

**General Info**

Frankfurt/Main, DEU

N 50° 02.0' E 08° 34.2' Mag Var: 0.0°W

Elevation: 364'

Public, Control Tower, IFR, Landing Fee, Jet Starting Unit available,  
 Rotating Beacon, Customs  
 Fuel: 100LL, Jet A-1  
 Repairs: Minor Airframe, Minor Engine

Time Zone Info: GMT+1:00 uses DST

**Runway Info**

Runway 07L-25R 13123' x 197' asphalt

Runway 07R-25L 13123' x 148' concrete

Runway 18-36 13123' x 148' concrete

Runway 07L (69.0°M) TDZE 329'  
 Lights: Edge, ALS, Centerline, REIL, TDZ

Runway 07R (69.0°M) TDZE 328'  
 Lights: Edge, ALS, Centerline, REIL, TDZ

Runway 18 (179.0°M) TDZE 326'  
 Lights: Edge, Centerline

Runway 25L (249.0°M) TDZE 362'  
 Lights: Edge, ALS, Centerline, REIL, TDZ

Runway 25R (249.0°M) TDZE 364'  
 Lights: Edge, ALS, Centerline, REIL, TDZ

Runway 26L (249.0°M) TDZE 342'  
 Lights: Edge, ALS, Centerline, TDZ

**Communications Info**

ATIS 118.725

ATIS 118.025

ATIS 114.2

Frankfurt Tower 127.325 At or below 4000'

Frankfurt Tower 124.85 At or below 4000'

Frankfurt Tower 119.9 At or below 4000'

Frankfurt Tower 378.35 At or below 4000' Military

Frankfurt Ground Control 121.8

Frankfurt De-Icing Centre Ramp/Taxi Control 135.225

Frankfurt Apron Ramp/Taxi Control 121.95

Frankfurt Apron Ramp/Taxi Control 121.85

Frankfurt Apron Ramp/Taxi Control 121.7

Frankfurt Clearance Delivery 121.9

Langen Radar Approach Control 136.125

Langen Radar Approach Control 126.55 Departure Service

Langen Radar Approach Control 125.35

Langen Radar Approach Control 120.8

Langen Radar Approach Control 120.15

Langen Radar Approach Control 119.025 Arrival Service

Langen Radar Approach Control 372.85 Military

Langen Radar Approach Control 277.80 Military

Frankfurt Director Approach Control 127.275 At or below 15000' Out to 40 mi.

Frankfurt Director Approach Control 375.45 At or below 10000' Military

Frankfurt Arrival Approach Control 118.5

**Notebook Info**

EDDF/FRA

4 AUG 06

**JEPPESEN** FRANKFURT/MAIN, GERMANY  
AIRPORT BRIEFING**1. GENERAL****1.1. ATIS**

\*ATIS ARRIVAL 118.02 114.2

\*ATIS DEPARTURE 118.72

**1.2. NOISE ABATEMENT PROCEDURES****1.2.1. RUNWAY USAGE****1.2.1.1. ARRIVALS**

RWYs 25R/L will preferably be assigned to landing ACFT, provided the tailwind component does not exceed 5 KT. The landing direction will be changed, however, even if the tailwind component is less than 5 KT when braking action on the RWYs is impaired by ice, snow, slush, etc.

**1.2.1.2. DEPARTURES****In case of landing direction 07:**

RWY 07L will preferably be assigned to departures into northern and eastern directions.

**In case of landing direction 25:**

RWY 25R will preferably be assigned to departures into northern directions.

**In case of landing direction 07 or 25:**

RWY 18 will generally be assigned to departures into south-eastern, southern and western directions, provided the tailwind component does not exceed 15 KT. If the tailwind component for RWY 18 is more than 10 KT this will be announced by ATIS. Pilots-in-command who cannot accept the higher tailwind component are requested to advise ATC at the same time as the request for the start-up clearance. **Exceptions** are possible if the traffic situation permits or for reasons of traffic safety.

**1.2.2. NIGHT FLYING RESTRICTIONS AS WELL AS OPERATIONAL RESTRICTIONS****OF CHAPTER 2 AIRCRAFT OUTSIDE NIGHTTIME FOR CIVIL AVIATION**

- a) ACFT which have no noise certificate in accordance with ICAO Annex 16 are not permitted to take-off or land.
- b) ACFT licensed in accordance with ICAO Annex 16, Chapter 2 are not permitted to take-off or land as follows:
  - 2000-0800LT on weekdays
  - additionally, FRI 2000LT - MON 0800LT.
- c) For ACFT licensed in accordance with ICAO Annex 16, Chapter 3 the following restrictions apply:
  - Between 2200-0600LT take-offs and landings are not permitted unless they have been coordinated at least one day in advance by the Scheduling Coordinator (ad hoc charter flights, in particular individual flights for specific reasons, but of no public interest).
  - Between 2300-0600LT take-offs and landings for the performance of exercise flights, check flights and training flights are not permitted.
  - Between 0000-0500LT landings are not permitted for all kinds of flights.

**EXCEPTIONS**

Excluded from the restrictions mentioned above are:

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

Excluded from the restrictions according to paras b). and c). only:

Take-offs and landings of ACFT used for checking radio and radar as well as APT facilities.

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**JEPPESEN** FRANKFURT/MAIN, GERMANY  
AIRPORT BRIEFING**1. GENERAL**

Excluded from the restrictions according to para c) only:

ACFT of operators having proved to the approving authority that their main base and maintenance facilities are located at Frankfurt; however, such ACFT are not permitted to land between 0100-0400LT.

In justified cases the approving authority may grant exceptions on request for particular and specified flights. The application shall generally be submitted in writing to:

Hessisches Ministerium fuer Wirtschaft, Verkehr und Landesentwicklung  
 - Referat VIb 3 -  
 Kaiser-Friedrich-Ring 75  
 65185 Wiesbaden/Germany  
 Teletex: ISDN 126119850370  
 Telefax: 0611/815-2226

In urgent cases the application shall be submitted in writing or verbally to:

Oertliche Luftaufsichtsstelle  
 Flughafen Frankfurt/Main  
 Gebaeude (building) 205  
 60547 Frankfurt am Main/Germany  
 Tel.: 069/690-71715, 71717  
 Telefax: 069/690-66150

The application shall contain:

- Name and address of ACFT operating agency and ACFT operator,
- aerodrome of departure or destination,
- radio call sign of the ACFT,
- type, year of construction and noise certificate according to paragraph 11c of the Luftverkehrs-Ordnung (LuftVO) of the ACFT,
- time of departure or landing for which the exception is requested.

The reasons for the application have to be specified; the applicant has to state, in particular, that the ACFT will be flown by a pilot who is familiar with the noise abatement procedures at Frankfurt/Main APT.

If detailed reasons cannot be given because of urgency, these reasons shall be forwarded subsequently in writing within 24 hours to 'Hessisches Ministerium fuer Wirtschaft, Verkehr und Landesentwicklung' or to the local 'Luftaufsichtsstelle' Frankfurt/Main APT'.

Take-off or landing clearance granted by ATC, as well as other clearances, do not automatically include the necessary exceptional permission by the approving authority.

Exceptional permission will not be granted by ATC via radio telephony. The pilot shall report landing outside the times permitted, which have not previously been approved, and justify this in writing to the local 'Luftaufsichtsstelle' immediately after landing.

**1.2.3. REVERSE THRUST**

Reverse thrust other than idle thrust shall not be used between 2200-0600LT except for safety reasons.

**1.2.4. RUN-UP TESTS**

Run-up tests and engine test runs as well as extensive maintenance work on ACFT at the positions are not permitted. Apron Control may grant exceptions in justified cases.

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FRANKFURT/MAIN**JEPPESEN** FRANKFURT/MAIN, GERMANY  
30 MAR 07      10-1P10      AIRPORT BRIEFING**3. DEPARTURE****COB reporting ways**

For entering and updating the COB the following ways are available:

- Linked internal systems of airlines or handling agents
- OBCCOS (Off-Block Calculation and Coordination System)
- SITA Address FRAAF7X
- Fax +49 (0)69 690 56701
- Tel. +49 (0)69-690 71740, Traffic Data Center

**Target times for start-up and off-block****Calculation of Target Start-Up Approval Time (TSAT) and Target Off-Block Approval Time (TOAT)**

Based on the reported COB, the flight will be planned into the departure sequence 45 minutes prior to the estimated end of ground handling, a TOAT will be generated. As soon as a COB is updated, a new calculation of the departure sequence and the target times will be conducted.

For this calculation the parking position, RWY, taxi time, departure routes and their separation minima and an existing CFMU slot are taken into consideration and - based on this - an optimal departure sequence is determined. Consequently, for each flight the optimal time for Start-Up (TSAT) and Off-Block (TOAT) will be determined. The TSAT is the result of the TOAT, and is defined as

$$\text{TSAT} = \text{TOAT} - 5 \text{ minutes.}$$

**Announcement of the Target Time TOAT**

The first announcement of the TOAT is 30 minutes before COB and will be updated 20 minutes, respectively 10 minutes before TOAT.

The announcement of the TOAT is by way of the information systems FADS (Frankfurt Airport Display System), OBCCOS or linked internal systems of airlines or handling agents. For general aviation flights or flights without handling agent the TOAT can be requested at the GAT-Terminal or by calling the Traffic Data Center.

**Transferring the target times to pilots**

The transfer of the target times TOAT and TSAT to the pilot is in the responsibility of the airline or the assigned handling agent. For flights without handling agents the responsibility for inquiring the target times is in the hands of the pilot-in-command.

**Use of the target times for start-up**

Based on the new procedure, the "Pre-Departure Sequence" is no longer according to the order of start-up requests but according to the target times TOAT, respectively TSAT.

At TSAT (TOAT-5 minutes) start-up must be requested.

Start-up and enroute clearance are still possible via Data Link. For requests before TSAT only enroute clearance is possible. The start-up clearance must be requested separately at TSAT via radio.

**Use of target times for push-back (Off-Block)**

After reception of start-up the pilot has to request push-back not later than TOAT. The pilot will receive push-back approval from apron control depending on the traffic situation.

For ACFT in nose-out positions the request for taxi must be made at TOAT.

**NON-STANDARD PROCEDURES****Re-Planning procedure / Standby status**

If the TOAT is reached - without push-back or start-up request having been made the re-planning procedure goes into effect.

In the re-planning procedure the flight is set back in the departure sequence by at least five minutes. A new TOAT is generated. If the new TOAT is exceeded again, this process will be repeated. With the third exceedance of the TOAT the flight is removed from the departure sequence and placed in standby (STBY) status. The target times of that flight will be deleted. A flight in standby is not included in the departure sequence anymore.

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30 MAR 07      10-1P11      AIRPORT BRIEFING**3. DEPARTURE**

After setting a new COB the flight will be put into the departure sequence again, a new TOAT will be generated.

**Remote-Holding**

If a flight is planned for the remote-holding procedure, the target time TOAT is the time when the flight leaves the remote-holding position. In that case, push-back approval and taxi instructions to the assigned remote-holding position is given before reaching the TOAT by apron control.

At the remote-holding position, start-up has to be requested at TSAT, taxi instructions at TOAT (same as standard procedure).

**De-icing**

If de-icing is required, the pilot or the airline has to request de-icing before reaching TOAT. DMAN will then calculate target times for de-icing, the TOAT will be adjusted to these times.

For both, de-icing on parking position and de-icing on a de-icing pad the TOAT is the time at which the parking position is left. In case of a position de-icing this is done before reaching the TOAT, and in case of a remote de-icing after having left the position and therefore after the TOAT.

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(10-1P2)

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FRANKFURT/MAIN

FRANKFURT/MAIN, GERMANY  
AIRPORT BRIEFING**1. GENERAL****1.3. LOW VISIBILITY PROCEDURES (LVP)****1.3.1. CAT III OPERATIONS****1.3.1.1. GENERAL**

RWYs 07R/25L & 07L/25R will be announced via ATIS. Taxiing for all ACFT is restricted to TWYs with operating centerline lights. The TWY centerline lights within the ILS sensitive area from RWY 07L/25R towards TWY A and from RWY 07R/25L towards TWY C are colourcoded (yellow/green). Landing ACFT are requested to report RWY vacated at the end of the colourcoded TWY centerline lights to indicate that the ACFT has vacated the ILS sensitive area.

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

**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 center line.

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. TAXI PROCEDURES****1.4.1. GENERAL**

Taxiing on TWY B EAST permitted to ACFT with a size up to A321 (tail unit height MAX 39'/11.8m) regardless of approaches to RWY 25L/R.

To avoid crossing the apch ground lines 25L/R while another ACFT is flying over TWY B EAST, pilots can choose taxiing speed at their own discretion, or can wait at the appropriate stop point (295'/90m in front of apch ground line on TWY B EAST). Pilots can continue to taxi w/o a renewed clearance from ATC.

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

Turns from TWY Hto to Cto & conversely not authorized.

TWY M1 MAX wingspan 113'/34.5m.

TWYs N blue, N orange and Z MAX wingspan 118'/36m.

Part of TWY K (South of TWY S) and TWY N SOUTH MAX wingspan 171'/52m.

**1.4.2. TAXIING OF THE APRON**

Wing-tip clearance for B747-400 on ACFT stand taxilanes is 25'/7.5m as a minimum, to parallel service roads or 10'/3m - height-limited objects, is 16'/5m as a minimum.

Heavy ACFT taxiing on apron shall apply minimum thrust only. 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.

Push-backs to TWY N have to be executed facing West.

In the General Aviation Area the wing-tip clearance is MIN 15'/4.5m.  
Adhere strictly to the yellow, blue and orange taxi guidance lines.

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(10-1P3)

FRANKFURT/MAIN, GERMANY  
AIRPORT BRIEFING**1. GENERAL****1.5. PARKING INFORMATION**

On stands A10 thru A21, A23, A26 thru A42, B2, B20 thru B48, C4 thru C11, D1 thru D13, E2 thru E9A, F211 thru F240, S501 thru S504, V92 thru V119, V123, V125, V126, V128, V130 and V251 thru V270 push-back required.

**1.6. OTHER INFORMATION****1.6.1. GENERAL**

Glider areas in the vicinity of APT.

**1.6.2. OPERATION OF SSR-MODE S TRANSPONDERS****1.6.2.1. GENERAL**

An improved surface surveillance system using Mode S multilateration has been installed.

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

ACFT operators shall ensure that the Mode S transponders are able to operate when the ACFT is on the ground. Therefore it is necessary that aircrews select AUTO mode or its equivalent, according to specific installation and assigned mode A code, if AUTO mode is not available select ON (e.g. XPDR) and assigned mode A code under the following conditions:

- From the request for push-back or taxi, whichever comes first.
- After landing, continuously until the ACFT is fully parked on the stand.

