JEPPESEN
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List of pages in this Trip Kit

General Information

Location: BUCHAREST ROU
ICAO/IATA: LROP / OTP
Lat/Long: N44° 34.27', E026° 05.10'
Elevation: 314 ft

Airport Use: Joint-Use
Daylight Savings: Observed
UTC Conversion: -2:00 = UTC
Magnetic Variation: 5.0° E

Fuel Types: 100 Octane (LL), 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: 0412 Z
Sunset: 1600 Z

Runway Information

Runway: 08L
Length x Width: 11480 ft x 148 ft
Surface Type: asphalt
TDZ-Elev: 314 ft
Lighting: Edge, ALS, Centerline, TDZ

Runway: 08R
Length x Width: 11486 ft x 148 ft
Surface Type: asphalt
TDZ-Elev: 314 ft
Lighting: Edge, ALS, Centerline, TDZ

Runway: 26L
Length x Width: 11486 ft x 148 ft
Surface Type: asphalt
TDZ-Elev: 304 ft
Lighting: Edge, ALS, Centerline

Runway: 26R
Length x Width: 11480 ft x 148 ft
Surface Type: asphalt
TDZ-Elev: 306 ft
Lighting: Edge, ALS, Centerline, TDZ

Communication Information

ATIS: 118.500
Otopeni Tower: 118.805
Otopeni Tower: 120.900 Secondary
Otopeni Ground: 121.700 Secondary
Otopeni Ground: 121.855
Otopeni Clearance Delivery: 121.700 Secondary
Otopeni Clearance Delivery: 121.955
Bucharest Approach: 120.600 Secondary
Bucharest Approach: 119.415
Bucharest Direct (Approach Control Radar): 120.600 Secondary
Bucharest Direct (Approach Control Radar): 127.155
Muntenia And Oltenia Information: 129.400 Flight Info Service RCO

1. GENERAL

1.1. ATIS

ATIS 118.5

1.2. NOISE ABATEMENT PROCEDURES

1.2.1. GENERAL

NADP1 shall be applied for all take-offs from RWYs 08R/26L and 08L/26R.

1.2.2. REVERSE THRUST

Avoid reverse thrust after landing, consistent with safe operation of ACFT, especially between 2300-0700LT.

1.2.3. RUN-UP TESTS

ATC will approve idle ground engine runs.

Permission for ground testing in excess of idle must commence in the Engine Test Bay and must be requested through the marshaller, ext. 3426, at all times.

Times of operation are 0600-2300LT.

Engine testing on the open airfield will only be allowed for Chapter 2 ACFT between 0900-1700LT and Chapter 3 ACFT between 0600-2300LT. Propeller-driven ACFT are to be classified as Chapter 3.

1.2.4. USE OF APU

The APU is permitted functioning maximum 15 minutes after block-on time and may be started over 30 minutes before standard.

1.3. LOW VISIBILITY PROCEDURES (LVP)

RWY 08R instrument approach operation type B - CAT IIIA. LVTO only for RVR not less than 125m.

RWY 08L instrument approach operation type B - CAT II. LVTO only for RVR not less than 125m.

RWY 26R and RWY 26L instrument approach operation type B - CAT I. LVTO only for RVR not less than 125m.

The preparation phase will be implemented when RVR is 800m or horizontal VIS falls below 1500m or ceiling/vertical VIS of 500'.

The operations phase will be commenced when RVR falls below 550m (VIS falls below 800m) or ceiling/vertical VIS is below 200'.

LVP will be terminated when RVR is greater than 800m (horizontal VIS is greater than 1500m) and ceiling/vertical VIS is greater than 300'.

Simulated LVP should be requested 30 minutes prior to estimated time of departure or arrival.

If available visual aids do not provide sufficient taxi information, pilots may ask for Follow-me car assistance.

Pilots will report "RWY vacated" only when the ACFT has completely passed the end of the green/yellow color coded TWY centerline lights.

Red stop bars at all intersections of TWYs with RWYs and no entry bar on rapid exit TWYs W and V.

1. GENERAL

1.4. OPERATION OF MODE S TRANSPONDERS WHEN ACFT IS ON THE GROUND

ACFT operators shall ensure that the Mode S transponders are able to operate when ACFT is on the ground, according to ICAO specifications (Annex 10, Volume IV, 3.1.2.8.5.3 and 3.1.2.10.3.10).

Aircrews shall select the assigned Mode A code and activate the Mode S by selecting AUTO, ON, XPNDR, or the equivalent according to specific installation and assigned Mode A code under the following conditions:

- From request of push-back or taxi, whichever is earlier;
- After landing, continuously until the ACFT is fully parked on the stand.

The transponder shall be switched off immediately after parking.

Whenever the ACFT is capable of reporting flight identification (i.e. call sign used in flight), the flight identification should also be entered from the request for push-back or taxi, whichever is earlier (through the FMS or the transponder control panel). Aircrews shall use the format as defined in field 7 of the ICAO flight plan for entry of the flight identification.

To ensure that the performance of the systems based on SSR frequencies (including airborne TCAS units and SSR radars) is not compromised, TCAS shall not be activated before receiving the clearance to line up. After landing, it shall be deactivated after vacating the RWY.

1.5. TAXI PROCEDURES

Following TWYs are classified as ACFT stand taxilanes and apron TWYs:

TWY L: EASA code C - ACFT stand taxilane
TWY I: EASA code D - apron TWY
TWY M: EASA code E - apron TWY
TWY C: EASA code E - apron TWY

On the aprons ACFT are permitted to taxi only at the indispensable minimum engine speed.

Taxiing of ACFT with wingspan greater than 171'/52m is permitted only with engines 1 and 4 on idle power.

Pilots are to delay call "RWY vacated" until ACFT has completely passed the end of green/yellow TWY centerline lights.

Orange guidelines are mandatory for:

A300, A310, B707-320, B757-200, B767-200, B777, DC10-30, IL18, IL62, IL76, IL86, L100-30, L1011-500, TU154, B747-200 and B747-400.

ACFT intending to use apron 3 will be stopped by marshaller on taxilane T.

ACFT positioning on apron 3 or in Hangar will be executed by Ion Tiriac Air personnel with towing equipment.

On LROP following taxiing restrictions/limitations are in force:

- ACFT with outer main gear wheel span greater than 30'/9m in intersections of TWY O-P, O-N, N-C-G, N-S, shall taxi only orange markings and ONLY when RVR is greater than 350m.
- ACFT with outer main gear wheel span greater than 30'/9m are not allowed to taxi in intersection TWY P-C.

1.6. PARKING INFORMATION

Floodlight poles close to stands 106, 107, 109, 110, 120 and 121.

Apron 1: Stands 101 thru 107 and 109 thru 115 are equipped with stand entry guidance SAFEDOCK T-1.

Stands 101 thru 107, 107R thru 109, 109L thru 116 and 117 on apron 1 push-back required.

Stands 116B, 117B, 118 on apron 1 push-back or power-back required.

Stands 107A thru 107L, 109A thru 109R, 116A, 119B and 119C, 120A thru 120C on apron 1 alternative parking stands.

1. GENERAL

Stands 201A-205A, 202B and 204B on apron 2 alternative parking stands.

Parking at 201 and all alternative stands will be performed only with marshaller assistance.

Stands 119 thru 122 on apron 1 and stands 201 thru 222 on apron 2:

Self-parking procedure, stop ACFT when yellow STOP marking is in line with pilots eye view at an angle of 90° to the lead-in line.

1.7. OTHER INFO

Birds flocks within APT area.

Caution advised when taking off and landing.

2. ARRIVAL

2.1. CAT II/III OPERATIONS

RWY 08R approved for CAT II/III and RWY 08L approved for CAT II operations, special aircrew and ACFT certification required.

2.2. TAXI PROCEDURES

2.2.1. STANDARD TAXI ROUTES

2.2.1.1. RWY 08R

Taxi Route	Apron	TWY to be followed	Remarks	Low Visibility Operations
Arrival 1	Apron 1	D, C, N, S or B	For ACFT with wingspan less than 171'/52m only.	-
Arrival 2		D, P, O, N, S, or B	ACFT with OMGWS greater than 30'/9m shall follow orange markings in TWY intersections.	Not available with RVR less than 350m, for ACFT with OMGWS greater than 30'/9m.
Arrival 3		G, N, S or B	-	
Arrival 4	Apron 2	D, C	For ACFT with wingspan less than 171'/52m only.	-
Arrival 5		D, stand 201A	-	
Arrival 6		G, C	For ACFT with wingspan less than 171'/52m only.	
Arrival 7		G, N, O, P, stand 201A	ACFT with OMGWS greater than 30'/9m shall follow orange markings in TWY intersections.	Not available with RVR les than 350m, for ACFT with OMGWS greater than 30'/9m.
Arrival 8	Apron 3	D, P, taxilane T	For ACFT with wingspan less than 118'/36m only.	-
Arrival 9		G, C, P, taxilane T		

2. ARRIVAL

2.2.1.2. RWY 26L*

Taxi Route	Apron	TWY to be followed	Remarks	Low Visibility Operations
Arrival 10	Apron 1	G	-	N/A
Arrival 11		A, B		
Arrival 12	Apron 2	G, C	For ACFT with wingspan less than 171'/52m only.	
Arrival 13		G, N, O, P, stand 201A	ACFT with OMGWS greater than 30'/9m shall follow orange markings in TWY intersections.	
Arrival 14	Apron 3	G, C, P, taxilane T	For ACFT with wingspan less than 118'/36m only.	
Arrival 15		G, N, O, P, taxilane T		-

* Not authorized for LVO.

2.2.1.3. RWY 08L

Taxi Route	Apron	TWY to be followed	Remarks	Low Visibility Operations
Arrival 16	Apron 1	V, O, N, S or B	ACFT with OMGWS greater than 30'/9m shall follow orange markings in TWY intersections.	Not available with RVR less than 350m, for ACFT with OMGWS greater than 30'/9m.
Arrival 17		O, N, S or B		
Arrival 18	Apron 2	V, O, P, stand 201A		
Arrival 19		O, P, C	For ACFT with wingspan less than 171'/52m and with OMGWS less than 30'/9m only.	-
Arrival 20	Apron 3	V, O, P, taxilane T	For ACFT with wingspan less than 118'/36m only.	
Arrival 21		O, P, taxilane T		

2.2.1.4. RWY 26R*

Taxi Route	Apron	TWY to be followed	Remarks	Low Visibility Operations
Arrival 22	Apron 1	W, O, N, S or B	ACFT with OMGWS greater than 30'/9m shall follow orange markings in TWY intersections.	N/A
Arrival 23		N, S or B		
Arrival 24	Apron 2	W, P, stand 201A		
Arrival 25		N, C	For ACFT with wingspan less than 171'/52m only.	
Arrival 26	Apron 3	W, P, taxilane T	For ACFT with wingspan less than 118'/36m only.	

* Not authorized for LVO.

2. ARRIVAL

2.3. RWY OPERATIONS

2.3.1. RWY OCCUPANCY TIME

Pilots are reminded that rapid exit from the landing RWY minimises the occurrences of go-arounds and allows ATC to apply minimum spacing on final approach.

To ensure minimum RWY occupancy time, pilots will avoid rolling slowly on RWY.

ATC expect all ACFT to vacate the RWYs within time frames detailed as follows:

- RWY 08R/26L - 90 seconds
- RWY 08L/26R - 60 seconds

If ACFT are not able to vacate RWY within these time frames crews will notify ATC at once.

2.3.2. USE OF RWY 08R/26L BY HIGHER CODE LETTER ACFT

ACFT with code higher than aerodrome code 4D (wingspan greater than 171'/52m and Outer Main Gear Wheel Span (OMGWS) greater than 30'/9m) shall vacate RWY 08R via TWY D; if not able, shall wait for towing and push-back procedures, and will shut down engine no.1 and no.4 (if applicable).

If ACFT is not able to vacate RWY on TWY D, pilot may decide and request ATC to back-track the RWY using turn pad 26L.

2.4. PARKING PROCEDURES

When taxiing into ACFT stands, ACFT shall generally not stop in curves between the centerlines of apron TWYs or ACFT stand taxi lanes and the centerlines of ACFT stands so as to avoid the further appliance of break-away power.

If in the course of a maneuver as described above, an ACFT inadvertently comes to a stop, prior to increasing engine power again to continue, the pilot shall notify Ground Control and await further instructions.

Parking of ACFT at positions not provided with SEG is only permitted according to the signals of the marshaller.

3. DEPARTURE

3.1. CLEARANCE DELIVERY

Enroute clearance shall be requested to OTOPENI Clearance MAX 20 minutes prior to EOBT or MAX 35 minutes prior to CTOT.

3.2. START-UP, PUSH-BACK AND TAXI PROCEDURES

3.2.1. GENERAL

Pilots shall only ask for start-up and push-back permission after obtaining confirmation from handling agent that is ready for the maneuver. The anti-collision light must be switched on just prior to push-back.

ATC will consider every ACFT at the holding position as able to commence the line-up and take-off roll immediately after the departure clearance is issued. Pilots not able to comply shall advise OTOPENI Ground as early as possible but ultimately before transfer to OTOPENI Tower.

3.2.2. OPERATIONAL USE OF INTERSECTION TAKE-OFFS

In principle all jet ACFT must use the full RWY length available for noise abatement reasons.

Take-offs from intersection with TWY may be allowed at ATC discretion (for operational reasons) or pilot request.

3. DEPARTURE

3.2.3. STANDARD TAXI ROUTES

3.2.3.1. RWY 08R/26L*

Apron	Taxi Route	Holding Position	TWY to be followed	Remarks	LVTO
Apron 1	DEP 1	A	A	ACFT with OMGWS greater than 30'/9m shall taxi following strictly center-line markings/ lights and with reduced speed.	-
	DEP 2		Taxilane M, B, A		
	DEP 3	G	TWY G, turn right, taxi to the end of RWY and line-up THR.	-	
	DEP 4		TWY G and line-up for take-off with reduced declared distances.		
	DEP 5	D**	C, D	For ACFT with wingspan less than 171'/52m only.	
	DEP 6		B or S, N, O, P, D	ACFT with OMGWS greater than 30'/9m shall follow orange markings in TWY intersections.	Not available with RVR less than 350m, for ACFT with OMGWS greater than 30'/9m.

3. DEPARTURE

Apron	Taxi route	Holding position	TWY to be followed	Remarks	LVTO
Apron 2	DEP 7	A	C, B, A	For ACFT with wingspan less than 171'/52m only.	-
	DEP 8		Stand 201A, P, O, N, B, A	ACFT with OMGWS greater than 30'/9m shall follow orange markings in TWY intersections.	Not available with RVR less than 350m, for ACFT with OMGWS greater than 30'/9m.
	DEP 9	G	TWY C, G, turn right taxi to the end of RWY and line-up THR or line-up for take-off with reduced declared distances.	For ACFT with wingspan less than 171'/52m only.	-
	DEP 10		Stand 201A, P, O, N, G	ACFT with OMGWS greater than 30'/9m shall follow orange markings in TWY intersections.	Not available with RVR less than 350m, for ACFT with OMGWS greater than 30'/9m.
	DEP 11	D**	C, D	For ACFT with wingspan less than 171'/52m only.	-
	DEP 12		Stand 201A, D	-	

3. DEPARTURE

Apron	Taxi Route	Holding Position	TWY to be followed	Remarks	LVTO
Apron 3	DEP 13	A	P, C, B, A	-	-
	DEP 14	G	TWY P, C, G, turn right taxi to the end of RWY and line-up THR or take-off with reduced declared distances.		
	DEP 15		TWY P, O, N, G, turn right taxi to the end of RWY and line-up THR or take-off with reduced declared distances.		
	DEP 16	D**	P, D		

* Guided Low Visibility Take-offs (LVTO) are permitted only on RWY 08R.

** The 26L THR turn pad is authorized for ACFT with distance from the main gear to cockpit less than 64'/19.48m and Outer Main Gear Wheel Span (OMGWS) less than 36'/11m.

3.2.3.2. RWY 08L/26R*

Apron	Taxi Route	Holding Position	TWY to be followed	Remarks	LVTO
Apron 1	DEP 17	N	B or S, N	-	-
	DEP 18	O	B or S, N, O	ACFT with OMGWS greater than 30'/9m shall follow orange markings in TWY intersections.	Not available with RVR less than 350m, for ACFT with OMGWS greater than 30'/9m.
	DEP 19		S, N or B, C, P, O	For ACFT with wingspan less than 171'/52m and with OMGWS less than 30'/9m only.	-

3. DEPARTURE

Apron	Taxi Route	Holding Position	TWY to be followed	Remarks	LVTO
Apron 2	DEP 20	N	C, N	For ACFT with wingspan less than 171'/52m only.	-
	DEP 21		C, P, O, N	For ACFT with wingspan less than 171'/52m and with OMGWS less than 30'/9m only.	
	DEP 22		Stand 201A, P, O, N	ACFT with OMGWS greater than 30'/9m shall follow orange markings in TWY intersections.	Not available with RVR less than 350m, for ACFT with OMGWS greater than 30'/9m.
	DEP 23	O	Stand 201A, P, O		
	DEP 24		C, N, O	For ACFT with wingspan less than 171'/52m only.	-
Apron 3	DEP 25	N	P, O, N	-	
	DEP 26		P, C, N		
	DEP 27	O	P, O		
	DEP 28		P, C, N, O		

* Guided Low Visibility Take-offs (LVTO) are permitted only on RWY 08L.

3. DEPARTURE

3.3. RWY OPERATIONS

3.3.1. RWY OCCUPANCY TIME

Pilots should be ready for line-up in sequence according to ATC instructions. Cockpit checks should be completed prior to line-up and any checks requiring completion whilst on the RWY should be kept to the minimum required. Pilots should ensure that they are able to commence the take-off roll immediately after receiving take-off clearance.

When cleared for take-off ATC will expect movement within MAX 30 seconds (of take-off clearance being issued).

Pilots not able to comply with the above requirements shall notify ATC before entering RWY or immediately after.

Pilots who require to back-track RWY must notify ATC prior to arrival at the holding point.

3.3.2. USE OF RWY 08R/26L BY HIGHER CODE LETTER ACFT

For departure 26L ACFT with code higher than aerodrome code 4D (wingspan greater than 171'/52m and Outer Main Gear Wheel Span (OMGWS) greater than 30'/9m) shall take-off from TWY D intersection.

3.4. OTHER

3.4.1. ADDITIONAL DEPARTURE INSTRUCTIONS

Especially propeller-driven ACFT can expect additional departure instructions. These instructions may be added to the enroute or take-off clearance and may comprise a specific heading or temporary altitude restriction. Such additives amend the relevant part of the SID only.

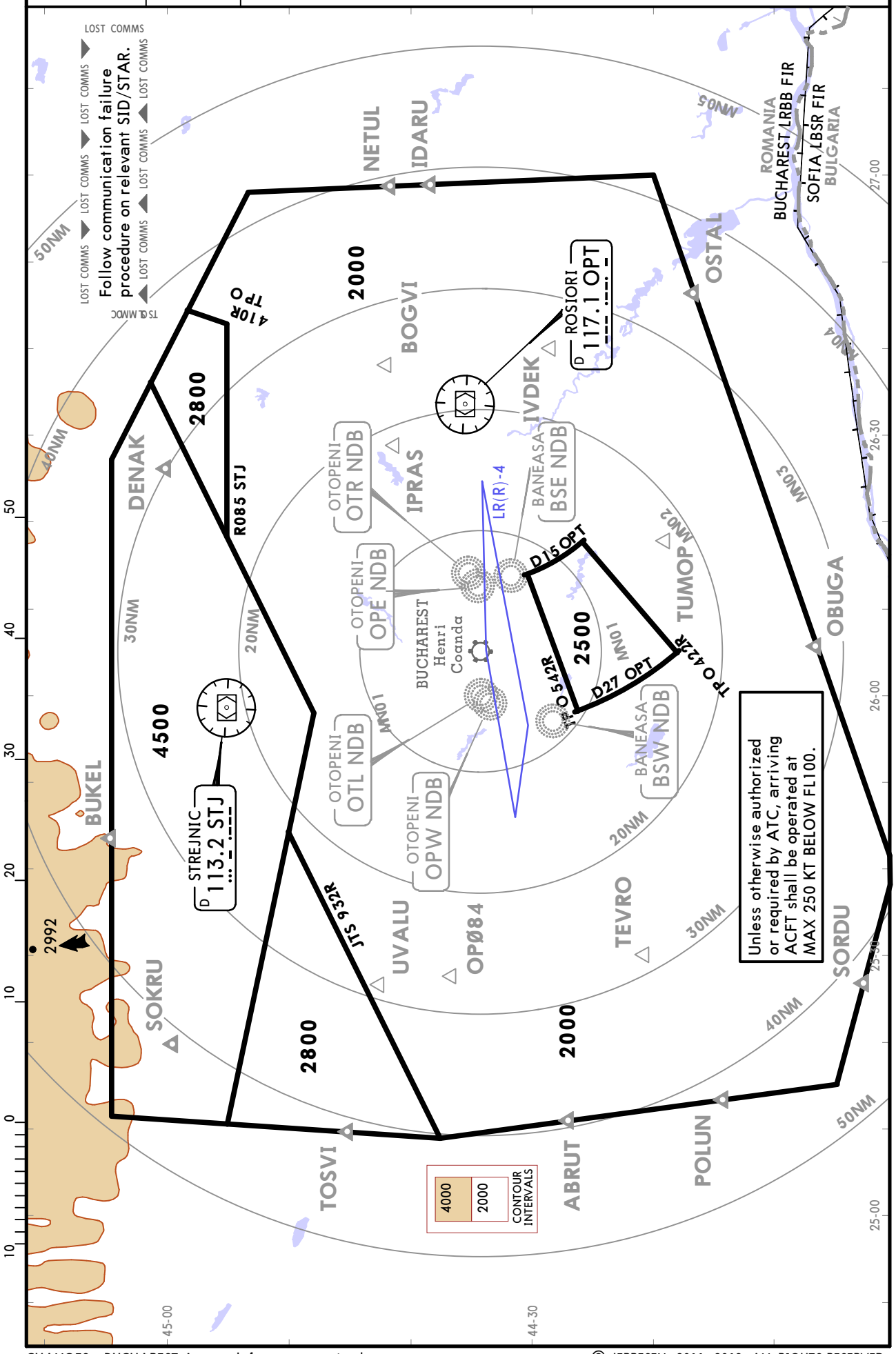
LROP/OTP
HENRI COANDA

JEPPESEN
8 FEB 19 20-1R

BUCHAREST, ROMANIA
RADAR MINIMUM ALTITUDES

BUCHAREST Approach (R)	Apt Elev
119.415 120.6	314

Alt Set: hPa (MM on request) Trans level: By ATC Trans alt: 4000
1. Chart only to be used for cross-checking of altitudes assigned while under radar control.
2. During LR(R)-4 activity, IFR flight is not affected.

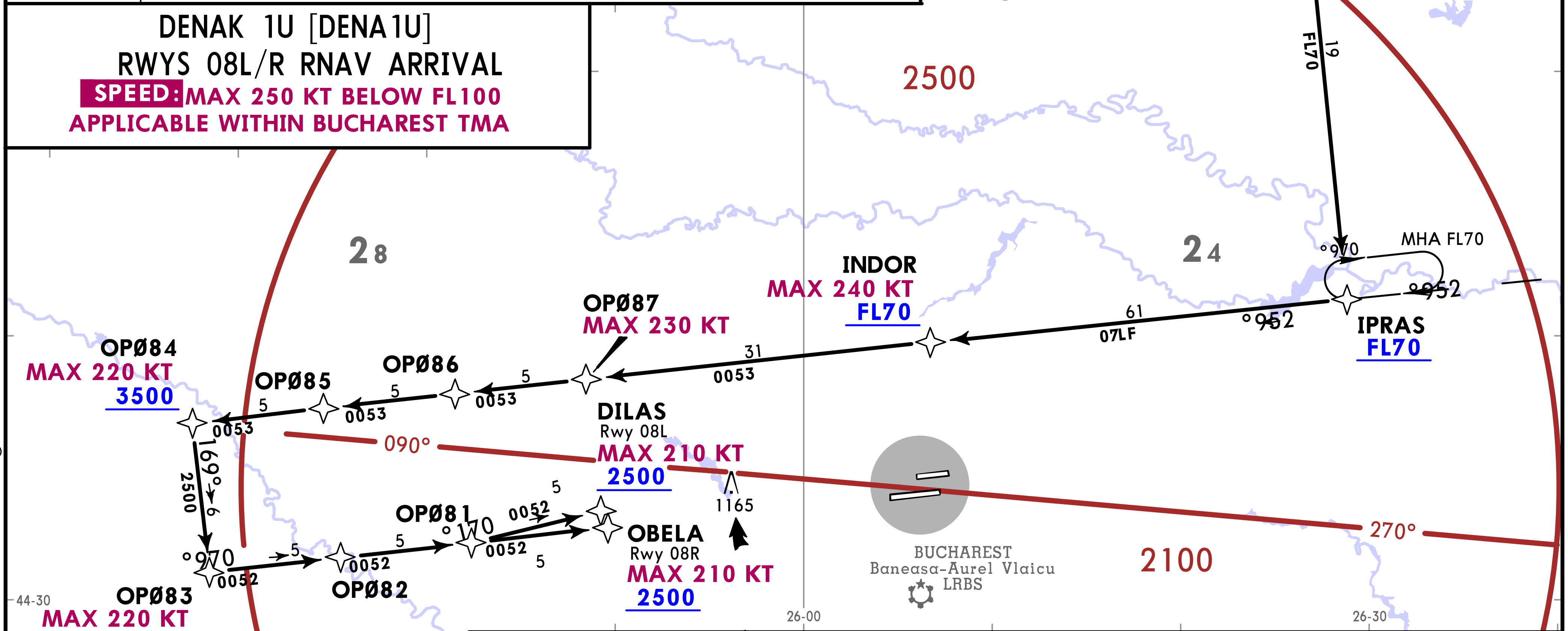


CHANGES: BUCHAREST Approach frequency revised.

ATIS 118.5	Alt Set: hPa (MM on request) Trans level: By ATC
Apt Elev 314	**1. P-RNAV (DME/DME).** **2. RNAV-1 (P-RNAV) approval required.** 3. Aircrews should plan for possible descent clearance in accordance with vertical restrictions specified on chart. Actual descent clearance will be as directed by ATC. 4. EXPECT direct routing/shortcuts by ATC whenever possible, including shortcuts on downwind to final approach. 5. 112.2 FLR, 117.1 OPT and 113.2 STJ must all be serviceable for DME/DME operation. 6. OBELA/DILAS is a tactical fix for non-standard shorter approach, used only after request or approval by aircrews.

DENAK 1U [DENA1U]
RWYS 08L/R RNAV ARRIVAL

SPEED: MAX 250 KT BELOW FL100 APPLICABLE WITHIN BUCHAREST TMA



LOST COMMS
Refer to chart 20-2S.

ROUTING

DENAK - IPRAS (FL70+) - INDOR (K240-; FL70+) - OP087 (K230-) - OP086 - OP085 - OP084 (K220-; 3500+) - OP083 (K220-) - OP082 - OP081 - DILAS (K210-; 2500+; 08L) / OBELA (K210-; 2500+; 08R).

CHANGES: New format.

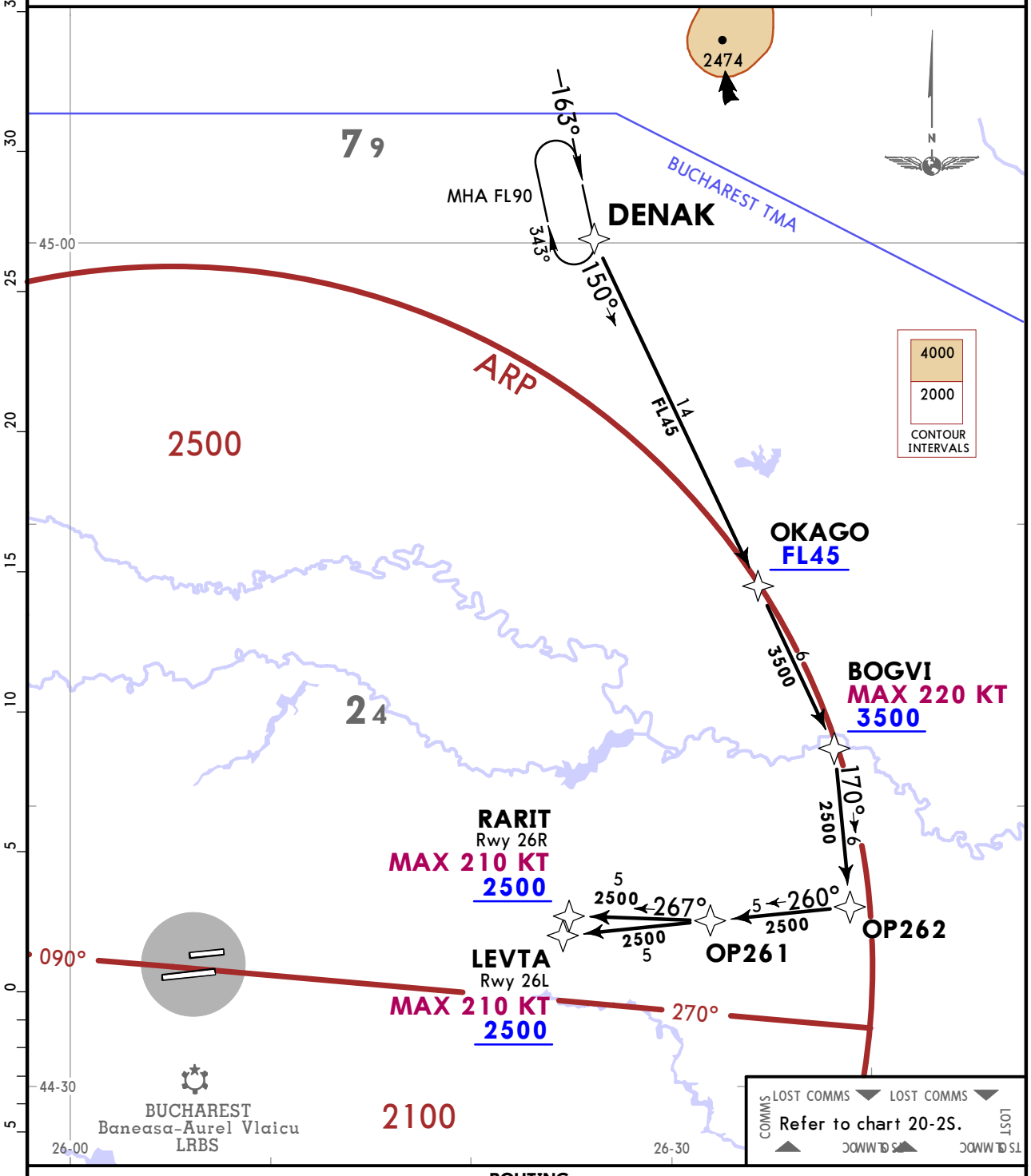
ATIS
118.5

Apt Elev
314

Alt Set: hPa (MM on request) Trans level: By ATC
1. P-RNAV (DME/DME).
2. RNAV-1 (P-RNAV) approval required.
3. Aircrews should plan for possible descent clearance in accordance with vertical restrictions specified on chart. Actual descent clearance will be as directed by ATC.
4. EXPECT direct routing/shortcuts by ATC whenever possible, including shortcuts on downwind to final approach.
5. 112.2 FLR, 117.1 OPT and 113.2 STJ must all be serviceable for DME/DMEoperation.
6. RARIT/LEVTA is a tactical fix for non-standard shorter approach, used only after request or approval by aircrews.

