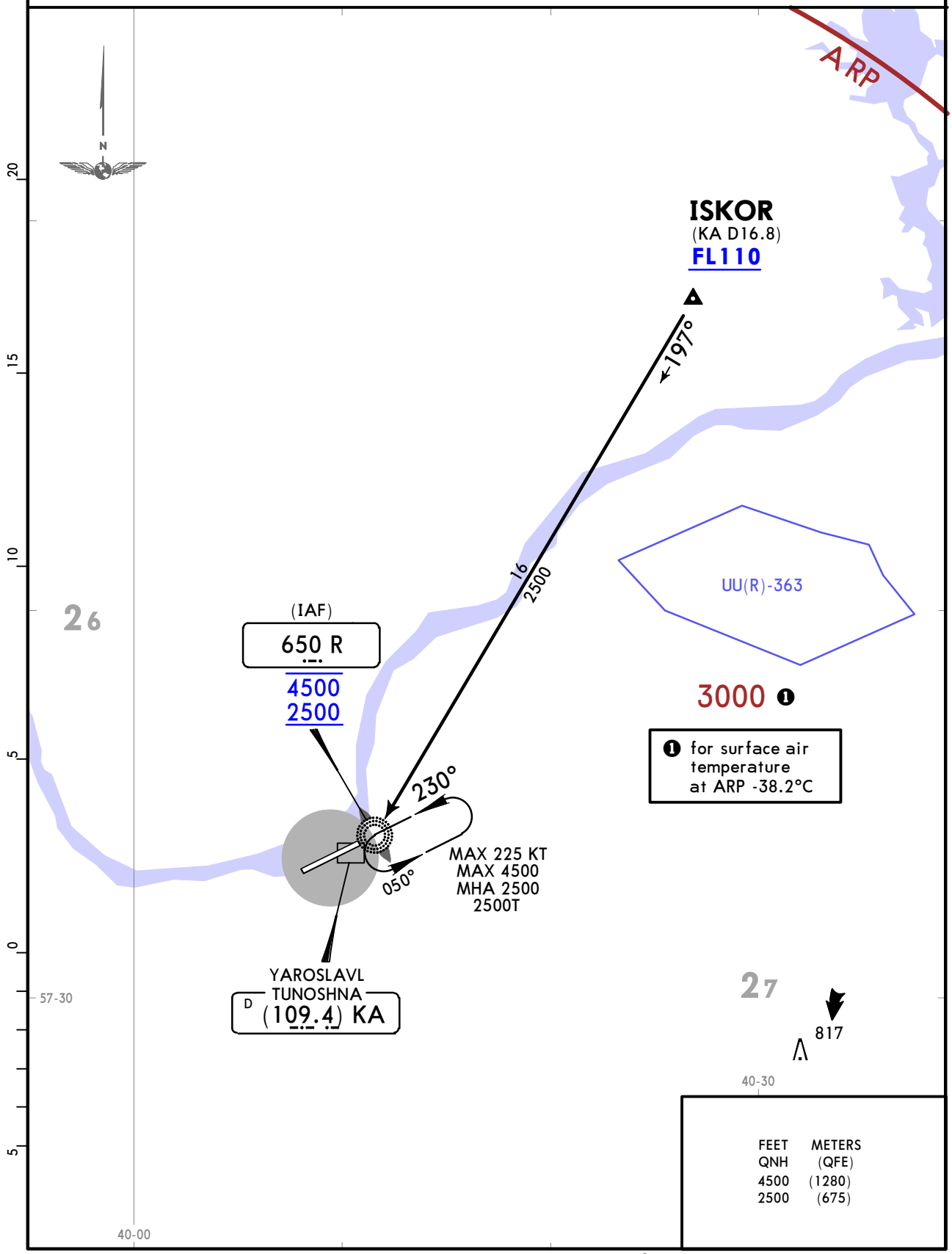
RNAV ARRIVALS
(RWY 23)



CHANGES: Track update, MEAs, MOCA, MAGOK 2H revised.

ATIS	Apt Elev	
127.350	305	Alt Set: hPa (MM on request) Trans level: FL060 FL070 if pressure is less than 1013 hPa (760 mm) FL080 if pressure is less than 977 hPa (733 mm) UU(R)-363 may affect STAR and holding area over Lctr R.

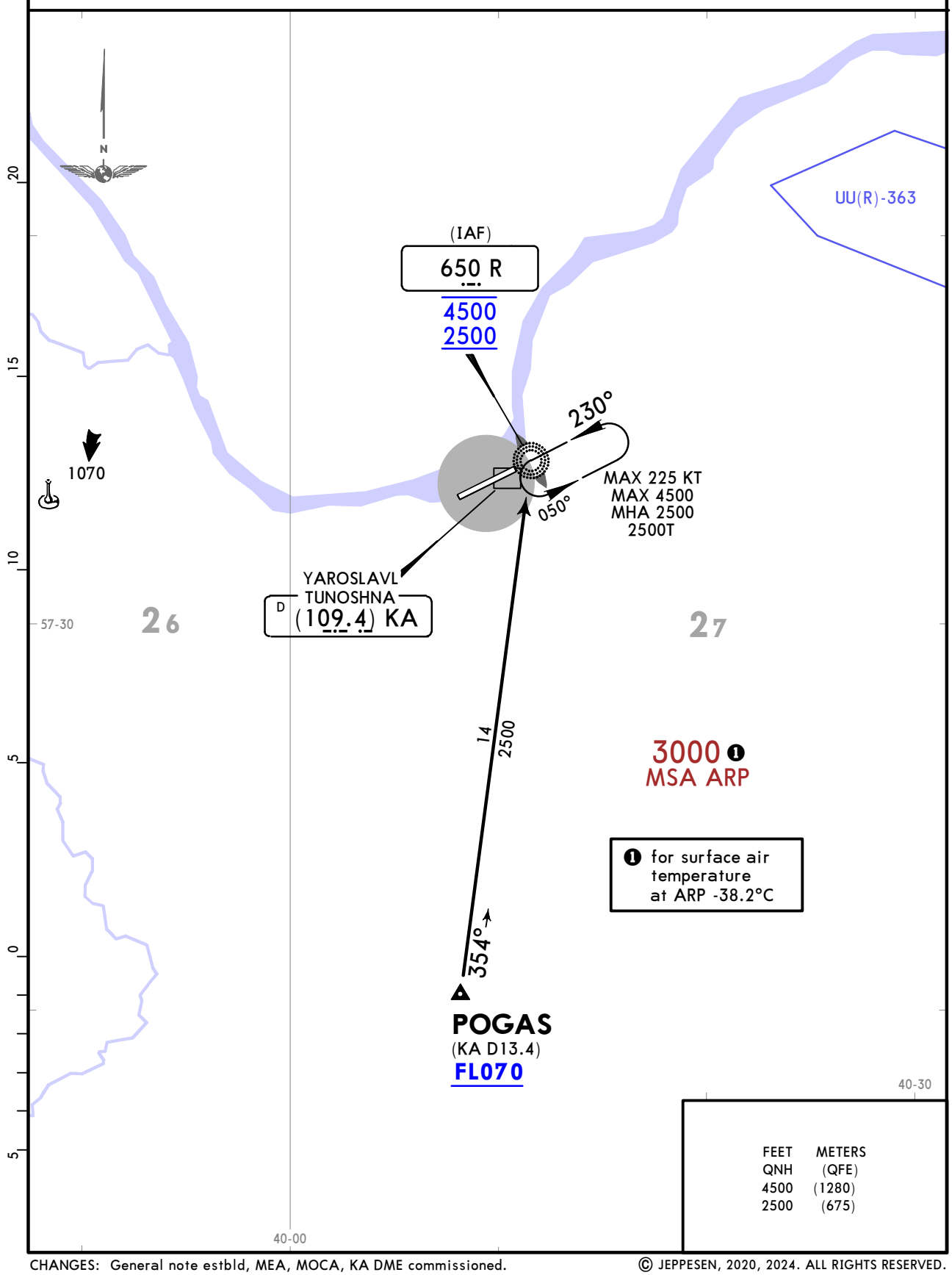
ISKOR 2G [ISKO2G]
ARRIVAL
(RWY 23)



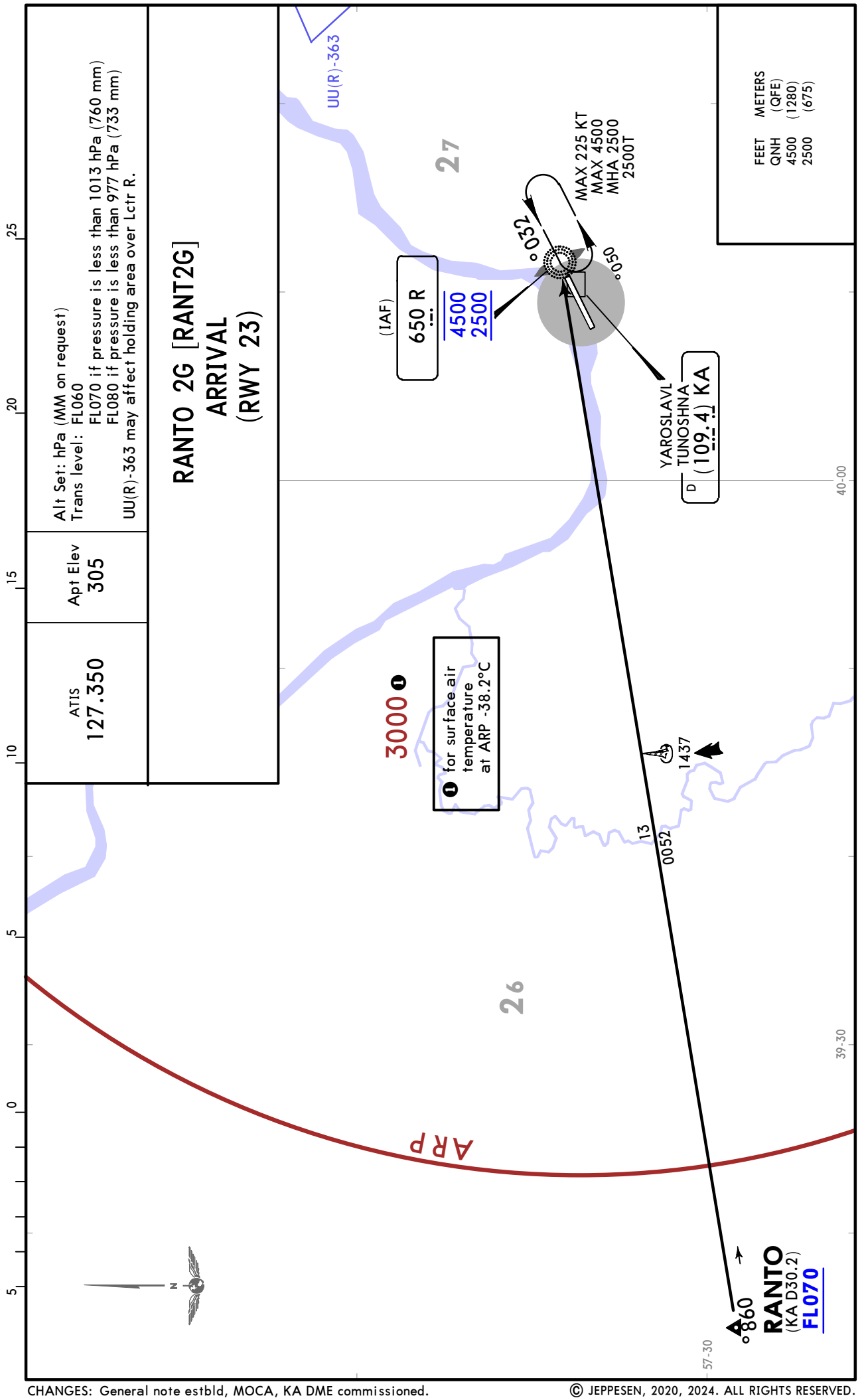
CHANGES: General note estbld, MEA, MOCA, KA DME commissioned.

ATIS	Apt Elev	
127.350	305	Alt Set: hPa (MM on request) Trans level: FL060 FL070 if pressure is less than 1013 hPa (760 mm) FL080 if pressure is less than 977 hPa (733 mm) UU(R)-363 may affect holding area over Lctr R.

POGAS 2G [POGA2G]
ARRIVAL
(RWY 23)



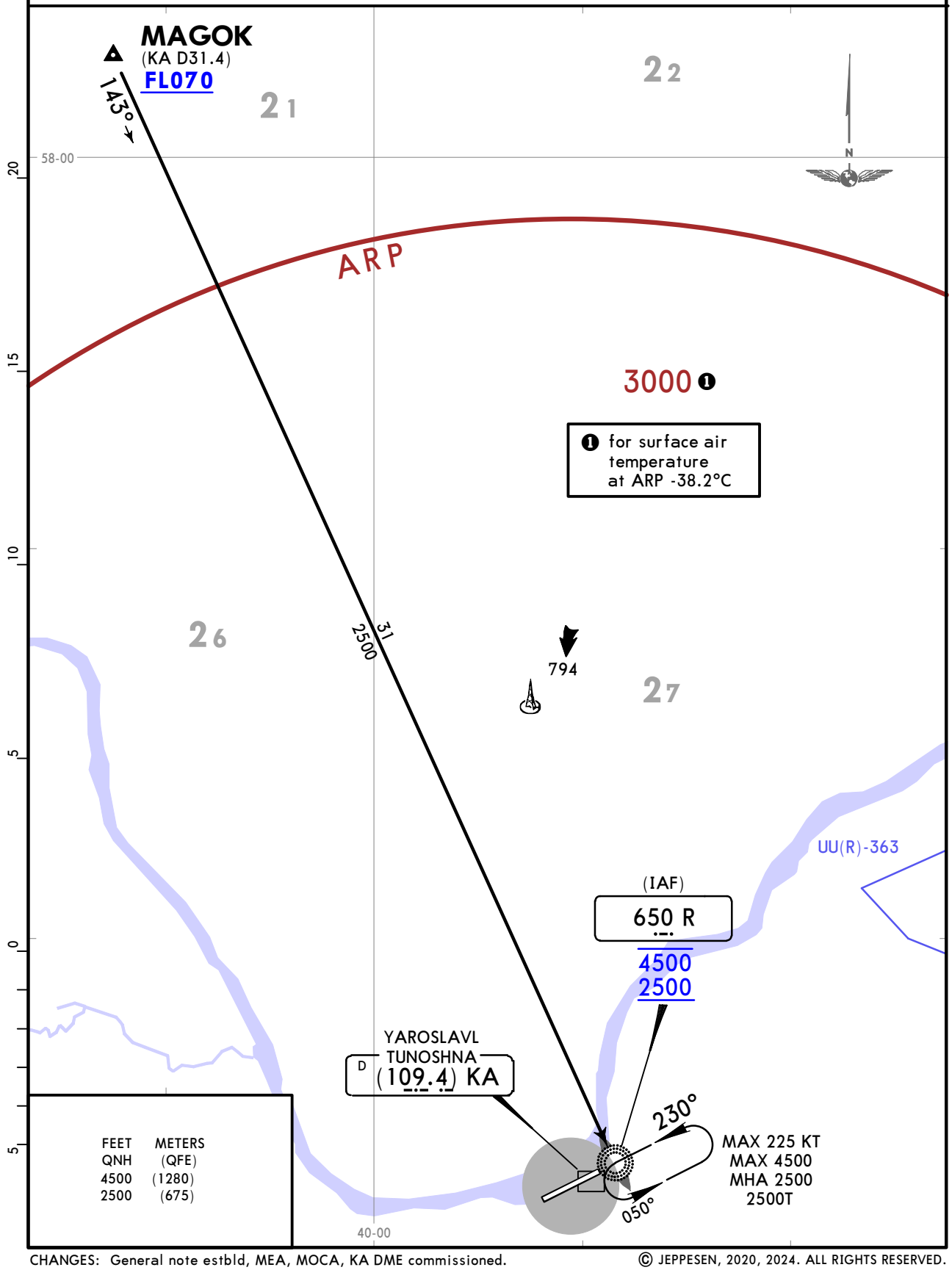
CHANGES: General note estbld, MEA, MOCA, KA DME commissioned.



CHANGES: General note estbld, MOCA, KA DME commissioned.

ATIS	Apt Elev	
127.350	305	Alt Set: hPa (MM on request) Trans level: FL060 FL070 if pressure is less than 1013 hPa (760 mm) FL080 if pressure is less than 977 hPa (733 mm) UU(R)-363 may affect holding area over Lctr R.