When fully parked on the stand, the transponder shall be switched off.

Whenever the ACFT is capable of reporting ACFT identification (i.e. call sign used in flight), the ACFT identification should also be entered from the request for push-back or taxi, whichever comes first (through the FMS or the transponder control panel). Aircrews shall use the format as defined in field 7 of the ICAO flight plan for entry of the ACFT identification (e.g. DLH123, TAP234, AFR6380,...).

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

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JEPPESEN FRANKFURT/MAIN, GERMANY  
AIRPORT BRIEFING

## 2. ARRIVAL

### 2.1. SPEED RESTRICTIONS

MAX 250 KT below FL100 or as by ATC.  
Not applicable within Airspace C.

### 2.2. NOISE ABATEMENT PROCEDURES

Between 2300-0500LT all inbound ACFT should expect clearances whereby final will be reached not closer to the APT than:

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

These "final-interception points" correspond to the GPS/FMS waypoints DF022 (RWYs 25L/R) and DF052 (RWYs 07L/R). 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'.

In addition pilots should expect a clearance to descend below FL70 only 6 NM prior to reaching the above mentioned points. Pilots should adjust their speed accordingly (approximately 200-220 KT when leaving FL70) and are urgently requested to perform their descent from FL70 as a continuous descent whenever possible.

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

Requests for non-precision approaches for training purposes will be denied.

The above procedures will not be applied to:

- flights with STS/HOSP
- flights in adverse weather conditions and
- flights in emergency situations.

### 2.3. CAT II/III OPERATIONS

RWY 07L/25R and RWY 07R/25L(except THR 26L) approved for CAT II/III operations, special aircrew and ACFT certification required.

## 2.4. RWY OPERATIONS

### 2.4.1. LANDING THR 26L

#### 2.4.1.1. GENERAL

Second landing THR 26L established on RWY 25L in connection with the High Approach Landing System (HALS).

The HALS offers the possibility to reduce wake turbulence separation for ACFT of categories Medium or Light to the permissible Radar separation minima. For this purpose, RWY 25L is provided with a second landing THR designated as 26L.

#### 2.4.1.2. DESCRIPTION OF THE SECOND LANDING THR 26L

Threshold 26L is only permitted for landings of ACFT with a maximum certified take-off mass of less than 136,000 kg. THR 26L is displaced by 4921'/1500m from landing THR 25L. Simultaneous operation of two THRs on one RWY is not permitted.

#### 2.4.1.3. MARKINGS AND LIGHTING

For operation on THR 26L, special markings and lighting are installed which deviate from the 'Guidelines for the Markings and Lighting at APTs', as well as ICAO.

For detailed depiction refer to page 10-9H.

Lighting for THR 26L, including PAPI, will be kept working together with the edge and centerline lights while operations are being conducted. Approach-, THR- and TDZ lighting 25L, as well as PAPI 25L, will be turned off when THR 26L is in operation.

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AIRPORT BRIEFING

## 2. ARRIVAL

### 2.4.1.4. HALS OPERATION

- Approach procedure:  
An additional instrument landing system (ILS DME 26L) has been installed.

- ATIS broadcasts:  
As soon as the HALS operations begin, the ATIS broadcast will provide pilots with the pertinent information.

- Use of procedure:  
Pilots who do not wish to use the THR 26L approach procedure must explicitly inform Frankfurt Approach when establishing initial contact.

- Taxi procedure:  
Two types of standard taxi guidance procedures will be used for ACFT having landed after use of THR 26L.  
Type 1: Guidance via TWY C and intersection of RWY North.  
Type 2: Guidance via TWYs R, W and A to destinations West of TWY H.

### 2.4.1.5. METEOROLOGICAL AND FLIGHT OPERATIONS CONDITIONS

THR 26L will be used under the following conditions:

- Ground visibility is 2400m or more;
- Ceiling is approx. 400 ft (ceiling must be such that THR 26L is in sight at outer marker);
- No tailwind prevails;
- Braking action is good;
- All ILS DME facilities are fully serviceable;
- Lighting for use of THR 26L, including PAPI 26L, is fully serviceable.

### 2.4.2. HIGH INTENSITY RWY OPERATIONS (HIRO)

#### 2.4.2.1. APPROACH

Approaching ACFT for which a parking position is designated on the Southern airport area shall advise LANGEN Radar on 120.8.

These ACFT and propeller-driven ACFT which park in the Eastern part of the Northern apron will preferably be assigned to RWY 07R/25L.

When changing frequency from LANGEN Radar to FRANKFURT Director initial contact shall be restricted to

#### FRANKFURT DIRECTOR & CALLSIGN

in order to avoid frequency congestion.

When being transferred to FRANKFURT Tower initial contact shall consist of

#### FRANKFURT TOWER, CALLSIGN & RWY.

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**JEPPESEN** FRANKFURT/MAIN, GERMANY  
30 MAR 07 10-1P6 AIRPORT BRIEFING

## 2. ARRIVAL

### 2.4.2.2. LANDINGS

Pilots are reminded that by leaving the RWY quickly, ATC will be able to guide ACFT on final using minimum radar separation.

In order to reduce RWY occupancy times, pilots shall apply the following procedures:  
The RWYs shall, as a rule, be left via the existing high-speed turn-offs.  
When RWY conditions permit, pilots should prepare their landings in order to leave the RWYs via the high-speed turn-offs listed below:

RWY	ACFT	Turn off intersections	Dist from THR ft (m)
07L	heavy	G	8202' (2500m)
	medium / light	Mto	5906' (1800m)
07R	heavy	Gto	7054' (2150m)
	medium / light	Cto	5577' (1700m)
25L	heavy	Jto	7546' (2300m)
	medium (JET)	Hto	6070' (1850m)
	medium (PROP) / light	G	3609' (1100m)
25R	heavy	Hto	6890' (2100m)
	medium (JET)	Ato	6070' (1850m)
	medium (PROP) / light	Gto	3773' (1150m)

Name the expected high-speed turn-off during the approach briefing to ensure a minimum RWY occupancy time.

The possibility of FRANKFURT Tower applying reduced RWY separation remains unaffected and shall continue to be observed.

The frequency change after landing from FRANKFURT Tower to FRANKFURT Apron shall only be carried out on request.

If the pilot-in-command does not receive further taxi clearance, he should stop in front of TWY A.

## 2.5. 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 07L/25R.

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

Taxi to stands F236 thru F240 via TWY N NORTH, facing North.

Taxi to stands V119 thru V130 or V150 thru V178 via TWY N, facing South.

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**JEPPESEN** FRANKFURT/MAIN, GERMANY  
30 MAR 07 10-1P7 AIRPORT BRIEFING

## 3. DEPARTURE

### 3.1. DE-ICING

#### 3.1.1. GENERAL

De-icing notification shall be directed to FRANKFURT De-icing 135.22 or via phone. 069/690-73891.

Acft shall be ready at the estimated de-icing time. If this is impossible, the APT De-icing Center (ADC) shall be informed and the new "ready for de-icing time" be transmitted to the ADC.

CAUTION: If the ACFT is not ready at the estimated de-icing time (i.e. doors not closed) the de-icing vehicles will be directed to the next ACFT waiting and subject flight will have to wait until other vehicles become available for disposition.

#### 3.1.2. ACFT STANDS

The de-icing/anti-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.

#### 3.1.3. REMOTE DE-ICING PADS (DPS)

The remote de-icing pads are located West of the head of RWY 18 and fall within the responsibility of FRANKFURT Tower. When carrying out de-icing procedure, responsibility will temporarily be transferred to FRANKFURT Apron.

On the remote de-icing pads, only jet ACFT with running engines and APU switched off will be de-iced.

Propeller ACFT will not be de-iced for safety reasons.

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

Taxiing manoeuvres may only be carried out at the indispensable minimum engine speed. On the de-icing pads ACFT shall stop in front of the clearance bar or follow the advice of the marshaller and will be advised by FRANKFURT Apron to establish radio contact with the de-icing crew teamleader on an assigned frequency.

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.

## 3.2. START-UP & TAXI PROCEDURES

#### 3.2.1. GENERAL

Departures from the Southern APT area shall state their position when request start-up clearance.

#### 3.2.2. FROM 0600 - 2200LT

All ACFT up to A321 parked at positions East of TWY E and planned for departure from RWY 18 have to expect to taxi via TWY B EAST (ATTENTION: Overflying ACFT on extended CL RWY 25L/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. SPEED RESTRICTIONS

MAX 250 KT below FL100 or as by ATC.  
Not applicable within Airspace C.

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AIRPORT BRIEFING  
23 NOV 07 (10-1P8)**3. DEPARTURE****3.4. NOISE ABATEMENT**

For additional depiction refer to 10-4.

**3.4.1 DEPARTURE DESIGNATION****RWY's 07L/R:****a) Between 0700-2200LT:**

- SIDs with designator **ECHO** may be used by all **MEDIUM** and **LIGHT** ACFT able to comply with the climb restrictions;
- SIDs with designator **DELTA** shall be used by all **HEAVY** ACFT and by all ACFT unable to comply with the climb restrictions in SIDs with designator **ECHO**.

**b) Between 2200-0700LT ALL ACFT** shall use SIDs with designator **DELTA**.**c) NON RNAV** (enroute only) equipped ACFT shall use SIDs with designator **CHARLIE**.**RWYs 25L/R:****a) Between 0700-2200LT:**

- SIDs with designator **FOXTROT** may be used by all **MEDIUM** and **LIGHT** ACFT able to comply with the climb restrictions;
- SIDs with designator **JULIETT** shall be used by all **HEAVY** ACFT northbound able to comply with the climb restrictions;
- SIDs with designator **GOLF** shall be used by all ACFT unable to comply with the climb restrictions in SIDs with designators **FOXTROT** or **JULIETT** and by all **HEAVY** ACFT west-, south- and southeastbound;

**EXCEPTION:** ACFT via BIBOS shall use SIDs with designators **FOXTROT** for **MEDIUM** or **LIGHT** ACFT and **GOLF** for **HEAVY** ACFT.

**b) Between 2200-0700LT:**

- All 3- and 4-engined jet ACFT, except Avroliner, BAe 146, FA50, FA90 and L29A (C140) via BIBOS, MARUN, SOBRA and TOBAK, shall use SIDs with designator **NOVEMBER**;
- Single- and twin-engined ACFT shall use SIDs according to paragraphs a) & c) respectively.
- c) SIDs with designator **PAPA** may be used by single and twin-engined propeller-driven ACFT and DASH 7 only.
- d) NON RNAV (enroute only) equipped ACFT shall use SIDs with designator **QUEBEC**.

**RWY 18:**

**NON RNAV** (enroute only) equipped ACFT shall use SIDs with designator **CHARLIE** and **QUEBEC** respectively.

**3.5. RWY OPERATIONS****3.5.1. HIGH INTENSITY RWY OPERATIONS (HIRO)**

Cockpit checks should be completed prior to line-up and any checks requiring completion on the RWY should be kept to a minimum.

ACFT ready for departure should be in a position to taxi directly from hold upon receiving take-off clearance from FRANKFURT Tower.

When using landing direction 07, the pilot shall advise FRANKFURT Tower on initial contact of the earliest possible take-off intersection.

EDDF/FRA  
FRANKFURT/MAINJEPPESSEN FRANKFURT/MAIN, GERMANY  
AIRPORT BRIEFING  
23 NOV 07 (10-1P9)**3. DEPARTURE****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.

**3.6.2. DATALINK DEPARTURE CLEARANCE (DCL)**

DFS (Deutsche Flugsicherung GmbH) is offering start-up and enroute clearances using Datalink. The procedures have been described in an AIC. Deviations from this, in special situations (e.g. snow), enroute clearance may be transmitted via Datalink in advance after receiving a RCD, while at the appropriate time, start-up approval will be granted on the frequency specified in the CLD. Pilots shall maintain listening watch on this frequency and shall refrain from making enquiries about the start-up approval.

The following time parameters apply:

$t_i$	25 min prior to EOBT for unregulated flights.
	30 min prior to CTOT for ATFM regulated flights.
$t_t$	11 min prior to EOBT for unregulated flights.
	16 min prior to CTOT for ATFM regulated flights.
$t_0$	1 min
$t_1$	5 min
$t_2$	1 min

**3.6.3. DEPARTURE MANAGEMENT SYSTEM****3.6.3.1 INTRODUCTION**

To optimize the outbound process from the parking position to the RWY, a computerized Departure Management System (DMAN) calculating a departure sequence and generating target times for Start-Up and Off-Block, has been established. The target times TSAT (Target Start-Up Approval Time) and TOAT (Target Off-Block Approval Time) are generated. TOAT is published in the APT information systems. Start-up is to be requested at TSAT, (5 minutes before TOAT), push-back or taxi is to be requested at TOAT. Pilots should adhere to the assigned target times.

For any inquiries contact the back office landline +49 69 690 DMAN1 (+49 69 690 36261).

The basis for the calculation of the target times is the COB (Confirmed Off-Block) which is reported by the airline or the assigned handling agent. It indicates the time when all ground handling services will be completed and the ACFT is ready to leave the parking position.

**3.6.3.2. PROCEDURES**

All IFR flights with ATC flight plan are taken into consideration.

**STANDARD PROCEDURES****Reporting of end of ground handling (COB)**

Input and update of COB

All airlines or assigned handling agents are required to deliver a COB in time - but no later than 60 minutes prior to the completion of ground handling to the Traffic Data Center using the described ways to report. Any deviation from an already published COB must immediately be reported after having become known. This must be done continuously until the actual off-block. Changes of the COB are continuously possible, the COB must be indicated in the form of a precise minute.

