JEPPESEN
JeppView for Windows

List of pages in this Trip Kit

General Information

Location: FRANKFURT/MAIN DEU
ICAO/IATA: EDDF / FRA
Lat/Long: N50° 02.00', E008° 34.23'
Elevation: 363 ft

Airport Use: Public
Daylight Savings: Observed
UTC Conversion: -1:00 = UTC
Magnetic Variation: 3.0° 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: Yes
LLWS Alert: No
Beacon: Yes

Sunrise: 0321 Z
Sunset: 1926 Z

Runway Information

Runway: 07C
Length x Width: 13123 ft x 197 ft
Surface Type: asphalt
TDZ-Elev: 328 ft
Lighting: Edge, ALS, Centerline, TDZ

Runway: 07L
Length x Width: 9186 ft x 148 ft
Surface Type: concrete
TDZ-Elev: 304 ft
Lighting: Edge, ALS, Centerline, TDZ

Runway: 07R
Length x Width: 13123 ft x 148 ft
Surface Type: asphalt
TDZ-Elev: 327 ft
Lighting: Edge, ALS, Centerline, TDZ

Runway: 18
Length x Width: 13123 ft x 148 ft
Surface Type: concrete
TDZ-Elev: 325 ft
Lighting: Edge, Centerline

Runway: 25C
Length x Width: 13123 ft x 197 ft
Surface Type: asphalt
TDZ-Elev: 363 ft
Lighting: Edge, ALS, Centerline, TDZ

Runway: 25L
Length x Width: 13123 ft x 148 ft
Surface Type: asphalt
TDZ-Elev: 361 ft
Lighting: Edge, ALS, Centerline, TDZ

Runway: 25R
Length x Width: 9186 ft x 148 ft
Surface Type: concrete
TDZ-Elev: 351 ft
Lighting: Edge, ALS, Centerline, TDZ

Communication Information

ATIS: 118.030 Arrival Service
ATIS: 118.730 Departure Service
Frankfurt Tower: 127.330 Secondary
Frankfurt Tower: 118.780
Frankfurt Tower: 119.905
Frankfurt Tower: 124.855
Frankfurt Tower: 136.500
Frankfurt Ground: 121.805
Frankfurt Apron Ramp/Taxi: 121.655
Frankfurt Apron Ramp/Taxi: 121.705
Frankfurt Apron Ramp/Taxi: 121.755
Frankfurt Apron Ramp/Taxi: 121.855
Frankfurt Apron Ramp/Taxi: 121.955
Frankfurt Apron Ramp/Taxi: 121.965
Frankfurt Delivery Clearance Delivery: 122.035
Langen Radar Approach: 126.555 RCO
Langen Radar Approach: 125.355 RCO
Langen Radar Approach: 120.155 RCO
Langen Radar Approach: 119.030 Secondary RCO
Langen Radar Approach: 136.130 RCO
Langen Radar Approach: 120.805 RCO
Frankfurt Deicing Operations: 121.985
Frankfurt Direct (Approach Control Radar): 118.505
Frankfurt Direct (Approach Control Radar): 127.280
Frankfurt Rescue Emergency: 121.555

1. GENERAL

1.1. ATIS

*D-ATIS Arrival 118.030
*D-ATIS Departure 118.730

1.2. NOISE ABATEMENT PROCEDURES

1.2.1. RWY USAGE

1.2.1.1. ARRIVALS/DEPARTURES

RWY 25 will preferably be assigned to landing ACFT, provided the tailwind component does not exceed 5 KT. However, the take-off and landing direction will be changed from RWY 25 to RWY 07 if the braking action on the RWYs is impaired by water, snow, slush, ice, or frost, etc., even if the tailwind component is less than 5 KT. The take-off and landing direction also depends on the availability of navigation aids or significant weather in the approach and departure area.

1.2.1.2. DEPARTURES

Preferred take-off direction for landing direction 25/18:

For departures to the Northwest (OBOKA), North (MARUN) and Northeast (TOBAK), RWY 25C is preferred.

For departures to the Southwest (SOBRA, ULKIG), South (ANEKI), Southeast (CINDY) and East (SULUS), RWY 18 is preferred, provided the tailwind component for RWY 18 is not greater than 15 KT.

Preferred take-off direction for landing direction 07/18:

For departures to the Northwest (OBOKA), North (MARUN), Northeast (TOBAK) and East (KOMIB, SULUS), RWY 07C is preferred.

For departures to the Southwest (SOBRA, ULKIG), South (ANEKI) and Southeast (CINDY), RWY 18 is preferred, provided the tailwind component for RWY 18 is not greater than 15 KT.

Exceptions are possible if required due to traffic safety, the availability of navigation aids, significant weather in the approach and departure area or noise abatement measures or if Aerodrome Control deems that the traffic situation permits.

Tailwind component RWY 18:

If the tailwind component for RWY 18 exceeds 10 KT, this will be broadcast by ATIS.

Pilots unable to accept the greater tailwind component are requested to advise ATC as early as possible - at the latest when they request start-up approval.

Warning: In cases of strong winds, wind shear and increased turbulence must be expected on RWY 18.

1.2.2. NIGHT FLYING RESTRICTIONS AND OPERATIONAL RESTRICTIONS OUTSIDE NIGHTTIME HOURS FOR CIVIL AVIATION

a) Landing RWY Northwest (07L/25R) may only be used by ACFT up to and including code letter E in compliance with ICAO categorization. Airplanes with code letter F in compliance with categorization according to ICAO Attachment 14, jet airplanes, which cannot be classified into the airplane groups up to and including S 6.3 in compliance with the instructions for calculating noise protection zones as well as airplanes of the type MD11 may not use landing RWY Northwest (07L/25R). Take-offs of ACFT are not permitted from landing RWY Northwest (07L/25R).

b) ACFT without a noise certification in accordance with ICAO Annex 16 are not permitted to take-off from or land on the whole RWY system of Frankfurt/Main APT during the entire hours of operation of Frankfurt/Main APT.

1. GENERAL

c) ACFT that merely meet the noise certification values in accordance with ICAO Annex 16, Volume I, Part II, Chapter 2 are not permitted to take-off from or land on the whole RWY system of Frankfurt/Main APT during the entire hours of operation of Frankfurt/Main APT unless - documented by a certificate according to Article 11c, paragraph 7 of the German Aviation Regulation (LuftVO) - the Federal Aviation Office (LBA) has granted an exemption for the ACFT concerned according to Article 11c, paragraphs 4 - 6 of the LuftVO or a Member State of the European Union has granted an exemption in accordance with Article 11c, paragraph 8 of the LuftVO.

d) The following operational provisions apply to ACFT that are marginally compliant with ICAO Annex 16, Volume 1, Part II, Chapter 3 within the meaning of Article 48a no. 4 of the Regulation on the Certification and Licensing in Aviation (LuftVZO):

Take-offs and landings are not permitted on all days of the week between 2000-0800LT, unless an exemption in accordance with Article 48f, paragraph 1 of the LuftVZO or an individual exemption in accordance with paragraph 2 of the regulation has been granted.

From the beginning of the winter 2011/2012 scheduling period, take-offs and landings are not permitted between Friday, 2000LT and Monday, 0800LT, unless they have been granted an exemption in accordance with Article 48f, paragraph 1 of the LuftVZO or an individual exemption in accordance with paragraph 2 of the regulation.

ACFT arriving late or early whose landing is planned by the APT coordinator for a slot outside the operational restrictions up to 2000LT or from 0800LT may land until 2200LT and from 0600LT, provided that the late or early arrival was not envisaged as such in the flight plan (Article 25 LuftVO).

e) Following the opening of the landing RWY Northwest, from the first day of the new scheduling period, which - because of the added capacity of the landing RWY Northwest - provides an increase in the coordinated hourly RWY capacity, take-offs and landings are not permitted on the whole RWY system of Frankfurt/Main APT between 2200-0600LT on all days of the week, unless otherwise provided.

Between 2200-2300LT as well as between 0500-0600LT, only such ACFT are permitted to take off and land that - have a noise certification value in accordance with ICAO Annex 16, Volume I, Part II, Chapter 4 and whose take-off or landing has been coordinated by the APT coordinator of the Federal Republic of Germany at least one day in advance.

Between 2300-0500LT scheduled ACFT movements are not permitted.

The following regulations apply to ACFT arriving late or early:

- ACFT that are not only marginally compliant with ICAO Annex 16, Volume I, Part III, Chapter 3 within the meaning of Article 48a of the LuftVZO, and ACFT fulfilling the provisions of ICAO Annex 16, Volume 1, Part II, Chapter 4 and whose landing is planned by the APT coordinator for a slot up to 2200LT or from 0600LT, are permitted to land until 2400LT and/or from 0500LT without being counted against the quota as well as the maximum limit, provided that the late or early arrival was not envisaged as such in the flight plan (Article 25 of the LuftVO).
- ACFT fulfilling the provisions of ICAO Annex 16, Volume I, Part II, Chapter4 and whose landing is planned by the APT coordinator for a slot between 2200-2300LT and between 0500-0600LT under the conditions set out, are permitted to land until 2400LT without being counted against the maximum limit provided that the late arrival was not envisaged as such in the flight plan (Article 25 of the LuftVO).

1. GENERAL

Early arrivals before 0500LT are not permitted.

ACFT are not permitted to use the landing RWY Northwest between 2300-0500LT. At Frankfurt/Main APT, take-offs and landings of ACFT conducting flight checks of radio, radar or APT facilities are permitted between 2200-0600LT only if the ACFT meet the provisions of ICAO Annex 16, Volume I, Part II, Chapter 4 and if it is absolutely necessary to conduct these checks during this period of time.

Propeller ACFT with a maximum take-off mass of less than 9,000kg may take-off and land between 2200-0600LT only under the restrictions outlined in sections above; instead of the mentioned noise certification values they must at least fulfill the higher sound-proofing requirements defined in Article 4 of the Airfield Noise Abatement Ordinance (Landeplatz-LaermschutzV) of 5 January 1999 (Federal Law Gazette I, page 35; German-language publication Nfl I 134/99).

f) Delayed take-offs to be conducted in a period of restricted operations by an ACFT subject to the restrictions require individual permission by the local aviation supervision office. Permission may only be granted if the delay is due to reasons beyond the control of the air carrier concerned. Delayed take-offs are not permitted between 2400-0500LT.

EXCEPTIONS

Excluded from the restrictions mentioned above are:

- Landings of ACFT approaching Frankfurt/Main APT as an alternate aerodrome for meteorological, technical or other safety reasons as well as take-offs and landings of ACFT rendering medical assistance or on missions in disasters, as well as evacuation flights;
- Flights conducted particularly in the public interest.

Apart from this, the approving authority may grant exemptions from the operational restrictions only upon application in cases of particular hardship. It is not a case of particular hardship if the operational restriction makes the air carrier's ACFT turn-around planning more difficult or requires arrangements for passenger transfer or accommodation. Processing of applications is subject to charges.

As a rule, the application shall be submitted in writing - in urgent cases also via telephone - to:

Hessisches Ministerium fuer Wirtschaft, Energie,
Verkehr und Wohnen
Oertliche Luftaufsichtsstelle/local Aviation Supervision Office
Gebaeude (building) 514
60547 Frankfurt am Main/Germany
Tel.: 069/690-71717
Fax: 069/690-66150

The application shall contain:

- Applicant's name and, if necessary, name of the handling partner;
- Applicant's telephone and fax numbers;
- Name and address of the air carrier;
- E-mail address of the applicant for the invoice;
- Flight number;
- Registration and type of ACFT;
- Classification of the ACFT according to noise certification level (noise certificate of the ACFT according to Section 11c LuftVO);
- Planned time of departure for which the exemption is requested;
- Number of passengers;
- Weight of cargo in tonnes.

1. GENERAL

The reasons for the application shall be specified; the applicant shall state, in particular, to what extent the take-off delay is due to reasons beyond the control of the airline and/or where the hardship lies.

Take-off or landing clearances granted by ATC as well as other clearances do not automatically include the necessary exemption by the approval authority.

ATC will not grant exemptions via radiotelephony.

The pilot-in-command (PIC) shall report any landing conducted during a period of restricted operations by an ACFT subject to the restriction which does not meet any of the grounds for exemption according to the provisions to the local aviation supervision office immediately after landing and specify the reasons (declaration of PIC).

1.2.3. REVERSE THRUST

On the entire RWY system of Frankfurt Main APT, reverse thrust may only be used in the idle reverse thrust mode. Exceptions are unavoidable cases for safety reasons, e.g. because of the comparatively shorter LDA on RWY 25R/07L.

1.2.4. RUN-UP TESTS

Engine run-ups with thrust settings above an idle power setting may only be conducted at the following positions:

- On the apron of hangar 5 and in the run-up enclosure in the time between 0600-2200LT;
- In the time between 2200-0600LT, engine run-ups with the thrust setting on part-load on the apron of hangar 5, whereby on the position hangar 5 west the maximum power setting may only be taken to part-load low (up to 50% N1), as well as in the run-up enclosure; engine run-ups with the thrust setting on full-load may only be conducted in the run-up enclosure.

Engine run-ups shall be conducted in such a way that their duration of exposure on the next built-up area shall not, on average, result in a continuous sound level higher than 57 dB(A) during the day and 50 dB(A) during the night.

Engine run-ups in the time between 2200-0600LT with a thrust setting above an idle power setting shall be notified to the local aviation supervision office.

Engine test runs and run-ups as well as extensive maintenance work on ACFT at the positions are not permitted. Apron control may grant exceptions in justified cases.

1.3. LOW VISIBILITY PROCEDURES

1.3.1. CAT III OPERATIONS

1.3.1.1. GENERAL

Whenever the operation of CAT III low visibility procedures is announced, taxiing is restricted for all ACFT to TWYs with operating centerline lights, unless otherwise instructed.

The TWY centerline lights within the ILS-critical/sensitive area are color-coded (yellow/green) from RWY 07C/25C to TWYs L and M, from RWY 07R/25L to TWYs M and R, from RWY 07L/25R to TWY P, from RWY 18 from the North to TWY Y5 and from RWY 18 from the South to TWYs L and N. Landing ACFT are requested to report when they are clear of the color-coded TWY centerline lights to indicate that they have vacated the ILS-critical/sensitive area.

In order to facilitate ground movement, centerline lights, several clearance bars and stop bars are installed.

1. GENERAL

1.3.1.2. CLEARANCE BARS

Clearance bars are operated together with the centerline lighting and consist of three unidirectional surface lights showing YELLOW in the direction of approach to the intersection, arranged at 90° to the TWY centerline and partly displaced laterally to centerline.

If the traffic situation requires, ACFT may be instructed to hold at a specific clearance bar. If no such instruction is given, ACFT may taxi across the clearance bar without a specific clearance.

1.3.1.3. STOP BARS

Stop bars are operated independently of the centerline lighting and consist of unidirectional surface lights showing red in the direction of approach to a taxi-holding position/an intersection, spaced at intervals of 10'/3m across the overall width of a TWY at 90° to the TWY centerline.

Taxiing across an operating stop bar is strictly prohibited.

1.4. SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM

1.4.1. OPERATION OF MODE S TRANSPONDERS

1.4.1.1. GENERAL

An Advanced Surface Movement Guidance and Control System, using Mode S multilateration and Automatic Dependent Surveillance-Broadcast (ADS-B), is in operation.

1.4.1.2. OPERATION OF MODE S TRANSPONDERS WHEN ACFT IS ON GROUND

Pilots shall ensure that Mode S transponders are able to operate when ACFT is on the ground.

Pilots shall select the assigned Mode A code as well as the Mode S call sign and set the transponder to AUTO Mode or ON (eg. XPDR):

- From request for push-back or taxi, whichever is earlier;
- After landing, continuously until ACFT is fully parked on stand;
- When fully parked on stand, select STBY.

For Mode S call sign, flight crew shall use ICAO defined format for entering the ACFT identification (e.g. DLH5MC, AFR6380, SAS589, BAW68PG).

To ensure that performance of systems based on SSR frequencies is not compromised, TCAS shall not be activated before reaching the RWY holding position. After landing, it shall be deselected after vacating RWY.

ACFT taxiing without flight plan shall select Mode A code 2000.

1.5. TAXI PROCEDURES

1.5.1. GENERAL

ACFT are permitted to taxi on the maneuvering area between RWY 07C/25C and TWY L only with the minimum engine revolutions absolutely required.

TWY Y7 (section East of ACFT stand V718) MAX wingspan 79'/24m.

TWYs N blue, N orange, N7 blue, N7 orange, N8 blue, N8 orange, western link between TWYs S33 and S and TWY Y7 (section between TWY Y5 and ACFT stand V718) MAX wingspan 118'/36m.

TWY N South MAX wingspan 171'/52m.

TWY N7 (section North of TWY N) MAX wingspan 213'/65m.

Taxi connection between TWY S33 and TWY S (direction West) MAX wingspan 118'/36m.

On the entire operating area including ACFT hangars and their aprons, taxi maneuvers which do not take place prior to take-off or after landing of an ACFT must be carried out by means of ACFT tractors and not by means of engine power.

1. GENERAL

1.5.2. TAXIING ON APRON

ACFT stand taxilanes on aprons have been classified as follows:

- L (East of U): EASA code C;
- N (between N3 and N-East): EASA code F;
- N-Blue (between N3 and N-East): EASA code C;
- N-Orange (between N3 and N-East): EASA code C;
- N3 (North of N): EASA code E;
- N5 (North of N): code E/code F (until A23);
- N7 (North of N): EASA code E;
- N8 (North of N): EASA code F;
- N13 (North of N): EASA code E;
- N14 (North of N): EASA code E;
- S4 (South of S): EASA code F;
- S5 (South of S): EASA code F;
- S6 (South of S): EASA code F;
- S7 (South of S): EASA code F;
- S8 (South of S): EASA code F;
- S9 (South of S): EASA code F;
- S11 (South of S): EASA code F;
- S13 (East of S15): EASA code E (up to K4)
- S15: EASA code F (up to K6)
- S16 (South of R): EASA code E;
- S21 (South of R): EASA code E;
- S23 (South of R): EASA code D;
- S23 (GAT): EASA code B.

Reduced wing-tip clearance for ACFT of EASA code A, B and C on ACFT stand taxilanes is minimum 15'/4.5m from obstacles.

Reduced wing-tip clearance for ACFT of EASA code D, E and F on ACFT stand taxilanes is minimum 25'/7.5m from obstacles and is minimum 8'/2.5m from parallel apron roadways or height restricted objects.

ACFT type A380-800 will be towed with reduced obstacle clearance of 16'/5m on TWY N11.

ACFT are permitted to taxi on the apron only at the indispensable minimum engine speed. As a rule, when taxiing (especially in turns), it shall be ensured that the engine power of all engines in operation is as synchronous as possible.

ACFT are not allowed to increase engine power significantly beyond idle speed, especially when taxiing within the apron cul-de-sacs or close to buildings. This particularly applies to the area of turn positions A1, B10 and C2.

When taxiing into parking stands, ACFT shall not stop in turns. If an ACFT comes to a stop, notify Apron Control prior to increasing engine power.

In the General Aviation area the wing-tip clearance is minimum 15'/4.5m.

Adhere strictly to the yellow, blue and orange taxi guidance lines. Adjust taxi speed accordingly.

1.5.3. TAXIING IN CASES OF LOW VISIBILITY

When leaving stand V173B at night and in other low visibility situations, nose gear lights shall generally be switched on. This shall not apply if ACFT is guided by Follow-me car and if the lights dazzle the pilot. In these situations, it is permitted to keep nose gear lights switched off even in cases of low visibility.

1.5.4. FAILURE OF AN ACFT's ANTI-COLLISION LIGHT (BEACON)

Before push-back or entering the apron, the red anti-collision lights (beacon) of an ACFT shall be switched on. If one anti-collision light (beacon) on the ACFT is inoperative, the pilot shall inform apron control and, additionally, switch on the white wing-tip strobe lights.

1. GENERAL

1.5.5. SEPARATE CENTERLINES FOR ACFT TYPE A380

Stands C15 and C16 have separate centerlines only available for ACFT type A380 designated with C15S and C16S. To park other ACFT types, the centerlines C15 and C16 shall be used. The separate centerlines C15S and C16S are parallel to centerlines C15 and C16. Due to the short distance between the centerlines C15 and C15S as well as between C16 and C16S, the pilot shall pay special attention when taxiing onto the stand.

1.5.6. DEVIATIONS TO EASA REGULATIONS

1.5.6.1. TWYs

Fillets

At numerous TWYs, the distances from the taxi guideline to the TWY side strip marking are up to 1.6'/0.5m less than required in curves. Therefore, taxiing in TWY curves always has to be performed with great accuracy at Frankfurt APT.

Rapid exit TWYs: TWY L7, L8, L10, L15

The radius of the turn-off curve is significantly less than the required minimum of 550m on rapid exit TWYs.

RWY holding positions: TWY L, L1, L21, M, M29, T, U, W, W9, Y, Y1, Y3, S33

At the following holding positions, approach surface 07C and/or take-off climb surface 25C are penetrated by holding ACFT:

- TWY L: CAT I RWY holding position before RWY 18,
- TWY M: CAT I RWY holding position before RWY 18 and RWY holding position M2,
- TWY L21: CAT I RWY holding position before RWY 07C/25C,
- TWY W: RWY holding positions W4, W6 and W8,
- TWY Y: RWY holding position Y2,
- TWY Y1: RWY holding position Y10.

At the following holding positions, approach surface 25C and/or take-off climb surface 07C are penetrated by holding ACFT:

- TWY L1: CAT I RWY holding position before RWY 07C/25C,
- TWY T: RWY holding positions T2 and T4,
- TWY U: RWY holding positions U2 and U4.

At the following holding positions, approach surface 07R is penetrated by holding ACFT:

- TWY M29: CAT I RWY holding position before RWY 07R/25L,
- TWY S33: RWY holding position S40,
- TWY W: RWY holding positions W6, W8 and W10,
- TWY W9: RWY holding position W9,
- TWY Y: RWY holding position Y6,
- TWY Y3: RWY holding position Y12.

At the following holding positions, approach surface 25L and/or take-off climb surface 07R are penetrated by holding ACFT:

- TWY T: RWY holding position T6 and T8,
- TWY U: RWY holding positions U6 and U8.

TWY width: TWY Y5

The TWY width is slightly less than the required 75'/23m for ACFT with an outer main gear wheel span 30'/9m to 49'/15m.

1. GENERAL

1.5.6.2. Clearance Distances

At a majority of the ACFT stands, the clearance distances to neighbouring objects are less than required.

Especially for ACFT stands A26-A40, safe horizontal distances of at least 3.6'/0.8m to height-restricted objects are to be expected in the area of the wings.

1.6. PARKING INFORMATION

On stands A11 thru A40, A50 thru A69, B20 thru B48, C4 thru C16, D1 thru D4A, D5 thru D8A, E2, E2A, E5, E5A, E6 thru E9A, F211 thru F232, F233, F234thruF238, G1 thru G16, H2 thru H6, H14, J2 thru J8, K2 thru K10, S501thruS604, V94 thru V130, V143, V144, V266 thru V270 , V322 thru V328 and V702 thru V721 push-back required.

In order to protect ground handling personnel from jet blast and to avoid damage, pilots are not allowed to increase engine power significantly above idle speed during taxi procedures into and out of stands, in particular for stands A1, B10 and C2.

On stands A11, A13 thru A26, A28, A30, A34, A36, A38, A40, A50, A52, A54 thru A54B, A58 thru A58B, A62 thru A62B, A66 thru A66B, A69, B20, B22thruB28, B41 thru B48, C4, C5, C6, C8, C11, C13, C14, C14S, C15, C15A, C15S, C16, C16A, C16S, D1, D1A, D4, D4A, D5, D5A, D8, D8A, E2, E2A, E5, E5A, E6, E6A, E9, E9A, F211, F213, F214, F215, F231, F232, F233, F237, F238, G1thruG9, H2, H4, H6, K2, K4, K6, K8, K10, S501, S503, S504, V106 thru V130 and V266 thru V270 Visual Docking Guidance System (A-VDGS) available.

1.7. OTHER INFORMATION

Glider areas in vicinity of APT.

Warning: In cases of strong winds, wind shears and increased turbulence can be expected on RWY 18.

Bird strike warning system for RWY 07L APCH available.

For APT Collaborative Decision Making (ACDM) see ATC pages Germany.

2. ARRIVAL

2.1. NOISE ABATEMENT PROCEDURES

Frankfurt ATC will apply the following "NIGHT Procedures":

Between 2200-0500LT all inbound ACFT shall expect a RNP X approach.

In addition, pilots should be prepared not to expect a descent clearance below FL070 until 6NM prior to reaching KUGUK and/or ORVIV (RWYs 25C/25L) and 6NM prior to reaching ULNOK and/or IBLUS (RWYs 07C/07R). Pilots shall adjust their speed accordingly and are urgently requested to conduct the descent from FL070 as continuous descent, whenever possible.

In the case that RNP X approach procedures cannot be applied due to the absence of RNP equipment or restricting weather minima, pilots will be issued a clearance for an ILS approach in compliance with the "NIGHT approach procedures" described below.

During "NIGHT approach procedures" inbound ACFT should expect clearances whereby the final track will be reached not closer to the APT than:

- approximately 18NM (RWYs 25 C/L); and
- approximately 19NM (RWYs 07 C/R) from THR.

This corresponds with the waypoints DF622 (25L), DF522 (25C), DF652 (07R) und DF552 (07C). The fly-by function of these waypoints is not affected.

Pilots should subsequently expect a clearance for an ILS approach with GP interception at 5000'.

2. ARRIVAL

In addition, pilots should expect a clearance to descend below FL070 only 6NM prior to reaching the above-mentioned points. Pilots should adjust their speed accordingly and are urgently requested to perform their descent from FL070 as a continuous descent whenever possible.

These procedures may not be applied:

- to flights with STS/HOSP;
- in meteorological conditions such as CB,TS;
- in emergencies.

In the event of a technical failure of the ILS equipment, i.e. the need to fly non-precision approaches, descent clearances to 4000' will be issued.

2.2. CAT II/III OPERATIONS

RWYs 07L, 07C, 07R, 25L, 25C and 25R approved for CAT II/III operations, special aircrew and ACFT certification required.

2.3. RWY OPERATIONS

2.3.1. HIGH INTENSITY RWY OPERATIONS (HIRO)

ACFT of CAT SUPER will not be included in high intensity RWY operations, but should also vacate the RWY as quickly as possible.

At NIGHT, the use of HIRO is restricted to RWY 07L/25R and RWY 07R/25L.

2.3.1.1. APPROACH

ACFT on A- and D-STARs will be guided onto RWY 07L/25R, while ACFT on B- and C-STARs will be guided onto RWY 07R/25L. Irrespective of this, approaching ACFT which are planned to be parked at an ACFT stand in Cargo City South or at the GAT will preferably be guided to RWY 07R/25L. If operationally possible, ACFT which are parked in the Eastern section of the Northern apron and at T3 will also be guided to RWY 07R/25L.

When changing frequencies from LANGEN Radar to FRANKFURT Director initial call shall be restricted to
FRANKFURT DIRECTOR + CALLSIGN + WAKE TURBULENCE CATEGORY
if other than "M" to avoid frequency congestion. When being transferred from approach control to aerodrome control the initial call shall consist of
FRANKFURT TOWER, CALL SIGN, TYPE OF APPROACH + RWY

2.3.1.2. APPROACHES AT A GLIDE ANGLE OF 3.2°

RWY 07L/25R is equipped with two ILS systems for each landing direction.

One ILS per landing direction radiates signals for a glide angle of 3.2°, the other one for a glide angle of 3.0°.

The PAPI systems indicate the correct path down to a height of 200' for 3.0° and 3.2°.

Regular operations will be conducted under CAT I conditions only. The approach procedure will only be assigned if no long-lasting tail wind (more than 30 minutes) is expected. If tail wind prevails or is to be expected, the provisions of Item 1.2.1.1. will be applied and an ILS approach procedure at 3.0° will be assigned for RWY 07L/25R.

If it is not possible to conduct an approach at 3.2° for safety reasons, the pilot shall mention this in the initial call to LANGEN Radar. Such ACFT will be assigned another RWY.

2.3.1.3. ARRIVALS

Pilots are reminded:

- to plan and to name the expected rapid exit TWY during the APCH briefing;
- to vacate the RWY as quickly as possible;
- to adjust taxi speed after touchdown when it is evident that the ACFT will miss the planned rapid exit TWY. Low taxi speeds shall be avoided on the RWY.

2. ARRIVAL

Whenever RWY conditions permit, the following rapid exit TWYs shall be considered for planning:

RWY	ACFT	Preferred Turnoffs	Dist from THR ft (m)
07L	HEAVY (except SUPER)	P6	7382′ (2250m)
	MEDIUM (JET)	P8	5741′ (1750m)
	MEDIUM (PROP)/LIGHT	P10	4429′ (1350m)
07C DAY only	HEAVY (except SUPER)	L9	8202′ (2500m)
	MEDIUM/LIGHT	L11	5906′ (1800m)
07R	HEAVY (except SUPER)	M13	7054′ (2150m)
	MEDIUM/LIGHT	M15	5659′ (1725m)
25L	HEAVY (except SUPER)	M21	7464′ (2275m)
	MEDIUM (JET)	M17	6135′ (1870m)
	MEDIUM (PROP)/LIGHT	M11	3560′ (1085m)
25C DAY only	HEAVY (except SUPER)	L13	6742′ (2055m)
	MEDIUM (JET)	L10	5577′ (1700m)
	MEDIUM (PROP)/LIGHT	L8	3691′ (1125m)
25R	HEAVY (except SUPER)	P20	7382′ (2250m)
	MEDIUM (JET)	P16	5741′ (1750m)
	MEDIUM (PROP)/LIGHT	P14	4429′ (1350m)

Aerodrome Control may apply reduced separation on RWYs. Any changes in separation by Aerodrome Control shall be observed.

Pilots may only change the frequency after landing if instructed to do so by Aerodrome Control.

If pilots do not receive further taxi clearance, they shall stop in front of a RWY and the corresponding landing and take-off climb surfaces and TWYs L and N11.

2.4. TAXI PROCEDURES

To maintain smooth taxiing traffic, ACFT having landed on RWY 07R/25L will be guided, if possible, to defined change-over points, depending on the assigned parking position, to cross RWY 07C/25C.

This procedure will be withdrawn during adverse weather conditions, at the latest when CAT III operation is in force.

Exiting RWY 25C out of exit TWY L8 up to code C only.

2.5. OTHER INFORMATION

Parallel independent operation may be in force.

2.5.1. FLIGHT AND DESCENT PLANNING

For flight and descent planning purposes expect the following levels at the transfer points from LANGEN ACC to FRANKFURT APP:

- KERAX between FL130 and FL110;
- SPESA between FL120 and FL100;
- ROLIS at FL150;
- UNOKO between FL130 and FL110 (at RAMOB).

These levels shall only be used for planning purposes. The actual transfer level will be cleared by ATC individually.

3. DEPARTURE

3.1. DATALINK DEPARTURE CLEARANCE (DCL)

In addition to clearances via radio, DFS Deutsche Flugsicherung GmbH offers to issue start-up approval and en-route clearance by means of data link (Eurocae Standard ED85A).

The following time parameters apply to data link departure clearances (DCL):

t_i 30 minutes prior to TOBT (earliest point in time for cockpit RCD message).

t_t TSAT (latest point in time for cockpit RCD message).

t_0 1 minute (defined standard).

t_1 5 minutes (defined standard).

t_2 1 minute (defined standard).

The clearance (CLD - departure clearance uplink message) issued by the tower is based on TSAT - "Start-up approved according TSAT". The TSAT issued at this point in time by means of the TSAT reporting channels applies. In addition, the pilot shall monitor TSAT updates. After completion of the data link process, the pilots shall maintain continuous air-ground voice communication watch on the frequency given in the CLD and shall refrain from asking questions about the start-up approval.

Depending on the traffic and weather situation, the process can be altered and the enroute clearance can be transmitted separately via data link (CLD) after receiving an RCD, while start-up approval will be issued at a later point in time.

Pilots are obliged to state during their initial call (RCD) whether only an enroute clearance (Request ENROUTE CLEARANCE) or a combined enroute and start-up approval (Request START-UP and ENROUTE CLEARANCE) is requested.

Pilots shall maintain continuous air-ground voice communication watch on frequency FRANKFURT Delivery throughout the complete process.

3.2. DE-ICING

3.2.1. GENERAL

Notification of ACFT de-icing may be sent on frequency 121.985 or via phone 069/690-30560 by the ACFT operator or his representative. In the period of 1 May up to and including 14 October, requests for ACFT de-icing can only be made by phone: 069/690-30560.

3.2.2. ACFT STANDS

The de-icing of ACFT at the respective ACFT stands will take place with engines switched off, passenger bridges cast off, and the ACFT clear of handling equipment.

3.2.3. REMOTE DE-ICING PADS (DPS)

The remote De-icing Pad West (DPW) falls within the responsibility of Aerodrome Control and includes de-icing pads DP1 and DP2. When carrying out de-icing procedure, responsibility will temporarily be transferred to FRANKFURT Apron.

If necessary for operations, the ADC will assign ACFT to be de-iced at additional locations (TWY N7, positions V159, V161 and G16A). Instructions for taxiing to and onto these positions will be issued by FRANKFURT Apron. ACFT will be guided by a marshaller to the de-icing position. The marshaller's instructions must be followed. When requested by FRANKFURT Apron, radiotelephony communication shall be established with the de-icing crew on the frequency assigned. ACFT parked on positions East of TWY N3 which intend to depart from RWY 18 can be de-iced at position G16A with running engines.

De-icing on DP1 and DP2 Center MAX wingspan less than 262'/80m.

De-icing on DP2 East and DP2 West MAX wingspan less than 118'/36m.

ACFT which were de-iced on DP1 will be guided to TWY W1 by Apron Control before handed over to ATC.

3. DEPARTURE

After de-icing on DP2 intersection take-off out of TWY W3 from RWY 18 required.

On the remote de-icing pads, only jet ACFT with running engines will be de-iced. Propeller ACFT will not be de-iced for safety reasons.

Underwing de-icing or with hot air, de-icing of undercarriage or de-icing with special viscosities, the control of the central engines (e.g. DC10, MD11), as well as special examinations of individual ACFT parts (e.g. hands on checks) cannot be carried out on the remote de-icing pads.

ACFT will be positioned on de-icing pad DP1 by an eyeline to the LEFT of centerline, which depicts the exact holding position to the pilot optically. This taxiing-aid is made up of 5 amber surface lights with single-sided beams. If the surface lighting or the eyeline is out of order, ACFT will be guided by a marshaller.

ACFT will be positioned on de-icing pad DP2 by an eyeline to the LEFT of the respective centerline, which enables the pilot to visualize the exact holding position. This eyeline is made up to 5 yellow surface lights which shine on one side. If centerline lighting or eyeline is out of operation, ACFT will be guided by a marshaller.

During the de-icing proceedings, the pilot-in-command shall ensure continuous listening watch on the respective frequency of FRANKFURT Apron. After de-icing proceedings have been concluded, the pilot-in-command shall report to FRANKFURT Apron that he is ready to taxi.

3.3. START-UP AND TAXI PROCEDURES

3.3.1. GENERAL

At TOBT, the ACFT must be ready for start-up or on-stand de-icing, and the pilot shall maintain continuous air-ground voice communication watch on the frequency of FRANKFURT Delivery.

Start-up may be requested and approved either via radio or data link (DCL).

Starting engines on push-back stands may only take place prior to push-back operation and after prior approval by apron control.

ACFT parking on stand B10 have to contact FRANKFURT Apron, prior to actual engine start-up.

3.3.2. FROM 0600-2200LT

All ACFT parked at positions East of TWY N3 and planned for departure from RWY 18 have to expect to taxi via TWYs U, T, R and S. Departure will take place basically from position S. Pilots unable to comply with these conditions shall advise FRANKFURT Apron upon initial contact.

3.3.3. STANDARD TAXI ROUTE (STR)

Name	Handover from Apron to DFS	Taxi Instructions	Holding Point
TRANSITION 1	STOP U2	U-S-S11-R-S28-S	S-RWY18

If the flight crew is unable to follow the standard taxi route TRANSITION 1, they shall inform during the initial call.

If the flight crew becomes unsure about TRANSITION 1, they shall request an individual clearance.

3.3.3.1. VOICE COMMUNICATION

Standard taxi route TRANSITION 1.

ACFT CALL SIGN.

Taxi to holding point RWY 18, intersection Sierra, via TRANSITION 1.

3. DEPARTURE

3.4. NOISE ABATEMENT PROCEDURES

3.4.1. OPERATIONAL RWY USE AND SID CONCEPT - STANDARD OPS

In general, pilots have to expect en-route clearance according to this concept. OPR are requested to file SID in flight plan according to this guideline. Deviating SID in flight plan will be changed automatically. Route details and further non-standard SIDs see 10-3 pages. Non-standards on pilot's request only. Non-standard operation temporarily possible, if considered necessary by ATC. If unable to comply with restrictions, advise EDDF Delivery prior to start-up.

RWY-in-use	RWY (C)enter (L)eft (R)ight	SID Route Designator	Direction/ACFT CAT	NAV Spec
25/18			**RWY 25C** for DEP to the NW (OBOKA), N (MARUN), NE (TOBAK). *RWY 25L* with special authorization by *TWR only* . **RWY 18** for DEP to the SW (SOBRA, ULKIG), S (ANEKI), SE (CINDY), E (SULUS).	
07/18			**RWY 07C** for DEP to the NW (OBOKA), N (MARUN), NE (TOBAK), E (SULUS) and EDDN Area (KOMIB). *RWY 07R* with special authorization by TWR only. **RWY 18** for DEP to the SW (SOBRA, ULKIG), S (ANEKI), SE (CINDY).	

3. DEPARTURE

In general, pilots have to expect en-route clearance according to this concept. OPR are requested to file SID in flight plan according to this guideline. Deviating SID in flight plan will be changed automatically. Route details and further non-standard SIDs see 10-3 pages. Non-standards on pilot's request only. Non-standard operation temporarily possible, if considered necessary by ATC. If unable to comply with restrictions, advise EDDF Delivery prior to start-up.

RWY-in-use	RWY (C)enter (L)eft (R)ight	SID Route Designator	Direction/ACFT CAT	NAV Spec
25	C + *L*	FOXTROT	2-engined HEAVY ACFT to the N, NE.	BRNAV
	C + *L*	GOLF	2-engined HEAVY ACFT to the NW, N, NE.	BRNAV
			All ACFT to the NW, N, NE unable to comply with restrictions on SIDs northbound.	
	C	MIKE	All ACFT, except 2-engined HEAVY ACFT, to the NW, N, NE unable WHISKEY.	BRNAV
	C	WHISKEY	Shall be used by all ACFT, except 2-engined HEAVY ACFT, to the NW, N, NE complying with RNP-1 and RF-leg requirements instead of MIKE.	RNP-1*
	L	*HOTEL*	All ACFT RWY 25L (with special authorization by TWR only), except 2-engined HEAVY ACFT, to the NW, N, NE unable KILO. Shall be used by all ACFT RWY 25L (with special authorization by TWR only), except 2-engined HEAVY ACFT, to the NW, N, NE complying with RNP-1 and RF-leg requirements instead of HOTEL.	BRNAV
	L	*KILO*		RNP-1*
	C + *L*	NOVEMBER	Between 2200-0700LT: All 3- and 4-engined HEAVY and SUPER ACFT due to noise abatement.	RNAV-1
	C + *L*	PAPA	Single- and Twin-Props may use PAPA to the SW instead of RWY 18.	RNAV-1
	C + *L*	QUEBEC	In case of RNAV-failure and by ATC only.	NON RNAV

* Check SID description for required NAV-specification/sensor restriction.

3. DEPARTURE

In general, pilots have to expect en-route clearance according to this concept. OPR are requested to file SID in flight plan according to this guideline. Deviating SID in flight plan will be changed automatically. Route details and further non-standard SIDs see 10-3 pages. Non-standards on pilot's request only. Non-standard operation temporarily possible, if considered necessary by ATC. If unable to comply with restrictions, advise EDDF Delivery prior to start-up.

RWY-in-use	RWY (C)enter (L)eft (R)ight	SID Route Designator	Direction/ACFT CAT	NAV Spec
07	C + *R*	CHARLIE	In case of RNAV-failure and by ATC only.	NON RNAV
	C + *R*	DELTA	All HEAVY and SUPER ACFT to the NW, N, NE, E.	BRNAV
			All MEDIUM and LIGHT ACFT to the NE, E or if considered necessary by ATC.	
			All MEDIUM and LIGHT ACFT to the NW, N if considered necessary by ATC.	
			Between 2200-0700LT: All ACFT to the NW, N, NE, E due to noise abatement.	
	C + *R*	ECHO	Between 0700-2200LT: All MEDIUM and LIGHT ACFT to the NW, N.	BRNAV
18		BRAVO	In case of RNAV-failure and by ATC only.	NON RNAV
		LIMA	All ACFT to the SW, S, SE. All ACFT to the NW (by ATC only).	RNAV-1*
		UNIFORM	Shall be used by all ACFT to the SW complying with the restrictions and RNP-1 and RF-leg requirements.	RNP-1
		SIERRA	All ACFT to the SE. All ACFT to the SW, NW, N, NE (by ATC only).	RNAV-1*
		ROMEO	Between 2300-0600LT: All ACFT to the NW, N, NE (by ATC only).	RNAV-1*

* Check SID description for required NAV-specification/sensor restriction.

3. DEPARTURE

3.4.2. ADDITIONAL NOISE ABATEMENT MEASURES

3.4.2.1. OPERATIONAL CONCEPT "NOISE RESPITE PERIODS"

At APT, noise respite periods for operating direction 25 will be implemented in accordance with the following plan.

As a rule, the following RWY shall always be used during the times shown:

Between 0500-0600LT
- RWYs 25C/R shall be used for landing;
- RWY 25L shall be used for departing.

Between 2200-2300LT
- RWY 25L shall be used for landing;
- RWYs 18 and 25C shall be used for departing.

GENERAL

As a rule, noise respite periods will always be implemented in the time periods between 0500-0600LT and between 2200-2300LT, provided the conditions required by air traffic control are met.

In the provision of air traffic control, the following flights, among others, will be exempt from the regulations of the noise respite periods:

- Flights for which the pilot has declared an emergency or which are apparently in an emergency situation, including flights affected or threatened by unlawful interference;
- Security flights of air defense;
- Flights on search and rescue missions;
- Flights transporting sick or injured persons requiring immediate medical assistance (including flights designated as LHO (Live Human Organ);
- Government flights, including flights with Head of State status in accordance with the regulations laid down by the Federal Ministry of Transport and Digital Infrastructure (BMVI);
- Flights where a pilot requests the use of a certain RWY for safety reasons;
- Particularly endangered flights;
- Calibration flights.

In addition, noise respite periods will not be implemented when restricted by infrastructure or poor weather conditions (e.g. construction work, snow clearing).

Further information can be found in the "alliance paper" which is the basis for the respite periods (www.wirtschaft.hessen.de).

PROCEDURES

The provisions concerning delayed take-offs and landings of ACFT described in Para 1.2.2. remain unchanged.

If the APT operator Fraport or an airline using the APT thinks that the implementation of the noise respite period in the morning or evening is very likely to lead to operational disruptions, they shall inform the aviation supervision office (Luftaufsicht) about this. The aviation supervision office will then suspend the noise respite period without further formalities or verification processes.

The aviation supervision office (Luftaufsicht) will inform Fraport about the suspension of the noise respite period. Fraport will in turn inform the air navigation services and airlines using its communication channels.

3. DEPARTURE

3.4.3. DEDICATED RWY OPERATIONS (DROPS)

When RWY 07 is in use, between 0500-0600LT RWY utilization will be arranged on **odd** calendar days:

All take-offs will be handled via RWY 18, thus avoiding the utilisation of the RWYs 07C/07R for take-offs.

When using the DROps procedures and operating direction 07 for departures to the North, only SIDs with the designation "R" will be allocated by the AD control tower. ACFT unable to adhere to "Cross FFM R-200 at or above 2500'" on the SIDs with the designation "R" will only be granted start-up approval and enroute clearance after coordination has taken place with the approach control unit.

Special Features

If meteorological conditions and/or other operational conditions do not allow the use of RWY 18, another RWY will be allocated after coordination has taken place with the approach control unit. This also applies to ambulance flights and/or flights with corresponding priority of service.

On **even** weekdays, the current procedures employed and published shall apply.

3.5. RWY OPERATIONS

3.5.1. CALCULATED TAKE-OFF TIME (CTOT) AND SLOT PROCEDURES

Departing ACFT shall be ready for take-off at the RWY 5 minutes prior to CTOT at the earliest, and at CTOT at the latest.

3.5.2. HIGH INTENSITY RWY OPERATIONS (HIRO)

ACFT that are not ready for departure will not receive clearance to line up.

Pilots are requested to report to Aerodrome Control if they are not ready to depart without being asked.

Pilots shall advise Aerodrome Control on initial call of the earliest possible intersection take-off.

When using RWYs 07 and 18, pilots of ACFT of wake turbulence categories light and medium which are taxiing to RWY 18 via TWY N or L due to their ACFT stand shall calculate the take-off run from the intersection to TWY M in order to avoid a departure delay due to required separation from arriving ACFT on RWY 07R. Pilots who cannot accept a take-off run from the intersection of TWY M are requested to advise ATC at the same time they request start-up approval.

The entire RWY system is characterized by interdependencies. Pilots are thus expected to begin their take-off runs immediately after receiving their take-off clearance.

After take-off, ACFT should rapidly accelerate to the published maximum speed for the initial segment of the cleared SID. Afterwards, or if there is no published MAX speed, ACFT below FL100 should rapidly accelerate to 250 KT.

3.6. OTHER INFORMATION

3.6.1. GENERAL

When glider areas in vicinity of APT activated, expect higher crossing altitude by ATC for SIDs which require higher climb gradient than standard.

Winds between 200° and 160° in a clockwise direction and speeds of 15 KT and more shall be expected on RWY 18. Gusts and strong windshifts up to tail wind components may occur.

JEPPESEN
27 OCT 23 10-2 Eff 2 Nov

FRANKFURT/MAIN, GERMANY

RNAV STAR

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

Flights shall follow the cleared STAR laterally and comply with the following instructions:

If already cleared to FL130 or below continue immediately via respective STAR, otherwise enter holding at EMGOD descend to FL130 and continue on STAR thereafter without delay.

If cleared "Direct to (waypoint)" or "Via (waypoint)..." continue as cleared and follow the subsequent part of the respective STAR. After passing DF411 (RWY 25), continue descend to 4000.

When reaching end of STAR or already beyond, turn direct to IAF DF626 (RWY 25L) and follow an adequate instrument approach procedure to land on RWY 25L.

LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS

A clearance for a STAR with level and/or speed restrictions consists of a lateral and vertical part:
Lateral part: "Cleared (designator) arrival"
Vertical part: "Descend via STAR FL (figures)"
Adherence to waypoint restrictions is mandatory after a "Descend via STAR FL (figures)" clearance.
Non-adherence may lead to separation infringement.
Do not descend below the FL cleared by ATC.

D-ATIS	Apt Elev
118.030	363

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

RNP 1 required

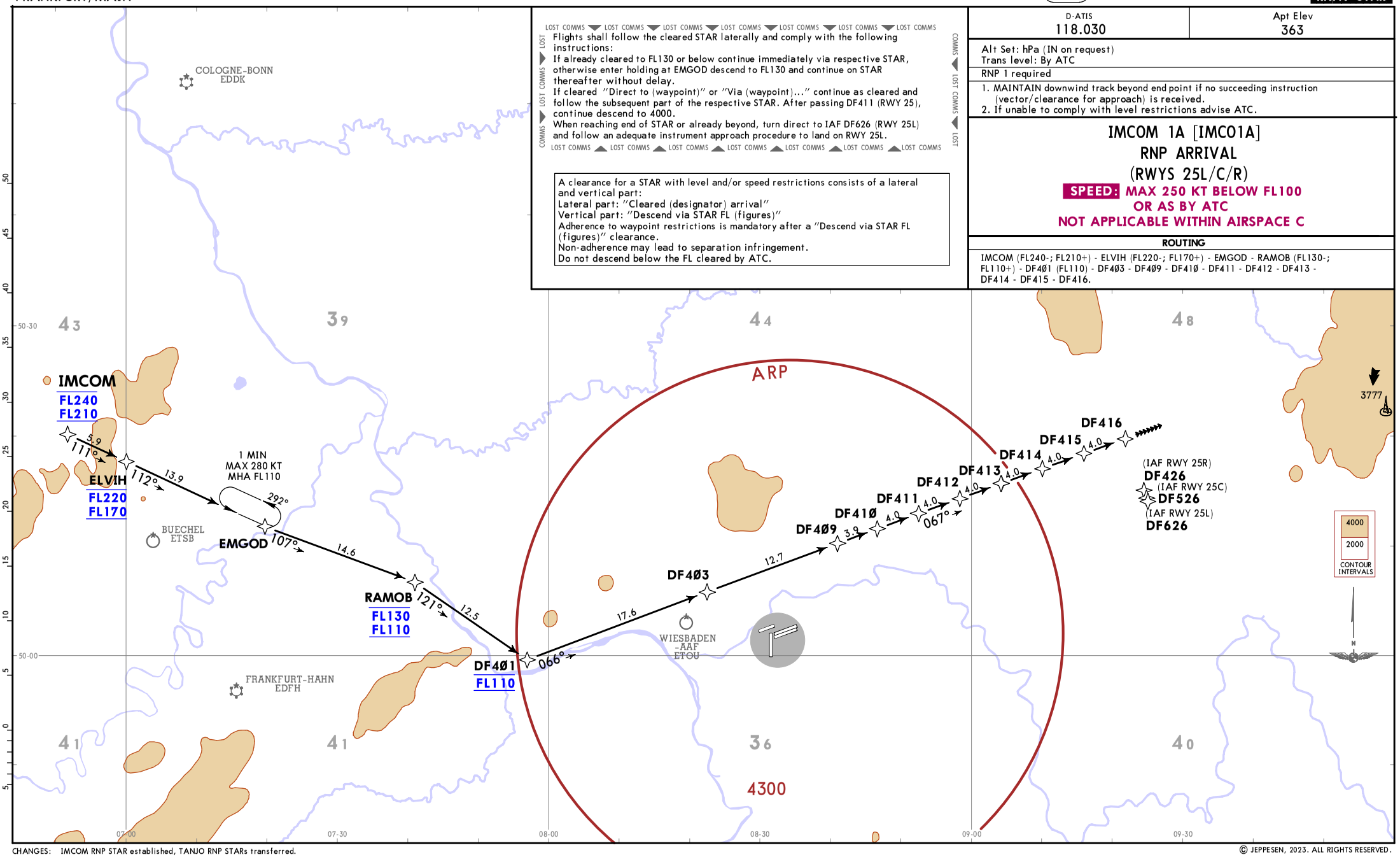
1. MAINTAIN downwind track beyond end point if no succeeding instruction (vector/clearance for approach) is received.
2. If unable to comply with level restrictions advise ATC.

IMCOM 1A [IMC01A]
RNP ARRIVAL
(RWYS 25L/C/R)

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

ROUTING

IMCOM (FL240-; FL210+) - ELVIH (FL220-; FL170+) - EMGOD - RAMOB (FL130-; FL110+) - DF401 (FL110) - DF403 - DF409 - DF410 - DF411 - DF412 - DF413 - DF414 - DF415 - DF416.



CHANGES: IMCOM RNP STAR established, TANJO RNP STARs transferred.

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

Flights shall follow the cleared STAR laterally and comply with the following instructions:
If already cleared to FL130 or below continue immediately via respective STAR, otherwise enter holding at EMGOD descend to FL130 and continue on STAR thereafter without delay.
If cleared "Direct to (waypoint)" or "Via (waypoint)..." continue as cleared and follow the subsequent part of the respective STAR. After passing DF611 (RWY 25), continue descend to 4000.
When reaching end of STAR or already beyond, turn direct to IAF DF626 (RWY 25L) and follow an adequate instrument approach procedure to land on RWY 25L.

LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS

A clearance for a STAR with level and/or speed restrictions consists of a lateral and vertical part:
Lateral part: "Cleared (designator) arrival"
Vertical part: "Descend via STAR FL (figures)"
Adherence to waypoint restrictions is mandatory after a "Descend via STAR FL (figures)" clearance.
Non-adherence may lead to separation infringement.
Do not descend below the FL cleared by ATC.

D-ATIS	Apt Elev
118.030	363

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

RNP 1 required

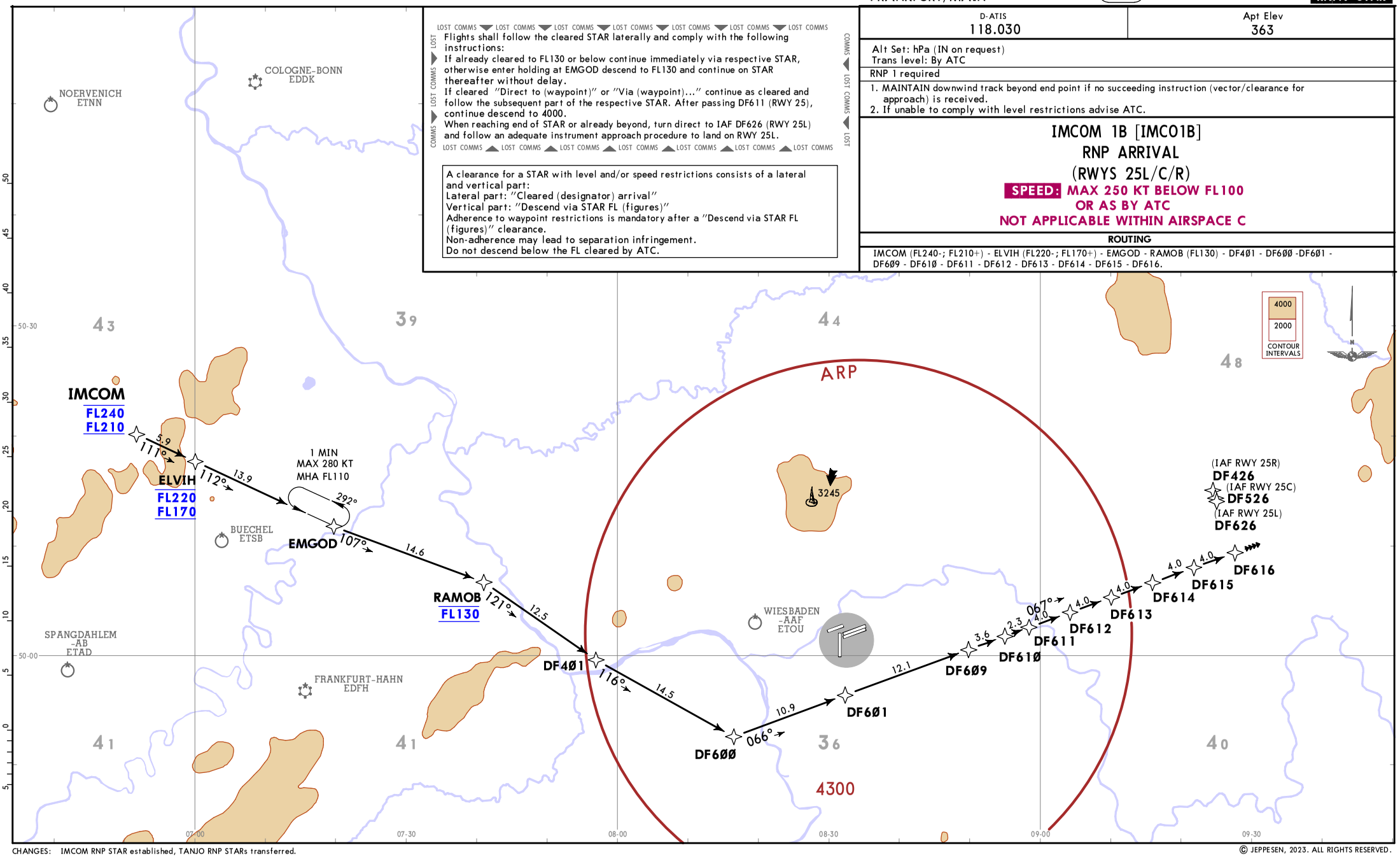
1. MAINTAIN downwind track beyond end point if no succeeding instruction (vector/clearance for approach) is received.
2. If unable to comply with level restrictions advise ATC.

IMCOM 1B [IMCO1B]
RNP ARRIVAL
(RWYS 25L/C/R)

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

ROUTING

IMCOM (FL240-; FL210+) - ELVIH (FL220-; FL170+) - EMGOD - RAMOB (FL130) - DF401 - DF600 -DF601 - DF609 - DF610 - DF611 - DF612 - DF613 - DF614 - DF615 - DF616.



CHANGES: IMCOM RNP STAR established, TANJO RNP STARs transferred.

EDDF/FRA
FRANKFURT/MAIN

JEPPESEN 27 OCT 23 (10-2B) Eff 2 Nov

FRANKFURT/MAIN, GERMANY

RNAV STAR

D-ATIS	Apt Elev	
118.030	363	Alt Set: hPa (IN on request) Trans level: By ATC
		RNP 1 required
		1. MAINTAIN downwind track beyond end point if no succeeding instruction (vector/clearance for approach) is received. 2. If unable to comply with level restrictions advise ATC.

IMCOM 1C [IMC01C]
RNP ARRIVAL
(RWYS 07L/C/R)

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

ROUTING

IMCOM (FL240-; FL210+) - ELVIH (FL220-; FL170+) - EMGOD - RAMOB (FL130) - DF431 - DF631 - DF632 - FFM - DF621 - DF622 - DF623 (K220-) - DF613 - DF612 - DF611 - DF635 - DF636 - DF640 - DF641 - DF642 - DF643 - DF644.

LOST COMMS

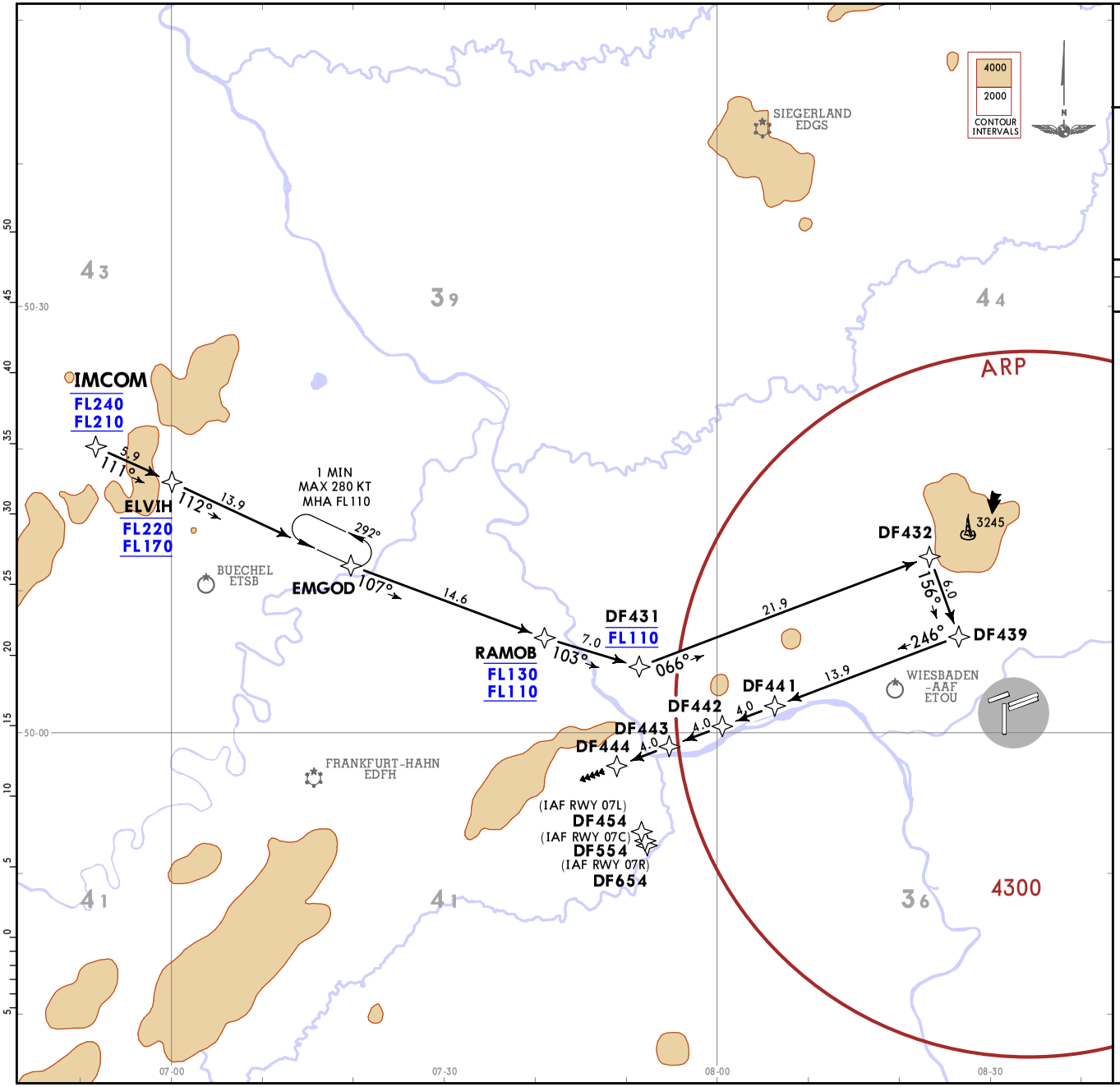
Flights shall follow the cleared STAR laterally and comply with the following instructions:
- If already cleared to FL130 or below continue immediately via respective STAR, otherwise enter holding at EMGOD, descend to FL130 and continue on STAR thereafter without delay.
- If cleared "Direct to (waypoint)" or "Via (waypoint)..." continue as cleared and follow the subsequent part of the respective STAR.
- After passing DF636 (RWY07), continue descend to 4000.
- When reaching end of STAR or already beyond, turn direct to IAF DF654 (RWY 07R) and follow an adequate instrument approach procedure to land on RWY 07R.

LOST COMMS

A clearance for a STAR with level and/or speed restrictions consists of a lateral and vertical part:
Lateral part: "Cleared (designator) arrival"
Vertical part: "Descend via STAR FL (figures)"
Adherence to waypoint restrictions is mandatory after a "Descend via STAR FL (figures)" clearance.
Non-adherence may lead to separation infringement.
Do not descend below the FL cleared by ATC.

IMCOM
FL240
FL210
111°
5.9
ELVIH
FL220
FL170
112°
13.9
1 MIN
MAX 280 KT
MHA FL110
292°
EMGOD
107°
14.6
RAMOB
FL130
103°
7.0
DF431
104°
14.4
DF631
077°
5.1
DF632
11.6
FRANKFURT
114.2 FFM
067°
12.0
DF621
4.0
DF622
4.0
DF623
MAX 220 KT
151°
5.0
DF613
247°
4.0
DF612
4.0
DF611
10.6
246°
9.6
DF635
DF636
7.5
DF640
4.1
DF641
4.0
DF642
4.0
DF643
4.0
DF644
(IAF RWY 07L)
DF454
(IAF RWY 07C)
DF554
(IAF RWY 07R)
DF654
ARP
4300
COLOGNE-BONN
EDDK
SIEGERLAND
EDGS
BUECHEL
ETSB
WIESBADEN
-AAF
ETOU
SPANGDAHLEM
-AB
ETAD
FRANKFURT-HAHN
EDFH
CONTOUR INTERVALS
4000
2000
43
39
44
48
40
41
41
36
50-30
50-00
07-00
07-30
08-00
08-30
09-00
09-30

CHANGES: IMCOM RNP STAR established, KERAX & SPESA RNAV STARs transferred.



D-ATIS	Apt Elev	
118.030	363	Alt Set: hPa (IN on request) Trans level: By ATC
		RNP 1 required
		1. MAINTAIN downwind track beyond end point if no succeeding instruction (vector/clearance for approach) is received. 2. If unable to comply with level restrictions advise ATC.

IMCOM 1D [IMC01D]
RNP ARRIVAL
(RWYS 07L/C/R)

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

ROUTING

IMCOM (FL240-; FL210+) - ELVIH (FL220-; FL170+) - EMGOD - RAMOB (FL130-; FL110+) - DF431 (FL110) - DF432 - DF439 - DF441 - DF442 - DF443 - DF444.

LOST COMMS

Flights shall follow the cleared STAR laterally and comply with the following instructions:
If already cleared to FL130 or below continue immediately via respective STAR, otherwise enter holding at EMGOD, descend to FL130 and continue on STAR thereafter without delay.
If cleared "Direct to (waypoint)" or "Via (waypoint)..." continue as cleared and follow the subsequent part of the respective STAR.
After passing DF439 (RWY07), continue descend to 4000.
When reaching end of STAR or already beyond, turn direct to IAF DF654 (RWY 07R) and follow an adequate instruction approach procedure to land on RWY 07R.

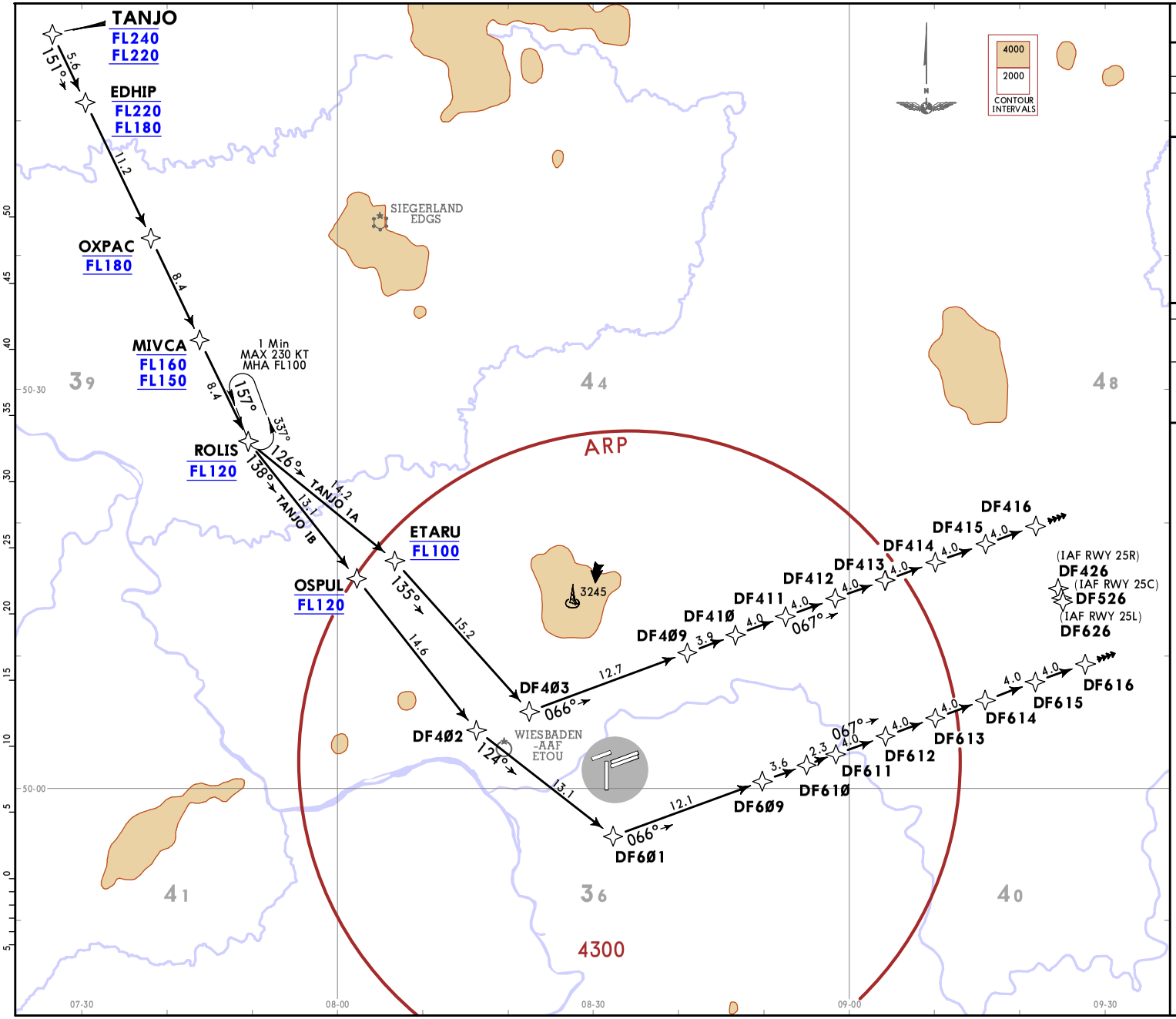
A clearance for a STAR with level and/or speed restrictions consists of a lateral and vertical part:
Lateral part: "Cleared (designator) arrival"
Vertical part: "Descend via STAR FL (figures)"
Adherence to waypoint restrictions is mandatory after a "Descend via STAR FL (figures)" clearance.
Non-adherence may lead to separation infringement.
Do not descend below the FL cleared by ATC.

CHANGES: IMCOM RNP STAR established, KERAX & SPESA RNAV STARs transferred.

JEPPESEN
27 OCT 23 (10-2D) Eff 2 Nov

FRANKFURT/MAIN, GERMANY

RNAV STAR



D-ATIS	Apt Elev
118.030	363

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

RNP 1 required

1. MAINTAIN downwind track beyond end point if no succeeding instruction (vector/clearance for approach) is received.
2. If unable to comply with level restrictions advise ATC.

TANJO 1A [TANJ1A]
TANJO 1B [TANJ1B]
RNP ARRIVALS
(RWYS 25L/C/R)

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

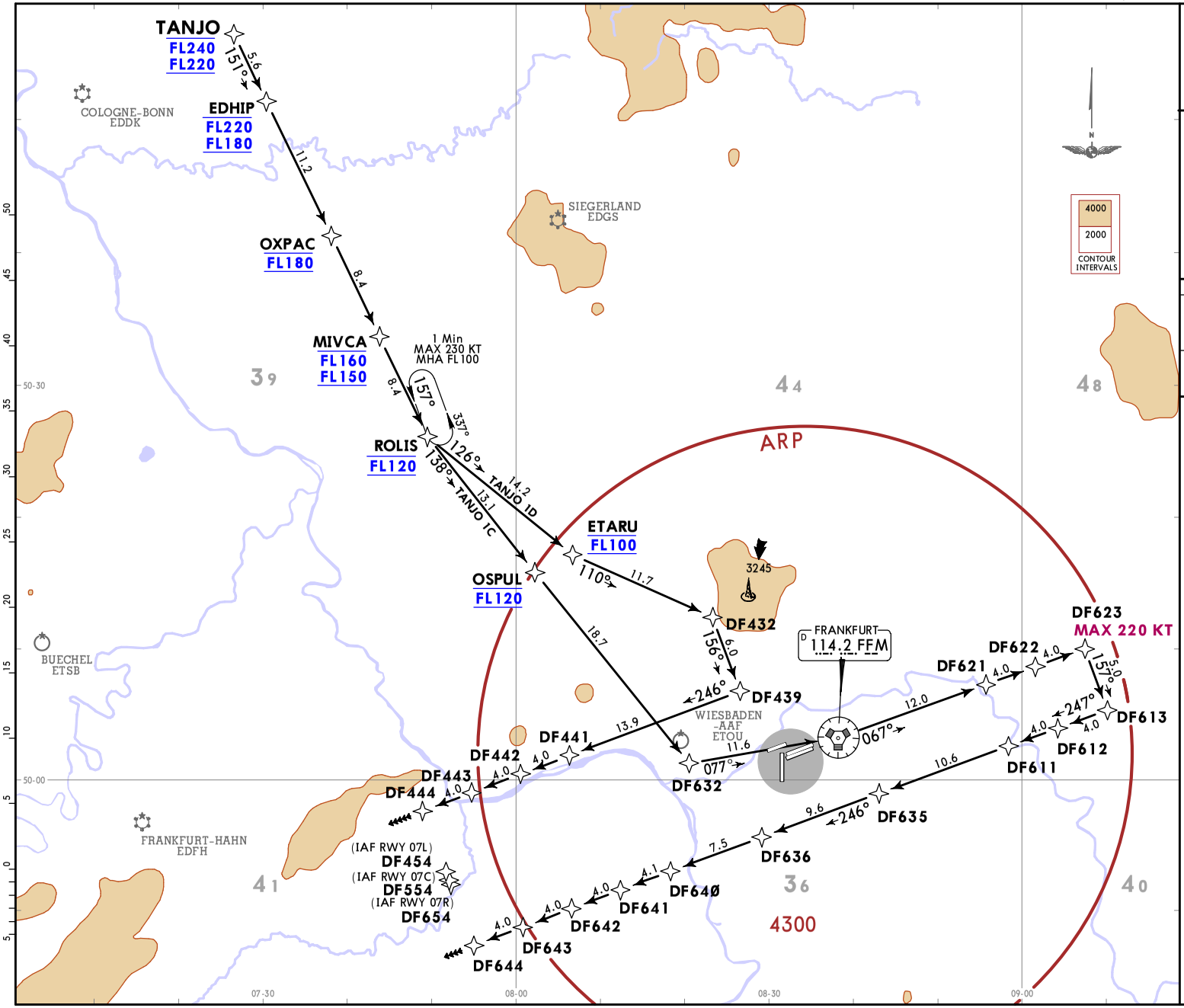
STAR	ROUTING
TANJO 1A	TANJO (FL240-; FL220+) - EDHIP (FL220-; FL180+) - OXPAC (FL180) - MIVCA (FL160-; FL150+) - ROLIS (FL120) - ETARU (FL100) - DF4Ø3 - DF4Ø9 - DF41Ø - DF411 - DF412 - DF413 - DF414 - DF415 - DF416.
TANJO 1B	TANJO (FL240-; FL220+) - EDHIP (FL220-; FL180+) - OXPAC (FL180) - MIVCA (FL160-; FL150+) - ROLIS (FL120) - OSPUL (FL120) - DF4Ø2 - DF6Ø1 - DF6Ø9 - DF61Ø - DF611 - DF612 - DF613 - DF614 - DF615 - DF616.

LOST COMMS

Flights shall follow the cleared STAR laterally and comply with the following instructions:
If already cleared to FL130 or below continue immediately via respective STAR, otherwise enter holding at ROLIS descend to FL130 and continue on STAR thereafter without delay.
If cleared "Direct to (waypoint)" or "Via (waypoint)..." continue as cleared and follow the subsequent part of the respective STAR. After passing DF411/DF611 (RWY 25), continue descend to 4000.
When reaching end of STAR or already beyond, turn direct to IAF DF626 (RWY 25L) and follow an adequate instrument approach procedure to land on RWY 25L.

A clearance for a STAR with level and/or speed restrictions consists of a lateral and vertical part:
Lateral part: "Cleared (designator) arrival"
Vertical part: "Descend via STAR FL (figures)"
Adherence to waypoint restrictions is mandatory after a "Descend via STAR FL (figures)" clearance.
Non-adherence may lead to separation infringement.
Do not descend below the FL cleared by ATC.

CHANGES: Chart reindexed.



D-ATIS	Apt Elev	
118.030	363	Alt Set: hPa (IN on request) Trans level: By ATC
		RNP 1 required
		1. MAINTAIN downwind track beyond end point if no succeeding instruction (vector/clearance for approach) is received. 2. If unable to comply with level restrictions advise ATC.

TANJO 1C [TANJ1C]
TANJO 1D [TANJ1D]
RNP ARRIVALS
(RWYS 07L/C/R)

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

STAR	ROUTING
TANJO 1C	TANJO (FL240-; FL220+) - EDHIP (FL220-; FL180+) - OXPAC (FL180) - MIVCA (FL160-; FL150+) - ROLIS (FL120) - OSPUL (FL120) - DF632 - FFM - DF621 - DF622 - DF623 (K220-) - DF613 - DF612 - DF611 - DF635 - DF636 - DF640 - DF641 - DF642 - DF643 - DF644.
TANJO 1D	TANJO (FL240-; FL220+) - EDHIP (FL220-; FL180+) - OXPAC (FL180) - MIVCA (FL160-; FL150+) - ROLIS (FL120) - ETARU (FL100) - DF432 - DF439 - DF441 - DF442 - DF443 - DF444.

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

Flights shall follow the cleared STAR laterally and comply with the following instructions:
- If already cleared to FL130 or below continue immediately via respective STAR, otherwise enter holding at ROLIS, descend to FL130 and continue on STAR thereafter without delay.
- If cleared "Direct to (waypoint)" or "Via (waypoint)..." continue as cleared and follow the subsequent part of the respective STAR.
- After passing DF439/DF636 (RWY07), continue descend to 4000.
- When reaching end of STAR or already beyond, turn direct to IAF DF654 (RWY 07R) and follow an adequate instrument approach procedure to land on RWY 07R.

LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS

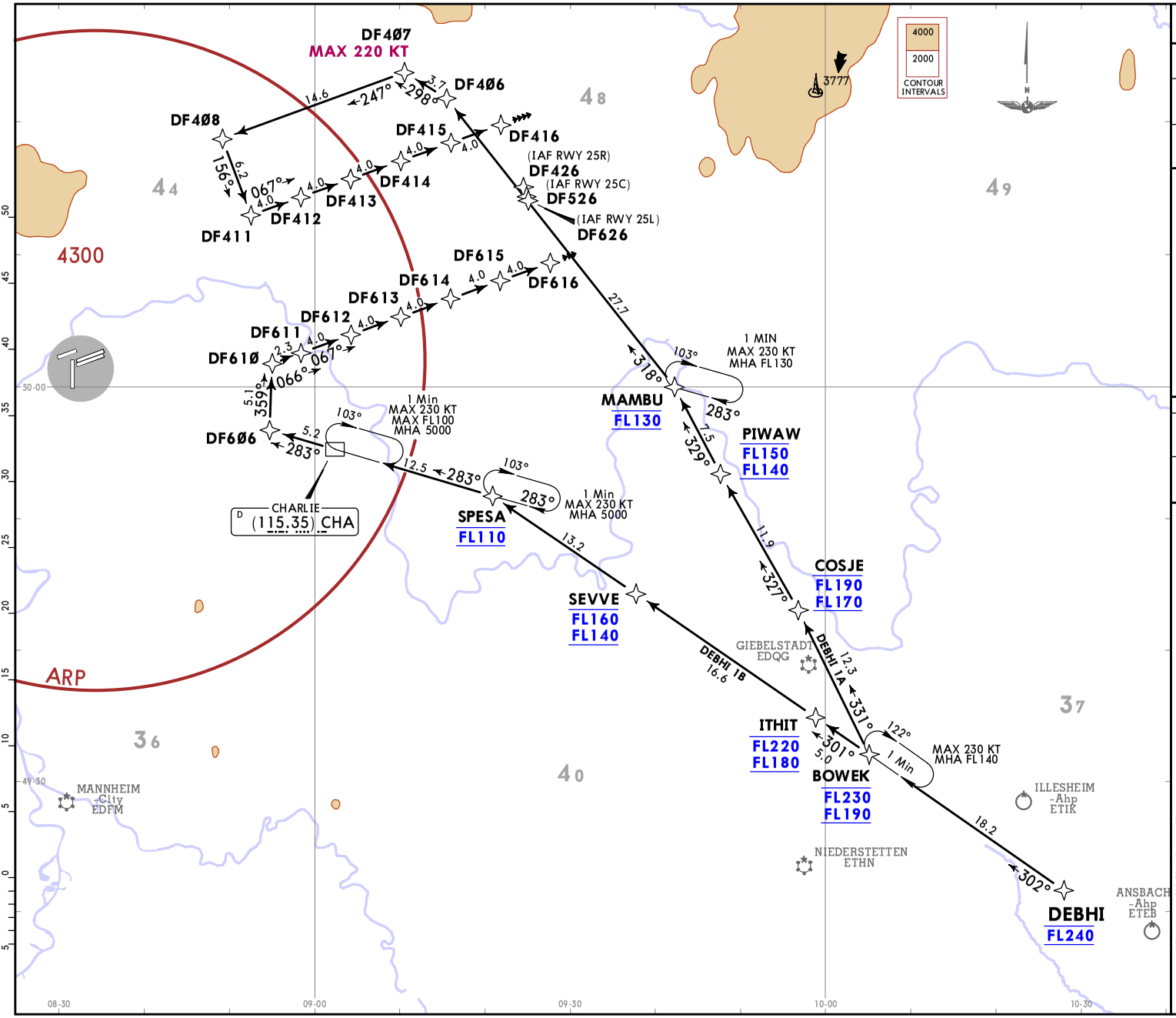
A clearance for a STAR with level and/or speed restrictions consists of a lateral and vertical part:
Lateral part: "Cleared (designator) arrival"
Vertical part: "Descend via STAR FL (figures)"
Adherence to waypoint restrictions is mandatory after a "Descend via STAR FL (figures)" clearance.
Non-adherence may lead to separation infringement.
Do not descend below the FL cleared by ATC.

CHANGES: Chart reindexed.

JEPPESEN
8 DEC 23 (10-2F)

FRANKFURT/MAIN, GERMANY

RNAV STAR



D-ATIS	Apt Elev
118.030	363

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

RNAV (GPS, DME/DME, DME/DME/IRU)
RNAV 1 required
RADAR required

1. MAINTAIN downwind track beyond end point if no succeeding instruction (vector/clearance for approach) is received.
2. If unable to comply with level restrictions advise ATC.

DEBHI 1A [DEBH1A]
DEBHI 1B [DEBH1B]
RNAV ARRIVALS
(RWYS 25L/C/R)

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

STAR	ROUTING
DEBHI 1A By ATC	DEBHI (FL240) - BOWEK (FL230-; FL190+) - COSJE (FL190-; FL170+) - PIWAW (FL150-; FL140+) - MAMBU (FL130) - DF406 - DF407 (K220-) - DF408 - DF411 - DF412 - DF413 - DF414 - DF415 - DF416.
DEBHI 1B	DEBHI (FL240) - BOWEK (FL230-; FL190+) - ITHIT (FL220-; FL180+) - SEVVE (FL160-; FL140+) - SPESA (FL110) - CHA - DF606 - DF610 - DF611 - DF612 - DF613 - DF614 - DF615 - DF616.

A clearance for a STAR with level and/or speed restrictions consists of a lateral and a vertical part:
Lateral part: 'Cleared (designator) arrival.'
Vertical part: 'Descend via STAR FL (figures).'
Adherence to waypoint restrictions is mandatory after a 'Descend via STAR FL (figures).' clearance.
Non-adherence may lead to separation infringement.
Do not descend below the FL cleared by ATC.

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

Flights shall follow the cleared STAR laterally and comply with the following instructions:
If already cleared to FL130 or below continue immediately via respective STAR, otherwise enter holding at MAMBU/SPESA descend to FL130 and continue on STAR thereafter without delay.
If cleared "Direct to (waypoint)" or "Via (waypoint)..." continue as cleared and follow the subsequent part of the respective STAR. After passing DF411/DF611 (RWY 25), continue descend to 4000.
When reaching end of STAR or already beyond, turn direct to IAF DF626 (RWY 25L) and follow an adequate instrument approach procedure to land on RWY 25L.

LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS

CHANGES: CHA VOR decommissioned.

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

Flights shall follow the cleared STAR laterally and comply with the following instructions:

If already cleared to FL130 or below continue immediately via respective STAR, otherwise enter holding at SPESA, descend to FL130 and continue on STAR thereafter without delay.

If cleared "Direct to (waypoint)" or "Via (waypoint)..." continue as cleared and follow the subsequent part of the respective STAR.

After passing DF439/DF636 (RWY07), continue descend to 4000.

When reaching end of STAR or already beyond, turn direct to IAF DF654 (RWY 07R) and follow an adequate instrument approach procedure to land on RWY 07R.

LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS

A clearance for a STAR with level and/or speed restrictions consists of a lateral and a vertical part:
Lateral part: 'Cleared (designator) arrival.'
Vertical part: 'Descend via STAR FL (figures).'
Adherence to waypoint restrictions is mandatory after a 'Descend via STAR FL (figures).' clearance.
Non-adherence may lead to separation infringement.
Do not descend below the FL cleared by ATC.

D-ATIS	Apt Elev
118.030	363

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

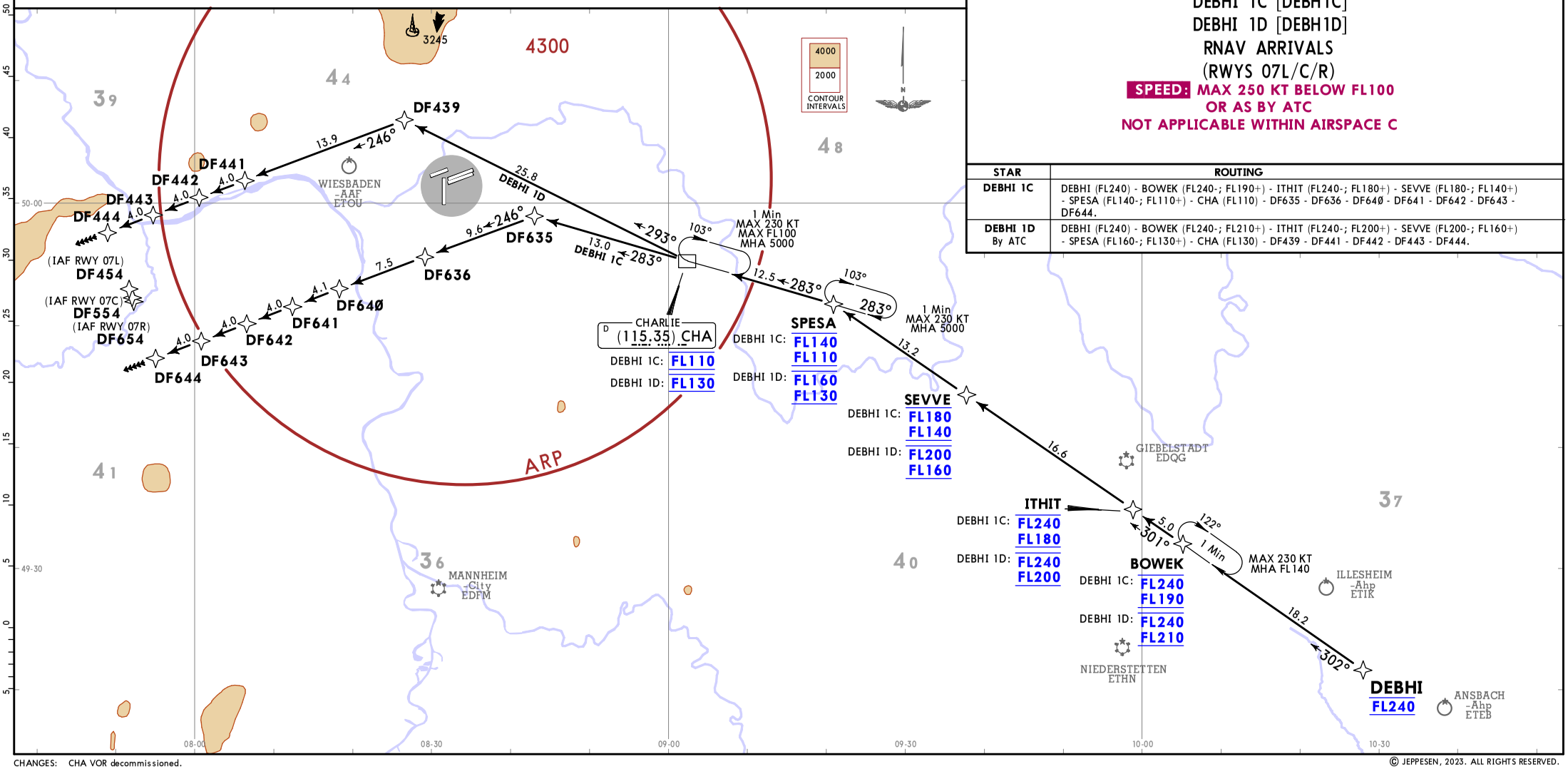
RNAV (GPS, DME/DME, DME/DME/IRU)
RNAV 1 required
RADAR required

1. MAINTAIN downwind track beyond end point if no succeeding instruction (vector/clearance for approach) is received.
2. If unable to comply with level restrictions advise ATC.

DEBHI 1C [DEBH1C]
DEBHI 1D [DEBH1D]
RNAV ARRIVALS
(RWYS 07L/C/R)

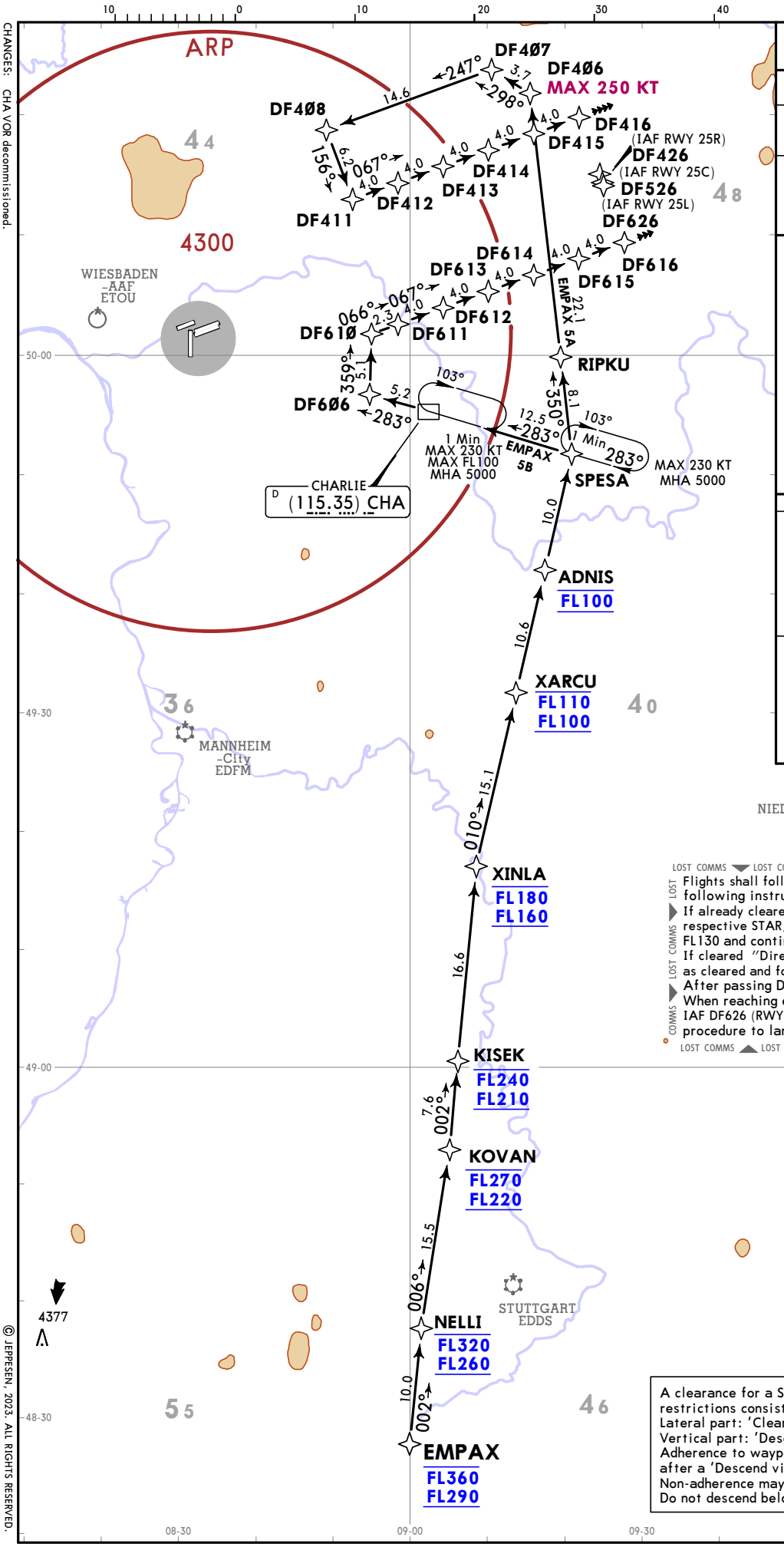
SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

STAR	ROUTING
DEBHI 1C	DEBHI (FL240) - BOWEK (FL240-; FL190+) - ITHIT (FL240-; FL180+) - SEVVE (FL180-; FL140+) - SPESA (FL140-; FL110+) - CHA (FL110) - DF635 - DF636 - DF64Ø - DF641 - DF642 - DF643 - DF644.
DEBHI 1D By ATC	DEBHI (FL240) - BOWEK (FL240-; FL210+) - ITHIT (FL240-; FL200+) - SEVVE (FL200-; FL160+) - SPESA (FL160-; FL130+) - CHA (FL130) - DF439 - DF441 - DF442 - DF443 - DF444.



CHANGES: CHA VOR decommissioned.

CHANGES: CHA VOR decommissioned.



D-ATIS	Apt Elev
118.030	363

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

RNAV (GPS, DME/DME, DME/DME/IRU)
RNAV 1 required
RADAR required

1. MAINTAIN downwind track beyond end point if no succeeding instruction (vector/clearance for approach) is received.
2. If unable to comply with level restrictions advise ATC.

EMPAX 5A [EMPA5A]
EMPAX 5B [EMPA5B]
RNAV ARRIVALS
(RWYS 25L/C/R)

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC

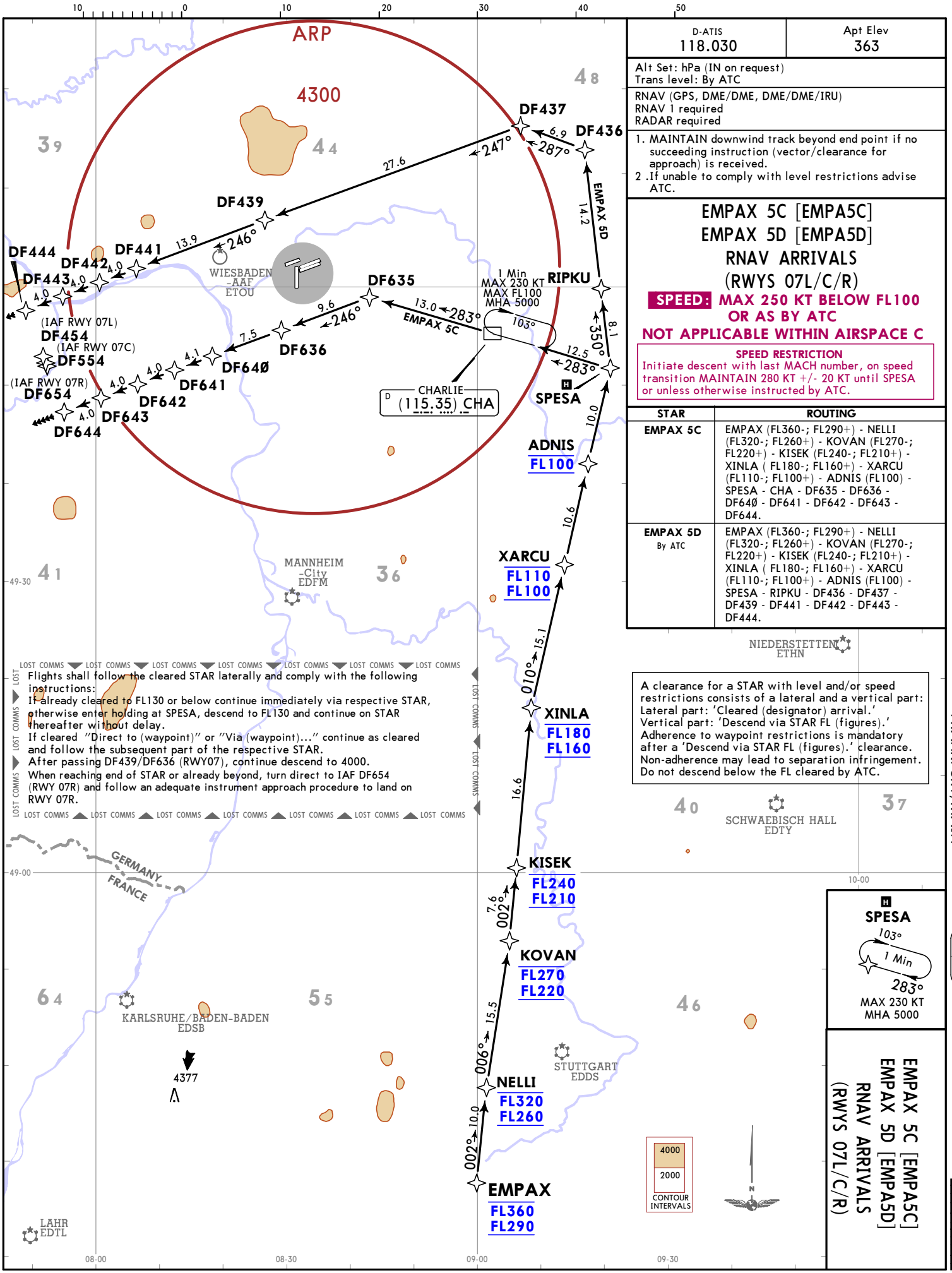
NOT APPLICABLE WITHIN AIRSPACE C

SPEED RESTRICTION
Initiate descent with last MACH number, on speed transition MAINTAIN 280 KT +/- 20 KT until SPESA or unless otherwise instructed by ATC.

STAR	ROUTING
EMPAX 5A By ATC	EMPAX (FL360-; FL290+) - NELLI (FL320-; FL260+) - KOVAN (FL270-; FL220+) - KISEK (FL240-; FL210+) - XINLA (FL180-; FL160+) - XARCU (FL110-; FL100+) - ADNIS (FL100) - SPESA - RIPKU - DF406 (K250-) - DF407 - DF408- DF411 - DF412 - DF413 - DF414 - DF415 - DF416.
EMPAX 5B	EMPAX (FL360-; FL290+) - NELLI (FL320-; FL260+) - KOVAN (FL270-; FL220+) - KISEK (FL240-; FL210+) - XINLA (FL180-; FL160+) - XARCU (FL110-; FL100+) - ADNIS (FL100) - SPESA - CHA - DF606 - DF610 - DF611 - DF612 - DF613 - DF614 - DF615 - DF616.

EMPAX 5A [EMPA5A]
EMPAX 5B [EMPA5B]
RNAV ARRIVALS
(RWYS 25L/C/R)

8 DEC 23
10-2H
JEPPESEN FRANKFURT/MAIN, GERMANY
RNAV STAR



D-ATIS	Apt Elev
118.030	363

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

RNAV (GPS, DME/DME, DME/DME/IRU)
RNAV 1 required
RADAR required

1. MAINTAIN downwind track beyond end point if no succeeding instruction (vector/clearance for approach) is received.
2. .If unable to comply with level restrictions advise ATC.

EMPAX 5C [EMPA5C]
EMPAX 5D [EMPA5D]
RNAV ARRIVALS
(RWYS 07L/C/R)

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

SPEED RESTRICTION
Initiate descent with last MACH number, on speed transition MAINTAIN 280 KT +/- 20 KT until SPESA or unless otherwise instructed by ATC.

STAR	ROUTING
EMPAX 5C	EMPAX (FL360-; FL290+) - NELLI (FL320-; FL260+) - KOVAN (FL270-; FL220+) - KISEK (FL240-; FL210+) - XINLA (FL180-; FL160+) - XARCU (FL110-; FL100+) - ADNIS (FL100) - SPESA - CHA - DF635 - DF636 - DF64Ø - DF641 - DF642 - DF643 - DF644.
EMPAX 5D By ATC	EMPAX (FL360-; FL290+) - NELLI (FL320-; FL260+) - KOVAN (FL270-; FL220+) - KISEK (FL240-; FL210+) - XINLA (FL180-; FL160+) - XARCU (FL110-; FL100+) - ADNIS (FL100) - SPESA - RIPKU - DF436 - DF437 - DF439 - DF441 - DF442 - DF443 - DF444.

Flights shall follow the cleared STAR laterally and comply with the following instructions:
If already cleared to FL130 or below continue immediately via respective STAR, otherwise enter holding at SPESA, descend to FL130 and continue on STAR thereafter without delay.
If cleared "Direct to (waypoint)" or "Via (waypoint)..." continue as cleared and follow the subsequent part of the respective STAR.
After passing DF439/DF636 (RWY07), continue descend to 4000.
When reaching end of STAR or already beyond, turn direct to IAF DF654 (RWY 07R) and follow an adequate instrument approach procedure to land on RWY 07R.

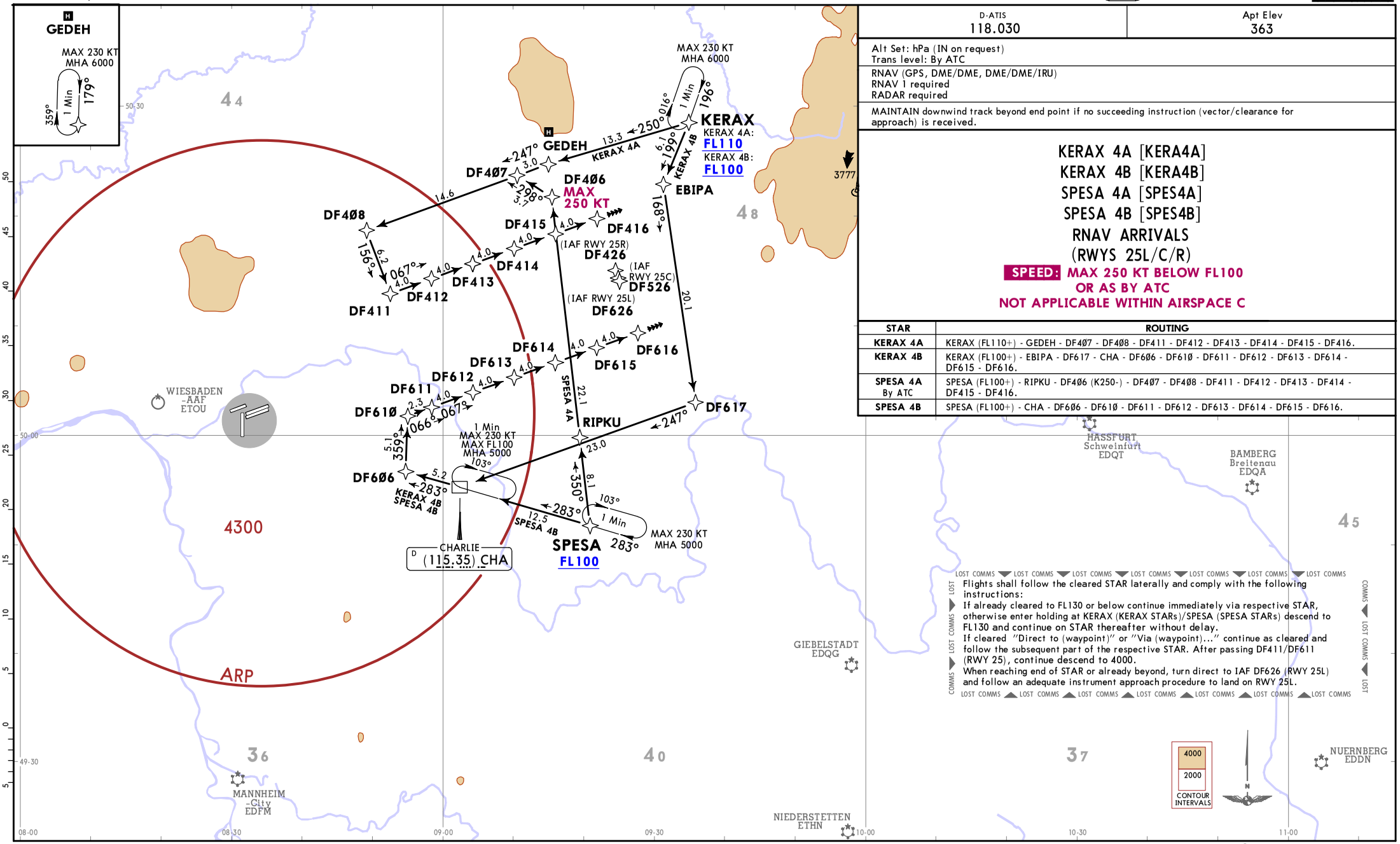
A clearance for a STAR with level and/or speed restrictions consists of a lateral and a vertical part:
Lateral part: 'Cleared (designator) arrival.'
Vertical part: 'Descend via STAR FL (figures).'
Adherence to waypoint restrictions is mandatory after a 'Descend via STAR FL (figures).' clearance.
Non-adherence may lead to separation infringement.
Do not descend below the FL cleared by ATC.

EDDF/FRA
FRANKFURT/MAIN

8 DEC 23
10-2J

JEPPESEN FRANKFURT/MAIN, GERMANY
RNAV STAR

EMPAX 5C [EMPA5C]
EMPAX 5D [EMPA5D]
RNAV ARRIVALS
(RWYS 07L/C/R)



D-ATIS	Apt Elev
118.030	363

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

RNAV (GPS, DME/DME, DME/DME/IRU)
RNAV 1 required
RADAR required

MAINTAIN downwind track beyond end point if no succeeding instruction (vector/clearance for approach) is received.

KERAX 4A [KERA4A]
KERAX 4B [KERA4B]
SPESA 4A [SPES4A]
SPESA 4B [SPES4B]
RNAV ARRIVALS
(RWYS 25L/C/R)

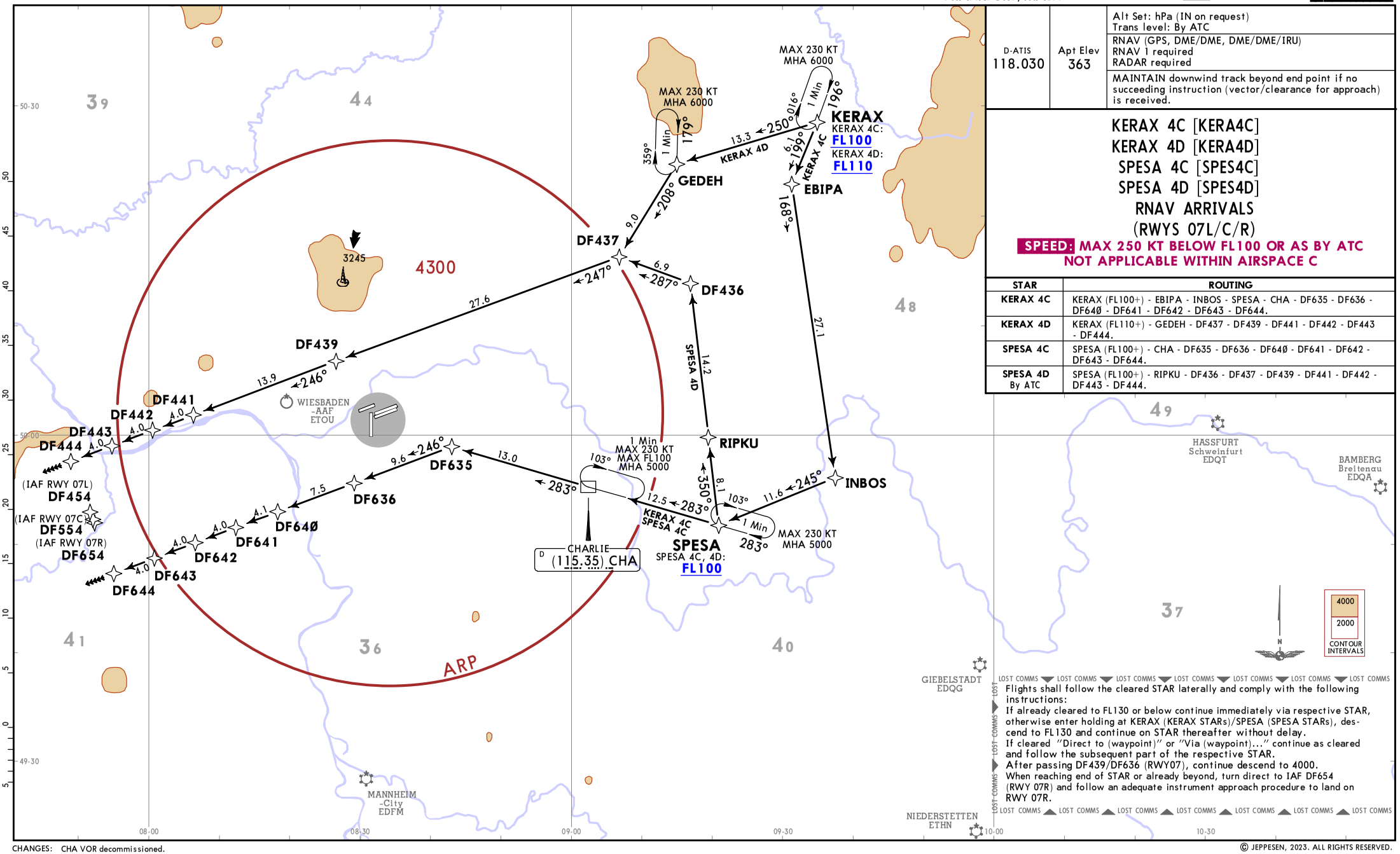
SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

STAR	ROUTING
KERAX 4A	KERAX (FL110+) - GEDEH - DF407 - DF408 - DF411 - DF412 - DF413 - DF414 - DF415 - DF416.
KERAX 4B	KERAX (FL100+) - EBIPA - DF617 - CHA - DF606 - DF610 - DF611 - DF612 - DF613 - DF614 - DF615 - DF616.
SPESA 4A By ATC	SPESA (FL100+) - RIPKU - DF406 (K250-) - DF407 - DF408 - DF411 - DF412 - DF413 - DF414 - DF415 - DF416.
SPESA 4B	SPESA (FL100+) - CHA - DF606 - DF610 - DF611 - DF612 - DF613 - DF614 - DF615 - DF616.

LOST COMMS

Flights shall follow the cleared STAR laterally and comply with the following instructions:
If already cleared to FL130 or below continue immediately via respective STAR, otherwise enter holding at KERAX (KERAX STARs)/SPESA (SPESA STARs) descend to FL130 and continue on STAR thereafter without delay.
If cleared "Direct to (waypoint)" or "Via (waypoint)..." continue as cleared and follow the subsequent part of the respective STAR. After passing DF411/DF611 (RWY 25), continue descend to 4000.
When reaching end of STAR or already beyond, turn direct to IAF DF626 (RWY 25L) and follow an adequate instrument approach procedure to land on RWY 25L.

CHANGES: CHA VOR decommissioned.



D-ATIS	Apt Elev	
118.030	363	Alt Set: hPa (IN on request) Trans level: By ATC
		RNAV (GPS, DME/DME, DME/DME/IRU) RNAV 1 required RADAR required
		MAINTAIN downwind track beyond end point if no succeeding instruction (vector/clearance for approach) is received.

KERAX 4C [KERA4C]
KERAX 4D [KERA4D]
SPESA 4C [SPES4C]
SPESA 4D [SPES4D]
RNAV ARRIVALS
(RWYS 07L/C/R)

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

STAR	ROUTING
KERAX 4C	KERAX (FL100+) - EBIPA - INBOS - SPESA - CHA - DF635 - DF636 - DF640 - DF641 - DF642 - DF643 - DF644.
KERAX 4D	KERAX (FL110+) - GEDEH - DF437 - DF439 - DF441 - DF442 - DF443 - DF444.
SPESA 4C	SPESA (FL100+) - CHA - DF635 - DF636 - DF640 - DF641 - DF642 - DF643 - DF644.
SPESA 4D By ATC	SPESA (FL100+) - RIPKU - DF436 - DF437 - DF439 - DF441 - DF442 - DF443 - DF444.

LOST COMMS

Flights shall follow the cleared STAR laterally and comply with the following instructions:

If already cleared to FL130 or below continue immediately via respective STAR, otherwise enter holding at KERAX (KERAX STARs)/SPESA (SPESA STARs), descend to FL130 and continue on STAR thereafter without delay.

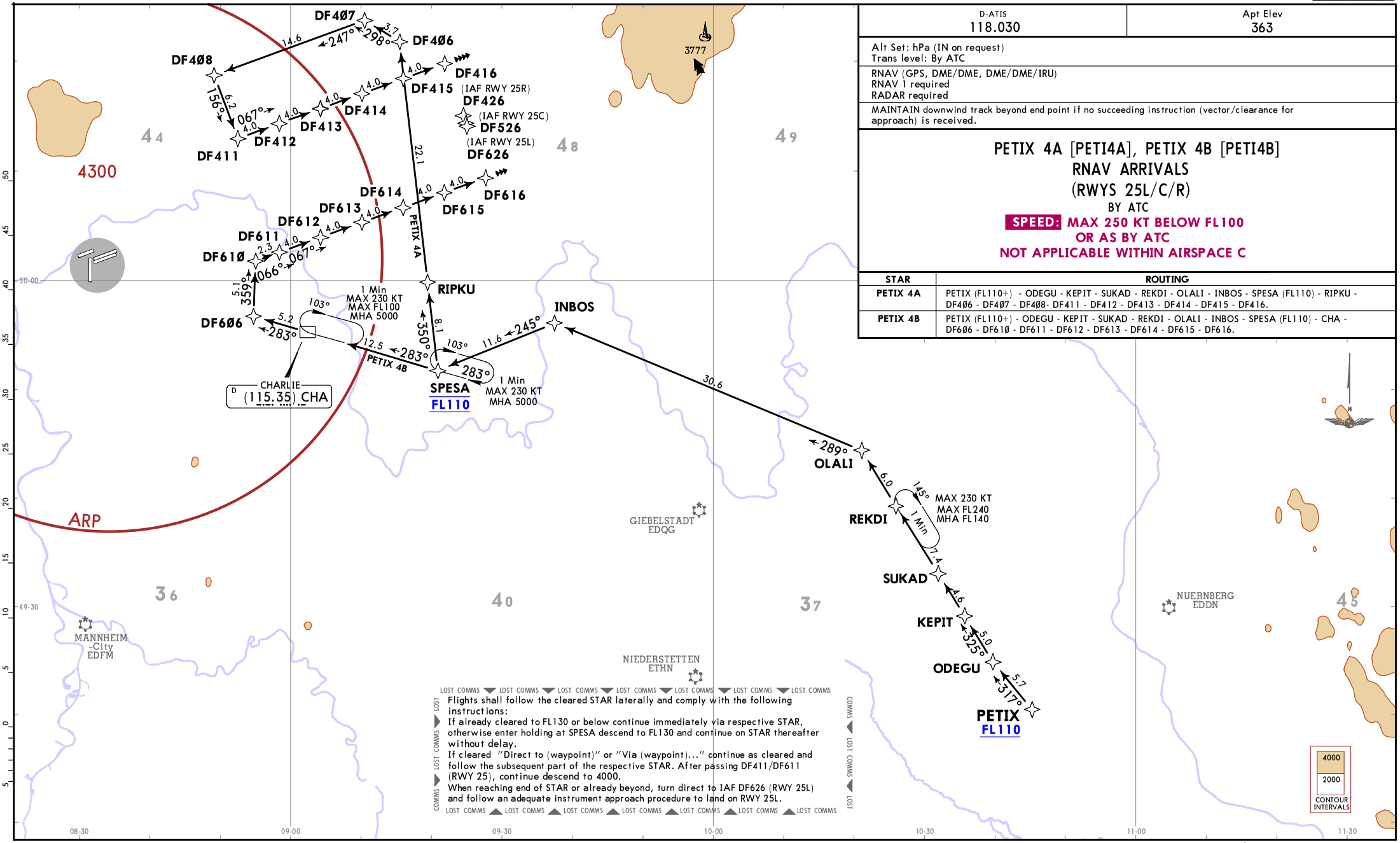
If cleared "Direct to (waypoint)" or "Via (waypoint)..." continue as cleared and follow the subsequent part of the respective STAR.

After passing DF439/DF636 (RWY07), continue descend to 4000.

When reaching end of STAR or already beyond, turn direct to IAF DF654 (RWY 07R) and follow an adequate instrument approach procedure to land on RWY 07R.

CHANGES: CHA VOR decommissioned.

JEPPESEN FRANKFURT/MAIN, GERMANY
8 DEC 23 (10-2M)
RNAV STAR



D-ATIS	Apt Elev
118.030	363

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

RNAV (GPS, DME/DME, DME/DME/IRU)
RNAV 1 required
RADAR required

MAINTAIN downwind track beyond end point if no succeeding instruction (vector/clearance for approach) is received.

PETIX 4A [PETI4A], PETIX 4B [PETI4B]
RNAV ARRIVALS
(RWYS 25L/C/R)

BY ATC

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

STAR	ROUTING
PETIX 4A	PETIX (FL110+) - ODEGU - KEPIT - SUKAD - REKDI - OLALI - INBOS - SPESA (FL110) - RIPKU - DF406 - DF407 - DF408- DF411 - DF412 - DF413 - DF414 - DF415 - DF416.
PETIX 4B	PETIX (FL110+) - ODEGU - KEPIT - SUKAD - REKDI - OLALI - INBOS - SPESA (FL110) - CHA - DF606 - DF610 - DF611 - DF612 - DF613 - DF614 - DF615 - DF616.