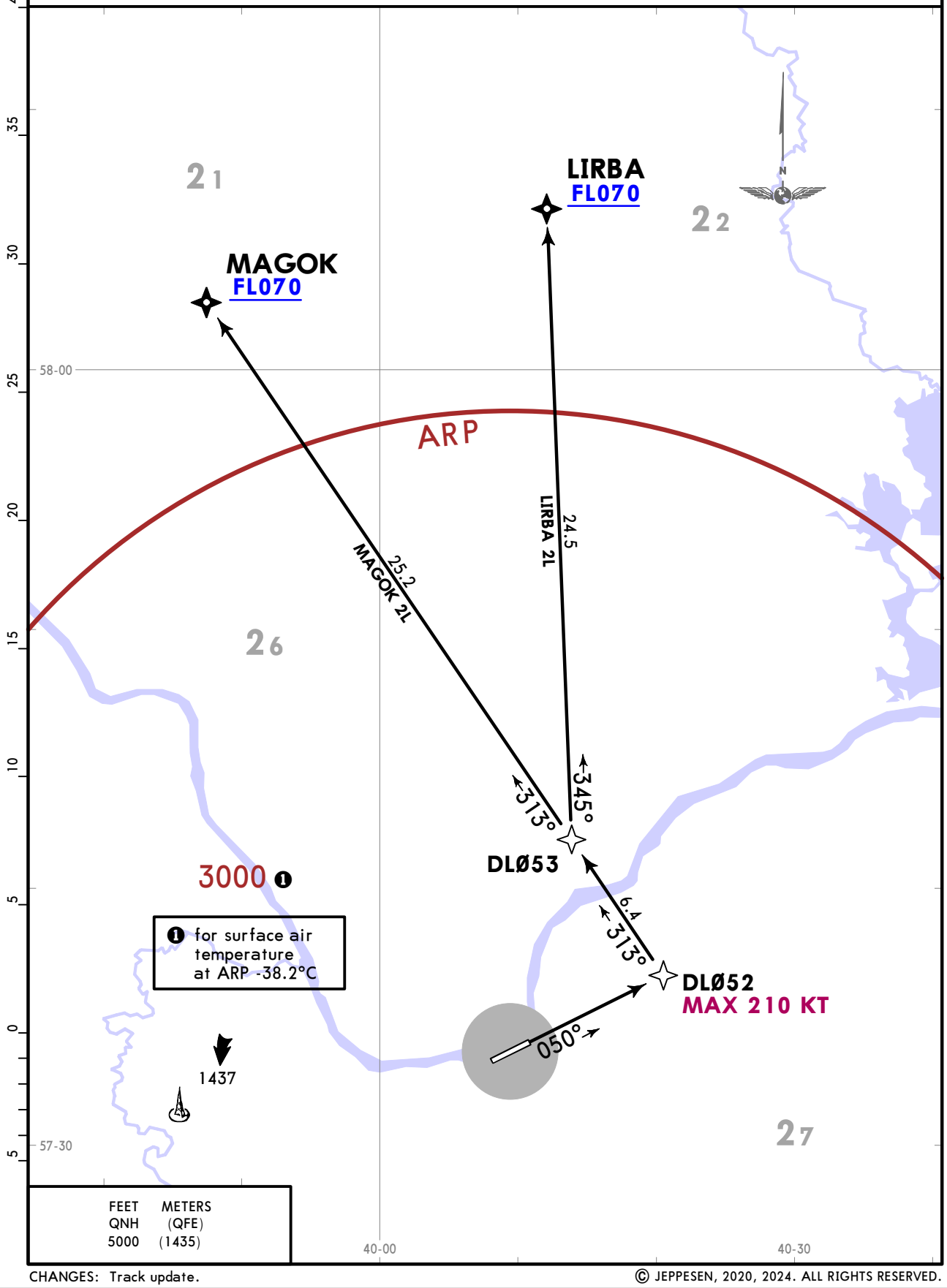
MAGOK 2G [MAGO2G]
ARRIVAL
(RWY 23)



CHANGES: General note estbld, MEA, MOCA, KA DME commissioned.

Apt Elev	
305	QNH (QFE on request) Trans alt: 5000
	RNAV 1 GNSS required
	EXPECT close-in obstacles.

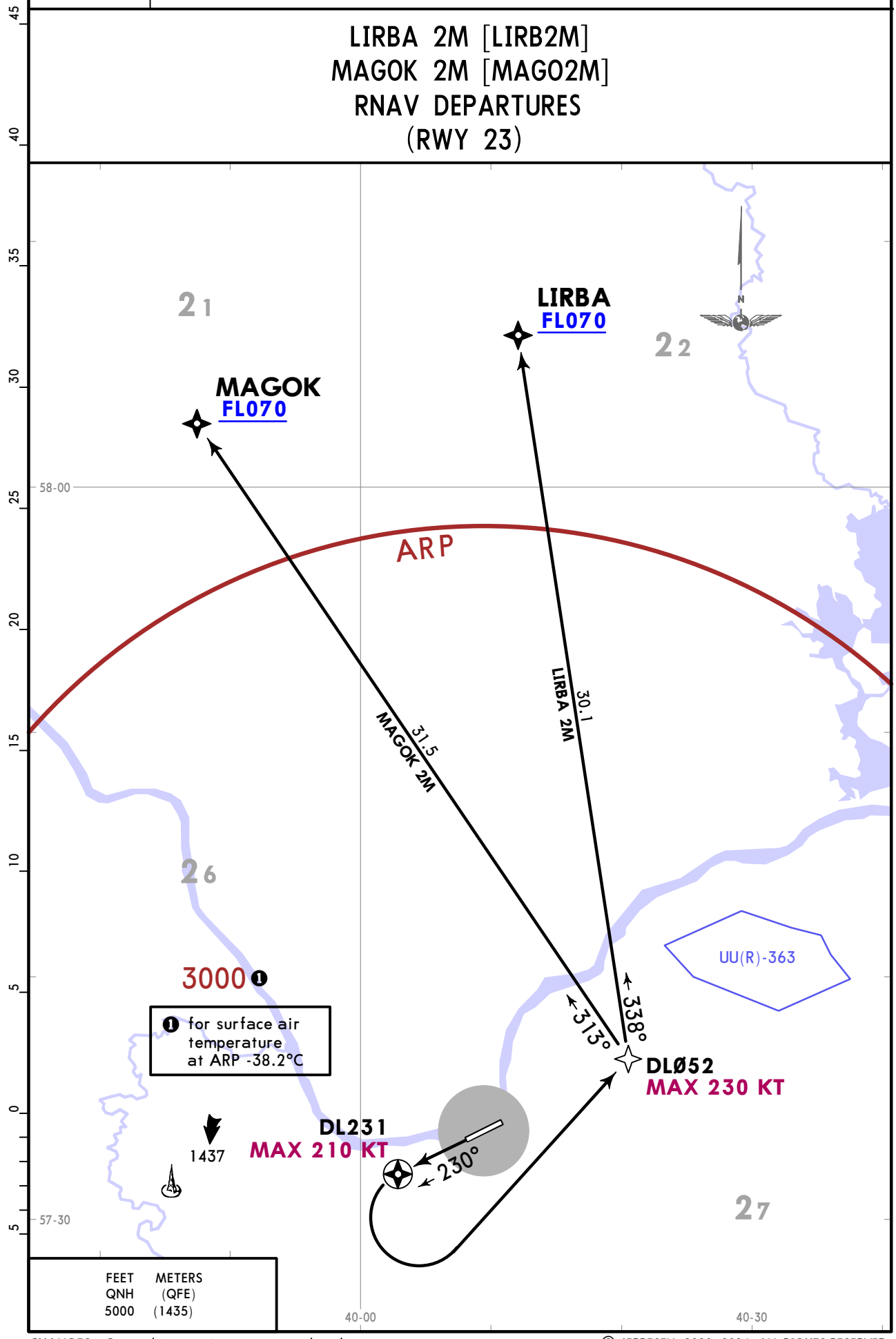
LIRBA 2L [LIRB2L]
MAGOK 2L [MAGO2L]
RNAV DEPARTURES
(RWY 05)



CHANGES: Track update.

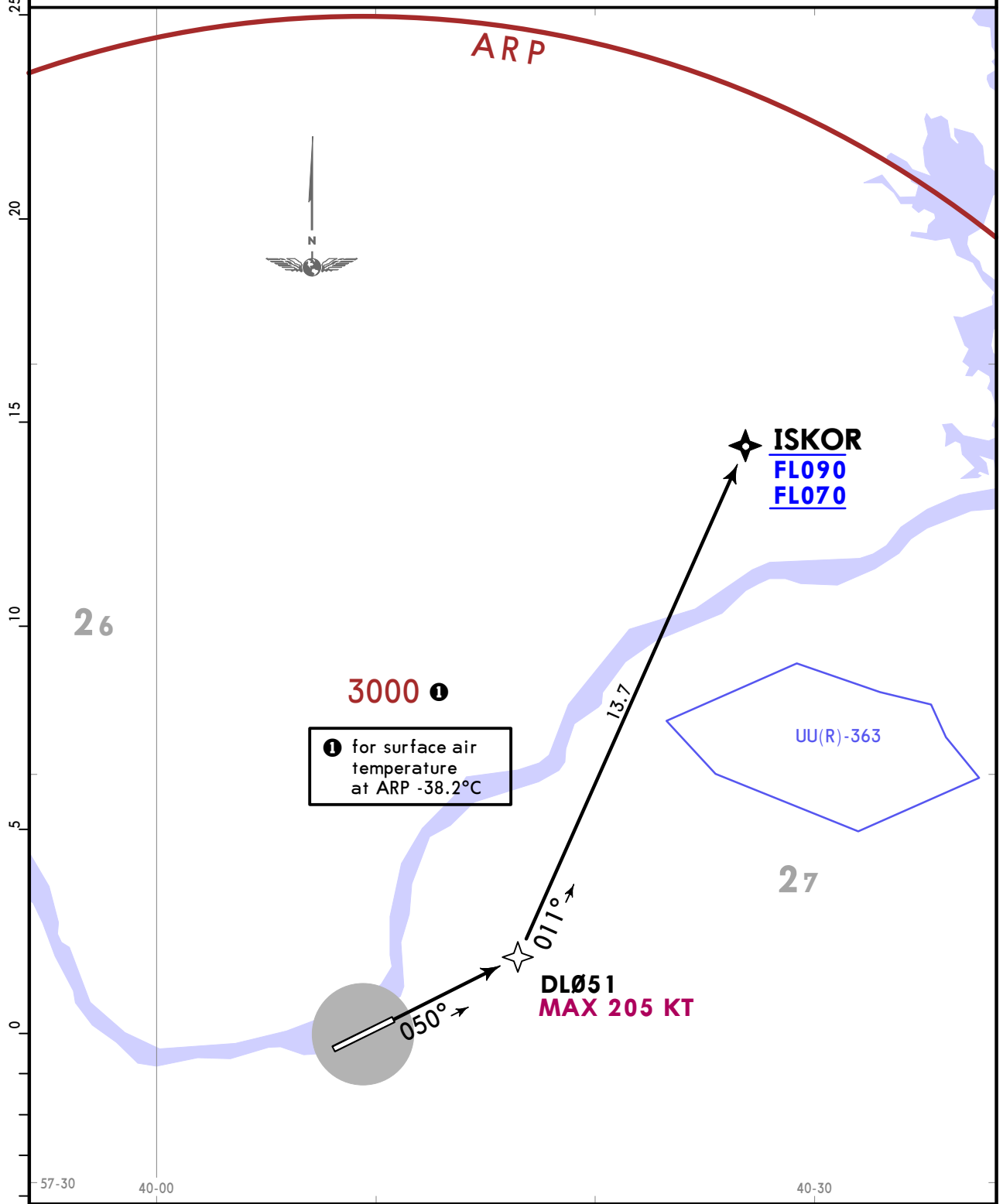
Apt Elev 305	Trans alt: 5000 QNH (QFE on request)
	RNAV 1 GNSS required
	1. LIBRA 2M: UU(R)-363 may affect SID. 2. EXPECT close-in obstacles.

LIRBA 2M [LIRB2M]
MAGOK 2M [MAGO2M]
RNAV DEPARTURES
(RWY 23)



Apt Elev 305	Trans alt: 5000 QNH (QFE on request)
	RNAV 1 GNSS required
	1. UU(R)-363 may affect SID. 2. EXPECT close-in obstacles.

ISKOR 2L [ISKO2L]
RNAV DEPARTURE
(RWY 05)
BY ATC



FEET METERS
QNH (QFE)
5000 (1435)

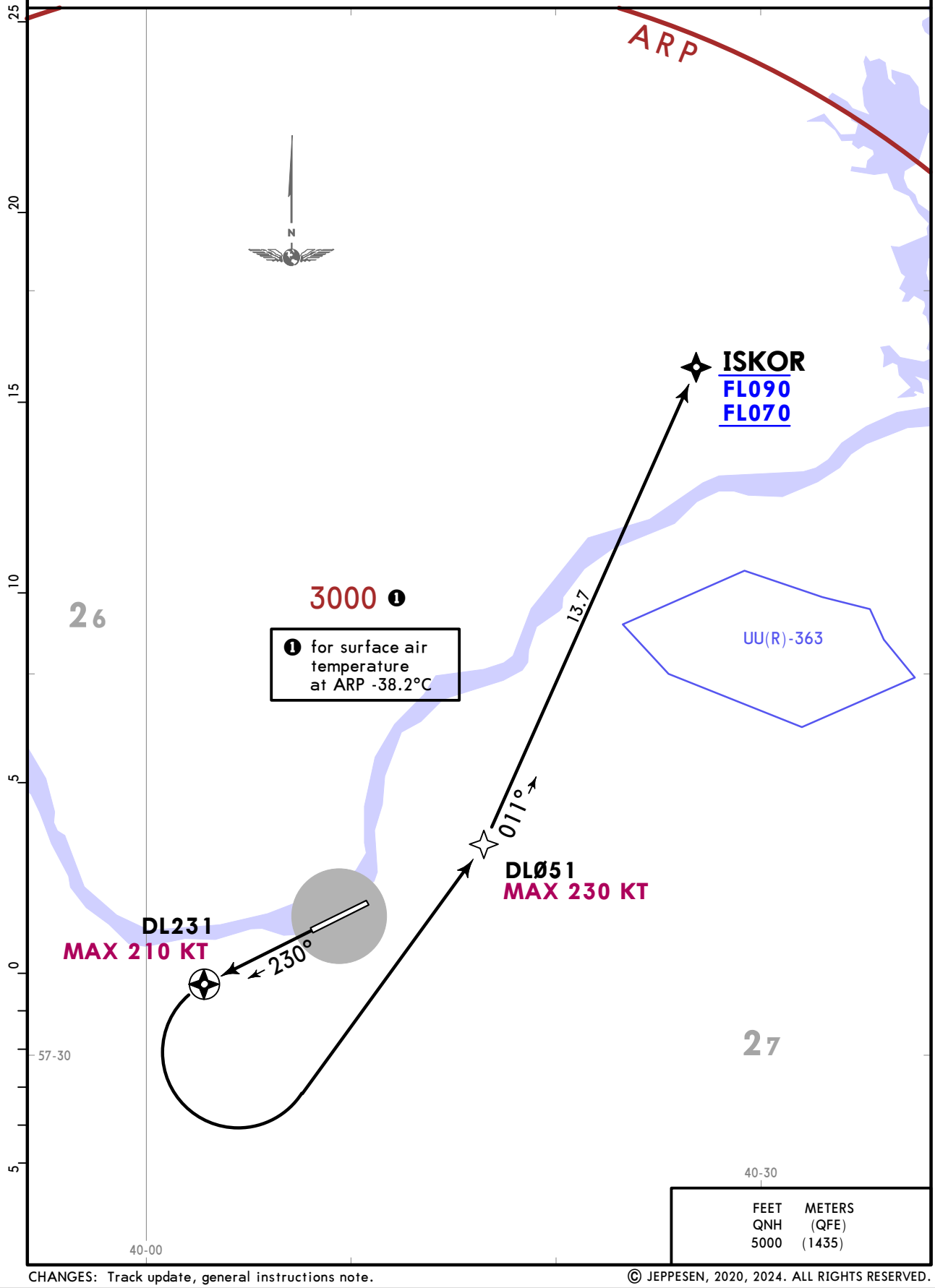
This SID requires a minimum climb gradient of
6.5% up to FL070 due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
6.5% V/V (fpm)	494	658	987	1316	1646	1975

CHANGES: Climb gradient, general instructions note, track update.

Apt Elev 305	Trans alt: 5000 QNH (QFE on request)
	RNAV 1 GNSS required
	1. UU(R)-363 may affect SID. 2. EXPECT close-in obstacles.