DENAK 2X [DENA2X]
RWYS 26L/R RNAV ARRIVAL

SPEED: MAX 250 KT BELOW FL100
APPLICABLE WITHIN BUCHAREST TMA



ROUTING

DENAK - OKAGO (FL45+) - BOGVI (K220-; 3500+) - OP262 - OP261 - LEVTA (K210-; 2500+; 26L)/ RARIT (K210-; 2500+; 26R).

CHANGES: New format.

IDARU 2U [IDAR2U], NETUL 2U [NETU2U]
OSTAL 1U [OSTA1U]
RWYS 08L/R RNAV ARRIVALS

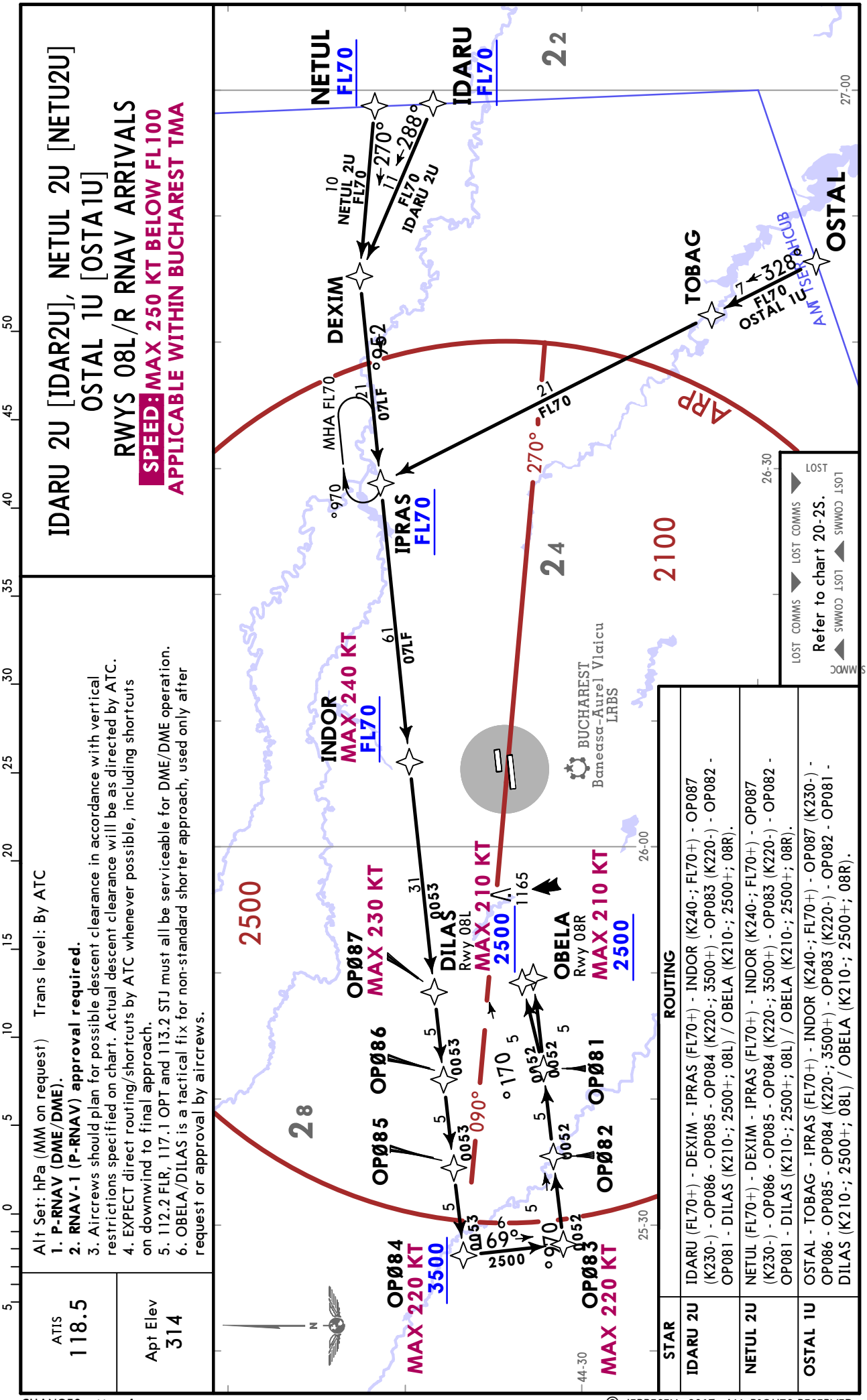
SPEED: MAX 250 KT BELOW FL100
APPLICABLE WITHIN BUCHAREST TMA

ATIS 118.5

Apt Elev 314

Alt Set: hPa (MM on request) Trans level: By ATC

1. **P-RNAV (DME/DME).**
2. **RNAV-1 (P-RNAV) approval required.**
3. Aircrews should plan for possible descent clearance in accordance with vertical restrictions specified on chart. Actual descent clearance will be as directed by ATC.
4. EXPECT direct routing/shortcuts by ATC whenever possible, including shortcuts on downwind to final approach.
5. 112.2 FLR, 117.1 OPT and 113.2 STJ must all be serviceable for DME/DME operation.
6. OBELA/DILAS is a tactical fix for non-standard shorter approach, used only after request or approval by aircrews.



STAR	ROUTING
IDARU 2U	IDARU (FL70+) - DEXIM - IPRAS (FL70+) - INDOR (K240-; FL70+) - OP087 (K230-) - OP086 - OP085 - OP084 (K220-; 3500+) - OP083 (K220-) - OP082 - OP081 - DILAS (K210-; 2500+; 08L) / OBELA (K210-; 2500+; 08R).
NETUL 2U	NETUL (FL70+) - DEXIM - IPRAS (FL70+) - INDOR (K240-; FL70+) - OP087 (K230-) - OP086 - OP085 - OP084 (K220-; 3500+) - OP083 (K220-) - OP082 - OP081 - DILAS (K210-; 2500+; 08L) / OBELA (K210-; 2500+; 08R).
OSTAL 1U	OSTAL - TOBAG - IPRAS (FL70+) - INDOR (K240-; FL70+) - OP087 (K230-) - OP086 - OP085 - OP084 (K220-; 3500+) - OP083 (K220-) - OP082 - OP081 - DILAS (K210-; 2500+; 08L) / OBELA (K210-; 2500+; 08R).

CHANGES: New format.

IDARU 1X [IDAR1X], NETUL 1X [NETU1X]
OSTAL 1X [OSTA1X]
RWYS 26L/R RNAV ARRIVALS

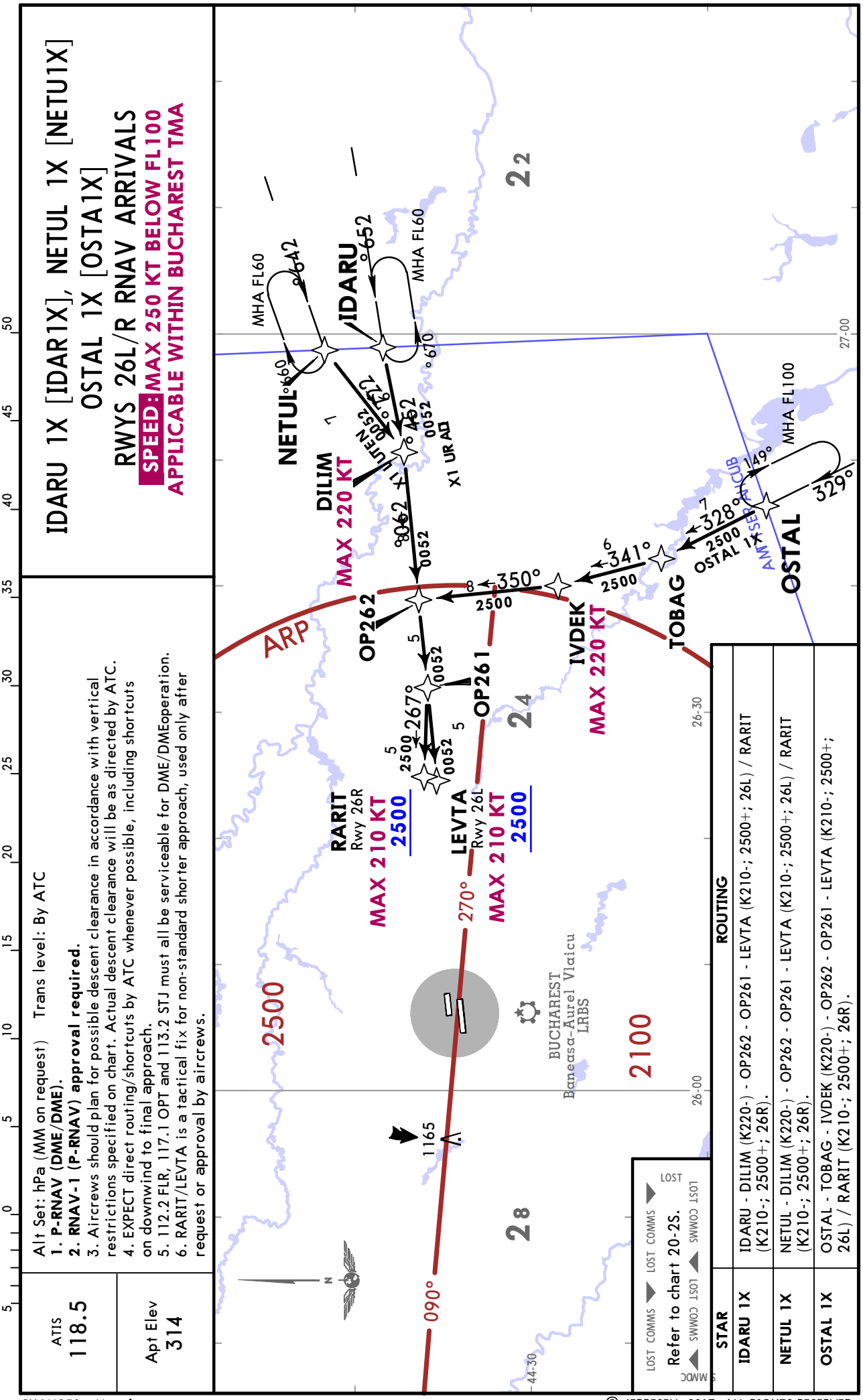
SPEED: MAX 250 KT BELOW FL100
APPLICABLE WITHIN BUCHAREST TMA

ATIS 118.5

Apt Elev 314

Alt Set: hPa (MM on request) Trans level: By ATC

1. **P-RNAV (DME/DME).**
2. **RNAV-1 (P-RNAV) approval required.**
3. Aircrews should plan for possible descent clearance in accordance with vertical restrictions specified on chart. Actual descent clearance will be as directed by ATC.
4. EXPECT direct routing/shortcuts by ATC whenever possible, including shortcuts on downwind to final approach.
5. 112.2 FLR, 117.1 OPT and 113.2 STJ must all be serviceable for DME/DMEoperation.
6. RARIT/LEVTA is a tactical fix for non-standard shorter approach, used only after request or approval by aircrews.



STAR	ROUTING
IDARU 1X	IDARU - DILIM (K220-) - OP262 - OP261 - LEVTA (K210-; 2500+; 26L) / RARIT (K210-; 2500+; 26R).
NETUL 1X	NETUL - DILIM (K220-) - OP262 - OP261 - LEVTA (K210-; 2500+; 26L) / RARIT (K210-; 2500+; 26R).
OSTAL 1X	OSTAL - TOBAG - IVDEK (K220-) - OP262 - OP261 - LEVTA (K210-; 2500+; 26L) / RARIT (K210-; 2500+; 26R).

CHANGES: New format.

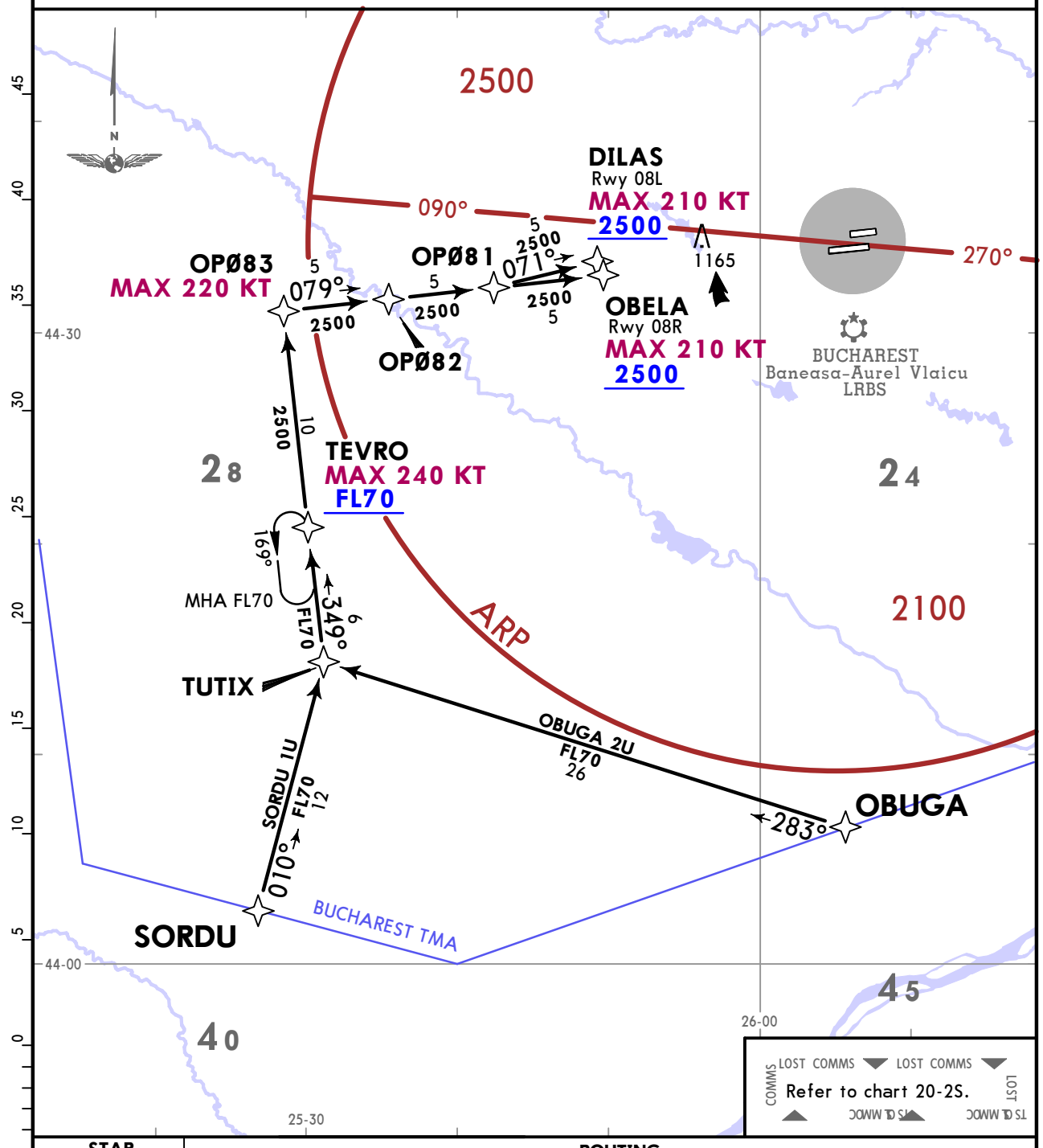
ATIS
118.5

Apt Elev
314

Alt Set: hPa (MM on request) Trans level: By ATC
1. P-RNAV (DME/DME).
2. RNAV-1 (P-RNAV) approval required.
3. Aircrews should plan for possible descent clearance in accordance with vertical restrictions specified on chart. Actual descent clearance will be as directed by ATC.
4. EXPECT direct routing/shortcuts by ATC whenever possible, including shortcuts on downwind to final approach.
5. 112.2 FLR, 117.1 OPT and 113.2 STJ must all be serviceable for DME/DME operation.
6. OBELA/DILAS is a tactical fix for non-standard shorter approach, used only after request or approval by aircrews.

OBUGA 2U [OBUG2U], SORDU 1U [SORD1U]
RWYS 08L/R RNAV ARRIVALS

SPEED: MAX 250 KT BELOW FL100
APPLICABLE WITHIN BUCHAREST TMA



STAR	ROUTING
OBUGA 2U	OBUGA - TUTIX - TEVRO (K240-; FL70+) - OP083 (K220-) - OP082 - OP081 - DILAS (K210-; 2500+; 08L) / OBELA (K210-; 2500+; 08R).
SORDU 1U	SORDU - TUTIX - TEVRO (K240-; FL70+) - OP083 (K220-) - OP082 - OP081 - DILAS (K210-; 2500+; 08L) / OBELA (K210-; 2500+; 08R).

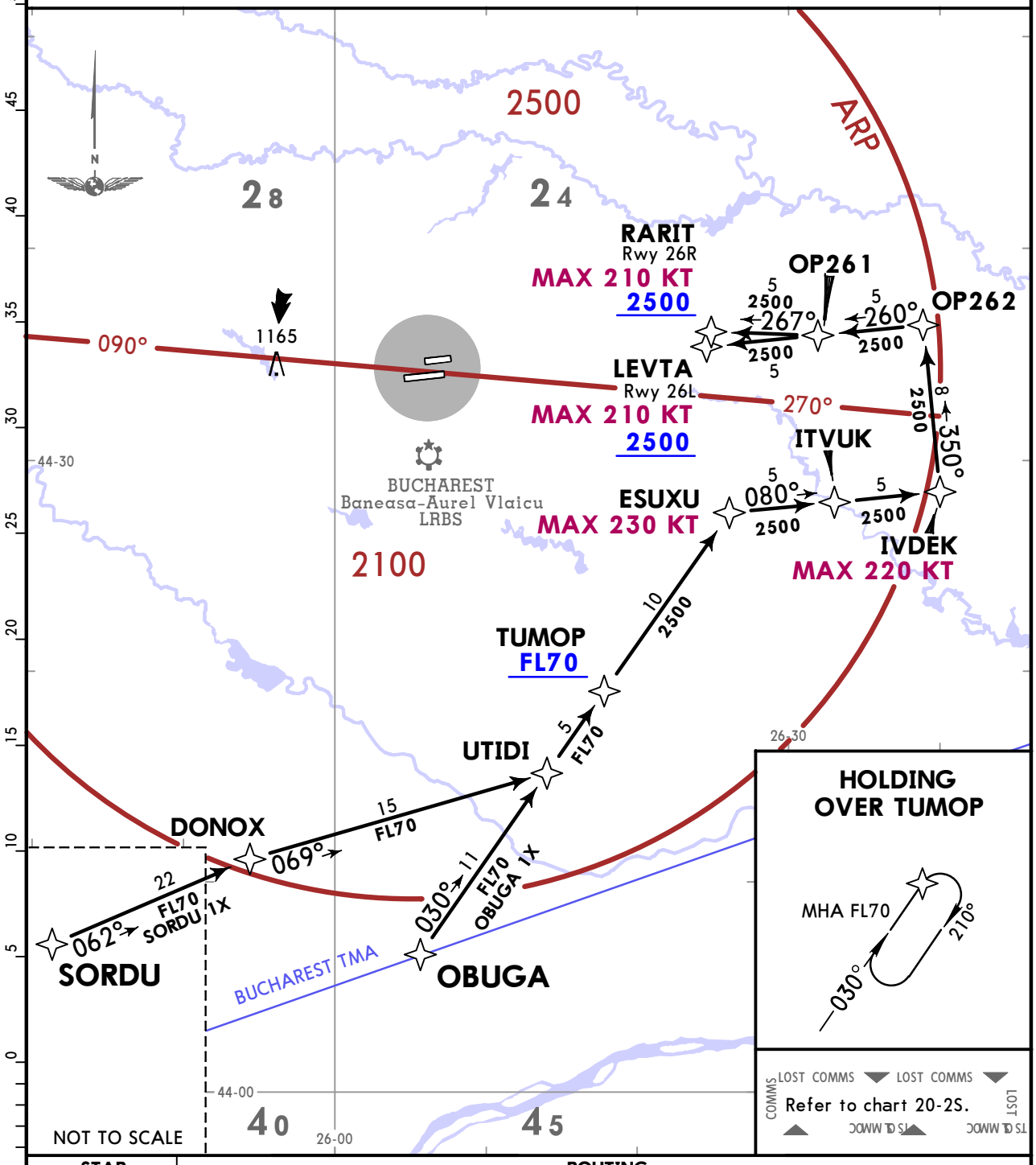
CHANGES: New format.

ATIS
118.5

Apt Elev
314

Alt Set: hPa (MM on request) Trans level: By ATC
1. **P-RNAV (DME/DME).**
2. **RNAV-1 (P-RNAV) approval required.**
3. Aircrews should plan for possible descent clearance in accordance with vertical restrictions specified on chart. Actual descent clearance will be as directed by ATC.
4. EXPECT direct routing/shortcuts by ATC whenever possible, including shortcuts on downwind to final approach.
5. 112.2 FLR, 117.1 OPT and 113.2 STJ must all be serviceable for DME/DME operation.
6. RARIT/LEVTA is a tactical fix for non-standard shorter approach, used only after request or approval by aircrews.

OBUGA 1X [OBUG1X], SORDU 1X [SORD1X]
RWYS 26L/R RNAV ARRIVALS
SPEED: MAX 250 KT BELOW FL100
APPLICABLE WITHIN BUCHAREST TMA



STAR	ROUTING
OBUGA 1X	OBUGA - UTIDI - TUMOP (FL70+) - ESUXU (K230-) - ITVUK - IVDEK (K220-) - OP262 - OP261 - LEVTA (K210-; 2500+; 26L) / RARIT (K210-; 2500+; 26R).
SORDU 1X	SORDU - DONOX - UTIDI - TUMOP (FL70+) - ESUXU (K230-) - ITVUK - IVDEK (K220-) - OP262 - OP261 - LEVTA (K210-; 2500+; 26L) / RARIT (K210-; 2500+; 26R).

CHANGES: New format.

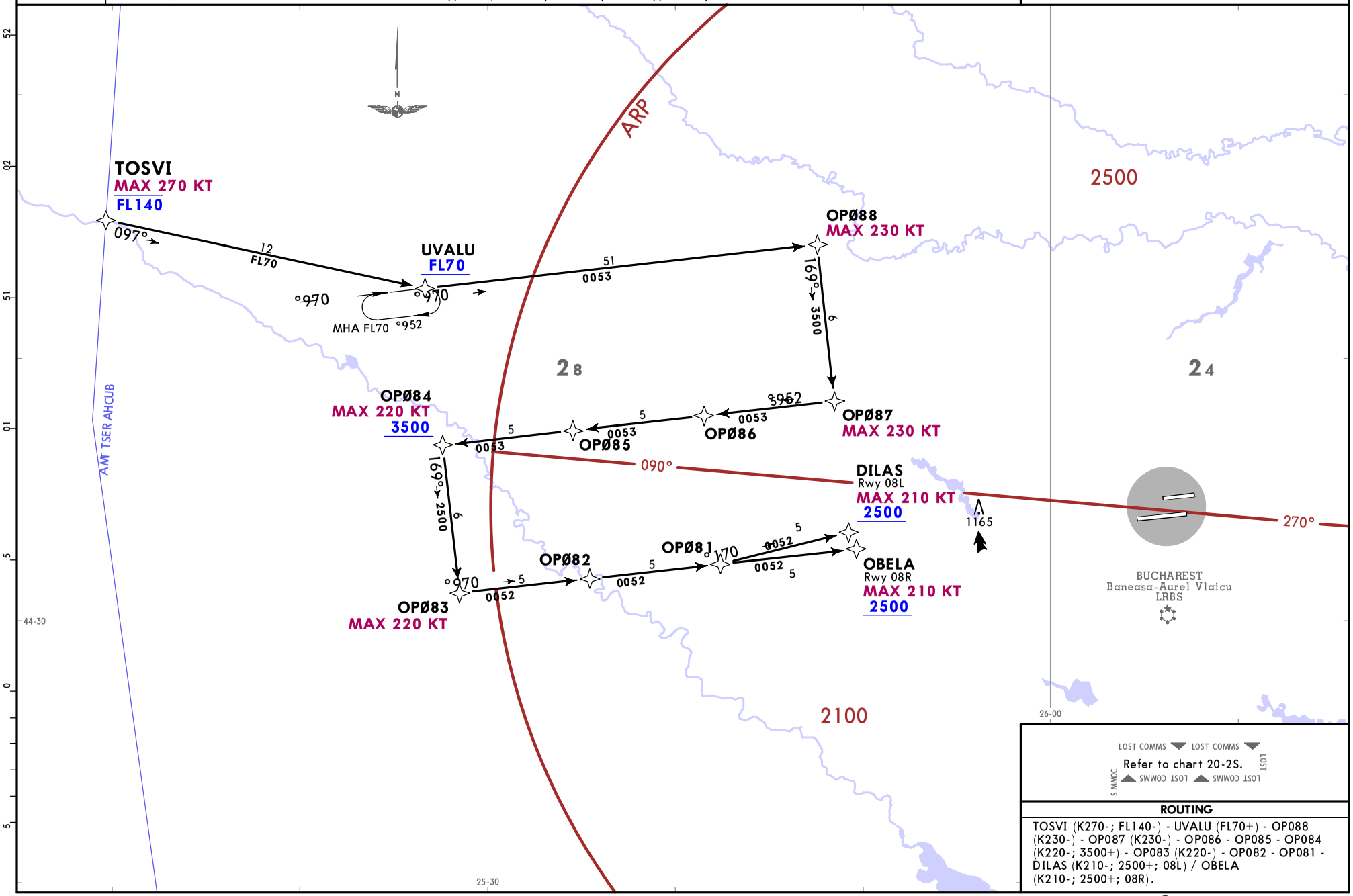
ATIS
118.5

Apt Elev
314

Alt Set: hPa (MM on request) Trans level: By ATC
1. **P-RNAV (DME/DME).**
2. **RNAV-1 (P-RNAV) approval required.**
3. Aircrews should plan for possible descent clearance in accordance with vertical restrictions specified on chart. Actual descent clearance will be as directed by ATC.
4. EXPECT direct routing/shortcuts by ATC whenever possible, including shortcuts on downwind to final approach.
5. 112.2 FLR, 117.1 OPT and 113.2 STJ must all be serviceable for DME/DME operation.
6. OBELA/DILAS is a tactical fix for non-standard shorter approach, used only after request or approval by aircrews.

TOSVI 2U [TOSV2U]
RWYS 08L/R RNAV ARRIVALS

SPEED: MAX 250 KT BELOW FL100
APPLICABLE WITHIN BUCHAREST TMA



LOST COMMS LOST COMMS
Refer to chart 20-2S.
S MMOC LOST COMMS LOST COMMS LOST

ROUTING

TOSVI (K270-; FL140-) - UVALU (FL70+) - OP088 (K230-) - OP087 (K230-) - OP086 - OP085 - OP084 (K220-; 3500+) - OP083 (K220-) - OP082 - OP081 - DILAS (K210-; 2500+; 08L) / OBELA (K210-; 2500+; 08R).

CHANGES: New format.

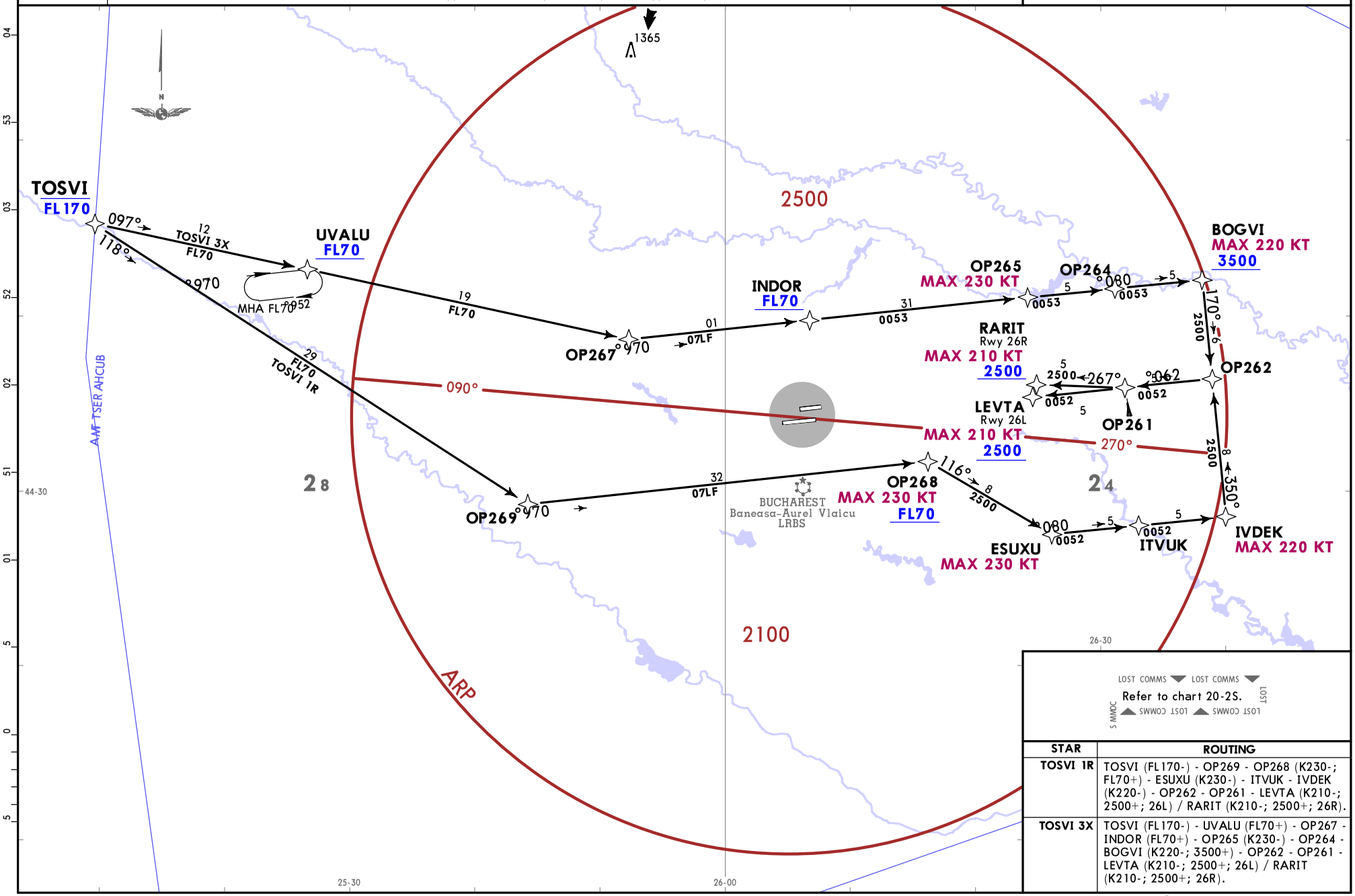
TOSVI 1R [TOSV1R]
TOSVI 3X [TOSV3X]
RWYS 26L/R RNAV ARRIVALS

SPEED: MAX 250 KT BELOW FL100
APPLICABLE WITHIN BUCHAREST TMA

ATIS
118.5

Apt Elev
314

Alt Set: hPa (MM on request) Trans level: By ATC
1. P-RNAV (DME/DME).
2. RNAV-1 (P-RNAV) approval required.
1. Aircrews should plan for possible descent clearance in accordance with vertical restrictions specified on chart. Actual descent clearance will be as directed by ATC.
2. EXPECT direct routing/shortcuts by ATC whenever possible, including shortcuts on downwind to final approach.
3. 112.2 FLR, 117.1 OPT and 113.2 STJ must all be serviceable for DME/DME operation.
4. RARIT/LEVTA is a tactical fix for non-standard shorter approach, used only after request or approval by aircrews.