LOST COMMS

Flights shall follow the cleared STAR laterally and comply with the following instructions:
If already cleared to FL130 or below continue immediately via respective STAR, otherwise enter holding at SPESA descend to FL130 and continue on STAR thereafter without delay.
If cleared "Direct to (waypoint)" or "Via (waypoint)..." continue as cleared and follow the subsequent part of the respective STAR. After passing DF411/DF611 (RWY 25), continue descend to 4000.
When reaching end of STAR or already beyond, turn direct to IAF DF626 (RWY 25L) and follow an adequate instrument approach procedure to land on RWY 25L.

CHANGES: CHA VOR decommissioned.

D-ATIS	Apt Elev	
118.030	363	Alt Set: hPa (IN on request) Trans level: By ATC
		RNAV (GPS, DME/DME, DME/DME/IRU) RNAV 1 required RADAR required
		MAINTAIN downwind track beyond end point if no succeeding instruction (vector/clearance for approach) is received.

PETIX 4C [PETI4C]
PETIX 4D [PETI4D]
RNAV ARRIVALS
(RWYS 07L/C/R)

BY ATC

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC

NOT APPLICABLE WITHIN AIRSPACE C

STAR	ROUTING
PETIX 4C	PETIX (FL110+) - ODEGU - KEPIT - SUKAD - REKDI - OLALI - INBOS - SPESA (FL110) - CHA - DF635 - DF636 - DF64Ø - DF641 - DF642 - DF643 - DF644.
PETIX 4D	PETIX (FL110+) - ODEGU - KEPIT - SUKAD - REKDI - OLALI - INBOS - SPESA (FL110) - RIPKU - DF436 - DF437 - DF439 - DF441 - DF442 - DF443 - DF444.

DF437 247° 6.9 287° DF436

DF439 27.6 DF441 13.9 246° DF442 4.0 DF443 4.0 DF444

DF436 14.2 PETIX 4D RIPKU

INBOS 11.6 245° 8.1 103° 1 Min MAX 230 KT MHA 5000 350° RIPKU

INBOS 30.6 289° OLALI 6.0 145° 1 Min MAX 230 KT MAX FL240 MHA FL140 7.4 SUKAD 4.6 KEPIT 5.0 325° ODEGU 5.7 317° PETIX FL110

DF635 9.6 246° DF636 7.5 DF64Ø 4.1 DF641 4.0 DF642 4.0 DF643 4.0 DF644

DF635 13.0 283° CHARLIE D (115.35) CHA

RIPKU 103° 1 Min MAX 230 KT MAX FL100 MHA 5000 12.5 283° PETIX 4C SPESA FL110 1 Min MAX 230 KT MHA 5000 283°

(IAF RWY 07L) DF454
(IAF RWY 07C) DF554
(IAF RWY 07R) DF654

3245

WIESBADEN -AAF ETOU

GIEBELSTADT EDQG

MANNHEIM -City EDFM

NIEDERSTETTEN ETHN

ARP

4000
2000
CONTOUR INTERVALS

LOST COMMS

Flights shall follow the cleared STAR laterally and comply with the following instructions:
If already cleared to FL130 or below continue immediately via respective STAR, otherwise enter holding at SPESA, descend to FL130 and continue on STAR thereafter without delay.
If cleared "Direct to (waypoint)" or "Via (waypoint)..." continue as cleared and follow the subsequent part of the respective STAR.
After passing DF439/DF636 (RWY07), continue descend to 4000.
When reaching end of STAR or already beyond, turn direct to IAF DF654 (RWY 07R) and follow an adequate instrument approach procedure to land on RWY 07R.

CHANGES: CHA VOR decommissioned.

JEPPESEN
27 OCT 23 (10-2P) Eff 2 Nov

FRANKFURT/MAIN, GERMANY

RNAV STAR

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

Flights shall follow the cleared STAR laterally and comply with the following instructions:
If already cleared to FL130 or below continue immediately via respective STAR, otherwise enter holding at UNOKO descend to FL130 and continue on STAR thereafter without delay.
If cleared "Direct to (waypoint)" or "Via (waypoint)..." continue as cleared and follow the subsequent part of the respective STAR. After passing DF411/DF611 (RWY 25), continue descend to 4000.
When reaching end of STAR or already beyond, turn direct to IAF DF626 (RWY 25L) and follow an adequate instrument approach procedure to land on RWY 25L.

LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS

D-ATIS	Apt Elev
118.030	363

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

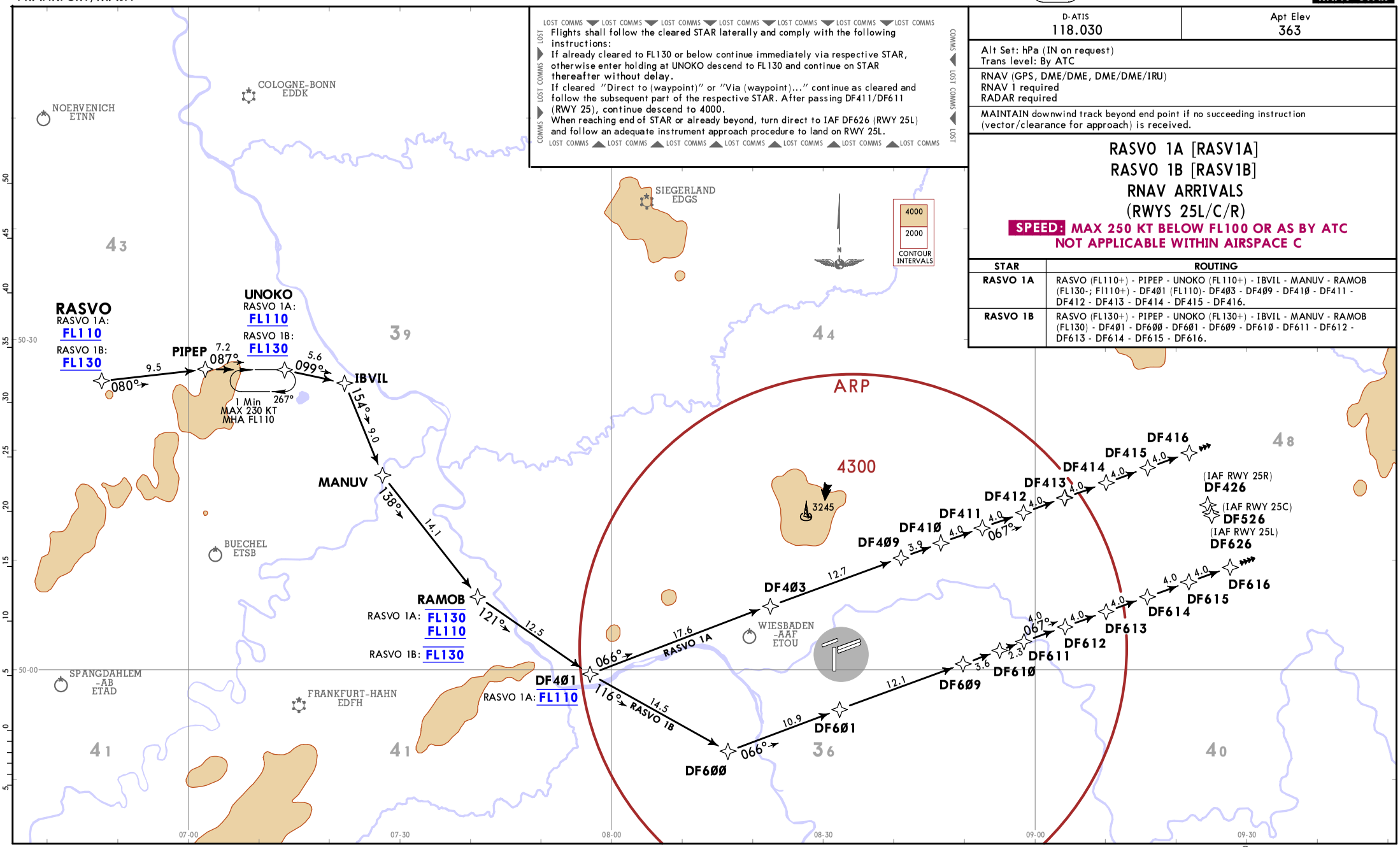
RNAV (GPS, DME/DME, DME/DME/IRU)
RNAV 1 required
RADAR required

MAINTAIN downwind track beyond end point if no succeeding instruction (vector/clearance for approach) is received.

RASVO 1A [RASV1A]
RASVO 1B [RASV1B]
RNAV ARRIVALS
(RWYS 25L/C/R)

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

STAR	ROUTING
RASVO 1A	RASVO (FL110+) - PIPEP - UNOKO (FL110+) - IBVIL - MANUV - RAMOB (FL130-; FI110+) - DF401 (FL110)- DF403 - DF409 - DF410 - DF411 - DF412 - DF413 - DF414 - DF415 - DF416.
RASVO 1B	RASVO (FL130+) - PIPEP - UNOKO (FL130+) - IBVIL - MANUV - RAMOB (FL130) - DF401 - DF600 - DF601 - DF609 - DF610 - DF611 - DF612 - DF613 - DF614 - DF615 - DF616.



CHANGES: New procedures at this airport.

D-ATIS	Apt Elev	
118.030	363	Alt Set: hPa (IN on request) Trans level: By ATC
		RNAV (GPS, DME/DME, DME/DME/IRU) RNAV 1 required RADAR required
		MAINTAIN downwind track beyond end point if no succeeding instruction (vector/clearance for approach) is received.

RASVO 1C [RASV1C]
RASVO 1D [RASV1D]
RNAV ARRIVALS
(RWYS 07L/C/R)

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

STAR	ROUTING
RASVO 1C	RASVO (FL130+) - PIPEP - UNOKO (FL130+) - IBVIL - MANUV - RAMOB (FL130) - DF431 - DF631 - DF632 - FFM - DF621 - DF622 - DF623 (K220-) - DF613 - DF612 - DF611 - DF635 - DF636 - DF640 - DF641 - DF642 - DF643 - DF644.
RASVO 1D	RASVO (FL110+) - PIPEP - UNOKO (FL110+) - IBVIL - MANUV - RAMOB (FL130-; FL110+) - DF431 (FL110) - DF432 - DF439 - DF441 - DF442 - DF443 - DF444.

RASVO
RASVO 1C: FL130
RASVO 1D: FL110

UNOKO
RASVO 1C: FL130
RASVO 1D: FL110

PIPEP
080° 9.5
087° 7.2
099° 5.6
267°
1 Min
MAX 230 KT
MHA FL110

IBVIL
154° 9.0

MANUV
138° 14.1

RAMOB
RASVO 1C: FL130
RASVO 1D: FL130 FL110
103° 7.0

DF431
RASVO 1D: FL110
066° 21.9 RASVO 1D
104° 14.4 RASVO 1C

DF432
3245
156° 6.0

DF439
246° 13.9

DF441
077° 5.1

DF442
4.0

DF443
4.0

DF444
4.0

(IAF RWY 07L)
DF454
(IAF RWY 07C)
DF554
(IAF RWY 07R)
DF654

DF631
4.0

DF632
11.6

FRANKFURT
D 114.2 FFM
067° 12.0

DF621
4.0

DF622
4.0

DF623
MAX 220 KT
157° 5.0

DF613
4.0

DF612
4.0
247°

DF611
10.6

DF635
9.6
246°

DF636
7.5

DF640
4.1

DF641
4.0

DF642
4.0

DF643
4.0

DF644

4300

ARP

BUECHEL ETSB
SIEGERLAND EDGS
NOERVENICH ETNN
SPANGDAHLEM -AB ETAD
FRANKFURT-HAHN EDFH
WIESBADEN -AAF ETOU

39 44 43 48 41 41 36 40

50-30 50-00 07-00 07-30 08-00 08-30 09-00 09-30

LOST COMMS

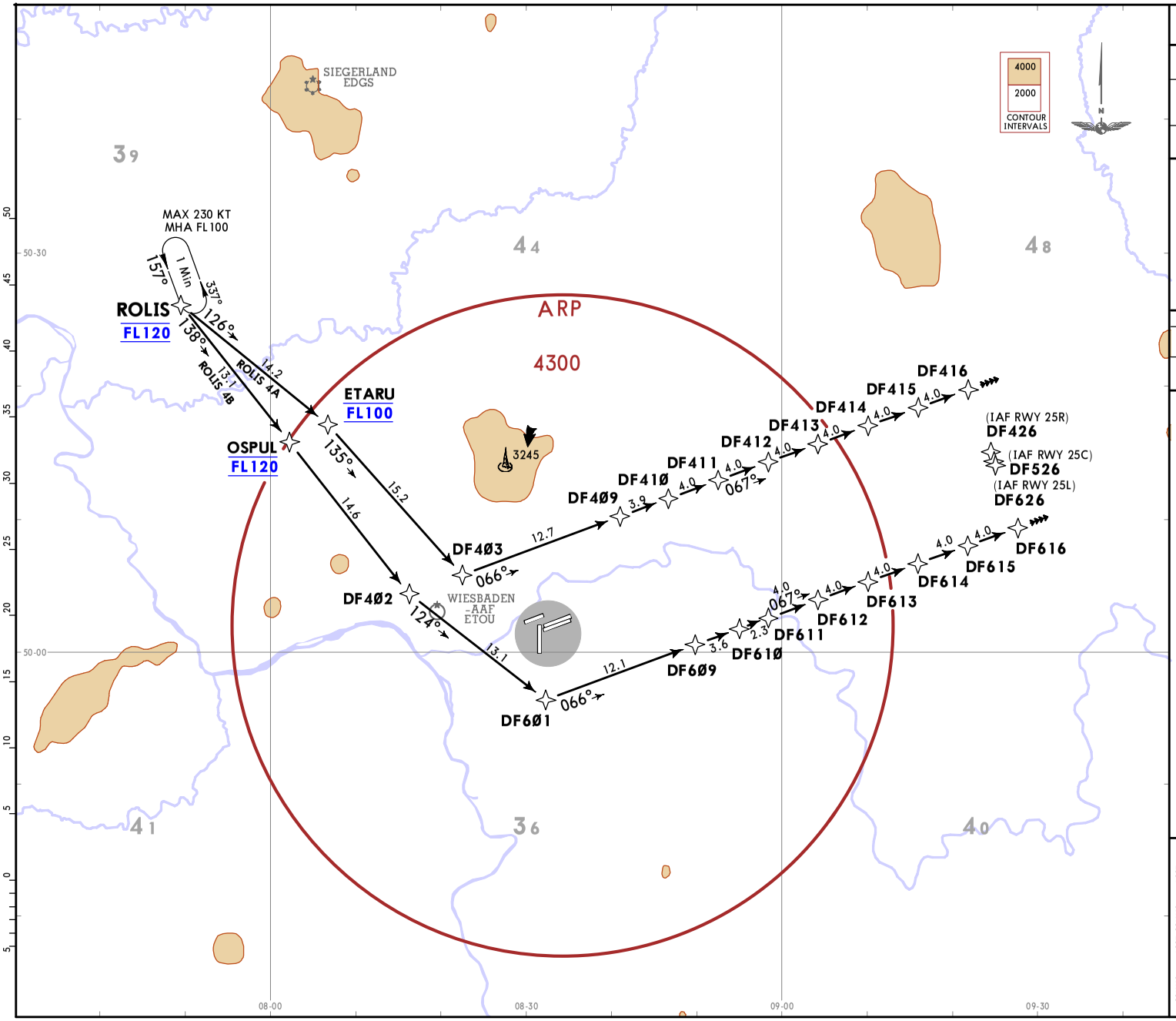
Flights shall follow the cleared STAR laterally and comply with the following instructions:
If already cleared to FL130 or below continue immediately via respective STAR, otherwise enter holding at UNOKO, descend to FL130 and continue on STAR thereafter without delay.
If cleared "Direct to (waypoint)" or "Via (waypoint)..." continue as cleared and follow the subsequent part of the respective STAR.
After passing DF439/DF636 (RWY07), continue descend to 4000.
When reaching end of STAR or already beyond, turn direct to IAF DF654 (RWY 07R) and follow an adequate instrument approach procedure to land on RWY 07R.

CHANGES: New procedures at this airport.

JEPPESEN
27 OCT 23 (10-2S) Eff 2 Nov

FRANKFURT/MAIN, GERMANY

RNAV STAR



D-ATIS	Apt Elev
118.030	363

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

RNAV (GPS, DME/DME, DME/DME/IRU)
RNAV 1 required
RADAR required

MAINTAIN downwind track beyond end point if no succeeding instruction (vector/clearance for approach) is received.

ROLIS 4A [ROLI4A]
ROLIS 4B [ROLI4B]
RNAV ARRIVALS
(RWYS 25L/C/R)

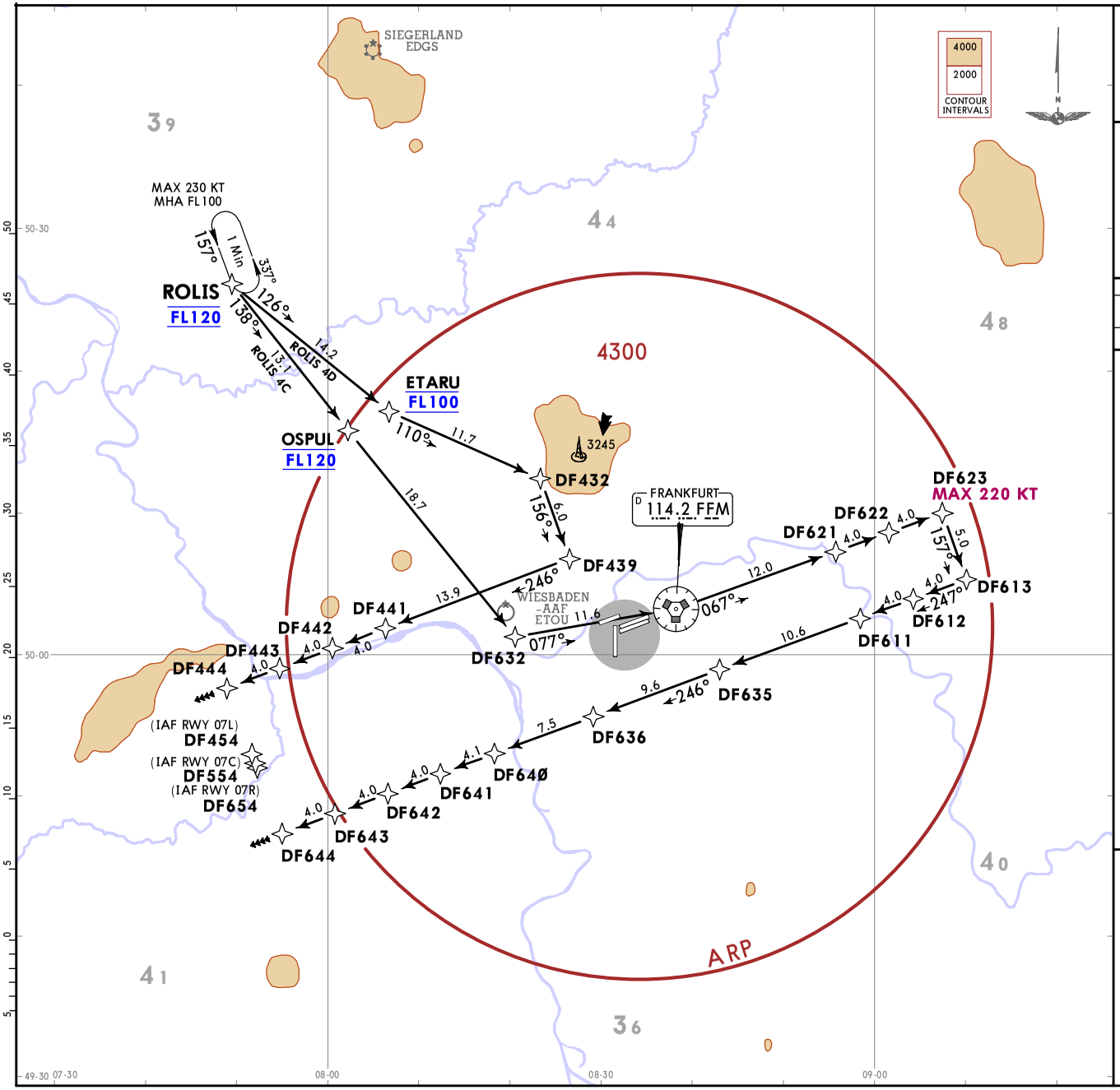
SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

STAR	ROUTING
ROLIS 4A	ROLIS (FL120) - ETARU (FL100) - DF4Ø3 - DF4Ø9 - DF41Ø - DF411 - DF412 - DF413 - DF414 - DF415 - DF416.
ROLIS 4B	ROLIS (FL120) - OSPUL (FL120) - DF4Ø2 - DF6Ø1 - DF6Ø9 - DF61Ø - DF611 - DF612 - DF613 - DF614 - DF615 - DF616.

LOST COMMS

Flights shall follow the cleared STAR laterally and comply with the following instructions:
If already cleared to FL130 or below continue immediately via respective STAR, otherwise enter holding at ROLIS, descend to FL130 and continue on STAR thereafter without delay.
If cleared "Direct to (waypoint)" or "Via (waypoint)..." continue as cleared and follow the subsequent part of the respective STAR. After passing DF411/DF611 (RWY 25), continue descend to 4000.
When reaching end of STAR or already beyond, turn direct to IAF DF626 (RWY 25L) and follow an adequate instrument approach procedure to land on RWY 25L.

CHANGES: New chart (chart reindexed, RNAV STARs UNOKO 4A & 4B withdrawn).



D-ATIS	Apt Elev	
118.030	364	Alt Set: hPa (IN on request) Trans level: By ATC
		RNAV (GPS, DME/DME, DME/DME/IRU). RNAV 1 required. RADAR required.
		MAINTAIN downwind track beyond end point if no succeeding instruction (vector/clearance for approach) is received.

ROLIS 4C [ROLI4C]
ROLIS 4D [ROLI4D]
RNAV ARRIVALS
(RWYS 07L/C/R)

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

STAR	ROUTING
ROLIS 4C	ROLIS (FL120) - OSPUL (FL120) - DF632 - FFM - DF621 - DF622 - DF623 (K220-) - DF613 - DF612 - DF611 - DF635 - DF636 - DF640 - DF641 - DF642 - DF643 - DF644.
ROLIS 4D	ROLIS (FL120) - ETARU (FL100) - DF432 - DF439 - DF441 - DF442 - DF443 - DF444.

LOST COMMS

Flights shall follow the cleared STAR laterally and comply with the following instructions:

If already cleared to FL130 or below continue immediately via respective STAR, otherwise enter holding at ROLIS, descend to FL130 and continue on STAR thereafter without delay.

If cleared "Direct to (waypoint)" or "Via (waypoint)..." continue as cleared and follow the subsequent part of the respective STAR.

After passing DF439/DF636 (RWY07), continue descend to 4000.

When reaching end of STAR or already beyond, turn direct to IAF DF654 (RWY 07R) and follow an adequate instrument approach procedure to land on RWY 07R.

CHANGES: New chart (chart reindexed, RNAV STARs UNOKO 4C & 4D withdrawn).

D-ATIS	Apt Elev	Alt Set: hPa (IN on request) Trans level: By ATC
118.030	363	RNAV 1 or RNP 1 or A-RNP equivalent GPS required DME/DME, DME/DME/IRU not authorized

KERAX 3G [KERA3G]
SPESA 2G [SPES2G]
RNAV ARRIVALS (RWYS 25L/C)

KERAX 4R [KERA4R]
SPESA 4R [SPES4R]
RNAV ARRIVALS (RWYS 07C/R)

BY ATC
PROCEDURES SHOULD BE USED
BETWEEN 2300-0500LT BY ALL
RNAV (GPS) EQUIPPED ACFT

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

ARP
METRO
110.0 MTR
MHA 6000
MHA 5000
KERAX
GEDEH
GEDSI
ETARU
DF951
FL080
DF95Ø
6500
ORVIV
5000
KUGUK
SPESA 2G: 5000
IBLUS
5000
ULNOK
5000
SPESA
SPESA 2G: 5000
SPESA 4R: 6500
WIESBADEN
-AAF
ETOU
3245
4300
(IAF RWY 25L/C)
(IAF RWY 07C/R)
KERAX 3G
4500
6500 By ATC
5000
FL080 By ATC
KERAX 3G, 4R
KERAX 4R
4000
5000 By ATC
SPESA 4R
3000
5000 By ATC
CONTOUR INTERVALS
4000
2000

EDDF/FRA
FRANKFURT/MAIN
JEPPESEN FRANKFURT/MAIN, GERMANY
27 OCT 23
10-2U
Eff 2 Nov
RNAV STAR

EDDF/FRA
FRANKFURT/MAIN

JEPPESEN FRANKFURT/MAIN, GERMANY

27 OCT 23 | 10-2V | Eff 2 Nov | RNAV STAR

ROLIS 4G [ROLI4G], UNOKO 4G [UNOK4G] RNAV ARRIVALS (RWYS 25L/C)
ROLIS 3R [ROLI3R], UNOKO 4R [UNOK4R] RNAV ARRIVALS (RWYS 07C/R)

BY ATC

PROCEDURES SHOULD BE USED BETWEEN 2300-0500LT BY ALL RNAV (GPS) EQUIPPED ACFT

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC NOT APPLICABLE WITHIN AIRSPACE C

D-ATIS 118.030

Apt Elev 363

Alt Set: hPa (IN on request) Trans level: By ATC
RNAV 1 or RNP 1 or A-RNP equivalent
GPS required
DME/DME, DME/DME/IRU not authorized

ARP

UNOKO
MHA FL110
088°
268°
100°
5.6
UNOKO 4G, 4R
5000
FL110 By ATC

IBVIL
155°
9.0
5000
FL110 By ATC

MANUV
139°
14.1
5000
FL110 By ATC

RAMOB
112°
UNOKO 4G
15.7
5000
FL080 By ATC
138°
7.1
5000
FL080 By ATC
UNOKO 4R

REDLI
120°
13.6
4000
5000 By ATC

ROLIS
MHA FL100
337°
126°
14.2
5000
FL100 By ATC
ROLIS 4G
157°
159°
23.0
5000
FL080 By ATC
ROLIS 3R

DF951
FL080

ETARU
4300
122°
24.6
5000
FL080 By ATC

ROKIM
160°
079°
11.0
4000
5000 By ATC

IBLUS
5000
(IAF RWY 07C/R)

ORVIV
5000
(IAF RWY 25L/C)
8.4
4000
5000 By ATC
129°

029°
15.7
ROLIS 4G
UNOKO 4G
4000
6500 By ATC

METRO
110.0 MTR

FRANKFURT
114.2 FFM

WIESBADEN
-AAF
ETOU
22.9
4000
FL080 By ATC

3245

FRANKFURT-HAHN
EDFH

BUECHEL
ETSB

CONTOUR INTERVALS
4000
2000

CHANGES: New chart (chart reindexed).

RNAV SID DESIGNATION	REFER TO CHART
ANEKI 1X	10-3A3
ANEKI 1Y	10-3A4
CINDY 1X	10-3A5
CINDY 1Y	10-3A6
SOBRA 2U	10-3A7
SOBRA 1X	10-3A8
SOBRA 1Y	10-3A9
ANEKI 3A	10-3B
CINDY 2A	10-3C
MARUN 3K	10-3C1
MARUN 3W	10-3C2
OBOKA 3K	10-3C3
OBOKA 3W	10-3C4
SULUS 3A	10-3C5
TOBAK 3K	10-3C6
TOBAK 3W	10-3C7
ANEKI 3D	10-3C8
ANEKI 5E	10-3C9
ANEKI 2F, 2L	10-3C10
CINDY 2D	10-3D
CINDY 3F	10-3E
CINDY 3L	10-3E1
CINDY 5S	10-3E2
MARUN 1N	10-3E3
MARUN 4R	10-3E4
MARUN 8S	10-3E5
MARUN 6T	10-3E6
OBOKA 5N	10-3E7
OBOKA 2L, 4S	10-3E8
OBOKA 2R	10-3E9
OBOKA 3T	10-3E10

FOR FURTHER RNAV SID DESIGNATION REFER TO PAGE 10-3A

CHANGES: RNAV SIDs, RNAV SID charts reindexed.

RNAV SID DESIGNATION	REFER TO CHART
SOBRA 7D	10-3F
SOBRA 7E	10-3G
SOBRA 8F, 7P	10-3G1
SOBRA 8N	10-3G2
SOBRA 2L	10-3G3
SULUS 3F	10-3G4
SULUS 2L	10-3G5
SULUS 4S	10-3G6
TOBAK 3N	10-3H
TOBAK 4R	10-3J
TOBAK 1S	10-3J1
TOBAK 8T	10-3K
ULKIG 2L, 3S	10-3L

CHANGES: RNAV SID added, RNAV SID charts reindexed.

SID DESIGNATION	REFER TO CHART
FRANKENSTEIN 1B	10-3L1
FRANKENSTEIN 1C, 1Q	10-3L2
KOMIB 3D	10-3L3
MARUN 9D, 5E	10-3L4
MARUN 6F, 1G	10-3L5
MARUN 5H	10-3L6
MARUN 7M	10-3L7
METRO 6C	10-3L8
OBOKA 1D, 1E	10-3M
OBOKA 3G	10-3N
OBOKA 2H	10-3N1
OBOKA 2M	10-3N2
SULUS 1D	10-3N3
TAUNUS 3Q	10-3N4
TOBAK 9D	10-3N5
TOBAK 7F, 2G	10-3N6
TOBAK 5H	10-3N7
TOBAK 7M	10-3N8

CHANGES: SIDs renumbered, transferred, SID charts reindexed.

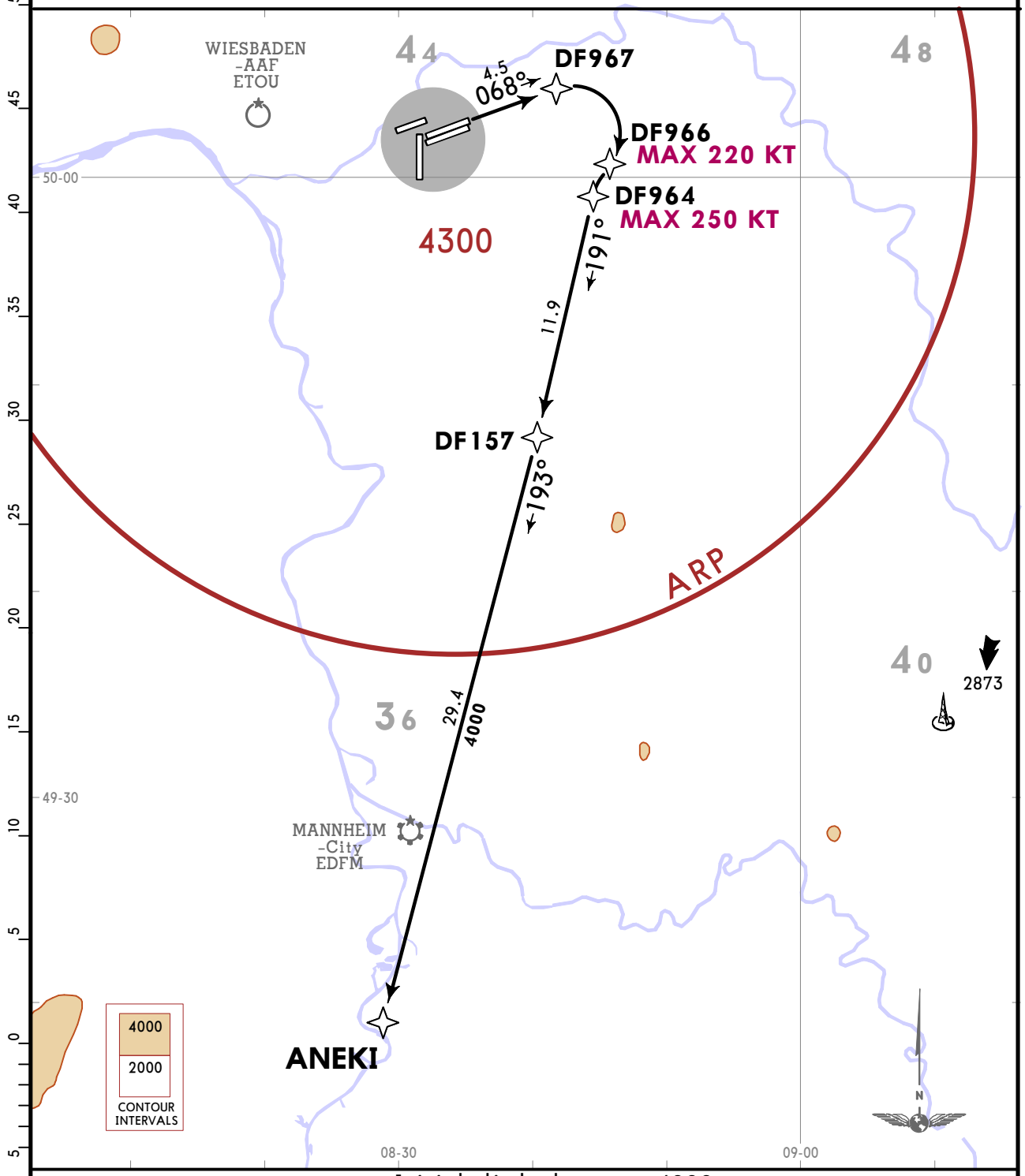
RNAV SID DESIGNATION	REFER TO CHART
KOMIB 3D	10-3P
MARUN 9D, 5E	10-3Q
MARUN 6F, 1G	10-3Q1
MARUN 5H	10-3Q2
MARUN 7M	10-3Q3
OBOKA 1D, 1E	10-3Q4
OBOKA 3G	10-3Q5
OBOKA 2H	10-3S
OBOKA 2M	10-3T
SULUS 1D	10-3U
TOBAK 9D	10-3V
TOBAK 7F, 2G	10-3W
TOBAK 5H	10-3X
TOBAK 7M	10-3X1

CHANGES: RNAV SIDs withdrawn, RNAV SID overlay charts reindexed.

*LANGEN Radar (APP) 136.130	Apt Elev 363	Trans alt: 5000
		RNP-1/A-RNP, RF leg required GPS required
		1. Contact LANGEN Radar when advised by Tower. 2. WARNING: Close-in obstacles 3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 4. For operational RWY use concept refer to 10-1P pages.

ANEKI 1X [ANEK1X]
RNP DEPARTURE
(RWY 07C)

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



Initial climb clearance **4000**

ROUTING

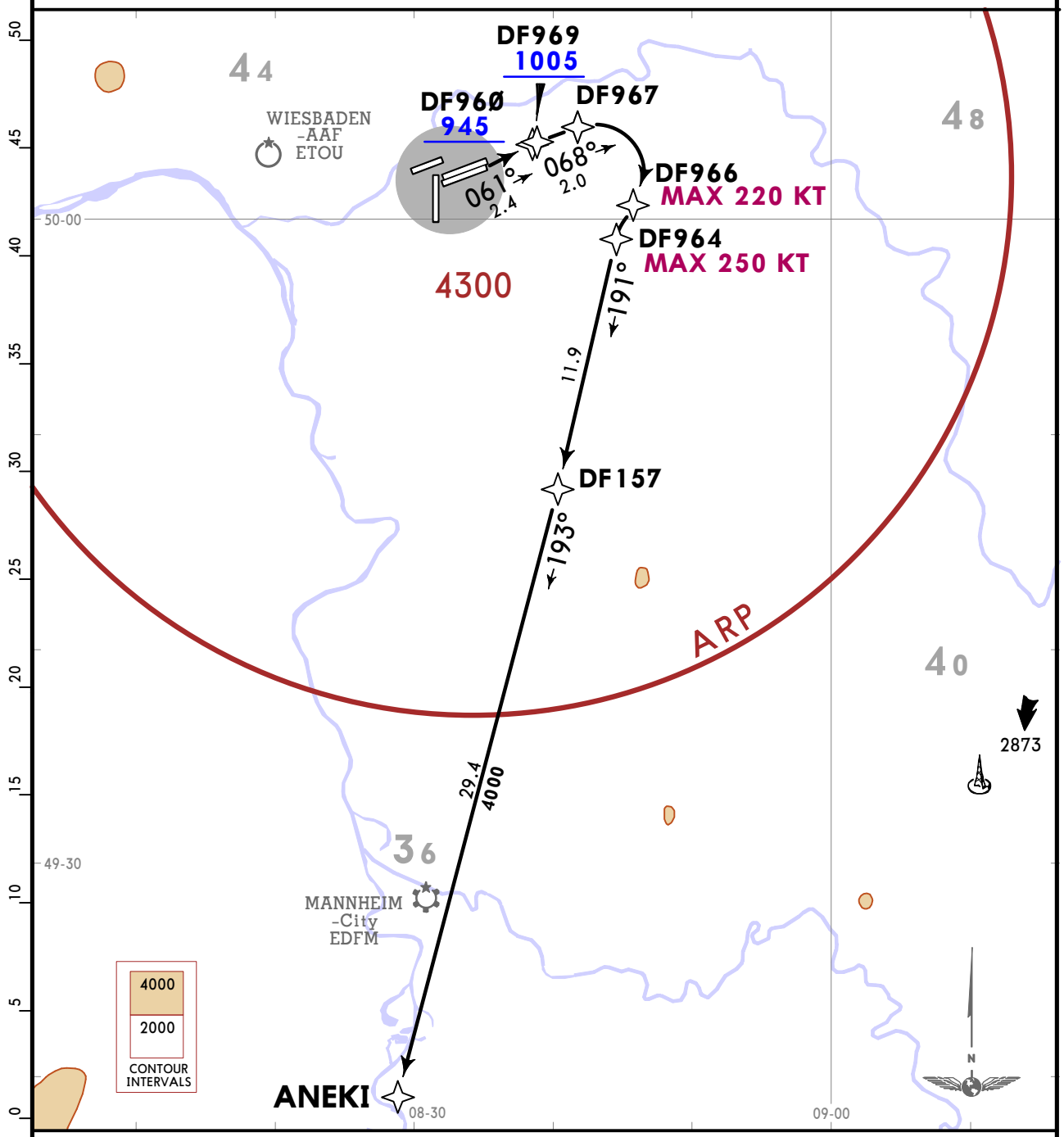
On 068° track to DF967, turn RIGHT to DF966, turn LEFT to DF964, to DF157, to ANEKI.

CHANGES: General notes.

*LANGEN Radar (APP) 136.130	Apt Elev 363	Trans alt: 5000 RNP-1/A-RNP, RF leg required GPS required 1. Contact LANGEN Radar when advised by Tower. 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 3. For operational RWY use concept refer to 10-1P pages.

ANEKI 1Y [ANEK1Y]
RNP DEPARTURE
(RWY 07R)

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



This SID requires a minimum climb gradient of 3.9% (240 FT/NM) until passing 1005 due to operational reasons.

Gnd speed-KT	75	100	150	200	250	300
3.9% V/V (fpm)	296	395	592	790	987	1185

Initial climb clearance **4000**

ROUTING

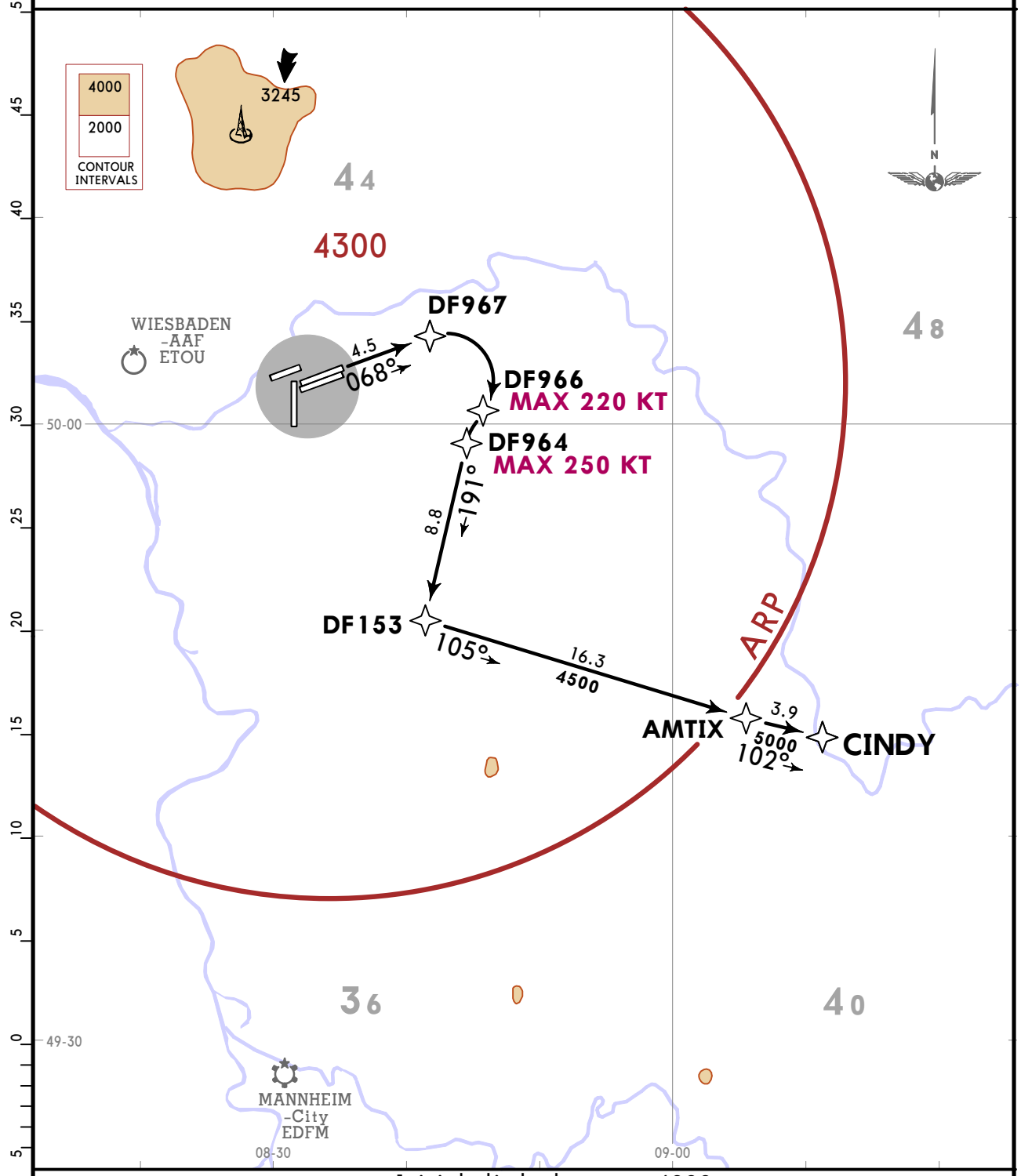
On 061° track to DF96Ø, turn RIGHT to DF969, to DF967, turn RIGHT to DF966, turn LEFT to DF964, to DF157, to ANEKI.

CHANGES: None.

*LANGEN Radar (APP) 136.130	Apt Elev 363	Trans alt: 5000 RNP-1/A-RNP, RF leg required GPS required 1. Contact LANGEN Radar when advised by Tower. 2. WARNING: Close-in obstacles. 3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 4. For operational RWY use concept refer to 10-1P pages.

CINDY 1X [CIND1X]
RNP DEPARTURE
(RWY 07C)

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



Initial climb clearance **4000**

ROUTING

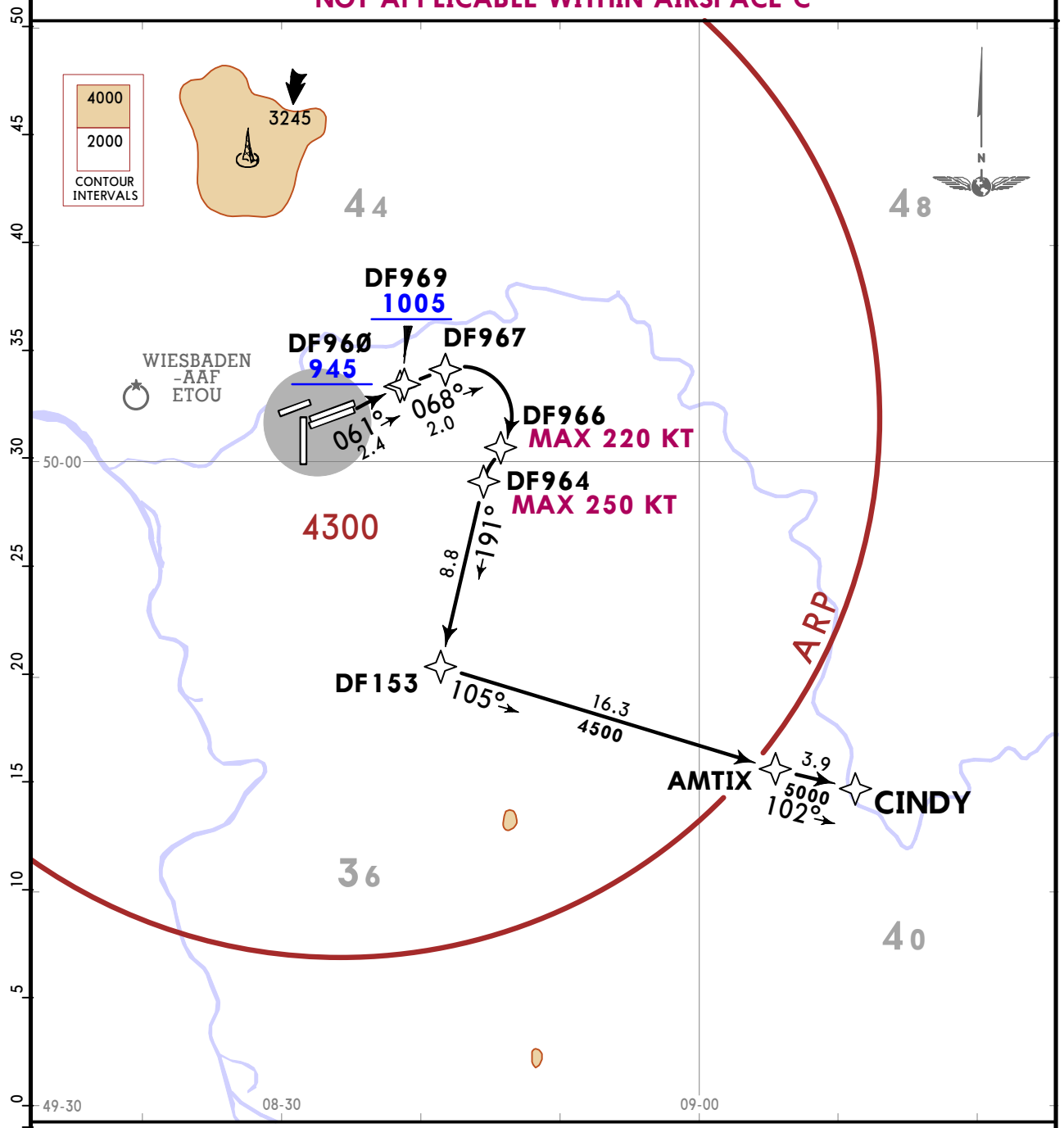
On 068° track to DF967, turn RIGHT to DF966, turn LEFT to DF964, to DF153, to AMTIX, to CINDY.

CHANGES: General notes.

*LANGEN Radar (APP) 136.130	Apt Elev 363	Trans alt: 5000
		RNP-1/A-RNP, RF leg required GPS required
		1. Contact LANGEN Radar when advised by Tower. 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 3. For operational RWY use concept refer to 10-1P pages.

CINDY 1Y [CIND1Y]
RNP DEPARTURE
(RWY 07R)

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



This SID requires a minimum climb gradient of 3.9% (240 FT/NM) until passing 1005 due to operational reasons.

Gnd speed-KT	75	100	150	200	250	300
3.9% V/V (fpm)	296	395	592	790	987	1185

Initial climb clearance **4000**

ROUTING

On 061° track to DF96Ø, turn RIGHT to DF969, to DF967, turn RIGHT to DF966, turn LEFT to DF964, to DF153, to AMTIX, to CINDY.

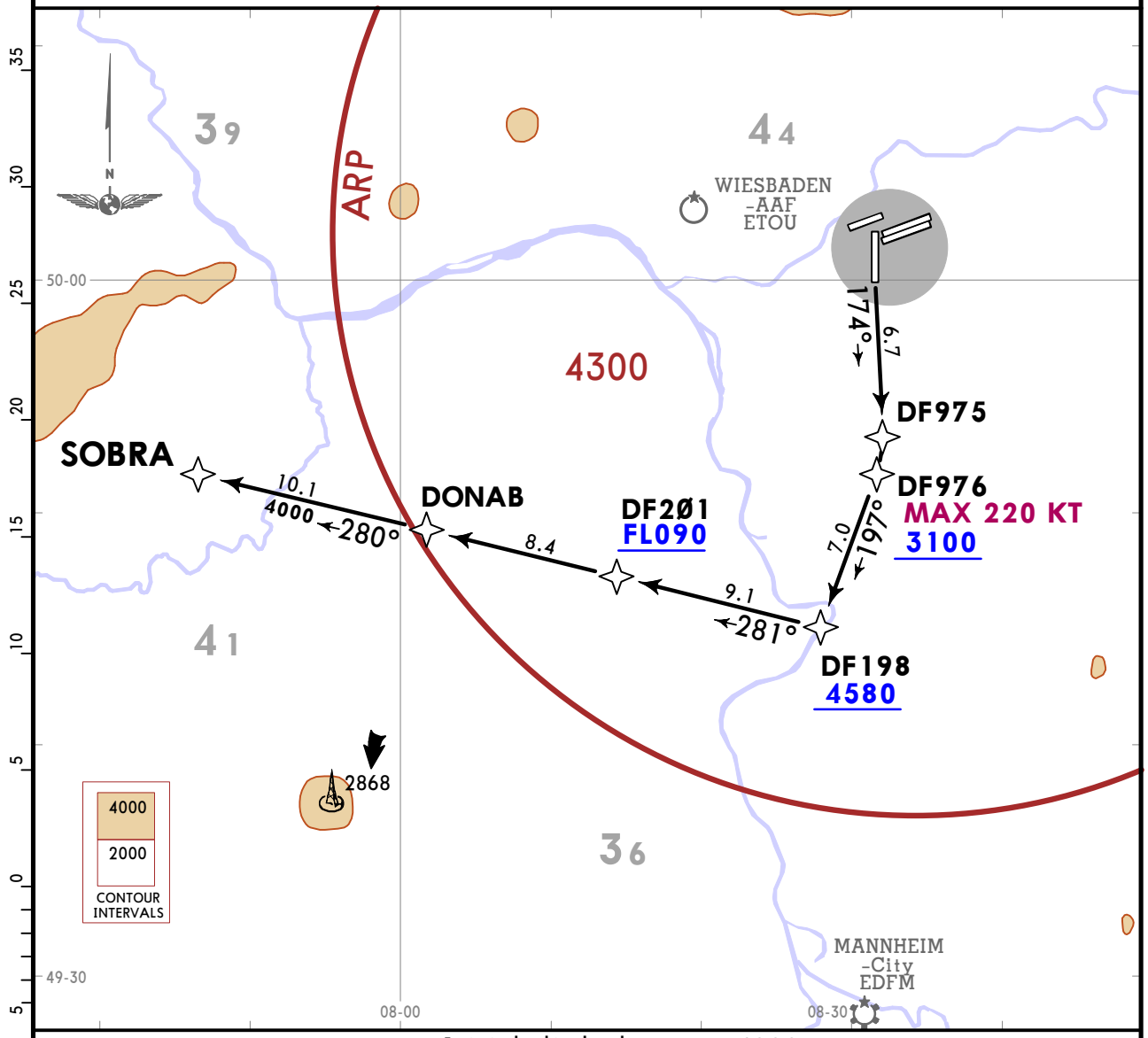
CHANGES: None.

*LANGEN Radar (APP) 136.130	Apt Elev 363	Trans alt: 5000
		RNP-1, RF required GPS
		1. Contact LANGEN Radar when advised by Tower. 2. WARNING: Close-in obstacles. 3. WARNING: Wind shears and increased turbulences must be EXPECTED when strong winds. 4. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 5. For operational RWY use concept refer to 10-1P pages. 6. Do not turn before DER. 7. If unable to cross DF201 at or above FL090 advise EDDF DELIVERY prior to start-up and EXPECT routing via SID ULKIG 2L.

SOBRA 2U [SOBR2U]
RNP DEPARTURE
(RWY 18)

FOR FLIGHTS INTENDING TO PROCEED
AT OR ABOVE FL250 VIA AIRWAYS Y-180/Y-181
FLIGHTS HAVE TO BE ABLE TO CROSS RUDOT AT OR ABOVE FL240
IF UNABLE TO COMPLY FPL SHALL READ
RUDOT FL220 - Y-180 - NISIV - UY-180 - DIK RFL

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



Initial climb clearance **4000**

ROUTING

On 174° track to DF975, turn RIGHT to DF976, to DF198, to DF201, to DONAB, to SOBRA.

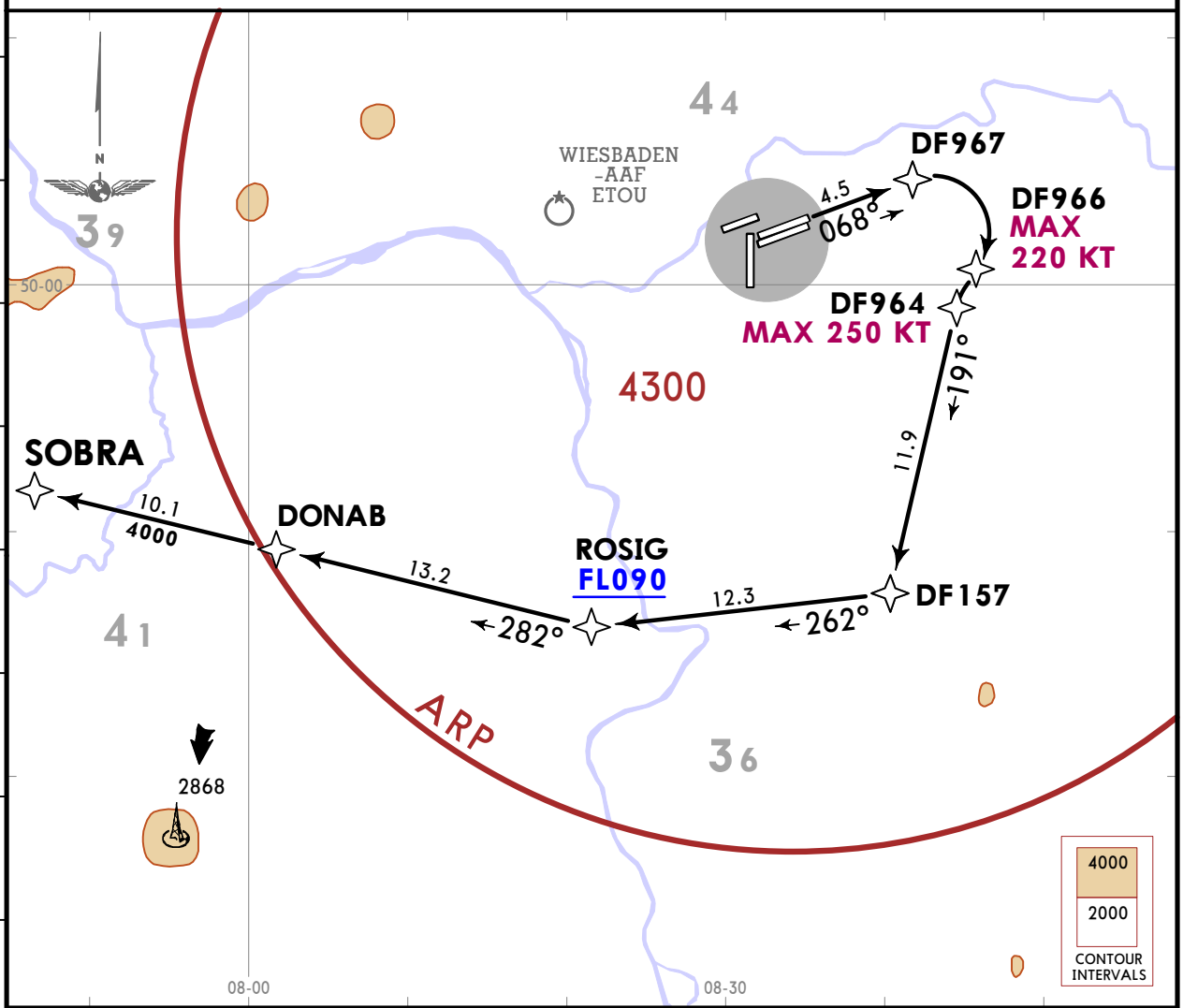
CHANGES: Reissue.

*LANGEN Radar (APP) 136.130	Apt Elev 363	Trans alt: 5000
		RNP-1/A-RNP, RF leg required. GPS required.
		1. Contact LANGEN Radar when advised by Tower. 2. WARNING: Close-in obstacles. 3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 4. For operational RWY use concept refer to 10-1P pages.

SOBRA 1X [SOBR1X]
RNP DEPARTURE
(RWY 07C)

FOR FLIGHTS INTENDING TO PROCEED
AT OR ABOVE FL250 VIA AIRWAYS Y-180/Y-181
FLIGHTS HAVE TO BE ABLE TO CROSS RUDOT AT OR ABOVE FL240
IF UNABLE TO COMPLY FPL SHALL READ
RUDOT FL220 - Y-180 - NISIV - UY-180 - DIK RFL

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



This SID requires a minimum climb gradient of 3.9% (240 FT/NM) until passing FL090, due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
3.9% V/V (fpm)	296	395	592	790	987	1185

If unable to comply advise EDDF DELIVERY prior to start-up.

Initial climb clearance **4000**

ROUTING

On 068° track to DF967, turn RIGHT to DF966, turn LEFT to DF964, to DF157, to ROSIG, to DONAB, to SOBRA.

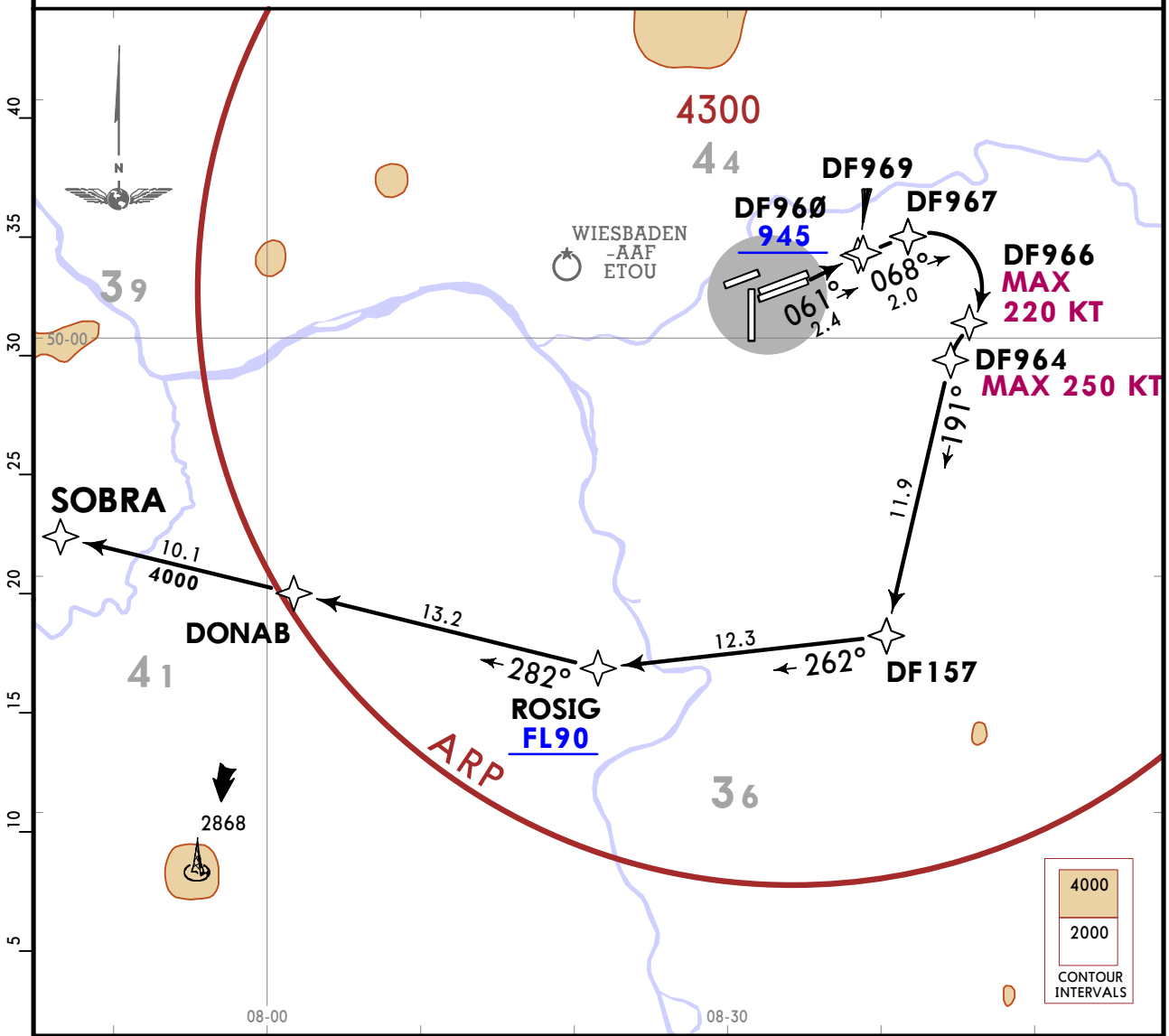
CHANGES: None.

*LANGEN Radar 136.130	Apt Elev 364	Trans alt: 5000 **1. RNP-1/A-RNP, RF leg required.** **2. GPS required.** 3. Contact LANGEN Radar when advised by Tower. 4. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 5. For operational RWY use concept refer to 10-1P pages.

SOBRA 1Y [SOBR1Y]
RWY 07R RNP DEPARTURE

FOR FLIGHTS INTENDING TO PROCEED
AT OR ABOVE FL250 VIA AIRWAYS Y-180/Y-181
FLIGHTS HAVE TO BE ABLE TO CROSS RUDOT AT OR ABOVE FL240
IF UNABLE TO COMPLY FPL SHALL READ
RUDOT FL220 - Y-180 - NISIV - UY-180 - DIK RFL

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



This SID requires a minimum climb gradient of 240 per NM (3.9%) until passing FL90, due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
240 per NM	300	400	600	800	1000	1200

If unable to comply advise EDDF DELIVERY prior to start-up.

Initial climb clearance **4000**

ROUTING

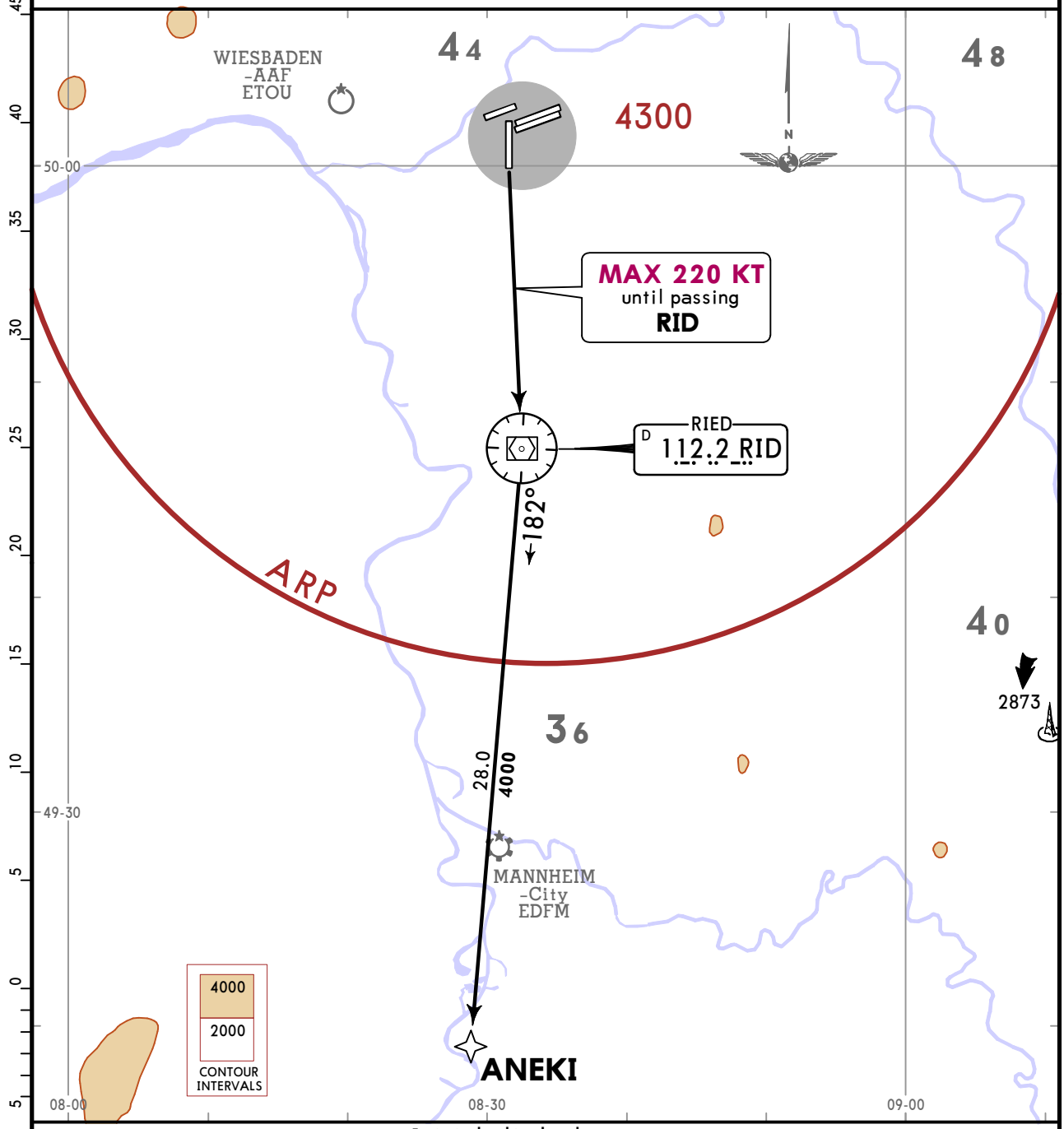
On 061° track to DF960, turn RIGHT to DF969, to DF967, turn RIGHT to DF966, turn LEFT to DF964, to DF157, to ROSIG, to DONAB, to SOBRA.

CHANGES: New chart.

*LANGEN Radar 136.130	Apt Elev 364	Trans alt: 5000
		RNAV 1 or RNP 1 or RNP equivalent. GPS required. DME/DME, DME/DME/IRU not authorized.
		1. Contact LANGEN Radar when advised by Tower. 2. WARNING: Close-in obstacles. 3. Wind shears and increased turbulences must be EXPECTED when winds strong. 4. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 5. For operational RWY use concept refer to 10-1P pages. 6. Do not turn before DER.

ANEKI 3A [ANEK3A]
RNAV DEPARTURE
(RWY 18)
BY ATC

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



Initial climb clearance **4000**

ROUTING

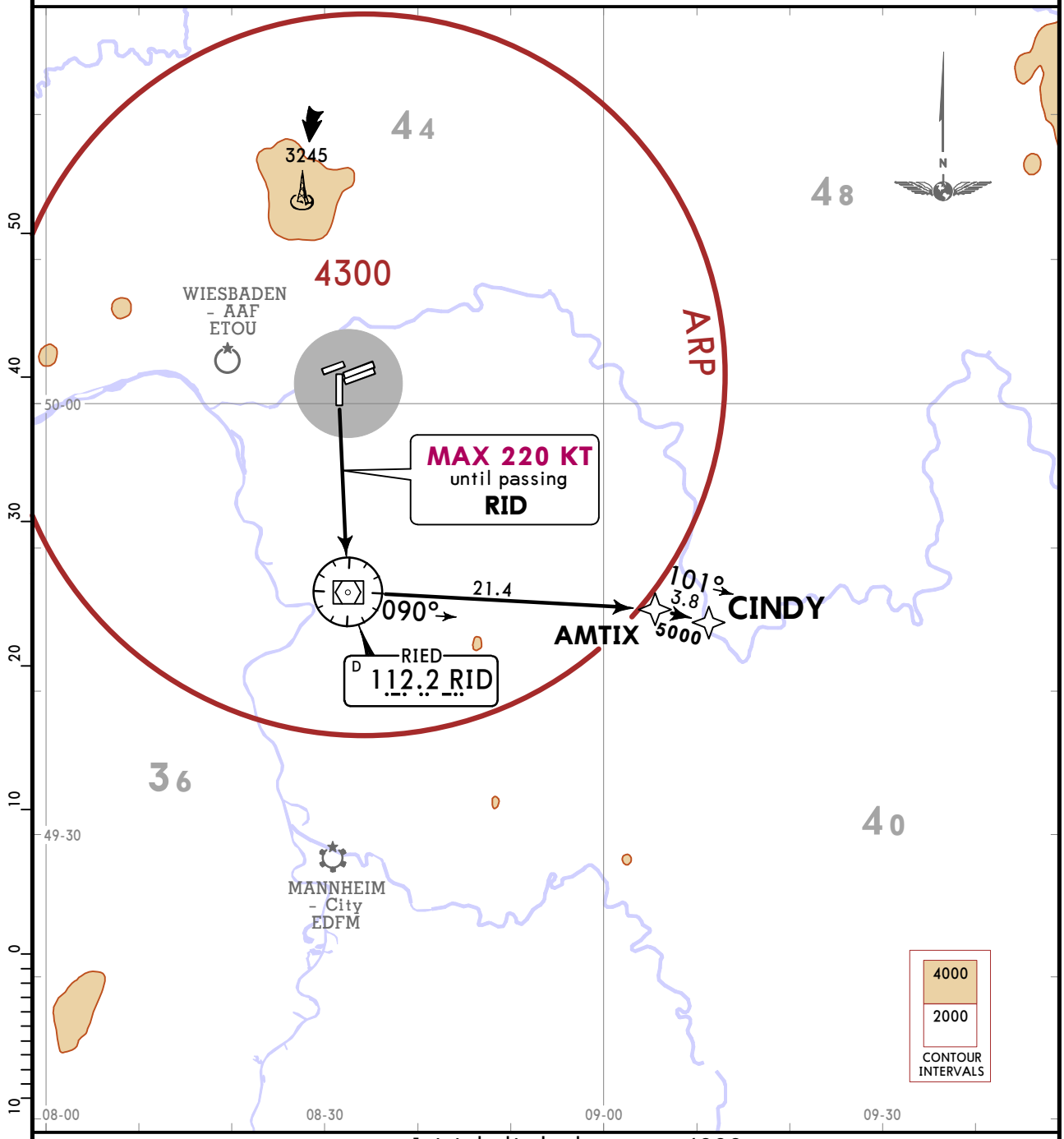
Climb on runway heading to 800, direct to RID, to ANEKI.

CHANGES: RNAV SID renumbered; track update.

*LANGEN Radar 136.130	Apt Elev 364	Trans alt: 5000 RNAV 1 or RNP 1 or RNP equivalent. GPS required. DME/DME, DME/DME/IRU not authorized. 1. Contact LANGEN Radar when advised by Tower. 2. WARNING: Close-in obstacles. 3. Wind shears and increased turbulences must be EXPECTED when winds strong. 4. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 5. For operational RWY use concept refer to 10-1P pages. 6. Do not turn before DER.

CINDY 2A [CIND2A]
RNAV DEPARTURE
(RWY 18)
BY ATC

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



Initial climb clearance **4000**

ROUTING

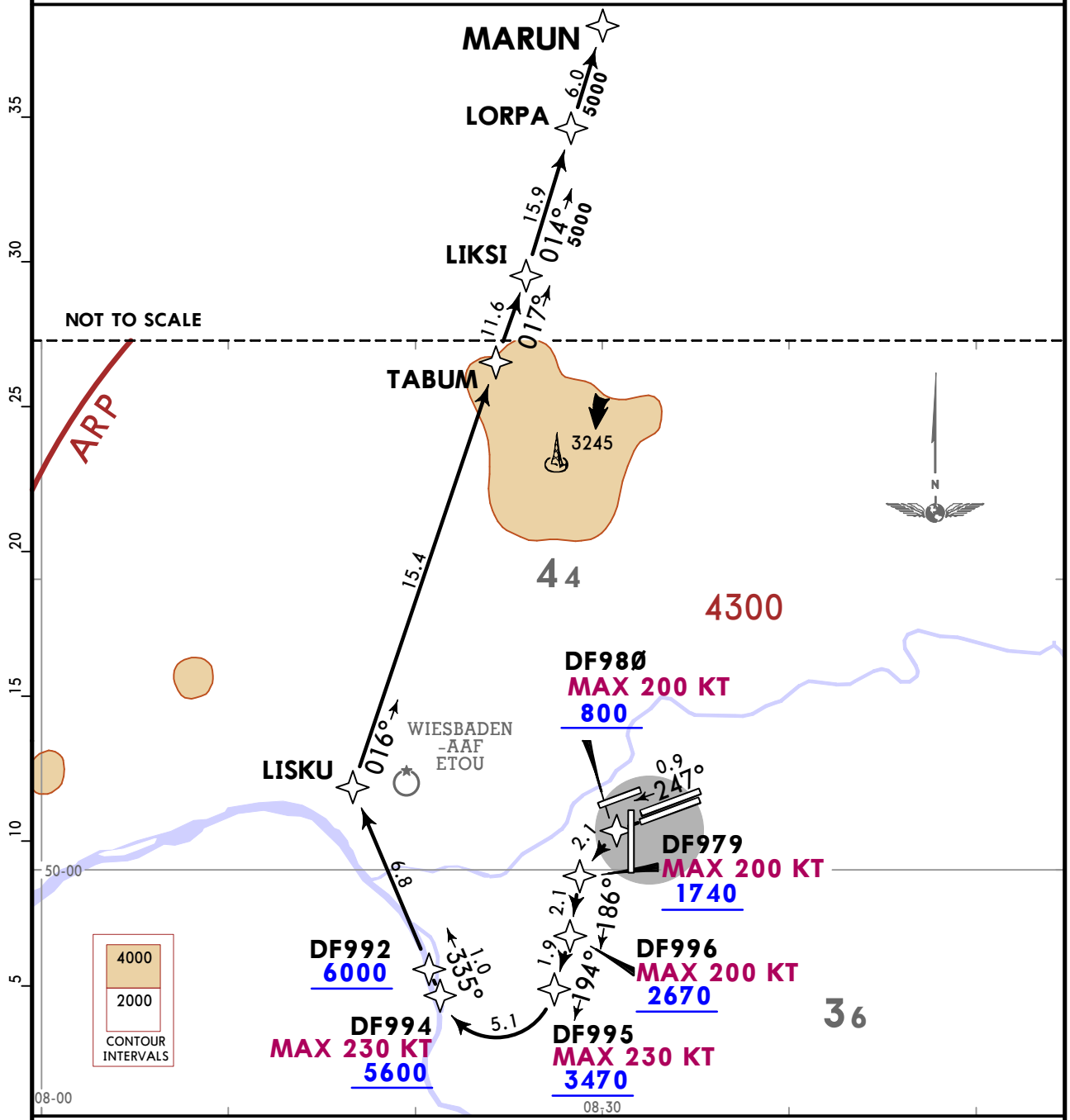
Climb on runway heading to 800, direct to RID, to AMTIX, to CINDY.

CHANGES: RNAV SID renumbered; track update.

*LANGEN Radar 120.155	Apt Elev 364	Trans alt: 5000 1. RNP 1/A-RNP required. 2. RF required. 3. GPS required. 4. Contact LANGEN Radar when advised by Tower. 5. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 6. For operational RWY use concept refer to 10-1P pages.

MARUN 3K [MARU3K]
RWY 25L RNP DEPARTURE

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



This SID requires minimum climb gradients of 520 per NM (8.5%) up to 800, due to operational requirements, then 445 per NM (7.3%) up to 2670, due to operational requirements, then 415 per NM (6.8%) up to 6000, due to operational requirements.

Gnd speed-KT	75	100	150	200	250	300
415 per NM	519	692	1038	1383	1729	2075
445 per NM	556	742	1113	1483	1854	2225
520 per NM	650	867	1300	1733	2167	2600

Initial climb clearance **FL70**

ROUTING

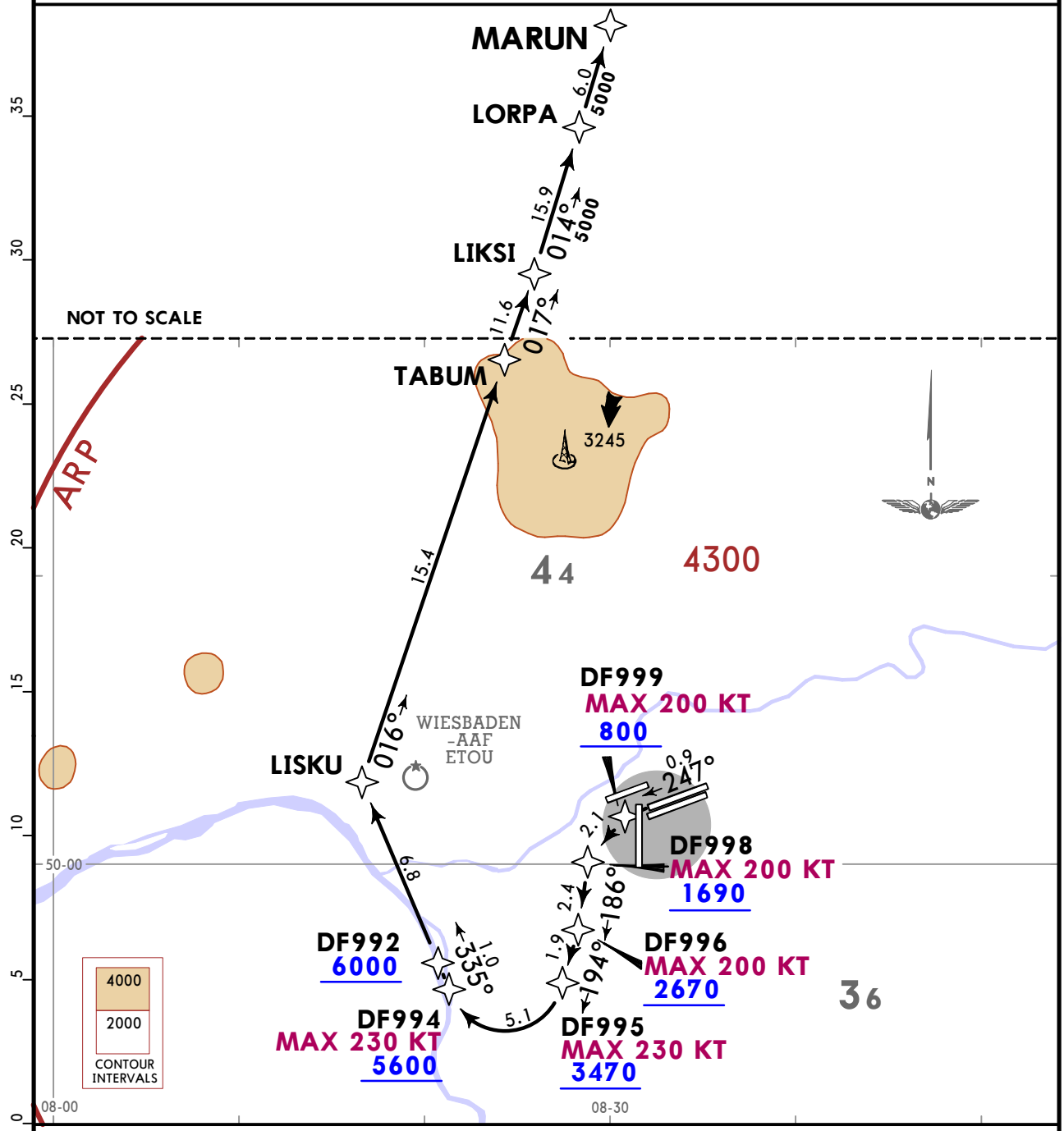
DF980 (K200-; 800+) - DF979 (K200-; 1740+) - DF996 (K200-; 2670+) - DF995 (K230-; 3470+) - DF994 (K230-; 5600+) - DF992 (6000+) - LISKU - TABUM - LIKSI - LORPA - MARUN.

CHANGES: RNAV SID renumbered & revised.

*LANGEN Radar 120.155	Apt Elev 364	Trans alt: 5000 1. RNP 1/A-RNP required. 2. RF required. 3. GPS required. 4. Contact LANGEN Radar when advised by Tower. 5. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 6. For operational RWY use concept refer to 10-1P pages.

MARUN 3W [MARU3W]
RWY 25C RNP DEPARTURE

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



This SID requires minimum climb gradients of
520 per NM (8.5%) up to 800, due to operational requirements, then
415 per NM (6.8%) up to 6000, due to operational requirements.

Gnd speed-KT	75	100	150	200	250	300
415 per NM	519	692	1038	1383	1729	2075
520 per NM	650	867	1300	1733	2167	2600

Initial climb clearance **FL70**

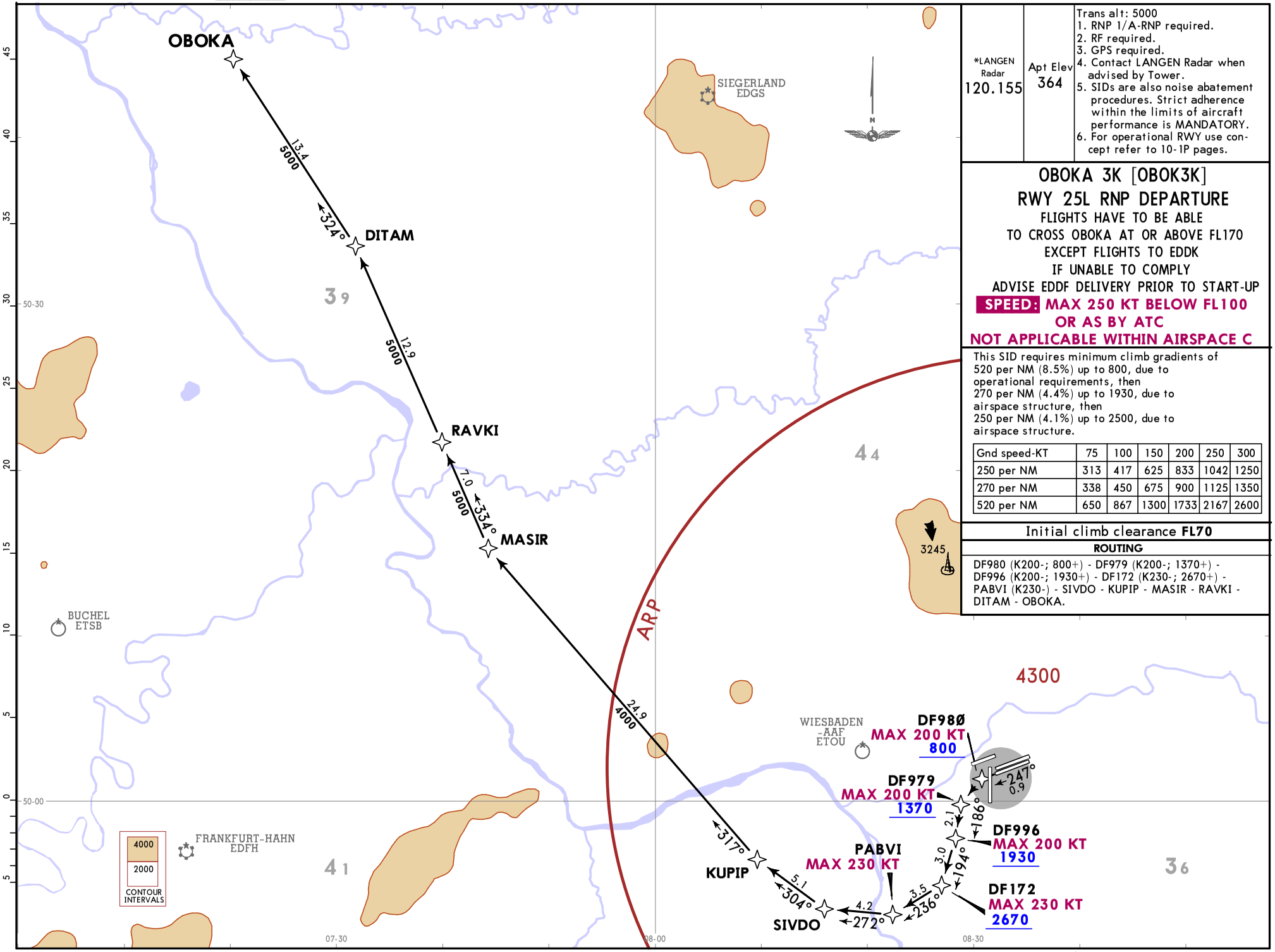
ROUTING

DF999 (K200-; 800+) - DF998 (K200-; 1690+) - DF996 (K200-; 2670+) - DF995 (K230-; 3470+) - DF994 (K230-; 5600+) - DF992 (6000+) - LISKU - TABUM - LIKSI - LORPA - MARUN.

CHANGES: RNAV SID renumbered & revised.

FRANKFURT/MAIN, GERMANY

RNAV SID



*LANGEN Radar	Apt Elev
120.155	364

Trans alt: 5000
1. RNP 1/A-RNP required.
2. RF required.
3. GPS required.
4. Contact LANGEN Radar when advised by Tower.
5. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.
6. For operational RWY use concept refer to 10-1P pages.

OBOKA 3K [OBOK3K]
RWY 25L RNP DEPARTURE

FLIGHTS HAVE TO BE ABLE
TO CROSS OBOKA AT OR ABOVE FL170
EXCEPT FLIGHTS TO EDDK
IF UNABLE TO COMPLY
ADVISE EDDF DELIVERY PRIOR TO START-UP

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

This SID requires minimum climb gradients of
520 per NM (8.5%) up to 800, due to
operational requirements, then
270 per NM (4.4%) up to 1930, due to
airspace structure, then
250 per NM (4.1%) up to 2500, due to
airspace structure.

Gnd speed-KT	75	100	150	200	250	300
250 per NM	313	417	625	833	1042	1250
270 per NM	338	450	675	900	1125	1350
520 per NM	650	867	1300	1733	2167	2600

Initial climb clearance **FL70**

ROUTING

DF980 (K200-; 800+) - DF979 (K200-; 1370+) - DF996 (K200-; 1930+) - DF172 (K230-; 2670+) - PABVI (K230-) - SIVDO - KUPIP - MASIR - RAVKI - DITAM - OBOKA.

CHANGES: RNAV SID renumbered & revised.

*LANGEN Radar 120.155	Apt Elev 364	Trans alt: 5000 1. RNP 1/A-RNP required. 2. RF required. 3. GPS required. 4. Contact LANGEN Radar when advised by Tower. 5. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 6. For operational RWY use concept refer to 10-1P pages.

OBOKA 3W [OBOK3W]
RWY 25C RNP DEPARTURE

FLIGHTS HAVE TO BE ABLE TO CROSS OBOKA AT OR ABOVE FL170 EXCEPT FLIGHTS TO EDDK
IF UNABLE TO COMPLY ADVISE EDDF DELIVERY PRIOR TO START-UP

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

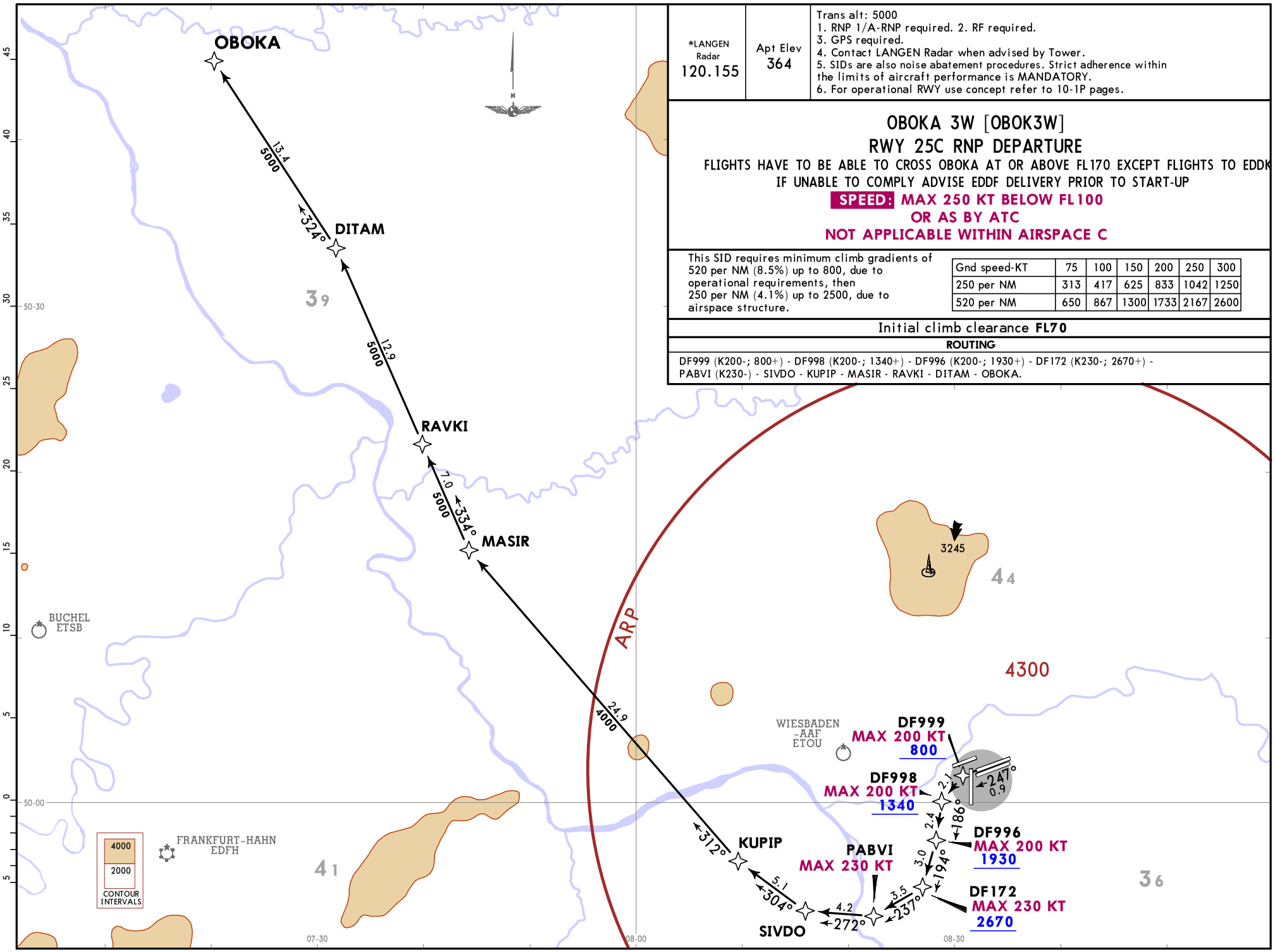
This SID requires minimum climb gradients of 520 per NM (8.5%) up to 800, due to operational requirements, then 250 per NM (4.1%) up to 2500, due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
250 per NM	313	417	625	833	1042	1250
520 per NM	650	867	1300	1733	2167	2600

Initial climb clearance **FL70**

ROUTING

DF999 (K200-; 800+) - DF998 (K200-; 1340+) - DF996 (K200-; 1930+) - DF172 (K230-; 2670+) - PABVI (K230-) - SIVDO - KUPIP - MASIR - RAVKI - DITAM - OBOKA.



CHANGES: RNAV SID renumbered & revised.

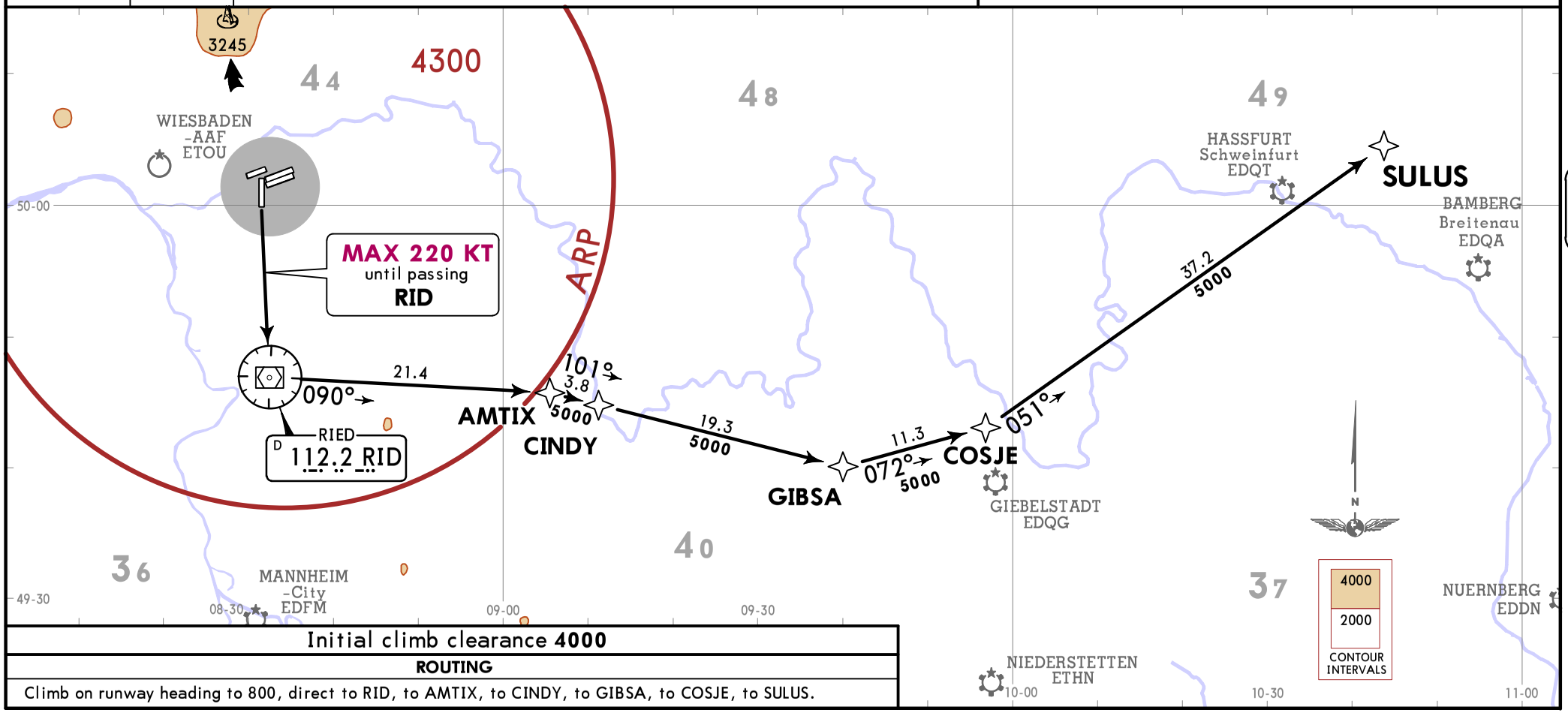
SULUS 3A [SULU3A]
RNAV DEPARTURE
(RWY 18)

BY ATC

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

JEPPESEN FRANKFURT/MAIN, GERMANY
7 JUL 23 (10-3C5) Eff 13 Jul
RNAV SID

*LANGEN Radar 136.130	Apt Elev 363	Trans alt: 5000
		RNAV 1 or RNP 1 or RNP equivalent. GPS required. DME/DME, DME/DME/IRU not authorized.
		1. Contact LANGEN Radar when advised by Tower. 2. WARNING: Close-in obstacles. 3. Wind shears and increased turbulences must be EXPECTED when winds strong. 4. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 5. For operational RWY use concept refer to 10-1P pages. 6. Do not turn before DER.



Initial climb clearance **4000**

ROUTING

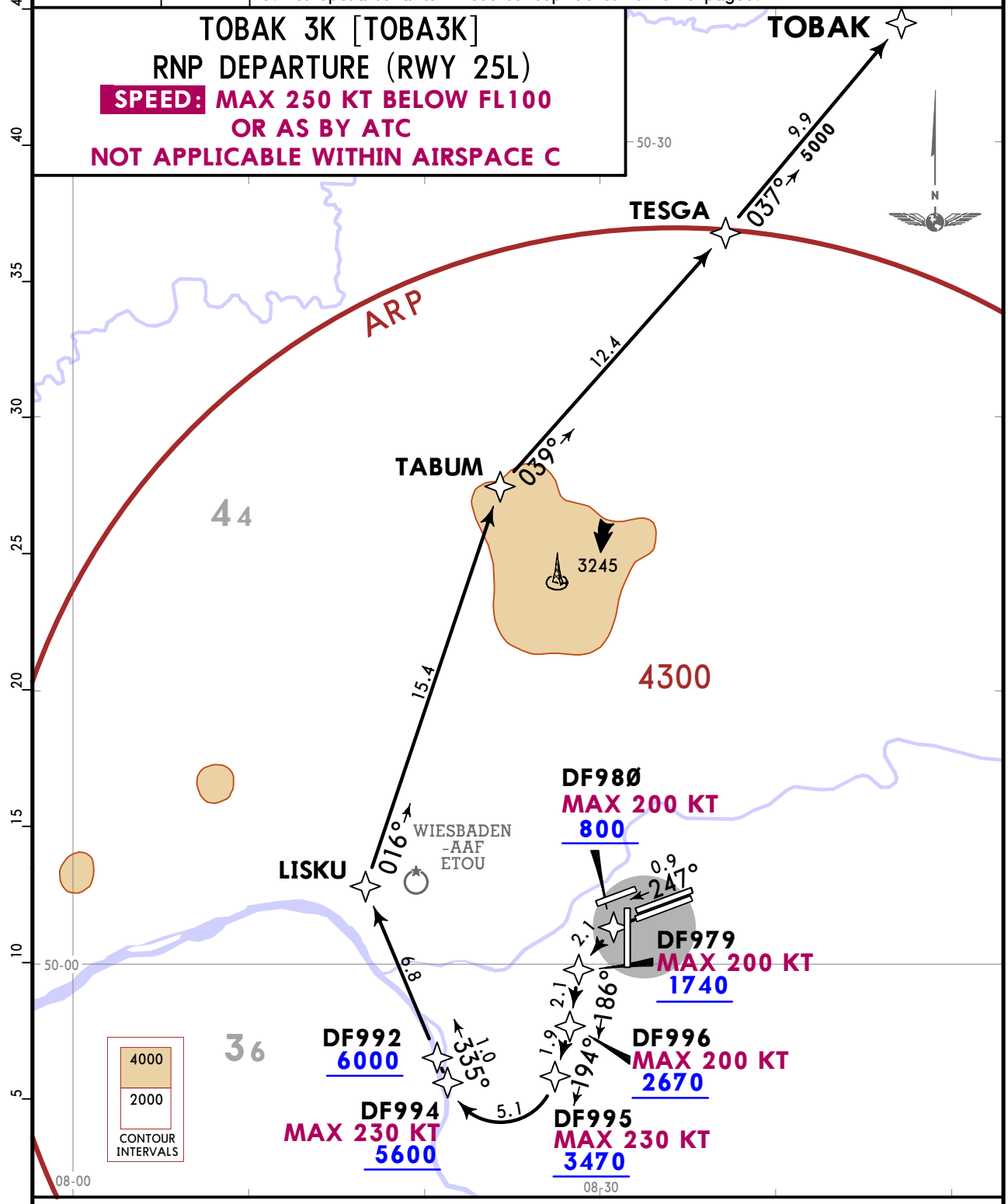
Climb on runway heading to 800, direct to RID, to AMTIX, to CINDY, to GIBSA, to COSJE, to SULUS.

CHANGES: Chart reindexed.

*LANGEN Radar 120.155	Apt Elev 363	Trans alt: 5000 RNP 1/A-RNP required RF required GPS required 1. Contact LANGEN Radar when advised by Tower. 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 3. For operational RWY use concept refer to 10-1P pages.

TOBAK 3K [TOBA3K]
RNP DEPARTURE (RWY 25L)

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



This SID requires minimum climb gradients of
520 per NM (8.5%) up to 800, due to operational requirements, then
445 per NM (7.3%) up to 2670, due to operational requirements, then
415 per NM (6.8%) up to 6000, due to operational requirements.

Gnd speed-KT	75	100	150	200	250	300
415 per NM	519	692	1038	1383	1729	2075
445 per NM	556	742	1113	1483	1854	2225
520 per NM	650	867	1300	1733	2167	2600

Initial climb clearance **FL070**

ROUTING

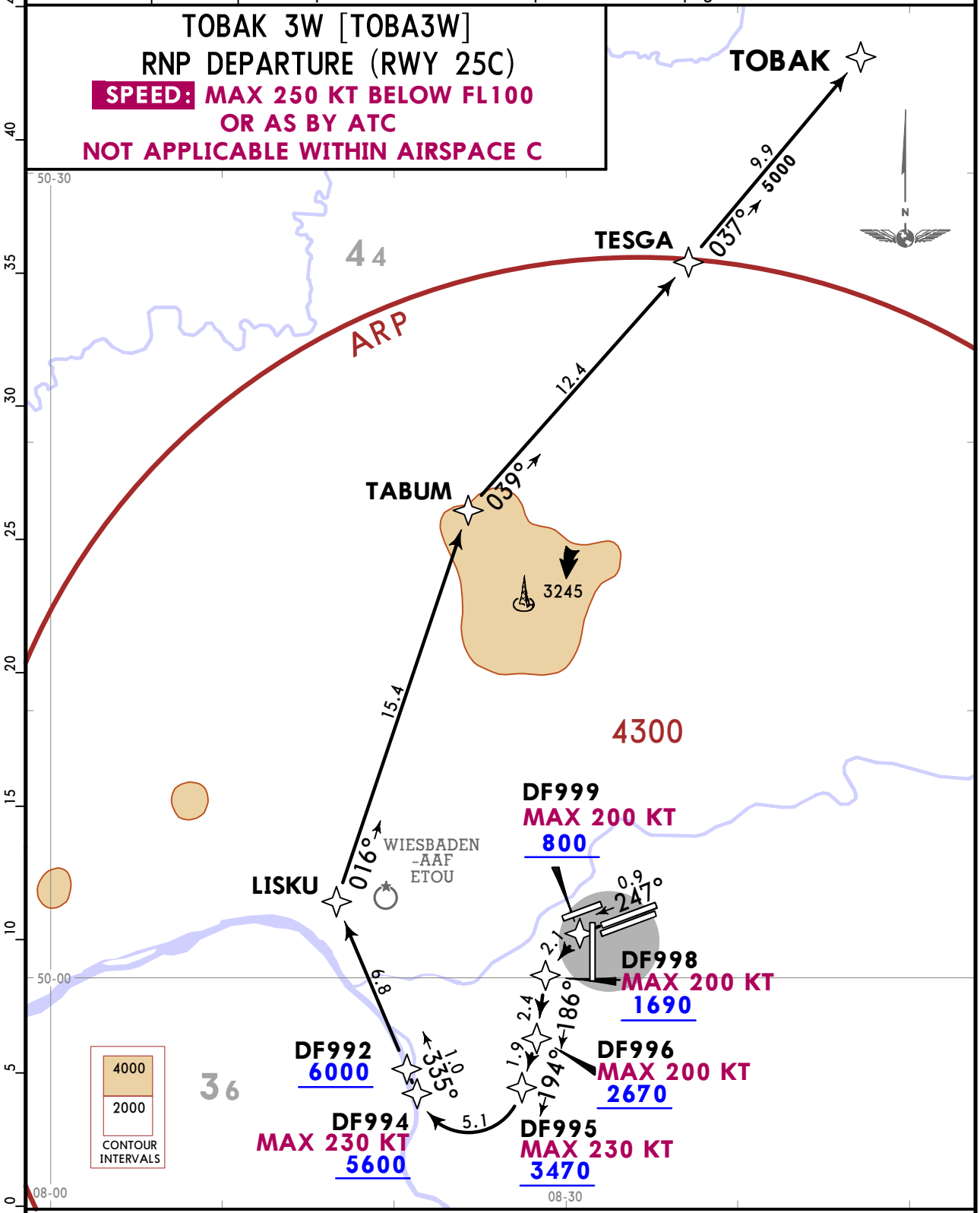
DF980 (K200-; 800+) - DF979 (K200-; 1740+) - DF996 (K200-; 2670+) - DF995 (K230-; 3470+) - DF994 (K230-; 5600+) - DF992 (6000+) - LISKU - TABUM - TESGA - TOBAK.

CHANGES: Chart reindexed.

*LANGEN Radar 120.155	Apt Elev 363	Trans alt: 5000 RNP 1/A-RNP required RF required GPS required 1. Contact LANGEN Radar when advised by Tower. 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 3. For operational RWY use concept refer to 10-1P pages.

TOBAK 3W [TOBA3W]
RNP DEPARTURE (RWY 25C)

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



This SID requires minimum climb gradients of
520 per NM (8.5%) up to 800, due to operational requirements, then
415 per NM (6.8%) up to 6000, due to operational requirements.

Gnd speed-KT	75	100	150	200	250	300
415 per NM	519	692	1038	1383	1729	2075
520 per NM	650	867	1300	1733	2167	2600

Initial climb clearance **FL070**

ROUTING

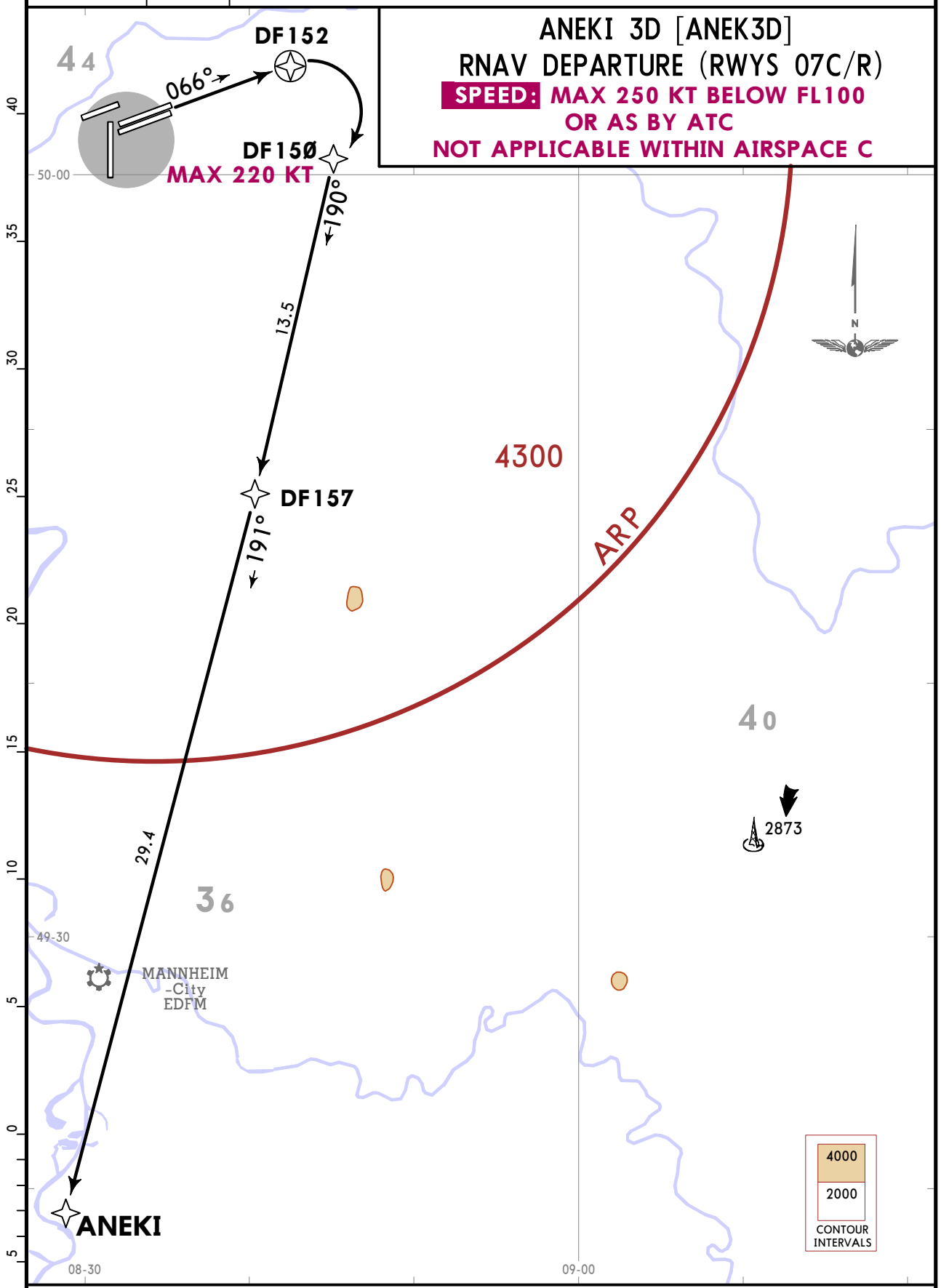
DF999 (K200-; 800+) - DF998 (K200-; 1690+) - DF996 (K200-; 2670+) - DF995 (K230-; 3470+) - DF994 (K230-; 5600+) - DF992 (6000+) - LISKU - TABUM - TESGA - TOBAK.

CHANGES: Chart reindexed.

*LANGEN Radar 136.130	Apt Elev 363	Trans alt: 5000
		RNAV 1 required GPS, DME/DME/IRU DME/DME without IRU not authorized
		1. Contact LANGEN Radar when advised by Tower. 2. RADAR required. 3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 4. For operational RWY use concept refer to 10-1P pages. 5. WARNING: Close-in obstacles.

ANEKI 3D [ANEK3D]
RNAV DEPARTURE (RWYS 07C/R)

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



Initial climb clearance **4000**

ROUTING

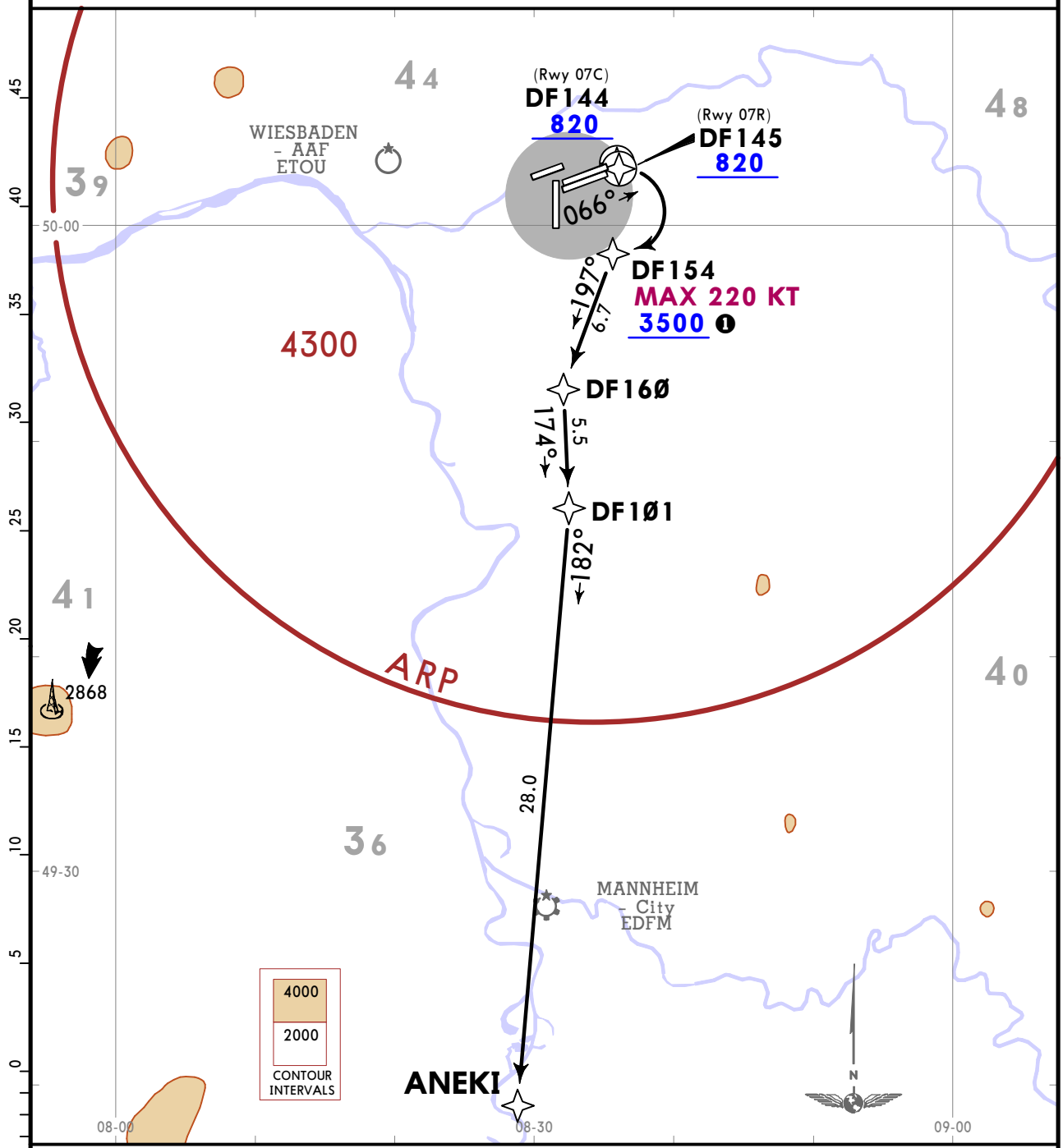
(820+) - DF152 - DF15Ø (K220-) - DF157 - ANEKI.

CHANGES: Chart completely revised.

*LANGEN Radar 136.130	Apt Elev 363	Trans alt: 5000 RNAV 1 required GPS, DME/DME/IRU DME/DME without IRU not authorized 1. Contact LANGEN Radar when advised by Tower. 2. RADAR required. 3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 4. For operational RWY use concept refer to 10-1P pages. 5. WARNING: Close-in obstacles.

ANEKI 5E [ANEK5E]
RNAV DEPARTURE
(RWYS 07C/R)

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



Initial climb clearance **4000**

RWY	ROUTING
07C	DF144 (820+) - DF154 (K220-; 3500+ ❶) - DF16Ø - DF1Ø1 - ANEKI.
07R	DF145 (820+) - DF154 (K220-; 3500+ ❶) - DF16Ø - DF1Ø1 - ANEKI.

❶ If unable to comply, advise EDDF DELIVERY prior to start-up.

CHANGES: Chart completely revised.

CHANGES: Chart completely revised.

*LANGEN Radar 136.130	Apt Elev 363	Trans alt: 5000 RNAV 1 required GPS, DME/DME/IRU DME/DME without IRU not authorized

1. Contact LANGEN Radar when advised by Tower.
2. RADAR required.
3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.
4. RWY 18: WARNING: Close-in obstacles.
5. RWY 18: WARNING: Wind shears and increased turbulences must be expected when strong winds.
6. For operational RWY use concept refer to 10-1P pages.

ANEKI 2F [ANEK2F]
ANEKI 2L [ANEK2L]
RNAV DEPARTURES
(RWYS 18, 25L/C)

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

ANEKI 2F: Initial climb clearance **5000**
ANEKI 2L: Initial climb clearance **4000**

SID	RWY	ROUTING
ANEKI 2F	25L	DF135 (800+) - DF142 - DF143 - DF137 (K210-) - DF1Ø1 - ANEKI.
	25C	DF134 (800+) - DF141 - DF143 - DF137 (K210-) - DF1Ø1 - ANEKI.
ANEKI 2L	18	(800+) - DF1Ø1 (K220-) - ANEKI.