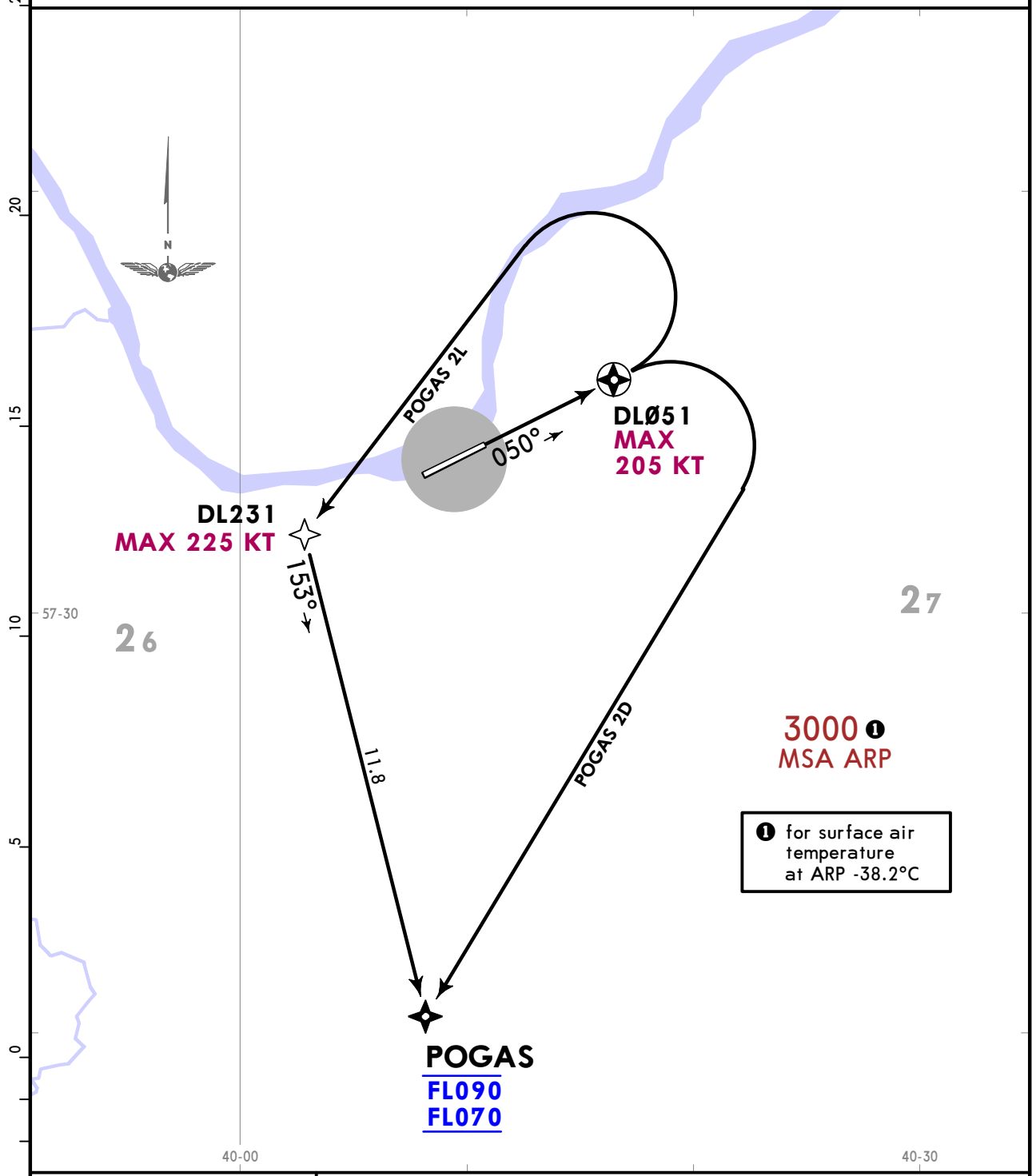
ISKOR 2M [ISKO2M]
RNAV DEPARTURE
(RWY 23)



CHANGES: Track update, general instructions note.

Apt Elev	
305	QNH (QFE on request) Trans alt: 5000
	RNAV 1 GNSS required
	EXPECT close-in obstacles.

POGAS 2D [POGA2D]
POGAS 2L [POGA2L]
RNAV DEPARTURES
(RWY 05)



FEET METERS
QNH (QFE)
5000 (1435)

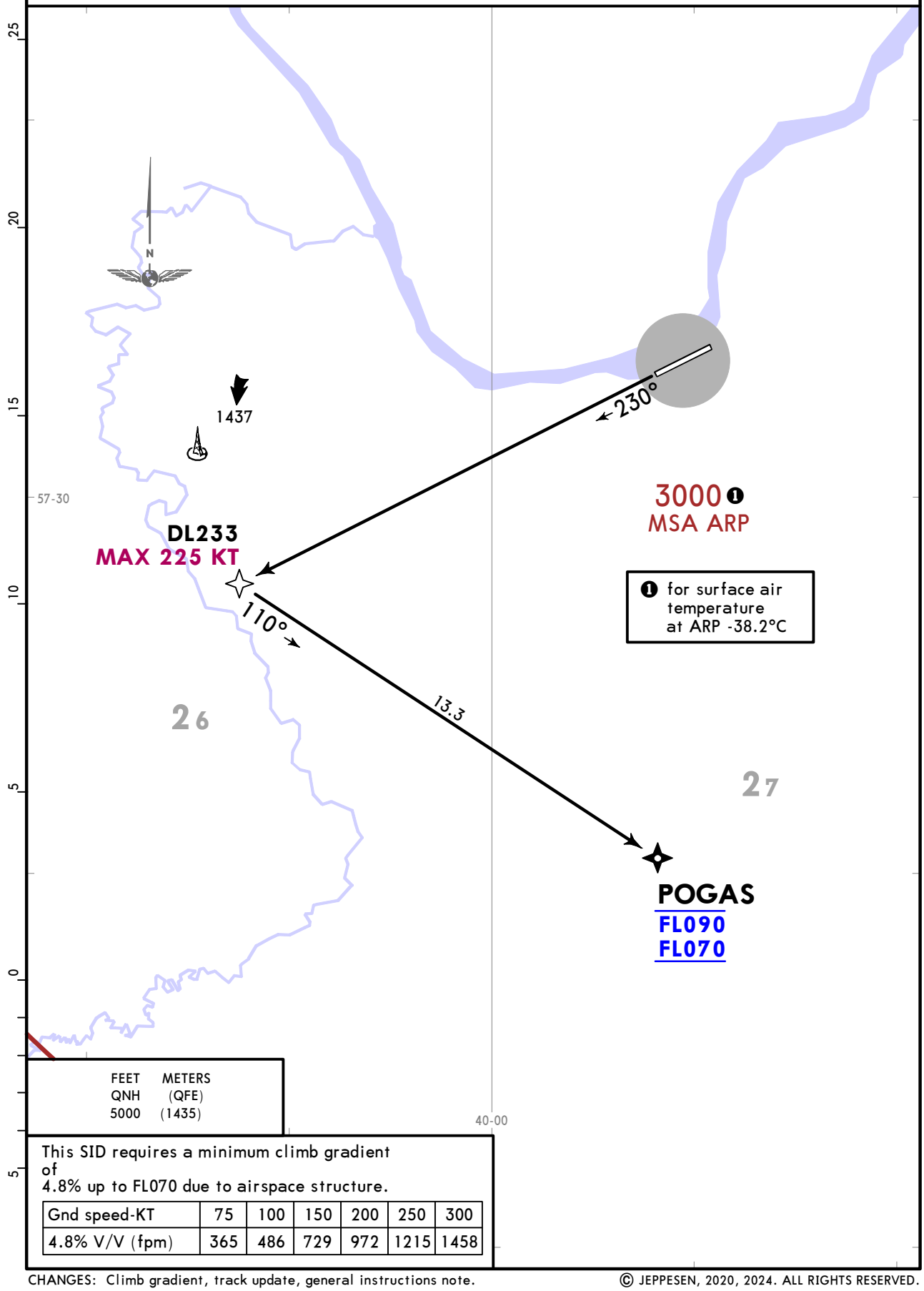
These SIDs require minimum climb gradients of
POGAS 2D: 5.0% up to FL070 due to airspace structure.
POGAS 2L: 3.7% up to FL070 due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
3.7% V/V (fpm)	281	375	562	749	937	1124
5.0% V/V (fpm)	380	506	760	1013	1266	1519

CHANGES: Climb gradient POGAS 2D, track update.

Apt Elev	Trans alt: 5000 QNH (QFE on request)
305	RNAV 1 GNSS required
	EXPECT close-in obstacles.

POGAS 2M [POGA2M]
RNAV DEPARTURE
(RWY 23)

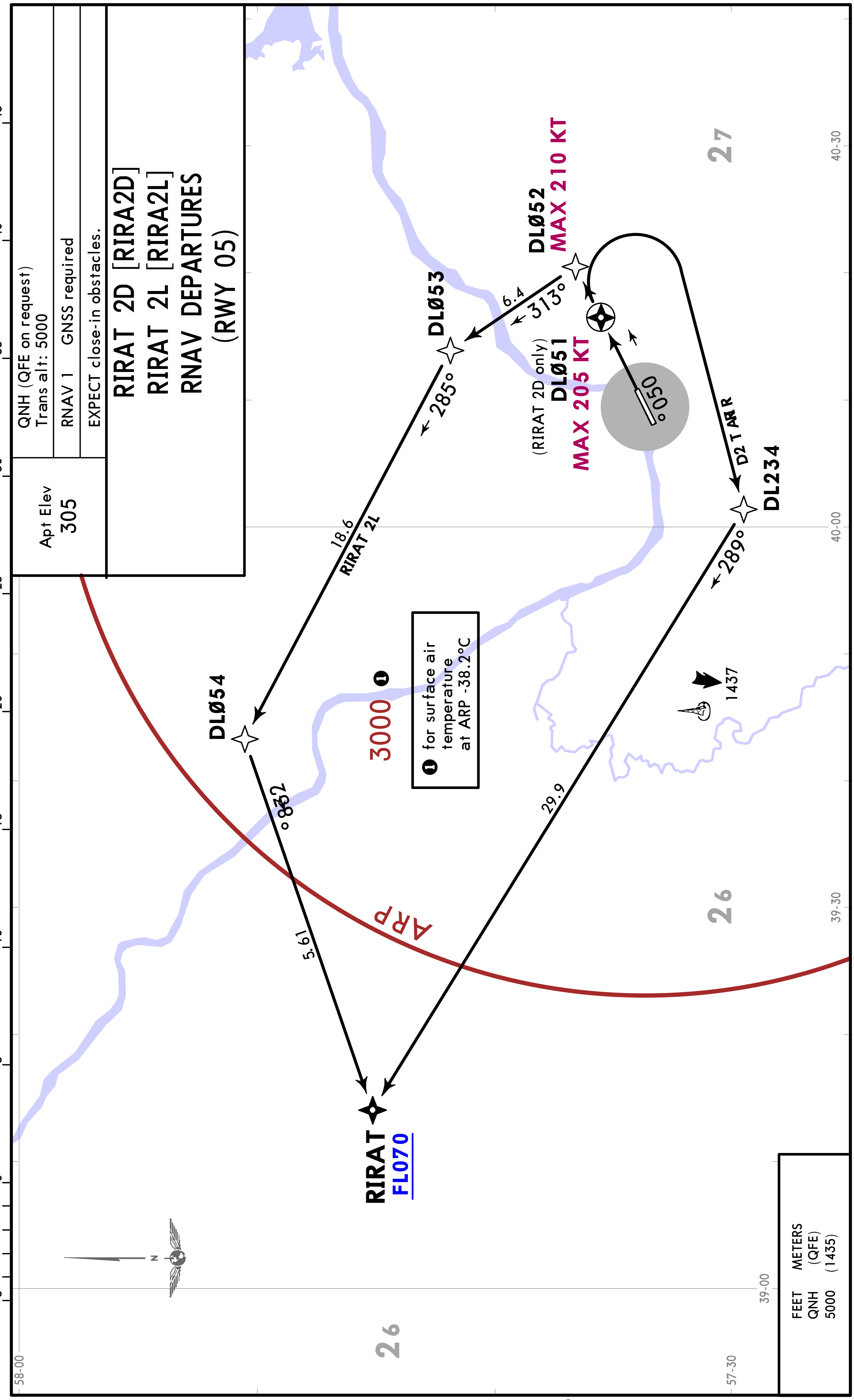


FEET	METERS
QNH	(QFE)
5000	(1435)

This SID requires a minimum climb gradient of 4.8% up to FL070 due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
4.8% V/V (fpm)	365	486	729	972	1215	1458

CHANGES: Climb gradient, track update, general instructions note.



UUDL/IAR
TUNOSHNA

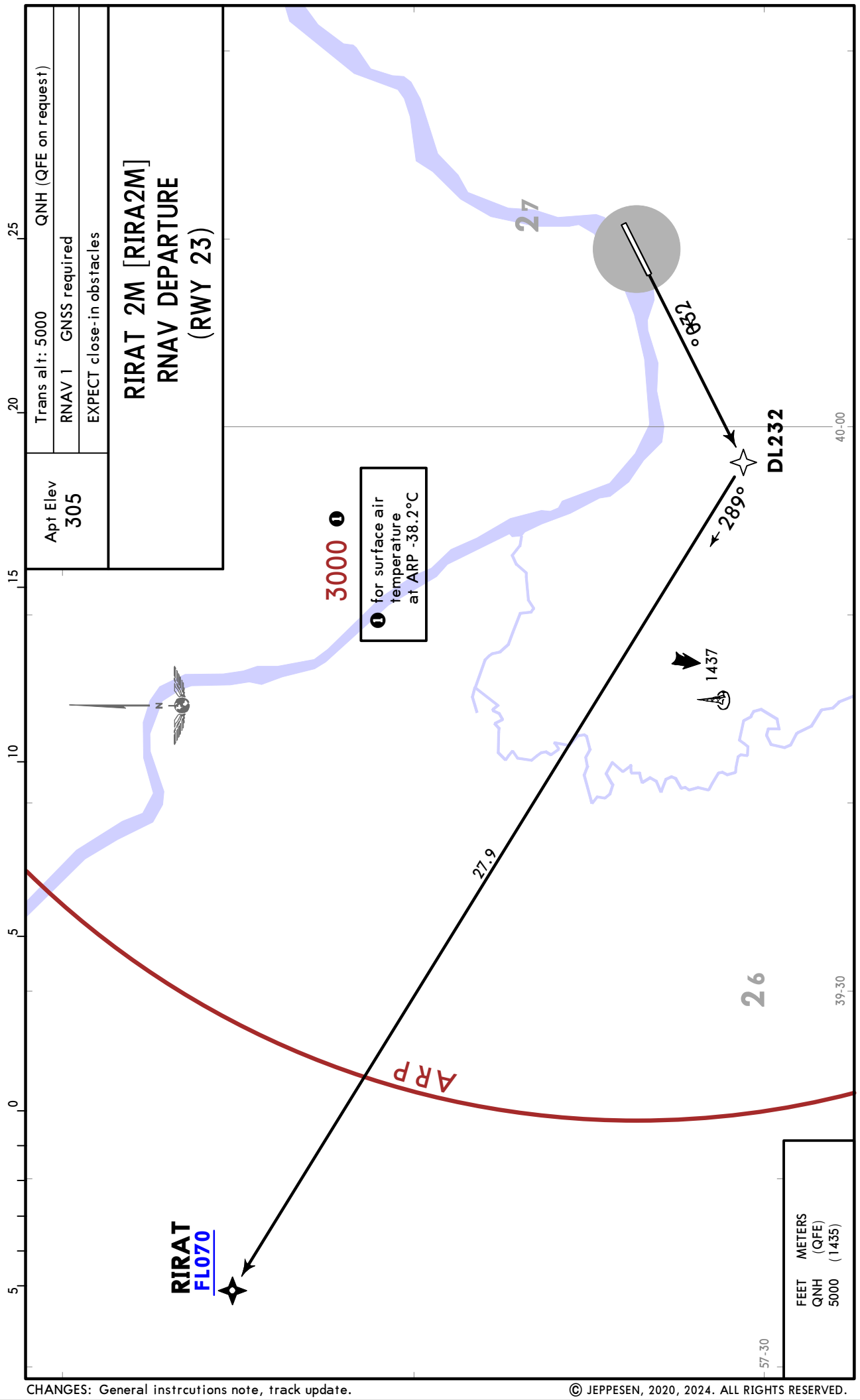
JEPPESEN
25 OCT 24 (10-3G) Eff 31 Oct

YAROSLAVL, ~~RUSSIA~~
RNAV SID

RIRAT 2M [RIRA2M]
RNAV DEPARTURE
(RWY 23)

Trans alt: 5000 QNH (QFE on request)
RNAV 1 GNSS required
EXPECT close-in obstacles

Apt Elev
305



CHANGES: General instrcutions note, track update.