**Responsibility for the COB**

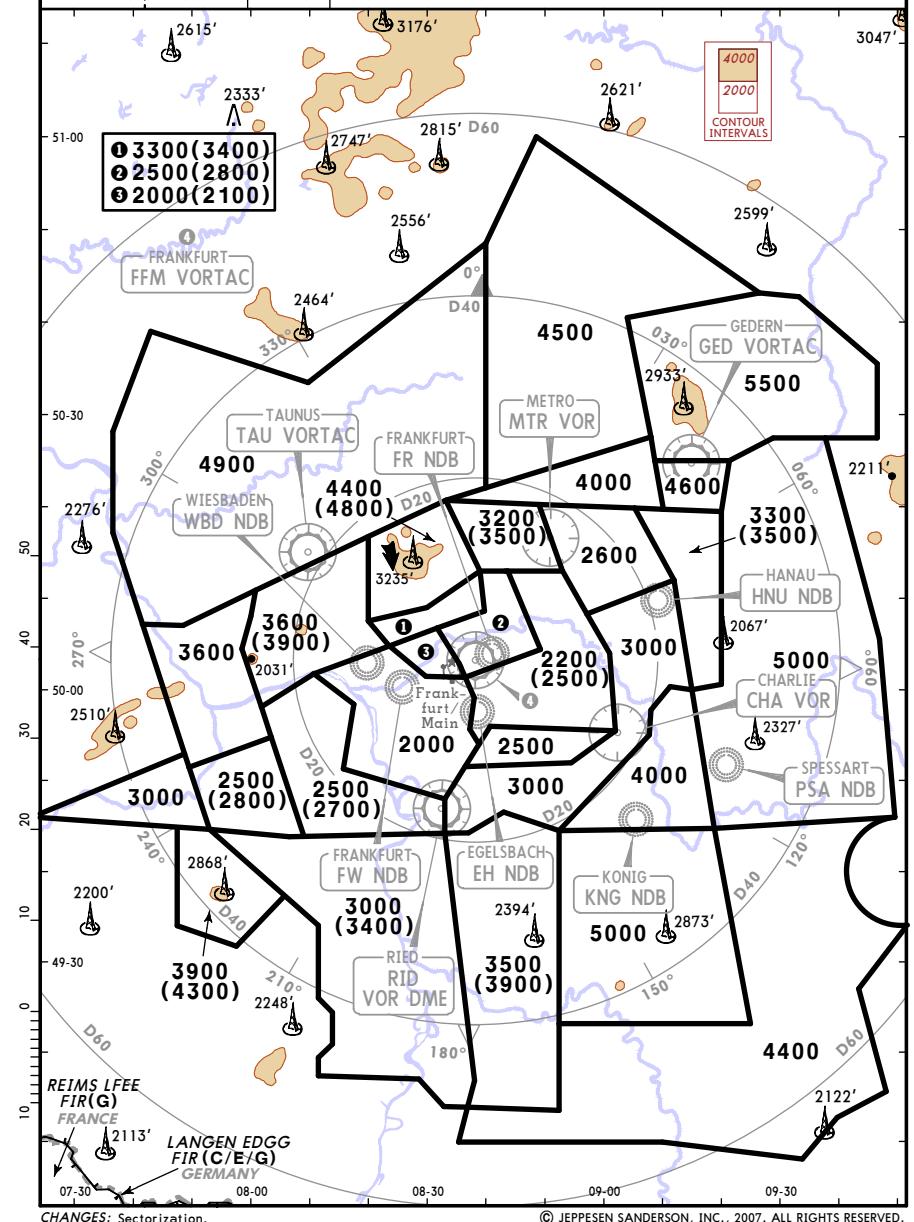
The responsibility for entering and updating the COB is in the hands of the airline, the assigned handling agent, or the pilot-in-command for all flights without handling agent.

**EDDF/FRA**  
FRANKFURT/MAIN

**JEPPESENFRANKFURT/MAIN, GERMANY**  
MAY 07 (10-1R) **RADAR MINIMUM ALTITUDES**

LANGEN	Radar (APP)
ARRIVAL	DEPARTURE
*119.02	*120.15
North	*136.12
120.8	*126.55
South	
*125.35	

Alt Set: hPa (IN on request)  
Trans level: By ATC Trans alt: 5000'  
The MRVA (Minimum Radar Vectoring Altitude) is the lowest altitude which may be used for radar vectors for IFR flights taking into account the minimum safe height (1000' above the highest obstacle within a radius of 8 km) and airspace structure (lower limit of the controlled airspace plus a buffer of 500'). Below the MRVA, IFR flights will normally be cleared on published IFR procedures only.  
Altitudes in brackets apply for the period from AIRAC date in November until AIRAC date in March in order to meet required obstacle clearance at cold temperatures.

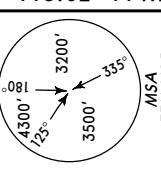


**EDDF/FRA**  
**FRANKFURT/MA**

**JEPPESEN FRANKFURT/MAIN, GERMANY**

ATIS  
\*118.02 114.2

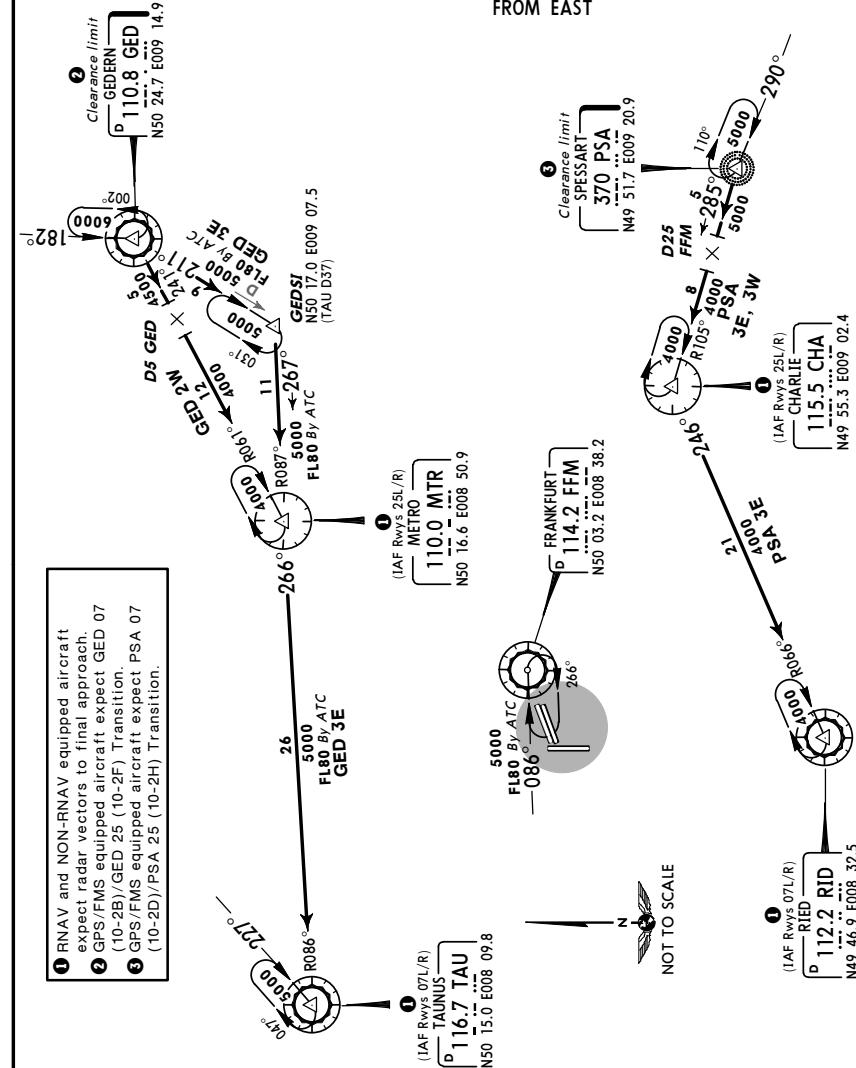
Alt Set: hPa (IN on request)  
Trans level: By ATC Trans alt: 5000



GEDERN THREE ECHO (GED 3E)  
SPESSART THREE ECHO (PSA 3E)  
RWYS 07L/R ARRIVALS

GEDERN TWO WHISKEY (GED 2W)  
SPESSART THREE WHISKEY (PSA 3W)  
RWYS 25L/R ARRIVALS

FROM EAST

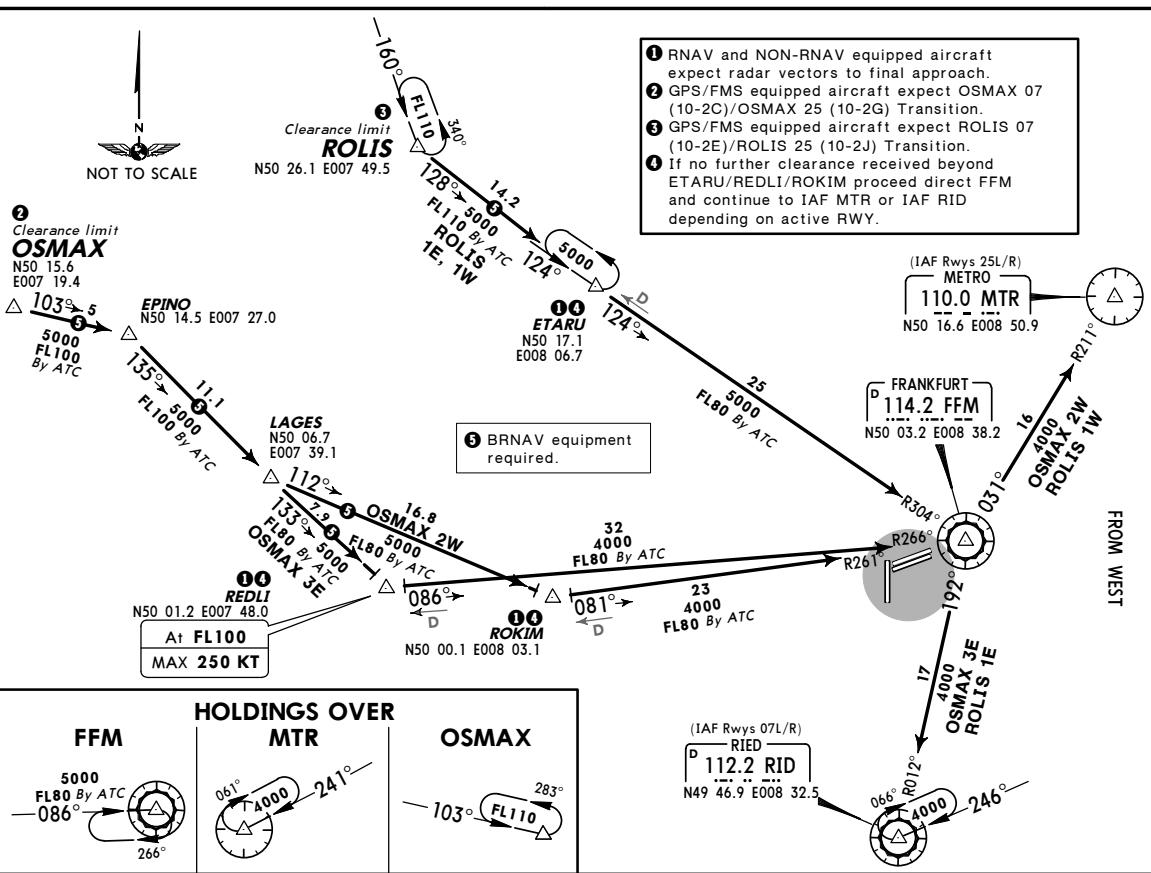


**EDDF / FRA**  
**FRANKFURT / MAIN**

**NJEPPESEN FRAN**  
17 AUG 07 10-2A Eff 30 Aug

MAN  
STAR

**\*118.02** ATIS  
**114.2** Alt Set: mPa (IN on request)  
**364'** Trans level: By ATC      Trans alt: 5000'

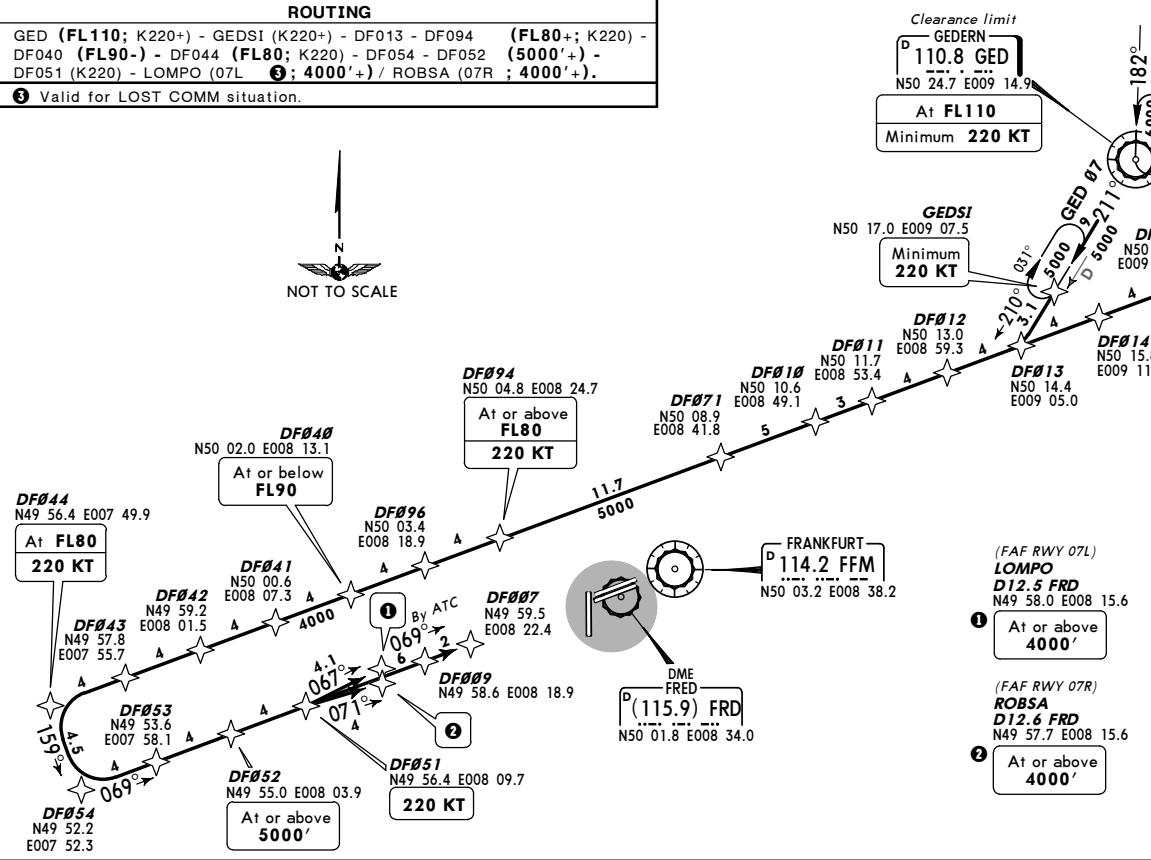


**EDDF/FRA**  
**FRANKFURT/MAIN**

Alt Set: hPa (IN on request) Transition  
**1.** On downwind transition expect **2.** Speed restrictions on Transition mandatory, unless cancelled by ATC