LOST COMMS ▼ LOST COMMS ▼
Refer to chart 20-2S.
▲ LOST COMMS ▲ LOST COMMS

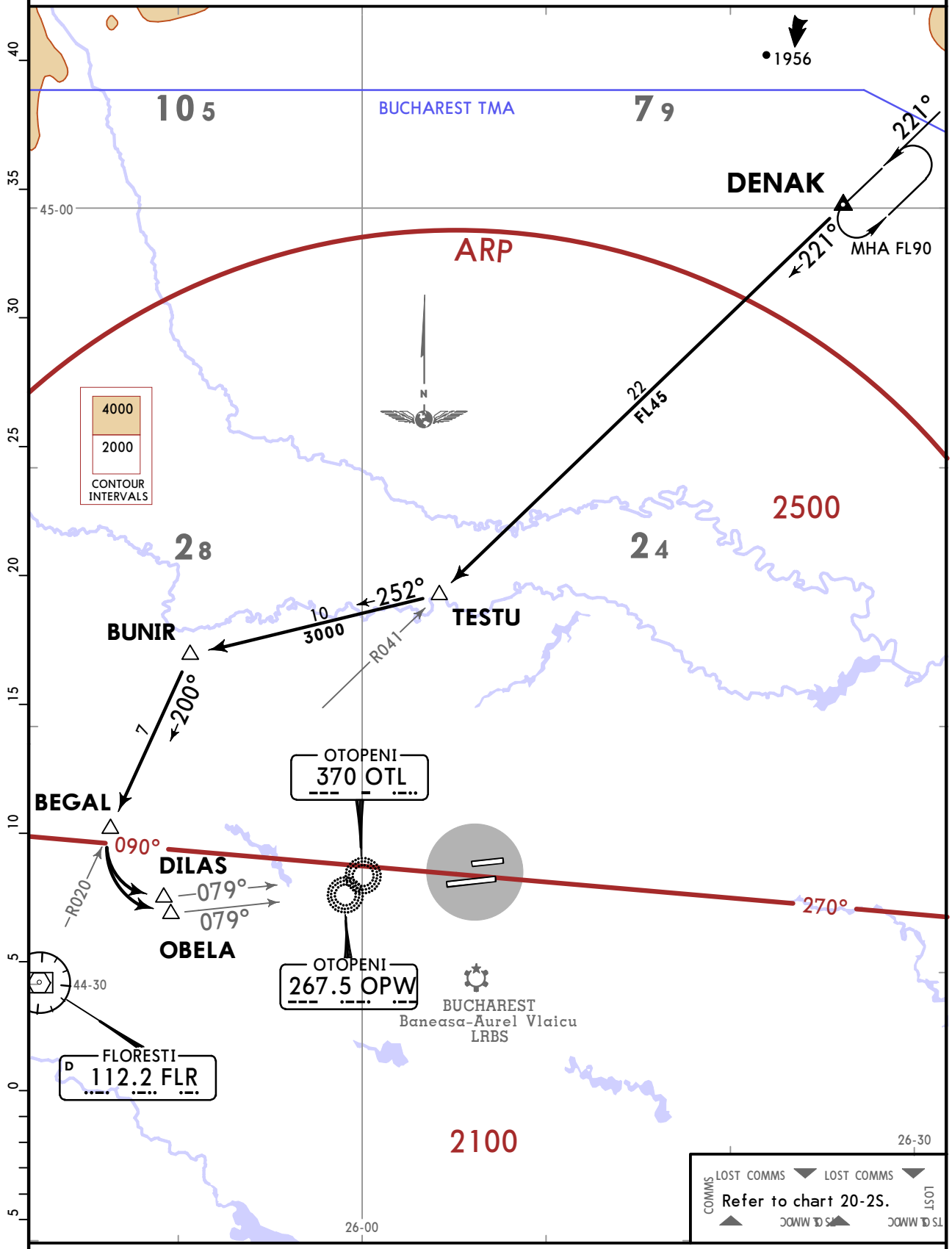
STAR	ROUTING
TOSVI 1R	TOSVI (FL170-) - OP269 - OP268 (K230-; FL70+) - ESUXU (K230-) - ITVUK - IVDEK (K220-) - OP262 - OP261 - LEVTA (K210-; 2500+; 26L) / RARIT (K210-; 2500+; 26R).
TOSVI 3X	TOSVI (FL170-) - UVALU (FL70+) - OP267 - INDOR (FL70+) - OP265 (K230-) - OP264 - BOGVI (K220-; 3500+) - OP262 - OP261 - LEVTA (K210-; 2500+; 26L) / RARIT (K210-; 2500+; 26R).

CHANGES: New format.

ATIS	Apt Elev	Alt Set: hPa (MM on request) Trans level: By ATC
118.5	314	

DENAK 3E [DENA3E]
RWYS 08L/R ARRIVAL

SPEED: MAX 250 KT BELOW FL100
APPLICABLE WITHIN BUCHAREST TMA



ROUTING

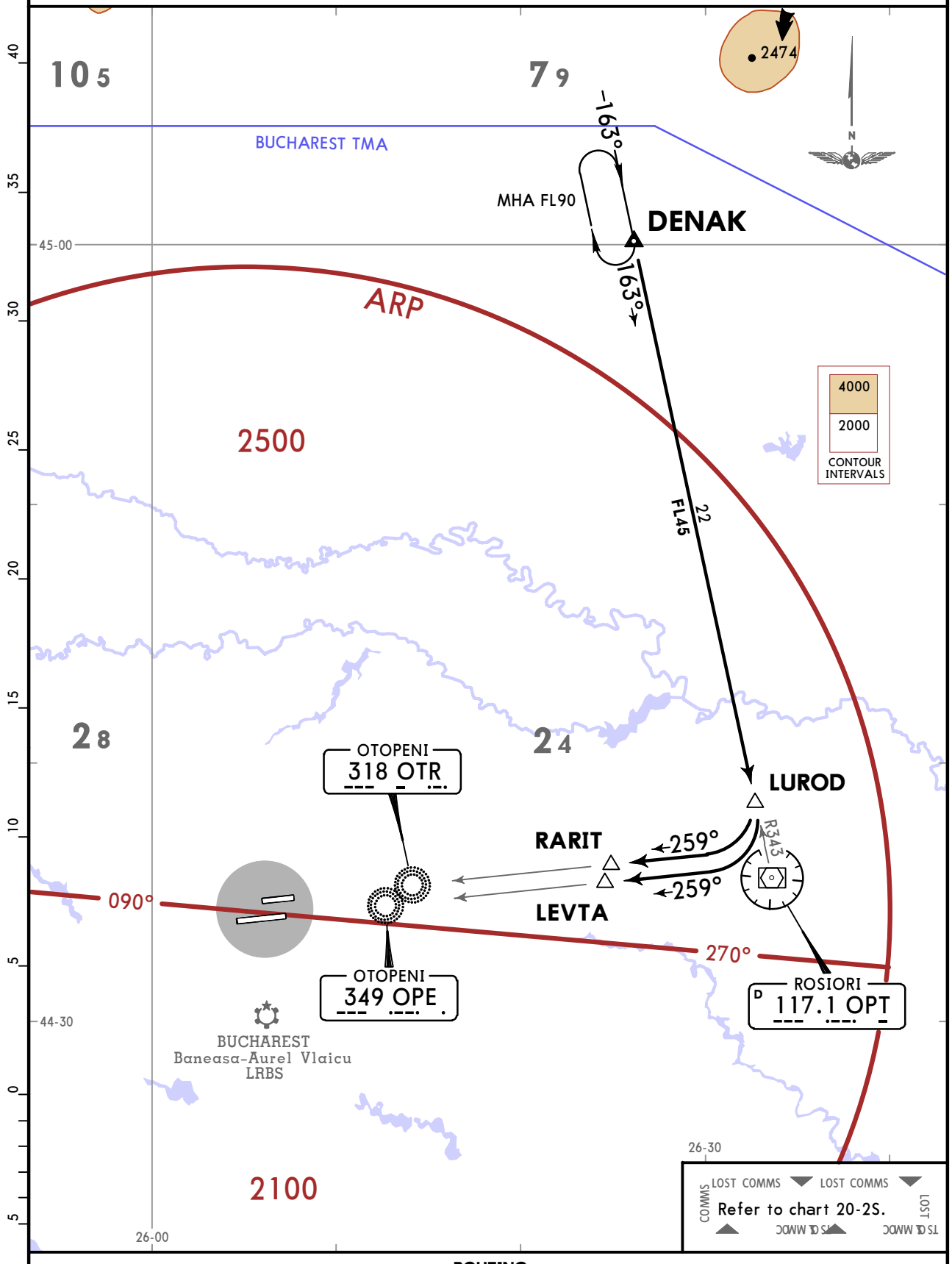
Intercept FLR R041 inbound to TESTU, 252° track to BUNIR, intercept FLR R020 inbound to BEGAL, turn LEFT to DILAS (Rwy 08L) or OBELA (Rwy 08R).

CHANGES: New format.

ATIS	Apt Elev	Alt Set: hPa (MM on request) Trans level: By ATC
118.5	314	

DENAK 3F [DENA3F]
RWYS 26L/R ARRIVAL

SPEED: MAX 250 KT BELOW FL100
APPLICABLE WITHIN BUCHAREST TMA



ROUTING

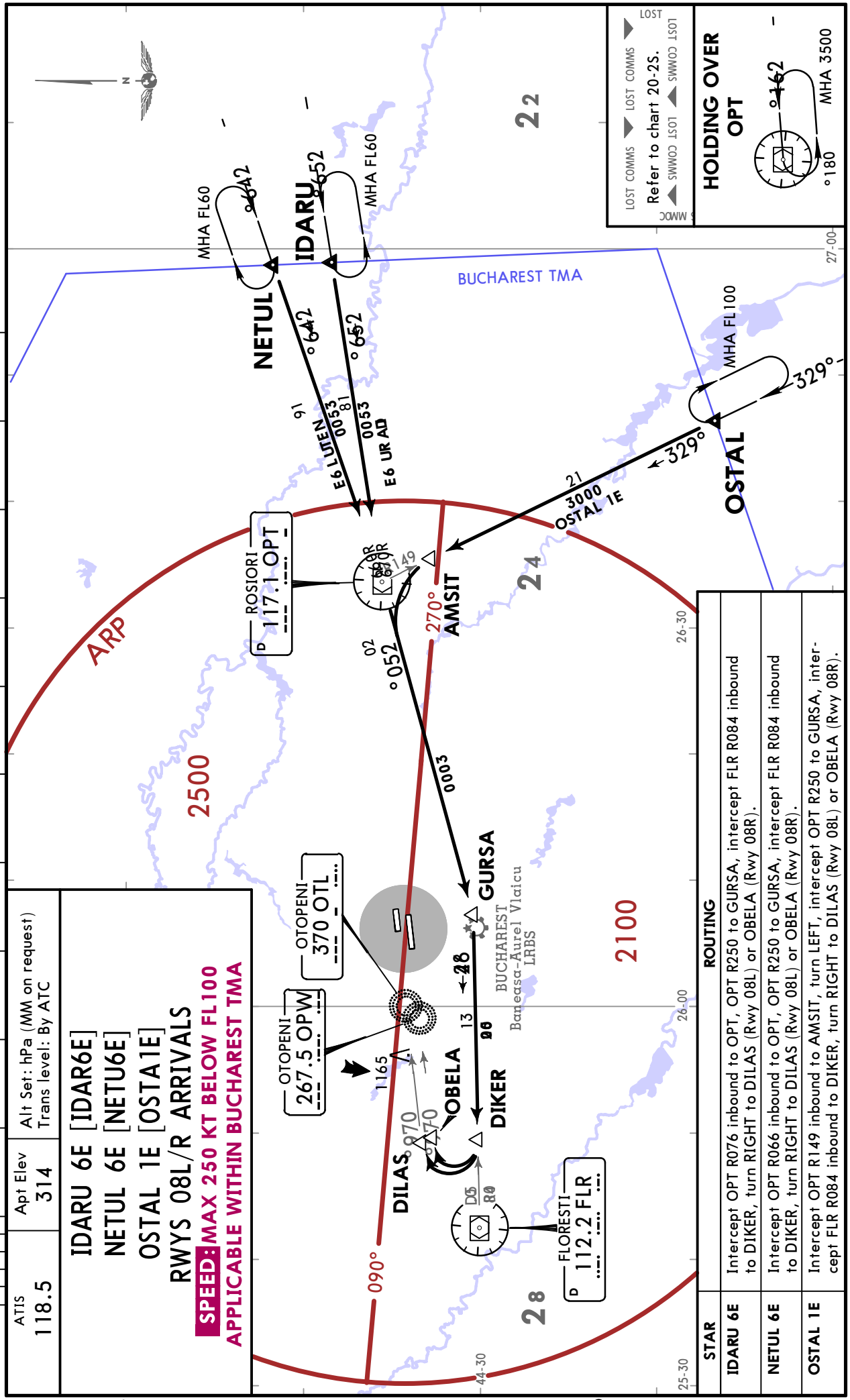
Intercept OPT R343 inbound to LUROD, turn RIGHT, intercept 259° bearing towards OPE to LEVTA (Rwy 26L) or towards OTR to RARIT (Rwy 26R).

CHANGES: New format.

LROP/OTP
HENRI COANDA

JEPPESEN
31 MAR 17 (20-2K)

BUCHAREST, ROMANIA
STAR



ATIS 118.5

Apt Elev 314

Alt Set: hPa (MM on request)
Trans level: By ATC

IDARU 6E [IDAR6E]
NETUL 6E [NETU6E]
OSTAL 1E [OSTA1E]
RWYS 08L/R ARRIVALS

SPEED: MAX 250 KT BELOW FL100
APPLICABLE WITHIN BUCHAREST TMA

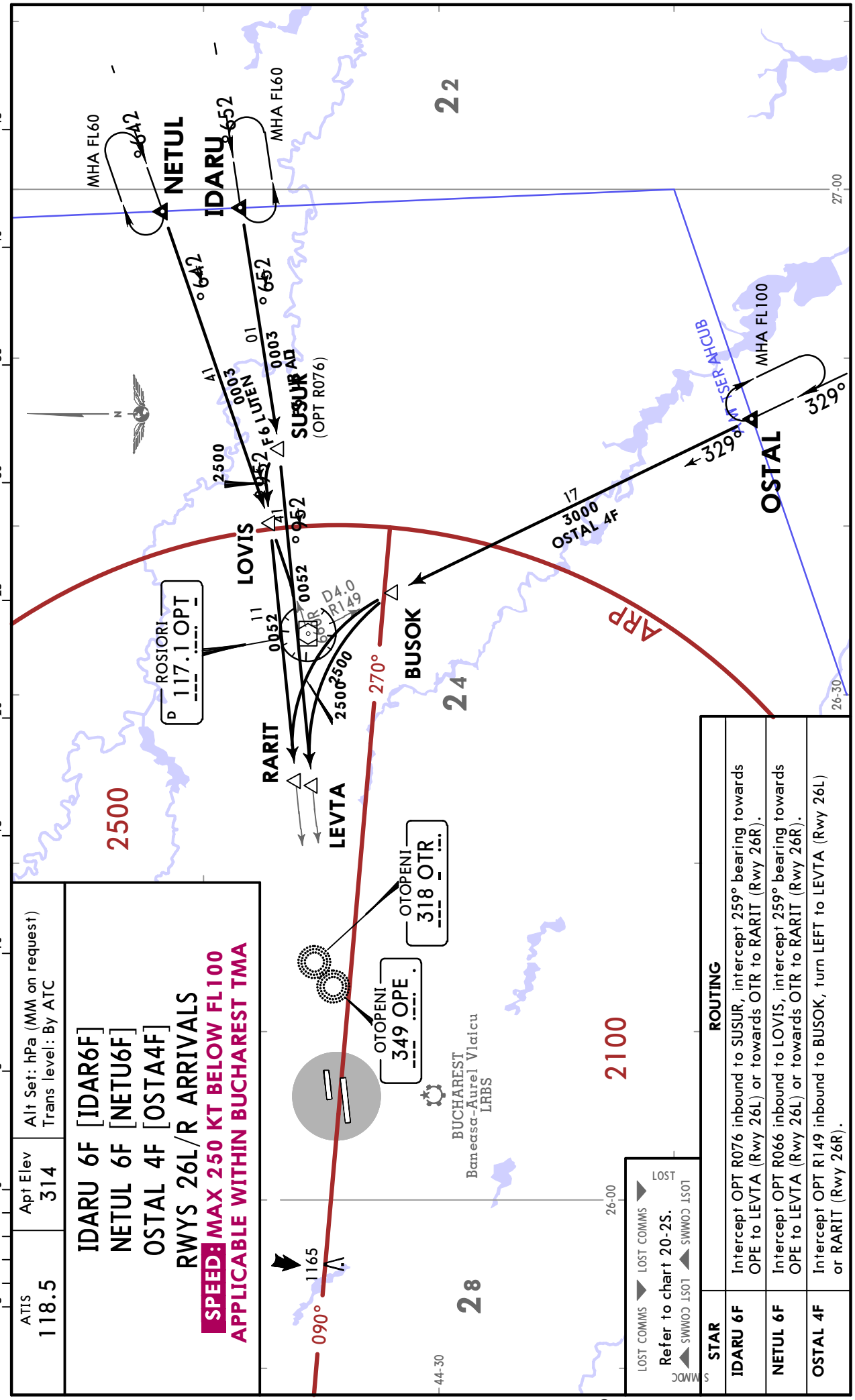
STAR	ROUTING
IDARU 6E	Intercept OPT R076 inbound to OPT, OPT R250 to GURSA, intercept FLR R084 inbound to DIKER, turn RIGHT to DILAS (Rwy 08L) or OBELA (Rwy 08R).
NETUL 6E	Intercept OPT R066 inbound to OPT, OPT R250 to GURSA, intercept FLR R084 inbound to DIKER, turn RIGHT to DILAS (Rwy 08L) or OBELA (Rwy 08R).
OSTAL 1E	Intercept OPT R149 inbound to AMSIT, turn LEFT, intercept OPT R250 to GURSA, intercept FLR R084 inbound to DIKER, turn RIGHT to DILAS (Rwy 08L) or OBELA (Rwy 08R).

CHANGES: Nerw format.

LROP/OTP
HENRI COANDA

JEPPESEN
31 MAR 17
20-2L

BUCHAREST, ROMANIA
STAR



ATIS 118.5

Apt Elev 314

Alt Set: hPa (MM on request)
Trans level: By ATC

IDARU 6F [IDAR6F]
NETUL 6F [NETU6F]
OSTAL 4F [OSTA4F]
RWYS 26L/R ARRIVALS

SPEED: MAX 250 KT BELOW FL100 APPLICABLE WITHIN BUCHAREST TMA

LOST COMMS ▼ LOST COMMS ▼ LOST COMMS
Refer to chart 20-2S.
LOST COMMS ▲ LOST COMMS ▲ LOST COMMS

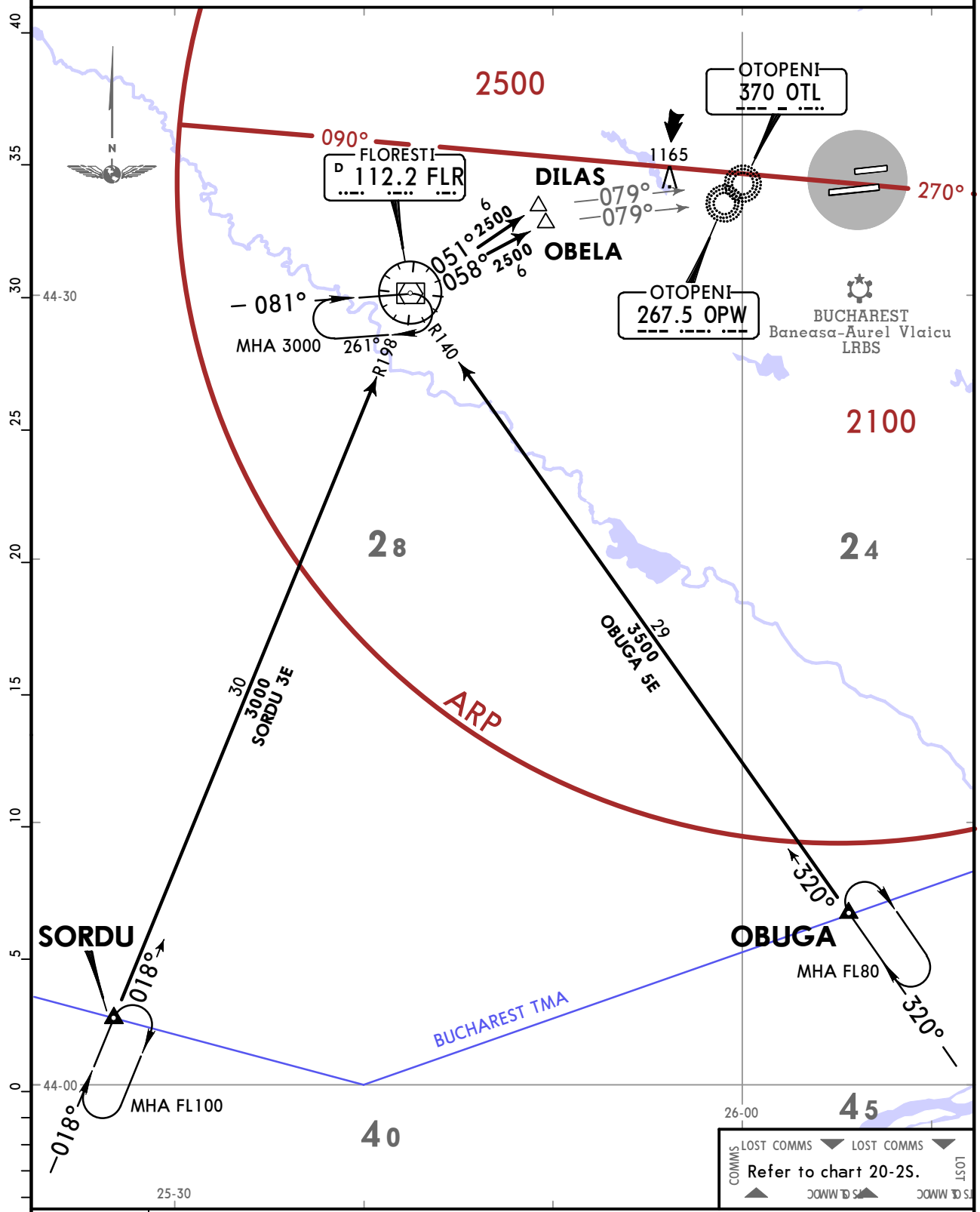
STAR	ROUTING
IDARU 6F	Intercept OPT R076 inbound to SUSUR, intercept 259° bearing towards OPE to LEVTA (Rwy 26L) or towards OTR to RARIT (Rwy 26R).
NETUL 6F	Intercept OPT R066 inbound to LOVIS, intercept 259° bearing towards OPE to LEVTA (Rwy 26L) or towards OTR to RARIT (Rwy 26R).
OSTAL 4F	Intercept OPT R149 inbound to BUSOK, turn LEFT to LEVTA (Rwy 26L) or RARIT (Rwy 26R).

CHANGES: New format.

ATIS	Apt Elev	
118.5	314	Alt Set: hPa (MM on request) Trans level: By ATC

OBUGA 5E [OBUG5E]
SORDU 3E [SORD3E]
RWYS 08L/R ARRIVALS

SPEED: MAX 250 KT BELOW FL100
APPLICABLE WITHIN BUCHAREST TMA



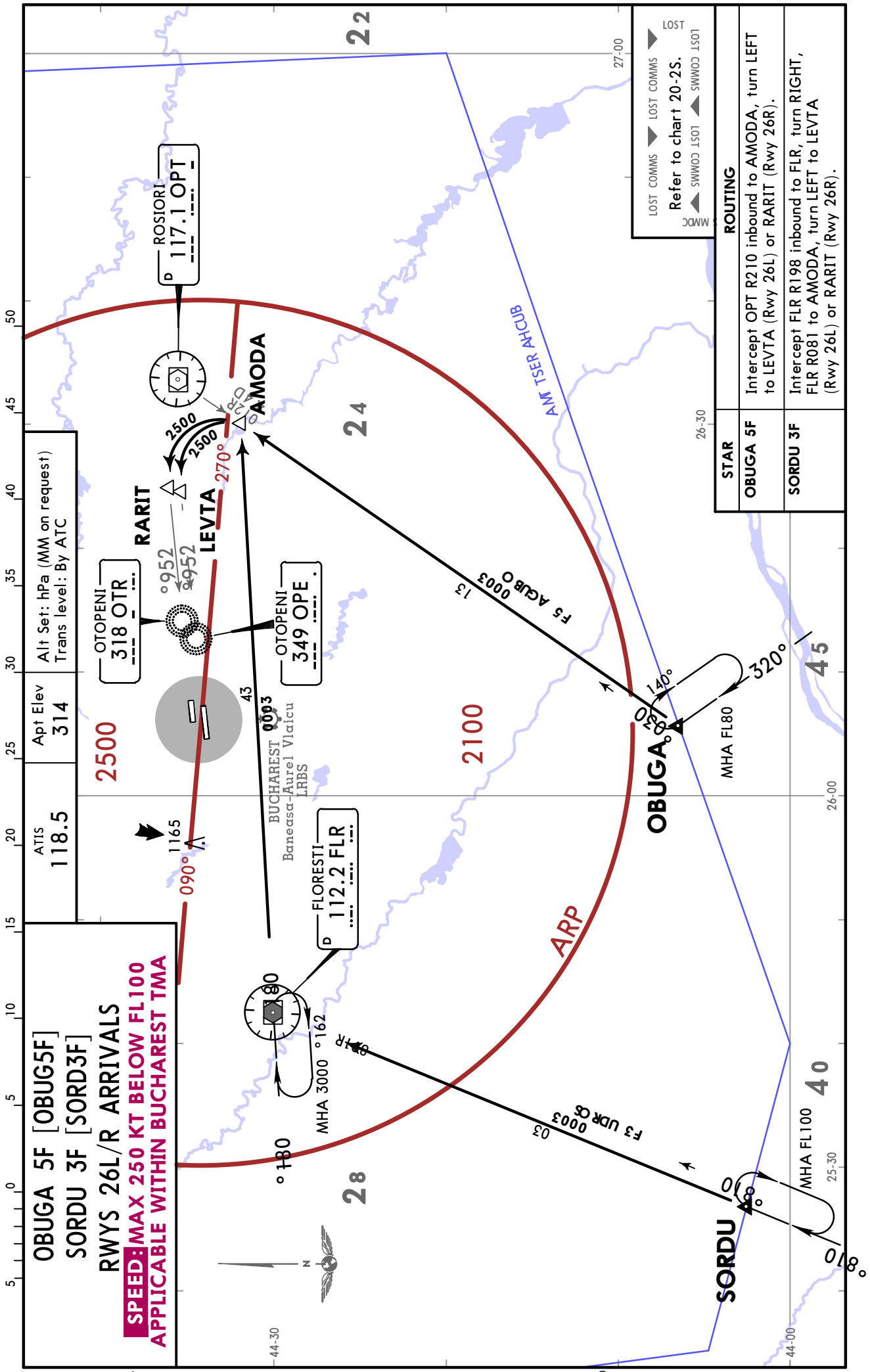
STAR	ROUTING
OBUGA 5E	Intercept FLR R140 inbound to FLR, FLR R051 to DILAS (Rwy 08L) or FLR R058 to OBELA (Rwy 08R).
SORDU 3E	Intercept FLR R198 inbound to FLR, FLR R051 to DILAS (Rwy 08L) or FLR R058 to OBELA (Rwy 08R).

CHANGES: New format.

LROP/OTP
HENRI COANDA

JEPPESEN
31 MAR 17
20-2N

BUCHAREST, ROMANIA
STAR



CHANGES: New format.

LROP/OTP
HENRI COANDA

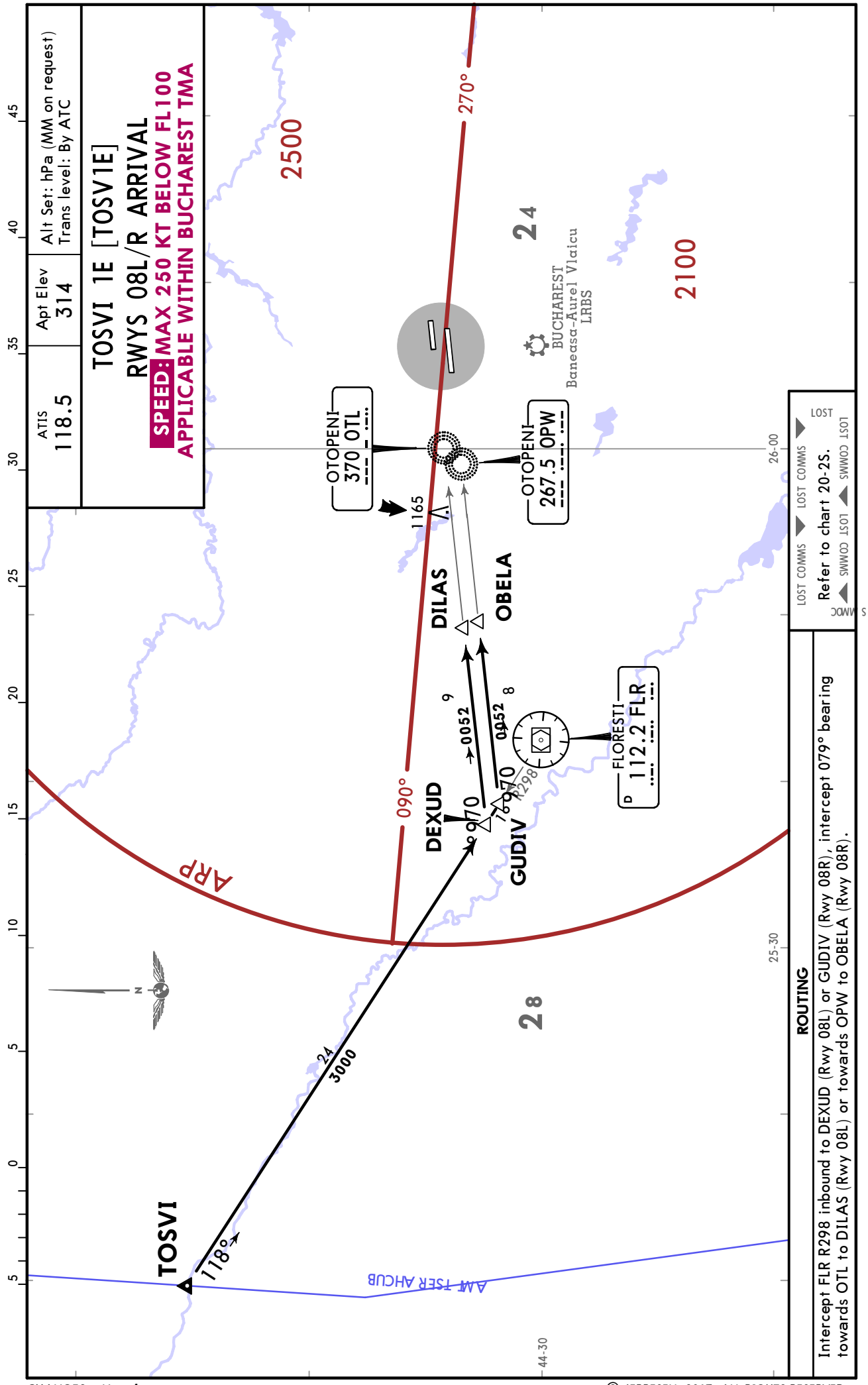
JEPPESEN
31 MAR 17 (20-2P)

BUCHAREST, ROMANIA
STAR

ATIS 118.5 | Apt Elev 314 | Alt Set: hPa (MM on request) Trans level: By ATC

TOSVI 1E [TOSV1E]
RWYS 08L/R ARRIVAL

SPEED: MAX 250 KT BELOW FL100 APPLICABLE WITHIN BUCHAREST TMA



CHANGES: New format.