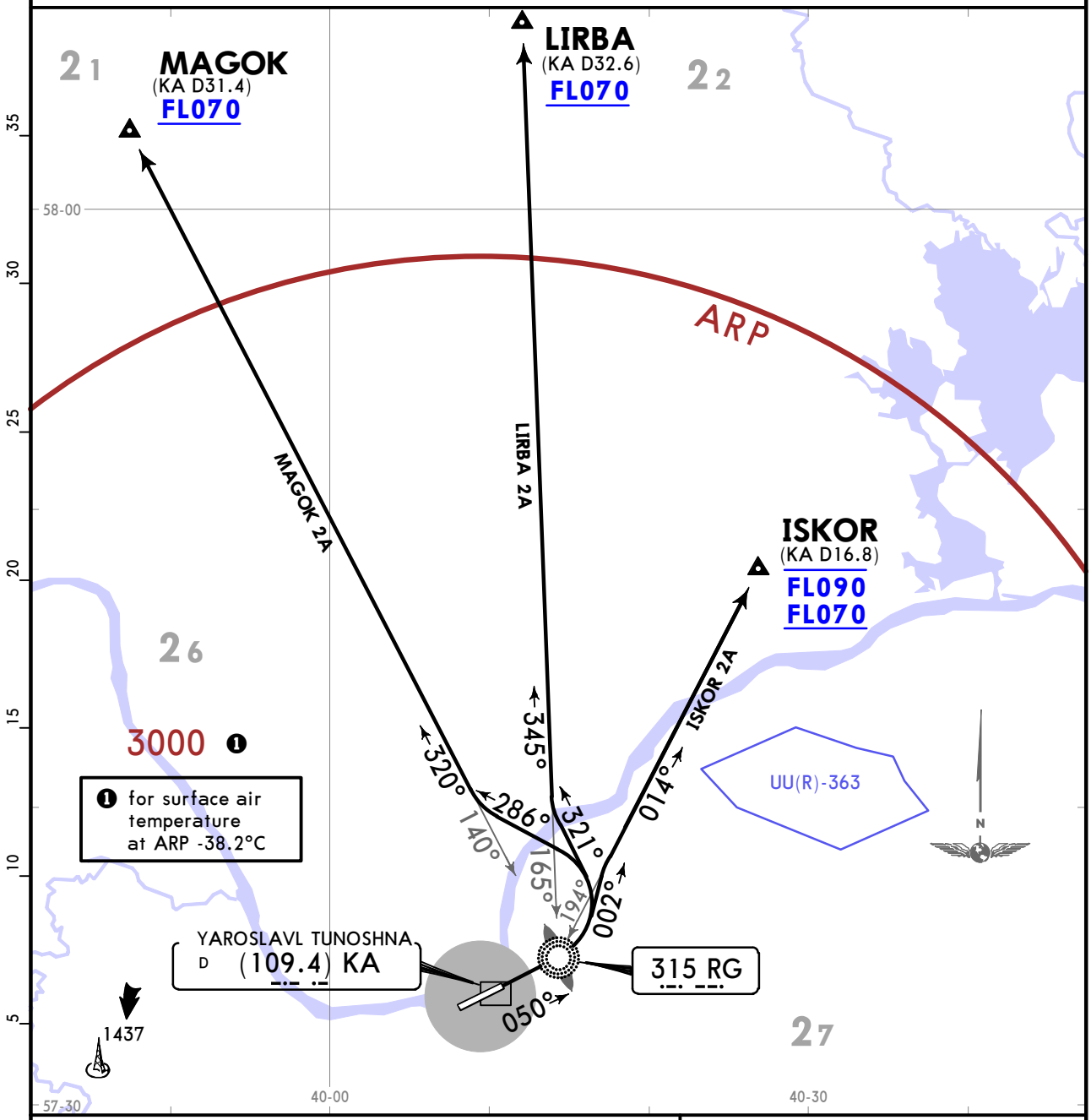
Apt Elev	
305	QNH (QFE on request) Trans alt: 5000 1. Turn before passing RG Lctr is prohibited. 2. ISKOR 2A: UU(R)-363 may affect SID.

ISKOR 2A [ISKO2A]
BY ATC

LIRBA 2A [LIRB2A]
MAGOK 2A [MAGO2A]

SPEED: MAX 220 KT

DEPARTURES
(RWY 05)



ISKOR 2A
This SID requires a minimum climb gradient of
6.5% up to FL070 due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
6.5% V/V (fpm)	494	658	987	1316	1646	1975

Close-in Obstacles
Trees and powerline poles at 0.1-0.2 NM from RWY 23 THR

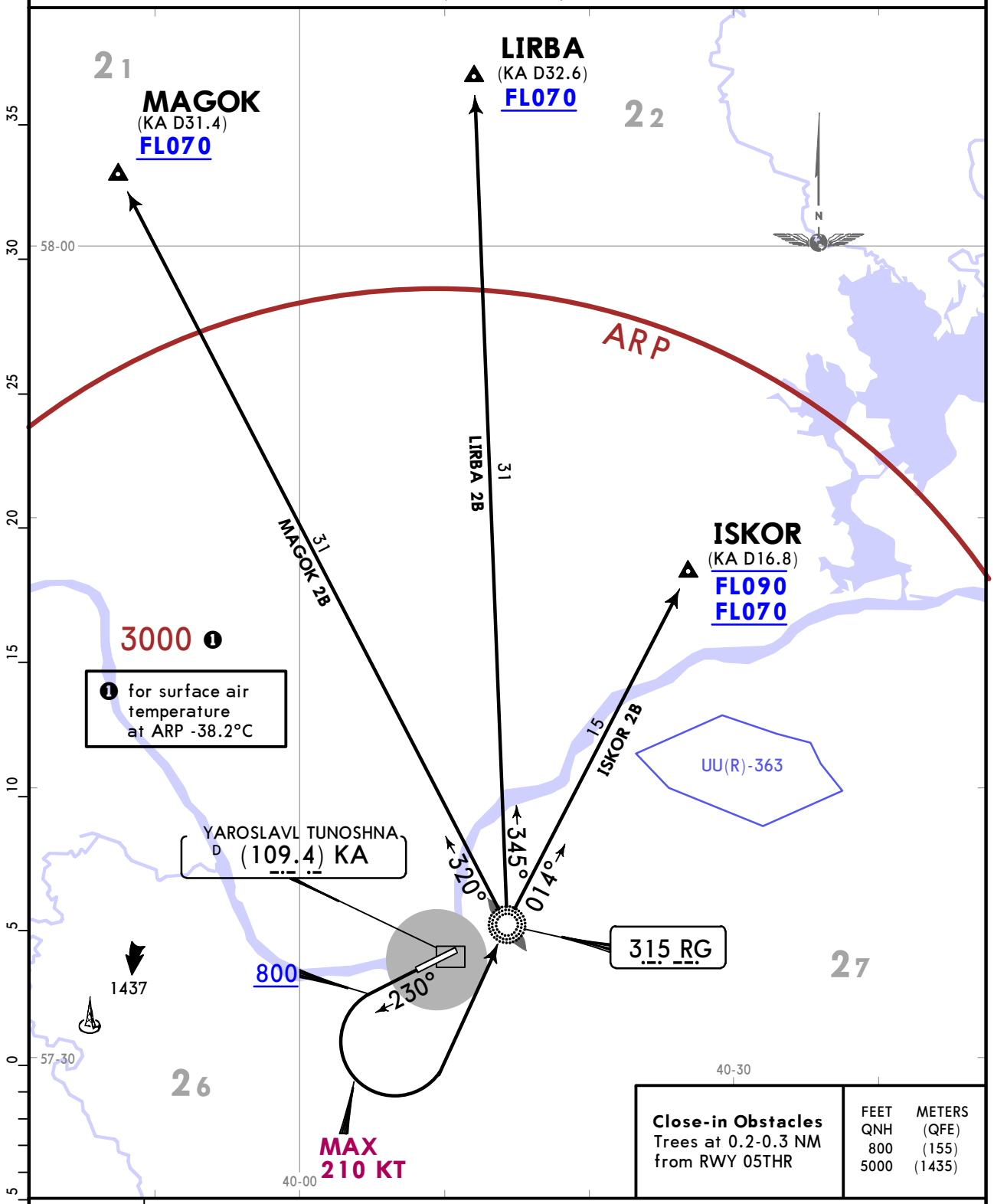
FEET	METERS
QNH	(QFE)
5000	(1435)

SID	ROUTING
ISKOR 2A	Climb on 050° track, turn LEFT 002° track, intercept 014° brg from RG to ISKOR.
LIRBA 2A	Climb on 050° track, turn LEFT 321° track, intercept 345° brg from RG to LIRBA.
MAGOK 2A	Climb on 050° track, turn LEFT 286° track, intercept 320° brg from RG to MAGOK.

CHANGES: KA DME established, notes, climb gradient, track update.

Apt Elev	Trans alt: 5000 QNH (QFE on request)
305	1. Turn before DER is prohibited. 2. ISKOR 2B: UU(R)-363 may affect SID.

ISKOR 2B [ISKO2B]
LIRBA 2B [LIRB2B]
MAGOK 2B [MAGO2B]
DEPARTURES
(RWY 23)



SID	ROUTING
ISKOR 2B	Climb on 230° track to 800, turn LEFT to RG, 014° bearing to ISKOR.
LIRBA 2B	Climb on 230° track to 800, turn LEFT to RG, 345° bearing to LIRBA.
MAGOK 2B	Climb on 230° track to 800, turn LEFT to RG, 320° bearing to MAGOK.

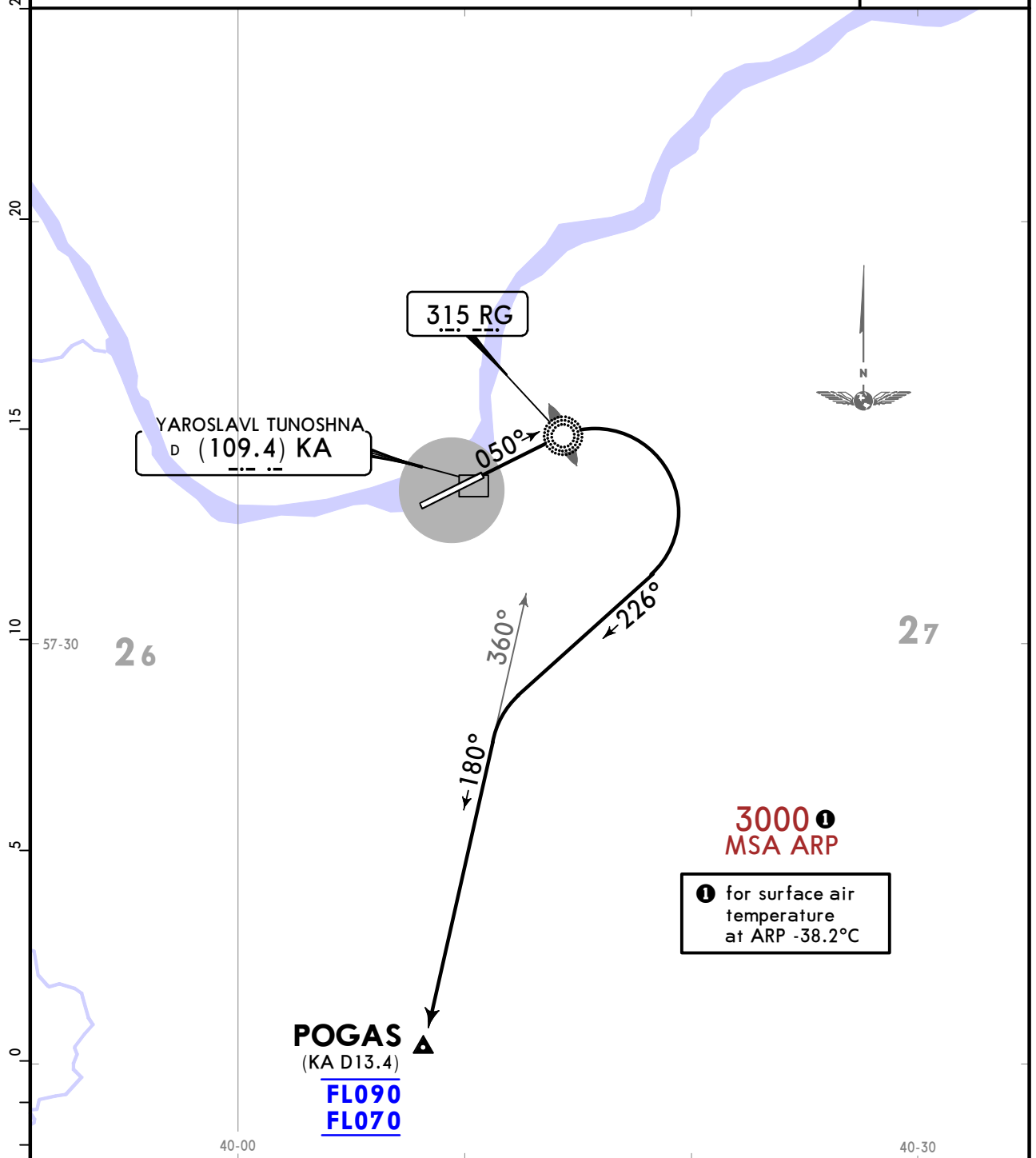
CHANGES: KA DME established, notes, track update.

Apt Elev	
305	QNH (QFE on request) Trans alt: 5000 Turn before passing RG Lctr is prohibited.

POGAS 2A [POGA2A]
DEPARTURE
(RWY 05)

SPEED: MAX 210 KT

FEET	METERS
QNH	(QFE)
5000	(1435)



This SID requires a minimum climb gradient of 4.9% up to FL070 due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
4.9% V/V (fpm)	372	496	744	992	1241	1489

Close-in Obstacles
Trees and powerline poles at 0.1-0.2 NM from RWY 23 THR

ROUTING

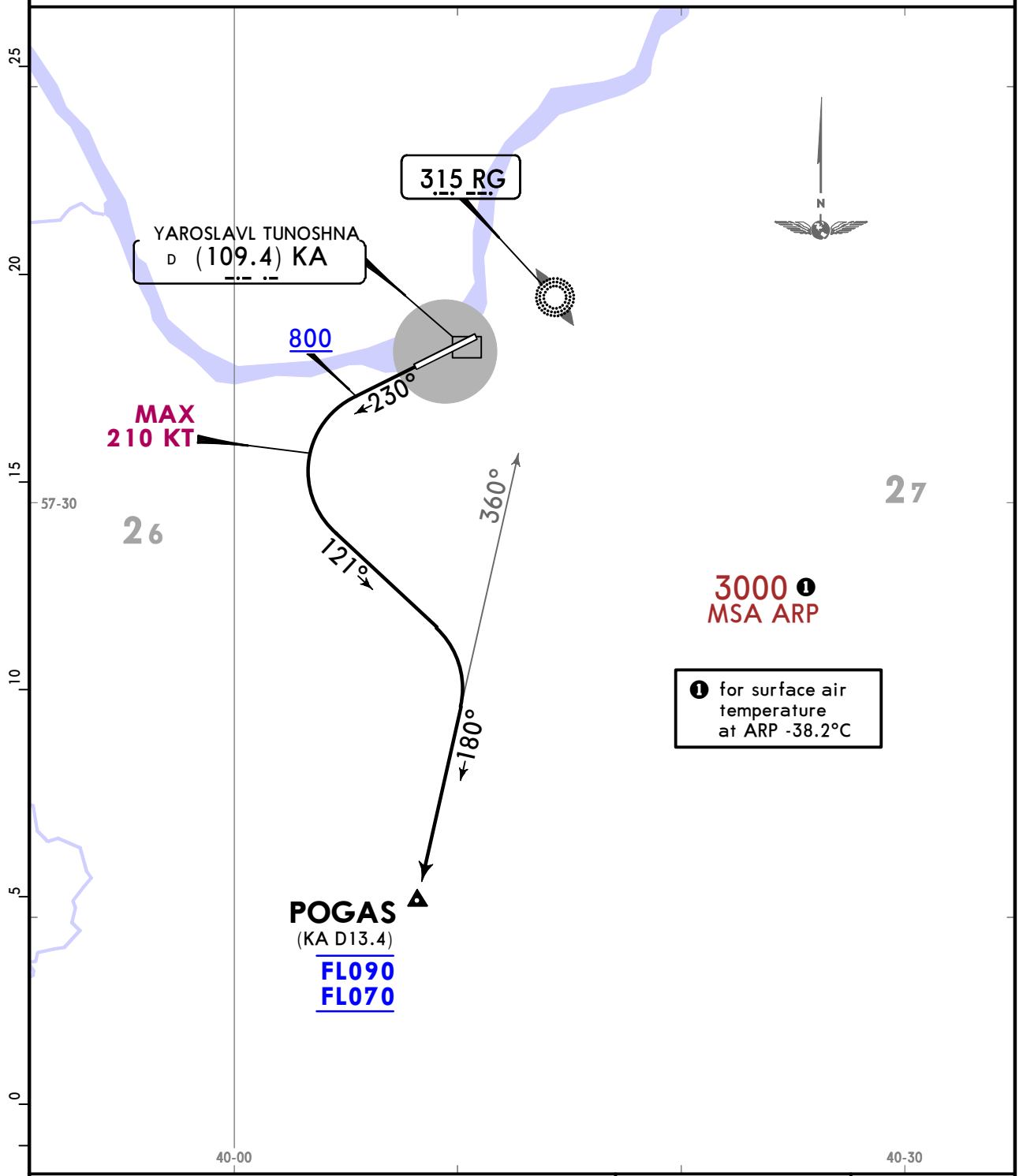
Climb on 050° track, turn RIGHT 226° track, intercept 180° bearing from RG to POGAS.