level: By ATC Trans alt: 5000  
ors to final.  
en without profile) are alway

10' 5.7 GED 07



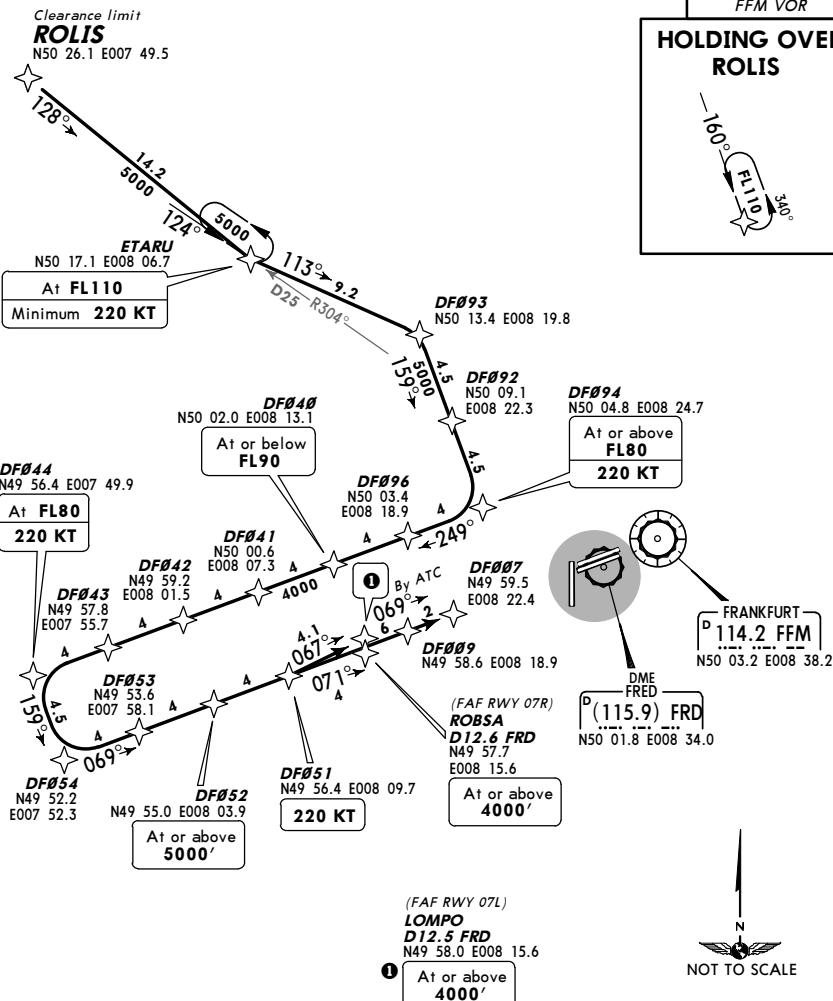


EDDF/FRA  
FRANKFURT/MAINJEPPESEN FRANKFURT/MAIN, GERMANY  
RNAV TRANSITION

17 AUG 07 10-2E Eff 30 Aug

\*ATIS  
118.02  
114.2Apt Elev  
364'Alt Set: hPa (IN on request) Trans level: By ATC Trans alt: 5000'  
1. On downwind transition expect vectors to final.  
2. Speed restrictions on Transition (even without profile) are always mandatory, unless cancelled by ATC.ROLIS Ø7 [ROLØ7]  
RWYS 07L/R RNAV TRANSITION  
GPS- OR FMS-EQUIPPED AIRCRAFT

USE OF RNAV TRANSITION ONLY WHEN CLEARED BY ATC

**ROUTING**

ROLIS - ETARU (FL110; K220+) - DF093 - DF094 (FL80+; K220) - DF040 (FL90-) - DF044 (FL80; K220) - DF054 - DF052 (5000'+) - DF051 (K220) - LOMPO (07L 2; 4000'+)/ ROBSA (07R ; 4000'+).

② Valid for LOST COMM situation.

EDDF/FRA  
FRANKFURT/MAINJEPPESEN FRANKFURT/MAIN, GERMANY  
RNAV TRANSITION

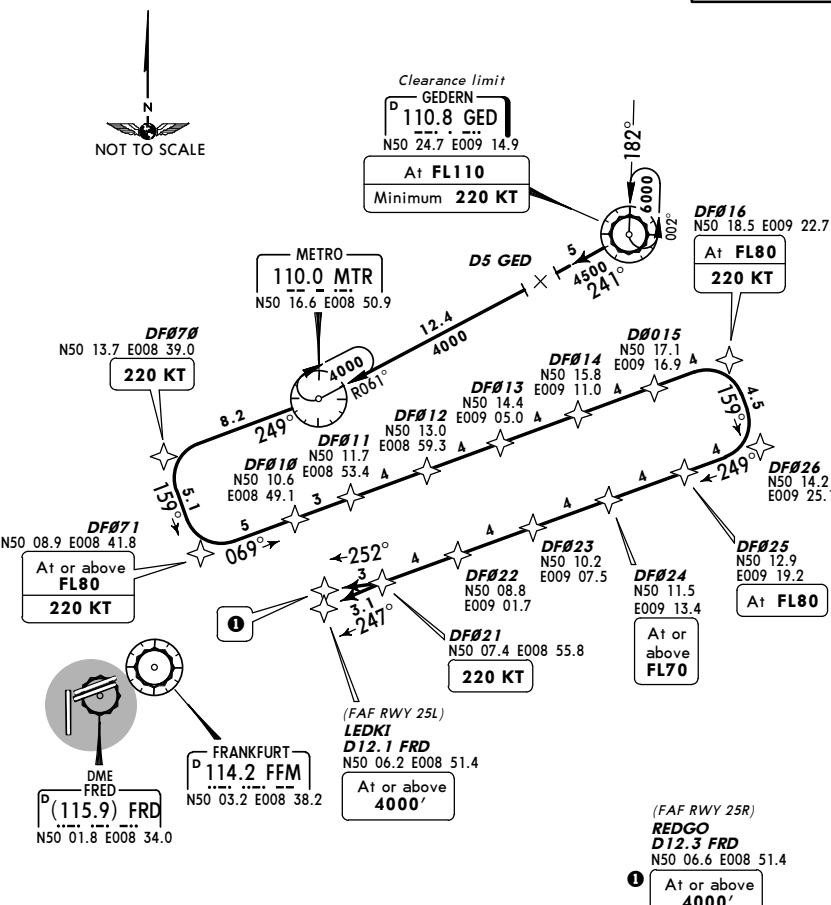
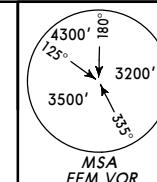
17 AUG 07 10-2F Eff 30 Aug

\*ATIS  
118.02  
114.2Alt Set: hPa (IN on request) Trans level: By ATC Trans alt: 5000'  
1. On downwind transition expect vectors to final.  
2. Speed restrictions on Transition (even without profile) are always mandatory, unless cancelled by ATC.

## GED 25

RWYS 25L/R RNAV TRANSITION  
GPS- OR FMS-EQUIPPED AIRCRAFT

USE OF RNAV TRANSITION ONLY WHEN CLEARED BY ATC



**EDDF/FRA**  
**FRANKFURT/MAI**

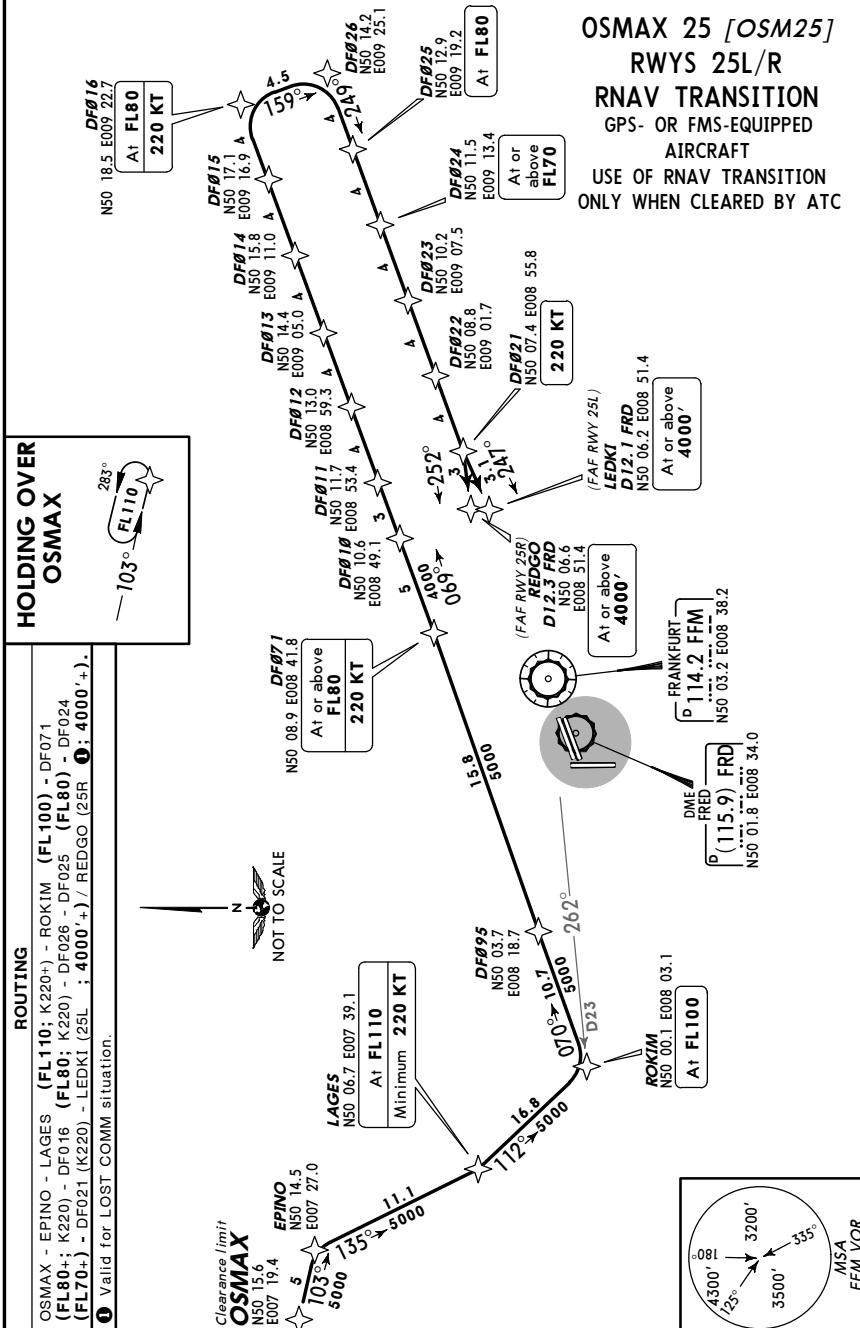
**JEPPESEN FRANKFURT/MAIN, GERMANY**  
JUG 07 10-2G Eff 30 Aug RNAV TRANSITION

ATIS  
\*118.02  
114 2 | Apt Ele  
364'

17 AUG 07 10-2G Eff 30 Aug

## RNAV TRANSITION

**ATIS** **\*118.02** **Apt Elev** **364'** Alt Set: hPa (IN on request) Trans level: By ATC Trans alt: 500  
1. On downwind transition expect vectors to final.  
2. Speed restrictions on Transition (even without profile) are always mandatory, unless cancelled by ATC.



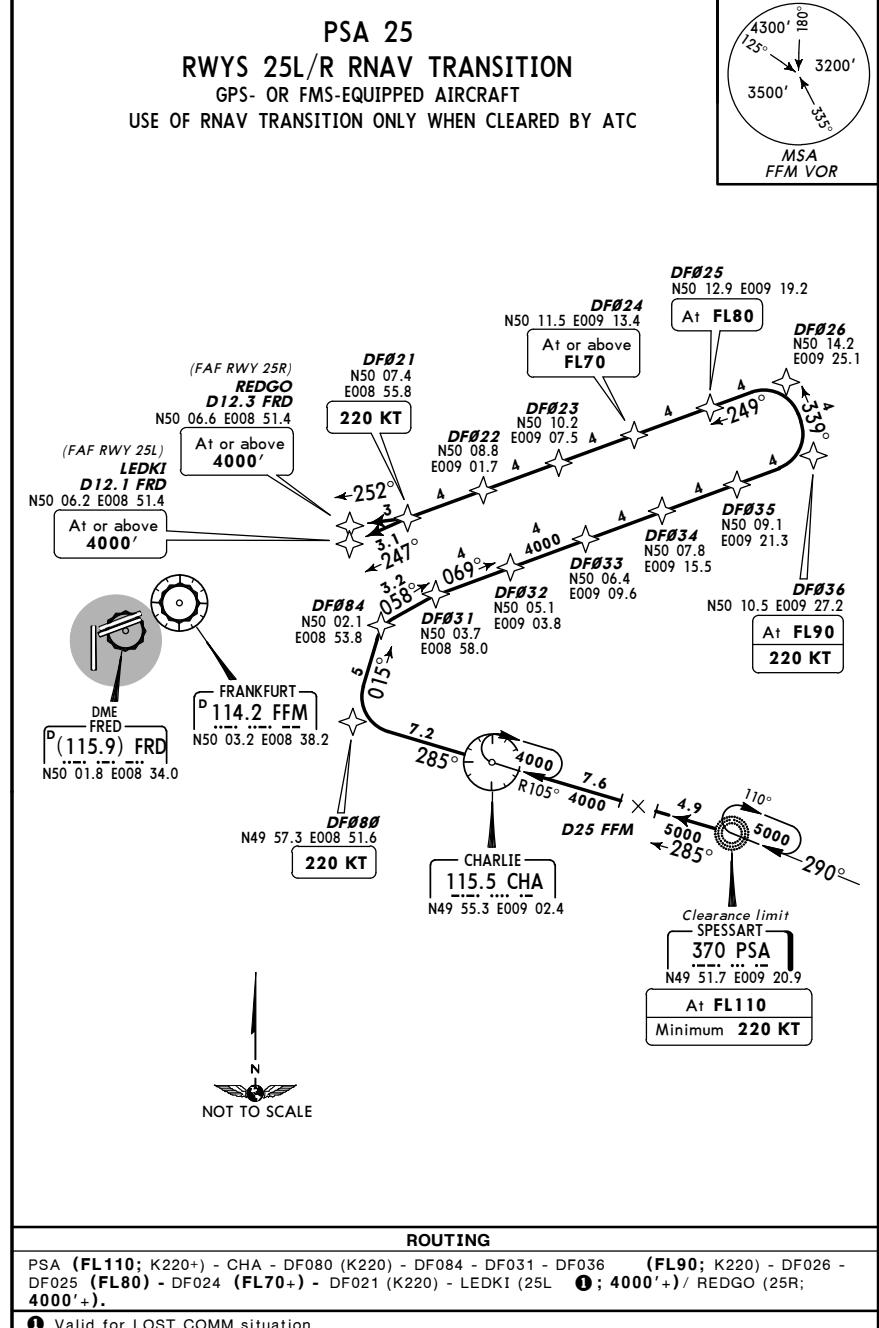
EDDF/FRA  
FRANKFURT/

**JEPPESEN FRANKFURT/MAIN, GERMANY**  
7 AUG 07 **10-2H** Eff 30 Aug **RNAV TRANSITION**

\*ATIS  
118.02  
114.2

17 AUG 07 (10-2H) Eff 30 Aug

Trans alt: 5000'  
ofile) are always





EDDF/FRA  
FRANKFURT/MAIN

## JEPPESSEN FRANKFURT/MAIN, GERMANY

12 OCT 07 10-3A Eff 25 Oct

RNAV SID

RNAV SID DESIGNATION	REFER TO CHART
AMUGI 1D, 1E	10-3Q1
ANEKI 6D, 8E	10-3Q2
ANEKI 5F, 5G, 4L	10-3Q3
BIBOS 1D, 7E	10-3Q4
BIBOS 6F, 6G, 6N	10-3Q5
BIBOS 6L, 6S	10-3Q6
BIBOS 7T	10-3Q7
DKB 6D, 4E, 3F, 4G	10-3Q8
DKB 2L, 5S	10-3S
MARUN 5D, 2E	10-3T
MARUN 1F, 1J	10-3T1
MARUN 1N	10-3T2
MARUN 1S	10-3T3
MARUN 1T	10-3T4
NEKOM 2D, 2E	10-3T5
NEKOM 1F, 1G, 1L	10-3T6
NOMBO 5D, 4E, 3F, 4G	10-3T7
NOMBO 3L, 4S	10-3T8
RATIM 2D, 2E, 2F, 2G	10-3U
RATIM 2S	10-3V
ROTEM 3F, 2G, 1L, 4S	10-3V1
SOBRA 2D, 2E	10-3V2
SOBRA 1F, 1G, 2N, 1P	10-3V3
SOBRA 2L, 1S, 2U	10-3V4
SULUS 3D, 2E, 3F, 4G	10-3V5
SULUS 4L, 4S	10-3V6
TOBAK 5D, 5E	10-3V7
TOBAK 2F, 2J	10-3V8
TOBAK 3N	10-3W
TOBAK 2S, 3T	10-3X
ULKIG 3U	10-3X1