LROP/OTP
HENRI COANDA

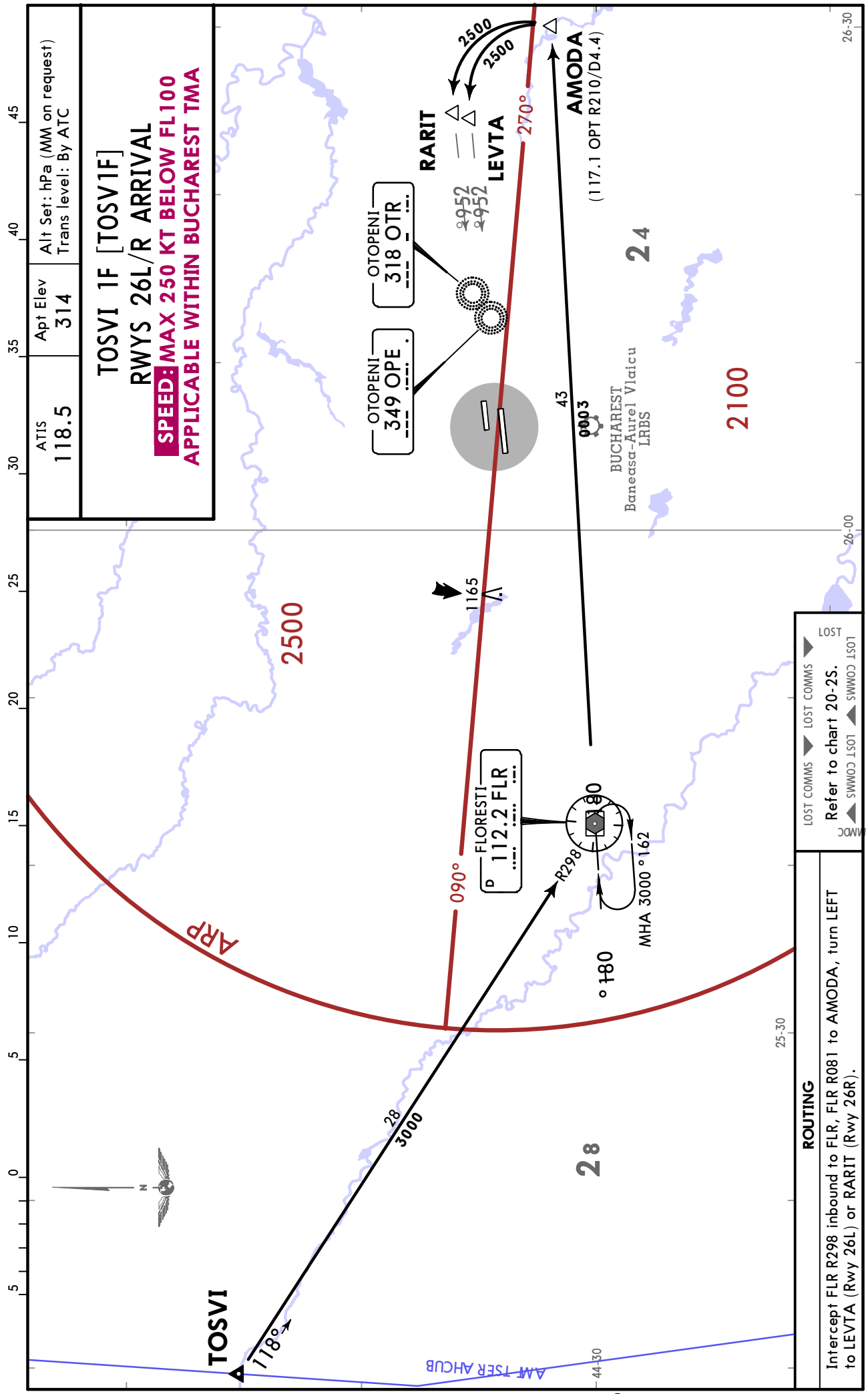
JEPPESEN
31 MAR 17 (20-2Q)

BUCHAREST, ROMANIA
STAR

ATIS 118.5 | Apt Elev 314 | Alt Set: hPa (MM on request) Trans level: By ATC

TOSVI 1F [TOSV1F]
RWYS 26L/R ARRIVAL

SPEED: MAX 250 KT BELOW FL100
APPLICABLE WITHIN BUCHAREST TMA



CHANGES: New format.

COMMUNICATION FAILURE PROCEDURES

1. FLIGHTS ABLE TO PERFORM RNAV ARRIVAL

- if RWY was assigned or received by ATC or ATIS, set transponder 7600, proceed according FPL and assigned or designated STAR. Descending shall be executed in accordance with vertical restrictions specified on chart after 2 min from setting 7600.

- if RWY was assigned or received by ATC or ATIS and vectoring was initiated, set transponder 7600 and continue on assigned heading and last cleared and acknowledged altitude for 2 min from setting 7600. Then proceed direct to OBELA(RWY 08R)/DILAS(RWY08L) or RARIT(RWY 26R)/LEVTA(RWY 26L).
Descending shall be executed in accordance with minimum altitude of BUCHAREST TMA or vertical restrictions specified on 20-1R, whichever is greater, but not less than 2500'.

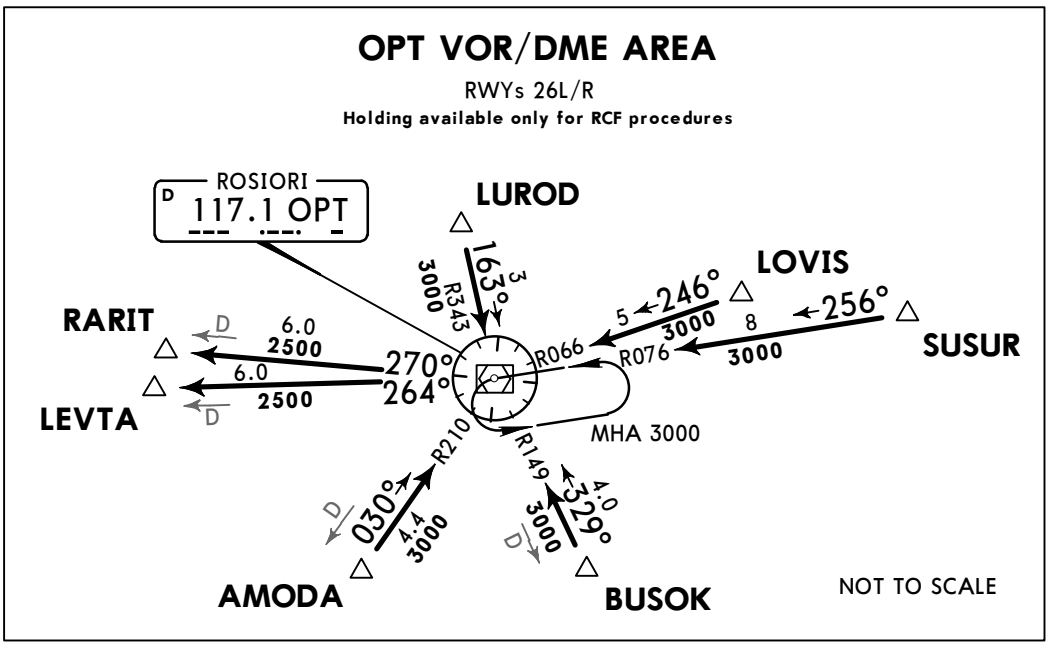
- if STAR was not assigned and RWY not assigned or received by ATC or ATIS, set transponder 7600, proceed according to FPL and FPL STAR. Descending shall be executed in accordance with vertical restrictions specified on chart after 2 min from setting 7600.

2. FLIGHTS UNABLE TO PERFORM RNAV ARRIVAL

- if RWY was assigned or received by ATC or ATIS, set transponder 7600, proceed according FPL and assigned or designated STAR. Descending shall be executed in accordance with vertical restrictions specified on chart after 2 min from setting 7600.

- if RWY was assigned or received by ATC or ATIS and vectoring was initiated, set transponder 7600 and continue on assigned heading and last cleared and acknowledged altitude for 2 min from setting 7600. Then proceed direct to FLR VOR/DME, then to OBELA (RWY 08R)/DILAS (RWY08L) or direct to OPT VOR/DME, then OPT R-264 to LEVTA (RWY 26L)/OPT R-270 to RARIT (RWY 26R).
Descending shall be executed in accordance with minimum altitude of BUCHAREST TMA or vertical restrictions specified on 20-1R, whichever is greater, but not less than 2500'.

- if STAR was not assigned and RWY not assigned or received by ATC or ATIS, set transponder 7600, proceed according to FPL and FPL STAR. Descending shall be executed in accordance with vertical restrictions specified on chart after 2 min from setting 7600.

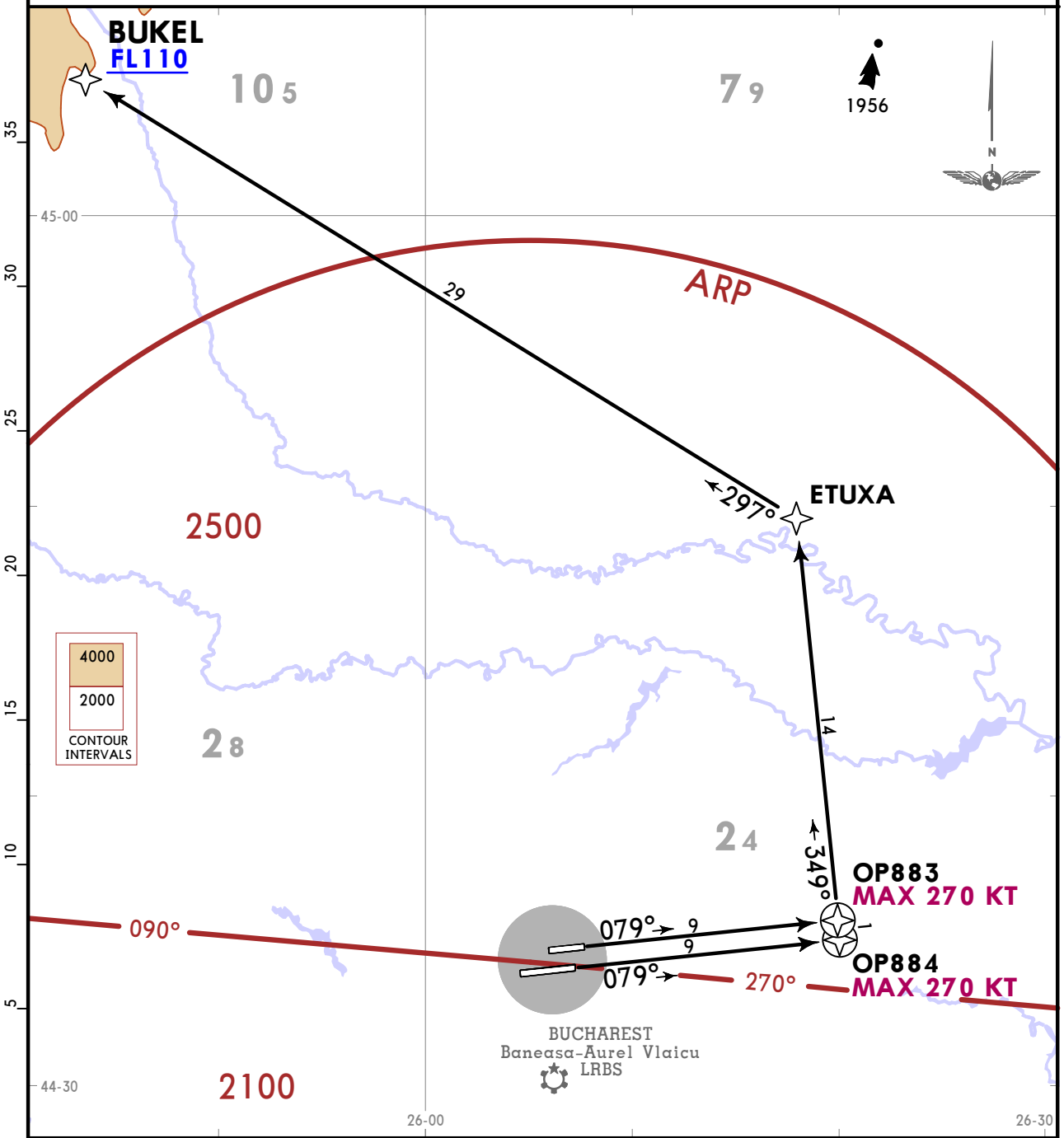


BUCHAREST
Approach (R)
119.415
120.6

Apt Elev
314

Trans alt: 4000
1. RNAV (DME/DME). 2. RNAV-1 (P-RNAV) approval required.
3. 112.2 FLR, 117.1 OPT and 113.2 STJ must all be serviceable for DME/DME operation.
4. Aircraft unable to achieve SID profile restrictions must request non-standard departure from ATC before start-up. 5. When changing from OTOPENI Tower to BUCHAREST Approach, report actual altitude and SID. 6. Contact BUCHAREST Approach when passing 2000 AMSL and report altitude in order to verify SSR mode C.

BUKEL 1K [BUKE1K]
RWYS 08L/R RNAV DEPARTURE
NOT AVAILABLE FOR TRAFFIC TO NEPOT



Set transponder:
- continue on assigned and acknowledged SID. After 2 minutes climb to flight planned FL.
- if being vectored, continue on assigned heading for 2 minutes, then proceed direct to last SID point climbing to flight planned FL.

LOST COMMS ◀ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▶ LOST COMMS

This SID requires a minimum climb gradient of
3.5% until BUKEL due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
3.5% V/V(fpm)	266	354	532	709	886	1063

If unable to comply, contact ATC before start-up.

ROUTING

OP883 (08L; K270-)/OP884 (08R; K270-) - ETUXA - BUKEL (FL110+).

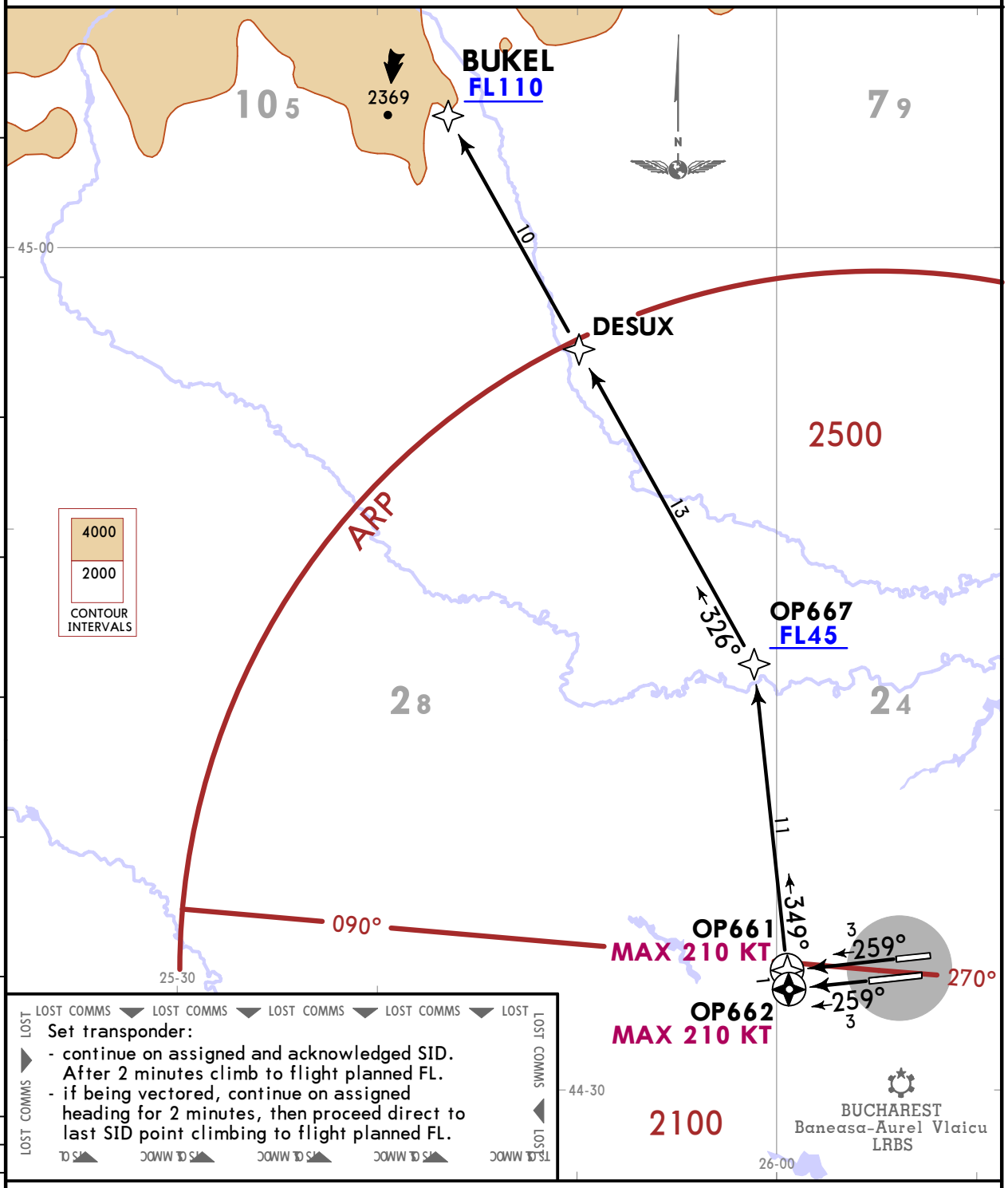
CHANGES: Reissue.

BUCHAREST
Approach (R)
119.415
120.6

Apt Elev
314

Trans alt: 4000
1. RNAV (DME/DME). 2. RNAV-1 (P-RNAV) approval required.
3. 112.2 FLR, 117.1 OPT and 113.2 STJ must all be serviceable for DME/DME operation.
4. Aircraft unable to achieve SID profile restrictions must request non-standard departure from ATC before start-up. 5. EXPECT close-in obstacles. 6. When changing from OTOPENI Tower to BUCHAREST Approach, report actual altitude and SID. 7. Contact BUCHAREST Approach when passing 2000 AMSL and report altitude in order to verify SSR mode C.

BUKEL 1M [BUKE1M]
RWYS 26L/R RNAV DEPARTURE
NOT AVAILABLE FOR TRAFFIC TO NEPOT



LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS

Set transponder:
- continue on assigned and acknowledged SID. After 2 minutes climb to flight planned FL.
- if being vectored, continue on assigned heading for 2 minutes, then proceed direct to last SID point climbing to flight planned FL.

This SID requires a minimum climb gradient of

4.9% until BUKEL due to airspace structure.

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

If unable to comply, contact ATC before start-up.

ROUTING

OP662 (26L; K210-)/OP661 (26R; K210-) - OP667 (FL45+) - DESUX - BUKEL (FL110+).

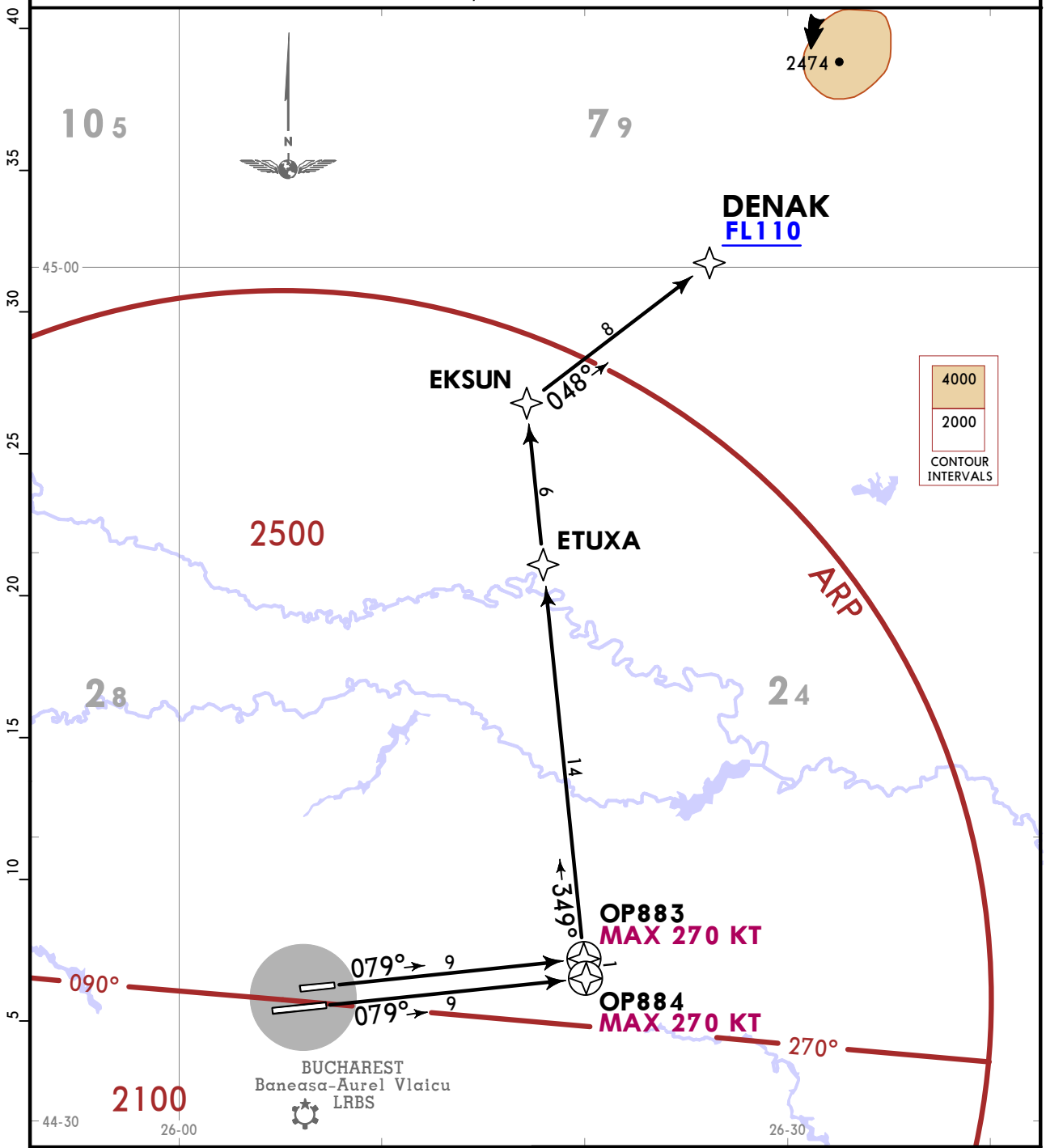
CHANGES: Reissue.

BUCHAREST
Approach (R)
119.415
120.6

Apt Elev
314

Trans alt: 4000
1. RNAV (DME/DME). 2. RNAV-1 (P-RNAV) approval required.
3. 112.2 FLR, 117.1 OPT and 113.2 STJ must all be serviceable for DME/DME operation.
4. Aircraft unable to achieve SID profile restrictions must request non-standard departure from ATC before start-up. 5. When changing from OTOPENI Tower to BUCHAREST Approach, report actual altitude and SID. 6. Contact BUCHAREST Approach when passing 2000 AMSL and report altitude in order to verify SSR mode C.

DENAK 1K [DENA1K]
RWYS 08L/R RNAV DEPARTURE



Set transponder:
- continue on assigned and acknowledged SID. After 2 minutes climb to flight planned FL.
- if being vectored, continue on assigned heading for 2 minutes, then proceed direct to last SID point climbing to flight planned FL.

LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS

This SID requires a minimum climb gradient of
5.0% until DENAK due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
5.0% V/V(fpm)	380	506	760	1013	1266	1519

If unable to comply, contact ATC before start-up.

ROUTING

OP883 (08L; K270-)/OP884 (08R; K270-) - ETUXA - EKSUN - DENAK (FL110+).

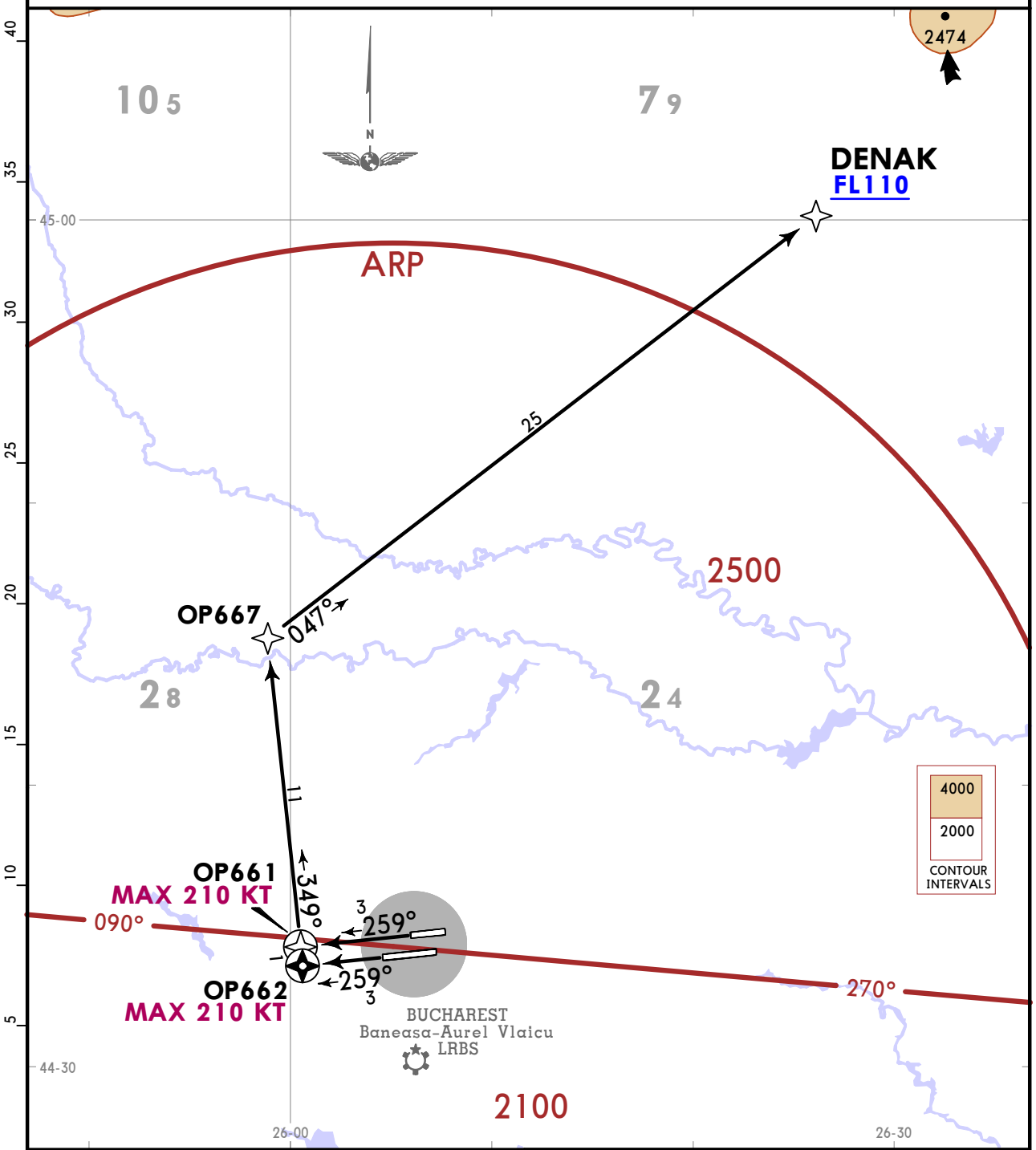
CHANGES: Reissue.

BUCHAREST
Approach (R)
119.415
120.6

Apt Elev
314

Trans alt: 4000
1. RNAV (DME/DME). 2. RNAV-1 (P-RNAV) approval required.
3. 112.2 FLR, 117.1 OPT and 113.2 STJ must all be serviceable for DME/DME operation.
4. Aircraft unable to achieve SID profile restrictions must request non-standard departure from ATC before start-up. 5. EXPECT close-in obstacles. 6. When changing from OTOPENI Tower to BUCHAREST Approach, report actual altitude and SID. 7. Contact BUCHAREST Approach when passing 2000 AMSL and report altitude in order to verify SSR mode C.

DENAK 1M [DENA1M]
RWYS 26L/R RNAV DEPARTURE



Set transponder:
- continue on assigned and acknowledged SID. After 2 minutes climb to flight planned FL.
- if being vectored, continue on assigned heading for 2 minutes, then proceed direct to last SID point climbing to flight planned FL.

This SID requires a minimum climb gradient of 4.7% until DENAK due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
4.7% V/V(fpm)	357	476	714	952	1190	1428

If unable to comply, contact ATC before start-up.

ROUTING

OP662 (26L; K210-)/OP661 (26R; K210-) - OP667 - DENAK (FL110+).

CHANGES: Reissue.

IDARU 1K [IDAR1K], NETUL 1K [NETU1K]
RWYS 08L/R RNAV DEPARTURES

Trans alt: 4000
1. RNAV (DME/DME). 2. RNAV-1 (P-RNAV) approval required.
3. 112.2 FLR, 117.1 OPT and 113.2 STJ must all be serviceable for DME/DME operation.
4. Aircraft unable to achieve SID profile restrictions must request non-standard departure from ATC before start-up. 5. When changing from OTOPENI Tower to BUCHAREST Approach, report actual altitude and SID. 6. Contact BUCHAREST Approach when passing 2000 AMSL and report altitude in order to verify SSR mode C.

BUCHAREST Approach (R)
119.415
120.6

Apt Elev
314

SID	ROUTING
IDARU 1K	OP887 (08L)/OP888 (08R) - IDARU.
NETUL 1K	OP887 (08L)/OP888 (08R) - NETUL.