CHANGES: KA DME established, climb gradient, notes, track update.

Apt Elev	
305	QNH (QFE on request) Trans alt: 5000 Turn before DER is prohibited.

POGAS 2B [POGA2B]
DEPARTURE (RWY 23)

SPEED: MAX 210 KT



This SID requires a minimum climb gradient of 6.6% up to FL070 due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
6.6% V/V (fpm)	501	668	1003	1337	1671	2005

Close-in Obstacles
Trees at 0.2-0.3 NM from RWY 05 THR

FEET QNH	METERS (QFE)
800	(155)
5000	(1435)

ROUTING

Climb on 230° track to 800, turn LEFT 121° track, intercept 180° bearing from RG to POGAS.

CHANGES: KA DME established, climb gradient, notes, track update.

UUDL/IAR TUNOSHNA

JEPPESEN

25 OCT 24 | 10-3M | Eff 31 Oct

YAROSLAVL, RUSSIA

SID

Apt Elev	Trans alt: 5000 QNH (QFE on request)
305	1. Turn before DER is prohibited. 2. POGAS 2E: UU(R)-363 may affect climb procedure.

POGAS 2E [POGA2E]

RIRAT 2A [RIRA2A]

SPEED: MAX 210 KT

DEPARTURES (RWY 05)

NOT TO SCALE

RIRAT
(KA D32.3)
FL070

RIRAT 2A

275°

230°

095°

315 RG

POGAS 2E:
Climb in
holding to
5000

UU(R)-363

050°

360°

226°

180°

POGAS 2E

1437

YAROSLAVL TUNOSHNA
D (109.4) KA

2 6

2 7

3000 ❶

❶ for surface air temperature at ARP -38.2°C

ARP

POGAS
(KA D13.4)
FL090
FL070

RG

050°

230°

MAX 225 KT
MHA 2500

Close-in Obstacles
Trees and powerline poles at 0.1-0.2 NM from RWY 23 THR

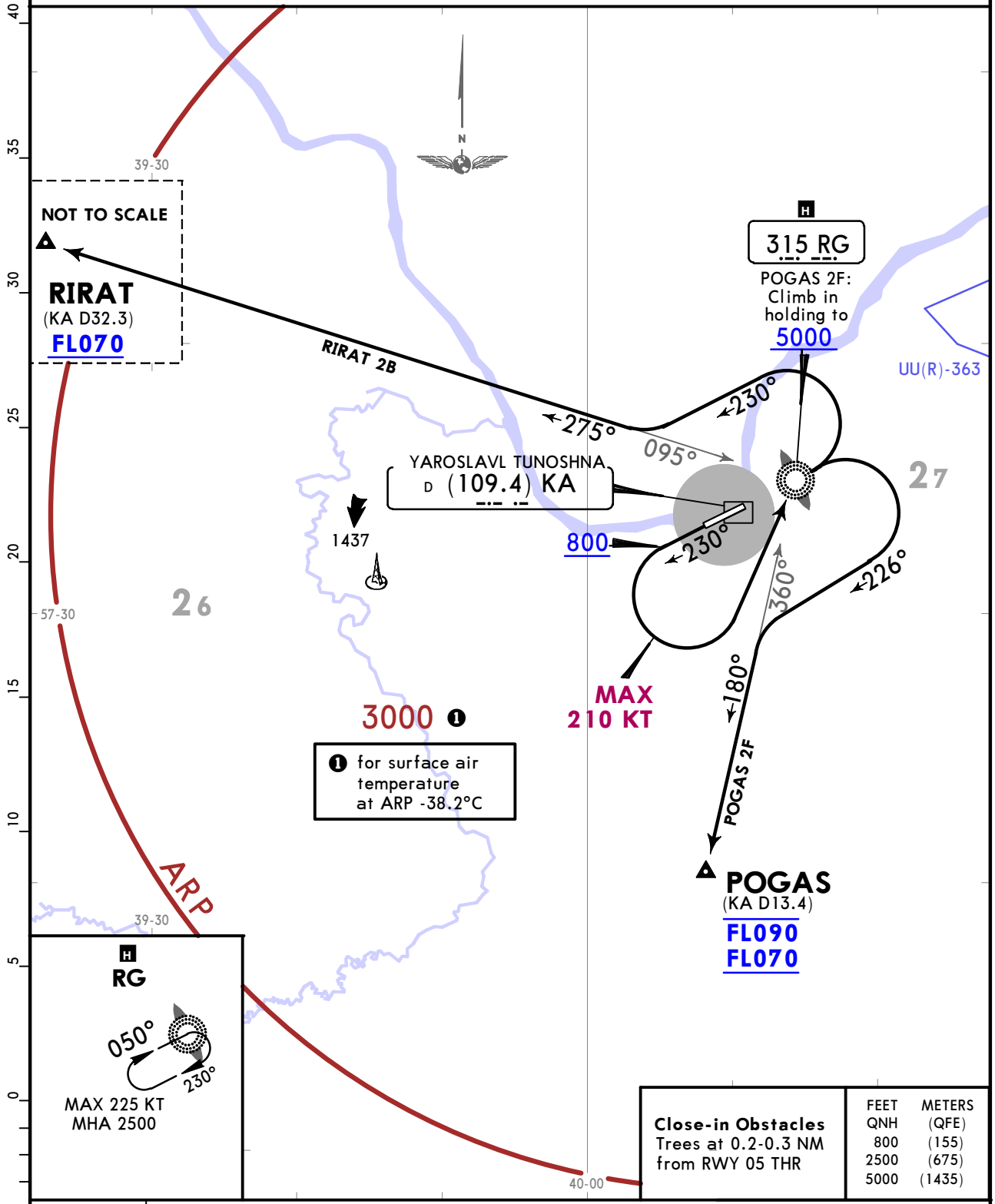
FEET QNH	METERS (QFE)
2500	(675)
5000	(1435)

SID	ROUTING
POGAS 2E	Climb on 050° track, turn RIGHT to holding area over RG climbing to at or above 5000, after passing RG turn RIGHT 226° track, intercept 180° bearing from RG to POGAS.
RIRAT 2A	Climb on 050° track, turn LEFT 230° track, intercept 275° bearing from RG to RIRAT.

CHANGES: RIRAT 2A revised, KA DME established, notes, track update.

Apt Elev	
305	Trans alt: 5000 QNH (QFE on request) 1. Turn before DER is prohibited. 2. POGAS 2F: UU(R)-363 may affect climb procedure.

POGAS 2F [POGA2F]
RIRAT 2B [RIRA2B]
DEPARTURES
(RWY 23)



Close-in Obstacles
Trees at 0.2-0.3 NM from RWY 05 THR

FEET QNH	METERS (QFE)
800	(155)
2500	(675)
5000	(1435)

SID	ROUTING
POGAS 2F	Climb on 230° track to 800, turn LEFT to RG, join holding pattern climbing to at or above 5000, after passing RG turn RIGHT 226° track, intercept 180° bearing from RG to POGAS.
RIRAT 2B	Climb on 230° track to 800, turn LEFT to RG, turn LEFT 230° track, intercept 275° bearing from RG to RIRAT.

CHANGES: RIRAT 2B revised, KA DME established, notes, track update.

UUDL/IAR

Apt Elev 305′

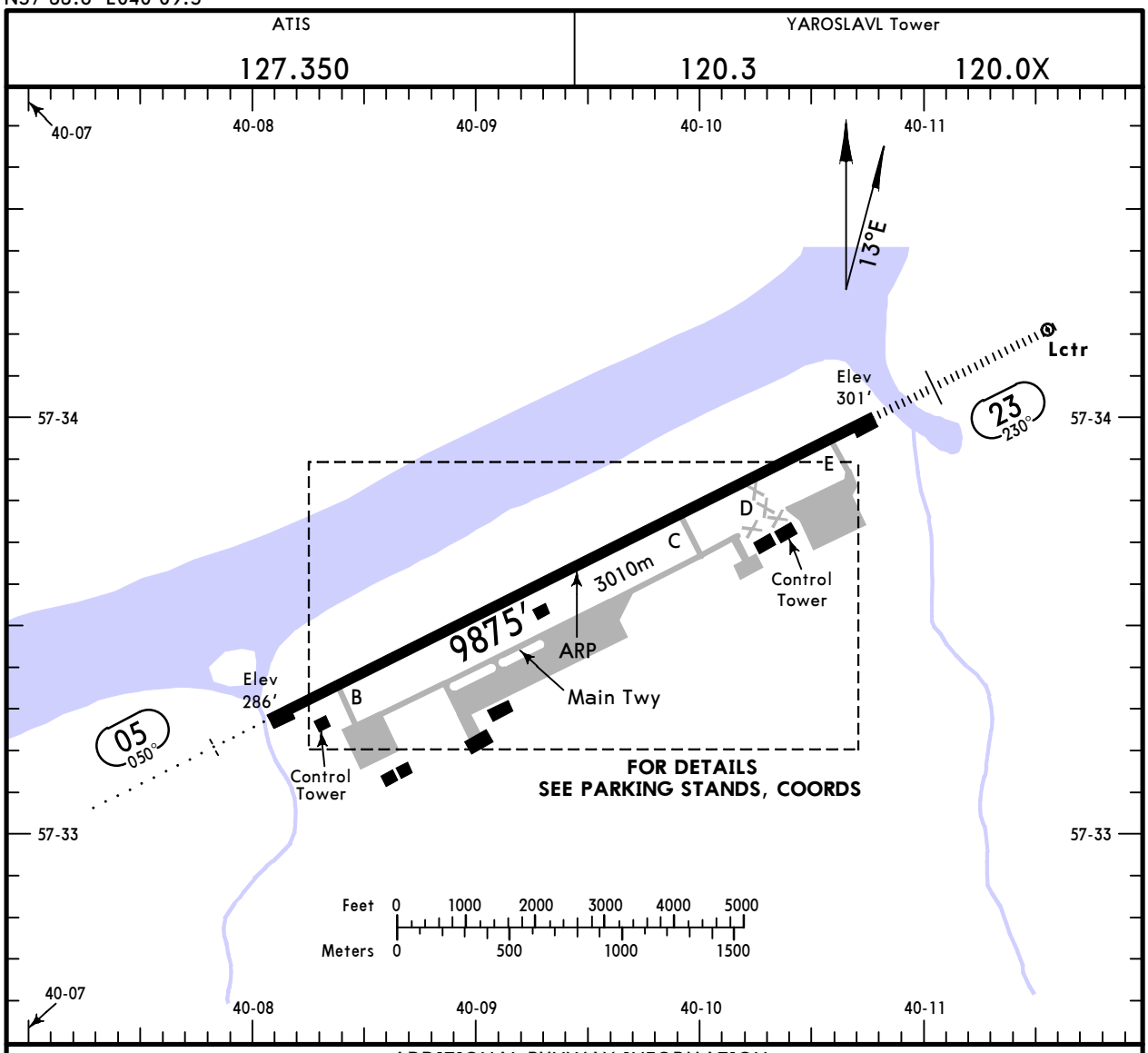
N57 33.6 E040 09.5

JEPPESEN

6 JUN 25 (10-9) Eff 12 Jun

YAROSLAVL, ~~RUSSIA~~

TUNOSHNA



ADDITIONAL RUNWAY INFORMATION

RWY		USABLE LENGTHS — LANDING BEYOND — Threshold	Glide Slope	TAKE-OFF	WIDTH
05	RL (60m) ❶ ALS PAPI-L (angle 3.0°)			❷	144′ 44m
23	RL (60m) ❶ HIALS PAPI-L (angle 3.0°)		8904′2714m		

❶ length 900m

❷ TAKE-OFF RUN AVAILABLE

RWY 05:

From rwy head 9875′(3010m)
twy B int 8366′(2550m)

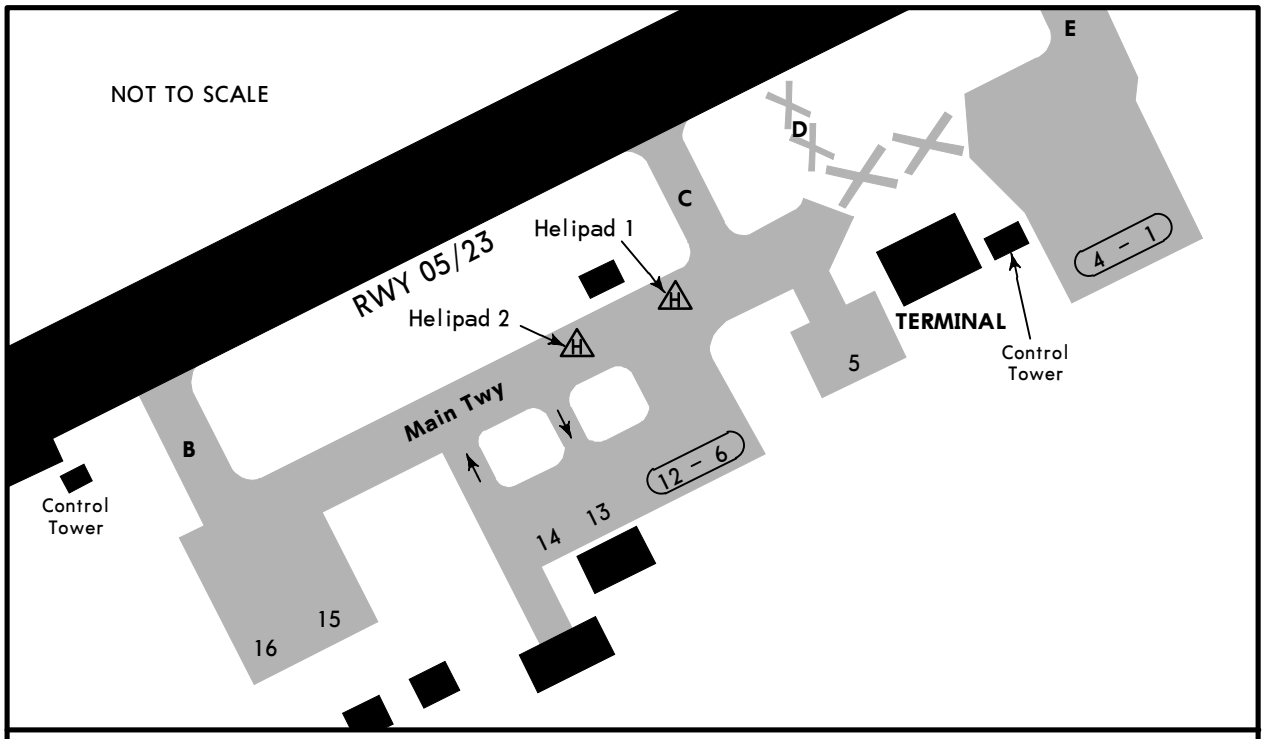
RWY 23:

From rwy head 9875′(3010m)
twy E int 8694′(2650m)

Std TAKE-OFF

RL & RCLM	RL	RL or RCLM	Adequate Vis Ref	
DAY	NIGHT	DAY	DAY	NIGHT
R300m		R400m	R/V500m	NA

CHANGES: YAROSLAVL Start withdrawn.



INS COORDINATES

STAND No.	COORDINATES	STAND No.	COORDINATES
1 thru 1B	N57 33.8 E040 10.6		
2 thru 2B	N57 33.8 E040 10.5		
3 thru 4	N57 33.8 E040 10.4		
5	N57 33.7 E040 10.1		
6 thru 8	N57 33.5 E040 09.5		
9 thru 11	N57 33.5 E040 09.4		
12	N57 33.5 E040 09.3		
13	N57 33.4 E040 09.1		
14	N57 33.4 E040 09.0		
15	N57 33.3 E040 08.6		
16	N57 33.3 E040 08.5		

CHANGES: None.