WIESBADEN
-AAF
ETOU

DF134
800

DF141
(RWY 25L only)

DF142

DF135
800

246°

196°
2.2 from DF141
1.6 from DF142

176°
ANEKI 2L

DF143

2.0

ANEKI 2F
116°

174°

(ANEKI 2F only)

DF137
MAX 210 KT

11.1

DF1Ø1
ANEKI 2L: MAX 220 KT

182°

28.0

ANEKI

4300

ARP

MANNHEIM
-City
EDFM

2873

50-00
49-30
08-30
09-00

CONTOUR INTERVALS
4000
2000

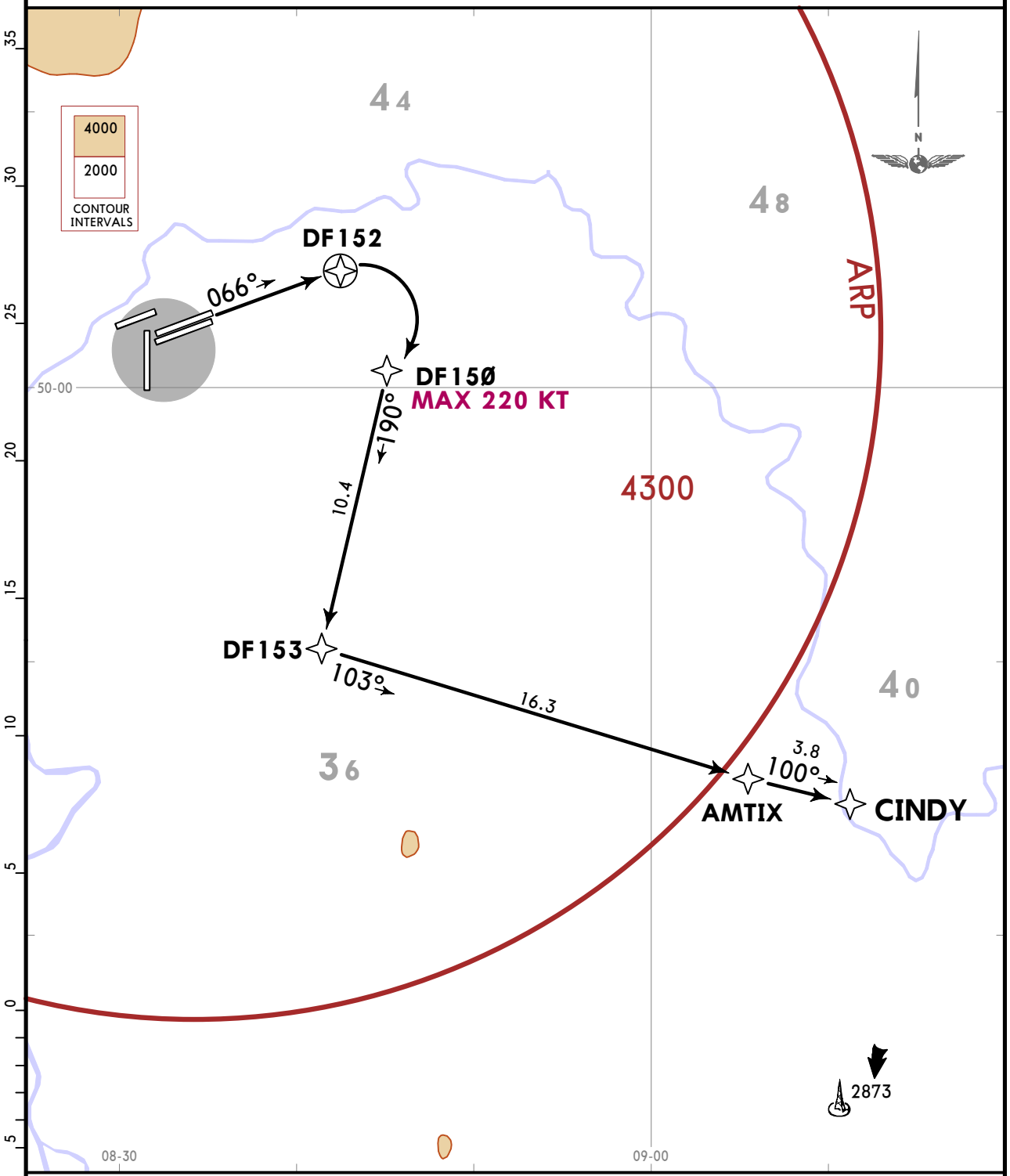
FRANKFURT/MAIN, GERMANY
RNAV SID

ANEKI 2F [ANEK2F]
ANEKI 2L [ANEK2L]
RNAV DEPARTURES
(RWYS 18, 25L/C)

*LANGEN Radar 136.130	Apt Elev 363	Trans alt: 5000
		RNAV 1 required GPS, DME/DME/IRU DME/DME without IRU not authorized
		1. Contact LANGEN Radar when advised by Tower. 2. RADAR required. 3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 4. For operational RWY use concept refer to 10-1P pages. 5. WARNING: Close-in obstacles.

CINDY 2D [CIND2D]
RNAV DEPARTURE
(RWYS 07C/R)

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



Initial climb clearance **4000**

ROUTING

(820+) - DF152 - DF15Ø (K220-) - DF153 - AMTIX - CINDY.

CHANGES: Chart reindexed.

*LANGEN Radar 136.130	Apt Elev 363	Trans alt: 5000
		RNAV 1 required GPS, DME/DME/IRU DME/DME without IRU not authorized
		1. Contact LANGEN Radar when advised by Tower. 2. RADAR required. 3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 4. For operational RWY use concept refer to 10-1P pages.

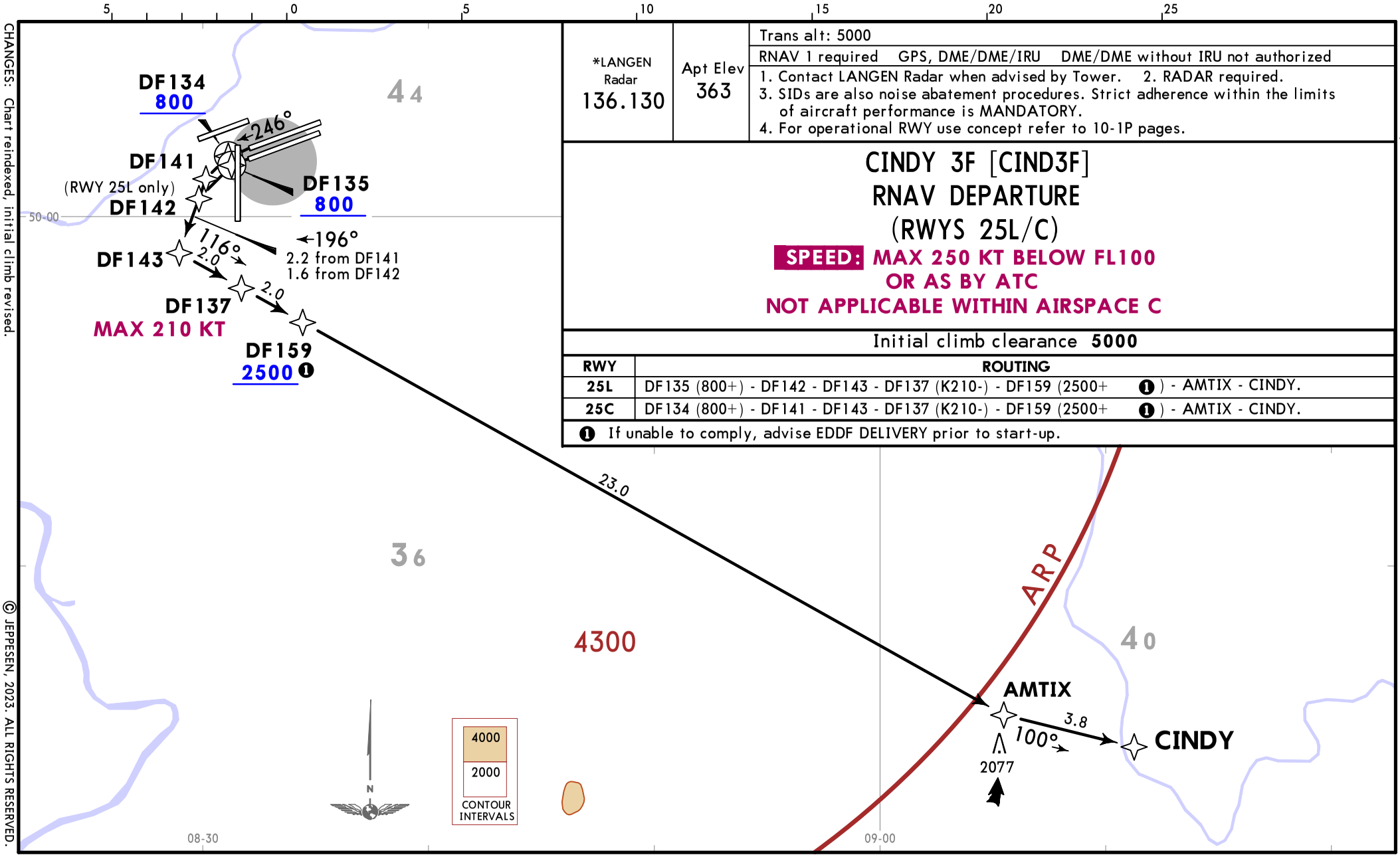
CINDY 3F [CIND3F]
RNAV DEPARTURE
(RWYS 25L/C)

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

Initial climb clearance **5000**

RWY	ROUTING
25L	DF135 (800+) - DF142 - DF143 - DF137 (K210-) - DF159 (2500+ ❶) - AMTIX - CINDY.
25C	DF134 (800+) - DF141 - DF143 - DF137 (K210-) - DF159 (2500+ ❶) - AMTIX - CINDY.

❶ If unable to comply, advise EDDF DELIVERY prior to start-up.

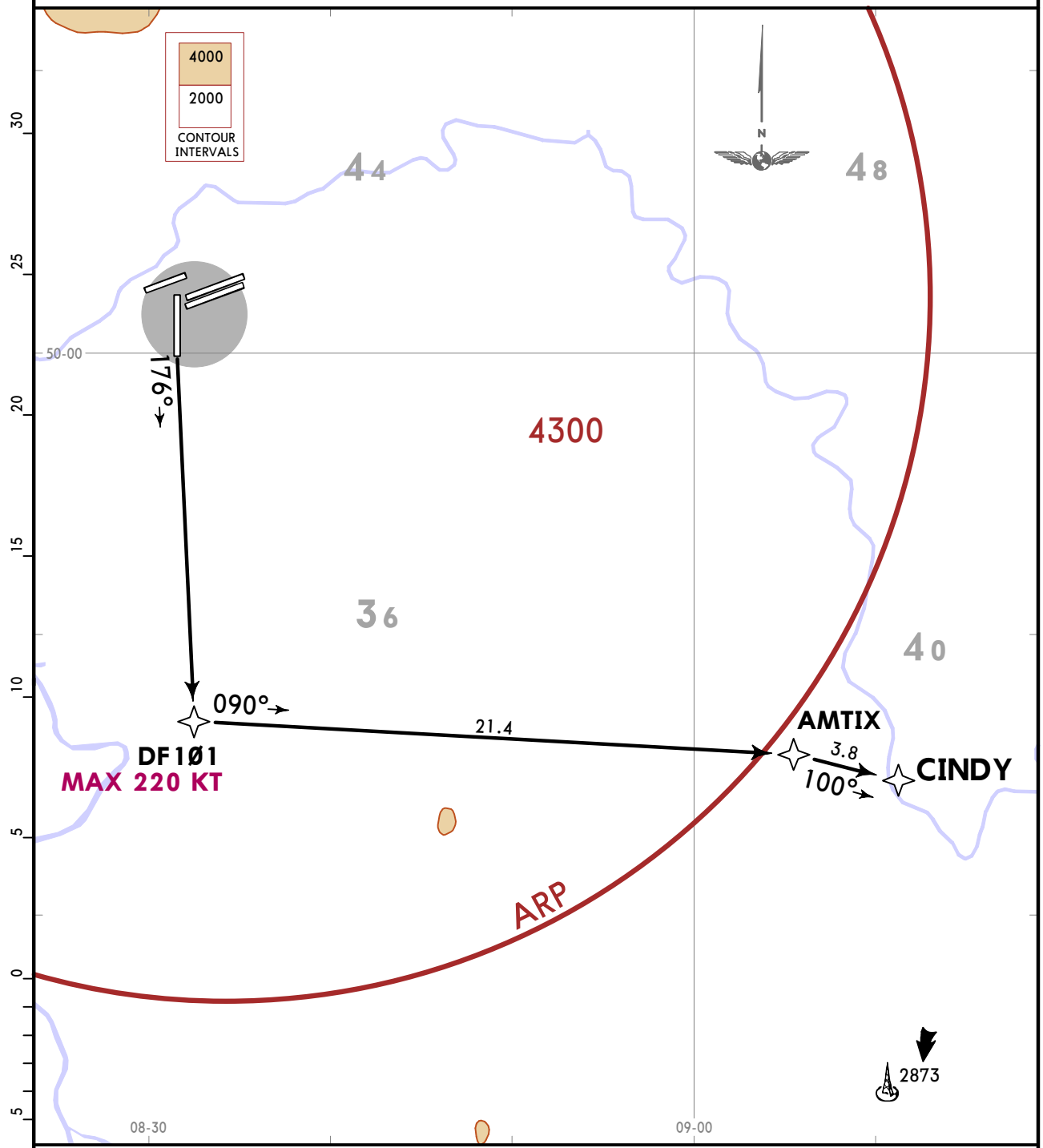


JEPPESEN FRANKFURT/MAIN, GERMANY
4 AUG 23
10-3E
Eff 10 Aug
RNAV SID

*LANGEN Radar (APP) 136.130	Apt Elev 363	Trans alt: 5000 RNAV 1 required GPS, DME/DME/IRU DME/DME without IRU not authorized 1. Contact LANGEN Radar when advised by Tower. 2. RADAR required. 3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 4. WARNING: Close-in obstacles. 5. WARNING: Wind shears and increased turbulences must be expected when strong winds. 6. For operational RWY use concept refer to 10-1P pages.

CINDY 3L [CIND3L]
RNAV DEPARTURE
(RWY 18)

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



Initial climb clearance **4000**

ROUTING

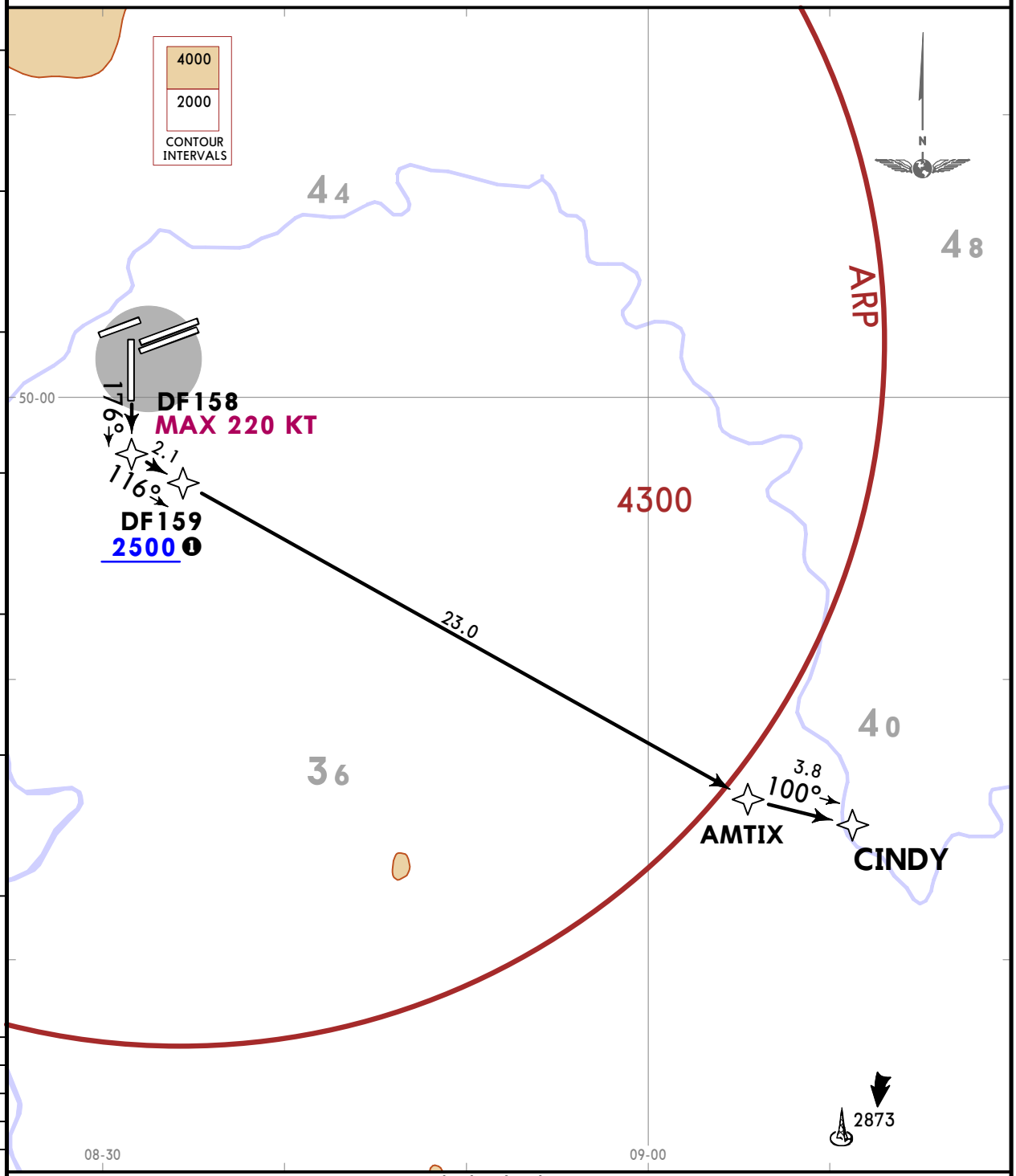
(800+) - DF1Ø1 (K220-) - AMTIX - CINDY.

CHANGES: None.

*LANGEN Radar (APP) 136.130	Apt Elev 363	Trans alt: 5000 RNAV 1 required GPS, DME/DME/IRU DME/DME without IRU not authorized 1. Contact LANGEN Radar when advised by Tower. 2. RADAR required. 3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 4. For operational RWY use concept refer to 10-1P pages. 5. WARNING: Close-in obstacles. 6. WARNING: Wind shears and increased turbulences must be expected when strong winds. 7. Do not turn before DER.

CINDY 5S [CIND5S]
RNAV DEPARTURE (RWY 18)

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



Initial climb clearance **4000**

ROUTING

(800+) - DF158 (K220-) - DF159 (2500+ ❶) - AMTIX - CINDY.

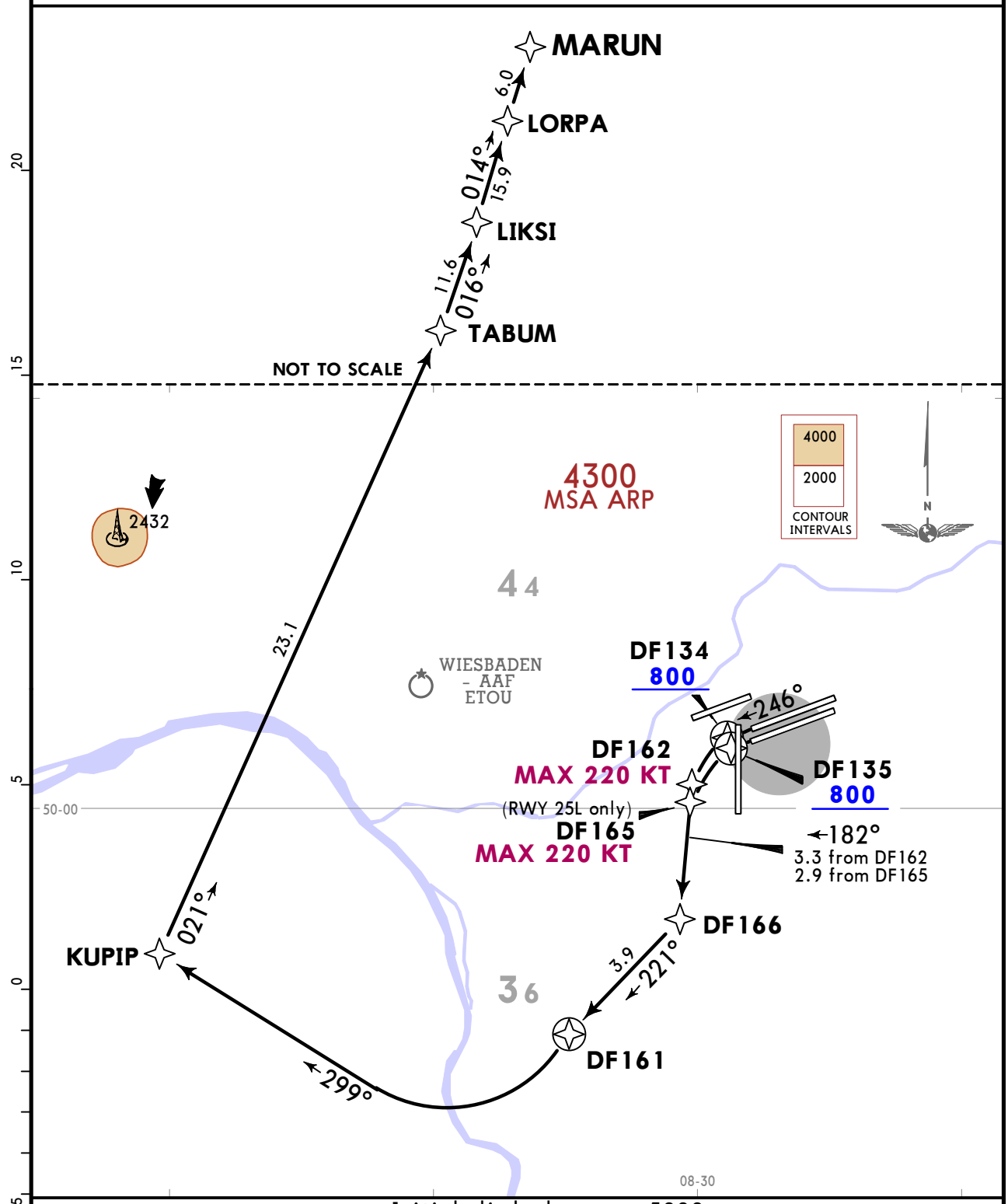
❶ If unable to comply, advise EDDF DELIVERY prior to start-up and EXPECT routing via SID CINDY 3L.

CHANGES: Reissue.

*LANGEN Radar 120.155	Apt Elev 363	Trans alt: 5000
		RNAV 1 required GPS, DME/DME/IRU DME/DME without IRU not authorized
		1. Contact LANGEN Radar when advised by Tower. 2. RADAR required. 3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 4. For operational RWY use concept refer to 10-1P pages.

MARUN 1N [MARU1N]
RNAV DEPARTURE (RWYS 25L/C)

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



Initial climb clearance **5000**

RWY	ROUTING
25L	DF135 (800+) - DF165 (K220-) - DF166 - DF161 - KUPIP - TABUM - LIKSI - LORPA - MARUN.
25C	DF134 (800+) - DF162 (K220-) - DF166 - DF161 - KUPIP - TABUM - LIKSI - LORPA - MARUN.

CHANGES: Chart reindexed; initial climb revised.

CHANGES: Chart reindexed.

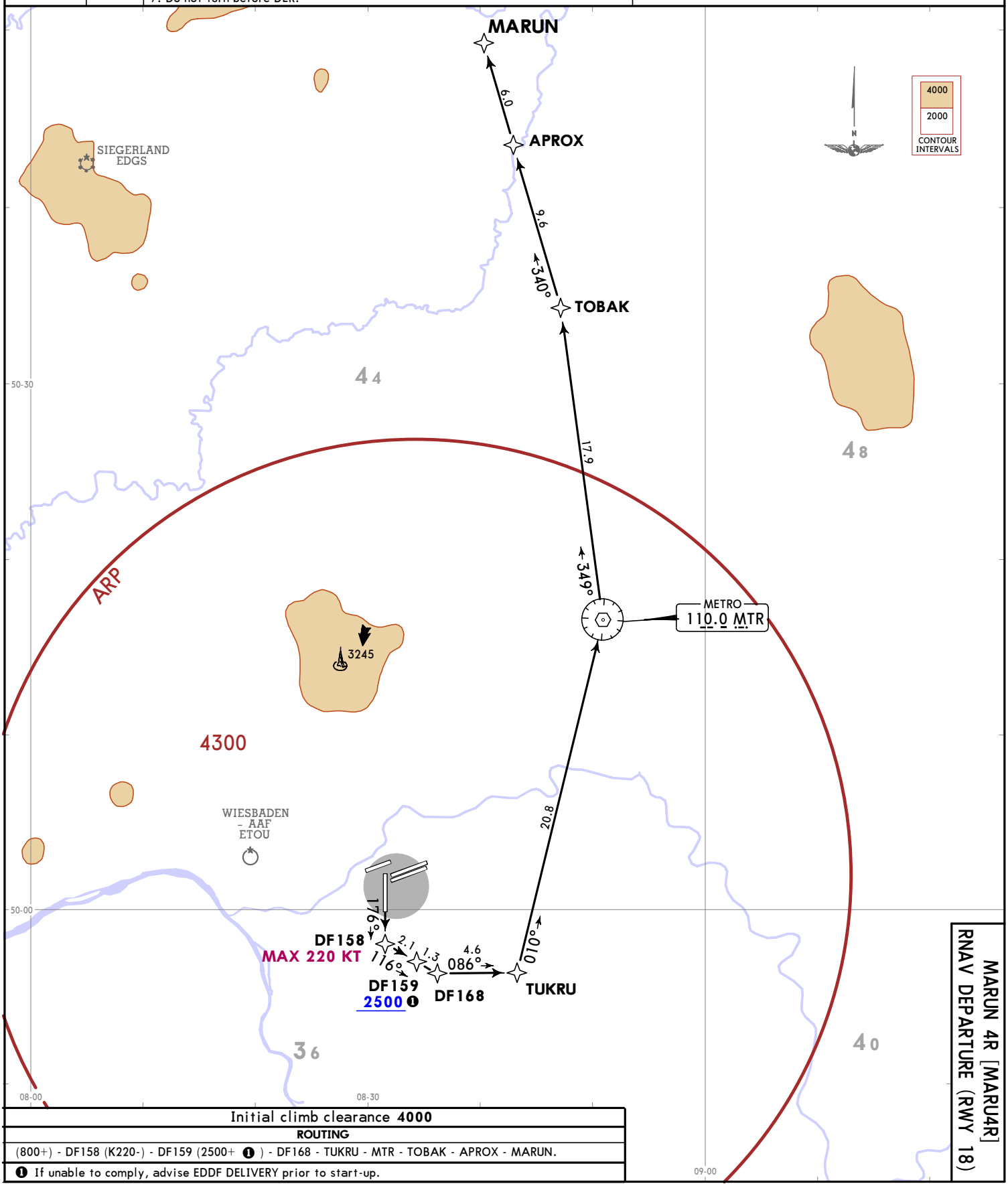
*LANGEN Radar 120.155	Apt Elev 363	Trans alt: 5000

RNAV 1 required GPS, DME/DME/IRU DME/DME without IRU not authorized

1. Contact LANGEN Radar when advised by Tower.
2. RADAR required.
3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.
4. For operational RWY use concept refer to 10-1P pages.
5. WARNING: Close-in obstacles.
6. WARNING: Wind shears and increased turbulences must be expected when strong winds.
7. Do not turn before DER.

MARUN 4R [MARU4R]
RNAV DEPARTURE (RWY 18)
BY ATC

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



Initial climb clearance **4000**

ROUTING

(800+) - DF158 (K220-) - DF159 (2500+ ❶) - DF168 - TUKRU - MTR - TOBAK - APROX - MARUN.

❶ If unable to comply, advise EDDF DELIVERY prior to start-up.

MARUN 4R [MARU4R]
RNAV DEPARTURE (RWY 18)

CHANGES: Chart reindexed.

*LANGEN Radar 120.155	Apt Elev 363	Trans alt: 5000

RNAV 1 required GPS, DME/DME/IRU DME/DME without IRU not authorized

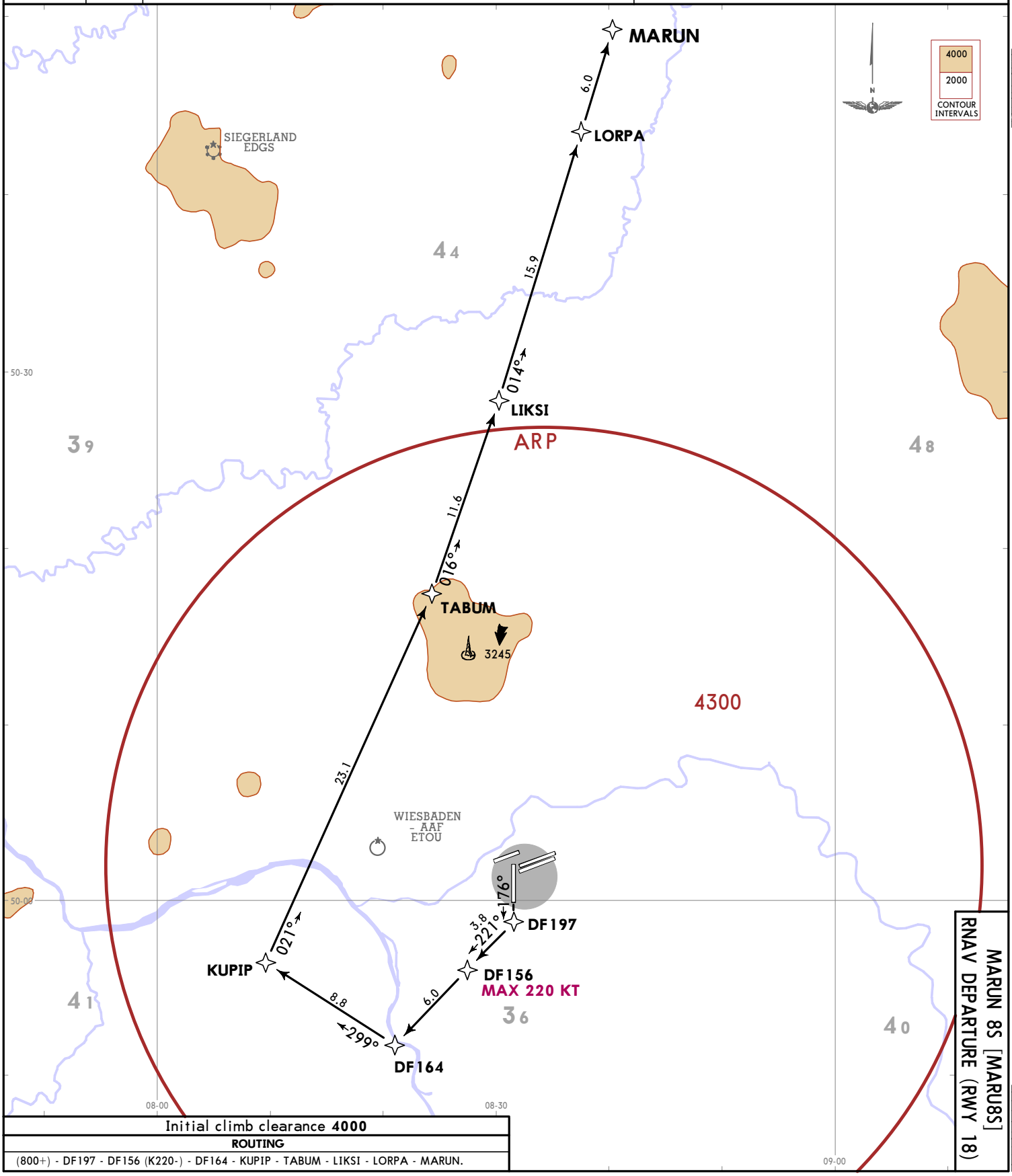
1. Contact LANGEN Radar when advised by Tower.
2. RADAR required.
3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.
4. For operational RWY use concept refer to 10-1P pages.
5. WARNING: Close-in obstacles.
6. WARNING: Wind shears and increased turbulences must be expected when strong winds.
7. Do not turn before DER.

MARUN 8S [MARU8S]
RNAV DEPARTURE (RWY 18)

WILL ONLY BE ASSIGNED WHEN LANDING DIRECTION IS RWY 25

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC

NOT APPLICABLE WITHIN AIRSPACE C



Initial climb clearance **4000**

ROUTING

(800+) - DF197 - DF156 (K220-) - DF164 - KUPIP - TABUM - LIKSI - LORPA - MARUN.

FRANKFURT/MAIN, GERMANY
RNAV SID
MARUN 8S [MARU8S]
RNAV DEPARTURE (RWY 18)

*LANGEN Radar
136.130

Apt Elev
363

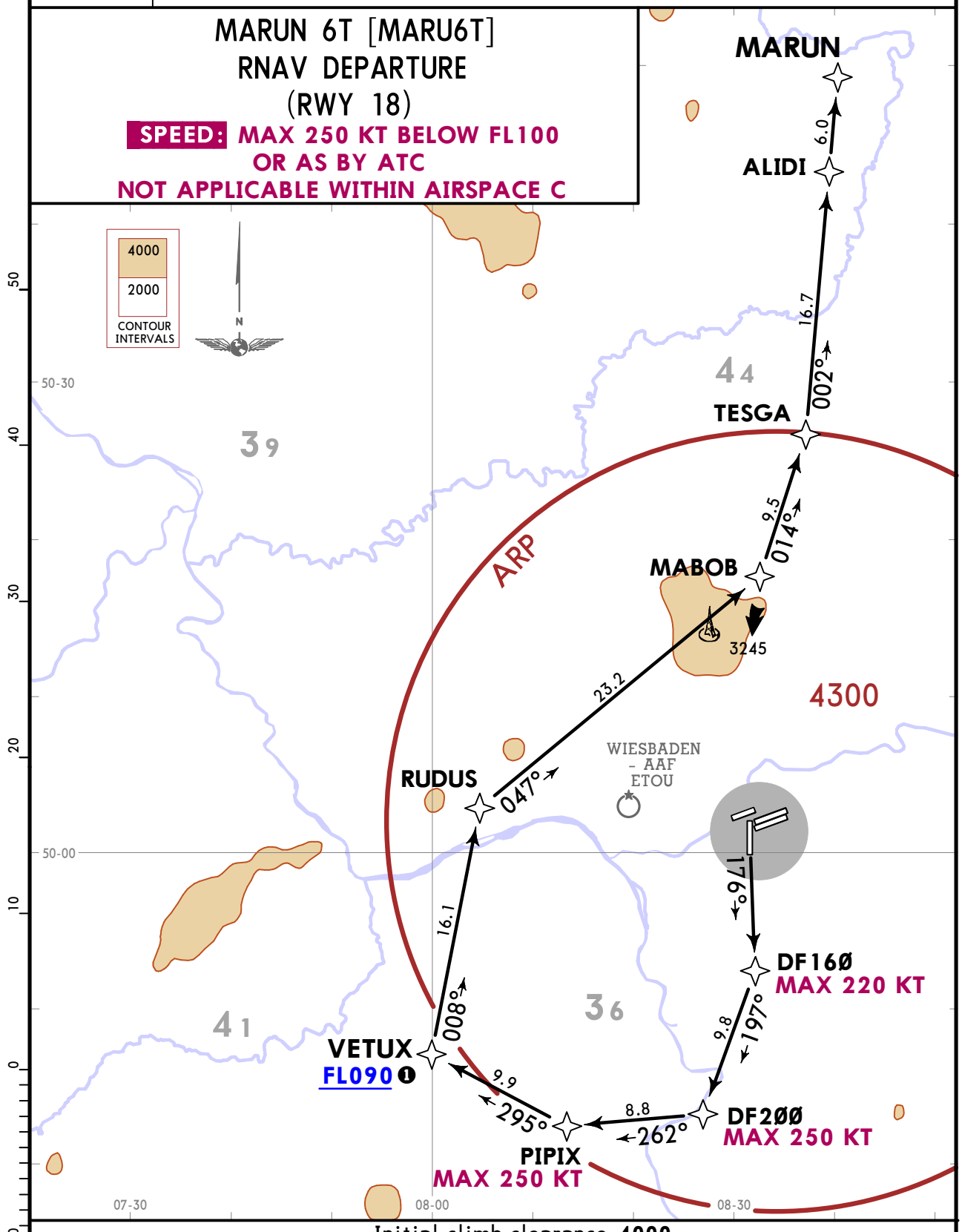
Trans alt: 5000

RNAV 1 required GPS, DME/DME/IRU DME/DME without IRU not authorized

1. Contact LANGEN Radar when advised by Tower. 2. RADAR required.
3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.
4. For operational RWY use concept refer to 10-1P pages.
5. WARNING: Close-in obstacles.
6. WARNING: Wind shears and increased turbulences must be expected when strong winds.
7. Do not turn before DER.

MARUN 6T [MARU6T]
RNAV DEPARTURE
(RWY 18)

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



Initial climb clearance **4000**

ROUTING

(800+) - DF16Ø (K220-) - DF2ØØ (K250-) - PIPIX (K250-) - VETUX (FL090+ ❶) - RUDUS - MABOB - TESGA - ALIDI - MARUN.

❶ If unable to comply, advise EDDF DELIVERY prior to start-up.

CHANGES: Chart reindexed.

FRANKFURT/MAIN, GERMANY

RNAV SID

Apt Elev	*LANGEN Radar
363	120.155

Trans alt: 5000

RNAV 1 required GPS, DME/DME/IRU
DME/DME without IRU not authorized

1. Contact LANGEN Radar when advised by Tower.
2. RADAR required.
3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.
4. For operational RWY use concept refer to 10-1P pages.

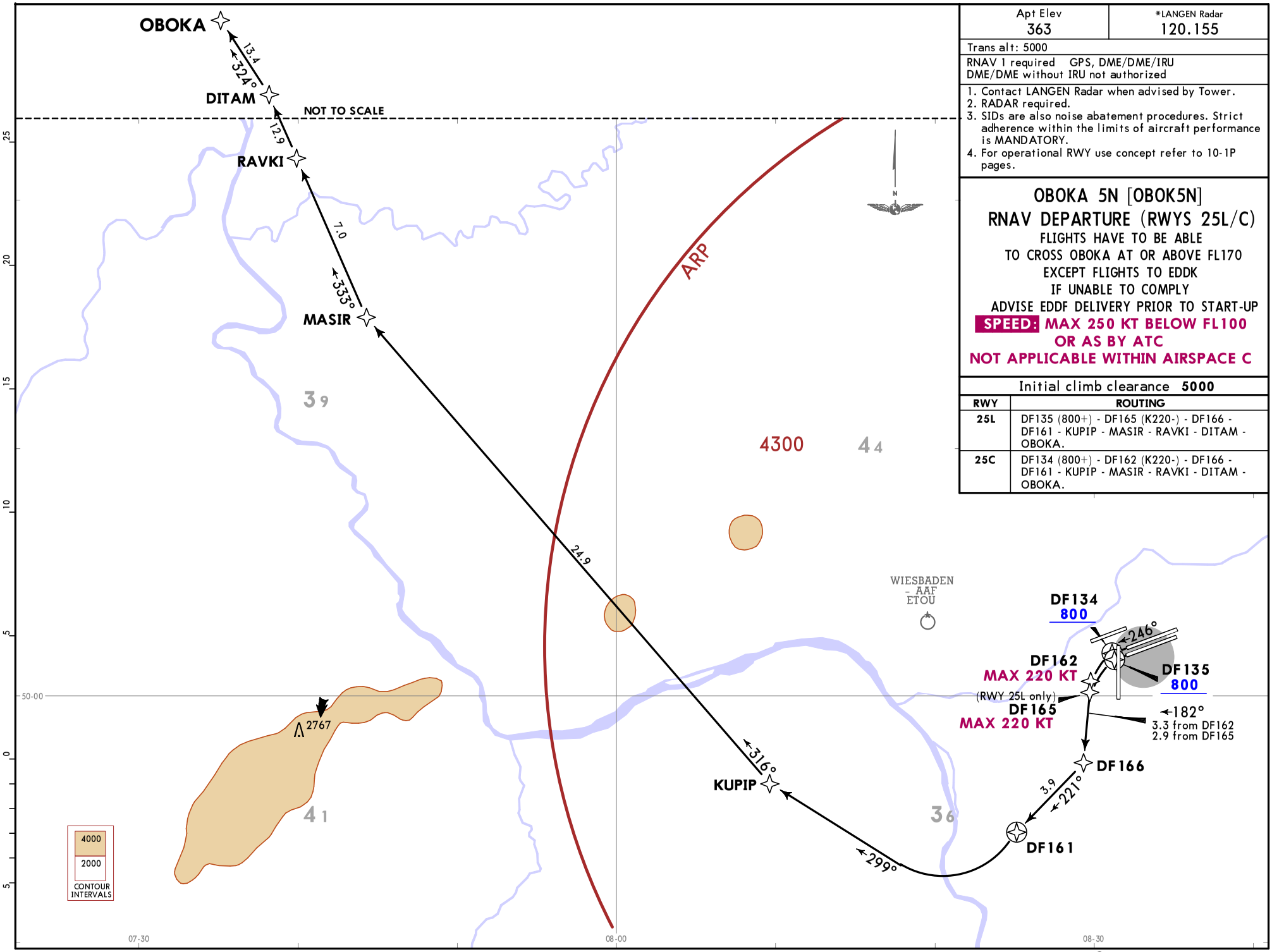
OBOKA 5N [OBOK5N]
RNAV DEPARTURE (RWYS 25L/C)

FLIGHTS HAVE TO BE ABLE
TO CROSS OBOKA AT OR ABOVE FL170
EXCEPT FLIGHTS TO EDDK
IF UNABLE TO COMPLY
ADVISE EDDF DELIVERY PRIOR TO START-UP

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

Initial climb clearance **5000**

RWY	ROUTING
25L	DF135 (800+) - DF165 (K220-) - DF166 - DF161 - KUPIP - MASIR - RAVKI - DITAM - OBOKA.
25C	DF134 (800+) - DF162 (K220-) - DF166 - DF161 - KUPIP - MASIR - RAVKI - DITAM - OBOKA.



CHANGES: Chart reindexed, initial climb revised.

CHANGES: Chart reindexed.

*LANGEN Radar 120.155	Apt Elev 363	Trans alt: 5000

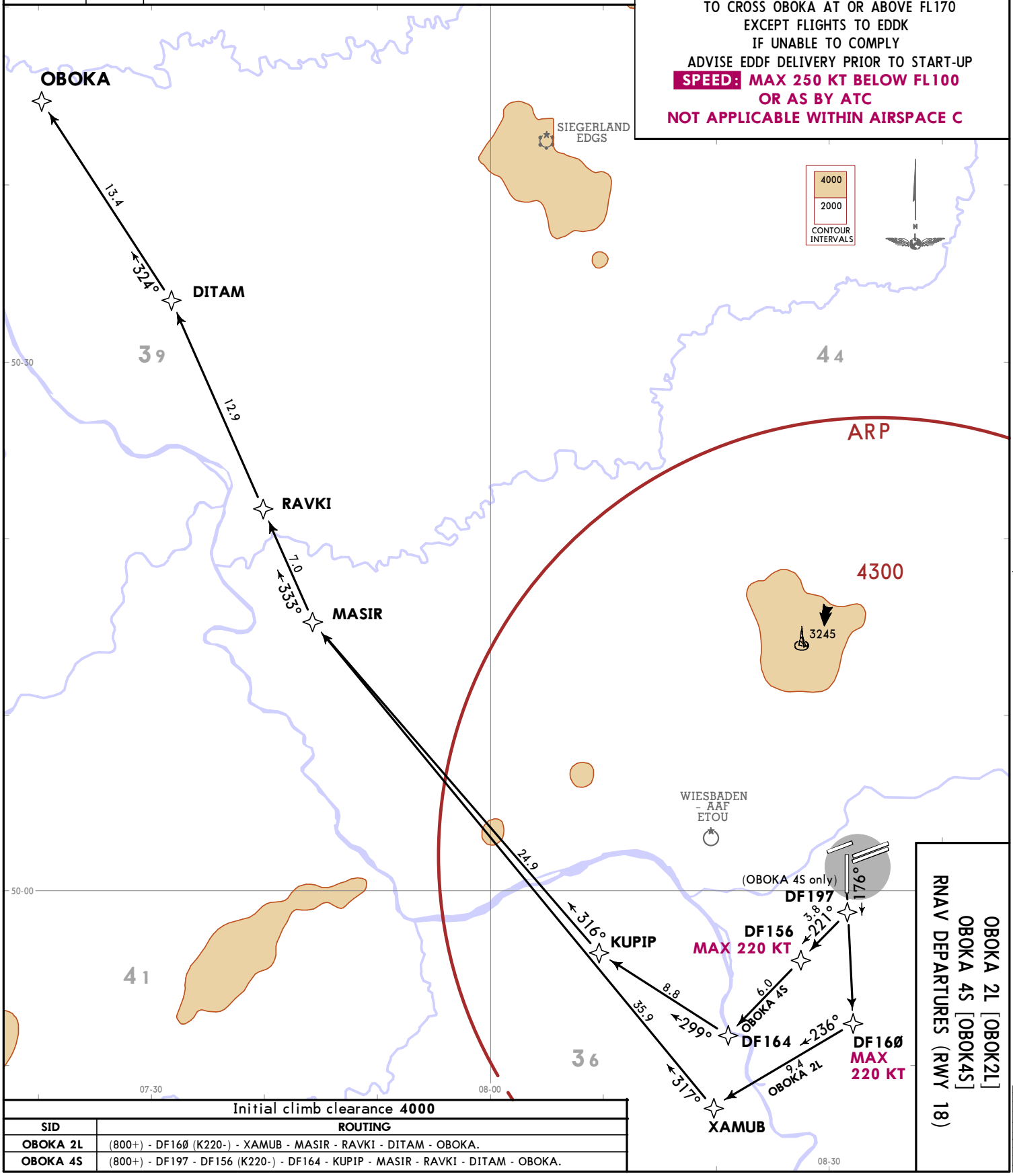
RNAV 1 required GPS, DME/DME/IRU DME/DME without IRU not authorized

1. Contact LANGEN Radar when advised by Tower.
2. RADAR required.
3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.
4. For operational RWY use concept refer to 10-1P pages.
5. WARNING: Close-in obstacles.
6. WARNING: Wind shears and increased turbulences must be expected when strong winds.
7. Do not turn before DER.

OBOKA 2L [OBOK2L]
OBOKA 4S [OBOK4S]
RNAV DEPARTURES
(RWY 18)

WILL ONLY BE ASSIGNED WHEN
LANDING DIRECTION IS RWY 25
FLIGHTS HAVE TO BE ABLE
TO CROSS OBOKA AT OR ABOVE FL170
EXCEPT FLIGHTS TO EDDK
IF UNABLE TO COMPLY
ADVISE EDDF DELIVERY PRIOR TO START-UP

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



Initial climb clearance 4000	
SID	**ROUTING**
OBOKA 2L	(800+) - DF16Ø (K220-) - XAMUB - MASIR - RAVKI - DITAM - OBOKA.
OBOKA 4S	(800+) - DF197 - DF156 (K220-) - DF164 - KUPIP - MASIR - RAVKI - DITAM - OBOKA.

OBOKA 2L [OBOK2L]
OBOKA 4S [OBOK4S]
RNAV DEPARTURES (RWY 18)

EDDF/FRA
FRANKFURT/MAIN
4 AUG 23 (10-3E8)
JEPPESEN
Eff 10 Aug

FRANKFURT/MAIN, GERMANY
RNAV SID

*LANGEN Radar 120.155	Apt Elev 363	Trans alt: 5000
		RNAV 1 required GPS, DME/DME/IRU DME/DME without IRU not authorized
		1. Contact LANGEN Radar when advised by Tower. 2. RADAR required. 3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 4. For operational RWY use concept refer to 10-1P pages. 5. WARNING: Close-in obstacles. 6. WARNING: Wind shears and increased turbulences must be expected when strong winds. 7. Do not turn before DER.

Initial climb clearance **4000**

ROUTING

(800+) - DF158 (K220-) - DF159 (2500+ ❶) - DF168 - TUKRU - MTR - ODAGA - KUSOM - GUBAX - RAVKI - DITAM - OBOKA.

❶ If unable to comply, advise EDDF DELIVERY prior to start-up.

OBOKA 2R [OBOK2R]
RNAV DEPARTURE
(RWY 18)

BY ATC

FLIGHTS HAVE TO BE ABLE TO CROSS OBOKA AT OR ABOVE FL170 EXCEPT FLIGHTS TO EDDK

IF UNABLE TO COMPLY ADVISE EDDF DELIVERY PRIOR TO START-UP

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC

NOT APPLICABLE WITHIN AIRSPACE C

OBOKA
13.4
324°
DITAM
12.9
333°
RAVKI
10.4
291°
GUBAX
18.3
249°
KUSOM
10.3
285°
ODAGA
9.3
286°
METRO
110.0 MTR
ARP
3245
176°
DF158
MAX 220 KT
2.1
116°
DF159
2500 ❶
1.3
4.6
086°
DF168
TUKRU
20.8
010°
4300
WIESBADEN
- AAF
ETOU
FRANKFURT-HAHN
EDFH
4000
2000
CONTOUR INTERVALS
N
39
44
48
41
36
40
50-30
50-00
07-30
08-00
08-30
09-00

CHANGES: Chart reindexed.

*LANGEN Radar 136.130	Trans alt: 5000
	RNAV 1 required GPS, DME/DME/IRU DME/DME without IRU not authorized
	1. Contact LANGEN Radar when advised by Tower. 2. RADAR required.
	3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.
Apt Elev 363	4. For operational RWY use concept refer to 10-1P pages.
	5. WARNING: Close-in obstacles.
	6. WARNING: Wind shears and increased turbulences must be expected when strong winds.
	7. Do not turn before DER.

OBOKA 3T [OBOK3T]
RNAV DEPARTURE
(RWY 18)

FLIGHTS HAVE TO BE ABLE
TO CROSS OBOKA AT OR ABOVE FL170 EXCEPT FLIGHTS TO EDDK
IF UNABLE TO COMPLY
ADVISE EDDF DELIVERY PRIOR TO START-UP

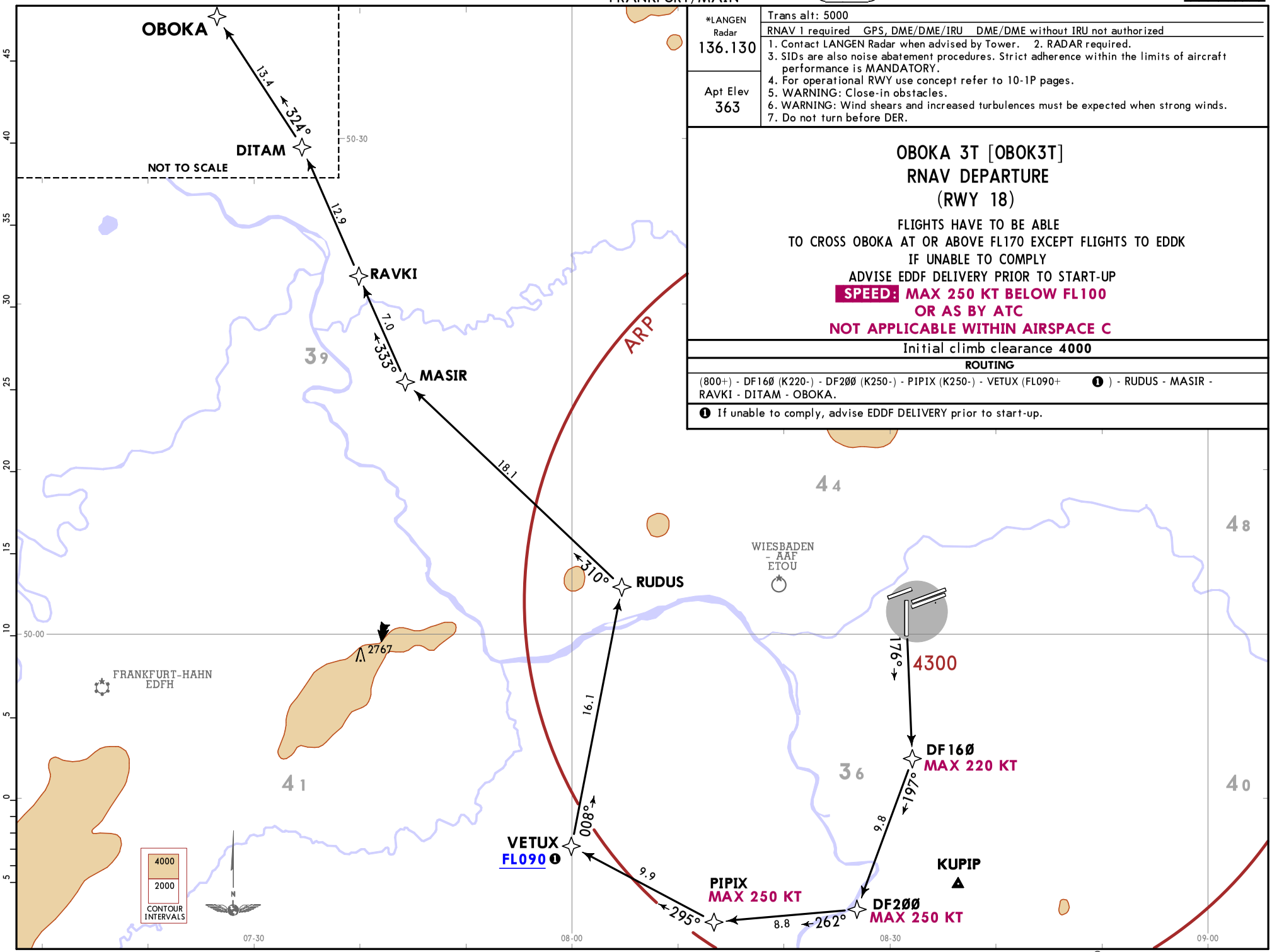
SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

Initial climb clearance **4000**

ROUTING

(800+) - DF16Ø (K220-) - DF20Ø (K250-) - PIPIX (K250-) - VETUX (FL090+ ❶) - RUDUS - MASIR - RAVKI - DITAM - OBOKA.

❶ If unable to comply, advise EDDF DELIVERY prior to start-up.



CHANGES: Chart reindexed.

JEPPESEN
4 AUG 23
10-3F
Eff 10 Aug

*LANGEN Radar 136.130	Apt Elev 363	Trans alt: 5000
		RNAV 1 required GPS, DME/DME/IRU DME/DME without IRU not authorized
		1. Contact LANGEN Radar when advised by Tower. 2. RADAR required.
		3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.
		4. For operational RWY use concept refer to 10-1P pages.
		5. WARNING: Close-in obstacles.

SOBRA 7D [SOBR7D]
RNAV DEPARTURE
(RWYS 07C/R)

FOR FLIGHTS INTENDING TO PROCEED AT OR ABOVE FL250 VIA AIRWAYS Y-180/Y-181
FLIGHTS HAVE TO BE ABLE TO CROSS RUDOT AT OR ABOVE FL240
IF UNABLE TO COMPLY, FLIGHT PLAN SHALL READ:
RUDOT FL220 - Y-180 - NISIV - UY-180 - DIK RFL

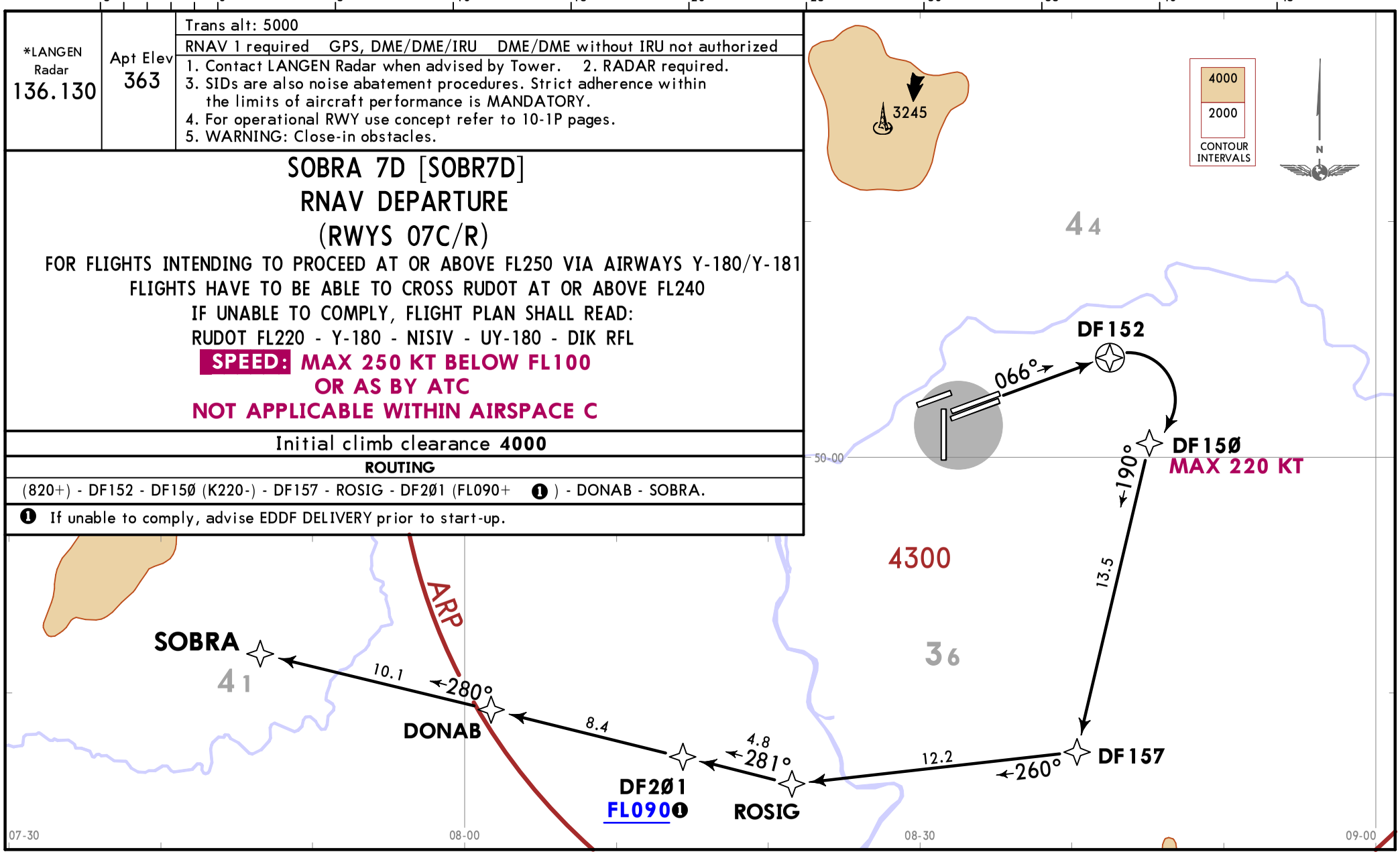
SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

Initial climb clearance **4000**

ROUTING

(820+) - DF152 - DF15Ø (K220-) - DF157 - ROSIG - DF2Ø1 (FL090+ ❶) - DONAB - SOBRA.

❶ If unable to comply, advise EDDF DELIVERY prior to start-up.



*LANGEN Radar 136.130	Apt Elev 363	Trans alt: 5000
		RNAV 1 required GPS, DME/DME/IRU DME/DME without IRU not authorized
		1. Contact LANGEN Radar when advised by Tower. 2. RADAR required. 3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 4. For operational RWY use concept refer to 10-1P pages. 5. WARNING: Close-in obstacles.

SOBRA 7E [SOBR7E]
RNAV DEPARTURE (RWYS 07C/R)

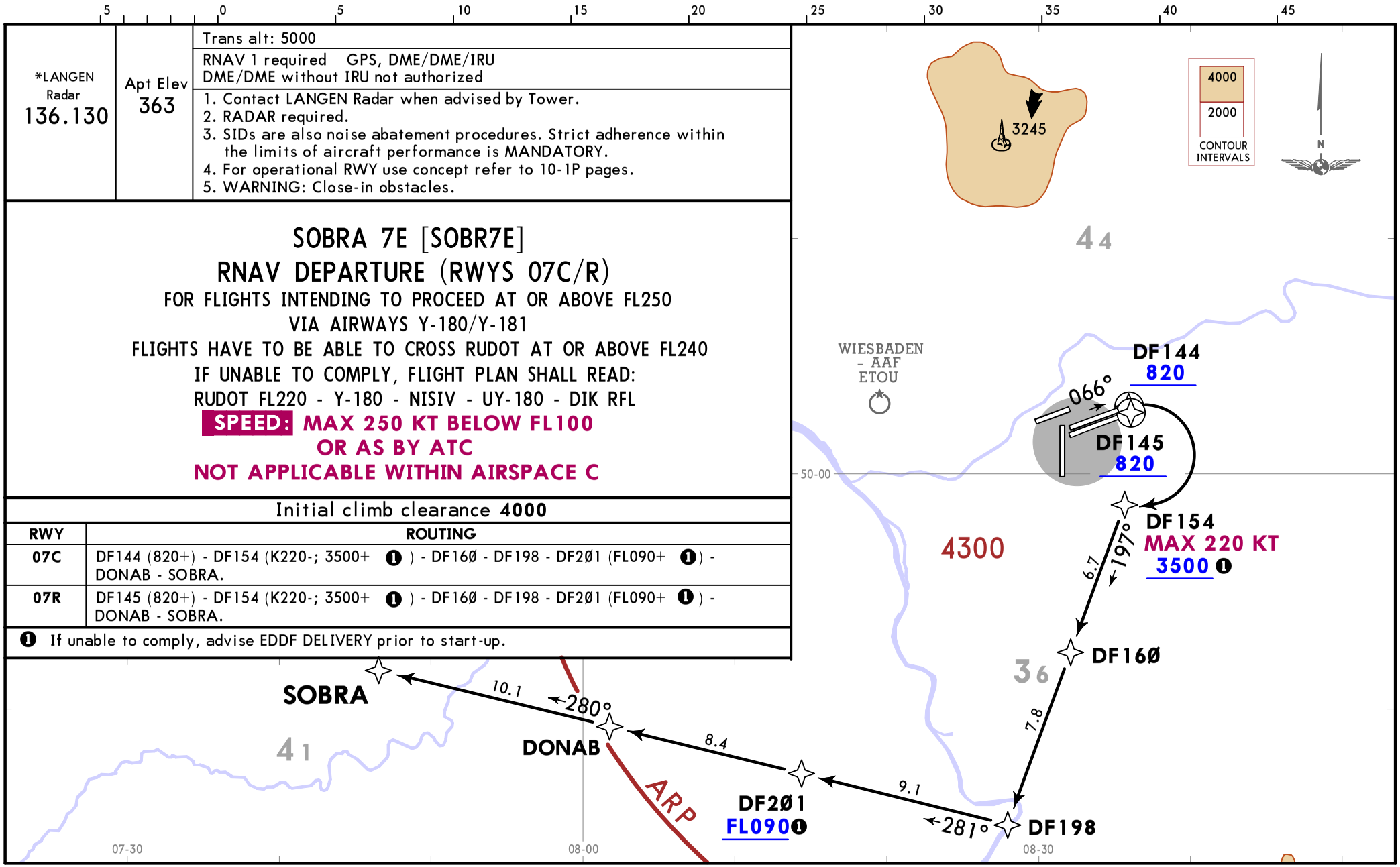
FOR FLIGHTS INTENDING TO PROCEED AT OR ABOVE FL250
VIA AIRWAYS Y-180/Y-181
FLIGHTS HAVE TO BE ABLE TO CROSS RUDOT AT OR ABOVE FL240
IF UNABLE TO COMPLY, FLIGHT PLAN SHALL READ:
RUDOT FL220 - Y-180 - NISIV - UY-180 - DIK RFL

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

Initial climb clearance **4000**

RWY	ROUTING
07C	DF144 (820+) - DF154 (K220-; 3500+ ❶) - DF16Ø - DF198 - DF2Ø1 (FL090+ ❶) - DONAB - SOBRA.
07R	DF145 (820+) - DF154 (K220-; 3500+ ❶) - DF16Ø - DF198 - DF2Ø1 (FL090+ ❶) - DONAB - SOBRA.

❶ If unable to comply, advise EDDF DELIVERY prior to start-up.



CHANGES: Chart reindexed, initial climb revised.

SOBRA 8F [SOBR8F], SOBRA 7P [SOBR7P]
RNAV DEPARTURES (RWYS 25L/C)

FOR FLIGHTS INTENDING TO PROCEED AT OR ABOVE FL250
VIA AIRWAYS Y-180/Y-181
FLIGHTS HAVE TO BE ABLE TO CROSS RUDOT AT OR ABOVE FL240
IF UNABLE TO COMPLY, FLIGHT PLAN SHALL READ:
RUDOT FL220 - Y-180 - NISIV - UY-180 - DIK RFL

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC NOT APPLICABLE WITHIN AIRSPACE C

Trans alt: 5000

RNAV 1 required GPS, DME/DME/IRU
DME/DME without IRU not authorized

1. Contact LANGEN Radar when advised by Tower.
2. RADAR required.
3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.
4. For operational RWY use concept refer to 10-1P pages.

*LANGEN Radar 136.130

Apt Elev 363

Initial climb clearance 5000

SID	RWY	ROUTING
SOBRA 8F	25L	DF135 (800+) - DF142 - DF163 (K220-) - DF201 - DONAB - SOBRA.
	25C	DF134 (800+) - DF141 - DF163 (K220-) - DF201 - DONAB - SOBRA.
SOBRA 7P	25L	DF135 (800+) - DF138 (K220-) - DONAB - SOBRA.
	25C	DF134 (800+) - DF138 (K220-) - DONAB - SOBRA.

DF135 800
DF134 800
DF142
DF141
DF138
DF163 MAX 220 KT
DF138 MAX 220 KT
DF201
DONAB
SOBRA
WIESBADEN - AAF - ETOU
(SOBRA 8F/RWY 25C only)
(SOBRA 8F/RWY 25L only)
SOBRA 8F
SOBRA 7P
246°
196°
221°
226°
281°
280°
5.5 from DF141
4.9 from DF142
12.0
17.8
8.4
10.1
4300
ARP
1 from DF134: 5.0 →224°
from DF135: 4.9 →227°
08-30
08-00
50-00
CONTOUR INTERVALS 4000 2000

CHANGES: Chart reindexed, initial climb revised.

*LANGEN Radar	Apt Elev
136.130	363

Trans alt: 5000

RNAV 1 required GPS, DME/DME/IRU
DME/DME without IRU not authorized

1. Contact LANGEN Radar when advised by Tower.
2. RADAR required.
3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.
4. For operational RWY use concept refer to 10-1P pages.

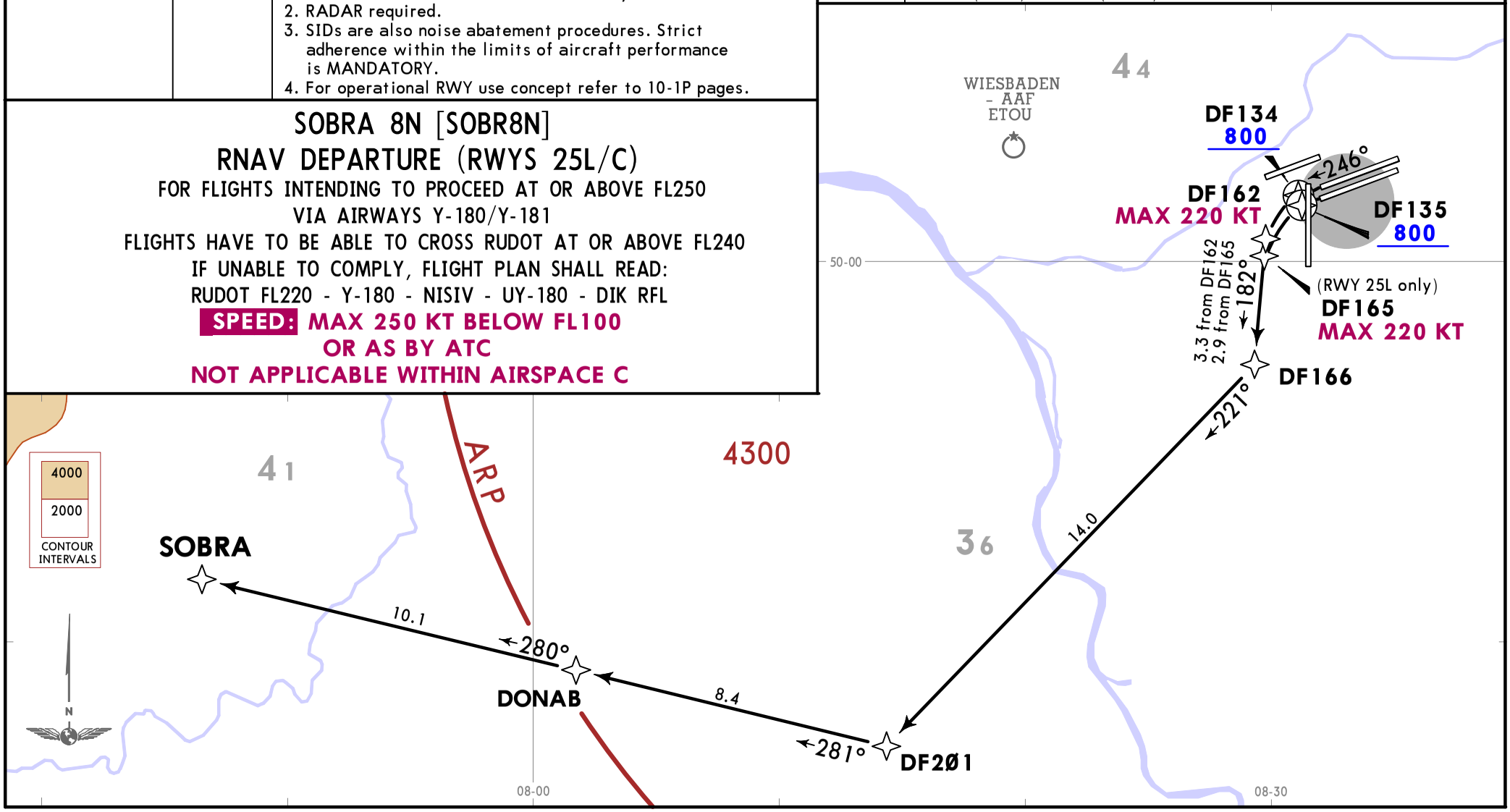
Initial climb clearance **5000**

RWY	ROUTING
25L	DF135 (800+) - DF165 (K220-) - DF166 - DF2Ø1 - DONAB - SOBRA.
25C	DF134 (800+) - DF162 (K220-) - DF166 - DF2Ø1 - DONAB - SOBRA.

SOBRA 8N [SOBR8N]
RNAV DEPARTURE (RWYS 25L/C)

FOR FLIGHTS INTENDING TO PROCEED AT OR ABOVE FL250
VIA AIRWAYS Y-180/Y-181
FLIGHTS HAVE TO BE ABLE TO CROSS RUDOT AT OR ABOVE FL240
IF UNABLE TO COMPLY, FLIGHT PLAN SHALL READ:
RUDOT FL220 - Y-180 - NISIV - UY-180 - DIK RFL

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

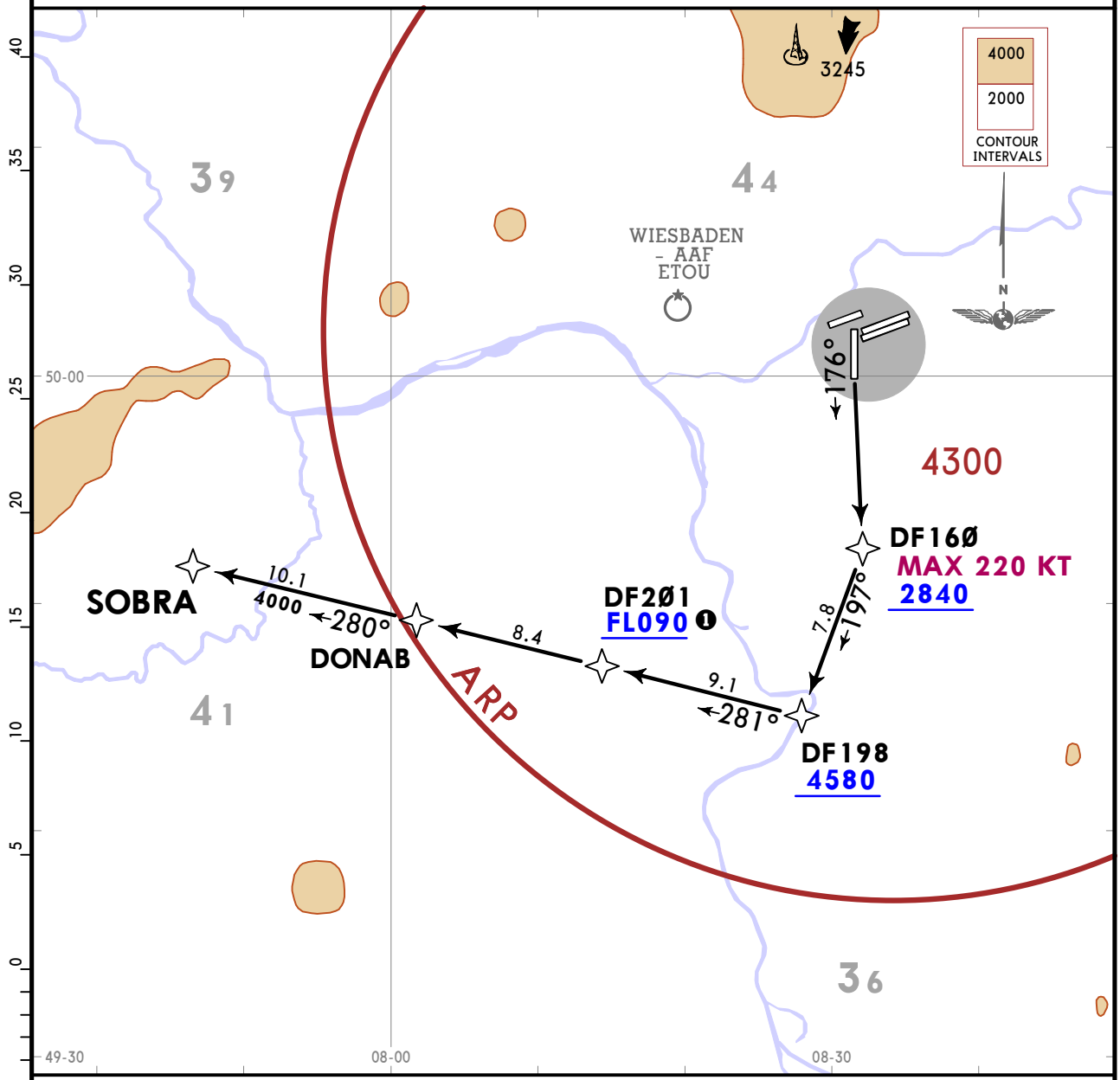


*LANGEN Radar 136.130	Apt Elev 363	Trans alt: 5000 RNAV 1 required GPS, DME/DME/IRU DME/DME withou IRU not authorized 1. Contact LANGEN Radar when advised by Tower. 2. RADAR required. 3. WARNING: Close-in obstacles. 4. WARNING: Wind shears and increased turbulences must be EXPECTED when strong winds. 5. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 6. Do not turn before DER.

SOBRA 2L [SOBR2L]
RNAV DEPARTURE
(RWY 18)

FOR FLIGHTS INTENDING TO PROCEED AT OR ABOVE FL250 VIA AIRWAYS Y-180/Y-181
FLIGHTS HAVE TO BE ABLE TO CROSS RUDOT AT OR ABOVE FL240
IF UNABLE TO COMPLY FPL SHALL READ RUDOT FL220 - Y-180 - NISIV - UY-180 - DIK RFL

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



Initial climb clearance **4000**

ROUTING

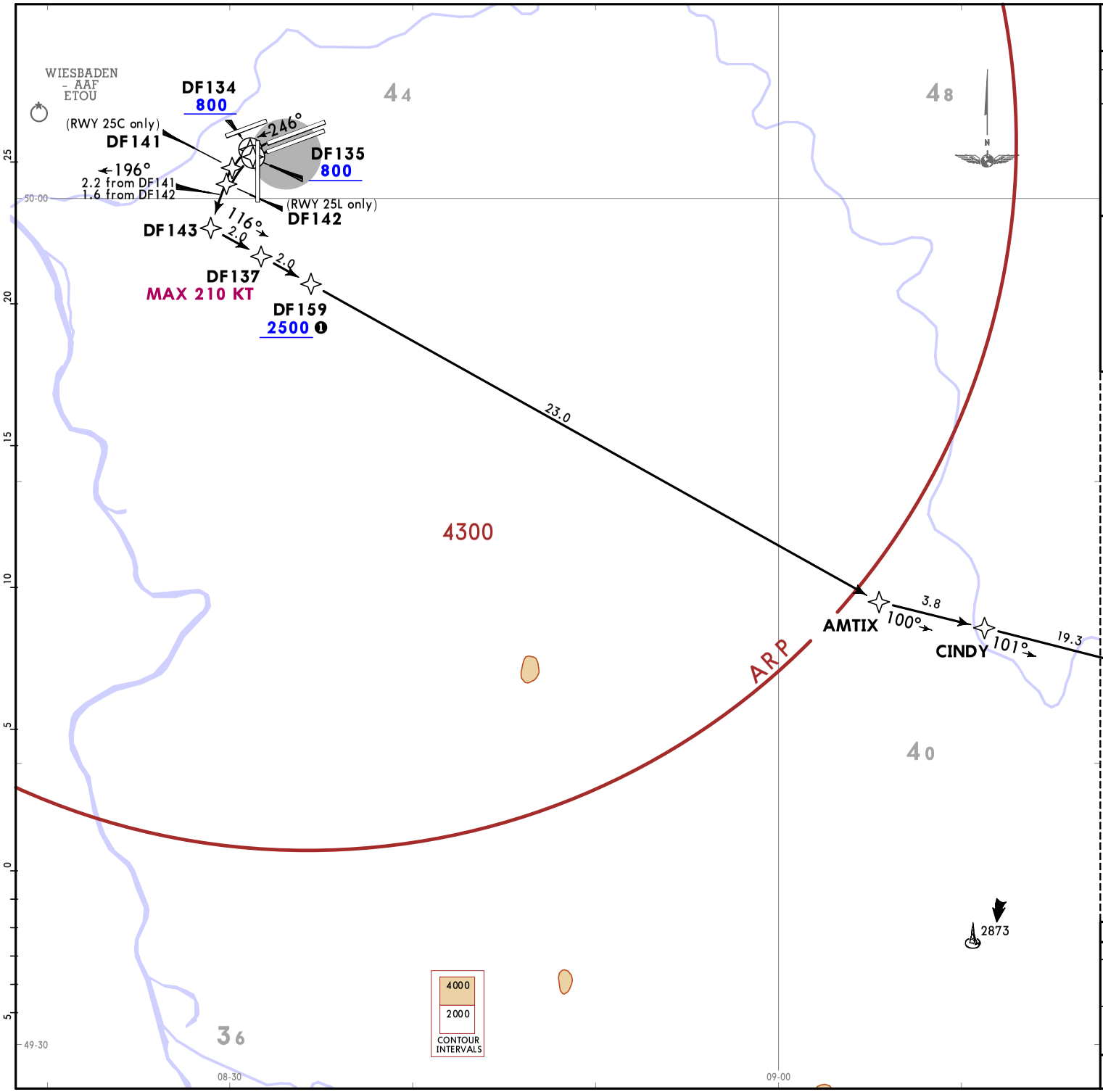
(800+) - DF16Ø (K220-; 2840+) - DF198 (4580+) - DF2Ø1 (FL090+ ❶) - DONAB - SOBRA.

❶ If unable to comply, advise EDDF DELIVERY prior to start-up and EXPECT routing via SID ULKIG 2L.

CHANGES: Chart reindexed.

FRANKFURT/MAIN, GERMANY

RNAV SID



*LANGEN Radar	Apt Elev
136.130	363

Trans alt: 5000

RNAV 1 required GPS, DME/DME/IRU
DME/DME without IRU not authorized

1. Contact LANGEN Radar when advised by Tower.
2. RADAR required.
3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.
4. For operational RWY use concept refer to 10-1P pages.

SULUS 3F [SULU3F]
RNAV DEPARTURE
(RWYS 25L/C)

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

Initial climb clearance **5000**

RWY	ROUTING
25L	DF135 (800+)- DF142 - DF143 - DF137 (K210-) - DF159 (2500+ ❶) - AMTIX - CINDY - GIBSA - COSJE - SULUS.
25C	DF134 (800+) - DF141 - DF143 - DF137 (K210-) - DF159 (2500+ ❶) - AMTIX - CINDY - GIBSA - COSJE - SULUS.

❶ If unable to comply, advise EDDF DELIVERY before start-up.

CHANGES: Chart reindexed, initial climb revised.

FRANKFURT/MAIN, GERMANY

RNAV SID

*LANGEN Radar (APP) 136.130	Apt Elev 363	Trans alt: 5000 RNAV 1 required GPS, DME/DME/IRU DME/DME without IRU not authorized 1. Contact LANGEN Radar when advised by Tower. 2. RADAR required. 3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 4. For operational RWY use concept refer to 10-1P pages. 5. WARNING: Close-in obstacles. 6. WARNING: Wind shears and increased turbulences must be expected when strong winds.

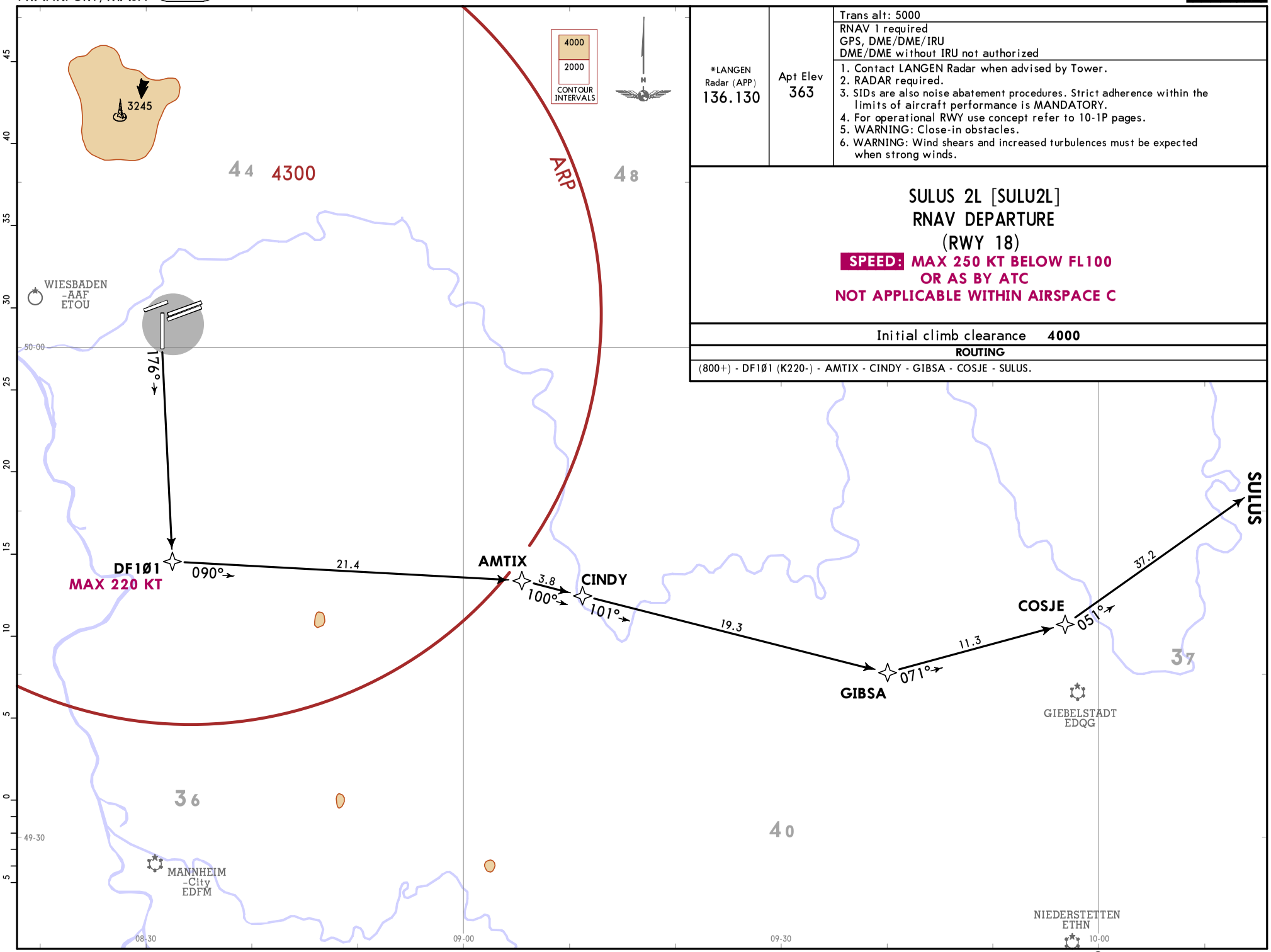
SULUS 2L [SULU2L]
RNAV DEPARTURE
(RWY 18)

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

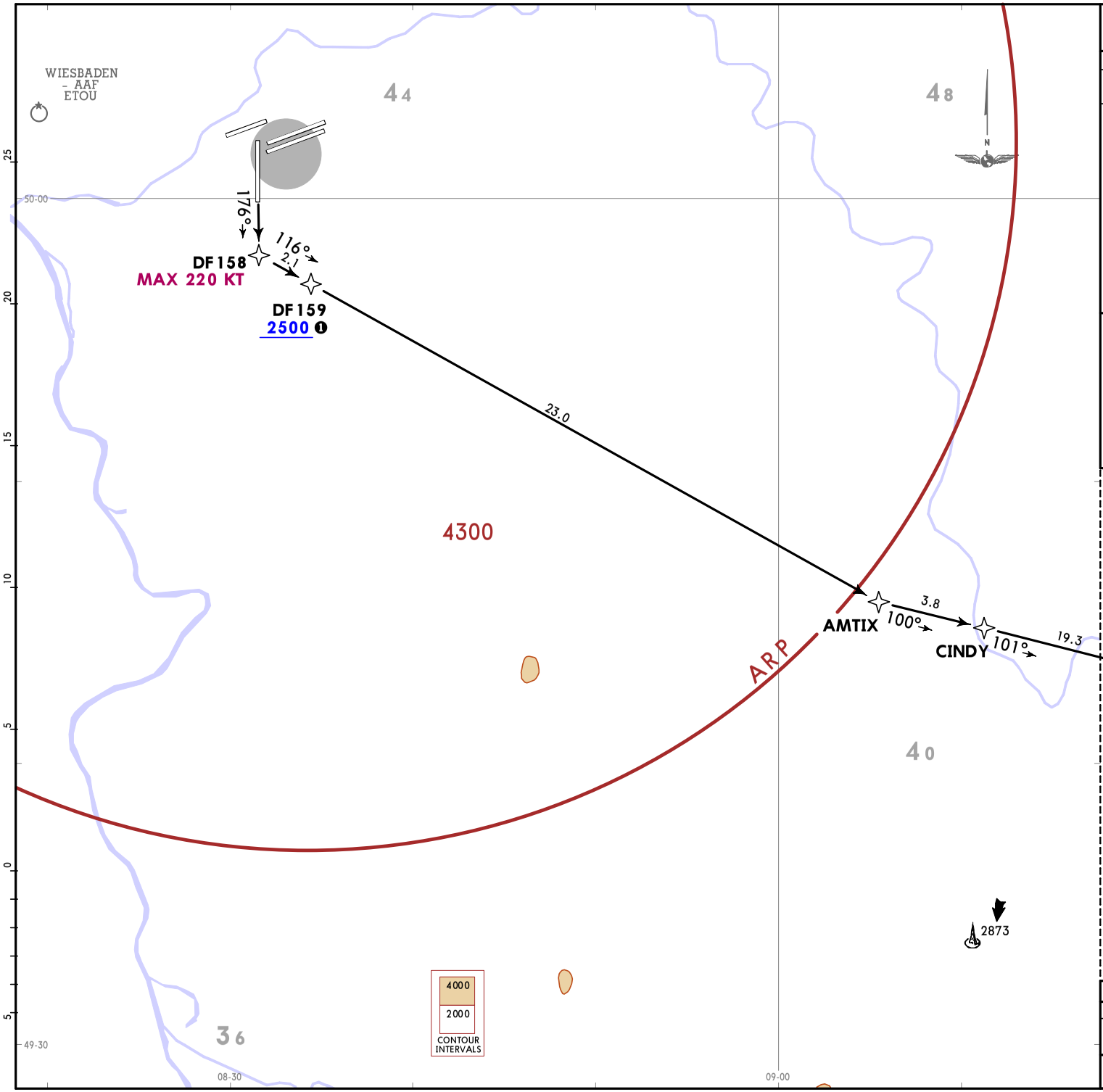
Initial climb clearance **4000**

ROUTING

(800+) - DF1Ø1 (K220-) - AMTIX - CINDY - GIBSA - COSJE - SULUS.



CHANGES: None.



*LANGEN Radar (APP)	Apt Elev
136.130	363

Trans alt: 5000

RNAV 1 required GPS, DME/DME/IRU
DME/DME without IRU not authorized

1. Contact LANGEN Radar when advised by Tower.
2. RADAR required
3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.
4. For operational RWY use concept refer to 10-1P pages.
5. WARNING: Close-in obstacles.
6. WARNING: Wind shears and turbulences must be expected when strong winds.
7. Do not turn before DER.

SULUS 4S [SULU4S]
RNAV DEPARTURE
(RWY 18)

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

Initial climb clearance **4000**

ROUTING

(800+) - DF158 (K220-) - DF159 (2500+ ❶) - AMTIX - CINDY - GIBSA - COSJE - SULUS.

❶ If unable to comply, advise EDDF DELIVERY before start-up and EXPECT routing via SID SULUS 2L.

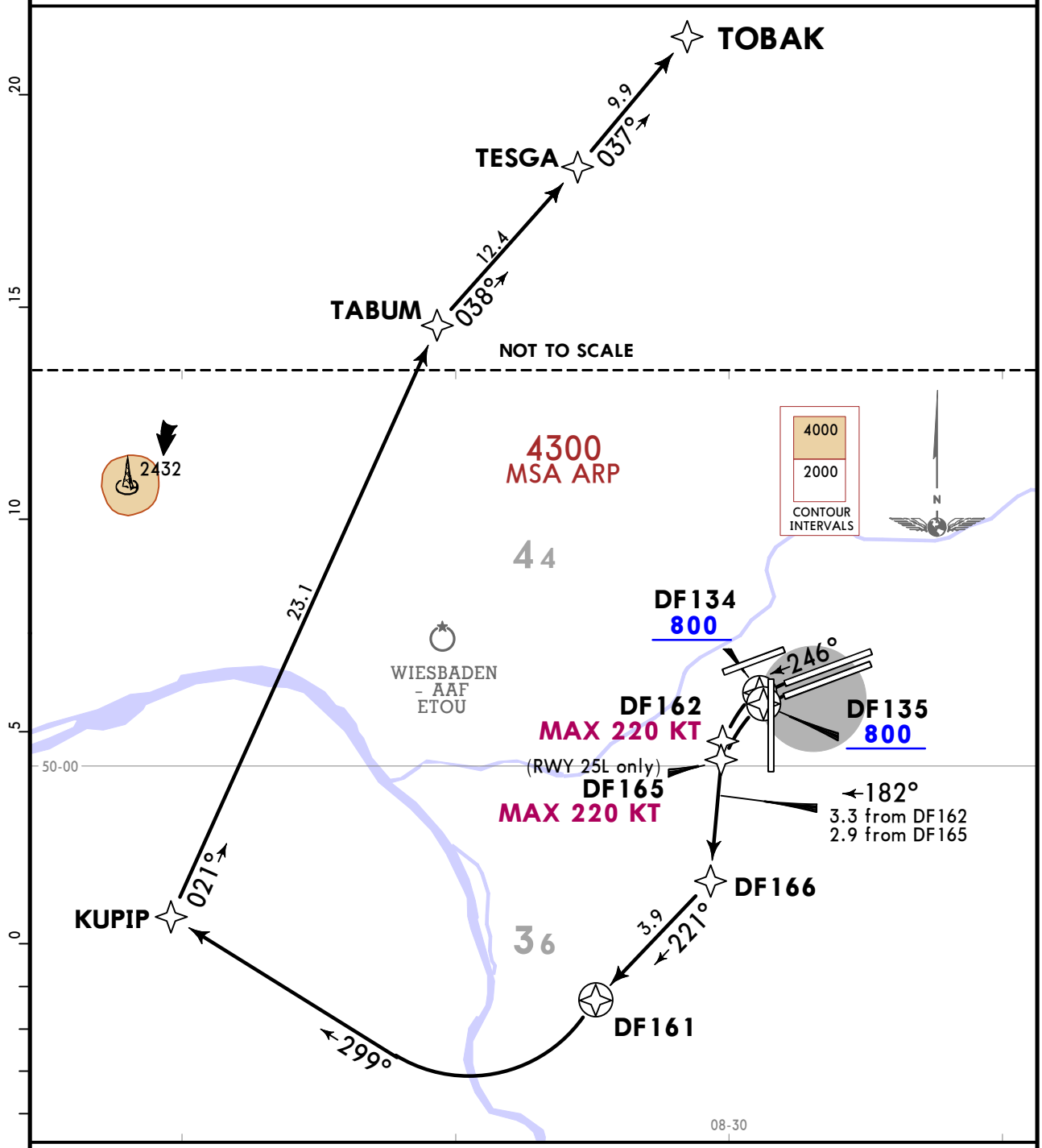
CHANGES: Reissue.

*LANGEN Radar 120.155	Apt Elev 363	Trans alt: 5000
		RNAV 1 required GPS, DME/DME/IRU DME/DME without IRU not authorized
		1. Contact LANGEN Radar when advised by Tower. 2. RADAR required. 3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 4. For operational RWY use concept refer to 10-1P pages.

TOBAK 3N [TOBA3N]
RNAV DEPARTURE (RWYS 25L/C)

NOT FOR FLIGHTS CONTINUING VIA AIRWAY Z-10

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



Initial climb clearance **5000**

RWY	ROUTING
25L	DF135 (800+) - DF165 (K220-) - DF166 - DF161 - KUPIP - TABUM - TESGA - TOBAK.
25C	DF134 (800+) - DF162 (K220-) - DF166 - DF161 - KUPIP - TABUM - TESGA - TOBAK.

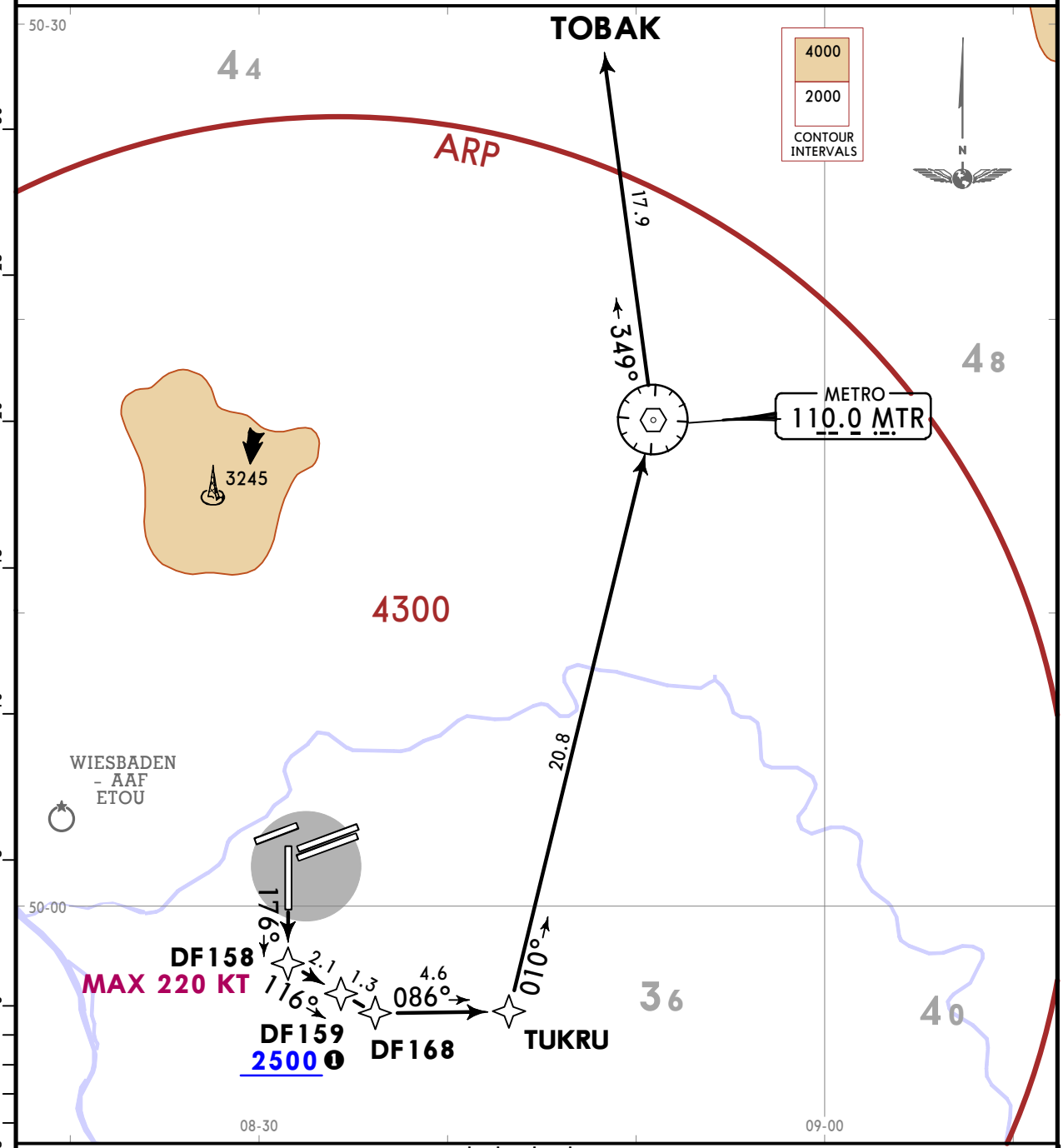
CHANGES: Chart reindexed, initial climb revised.

*LANGEN Radar 120.155	Apt Elev 363	Trans alt: 5000

RNAV 1 required GPS, DME/DME/IRU DME/DME without IRU not authorized

1. Contact LANGEN Radar when advised by Tower. 2. RADAR required.
3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.
4. For operational RWY use concept refer to 10-1P pages.
5. WARNING: Close-in obstacles.
6. WARNING: Wind shears and increased turbulences must be expected when strong winds.
7. Do not turn before DER.

TOBAK 4R [TOBA4R]
RNAV DEPARTURE (RWY 18)
BY ATC
NOT FOR FLIGHTS CONTINUING VIA AIRWAY Z-10
SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



Initial climb clearance **4000**

ROUTING

(800+) - DF158 (K220-) - DF159 (2500+ ❶) - DF168 - TUKRU - MTR - TOBAK.

❶ If unable to comply, advise EDDF DELIVERY prior to start-up.

CHANGES: Chart reindexed.

*LANGEN Radar 120.155	Apt Elev 363	Trans alt: 5000

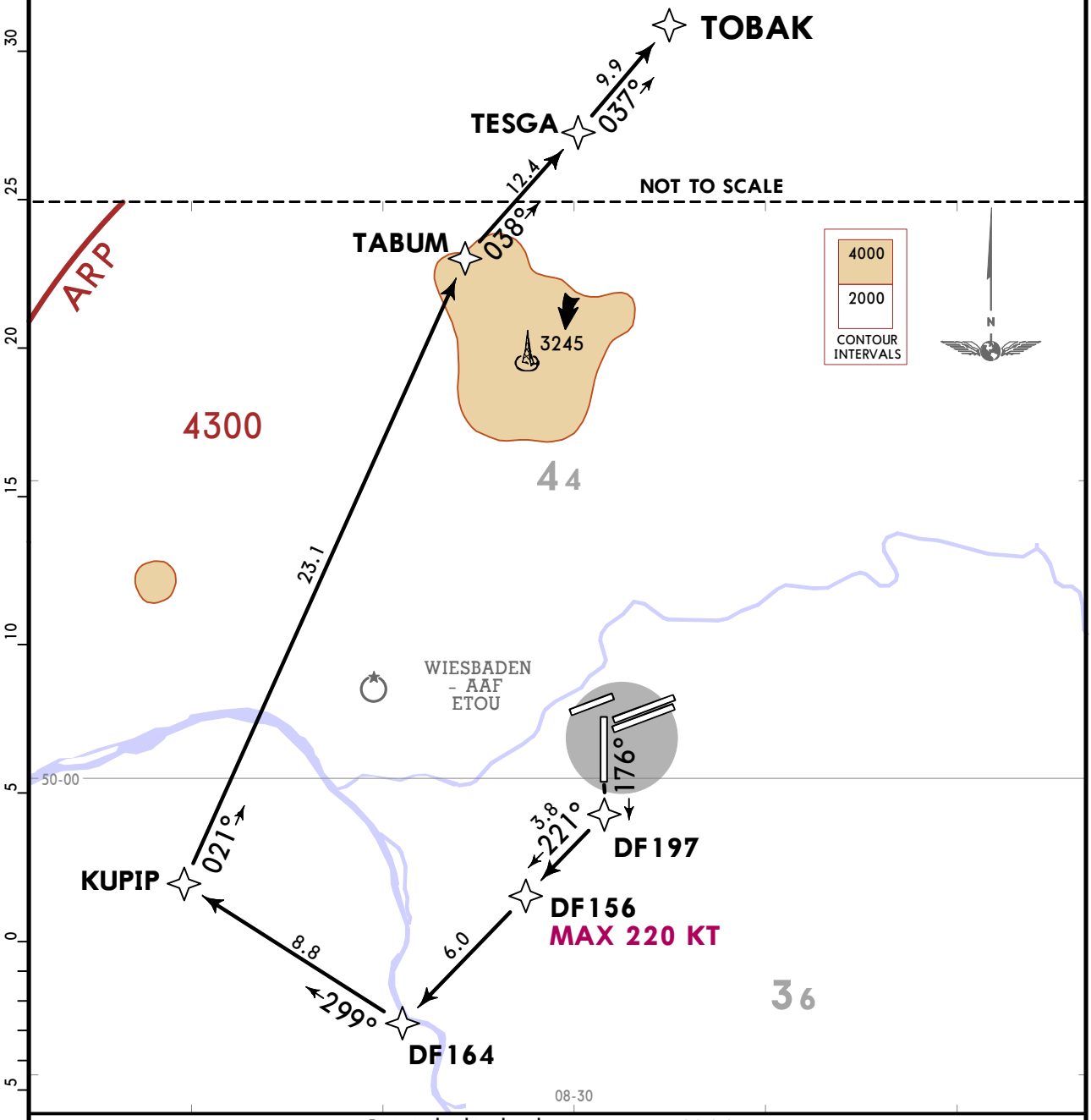
RNAV 1 required GPS, DME/DME/IRU DME/DME without IRU not authorized

1. Contact LANGEN Radar when advised by Tower. 2. RADAR required.
3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.
4. For operational RWY use concept refer to 10-1P pages.
5. WARNING: Close-in obstacles.
6. WARNING: Wind shears and increased turbulences must be expected when strong winds.
7. Do not turn before DER.

TOBAK 1S [TOBA1S]
RNAV DEPARTURE
(RWY 18)

WILL ONLY BE ASSIGNED
WHEN LANDING DIRECTION IS RWY 25
NOT FOR FLIGHTS CONTINUING VIA AIRWAY Z-10

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



Initial climb clearance **4000**

ROUTING

(800+) - DF197 - DF156 (K220-) - DF164 - KUPIP - TABUM - TESGA - TOBAK.

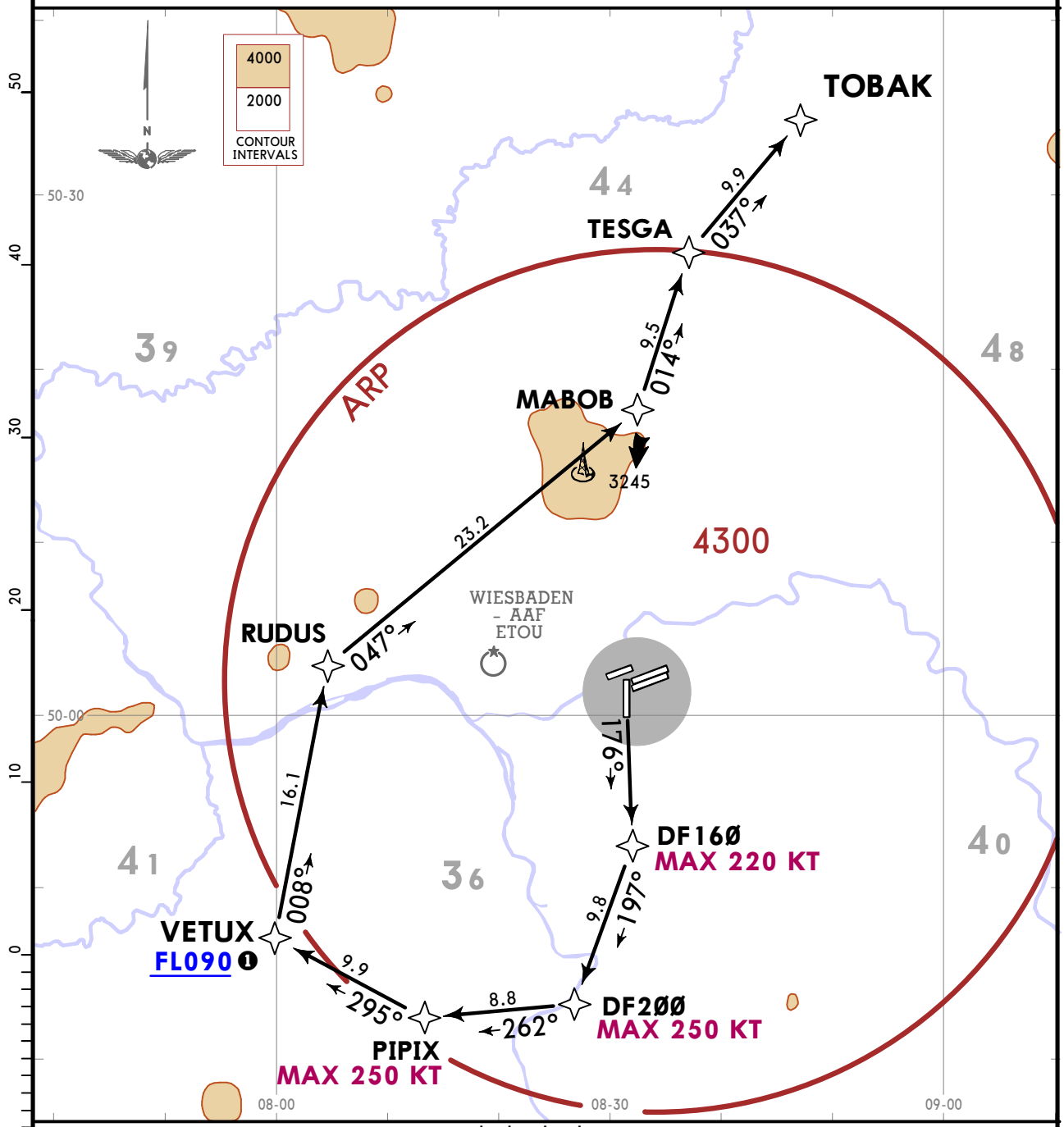
CHANGES: Chart reindexed.

*LANGEN Radar 136.130	Trans alt: 5000
	RNAV 1 required GPS, DME/DME/IRU DME/DME without IRU not authorized
	1. Contact LANGEN Radar when advised by Tower. 2. RADAR required.
	3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.
Apt Elev 363	4. For operational RWY use concept refer to 10-1P pages.
	5. WARNING: Close-in obstacles.
	6. WARNING: Wind shears and increased turbulences must be expected when strong winds.
	7. Do not turn before DER.

TOBAK 8T [TOBA8T]
RNAV DEPARTURE
(RWY 18)

NOT FOR FLIGHTS CONTINUING VIA AIRWAY Z-10

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



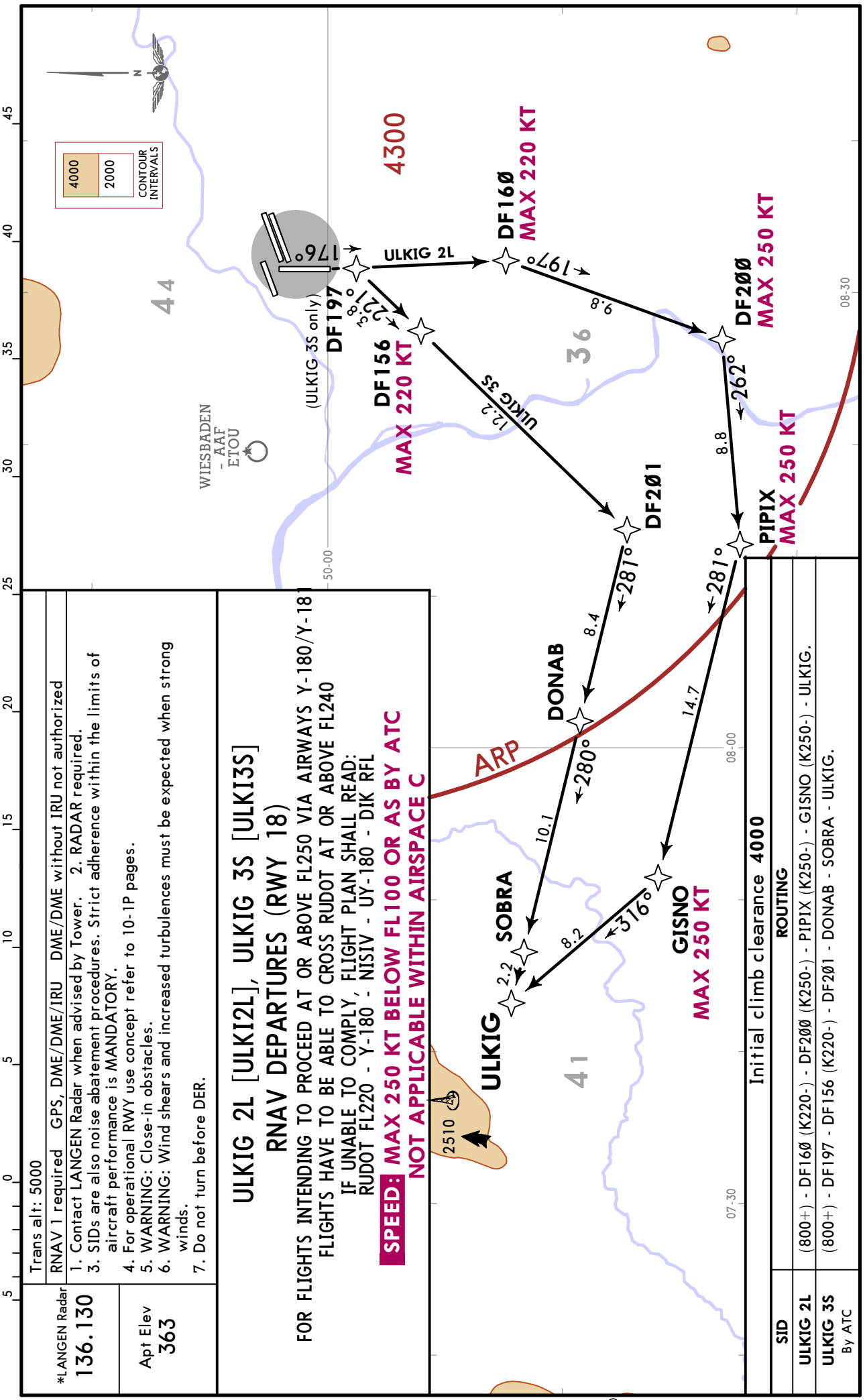
Initial climb clearance **4000**

ROUTING

(800+) - DF16Ø (K220-) - DF2ØØ (K250-) - PIPIX (K250-) - VETUX (FL090+ ❶) - RUDUS - MABOB - TESGA - TOBAK.

❶ If unable to comply, advise EDDF DELIVERY prior to start-up.

CHANGES: Chart reindexed.



*LANGEN Radar
136.130

Apt Elev
363

Trans alt: 5000
RNAV 1 required GPS, DME/DME/IRU DME/DME without IRU not authorized
1. Contact LANGEN Radar when advised by Tower. 2. RADAR required.
3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.
4. For operational RWY use concept refer to 10-1P pages.
5. WARNING: Close-in obstacles.
6. WARNING: Wind shears and increased turbulences must be expected when strong winds.
7. Do not turn before DER.

ULKIG 2L [ULKI2L], ULKIG 3S [ULKI3S]
RNAV DEPARTURES (RWY 18)

FOR FLIGHTS INTENDING TO PROCEED AT OR ABOVE FL250 VIA AIRWAYS Y-180/Y-181
FLIGHTS HAVE TO BE ABLE TO CROSS RUDOT AT OR ABOVE FL240
IF UNABLE TO COMPLY, FLIGHT PLAN SHALL READ:
RUDOT FL220 - Y-180 - NISIV - UY-180 - DIK RFL

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

Initial climb clearance **4000**

SID	ROUTING
ULKIG 2L	(800+) - DF160 (K220-) - DF200 (K250-) - PIPIX (K250-) - GISNO (K250-) - ULKIG.
ULKIG 3S By ATC	(800+) - DF197 - DF156 (K220-) - DF201 - DONAB - SOBRA - ULKIG.

CHANGES: Chart reindexed.

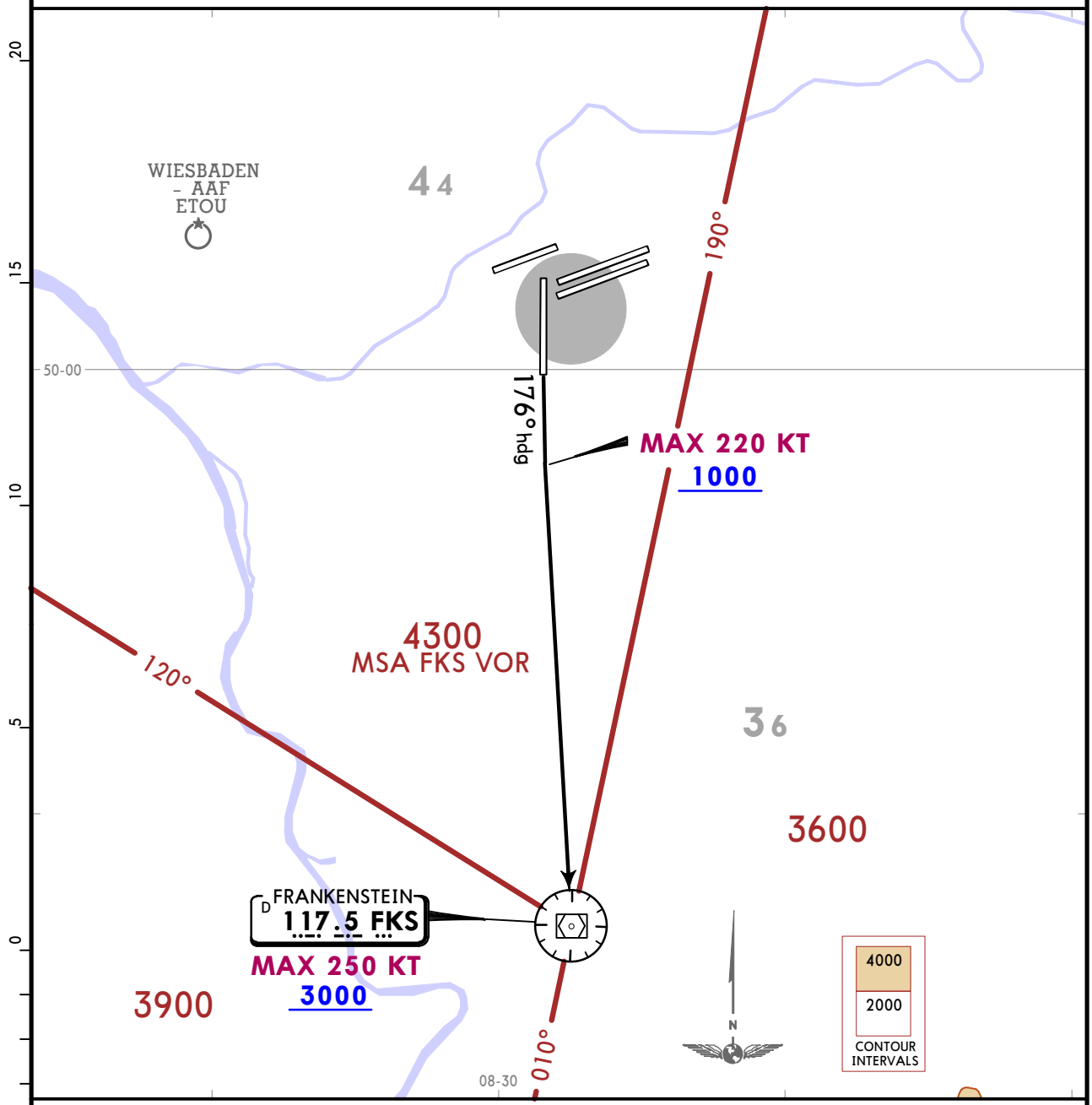
*LANGEN Radar 136.130	Apt Elev 363	Trans alt: 5000 1. Contact LANGEN Radar when advised by Tower. 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 3. WARNING: Close-in obstacles. 4. WARNING: Wind shears and increased turbulences must be expected when strong winds 5. For operational RWY use concept refer to 10-1P pages.