EDDF/FRA  
FRANKFURT/MAIN

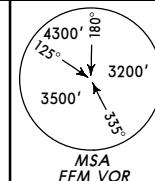
## JEPPESSEN FRANKFURT/MAIN, GERMANY

2 FEB 07 10-3B Eff 15 Feb

SID

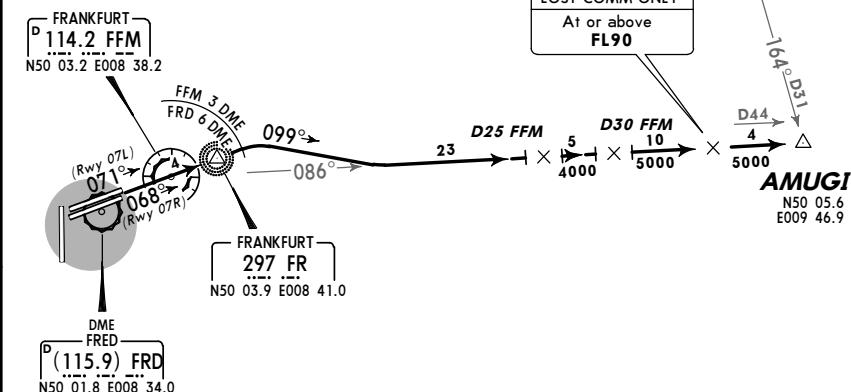
LANGEN Radar 120.15	Apt Elev 364'	Trans level: By ATC Trans alt: 5000' 1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory. 3. For departure designation refer to 10-1P pages.
------------------------	------------------	--

AMUGI ONE DELTA (AMUGI 1D)  
AMUGI ONE ECHO (AMUGI 1E)  
RWYS 07L/R DEPARTURES  
ONLY FOR FLIGHTS TERMINATING WITHIN EDDN AREA



**SPEED RESTRICTION**  
MAX 250 KT below FL100  
or as by ATC.  
Not applicable within airspace C.

FULDA  
P 112.1 FUL  
N50 35.5 E009 34.3



Initial climb clearance 4000'

**ROUTING**

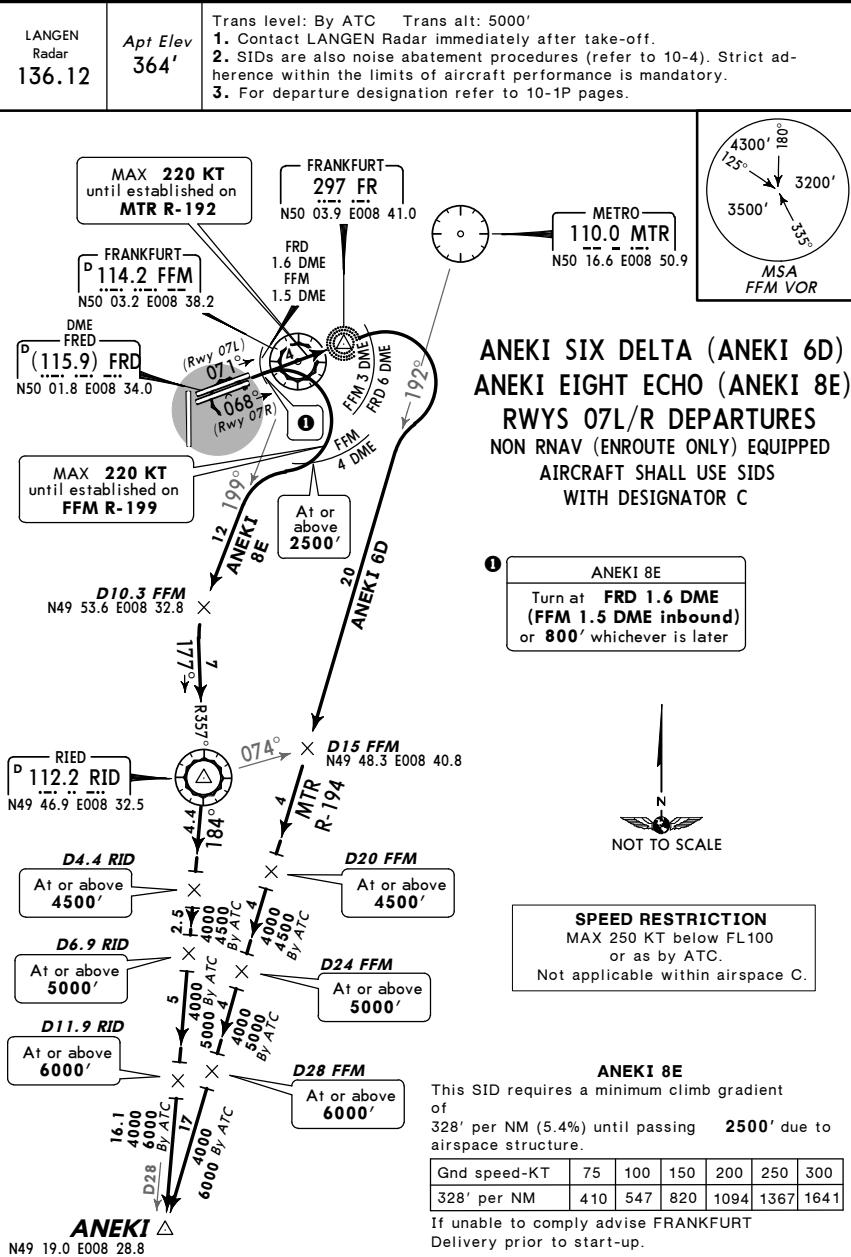
Climb on runway track to 800', via FR to FRD 6 DME (FFM 3 DME outbound), turn RIGHT, 099° track, intercept FFM R-086 to AMUGI.

EDDF/FRA  
FRANKFURT/MAIN

## JEPPESEN FRANKFURT/MAIN, GERMANY

2 FEB 07 10-3C Eff 15 Feb

SID

EDDF/FRA  
FRANKFURT/MAIN

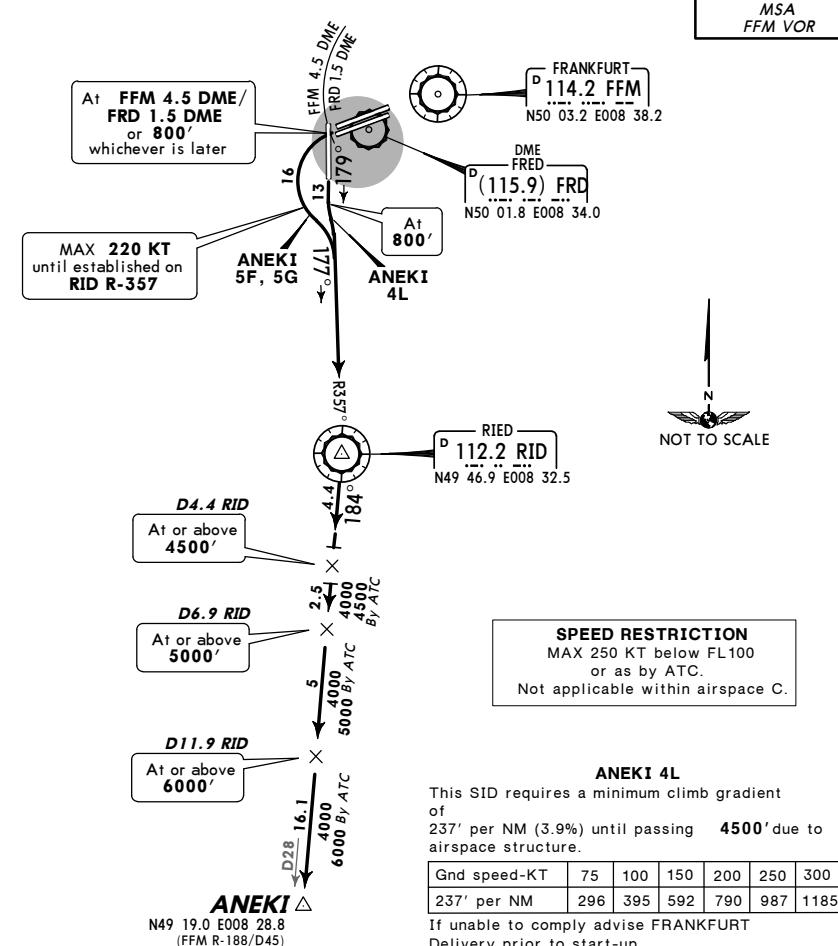
## JEPPESEN FRANKFURT/MAIN, GERMANY

12 OCT 07 10-3D Eff 25 Oct

SID

\*LANGEN Radar 136.12 Apt Elev 364' Trans level: By ATC Trans alt: 5000'  
1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory. 3. RWY 18: EXPECT close-in obstacles. 4. RWY 18: Wind shears and increased turbulences must be expected when winds heavy. 5. For departure designation refer to 10-1P pages.

**ANEKI FIVE FOXTROT (ANEKI 5F)**  
**ANEKI FIVE GOLF (ANEKI 5G)**  
**ANEKI FOUR LIMA (ANEKI 4L)**  
**RWYS 25L/R, 18 DEPARTURES**



**ANEKI 5F, 5G: Initial climb clearance 5000'**  
**ANEKI 4L: Initial climb clearance 4000'**

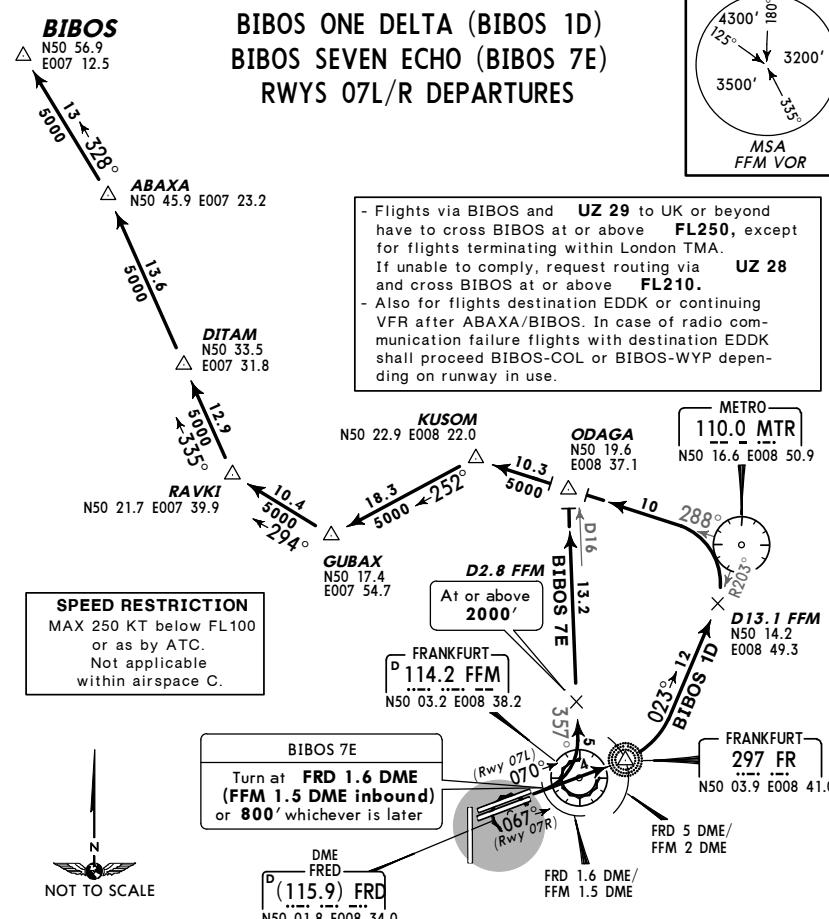
ROUTING	SID	RWY
Climb on runway track to FFM 4.5 DME/FRD 1.5 DME or 800', which-ever is later, turn LEFT, intercept RID R-357 inbound to RID, RID R-184 to ANEKI.	ANEKI 5F, 5G	25L/R
Climb on runway track to 800', intercept RID R-357 inbound to RID, turn RIGHT, RID R-184 to ANEKI.	ANEKI 4L	18