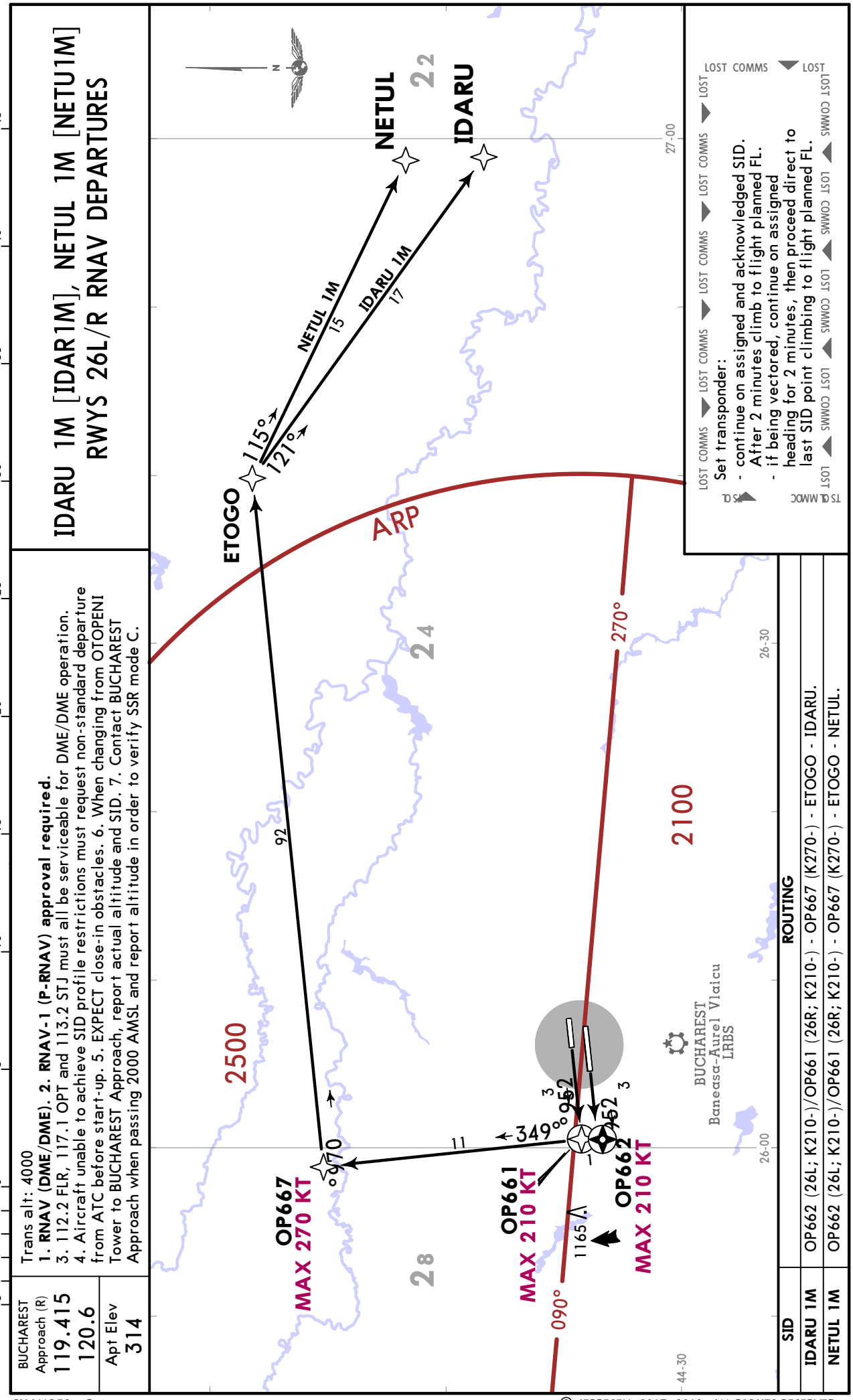
Set transponder:
- continue on assigned and acknowledged SID.
- After 2 minutes climb to flight planned FL.
- if being vectored, continue on assigned heading for 2 minutes, then proceed direct to last SID point climbing to flight planned FL.

LOST COMMS ▼ LOST
LOST COMMS ▼ LOST COMMS ▼ LOST COMMS
LOST COMMS ▼ LOST COMMS ▼ LOST COMMS

NETUL
IDARU
IDARU 1K
OP887
OP888
ARP
270°
090°
2500
2100
BUCHAREST
Baneasa-Aurel Vlaicu
LRBS
1165
970
970
13
03
27-00
26-30
26-00
44-30

CHANGES: Reissue.

IDARU 1M [IDAR1M], NETUL 1M [NETU1M]
RWYS 26L/R RNAV DEPARTURES



Trans alt: 4000
1. RNAV (DME/DME). 2. RNAV-1 (P-RNAV) approval required.
3. 112.2 FLR, 117.1 OPT and 113.2 STJ must all be serviceable for DME/DME operation.
4. Aircraft unable to achieve SID profile restrictions must request non-standard departure from ATC before start-up. 5. EXPECT close-in obstacles. 6. When changing from OTOPENI Tower to BUCHAREST Approach, report actual altitude and SID. 7. Contact BUCHAREST Approach when passing 2000 AMSL and report altitude in order to verify SSR mode C.

BUCHAREST Approach (R)
119.415
120.6

Apt Elev
314

SID	ROUTING
IDARU 1M	OP662 (26L; K210-)/OP661 (26R; K210-) - OP667 (K270-) - ETOGO - IDARU.
NETUL 1M	OP662 (26L; K210-)/OP661 (26R; K210-) - OP667 (K270-) - ETOGO - NETUL.

CHANGES: Reissue.

BUCHAREST Approach (R)
119.415
120.6

Apt Elev
314

Trans alt: 4000
1. **RNAV (DME/DME).**
2. **RNAV-1 (P-RNAV) approval required.**
3. 112.2 FLR, 117.1 OPT and 113.2 STJ must all be serviceable for DME/DME operation.
4. Aircraft unable to achieve SID profile restrictions must request non-standard departure from ATC before start-up.
5. When changing from OTOPENI Tower to BUCHAREST Approach, report actual altitude and SID.
6. Contact BUCHAREST Approach when passing 2000 AMSL and report altitude in order to verify SSR mode C.

POLUN 1K [POLU1K]
SOKRU 1K [SOKR1K]
RWYS 08L/R RNAV DEPARTURES

LOST COMMS

Set transponder to 7600, then:
- continue on assigned and acknowledged SID. After 2 minutes climb to flight planned FL.
- if being vectored, continue on assigned heading for 2 minutes, then proceed direct to last SID point climbing to flight planned FL.

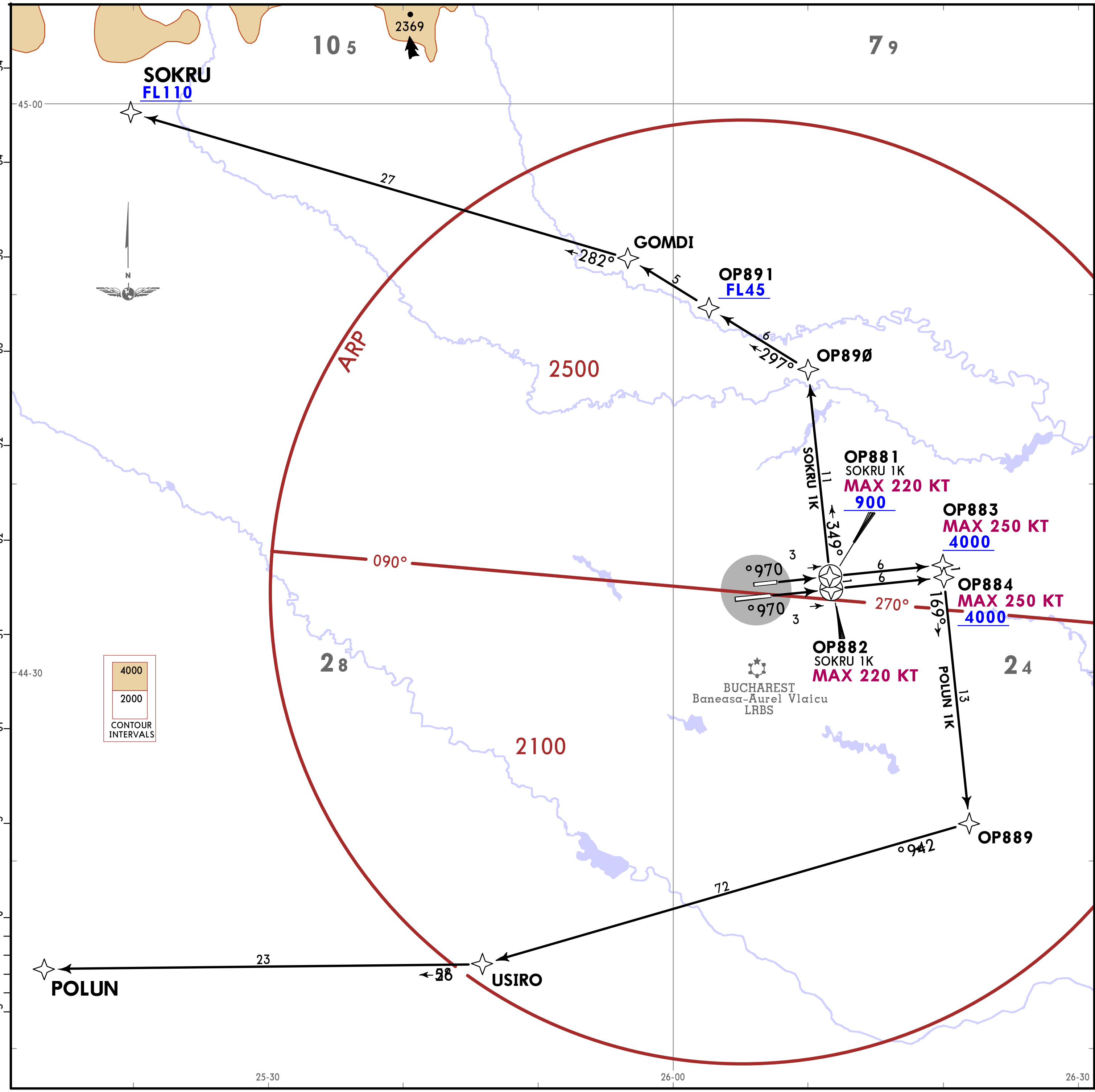
These SIDs require minimum climb gradients of

POLUN 1K: Rwy 08R: 6.7% until OP884 due to airspace structure.
Rwy 08L: 7.0% until OP883 due to airspace structure.

SOKRU 1K: Rwy 08R: 3.5% until SOKRU due to airspace structure.
Rwy 08L: 3.4% until OP881, then 3.5% until SOKRU due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
7.0% V/V(fpm)	532	709	1063	1418	1772	2127
6.7% V/V(fpm)	509	679	1018	1357	1696	2036
3.5% V/V(fpm)	266	354	532	709	886	1063
3.4% V/V(fpm)	258	344	516	689	861	1033

If unable to comply, contact ATC before start-up.



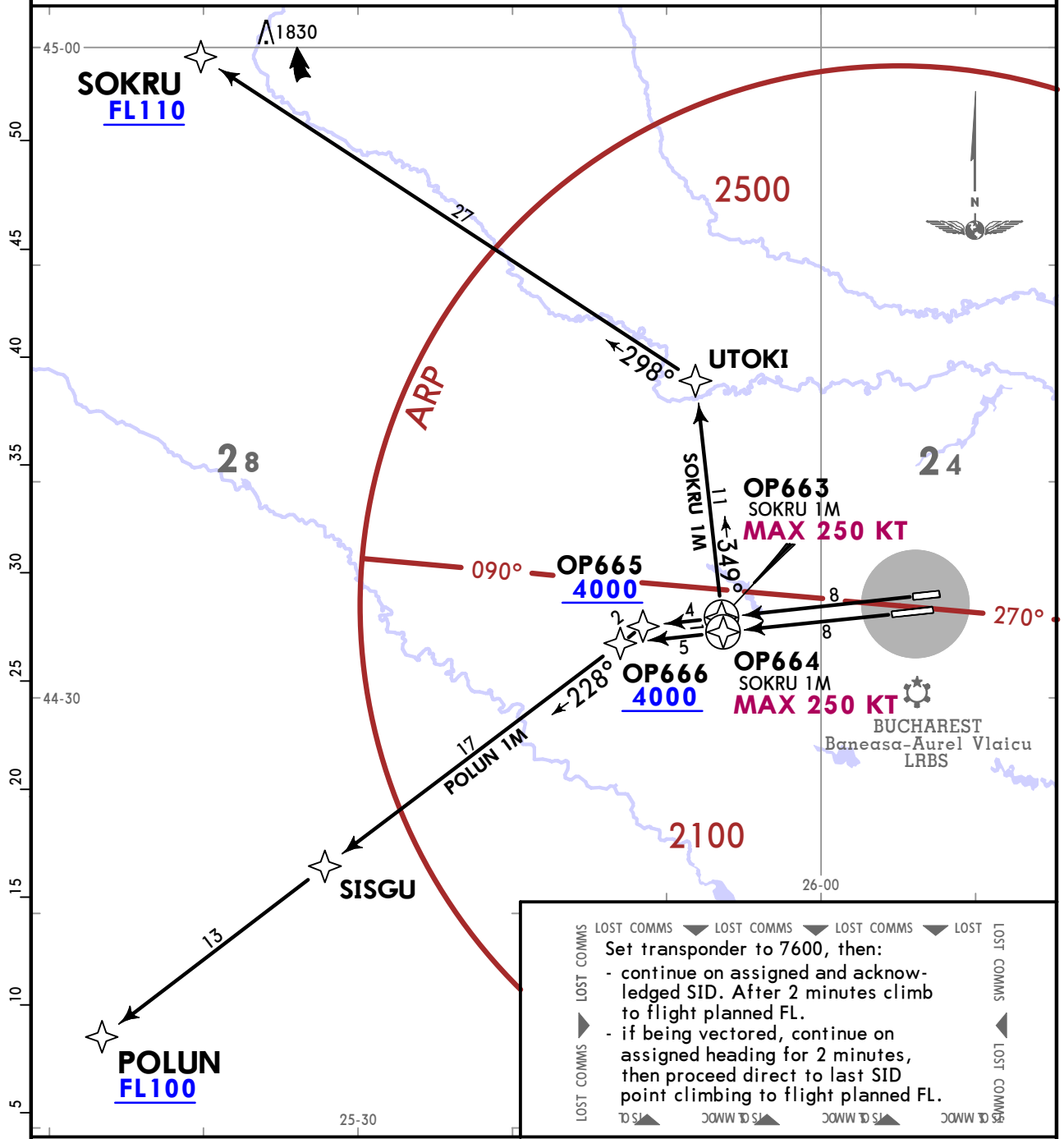
SID	ROUTING
POLUN 1K ❶	OP883 (08L; K250-; 4000+)/OP884 (08R; K250-; 4000+) - OP889 - USIRO - POLUN.
SOKRU 1K ❷	OP881 (08L; K220-; 900+)/OP882 (08R; K220-) - OP890 - OP891 (FL45+) - GOMDI - SOKRU (FL110+).

❶ Not available for traffic to MOPUG.
❷ Not available for traffic to DIRER.

CHANGES: Reissue.

BUCHAREST Approach (R) 119.415 120.6	Trans alt: 4000
Apt Elev 314	**1. RNAV (DME/DME). 2. RNAV-1 (P-RNAV) approval required.** 3. 112.2 FLR, 117.1 OPT and 113.2 STJ must all be serviceable for DME/DME operation. 4. Aircraft unable to achieve SID profile restrictions must request non-standard departure from ATC before start-up. 5. EXPECT close-in obstacles. 6. When changing from OTOPENI Tower to BUCHAREST Approach, report actual altitude and SID. 7. Contact BUCHAREST Approach when passing 2000 AMSL and report altitude in order to verify SSR mode C.

POLUN 1M [POLU1M], SOKRU 1M [SOKR1M]
RWYS 26L/R RNAV DEPARTURES



These SIDs require minimum climb gradients of

POLUN 1M: Rwy 26L: 4.9% until OP666 due to airspace structure.
Rwy 26R: 5.2% until OP665 due to airspace structure.

SOKRU 1M: 3.9% until SOKRU due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
5.2% V/V(fpm)	395	527	790	1053	1317	1580
4.9% V/V(fpm)	372	496	744	992	1241	1489
3.9% V/V(fpm)	296	395	592	790	987	1185

If unable to comply, contact ATC before start-up.

SID	ROUTING
POLUN 1M ❶	OP666 (26L; 4000+)/OP665 (26R; 4000+) - SISGU - POLUN (FL100+).
SOKRU 1M ❷	OP664 (26L; K250-)/OP663 (26R; K250-) - UTOKI - SOKRU (FL110+).

❶ Not available for traffic to MOPUG. ❷ Not available for traffic to DIRER.

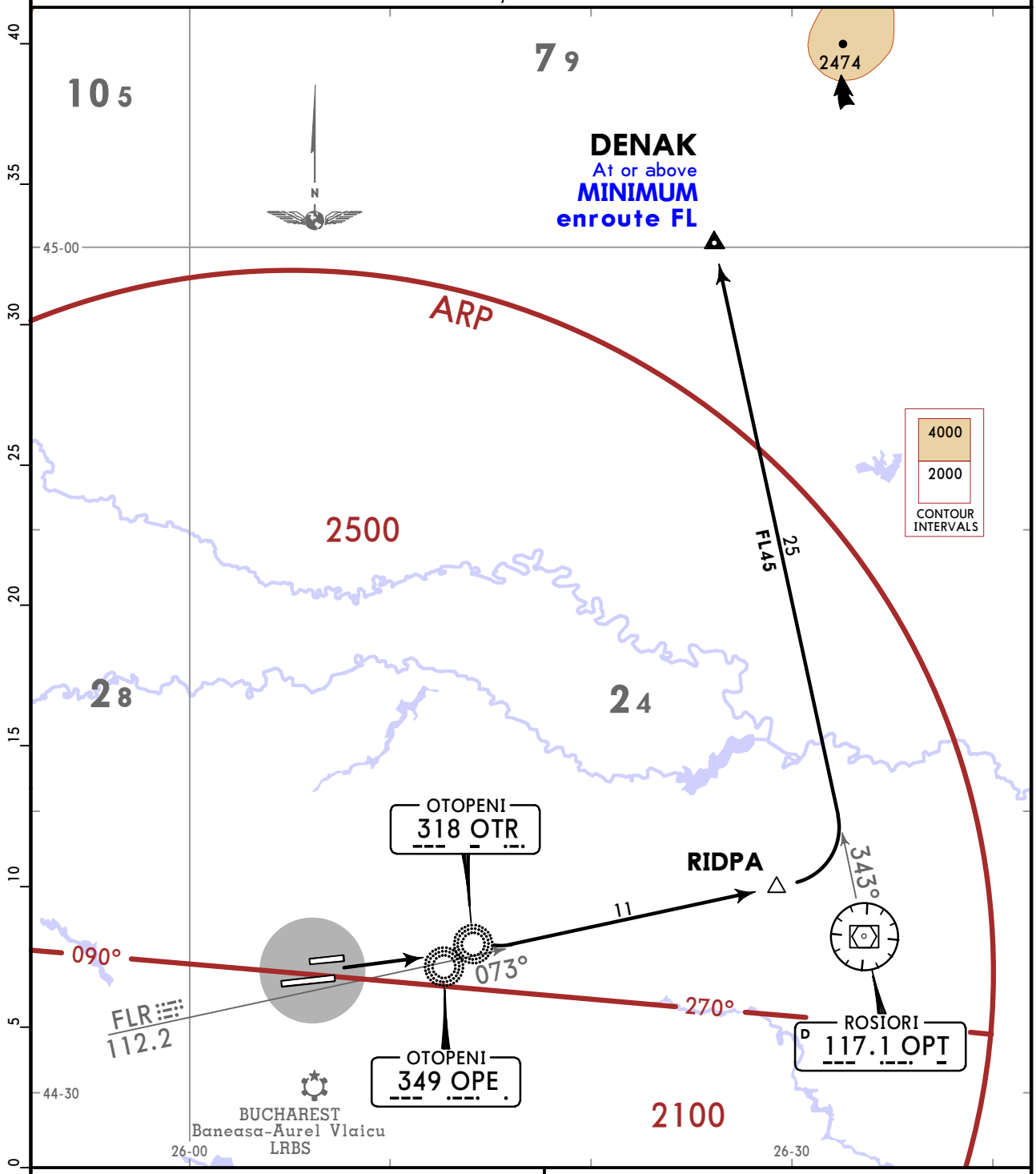
CHANGES: Reissue.

BUCHAREST
Approach (R)
119.415
120.6

Apt Elev
314

Trans alt: 4000
1. SIDs are also noise abatement routings. Strict adherence within the limits of aircraft performance is mandatory.
2. When changing from OTOPENI Tower to BUCHAREST Approach, report actual altitude and SID.
3. Contact BUCHAREST Approach when passing 2000 AMSL and report altitude in order to verify SSR mode C.

DENAK 3A [DENA3A]
RWYS 08L/R DEPARTURE



This SID requires a minimum climb gradient of 4.4% due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
4.4% V/V(fpm)	334	446	668	891	1114	1337

LOST COMMS
Set transponder:
- continue on assigned and acknowledged SID.
After 2 minutes climb to flight planned FL.
- if being vectored, continue on assigned heading for 2 minutes, then proceed direct to last SID point climbing to flight planned FL.

ROUTING

To OTR/OPE, intercept FLR R073 to RIDPA, turn LEFT, intercept OPT R343 to DENAK.

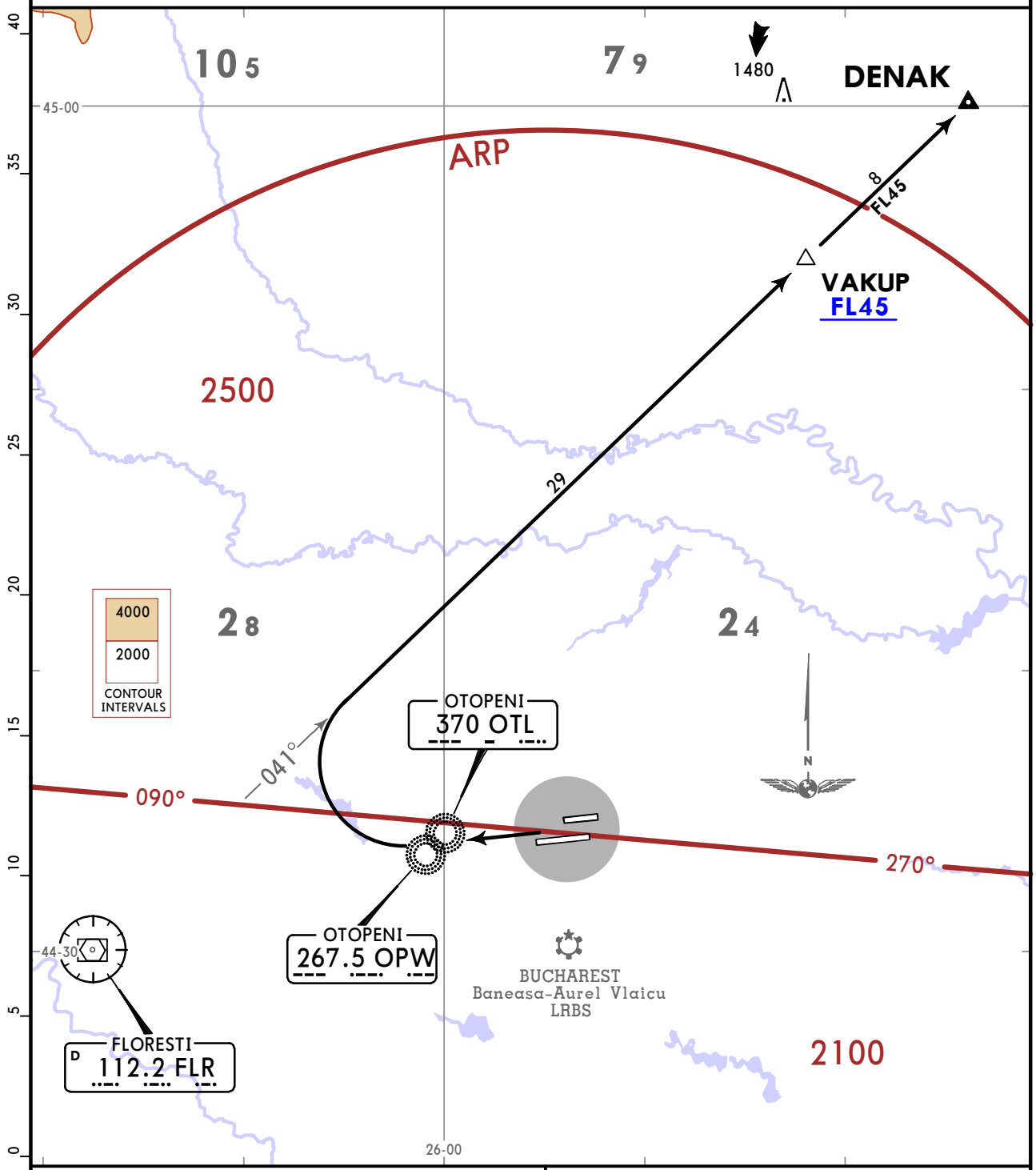
CHANGES: Reissue.

BUCHAREST
Approach (R)
119.415
120.6

Apt Elev
314

Trans alt: 4000
1. SIDs are also noise abatement routings. Strict adherence within the limits of aircraft performance is mandatory. 2. EXPECT close-in obstacles. 3. When changing from OTOPENI Tower to BUCHAREST Approach, report actual altitude and SID. 4. Contact BUCHAREST Approach when passing 2000 AMSL and report altitude in order to verify SSR mode C.

DENAK 5C [DENA5C]
RWYS 26L/R DEPARTURE



This SID requires a minimum climb gradient of
4.2% due to airspace structure.

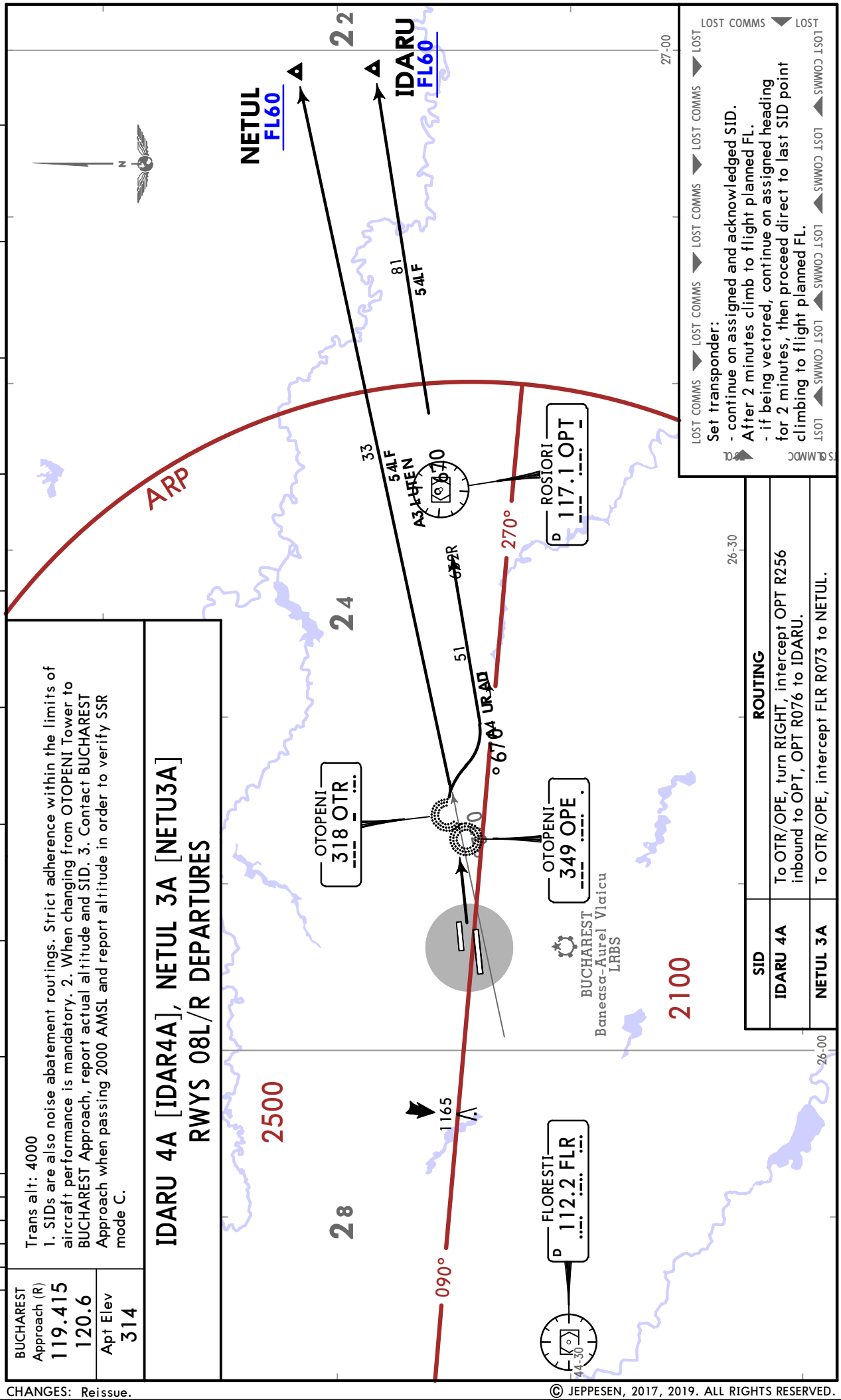
Gnd speed-KT	75	100	150	200	250	300
4.2% V/V(fpm)	319	425	638	851	1063	1276

LOST COMMS
Set transponder:
- continue on assigned and acknowledged SID. After 2 minutes climb to flight planned FL.
- if being vectored, continue on assigned heading for 2 minutes, then proceed direct to last SID point climbing to flight planned FL.

ROUTING

To OTL/OPW, turn RIGHT, intercept FLR R041 to DENAK.

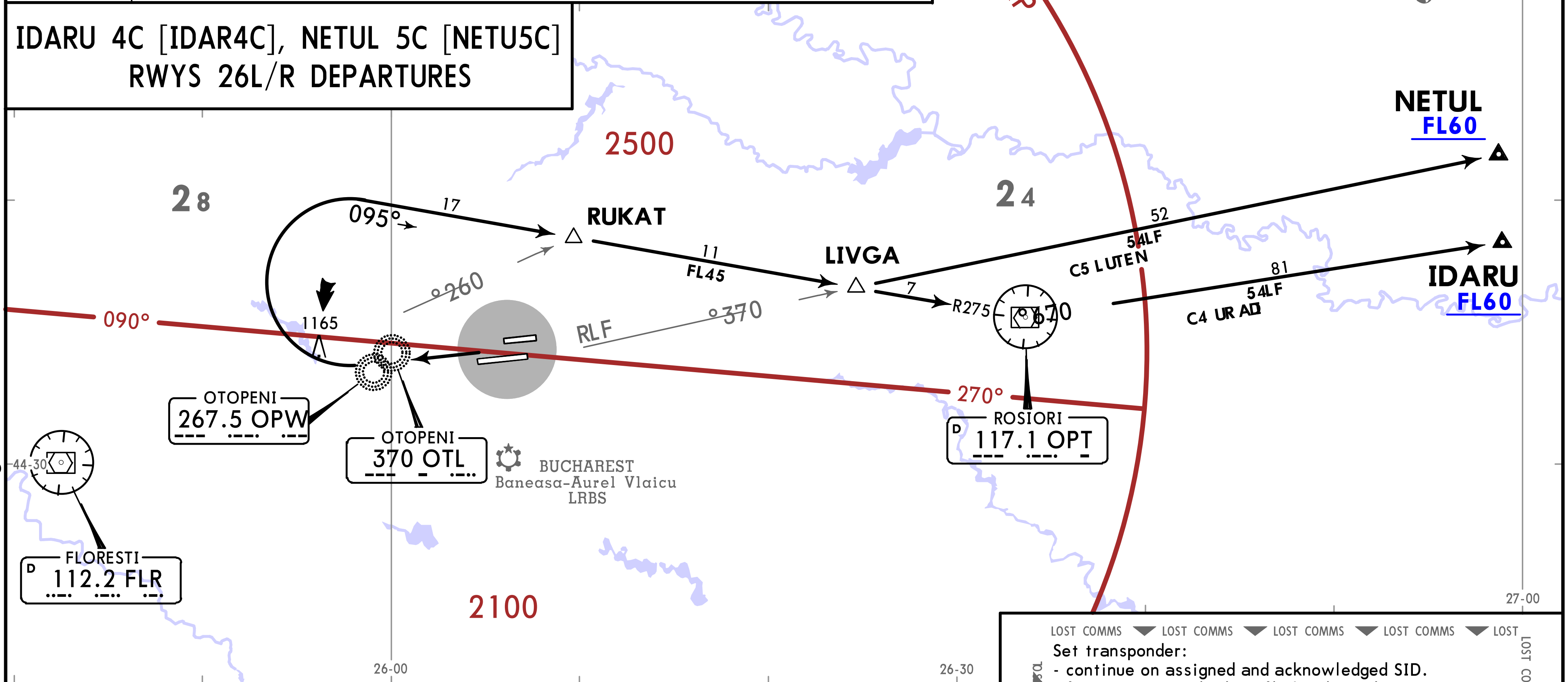
CHANGES: Reissue.