FRANKENSTEIN 1B (FKS 1B) DEPARTURE (RWY 18)

BY ATC

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC

NOT APPLICABLE WITHIN AIRSPACE C



This SID requires a minimum climb gradient of 3.5% until FKS.

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

Initial climb clearance **4000**

ROUTING

Climb on 176° heading to at or above 1000, direct to FKS.

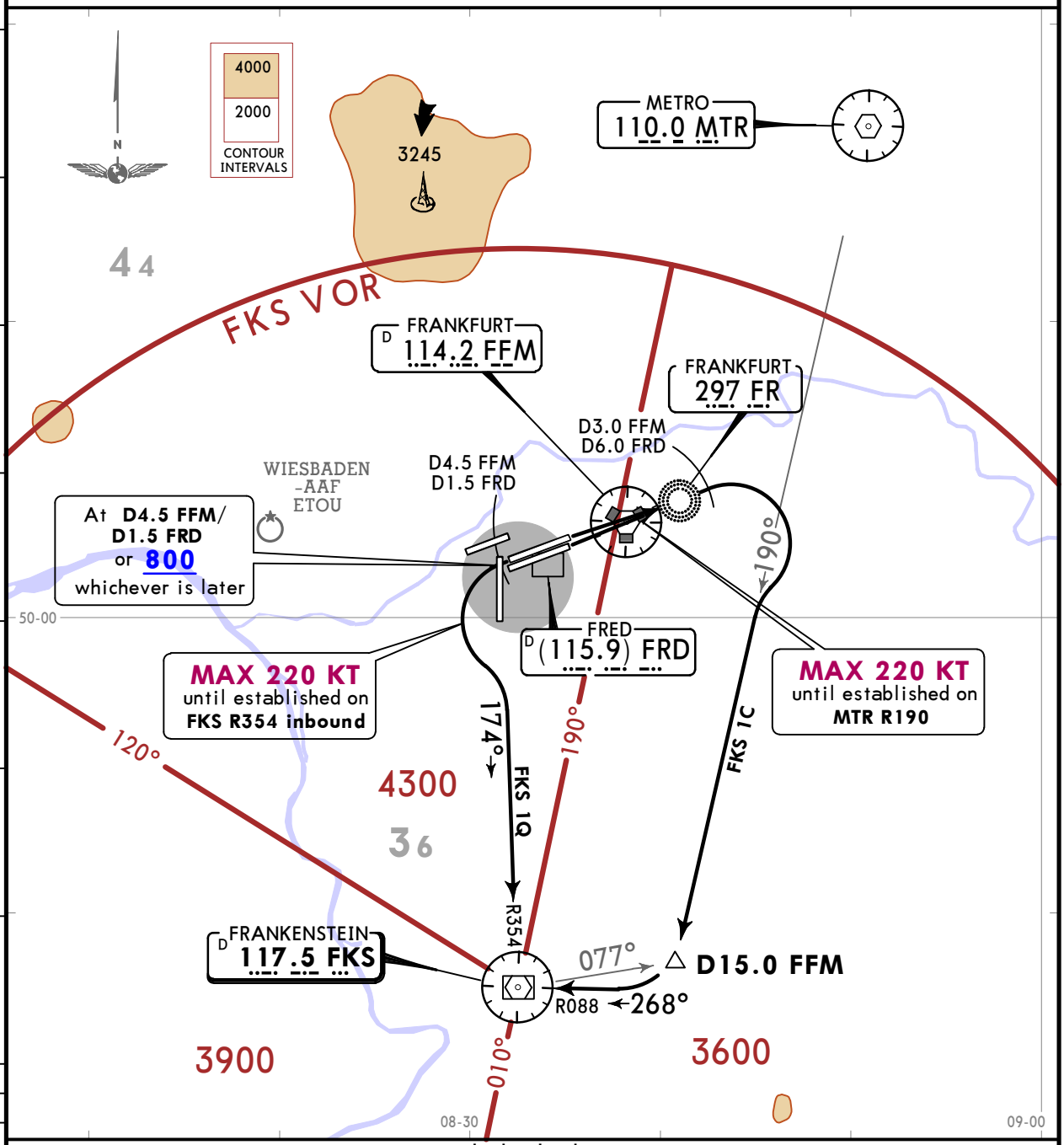
CHANGES: MSA, SID FKS 1B established, SID KOMIB 3D transferred.

*LANGEN Radar 136.130	Apt Elev 363	Trans alt: 5000 1. Contact LANGEN Radar when advised by Tower. 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 3. RWYS 07C/R: WARNING: Close-in obstacles. 4. For operational RWY use concept refer to 10-1P pages.

FRANKENSTEIN 1C (FKS 1C)
FRANKENSTEIN 1Q (FKS 1Q)
DEPARTURES (RWYS 07C/R, 25L/C)

BY ATC

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



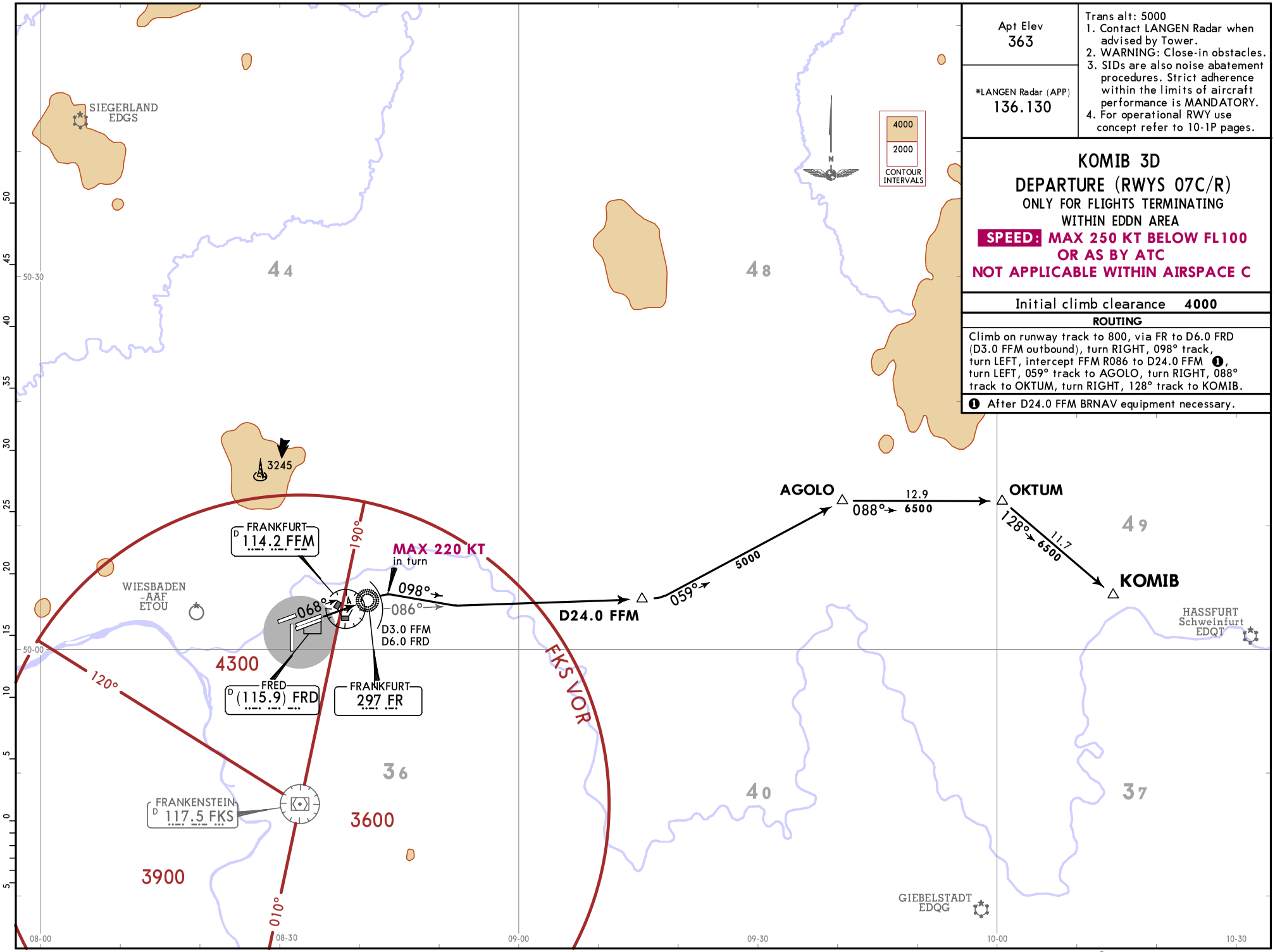
FKS 1C: Initial climb clearance **4000**
FKS 1Q: Initial climb clearance **5000**

SID	RWY	ROUTING
FKS 1C	07C/R	Climb on runway track to 800, via FR to D6.0 FRD (D3.0 FFM outbound), turn RIGHT, intercept MTR R190 to D15.0 FFM, turn RIGHT, intercept FKS R088 inbound to FKS.
FKS 1Q	25L/C	Climb on runway track to D4.5 FFM/D1.5 FRD or 800, whichever is later, turn LEFT, intercept FKS R354 inbound to FKS.

CHANGES: MSA, FKS SIDs established, MARUN SIDs transferred.

FRANKFURT/MAIN, GERMANY

SID



Apt Elev	Trans alt: 5000
363	1. Contact LANGEN Radar when advised by Tower. 2. WARNING: Close-in obstacles. 3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 4. For operational RWY use concept refer to 10-1P pages.
*LANGEN Radar (APP)	
136.130	

KOMIB 3D
DEPARTURE (RWYS 07C/R)

ONLY FOR FLIGHTS TERMINATING WITHIN EDDN AREA

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC

NOT APPLICABLE WITHIN AIRSPACE C

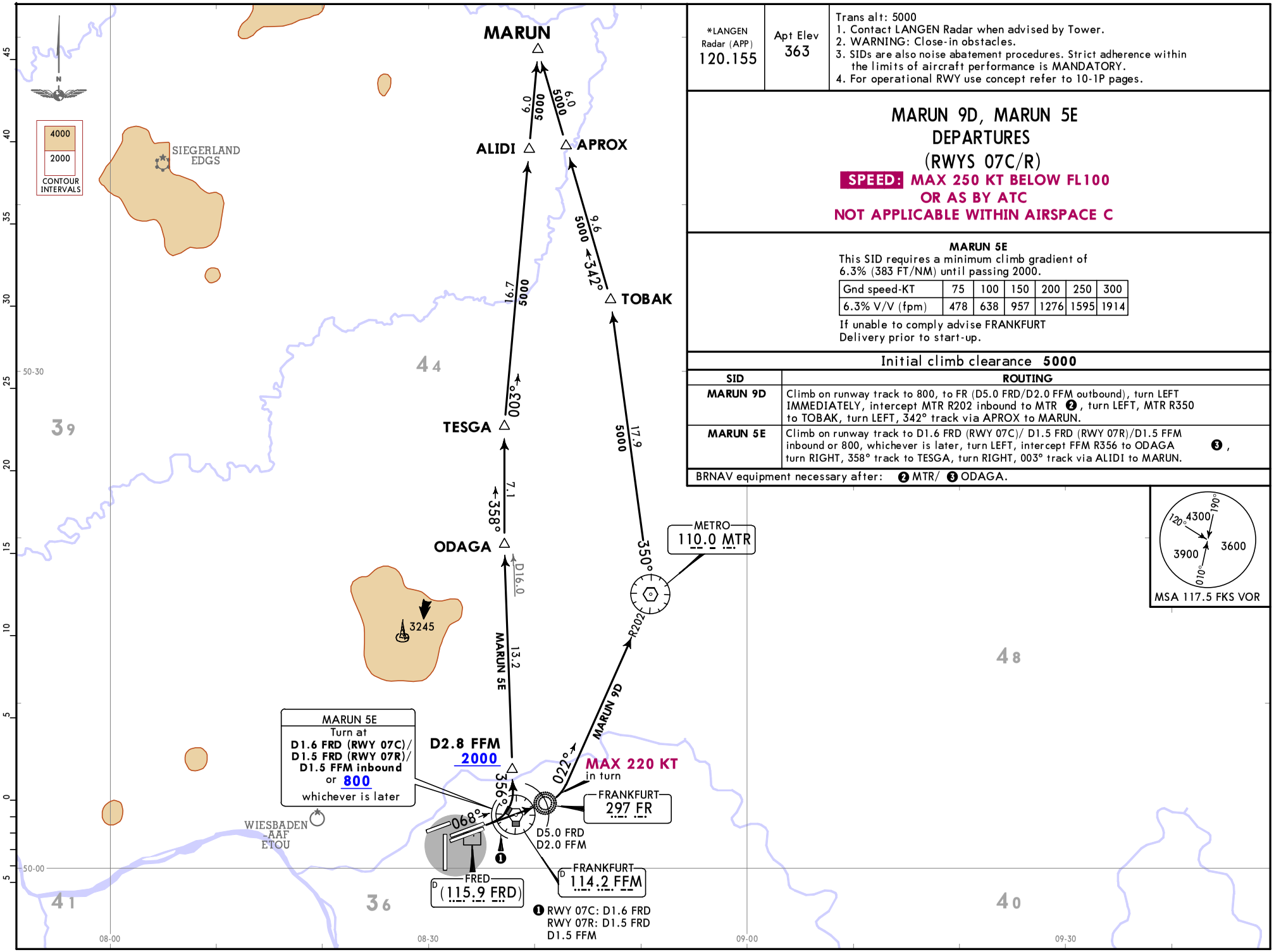
Initial climb clearance **4000**

ROUTING

Climb on runway track to 800, via FR to D6.0 FRD (D3.0 FFM outbound), turn RIGHT, 098° track, turn LEFT, intercept FFM R086 to D24.0 FFM ❶, turn LEFT, 059° track to AGOLO, turn RIGHT, 088° track to OKTUM, turn RIGHT, 128° track to KOMIB.

❶ After D24.0 FFM BRNAV equipment necessary.

CHANGES: General notes.



*LANGEN Radar (APP) 120.155	Apt Elev 363	Trans alt: 5000 1. Contact LANGEN Radar when advised by Tower. 2. WARNING: Close-in obstacles. 3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 4. For operational RWY use concept refer to 10-1P pages.

MARUN 9D, MARUN 5E DEPARTURES (RWYS 07C/R)

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

MARUN 5E
This SID requires a minimum climb gradient of 6.3% (383 FT/NM) until passing 2000.

Gnd speed-KT	75	100	150	200	250	300
6.3% V/V (fpm)	478	638	957	1276	1595	1914

If unable to comply advise FRANKFURT Delivery prior to start-up.

Initial climb clearance **5000**

SID	ROUTING
MARUN 9D	Climb on runway track to 800, to FR (D5.0 FRD/D2.0 FFM outbound), turn LEFT IMMEDIATELY, intercept MTR R202 inbound to MTR ❷, turn LEFT, MTR R350 to TOBAK, turn LEFT, 342° track via APROX to MARUN.
MARUN 5E	Climb on runway track to D1.6 FRD (RWY 07C)/ D1.5 FRD (RWY 07R)/D1.5 FFM inbound or 800, whichever is later, turn LEFT, intercept FFM R356 to ODAGA ❸, turn RIGHT, 358° track to TESGA, turn RIGHT, 003° track via ALIDI to MARUN.

BRNAV equipment necessary after: ❷ MTR/ ❸ ODAGA.

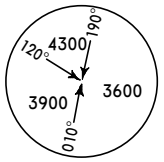
❶ RWY 07C: D1.6 FRD
RWY 07R: D1.5 FRD
D1.5 FFM

CHANGES: General notes.

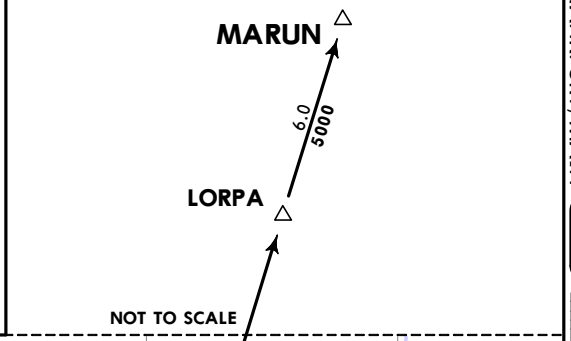
*LANGEN Radar	Apt Elev	Trans alt: 5000
120.155	363	1. Contact LANGEN Radar when advised by Tower. 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 3. For operational RWY use concept refer to 10-1P pages.

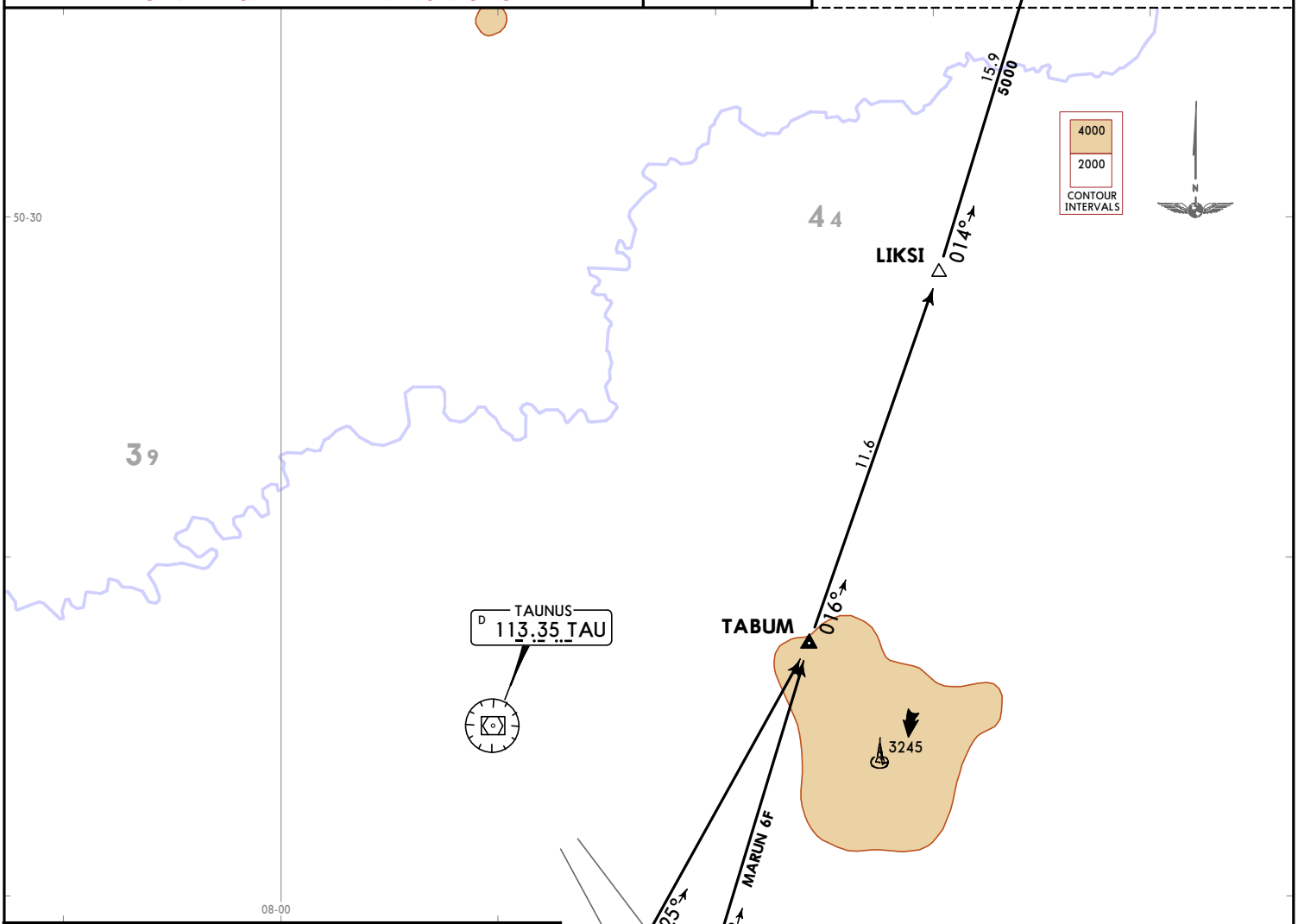
MARUN 6F
MARUN 1G
DEPARTURES
(RWYS 25L/C)

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



MSA 117.5 FKS VOR





MARUN 6F
This SID requires a minimum climb gradient of 12.0% (729 FT/NM) until D8.4 FFM (4.5 NM after DER) due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
12.0% V/V (fpm)	911	1215	1823	2430	3038	3646

If unable to comply advise FRANKFURT Delivery prior to start-up

Initial climb clearance 5000

SID	ROUTING
MARUN 6F	Climb on runway track to D5.0 FFM/D2.0 FRD or 800, whichever is later, turn RIGHT, 272° track (RWY 25L: 277° track) to D8.4 FFM, turn RIGHT, intercept TAU R141 inbound to D11.4 TAU ❶, turn RIGHT, 015° track to TABUM, turn RIGHT, 016° track to LIKSI, turn LEFT, 014° track via LORPA to MARUN.
MARUN 1G	Climb on runway track to D5.0 FFM/D2.0 FRD or 800, whichever is later, turn RIGHT, 272° track (RWY 25L: 277° track), intercept FFM R256 to D9.7 FFM or 3500, whichever is later, turn RIGHT, intercept TAU R148 inbound to D9.6 TAU ❷, turn RIGHT, 025° track to TABUM, turn LEFT, 016° track to LIKSI, turn LEFT, 014° track via LORPA to MARUN.

RNAV 5 equipment necessary after: ❶ D11.4 TAU/ ❷ D9.6 TAU.

MARUN 6F, MARUN 1G
DEPARTURES
(RWYS 25L/C)

FRANKFURT/MAIN, GERMANY
SID

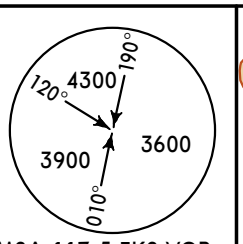
CHANGES: MSA, chart reindexed.

*LANGEN Radar 120.155	Apt Elev 363	Trans alt: 5000 1. Contact LANGEN Radar when advised by Tower. 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 3. For operational RWY use concept refer to 10-1P pages.

MARUN 5H

DEPARTURE (RWY 25L)

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



MSA 117.5 FKS VOR

This SID requires minimum climb gradients of
8.5% (520 FT/NM) until passing 800, then
6.8% (415 FT/NM) until passing 6000 due to operational requirements.

Gnd speed-KT	75	100	150	200	250	300
6.8% V/V (fpm)	516	689	1033	1377	1722	2066
8.5% V/V (fpm)	646	861	1291	1722	2152	2582

If unable to comply advise FRANKFURT Delivery prior to start-up.

Initial climb clearance **FL070**

ROUTING

On runway track to D5.2 FFM/D2.2 FRD, turn LEFT direct to VFM, VFM R194 to D10.1 FFM/D7.2 FRD ❸, turn RIGHT to ROXAP, to ADEVO, to LISKU, to TABUM, to LIKSI, to LORPA, to MARUN.

❸ After D10.1 FFM/D7.2 FRD RNAV 5 equipment necessary.

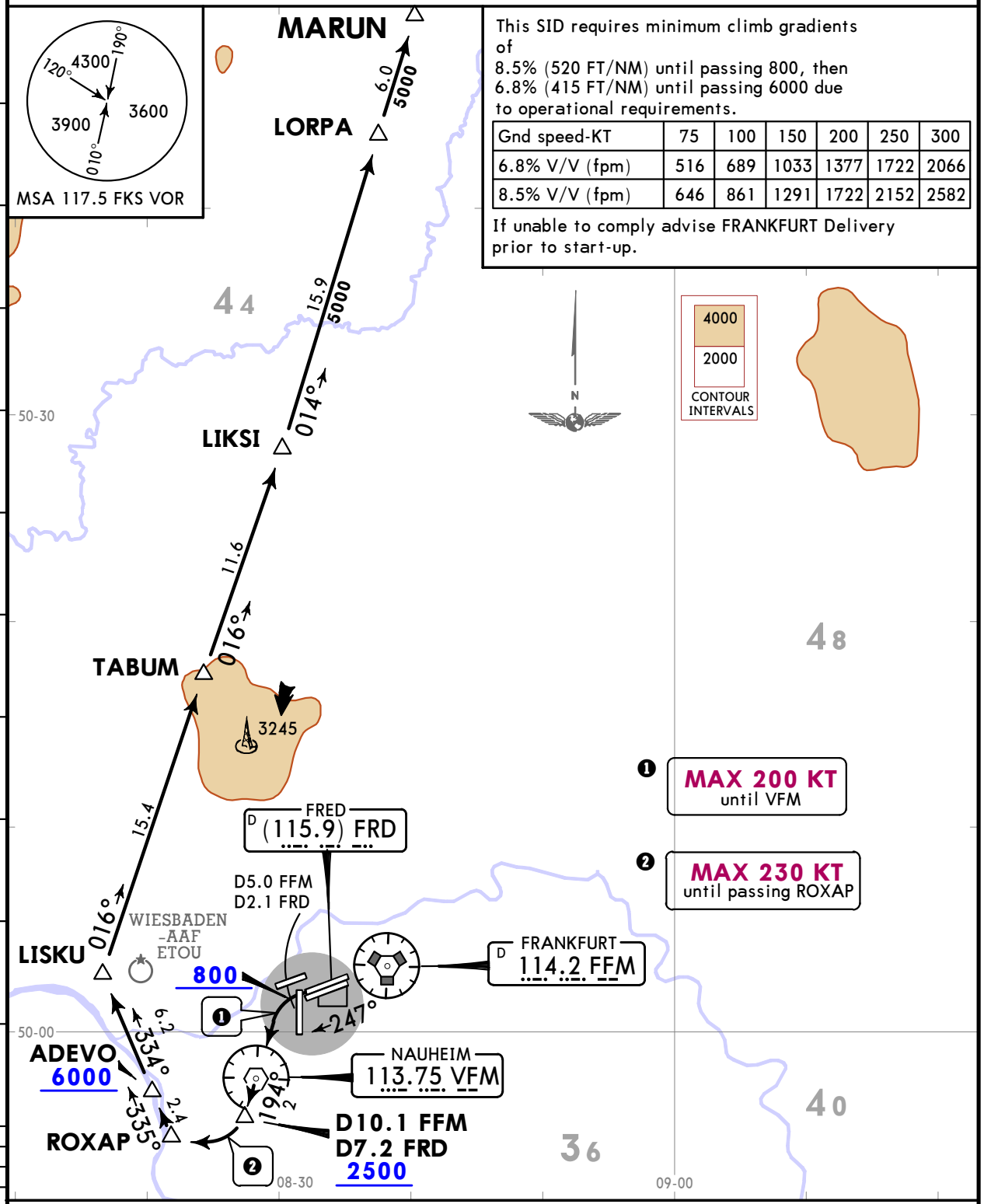
CHANGES: MSA, chart reindexed.

*LANGEN Radar 120.155	Apt Elev 363	Trans alt: 5000 1. Contact LANGEN Radar when advised by Tower. 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 3. For operational RWY use concept refer to 10-1P pages.

MARUN 7M

DEPARTURE (RWY 25C)

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



This SID requires minimum climb gradients of
8.5% (520 FT/NM) until passing 800, then
6.8% (415 FT/NM) until passing 6000 due to operational requirements.

Gnd speed-KT	75	100	150	200	250	300
6.8% V/V (fpm)	516	689	1033	1377	1722	2066
8.5% V/V (fpm)	646	861	1291	1722	2152	2582

If unable to comply advise FRANKFURT Delivery prior to start-up.

❶ **MAX 200 KT** until VFM

❷ **MAX 230 KT** until passing ROXAP

Initial climb clearance **FL070**

ROUTING

On runway track to D5.0 FFM/D2.1 FRD, turn LEFT direct to VFM, VFM R194 to D10.1 FFM/D7.2 FRD ❸, turn RIGHT to ROXAP, to ADEVO, to LISKU, to TABUM, to LIKSI, to LORPA, to MARUN.

❸ After D10.1 FFM/D7.2 FRD RNAV 5 equipment necessary.

CHANGES: MSA, chart reindexed.

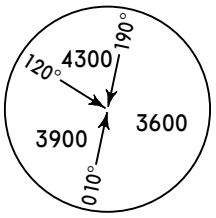
*LANGEN Radar 120.155	Apt Elev 363	Trans alt: 5000 1. Contact LANGEN Radar when advised by Tower. 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 3. WARNING: Close-in obstacles. 4. For operational RWY use concept refer to 10-1P pages.

METRO 6C (MTR 6C) DEPARTURE (RWYS 07C/R)

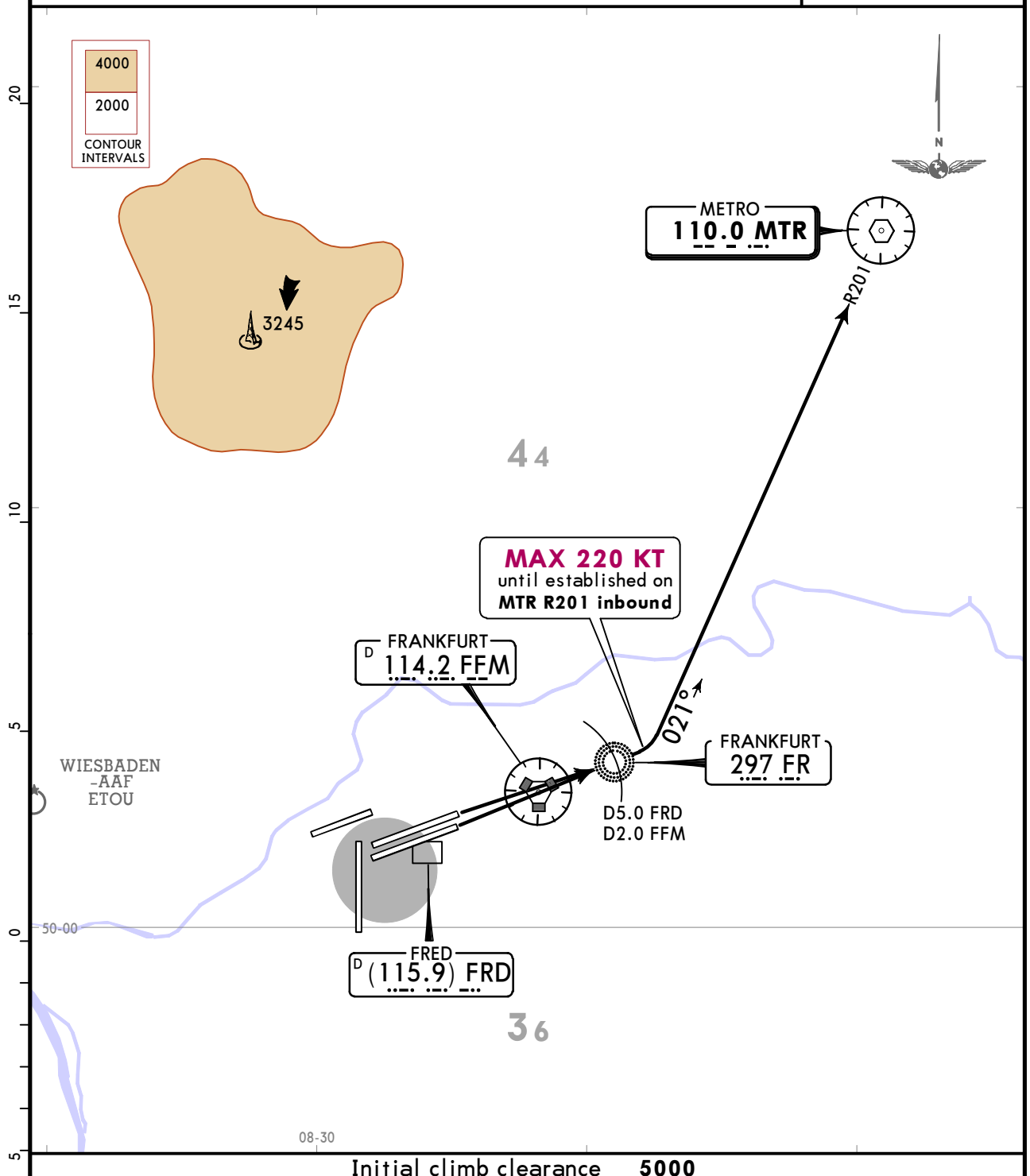
BY ATC

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC

NOT APPLICABLE WITHIN AIRSPACE C



MSA 117.5 FKS VOR



Initial climb clearance **5000**

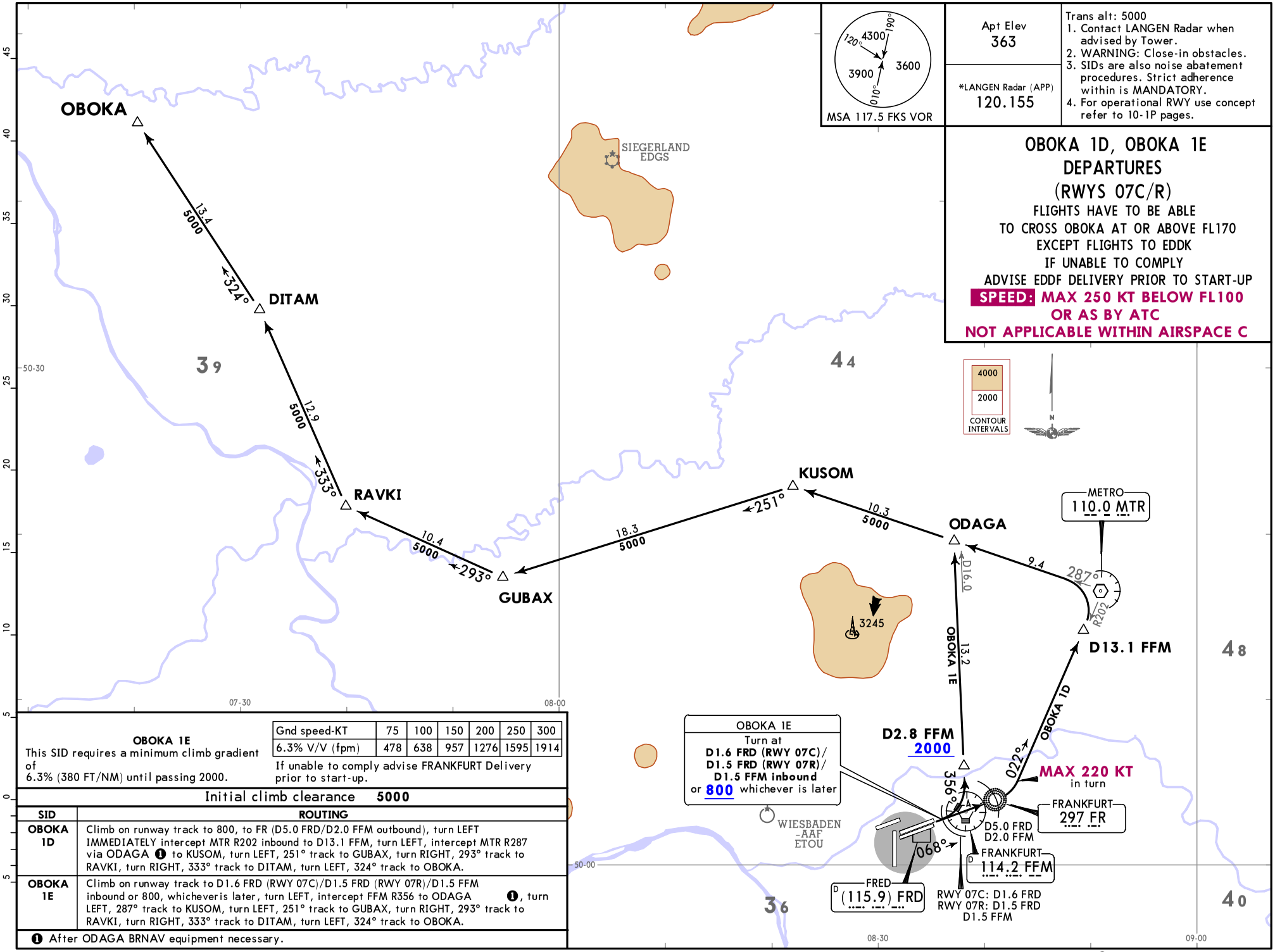
ROUTING

Climb on runway track to 800, direct to FR (D5.0 FRD/D2.0 FFM outbound), turn LEFT IMMEDIATELY, intercept MTR R201 inbound to MTR.

CHANGES: MSA, chart reindexed, SID renumbered & revised.

FRANKFURT/MAIN, GERMANY

SID



OBOKA 1E
This SID requires a minimum climb gradient of 6.3% (380 FT/NM) until passing 2000.

Gnd speed-KT	75	100	150	200	250	300
6.3% V/V (fpm)	478	638	957	1276	1595	1914

If unable to comply advise FRANKFURT Delivery prior to start-up.

Initial climb clearance **5000**

SID	ROUTING
OBOKA 1D	Climb on runway track to 800, to FR (D5.0 FRD/D2.0 FFM outbound), turn LEFT IMMEDIATELY intercept MTR R202 inbound to D13.1 FFM, turn LEFT, intercept MTR R287 via ODAGA ❶ to KUSOM, turn LEFT, 251° track to GUBAX, turn RIGHT, 293° track to RAVKI, turn RIGHT, 333° track to DITAM, turn LEFT, 324° track to OBOKA.
OBOKA 1E	Climb on runway track to D1.6 FRD (RWY 07C)/D1.5 FRD (RWY 07R)/D1.5 FFM inbound or 800, whicheveris later, turn LEFT, intercept FFM R356 to ODAGA ❶, turn LEFT, 287° track to KUSOM, turn LEFT, 251° track to GUBAX, turn RIGHT, 293° track to RAVKI, turn RIGHT, 333° track to DITAM, turn LEFT, 324° track to OBOKA.

❶ After ODAGA BRNAV equipment necessary.

CHANGES: General notes.

*LANGEN Radar (APP) 120.155	Apt Elev 363	Trans alt: 5000 1. Contact LANGEN Radar when advised by Tower. 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 3. For operational RWY use concept refer to 10-1P pages.

OBOKA 3G
DEPARTURE (RWYS 25L/C)

FLIGHTS HAVE TO BE ABLE
TO CROSS OBOKA AT OR ABOVE FL170 EXCEPT FLIGHTS TO EDDK
IF UNABLE TO COMPLY
ADVISE EDDF DELIVERY PRIOR TO START-UP

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

This SID requires a minimum climb gradient of 5.8% (350 FT/NM) until passing 3600, due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
5.8% V/V (fpm)	441	587	881	1175	1468	1762

If unable to comply advise FRANKFURT Delivery prior to start-up.

Initial climb clearance **5000**

ROUTING

Climb on runway track to D5.0 FFM/D2.0 FRD or 800, whichever is later, turn RIGHT, 272° track (RWY 25L: 277° track), intercept FFM R256 to D13.7 FFM ❶, turn RIGHT, 291° track to ESUPI, turn RIGHT, 305° track to MASIR, turn RIGHT, 333° track via RAVKI to DITAM, turn LEFT, 324° track to OBOKA.

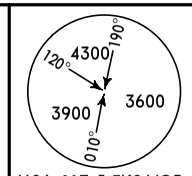
❶ After D13.7 FFM RNAV 5 equipment necessary.

OBOKA
13.4
5000
324°
DITAM
12.9
5000
RAVKI
7.0
5000
333°
MASIR
18.9
4000
305°
ESUPI
6.9
291°
D13.7 FFM
3600
At D5.0 FFM/ D2.0 FRD or 800 whichever is later
D5.0 FFM
D2.0 FRD
246°
256°
272°
FRANKFURT
D 114.2 FFM
FRED
D (115.9) FRD
MSA 117.5 FKS VOR
4300
3900
3600
120°
190°
010°
3245
SIEGERLAND EDGS
WIESBADEN -AAF ETOU
FRANKFURT-HAHN EDFH
4000
2000
CONTOUR INTERVALS
50-30
50-00
07-30
08-00
08-30
09-00

CHANGES: None.

FRANKFURT/MAIN, GERMANY

SID



MSA 117.5 FKS VOR

*LANGEN Radar
120.155

Apt Elev
363

Trans alt: 5000
1. Contact LANGEN Radar when advised by Tower.
2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.
3. For operational RWY use concept refer to 10-1P pages.

OBOKA 2H
DEPARTURE (RWY 25L)

FLIGHTS HAVE TO BE ABLE TO CROSS OBOKA AT OR ABOVE FL170 EXCEPT FLIGHTS TO EDDK IF UNABLE TO COMPLY

ADVISE EDDF DELIVERY PRIOR TO START-UP

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC

NOT APPLICABLE WITHIN AIRSPACE C

OBOKA
13.4
5000
324°
DITAM
12.9
5000
RAVKI
7.0
5000
333°
MASIR
24.9
4000
317°
KUPIP
5.1
304°
SIVDO
4.2
272°
PABVI
D10.1 FFM
D7.2 FRD
2500

SIEGERLAND EDGS

BUCHEL ETSB

3245

4000
2000
CONTOUR INTERVALS

WIESBADEN -AAF ETOU

800

MAX 200 KT
until VFM

247°

D5.2 FFM
D2.2 FRD

MAX 230 KT
until passing PABVI

194°

FRANKFURT
114.2 FFM

FRED
(115.9) FRD

NAUHEIM
113.75 VFM

Gnd speed-KT	75	100	150	200	250	300
4.5% V/V (fpm)	342	456	684	911	1139	1367
8.5% V/V (fpm)	646	861	1291	1722	2152	2582

This SID requires minimum climb gradients of
8.5% (520 FT/NM) until passing 800, then
4.5% (273 FT/NM) until passing 2500 due to airspace structure.

If unable to comply advise FRANKFURT Delivery prior to start-up.

Initial climb clearance **FL070**

ROUTING

On runway track to D5.2 FFM/D2.2 FRD, turn LEFT direct to VFM, VFM R194 to D10.1 FFM/D7.2 FRD turn RIGHT to PABVI, to SIVDO, to KUPIP, to MASIR, to RAVKI, to DITAM, to OBOKA. ❶,

❶ After D10.1 FFM/D7.2 FRD RNAV 5 equipment necessary.

CHANGES: MSA, chart reindexed.

*LANGEN Radar	Apt Elev	Trans alt: 5000
120.155	363	1. Contact LANGEN Radar when advised by Tower. 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 3. For operational RWY use concept refer to 10-1P pages.

OBOKA 2M
DEPARTURE (RWY 25C)

FLIGHTS HAVE TO BE ABLE
TO CROSS OBOKA AT OR ABOVE FL170 EXCEPT FLIGHTS TO EDDK
IF UNABLE TO COMPLY
ADVISE EDDF DELIVERY PRIOR TO START-UP

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

This SID requires minimum climb gradients of
8.5% (520 FT/NM) until passing 800, then
4.5% (273 FT/NM) until passing 2500 due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
4.5% V/V (fpm)	342	456	684	911	1139	1367
8.5% V/V (fpm)	646	861	1291	1722	2152	2582

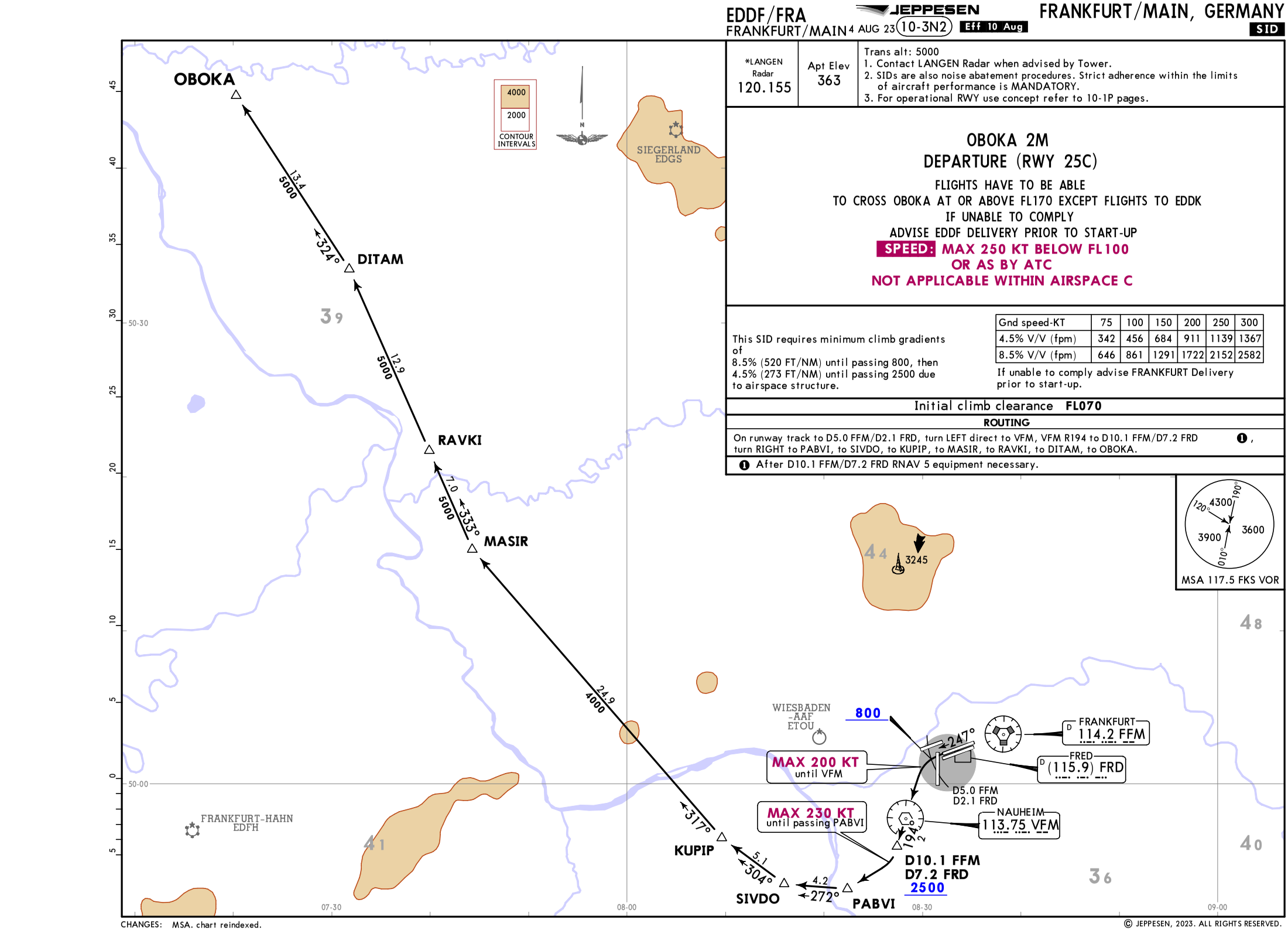
If unable to comply advise FRANKFURT Delivery prior to start-up.

Initial climb clearance **FL070**

ROUTING

On runway track to D5.0 FFM/D2.1 FRD, turn LEFT direct to VFM, VFM R194 to D10.1 FFM/D7.2 FRD ❶, turn RIGHT to PABVI, to SIVDO, to KUPIP, to MASIR, to RAVKI, to DITAM, to OBOKA.

❶ After D10.1 FFM/D7.2 FRD RNAV 5 equipment necessary.



CHANGES: MSA. chart reindexed.

*LANGEN Radar (APP) 136.130	Apt Elev 363	Trans alt: 5000 1. Contact LANGEN Radar when advised by Tower. 2. WARNING: Close-in obstacles. 3. SIDs are also noise abatement procedures . Strict adherence within the limits of aircraft performance is MANDATORY. 4. For operational RWY use concept refer to 10-1P pages.

SULUS 1D
DEPARTURE (RWYS 07C/R)

NOT FOR FLIGHTS DESTINATION EDDN

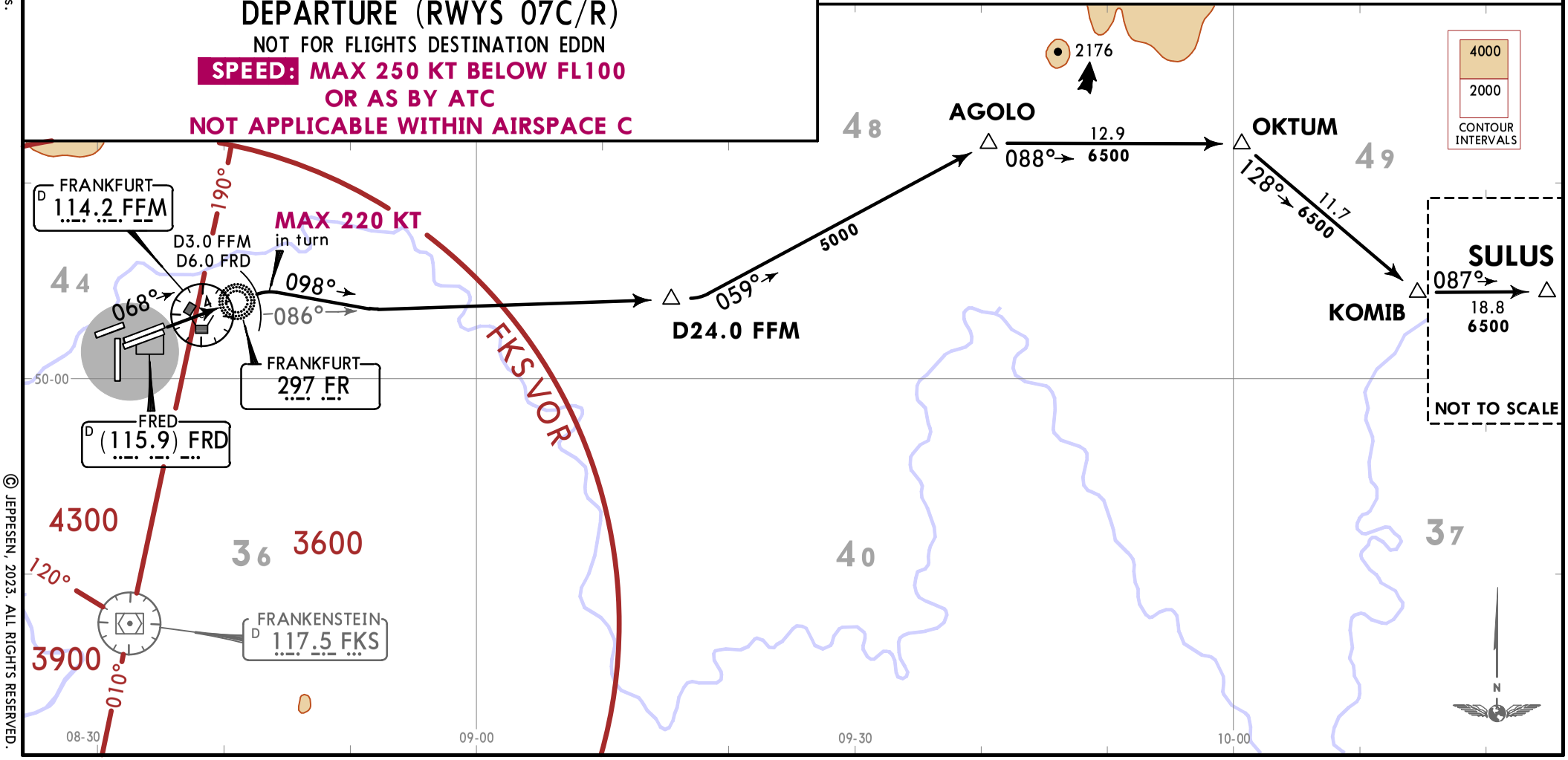
SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

Initial climb clearance **4000**

ROUTING

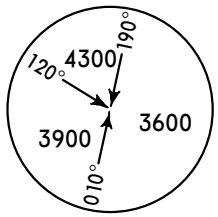
Climb on runway track to 800, via FR to D6.0 FRD (D3.0 FFM outbound), turn RIGHT, 098° track, turn LEFT, intercept FFM R086 to D24.0 FFM ❶, turn LEFT, 059° track to AGOLO, turn RIGHT, 088° track to OKTUM, turn RIGHT, 128° track to KOMIB, turn LEFT, 087° track to SULUS.

❶ After D24.0 FFM BRNAV equipment necessary.



JEPPESEN FRANKFURT/MAIN, GERMANY
27 OCT 23
(10-3N3)
Eff 2 Nov
SID

*LANGEN Radar (APP) 120.155	Apt Elev 363	Trans alt: 5000 1. Contact LANGEN Radar when advised by Tower. 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 3. For operational RWY use concept refer to 10-1P pages.



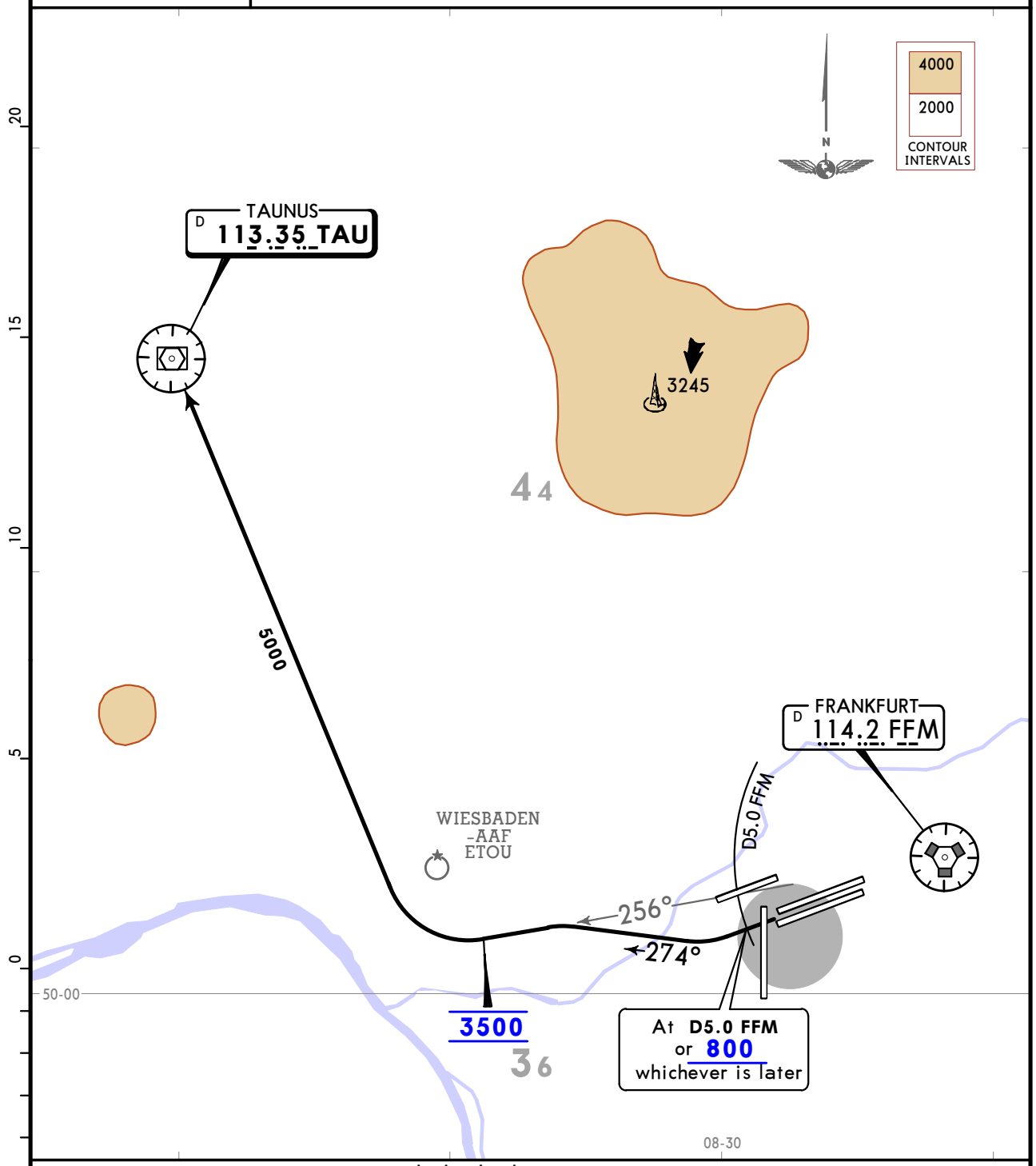
MSA 117.5 FKS VOR

TAUNUS 3Q (TAU 3Q) DEPARTURE (RWYS 25L/C)

BY ATC

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC

NOT APPLICABLE WITHIN AIRSPACE C



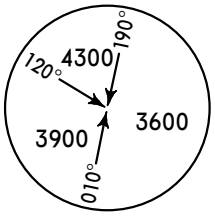
Initial climb clearance **5000**

ROUTING

Climb on runway track to D5.0 FFM or 800, whichever is later, turn RIGHT, 274° track (RWY 25L: 281° track), intercept FFM R256, at 3500 turn RIGHT to TAU, but not before reaching FFM R258.

CHANGES: None.

*LANGEN Radar (APP) 120.155	Apt Elev 363	Trans alt: 5000 1. Contact LANGEN Radar when advised by Tower. 2. WARNING: Close-in obstacles 3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 4. For operational RWY use concept refer to 10-1P pages.



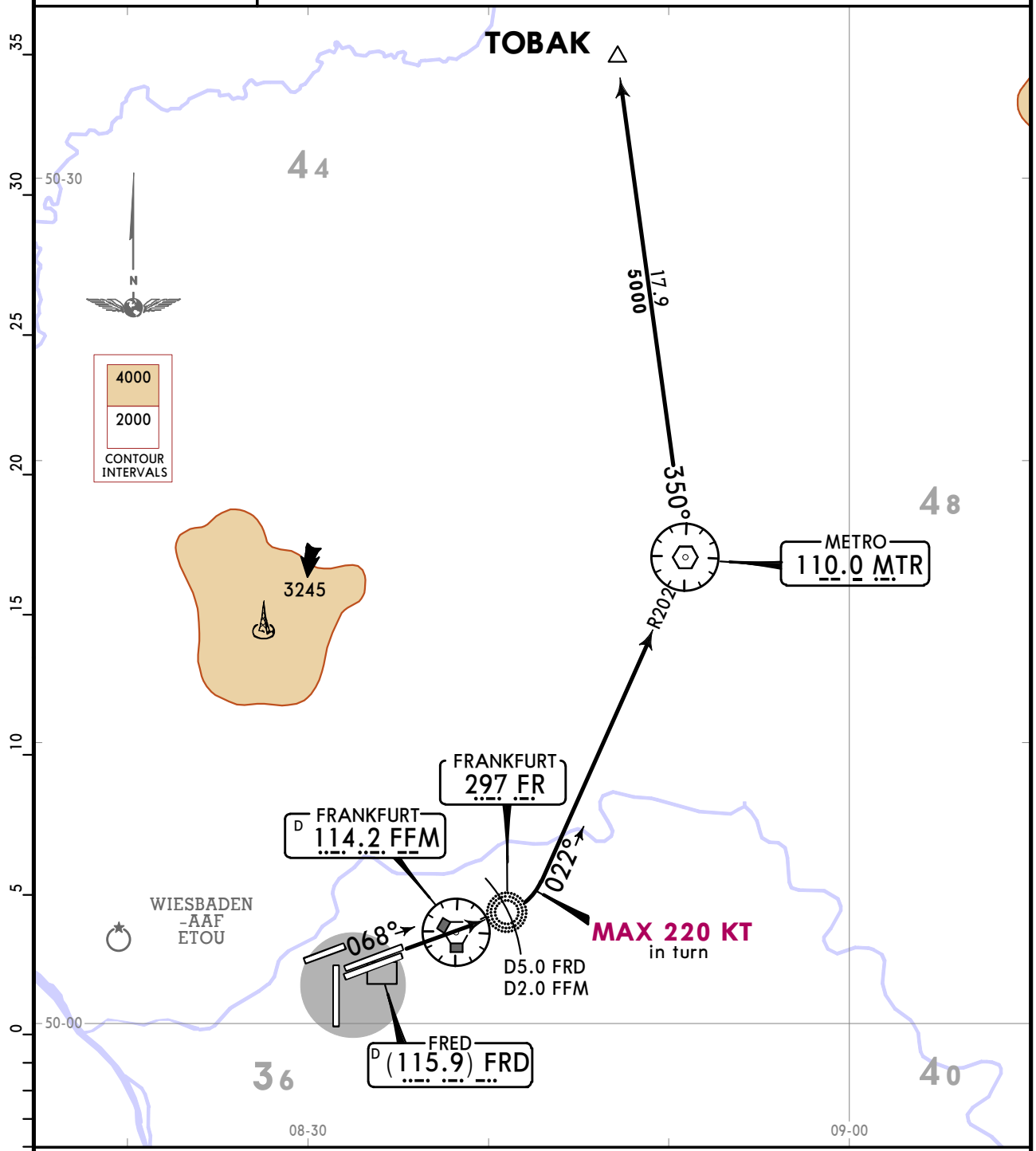
MSA 117.5 FKS VOR

TOBAK 9D
DEPARTURE (RWYS 07C/R)

NOT FOR FLIGHTS CONTINUING VIA AIRWAY Z-10

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC

NOT APPLICABLE WITHIN AIRSPACE C



Initial climb clearance **5000**

ROUTING

Climb on runway track to 800, to FR (D5.0 FRD/D2.0 FFM outbound), turn LEFT IMMEDIATELY intercept MTR R202 inbound to MTR ❶ , turn LEFT, MTR R350 to TOBAK.

❶ After MTR BRNAV equipment necessary.

CHANGES: General notes.

TOBAK 7F, TOBAK 2G DEPARTURES (RWYS 25L/C)

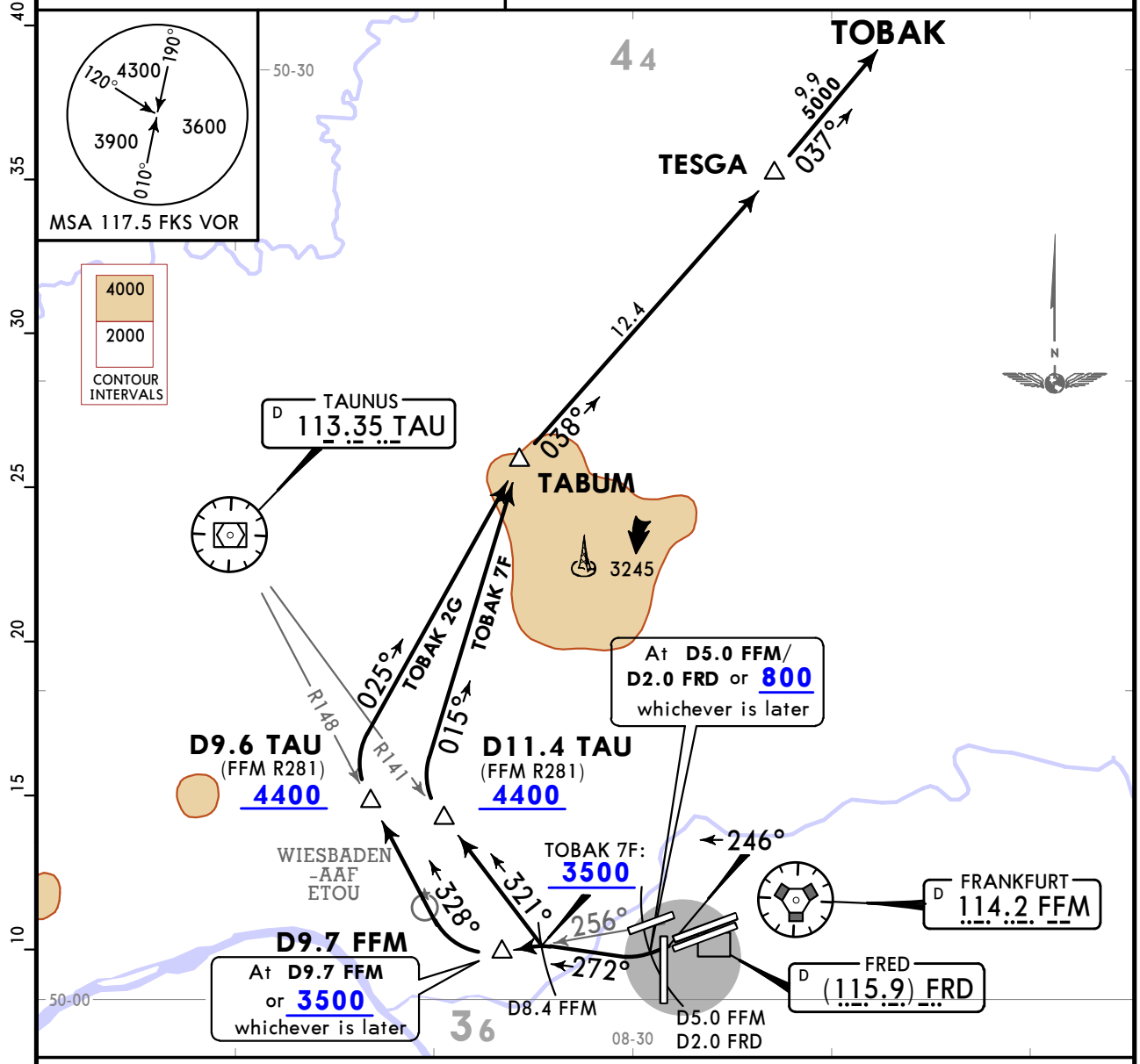
NOT FOR FLIGHTS CONTINUING VIA AIRWAY Z-10

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC

NOT APPLICABLE WITHIN AIRSPACE C

*LANGEN Radar (APP)	Apt Elev
120.155	363

Trans alt: 5000
1. Contact LANGEN Radar when advised by Tower.
2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.
3. For operational RWY use concept refer to 10-1P pages.



TOBAK 7F
This SID requires a minimum climb gradient of 12.0% (729 FT/NM) until D8.4 FFM (4.5 NM after DER) due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
12.0% V/V (fpm)	911	1215	1823	2430	3038	3646

If unable to comply advise FRANKFURT Delivery prior to start-up

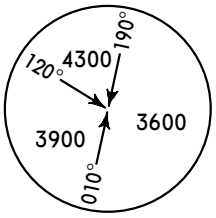
Initial climb clearance **5000**

SID	ROUTING
TOBAK 7F	Climb on runway track to D5.0 FFM/D2.0 FRD or 800, whichever is later, turn RIGHT, 272° track (RWY 25L: 277° track) to D8.4 FFM, turn RIGHT, intercept TAU R141 inbound to D11.4 TAU ❶, turn RIGHT, 015° track to TABUM, turn RIGHT, 038° track to TESGA, turn LEFT, 037° track to TOBAK.
TOBAK 2G	Climb on runway track to D5.0 FFM/D2.0 FRD or 800, whichever is later, turn RIGHT, 272° track (RWY 25L: 277° track), intercept FFM R256 to D9.7 FFM or 3500, whichever is later, turn RIGHT, intercept TAU R148 inbound to D9.6 TAU ❷, turn RIGHT, 025° track to TABUM, turn RIGHT, 038° track to TESGA, turn LEFT, 037° track to TOBAK.

RNAV 5 equipment necessary after: ❶ D11.4 TAU/ ❷ D9.6 TAU.

CHANGES: None.

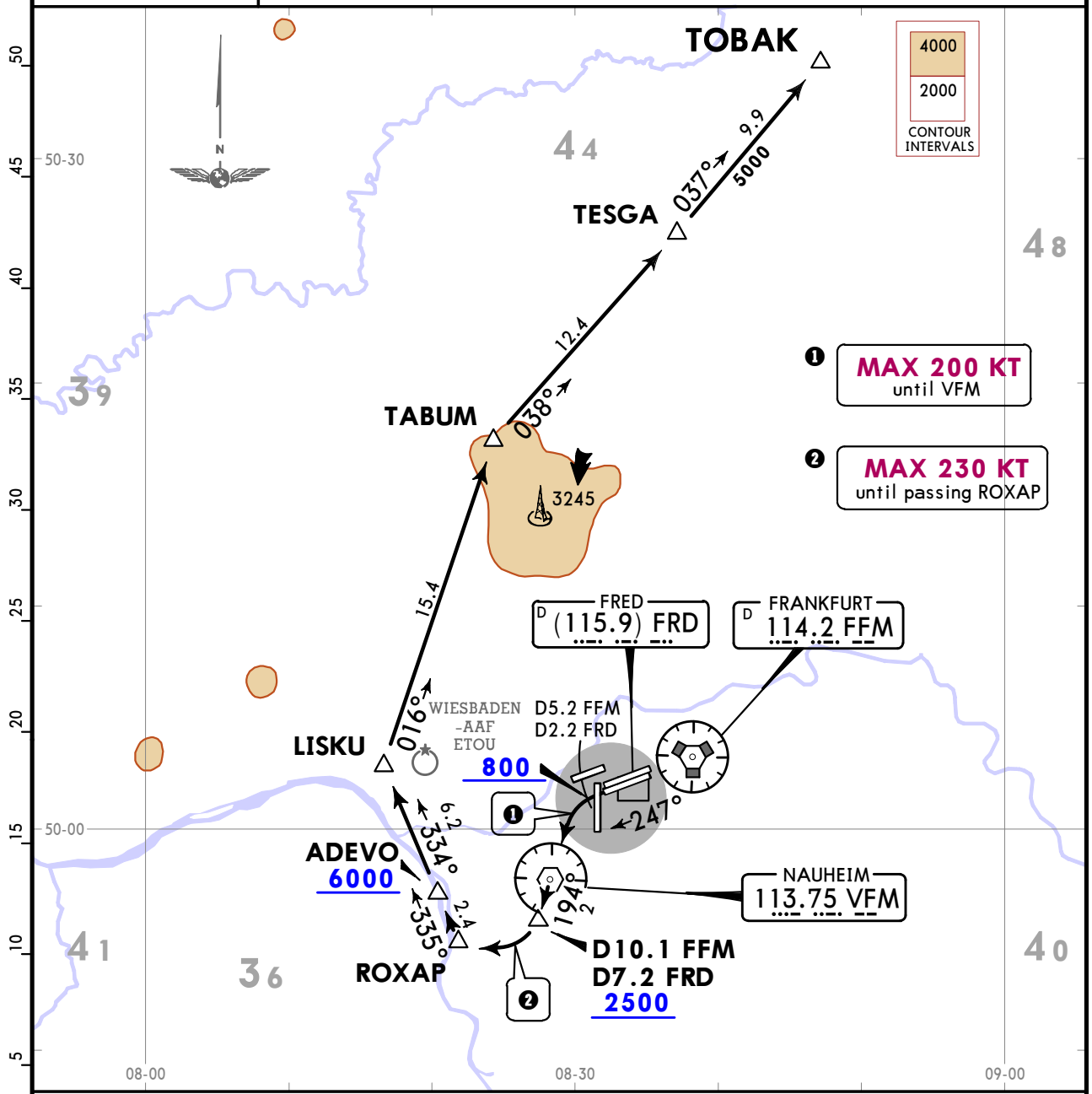
*LANGEN Radar 120.155	Apt Elev 363	Trans alt: 5000 1. Contact LANGEN Radar when advised by Tower. 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 3. For operational RWY use concept refer to 10-1P pages.



MSA 117.5 FKS VOR

TOBAK 5H
DEPARTURE (RWY 25L)

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



This SID requires minimum climb gradients of
520 per NM (8.5%) until passing 800, then
415 per NM (6.8%) until passing 6000 due to operational requirements.

Gnd speed-KT	75	100	150	200	250	300
415 per NM	519	692	1038	1383	1729	2075
520 per NM	650	867	1300	1733	2167	2600

If unable to comply advise FRANKFURT Delivery prior to start-up.

Initial climb clearance **FL070**

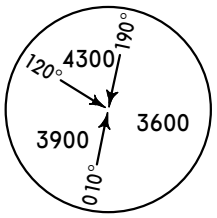
ROUTING

On runway track to D5.2 FFM/D2.2 FRD, turn LEFT direct to VFM, VFM R194 to D10.1 FFM/D7.2 FRD ❸, turn RIGHT to ROXAP, to ADEVO, to LISKU, to TABUM, to TESGA, to TOBAK.

❸ After D10.1 FFM/D7.2 FRD RNAV 5 equipment necessary.

CHANGES: MSA.

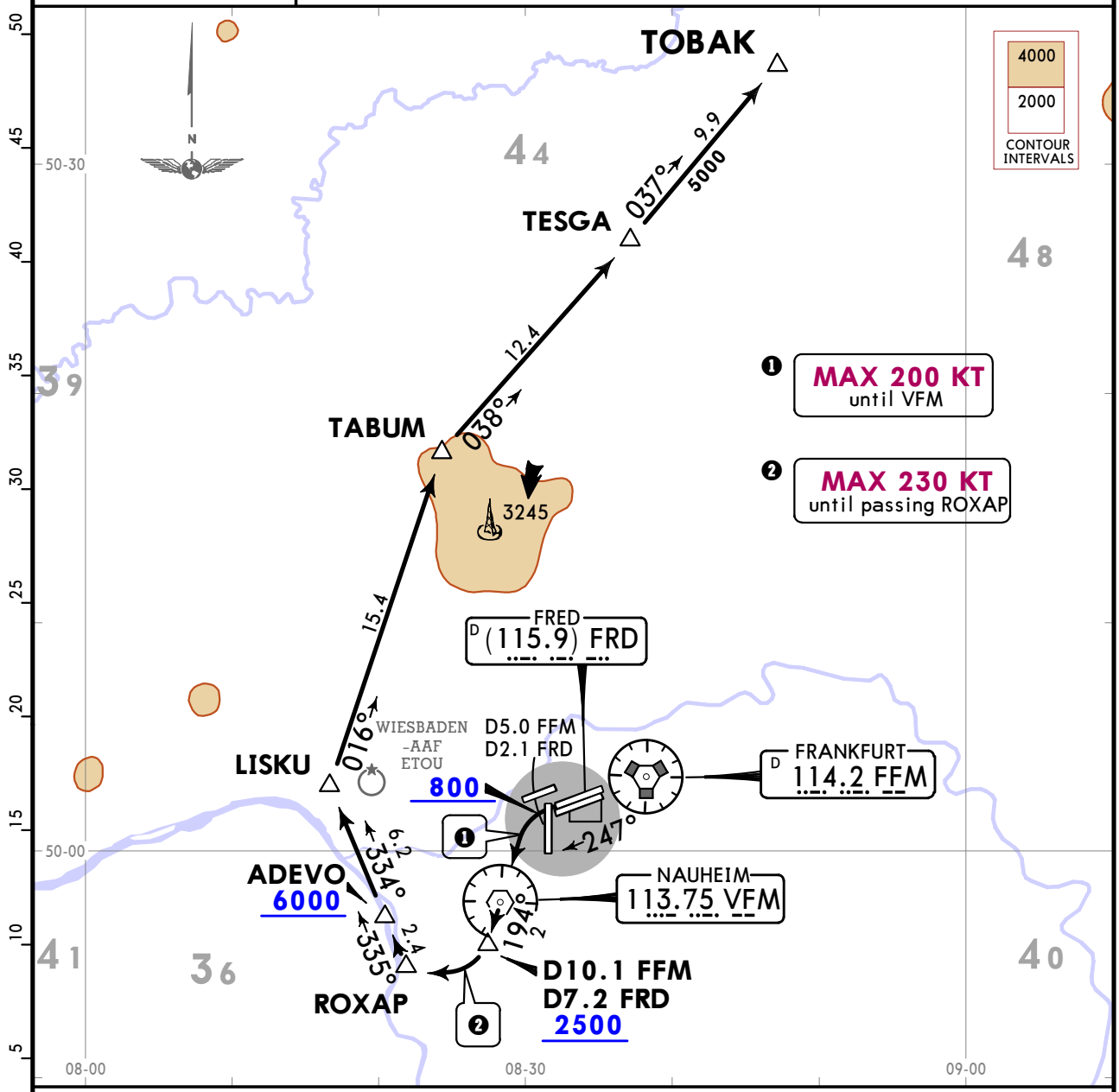
*LANGEN Radar 120.155	Apt Elev 363	Trans alt: 5000 1. Contact LANGEN Radar when advised by Tower. 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 3. For operational RWY use concept refer to 10-1P pages.



MSA 117.5 FKS VOR

TOBAK 7M
DEPARTURE (RWY 25C)

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



This SID requires minimum climb gradients of
520 per NM (8.5%) until passing 800, then
415 per NM (6.8%) until passing 6000 due to operational requirements.

Gnd speed-KT	75	100	150	200	250	300
415 per NM	519	692	1038	1383	1729	2075
520 per NM	650	867	1300	1733	2167	2600

If unable to comply advise FRANKFURT Delivery prior to start-up.

Initial climb clearance **FL070**

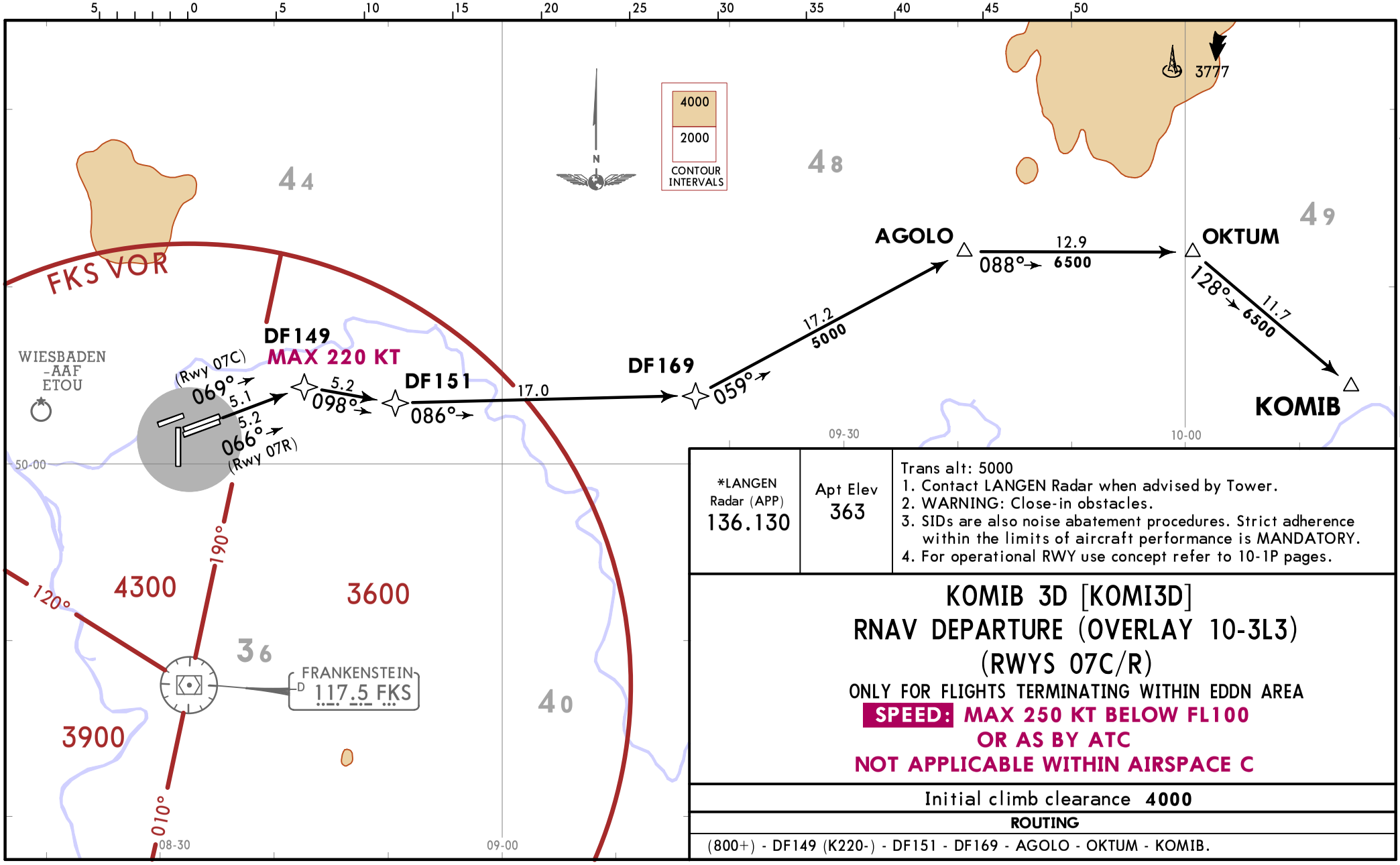
ROUTING

On runway track to D5.0 FFM/D2.1 FRD, turn LEFT direct to VFM, VFM R194 to D10.1 FFM/D7.2 FRD ❸, turn RIGHT to ROXAP, to ADEVO, to LISKU, to TABUM, to TESGA, to TOBAK.

❸ After D10.1 FFM/D7.2 FRD RNAV 5 equipment necessary.

CHANGES: MSA.

JEPPESEN FRANKFURT/MAIN, GERMANY
27 OCT 23 (10-3P) Eff 2 Nov
RNAV SID (OVERLAY)



*LANGEN Radar (APP) 136.130	Apt Elev 363	Trans alt: 5000 1. Contact LANGEN Radar when advised by Tower. 2. WARNING: Close-in obstacles. 3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 4. For operational RWY use concept refer to 10-1P pages.

KOMIB 3D [KOMI3D]
RNAV DEPARTURE (OVERLAY 10-3L3)
(RWYS 07C/R)

ONLY FOR FLIGHTS TERMINATING WITHIN EDDN AREA

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

Initial climb clearance **4000**

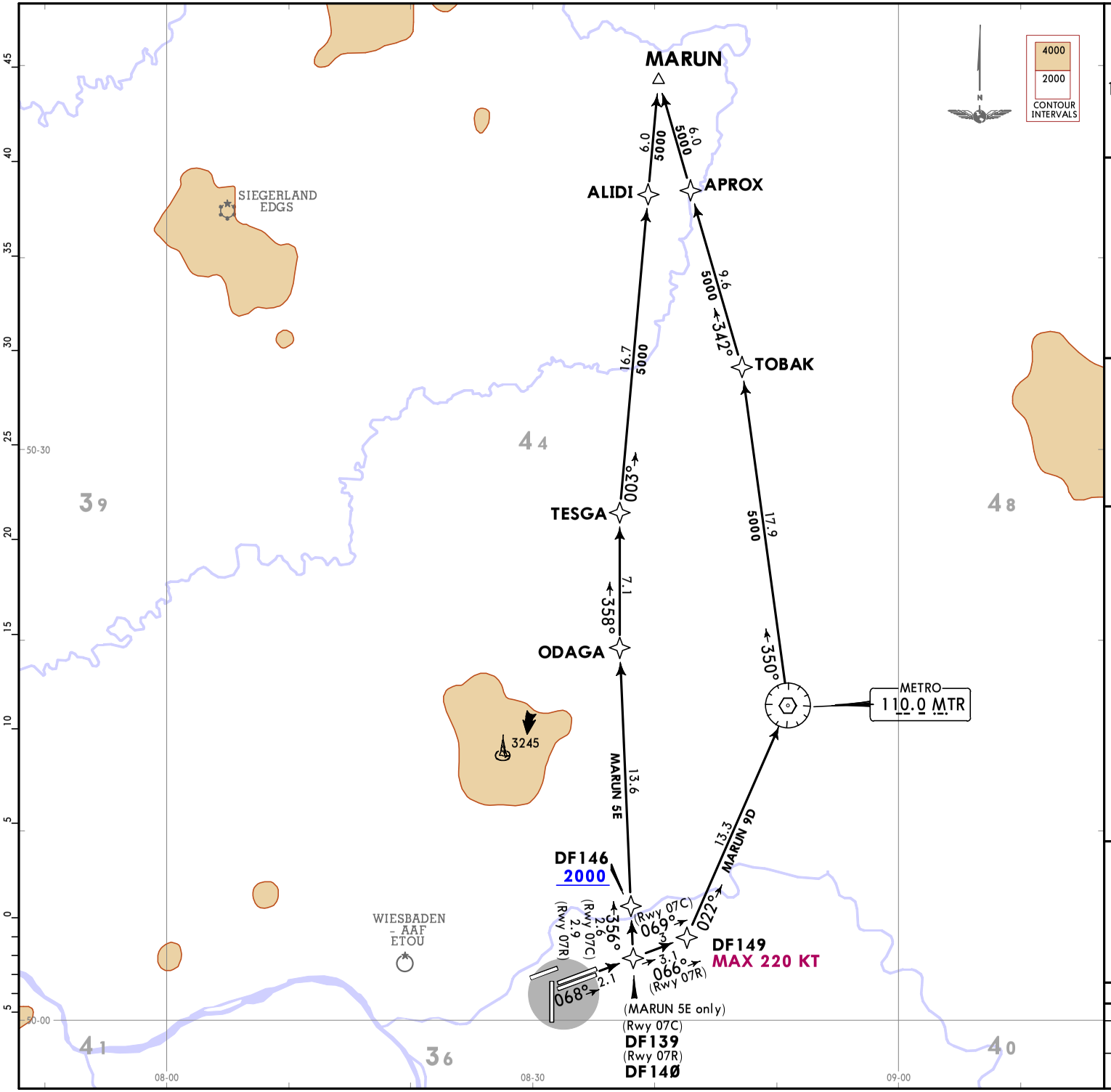
ROUTING

(800+) - DF149 (K220-) - DF151 - DF169 - AGOLO - OKTUM - KOMIB.

CHANGES: General notes.

FRANKFURT/MAIN, GERMANY

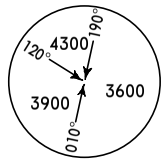
RNAV SID (OVERLAY)



*LANGEN Radar (APP) 120.155	Apt Elev 363	Trans alt: 5000 1. Contact LANGEN Radar when advised by Tower. 2. WARNING: Close-in obstacles. 3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 4. For operational RWY use concept refer to 10-1P pages.

MARUN 9D [MARU9D]
MARUN 5E [MARU5E]
RNAV DEPARTURES
(OVERLAY 10-3L4)
(RWYS 07C/R)

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



MSA 117.5 FKS VOR

MARUN 5E

This SID requires a minimum climb gradient of 6.3% (383 FT/NM) until passing 2000.

Gnd speed-KT	75	100	150	200	250	300
6.3% V/V (fpm)	478	638	957	1276	1595	1914

If unable to comply advise FRANKFURT Delivery prior to start-up.

Initial climb clearance **5000**

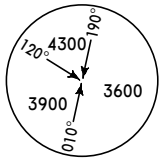
SID	ROUTING
MARUN 9D	(800+) - DF149 (K220-) - MTR - TOBAK - APROX - MARUN.
MARUN 5E	(800+) - DF139 (07C)/DF140 (07R) - DF146 (2000+) - ODAGA - TESGA - ALIDI - MARUN.

CHANGES: General notes.

*LANGEN Radar	Apt Elev	Trans alt: 5000
120.155	363	1. Contact LANGEN Radar when advised by Tower. 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 3. For operational RWY use concept refer to 10-1P pages.

MARUN 6F [MARU6F]
MARUN 1G [MARU1G]
RNAV DEPARTURES (OVERLAY 10-3L5)
(RWYS 25L/C)

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



MSA 117.5 FKS VOR

NOT TO SCALE

MARUN
LORPA
LIKSI
TABUM
DF238 4400
DF132 4400
DF233 3500
DF236
At DF236 or 3500 whichever is later
DF133 (MARUN 1G only)
DF234 (Rwy 25C)
DF235 (Rwy 25L)
WIESBADEN -AAF ETOU
3245
6.0 5000
15.9 5000
11.6
014°
016°
11.1
11.0
MARUN 6F
025°
015°
MARUN 1G
6.3
321°
328°
272°
256°
277°
248°
246°
MARUN 6F:
MARUN 1G:
1.0
2.2
2.4
2.7
1.1
0.7
50-30
50-00
08-00
08-30
4 4
3 9
3 6

4000
2000
CONTOUR INTERVALS

MARUN 6F
This SID requires a minimum climb gradient of
12.0% (729 FT/NM) until DF233 due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
12.0% V/V (fpm)	911	1215	1823	2430	3038	3646

If unable to comply advise FRANKFURT Delivery prior to start-up.

Initial climb clearance **5000**

SID	ROUTING
MARUN 6F	(800+) - DF234 (25C)/DF235 (25L) - DF233 (3500+) - DF132 (4400+) - TABUM - LIKSI - LORPA - MARUN.
MARUN 1G	(800+) - DF234 (25C)/DF235 (25L) - DF133 - DF236 - (3500+) - DF238 (4400+) - TABUM - LIKSI - LORPA - MARUN.

FRANKFURT/MAIN, GERMANY
RNAV SID (OVERLAY)
MARUN 6F [MARU6F]
MARUN 1G [MARU1G]
RNAV DEPARTURES
(OVERLAY 10-3L5)
(RWYS 25L/C)

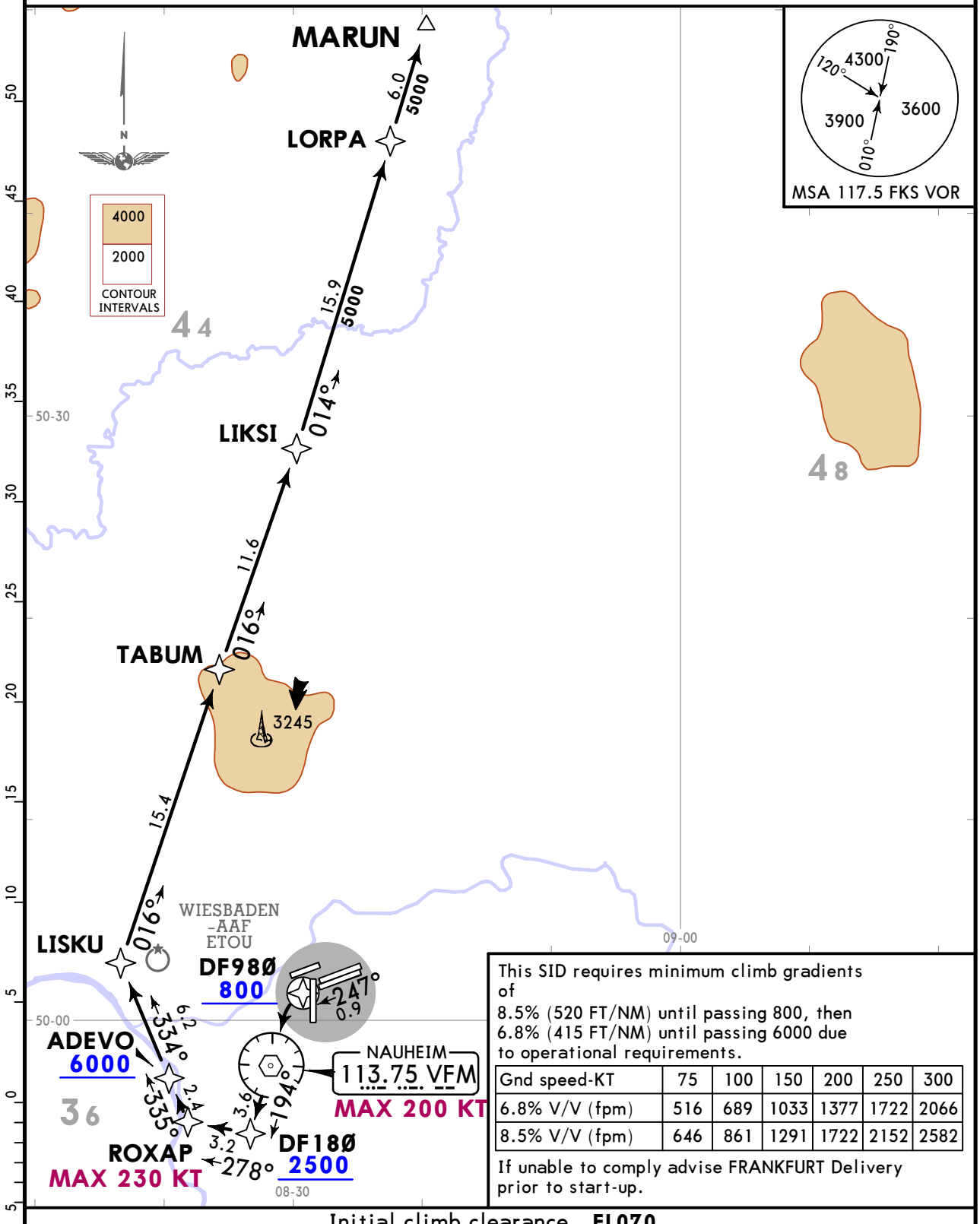
CHANGES: MSA, chart reindexed, reference note.

*LANGEN Radar 120.155	Apt Elev 363	Trans alt: 5000 1. Contact LANGEN Radar when advised by Tower. 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 3. For operational RWY use concept refer to 10-1P pages.

MARUN 5H [MARU5H]

RNAV DEPARTURE (OVERLAY 10-3L6) (RWY 25L)

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



This SID requires minimum climb gradients of
8.5% (520 FT/NM) until passing 800, then
6.8% (415 FT/NM) until passing 6000 due to operational requirements.

Gnd speed-KT	75	100	150	200	250	300
6.8% V/V (fpm)	516	689	1033	1377	1722	2066
8.5% V/V (fpm)	646	861	1291	1722	2152	2582

If unable to comply advise FRANKFURT Delivery prior to start-up.

Initial climb clearance **FL070**

ROUTING

DF98Ø (800+) - VFM (K200-) - DF18Ø (2500+) - ROXAP (K230-) - ADEVO (6000+) - LISKU - TABUM - LIKSI - LORPA - MARUN.

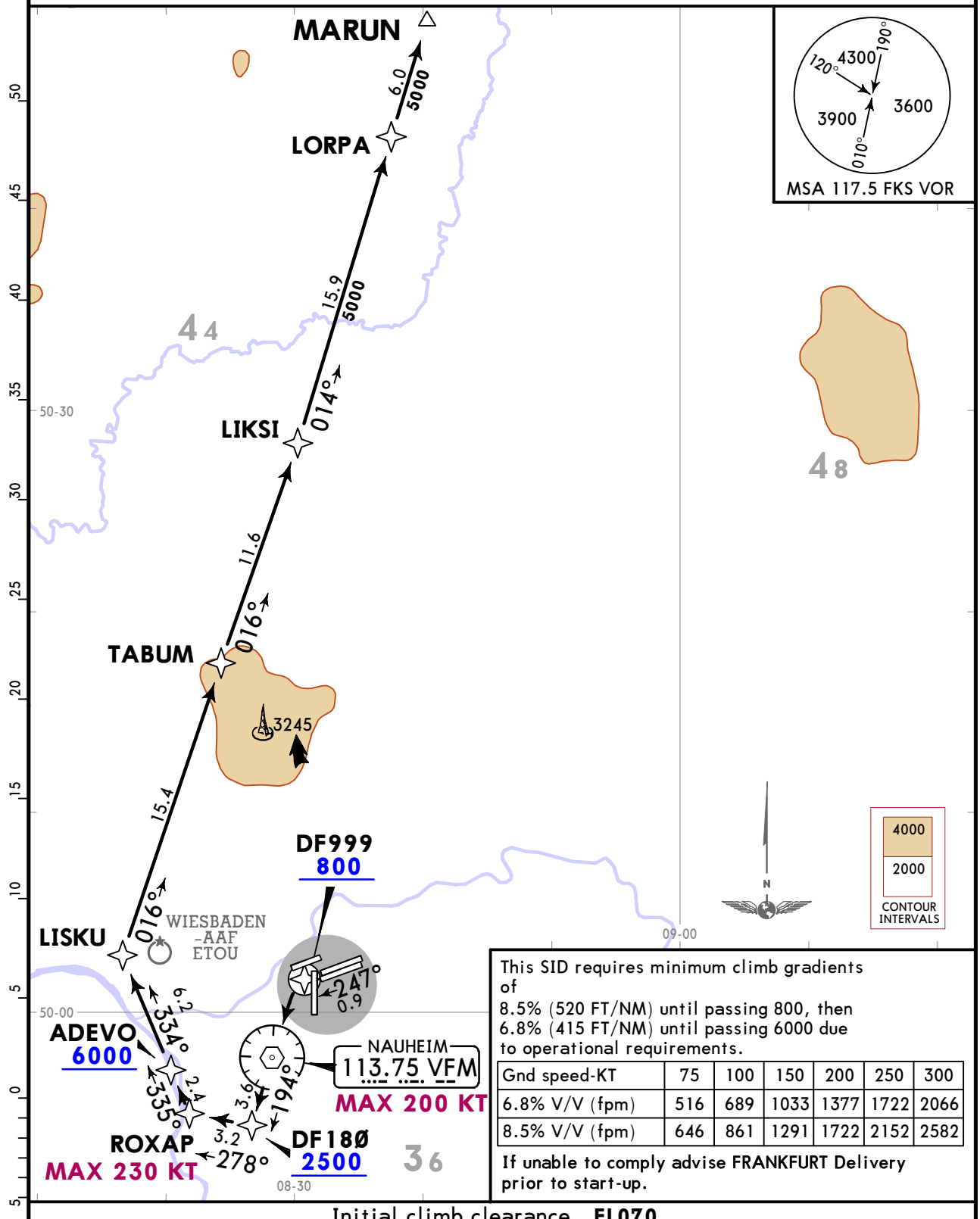
CHANGES: MSA, chart reindexed, reference note.

*LANGEN Radar 120.155	Apt Elev 363	Trans alt: 5000 1. Contact LANGEN Radar when advised by Tower. 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 3. For operational RWY use concept refer to 10-1P pages.

MARUN 7M [MARU7M]

RNAV DEPARTURE (OVERLAY 10-3L7) (RWY 25C)

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



This SID requires minimum climb gradients of
8.5% (520 FT/NM) until passing 800, then
6.8% (415 FT/NM) until passing 6000 due to operational requirements.

Gnd speed-KT	75	100	150	200	250	300
6.8% V/V (fpm)	516	689	1033	1377	1722	2066
8.5% V/V (fpm)	646	861	1291	1722	2152	2582

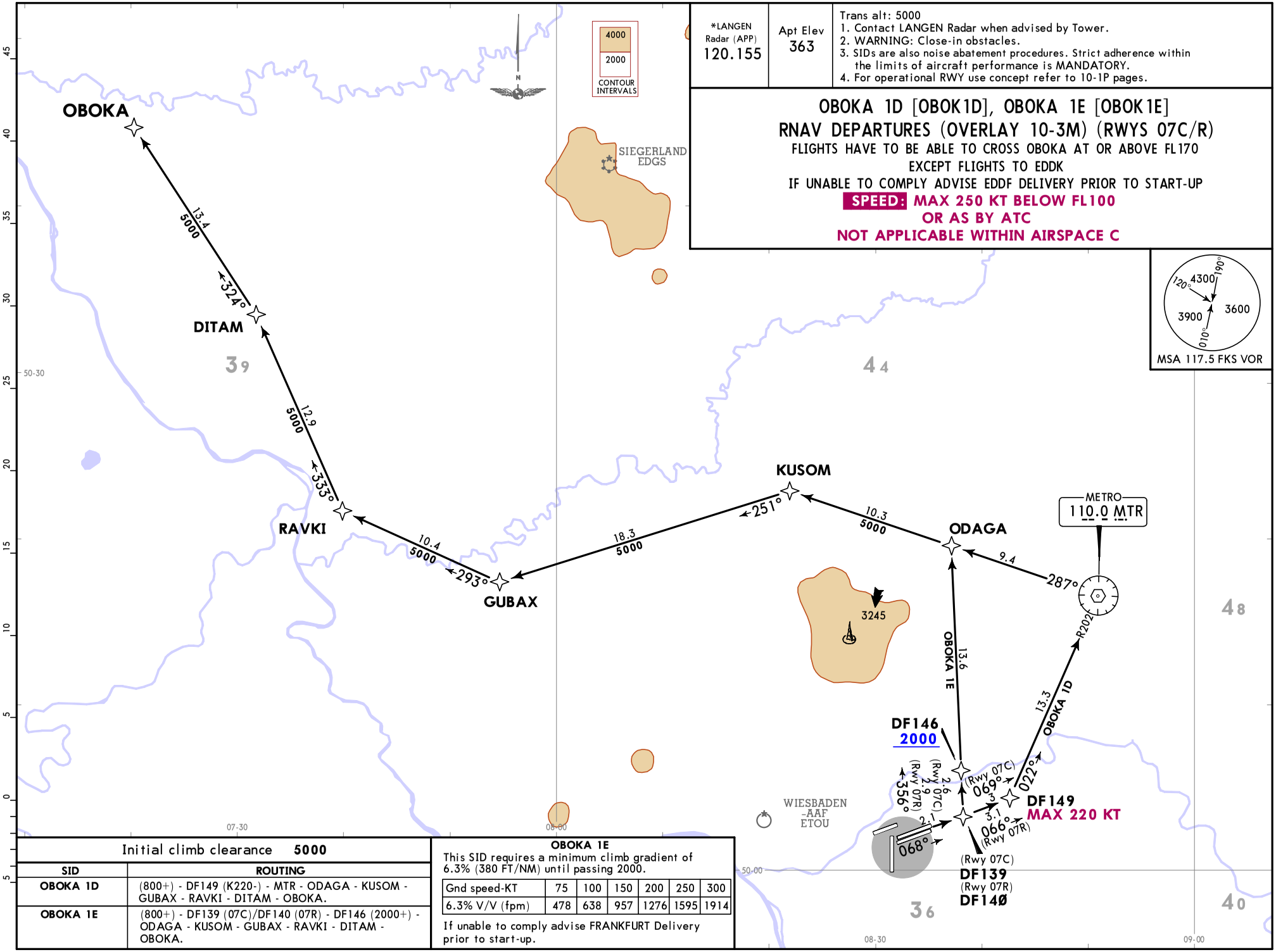
If unable to comply advise FRANKFURT Delivery prior to start-up.

Initial climb clearance **FL070**

ROUTING

DF999 (800+) - VFM (K200-) - DF18Ø (2500+) - ROXAP (K230-) - ADEVO (6000+) - LISKU - TABUM - LIKSI - LORPA - MARUN.

CHANGES: MSA, chart reindexed, reference note.



*LANGEN Radar (APP) 120.155

Apt Elev 363

Trans alt: 5000
1. Contact LANGEN Radar when advised by Tower.
2. WARNING: Close-in obstacles.
3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.
4. For operational RWY use concept refer to 10-1P pages.

OBOKA 1D [OBOK1D], OBOKA 1E [OBOK1E]
RNAV DEPARTURES (OVERLAY 10-3M) (RWYS 07C/R)

FLIGHTS HAVE TO BE ABLE TO CROSS OBOKA AT OR ABOVE FL170
EXCEPT FLIGHTS TO EDDK
IF UNABLE TO COMPLY ADVISE EDDF DELIVERY PRIOR TO START-UP

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

Initial climb clearance **5000**

SID	ROUTING
OBOKA 1D	(800+) - DF149 (K220-) - MTR - ODAGA - KUSOM - GUBAX - RAVKI - DITAM - OBOKA.
OBOKA 1E	(800+) - DF139 (07C)/DF140 (07R) - DF146 (2000+) - ODAGA - KUSOM - GUBAX - RAVKI - DITAM - OBOKA.

OBOKA 1E
This SID requires a minimum climb gradient of 6.3% (380 FT/NM) until passing 2000.

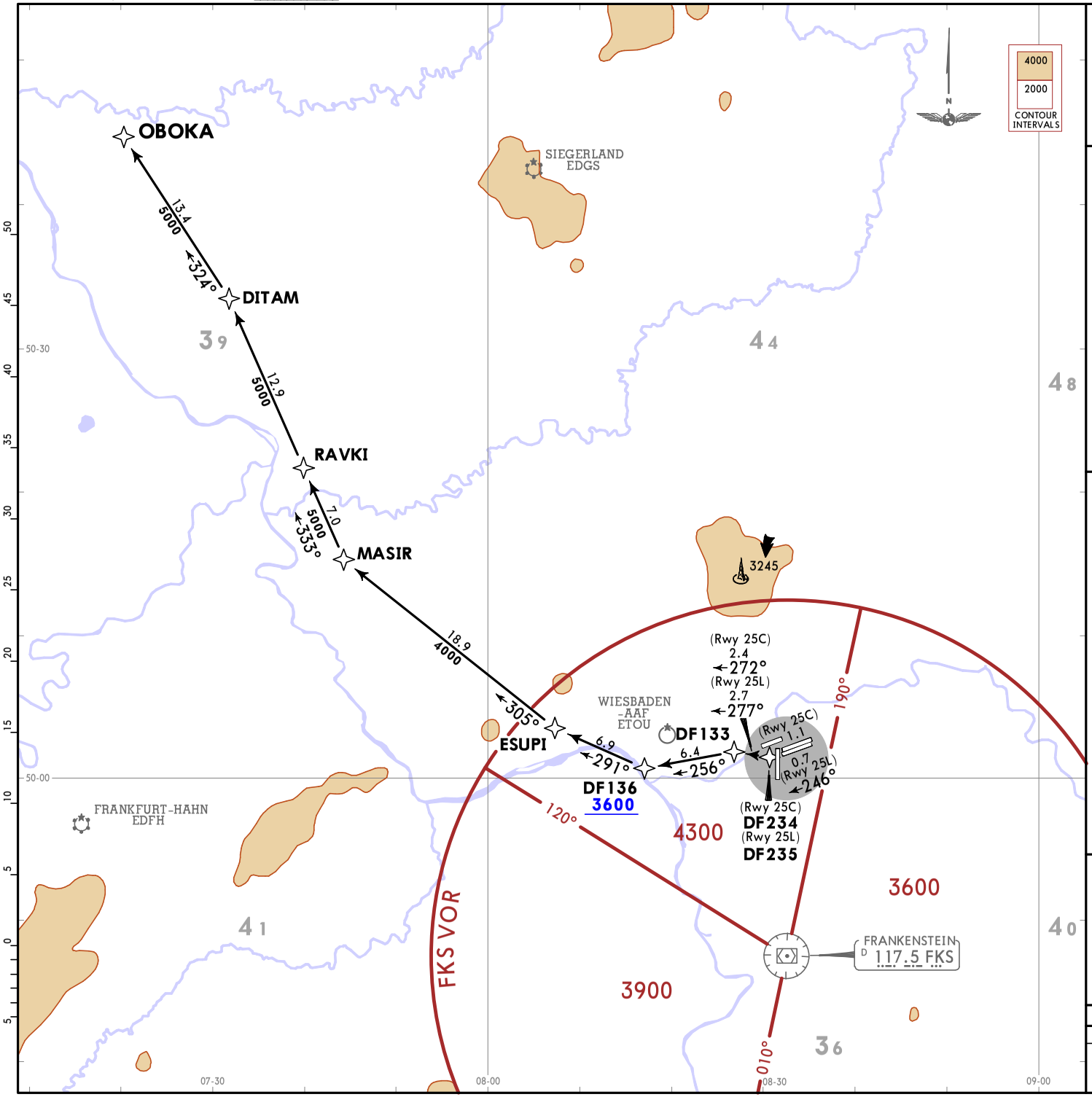
Gnd speed-KT	75	100	150	200	250	300
6.3% V/V (fpm)	478	638	957	1276	1595	1914

If unable to comply advise FRANKFURT Delivery prior to start-up.

CHANGES: General notes.

FRANKFURT/MAIN, GERMANY

RNAV SID (OVERLAY)



*LANGEN Radar	Apt Elev
120.155	363

Trans alt: 5000
1. Contact LANGEN Radar when advised by Tower.
2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.
3. For operational RWY use concept refer to 10-1P pages.

OBOKA 3G [OBOK3G]
RNAV DEPARTURE
(OVERLAY 10-3N)
(RWYS 25L/C)

FLIGHTS HAVE TO BE ABLE
TO CROSS OBOKA AT OR ABOVE FL170
EXCEPT FLIGHTS TO EDDK
IF UNABLE TO COMPLY
ADVISE EDDF DELIVERY PRIOR TO START-UP

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

This SID requires a minimum climb gradient of 5.8% (350 FT/NM) until passing 3600, due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
5.8% V/V (fpm)	441	587	881	1175	1468	1762

If unable to comply advise FRANKFURT Delivery prior to start-up.

Initial climb clearance **5000**

ROUTING

(800+) - DF234 (25C)/DF235 (25L) - DF133 - DF136 (3600+) - ESUPI - MASIR - RAVKI - DITAM - OBOKA .

CHANGES: MSA, chart reindexed, reference note.

FRANKFURT/MAIN, GERMANY

RNAV SID (OVERLAY)

*LANGEN Radar	Apt Elev
120.155	363

Trans alt: 5000
1. Contact LANGEN Radar when advised by Tower.
2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.
3. For operational RWY use concept refer to 10-1P pages.

OBOKA 2H [OBOK2H]

RNAV DEPARTURE (OVERLAY 10-3N1) (RWY 25L)

FLIGHTS HAVE TO BE ABLE TO CROSS OBOKA AT OR ABOVE FL170 EXCEPT FLIGHTS TO EDDK IF UNABLE TO COMPLY ADVISE EDDF DELIVERY PRIOR TO START-UP

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

This SID requires minimum climb gradients of
8.5% (520 FT/NM) until passing 800, then
4.5% (273 FT/NM) until passing 2500 due to airspace structure.

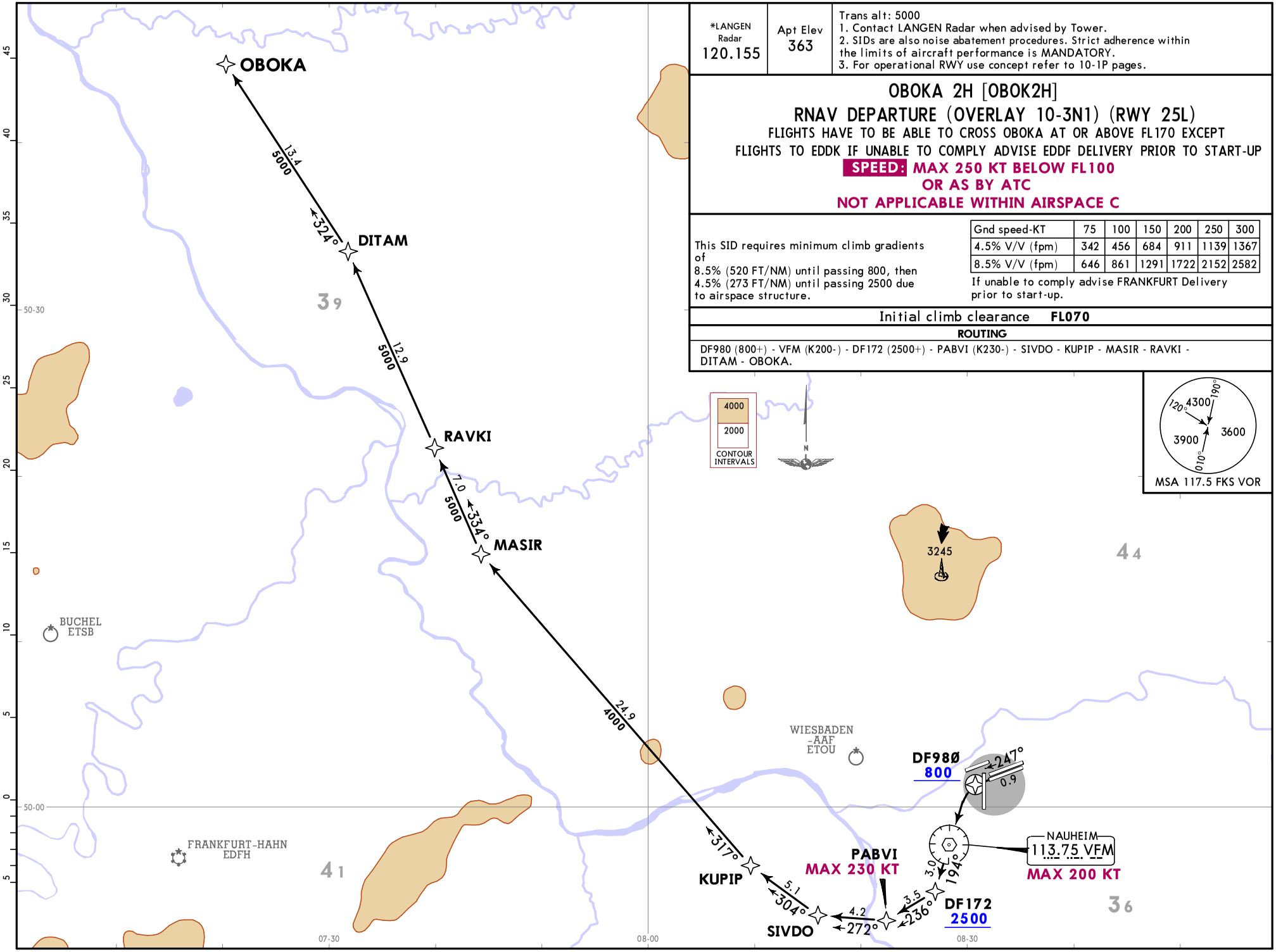
Gnd speed-KT	75	100	150	200	250	300
4.5% V/V (fpm)	342	456	684	911	1139	1367
8.5% V/V (fpm)	646	861	1291	1722	2152	2582

If unable to comply advise FRANKFURT Delivery prior to start-up.

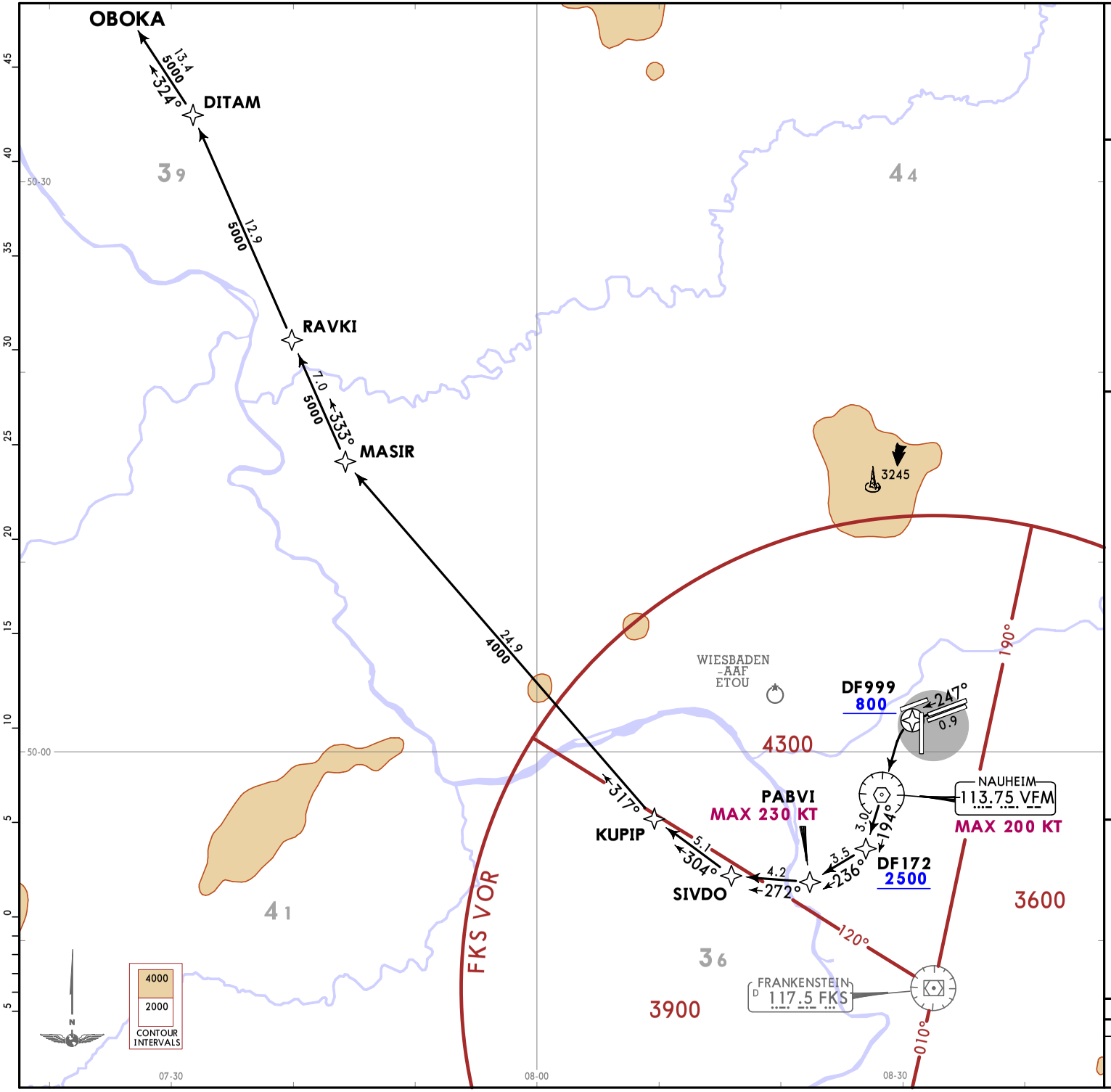
Initial climb clearance **FL070**

ROUTING

DF980 (800+) - VFM (K200-) - DF172 (2500+) - PABVI (K230-) - SIVDO - KUPIP - MASIR - RAVKI - DITAM - OBOKA.