EDDF/FRA  
FRANKFURT/MAIN**JEPPESEN** FRANKFURT/MAIN, GERMANY

12 OCT 07 [10-3E] Eff 25 Oct

SID

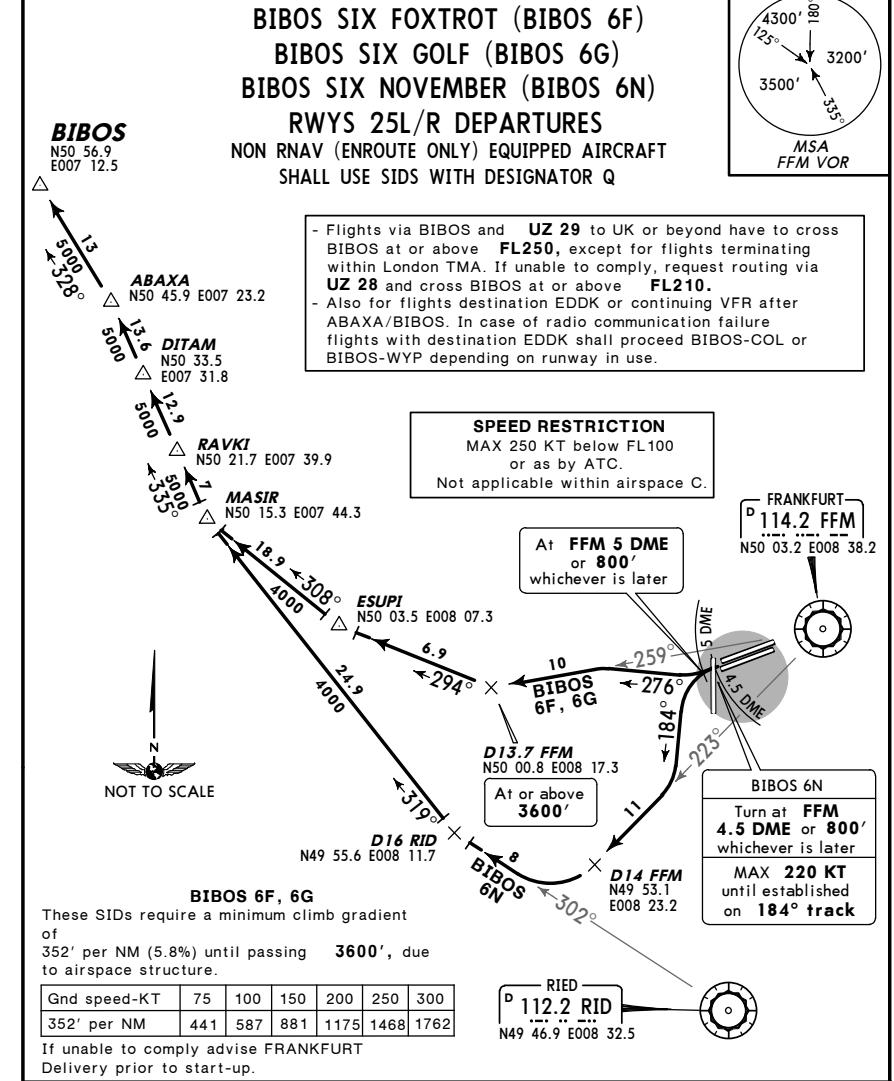
*LANGEN Radar 120.15	Apt Elev 364'	Trans level: By ATC Trans alt: 5000' 1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory. 3. For departure designation refer to 10-1P pages.
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EDDF/FRA  
FRANKFURT/MAIN**JEPPESEN** FRANKFURT/MAIN, GERMANY

2 FEB 07 [10-3F] Eff 15 Feb

SID

LANGEN Radar 120.15	Apt Elev 364'	Trans level: By ATC Trans alt: 5000' 1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory. 3. For departure designation refer to 10-1P pages.
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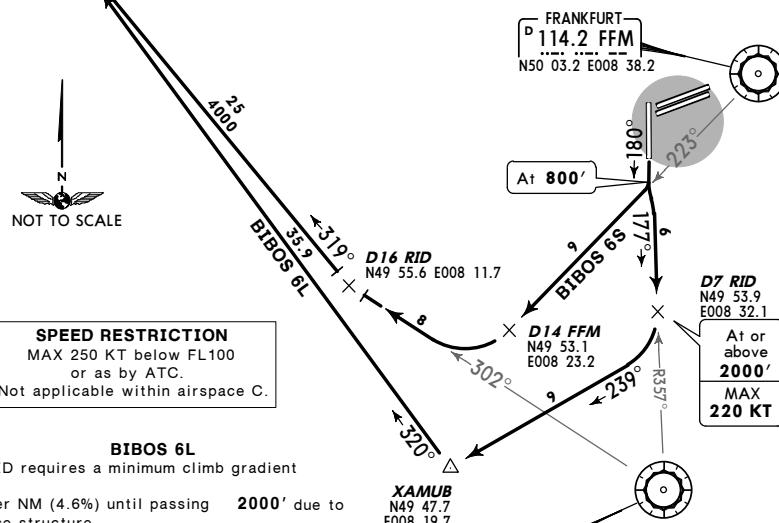


EDDF/FRA  
FRANKFURT/MAIN**JEPPESEN FRANKFURT/MAIN, GERMANY**  
2 FEB 07 [10-3G] Eff 15 Feb SID

LANGEN Radar 120.15	Apt Elev 364'	Trans level: By ATC Trans alt: 5000' 1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory. 3. EXPECT close-in obstacles. 4. Wind shears and increased turbulences must be expected when winds heavy. 5. For departure designation refer to 10-1P pages.
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**BIBOS SIX LIMA (BIBOS 6L)****BIBOS SIX SIERRA (BIBOS 6S)**  
BY ATC**RWY 18 DEPARTURES**NON RNAV (ENROUTE ONLY) EQUIPPED AIRCRAFT  
SHALL USE SIDS WITH DESIGNATOR Z  
WILL ONLY BE ASSIGNED WHEN LANDING DIRECTION IS 25

- Flights via BIBOS and UZ 29 to UK or beyond have to cross BIBOS at or above FL250, except for flights terminating within London TMA. If unable to comply, request routing via UZ 28
- Also for flights destination EDDK or continuing VFR after ABAXA/BIBOS. In case of radio communication failure flights with destination EDDK shall proceed BIBOS-COL or BIBOS-WYP depending on runway in use.



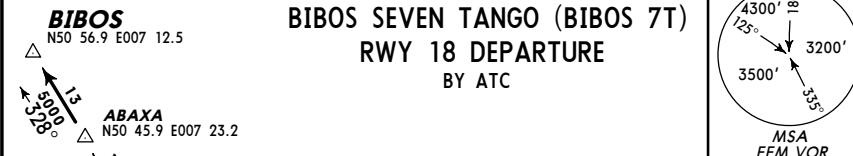
After D7 RID ①/D16 RID ② BRNAV equipment necessary.

CHANGES: Chart reindexed.

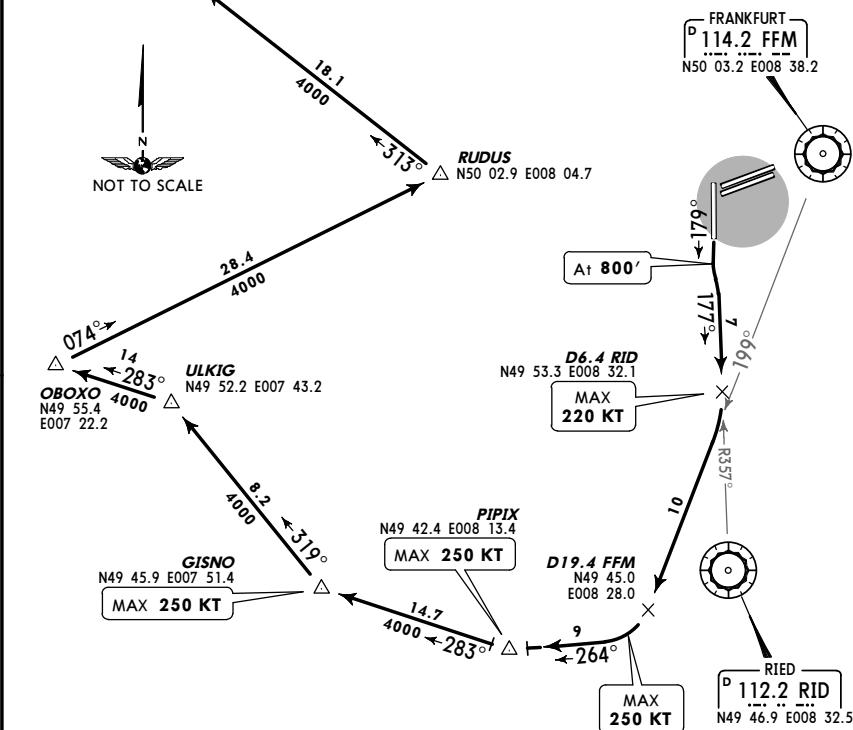
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EDDF/FRA  
FRANKFURT/MAIN**JEPPESEN FRANKFURT/MAIN, GERMANY**  
12 OCT 07 [10-3H] Eff 25 Oct SID

*LANGEN Radar 136.12	Apt Elev 364'	Trans level: By ATC Trans alt: 5000' 1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory. 3. EXPECT close-in obstacles. 4. Wind shears and increased turbulences must be expected when winds heavy. 5. For departure designation refer to 10-1P pages.
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**BIBOS**  
N50 56.9 E007 12.5**BIBOS SEVEN TANGO (BIBOS 7T)**  
**RWY 18 DEPARTURE**  
BY ATC

**SPEED RESTRICTION**  
MAX 250 KT below FL100  
or as by ATC.  
Not applicable within airspace C.



CHANGES: None.

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FRANKFURT/MAIN

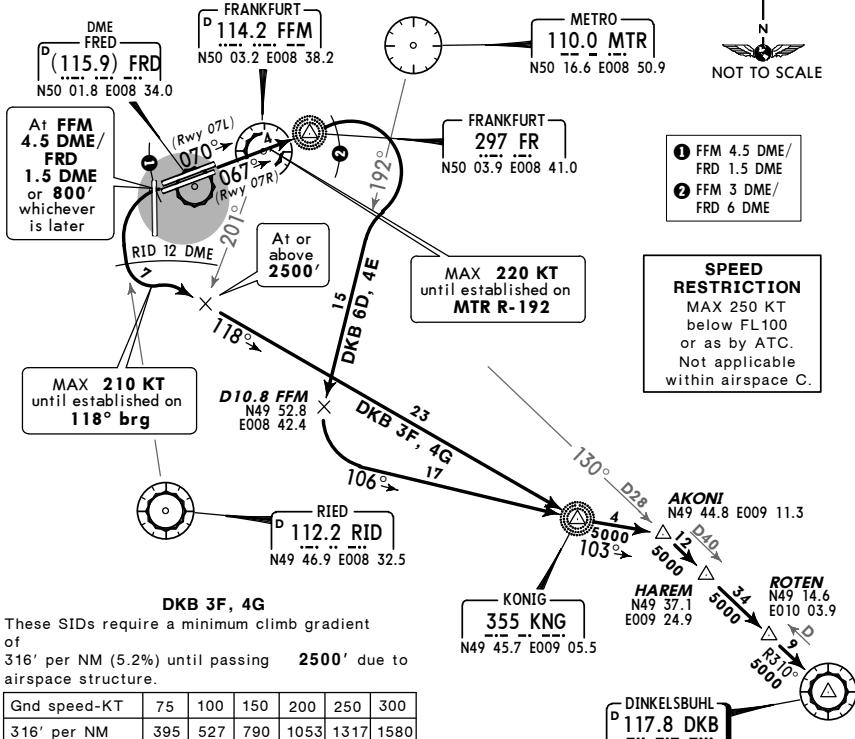
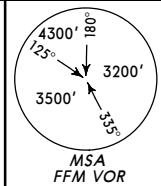
## JEPPESEN FRANKFURT/MAIN, GERMANY

12 OCT 07 [10-3J] Eff 25 Oct

SID

*LANGEN Radar 136.12	Apt Elev 364'	Trans level: By ATC Trans alt: 5000' 1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory. 3. For departure designation refer to 10-1P pages.
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DINKELSBUHL SIX DELTA (DKB 6D)  
 DINKELSBUHL FOUR ECHO (DKB 4E)  
 DINKELSBUHL THREE FOXTROT (DKB 3F)  
 DINKELSBUHL FOUR GOLF (DKB 4G)  
 RWYS 07L/R, 25L/R DEPARTURES  
 ONLY FOR FLIGHTS TERMINATING WITHIN EDMM FIR



SID	RWY	ROUTING
DKB 6D, 4E	07L/R	Climb on runway track to 800', via FR to FRD 6 DME (FFM 3 DME out-bound), turn RIGHT, intercept MTR R-192, at D10.8 FFM turn LEFT, intercept 106° bearing to KNG, turn LEFT, 103° bearing to AKONI, turn RIGHT, intercept FFM R-130/DKB R-310 inbound to DKB.
DKB 3F, 4G	25L/R	Climb on runway track to FFM 4.5 DME/FRD 1.5 DME or 800', whichever is later, turn LEFT towards RID, at RID 12 DME turn LEFT, intercept 118° bearing to KNG, turn LEFT, 103° bearing to AKONI, turn RIGHT, intercept FFM R-130/DKB R-310 inbound to DKB.

EDDF/FRA  
FRANKFURT/MAIN

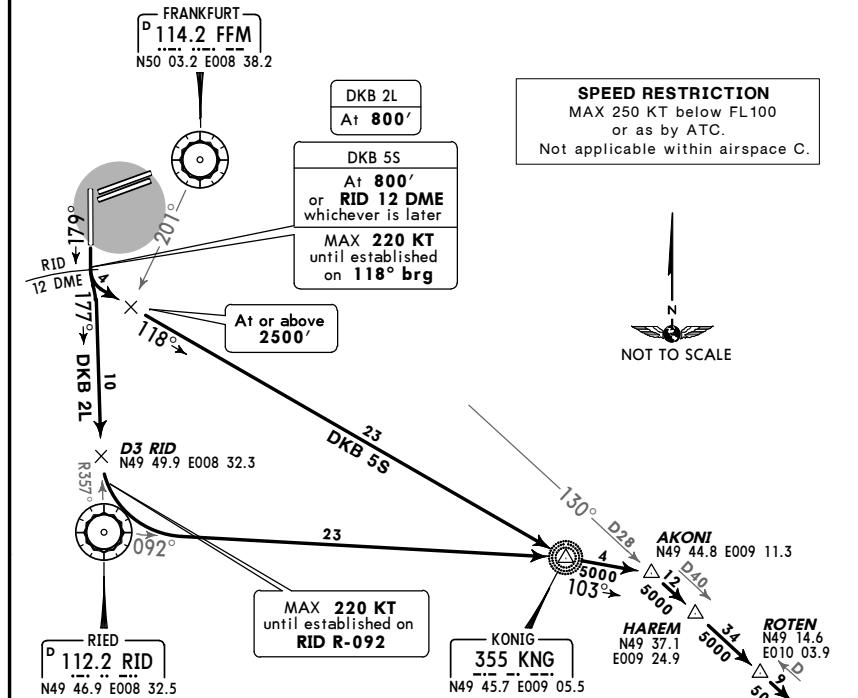
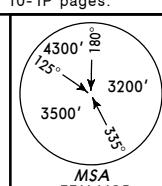
## JEPPESEN FRANKFURT/MAIN, GERMANY

12 OCT 07 [10-3J] Eff 25 Oct

SID

*LANGEN Radar 136.12	Apt Elev 364'	Trans level: By ATC Trans alt: 5000' 1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory. 3. EXPECT close-in obstacles. 4. Wind shears and increased turbulences must be expected when winds heavy. 5. For departure designation refer to 10-1P pages.
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DINKELSBUHL TWO LIMA (DKB 2L)  
 DINKELSBUHL FIVE SIERRA (DKB 5S)  
 RWY 18 DEPARTURES  
 ONLY FOR FLIGHTS TERMINATING WITHIN EDMM FIR



SID	ROUTING
DKB 2L	Climb on runway track to 800', intercept RID R-092 inbound to D3 RID, turn LEFT, intercept RID 12 DME to KNG, turn RIGHT, 103° bearing to AKONI, turn RIGHT, intercept FFM R-130/DKB R-310 inbound to DKB.
DKB 5S	Climb on runway track to 800' or RID 12 DME, whichever is later, turn LEFT, intercept 118° bearing to KNG, turn LEFT, 103° bearing to AKONI, turn RIGHT, intercept FFM R-130/DKB R-310 inbound to DKB.