YAROSLAVL, RUSSIA

TUNOSHNA

STRAIGHT-IN RWY		A	B	C	D
05	GLS	**486**′(200′)	**486**′(200′)	**510**′(224′)	**520**′(234′)
		R1000m	R1000m	R1000m	R1000m
	ALS out	R1200m	R1200m	R1200m	R1200m
	RNP LNAV/VNAV	**626**′(340′)	**636**′(350′)	**646**′(360′)	**646**′(360′)
		R1300m	R1400m	R1400m	R1400m
	ALS out	R1500m	R1500m	R1600m	R1600m
	❶ RNP LNAV	**800**′(514′)	**800**′(514′)	**800**′(514′)	**800**′(514′)
		R1500m	R1500m	R2100m	R2100m
	ALS out	R1500m	R1500m	R2400m	R2400m
23	ILS Y or X	**525**′(224′)	**538**′(237′)	**546**′(245′)	**556**′(255′)
		❷ R550m	❷ R550m	❷ R550m	❷ R600m
	ALS out	R1200m	R1200m	R1300m	R1300m
	GLS	**525**′(224′)	**538**′(237′)	**546**′(245′)	**556**′(255′)
		❷ R550m	❷ R550m	❷ R550m	❷ R600m
	ALS out	R1200m	R1200m	R1300m	R1300m
	RNP LNAV/VNAV	**551**′(250′)	**551**′(250′)	**561**′(260′)	**571**′(270′)
		❷ R550m	❷ R550m	❷ R600m	❷ R600m
	ALS out	R1300m	R1300m	R1300m	R1300m
	❶ RNP LNAV	**670**′(369′)	**670**′(369′)	**670**′(369′)	**670**′(369′)
		R1000m	R1000m	R1000m	R1000m
	ALS out	R1500m	R1500m	R1700m	R1700m
	❶ NDB	**1000**′(699′)	**1000**′(699′)	**1000**′(699′)	**1000**′(699′)
		R1500m	R1500m	R2400m	R2400m

❶ Continuous Descent Final Approach.
❷ R750m when a Flight Director or Autopilot or HUDLS to DA is not used.

CIRCLE-TO-LAND	100 Kts	135 Kts	180 Kts	205 Kts
❸ After RWY 05	**850**′(564′)	**850**′(564′)	**1010**′(724′)	**1900**′(1614′)
❹ After RWY 23	**850**′(549′)	**850**′(549′)	**1010**′(709′)	**1900**′(1599′)
❹ After NDB 23	**1000**′(699′)	**1000**′(699′)	**1010**′(709′)	**1900**′(1599′)
	V1500m	V1600m	V2400m	V3600m

❸ Circling height based on runway 05 threshold elev of 286′.
❹ Circling height based on runway 23 threshold elev of 301′.

TAKE-OFF

Low Visibility Procedure required / Approval for Low Visibility Take-off required / RCLM & RL & RVR		RCLM or RL	RL	Adequate Vis Ref	
DAY	NIGHT	DAY	NIGHT	DAY	NIGHT
R300m		R/V400m		R/V500m	NA

CHANGES: Minimums.

UUDL/IAR
TUNOSHNA

JEPPESEN
7 MAR 25 (11-1) Eff 20 Mar

YAROSLAVL, ~~RUSSIA~~
ILS Y Rwy 23

BRIEFING STRIP™

ATIS	YAROSLAVL Tower	
127.350	120.3	120.0X

LOC IRG	Final Apch Crs	[FF23]	DA(H) Refer to Minimums	Apt Elev 305′ Rwy 301′
110.5	230°	1600′(1299′)		

MISSED APCH: Climb STRAIGHT AHEAD to 1500′or above (MAX 215 KT), then turn LEFT to DL523 (MAX 215 KT), then proceed to DL423 climbing to 2500′ or above, then proceed according to chart, or as directed.

3000
MSA ARP ❶

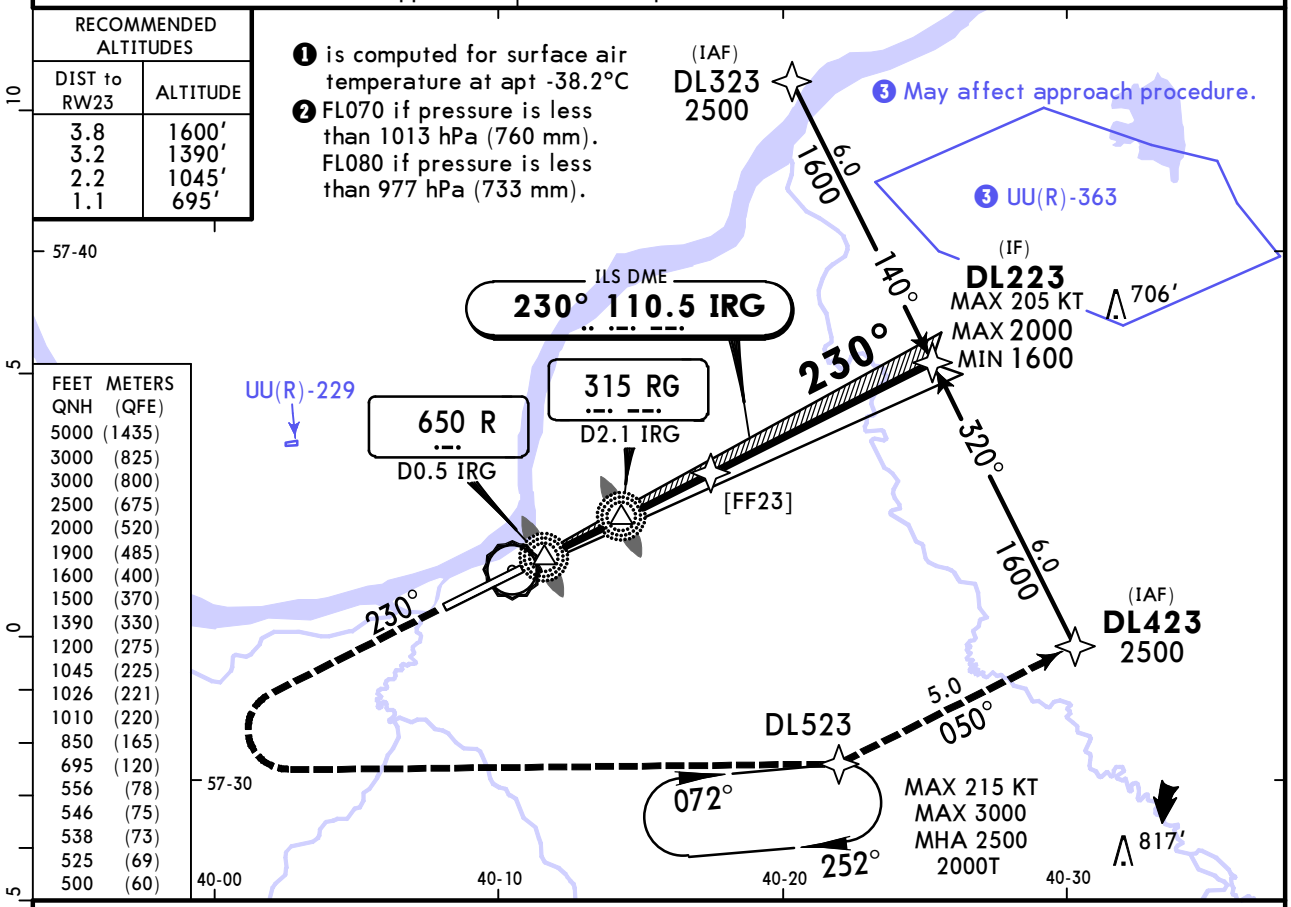
Alt Set: hPa (MM on req) | Rwy Elev: 11 hPa | Trans level: FL060 ❷ | Trans alt: 5000′

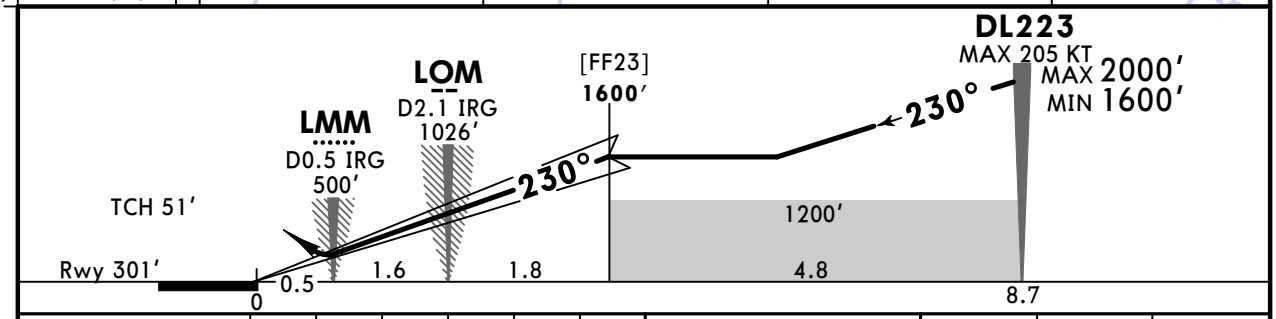
RNAV 1 for initial and missed approach. | 1. GNSS required. 2. ILS DME reads zero at RWY 23 thresh.

RECOMMENDED ALTITUDES	
DIST to RW23	ALTITUDE
3.8	1600′
3.2	1390′
2.2	1045′
1.1	695′

❶ is computed for surface air temperature at apt -38.2°C
❷ FL070 if pressure is less than 1013 hPa (760 mm). FL080 if pressure is less than 977 hPa (733 mm).

FEET QNH	METERS (QFE)
5000	(1435)
3000	(825)
3000	(800)
2500	(675)
2000	(520)
1900	(485)
1600	(400)
1500	(370)
1390	(330)
1200	(275)
1045	(225)
1026	(221)
1010	(220)
850	(165)
695	(120)
556	(78)
546	(75)
538	(73)
525	(69)
500	(60)





Gnd speed-Kts		70	90	100	120	140	160
GS	3.00°	372	478	531	637	743	849

HIALS
PAPI
MIN 1500′
215 KT MAX

Std STRAIGHT-IN LANDING

DA(H) A: **525′**(224′) C: **546′**(245′)
B: **538′**(237′) D: **556′**(255′)

	ALS out
A	❶ R550m
B	R1200m
C	
D	❶ R600m
	R1300m

CIRCLE-TO-LAND
Circling height based on rwy 23 thresh elev of 301′

Max KT	MDA(H)	
100	850′(549′)	V1500m
135	850′(549′)	V1600m
180	1010′(709′)	V2400m
205	1900′(1599′)	V3600m

PANS OPS

❶ R750m when a Flight Director or Autopilot or HUD to DA ist not used.

CHANGES: Yaroslavl Start withdrawn.

UUDL/IAR TUNOSHNA

JEPPESEN 7 MAR 25 (11-2) Eff 20 Mar

YAROSLAVL, ~~RUSSIA~~ ILS X Rwy 23

BRIEFING STRIP™

ATIS	YAROSLAVL Tower	
127.350	120.3	120.0X

LOC IRG	Final Apch Crs	[FF23]	DA(H) Refer to Minimums	Apt Elev 305′ Rwy 301′
110.5	230°	1600′ (1299′)		

MISSED APCH: Climb STRAIGHT AHEAD to 1500′or above, then turn LEFT (MAX 205 KT) to R Lctr climbing to 2500′ or above, then proceed according to chart, or as directed.

3000 MSA ARP ❶

Alt Set: hPa (MM on req) | Rwy Elev: 11 hPa | Trans level: FL060 ❷ | Trans alt: 5000′

1. CAT C & D: MAX 205 KT. 2. ILS DME reads zero at RWY 23 thresh.

❶ is computed for surface air temperature at apt -38.2°C

❷ FL070 if pressure is less than 1013 hPa (760 mm). FL080 if pressure is less than 977 hPa (733 mm).

❸ May affect approach procedure.

❸ UU(R)-363 706′

UU(R)-229

ILS DME 230° 110.5 IRG

(IAF) 650 R D0.5 IRG MAX 4500 MIN 2500

315 RG D2.1 IRG

230° [FF23] [CF23]

(SMA 1700)

062°→CAT A & B
073°→CAT C & D

(SMA 1800)

230° 050°

FEET QNH	METERS (QFE)
5000	(1435)
4500	(1280)
3000	(800)
2500	(675)
2000	(520)
1900	(485)
1800	(460)
1700	(430)
1600	(400)
1500	(370)
1390	(330)
1200	(275)
1045	(225)
1026	(221)
1010	(220)
850	(165)
695	(120)
556	(78)
546	(75)
538	(73)
525	(69)
500	(60)

57-40 57-30 40-00 40-10 40-20 40-30

HOLDING FIX
R Lctr 230° 050°
MAX 225 KT
MAX 4500
MHA 2500
2500T

DIST to RW23	1.1	2.2	3.2	3.8
ALTITUDE	695′	1045′	1390′	1600′

LMM D2.1 IRG
MAX 4500′ MIN 2500′
062°→CAT A & B
073°→CAT C & D
050°→RACETRACK
BASETURN
LOM D0.5 IRG 1026′
230° 2000′
CAT A & B: 3 Min
CAT C & D: 2 Min
TCH 51′ 500′
230° [FF23] 1600′ [CF23]
Rwy 301′ 0.5 1.6 1.8 1200′ 3.3

Gnd speed-Kts		70	90	100	120	140	160
GS	3.00°	372	478	531	637	743	849

HIALS PAPI MIN 1500′

Std STRAIGHT-IN LANDING

DA(H) A: **525′** (224′) C: **546′** (245′)
B: **538′** (237′) D: **556′** (255′)

CIRCLE-TO-LAND
Circling height based on rwy 23 thresh elev of 301′

		ALS out	Max KT	MDA(H)
A	❶ R550m	R1200m	100	850′ (549′) V1500m
B			135	850′ (549′) V1600m
C		R1300m	180	1010′ (709′) V2400m
D	❶ R600m		205	1900′ (1599′) V3600m

PANS OPS

❶ R750m when a Flight Director or Autopilot or HUD to DA ist not used.

CHANGES: Yaroslavl Start withdrawn, missed approach.

UUDL/IAR TUNOSHNA

JEPPESEN

6 JUN 25 (12-1) Eff 12 Jun

YAROSLAVL, ~~RUSSIA~~ RNP Rwy 05

BRIEFING STRIP™

ATIS	YAROSLAVL Tower	
127.350	120.3	120.0X

RNAV	Final Apch Crs 050°	DLØ05 2200′ (1914′)	LNAV/VNAV DA(H) Refer to Minimums	Apt Elev 305′ Rwy 286′

MISSED APCH: Climb STRAIGHT AHEAD to DLØ51 (MAX 215 KT), then turn RIGHT to DL7Ø5, then proceed to DL5Ø5 climbing to 2500′ or above, or as directed.

3000 MSA ARP ❶

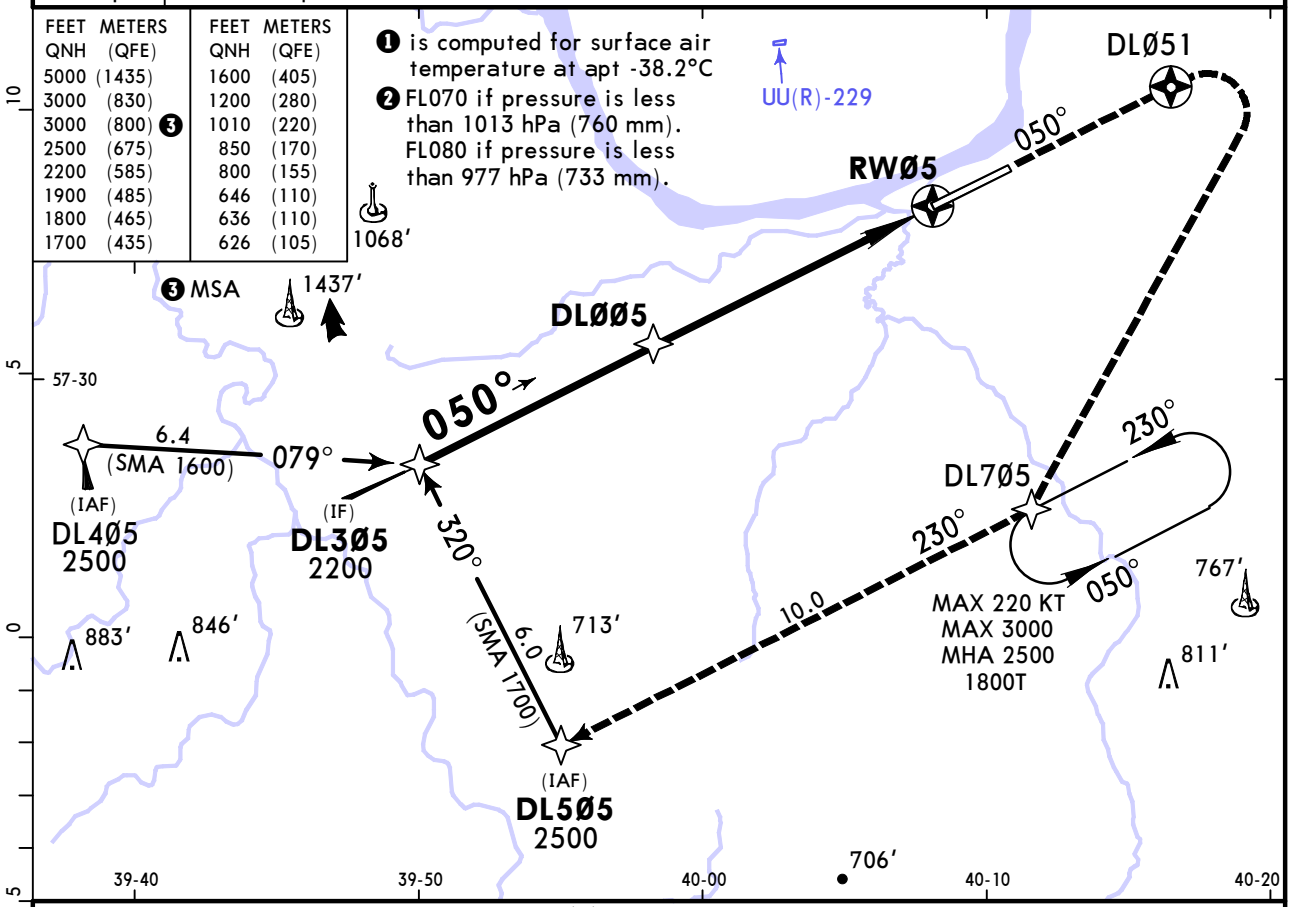
Alt Set: hPa (MM on req) | Rwy Elev: 10 hPa | Trans level: FL060 ❷ | Trans alt: 5000′