CHANGES: MSA. reference note.



*LANGEN Radar	Apt Elev
120.155	363

Trans alt: 5000
1. Contact LANGEN Radar when advised by Tower.
2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.
3. For operational RWY use concept refer to 10-1P pages.

OBOKA 2M [OBOK2M]
RNAV DEPARTURE
(OVERLAY 10-3N2) (RWY 25C)

FLIGHTS HAVE TO BE ABLE
TO CROSS OBOKA AT OR ABOVE FL170
EXCEPT FLIGHTS TO EDDK
IF UNABLE TO COMPLY
ADVISE EDDF DELIVERY PRIOR TO START-UP

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

This SID requires minimum climb gradients of
8.5% (520 FT/NM) until passing 800, then
4.5% (273 FT/NM) until passing 2500 due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
4.5% V/V (fpm)	342	456	684	911	1139	1367
8.5% V/V (fpm)	646	861	1291	1722	2152	2582

If unable to comply advise FRANKFURT Delivery prior to start-up.

Initial climb clearance **FL070**

ROUTING

DF999 (800+) - VFM (K200-) - DF172 (2500+) - PABVI (K230-) - SIVDO - KUPIP - MASIR - RAVKI - DITAM - OBOKA.

CHANGES: MSA, reference note.

SULUS 1D [SULU1D]
RNAV DEPARTURE
(OVERLAY 10-3N3) (RWYS 07C/R)

NOT FOR FLIGHTS DESTINATION EDDN

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC

NOT APPLICABLE WITHIN AIRSPACE C

*LANGEN Radar (APP) 136.130

Apt Elev 363

Trans alt: 5000
1. Contact LANGEN Radar when advised by Tower.
2. WARNING: Close-in obstacles.
3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.
4. For operational RWY use concept refer to 10-1P pages.

Initial climb clearance 4000

ROUTING

(800+) - DF149 (K220-) - DF151 - DF169 - AGOLO - OKTUM - KOMIB - SULUS.

NOT TO SCALE

SULUS
087° 18.8 6500

KOMIB
OKTUM
128° 11.7 6500

AGOLO
088° 12.9 6500

DF169
059° 17.2 5000

DF151
086° 17.0

DF149
MAX 220 KT
098° 5.2

(RWY 07C) 069° 5.1
(RWY 07R) 066° 5.2

FKS VOR
FRANKENSTEIN D 117.5 FKS

3777

CONTOUR INTERVALS 4000 2000

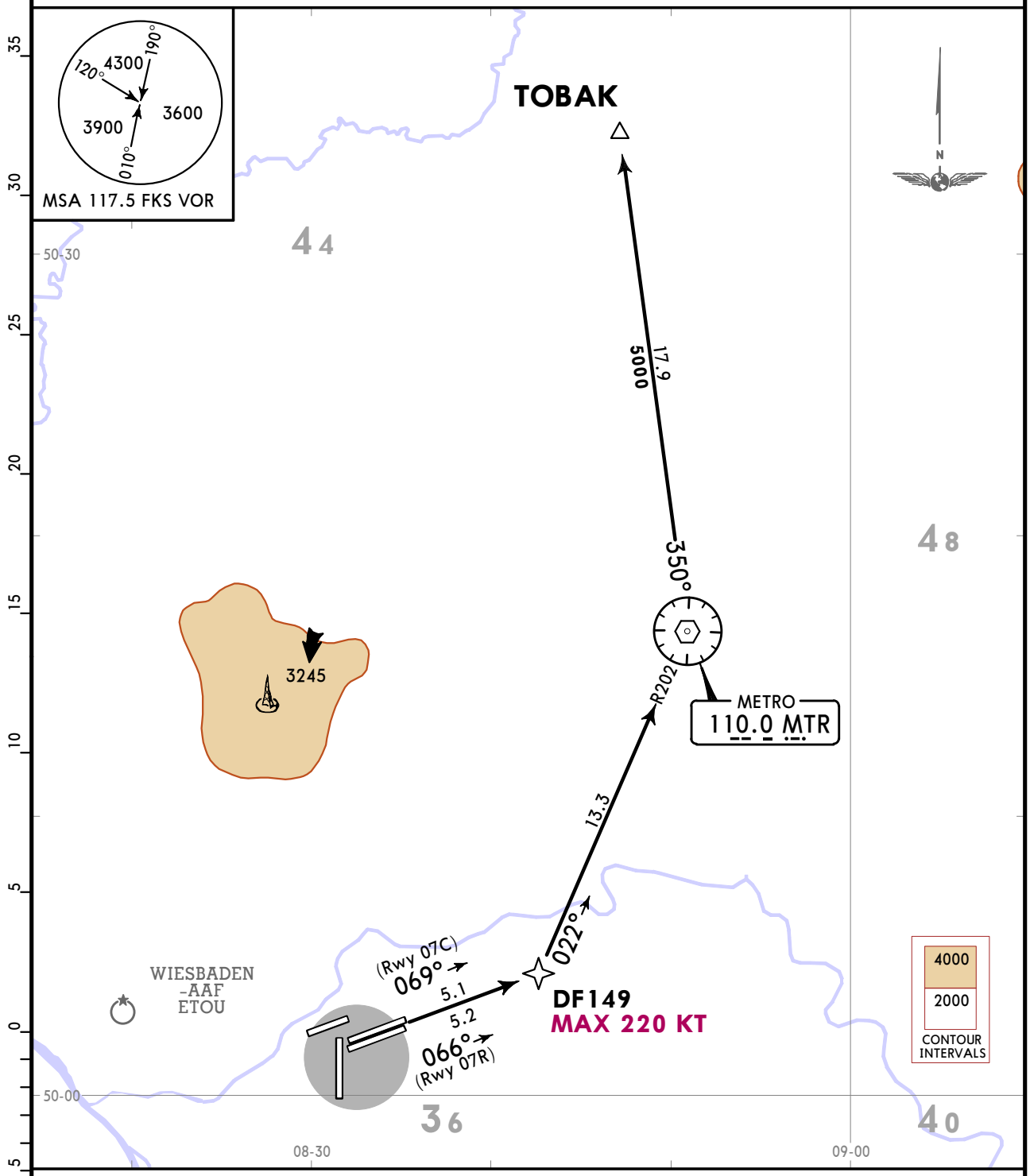
3600
4300
3900
190°
010°
120°

*LANGEN Radar (APP) 120.155	Apt Elev 363	Trans alt: 5000 1. Contact LANGEN Radar when advised by Tower. 2. WARNING: Close-in obstacles. 3. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 4. For operational RWY use concept refer to 10-1P pages.

TOBAK 9D [TOBA9D]
RNAV DEPARTURE (OVERLAY 10-3N5) (RWYS 07C/R)

NOT FOR FLIGHTS CONTINUING VIA AIRWAY Z-10

SPEED: MAX 250 KT BELOW FL100
OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



Initial climb clearance
5000

ROUTING

(800+) - DF149 (K220-) - MTR - TOBAK.

CHANGES: General notes.

*LANGEN Radar 120.155	Apt Elev 363	Trans alt: 5000 1. Contact LANGEN Radar when advised by Tower. 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 3. For operational RWY use concept refer to 10-1P pages.

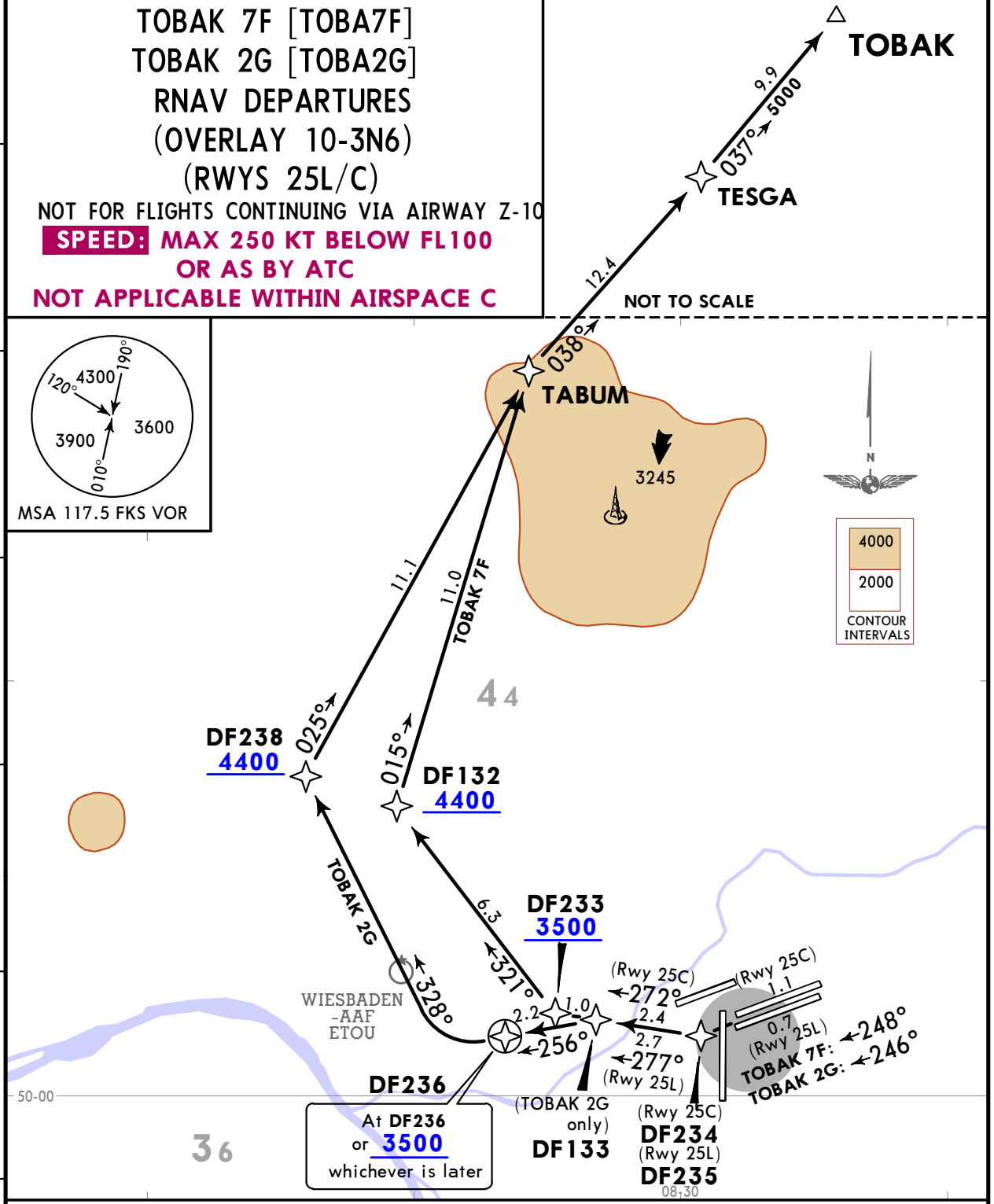
TOBAK 7F [TOBA7F]
TOBAK 2G [TOBA2G]
RNAV DEPARTURES
(OVERLAY 10-3N6)
(RWYS 25L/C)

NOT FOR FLIGHTS CONTINUING VIA AIRWAY Z-10

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC

NOT APPLICABLE WITHIN AIRSPACE C

NOT TO SCALE



TOBAK 7F

This SID requires a minimum climb gradient of 12.0% (729 FT/NM) until DF233 due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
12.0% V/V (fpm)	911	1215	1823	2430	3038	3646

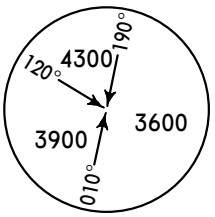
If unable to comply advise FRANKFURT Delivery prior to start-up

Initial climb clearance 5000

SID	ROUTING
TOBAK 7F	(800+) - DF234 (25C)/DF235 (25L) - DF233 (3500+) - DF132 (4400+) - TABUM - TESGA - TOBAK.
TOBAK 2G	(800+) - DF234 (25C)/DF235 (25L) - DF133 - DF236 - (3500+) - DF238 (4400+) - TABUM - TESGA - TOBAK.

CHANGES: MSA, chart reindexed.

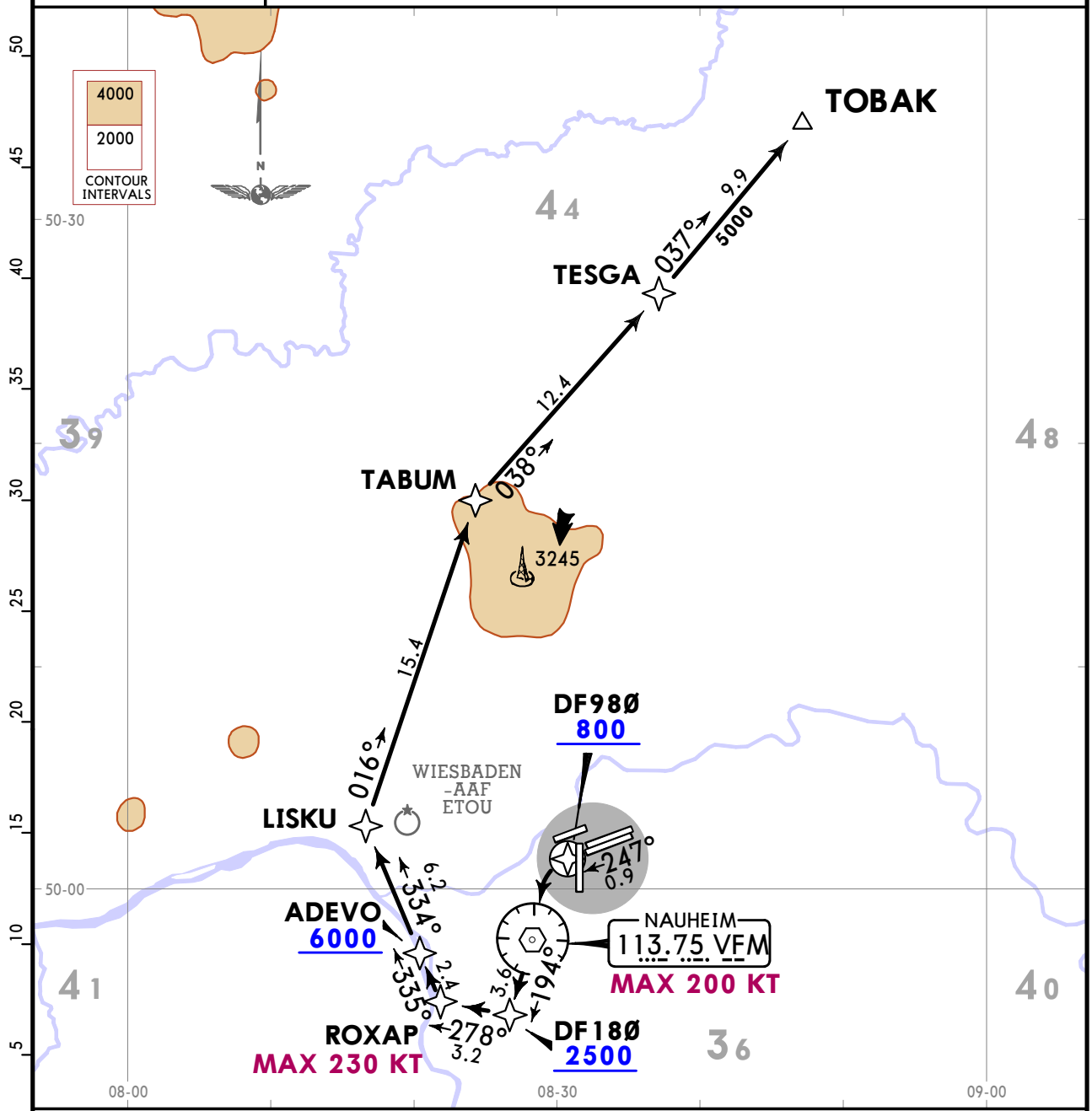
*LANGEN Radar 120.155	Apt Elev 363	Trans alt: 5000 1. Contact LANGEN Radar when advised by Tower. 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 3. For operational RWY use concept refer to 10-1P pages.



MSA 117.5 FKS VOR

TOBAK 5H [TOBA5H]
RNAV DEPARTURE
(OVERLAY 10-3N7) (RWY 25L)

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C



This SID requires minimum climb gradients of
8.5% (520 FT/NM) until passing 800, then
6.8% (415 FT/NM) until passing 6000 due to operational requirements.

Gnd speed-KT	75	100	150	200	250	300
4.5% V/V (fpm)	342	456	684	911	1139	1367
8.5% V/V (fpm)	646	861	1291	1722	2152	2582

If unable to comply advise FRANKFURT Delivery prior to start-up.

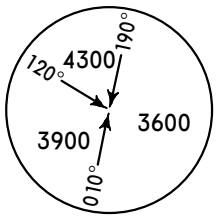
Initial climb clearance **FL070**

ROUTING

DF980 (800+) - VFM (K200-) - DF180 (2500+) - ROXAP (K230-) - ADEVO (6000+) - LISKU - TABUM - TESGA - TOBAK.

CHANGES: MSA, chart reindexed.

*LANGEN Radar 120.155	Apt Elev 363	Trans alt: 5000 1. Contact LANGEN Radar when advised by Tower. 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY. 3. For operational RWY use concept refer to 10-1P pages.

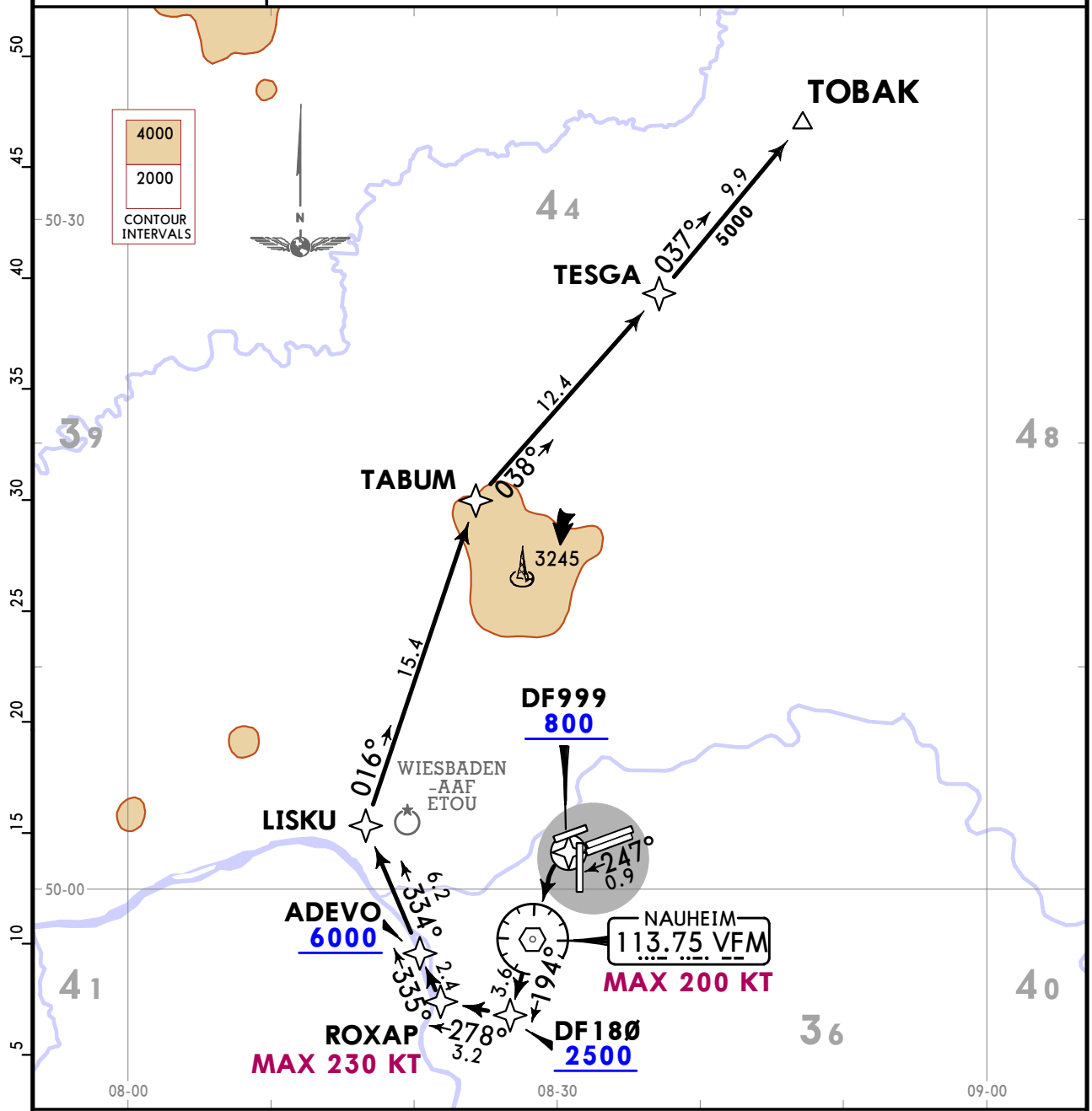


MSA 117.5 FKS VOR

TOBAK 7M [TOBA7M]
RNAV DEPARTURE
(OVERLAY 10-3N8) (RWY 25C)

SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC

NOT APPLICABLE WITHIN AIRSPACE C



This SID requires minimum climb gradients of
8.5% (520 FT/NM) until passing 800, then
6.8% (415 FT/NM) until passing 6000 due to operational requirements.

Gnd speed-KT	75	100	150	200	250	300
6.8% V/V (fpm)	516	689	1033	1377	1722	2066
8.5% V/V (fpm)	646	861	1291	1722	2152	2582

If unable to comply advise FRANKFURT Delivery prior to start-up.

Initial climb clearance **FL070**

ROUTING

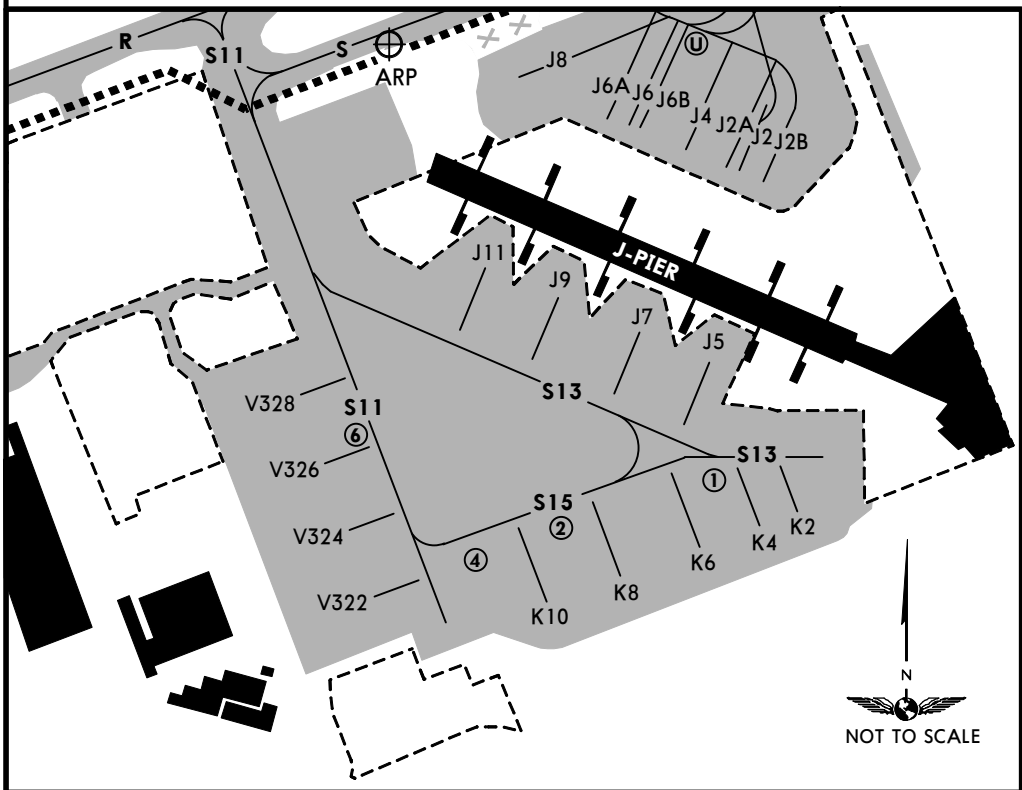
DF999 (800+) - VFM (K200-) - DF180 (2500+) - ROXAP (K230-) - ADEVO (6000+) - LISKU - TABUM - TESGA - TOBAK.

CHANGES: MSA, chart reindexed.

TEMPORARY CONSTRUCTION WORKS NEAR J-PIER

REFER ALSO TO LATEST NOTAMS

Stands J5, J7, J9 and J11 will be temporarily opened.
Stands J7, J9 and J11 can be used by ACFT with a wingspan up to 224'/68.4m.
Stand J5 can be used by ACFT with a wingspan up to 213'/65m.
The adjacent TWY S13 will also be opened.
The new taxiway section S13 can be used by ACFT with a wingspan up to 262'/80m.
The new taxiway section is not equipped with centreline lighting.



LEGEND

- Construction area
- Limit of Apron competence area
- ② Numbered Break away areas for push-back operations
- Ⓤ Unnumbered Break away areas for push-back operations

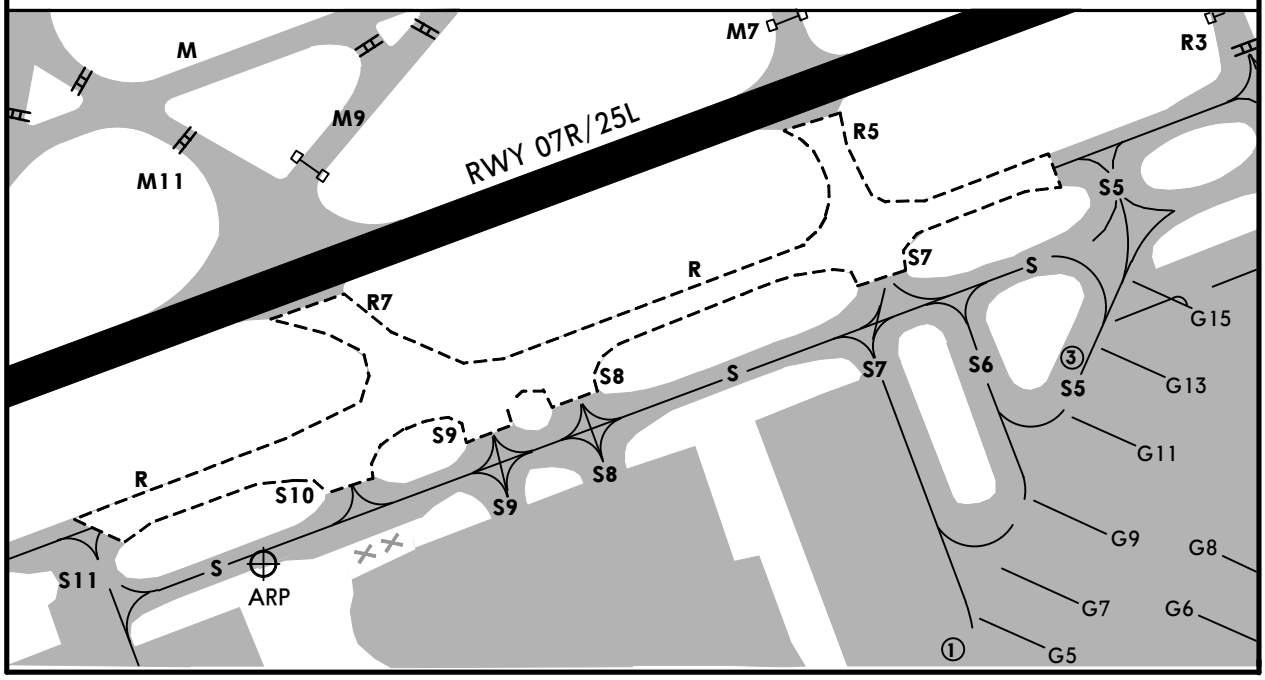
CHANGES: New temp chart.

RECONSTRUCTION OF TWY R

REFER ALSO TO LATEST NOTAMS

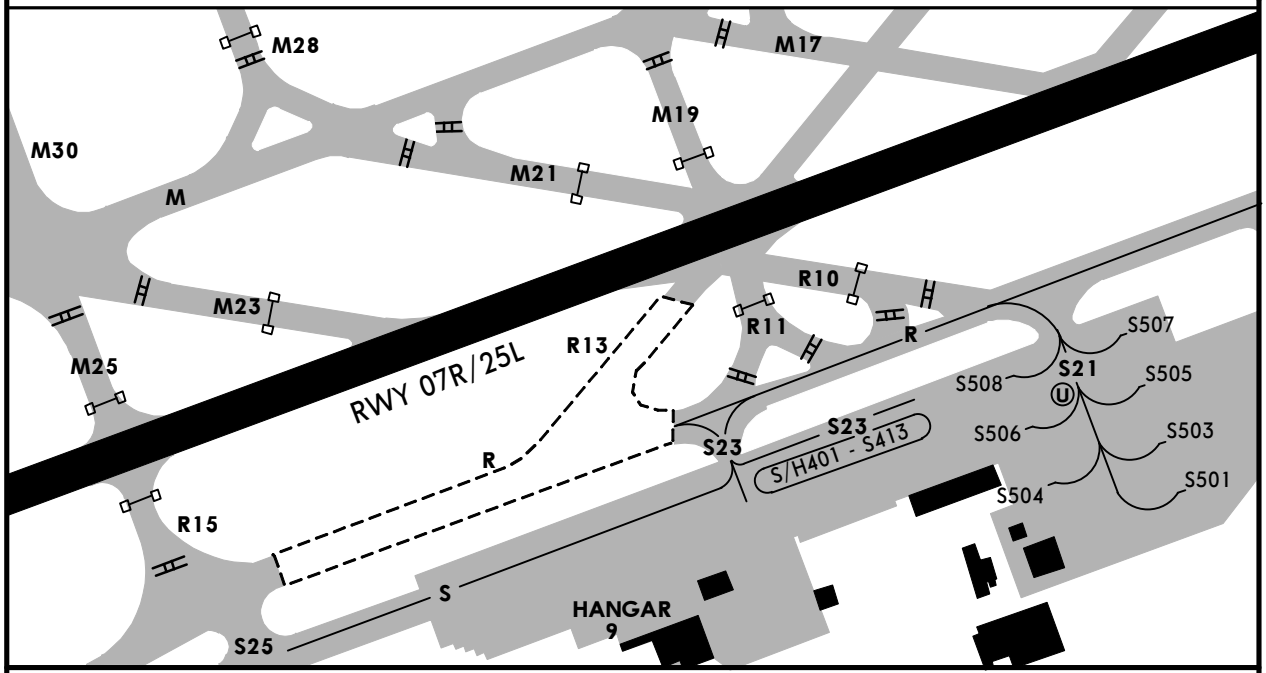
PHASE 1:

-TWY R closed between TWYs S5 and S11.
-TWYs R5 and R7 closed.



PHASE 2:

-TWY R closed between TWYs S23 and S25.
-TWY R13 closed.
-A new connection between TWYs S23 and S25 will be established via TWY S.



LEGEND

- Construction area
- ① Numbered Break away areas for push-back operations
- Ⓤ Unnumbered Break away areas for push-back operations

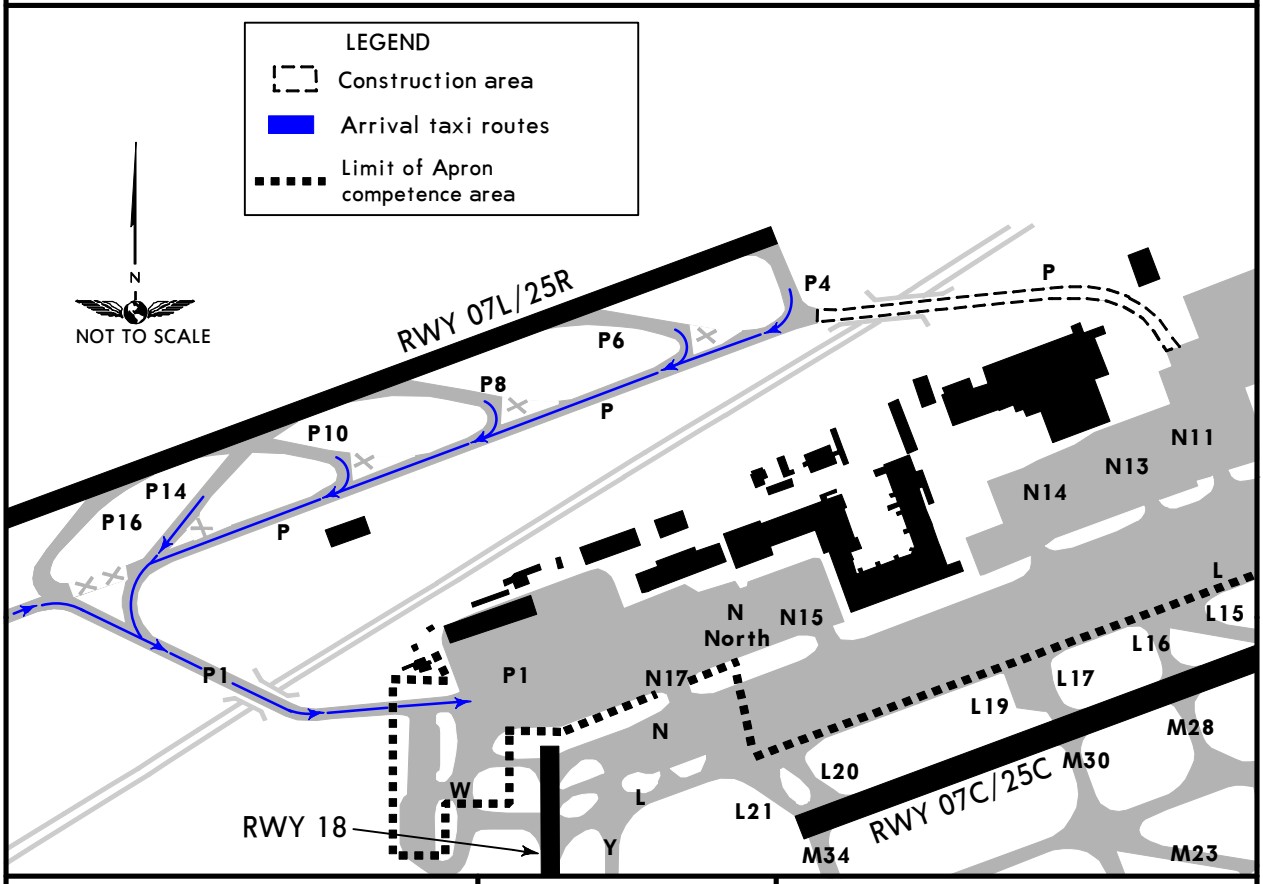
CHANGES: New temporary chart.

PARTIAL CLOSURE OF TWY P

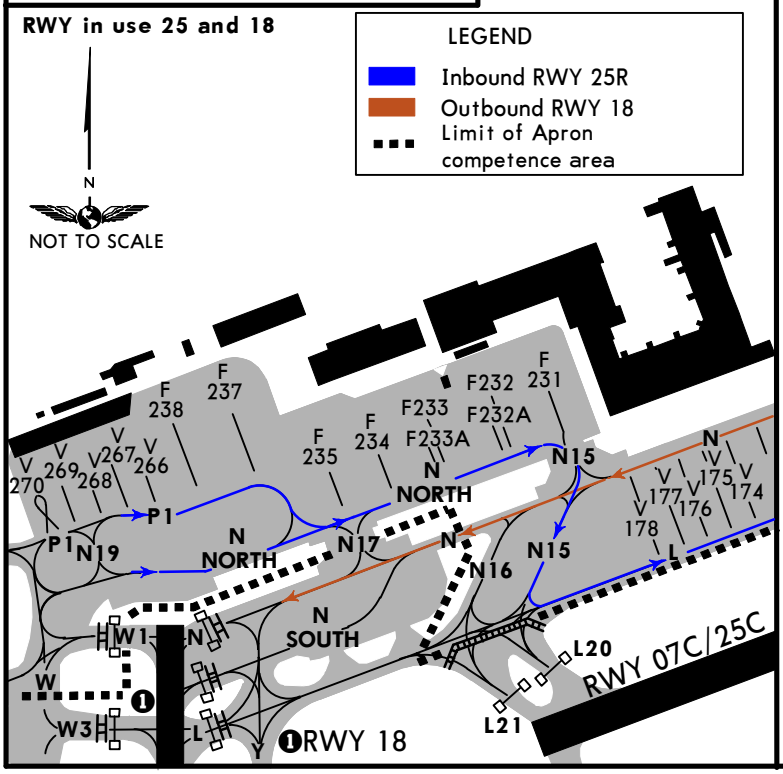
REFER ALSO TO LATEST NOTAMS

GENERAL INFORMATION

The eastern taxiway bridges will be reconstructed. TWY P will be closed between TWYs P4 and N11 during this period. The junctions leading to TWYs P4, P6, P8, P10 and P14 to the East will be marked as closed by means of red stop bar lights. After landing on RWY 07L/25R, access to the apron will exclusively be via TWY P.



OPERATING DIRECTION 25



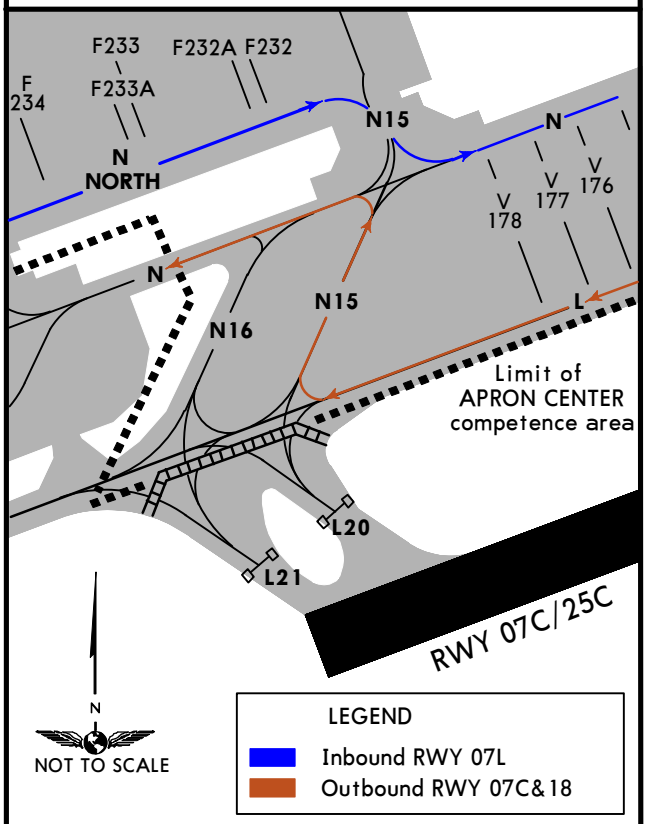
All taxiing traffic (inbound) from RWY 25R will be routed via TWYs P1, N-North, N15 and onwards via TWY L to the East. All taxiing traffic (outbound) will be conducted according to the standard.

CHANGES: New temporary chart.

PARTIAL CLOSURE OF TWY P (contd)

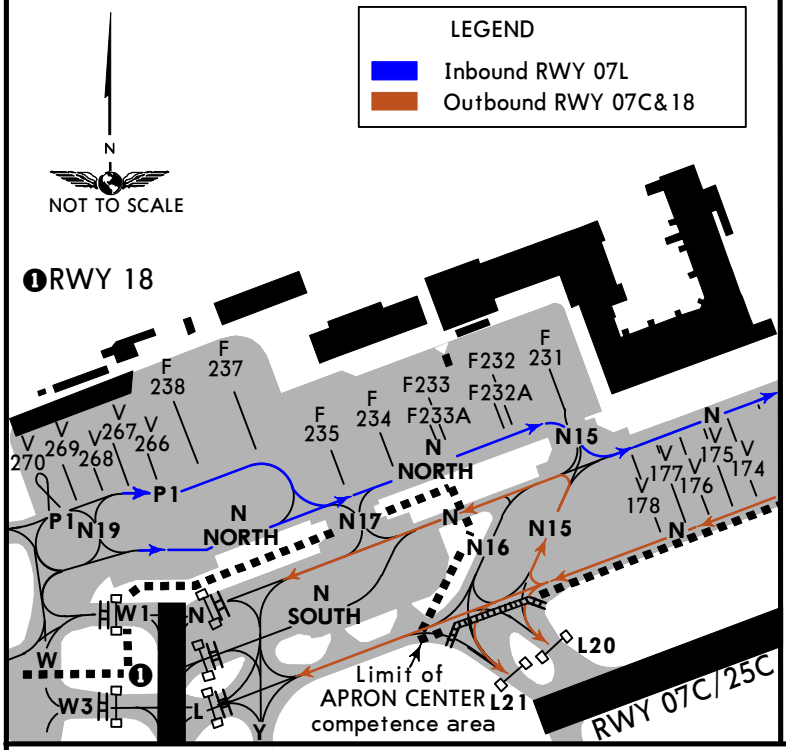
REFER ALSO TO LATEST NOTAMS

OPERATING DIRECTION 07



All taxiing traffic (inbound) from RWY 07L will be routed via TWYs P1, N-North, N15 and onwards via TWY N to the East. Taxiing traffic (outbound) in the direction of RWY 18 will be routed via TWY L according to the standard. Pilots who are unable to accept a take-off run on RWY 18 after guidance from TWY L shall notify apron control in good time. In this case, taxiing traffic (outbound) in the direction of RWY 18 will be routed via TWYs L, Y and N. The transfer of taxiing traffic (outbound) in the direction of RWY 18 between apron control and the control tower is conducted in front of TWY L20. Alternatively, acft can also be routed via TWYs L, N15 and N. Acft turning East onto TWY N from TWY N15 (coming from the north) do not conflict with acft turning West onto TWY N from TWY N15 (coming from the South).

RWY in use 07 and 18



Taxiing traffic (outbound) in the direction of RWY 07C will be routed via TWY L. Acft up to ICAO category Medium for which an intersection take-off is requested with apron control will be transferred to the control tower in good time. Pilots should inform the tower as early as with the start-up approval whether they accept an intersection take-off 07C. For operating direction 07, Sulu departures might be proactively moved from RWY 07C to RWY 18.

Vacate the RWY as quickly as possible after landing, being ready for take-off at the RWY when departing, and taxiing off immediately upon receipt of the take-off clearance. In general, all acft of categories Medium and Light departing from RWY 18 should also prepare for a take-off from TWY M or TWY S. All aircraft parked on aircraft stands East of TWY N4 shall expect to taxi to RWY 18 via TWYs U, T, R and S. The exact closing hours and closed areas of the taxiways concerned will be announced via NOTAM.

CHANGES: New temporary chart.

EDDF/FRA

Apt Elev 363′
N50 02.0 E008 34.2

JEPPESEN
26 JAN 24 (10-9)

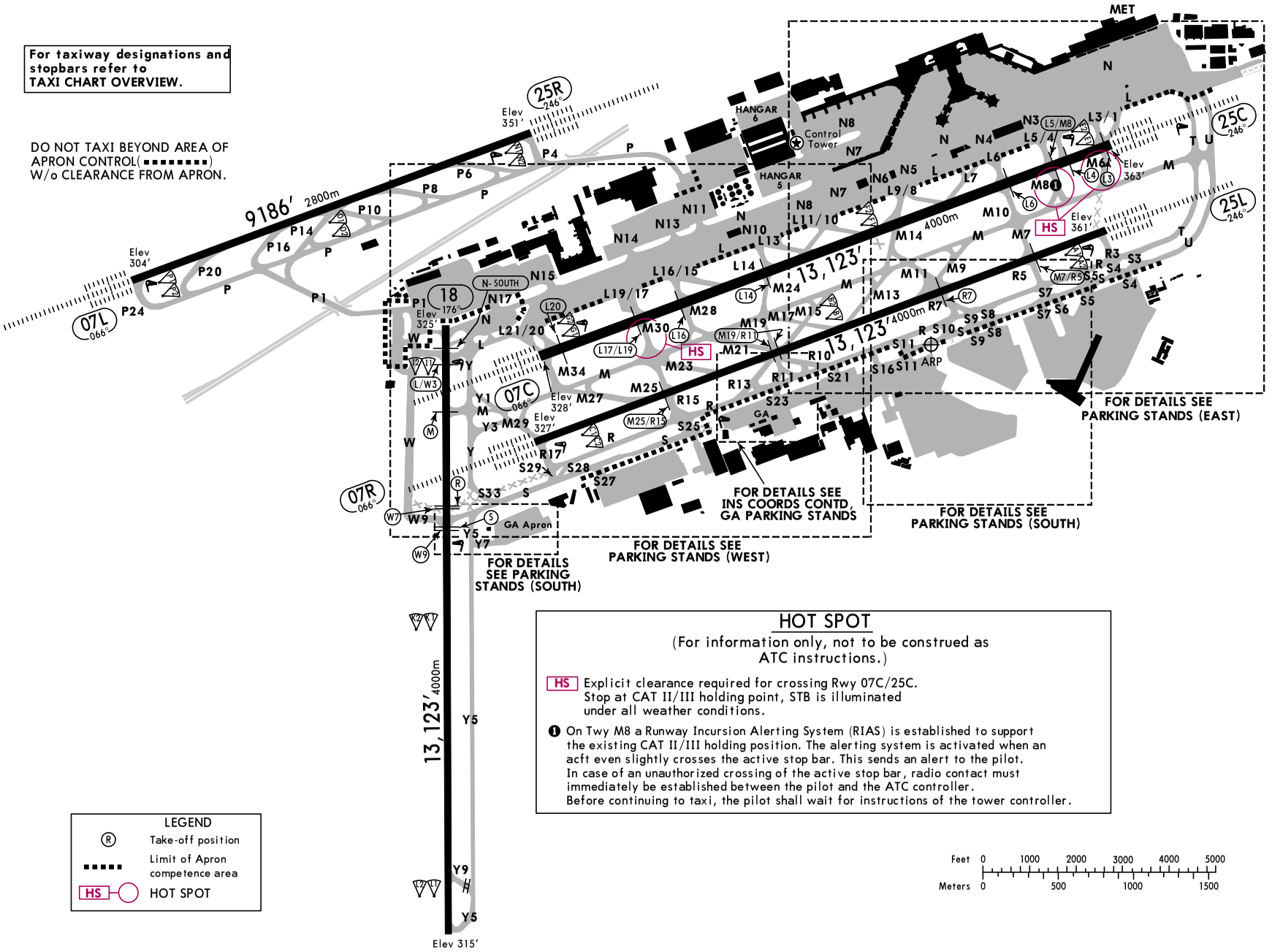
FRANKFURT/MAIN, GERMANY

FRANKFURT/MAIN

D-ATIS Departure	Data Comm ACARS: DCL	FRANKFURT Delivery (Initial call and Start-up clearance)	*Ground	Apron				*Tower RWY 07L/25R	Tower RWY 07C/25C		RWY 07R/25L	*Tower DEP via RWY 18	*LANGEN Radar	
118.730		122.035	121.805	121.655	121.755	121.955		136.5	118.780	119.905	119.905	124.855	120.155	136.130
				121.705	121.855	121.965								

For taxiway designations and stopbars refer to TAXI CHART OVERVIEW.

DO NOT TAXI BEYOND AREA OF APRON CONTROL(▪▪▪▪▪▪▪▪▪) W/o CLEARANCE FROM APRON.



HOT SPOT

(For information only, not to be construed as ATC instructions.)

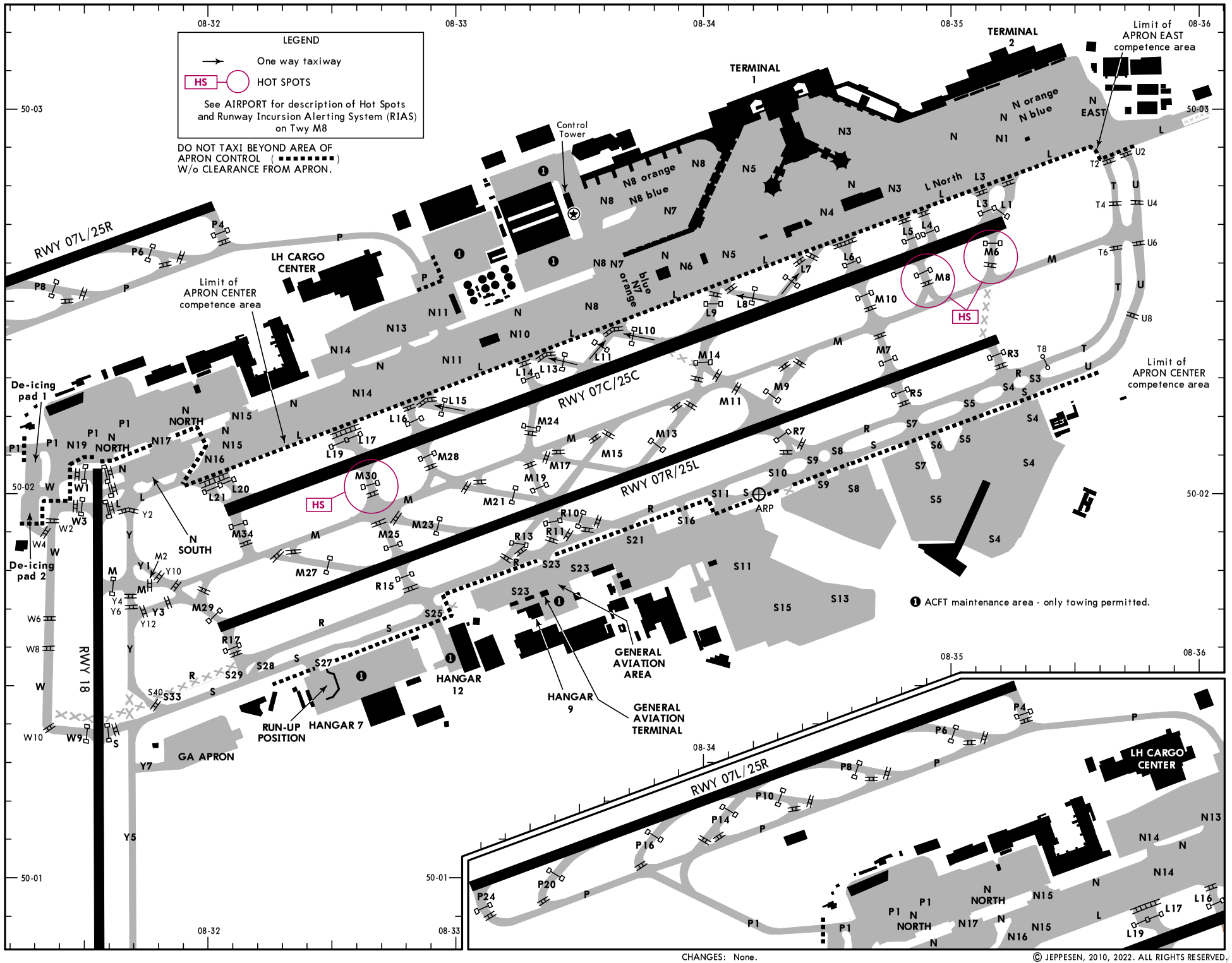
HS Explicit clearance required for crossing Rwy 07C/25C. Stop at CAT II/III holding point, STB is illuminated under all weather conditions.

❶ On Twy M8 a Runway Incursion Alerting System (RIAS) is established to support the existing CAT II/III holding position. The alerting system is activated when an acft even slightly crosses the active stop bar. This sends an alert to the pilot. In case of an unauthorized crossing of the active stop bar, radio contact must immediately be established between the pilot and the ATC controller. Before continuing to taxi, the pilot shall wait for instructions of the tower controller.

LEGEND
- Ⓡ Take-off position
- ▪▪▪▪▪ Limit of Apron competence area
- HS HOT SPOT

Feet 0 1000 2000 3000 4000 5000
Meters 0 500 1000 1500

CHANGES: Delivery frequency.



CHANGES: None.

ADDITIONAL RUNWAY INFORMATION

RWY		USABLE LENGTHS — LANDING BEYOND — Threshold	Glide Slope	TAKE-OFF	WIDTH
07L	❷HIRL ❸CL ALSF-II TDZ REIL ❹PAPI-L ❺ RVR		8215' 2504m	NA	148' 45m
❶25R	❷HIRL ❸CL ALSF-II TDZ REIL ❹PAPI-R ❻ RVR		7972' 2430m		

PAPI systems: For all acft on ILS CAT I approaches PAPI is only usable up to a height of 200' referring to the respective threshold.

❶ RWY porous friction course (antiskid surface)
❷ spacing 60m. ❸ spacing 15m
❹ (angle 3.0°/3.2°)
❺ HST-P8 & P10 ❻ HST-P16 & P20

07C	❼❽HIRL ❾❽CL ALSF-II ❽TDZ REIL ❿⓫ RVR		11,968' 3648m	⓭	197' 60m
25C	❼❽HIRL ❾❽CL ❽ALSF-II ❽TDZ REIL ❿⓬ RVR				

PAPI systems: For all acft on ILS CAT I approaches PAPI is only usable up to a height of 200' referring to the respective threshold.

❼ spacing 60m ❽ LED lights ❾ spacing 15m ❿ PAPI-L (3.0°/3.2°)
⓫ HST-L11 & L7 ⓬ HST-L8, L10, L13 & L15
⓭ TAKE-OFF RUN AVAILABLE

RWY 07C:

From rwy head	13,123'(4000m)
position L20	12,933'(3942m)
position L17/L19/M30	10,866'(3312m)
position L16/M28	9882'(3012m)
position M24	8018'(2444m)
position L14	7913'(2412m)

RWY 25C:

From rwy head	13,123'(4000m)
position L3	13,031'(3972m)
position L4	12,139'(3700m)
position L5/M8	11,795'(3595m)
position L6/M10	10,715'(3266m)

07R	⓮⓯HIRL ⓰⓯CL ALSF-II ⓯TDZ REIL ⓱⓲ RVR		12,090' 3685m	⓴	148' 45m
25L	⓮⓯HIRL ⓰⓯CL ⓯ALSF-II ⓯TDZ REIL ⓱⓳ RVR		11,909' 3630m		

PAPI systems: For all acft on ILS CAT I approaches PAPI is only usable up to a height of 200' referring to the respective threshold.

⓮ spacing 60m ⓯ LED lights ⓰ spacing 15m ⓱ PAPI-L (3.0°/3.2°)
⓲ HST-M15, M13, M9 & R10
⓳ HST-M17, M21, M23, M27 & R13
⓴ TAKE-OFF RUN AVAILABLE

RWY 07R:

From rwy head	13,123'(4000m)
position M25/R15	10,121'(3085m)
position M19/R11	7644'(2330m)

RWY 25L:

From rwy head	13,123'(4000m)
position M7/R5	11,463'(3494m)
position R7	9423'(2872m)
position M19	5577'(1700m)

18	㉑HIRL (60m) ㉑CL (15m) RVR	NA		㉒	148' 45m

㉑ LED lights
㉒ TAKE-OFF RUN AVAILABLE

RWY 18:

From rwy head	13,025'(3970m)
position N-SOUTH	12,776'(3894m)
position L	12,543'(3823m)
position W3	12,523'(3817m)
position M	11,332'(3454m)
position R	9324'(2842m)
position W7	9262'(2823m)
position S	9039'(2755m)
position W9	8944'(2726m)

Std/State TAKE-OFF

Rwys 07C/R, 18, 25L/C

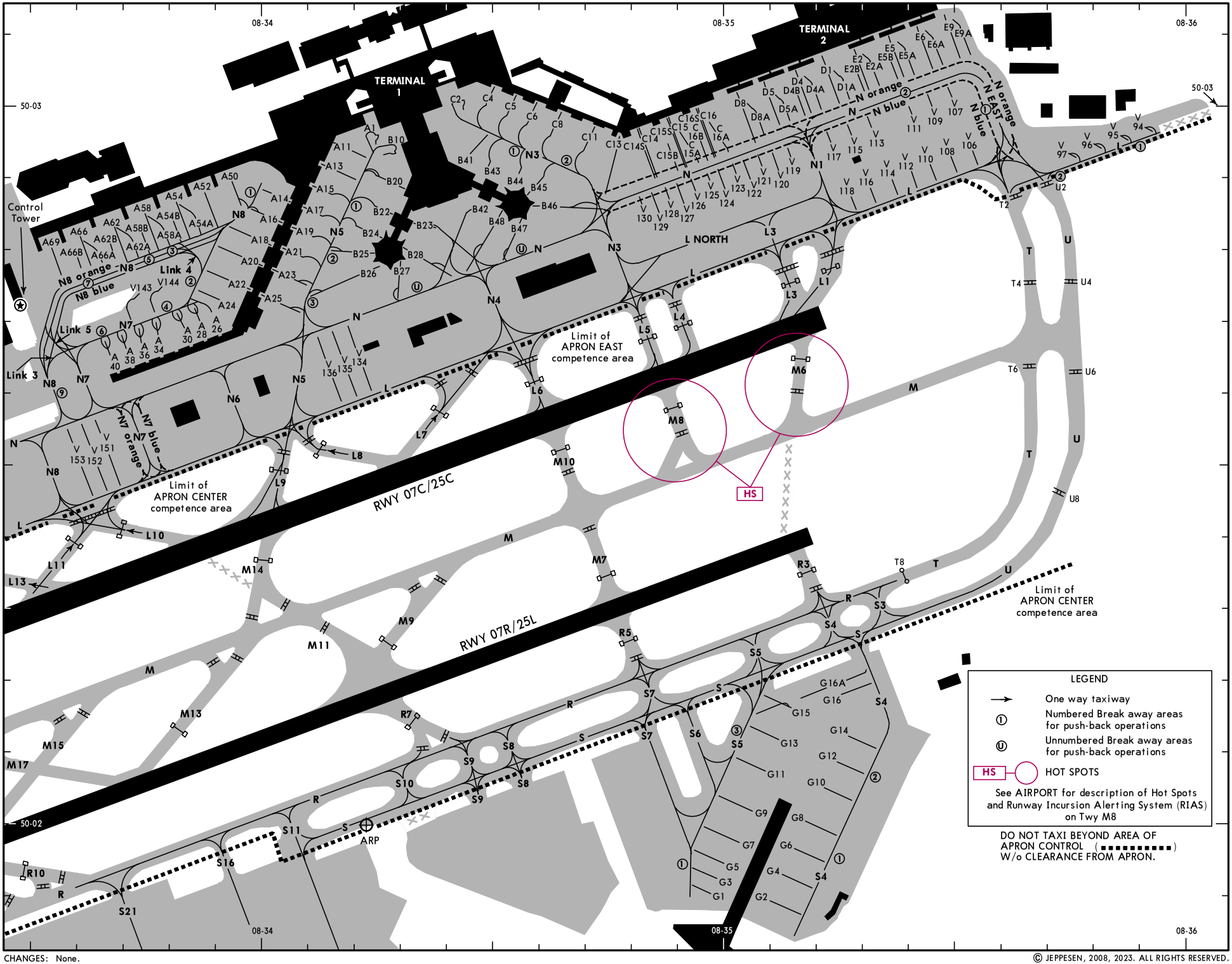
Low Visibility Procedures required / Approval for Low Visibility Take-off required				RCLM or RL or CL	RL or CL	Adequate Vis Ref	
RCLM & RL & CL (spacing 15m or less) & RVR	RCLM & RL & CL & RVR	RCLM & RL & RVR	RCLM & RVR & RL or CL	DAY	NIGHT	DAY	NIGHT
		DAY	NIGHT				
❶ R125m	R150m	R300m		R/V400m		R/V500m	NA

❶ RWY 07C/R, 25L/C: R75m with approved lateral guidance system.

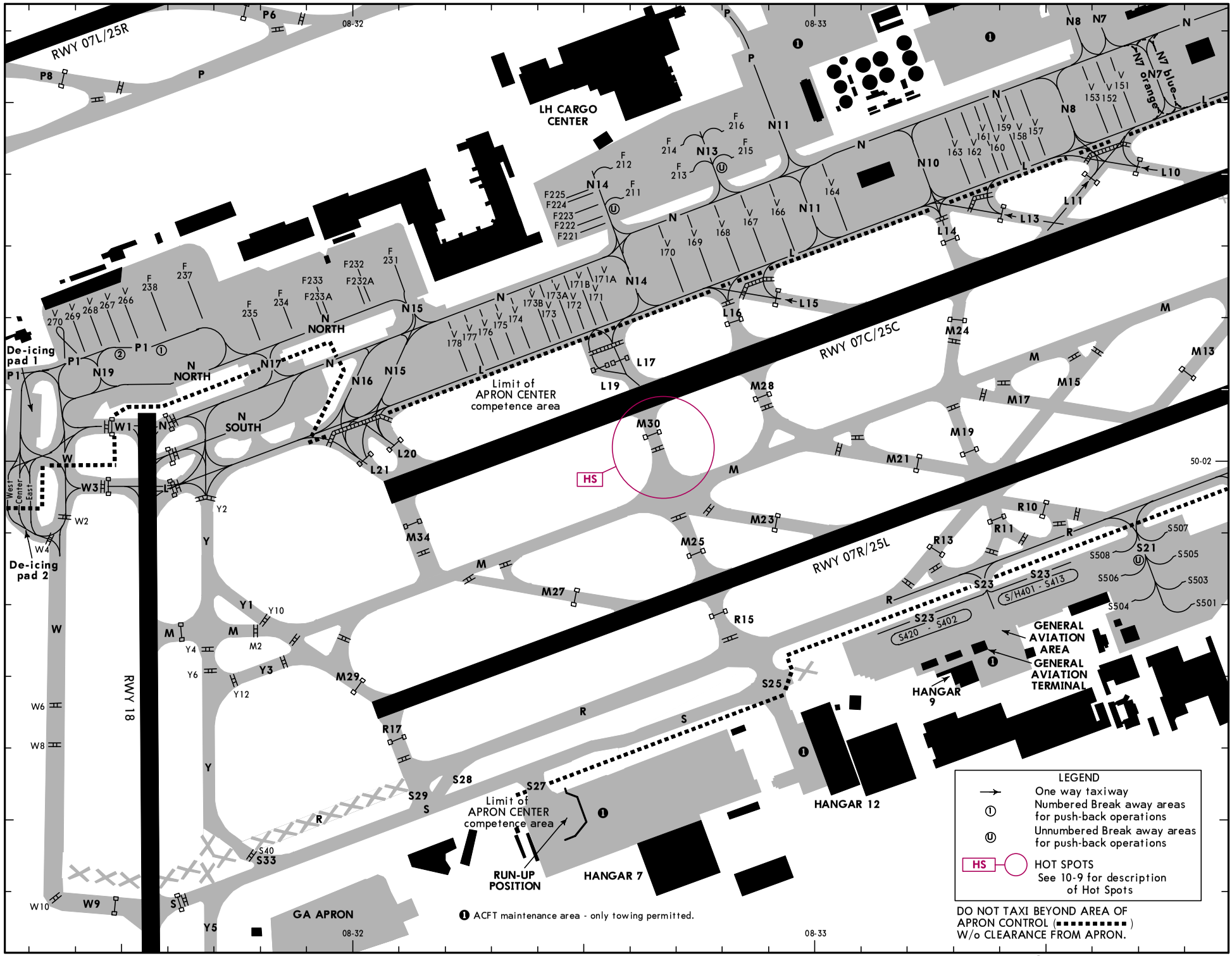
CHANGES: PAPI angle.

FRANKFURT/MAIN, GERMANY

FRANKFURT/MAIN



CHANGES: None.



CHANGES: Stands F224 & F225 reopend, stand H402 withdrawn.

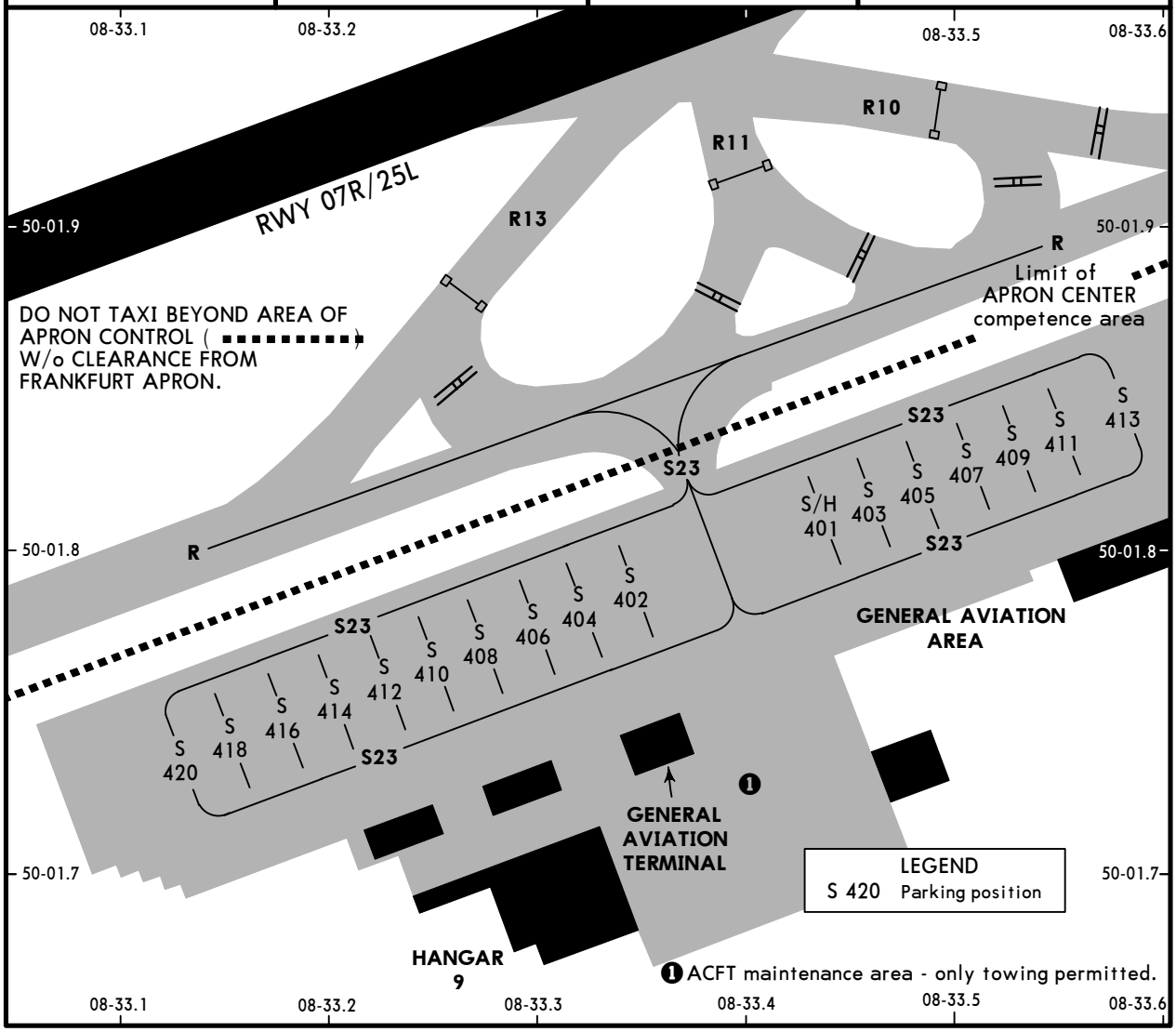
INS COORDINATES

STAND No.	COORDINATES	STAND No.	COORDINATES
A1	N50 02.9 E008 34.3	F237	N50 02.3 E008 31.7
A11	N50 02.9 E008 34.2	F238	N50 02.2 E008 31.6
A13 thru A15	N50 02.9 E008 34.1	G1	N50 01.9 E008 35.0
A16	N50 02.8 E008 34.1	G2	N50 01.9 E008 35.1
A17	N50 02.9 E008 34.1	G3	N50 01.9 E008 35.0
A18	N50 02.8 E008 34.0	G4	N50 01.9 E008 35.1
A19	N50 02.8 E008 34.1	G5	N50 01.9 E008 35.0
A20	N50 02.8 E008 34.0	G6, G7	N50 02.0 E008 35.1
A21	N50 02.8 E008 34.1	G8	N50 02.0 E008 35.2
A22	N50 02.7 E008 34.0	G9	N50 02.0 E008 35.1
A23	N50 02.8 E008 34.0	G10	N50 02.1 E008 35.2
A24, A25	N50 02.7 E008 34.0	G11	N50 02.1 E008 35.1
A26 thru A30	N50 02.7 E008 33.9	G12, G13	N50 02.1 E008 35.2
A34, A36	N50 02.6 E008 33.8	G14	N50 02.1 E008 35.3
A38, A40	N50 02.6 E008 33.7	G15	N50 02.1 E008 35.2
A50, A52	N50 02.9 E008 33.9	G16	N50 02.2 E008 35.2
A54 thru A58	N50 02.9 E008 33.8	G16A	N50 02.2 E008 35.3
A58A	N50 02.8 E008 33.8	H2	N50 01.9 E008 34.9
A58B thru A62B	N50 02.8 E008 33.7	H4	N50 01.9 E008 34.8
A66 thru A69	N50 02.8 E008 33.6	H6	N50 02.0 E008 34.8
B10, B20	N50 02.9 E008 34.3	H14	N50 02.1 E008 34.8
B22 thru B28	N50 02.8 E008 34.3	J2A thru J2B	N50 01.9 E008 34.6
B41 thru B43	N50 02.9 E008 34.5	J4 thru J6B	N50 01.9 E008 34.5
B44 thru B46	N50 02.9 E008 34.6	J8	N50 02.0 E008 34.4
B47	N50 02.8 E008 34.6	K2	N50 01.7 E008 34.7
B48	N50 02.9 E008 34.5	K4	N50 01.7 E008 34.6
C2, C4	N50 03.0 E008 34.5	K6, K8	N50 01.6 E008 34.5
C5, C6	N50 03.0 E008 34.6	K10	N50 01.6 E008 34.4
C8, C11	N50 03.0 E008 34.7	S401, S402	N50 01.8 E008 33.4
C13 thru C14S	N50 03.0 E008 34.8	S403	N50 01.8 E008 33.5
C15 thru C15S	N50 03.0 E008 34.9	S404	N50 01.8 E008 33.3
C16 thru C16S	N50 03.0 E008 35.0	S405	N50 01.8 E008 33.5
D1	N50 03.1 E008 35.2	S406	N50 01.8 E008 33.3
D1A thru D4B	N50 03.0 E008 35.2	S407	N50 01.8 E008 33.5
D5, D5A	N50 03.0 E008 35.1	S408	N50 01.8 E008 33.3
D8	N50 03.0 E008 35.0	S409	N50 01.8 E008 33.6
D8A	N50 03.0 E008 35.1	S410	N50 01.8 E008 33.3
E2 thru E2B	N50 03.1 E008 35.3	S411	N50 01.8 E008 33.6
E5 thru E6A	N50 03.1 E008 35.4	S412	N50 01.7 E008 33.2
E9, E9A	N50 03.1 E008 35.5	S413	N50 01.8 E008 33.6
F211	N50 02.4 E008 32.7	S414 thru S418	N50 01.7 E008 33.2
F212	N50 02.4 E008 32.6	S420	N50 01.7 E008 33.1
F213, F214	N50 02.4 E008 32.7	S501, S503	N50 01.8 E008 33.9
F215	N50 02.4 E008 32.9	S504	N50 01.8 E008 33.7
F216	N50 02.5 E008 32.9	S505	N50 01.9 E008 33.8
F221, F222	N50 02.3 E008 32.5	S506	N50 01.8 E008 33.6
F223	N50 02.3 E008 32.4	S507	N50 01.9 E008 33.8
F224, F225	N50 02.4 E008 32.4	S508	N50 01.9 E008 33.6
F231	N50 02.3 E008 32.1	S601	N50 01.9 E008 34.1
F232	N50 02.3 E008 32.0	S602	N50 01.8 E008 33.9
F232A	N50 02.2 E008 32.0	S603	N50 01.9 E008 34.1
F233	N50 02.3 E008 31.9	S604	N50 01.9 E008 33.9
F233A	N50 02.2 E008 32.0		
F234	N50 02.3 E008 31.8		
F235	N50 02.2 E008 31.8		

CHANGES: Stands F224 and F225 added.

INS COORDINATES

STAND No.	COORDINATES	STAND No.	COORDINATES
V92, V93	N50 03.0 E008 36.0	V171 thru V172	N50 02.2 E008 32.5
V94, V95	N50 03.0 E008 35.9	V173	N50 02.2 E008 32.4
V96	N50 03.0 E008 35.8	V173A	N50 02.2 E008 32.5
V97	N50 02.9 E008 35.7	V173B, V174	N50 02.2 E008 32.4
V106 thru V111	N50 03.0 E008 35.5	V175, V176	N50 02.2 E008 32.3
V112 thru V114	N50 02.9 E008 35.4	V177, V178	N50 02.1 E008 32.2
V115 thru V118	N50 02.9 E008 35.3	V322	N50 01.6 E008 34.1
V119	N50 02.9 E008 35.2	V324, V326	N50 01.7 E008 34.1
V120 thru V123	N50 02.9 E008 35.1	V328	N50 01.8 E008 34.1
V124, V125	N50 02.9 E008 35.0	V266 thru V268	N50 02.2 E008 31.5
V126	N50 02.8 E008 35.0	V269, V270	N50 02.2 E008 31.4
V127 thru V130	N50 02.8 E008 34.9	V701	N50 01.3 E008 31.9
V134 thru V136	N50 02.6 E008 34.2	V702	N50 01.4 E008 31.8
V143	N50 02.7 E008 33.7	V704, V706, V708	N50 01.4 E008 31.9
V144	N50 02.7 E008 33.8	V711	N50 01.3 E008 32.0
V151, V152	N50 02.5 E008 33.7	V712	N50 01.4 E008 32.0
V153	N50 02.5 E008 33.6	V713	N50 01.3 E008 32.0
V157	N50 02.5 E008 33.5	V714	N50 01.4 E008 32.0
V158, V159	N50 02.4 E008 33.5	V715	N50 01.3 E008 32.0
V160 thru V162	N50 02.4 E008 33.4	V716	N50 01.4 E008 32.0
V163	N50 02.4 E008 33.3	V717	N50 01.3 E008 32.0
V164	N50 02.3 E008 33.1	V718	N50 01.4 E008 32.0
V166, V167	N50 02.3 E008 32.9	V719, V721	N50 01.3 E008 32.1
V168, V169	N50 02.3 E008 32.8		
V170	N50 02.3 E008 32.7		



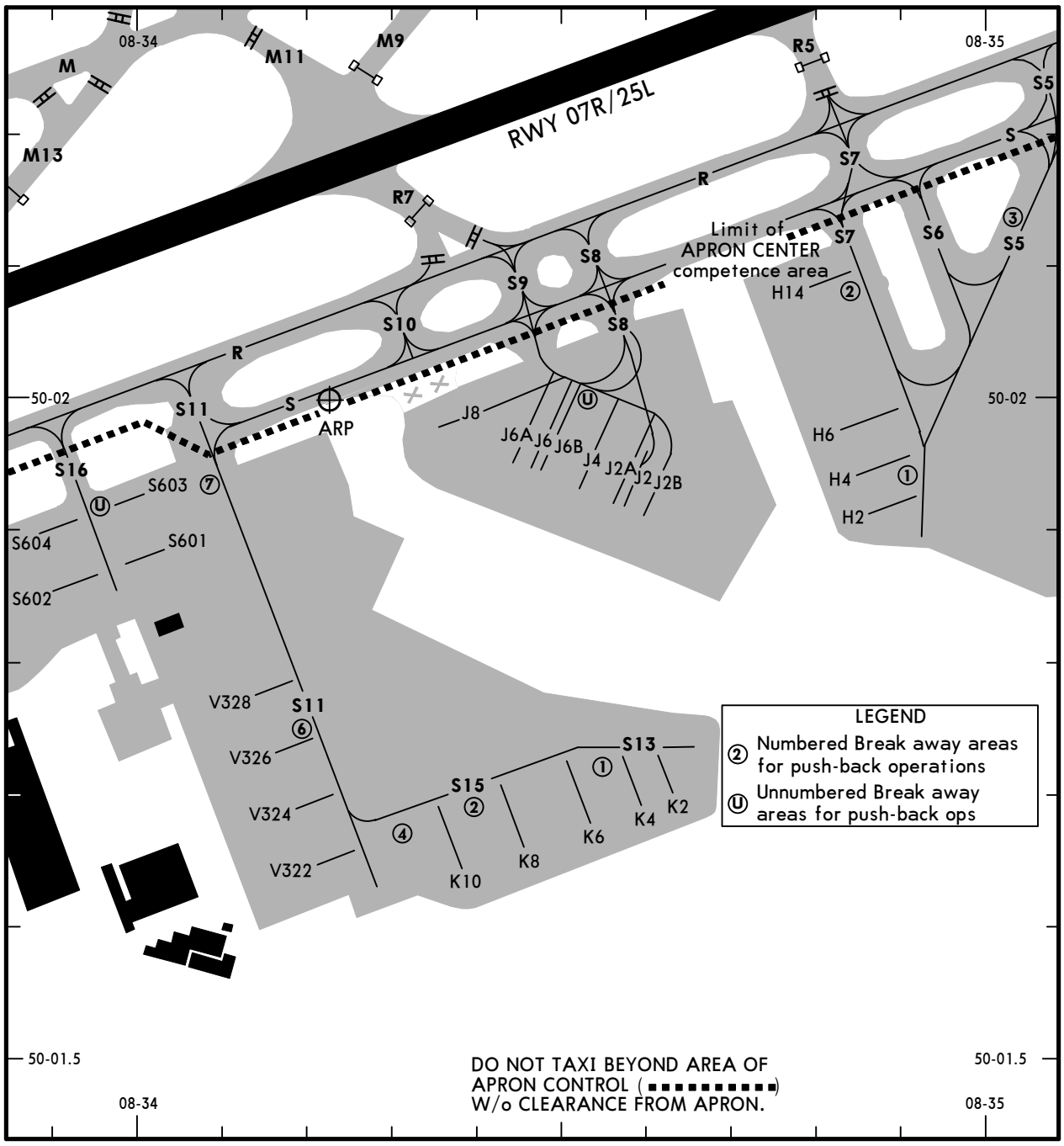
CHANGES: Stand H402 withdrawn.

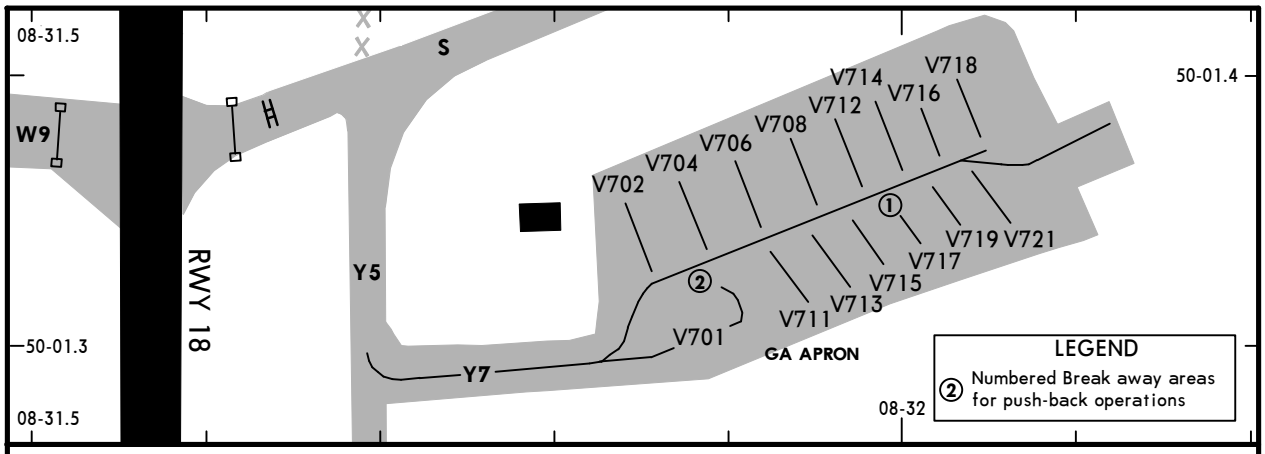
EDDF/FRA

JEPPESEN FRANKFURT/MAIN, GERMANY

18 AUG 23 (10-9E1)

FRANKFURT/MAIN



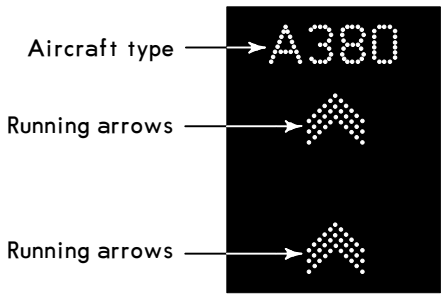


CHANGES: Break away areas for push-back operations.

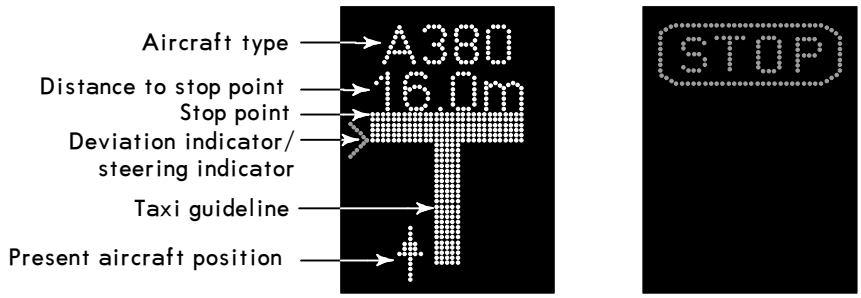
ADVANCED VISUAL DOCKING GUIDANCE SYSTEM (A-VDGS)

DISPLAY OF IMAGES AND FUNCTIONS ON THE PANEL

Examples:



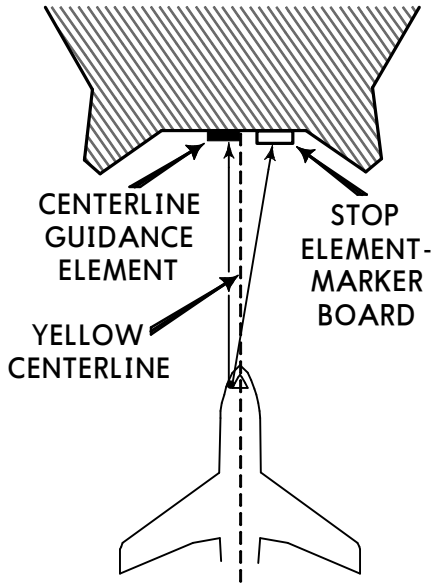
Safety Information:
- If a pilot is unsure of the information shown on the display the acft has to be stopped immediately and further information for clearance needs to be obtained.
- A pilot shall not enter the stand area unless the vertical running arrows are displayed on the docking system and unless the acft type displayed matches the approaching acft.
- The pilot shall not proceed beyond the first passenger loading bridge in sight unless the running arrows are superseded by the final lead-in information (distance to stop-point, stop-point, deviation indicator or steering direction, taxi guidance line, present acft position). The same applies in case the display shows "WAIT", "WAIT VIEW BLOCK" or "WAIT GATE BLOCK" or "WAIT ID FAIL".



Depending on the system type, displays can be slightly different or additional.

CHANGES: A-VDGS description.

AIRCRAFT GUIDANCE FOR NOSE-IN STANDS (AGNIS)



GENERAL

The visual guidance system for nose-in parking positions AGNIS (Aircraft Guidance for Nose-In Stands) consists of the following elements:

1. CENTERLINE GUIDANCE ELEMENT
2. YELLOW CENTERLINE
3. STOP ELEMENT - MARKER BOARD

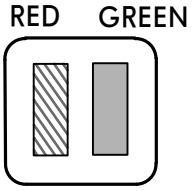
CAUTION

The system is aligned with the LEFT hand pilot seat only. In case of AGNIS failure, nose-in positioning will be guided by marshaller.

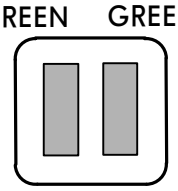
NOTE: Nose-in parking aircraft (on push-back position) have to use towing truck when leaving parking position.

CENTERLINE GUIDANCE ELEMENT

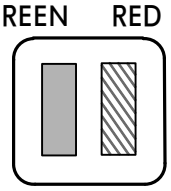
Approach the parking position along the yellow centerline so that both vertical slots in the Centerline Guidance Element show GREEN. Adjustments to the left or right shall always be made towards the GREEN.



LEFT of centerline. Turn towards GREEN. (RIGHT)



Aircraft on centerline.



RIGHT of centerline. Turn towards GREEN. (LEFT)

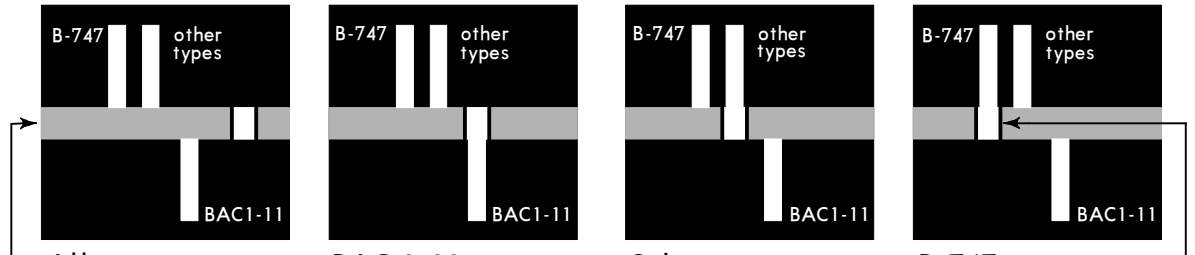
STOP ELEMENT - MARKER BOARD

The aircraft is stopped at the correct position by means of the Stop Element. When the tubular light, visible through the horizontal slot in the marker board, registers in line with the appropriate vertical reference mark, the aircraft has reached the correct stopping position.

CAUTION

Be sure to select the correct vertical reference mark corresponding to your type of aircraft. Marker board layouts are different for the various nose-in parking positions.

AGNIS CENTRE LINE GUIDANCE STOP ELEMENT - MARKER BOARD



All types continue taxiing.

BAC 1-11 stop. Other types and B-747 continue taxiing.

Other types stop. B-747 continue taxiing.

B-747 stop.

SIGHTING SLOT

LIGHT TUBE

CHANGES: Chart reindexed.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN 7 JUL 23 Eff 13 Jul (11-1)

FRANKFURT/MAIN, GERMANY
ILS Z Rwy 07L

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)	*FRANKFURT Tower	*Ground
118.030	120.805	125.355	118.505 127.280	136.5	121.805

LOC IFNE	Final Apch Crs	DF46Ø	DA(H) Refer to Minimums	Apt Elev / Rwy
111.75	066°	5000′ (4696′)		Apt Elev 363′ Rwy 304′

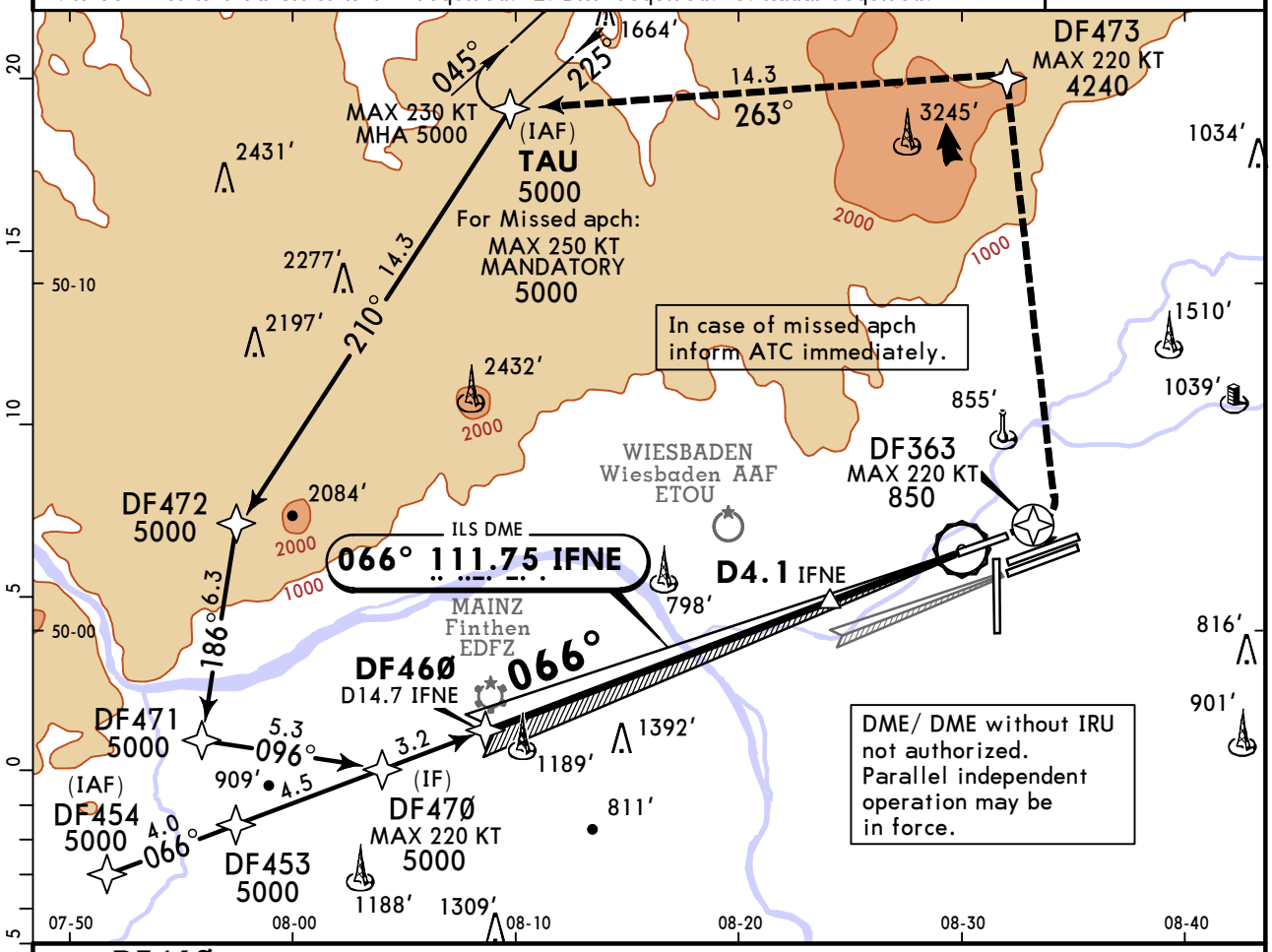
MISSED APCH: Direct to DF363 at or above 850′ (MAX 220 KT), turn LEFT direct to DF473 at or above 4240′ (MAX 220 KT), then to TAU VOR at 5000′ (MAX 250 KT). Missed apch requires a min climb of 4.1% (250′/NM) to 3500′.

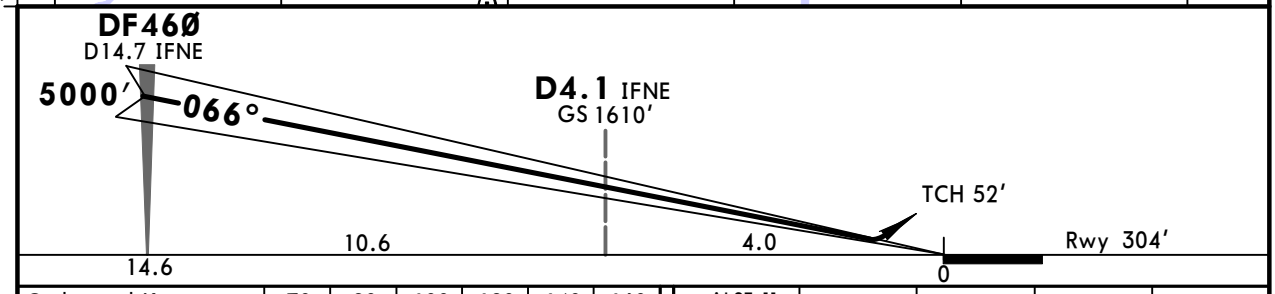
Alt Set: hPa(IN on req) Rwy Elev: 11 hPa Trans level: By ATC Trans alt: 5000′

1. RNAV-1 or RNP APCH or RNP-1 required. 2. DME required. 3. Radar required.

4300 MSA ARP

BRIEFING STRIP





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

ALSF-II REIL PAPI

D DF363 MIN 850′ 220 KT MAX

Std/State STRAIGHT-IN LANDING ILS

DA(H) ABC: 504′(200′) D: 512′(208′)

PANS OPS

	TDZ or CL out	ALS out
A B C D	R550m	1 R550m / R1200m

1 R750m when a Flight Director or Autopilot or HUDLS to DA is not used.

CHANGES: Procedure, MSA, missed apch.

EDDF/FRA
FRANKFURT/MAIN

JEPPESEN
7 JUL 23
Eff 13 Jul
(11-1A)

FRANKFURT/MAIN, GERMANY
CAT II/III ILS Z Rwy 07L

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)	*FRANKFURT Tower	*Ground
118.030	120.805	125.355	118.505 127.280	136.5	121.805

LOC IFNE	Final Apch Crs	DF46Ø	CAT III & II ILS Refer to Minimums	Apt Elev 363′ Rwy 304′
111.75	066°	5000′ (4696′)		

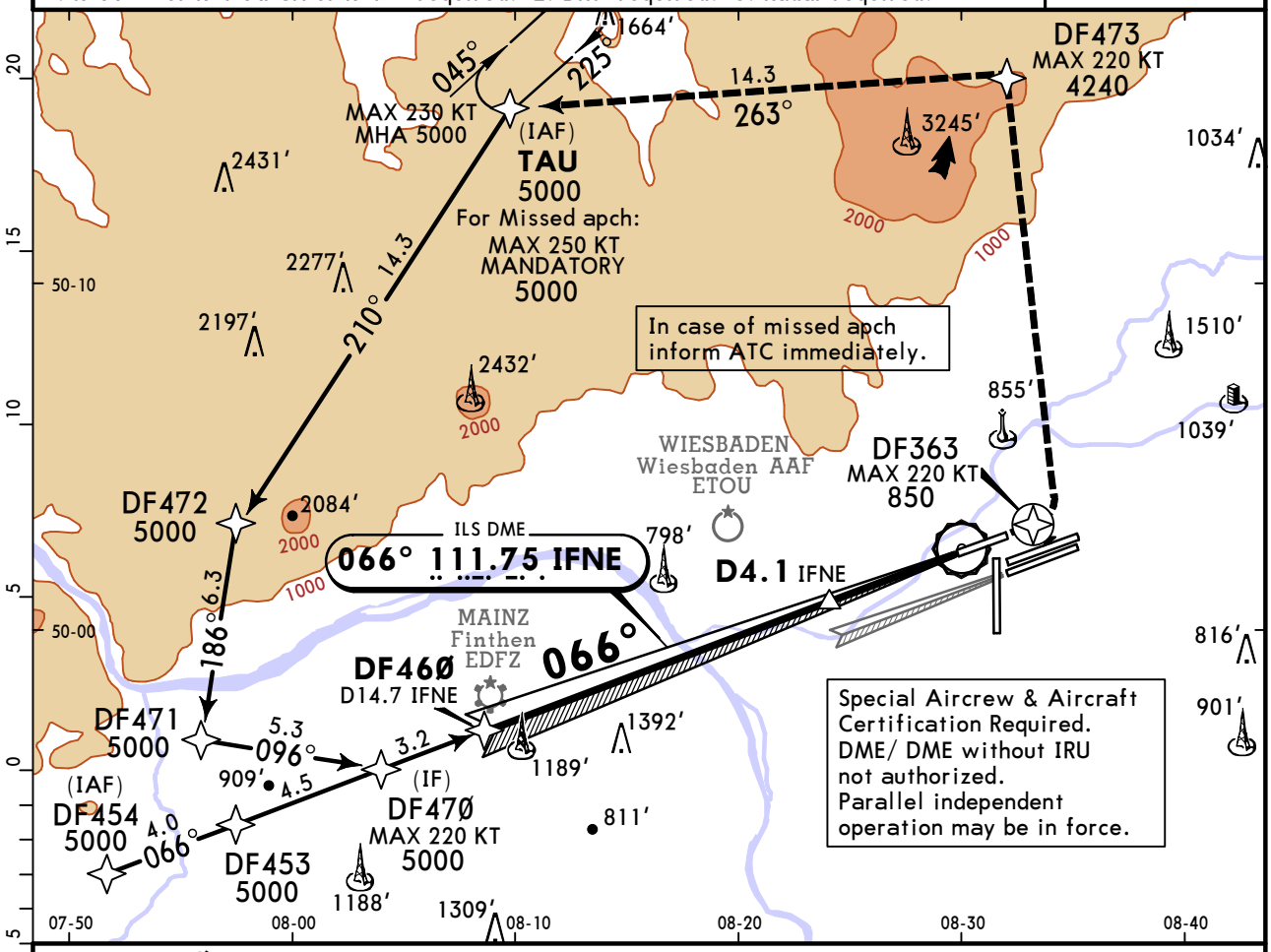
MISSED APCH: Direct to DF363 at or above 850′ (MAX 220 KT), turn LEFT direct to DF473 at or above 4240′ (MAX 220 KT), then to TAU VOR at 5000′ (MAX 250 KT). Missed apch requires a min climb of 4.1% (250′/NM) to 3500′.

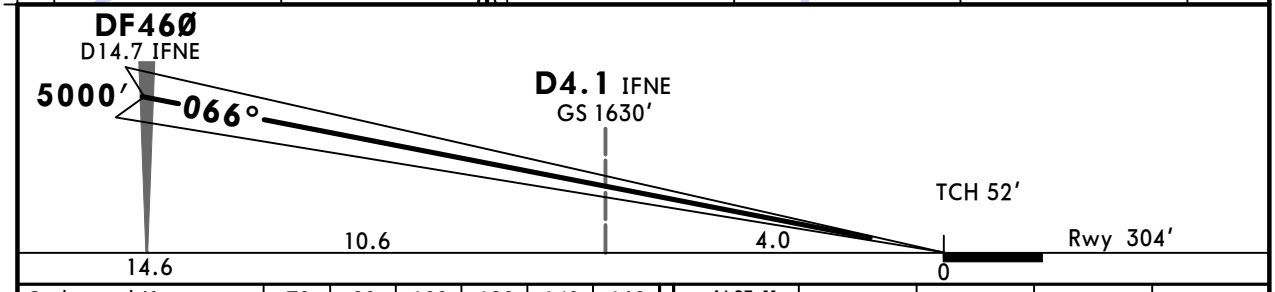
Alt Set: hPa(IN on req) Rwy Elev: 11 hPa Trans level: By ATC Trans alt: 5000′

1. RNAV-1 or RNP APCH or RNP-1 required. 2. DME required. 3. Radar required.

4300
MSA ARP

BRIEFING STRIP





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

ALSF-II
REIL
PAPI

D

DF363 | MIN 850′ | 220 KT MAX

Std/State STRAIGHT-IN LANDING

CAT III ILS	CAT II ILS	
	A: RA 99′ DA(H) 404′ (100′) B: RA 106′ DA(H) 411′ (107′) C: RA 117′ DA(H) 422′ (118′)	D: RA 132′ DA(H) 437′ (133′)
R75m	R300m	R400m

PANS OPS

CHANGES: Procedure, MSA, missed apch.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN 22 SEP 23 (11-2)

FRANKFURT/MAIN, GERMANY ILS Y Rwy 07L

BRIEFING STRIP

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		*FRANKFURT Tower	*Ground
118.030	120.805	125.355	118.505	127.280	136.5	121.805

LOC IFEL	Final Apch Crs	DF45Ø	DA(H) Refer to Minimums	Apt Elev	Rwy
110.30	066°	5000′ (4696′)		363′	304′

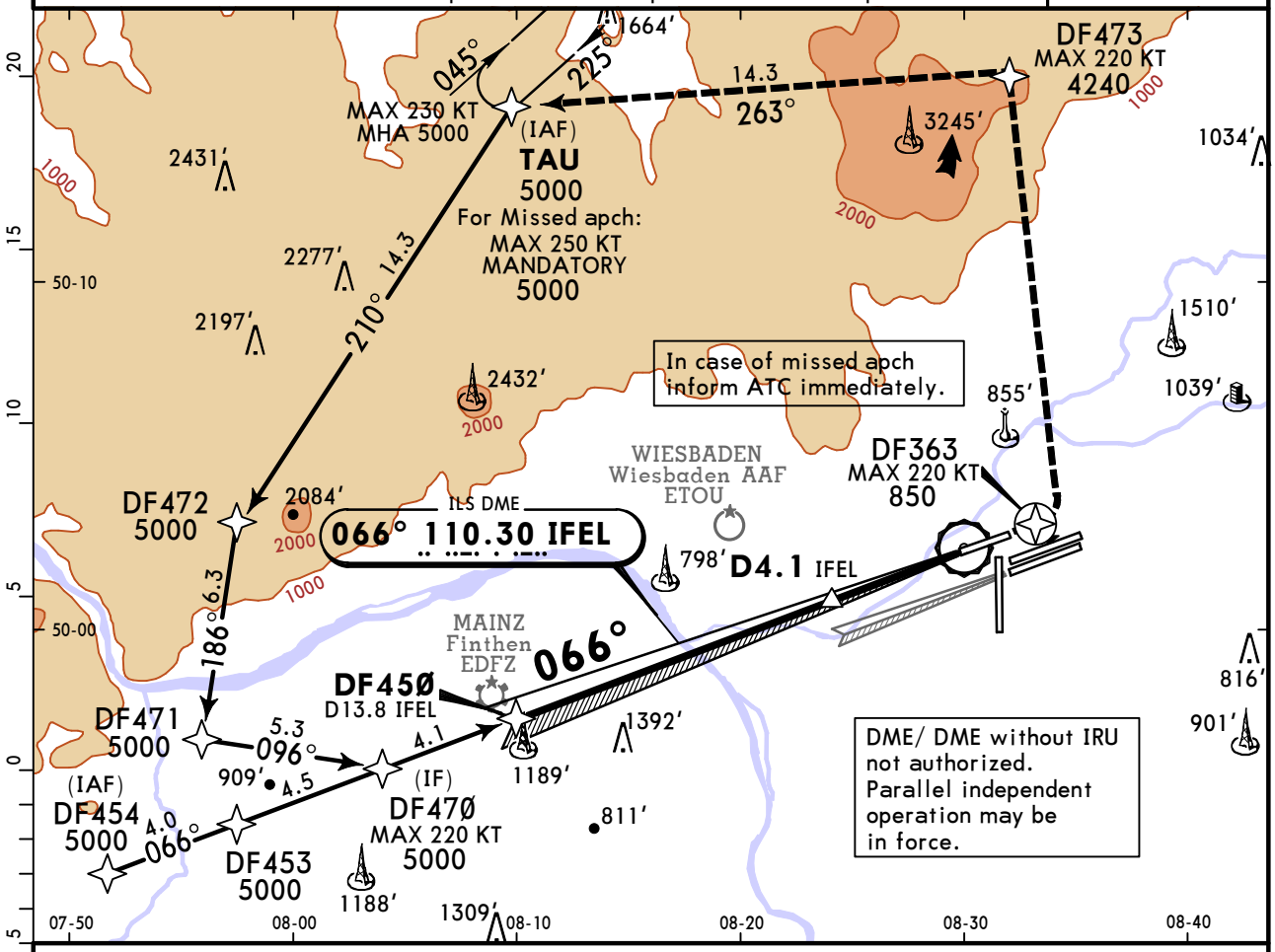
MISSED APCH: Direct to DF363 at or above 850′ (MAX 220 KT), turn LEFT direct to DF473 at or above 4240′ (MAX 220 KT), then to TAU VOR at 5000′ (MAX 250 KT). Missed apch requires a min climb of 4.1% (250′/NM) to 3500′.

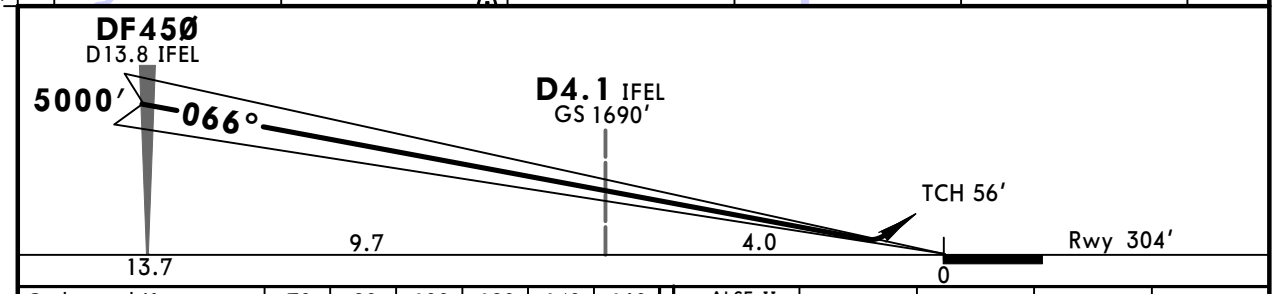
Alt Set: hPa(IN on req) Rwy Elev: 11 hPa Trans level: By ATC Trans alt: 5000′

1. RNAV-1 or RNP APCH or RNP-1 required. 2. DME required. 3. Radar required.

4300

MSA ARP





Gnd speed-Kts		70	90	100	120	140	160
GS	3.20°	396	510	566	679	793	906

ALSF-II
REIL
PAPI

D

DF363 MIN 850′ 220 KT MAX

Std/State

STRAIGHT-IN LANDING
ILS

DA(H) ABC: 504′(200′)
D: 512′(208′)

PANS OPS

	TDZ or CL out	ALS out
A	R550m	R1200m
B		
C		
D		

1 R750m when a Flight Director or Autopilot or HUDLS to DA is not used.

CHANGES: MSA.

EDDF/FRA
FRANKFURT/MAIN

JEPPESEN FRANKFURT/MAIN, GERMANY
7 JUL 23 (11-3) Eff 13 Jul
ILS Z Rwy 07C

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

BRIEFING STRIP™

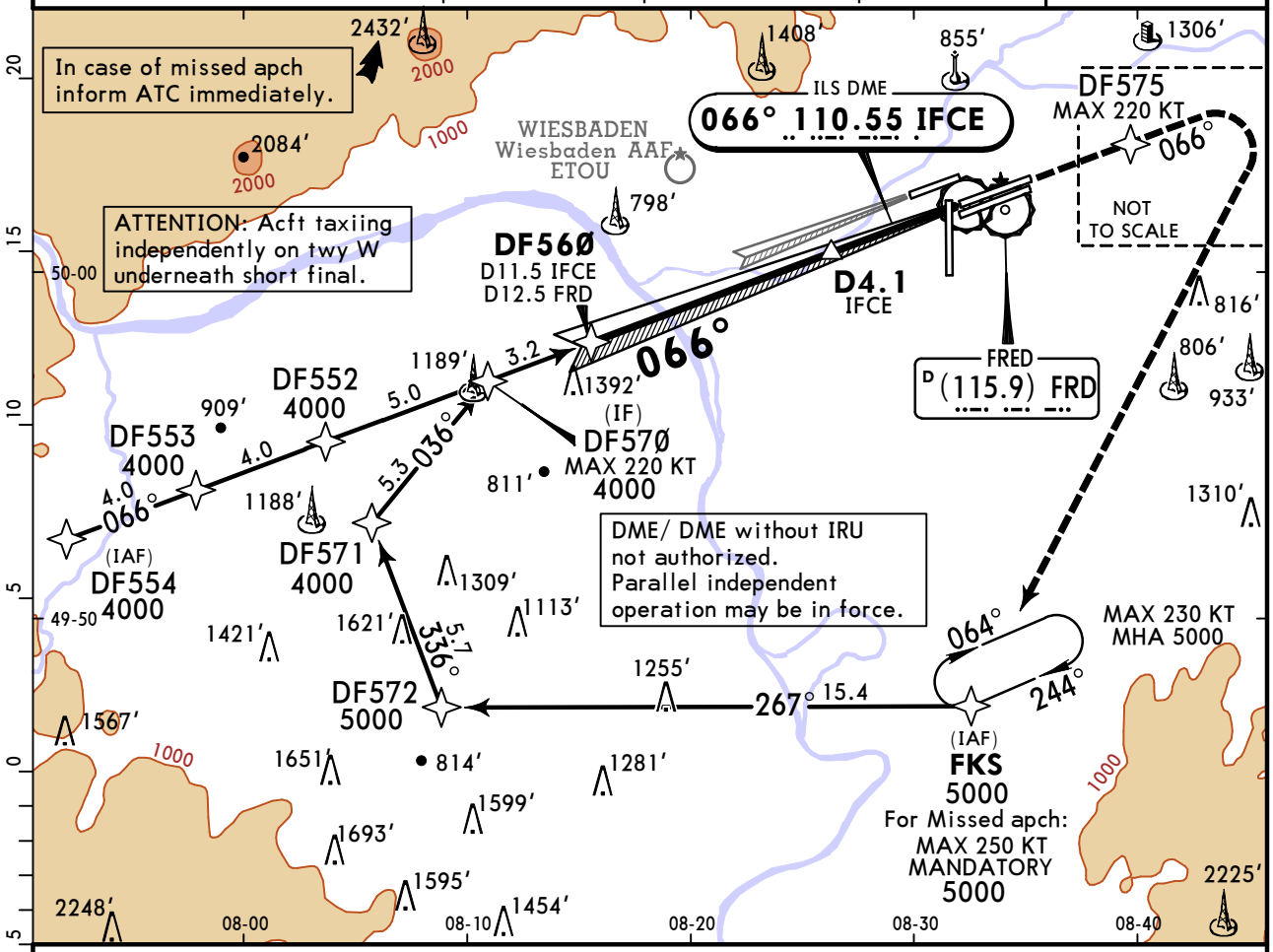
LOC IFCE	Final Apch Crs	DF56Ø	ILS DA(H)	Apt Elev 363′
110.55	066°	4000′ (3672′)	528′ (200′)	Rwy 328′

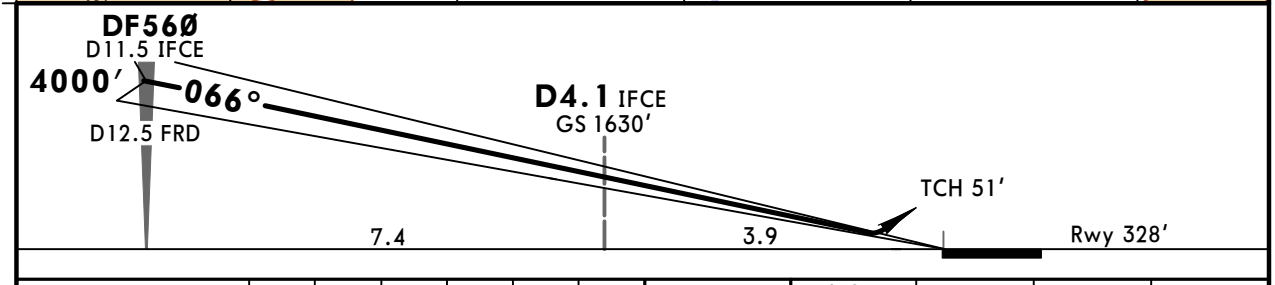
MISSED APCH: Direct to DF575 (MAX 220 KT), climb on course 066° to 5000′, then turn RIGHT (MAX 220 KT) direct to FKS at 5000′ (MAX 250 KT).

Alt Set: hPa(IN on req) Rwy Elev: 12 hPa Trans level: By ATC Trans alt: 5000′

1. RNAV-1 or RNP APCH or RNP-1 required. 2. DME required. 3. Radar required.

4300
MSA ARP





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

ALSF-II
REIL
PAPI

D | DF575 | 220 KT MAX

Std/State

STRAIGHT-IN LANDING
ILS

DA(H) **528′** (200′)

PANS OPS

	TDZ or CL out	ALS out
A	R550m	R1200m
B		
C		
D		

1 R750m when a Flight Director or Autopilot or HUDLS to DA is not used.

CHANGES: Procedure designation, procedure, missed apch, MSA, minimums.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN 7 JUL 23 Eff 13 Jul (11-3A)

FRANKFURT/MAIN, GERMANY
CAT II/III ILS Z Rwy 07C

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

BRIEFING STRIP

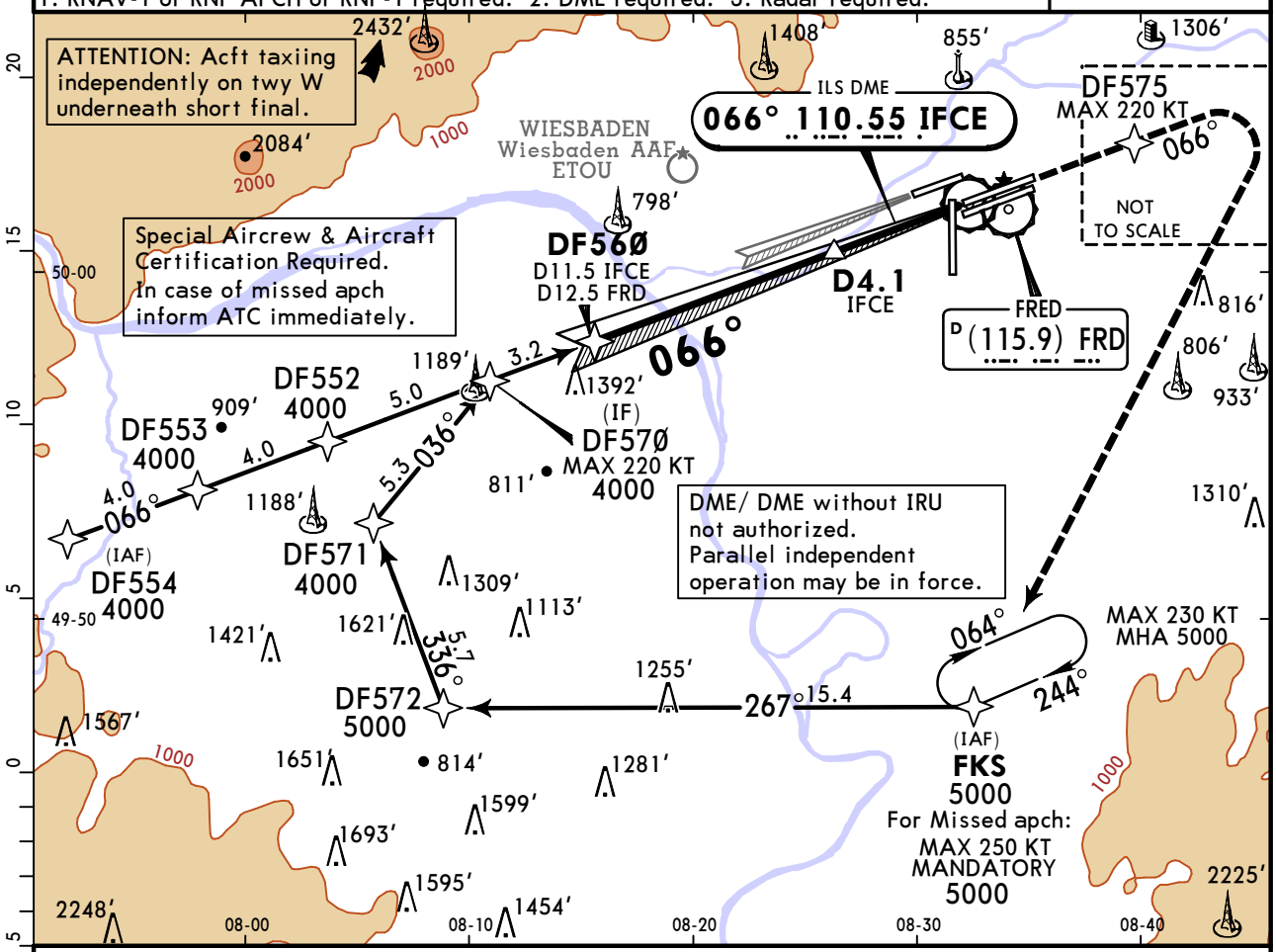
LOC IFCE 110.55	Final Apch Crs 066°	DF56Ø 4000′ (3672′)	CAT III ILS Refer to Minimums	CAT II ILS RA 102′ DA(H) 428′ (100′)	Apt Elev 363′ Rwy 328′

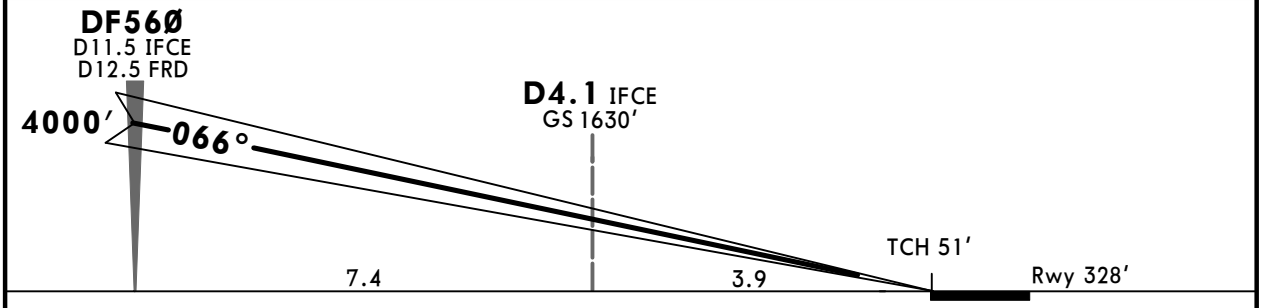
MISSED APCH: Direct to DF575 (MAX 220 KT), climb on course 066° to 5000′, then turn RIGHT (MAX 220 KT) direct to FKS at 5000′ (MAX 250 KT).