CHANGES: Reissue.

BUCHAREST Approach (R)	
119.415 120.6	Trans alt: 4000
Apt Elev 314	1. SIDs are also noise abatement routings. Strict adherence within the limits of aircraft performance is mandatory. 2. EXPECT close-in obstacles. 3. When changing from OTOPENI Tower to BUCHAREST Approach, report actual altitude and SID. 4. Contact BUCHAREST Approach when passing 2000 AMSL and report altitude in order to verify SSR mode C.

IDARU 4C [IDAR4C], NETUL 5C [NETU5C]
RWYS 26L/R DEPARTURES

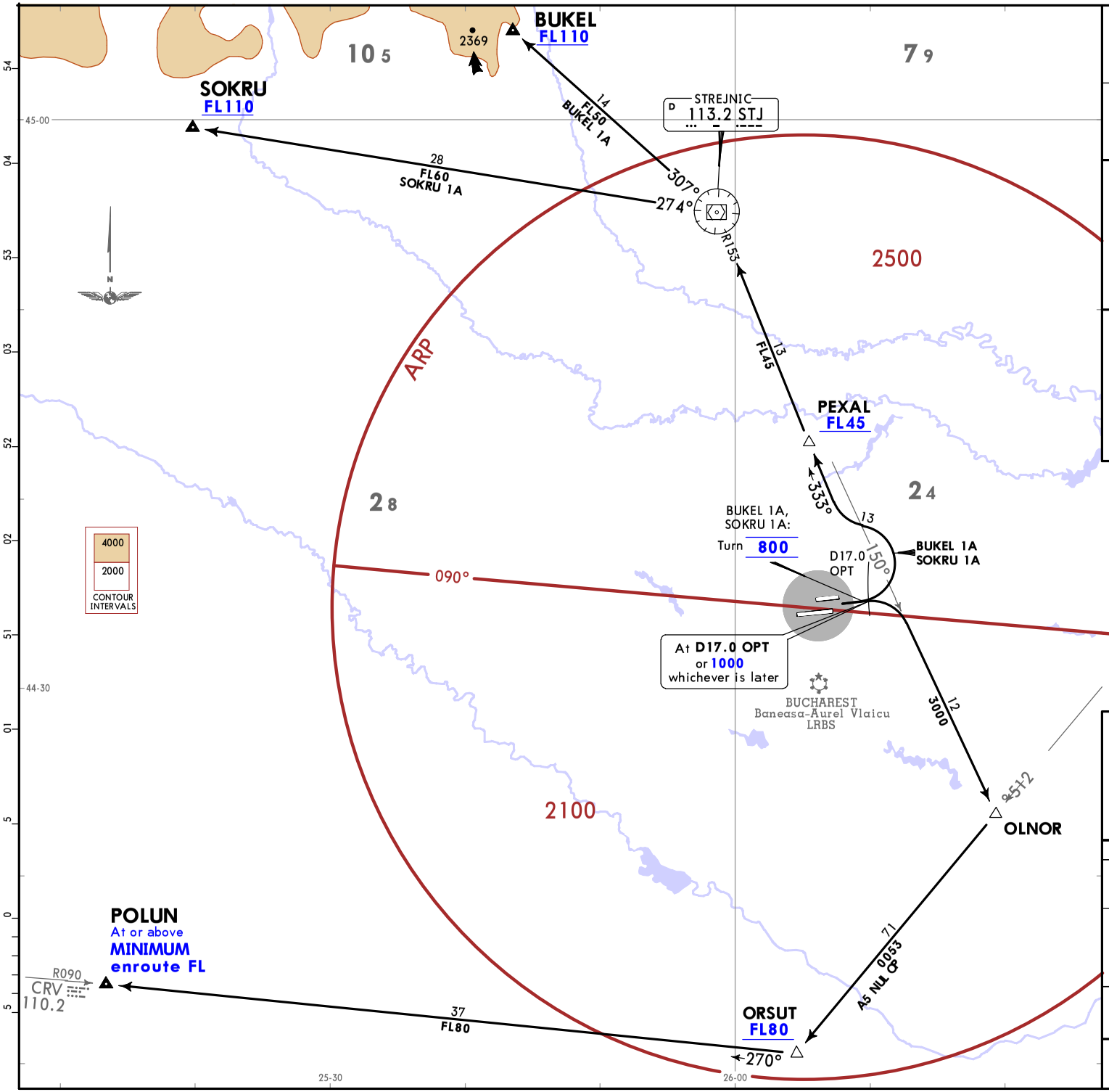


SID	ROUTING
IDARU 4C	To OTL/OPW, turn RIGHT, intercept OPT R275 inbound to OPT, turn LEFT, OPT R076 to IDARU.
NETUL 5C	To OTL/OPW, turn RIGHT, intercept OPT R275 inbound to LIVGA, turn LEFT, intercept FLR R073 to NETUL.

LOST COMMS

Set transponder:
- continue on assigned and acknowledged SID.
After 2 minutes climb to flight planned FL.
- if being vectored, continue on assigned heading for 2 minutes, then proceed direct to last SID point climbing to flight planned FL.

CHANGES: Reissue.



BUCHAREST Approach (R)	Trans alt: 4000
119.415 120.6	1. SIDs are also noise abatement routings. Strict adherence within the limits of aircraft performance is mandatory. 2. When changing from OTOPENI Tower to BUCHAREST Approach, report actual altitude and SID. 3. Contact BUCHAREST Approach when passing 2000 AMSL and report altitude in order to verify SSR mode C.
Apt Elev 314	

BUKEL 1A [BUKE1A]
POLUN 5A [POLU5A]
SOKRU 1A [SOKR1A]
RWYS 08L/R DEPARTURES

LOST COMMS
Set transponder to 7600, then:
- continue on assigned and acknowledged SID. After 2 minutes climb to flight planned FL.
- if being vectored, continue on assigned heading for 2 minutes, then proceed direct to last SID point climbing to flight planned FL.

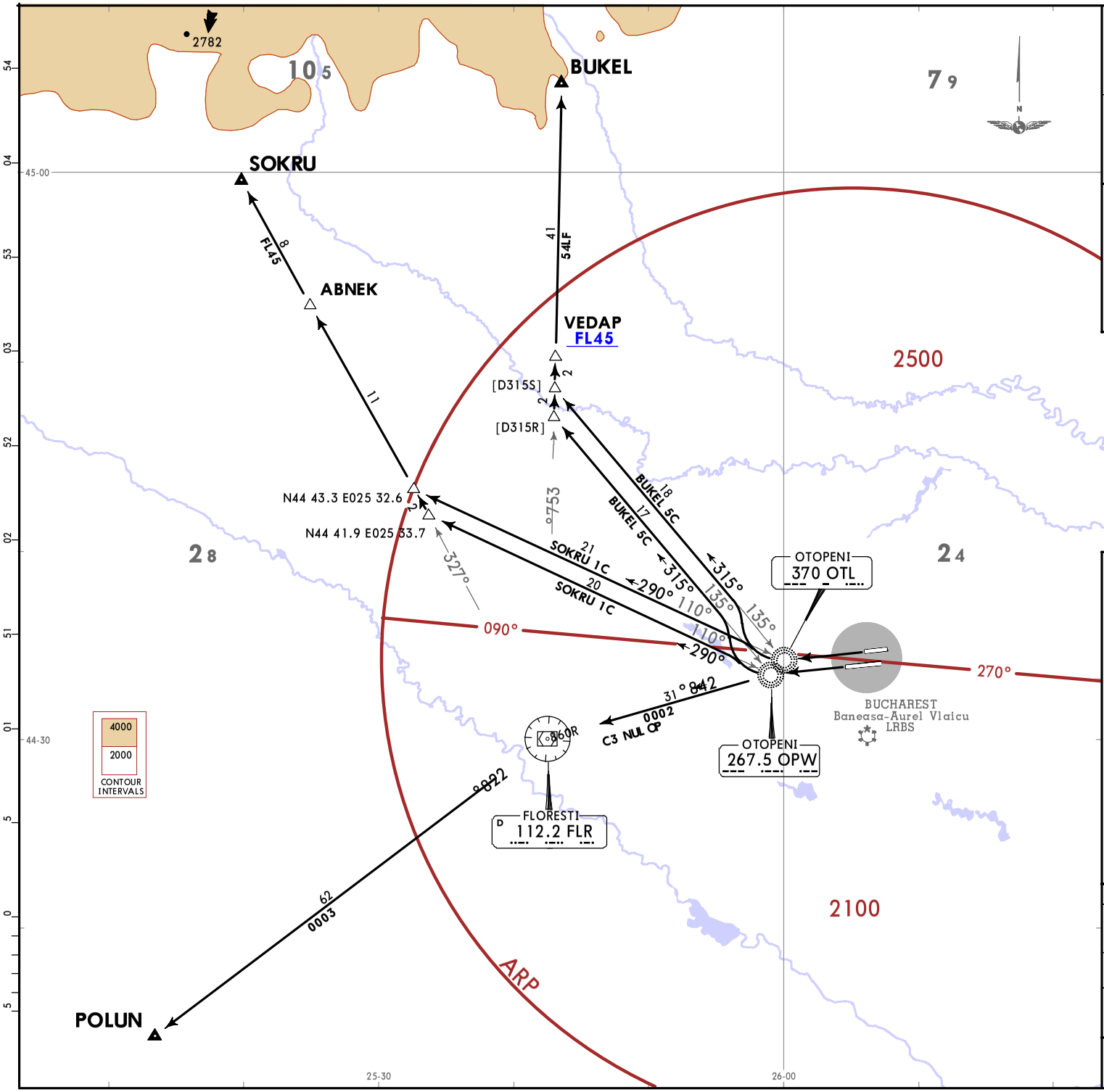
BUKEL 1A

This SID requires a minimum climb gradient of 4.4% due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
4.4% V/V(fpm)	334	446	668	891	1114	1337

SID	ROUTING
BUKEL 1A ❶	Climb on runway track to 800, intercept STJ R153 inbound to STJ, STJ R307 to BUKEL.
POLUN 5A ❷	Climb on runway track to D17.0 OPT or 1000, whichever is later, turn RIGHT, intercept STJ R150 to OLNOR, turn RIGHT, intercept OPT R215 to ORSUT, turn RIGHT, intercept CRV R090 inbound to POLUN.
SOKRU 1A ❸	Climb on runway track to 800, intercept STJ R153 inbound to STJ, STJ R274 to SOKRU.

❶ Not available for traffic to NEPOT.
❷ Not available for traffic to MOPUG.
❸ Not available for traffic to DIRER.



BUCHAREST Approach (R)
119.415
120.6
Apt Elev
314

Trans alt: 4000
1. SIDs are also noise abatement routings. Strict adherence within the limits of aircraft performance is mandatory.
2. EXPECT close-in obstacles.
3. When changing from OTOPENI Tower to BUCHAREST Approach, report actual altitude and SID.
4. Contact BUCHAREST Approach when passing 2000 AMSL and report altitude in order to verify SSR mode C.

BUKEL 5C [BUKE5C]
POLUN 3C [POLU3C]
SOKRU 1C [SOKR1C]
RWYS 26L/R DEPARTURES

LOST COMMS: Set transponder to 7600, then:
- continue on assigned and acknowledged SID. After 2 minutes climb to flight planned FL.
- if being vectored, continue on assigned heading for 2 minutes, then proceed direct to last SID point climbing to flight planned FL.

These SIDs require minimum climb gradients of
BUKEL 5C: 4.5% due to airspace structure.
POLUN 3C: 3.6% due to airspace structure.
SOKRU 1C: 3.9% due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
4.5% V/V(fpm)	342	456	684	911	1139	1367
3.9% V/V(fpm)	296	395	592	790	987	1185
3.6% V/V(fpm)	273	365	547	729	911	1094

SID	ROUTING
BUKEL 5C ❶	To OTL/OPW, turn RIGHT, intercept 315° bearing from OTL/OPW, intercept FLR R357 to BUKEL.
POLUN 3C ❷	To OTL/OPW, turn LEFT, intercept FLR R068 inbound to FLR, FLR R228 to POLUN.
SOKRU 1C ❸	To OTL/OPW, turn RIGHT, intercept 290° bearing from OTL/OPW, intercept FLR R327 to SOKRU.

❶ Not available for traffic to NEPOT.
❷ Not available for traffic to MOPUG.
❸ Not available for traffic to DIRER.

CHANGES: Reissue.

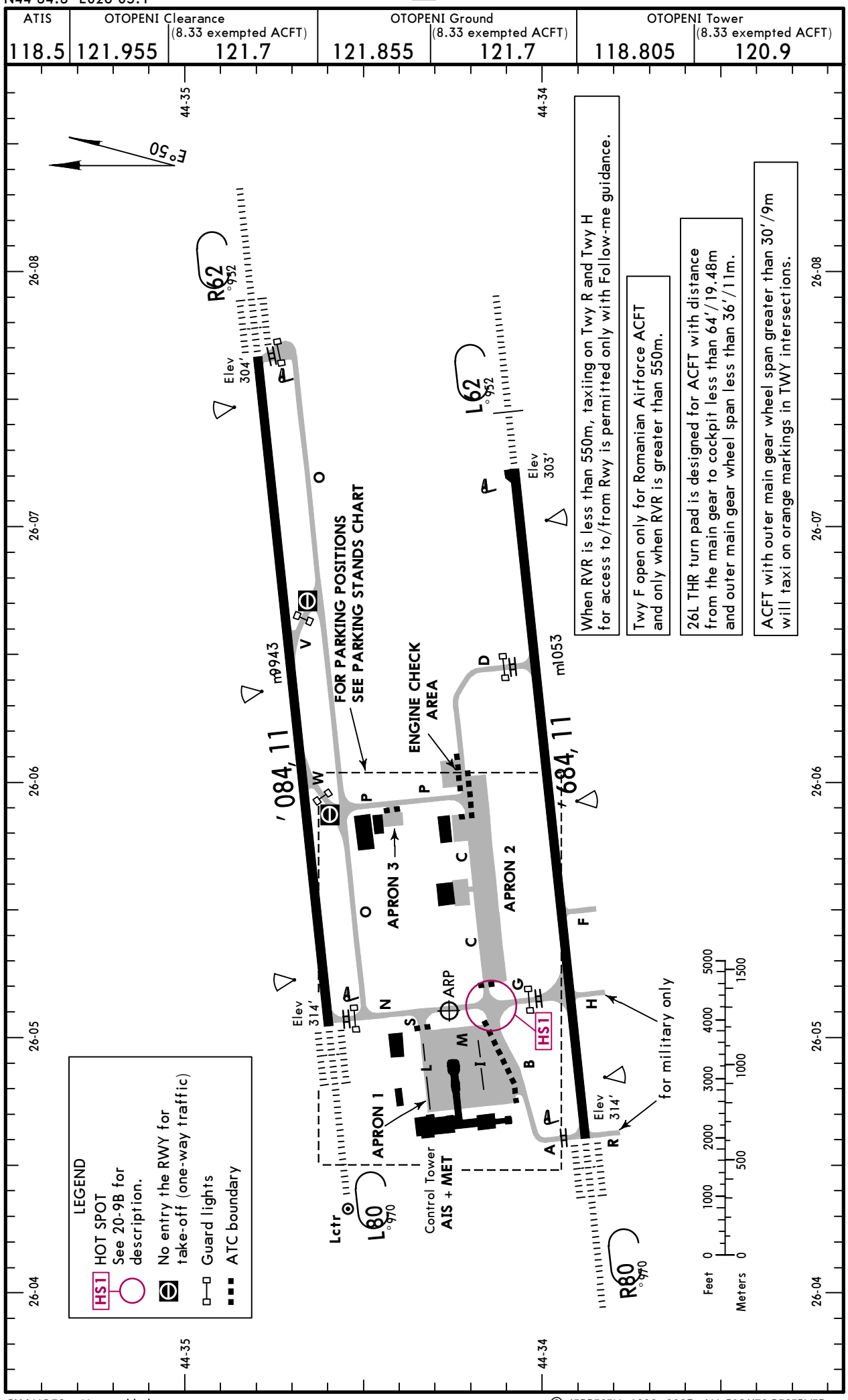
LROP/OTP

Apt Elev **314′**
N44 34.3 E026 05.1

JEPPESEN
4 AUG 23 (20-9) **Eff 10 Aug**

BUCHAREST, ROMANIA
HENRI COANDA

ATIS	OTOPENI Clearance	(8.33 exempted ACFT)	OTOPENI Ground	(8.33 exempted ACFT)	OTOPENI Tower	(8.33 exempted ACFT)
118.5	121.955	121.7	121.855	121.7	118.805	120.9



CHANGES: Note added.

BUCHAREST, ~~ROMANIA~~

HENRI COANDA

ADDITIONAL RUNWAY INFORMATION

RWY		USABLE LENGTHS LANDING BEYOND Threshold	Glide Slope	TAKE-OFF	WIDTH
08L	HIRL (60m) CL (15m) ❶ALSF-II TDZ ❷ HSTIL-V ❸ RVR	11,460′ 3493m	10,508′ 3203m		148′ 45m
26R	HIRL (60m) CL (15m) ❶ALSF-II TDZ ❷ HSTIL-W ❸ RVR				

❶ length 900m
❷ PAPI-L (3.0°)
❸ OFZ

08R	HIRL (60m) CL (15m) ❹ALSF-II TDZ ❺ OFZ RVR	11,467′ 3495m	10,332′ 3149m	❻	148′ 45m
26L	HIRL (60m) CL (15m) ❹HIALS PAPI-L (2.7°) OFZ RVR	11,463′ 3494m	10,392′ 3167m		

❹ length 900m
❺ PAPI-L (2.7°)
❻ TAKE-OFF RUN AVAILABLE

RWY 08R:
From rwy head 11,486′ (3501m)
twy G int 9068′ (2764m)

RWY 26L:
From rwy head 11,486′ (3501m)
twy D int 8166′ (2489m)

INS COORDINATES

STAND No.	COORDINATES	STAND No.	COORDINATES
	APRON 1		**APRON 2**
101	N44 34.3 E026 04.7	201 thru 202A	N44 34.2 E026 06.0
102 thru 104	N44 34.3 E026 04.8	202B thru 204A	N44 34.2 E026 05.9
105 thru 107	N44 34.3 E026 04.9	204B	N44 34.2 E026 05.8
107A	N44 34.3 E026 05.0	205	N44 34.1 E026 05.8
107L, 107R	N44 34.3 E026 04.9	205A	N44 34.2 E026 05.8
108	N44 34.3 E026 04.9	206	N44 34.1 E026 05.8
109	N44 34.2 E026 04.9	207 thru 209	N44 34.1 E026 05.7
109A, 109L	N44 34.2 E026 05.0	210 thru 212	N44 34.1 E026 05.6
109R	N44 34.2 E026 04.9	213 thru 215	N44 34.1 E026 05.5
110, 111	N44 34.2 E026 04.9	216 thru 218	N44 34.1 E026 05.4
112 thru 114	N44 34.2 E026 04.8		
115	N44 34.2 E026 04.7	219 thru 221	N44 34.1 E026 05.3
116 thru 118	N44 34.1 E026 04.7	222	N44 34.1 E026 05.2
119 thru 119C	N44 34.1 E026 04.8		
120 thru 120C	N44 34.1 E026 04.9		
120A	N44 34.1 E026 04.8		
121, 122	N44 34.1 E026 04.9		

Std/State TAKE-OFF

Low Visibility Take-off					RL or RCLM	RL or CL	Adequate Vis Ref	
HIRL & CL (spacing 15m or less) & relevant RVR	RL & CL & relevant RVR	RL & CL	RL & RCLM	RL or CL				
			DAY	NIGHT	DAY	NIGHT	DAY	NIGHT
TDZ R125m Mid R125m Rollout R125m	TDZ R150m Mid R150m Rollout R150m	R200m	R300m		R/V400m		R/V500m	NA

CHANGES: OFZ added, take-off run available.

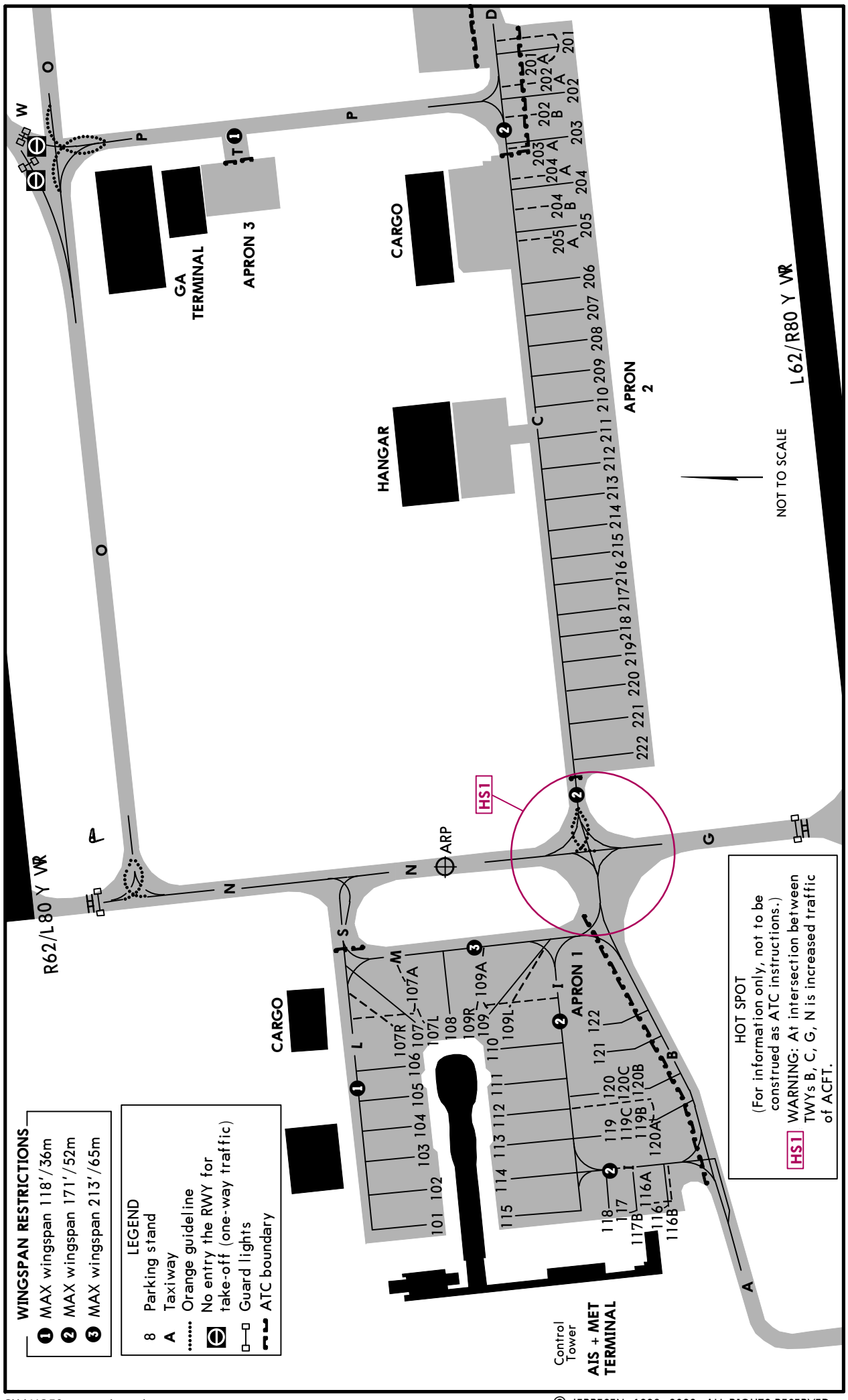
LROP/OTP

JEPPESEN

18 FEB 22 (20-9B) Eff 24 Feb

BUCHAREST, ROMANIA

HENRI COANDA



CHANGES: ATC boundary. Note.

DOCKING GUIDANCE SYSTEM (SAFEDOCK)

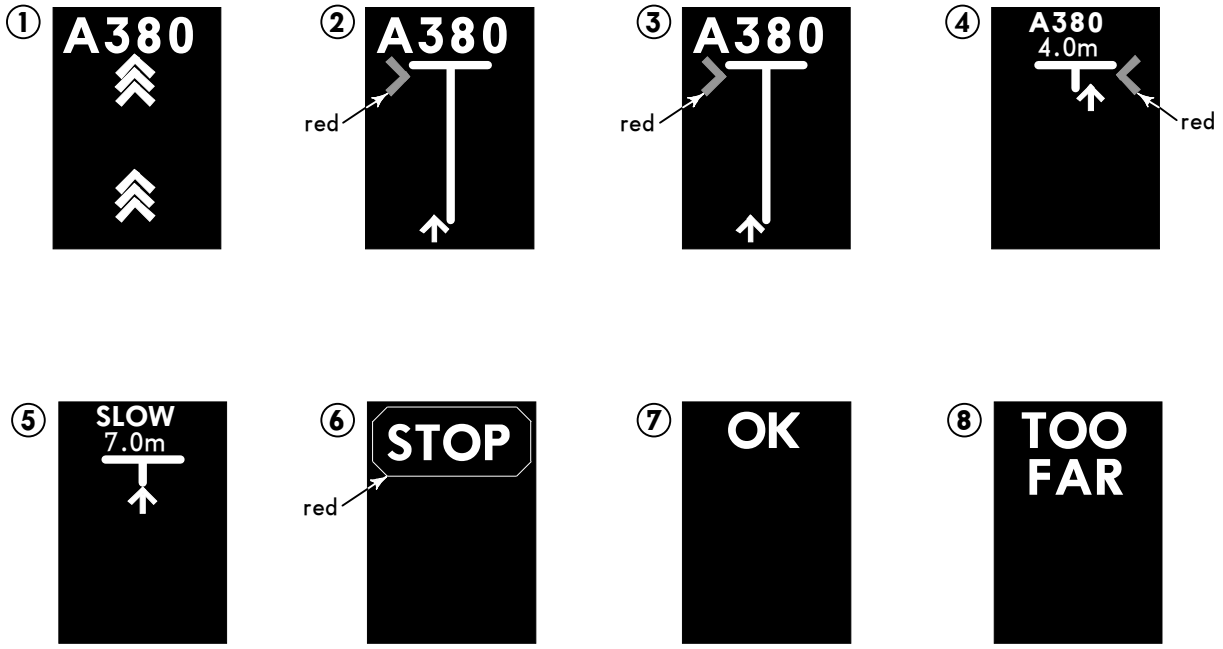
A. DESCRIPTION

The docking system consists of a display unit and a laser unit to identify type and position of aircraft.

B. DOCKING PROCEDURE

CAUTION: The safedock docking guidance system has a built-in error detecting program to inform the acft pilots of possible hazards during the docking procedure. During the acft approach to the terminal gate, the docking guidance system automatically confirms the identification of the acft. The acft must be identified at least 39' (12m) before the correct stop position. If this does not occur, the system displays "STOP" and then "WAIT" with two red, rectangular fields being lit in the azimuth guidance area of the display. While the acft is stopped, the system will attempt to identify it. If successful, the docking procedure will continue. If not, "WAIT" will be replaced with "STOP". If the display reverts to the "STOP" indication, the pilot must contact OTOPENI Ground to obtain clearance to complete the docking procedure.

DOCKING SYSTEM T1



1. Check that the correct acft type is displayed. The scrolling arrows indicate that the system is activated.

2. Follow the lead in line. When the solid yellow closing rate field appears, the acft has been caught by the scanning unit. The scanning unit now checks that the acft is the correct type and the display provides azimuth guidance information.

3. Look for the flashing red arrow and solid yellow arrow which provide azimuth guidance information. The flashing red arrow shows which direction to steer, while solid yellow arrow gives an indication of how far the acft is off of the centerline.

4. When the acft is 39' (12m) from the stop position, closing rate information is given. "Distance to go" is indicated by turning off one row of LED's for each 2' (0.5 m) that the acft advances towards the stop position.

5. When the acft is approaching with to high speed, display will indicate "SLOW".

6. When the correct stop position is reached all of the LED's for the closing rate field will be off, the word "STOP" will appear in the display and two red rectangular fields will light in the azimuth guidance area of the display.

7. If the acft stops in the correct position, "OK" will be displayed after a few seconds.

8. If the acft has gone past the correct stop position, the display will show "T-FAR" (too far).

LROP/OTP
HENRI COANDA

JEPPESEN

26 NOV 21 (21-1)

BUCHAREST, ROMANIA
ILS Rwy 08L

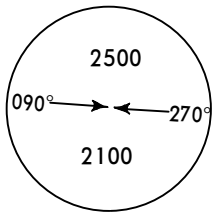
ATIS	BUCHAREST Approach (R)		*BUCHAREST Director ❶		OTOPENI Tower		Ground	
118.5	119.415	120.6	127.155	120.6	118.805	120.9❷	121.855	121.7❷

LOC ILL	Final Apch Crs	D6.9 ILL	ILS DA(H)	Apt Elev 314′
110.9	079°	2500′(2186′)	514′(200′)	Rwy 314′

MISSED APCH: Climb via OTR NDB to OPT VOR to 3000′ and hold, or as directed.