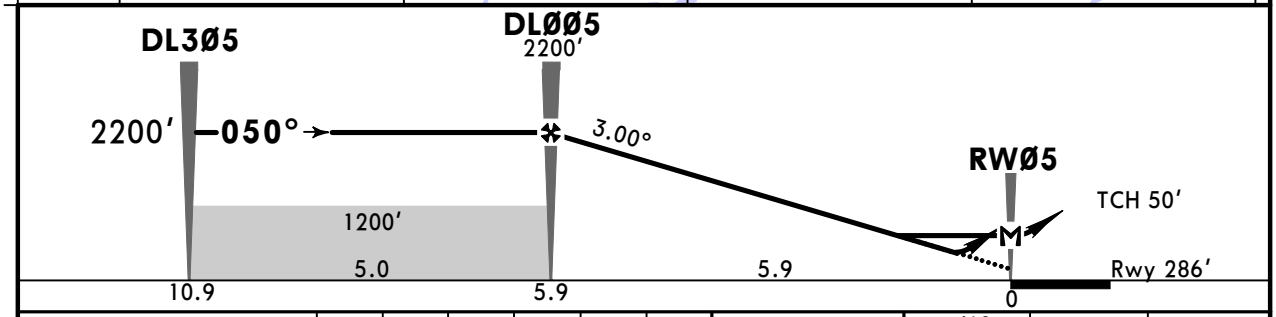
RNP Apch | 1. GNSS required. 2.Baro-VNAV not authorized below -31°C.

FEET QNH	METERS (QFE)	FEET QNH	METERS (QFE)
5000	(1435)	1600	(405)
3000	(830)	1200	(280)
3000	(800) ❸	1010	(220)
2500	(675)	850	(170)
2200	(585)	800	(155)
1900	(485)	646	(110)
1800	(465)	636	(110)
1700	(435)	626	(105)

❶ is computed for surface air temperature at apt -38.2°C

❷ FL070 if pressure is less than 1013 hPa (760 mm). FL080 if pressure is less than 977 hPa (733 mm).





Gnd speed-Kts		70	90	100	120	140	160
Glide Path Angle	3.00°	372	478	531	637	743	849
MAP at RWØ5							

ALS PAPI

DLØ51

215 KT MAX

Std STRAIGHT-IN LANDING

LNAV/VNAV

DA(H) A: **626′** (340′)
B: **636′** (350′) CD: **646′** (360′)

	ALS out
A	R1300m
B	
C	R1400m
D	R1600m

LNAV CDFA

❶ DA/MDA(H) **800′** (514′)

ALS out	
R1500m	R2100m
R1500m	R2400m

CIRCLE-TO-LAND

Circling height based on rwy 05 thresh elev of 286′

Max KT	MDA(H)
100	850′ (564′) V1500m
135	850′ (564′) V1600m
180	1010′ (724′) V2400m
205	1900′ (1614′) V3600m

❶ VNAV DA(H) in lieu of MDA(H) depends on operator policy.

PANS OPS

CHANGES: YAROSLAVL Start withdrawn.

UUDL/IAR
TUNOSHNA

JEPPESEN
6 JUN 25 (12-2) Eff 12 Jun

YAROSLAVL, ~~RUSSIA~~
RNP Rwy 23

BRIEFING STRIP ™

ATIS	YAROSLAVL Tower	
127.350	120.3	120.0X

RNAV	Final Apch Crs 230°	DLØØ8 1600′ (1299′)	LNAV/VNAV DA(H) Refer to Minimums	Apt Elev 305′ Rwy 301′

MISSED APCH: Climb STRAIGHT AHEAD to 1500′ or above (MAX 215 KT), then turn LEFT to DL523 (MAX 215 KT),then proceed to DL423 climbing to 2500′ or above, then proceed according chart, or as directed.

3000
MSA ARP ❶

Alt Set: hPa (MM on req) | Rwy elev 11 hPa | Trans level: FL060 ❷ | Trans alt: 5000′

RNP Apch | 1. GNSS required. 2. Baro-VNAV not authorized below -31°C.

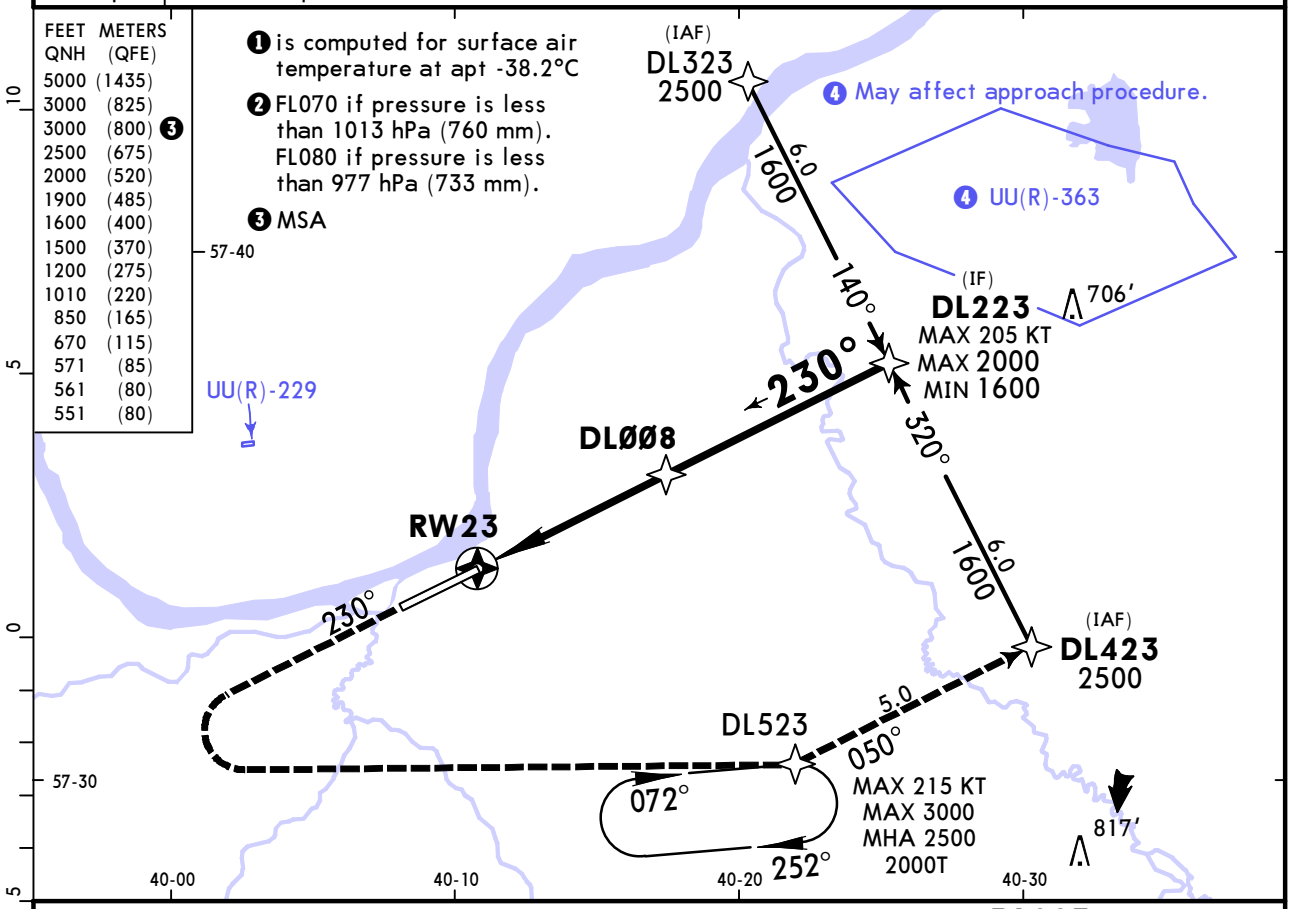
FEET QNH	METERS (QFE)
5000	(1435)
3000	(825)
3000	(800) ❸
2500	(675)
2000	(520)
1900	(485)
1600	(400)
1500	(370)
1200	(275)
1010	(220)
850	(165)
670	(115)
571	(85)
561	(80)
551	(80)

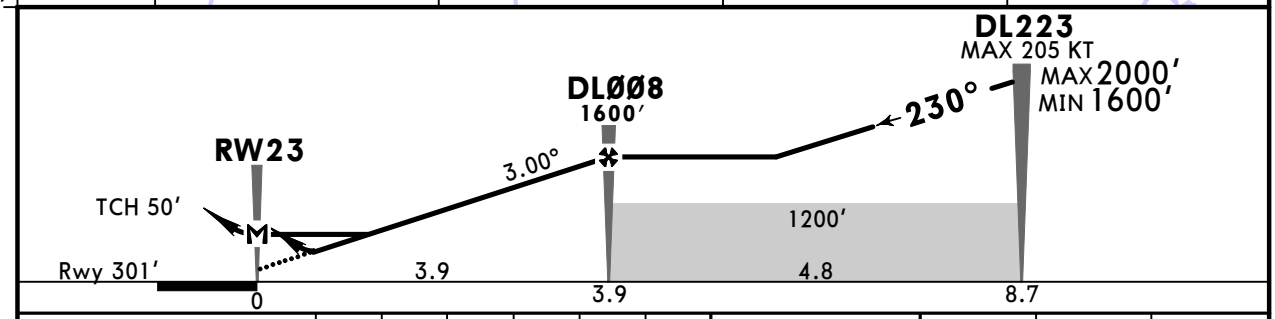
❶ is computed for surface air temperature at apt -38.2°C

❷ FL070 if pressure is less than 1013 hPa (760 mm). FL080 if pressure is less than 977 hPa (733 mm).

❸ MSA

❹ May affect approach procedure.





Gnd speed-Kts		70	90	100	120	140	160
Glide Path Angle	3.00°	372	478	531	637	743	849
MAP at RW23							

HIALS
PAPI
MIN 1500′
215 KT MAX

Std STRAIGHT-IN LANDING

	LNAV/VNAV		LNAV	
	DA(H)	ALS out	CDFA	ALS out
A	AB: 551′ (250′) C: 561′ (260′) D: 571′ (270′)	R750m	❶ DA/MDA(H) 670′ (369′)	R1500m
B				
C		R1300m		R1000m
D				R1700m

CIRCLE-TO-LAND

Circling height based on rwy 23 thresh elev of 301′

Max KT	MDA(H)
100	850′ (549′) V1500m
135	850′ (549′) V1600m
180	1010′ (709′) V2400m
205	1900′ (1599′) V3600m

❶ VNAV DA(H) in lieu of MDA(H) depends on operator policy.

PANS OPS

CHANGES: YAROSLAVL Start withdrawn.

UUDL/IAR
TUNOSHNA

JEPPESEN
6 JUN 25 (12-40) Eff 12 Jun

YAROSLAVL, ~~RUSSIA~~
GLS Rwy 05

BRIEFING STRIP ™

ATIS	YAROSLAVL Tower	
127.350	120.3	120.0X

GBAS	Final Apch Crs	DLØØ2	DA(H) Refer to Minimums	Apt Elev 305′ Rwy 286′
Ch 20826 G05A	050°	2200′ (1914′)		

MISSED APCH: Climb STRAIGHT AHEAD to DLØ51 (MAX 215 KT), then turn RIGHT to DL7Ø5, then proceed to DL5Ø5 climbing to 2500′ or above, or as directed.

3000
MSA ARP ❶

Alt Set: hPa (MM on req) | Rwy elev: 10 hPa | Trans level: FL060 ❷ | Trans alt: 5000′

RNAV 1 for initial and missed approach. | GNSS required.

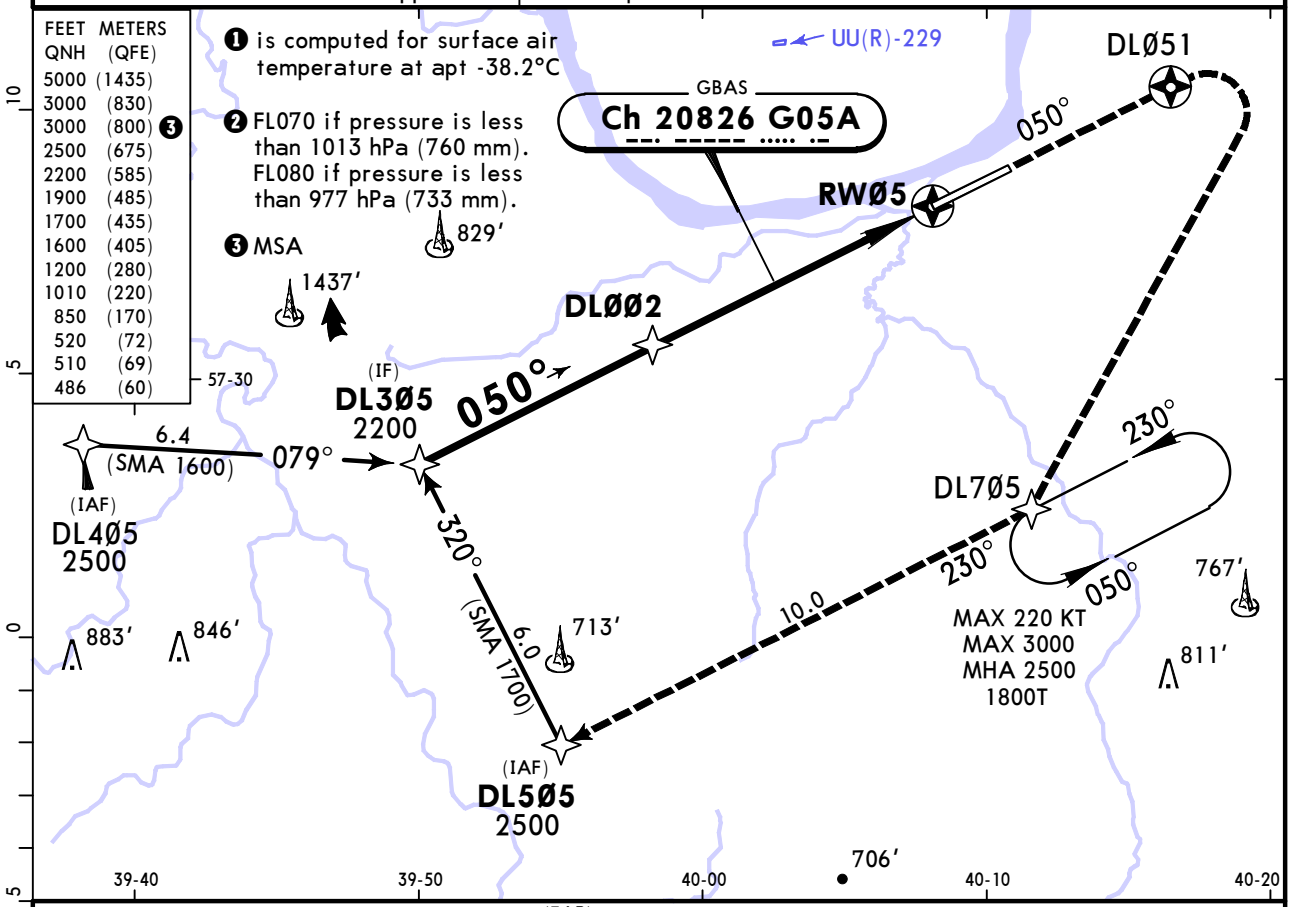
FEET QNH	METERS (QFE)
5000	(1435)
3000	(830)
3000	(800) ❸
2500	(675)
2200	(585)
1900	(485)
1700	(435)
1600	(405)
1200	(280)
1010	(220)
850	(170)
520	(72)
510	(69)
486	(60)

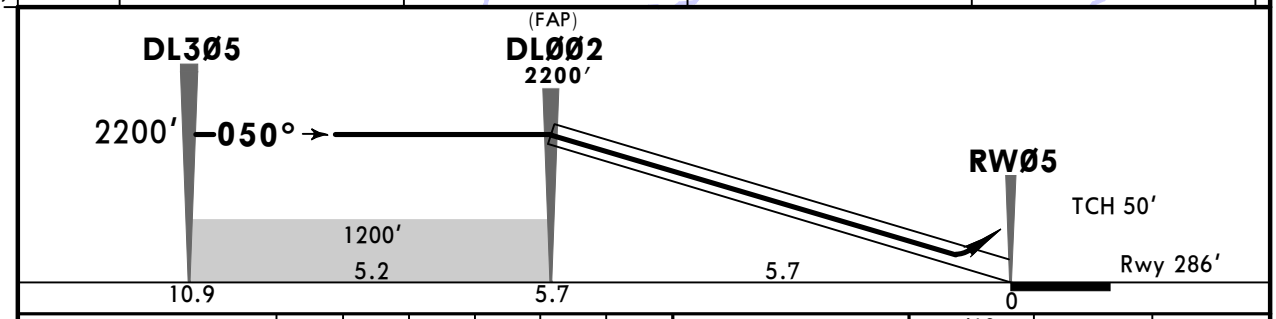
57-30

❶ is computed for surface air temperature at apt -38.2°C

❷ FL070 if pressure is less than 1013 hPa (760 mm). FL080 if pressure is less than 977 hPa (733 mm).