Alt Set: hPa(IN on req) Rwy Elev: 12 hPa Trans level: By ATC Trans alt: 5000′

1. RNAV-1 or RNP APCH or RNP-1 required. 2. DME required. 3. Radar required.

4300 MSA ARP





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

ALSF-II REIL PAPI

D DF575 220 KT MAX

Std/State STRAIGHT-IN LANDING

CAT III ILS	CAT II ILS
	RA 102′ DA(H) 428′ (100′)
R75m	1 R300m

PANS OPS

1 CAT D requires autoland or HUDLS, otherwise: R350m.

CHANGES: Procedure, missed apch, MSA.

EDDF/FRA
FRANKFURT/MAIN

JEPPESEN 11 AUG 23 (11-4)

FRANKFURT/MAIN, GERMANY
ILS X or LOC Rwy 07C

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

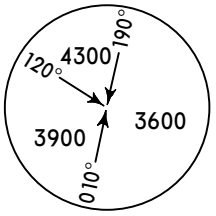
BRIEFING STRIP

ILS IFCE	Final Apch Crs	DF56Ø	ILS DA(H)	Apt Elev 363′
110.55	066°	4000′ (3672′)	528′ (200′)	Rwy 328′

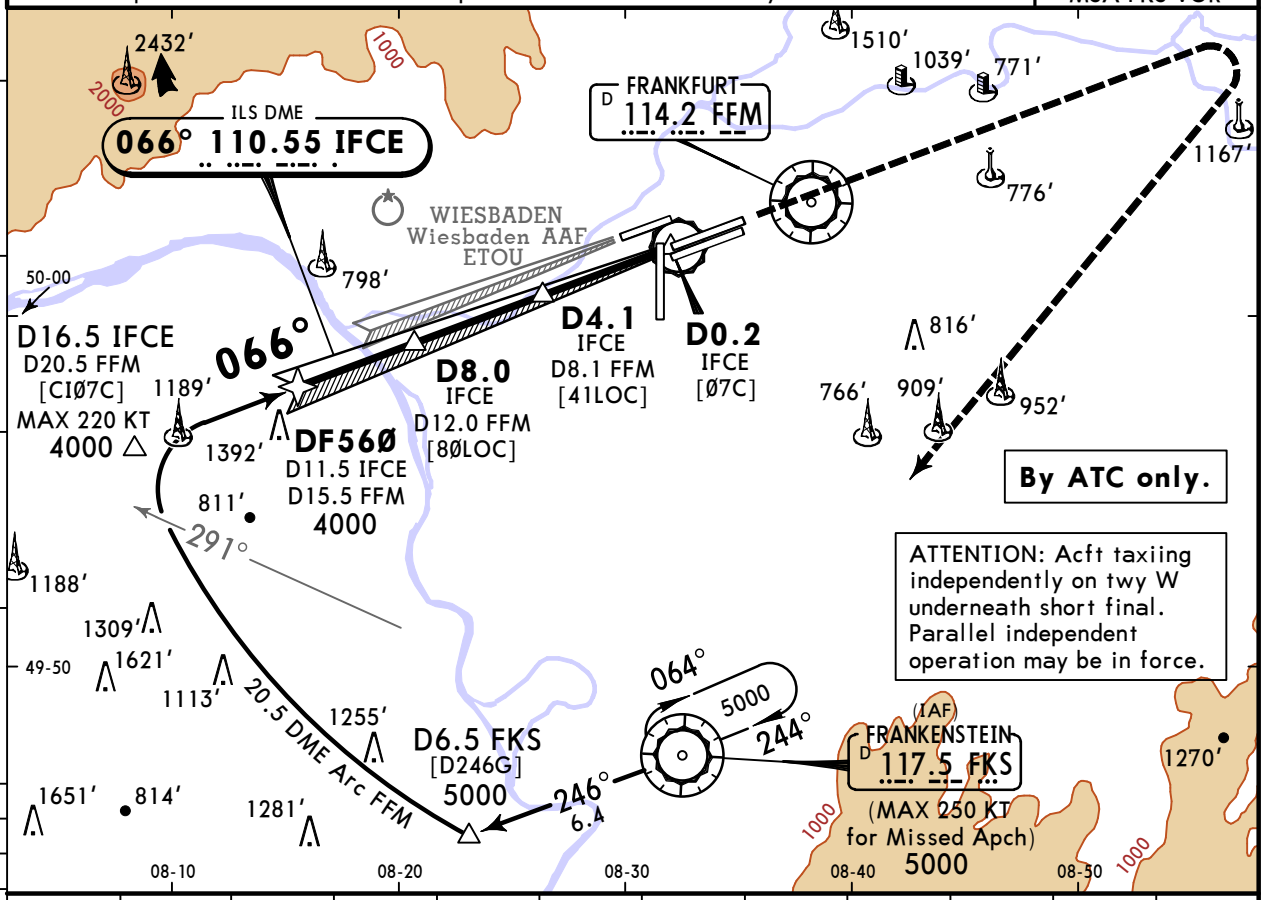
MISSED APCH: Climb on Rwy direction, at 5000′ turn RIGHT (MAX 220 KT), direct to FKS VOR at 5000′ (MAX 250 KT).

Alt Set: hPa (IN on req) Rwy Elev: 12 hPa Trans level: By ATC Trans alt: 5000′

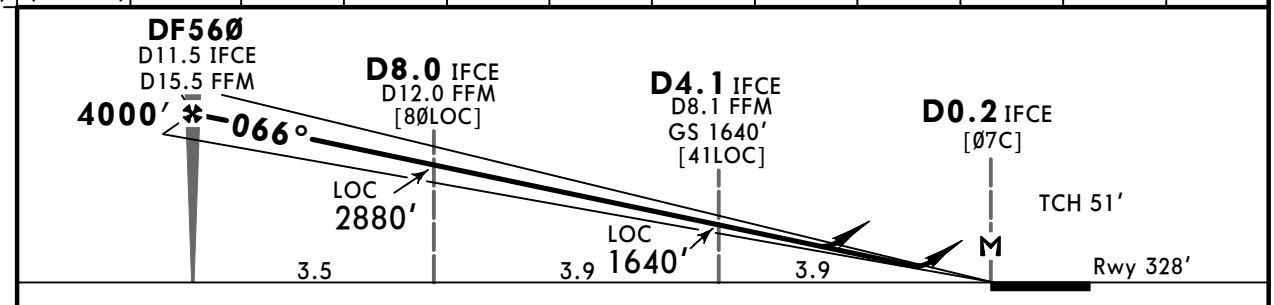
1. DME required. 2. In case of missed apch inform ATC immediately.



MSA FKS VOR



LOC (GS out)	IFCE DME	11.0	10.0	9.0	8.0	7.0	6.0	5.0	4.0	3.0	2.0
	ALTITUDE	3840′	3520′	3200′	2880′	2570′	2250′	1930′	1610′	1290′	970′



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 IFCE							

ALSF-II
REIL
PAPI

5000′

MAX 220 KT RT

FKS 117.5

PANS OPS

Std/State STRAIGHT-IN LANDING

	ILS DA(H) 528′ (200′)			LOC (GS out) CDFA 2 DA/MDA(H) 850′ (522′)	
		TDZ or CL out	ALS out	TDZ or CL out	ALS out
A	R550m	1 R550m	R1200m	R1500m	
B					
C				R1700m	R2400m
D					

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

CHANGES: MSA.

EDDF/FRA
FRANKFURT/MAIN

JEPPESEN 11 AUG 23 (11-4A)

FRANKFURT/MAIN, GERMANY
CAT II/III ILS X Rwy 07C

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

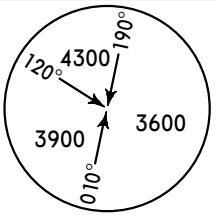
BRIEFING STRIP™

ILS IFCE	Final Apch Crs	DF56Ø	CAT III ILS	CAT II ILS	Apt Elev 363′
110.55	066°	4000′ (3672′)	Refer to Minimums	RA 102′ DA(H) 428′ (100′)	Rwy 328′

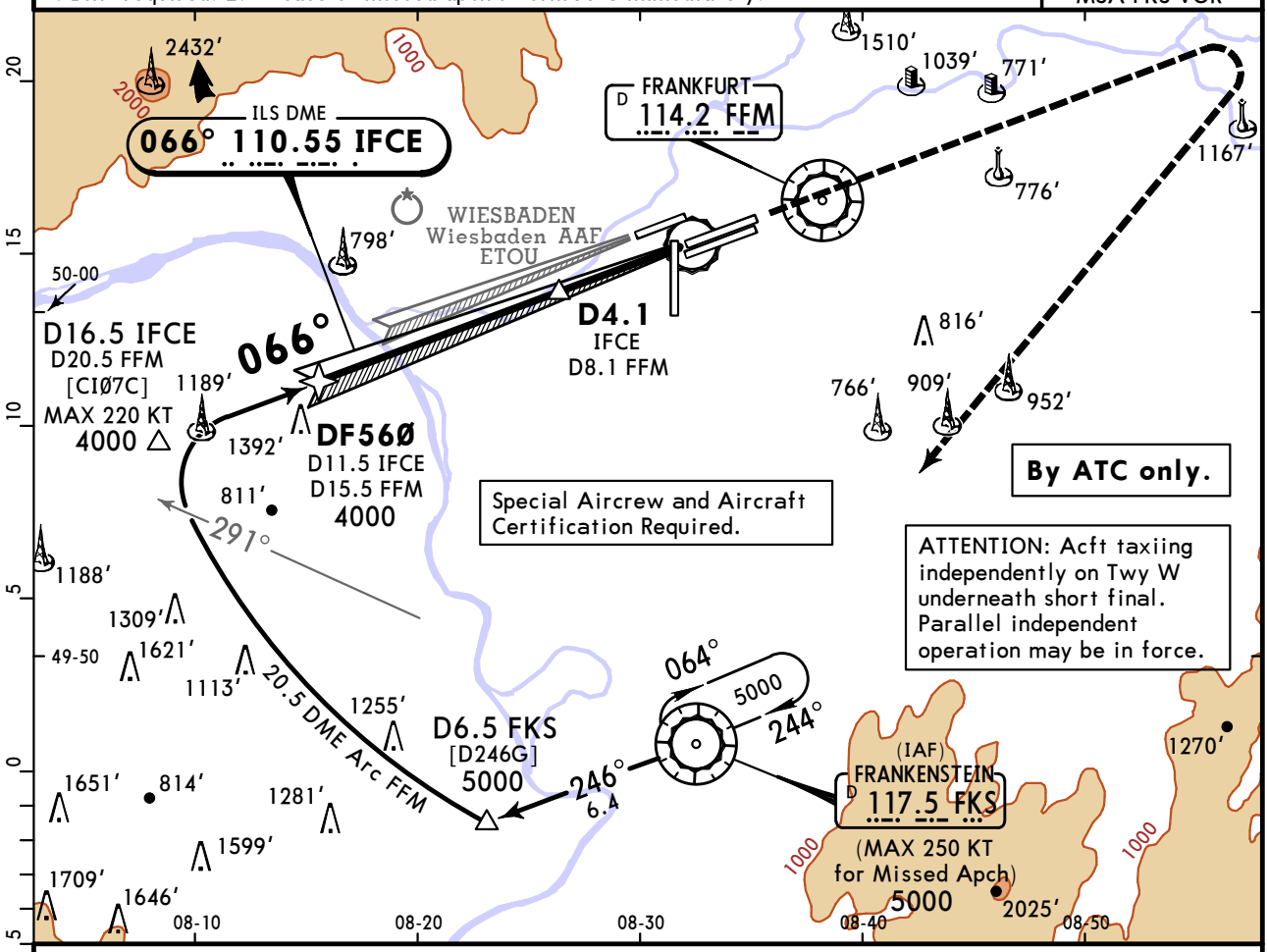
MISSED APCH: Climb on Rwy direction, at 5000′ turn RIGHT (MAX 220 KT), direct to FKS VOR at 5000′ (MAX 250 KT).

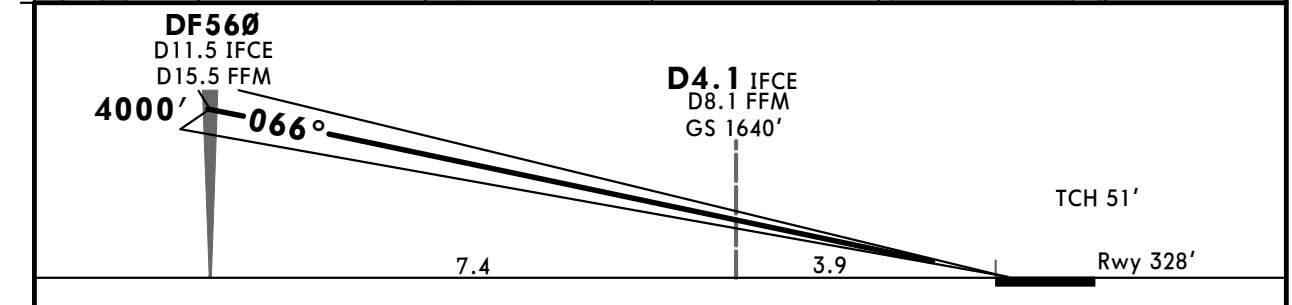
Alt Set: hPa (IN on req) Rwy Elev: 12 hPa Trans level: By ATC Trans alt: 5000′

1. DME required. 2. In case of missed apch inform ATC immediately.



MSA FKS VOR





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

ALSF-II REIL PAPI | 5000′ | MAX 220 KT RT | FKS 117.5

Std/State STRAIGHT-IN LANDING

CAT III ILS	CAT II ILS
	RA 102′ DA(H) 428′ (100′)
R75m	1 R300m

PANS OPS

1 CAT D requires autoland or HUDLS, otherwise: R350m.

CHANGES: MSA.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN FRANKFURT/MAIN, GERMANY

7 JUL 23 (11-5) Eff 13 Jul

ILS Rwy 07R

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

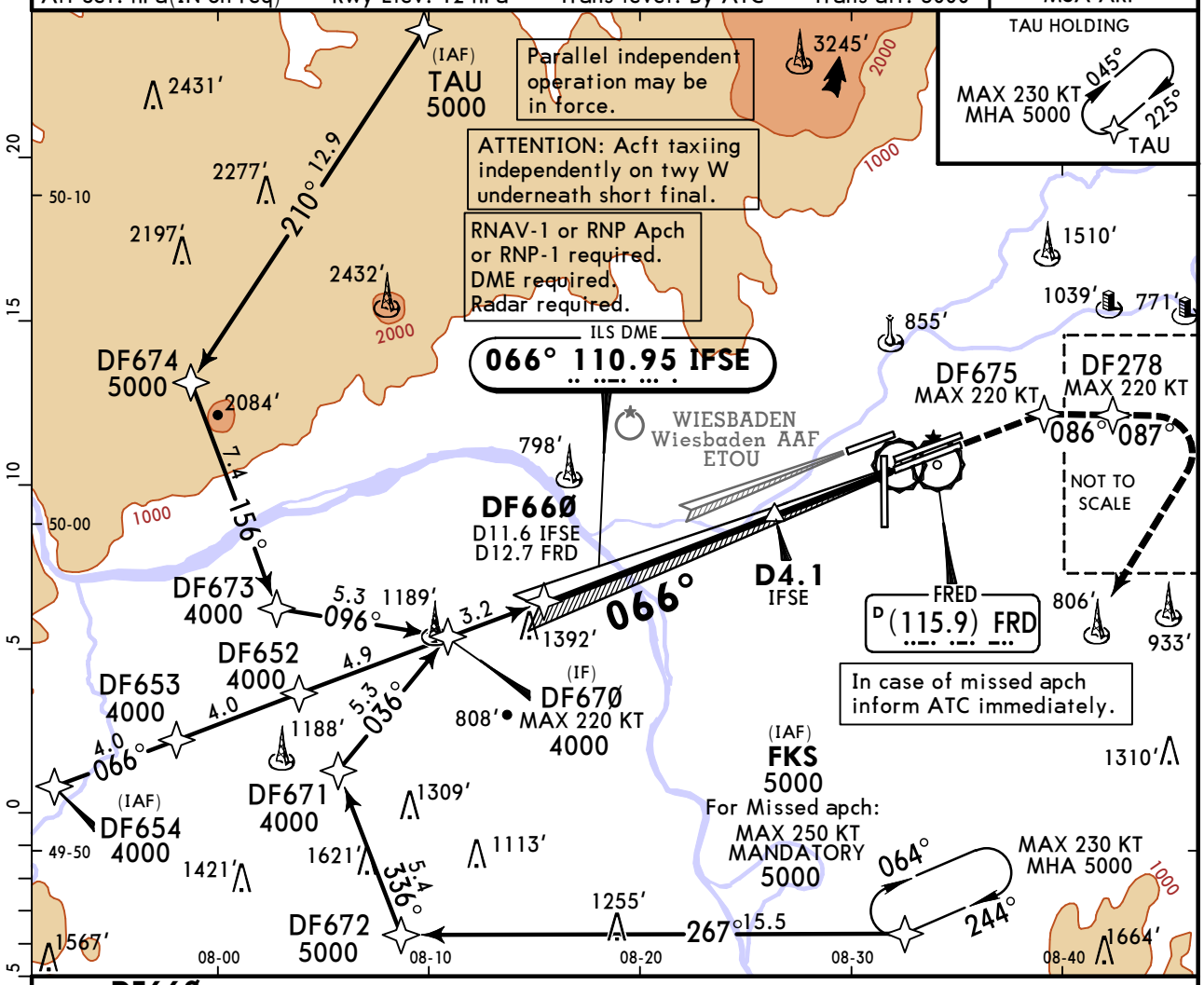
BRIEFING STRIP

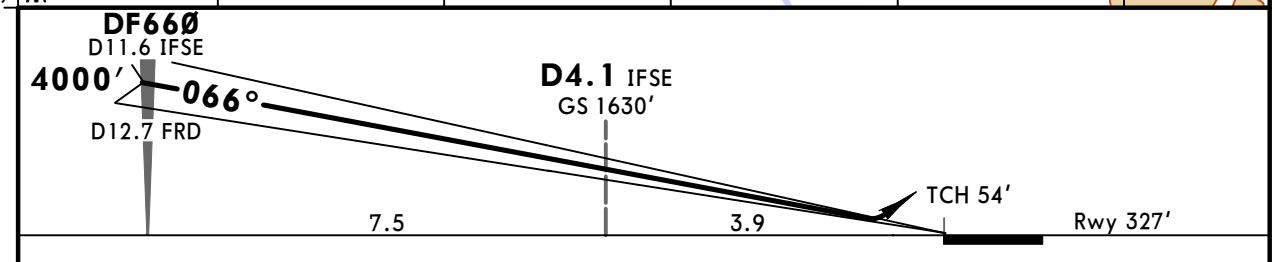
LOC IFSE	Final Apch Crs	DF66Ø	ILS DA(H)	Apt Elev 363′
110.95	066°	4000′ (3673′)	527′ (200′)	Rwy 327′

MISSED APCH: Direct to DF675 (MAX 220 KT), then to DF278 (MAX 220 KT). Climb on course 087° to 5000′, then turn RIGHT (MAX 220 KT) direct to FKS at 5000′ (MAX 250 KT).

4300 MSA ARP

Alt Set: hPa(IN on req) Rwy Elev: 12 hPa Trans level: By ATC Trans alt: 5000′





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

ALSF-II REIL PAPI

DF675 220 KT MAX

Std/State

STRAIGHT-IN LANDING
ILS

DA(H) **527′** (200′)

PANS OPS

	TDZ or CL out	ALS out
A B C D	R550m	1 R550m / R1200m

1 R750m when a Flight Director or Autopilot or HUDLS to DA is not used.

CHANGES: Chart reindexed, procedure, missed apch, MSA, minimums.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN

7 JUL 23
Eff 13 Jul

11-5A

FRANKFURT/MAIN, GERMANY
CAT II/III ILS Rwy 07R

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

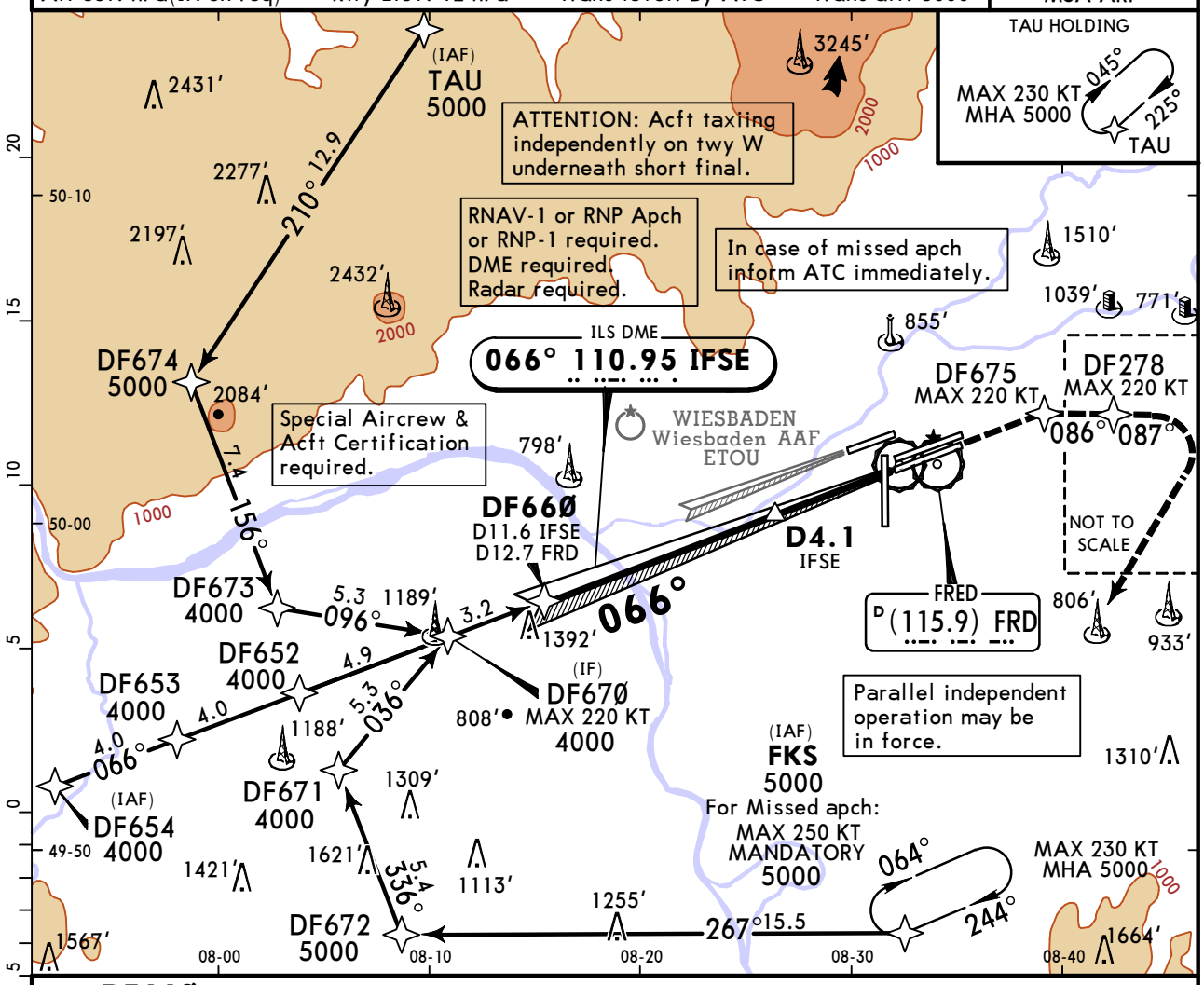
BRIEFING STRIP

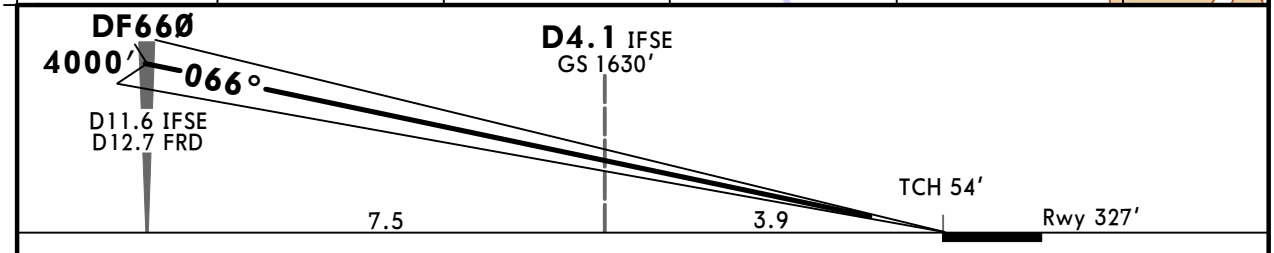
LOC IFSE	Final Apch Crs	DF66Ø	CAT III ILS	CAT II ILS	
110.95	066°	4000′ (3673′)	Refer to Minimums	RA 101′ DA(H) 427′ (100′)	Apt Elev 363′ Rwy 327′

MISSED APCH: Direct to DF675 (MAX 220 KT), then to DF278 (MAX 220 KT). Climb on course 087° to 5000′, then turn RIGHT (MAX 220 KT) direct to FKS at 5000′ (MAX 250 KT).

Alt Set: hPa(IN on req) | Rwy Elev: 12 hPa | Trans level: By ATC | Trans alt: 5000′

4300
MSA ARP





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

ALSF-II
REIL
PAPI

DF675 | 220 KT MAX

Std/State

STRAIGHT-IN LANDING

CAT III ILS	CAT II ILS
	RA 101′ DA(H) 427′ (100′)
R75m	1 R300m

1 CAT D requires autoland or HUDLS, otherwise: R350m.

PANS OPS

CHANGES: Chart reindexed, procedure, missed apch, MSA, minimums.

EDDF/FRA
FRANKFURT/MAIN

JEPPESEN FRANKFURT/MAIN, GERMANY
7 JUL 23 (11-6) Eff 13 Jul
ILS Rwy 25L

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

BRIEFING STRIP

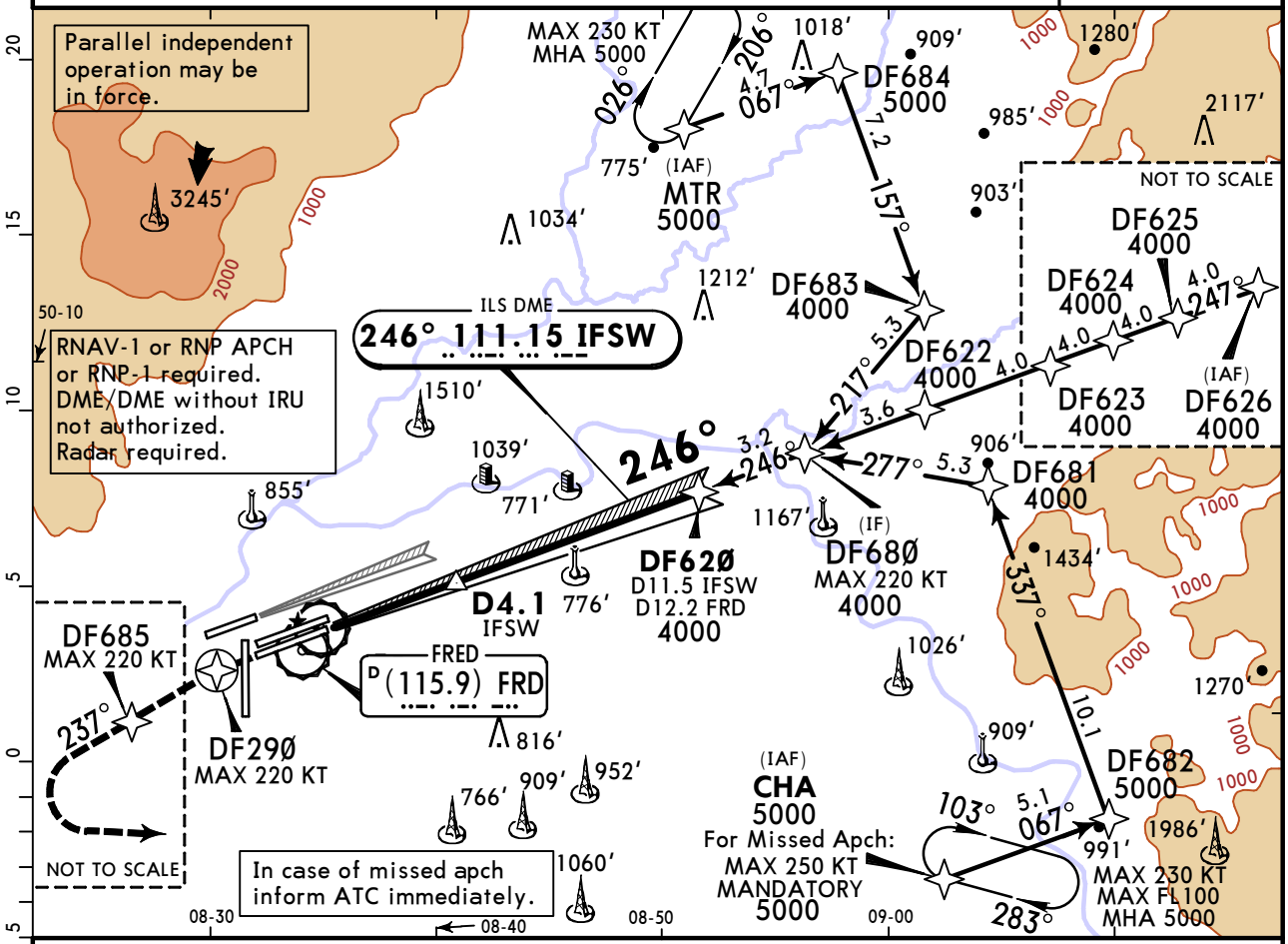
LOC IFSW	Final Apch Crs	DF62Ø	ILS DA(H)	Apt Elev 363′
111.15	246°	4000′ (3639′)	561′ (200′)	Rwy 361′

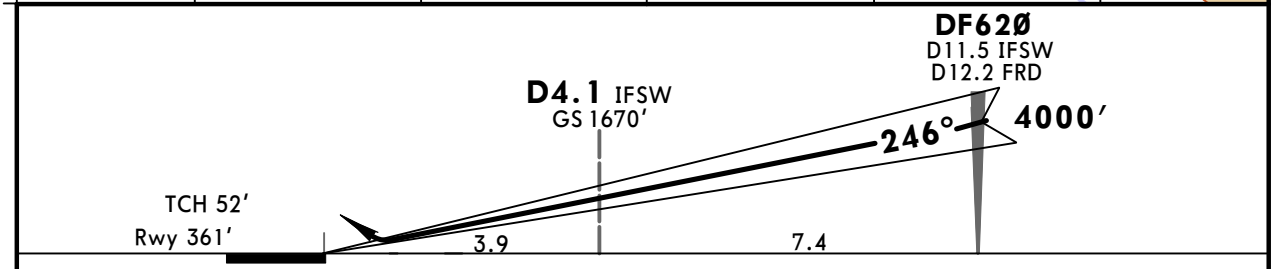
MISSED APCH: Direct to DF29Ø (MAX 220 KT), then direct to DF685 (MAX 220 KT). Climb on course 237° to 5000′, then turn LEFT (MAX 220 KT) direct to CHA at 5000′ (MAX 250 KT).

Alt Set: hPa(IN on req) Rwy Elev: 13 hPa Trans level: By ATC Trans alt: 5000′

1. DME required. 2. ATTENTION: Acft taxiing independently on Twy U underneath short final.

4300
MSA ARP





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

ALSF-II
REIL
PAPI

D | DF29Ø | 220 KT MAX

Std/State

STRAIGHT-IN LANDING

1 ILS

DA(H) 561′ (200′)

PANS OPS

	TDZ or CL out	ALS out
A	R550m	2 R550m	R1200m
B		
C		
D		

1 D_L: DA(H) 588′(227′). 2 R750m when a Flight Director or Autopilot or HUDLS to DA is not used.

CHANGES: Chart reindexed, procedure, MSA, missed apch, minimums.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN 7 JUL 23 (11-6A) Eff 13 Jul

FRANKFURT/MAIN, GERMANY
CAT II/III ILS Rwy 25L

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

BRIEFING STRIP™

LOC IFSW 111.15	Final Apch Crs 246°	DF62Ø 4000′ (3639′)	CAT III ILS Refer to Minimums	CAT II ILS RA 95′ DA(H) 461′ (100′)	Apt Elev 363′ Rwy 361′

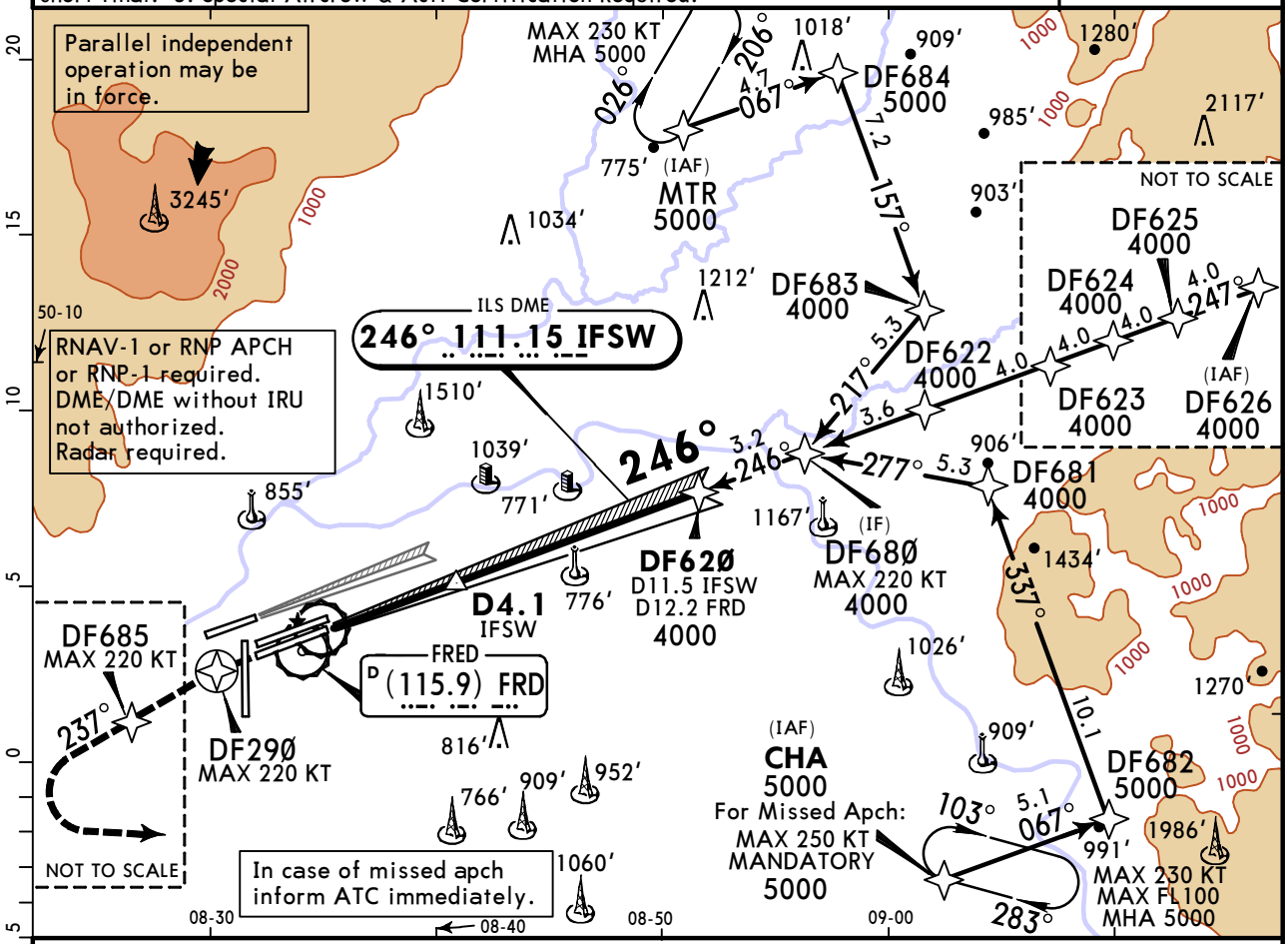
MISSED APCH: Direct to DF29Ø (MAX 220 KT), then direct to DF685 (MAX 220 KT). Climb on course 237° to 5000′, then turn LEFT (MAX 220 KT) direct to CHA at 5000′ (MAX 250 KT).

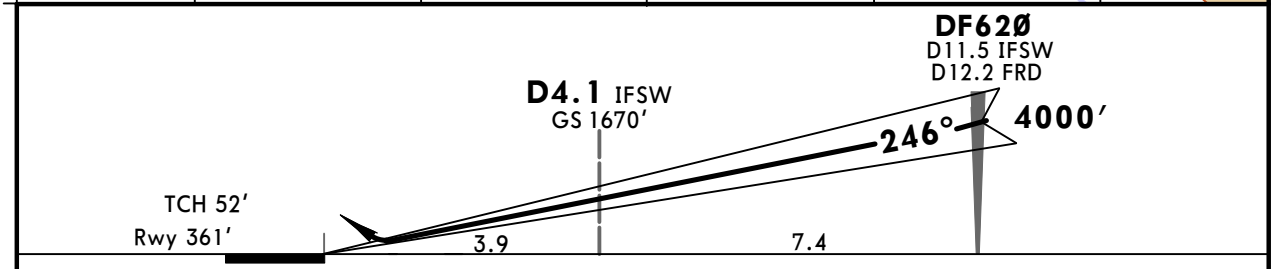
4300

MSA ARP

Alt Set: hPa(IN on req) Rwy Elev: 13 hPa Trans level: By ATC Trans alt: 5000′

1. DME required. 2. ATTENTION: Acft taxiing independently on Twy U underneath short final. 3. Special Aircrew & Acft Certification Required.





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

ALSF-II
REIL
PAPI

D | DF29Ø | 220 KT MAX

Std/State STRAIGHT-IN LANDING

CAT III ILS	CAT II ILS
	RA 95′ DA(H) 461′ (100′)
R75m	1 R300m

PANS OPS

1 CAT D requires autoland or HUDLS, otherwise: R350m.

CHANGES: Chart reindexed, procedure, MSA, missed apch.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN 7 JUL 23 (11-7) Eff 13 Jul

FRANKFURT/MAIN, GERMANY ILS Z Rwy 25C

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

BRIEFING STRIP

LOC IFCW	Final Apch Crs	DF52Ø	ILS DA(H)	Apt Elev 363′
111.55	246°	4000′ (3637′)	563′ (200′)	Rwy 363′

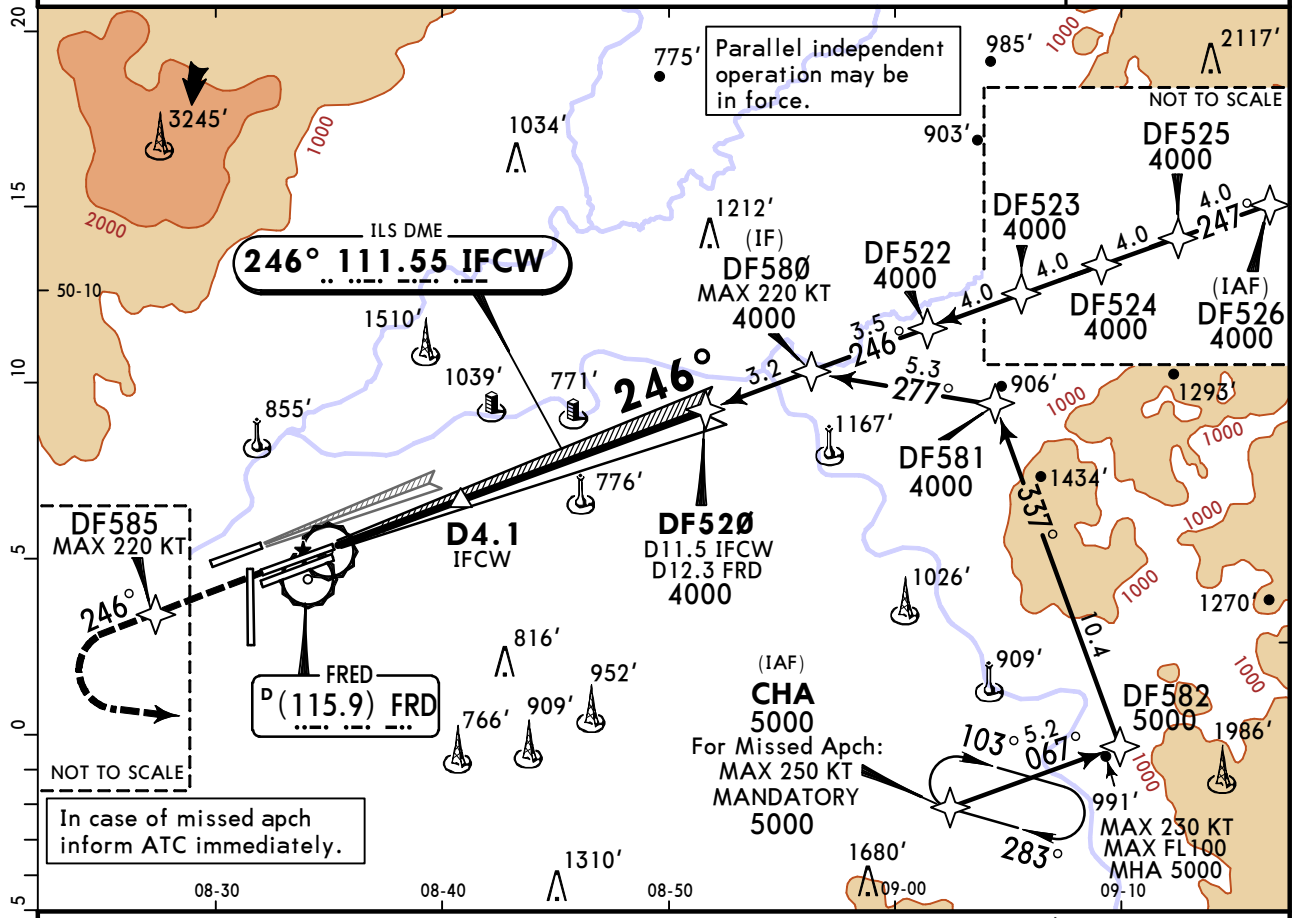
MISSED APCH: Direct to DF585 (MAX 220 KT), then climb on course 246° to 5000′, then turn LEFT (MAX 220 KT) direct to CHA at 5000′ (MAX 250 KT).

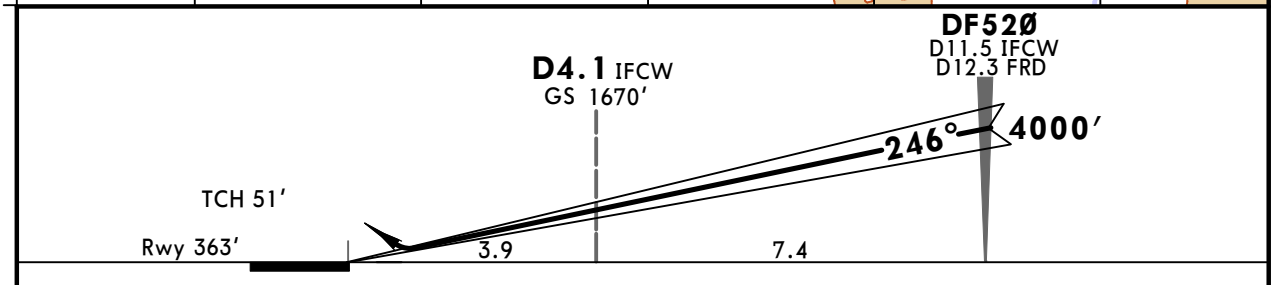
Alt Set: hPa (IN on req) Rwy Elev: 13 hPa Trans level: By ATC Trans alt: 5000′

1. DME required. 2. RNAV-1 or RNP APCH or RNP-1 required. 3. DME/DME without IRU not authorized. 4. Radar required. 5. ATTENTION: Acft taxiing independently on Twy U underneath short final.

4300

MSA ARP





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

ALSF-II
REIL
PAPI

DF585 | 220 KT MAX

Std/State STRAIGHT-IN LANDING

ILS

DA(H) **563′** (200′)

	TDZ or CL out	ALS out
A B C D	R550m	1 R550m	R1200m

PANS OPS

1 R750m when a Flight Director or Autopilot or HUDLS to DA is not used.

CHANGES: Chart reindexed, procedure, missed apch, MSA, minimums.

EDDF/FRA FRANKFURT/MAIN

7 JUL 23
Eff 13 Jul

11-7A

JEPPESEN

FRANKFURT/MAIN, GERMANY
CAT II/III ILS Z Rwy 25C

BRIEFING STRIP

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

LOC IFCW	Final Apch Crs	DF52Ø	CAT III ILS	CAT II ILS	Apt Elev 363′
111.55	246°	4000′ (3637′)	Refer to Minimums	RA 98′ DA(H) 463′ (100′)	Rwy 363′

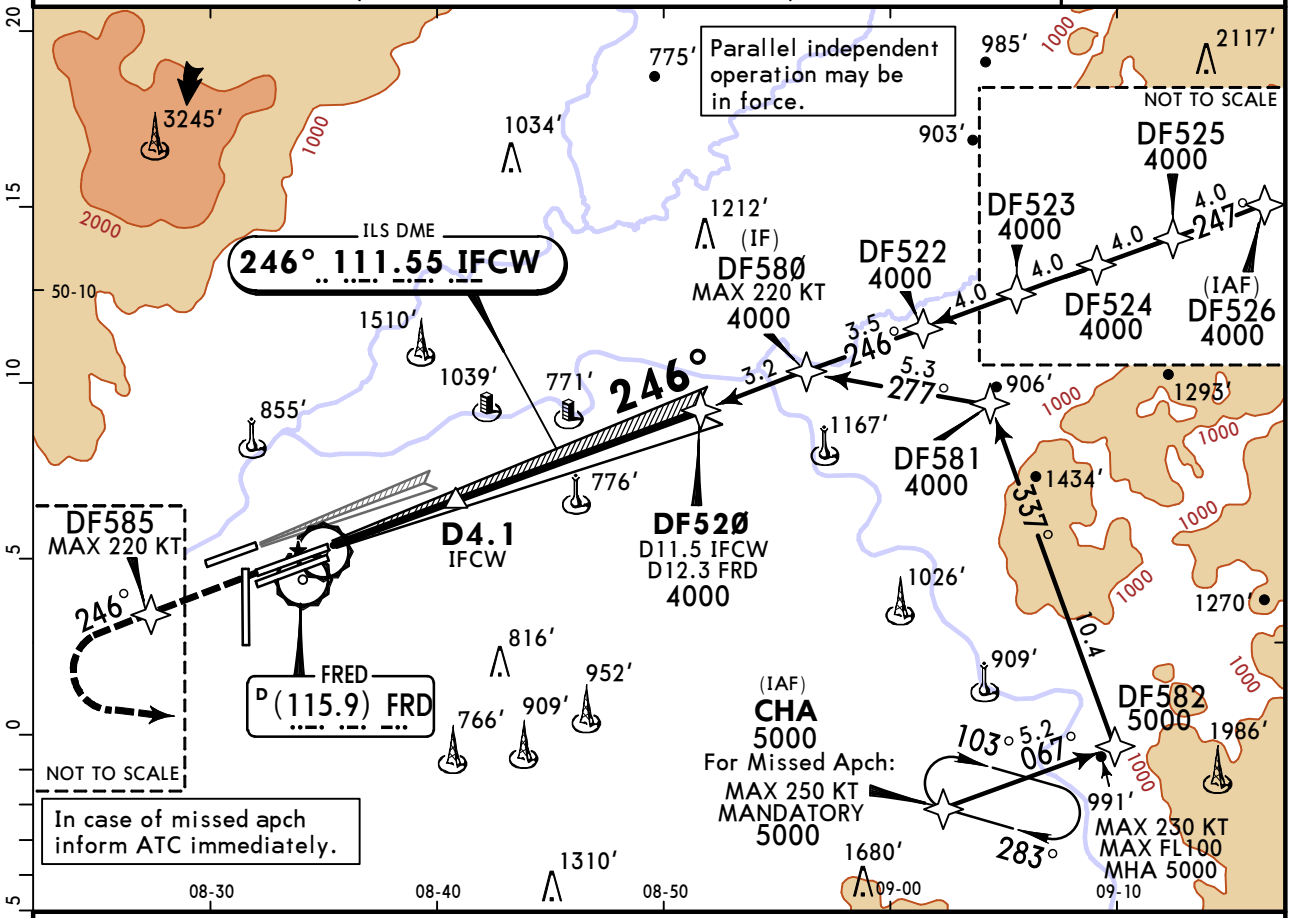
MISSED APCH: Direct to DF585 (MAX 220 KT), then climb on course 246° to 5000′, then turn LEFT (MAX 220 KT) direct to CHA at 5000′ (MAX 250 KT).

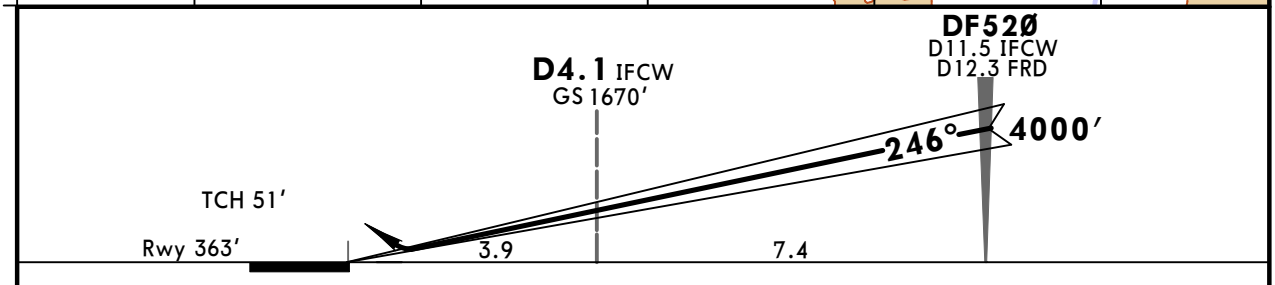
Alt Set: hPa (IN on req) Rwy Elev: 13 hPa Trans level: By ATC Trans alt: 5000′

1. DME required. 2. RNAV-1 or RNP APCH or RNP-1 required. 3. DME/DME without IRU not authorized. 4. Radar required. 5. ATTENTION: Acft taxiing independently on Twy U underneath short final. 6. Special Aircrew & Acft Certification Required.

4300

MSA ARP





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

ALSF-II
REIL
PAPI

D

DF585

220 KT MAX

Std/State STRAIGHT-IN LANDING

CAT III ILS	CAT II ILS
	RA 98′ DA(H) 463′ (100′)
R75m	1 R300m

1 CAT D requires autoland or HUDLS, otherwise: R350m.

PANS OPS

CHANGES: Chart reindexed, procedure, missed apch, MSA, minimums.

EDDF/FRA
FRANKFURT/MAIN

JEPPESEN FRANKFURT/MAIN, GERMANY
10 NOV 23 (11-8)
ILS X or LOC Rwy 25C

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

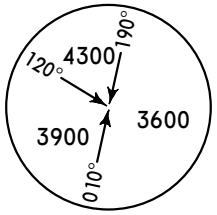
BRIEFING STRIP

ILS IFCW	Final Apch Crs	DF52Ø	ILS DA(H)	Apt Elev 363′
111.55	246°	4000′ (3637′)	563′ (200′)	Rwy 363′

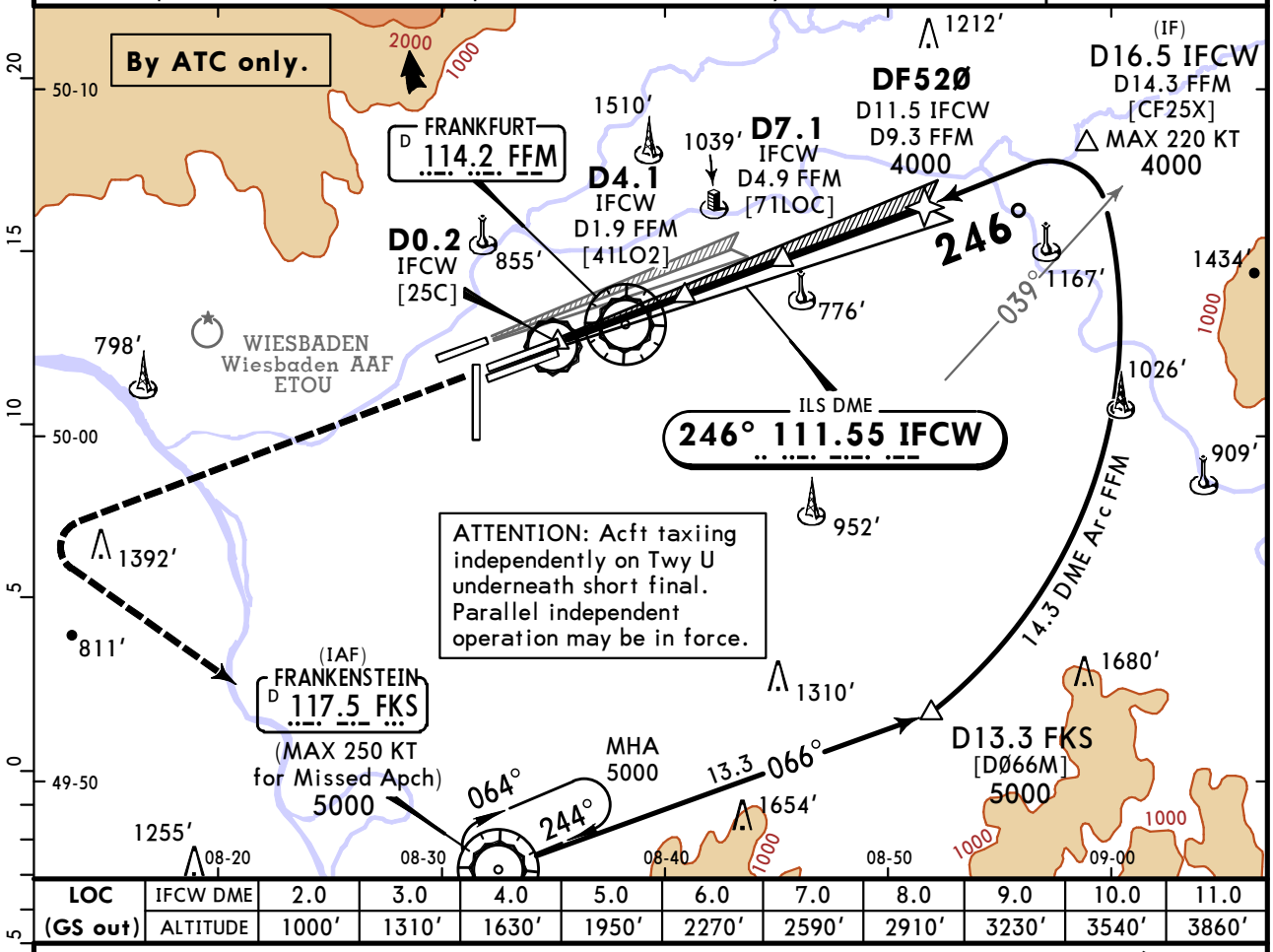
MISSED APCH: Climb on Rwy direction, at 5000′ turn LEFT (MAX 220 KT), direct to FKS VOR at 5000′ (MAX 250 KT).

Alt Set: hPa (IN on req) Rwy Elev: 13 hPa Trans level: By ATC Trans alt: 5000′

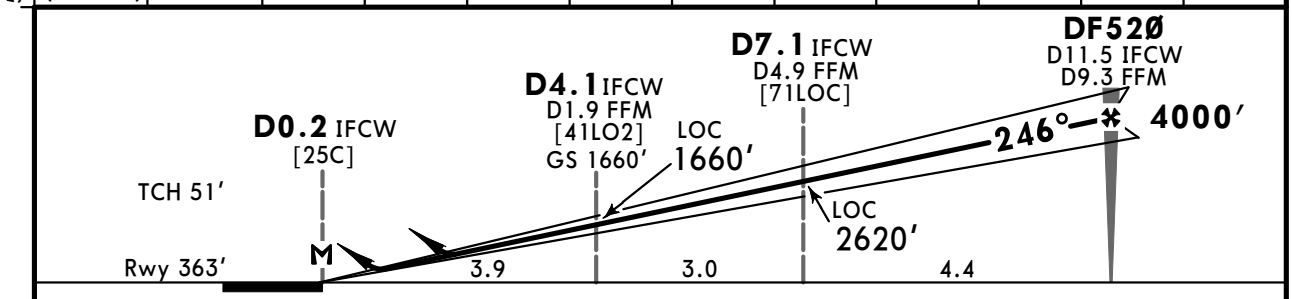
1. DME required. 2. In case of missed apch inform ATC immediately.



MSA FKS VOR



LOC (GS out)	IFCW DME	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0
	ALTITUDE	1000′	1310′	1630′	1950′	2270′	2590′	2910′	3230′	3540′	3860′



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 IFCW							

ALSF-II
REIL
PAPI

5000′

MAX 220 KT
LT

FKS 117.5

Std/State STRAIGHT-IN LANDING

	ILS DA(H) 563′ (200′)			LOC (GS out) CDFA 2 DA/MDA(H) 840′ (477′)		
		TDZ or CL out	ALS out		TDZ or CL out	ALS out
A	R550m	1 R550m	R1200m	R1500m	R1500m	R1500m
B						
C						R2200m
D						

PANS OPS

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

CHANGES: IF added.

EDDF/FRA
FRANKFURT/MAIN

JEPPESEN 10 NOV 23 (11-8A)

FRANKFURT/MAIN, GERMANY
CAT II/III ILS X Rwy 25C

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

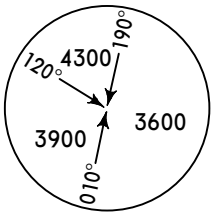
BRIEFING STRIP

ILS IFCW	Final Apch Crs	DF52Ø	CAT III ILS	CAT II ILS	Apt Elev 363′
111.55	246°	4000′ (3637′)	Refer to Minimums	RA 98′ DA(H) 463′ (100′)	Rwy 363′

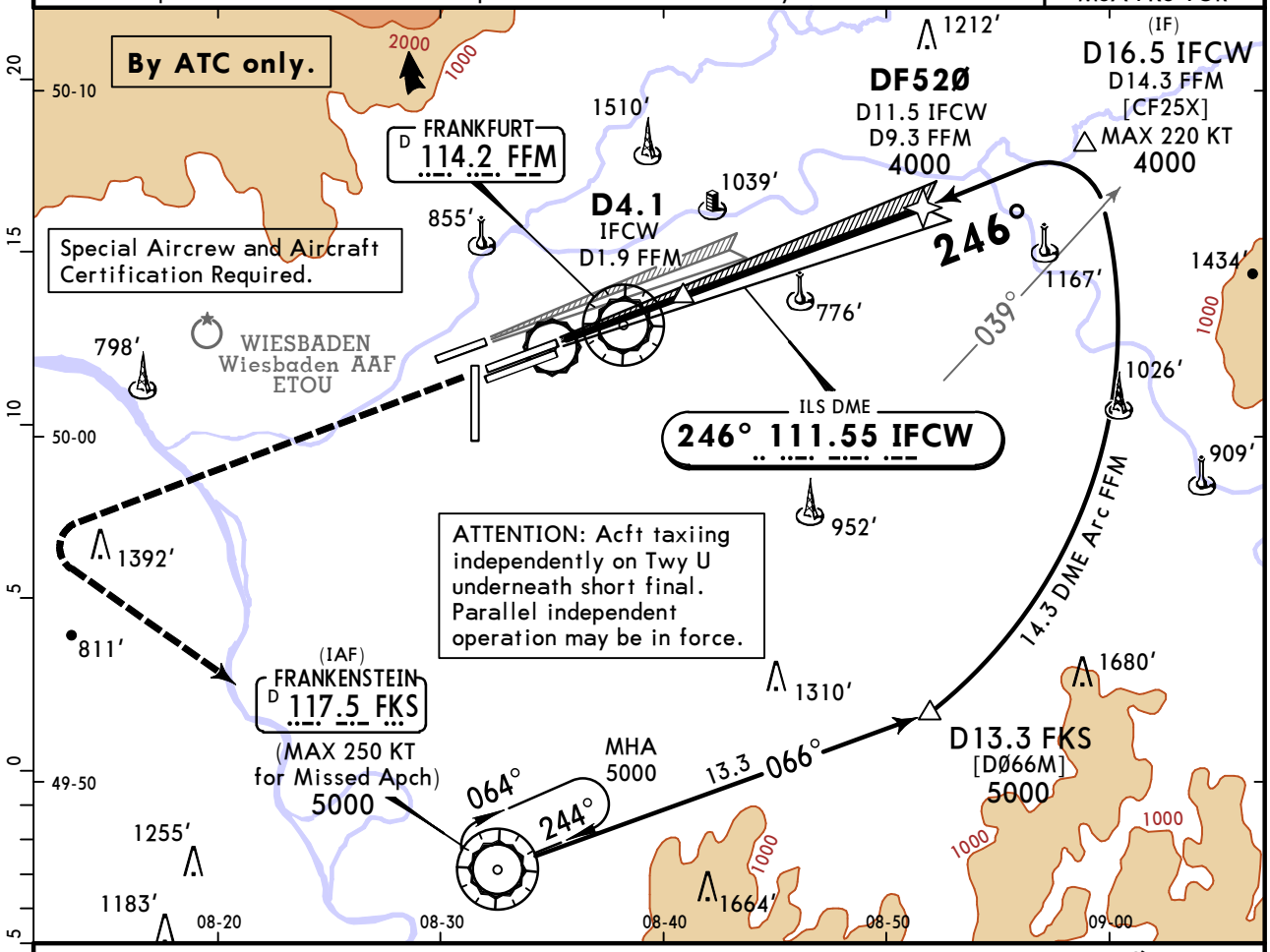
MISSED APCH: Climb on Rwy direction, at 5000′ turn LEFT (MAX 220 KT), direct to FKS VOR at 5000′ (MAX 250 KT).

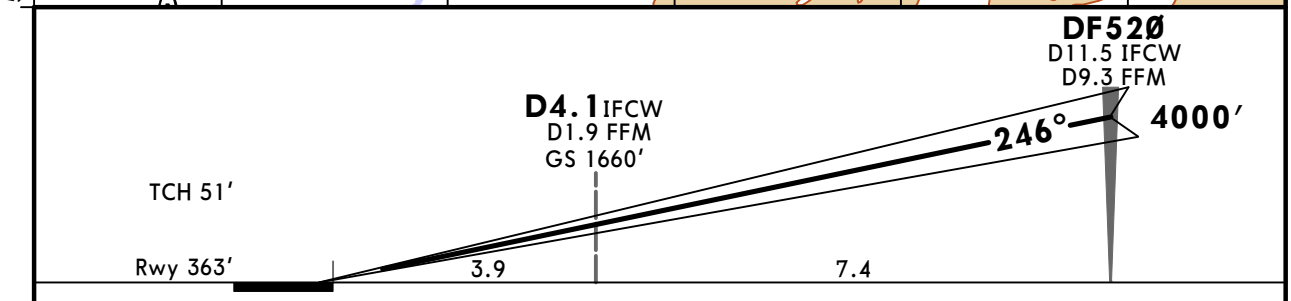
Alt Set: hPa (IN on req) Rwy Elev: 13 hPa Trans level: By ATC Trans alt: 5000′

1. DME required. 2. In case of missed apch inform ATC immediately.



MSA FKS VOR





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

ALSF-II REIL PAPI | 5000′ | MAX 220 KT LT | FKS 117.5

Std/State STRAIGHT-IN LANDING

CAT III ILS	CAT II ILS
	RA 98′ DA(H) 463′ (100′)
R75m	1 R300m

PANS OPS

1 CAT D requires autoland or HUDLS, otherwise: R350m.

CHANGES: IF added.

EDDF/FRA
FRANKFURT/MAIN

JEPPESEN 18 AUG 23 (11-9)

FRANKFURT/MAIN, GERMANY
ILS Z Rwy 25R

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		*FRANKFURT Tower	*Ground
118.030	120.805	125.355	118.505	127.280	136.5	121.805

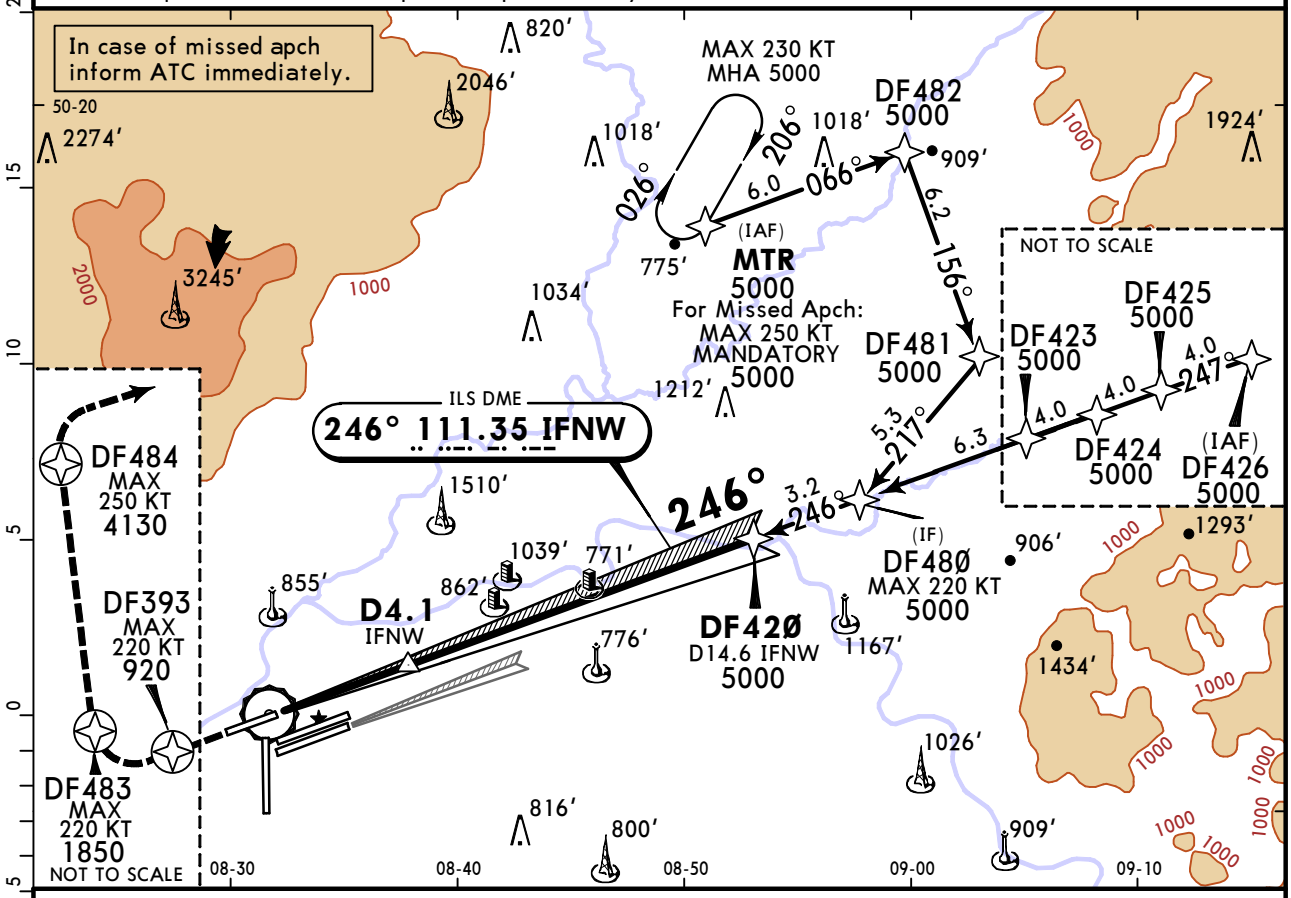
LOC IFNW	Final Apch Crs	DF42Ø	DA(H) Refer to Minimums	Apt Elev 363′ Rwy 351′
111.35	246°	5000′ (4649′)		

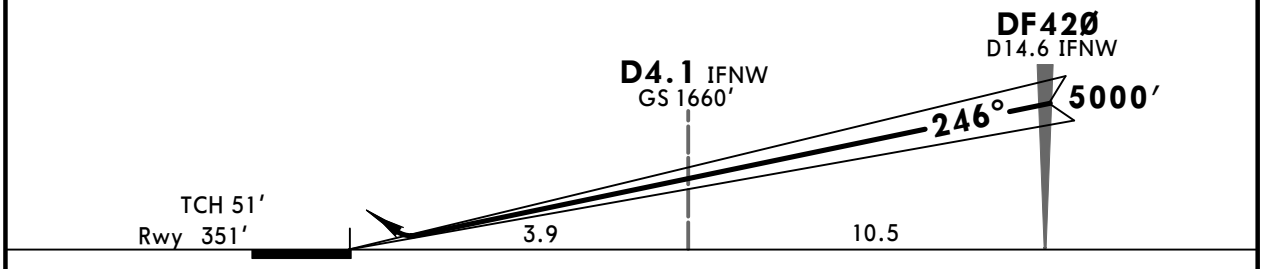
MISSED APCH: Direct to DF393 at or above 920′ (MAX 220 KT), turn RIGHT direct to DF483 at or above 1850′ (MAX 220 KT), turn RIGHT direct to DF484 at or above 4130′ (MAX 250 KT), turn RIGHT direct to MTR at 5000′.
Missed apch requires a mim climb of 4.3% (261′/NM) to 4130′.

4300
MSA ARP

Alt Set: hPa (IN on req) | Rwy Elev: 13 hPa | Trans level: By ATC | Trans alt: 5000′

1. DME required. 2. RNAV-1 or RNP APCH or RNP-1 required. 3. DME/DME without IRU not authorized.
4. Radar required. 5. Parallel independent operation may be in force.





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

ALSF-II | REIL | PAPI | D | DF393 | MIM 920′ | 220 KT MAX

Std/State

STRAIGHT-IN LANDING

ILS

DA(H) ABC: **551′**(200′) D: **558′**(207′)

	TDZ or CL out	ALS out
A, B, C, D	R550m	1 R550m / R1200m

1 R750m when a Flight Director or Autopilot or HUDLS to DA is not used.

CHANGES: Missed approach.

EDDF/FRA
FRANKFURT/MAIN

JEPPESEN 18 AUG 23 11-9A

FRANKFURT/MAIN, GERMANY
CAT II/III ILS Z Rwy 25R

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		*FRANKFURT Tower	*Ground
118.030	120.805	125.355	118.505	127.280	136.5	121.805

BRIEFING STRIP™

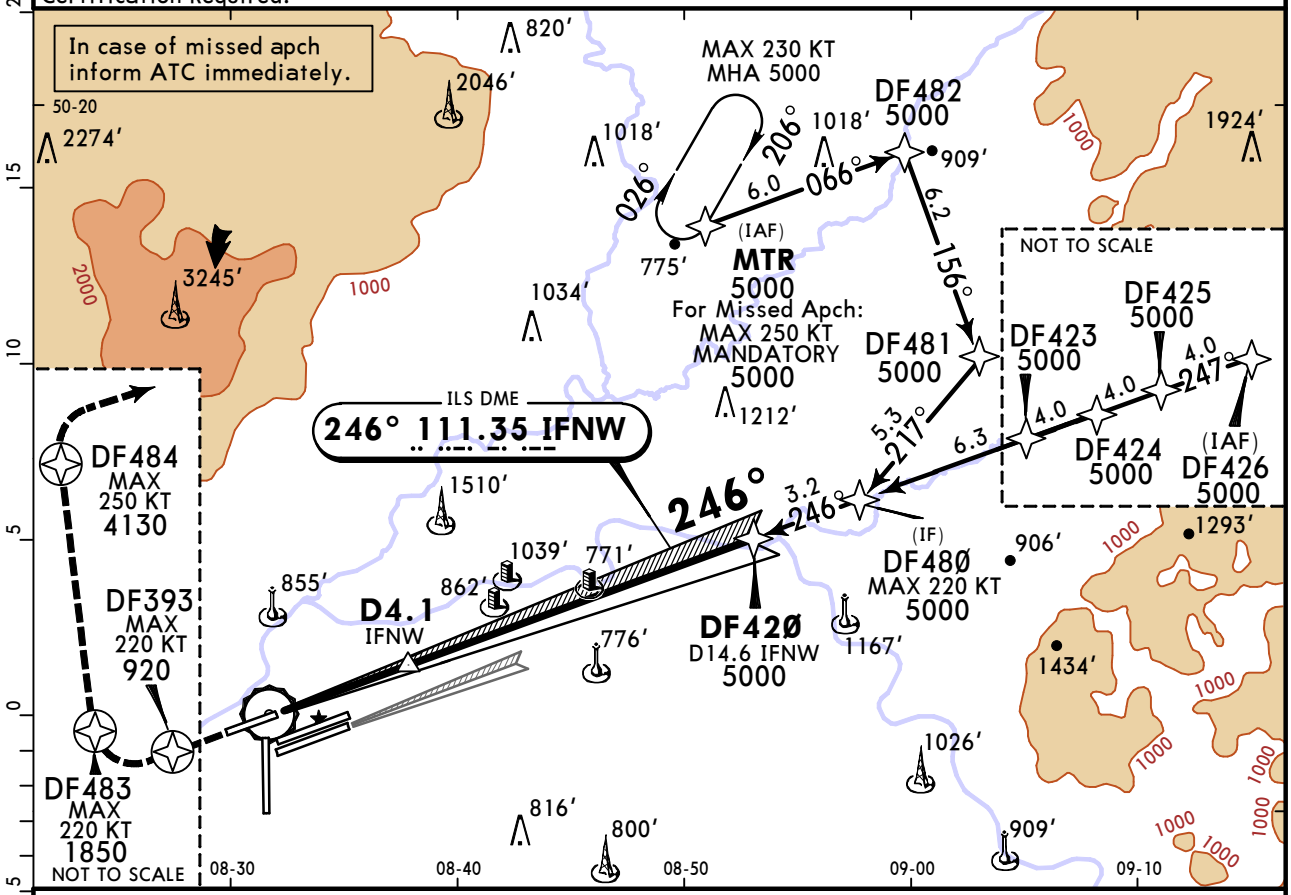
LOC IFNW 111.35	Final Apch Crs 246°	DF42Ø 5000′ (4649′)	CAT III ILS Refer to Minimums	CAT II ILS Refer to Minimums	Apt Elev 363′ Rwy 351′

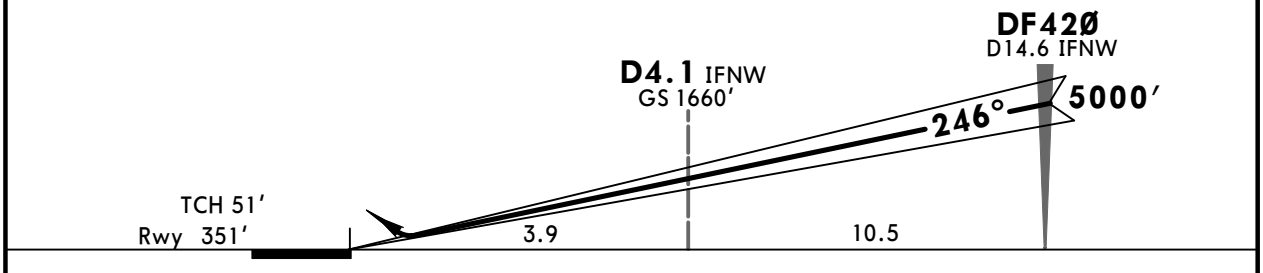
MISSED APCH: Direct to DF393 at or above 920′ (MAX 220 KT), turn RIGHT direct to DF483 at or above 1850′ (MAX 220 KT), turn RIGHT direct to DF484 at or above 4130′ (MAX 250 KT), turn RIGHT direct to MTR at 5000′.
Missed apch requires a mim climb of 4.3% (261′/NM) to 4130′.

4300
MSA ARP

Alt Set: hPa (IN on req) | Rwy Elev: 13 hPa | Trans level: By ATC | Trans alt: 5000′

1. DME required. 2. RNAV-1 or RNP APCH or RNP-1 required. 3. DME/DME without IRU not authorized. 4. Radar required. 5. Parallel independent operation may be in force. 6. Special Aircrew & Acft Certification Required.





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

ALSF-II REIL PAPI

DF393 | MIM 920′ | 220 KT MAX

Std/State STRAIGHT-IN LANDING

CAT III ILS	CAT II ILS	
	A: RA 103′ DA(H) 451′ (100′)	
	B: RA 109′ DA(H) 457′ (106′)	D: RA 145′ DA(H) 483′ (132′)
	C: RA 121′ DA(H) 468′ (117′)	
R75m	R300m	R400m

PANS OPS

CHANGES: Missed Approach

EDDF/FRA
FRANKFURT/MAIN

JEPPESEN 22 SEP 23 11-10

FRANKFURT/MAIN, GERMANY
ILS Y Rwy 25R

BRIEFING STRIP TM

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		*FRANKFURT Tower	*Ground
118.030	120.805	125.355	118.505	127.280	136.5	121.805

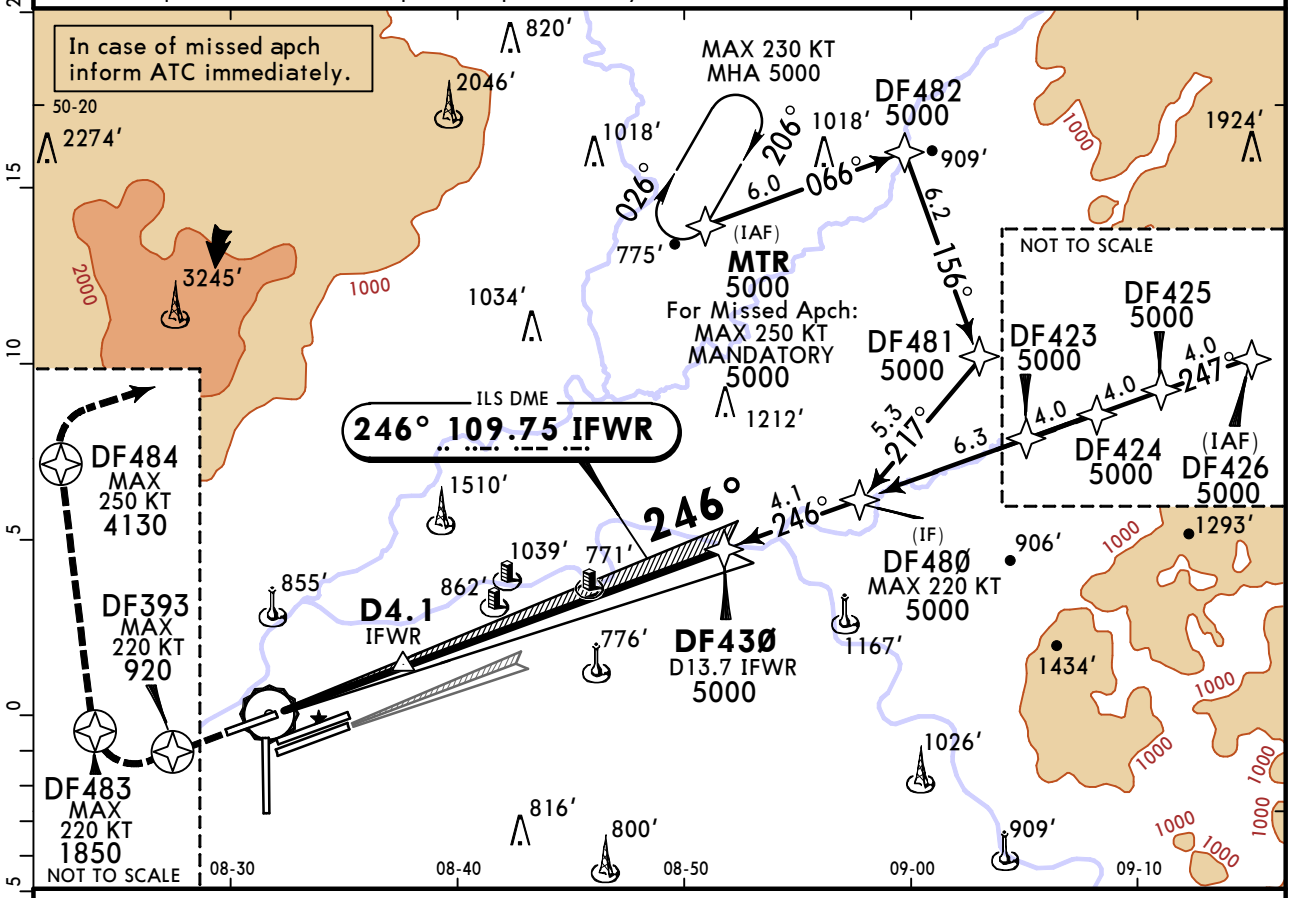
LOC IFWR	Final Apch Crs	DF43Ø	DA(H) Refer to Minimums	Apt Elev	Rwy
109.75	246°	5000′ (4649′)		363′	351′

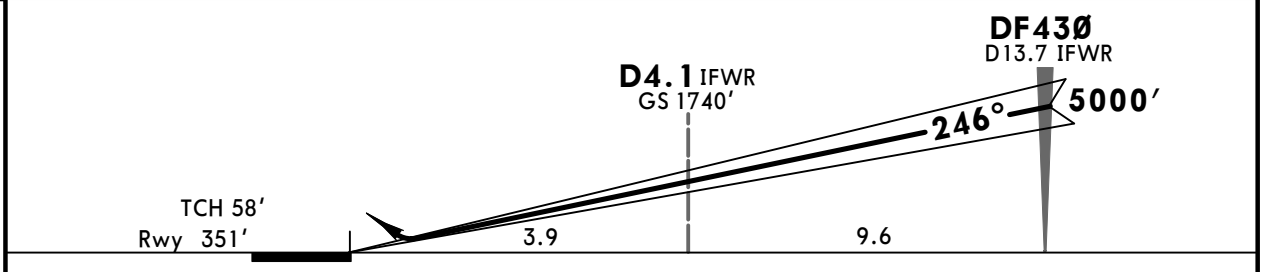
4300 MSA ARP

MISSED APCH: Direct to DF393 at or above 920′ (MAX 220 KT), turn RIGHT direct to DF483 at or above 1850′ (MAX 220 KT), turn RIGHT direct to DF484 at or above 4130′ (MAX 250 KT), turn RIGHT direct to MTR at 5000′.
Missed apch requires a mim climb of 4.3% (261′/NM) to 4130′.

Alt Set: hPa (IN on req) | Rwy Elev: 13 hPa | Trans level: By ATC | Trans alt: 5000′

1. DME required. 2. RNAV-1 or RNP APCH or RNP-1 required. 3. DME/DME without IRU not authorized.
4. Radar required. 5. Parallel independent operation may be in force.





Gnd speed-Kts		70	90	100	120	140	160
GS	3.20°	396	510	566	679	793	906

ALSF-II REIL PAPI

D | DF393 | MIM 920′ | 220 KT MAX

Std/State STRAIGHT-IN LANDING

ILS

DA(H) ABC: **551′**(200′) D: **558′**(207′)

PANS OPS

	TDZ or CL out	ALS out
A B C D	R550m	1 R550m	R1200m

1 R750m when a Flight Director or Autopilot or HUDLS to DA is not used.

CHANGES: MSA.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN

7 JUL 23
Eff 13 Jul

12-1

FRANKFURT/MAIN, GERMANY
RNP Z Rwy 07L

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)	*FRANKFURT Tower	*Ground
118.030	120.805	125.355	118.505 127.280	136.5	121.805

BRIEFING STRIP

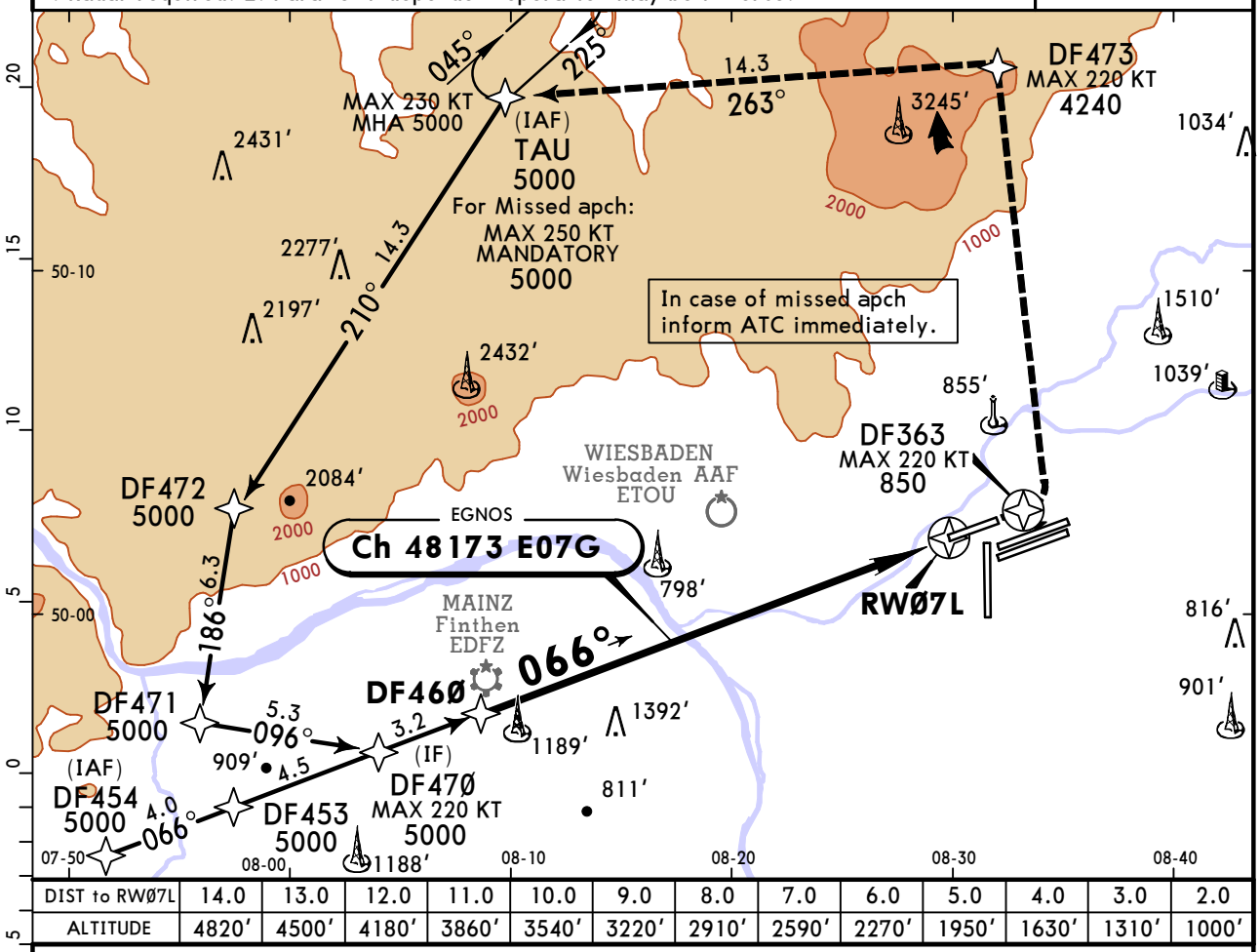
EGNOS	Final Apch Crs	DF46Ø	LPV DA(H) Refer to Minimums	Apt Elev 363′ Rwy 304′
Ch 48173 E07G	066°	5000′ (4696′)		

MISSED APCH: Direct to DF363 at or above 850′ (MAX 220 KT), turn LEFT direct to DF473 at or above 4240′ (MAX 220 KT), then to TAU VOR at 5000′ (MAX 250 KT). Missed apch requires a min climb of 4.1% (250′/NM) to 3500′.

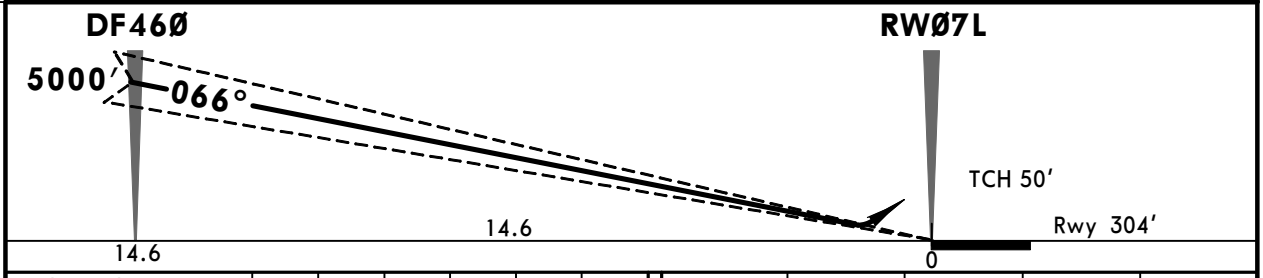
RNP Apch | Alt Set: hPa(IN on req) Rwy Elev: 11 hPa Trans level: By ATC Trans alt: 5000′

1. Radar required. 2. Parallel independent operation may be in force.

4300
MSA ARP



DIST to RWØ7L	14.0	13.0	12.0	11.0	10.0	9.0	8.0	7.0	6.0	5.0	4.0	3.0	2.0
ALTITUDE	4820′	4500′	4180′	3860′	3540′	3220′	2910′	2590′	2270′	1950′	1630′	1310′	1000′



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

ALSF-II
REIL
PAPI

D | DF363 | MIN 850′ | 220 KT MAX

Std/State

STRAIGHT-IN LANDING
1 LPV

DA(H) ABC: 504′(200′)
D: 512′(208′)

PANS OPS

	TDZ or CL out	ALS out
A	R550m	R1200m
B		
C	2 R550m	
D		

1 LPV (VAL 35m) 2 R750m when a Flight Director or Autopilot or HUDLS to DA is not used.

CHANGES: New procedure.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN 7 JUL 23 Eff 13 Jul (12-2)

FRANKFURT/MAIN, GERMANY RNP Y Rwy 07L

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		*FRANKFURT Tower	*Ground
118.030	120.805	125.355	118.505	127.280	136.5	121.805

BRIEFING STRIP

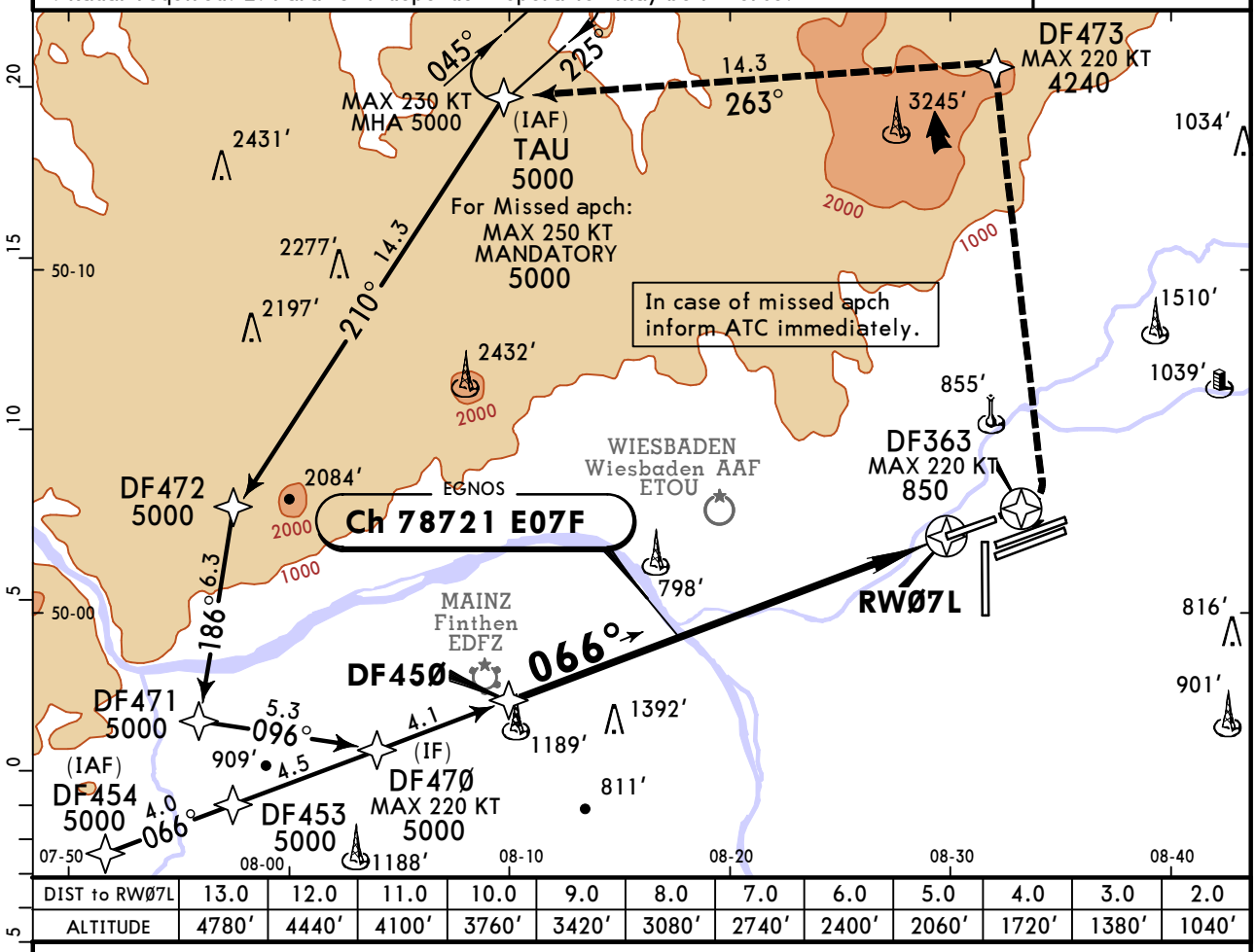
EGNOS	Final Apch Crs	DF45Ø	LPV DA(H) Refer to Minimums	Apt Elev 363′ Rwy 304′
Ch 78721 E07F	066°	5000′ (4696′)		

MISSED APCH: Direct to DF363 at or above 850′ (MAX 220 KT), turn LEFT direct to DF473 at or above 4240′ (MAX 220 KT), then to TAU VOR at 5000′ (MAX 250 KT). Missed apch requires a min climb of 4.1% (250′/NM) to 3500′.

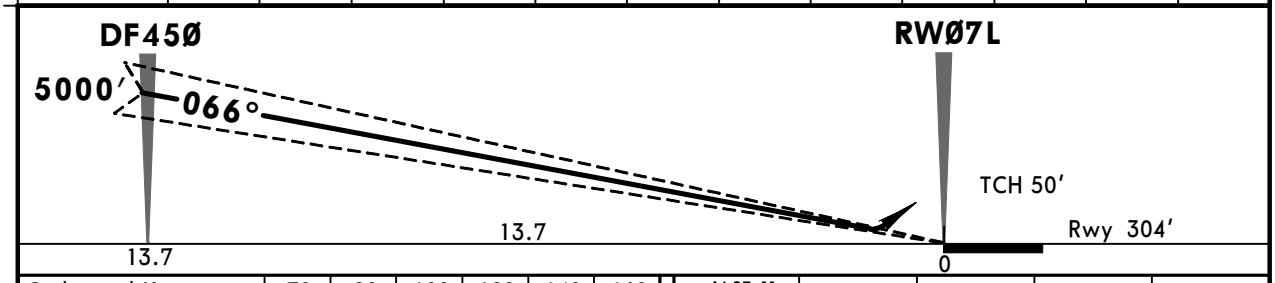
RNP Apch | Alt Set: hPa(IN on req) Rwy Elev: 11 hPa Trans level: By ATC Trans alt: 5000′

1. Radar required. 2. Parallel independent operation may be in force.

4300 MSA ARP



DIST to RWØ7L	13.0	12.0	11.0	10.0	9.0	8.0	7.0	6.0	5.0	4.0	3.0	2.0
ALTITUDE	4780′	4440′	4100′	3760′	3420′	3080′	2740′	2400′	2060′	1720′	1380′	1040′



Gnd speed-Kts	70	90	100	120	140	160
Glide Path Angle 3.20°	396	510	566	679	793	906

ALSF-II REIL PAPI | D | DF363 | MIN 850′ | 220 KT MAX

Std/State

STRAIGHT-IN LANDING

1 LPV

DA(H) ABC: 504′(200′) D: 512′(208′)

PANS OPS

	TDZ or CL out	ALS out
A B C D	R550m	2 R550m / R1200m

1 LPV (VAL 35m) 2 R750m when a Flight Director or Autopilot or HUDLS to DA is not used.

CHANGES: New procedure.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN FRANKFURT/MAIN, GERMANY

7 JUL 23 (12-3) Eff 13 Jul

RNP Z Rwy 07C

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

BRIEFING STRIP

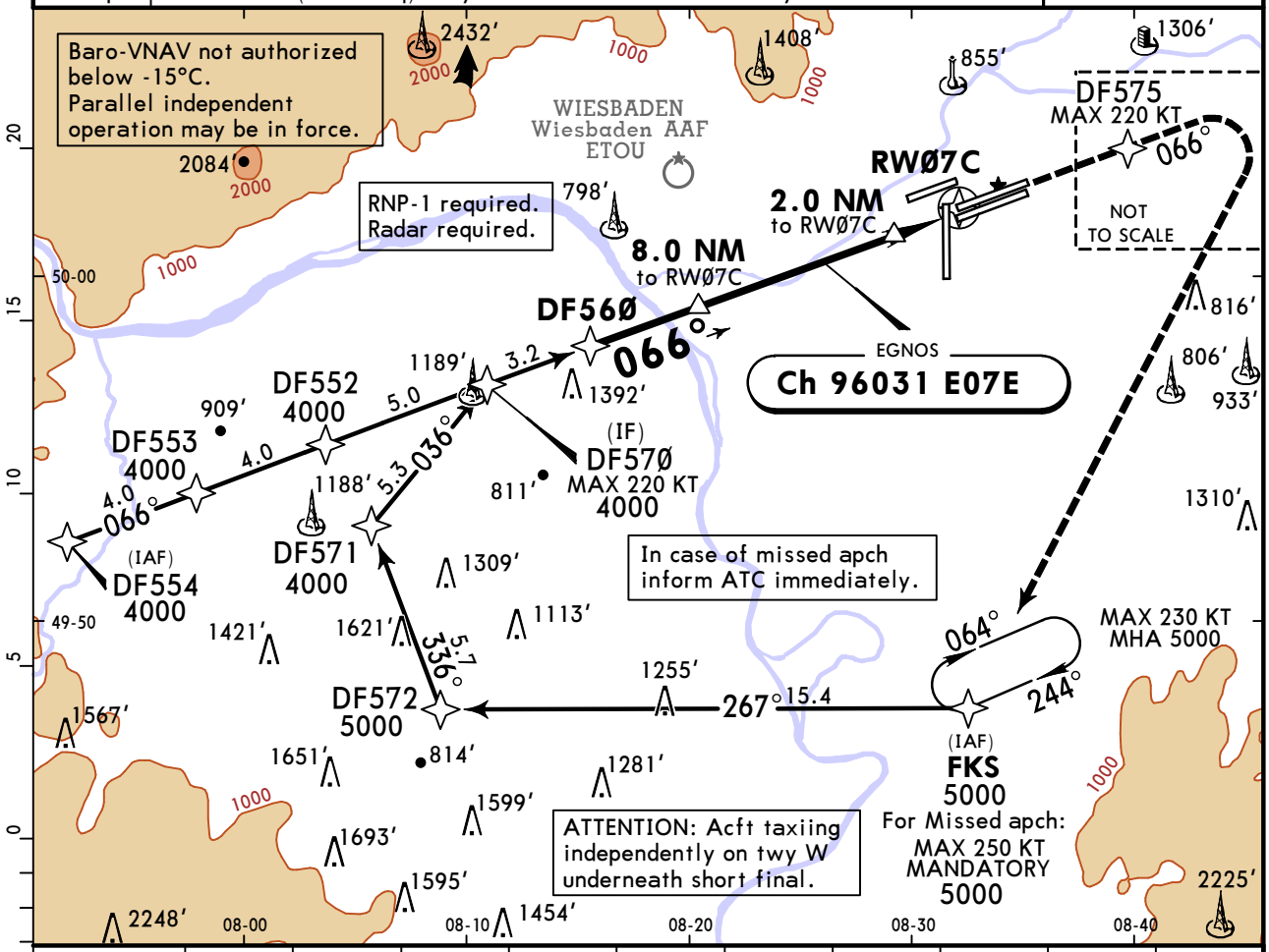
EGNOS	Final Apch Crs	DF56Ø	LPV DA(H)	Apt Elev	363′
Ch 96031 E07E	066°	4000′ (3672′)	528′ (200′)	Rwy	328′

MISSED APCH: Direct to DF575 (MAX 220 KT), climb on course 066° to 5000′, then turn RIGHT (MAX 220 KT) direct to FKS at 5000′ (MAX 250 KT).

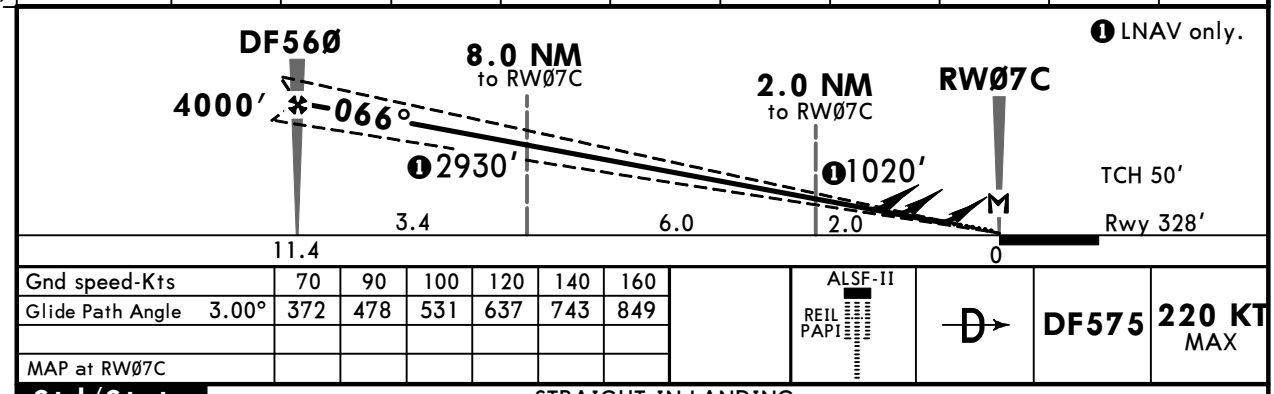
4300

MSA ARP

RNP Apch | Alt Set: hPa (IN on req) Rwy Elev: 12 hPa Trans level: By ATC Trans alt: 5000′



DIST to RW07C	11.0	10.0	9.0	8.0	7.0	6.0	5.0	4.0	3.0	2.0
ALTITUDE	3890′	3570′	3250′	2930′	2610′	2290′	1970′	1660′	1340′	1020′



Gnd speed-Kts		70	90	100	120	140	160
Glide Path Angle	3.00°	372	478	531	637	743	849
MAP at RW07C							

ALSF-II
REIL
PAPI

DF575 220 KT MAX

Std/State

STRAIGHT-IN LANDING

	❶ LPV		LNAV/VNAV		LNAV	
	DA(H) 528′ (200′)		DA(H) A: 652′ (324′) C: 692′ (364′) B: 665′ (337′) D: 701′ (373′)		❸ DA/MDA(H) 770′ (442′) CDFA	
	TDZ or CL out	ALS out	TDZ or CL out	ALS out	TDZ or CL out	ALS out
A	R550m	❷ R550m	R800m	R1500m	R1400m	R1500m
B						
C		R1200m	R1000m	R1700m		R2100m
D						

PANS OPS

❶ LPV (VAL 35m). ❷ R750m when a Flight Director or Autopilot or HUDLS to DA is not used.
❸ VNAV DA(H) in lieu of MDA(H) depends on operator policy.

CHANGES: Chart reindexed, Procedure, missed apch, MSA, minimums.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN FRANKFURT/MAIN, GERMANY

7 JUL 23 (12-4) Eff 13 Jul

RNP Y Rwy 07C

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

BRIEFING STRIP™

EGNOS	Final Apch Crs	DF55Ø	LPV DA(H)	Apt Elev 363′
Ch 95422 E07D	066°	4000′ (3672′)	528′ (200′)	Rwy 328′

MISSED APCH: Direct to DF575 (MAX 220 KT), climb on course 066° to 5000′, then turn RIGHT (MAX 220 KT) direct to FKS at 5000′ (MAX 250 KT).

RNP Apch | Alt Set: hPa (IN on req) Rwy Elev: 12 hPa Trans level: By ATC Trans alt: 5000′

4300 MSA ARP

Baro-VNAV not authorized below -15°C. Parallel independent operation may be in force.

RNP-1 required. Radar required.

WIESBADEN Wiesbaden AAF ETOU

DF575 MAX 220 KT 066° NOT TO SCALE

RW07C

2.0 NM to RW07C

8.0 NM to RW07C

DF55Ø 066°

EGNOS Ch 95422 E07D

In case of missed apch inform ATC immediately.

DF552 4000 5.0 066°

DF553 4000 4.0 066°

(IAF) DF554 4000

DF571 4000 5.3 036°

(IF) DF57Ø MAX 220 KT 4000

DF572 5000 5.7 336°

267° 15.4

064° 244°

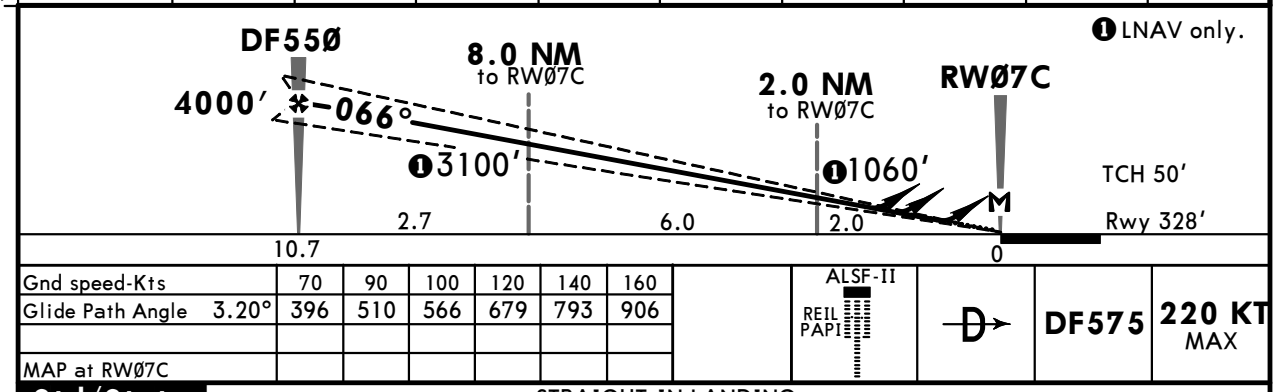
MAX 230 KT MHA 5000

(IAF) FKS 5000

For Missed apch: MAX 250 KT MANDATORY 5000

ATTENTION: Acft taxiing independently on twy W underneath short final.

DIST to RW07C	10.0	9.0	8.0	7.0	6.0	5.0	4.0	3.0	2.0
ALTITUDE	3780′	3440′	3100′	2770′	2430′	2090′	1750′	1410′	1060′



❶ LNAV only.

Gnd speed-Kts	70	90	100	120	140	160
Glide Path Angle 3.20°	396	510	566	679	793	906
MAP at RW07C						

ALSF-II REIL PAPI

D DF575 220 KT MAX

Std/State

	❶ LPV DA(H) 528′ (200′)			STRAIGHT-IN LANDING LNAV/VNAV DA(H) A: 652′ (324′) C: 692′ (364′) B: 665′ (337′) D: 701′ (373′)		LNAV CDFA ❸ DA/MDA(H) 770′ (442′)	
	TDZ or CL out	ALS out		TDZ or CL out	ALS out	TDZ or CL out	ALS out
A	R550m	❷ R550m	R1200m	R800m	R1500m	R1400m	R1500m
B							
C				R1000m	R1700m		R2100m
D							

PANS OPS

❶ LPV (VAL 35m). ❷ R750m when a Flight Director or Autopilot or HUDLS to DA is not used.
❸ VNAV DA(H) in lieu of MDA(H) depends on operator policy.

CHANGES: Chart reindexed, procedure, missed apch, MSA, minimums.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN 26 APR 24 (12-5)

FRANKFURT/MAIN, GERMANY
RNP X Rwy 07C

BRIEFING STRIP

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

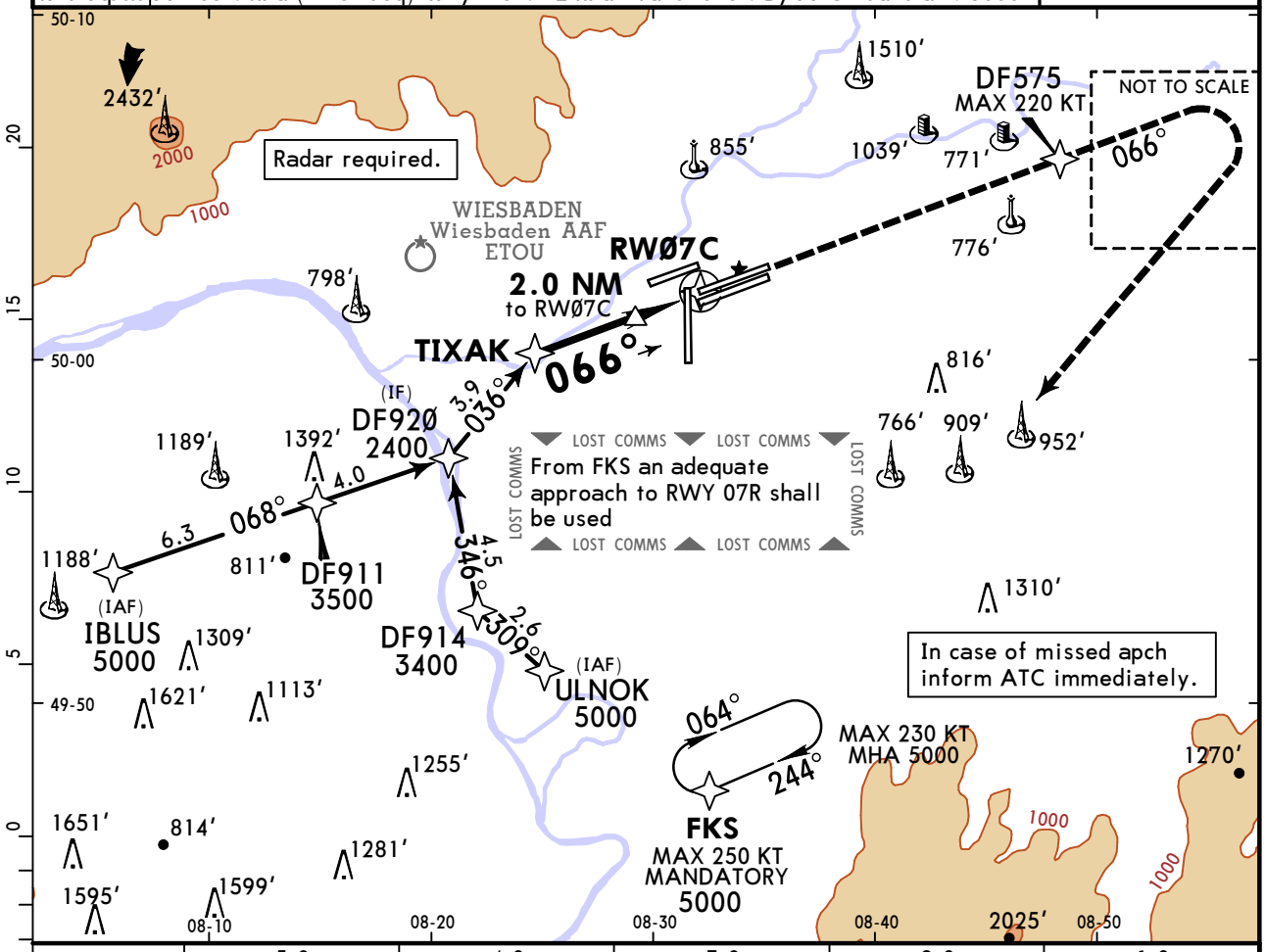
RNAV	Final Apch Crs 066°	TIXAK 2000′ (1672′)	DA/MDA(H) Refer to Minimums	Apt Elev 363′ Rwy 328′

MISSED APCH: Direct to DF575 (MAX 220 KT), climb on course 066° to 5000′, then turn RIGHT (MAX 220 KT) direct to FKS at 5000′ (MAX 250 KT).

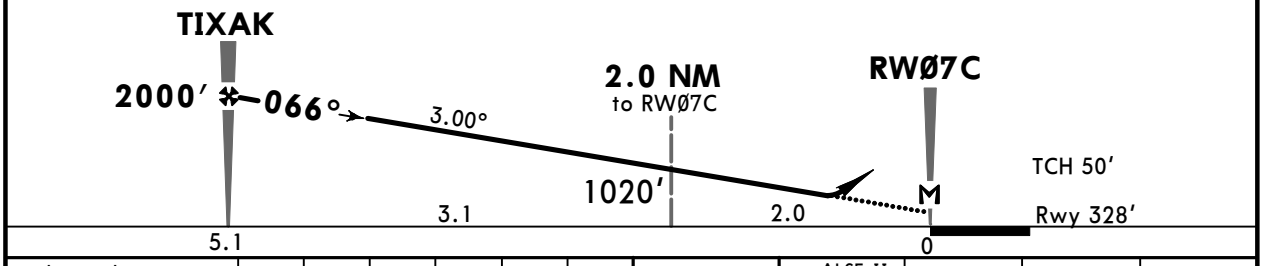
4300

MSA ARP

RNP Apch | Alt Set: hPa (IN on req) | Rwy Elev: 12 hPa | Trans level: By ATC | Trans alt: 5000′



DIST to RWØ7C	5.0	4.0	3.0	2.0	1.0
ALTITUDE	1880′	1660′	1340′	1020′	700′



Gnd speed-Kts		70	90	100	120	140	160
Descent Angle	3.00°	372	478	531	637	743	849
MAP at RWØ7C							
TIXAK to MAP	5.1	4:22	3:24	3:04	2:33	2:11	1:55

ALSF-II
REIL
PAPI

D | DF575 | 220 KT MAX

Std/State

STRAIGHT-IN LANDING
LNAV
CDFA

1 DA/MDA(H) A: **780′**(452′) BC: **820′**(492′) D: **840′**(512′)

	TDZ or CL out	ALS out
A	R1400m	R1500m
B	R1500m	
C		R2300m
D	R1600m	R2400m

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

PANS OPS

CHANGES: Recommended altitudes, Ground Speed Box.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN FRANKFURT/MAIN, GERMANY

26 APR 24 (12-6)

RNP Z Rwy 07R

BRIEFING STRIP

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

EGNOS	Final Apch Crs	DF66Ø	LPV DA(H)	Apt Elev 363′
Ch 85917 E07B	066°	4000′ (3673′)	527′ (200′)	Rwy 327′

MISSED APCH: Direct to DF675 (MAX 220 KT), then to DF278 (MAX 220 KT). Climb on course 087° to 5000′, then turn RIGHT (MAX 220 KT) direct to FKS at 5000′ (MAX 250 KT).