EDDF/FRA  
FRANKFURT/MAIN

## JEPPESSEN FRANKFURT/MAIN, GERMANY

12 OCT 07 (10-3J2) Eff 25 Oct

SID

\*LANGEN  
Radar  
136.12

- Apt Elev 364'  
Trans level: By ATC Trans alt: 5000'  
1. Contact LANGEN Radar immediately after take-off.  
2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory.  
3. For departure designation refer to 10-1P pages.

## KOENIG FOUR CHARLIE (KNG 4C)

## RWYS 07L/R DEPARTURE

NON RNAV (ENROUTE ONLY) EQUIPPED AIRCRAFT ONLY

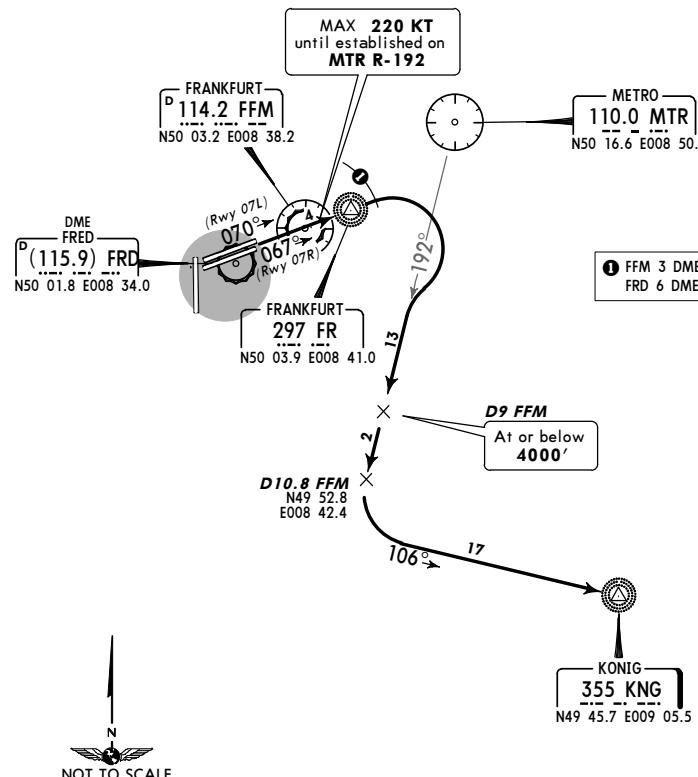
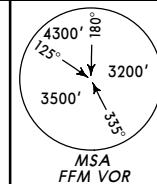
DELAY HAS TO BE EXPECTED

FURTHER ROUTING TO DESTINATION SHALL BE BASED ON VOR AND HAS TO BE COORDINATED WITH ATC PRIOR TO START-UP

NO RNAV OVERLAY EXISTING

MAX FL90 IN GERMAN AIRSPACE

SPECIAL PERMISSION NEEDED PRIOR TO FLIGHT

**SPEED: MAX 250 KT IN GERMAN AIRSPACE**

Initial climb clearance 4000'

## ROUTING

Climb on runway track to 800', via FR to FRD 6 DME (FFM 3 DME outbound), turn RIGHT, intercept MTR R-192, at D10.8 FFM turn LEFT, intercept 106° bearing to KNG.

CHANGES: None.

EDDF/FRA  
FRANKFURT/MAIN

## JEPPESSEN FRANKFURT/MAIN, GERMANY

12 OCT 07 (10-3J3) Eff 25 Oct

SID

\*LANGEN  
Radar  
120.15

- Apt Elev 364'  
Trans level: By ATC Trans alt: 5000'  
1. Contact LANGEN Radar immediately after take-off.  
2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory.  
3. For departure designation refer to 10-1P pages.

## MARUN

N50 49.3 E008 40.3

APROX  
ALIDI  
N50 43.3 E008 39.5  
TOBAK  
N50 34.3 E008 47.1

**SPEED RESTRICTION**  
MAX 250 KT below FL100  
or as by ATC.  
Not applicable within airspace C.

MARUN 2E  
N50 19.6 E008 37.1  
ODAGA  
N50 26.7 E008 37.1  
TESGA  
N50 43.3 E008 39.5  
METRO  
N50 16.6 E008 50.9

D2.8 FFM  
At or above 2000'  
FRD 5 DME/  
FFM 2 DME  
FRD 1.6 DME/  
FFM 1.5 DME

MARUN 2E  
Turn at  
FRD 1.6 DME  
(FFM 1.5 DME  
inbound)  
or 800'  
whichever is later

DME  
FRED  
(115.9) FRD  
N50 01.8 E008 34.0

NOT TO SCALE

## MARUN 2E

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

Gnd speed-KT	75	100	150	200	250	300
383' per NM	479	638	957	1276	1595	1914

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

Initial climb clearance 5000'

## ROUTING

## SID

## MARUN 5D

Climb on runway track to 800', to FR (FRD 5 DME/FFM 2 DME outbound), turn LEFT immediately, intercept MTR R-203 inbound to MTR ①, turn LEFT, MTR R-351 to TOBAK, turn LEFT, 343° track via APROX to MARUN.

## MARUN 2E

Climb on runway track to FRD 1.6 DME (FFM 1.5 DME inbound) or 800', whichever is later, turn LEFT, intercept FFM R-357 to ODAGA ②, turn RIGHT, 359° track to TESGA, turn RIGHT, 004° track via ALIDI to MARUN.

## After MTR ① /ODAGA ②

BRNAV

equipment necessary.

CHANGES: SID MARUN 4D renumbered 5D &amp; revised.

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EDDF/FRA  
FRANKFURT/MAIN**JEPPESEN** FRANKFURT/MAIN, GERMANY

8 JUN 07 (10-3L1)

SID

\*LANGEN  
Radar  
120.15Apt Elev  
364'

- Trans level: By ATC Trans alt: 5000'  
 1. Contact LANGEN Radar immediately after take-off.  
 2. SID's are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory.  
 3. For departure designation refer to 10-1P pages.

**METRO TWO CHARLIE (MTR 2C)****RWYS 07L/R DEPARTURE**

NON RNAV (ENROUTE ONLY) EQUIPPED AIRCRAFT ONLY

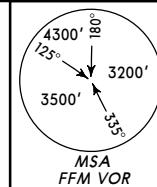
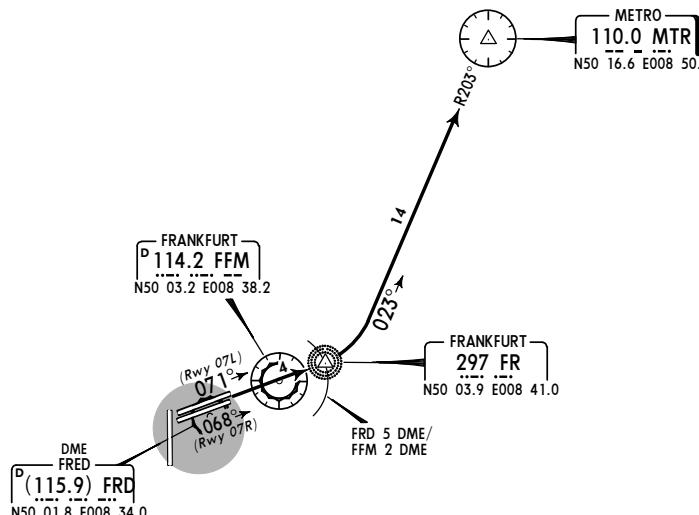
DELAY HAS TO BE EXPECTED

FURTHER ROUTING TO DESTINATION SHALL BE BASED ON VOR AND HAS TO BE COORDINATED WITH ATC PRIOR TO START-UP

NO RNAV OVERLAY EXISTING

MAX FL90 IN GERMAN AIRSPACE

SPECIAL PERMISSION NEEDED PRIOR TO FLIGHT

**SPEED: MAX 250 KT IN GERMAN AIRSPACE**METRO  
110.0 MTR  
N50 16.6 E008 50.9

NOT TO SCALE

Initial climb clearance 5000'

**ROUTING**

Climb on runway track to 800', to FR (FRD 5 DME/FFM 2 DME outbound), turn LEFT immediately, intercept MTR R-203 inbound to MTR.

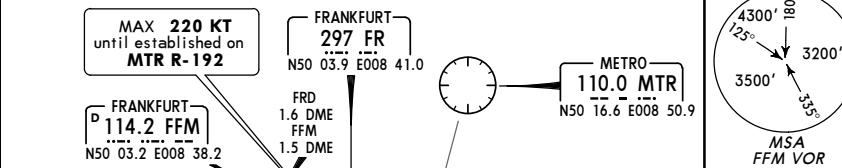
EDDF/FRA  
FRANKFURT/MAIN**JEPPESEN** FRANKFURT/MAIN, GERMANY

8 JUN 07 (10-3L2)

SID

\*LANGEN  
Radar  
136.12Apt Elev  
364'

- Trans level: By ATC Trans alt: 5000'  
 1. Contact LANGEN Radar immediately after take-off.  
 2. SID's are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory.  
 3. For departure designation refer to 10-1P pages.



MAX 220 KT until established on MTR R-192

FRANKFURT 297 FR  
N50 03.9 E008 41.0  
FRD 1.6 DME  
FFM 1.5 DMEFRANKFURT 114.2 FFM  
N50 03.2 E008 38.2  
DME FRED  
(115.9) FRD  
N50 01.8 E008 34.0

MAX 220 KT until established on FFM R-199

At or above 2500'

D 10.3 FFM  
N49 53.6 E008 32.8NEKOM 2E  
Turn at FRD 1.6 DME (FFM 1.5 DME inbound) or 800' whichever is laterD 15 FFM  
N49 48.3 E008 40.8D 112.2 RID  
N49 46.9 E008 32.5D 4.4 RID  
At or above 4500'D 6.9 RID  
At or above 5000'D 11.9 RID  
At or above 6000'D 20 FFM  
At or above 4500'D 24 FFM  
At or above 5000'D 28 FFM  
At or above 6000'NEKOM  
N49 20.2 E008 44.0SPEED RESTRICTION  
MAX 250 KT below FL100 or as by ATC.  
Not applicable within airspace C.NEKOM 2E  
Turn at FRD 1.6 DME (FFM 1.5 DME inbound) or 800' whichever is laterNEKOM 2E  
This SID requires a minimum climb gradient of 328' per NM (5.4%) until passing 2500' due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
328' per NM	410	547	820	1094	1367	1641

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

Initial climb clearance 4000'

**ROUTING**

SID	ROUTING
NEKOM 2D	Climb on runway track to 800', via FR to FRD 6 DME (FFM 3 DME outbound), turn RIGHT, intercept MTR R-192 to D15 FFM, turn LEFT, intercept FFM R-174 to NEKOM.
NEKOM 2E	Climb on runway track to FRD 1.6 DME (FFM 1.5 DME inbound) or 800', whichever is later, turn RIGHT, intercept FFM R-199, at D10.3 FFM turn LEFT, intercept RID R-357 inbound to RID, turn LEFT, RID R-163 to NEKOM.

EDDF/FRA  
FRANKFURT/MAIN

## JEPPESSEN FRANKFURT/MAIN, GERMANY

12 OCT 07 10-3L3 Eff 25 Oct

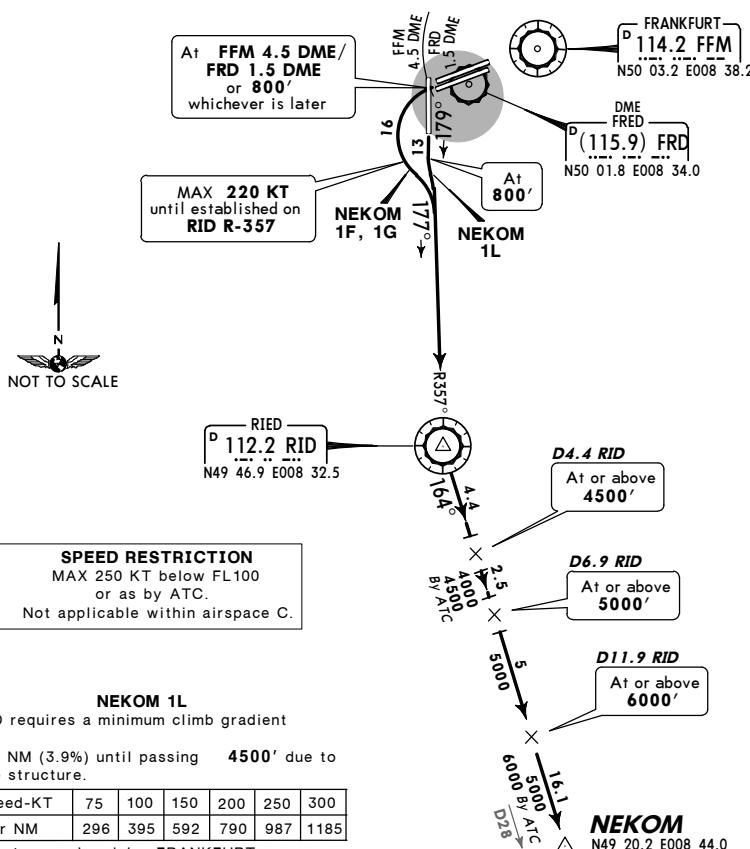
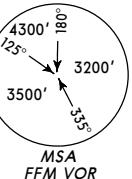
SID

\*LANGEN  
Radar  
136.12Apt Elev  
364'

Trans level: By ATC Trans alt: 5000'  
 1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory. 3. RWY 18: EXPECT close-in obstacles. 4. RWY 18: Wind shears and increased turbulences must be expected when winds heavy. 5. For departure designation refer to 10-1P pages.