Alt Set: hPa (MM on req) Rwy Elev: 11 hPa Trans level: By ATC Trans alt: 4000′

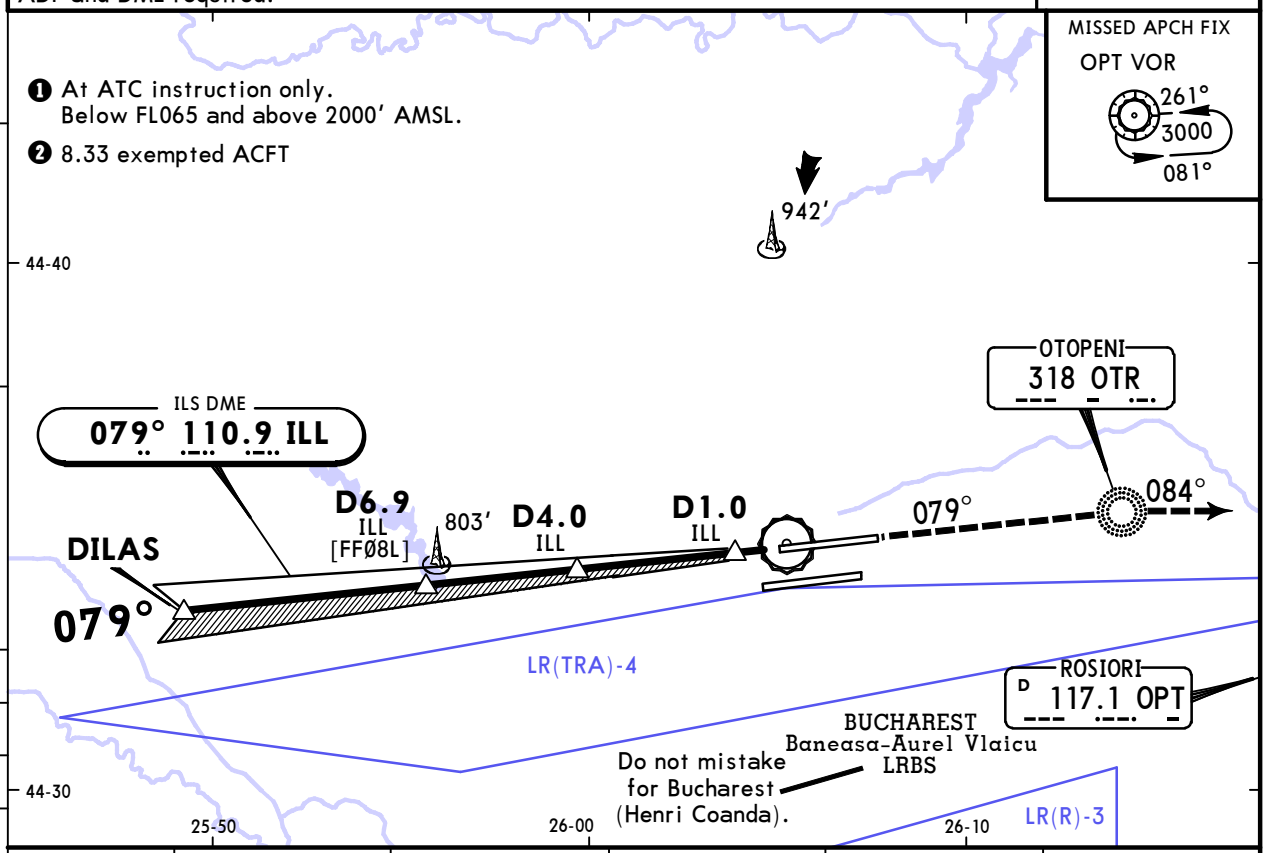
ADF and DME required.



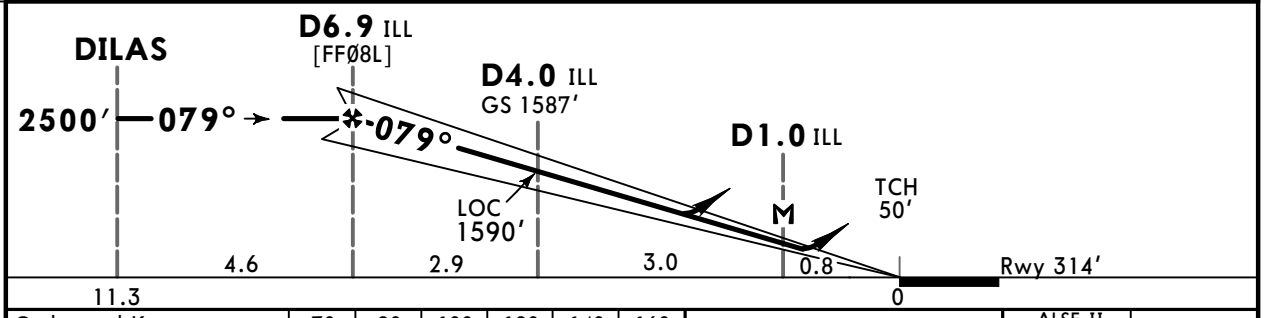
MSA ARP

❶ At ATC instruction only.
Below FL065 and above 2000′ AMSL.

❷ 8.33 exempted ACFT



LOC (GS out)	ILL DME	5.0	4.0	3.0	2.0
	ALTITUDE	1905′	1587′	1268′	950′



Gnd speed-Kts		70	90	100	120	140	160
GS	3.00°	372	478	531	637	743	849
MAP at D1.0 ILL							
D6.9 ILL to MAP	5.9	5:03	3:56	3:32	2:57	2:32	2:13

ALSF-II
PAPI

OTR
318

Std/State

STRAIGHT-IN LANDING

	ILS			LOC (GS out) CDFA	
	DA(H) 514′(200′)			❶ DA/MDA(H) 690′(376′)	
	FULL	TDZ or CL out	ALS out		ALS out
A	R550m	❷ R550m	R1200m	R1000m	R1500m
B					
C					R1700m
D					

CIRCLE-TO-LAND
Not authorized
South of airport

Max Kts	MDA(H)
100	780′(466′) V1500m
135	820′(506′) V1600m
180	1010′(696′) V2400m
205	1020′(706′) V3600m

❶ VNAV DA(H) in lieu of MDA(H) depends on operator policy.
❷ R750m when a Flight Director or Autopilot or HUD to DA is not used.

CHANGES: Minimums note added.

LROP/OTP
HENRI COANDA

JEPPESEN

26 NOV 21 (21-1A)

BUCHAREST, ROMANIA
CAT II ILS Rwy 08L

ATIS	BUCHAREST Approach (R)		*BUCHAREST Director ❶		OTOPENI Tower		Ground	
118.5	119.415	120.6	127.155	120.6	118.805	120.9❷	121.855	121.7❷

BRIEFING STRIP™

LOC ILL	Final Apch Crs	D6.9 ILL	CAT II ILS RA 99′ DA(H)	Apt Elev 314′
110.9	079°	2500′(2186′)	414′(100′)	Rwy 314′

MISSED APCH: Climb via OTR NDB to OPT VOR to 3000′ and hold, or as directed.

Alt Set: hPa (MM on req) Rwy Elev: 11 hPa Trans level: By ATC Trans alt: 4000′

1. ADF and DME required. 2. Special Aircrew & Acft Certification required.

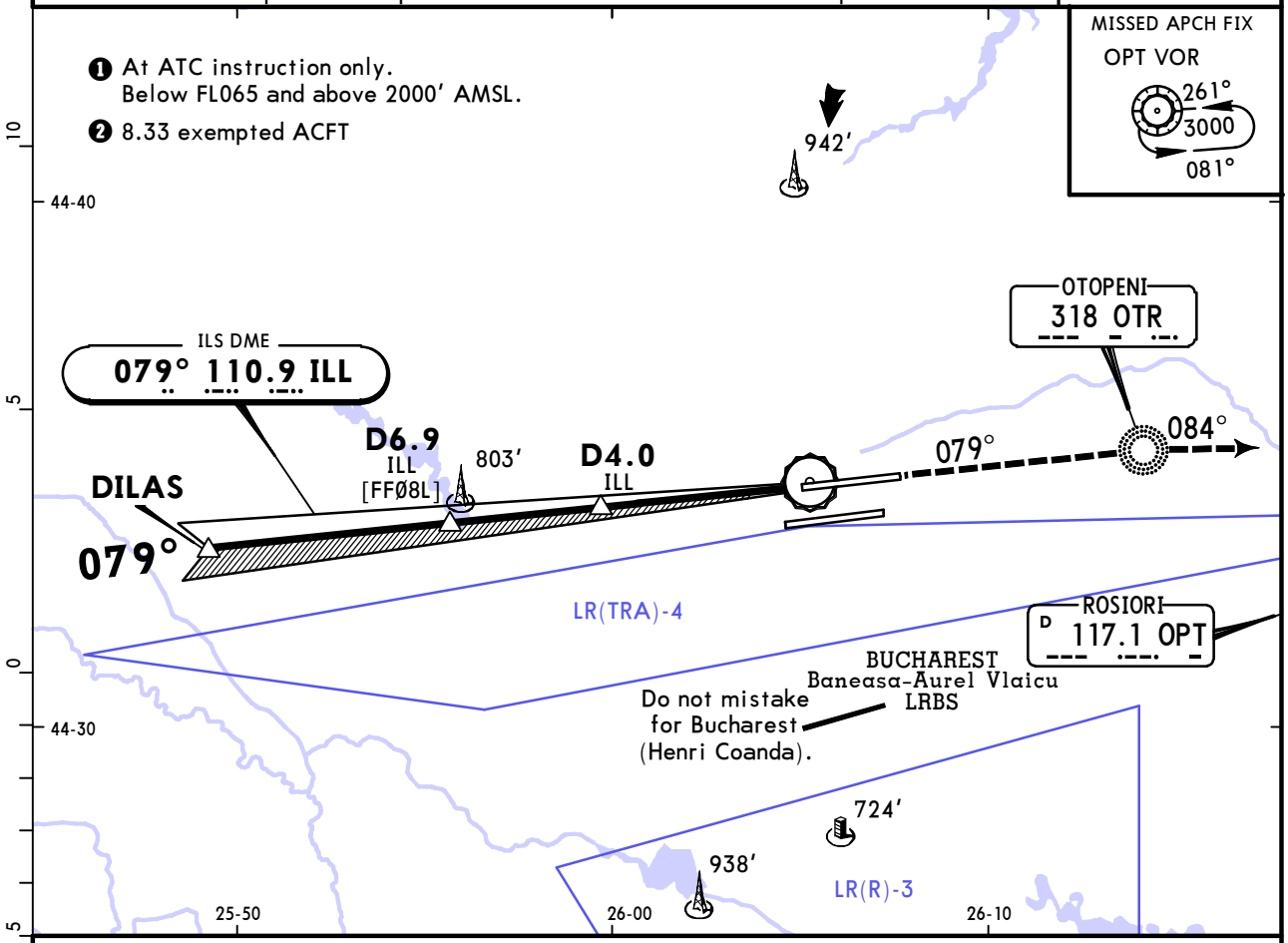
2500 090° 270° 2100

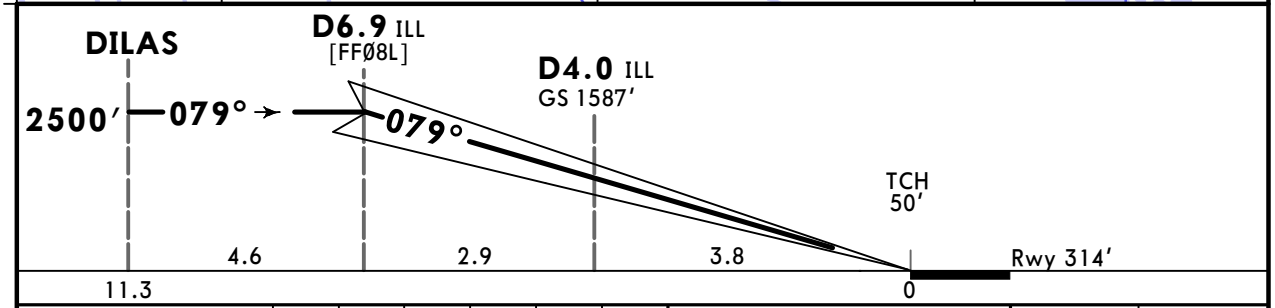
MSA ARP

MISSED APCH FIX
OPT VOR
261° 3000 081°

❶ At ATC instruction only.
Below FL065 and above 2000′ AMSL.

❷ 8.33 exempted ACFT





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

ALSF-II
PAPI

OTR 318

Std/State

STRAIGHT-IN LANDING

CAT II ILS

RA 99′

DA(H) **414′**(100′)

PANS OPS

R350m

CHANGES: Minimums.

LROP/OTP
HENRI COANDA

JEPPESEN
23 APR 21 (21-2)

BUCHAREST, ROMANIA
ILS Rwy 08R

ATIS	BUCHAREST Approach (R)	*BUCHAREST Director ❶	OTOPENI Tower	Ground
118.5	119.415 120.6	127.155 120.6	118.805 120.9❷	121.855 121.7❷

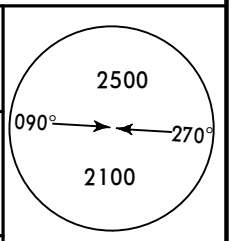
BRIEFING STRIP ™

LOC IOP	Final Apch Crs	D7.6 IOP	ILS DA(H)	Apt Elev 314′
110.3	079°	2500′ (2186′)	514′ (200′)	

MISSED APCH: Climb via OPE NDB to OPT VOR to 3000′ and hold, or as directed.

Alt Set: hPa (MM on req) Rwy Elev: 11 hPa Trans level: By ATC Trans alt: 4000′

ADF,VOR, DME required.

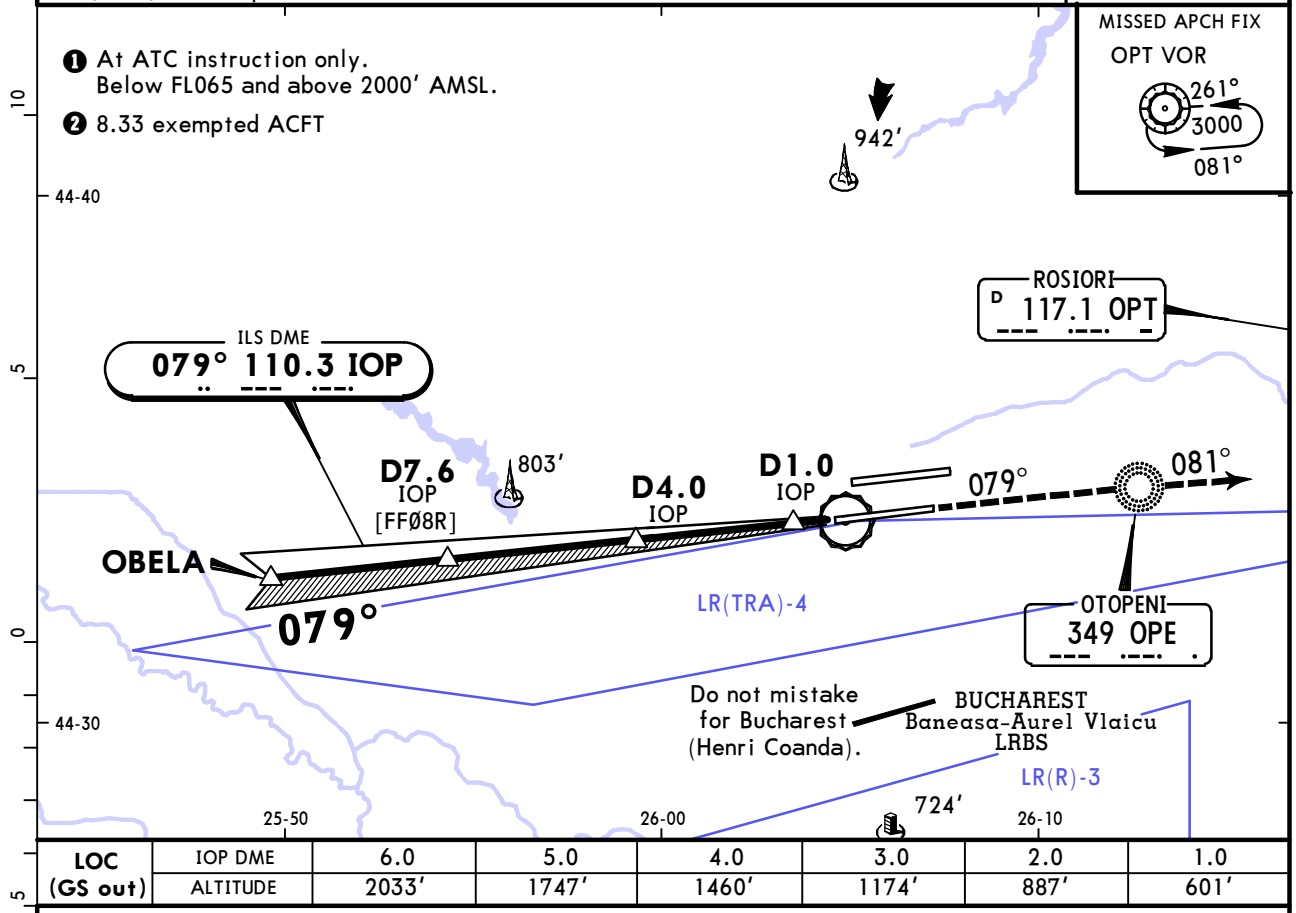


MSA ARP

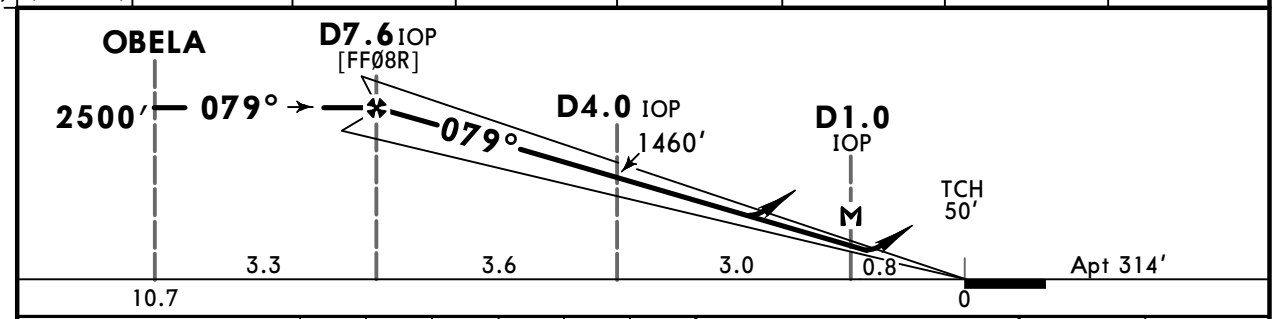
❶ At ATC instruction only.
Below FL065 and above 2000′ AMSL.

❷ 8.33 exempted ACFT

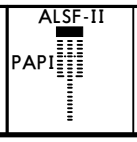
MISSED APCH FIX
OPT VOR
261°
3000
081°



LOC (GS out)	IOP DME	6.0	5.0	4.0	3.0	2.0	1.0
	ALTITUDE	2033′	1747′	1460′	1174′	887′	601′



Gnd speed-Kts		70	90	100	120	140	160
ILS GS or LOC Descent Angle	2.70°	334	430	478	573	669	764
MAP at D1.0 IOP							
D7.6 IOP to MAP	6.6	5:39	4:24	3:58	3:18	2:50	2:28



OPE
349

Std/State

STRAIGHT-IN LANDING

	ILS DA(H) 514′ (200′)			LOC (GS out) CDFA ❷ DA/MDA(H) 690′ (376′)	
	FULL	TDZ or CL out	ALS out		ALS out
A	R550m	❶ R550m	R1200m	R1000m	R1500m
B					
C					R1700m
D					

CIRCLE-TO-LAND
Not authorized
South of airport

Max Kts	MDA(H)
100	780′ (466′) V1500m
135	820′ (506′) V1600m
180	1010′ (696′) V2400m
205	1020′ (706′) V3600m

PANS OPS

❶ R750m when a Flight Director or Autopilot or HUD to DA is not used.
❷ VNAV DA(H) in lieu of MDA(H) depends on operator policy.

CHANGES: Minimums note.

LROP/OTP
HENRI COANDA

JEPPESEN

23 APR 21 (21-2A)

BUCHAREST, ROMANIA
CAT II/III ILS Rwy 08R

ATIS	BUCHAREST Approach (R)		*BUCHAREST Director ❶		OTOPENI Tower		Ground	
118.5	119.415	120.6	127.155	120.6	118.805	120.9❷	121.855	121.7❷

LOC IOP	Final Apch Crs	D7.6 IOP	CAT IIIA & II ILS Refer to Minimums	Apt Elev 314′
110.3	079°	2500′ (2186′)		

MISSED APCH: Climb via OPE NDB to OPT VOR to 3000′ and hold, or as directed.

Alt Set: hPa (MM on req) Rwy Elev: 11 hPa Trans level: By ATC Trans alt: 4000′

1. ADF, VOR, DME required. 2. Special Aircrew & Acft Certification required.

2500
090° 270°
2100
MSA ARP

❶ At ATC instruction only.
Below FL065 and above 2000′ AMSL.

❷ 8.33 exempted ACFT

MISSED APCH FIX
OPT VOR
261°
3000
081°

942′

ROSIORI
D 117.1 OPT

ILS DME
079° 110.3 IOP

D7.6 IOP [FFØ8R]

803′

D4.0 IOP

079°

081°

OBELA

079°

LR(TRA)-4

OTOPENI
349 OPE

Do not mistake for Bucharest (Henri Coanda).

BUCHAREST
Baneasa-Aurel Vlaicu
LRBS

724′

938′

LR(R)-3

44-40

44-30

25-50 26-00 26-10

10 5 0 5

OBELA
2500′
079°
D7.6 IOP [FFØ8R]
D4.0 IOP
079°
1460′
TCH 50′
3.3 3.6 3.8
Apt 314′
10.7 0

Gnd speed-Kts		70	90	100	120	140	160
GS	2.70°	334	430	478	573	669	764

ALSF-II
PAPI

OPE 349

Std/State STRAIGHT-IN LANDING

CAT IIIA ILS	CAT II ILS
DH 50′	RA 102′ DA(H) 414′ (100′)
R200m	❶ R300m

❶ CAT D without autoland: R350m.

CHANGES: CAT IIIB ILS withdrawn.

BRIEFING STRIP™

PANS OPS

LROP/OTP
HENRI COANDA

JEPPESEN
23 APR 21 (21-3)

BUCHAREST, ROMANIA
ILS Rwy 26L

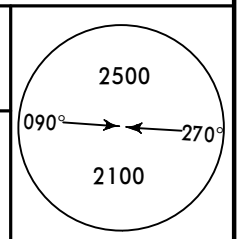
ATIS	BUCHAREST Approach (R)		*BUCHAREST Director ❶		OTOPENI Tower		Ground	
118.5	119.415	120.6	127.155	120.6	118.805	120.9❷	121.855	121.7❷

BRIEFING STRIP ™

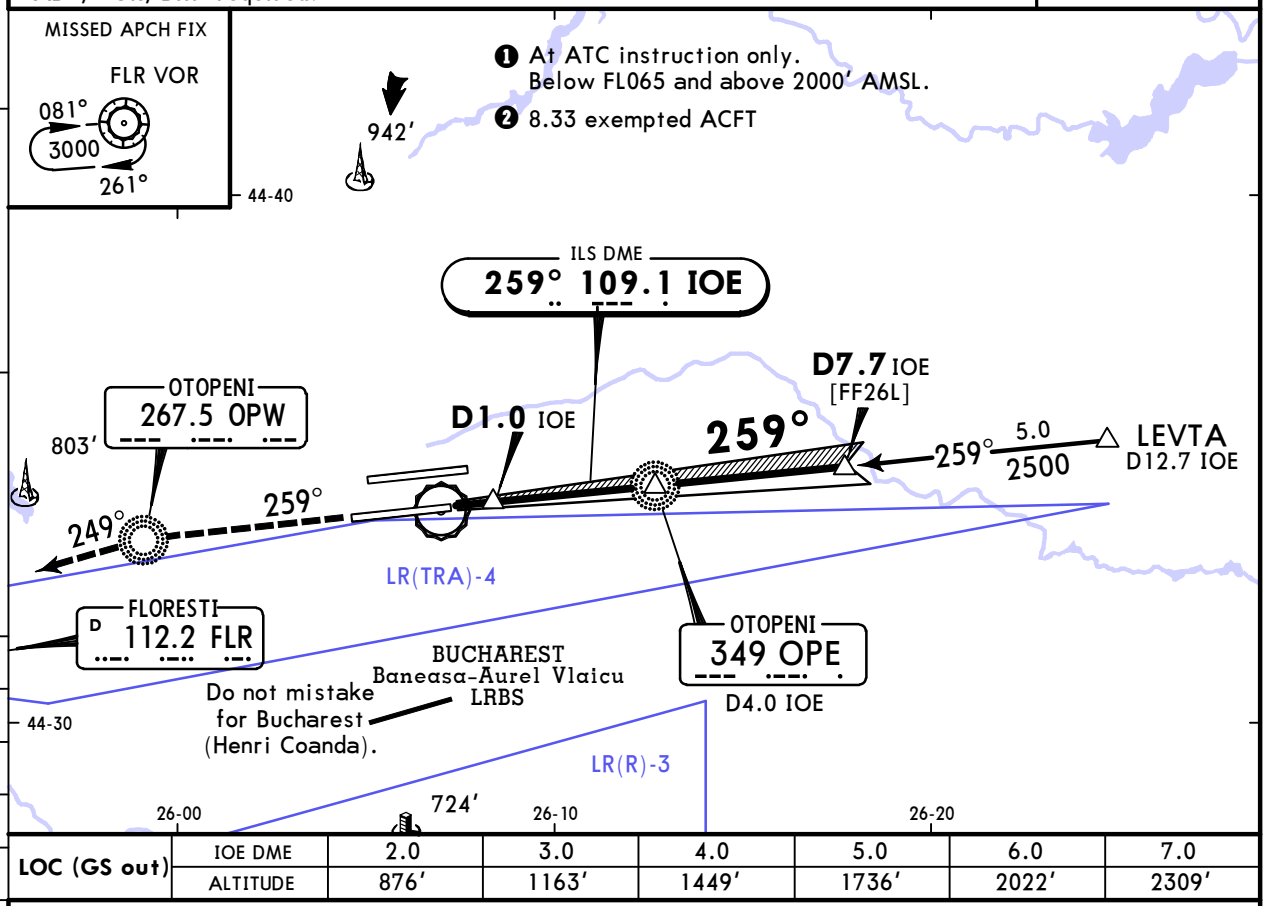
LOC IOE	Final Apch Crs	D7.7 IOE	ILS DA(H)	Apt Elev 314′
109.1	**259°**	**2500′** (2197′)	**503′** (200′)	Rwy 303′

MISSED APCH: Climb via OPW NDB to FLR VOR to 3000′ and hold, or as directed.

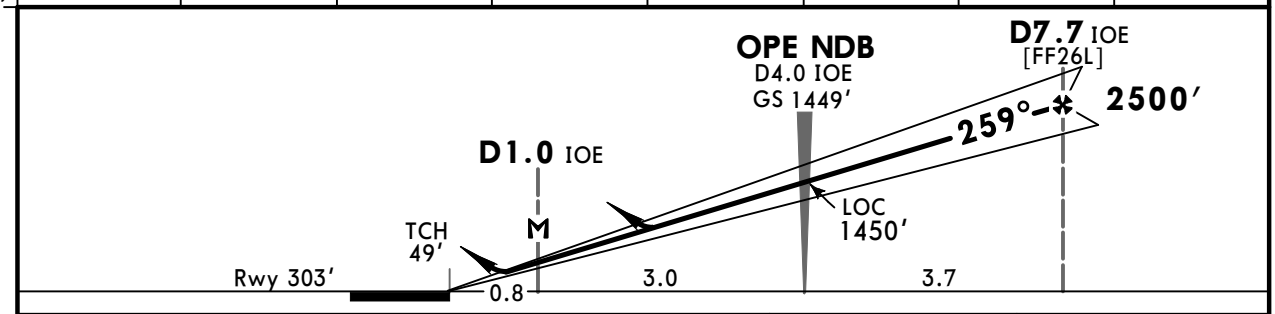
Alt Set: hPa (MM on req) Rwy Elev: 11 hPa Trans level: By ATC Trans alt: 4000′
ADF, VOR, DME required.



MSA ARP



LOC (GS out)	IOE DME	2.0	3.0	4.0	5.0	6.0	7.0
	ALTITUDE	876′	1163′	1449′	1736′	2022′	2309′



Gnd speed-Kts		70	90	100	120	140	160
ILS GS or LOC Descent Angle	2.70°	334	430	478	573	669	764
MAP at D1.0 IOE							
D7.7 IOE to MAP	6.7	5:45	4:28	4:01	3:21	2:52	2:31

HIALS
PAPI
OPW **267.5**

PANS OPS

Std/State STRAIGHT-IN LANDING

	ILS DA(H) 503′ (200′) FULL	ILS DA(H) 503′ (200′) ALS out	LOC (GS out) CDFA ❷ DA/MDA(H) 730′ (427′)	LOC (GS out) CDFA ❷ DA/MDA(H) 730′ (427′) ALS out
A	❶ R550m	R1200m	R1300m	R1500m
B				
C				R2000m
D				

CIRCLE-TO-LAND
Not authorized
South of airport

Max Kts	MDA(H)
100	780′ (466′) V1500m
135	820′ (506′) V1600m
180	1010′ (696′) V2400m
205	1020′ (706′) V3600m

❶ R750m when a Flight Director or Autopilot or HUD to DA is not used.
❷ VNAV DA(H) in lieu of MDA(H) depends on operator policy.

CHANGES: Minimums note.

LROP/OTP
HENRI COANDA

JEPPESEN

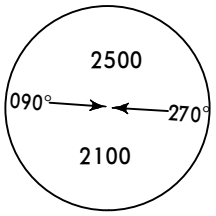
23 APR 21 (21-4)

BUCHAREST, ROMANIA
ILS Rwy 26R

ATIS	BUCHAREST Approach (R)		*BUCHAREST Director ❶		OTOPENI Tower		Ground	
118.5	119.415	120.6	127.155	120.6	118.805	120.9❷	121.855	121.7❷

BRIEFING STRIP ™

LOC IRR	Final Apch Crs	D6.9 IRR	ILS DA(H)	Apt Elev 314′
110.7	259°	2500′ (2196′)	Refer to Minimums	Rwy 304′

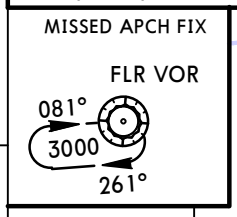


MSA ARP

MISSED APCH: Climb via OTL NDB to FLR VOR to 3000′ and hold, or as directed.

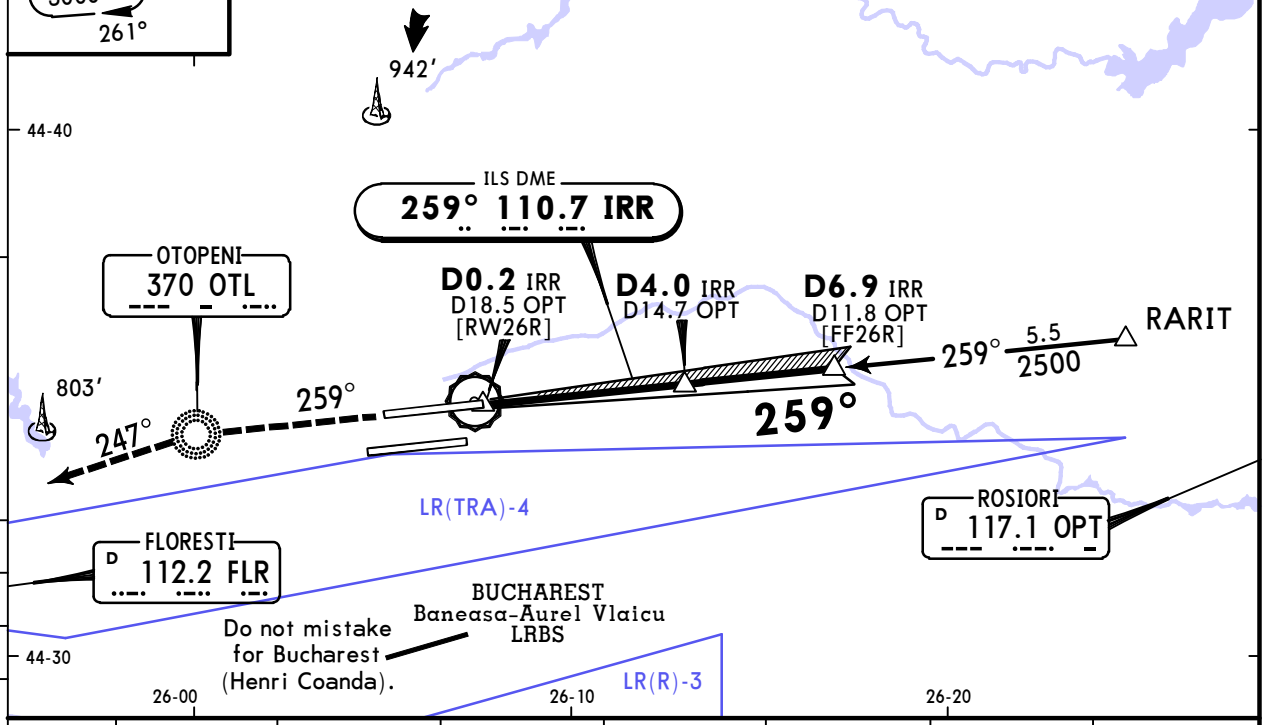
Alt Set: hPa (MM on req) Rwy Elev: 11 hPa Trans level: By ATC Trans alt: 4000′

ADF, VOR, DME required.