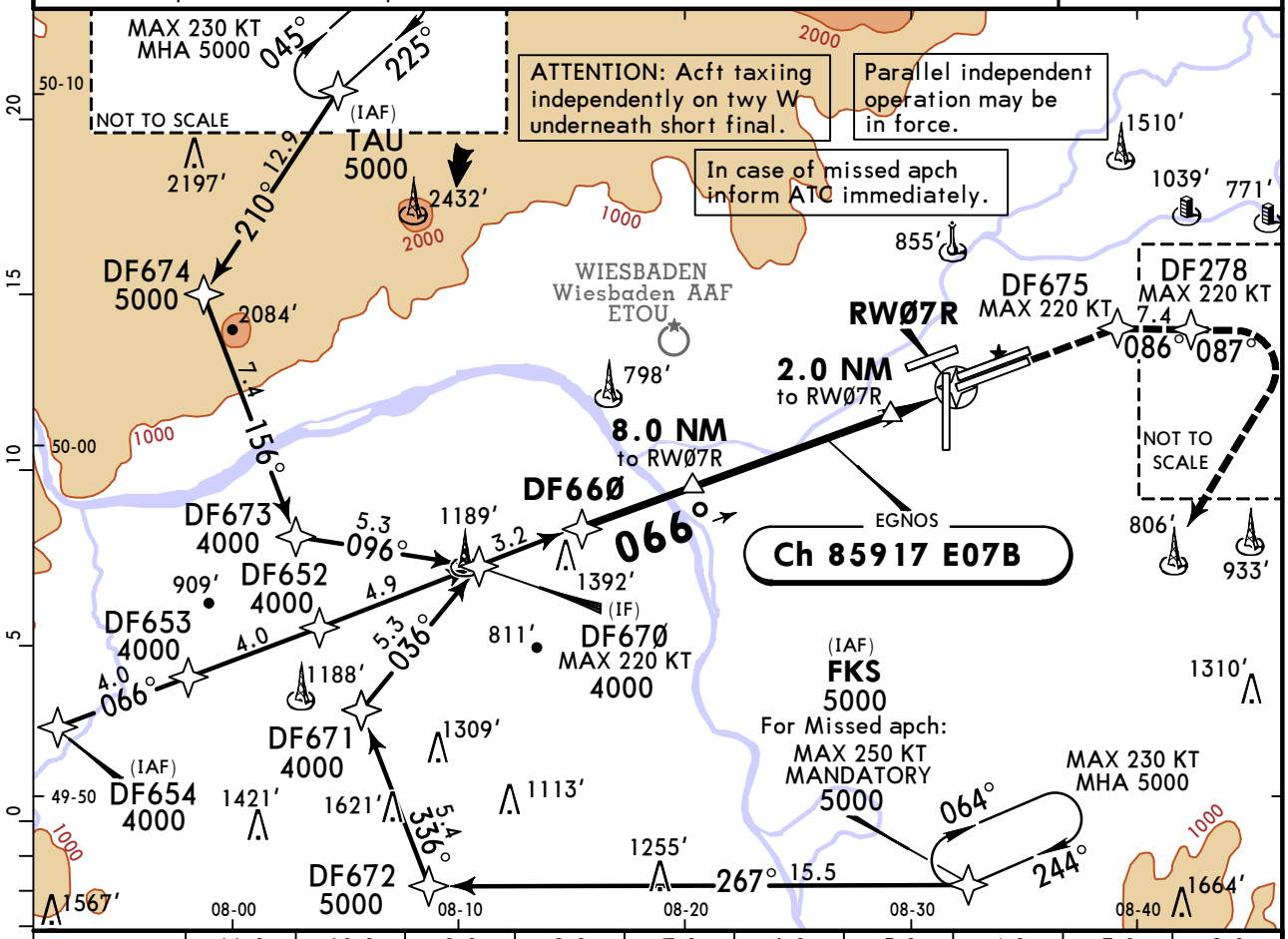
RNP Apch | Alt Set: hPa (IN on req) Rwy Elev: 12 hPa Trans level: By ATC Trans alt: 5000′

1. RNP-1 required. 2. Radar required. 3. Baro-VNAV not authorized below -15° C.

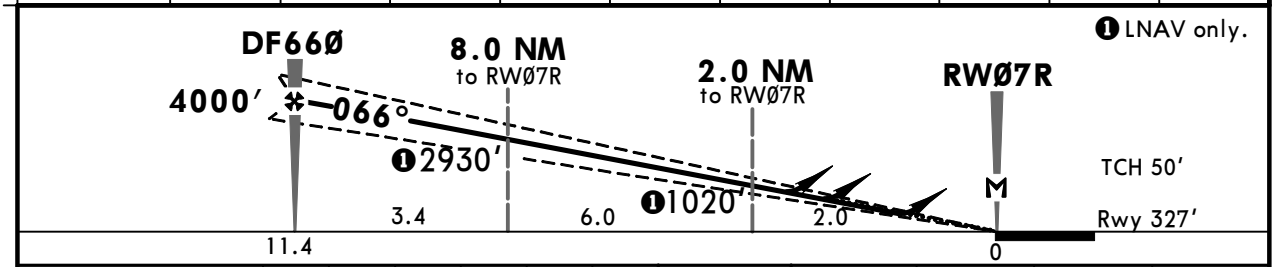
4300

MSA

ARP



DIST to RWØ7R	11.0	10.0	9.0	8.0	7.0	6.0	5.0	4.0	3.0	2.0
ALTITUDE	3880′	3570′	3250′	2930′	2610′	2290′	1970′	1660′	1340′	1020′



Gnd speed-Kts		70	90	100	120	140	160
Glide Path Angle	3.00°	372	478	531	637	743	849
MAP at RWØ7R							
DF66Ø to MAP	11.4	9:46	7:36	6:50	5:42	4:53	4:17

ALSF-II
REIL
PAPI

D

DF675 220 KT MAX

Std/State

STRAIGHT-IN LANDING

	❶ LPV		LNAV/VNAV		LNAV	
	DA(H) 527′ (200′)		DA(H) A: 652′ (325′) C: 673′ (346′) B: 665′ (338′) D: 715′ (388′)		CDFA ABC: 740′ (413′) ❸ DA/MDA(H) D: 750′ (423′)	
	TDZ or CL out	ALS out	TDZ or CL out	ALS out	TDZ or CL out	ALS out
A	R550m	❷ R550m	R800m	R1500m	R1200m	R1500m
B						
C			R900m	R1600m		R1900m
D			R1100m	R1800m	R1300m	R2000m

PANS OPS

❶ LPV (VAL 35m). ❷ R750m when a Flight Director or Autopilot or HUDLS to DA is not used.
❸ VNAV DA(H) in lieu of MDA(H) depends on operator policy.

CHANGES: Ground Speed Box.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN 26 APR 24 (12-7)

FRANKFURT/MAIN, GERMANY RNP Y Rwy 07R

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

BRIEFING STRIP

EGNOS	Final Apch Crs	DF65Ø	LPV DA(H)	Apt Elev 363′
Ch 54818 E07A	066°	4000′ (3673′)	527′ (200′)	Rwy 327′

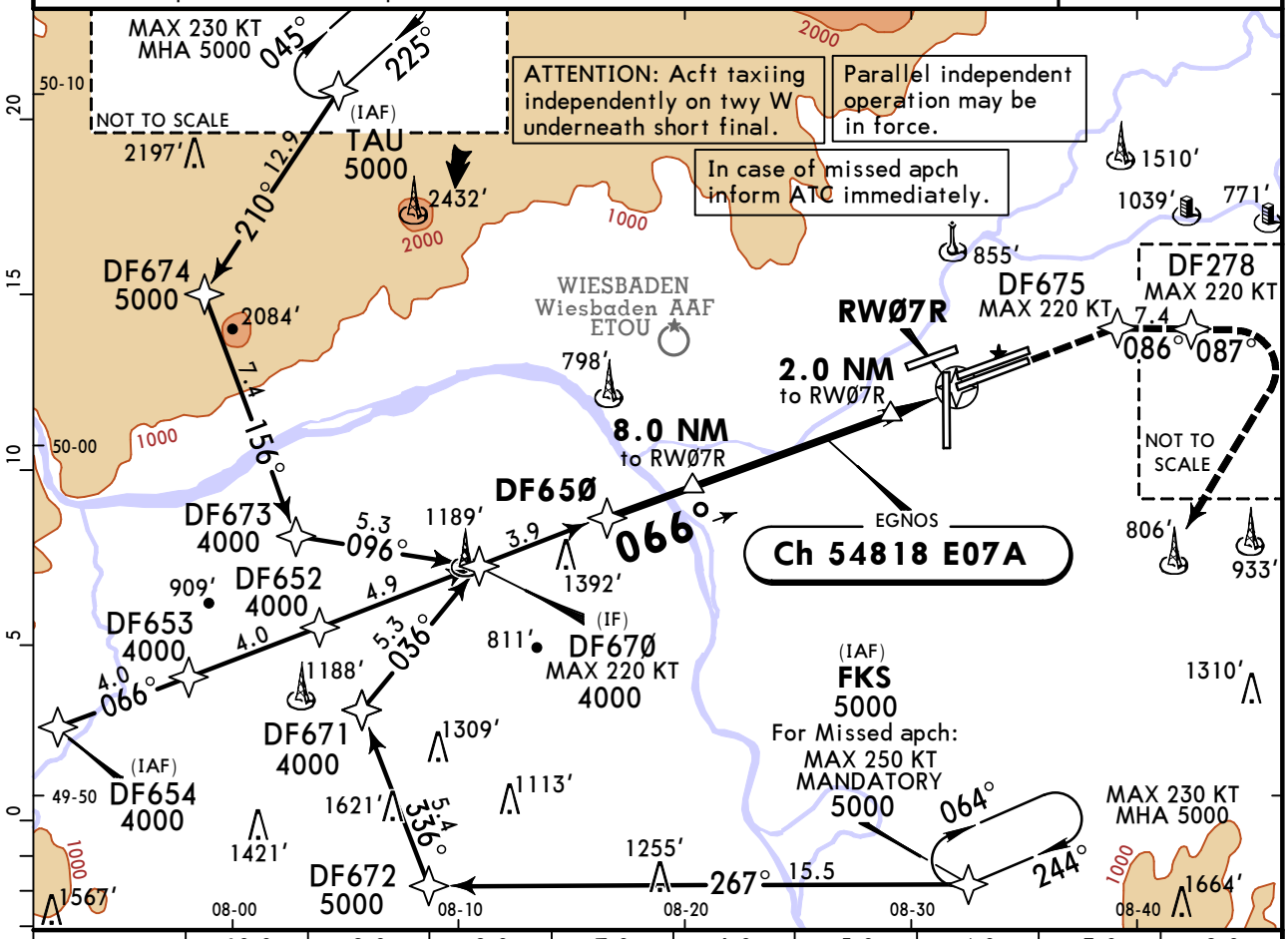
MISSED APCH: Direct to DF675 (MAX 220 KT), then to DF278 (MAX 220 KT). Climb on course 087° to 5000′, then turn RIGHT (MAX 220 KT) direct to FKS at 5000′ (MAX 250 KT).

RNP Apch | Alt Set: hPa (IN on req) Rwy Elev: 12 hPa Trans level: By ATC Trans alt: 5000′

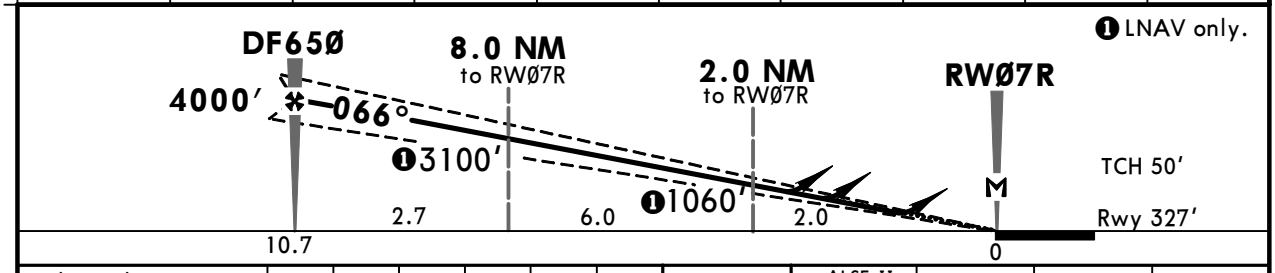
1. RNP-1 required. 2. Radar required. 3. Baro-VNAV not authorized below -15° C.

4300

MSA ARP



DIST to RWØ7R	10.0	9.0	8.0	7.0	6.0	5.0	4.0	3.0	2.0
ALTITUDE	3780′	3440′	3100′	2760′	2420′	2080′	1740′	1400′	1060′



Gnd speed-Kts		70	90	100	120	140	160
Glide Path Angle	3.20°	396	510	566	679	793	906
MAP at RWØ7R							
DF65Ø to MAP	10.7	9:10	7:08	6:25	5:21	4:35	4:01

ALSF-II
REIL
PAPI

DF675 220 KT MAX

Std/State STRAIGHT-IN LANDING

	❶ LPV		LNAV/VNAV		LNAV	
	DA(H) 527′ (200′)		DA(H) A: 652′ (325′) C: 673′ (346′) B: 665′ (338′) D: 715′ (388′)		CDFA ABC: 740′ (413′) ❸ DA/MDA(H) D: 750′ (423′)	
	TDZ or CL out	ALS out	TDZ or CL out	ALS out	TDZ or CL out	ALS out
A	R550m	❷ R550m	R800m	R1500m	R1200m	R1500m
B						
C			R900m	R1600m		R1900m
D		R1200m	R1100m	R1800m	R1300m	R2000m

PANS OPS

❶ LPV (VAL 35m). ❷ R750m when a Flight Director or Autopilot or HUDLS to DA is not used.
❸ VNAV DA(H) in lieu of MDA(H) depends on operator policy.

CHANGES: Ground Speed Box.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN 26 APR 24 (12-8)

FRANKFURT/MAIN, GERMANY RNP X Rwy 07R

BRIEFING STRIP

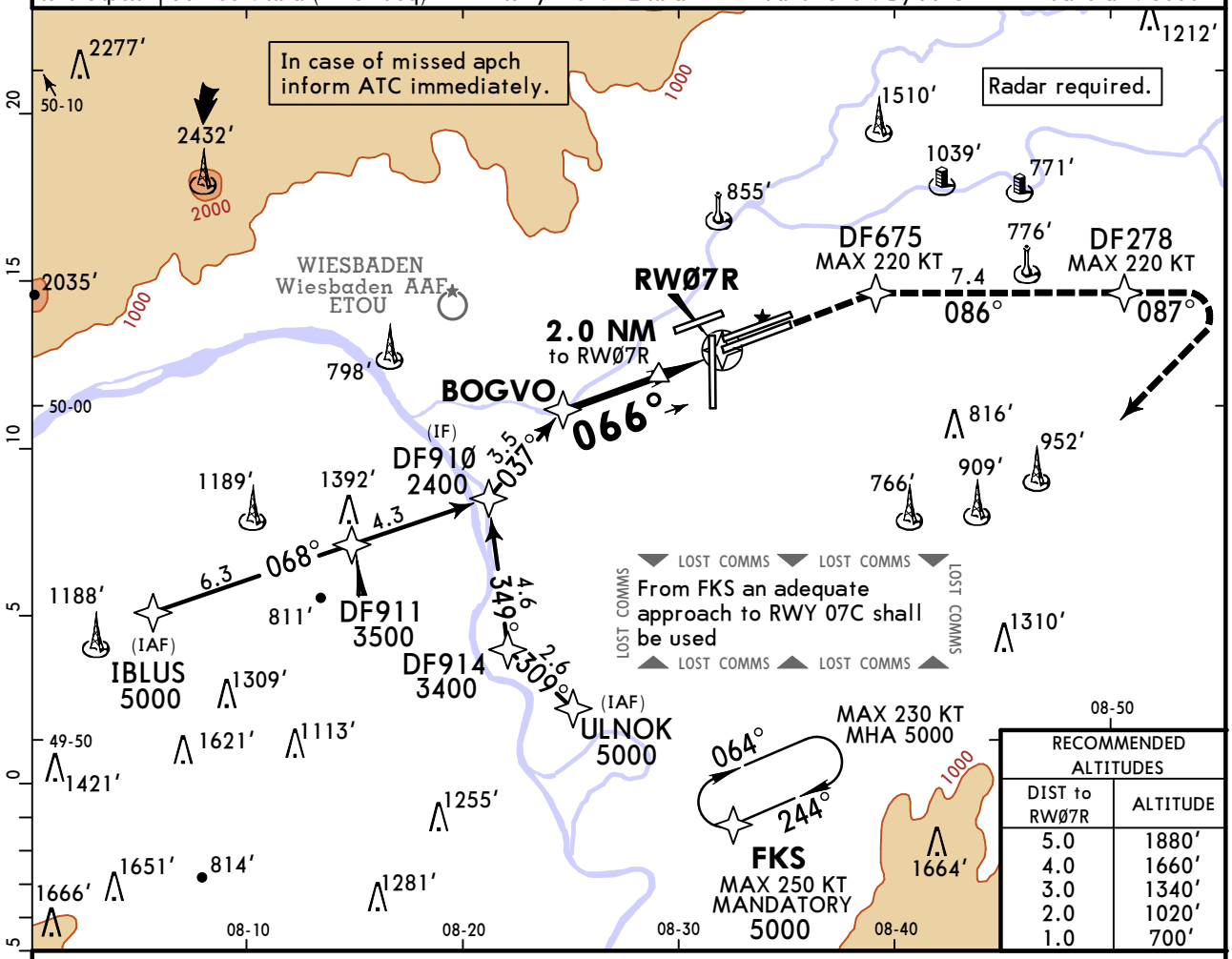
D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

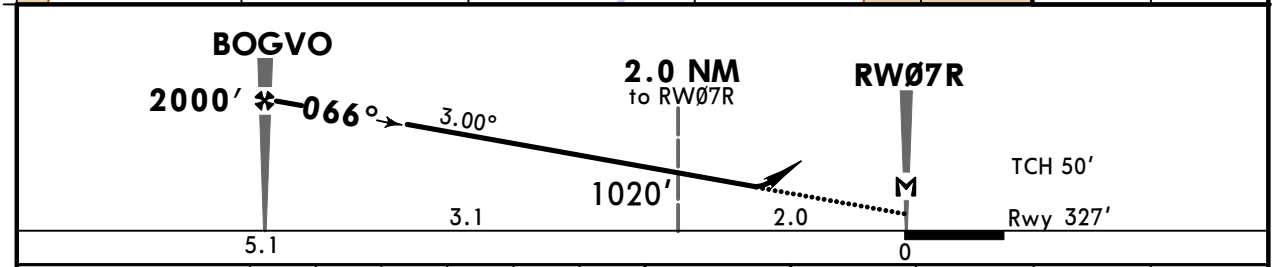
RNAV	Final Apch Crs 066°	BOGVO 2000′ (1673′)	DA/MDA(H) Refer to Minimums	Apt Elev 363′ Rwy 327′

MISSED APCH: Direct to DF675 (MAX 220 KT), then to DF278 (MAX 220 KT). Climb on course 087° to 5000′, then turn RIGHT (MAX 220 KT) direct to FKS at 5000′ (MAX 250 KT).

4300 MSA ARP

RNP Apch | Alt Set: hPa (IN on req) | Rwy Elev: 12 hPa | Trans level: By ATC | Trans alt: 5000′





Gnd speed-Kts		70	90	100	120	140	160
Descent Angle	3.00°	372	478	531	637	743	849
MAP at RW07R							
BOGVO to MAP	5.1	4:22	3:24	3:04	2:33	2:11	1:55

ALSF-II REIL PAPI

D DF675 220 KT MAX

Std/State

STRAIGHT-IN LANDING
LNAV
CDFA

1 DA/MDA(H) AB: **810′** (483′) C: **830′** (503′) D: **840′** (513′)

	TDZ or CL out	ALS out
A	R1500m	
B		
C	R1600m	R2400m
D		

PANS OPS

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

CHANGES: Recommended altitudes, Ground Speed Box.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN FRANKFURT/MAIN, GERMANY

7 JUL 23 (12-9) Eff 13 Jul

RNP Z Rwy 25L

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

BRIEFING STRIP

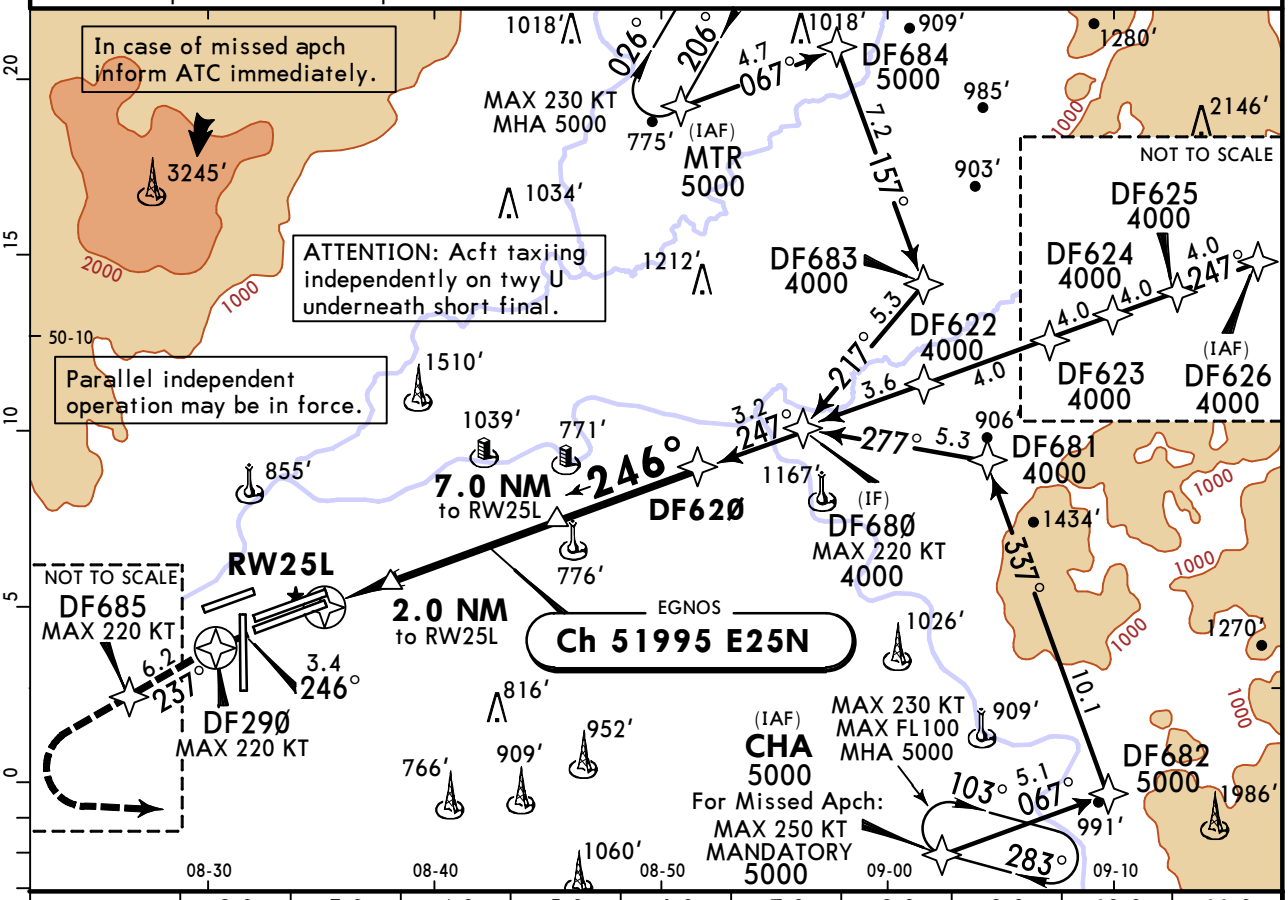
EGNOS	Final Apch Crs	DF62Ø	LPV DA(H)	Apt Elev / Rwy
Ch 51995 E25N	246°	4000′ (3639′)	561′ (200′)	Apt Elev 363′ / Rwy 361′

MISSED APCH: Direct to DF29Ø (MAX 220 KT), then direct to DF685 (MAX 220 KT). Climb on course 237° to 5000′, then turn LEFT (MAX 220 KT) direct to CHA at 5000′ (MAX 250 KT).

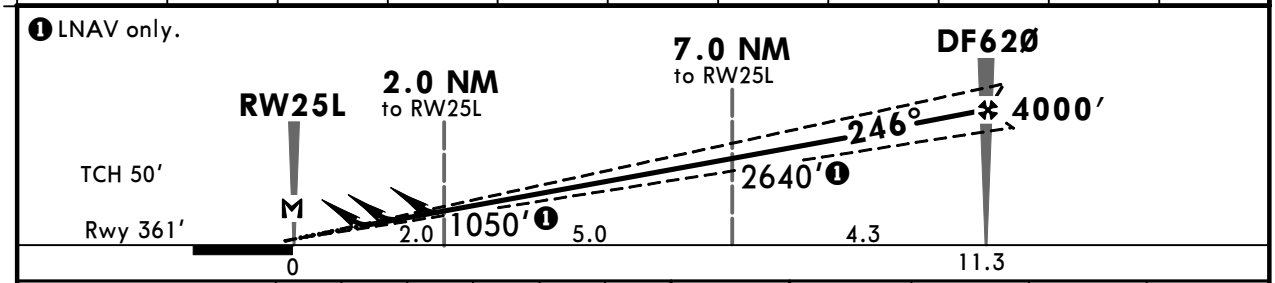
4300 MSA ARP

RNP Apch	Alt Set: hPa (IN on req)	Rwy Elev: 13 hPa	Trans level: By ATC	Trans alt: 5000′

1. RNP-1 required. 2. Radar required. 3. Baro-VNAV not authorized below -15°C.



DIST to RW25L	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0
ALTITUDE	1050′	1370′	1690′	2010′	2330′	2640′	2960′	3280′	3600′	3920′



Gnd speed-Kts	70	90	100	120	140	160
Glide Path Angle 3.00°	372	478	531	637	743	849
MAP at RW25L						

ALSF-II, REIL, PAPI — DF29Ø — 220 KT MAX

Std/State — STRAIGHT-IN LANDING

❶ LPV — ❷ DA(H) 561′ (200′)

LNAV/VNAV DA(H): A: 726′ (365′) C: 747′ (386′) B: 738′ (377′) D: 757′ (396′)

❹ DA/MDA(H) LNAV CDFA: A: 770′ (409′) C: 800′ (439′) B: 780′ (419′) D: 820′ (459′)

	TDZ or CL out	ALS out	TDZ or CL out	ALS out	TDZ or CL out	ALS out
A, B	R550m	❸ R550m	R1000m	R1500m	R1200m	R1500m
C, D	R550m	❸ R550m	R1100m	R1800m	R1300m / R1400m	R2000m / R2100m

PANS OPS

❶ LPV (VAL 35m). ❷ DL: DA(H) 588′ (227′). ❸ R750m when a Flight Director or Autopilot or HUDLS to DA is not used. ❹ VNAV DA(H) in lieu of MDA(H) depends on operator policy.

CHANGES: Procedure, missed apch, minimums.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN 7 JUL 23 (12-10) Eff 13 Jul

FRANKFURT/MAIN, GERMANY RNP Y Rwy 25L

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

BRIEFING STRIP

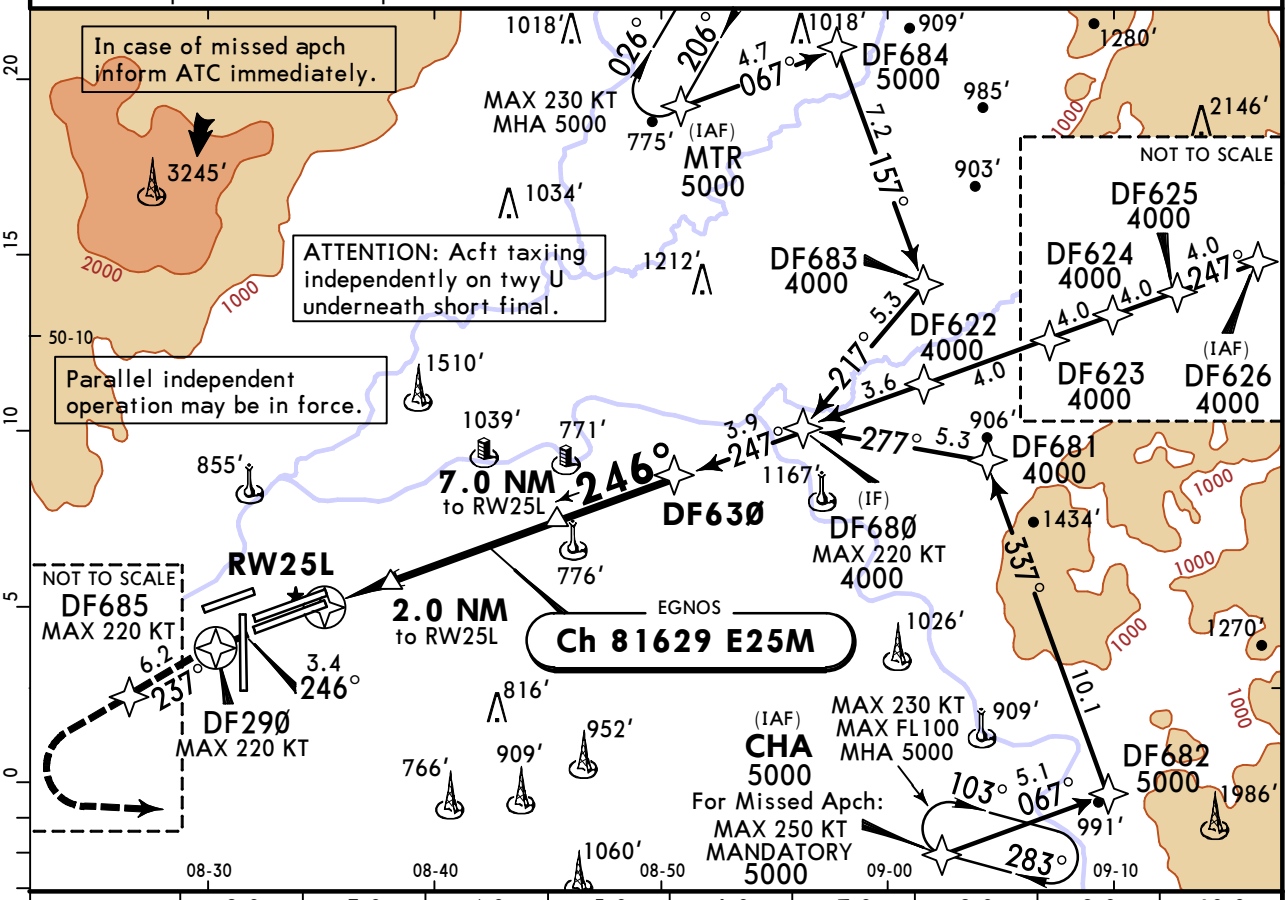
EGNOS	Final Apch Crs	DF63Ø	LPV DA(H)	Apt Elev / Rwy
Ch 81629 E25M	246°	4000′ (3639′)	561′ (200′)	Apt Elev 363′ / Rwy 361′

MISSED APCH: Direct to DF29Ø (MAX 220 KT), then direct to DF685 (MAX 220 KT). Climb on course 237° to 5000′, then turn LEFT (MAX 220 KT) direct to CHA at 5000′ (MAX 250 KT).

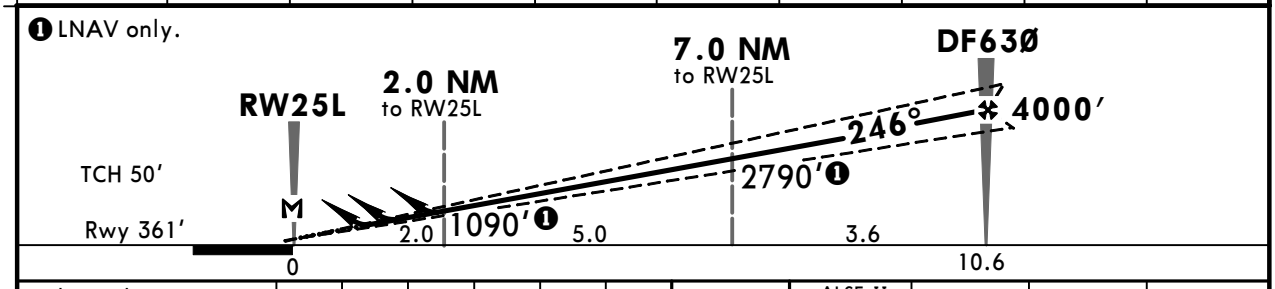
4300 MSA ARP

RNP Apch	Alt Set: hPa (IN on req)	Rwy Elev: 13 hPa	Trans level: By ATC	Trans alt: 5000′

1. RNP-1 required. 2. Radar required. 3. Baro-VNAV not authorized below -15°C.



DIST to RW25L	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0
ALTITUDE	1090′	1430′	1770′	2110′	2450′	2790′	3130′	3470′	3810′



Gnd speed-Kts		70	90	100	120	140	160
Glide Path Angle	3.20°	396	510	566	679	793	906
MAP at RW25L							

ALSF-II, REIL, PAPI — DF29Ø — 220 KT MAX

Std/State

STRAIGHT-IN LANDING

	1 LPV	LNAV/VNAV	3 DA/MDA(H) LNAV CDFA
	DA(H) 561′ (200′)	A: 729′ (368′) C: 750′ (389′) DA(H) B: 742′ (381′) D: 760′ (399′)	A: 770′ (409′) C: 800′ (439′) B: 780′ (419′) D: 820′ (459′)

	TDZ or CL out	ALS out	TDZ or CL out	ALS out	TDZ or CL out	ALS out
A	R550m	2 R550m	R1000m	R1500m	R1200m	R1500m
B						
C			R1100m	R1800m	R1300m	R2000m
D					R1400m	R2100m

PANS OPS

1 LPV (VAL 35m). 2 R750m when a Flight Director or Autopilot or HUDLS to DA is not used.
3 VNAV DA(H) in lieu of MDA(H) depends on operator policy.

CHANGES: New procedure.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN 26 APR 24 (12-11)

FRANKFURT/MAIN, GERMANY
RNP X Rwy 25L

BRIEFING STRIP™

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

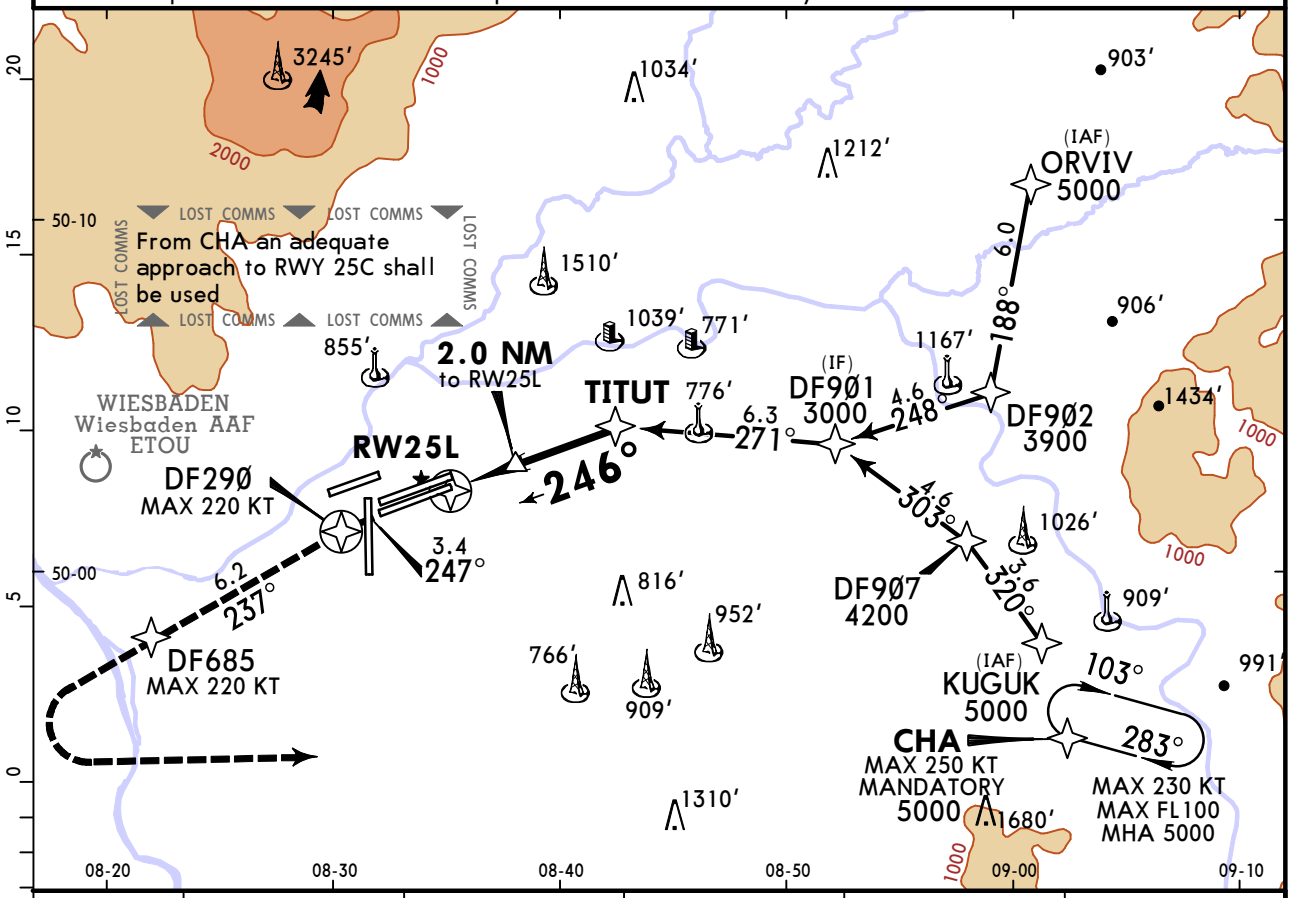
RNAV	Final Apch Crs	TITUT	DA/MDA(H)	Apt Elev / Rwy
	246°	2000′ (1639′)	840′ (479′)	Apt Elev 363′ / Rwy 361′

MISSED APCH: Direct to DF29Ø (MAX 220 KT), then direct to DF685 (MAX 220 KT). Climb on course 237° to 5000′, then turn LEFT (MAX 220 KT) direct to CHA at 5000′ (MAX 250 KT).

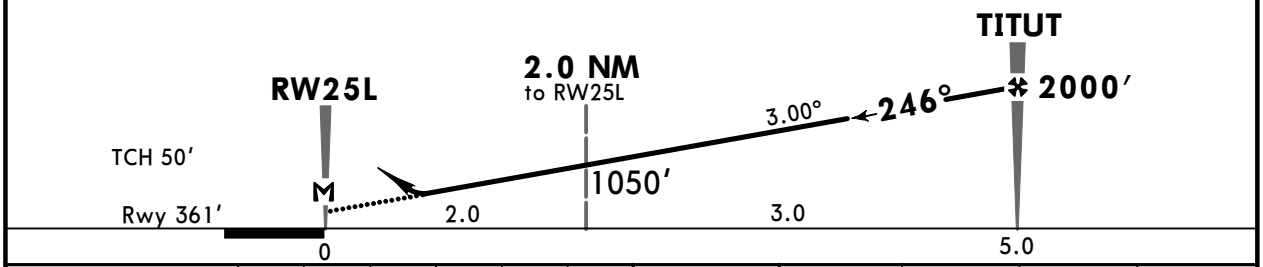
4300 MSA ARP

RNP Apch	Alt Set: hPa (IN on req)	Rwy Elev: 13 hPa	Trans level: By ATC	Trans alt: 5000′

1. Radar required. 2. In case of missed apch inform ATC immediately.



DIST to RW25L	1.0	2.0	3.0	4.0	5.0
ALTITUDE	730′	1050′	1370′	1690′	1930′



Gnd speed-Kts		70	90	100	120	140	160
Descent Angle	3.00°	372	478	531	637	743	849
MAP at RW25L							
TITUT to MAP	5.0	4:17	3:20	3:00	2:30	2:09	1:53

ALSF-II
REIL
PAPI

D

DF29Ø 220 KT MAX

Std/State

STRAIGHT-IN LANDING
LNAV
CDFA
1 DA/MDA(H) **840′** (479′)

	TDZ or CL out	ALS out
A	R1500m	R1500m
B		
C		R2200m
D		

PANS OPS

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

CHANGES: Recommended altitudes, Ground Speed Box.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN FRANKFURT/MAIN, GERMANY

26 APR 24 (12-12)

RNP Z Rwy 25C

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

BRIEFING STRIP™

EGNOS	Final Apch Crs	DF52Ø	LPV DA(H)	Apt Elev 363′
Ch 75346 E25K	**246°**	**4000′**(3637′)	**563′**(200′)	Rwy 363′

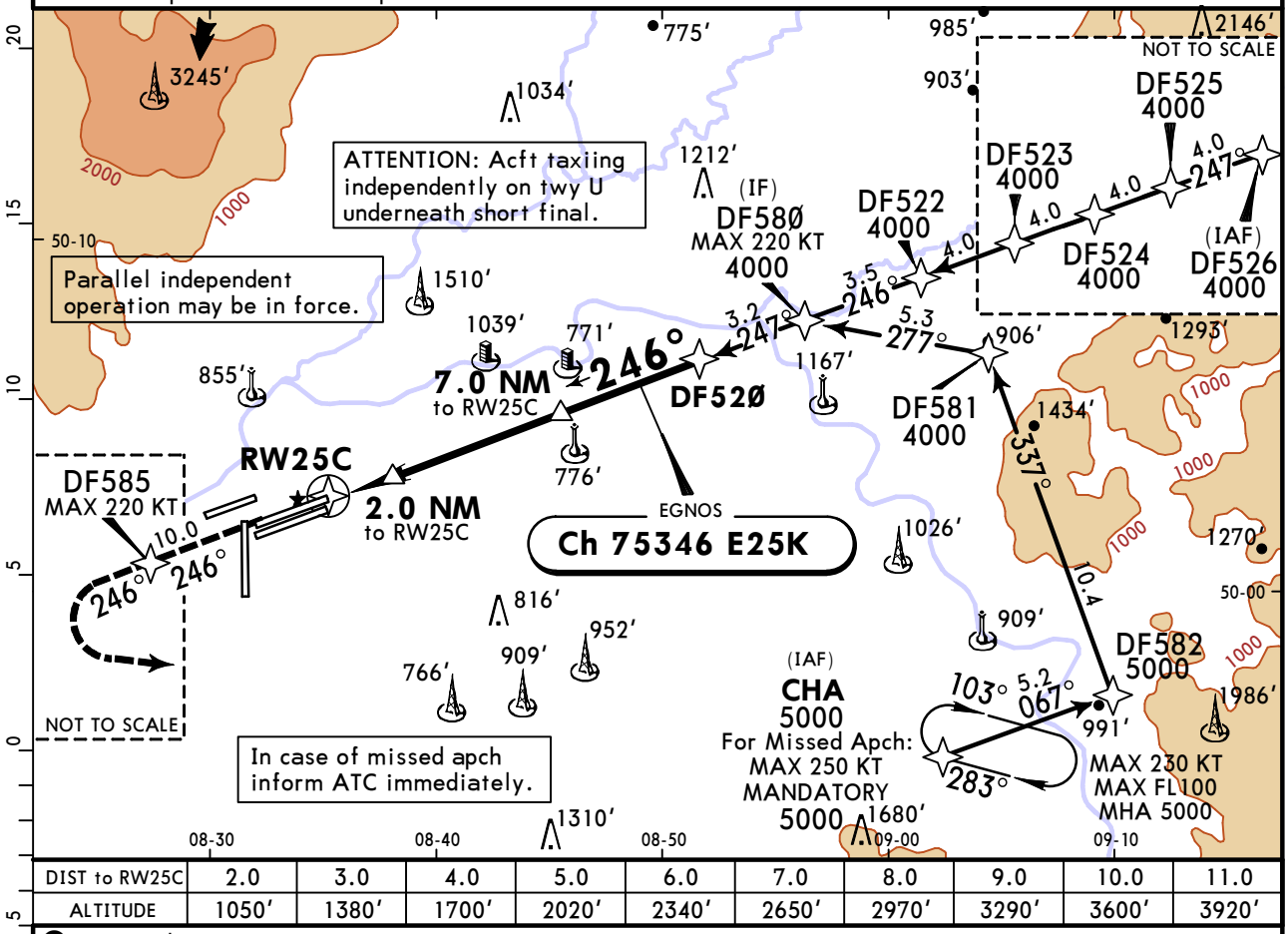
MISSED APCH: Direct to DF585 (MAX 220 KT), then climb on course 246° to 5000′, then turn LEFT (MAX 220 KT) direct to CHA at 5000′ (MAX 250KT).

4300

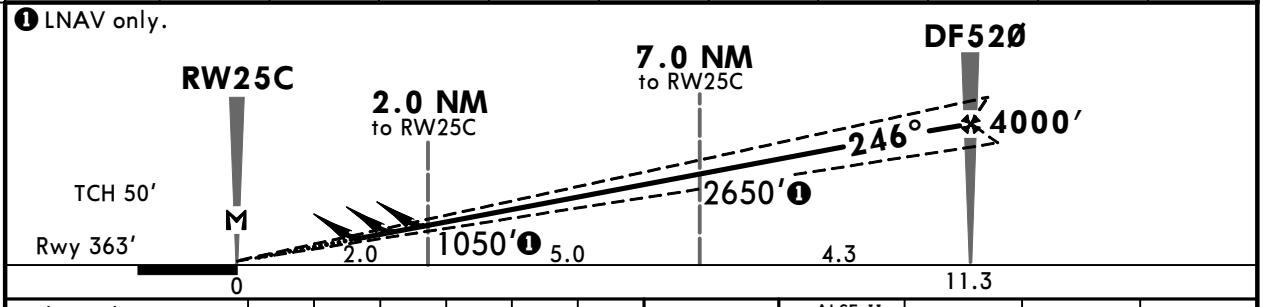
MSA ARP

RNP Apch	Alt Set: hPa (IN on req)	Rwy Elev: 13 hPa	Trans level: By ATC	Trans alt: 5000′

1. RNP-1 required. 2. Radar required. 3. Baro-VNAV not authorized below -15°C.



DIST to RW25C	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0
ALTITUDE	1050′	1380′	1700′	2020′	2340′	2650′	2970′	3290′	3600′	3920′



Gnd speed-Kts		70	90	100	120	140	160
Glide Path Angle	3.00°	372	478	531	637	743	849
MAP at RW25C							
DF52Ø to MAP	11.3	9:41	7:32	6:47	5:39	4:51	4:14

ALSF-II
REIL
PAPI

DF585 | 220 KT MAX

Std/State

STRAIGHT-IN LANDING

	❶ LPV DA(H) 563′(200′)			LNAV/VNAV DA(H) A: 691′(328′) C: 706′(343′) B: 700′(337′) D: 714′(351′)			LNAV CDFA ❸ DA/MDA(H) 790′(427′)		
		TDZ or CL out	ALS out		TDZ or CL out	ALS out		TDZ or CL out	ALS out
A	R550m	❷ R550m	R1200m	R800m		R1500m	R1300m		R1500m
B									
C				R900m		R1600m			R2000m
D									

PANS OPS

❶ LPV (VAL 35m). ❷ R750m when a Flight Director or Autopilot or HUDLS to DA is not used.
❸ VNAV DA(H) in lieu of MDA(H) depends on operator policy.

CHANGES: Ground Speed Box.

EDDF/FRA FRANKFURT/MAIN

26 APR 24 (12-13)

JEPPESEN FRANKFURT/MAIN, GERMANY RNP Y Rwy 25C

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

BRIEFING STRIP

EGNOS	Final Apch Crs	DF53Ø	LPV DA(H)	Apt Elev 363′
Ch 60675 E25J	**246°**	**4000′**(3637′)	**563′**(200′)	Rwy 363′

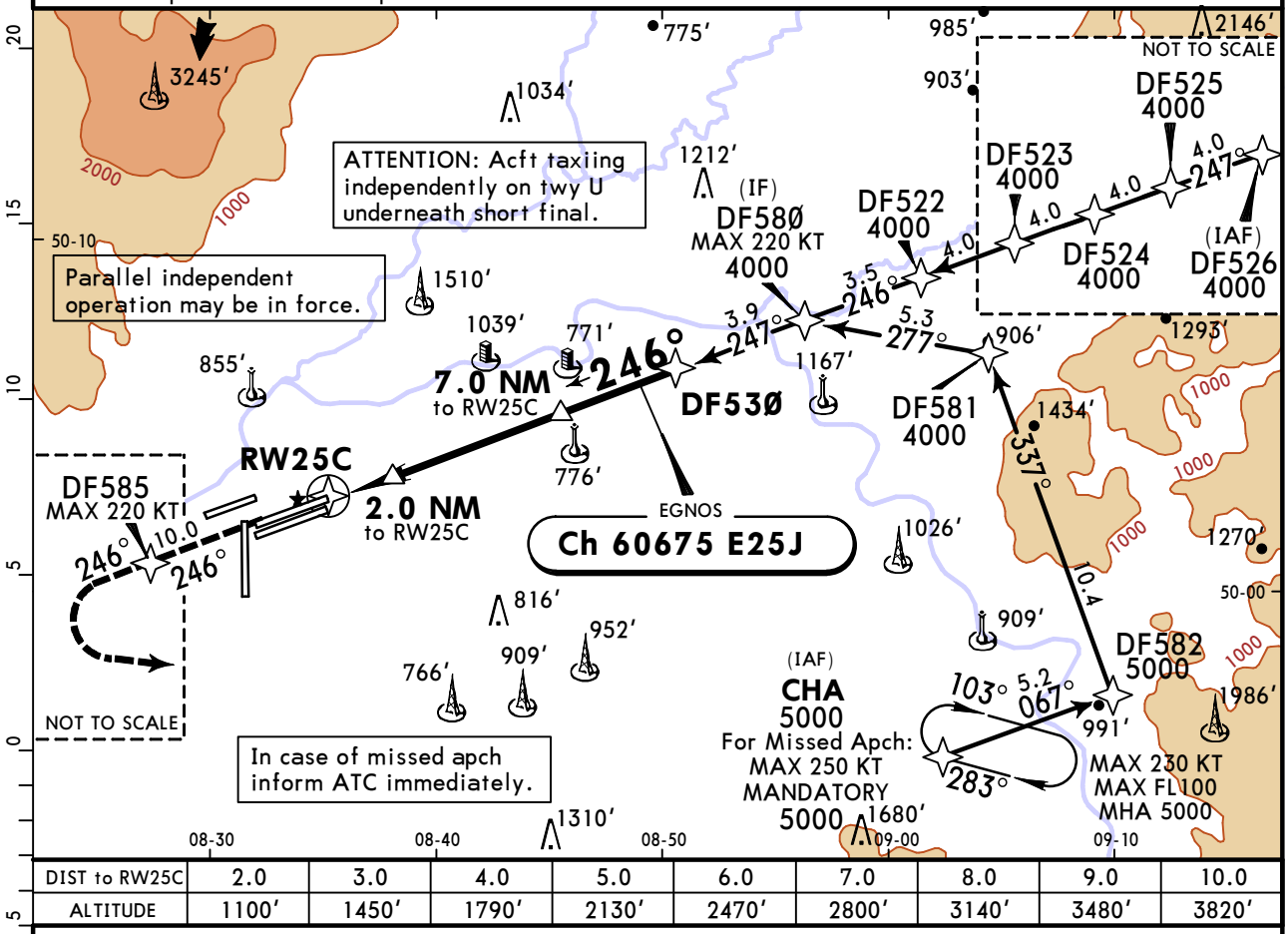
MISSED APCH: Direct to DF585 (MAX 220 KT), then climb on course 246° to 5000′, then turn LEFT (MAX 220 KT) direct to CHA at 5000′ (MAX 250KT).

4300

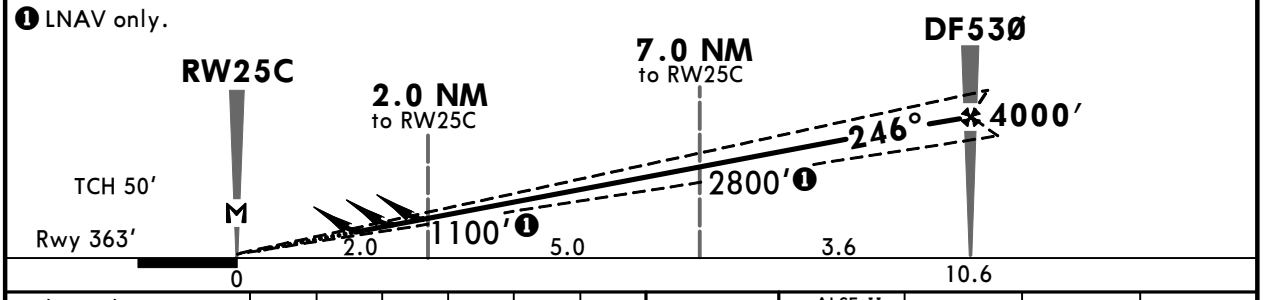
MSA ARP

RNP Apch	Alt Set: hPa (IN on req)	Rwy Elev: 13 hPa	Trans level: By ATC	Trans alt: 5000′

1. RNP-1 required. 2. Radar required. 3. Baro-VNAV not authorized below -15°C.



DIST to RW25C	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0
ALTITUDE	1100′	1450′	1790′	2130′	2470′	2800′	3140′	3480′	3820′



Gnd speed-Kts		70	90	100	120	140	160
Glide Path Angle	3.20°	396	510	566	679	793	906
MAP at RW25C							
DF53Ø to MAP	10.6	9:05	7:04	6:22	5:18	4:33	3:59

ALSF-II
REIL
PAPI

DF585 | 220 KT MAX

Std/State

STRAIGHT-IN LANDING

	❶ LPV DA(H) 563′(200′) TDZ or CL out	ALS out	LNAV/VNAV DA(H) A: 694′(331′) B: 703′(340′) C: 709′(346′) D: 716′(353′) TDZ or CL out	ALS out	LNAV CDFA ❸ DA/MDA(H) 790′(427′) TDZ or CL out	ALS out
A	R550m	❷ R550m	R800m	R1500m	R1300m	R1500m
B						
C			R900m	R1600m		R2000m
D						

PANS OPS

❶ LPV (VAL 35m). ❷ R750m when a Flight Director or Autopilot or HUDLS to DA is not used.
❸ VNAV DA(H) in lieu of MDA(H) depends on operator policy.

CHANGES: Ground Speed Box.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN FRANKFURT/MAIN, GERMANY

26 APR 24 (12-14)

RNP X Rwy 25C

BRIEFING STRIP

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

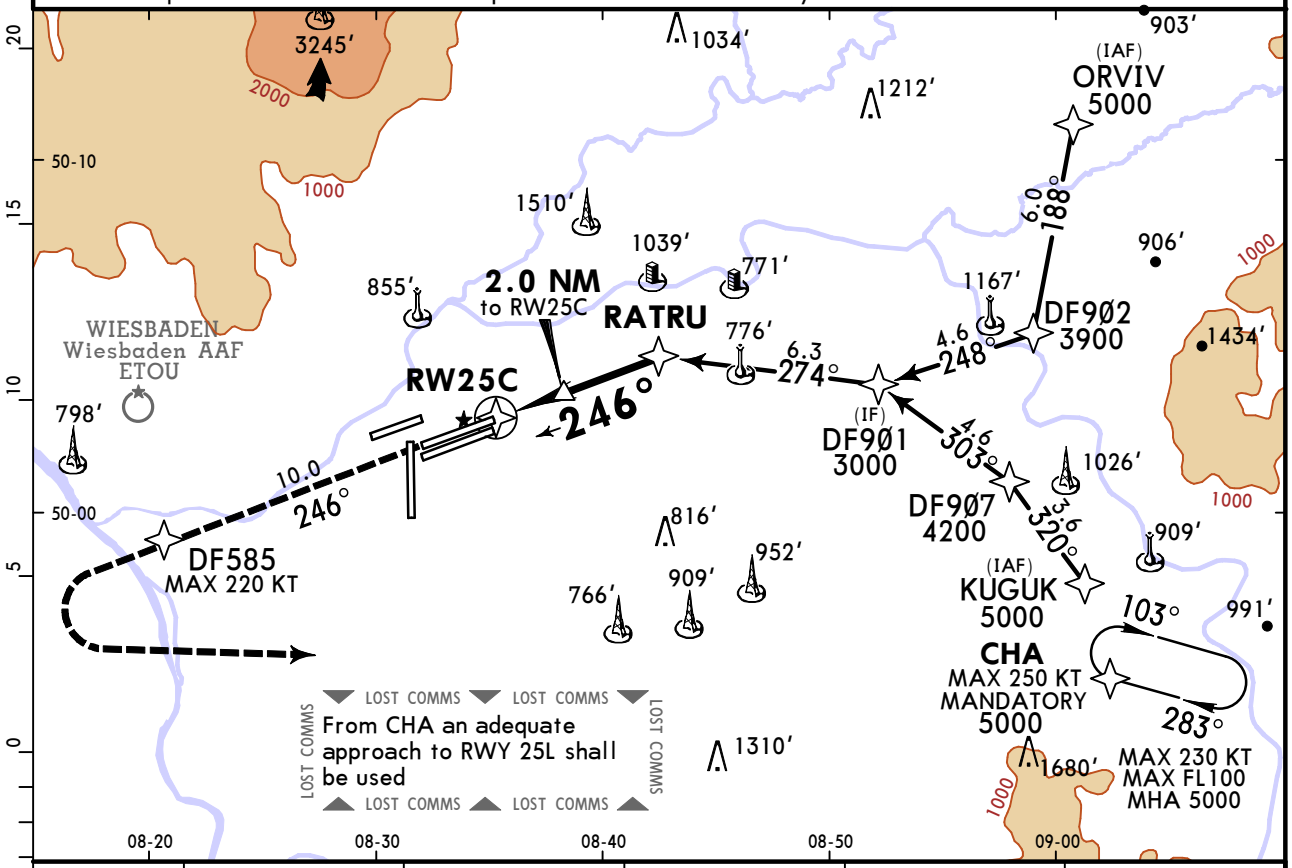
RNAV	Final Apch Crs 246°	RATRU 2000′(1637′)	DA/MDA(H) Refer to Minimums	Apt Elev 363′ Rwy 363′

MISSED APCH: Direct to DF585 (MAX 220 KT), then climb on course 246° to 5000′, then turn LEFT (MAX 220 KT) direct to CHA at 5000′ (MAX 250KT).

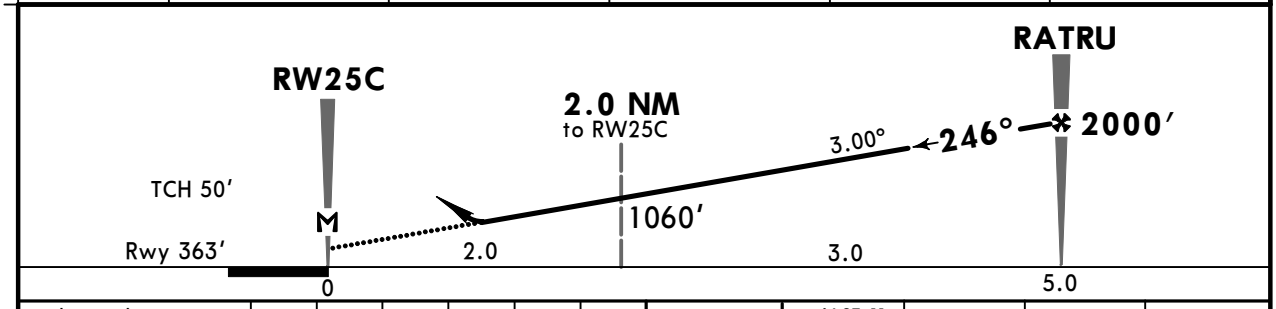
4300 MSA ARP

RNP Apch	Alt Set: hPa (IN on req)	Rwy Elev: 13 hPa	Trans level: By ATC	Trans alt: 5000′

1. Radar required. 2. In case of missed apch inform ATC immediately.



DIST to RW25C	1.0	2.0	3.0	4.0	5.0
ALTITUDE	740′	1050′	1370′	1690′	1920′



Gnd speed-Kts		70	90	100	120	140	160
Descent Angle	3.00°	372	478	531	637	743	849
MAP at RW25C							
RATRU to MAP	5.0	4:17	3:20	3:00	2:30	2:09	1:53

ALSF-II
REIL
PAPI

D

DF585

220 KT MAX

PANS OPS

Std/State

STRAIGHT-IN LANDING
LNAV
CDFA

1 DA/MDA(H) AB: **790′**(427′) CD: **840′**(477′)

	TDZ or CL out	ALS out
A	R1300m	R1500m
B		
C	R1500m	R2200m
D		

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

CHANGES: Recommended altitudes, Ground Speed Box.

EDDF/FRA
FRANKFURT/MAIN

JEPPESEN

18 AUG 23 (12-15)

FRANKFURT/MAIN, GERMANY
RNP Z Rwy 25R

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		*FRANKFURT Tower	*Ground
118.030	120.805	125.355	118.505	127.280	136.5	121.805

BRIEFING STRIP TM

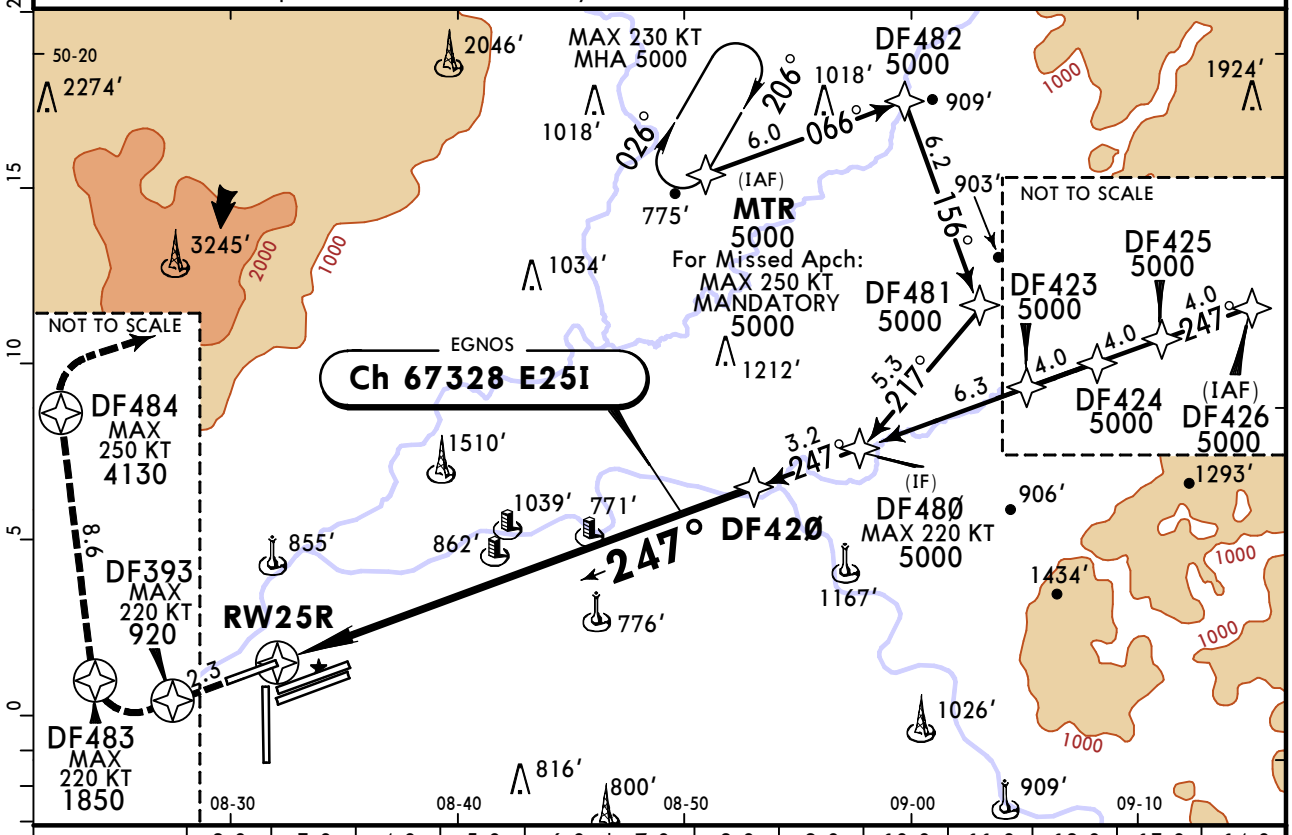
EGNOS	Final Apch Crs	DF42Ø	LPV DA(H) Refer to Minimums	Apt Elev 363′ Rwy 351′
Ch 67328 E25I	247°	5000′ (4649′)		

MISSED APCH: Direct to DF393 at or above 920′ (MAX 220 KT), turn RIGHT direct to DF483 at or above 1850′ (MAX 220 KT), turn RIGHT RIGHT direct to DF484 at or above 4130′ (MAX 250 KT), turn RIGHT direct to MTR at 5000′.
Missed apch requires a min climb of 4.3% (261′/NM) to 4130′.

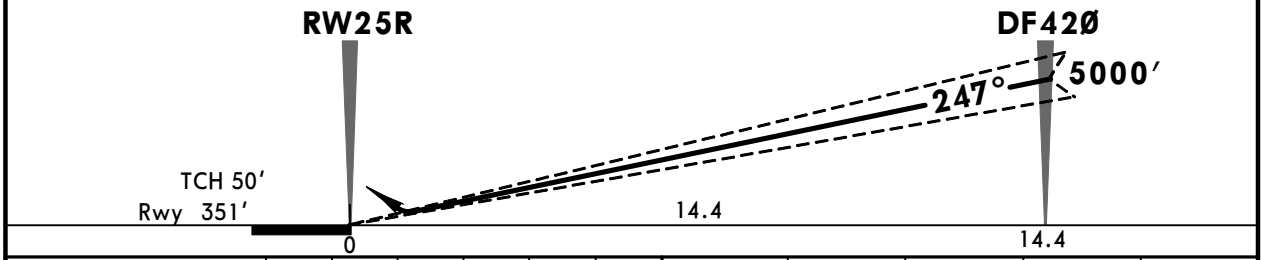
4300
MSA ARP

RNP Apch	Alt Set: hPa (IN on req)	Rwy Elev: 13 hPa	Trans level: By ATC	Trans alt: 5000′

1. RNP-1 required. 2. Radar required. 3. Parallel independent operation may be in force.
4. In case of missed apch inform ATC immediatley.



DIST to RW25R	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0
ALTITUDE	1040′	1360′	1680′	2000′	2320′	2640′	2950′	3270′	3590′	3910′	4230′	4550′	4860′



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

ALSF-II
REIL PAPI

D

DF393

MIN 920′

220 KT MAX

Std/State

STRAIGHT-IN LANDING

1 LPV

DA(H) ABC: **551′**(200′) D: **558′**(207′)

	TDZ or CL out	ALS out
A B C D	R550m	2 R550m	R1200m

PANS OPS

1 LPV (VAL 35m). 2 R750m when a Flight Director or Autopilot or HUDLS to DA is not used.

CHANGES: Missed approach.

EDDF/FRA
FRANKFURT/MAIN

JEPPESEN 18 AUG 23 12-16

FRANKFURT/MAIN, GERMANY
RNP Y Rwy 25R

BRIEFING STRIP TM

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		*FRANKFURT Tower	*Ground
118.030	120.805	125.355	118.505	127.280	136.5	121.805

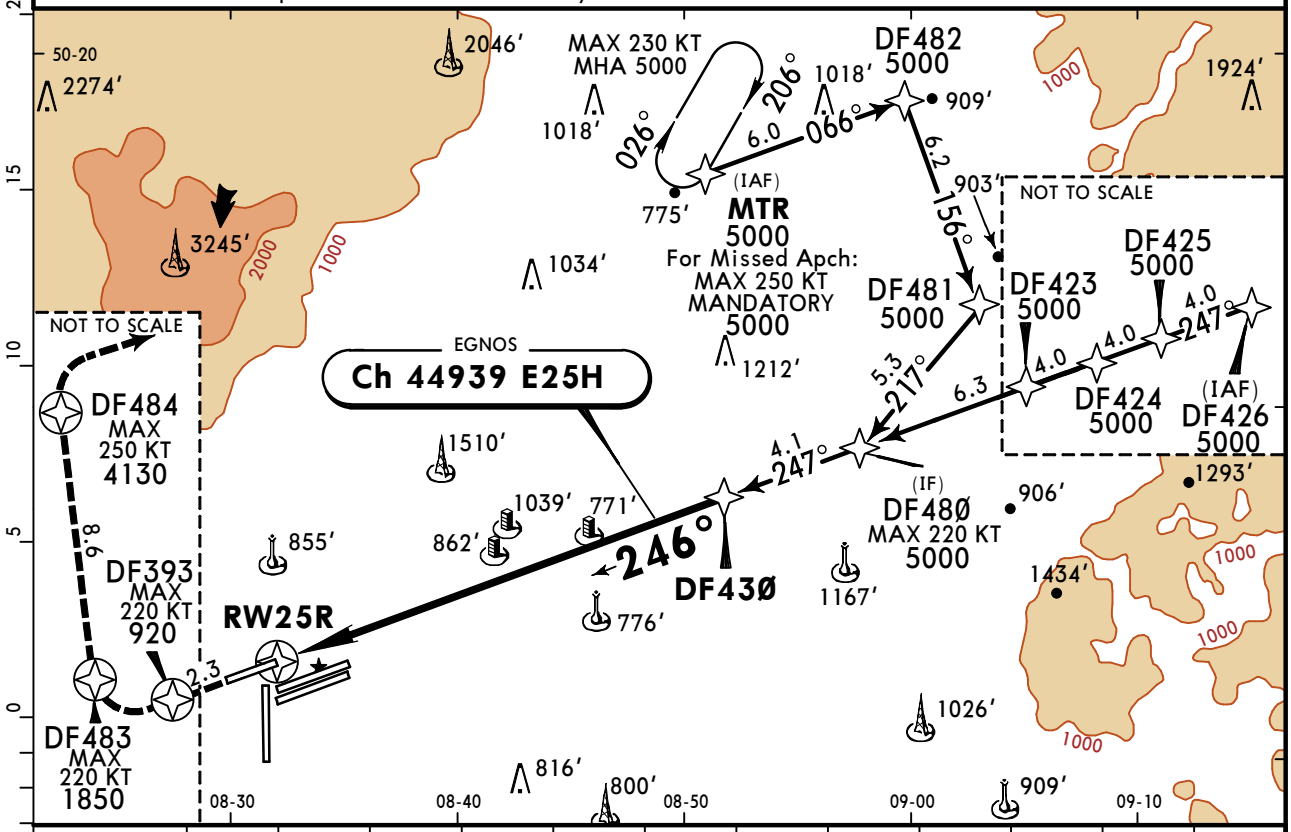
EGNOS	Final Apch Crs	DF43Ø	LPV DA(H) Refer to Minimums	Apt Elev 363′ / Rwy 351′
Ch 44939 E25H	246°	5000′ (4649′)		

MISSED APCH: Direct to DF393 at or above 920′ (MAX 220 KT), turn RIGHT direct to DF483 at or above 1850′ (MAX 220 KT), turn RIGHT RIGHT direct to DF484 at or above 4130′ (MAX 250 KT), turn RIGHT direct to MTR at 5000′.
Missed apch requires a min climb of 4.3% (261′/NM) to 4130′.

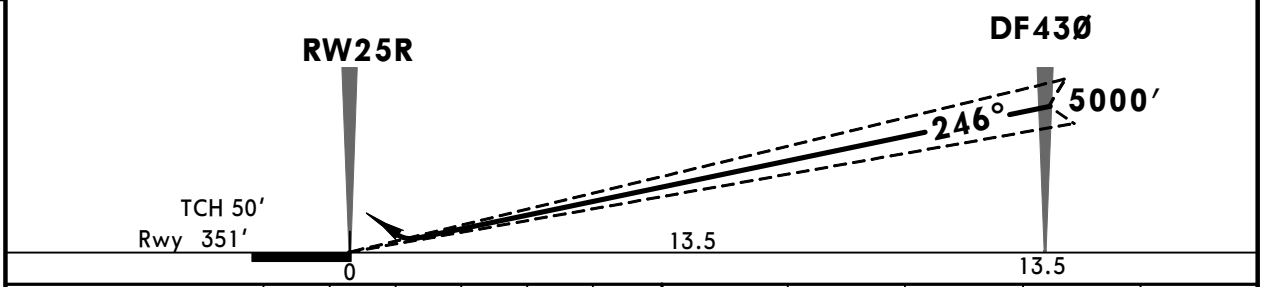
4300
MSA ARP

RNP Apch	Alt Set: hPa (IN on req)	Rwy Elev: 13 hPa	Trans level: By ATC	Trans alt: 5000′

1. RNP-1 required. 2. Radar required. 3. Parallel independent operation may be in force.
4. In case of missed apch inform ATC immediatley.



DIST to RW25R	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0
ALTITUDE	1090′	1430′	1770′	2100′	2440′	2780′	3120′	3460′	3800′	4140′	4480′	4820′



Gnd speed-Kts	70	90	100	120	140	160
Glide Path Angle 3.20°	396	510	566	679	793	906

ALSF-II
REIL PAPI

D → DF393 MIN 920′ 220 KT MAX

Std/State

STRAIGHT-IN LANDING

1 LPV

DA(H) ABC: 551′(200′) D: 558′(207′)

PANS OPS

	TDZ or CL out	ALS out
A B C D	R550m	2 R550m	R1200m

1 LPV (VAL 35m). 2 R750m when a Flight Director or Autopilot or HUDLS to DA is not used.

CHANGES: Missed approach.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN FRANKFURT/MAIN, GERMANY

7 JUL 23 | 12-40 | Eff 13 Jul

GLS Z Rwy 07L

BRIEFING STRIP

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		*FRANKFURT Tower	*Ground
118.030	120.805	125.355	118.505	127.280	136.5	121.805

GBAS	Final Apch Crs	DF46Ø	DA(H)	Apt Elev 363′
Ch 32667 G07O	066°	5000′ (4696′)	Refer to Minimums	Rwy 304′

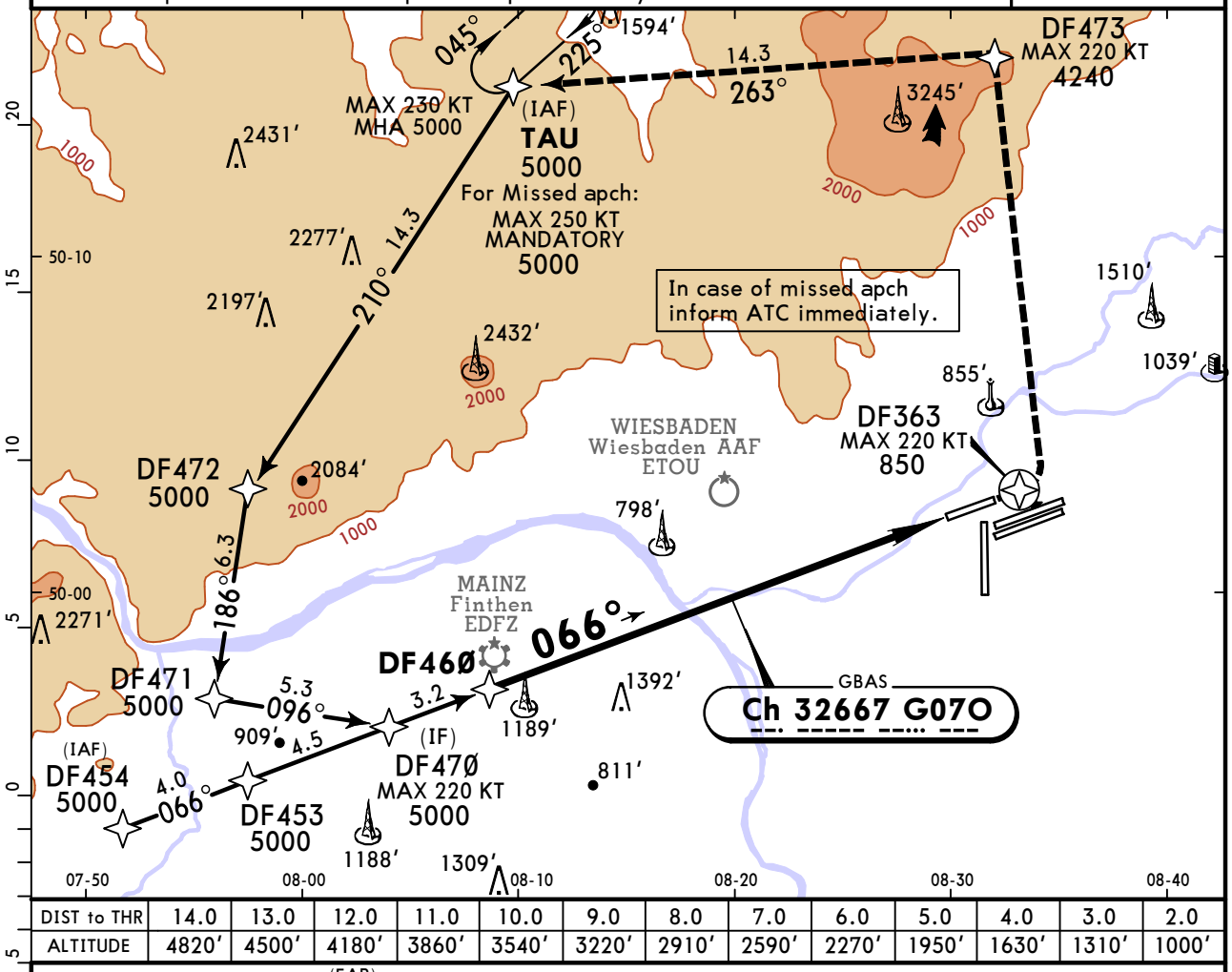
MISSED APCH: Direct to DF363 at or above 850′ (MAX 220 KT), turn LEFT direct to DF473 at or above 4240′ (MAX 220 KT), then to TAU VOR at 5000′ (MAX 250 KT). Missed apch requires a min climb of 4.1% (250′/NM) to 3500′.

RNP Apch | Alt Set: hPa (IN on req) Rwy Elev: 11 hPa Trans level: By ATC Trans alt: 5000′

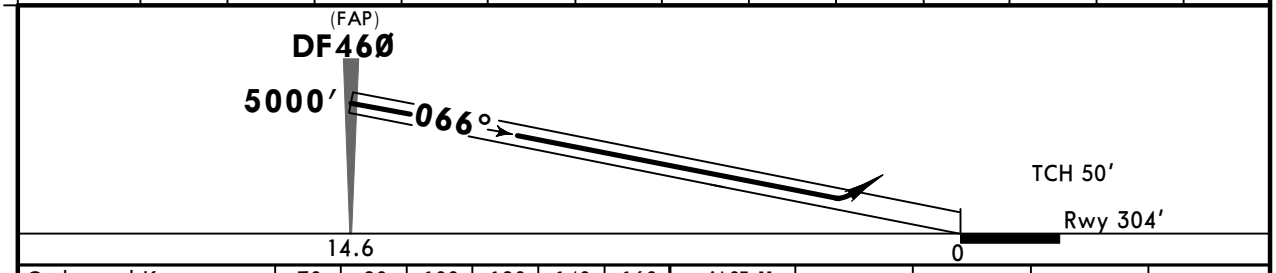
1. Radar required. 2. Parallel independent operation may be in force.

4300

MSA ARP



DIST to THR	14.0	13.0	12.0	11.0	10.0	9.0	8.0	7.0	6.0	5.0	4.0	3.0	2.0
ALTITUDE	4820′	4500′	4180′	3860′	3540′	3220′	2910′	2590′	2270′	1950′	1630′	1310′	1000′



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

ALSF-II
REIL
PAPI

D

DF363

MIN 850′

220 KT MAX

Std/State

STRAIGHT-IN LANDING
GLS

DA(H) ABC: **504′**(200′) D: **512′**(208′)

PANS OPS

	TDZ or CL out	ALS out
A B C D	R550m	1 R550m	R1200m

1 R750m when a Flight Director or Autopilot or HUDLS to DA is not used.

CHANGES: Procedure, missed apch, minimums.

EDDF/FRA
FRANKFURT/MAIN

JEPPESEN FRANKFURT/MAIN, GERMANY

7 JUL 23 (12-40A) Eff 13 Jul

CAT II GLS Z Rwy 07L

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		*FRANKFURT Tower	*Ground
118.030	120.805	125.355	118.505	127.280	136.5	121.805

BRIEFING STRIP™

GBAS	Final Apch Crs	DF46Ø	CAT II GLS	Apt Elev 364′
Ch 32667 G07O	066°	5000′ (4696′)	Refer to Minimums	Rwy 304′

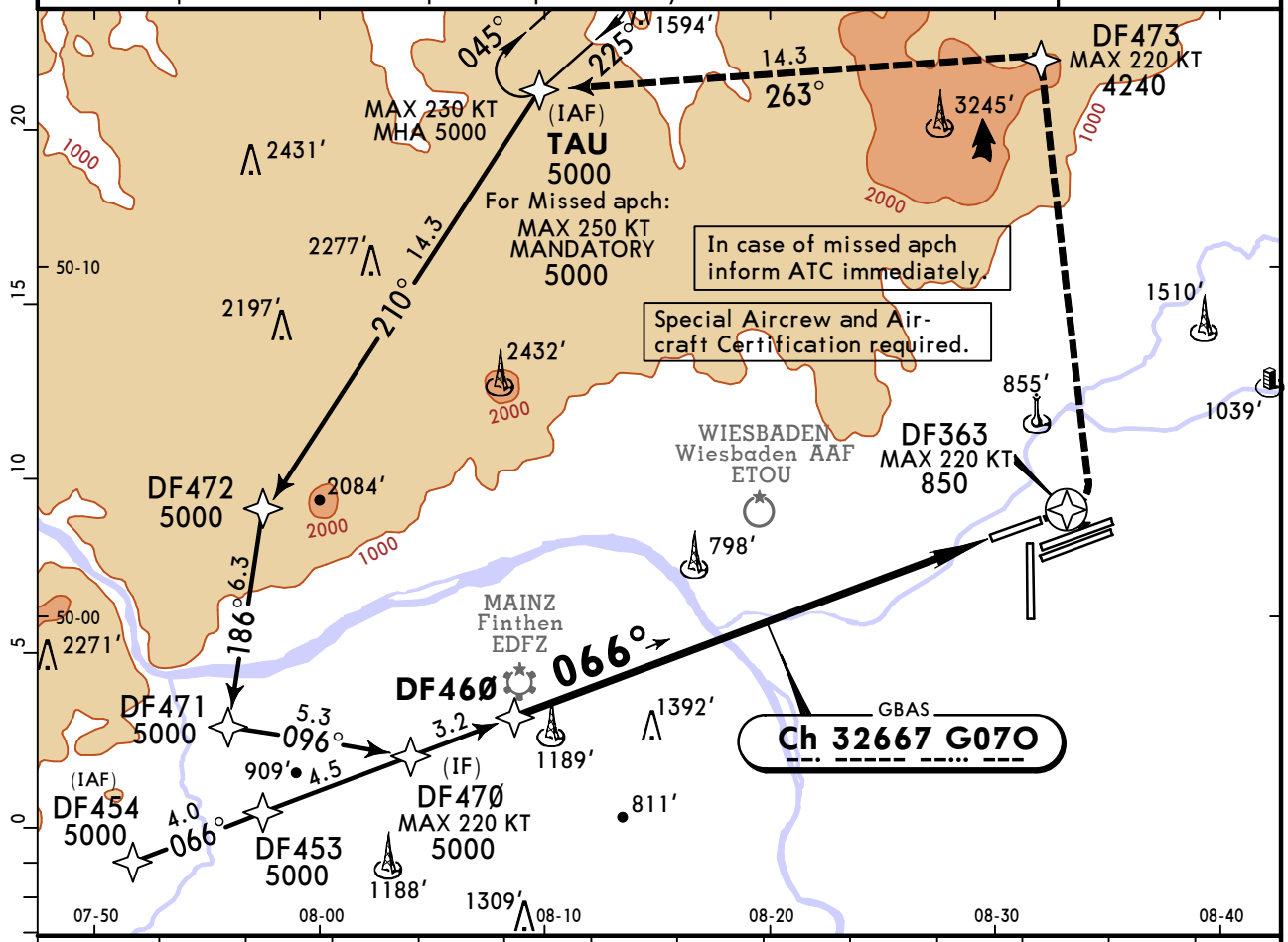
MISSED APCH: Direct to DF363 at or above 850′ (MAX 220 KT), turn LEFT direct to DF473 at or above 4240′ (MAX 220 KT), then to TAU VOR at 5000′ (MAX 250 KT). Missed apch requires a min climb of 4.1% (250′/NM) to 3500′.

RNP Apch | Alt Set: hPa (IN on req) Rwy Elev: 11 hPa Trans level: By ATC Trans alt: 5000′

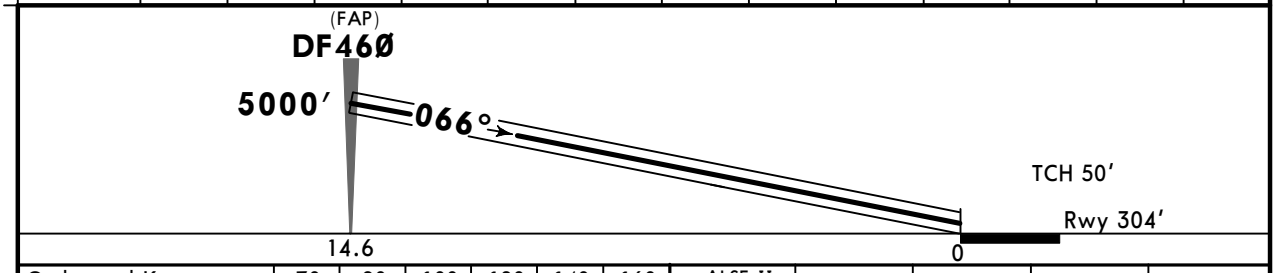
1. Radar required. 2. Parallel independent operation may be in force.

4300

MSA ARP



DIST to THR	14.0	13.0	12.0	11.0	10.0	9.0	8.0	7.0	6.0	5.0	4.0	3.0	2.0
ALTITUDE	4820′	4500′	4180′	3860′	3540′	3220′	2910′	2590′	2270′	1950′	1630′	1310′	1000′



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

ALSF-II
REIL
PAPI

DF363 | MIN 850′ | 220 KT MAX

Std/State

STRAIGHT-IN LANDING

A: RA 99′ DA(H) 404′(100′) B: RA 106′ DA(H) 411′(107′) C: RA 117′ DA(H) 422′(118′)	D: RA 132′ DA(H) 437′(133′)
R300m	R400m

PANS OPS

CHANGES: Procedure, missed apch, minimums.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN FRANKFURT/MAIN, GERMANY

7 JUL 23 | 12-41 | Eff 13 Jul

GLS Y Rwy 07L

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		*FRANKFURT Tower	*Ground
118.030	120.805	125.355	118.505	127.280	136.5	121.805

BRIEFING STRIP

GBAS	Final Apch Crs	DF45Ø	DA(H) Refer to Minimums	Apt Elev 363′ Rwy 304′
Ch 27735 G07K	066°	5000′ (4696′)		

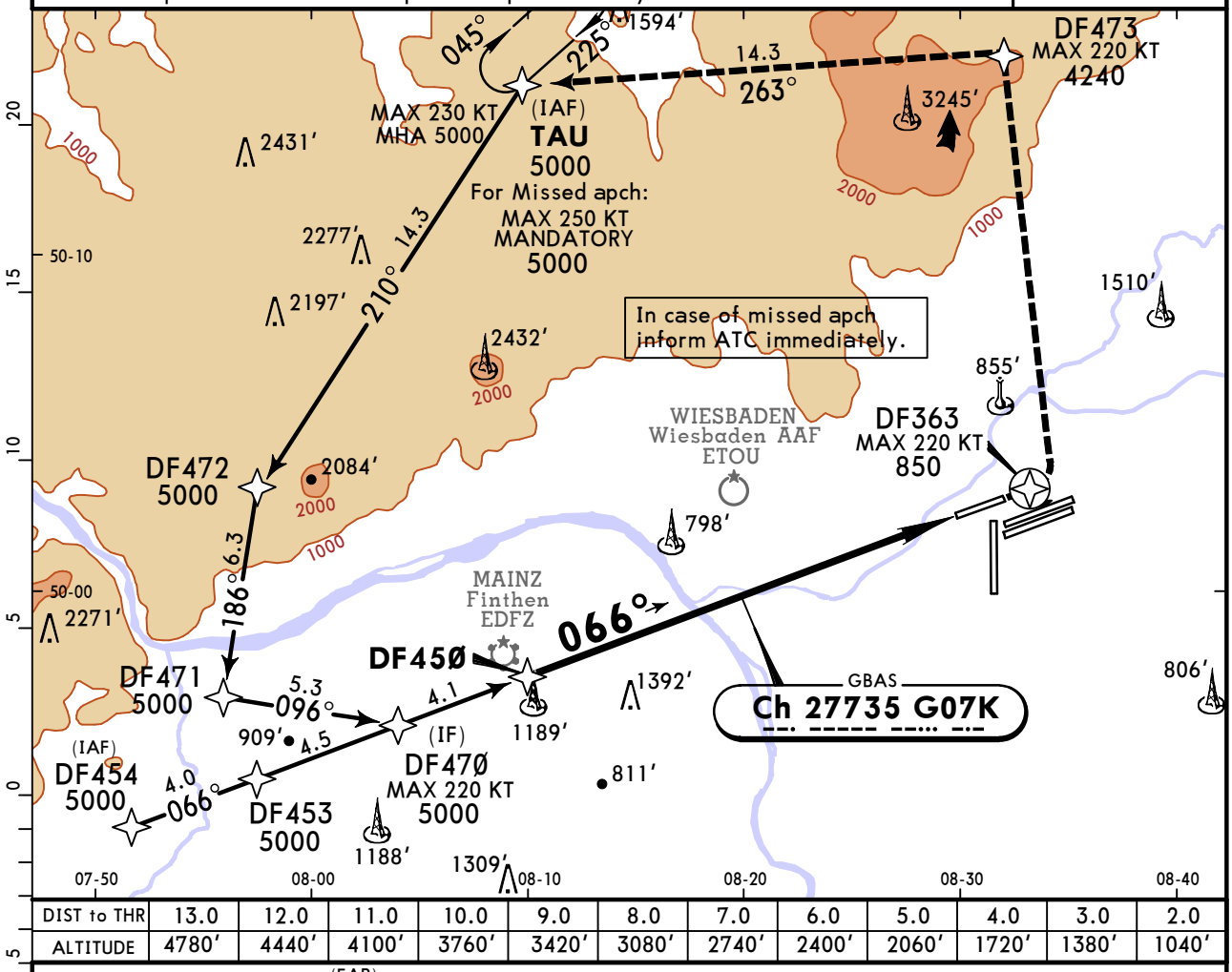
MISSED APCH: Direct to DF363 at or above 850′ (MAX 220 KT), turn LEFT direct to DF473 at or above 4240′ (MAX 220 KT), then to TAU VOR at 5000′ (MAX 250 KT). Missed apch requires a min climb of 4.1% (250′/NM) to 3500′.

RNP Apch | Alt Set: hPa (IN on req) Rwy Elev: 11 hPa Trans level: By ATC Trans alt: 5000′

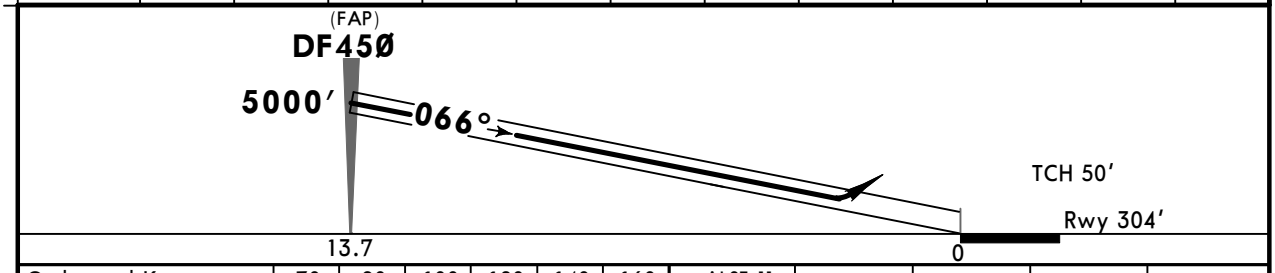
1. Radar required. 2. Parallel independent operation may be in force.

4300

MSA ARP



DIST to THR	13.0	12.0	11.0	10.0	9.0	8.0	7.0	6.0	5.0	4.0	3.0	2.0
ALTITUDE	4780′	4440′	4100′	3760′	3420′	3080′	2740′	2400′	2060′	1720′	1380′	1040′



Gnd speed-Kts	70	90	100	120	140	160
Glide Path Angle 3.20°	396	510	566	679	793	906

ALSF-II
REIL
PAPI

D

DF363 | MIN 850′ | 220 KT MAX

Std/State

STRAIGHT-IN LANDING

GLS

DA(H) ABC: **504′**(200′) D: **512′**(208′)

	TDZ or CL out	ALS out
A B C D	R550m	1 R550m	R1200m

1 R750m when a Flight Director or Autopilot or HUDLS to DA is not used.

PANS OPS

CHANGES: Procedure, missed apch, minimums.

EDDF/FRA FRANKFURT/MAIN

7 JUL 23
Eff 13 Jul

JEPPESEN 12-41A

FRANKFURT/MAIN, GERMANY
CAT II GLS Y Rwy 07L

BRIEFING STRIP

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		*FRANKFURT Tower	*Ground
118.030	120.805	125.355	118.505	127.280	136.5	121.805

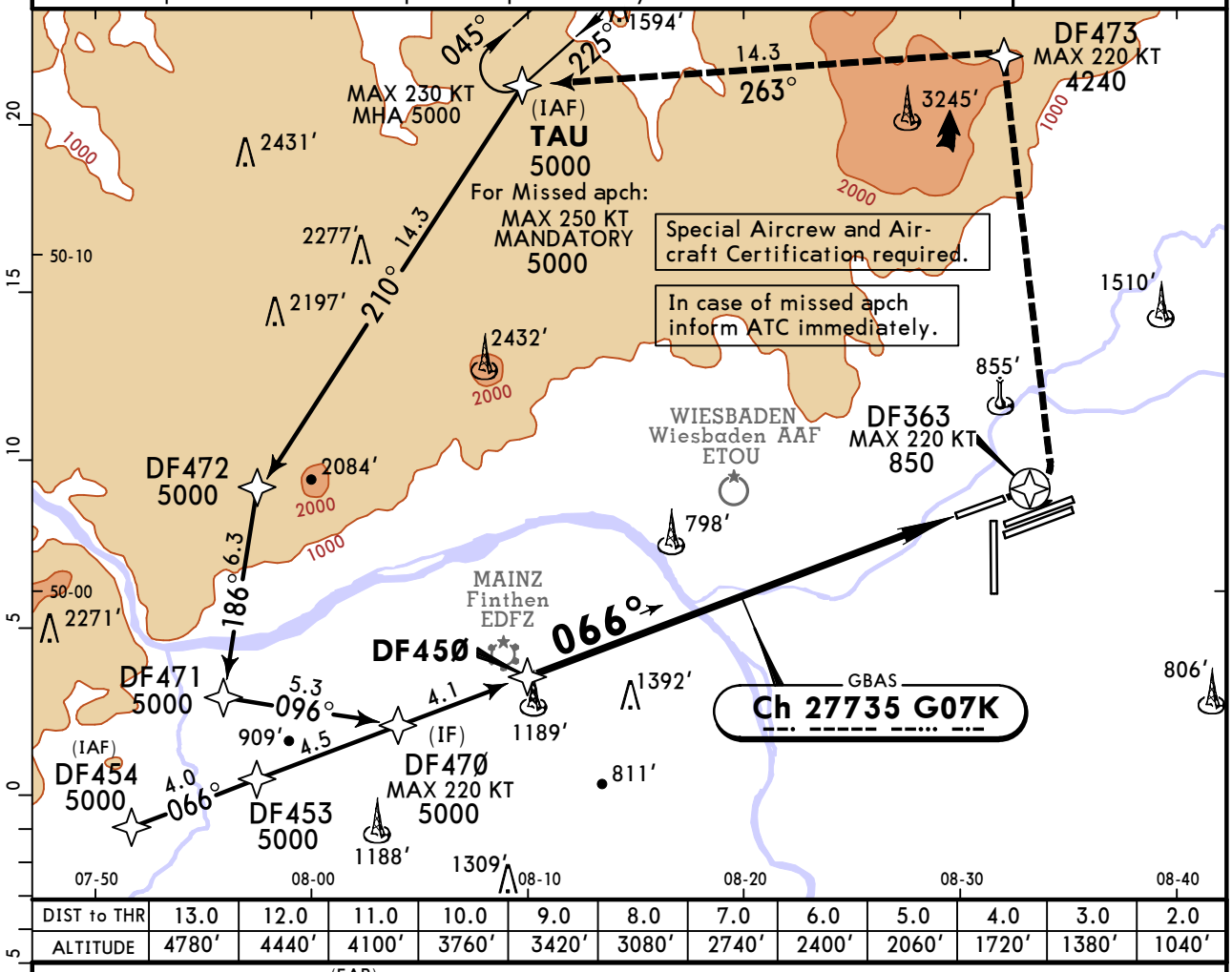
GBAS	Final Apch Crs	DF45Ø	CAT II GLS	Apt Elev 363′
Ch 27735 G07K	066°	5000′ (4696′)	Refer to Minimums	Rwy 304′

MISSED APCH: Direct to DF363 at or above 850′ (MAX 220 KT), turn LEFT direct to DF473 at or above 4240′ (MAX 220 KT), then to TAU VOR at 5000′ (MAX 250 KT). Missed apch requires a min climb of 4.1% (250′/NM) to 3500′.

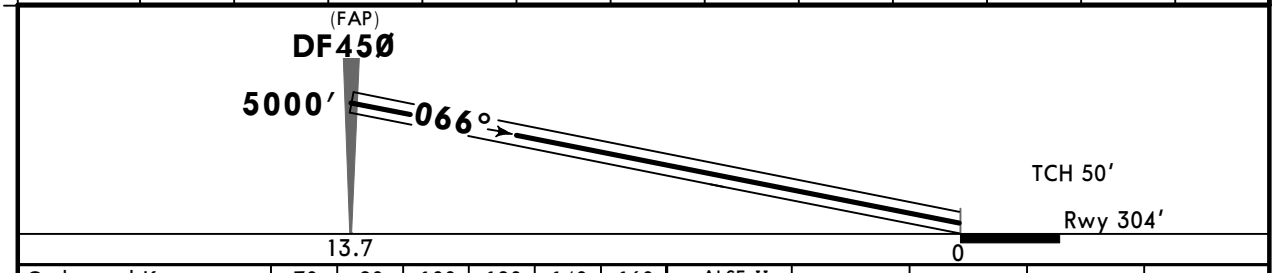
RNP Apch | Alt Set: hPa (IN on req) Rwy Elev: 11 hPa Trans level: By ATC Trans alt: 5000′

1. Radar required. 2. Parallel independent operation may be in force.

4300
MSA ARP



DIST to THR	13.0	12.0	11.0	10.0	9.0	8.0	7.0	6.0	5.0	4.0	3.0	2.0
ALTITUDE	4780′	4440′	4100′	3760′	3420′	3080′	2740′	2400′	2060′	1720′	1380′	1040′



Gnd speed-Kts	70	90	100	120	140	160
Glide Path Angle 3.20°	396	510	566	679	793	906

ALSF-II
REIL
PAPI

D → DF363 | MIN 850′ | 220 KT MAX

Std/State STRAIGHT-IN LANDING

A: **RA 99′** DA(H) **404′**(100′) B: **RA 106′** DA(H) **411′**(107′) C: **RA 117′** DA(H) **422′**(118′)	D: **RA 132′** DA(H) **437′**(133′)
R300m	R400m

PANS OPS

CHANGES: Procedure, missed apch, minimums.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN FRANKFURT/MAIN, GERMANY

7 JUL 23 (12-42) Eff 13 Jul

GLS Z Rwy 07C

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

BRIEFING STRIP™

GBAS	Final Apch Crs	DF56Ø	DA(H)	Apt Elev 363′
Ch 31023 G07P	**066°**	**4000′** (3672′)	**528′** (200′)	Rwy 328′

MISSED APCH: Direct to DF575 (MAX 220 KT), climb on course 066° to 5000′, then turn RIGHT (MAX 220 KT) direct to FKS at 5000′ (MAX 250 KT).

4300

MSA ARP

RNP Apch | Alt Set: hPa (IN on req) Rwy Elev: 12 hPa Trans level: By ATC Trans alt: 5000′

RNP-1 required.
Radar required.

ATTENTION: Acft taxiing independently on twy W underneath short final.

WIESBADEN
Wiesbaden AAF
ETOU

(IF)
DF57Ø
MAX 220 KT
4000

DF552
4000

DF553
4000

(IAF)
DF554
4000

DF571
4000

DF572
5000

DF56Ø

DF575
MAX 220 KT

NOT TO SCALE

GBAS
Ch 31023 G07P

Parallel independent operation may be in force.

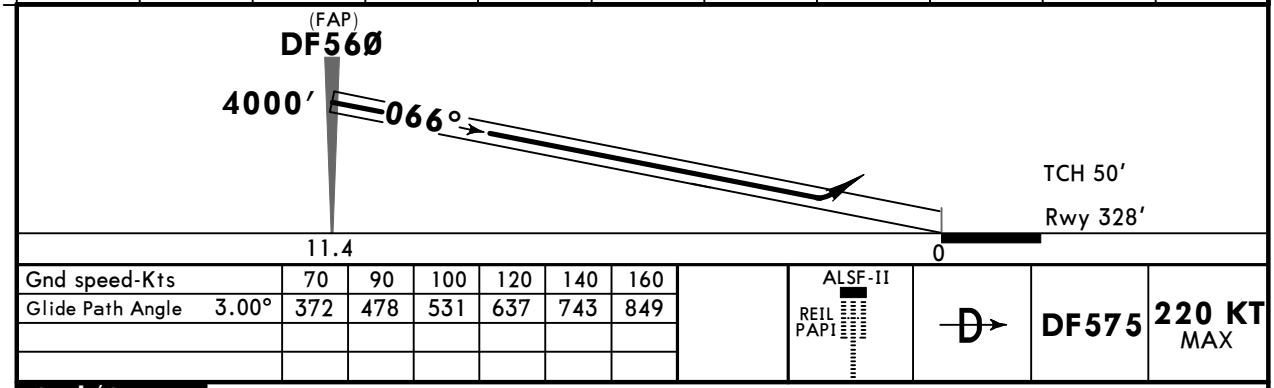
In case of missed apch inform ATC immediately.

(IAF)
FKS
5000

For Missed apch:
MAX 250 KT
MANDATORY
5000

MAX 230 KT
MHA 5000

DIST to THR	11.0	10.0	9.0	8.0	7.0	6.0	5.0	4.0	3.0	2.0
ALTITUDE	3890′	3570′	3250′	2930′	2610′	2290′	1980′	1660′	1340′	1020′



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

ALSF-II
REIL
PAPI

DF575 220 KT MAX

Std/State

STRAIGHT-IN LANDING
GLS
DA(H) **528′** (200′)

	TDZ or CL out	ALS out
A B C D	R550m	[1] R550m	R1200m

[1] R750m when a Flight Director or Autopilot or HUDLS to DA is not used.

PANS OPS

CHANGES: Procedure, missed apch, minimums.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN FRANKFURT/MAIN, GERMANY

7 JUL 23 (12-42A) Eff 13 Jul CAT II GLS Z Rwy 07C

BRIEFING STRIP

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

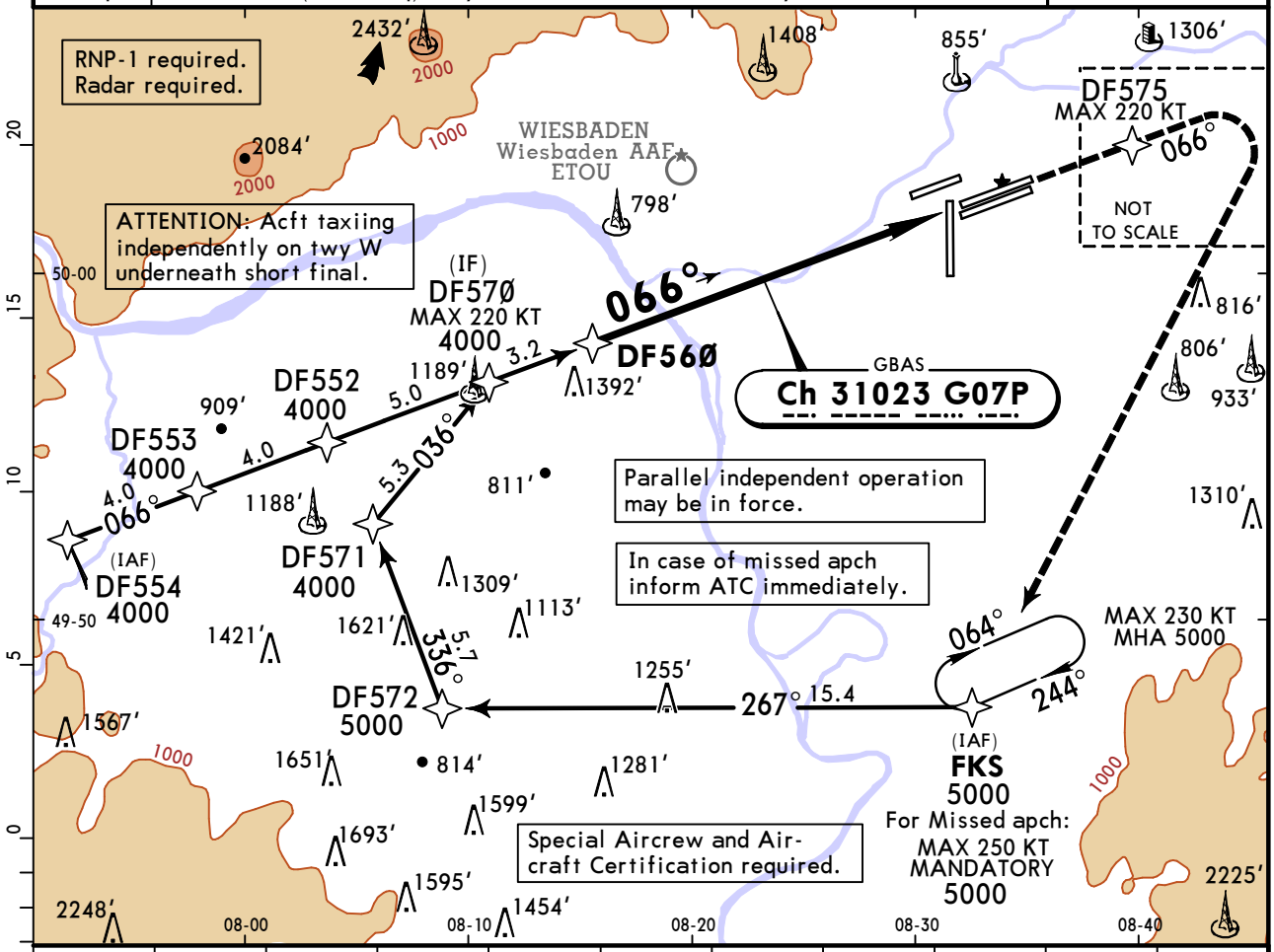
GBAS	Final Apch Crs	DF56Ø	CAT II GLS	Apt Elev 363′
Ch 31023 G07P	**066°**	**4000′** (3672′)	**RA 102′** DA(H) 428′(100′)	Rwy 328′

MISSED APCH: Direct to DF575 (MAX 220 KT), climb on course 066° to 5000′, then turn RIGHT (MAX 220 KT) direct to FKS at 5000′ (MAX 250 KT).

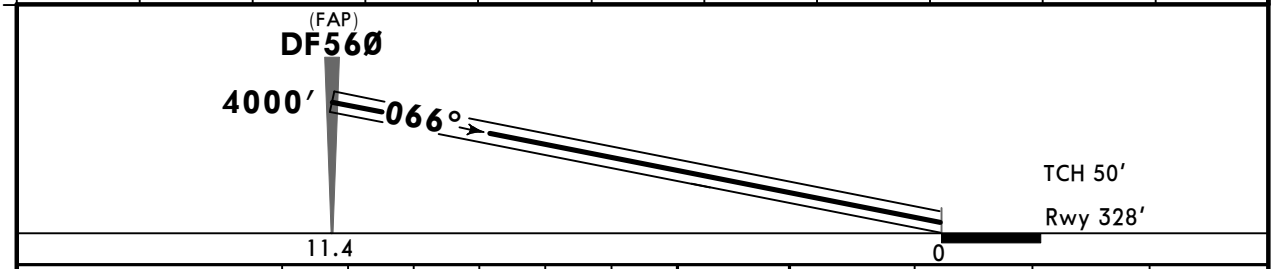
4300

MSA ARP

RNP Apch | Alt Set: hPa (IN on req) Rwy Elev: 12 hPa Trans level: By ATC Trans alt: 5000′



DIST to THR	11.0	10.0	9.0	8.0	7.0	6.0	5.0	4.0	3.0	2.0
ALTITUDE	3890′	3570′	3250′	2930′	2610′	2290′	1980′	1660′	1340′	1020′



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

ALSF-II
REIL
PAPI

D | DF575 | 220 KT MAX

Std/State

STRAIGHT-IN LANDING

RA 102′

DA(H) **428′**(100′)

1 R300m

PANS OPS

1 CAT D requires autoland or HUDLS, otherwise: R350m.

CHANGES: Procedure, missed apch, minimums.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN FRANKFURT/MAIN, GERMANY

7 JUL 23 (12-43) Eff 13 Jul

GLS Y Rwy 07C

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

BRIEFING STRIP™

GBAS	Final Apch Crs	DF55Ø	DA(H)	Apt Elev 363′
Ch 29379 G07M	**066°**	**4000′** (3672′)	**528′** (200′)	Rwy 328′

MISSED APCH: Direct to DF575 (MAX 220 KT), climb on course 066° to 5000′, then turn RIGHT (MAX 220 KT) direct to FKS at 5000′ (MAX 250 KT).

4300

MSA ARP

RNP Apch | Alt Set: hPa (IN on req) Rwy Elev: 12 hPa Trans level: By ATC Trans alt: 5000′

RNP-1 required.
Radar required.

ATTENTION: Acft taxiing independently on twy W underneath short final.

WIESBADEN
Wiesbaden AAF
ETOU

(IF) DF57Ø
MAX 220 KT
4000

DF55Ø

DF552 4000

DF553 4000

(IAF) DF554 4000

DF571 4000

DF572 5000

DF575
MAX 220 KT

NOT TO SCALE

GBAS
Ch 29379 G07M

Parallel independent operation may be in force.

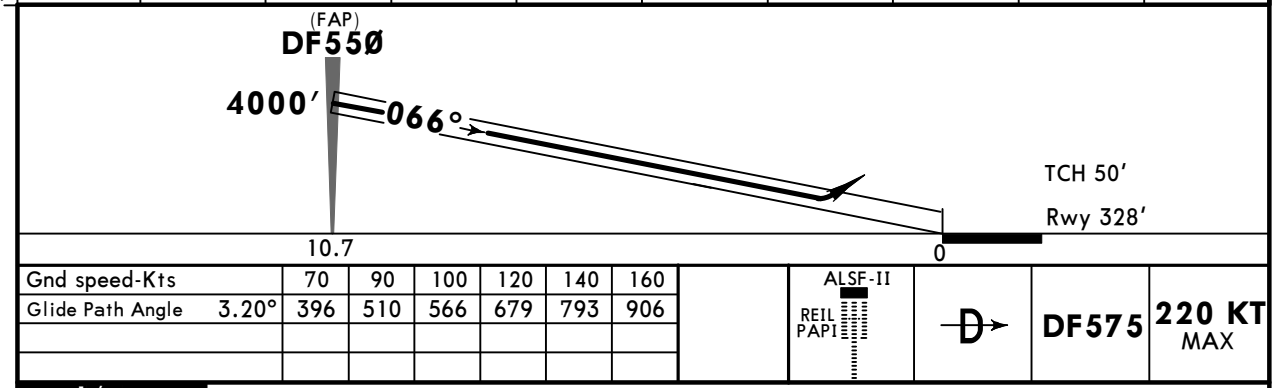
In case of missed apch inform ATC immediately.

MAX 230 KT
MHA 5000

(IAF) FKS 5000

For Missed apch:
MAX 250 KT
MANDATORY
5000

DIST to THR	10.0	9.0	8.0	7.0	6.0	5.0	4.0	3.0	2.0
ALTITUDE	3780′	3440′	3100′	2760′	2420′	2080′	1740′	1400′	1060′



Gnd speed-Kts	70	90	100	120	140	160
Glide Path Angle 3.20°	396	510	566	679	793	906

ALSF-II
REIL
PAPI

DF575 220 KT MAX

Std/State

STRAIGHT-IN LANDING
GLS
DA(H) **528′** (200′)

PANS OPS

	TDZ or CL out	ALS out
A B C D	R550m	[1] R550m	R1200m

[1] R750m when a Flight Director or Autopilot or HUDLS to DA is not used.

CHANGES: Procedure, missed apch, minimums.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN FRANKFURT/MAIN, GERMANY

7 JUL 23 (12-43A) Eff 13 Jul CAT II GLS Y Rwy 07C

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

BRIEFING STRIP™

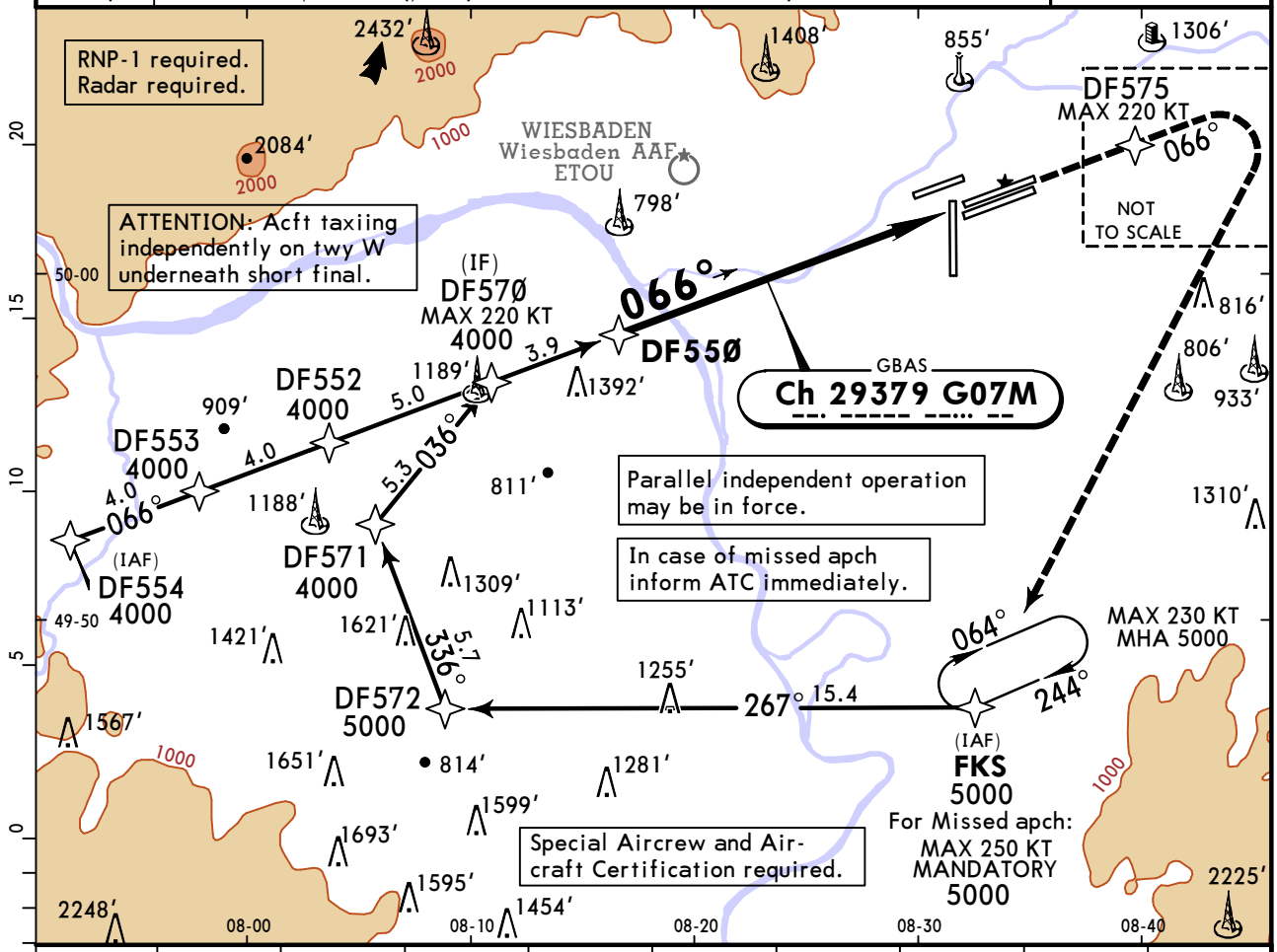
GBAS	Final Apch Crs	DF55Ø	CAT II GLS	Apt Elev 363′
Ch 29379 G07M	**066°**	**4000′** (3672′)	**RA 102′** DA(H) 428′(100′)	Rwy 328′

MISSED APCH: Direct to DF575 (MAX 220 KT), climb on course 066° to 5000′, then turn RIGHT (MAX 220 KT) direct to FKS at 5000′ (MAX 250 KT).