❸ MSA





Gnd speed-Kts		70	90	100	120	140	160
Glide Path Angle	3.00°	372	478	531	637	743	849

ALS
PAPI

DLØ51

215 KT MAX

Std

STRAIGHT-IN LANDING

DA(H)
C: **510′** (224′)
AB: **486′** (200′) D: **520′** (234′)

	ALS out
A	R1000m
B	
C	R1200m
D	

CIRCLE-TO-LAND

Circling height based on rwy 05 thresh elev of 286′

Max KT	MDA(H)
100	850′ (564′) V1500m
135	850′ (564′) V1600m
180	1010′ (724′) V2400m
205	1900′ (1614′) V3600m

PANS OPS

CHANGES: YAROSLAVL Start withdrawn.

UUDL/IAR
TUNOSHNA

JEPPESEN
6 JUN 25 (12-41) Eff 12 Jun

YAROSLAVL, ~~RUSSIA~~
GLS Rwy 23

BRIEFING STRIP ™

ATIS	YAROSLAVL Tower	
127.350	120.3	120.0X

GBAS	Final Apch Crs	DLØØ7	DA(H) Refer to Minimums	Apt Elev 305′ Rwy 301′
Ch 20415 G23A	230°	1600′ (1299′)		

MISSED APCH: Climb STRAIGHT AHEAD to 1500′or above (MAX 215 KT), then turn LEFT to DL523 (MAX 215 KT), then proceed to DL423 climbing to 2500′ or above, then proceed according to chart, or as directed.

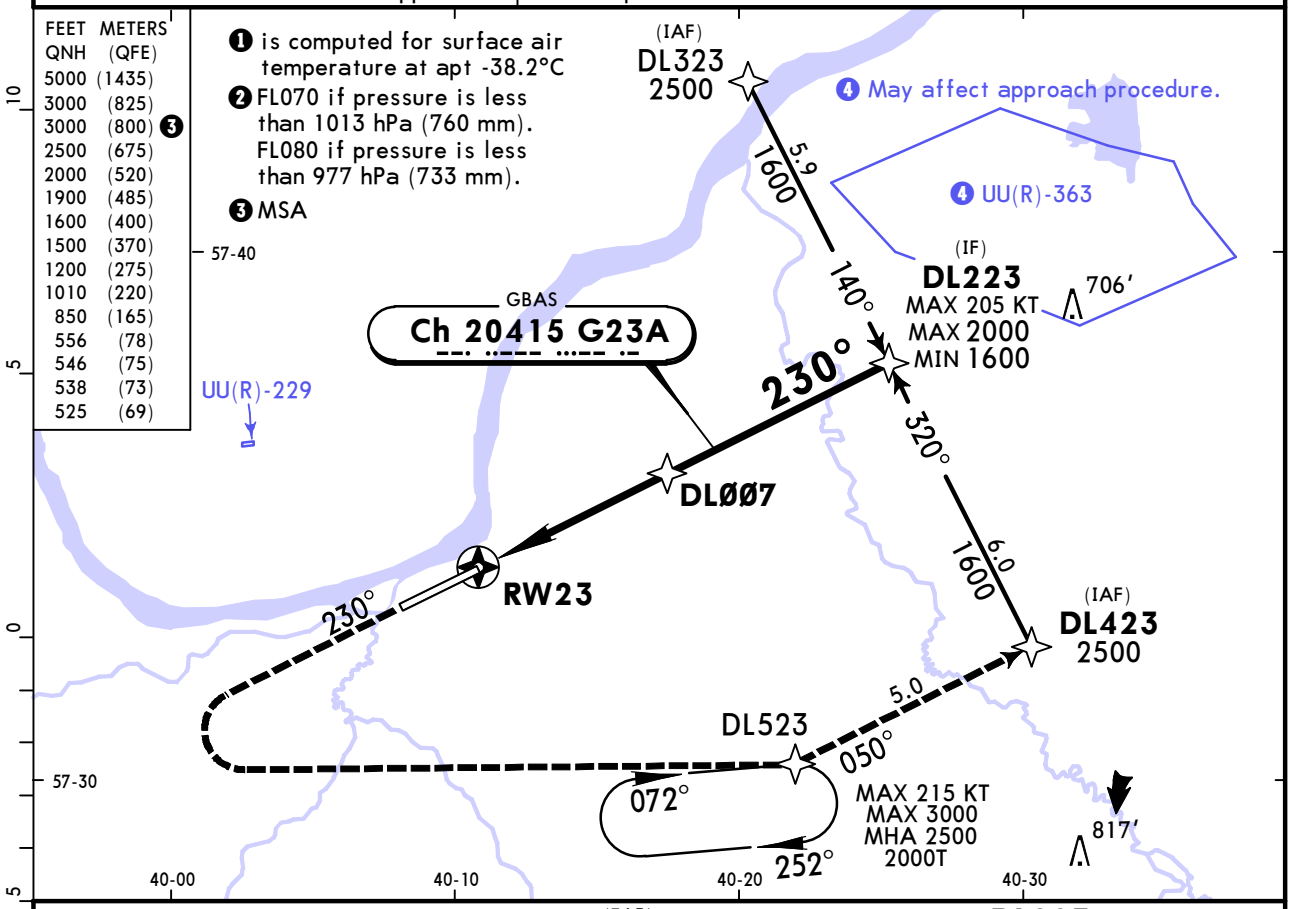
3000
MSA ARP ❶

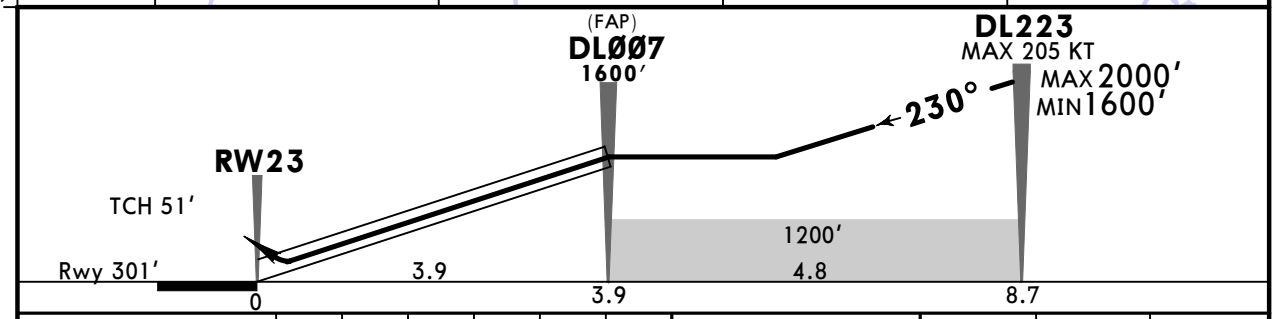
Alt Set: hPa (MM on req) | Rwy Elev: 11 hPa | Trans level: FL060 ❷ | Trans alt: 5000′

RNAV 1 for initial and missed approach. | GNSS required.

FEET QNH	METERS (QFE)
5000	(1435)
3000	(825)
3000	(800) ❸
2500	(675)
2000	(520)
1900	(485)
1600	(400)
1500	(370)
1200	(275)
1010	(220)
850	(165)
556	(78)
546	(75)
538	(73)
525	(69)

❶ is computed for surface air temperature at apt -38.2°C
❷ FL070 if pressure is less than 1013 hPa (760 mm). FL080 if pressure is less than 977 hPa (733 mm).
❸ MSA





Gnd speed-Kts		70	90	100	120	140	160
Glide Path Angle	3.00°	372	478	531	637	743	849

HIALS
PAPI
MIN 1500′
215 KT MAX

Std STRAIGHT-IN LANDING

DA(H) A: **525′** (224′) C: **546′** (245′)
B: **538′** (237′) D: **556′** (255′)

	ALS out	
A	❶ R550m	R1200m
B		
C		R1300m
D	❶ R600m	

CIRCLE-TO-LAND
Circling height based on rwy 23 thresh elev of 301′

Max KT	MDA(H)	
100	850′ (549′)	V1500m
135	850′ (549′)	V1600m
180	1010′ (709′)	V2400m
205	1900′ (1599′)	V3600m

PANS OPS

❶ R750m when a Flight Director or Autopilot or HUD to DA ist not used.

CHANGES: YAROSLAVL Start withdrawn.

UUDL/IAR TUNOSHNA

JEPPESEN 6 JUN 25 16-1 Eff 12 Jun

YAROSLAVL, ~~RUSSIA~~ NDB Rwy 23

BRIEFING STRIP ™

ATIS	YAROSLAVL Tower	
127.350	120.3	120.0X

Lctr	Final Apch Crs	[FN23Y]	DA/MDA(H)	Apt Elev 305′
R	230°	2300′ (1999′)	1000′ (699′)	Rwy 301′
650				

MISSED APCH: Climb STRAIGHT AHEAD to 1500′ or above, then turn LEFT (MAX 215 KT) to Lctr climbing to 2500′ or above, then proceed according chart, or as directed.

3000

MSA ARP ❶

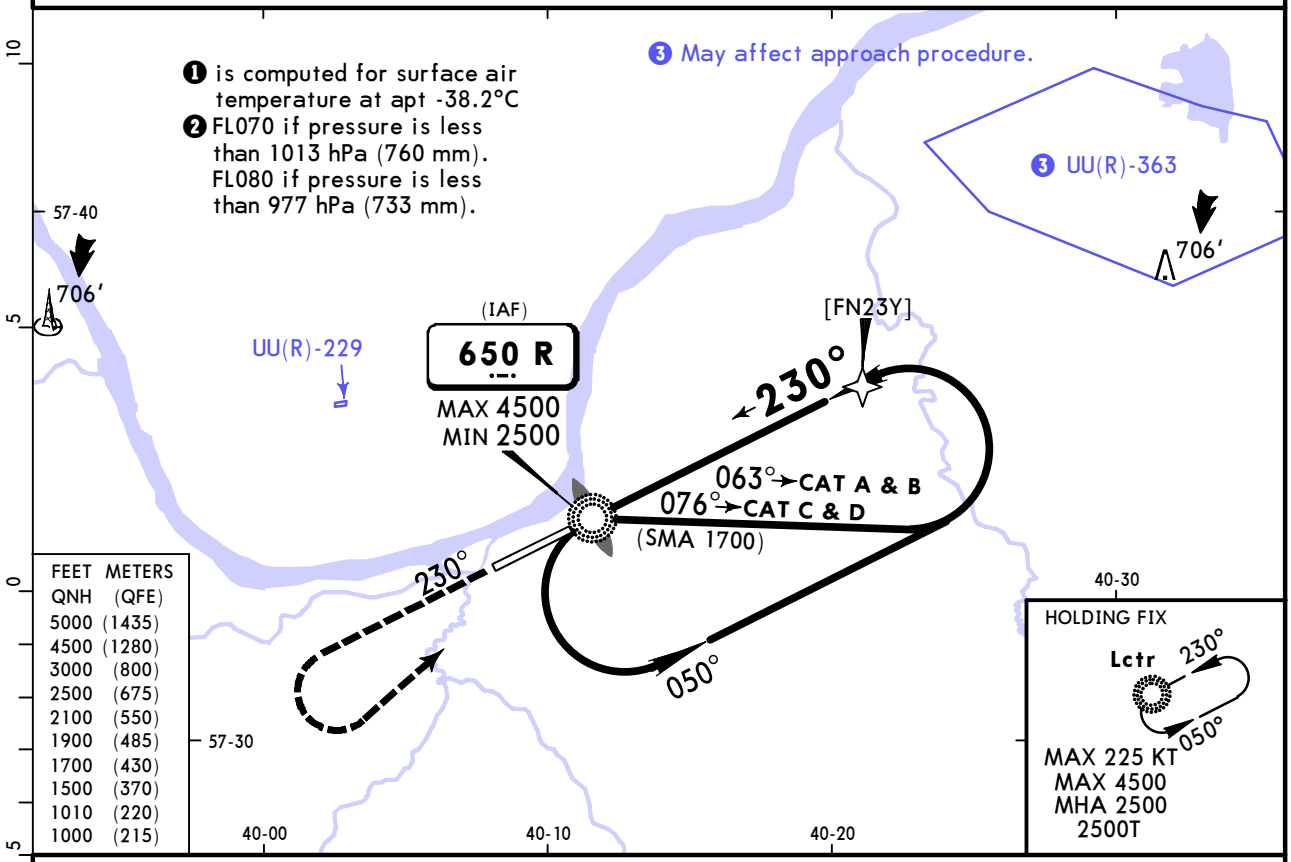
Alt Set: hPa (MM on req) | Rwy Elev: 11 hPa | Trans level: FL060 ❷ | Trans alt: 5000′

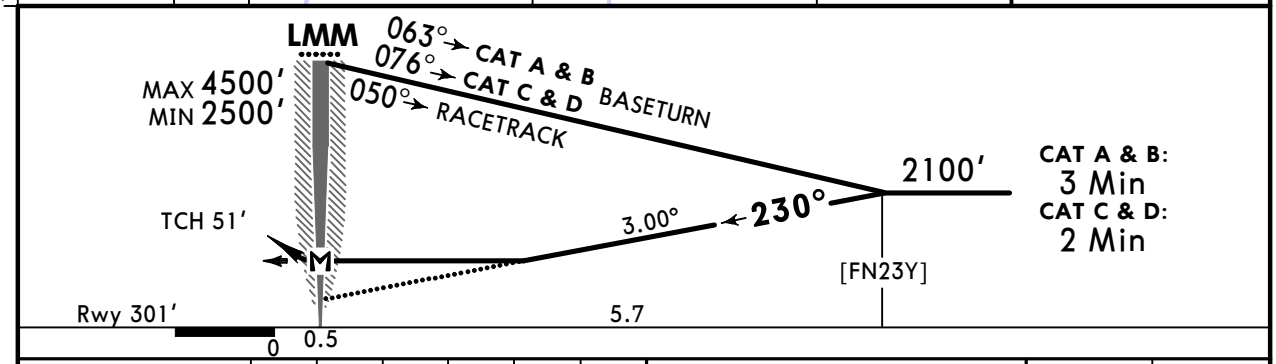
CAT C & D: MAX 215 KT.

❶ is computed for surface air temperature at apt -38.2°C

❷ FL070 if pressure is less than 1013 hPa (760 mm). FL080 if pressure is less than 977 hPa (733 mm).

❸ May affect approach procedure.





Gnd speed-Kts	70	90	100	120	140	160
Descent Angle 3.00°	372	478	531	637	743	849
MAP at LMM						

HIALS PAPI MIN 1500′

PANS OPS

Std STRAIGHT-IN LANDING

CDFA

❶ DA/MDA(H) 1000′ (699′)

ALS out

A	R1500m
B	
C	R2400m
D	

CIRCLE-TO-LAND

Circling height based on rwy 23 thresh elev of 301′

Max KT	MDA(H)	
100	1000′ (699′)	V1500m
135	1000′ (699′)	V1600m
180	1010′ (709′)	V2400m
205	1900′ (1599′)	V3600m

❶ VNAV DA(H) in lieu of MDA(H) depends on operator policy.

CHANGES: YAROSLAVL Start withdrawn.

Chart changes since cycle 07-2026

ADD = added chart, REV = revised chart, DEL = deleted chart.

ACT	PROCEDURE IDENT	INDEX	REV DATE	EFF DATE

YAROSLAVL, (TUNOSHNA - UUDL)

TERMINAL CHART CHANGE NOTICES

No Chart Change Notices for Airport UUDL