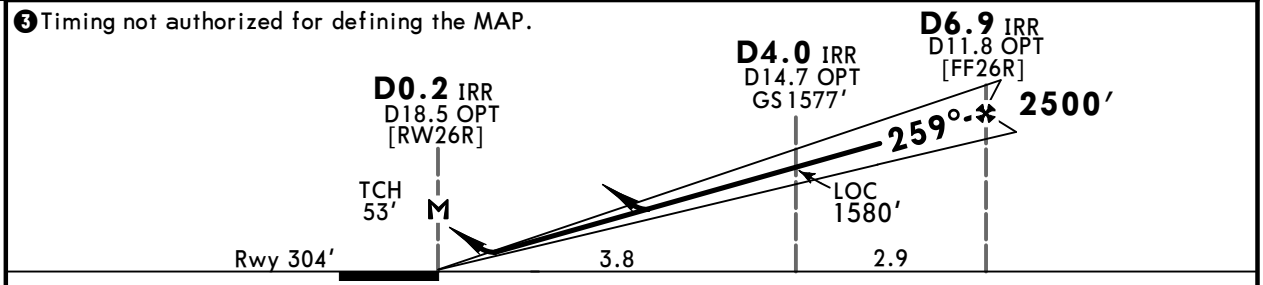
❶ At ATC instruction only. Below FL065 and above 2000′ AMSL.

❷ 8.33 exempted ACFT

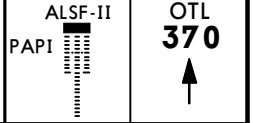


LOC (GS out)	IRR DME	1.0	2.0	3.0	4.0	5.0	6.0
	ALTITUDE	621′	940′	1258′	1577′	1895′	2214′

❸ Timing not authorized for defining the MAP.



Gnd speed-Kts		70	90	100	120	140	160
ILS GS or LOC Descent Angle	3.00°	372	478	531	637	743	849
MAP at D0.2 IRR/D18.5 OPT							
D6.9 IRR to MAP ❸	6.7	5:45	4:28	4:01	3:21	2:52	2:31



Std/State

STRAIGHT-IN LANDING

	ILS DA(H)		LOC (GS out) CDFA ❷ DA/MDA(H)	
	ABC: 504′ (200′) D: 509′ (205′)		680′ (376′)	
	FULL	TDZ or CL out	ALS out	ALS out
A	R550m	❶ R550m	R1200m	R1500m
B				
C				R1700m
D				

CIRCLE-TO-LAND
Not authorized
South of airport

Max Kts	MDA(H)
100	780′ (466′) V1500m
135	820′ (506′) V1600m
180	1010′ (696′) V2400m
205	1020′ (706′) V3600m

PANS OPS

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

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

CHANGES: Lights symbol. Minimums.

LROP/OTP
HENRI COANDA

JEPPESEN
5 MAR 21 (26-1)

BUCHAREST, ROMANIA
NDB Rwy 08L

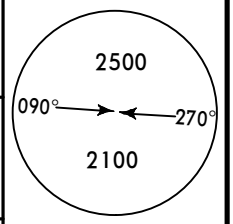
ATIS	BUCHAREST Approach (R)		*BUCHAREST Director ❶		OTOPENI Tower		Ground	
118.5	119.415	120.6	127.155	120.6	118.805	120.9❷	121.855	121.7❷

BRIEFING STRIP™

NDB OTL 370	Final Apch Crs 079°	D27.1 2500′(2186′)	DA/MDA(H) Refer to Minimums	Apt Elev 314′

MISSED APCH: Climb via OTR NDB to OPT VOR to 3000′ and hold, or as directed.

Alt Set: hPa (MM on req) Apt Elev: 11 hPa Trans level: By ATC Trans alt: 4000′
VOR and DME required.

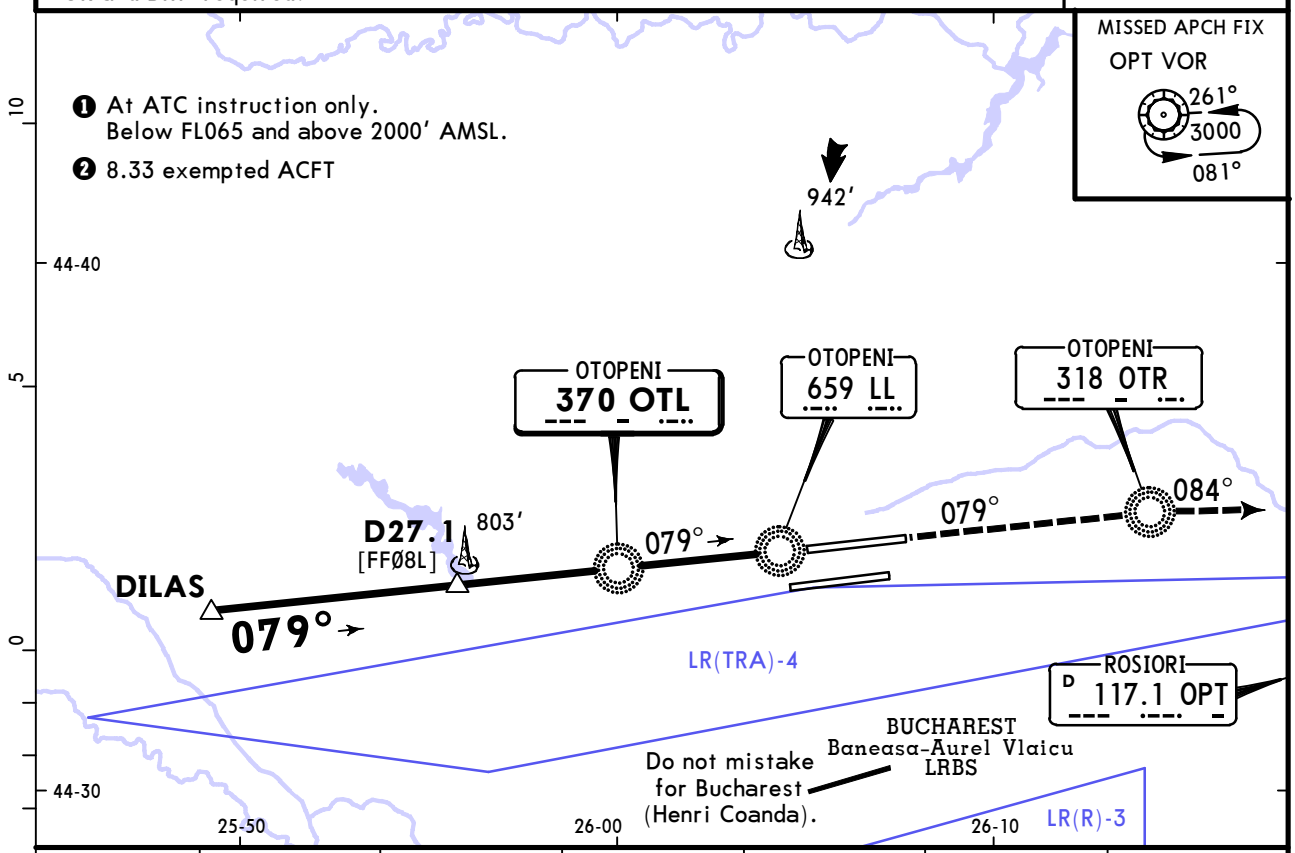


MSA ARP

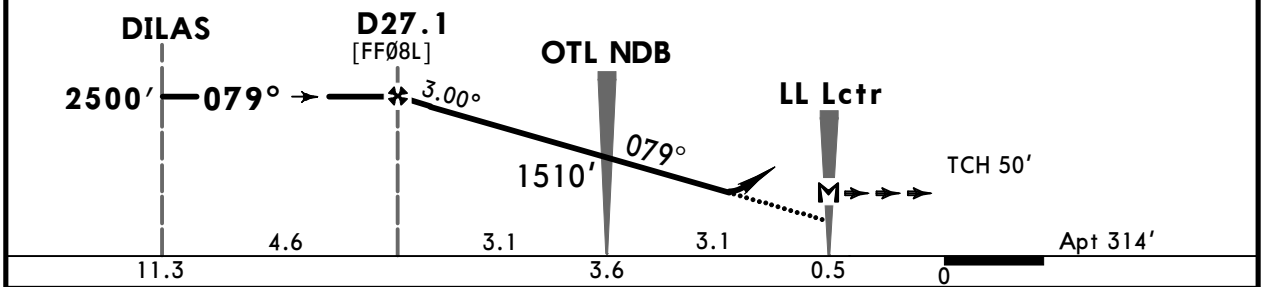
MISSED APCH FIX
OPT VOR
261°
3000
081°

❶ At ATC instruction only.
Below FL065 and above 2000′ AMSL.

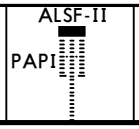
❷ 8.33 exempted ACFT



OPT DME	27.0	26.0	25.0	24.0	23.0	22.0
ALTITUDE	2450′	2140′	1820′	1510′	1190′	870′



Gnd speed-Kts		70	90	100	120	140	160
Descent Angle	3.00°	372	478	531	637	743	849
MAP at LL Lctr							
D27.1 to MAP	6.2	5:19	4:08	3:43	3:06	2:39	2:20



OTR
318

Std/State STRAIGHT-IN LANDING

CDFA

DA/MDA(H) AB: **710′**(396′) CD: **720′**(406′)

	ALS out	
A	R1100m	R1500m
B		
C	R1200m	R1900m
D		

CIRCLE-TO-LAND
Not authorized
South of airport

Max Kts	MDA(H)	
100	780′(466′)	V1500m
135	820′(506′)	V1600m
180	1010′(696′)	V2400m
205	1020′(706′)	V3600m

PANS OPS

CHANGES: Ground Speed Box. New AOM concept.

LROP/OTP
HENRI COANDA

JEPPESEN

5 MAR 21 (26-2)

BUCHAREST, ROMANIA
NDB Rwy 08R

ATIS	BUCHAREST Approach (R)		*BUCHAREST Director ❶		OTOPENI Tower		Ground	
118.5	119.415	120.6	127.155	120.6	118.805	120.9❷	121.855	121.7❷

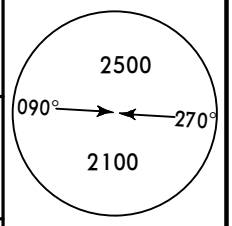
BRIEFING STRIP ™

NDB OPW	Final Apch Crs	D7.6 IOP	DA/MDA(H) Refer to Minimums	Apt Elev 314′
267.5	079°	2500′ (2186′)		

MISSED APCH: Climb via OPE NDB to OPT VOR to 3000′ and hold, or as directed.

Alt Set: hPa (MM on req) | Apt Elev: 11 hPa | Trans level: By ATC | Trans alt: 4000′

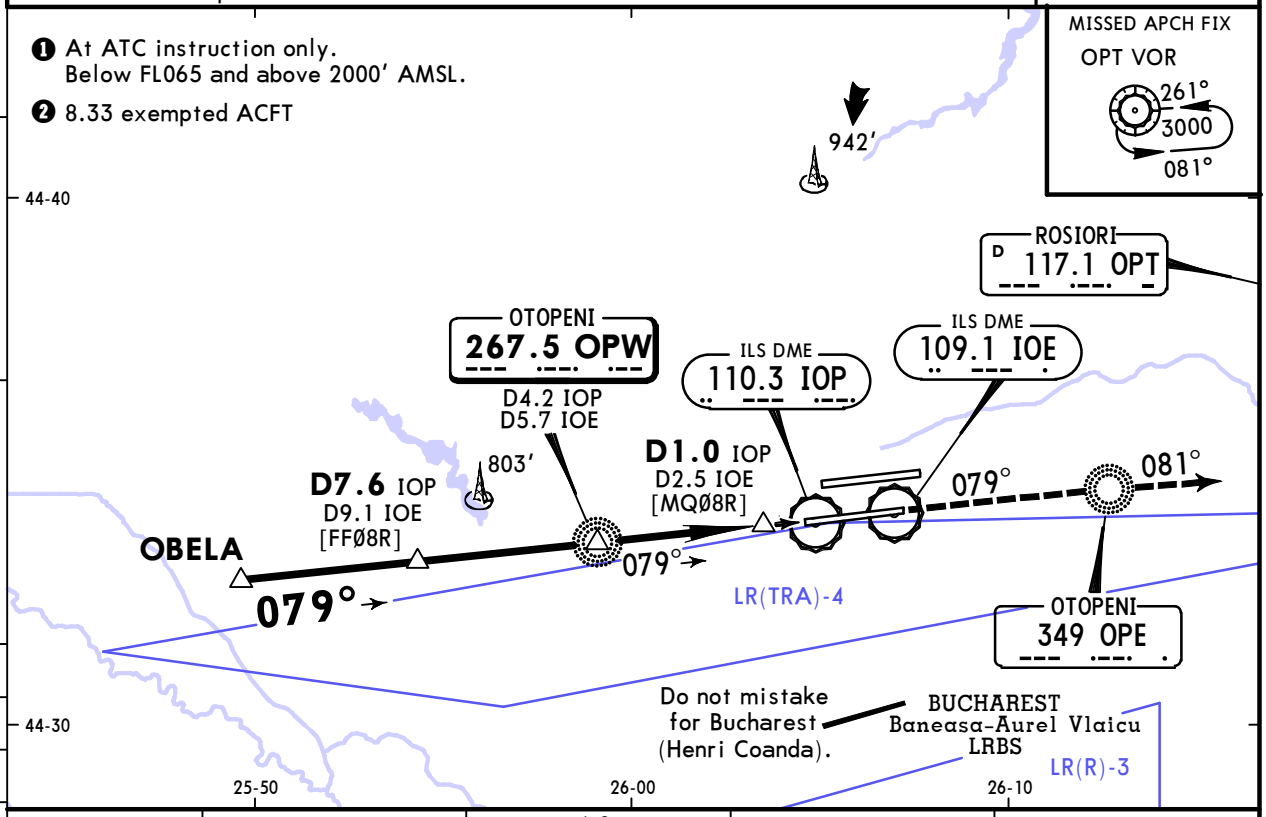
VOR and DME required.



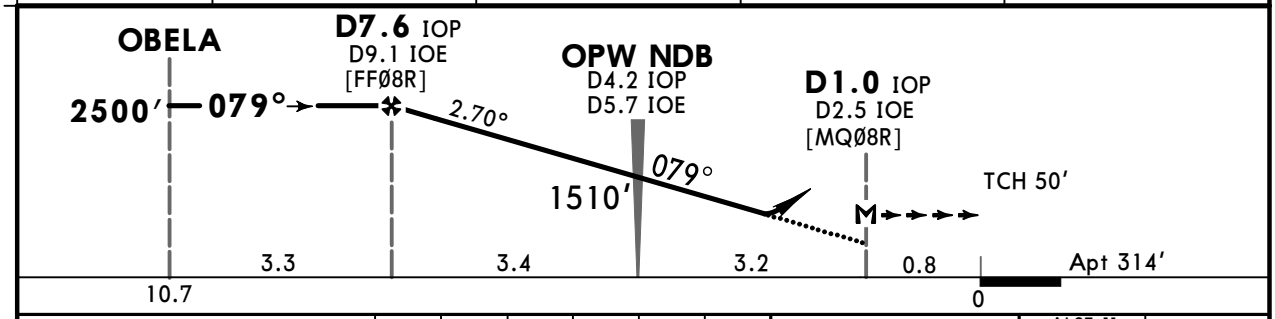
MSA ARP

❶ At ATC instruction only.
Below FL065 and above 2000′ AMSL.

❷ 8.33 exempted ACFT



IOP DME	5.0	4.0	3.0	2.0
IOE DME	6.5	5.5	4.5	3.5
ALTITUDE	1747′	1460′	1174′	887′



Gnd speed-Kts		70	90	100	120	140	160
Descent Angle	2.70°	334	430	478	573	669	764
MAP at D1.0 IOP/D2.5 IOE							
D7.6 IOP/D9.1 IOE to MAP	6.6	5:39	4:24	3:58	3:18	2:50	2:28

ALSF-II
PAPI

OPE 349

Std/State STRAIGHT-IN LANDING

CDFA

DA/MDA(H) AB: 710′ (396′) CD: 720′ (406′)

	ALS out	
A	R1100m	R1500m
B		
C	R1200m	R1900m
D		

CIRCLE-TO-LAND
Not authorized
South of airport

Max Kts	MDA(H)	
100	780′ (466′)	V1500m
135	820′ (506′)	V1600m
180	1010′ (696′)	V2400m
205	1020′ (706′)	V3600m

PANS OPS

CHANGES: Ground Speed Box. New AOM concept.

LROP/OTP HENRI COANDA

JEPPESEN

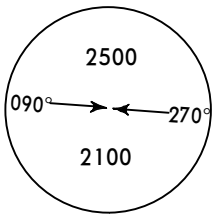
23 APR 21 (26-3)

BUCHAREST, ROMANIA NDB Rwy 26L

ATIS	BUCHAREST Approach (R)		*BUCHAREST Director ❶		OTOPENI Tower		Ground	
118.5	119.415	120.6	127.155	120.6	118.805	120.9❷	121.855	121.7❷

BRIEFING STRIP ™

NDB OPE 349	Final Apch Crs 259°	D7.7 IOE 2500′ (2197′)	DA/MDA(H) 790′ (487′)	Apt Elev 314′ Rwy 303′

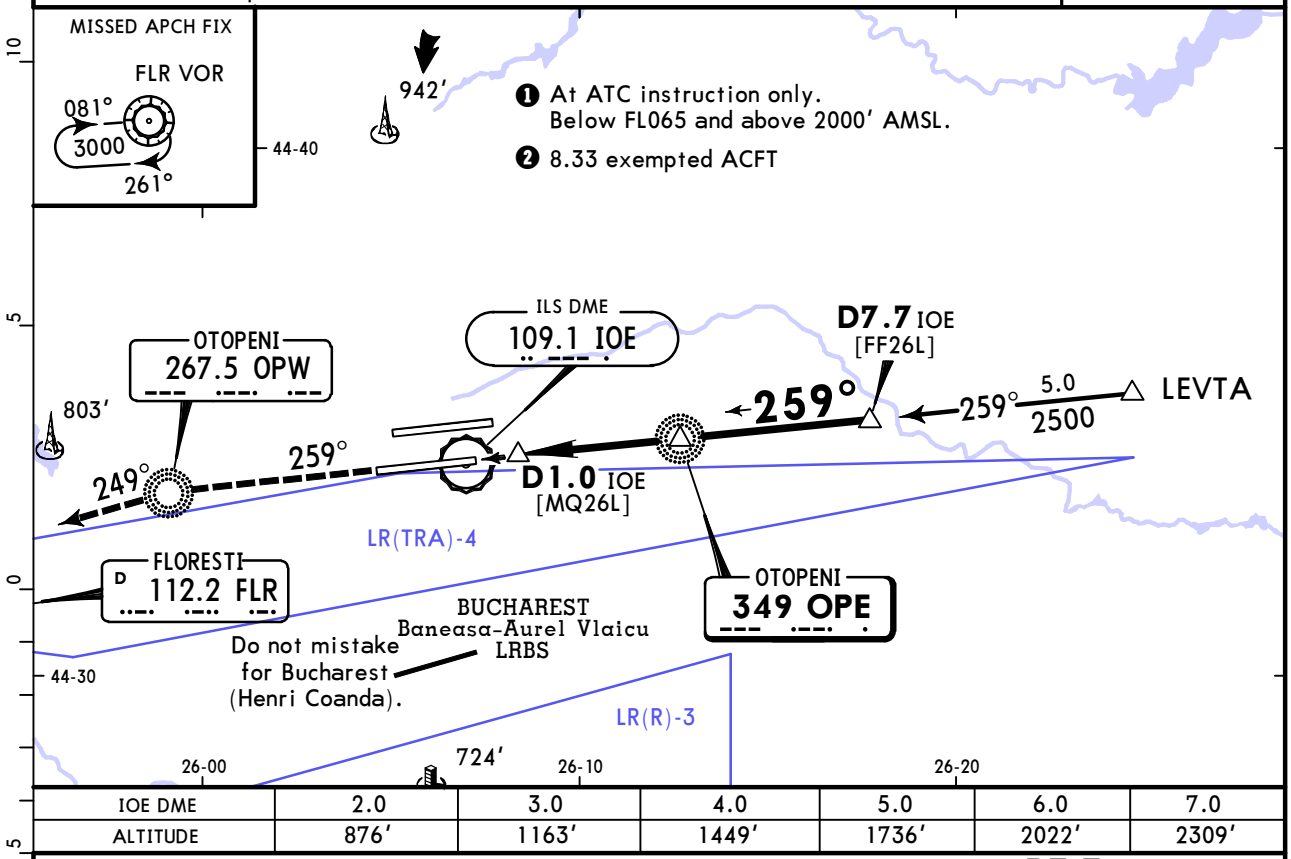


MSA ARP

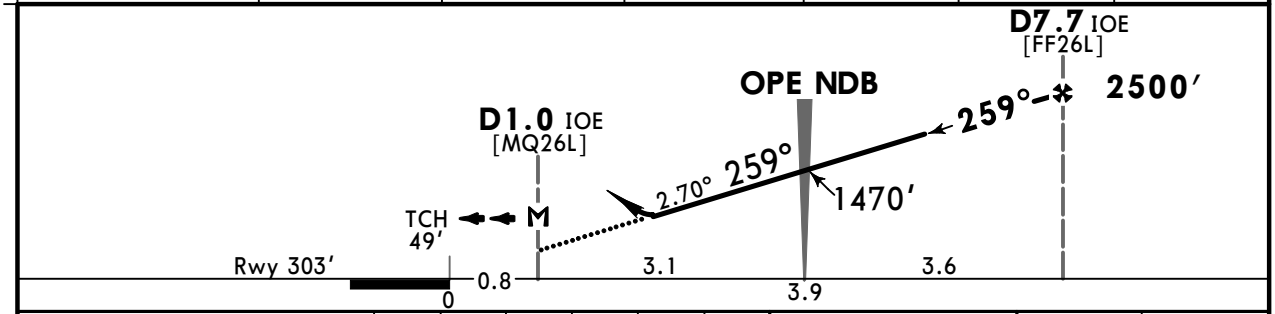
MISSED APCH: Climb via OPW NDB to FLR VOR to 3000′ and hold, or as directed.

Alt Set: hPa (MM on req) Rwy Elev: 11 hPa Trans level: By ATC Trans alt: 4000′

VOR and DME required.



IOE DME	2.0	3.0	4.0	5.0	6.0	7.0
ALTITUDE	876′	1163′	1449′	1736′	2022′	2309′



Gnd speed-Kts		70	90	100	120	140	160
Descent Angle	2.70°	334	430	478	573	669	764
MAP at D1.0 IOE							
D7.7 IOE to MAP	6.7	5:45	4:28	4:01	3:21	2:52	2:31

HIALS
PAPI
OPW 267.5

Std/State STRAIGHT-IN LANDING

CDFA

❶ DA/MDA(H) 790′ (487′)

ALS out

CIRCLE-TO-LAND
Not authorized
South of airport

			Max Kts	MDA(H)	
A	R1500m		100	780′ (466′)	V1500m
B			135	820′ (506′)	V1600m
C	R1500m	R2300m	180	1010′ (696′)	V2400m
D			205	1020′ (706′)	V3600m

PANS OPS

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

CHANGES: Minimums note.

LROP/OTP HENRI COANDA

JEPPESEN 23 APR 21 (26-4)

BUCHAREST, ROMANIA NDB Rwy 26R

ATIS	BUCHAREST Approach (R)		*BUCHAREST Director ❶		OTOPENI Tower		Ground	
118.5	119.415	120.6	127.155	120.6	118.805	120.9❷	121.855	121.7❷

BRIEFING STRIP TM

NDB OTR	Final Apch Crs	D11.8 OPT	DA/MDA(H)	Apt Elev 314′
318	259°	2500′ (2196′)	690′ (386′)	Rwy 304′

MISSED APCH: Climb via OTL NDB to FLR VOR to 3000′ and hold, or as directed.

Alt Set: hPa (MM on req) Rwy Elev: 11 hPa Trans level: By ATC Trans alt: 4000′

VOR and DME required.

2500 090° 270° 2100

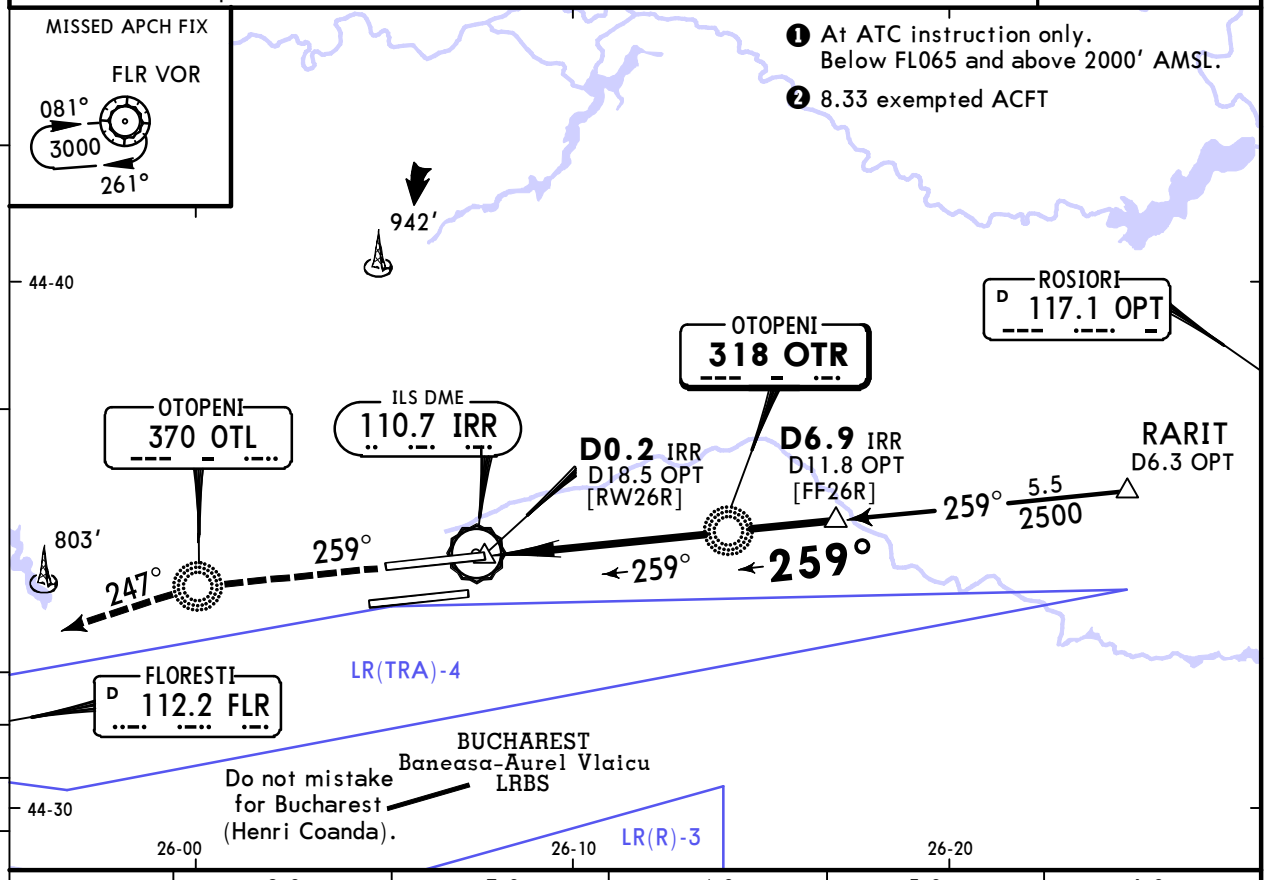
MSA ARP

MISSED APCH FIX

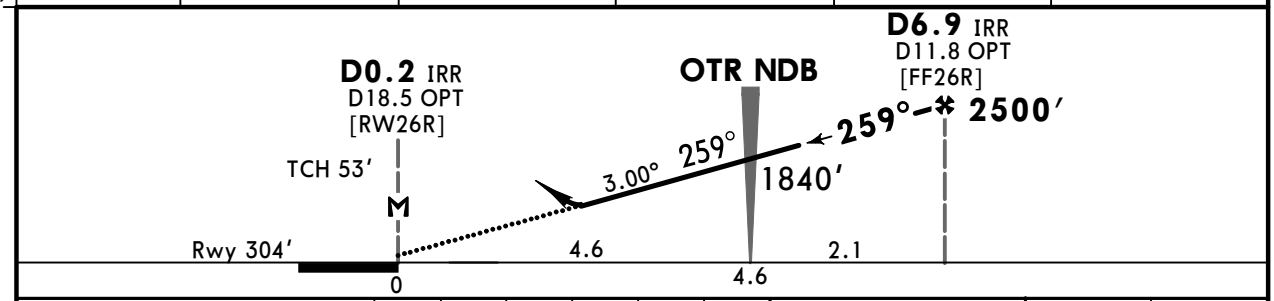
FLR VOR 081° 3000 261°

❶ At ATC instruction only. Below FL065 and above 2000′ AMSL.

❷ 8.33 exempted ACFT



IRR DME	2.0	3.0	4.0	5.0	6.0
ALTITUDE	930′	1250′	1570′	1890′	2210′



Gnd speed-Kts		70	90	100	120	140	160
Descent Angle	3.00°	372	478	531	637	743	849
MAP at D0.2 IRR/D18.5 OPT							
D6.9 IRR/D11.8 OPT to MAP	6.7	5:45	4:28	4:01	3:21	2:52	2:31

Timing not authorized for defining the MAP.

ALSF-II PAPI

OTL 370

Std/State

STRAIGHT-IN LANDING
CDFA
❶ DA/MDA(H) 690′ (386′)

		ALS out
A	R1100m	R1500m
B		
C		R1800m
D		

CIRCLE-TO-LAND
Not authorized
South of airport

Max Kts	MDA(H)	
100	780′ (466′)	V1500m
135	820′ (506′)	V1600m
180	1010′ (696′)	V2400m
205	1020′ (706′)	V3600m

PANS OPS

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

CHANGES: Lights symbol. Minimums.

Chart changes since cycle 15-2023

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

ACT	PROCEDURE IDENT	INDEX	REV DATE	EFF DATE
BUCHAREST, (HENRI COANDA - LROP)				
REV	AIRPORT	20-9	04 Aug 2023	10 Aug 2023
REV	AIRPORT INFO, PARKING COO...	20-9A	04 Aug 2023	10 Aug 2023

TERMINAL CHART CHANGE NOTICES

Chart Change Notices for Airport LROP

Type: Terminal
Effectivity: Temporary
Begin Date: 20180816
End Date: Until Further Notice

Based on SUP 02/18 following charts are suspended: - STAR (20-2H/J/K/L/M/N/P,Q) - SID (20-3H/J/K/L/M/N)