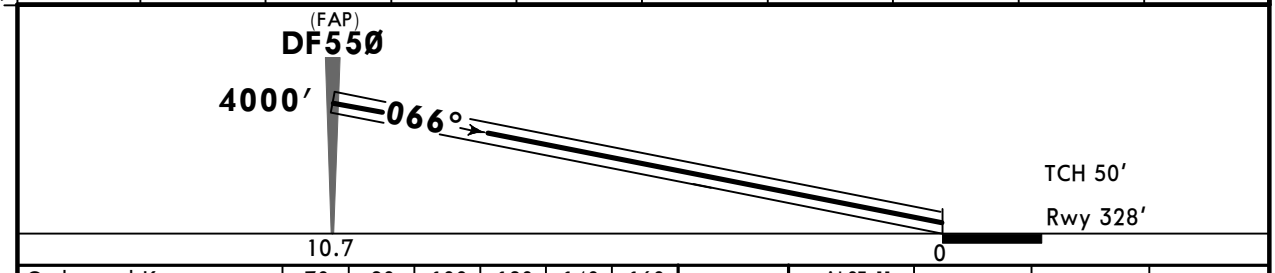
4300

MSA ARP

RNP Apch | Alt Set: hPa (IN on req) Rwy Elev: 12 hPa Trans level: By ATC Trans alt: 5000′



DIST to THR	10.0	9.0	8.0	7.0	6.0	5.0	4.0	3.0	2.0
ALTITUDE	3780′	3440′	3100′	2760′	2420′	2080′	1740′	1400′	1060′



Gnd speed-Kts	70	90	100	120	140	160
Glide Path Angle 3.20°	396	510	566	679	793	906

ALSF-II
REIL
PAPI

D | DF575 | 220 KT MAX

Std/State STRAIGHT-IN LANDING

RA 102′
DA(H) **428′**(100′)

1 R300m

PANS OPS

1 CAT D requires autoland or HUDLS, otherwise: R350m.

CHANGES: Procedure, missed apch, minimums.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN FRANKFURT/MAIN, GERMANY

7 JUL 23 (12-44) Eff 13 Jul

GLS Z Rwy 07R

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

BRIEFING STRIP

GBAS	Final Apch Crs	DF66Ø	DA(H)	Apt Elev 363′
Ch 33489 G07N	**066°**	**4000′** (3673′)	**527′** (200′)	Rwy 327′

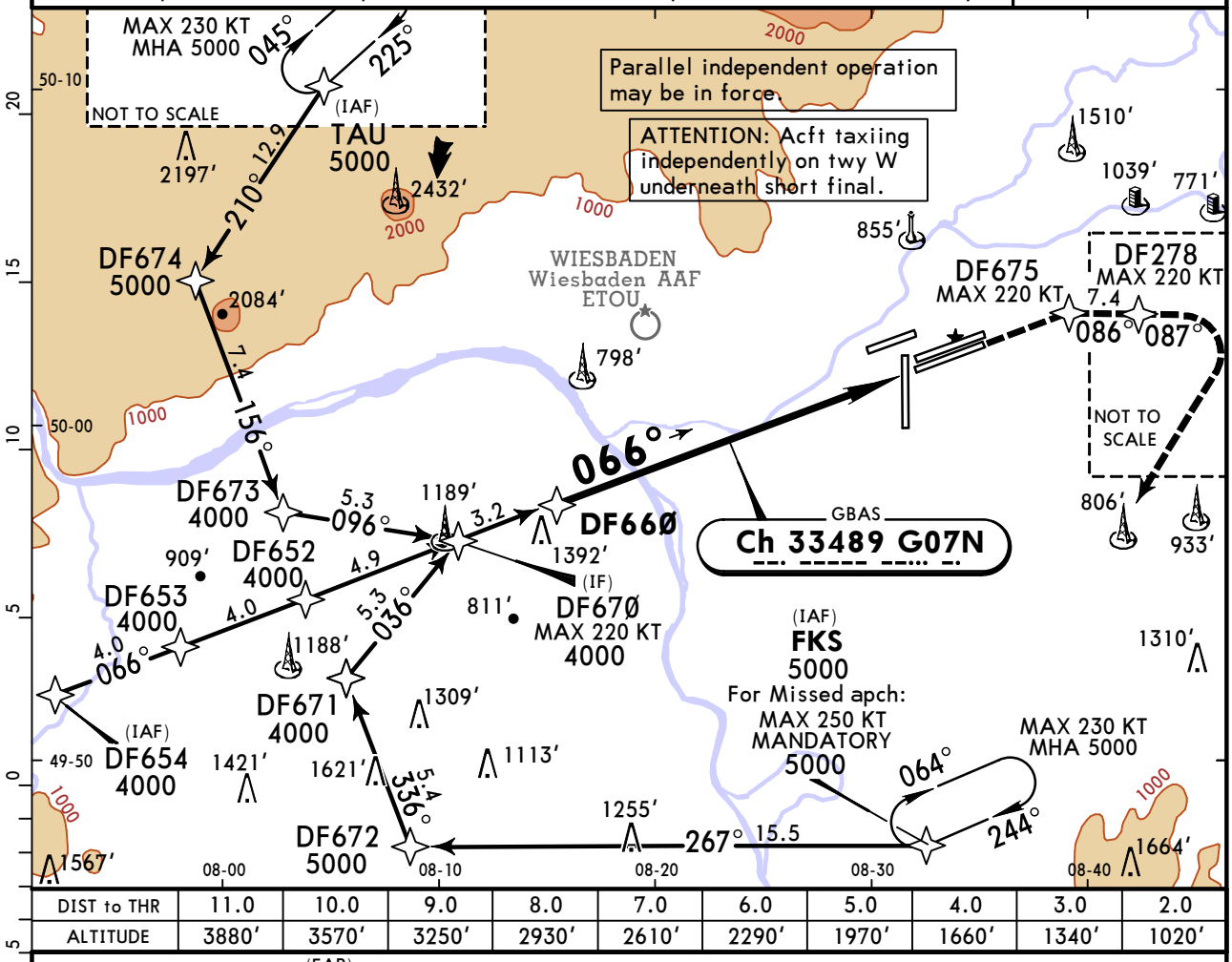
MISSED APCH: Direct to DF675 (MAX 220 KT), then to DF278 (MAX 220 KT). Climb on course 087° to 5000′, then turn RIGHT (MAX 220 KT) direct to FKS at 5000′ (MAX 250 KT).

4300

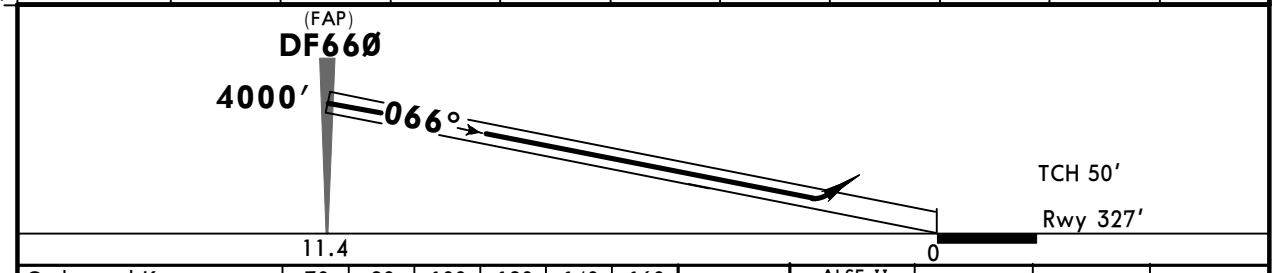
MSA ARP

RNP Apch | Alt Set: hPa (IN on req) Rwy Elev: 12 hPa Trans level: By ATC Trans alt: 5000′

1. RNP-1 required. 2. Radar required. 3. In case of missed apch inform ATC immediately.



DIST to THR	11.0	10.0	9.0	8.0	7.0	6.0	5.0	4.0	3.0	2.0
ALTITUDE	3880′	3570′	3250′	2930′	2610′	2290′	1970′	1660′	1340′	1020′



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

ALSF-II
REIL
PAPI

DF675 **220 KT** MAX

Std/State

STRAIGHT-IN LANDING

GLS

DA(H) **527′** (200′)

PANS OPS

	TDZ or CL out	ALS out
A	R550m	[1] R550m
B		
C		R1200m
D		

[1] R750m when a Flight Director or Autopilot or HUDLS to DA is not used.

CHANGES: Procedure, missed apch, minimums.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN FRANKFURT/MAIN, GERMANY

7 JUL 23 (12-44A) Eff 13 Jul

CAT II GLS Z Rwy 07R

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

BRIEFING STRIP

GBAS	Final Apch Crs	DF66Ø	CAT II GLS	Apt Elev 363′
Ch 33489 G07N	**066°**	**4000′** (3673′)	**RA 101′** DA(H) 427′ (100′)	Rwy 327′

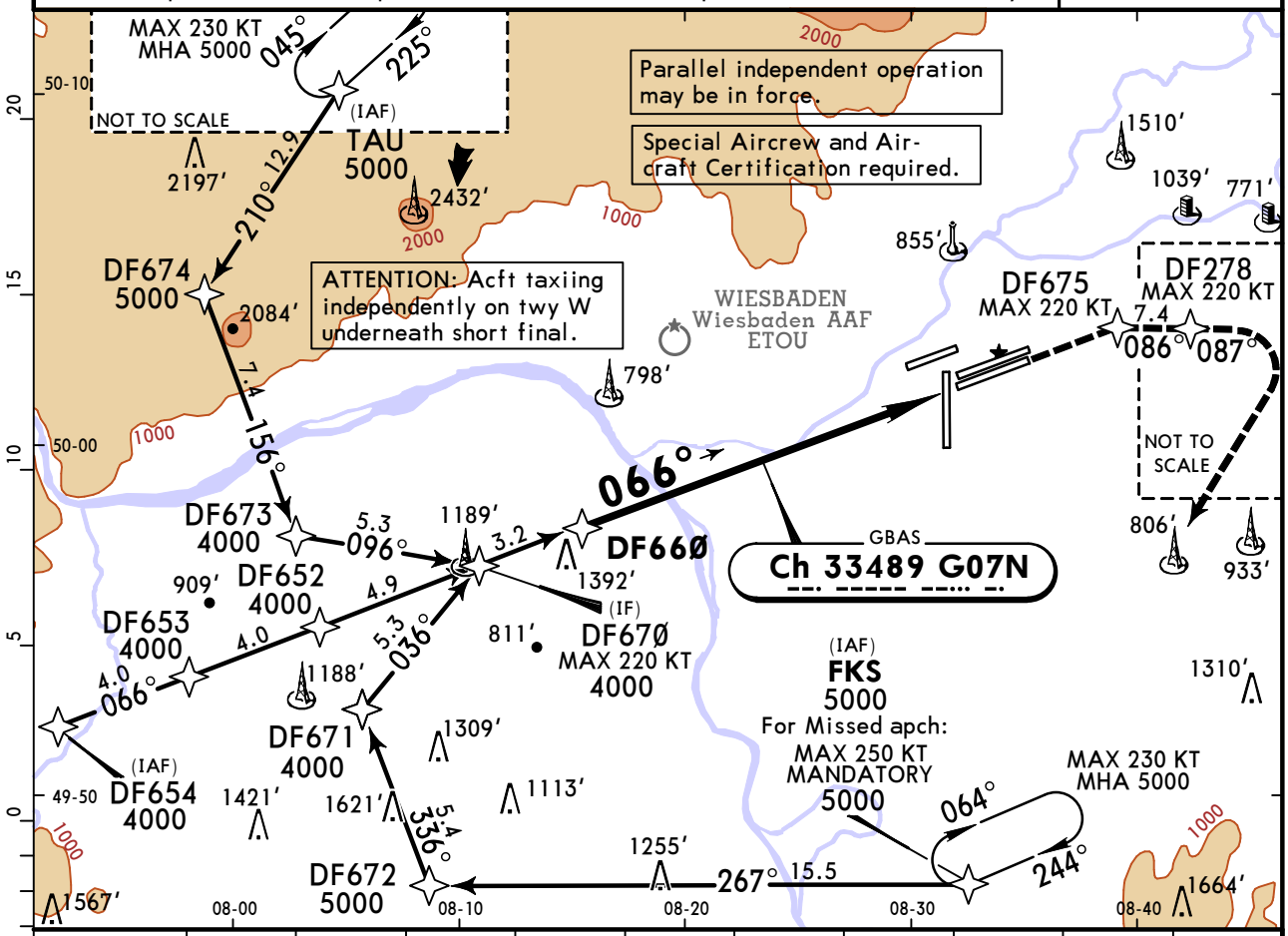
MISSED APCH: Direct to DF675 (MAX 220 KT), then to DF278 (MAX 220 KT). Climb on course 087° to 5000′, then turn RIGHT (MAX 220 KT) direct to FKS at 5000′ (MAX 250 KT).

RNP Apch | Alt Set: hPa (IN on req) Rwy Elev: 12 hPa Trans level: By ATC Trans alt: 5000′

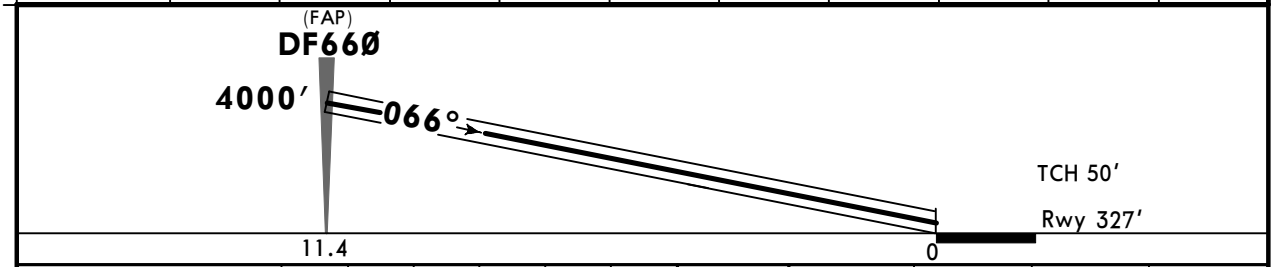
1. RNP-1 required. 2. Radar required. 3. In case of missed apch inform ATC immediately.

4300

MSA ARP



DIST to THR	11.0	10.0	9.0	8.0	7.0	6.0	5.0	4.0	3.0	2.0
ALTITUDE	3880′	3570′	3250′	2930′	2610′	2290′	1970′	1660′	1340′	1020′



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

ALSF-II
REIL
PAPI

D | DF675 | 220 KT MAX

Std/State STRAIGHT-IN LANDING

RA 101′

DA(H) **427′** (100′)

PANS OPS

1 R300m

1 CAT D requires autoland or HUDLS, otherwise: R350m.

CHANGES: Procedure, missed apch, minimums.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN FRANKFURT/MAIN, GERMANY

7 JUL 23 (12-45) Eff 13 Jul

GLS Y Rwy 07R

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

BRIEFING STRIP

GBAS	Final Apch Crs	DF65Ø	DA(H)	Apt Elev 363′
Ch 28557 G07J	**066°**	**4000′** (3673′)	**527′** (200′)	Rwy 327′

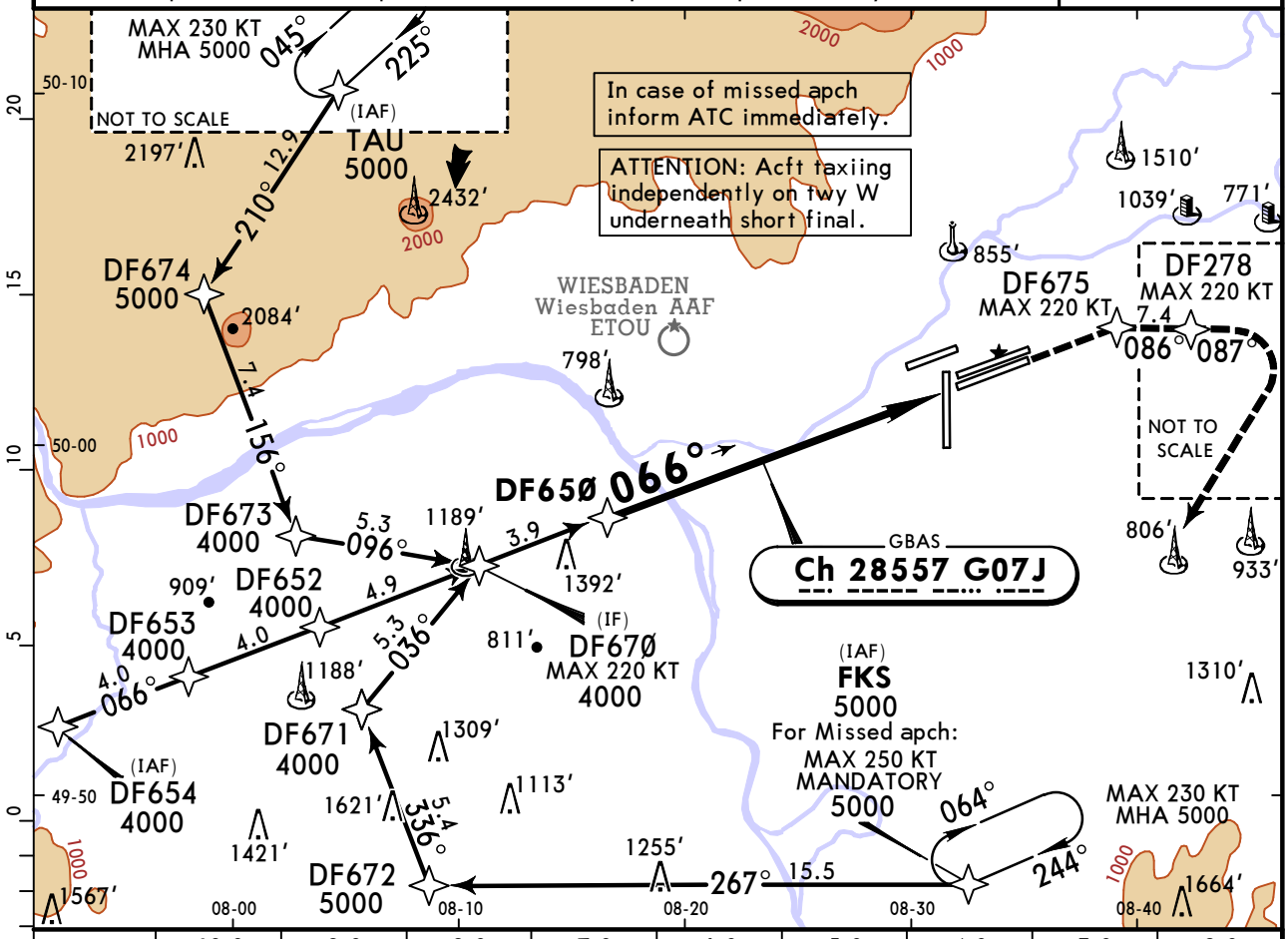
MISSED APCH: Direct to DF675 (MAX 220 KT), then to DF278 (MAX 220 KT). Climb on course 087° to 5000′, then turn RIGHT (MAX 220 KT) direct to FKS at 5000′ (MAX 250 KT).

4300

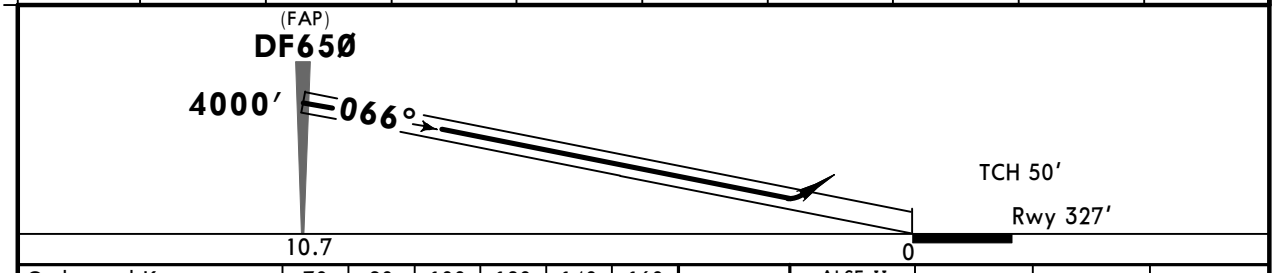
MSA ARP

RNP Apch | Alt Set: hPa (IN on req) Rwy Elev: 12 hPa Trans level: By ATC Trans alt: 5000′

1. RNP-1 required. 2. Radar required. 3. Parallel independent operation may be in force.



DIST to THR	10.0	9.0	8.0	7.0	6.0	5.0	4.0	3.0	2.0
ALTITUDE	3780′	3440′	3100′	2760′	2420′	2080′	1740′	1400′	1060′



Gnd speed-Kts	70	90	100	120	140	160
Glide Path Angle 3.20°	396	510	566	679	793	906

ALSF-II
REIL
PAPI

DF675 220 KT MAX

Std/State

STRAIGHT-IN LANDING

GLS

DA(H) **527′** (200′)

PANS OPS

	TDZ or CL out	ALS out
A B C D	R550m	[1] R550m	R1200m

[1] R750m when a Flight Director or Autopilot or HUDLS to DA is not used.

CHANGES: Procedure, missed apch, minimums.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN FRANKFURT/MAIN, GERMANY

7 JUL 23 (12-45A) Eff 13 Jul CAT II GLS Y Rwy 07R

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

GBAS	Final Apch Crs	DF65Ø	CAT II GLS	Apt Elev 363′
Ch 28557 G07J	**066°**	**4000′** (3673′)	**RA 101′** DA(H) 427′(100′)	Rwy 327′

MISSED APCH: Direct to DF675 (MAX 220 KT), then to DF278 (MAX 220 KT). Climb on course 087° to 5000′, then turn RIGHT (MAX 220 KT) direct to FKS at 5000′ (MAX 250 KT).

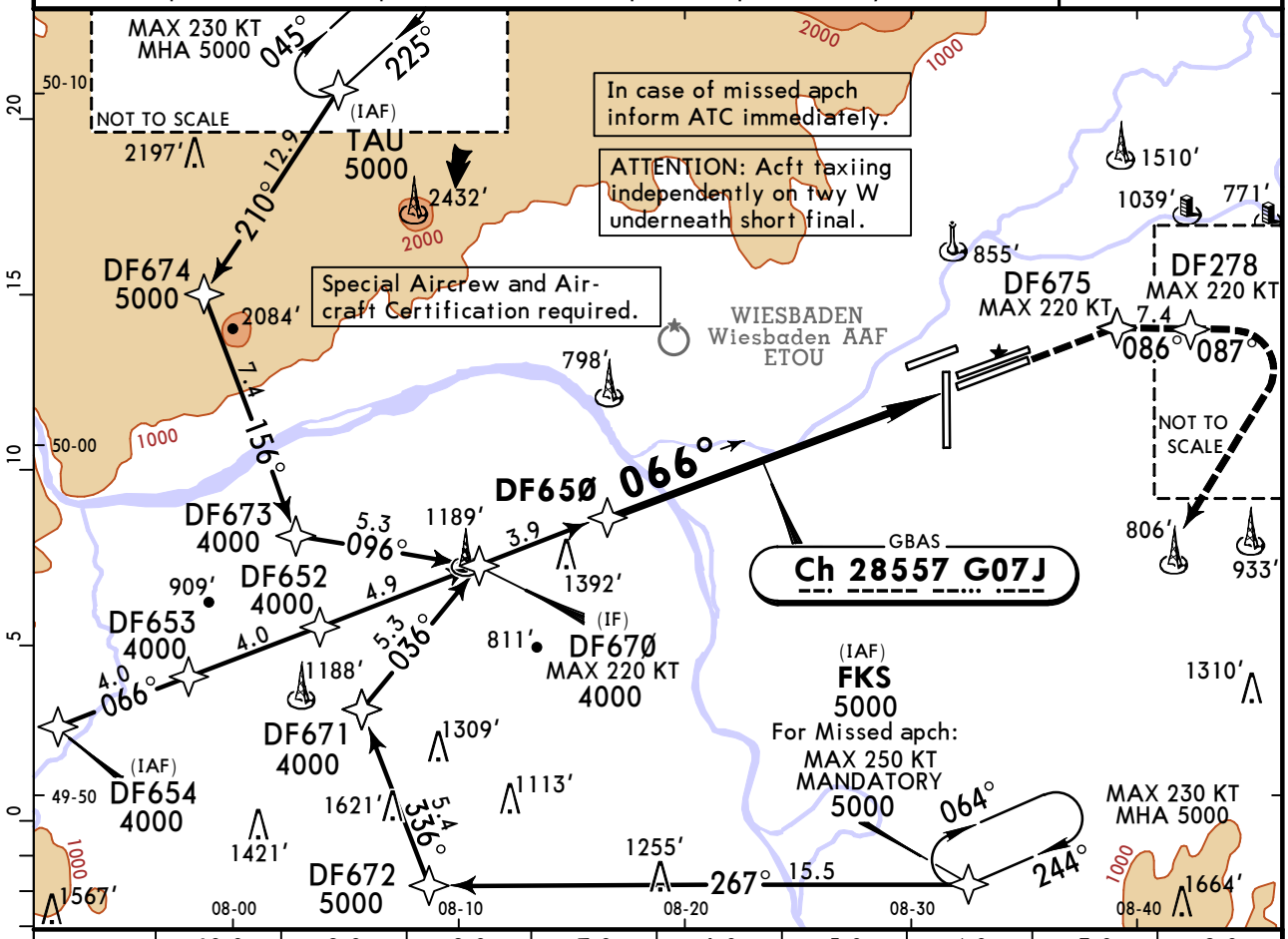
RNP Apch | Alt Set: hPa (IN on req) Rwy Elev: 12 hPa Trans level: By ATC Trans alt: 5000′

1. RNP-1 required. 2. Radar required. 3. Parallel independent operation may be in force.

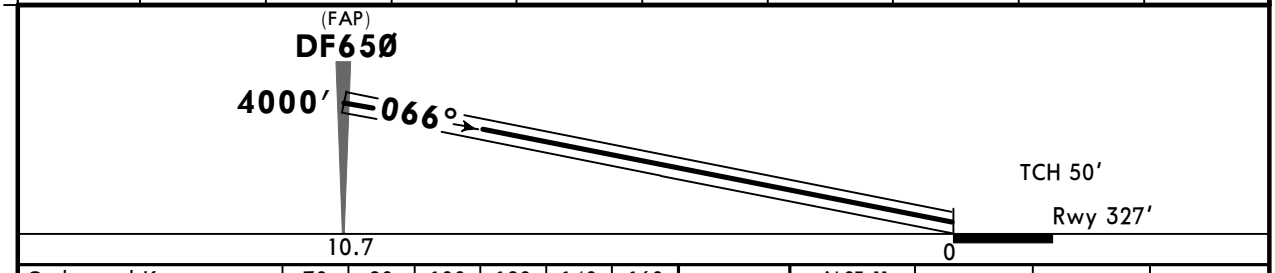
4300

MSA ARP

BRIEFING STRIP™



DIST to THR	10.0	9.0	8.0	7.0	6.0	5.0	4.0	3.0	2.0
ALTITUDE	3780′	3440′	3100′	2760′	2420′	2080′	1740′	1400′	1060′



Gnd speed-Kts		70	90	100	120	140	160
Glide Path Angle	3.20°	396	510	566	679	793	906

ALSF-II
REIL
PAPI

D | DF675 | 220 KT MAX

PANS OPS

Std/State STRAIGHT-IN LANDING

RA 101′

DA(H) **427′**(100′)

1 R300m

1 CAT D requires autoland or HUDLS, otherwise: R350m.

CHANGES: Procedure, missed apch, minimums.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN 7 JUL 23 (12-46) Eff 13 Jul

FRANKFURT/MAIN, GERMANY GLS Z Rwy 25L

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)	FRANKFURT Tower	*Ground
118.030	120.805	125.355	118.505 127.280	118.780 119.905	121.805

BRIEFING STRIP™

GBAS	Final Apch Crs	DF62Ø	DA(H)	Apt Elev 363′ Rwy 361′
Ch 32256 G25N	**246°**	**4000′** (3639′)	**561′** (200′)	

MISSED APCH: Direct to DF29Ø (MAX 220 KT), then direct to DF685 (MAX 220 KT). Climb on course 237° to 5000′, then turn LEFT (MAX 220 KT) direct to CHA at 5000′ (MAX 250 KT).

4300

MSA ARP

RNP Apch | Alt Set: hPa(IN on req) | Rwy Elev: 13 hPa | Trans level: By ATC | Trans alt: 5000′

Parallel independent operation may be in force.

ATTENTION: Acft taxiing independently on Twy U underneath short final.

RNP-1 required. Radar required.

MAX 230 KT MHA 5000

DF684 5000

DF683 4000

DF625 4000

DF624 4000

DF622 4000

DF623 4000

DF626 4000 (IAF)

DF681 4000

DF680 MAX 220 KT 4000 (IF)

DF62Ø 4000

MTR 5000 (IAF) 775′

DF685 MAX 220 KT

DF29Ø MAX 220 KT

GBAS Ch 32256 G25N

CHA 5000 (IAF)

For Missed Apch: MAX 250 KT MANDATORY 5000

DF682 5000

MAX 230 KT MAX FL100 MHA 5000

In case of missed apch inform ATC immediately.

NOT TO SCALE

NOT TO SCALE

DIST to THR	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0
ALTITUDE	1050′	1370′	1690′	2010′	2330′	2640′	2960′	3280′	3600′	3920′

(FAP) DF62Ø 4000′ 246°

TCH 50′ Rwy 361′ 0 11.3 11.3

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

ALSF-II REIL PAPI

D DF29Ø 220 KT MAX

Std/State

STRAIGHT-IN LANDING

1 GLS

DA(H) **561′** (200′)

PANS OPS

	TDZ or CL out	ALS out
A B C D	R550m	2 R550m	R1200m

1 D_L: DA(H) 588′(227′). 2 R750m when a Flight Director or Autopilot or HUDLS to DA is not used.

CHANGES: Procedure, missed apch, minimums.

EDDF/FRA FRANKFURT/MAIN

7 JUL 23 | 12-46A | Eff 13 Jul

JEPPESEN FRANKFURT/MAIN, GERMANY

CAT II GLS Z Rwy 25L

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

BRIEFING STRIP™

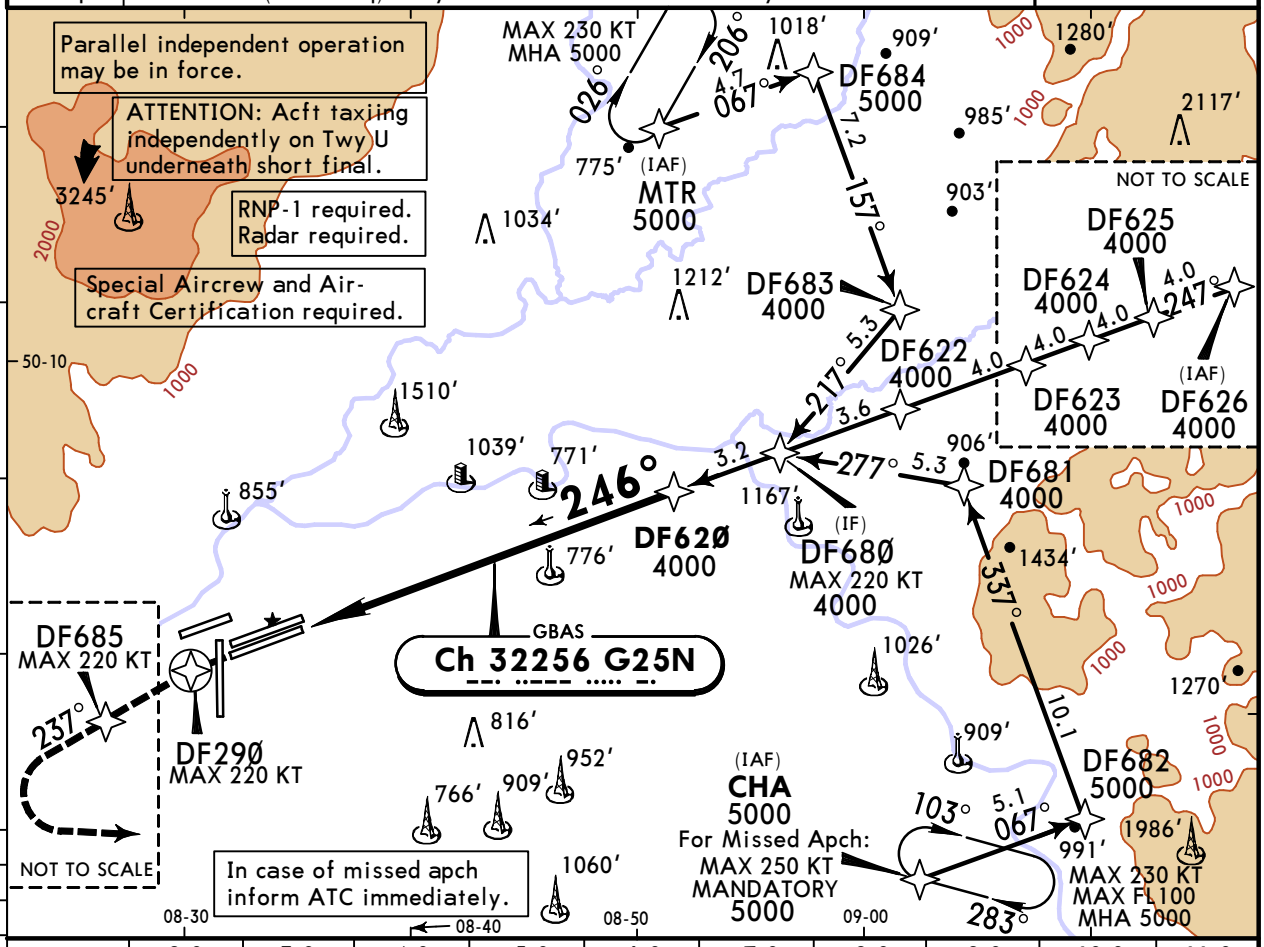
GBAS	Final Apch Crs	DF62Ø	CAT II GLS	Apt Elev 363′
Ch 32256 G25N	246°	4000′ (3639′)	RA 95′ DA(H) 461′ (100′)	Rwy 361′

MISSED APCH: Direct to DF29Ø (MAX 220 KT), then direct to DF685 (MAX 220 KT). Climb on course 237° to 5000′, then turn LEFT (MAX 220 KT) direct to CHA at 5000′ (MAX 250 KT).

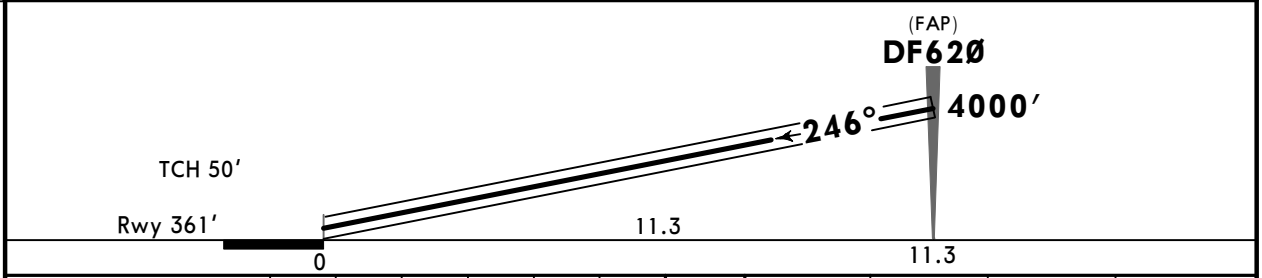
4300

MSA ARP

RNP Apch | Alt Set: hPa(IN on req) | Rwy Elev: 13 hPa | Trans level: By ATC | Trans alt: 5000′



DIST to THR	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0
ALTITUDE	1050′	1370′	1690′	2010′	2330′	2640′	2960′	3280′	3600′	3920′



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

ALSF-II
REIL
PAPI

D | DF29Ø | 220 KT MAX

Std/State STRAIGHT-IN LANDING

RA 95′
DA(H) **461′** (100′)

1 R300m

PANS OPS

1 CAT D requires autoland or HUDLS, otherwise: R350m.

CHANGES: Procedure, missed apch, minimums.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN 7 JUL 23 (12-47) Eff 13 Jul

FRANKFURT/MAIN, GERMANY GLS Y Rwy 25L

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

BRIEFING STRIP™

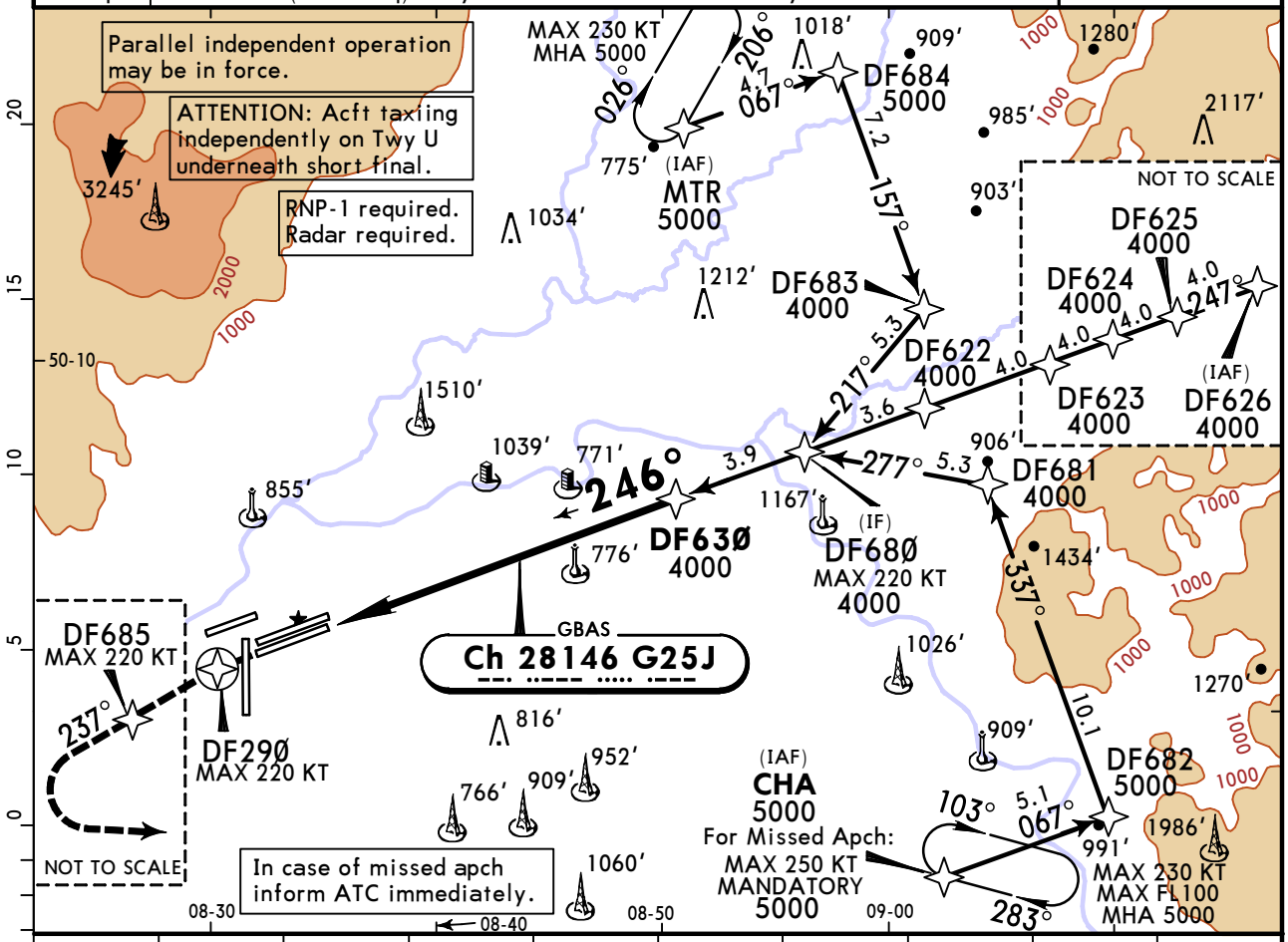
GBAS	Final Apch Crs	DF63Ø	DA(H)	Apt Elev 363′ Rwy 361′
Ch 28146 G25J	**246°**	**4000′** (3639′)	**561′** (200′)	

MISSED APCH: Direct to DF29Ø (MAX 220 KT), then direct to DF685 (MAX 220 KT). Climb on course 237° to 5000′, then turn LEFT (MAX 220 KT) direct to CHA at 5000′ (MAX 250 KT).

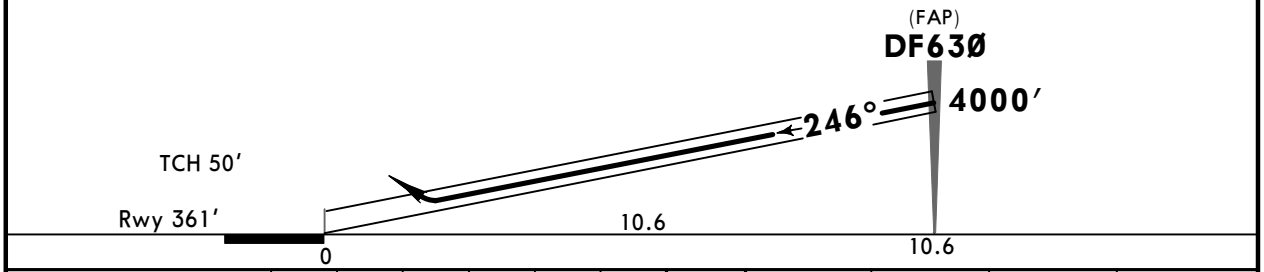
4300

MSA ARP

RNP Apch | Alt Set: hPa(IN on req) | Rwy Elev: 13 hPa | Trans level: By ATC | Trans alt: 5000′



DIST to THR	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0
ALTITUDE	1100′	1430′	1770′	2110′	2450′	2790′	3130′	3470′	3810′



Gnd speed-Kts	70	90	100	120	140	160
Glide Path Angle 3.20°	396	510	566	679	793	906

ALSF-II
REIL
PAPI

D

DF29Ø

220 KT MAX

Std/State

STRAIGHT-IN LANDING

GLS

DA(H) **561′** (200′)

PANS OPS

	TDZ or CL out	ALS out
A B C D	R550m	1 R550m	R1200m

1 R750m when a Flight Director or Autopilot or HUDLS to DA is not used.

CHANGES: Procedure, missed apch, minimums.

EDDF/FRA FRANKFURT/MAIN

7 JUL 23 | 12-47A | Eff 13 Jul

JEPPESEN FRANKFURT/MAIN, GERMANY CAT II GLS Y Rwy 25L

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

BRIEFING STRIP™

GBAS	Final Apch Crs	DF63Ø	CAT II GLS	Apt Elev 363′
Ch 28146 G25J	**246°**	**4000′** (3639′)	**RA 95′** DA(H) 461′ (100′)	Rwy 361′

MISSED APCH: Direct to DF29Ø (MAX 220 KT), then direct to DF685 (MAX 220 KT). Climb on course 237° to 5000′, then turn LEFT (MAX 220 KT) direct to CHA at 5000′ (MAX 250 KT).

4300

MSA ARP

RNP Apch | Alt Set: hPa(IN on req) | Rwy Elev: 13 hPa | Trans level: By ATC | Trans alt: 5000′

Parallel independent operation may be in force.

ATTENTION: Acft taxiing independently on Twy U underneath short final.

RNP-1 required. Radar required.

Special Aircrew and Aircraft Certification required.

MAX 230 KT MHA 5000

DF684 5000

DF683 4000

DF622 4000

DF625 4000

DF624 4000

DF623 4000

DF626 4000 (IAF)

DF681 4000

DF680 (IF) MAX 220 KT 4000

DF63Ø 4000

MTR 5000 (IAF)

DF685 MAX 220 KT

DF29Ø MAX 220 KT

GBAS Ch 28146 G25J

CHA 5000 (IAF)

For Missed Apch: MAX 250 KT MANDATORY 5000

DF682 5000

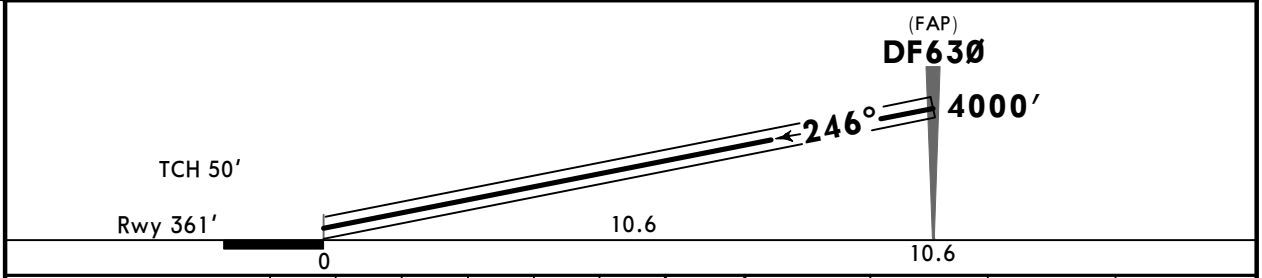
MAX 230 KT MAX FL100 MHA 5000

In case of missed apch inform ATC immediately.

NOT TO SCALE

NOT TO SCALE

DIST to THR	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0
ALTITUDE	1100′	1430′	1770′	2110′	2450′	2790′	3130′	3470′	3810′



Gnd speed-Kts	70	90	100	120	140	160
Glide Path Angle 3.20°	396	510	566	679	793	906

ALSF-II, REIL, PAPI | D | DF29Ø | 220 KT MAX

Std/State STRAIGHT-IN LANDING

RA 95′

DA(H) **461′** (100′)

1 R300m

PANS OPS

1 CAT D requires autoland or HUDLS, otherwise: R350m.

CHANGES: Procedure, missed apch, minimums.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN FRANKFURT/MAIN, GERMANY

7 JUL 23 (12-48) Eff 13 Jul

GLS Z Rwy 25C

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

BRIEFING STRIP

GBAS	Final Apch Crs	DF52Ø	DA(H)	Apt Elev 363′
Ch 31434 G25P	**246°**	**4000′** (3637′)	**563′** (200′)	Rwy 363′

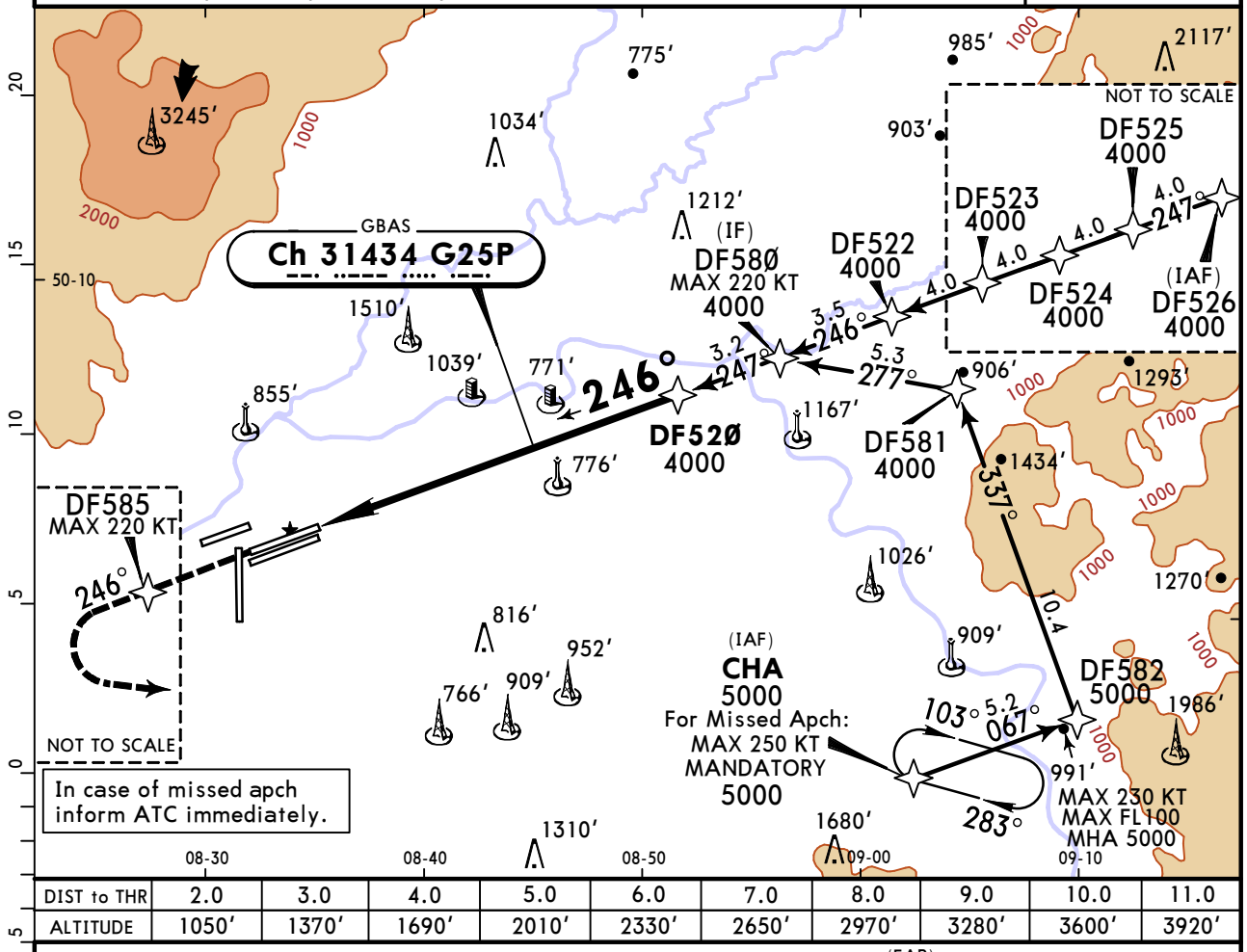
MISSED APCH: Direct to DF585 (MAX 220 KT), then climb on course 246° to 5000′, then turn LEFT (MAX 220 KT) direct to CHA at 5000′ (MAX 250 KT).

RNP Apch | Alt Set: hPa (IN on req) Rwy Elev: 13 hPa Trans level: By ATC Trans alt: 5000′

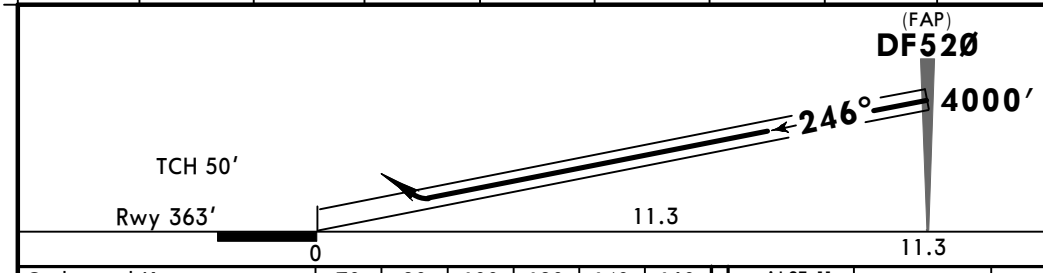
1. RNP-1 required. 2. Radar required.
3. ATTENTION: Acft taxiing independently on Twy U underneath short final.
4. Parallel independent operation may be in force.

4300

MSA ARP



DIST to THR	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0
ALTITUDE	1050′	1370′	1690′	2010′	2330′	2650′	2970′	3280′	3600′	3920′



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

ALSF-II
REIL
PAPI

D

DF585

220 KT MAX

Std/State

STRAIGHT-IN LANDING

GLS

DA(H) **563′** (200′)

	TDZ or CL out	ALS out
A B C D	R550m	1 R550m / R1200m

1 R750m when a Flight Director or Autopilot or HUDLS to DA is not used.

PANS OPS

CHANGES: Procedure, missed apch, minimums.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN FRANKFURT/MAIN, GERMANY

7 JUL 23 (12-48A) Eff 13 Jul

CAT II GLS Z Rwy 25C

BRIEFING STRIP

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

GBAS	Final Apch Crs	DF52Ø	CAT II GLS	Apt Elev 363′
Ch 31434 G25P	**246°**	**4000′** (3637′)	**RA 98′** DA(H) 463′ (100′)	Rwy 363′

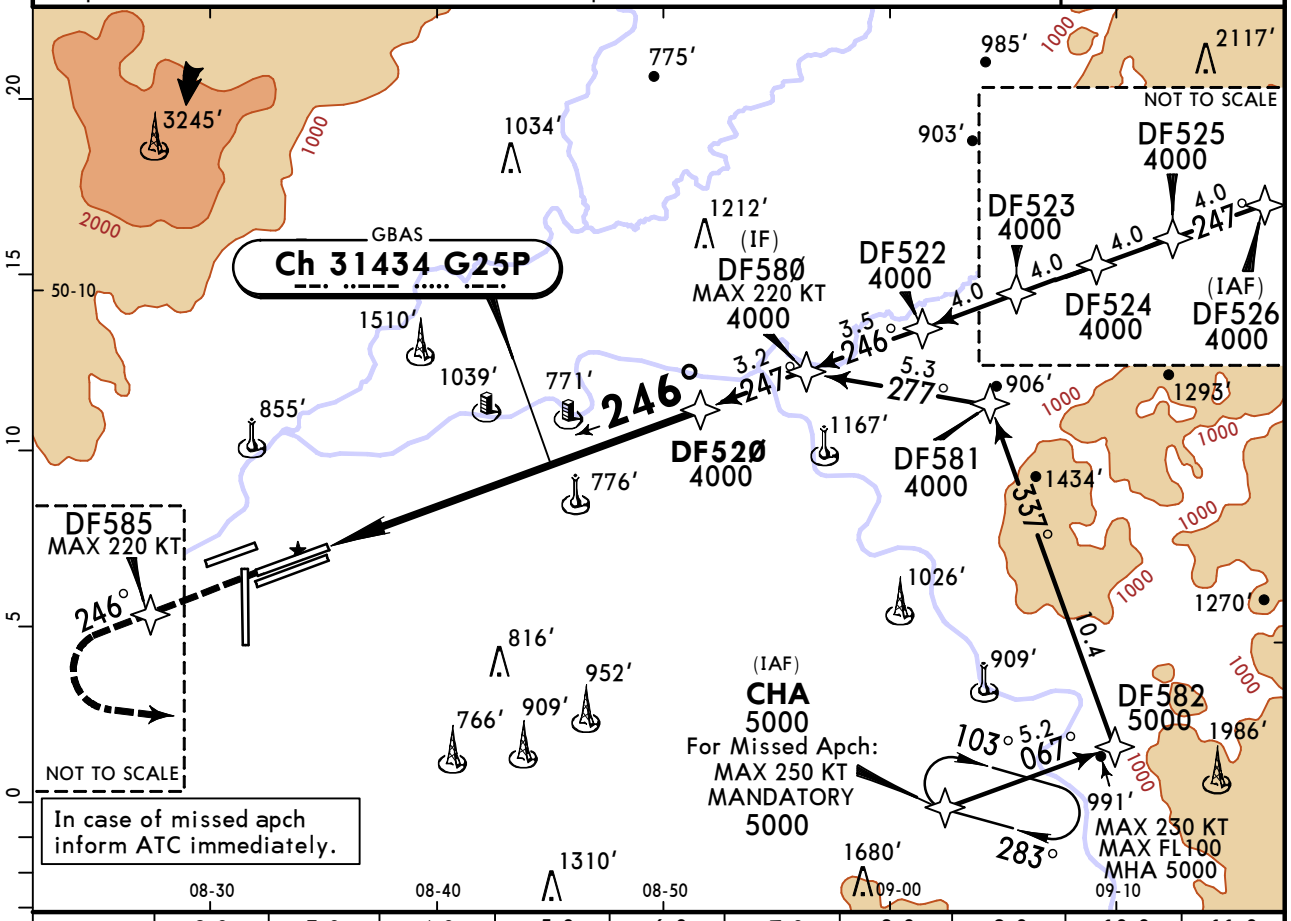
MISSED APCH: Direct to DF585 (MAX 220 KT), then climb on course 246° to 5000′, then turn LEFT (MAX 220 KT) direct to CHA at 5000′ (MAX 250 KT).

RNP Apch | Alt Set: hPa (IN on req) Rwy Elev: 13 hPa Trans level: By ATC Trans alt: 5000′

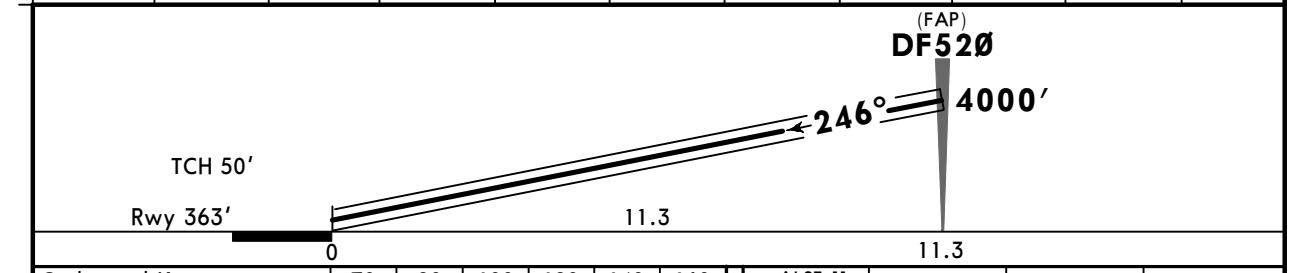
1. RNP-1 required. 2. Radar required. 3.ATTENTION: Acft taxiing independently TWY U underneath short final. 4. Parallel independent operation may be in force. 5. Special Aircrew and Aircraft Certification required.

4300

MSA ARP



DIST to THR	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0
ALTITUDE	1050′	1370′	1690′	2010′	2330′	2650′	2970′	3280′	3600′	3920′



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

ALSF-II
REIL
PAPI

D | DF585 | 220 KT MAX

Std/State STRAIGHT-IN LANDING

RA 98′
DA(H) **463′** (100′)

1 R300m

PANS OPS

1 CAT D requires autoland or HUDLS, otherwise: R350m.

CHANGES: Procedure, missed apch, minimums.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN 7 JUL 23 (12-49) Eff 13 Jul

FRANKFURT/MAIN, GERMANY
GLS Y Rwy 25C

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

BRIEFING STRIP

GBAS	Final Apch Crs	DF53Ø	DA(H)	Apt Elev 363′
Ch 28968 G25M	**246°**	**4000′** (3637′)	**563′** (200′)	Rwy 363′

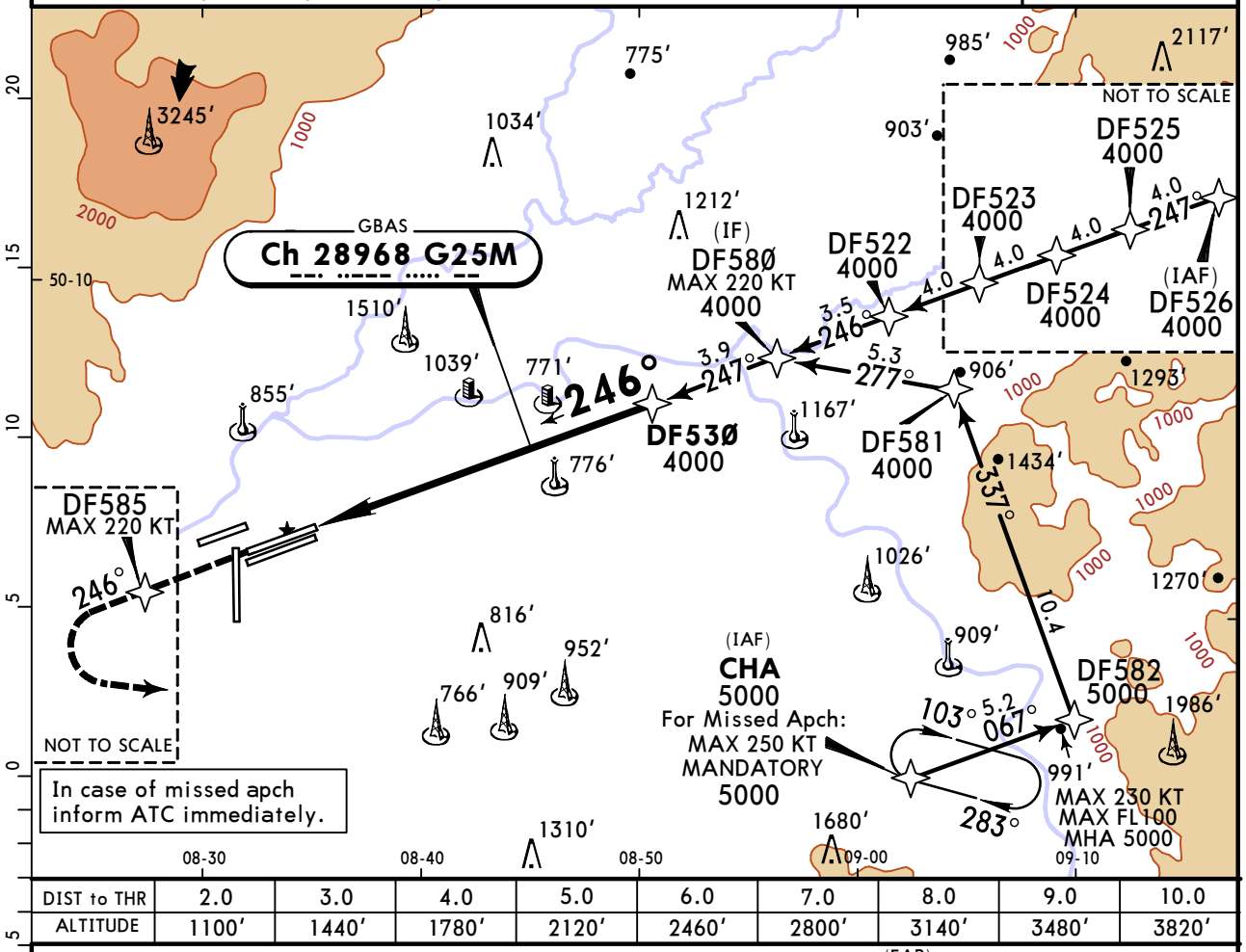
MISSED APCH: Direct to DF585 (MAX 220 KT), then climb on course 246° to 5000′, then turn LEFT (MAX 220 KT) direct to CHA at 5000′ (MAX 250 KT).

RNP Apch | Alt Set: hPa (IN on req) Rwy Elev: 13 hPa Trans level: By ATC Trans alt: 5000′

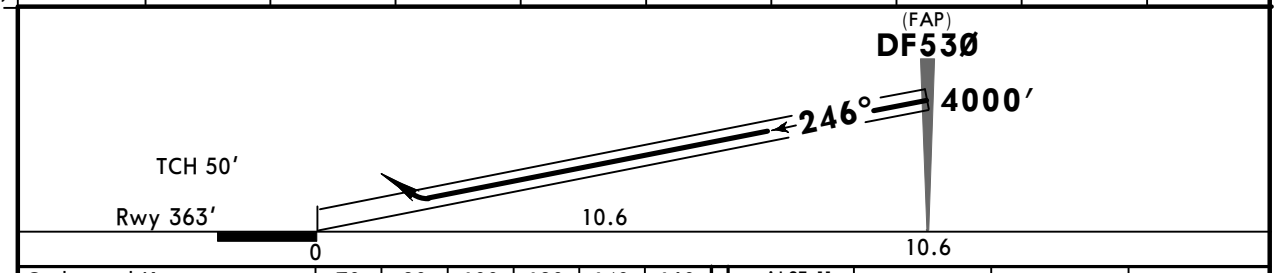
1. RNP-1 required. 2. Radar required.
3. ATTENTION: Independently taxiing acft on Twy U underneath short final.
4. Parallel independent operation may be in force.

4300

MSA ARP



DIST to THR	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0
ALTITUDE	1100′	1440′	1780′	2120′	2460′	2800′	3140′	3480′	3820′



Gnd speed-Kts	70	90	100	120	140	160
Glide Path Angle 3.20°	396	510	566	679	793	906

ALSF-II
REIL
PAPI

D

DF585

220 KT MAX

Std/State

STRAIGHT-IN LANDING

GLS

DA(H) **563′** (200′)

	TDZ or CL out	ALS out
A	R550m	R1200m
B		
C		
D		

1 R750m when a Flight Director or Autopilot or HUDLS to DA is not used.

PANS OPS

CHANGES: Procedure, missed apch, minimums.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN FRANKFURT/MAIN, GERMANY

7 JUL 23 (12-49A) Eff 13 Jul

CAT II GLS Y Rwy 25C

BRIEFING STRIP

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		FRANKFURT Tower		*Ground
118.030	120.805	125.355	118.505	127.280	118.780	119.905	121.805

GBAS	Final Apch Crs	DF53Ø	CAT II GLS	Apt Elev 363′
Ch 28968 G25M	**246°**	**4000′** (3637′)	**RA 98′** DA(H) 463′ (100′)	Rwy 363′

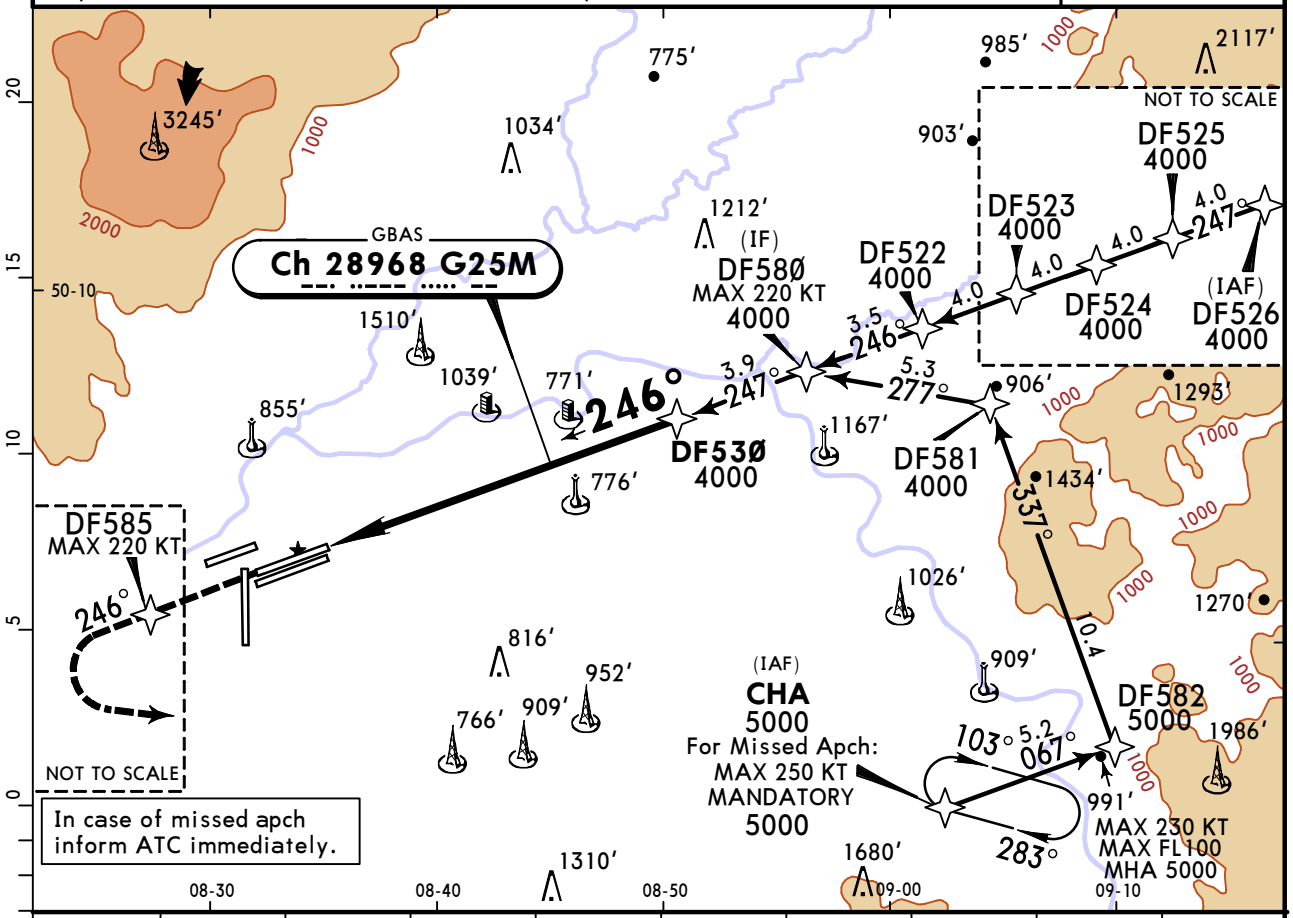
MISSED APCH: Direct to DF585 (MAX 220 KT), then climb on course 246° to 5000′, then turn LEFT (MAX 220 KT) direct to CHA at 5000′ (MAX 250 KT).

RNP Apch | Alt Set: hPa (IN on req) Rwy Elev: 13 hPa Trans level: By ATC Trans alt: 5000′

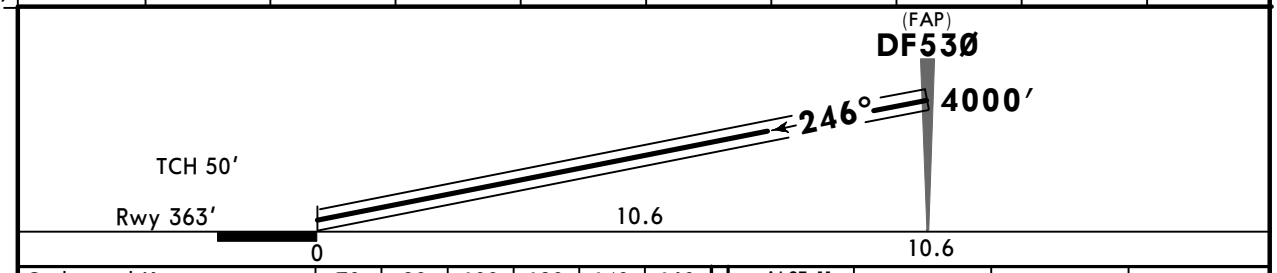
1. RNP-1 required. 2. Radar required. 3. ATTENTION: Independently taxiing acft on Twy U underneath short final. 4. Parallel independent operation may be in force. 5. Special Aircrew and Aircraft Certification required.

4300

MSA ARP



DIST to THR	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0
ALTITUDE	1100′	1440′	1780′	2120′	2460′	2800′	3140′	3480′	3820′



Gnd speed-Kts	70	90	100	120	140	160
Glide Path Angle 3.20°	396	510	566	679	793	906

ALSF-II
REIL
PAPI

D

DF585

220 KT MAX

Std/State STRAIGHT-IN LANDING

RA 98′
DA(H) **463′** (100′)

1 R300m

PANS OPS

1 CAT D requires autoland or HUDLS, otherwise: R350m.

CHANGES: Procedure, missed apch, minimums.

EDDF/FRA
FRANKFURT/MAIN

JEPPESEN 18 AUG 23 12-50

FRANKFURT/MAIN, GERMANY
GLS Z Rwy 25R

BRIEFING STRIP TM

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		*FRANKFURT Tower	*Ground
118.030	120.805	125.355	118.505	127.280	136.5	121.805

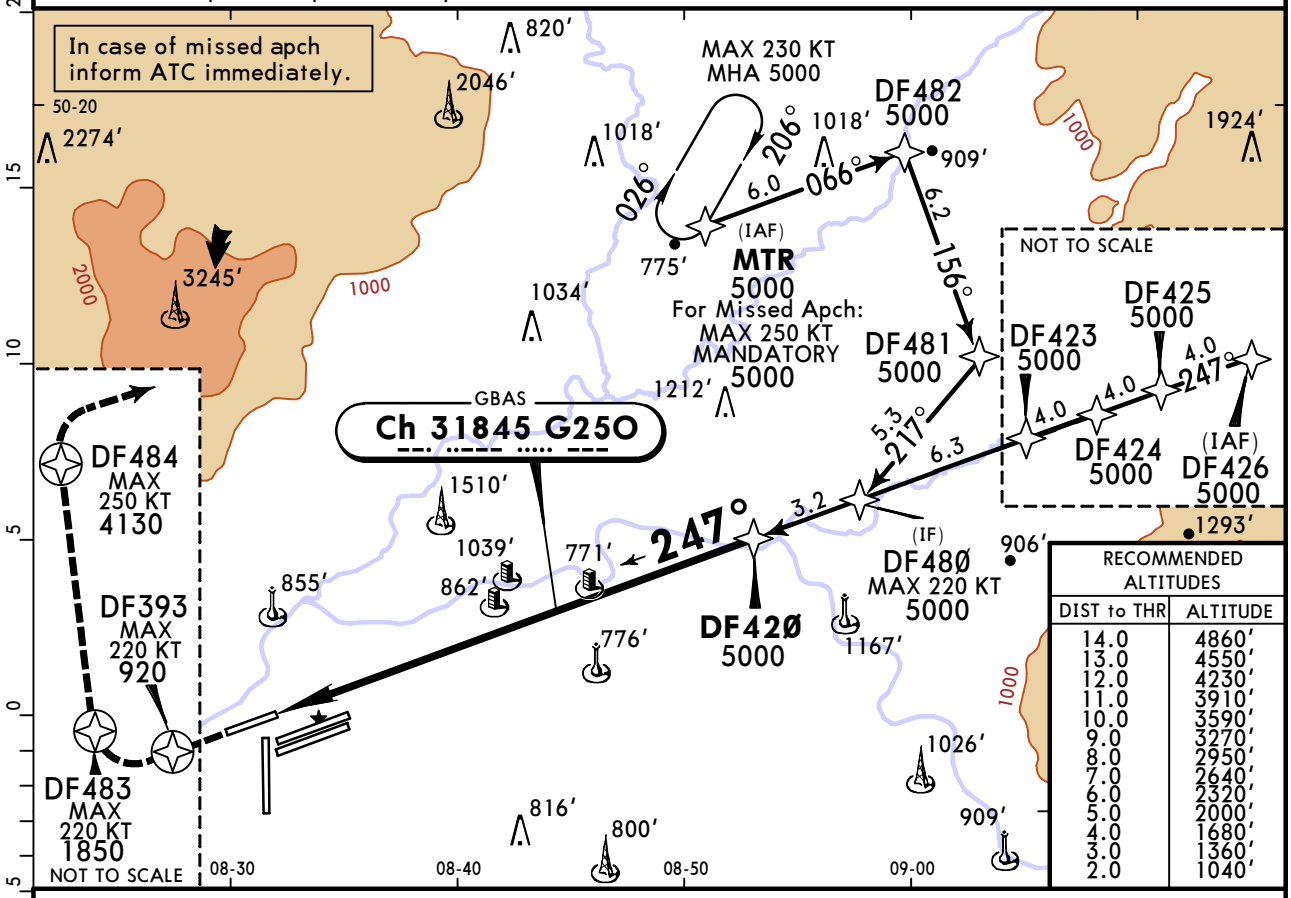
GBAS	Final Apch Crs	DF42Ø	DA(H) Refer to Minimums	Apt Elev 363′ Rwy 351′
Ch 31845 G25O	247°	5000′ (4649′)		

MISSED APCH: Direct to DF393 at or above 920′ (MAX 220 KT), turn RIGHT direct to DF483 at or above 1850′ (MAX 220 KT), turn RIGHT direct to DF484 at or above 4130′ (MAX 250 KT), turn RIGHT direct to MTR at 5000′.
Missed apch requires a mim climb of 4.3% (261′/NM) to 4130′.

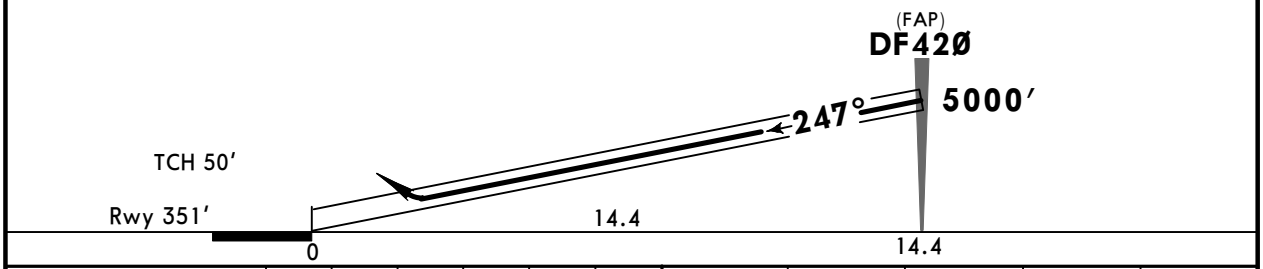
4300
MSA ARP

RNP Apch	Alt Set: hPa (IN on req)	Rwy Elev: 13 hPa	Trans level: By ATC	Trans alt: 5000′

1. RNP-1 required. 2. Radar required.
3. Parallel independent operation may be in force.



RECOMMENDED ALTITUDES	
DIST to THR	ALTITUDE
14.0	4860′
13.0	4550′
12.0	4230′
11.0	3910′
10.0	3590′
9.0	3270′
8.0	2950′
7.0	2640′
6.0	2320′
5.0	2000′
4.0	1680′
3.0	1360′
2.0	1040′



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

ALSF-II REIL PAPI

D

DF393 | MIM 920′ | 220 KT MAX

Std/State STRAIGHT-IN LANDING

GLS

DA(H) ABC: **551′**(200′) D: **558′**(207′)

	TDZ or CL out	ALS out
A B C D	R550m	1 R550m	R1200m

PANS OPS

1 R750m when a Flight Director or Autopilot or HUDLS to DA is not used.

CHANGES: Missed approach.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN 18 AUG 23 12-50A

FRANKFURT/MAIN, GERMANY CAT II GLS Z Rwy 25R

BRIEFING STRIP TM

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		*FRANKFURT Tower	*Ground
118.030	120.805	125.355	118.505	127.280	136.5	121.805

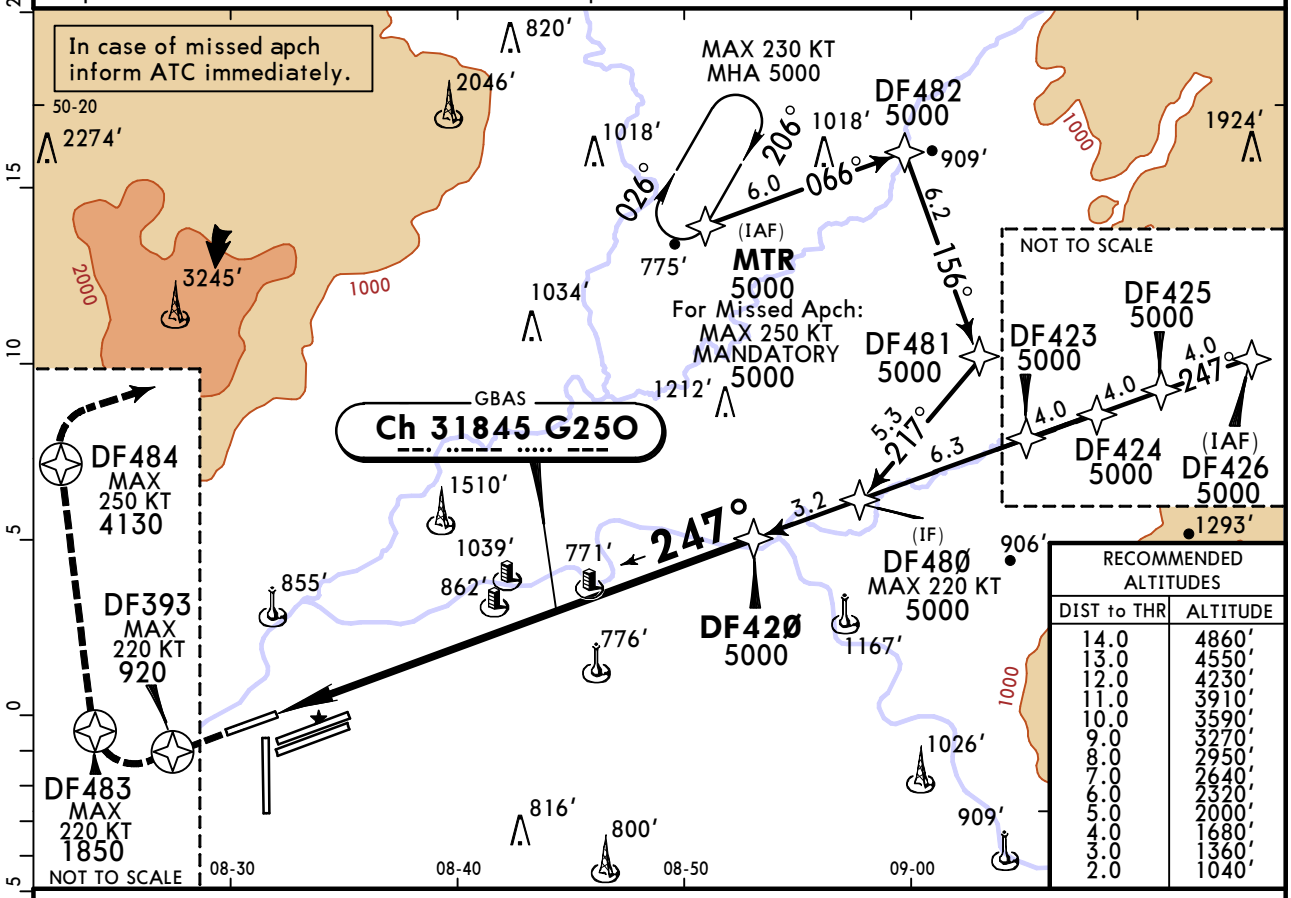
GBAS	Final Apch Crs	DF42Ø	CAT II GLS	Apt Elev 363′
Ch 31845 G25O	247°	5000′ (4649′)	Refer to Minimums	Rwy 351′

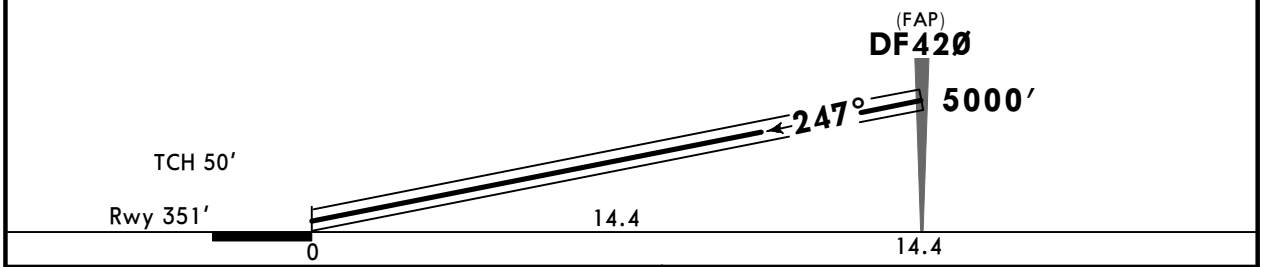
4300 MSA ARP

MISSED APCH: Direct to DF393 at or above 920′ (MAX 220 KT), turn RIGHT direct to DF483 at or above 1850′ (MAX 220 KT), turn RIGHT direct to DF484 at or above 4130′ (MAX 250 KT), turn RIGHT direct to MTR at 5000′.
Missed apch requires a mim climb of 4.3% (261′/NM) to 4130′.

RNP Apch	Alt Set: hPa (IN on req)	Rwy Elev: 13 hPa	Trans level: By ATC	Trans alt: 5000′

1. RNP-1 required. 2. Radar required. 3. Parallel independent operation may be in force.
4. Special Aircrew and Aircraft Certification required.





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

ALSF-II REIL PAPI

D

DF393 MIM 920′ 220 KT MAX

Std/State STRAIGHT-IN LANDING

A: **RA 103′** DA(H) **451′** (100′) B: **RA 109′** DA(H) **457′** (106′) C: **RA 121′** DA(H) **468′** (117′)	D: **RA 145′** DA(H) **483′** (132′)
R300m	R400m

PANS OPS

CHANGES: Missed approach.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN 18 AUG 23 12-51

FRANKFURT/MAIN, GERMANY GLS Y Rwy 25R

BRIEFING STRIP

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		*FRANKFURT Tower	*Ground
118.030	120.805	125.355	118.505	127.280	136.5	121.805

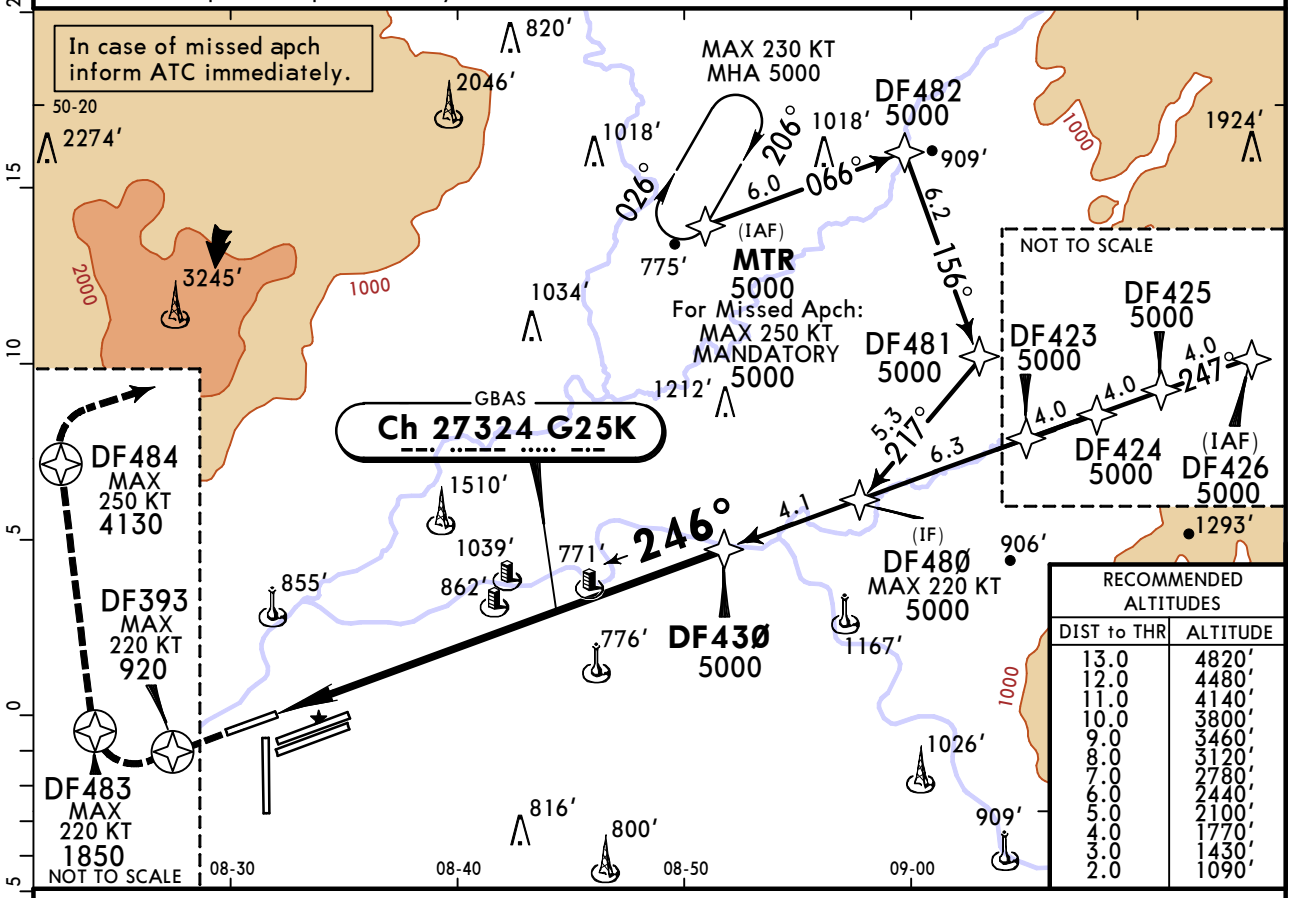
GBAS	Final Apch Crs	DF43Ø	DA(H) Refer to Minimums	Apt Elev 363′ Rwy 351′
Ch 27324 G25K	246°	5000′ (4649′)		

MISSED APCH: Direct to DF393 at or above 920′ (MAX 220 KT), turn RIGHT direct to DF483 at or above 1850′ (MAX 220 KT), turn RIGHT direct to DF484 at or above 4130′ (MAX 250 KT), turn RIGHT direct to MTR at 5000′.
Missed apch requires a mim climb of 4.3% (261′/NM) to 4130′.

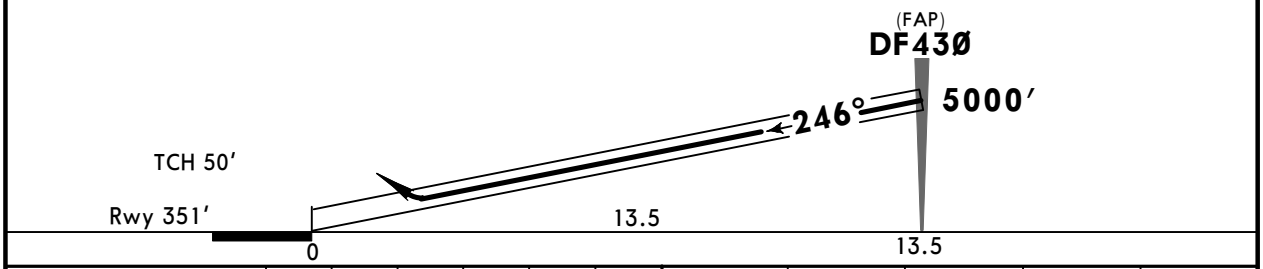
4300 MSA ARP

RNP Apch	Alt Set: hPa (IN on req)	Rwy Elev: 13 hPa	Trans level: By ATC	Trans alt: 5000′

1. RNP-1 required. 2. Radar required.
3. Parallel independent operation may be in force.



RECOMMENDED ALTITUDES	
DIST to THR	ALTITUDE
13.0	4820′
12.0	4480′
11.0	4140′
10.0	3800′
9.0	3460′
8.0	3120′
7.0	2780′
6.0	2440′
5.0	2100′
4.0	1770′
3.0	1430′
2.0	1090′



Gnd speed-Kts	70	90	100	120	140	160
Glide Path Angle 3.20°	396	510	566	679	793	906

ALSF-II REIL PAPI

D → DF393 | MIM 920′ | 220 KT MAX

Std/State STRAIGHT-IN LANDING

GLS

DA(H) ABC: **551′**(200′) D: **558′**(207′)

PANS OPS

	TDZ or CL out	ALS out
A B C D	R550m	1 R550m	R1200m

1 R750m when a Flight Director or Autopilot or HUDLS to DA is not used.

CHANGES: Missed approach.

EDDF/FRA FRANKFURT/MAIN

JEPPESEN 18 AUG 23 12-51A

FRANKFURT/MAIN, GERMANY CAT II GLS Y Rwy 25R

BRIEFING STRIP TM

D-ATIS Arrival	LANGEN Radar (APP) North	LANGEN Radar (APP) South	*FRANKFURT Director (APP)		*FRANKFURT Tower	*Ground
118.030	120.805	125.355	118.505	127.280	136.5	121.805

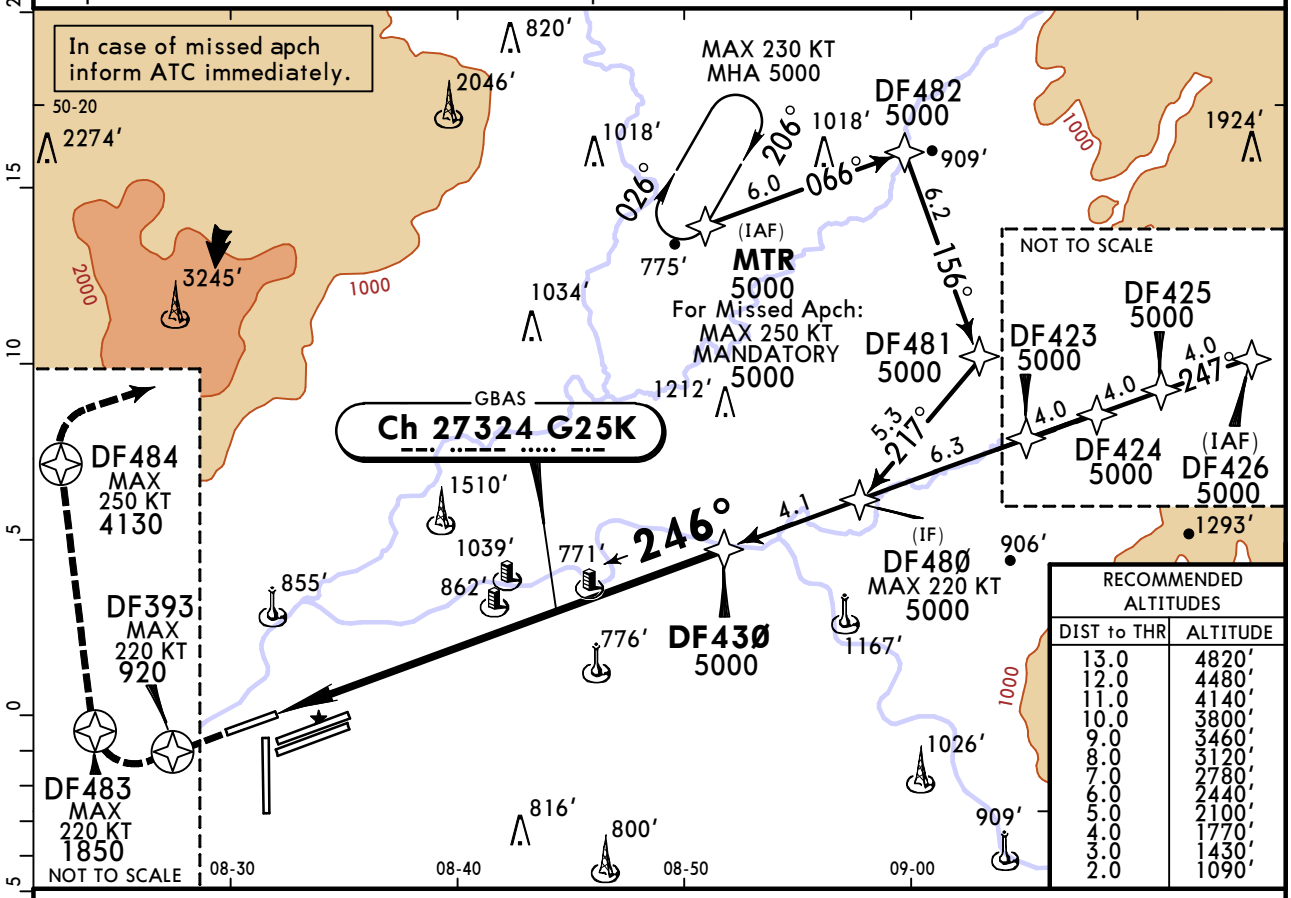
GBAS	Final Apch Crs	DF43Ø	CAT II GLS	Apt Elev 363′
Ch 27324 G25K	246°	5000′ (4649′)	Refer to Minimums	Rwy 351′

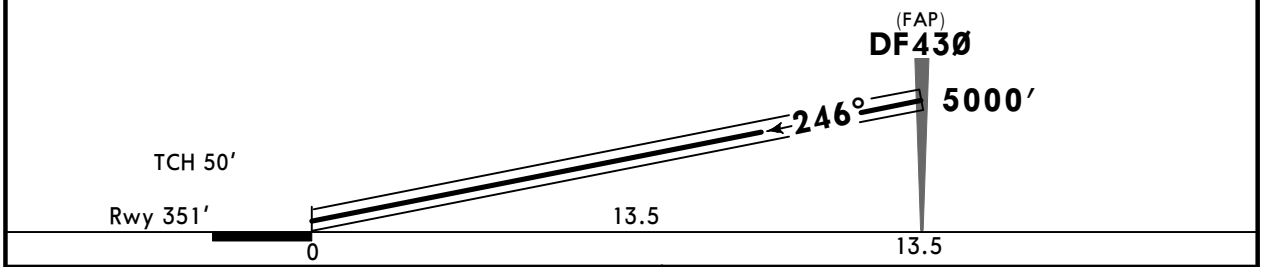
MISSED APCH: Direct to DF393 at or above 920′ (MAX 220 KT), turn RIGHT direct to DF483 at or above 1850′ (MAX 220 KT), turn RIGHT direct to DF484 at or above 4130′ (MAX 250 KT), turn RIGHT direct to MTR at 5000′.
Missed apch requires a mim climb of 4.3% (261′/NM) to 4130′.

4300 MSA ARP

RNP Apch	Alt Set: hPa (IN on req)	Rwy Elev: 13 hPa	Trans level: By ATC	Trans alt: 5000′

1. RNP-1 required. 2. Radar required. 3. Parallel independent operation may be in force.
4. Special Aircrew and Aircraft Certification required.





Gnd speed-Kts	70	90	100	120	140	160
Glide Path Angle 3.20°	396	510	566	679	793	906

ALSF-II REIL PAPI | D | DF393 | MIM 920′ | 220 KT MAX

Std/State STRAIGHT-IN LANDING

A: **RA 102′** DA(H) **451′** (100′) B: **RA 108′** DA(H) **457′** (106′) C: **RA 121′** DA(H) **468′** (117′)	D: **RA 136′** DA(H) **483′** (132′)
R300m	R400m

PANS OPS

CHANGES: Missed approach.

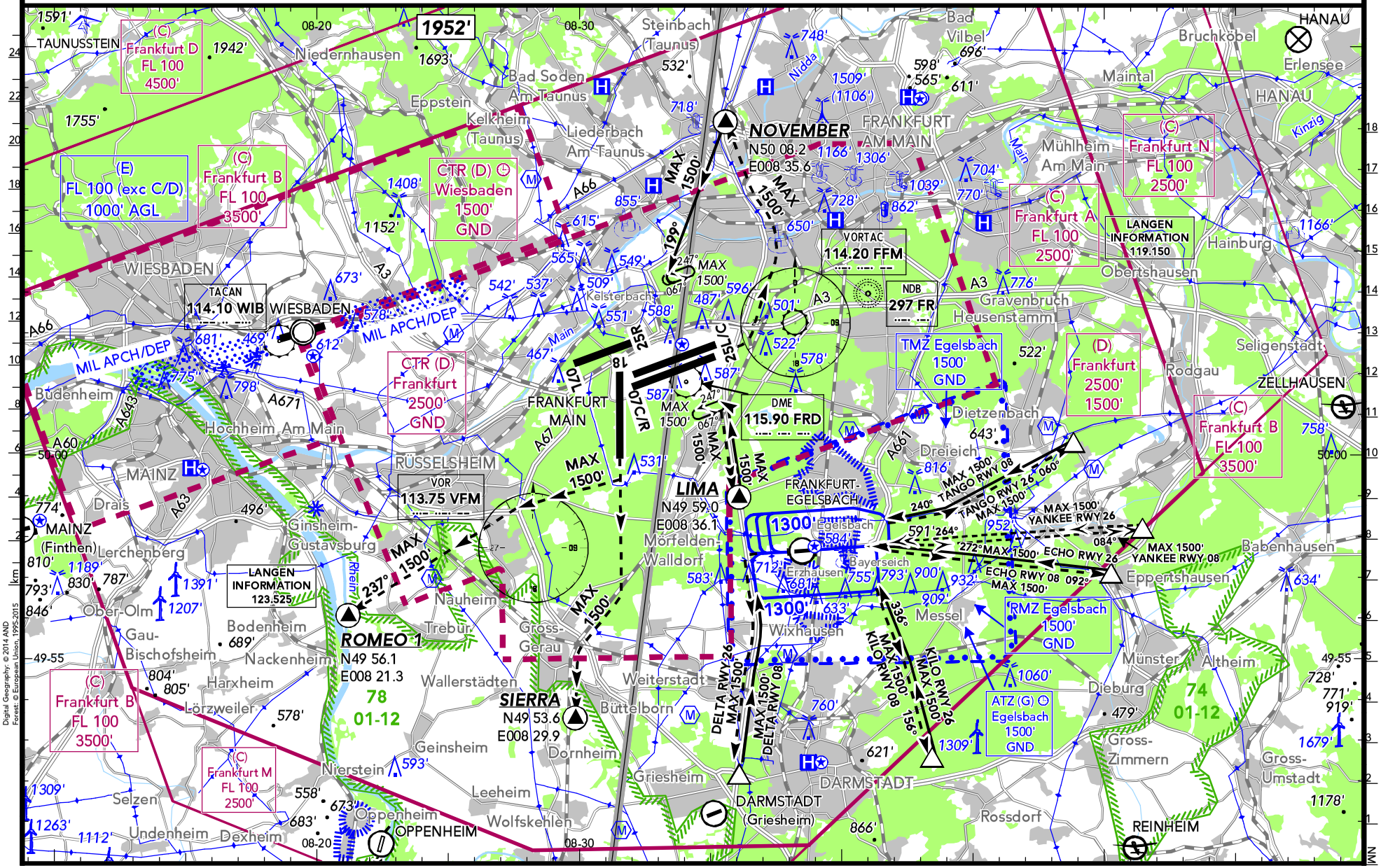
BRIEFING STRIP™

LOCATION	FIS	ATIS	AIRSPACE	TMZ
Elev **363'** /111m N50 02.0 E008 34.2	LANGEN INFORMATION **119.150**(1) (2)	ATIS **118.730**(3) **118.030**(4)	LANGEN INFORMATION **123.525**(5) (6) (7) EGELSBACH RADIO **118.405**(8) (9)	EGELSBACH RADIO **118.405**(10) (11)

TOWER
FRANKFURT TOWER **124.855**(12) (ge, en) **136.500**(13) (ge, en) **119.905**(14) (ge, en)
FRANKFURT GROUND **121.805**(ge, en)

(1) East (2) also Frankfurt (C) Airspace (3) 25 NM, DEP (4) 60 NM / FL250, ARR (5) Frankfurt (C) Airspace (6) Frankfurt (D) Airspace (7) West (8) Egelsbach RMZ (9) Egelsbach ATZ (10) Egelsbach TMZ
(11) A 4440-A 4443 (12) 25 NM / 4000', RWY 18 (13) 25 NM / 5000', North (14) 25 NM / 5000', South

VAR 4°E



Digital Geography: © 2014 AND
Forest: © European Union, 1995-2015

CHANGES: AD ELEV - COM - VAR - Airspace - OBST.

JEPPESEN

EDDF
FRANKFURT MAIN

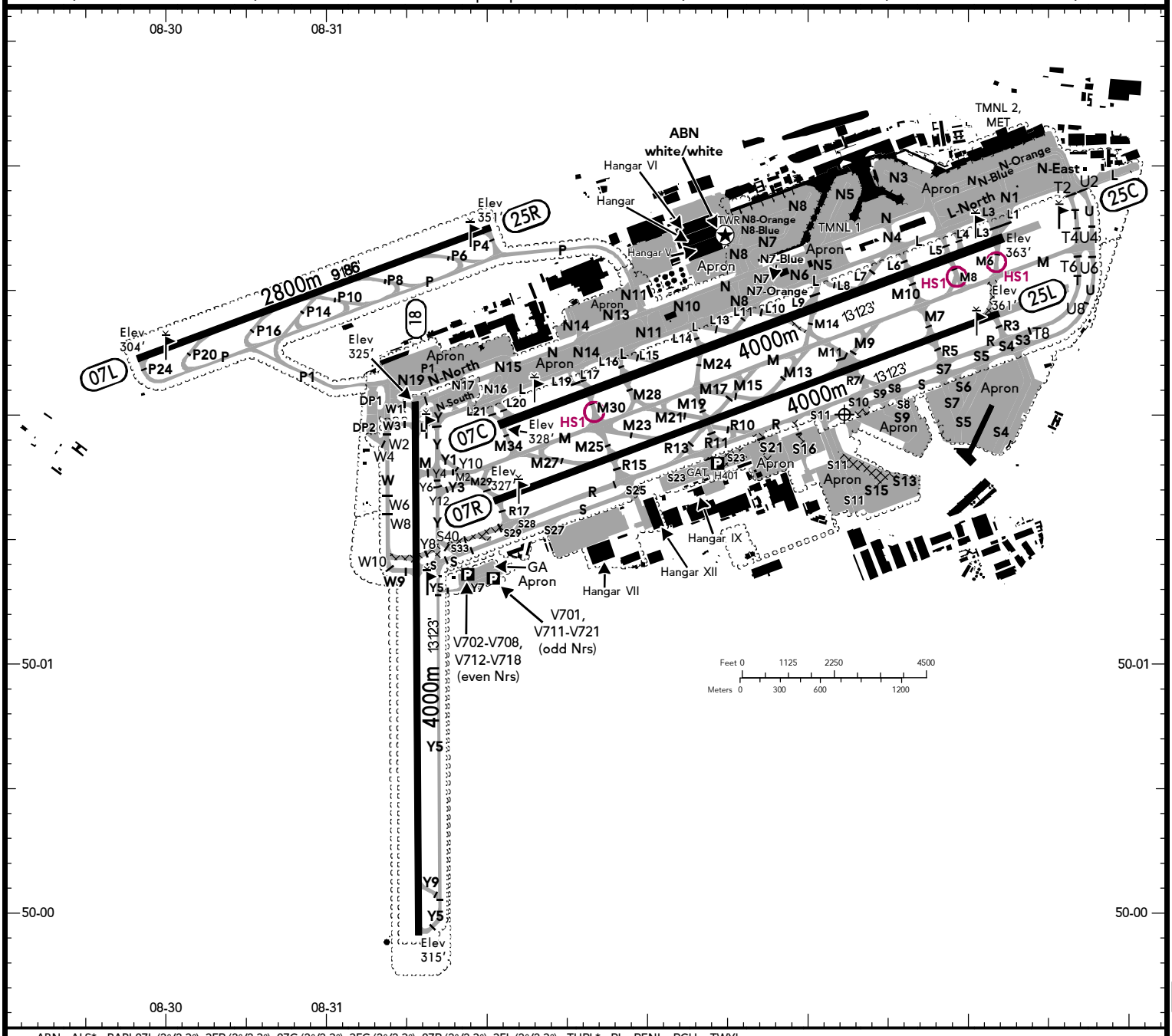
26 APR 24 (19-2)

FRANKFURT MAIN
GERMANY

BRIEFING STRIP™

LOCATION	ATIS	TOWER	ADMITTED AIRCRAFT
Elev **363'** /111m N50 02.0 E008 34.2	ATIS **118.730**(1) **118.030**(2)	FRANKFURT DELIVERY **122.035**(3) (ge, en) FRANKFURT APRON **121.855** (ge, en) **121.655** (ge, en) FRANKFURT GROUND **121.805** (ge, en) FRANKFURT TOWER **124.855**(4) (ge, en) **136.500**(5) (ge, en) **119.905**(6) (ge, en)	

(1) 25 NM, DEP (2) 60 NM / FL250, ARR (3) Initial call and start-up request (4) 25 NM / 4000', RWY 18 (5) 25 NM / 5000', North (6) 25 NM / 5000', South



ABN - ALS* - PAPI 07L (3°/3.2°), 25R (3°/3.2°), 07C (3°/3.2°), 25C (3°/3.2°), 07R (3°/3.2°), 25L (3°/3.2°) - THRL* - RL - RENL - RCLL - TWYL - APRON - WDI - OBSTL. *EXC 18

RWY No	Dimension (m) - Surface	TORA (m)	LDA (m)	Strength	Lights
07C (066°) 25C (246°)	4000 x 60 Asphalt	4000	4000	PCN 74/F/A/W/T	
07R (066°) 25L (246°)	4000 x 45 Asphalt	4000	4000	PCN 74/F/A/W/T	
18 (176°) ❶	4000 x 45 Paved	3970		PCN 74/R/A/W/T	
07L (066°) 25R (246°) ❷	2800 x 45 Concrete		2800	PCN 74/R/A/W/T	

❶ LDG prohibited.
❷ TKOF prohibited. Porous friction course.

CHANGES: AD ELEV - COM - TWYs - Parking Stands - Buildings - Text.

19-2
FRANKFURT MAIN

Intersection TKOF

RWY	TWY	TORA (m)
07C	L20	3942
	L19/M30	3312
	L17	3312
	L16/M28	3012
	L14	2412
	M24	2444
25C	L3	3972
	L4	3700
	L5/M8	3595
	L6/M10	3266
07R	M25/R15	3085
	M19/R11	2330
25L	M7/R5	3494
	R7	2872
	M19	1700
18	N-South	3894
	L	3823
	W3	3817
	M	3454
	R	2842
	W7	2823
	S	2755
	W9	2726

CAUTION: IFR traffic.

Avoid departure sector RWY 18.

WARNING: *In cases of strong winds, wind shears and increased turbulence must be expected on RWY 18 ((in the case of winds between 200° and 160° in a clockwise direction and speeds of 15 KT and more on TKOF RWY 18, gusts and strong wind shifts up to tail wind components may occur).*

DANGER: Possible wake turbulence.

RWY Incursion Hot Spots

HS1 - Explicit clearance required for crossing RWY 07C/25C. Stop at CAT II/III holding point, stop bar is illuminated under all weather conditions.

General

Aproaches via REP LIMA will cross ATZ / RMZ / TMZ Egelsbach and will be coordinated by LANGEN INFORMATION in advance. Initial contact with EGELSBACH RADIO.

Departures RWY 25 via REP NOVEMBER, all inbounds via REP NOVEMBER and crossing traffic north to south and vice versa in exceptional cases only.

Pilots wishing to use AD shall ensure that the Mode S transponders can be operated when the ACFT is on the ground.

Pilots shall select the assigned Mode A code as well as the Mode S CS and set the transponder to AUTO mode or ON (e.g. XPDR):

- From the REQ for push-back or TAX, whichever is earlier;
- Continuously after LDG until the ACFT is fully parked on stand;
- When the ACFT is fully parked on stand, standby shall be selected.

ACFT TAX without a flight plan shall select Mode A code 2000.

RWY 07L/25R with porous friction course (antiskid SFC). Expect different friction at the transition from RWY 07L/25R to TWYs P4, P6, P8, P10, P14, P16, P20 and P24.

TOWER/GROUND is responsible for preventing collisions between aircraft as well as between aircraft and other vehicles or obstacles on the manoeuvring area. In individual cases and after prior consultation between TOWER/GROUND and APRON, the boundaries of the manoeuvring area and thus the responsibility for handling traffic can be moved temporarily, for example to carry out construction work or snow removal. During the consultation, TOWER/GROUND and APRON will agree on temporary transfer points. Fraport will take all necessary closing-off and safety measures.

Taxiing Instructions

Arrival

Pilots of arriving ACFT will be instructed by FRANKFURT TOWER to contact FRANKFURT APRON.

Departure

All DEPs have to request a start-up clearance.

Pilots of departing ACFT shall first contact FRANKFURT DELIVERY, report "ready for taxiing" and will then be instructed to contact FRANKFURT APRON.

General Aviation Apron

Taxiing on the GA Apron

The wing-tip-clearance is MNM 4.5m.

Adhere strictly to the yellow taxi guidance lines.

ACFT maintenance area E of Hangar IX - only towing permitted.

HEL

All HELs parking at the GAT have to expect LDG and TKOF on RWY 07R/25L.

PRKG stand H401 MAX rotor diameter/length/width: 29m.

Chart changes since cycle 10-2024

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

ACT	PROCEDURE IDENT	INDEX	REV DATE	EFF DATE

FRANKFURT/MAIN, (FRANKFURT/MAIN - EDDF)

TERMINAL CHART CHANGE NOTICES

Chart Change Notices for Airport EDDF

Type: Terminal
Effectivity: Temporary
Begin Date: 20240329
End Date: Until Further Notice

Reconstruction of eastern Twy bridges and partial closure of Twy P (based on SUP 08/24). Refer to temp charts 10-8C, 10-8D and latest NOTAMs.

Type: Terminal
Effectivity: Temporary
Begin Date: 20240329
End Date: Until Further Notice

Temporary construction works near J-Pier (based on SUP 12/24). Refer to temp chart 10-8A and latest NOTAMs.

Type: Terminal
Effectivity: Temporary
Begin Date: 20230818
End Date: Until Further Notice

Reconstruction of TWY R (based on SUP 19/24). Refer to temp chart 10-8B and latest NOTAMs.

Type: Terminal (VFR)
Effectivity: Temporary
Begin Date: Immediately
End Date: Until Further Notice

EFF APR 24 until JUL 24 The eastern TWY bridges will be reconstructed and TWY P will be CLSD BTN TWYs P4 and N11. The junctions leading to TWYs P4, P6, P8, P10 and P14 to the east will be marked as CLSD. After LDG on RWY 07L/25R, access to the apron will exclusively be via TWY P1.

Type: Terminal (VFR)
Effectivity: Temporary
Begin Date: Immediately
End Date: Until Further Notice

Until APRX JUN 24 CONST works are carried out in two phases on TWY R. Phase 1: TWY R closed BTN TWY S11 and S5, TWY R7 and R5 closed; Phase 2: TWY R closed BTN TWY S23 and S25, TWY R13 closed, connection BTN TWY S23 and S25 estbld via TWY S. Please check current NOTAMs.

Type: Terminal (VFR)
Effectivity: Permanent
Begin Date: Immediately
End Date: No end date

Aprons around TWYs S16, S21 and E of PRKG stand H401 CLSD. Apron W of PRKG stand H401 replaced by TWY APRX 30m wide connected to TWY S25. PRKG stand H401 withdrawn. TWY S23 chgd to connect Hangar IX and TWY R, perpendicular to this TWY.

Chart Change Notices for Country DEU

Type: Gen Tmnl
Effectivity: Permanent
Begin Date: 20210326
End Date: No end date

Use of SID RNAV OVERLAY: Pilots of GPS/FMS-RNAV-equipped aircraft should, if possible, use the defined supplementary GPS/FMS/RNAV procedures which are published as "OVERLAY" to a conventional procedure. Please refer also to ATC Germany pages for additional information.

Type: Gen Tmnl
Effectivity: Temporary
Begin Date: Immediately
End Date: Until Further Notice

Jeppesen charted take-off minimums are determined according to the available RWY lights. In Germany, Low Visibility Procedures (LVP) are only available for the following airports: EDDB, EDDC, EDDE, EDDF, EDDG, EDDH, EDDK, EDDL, EDDM, EDDN, EDDP, EDDR, EDDS, EDDV, EDDW, EDFH, EDHI, EDHL, EDJA, EDLN, EDLP, EDLV, EDLW, EDMA, EDNY, EDQM, EDSB, EDTL, EDTY, EDVE, EDVK. All other German airports are notapproved for Low Visibility Take-off Operations (LVTO) with an RVR below 400m because of missing LVP.

Type: Gen Tmnl
Effectivity: Permanent
Begin Date: Immediately
End Date: No end date

Location/airport name changed from Buchel to Buechel, Buckeburg to Bueckeburg, Norvenich to Noervenich.

Type: Gen Tmnl (VFR)
Effectivity: Permanent
Begin Date: Immediately
End Date: No end date

Text section 2.3 Frequencies for Change of Flight Rules from VFR to IFR: BREMEN RADAR freq 131.330 chgd to 119.490.

Type: Gen Tmnl (VFR)
Effectivity: Permanent
Begin Date: Immediately
End Date: No end date

In general, the callsign of A/G communication station at uncontrolled aerodromes is RADIO, service AFIS is withdrawn. On approaches, radio telephony communication shall be established not later than 5 MIN prior to reaching the AD.

Type: Gen Tmnl (VFR)
Effectivity: Permanent
Begin Date: Immediately
End Date: No end date

EFF 25 MAR 21 BDRY between FIS sectors with COM LANGEN INFORMATION 126.950 and LANGEN INFORMATION 128.950 moved APRX 26 NM W. BDRY between FIS sectors with COM LANGEN INFORMATION 119.825 and LANGEN INFORMATION 125.800 and LANGEN INFORMATION 132.650 moved APRX 26 NM W.