NEKOM ONE FOXTROT (NEKOM 1F)  
 NEKOM ONE GOLF (NEKOM 1G)  
 NEKOM ONE LIMA (NEKOM 1L)  
 RWYS 25L/R, 18 DEPARTURES

ONLY FOR FLIGHTS TERMINATING WITHIN EDDS AREA AND  
 DESTINATION LSZH, LSZR & EDNY VIA AIRWAY N 850 AT OR BELOW FL90



**NEKOM 1L**  
 This SID requires a minimum climb gradient of 237' per NM (3.9%) until passing 4500' due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
237' per NM	296	395	592	790	987	1185

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

**NEKOM 1F, 1G:** Initial climb clearance 5000'  
**NEKOM 1L:** Initial climb clearance 4000'

SID	RWY	ROUTING
NEKOM 1F, 1G	25L/R	Climb on runway track to FFM 4.5 DME/FRD 1.5 DME or 800', whichever is later, turn LEFT, intercept RID R-357 inbound to RID, turn LEFT, RID R-164 to NEKOM.
NEKOM 1L	18	Climb on runway track to 800', intercept RID R-357 inbound to RID, turn LEFT, RID R-164 to NEKOM.

CHANGES: None.

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EDDF/FRA  
FRANKFURT/MAIN

JEPPESSEN FRANKFURT/MAIN, GERMANY

12 OCT 07 10-3L4 Eff 25 Oct

SID

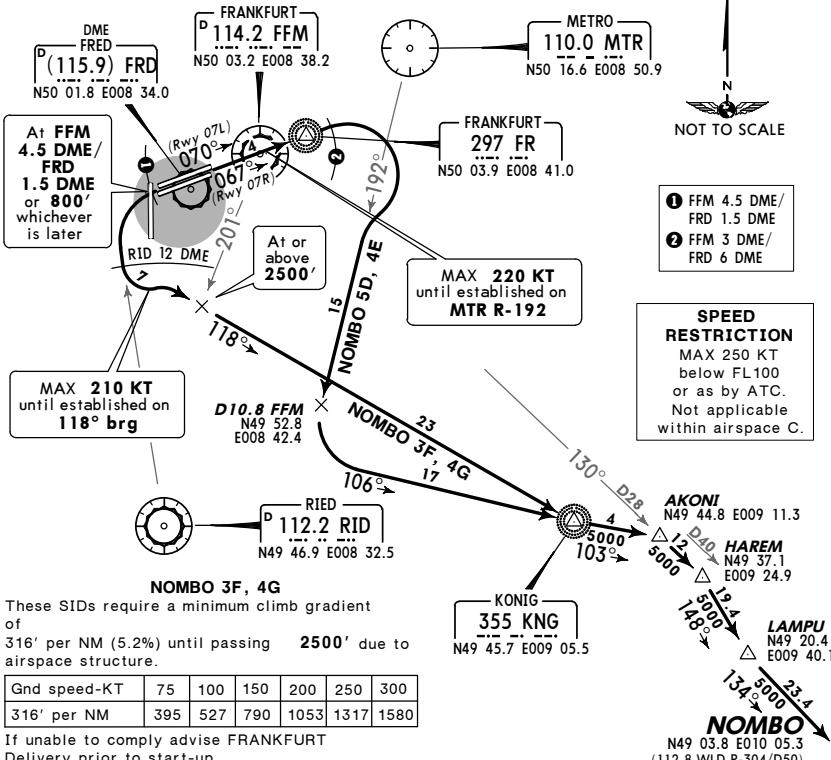
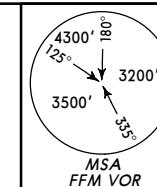
\*LANGEN  
Radar  
136.12

Trans level: By ATC Trans alt: 5000'  
 1. Contact LANGEN Radar immediately after take-off.  
 2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory.  
 3. For departure designation refer to 10-1P pages.

**NOMBO FIVE DELTA (NOMBO 5D)****NOMBO FOUR ECHO (NOMBO 4E)****NOMBO THREE FOXTROT (NOMBO 3F)****NOMBO FOUR GOLF (NOMBO 4G)****RWYS 07L/R, 25L/R DEPARTURES**

NOT FOR PROP ACFT, THESE FLIGHTS SHALL FILE RATIM SIDS

NOT FOR FLIGHTS TERMINATING WITHIN EDDN AREA OR EDMF FIR



**NOMBO 3F, 4G**  
 These SIDs require a minimum climb gradient of 316' per NM (5.2%) until passing 2500' due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
316' per NM	395	527	790	1053	1317	1580

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

**NOMBO 5D, 4E:** Initial climb clearance 4000'  
**NOMBO 3F, 4G:** Initial climb clearance 5000'

SID	RWY	ROUTING
NOMBO 5D, 4E	07L/R	Climb on runway track to 800', via FR to FRD 6 DME (FFM 3 DME outbound), turn RIGHT, intercept MTR R-192, at D10.8 FFM turn LEFT, intercept 106° bearing to KNG, turn LEFT, 103° bearing to AKONI, turn RIGHT, intercept FFM R-130 to HAREM ③, turn RIGHT, 148° track to LAMPU, turn LEFT, 134° track to NOMBO.
NOMBO 3F, 4G	25L/R	Climb on runway track to FFM 4.5 DME/FRD 1.5 DME or 800', whichever is later, turn LEFT towards RID, at RID 12 DME turn LEFT, intercept 118° bearing to KNG, turn LEFT, 103° bearing to AKONI, turn RIGHT, intercept FFM R-130 to HAREM ③, turn RIGHT, 148° track to LAMPU, turn LEFT, 134° track to NOMBO.

③ After HAREM BRNAV equipment necessary.

CHANGES: SIDs NOMBO 2F, 3G renumbered 3F, 4G &amp; revised.

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**EDDF/FRA**  
**FRANKFURT/MAIN**

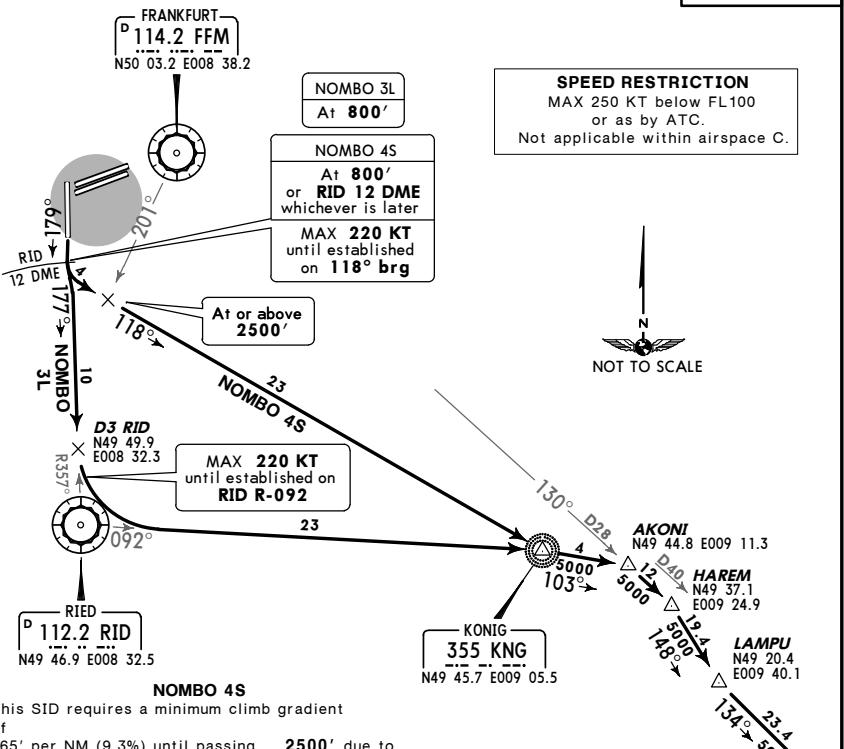
**JEPPESENFRANKFURT/MAIN, GERMANY**

12 OCT 07 (10-3L5) Eff 25 Oct

<b>*LANGEN</b> Radar <b>136.12</b>	<b>Apt Elev</b> <b>364'</b>	Trans level: By ATC      Trans alt: 5000' <b>1.</b> Contact LANGEN Radar immediately after take-off. <b>2.</b> SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory. <b>3.</b> EXPECT close-in obstacles. <b>4.</b> Wind shear and increased turbulences must be expected when winds heavy. <b>5.</b> For departure designation refer to 10-1P pages.
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NOMBO THREE LIMA (NOMBO 3L)  
NOMBO FOUR SIERRA (NOMBO 4S)

NOT FOR PROP ACFT, THESE FLIGHTS SHALL FILE RATIM SIDS  
NOT FOR FLIGHTS TERMINATING WITHIN EDDN AREA OR EDMM FIR



This SID requires a minimum climb gradient of 565' per NM (9.3%) until passing 2500' due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
565' per NM	706	942	1413	1884	2355	2825

If unable to comply advise FRANKFURT  
Delivery prior to start-up and expect routing  
via NOMBO 31

Initial climb clearance 4000

SID	ROUTING
<b>NOMBO 3L</b>	Climb on runway track to <b>800'</b> , intercept RID R-357 inbound to D3 RID, turn LEFT, intercept RID R-092 to KNG, turn RIGHT, 103° bearing to AKONI, turn RIGHT, intercept FFM R-130 to HAREM <b>1</b> , turn RIGHT, 148° track to LAMPU, turn LEFT, 134° track to NOMBO.
<b>NOMBO 4S</b>	Climb on runway track to <b>800'</b> or RID 12 DME, whichever is later, turn LEFT, intercept 118° bearing to KNG, turn LEFT, 103° bearing to AKONI, turn RIGHT, intercept FFM R-130 to HAREM <b>1</b> , turn RIGHT, 148° track to LAMPU, turn LEFT, 134° track to NOMBO.

**① After HAREM BRNAV equipment necessary**

**EDDF/FRA**  
**FRANKFURT/MAIN**

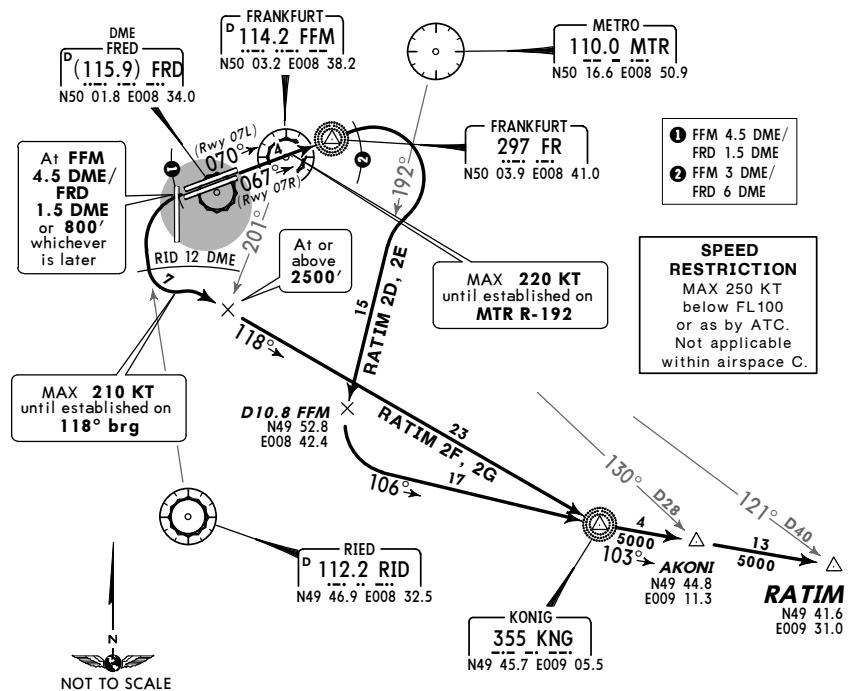
**JEPPESENFRANKFURT/MAIN, GERMANY**

OCT 07 (10-3L6) Eff 25 Oct

<b>*LANGEN</b> Radar <b>136.12</b>	<b>Apt Elev</b> <b>364'</b>	Trans level: By ATC      Trans alt: 5000' 1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory. 3. For departure designation refer to 10-1P pages.
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RATIM TWO DELTA (RATIM 2D)  
RATIM TWO ECHO (RATIM 2E)  
RATIM TWO FOXTROT (RATIM 2F)  
RATIM TWO GOLF (RATIM 2G)  
RWYS 07L/R, 25L/R DEPARTURES

ONLY PROP ACFT WITH MAX FL230 REQUESTED INSTEAD OF NOMBO SID'S  
NOT FOR FLIGHTS TERMINATING WITHIN EDRN AREA OR EDMM FIR



**RATIM 2F, 2G**  
These SIDs require a minimum climb gradient  
of  
316' per NM (5.2%) until passing      **2500'** du  
airspace structure.

Gnd speed-KT	75	100	150	200	250	300
316' per NM	395	527	790	1053	1317	1580

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

**RATIM 2D, 2E:** Initial climb clearance 4000'  
**RATIM 2F, 2G:** Initial climb clearance 5000'

SID	RWY	ROUTING
<b>RATIM 2D, 2E</b>	<b>07L/R</b>	Climb on runway track to <b>800'</b> , via FR to FRD 6 DME (FFM 3 DME out-bound), turn RIGHT, intercept MTR R-192, at D10.8 FFM turn LEFT, intercept 106° bearing to KNG, turn LEFT, 103° bearing via AKONI to RATIM.
<b>RATIM 2F, 2G</b>	<b>25L/R</b>	Climb on runway track to FFM 4.5 DME/FRD 1.5 DME or <b>800'</b> , whichever is later, turn LEFT towards RID, at RID 12 DME turn LEFT, intercept 119° bearing to KNG, turn LEFT, 107° bearing via AKONI to RATIM.





EDDF/FRA  
FRANKFURT/MAIN**JEPPESEN** FRANKFURT/MAIN, GERMANY

28 APR 06 (10-3N1)

SID

LANGEN Radar 136.12	Apt Elev 364'	Trans level: By ATC Trans alt: 5000' 1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4C). Strict adherence within the limits of aircraft performance is mandatory. 3. For departure designation refer to page 10-4.
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SOBRA ONE FOXTROT (SOBRA 1F)

SOBRA ONE GOLF (SOBRA 1G)

SOBRA TWO NOVEMBER (SOBRA 2N)

SOBRA ONE PAPA (SOBRA 1P)

RWYS 25L/R DEPARTURES

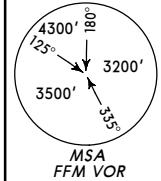
FOR FLIGHTS INTENDING TO PROCEED AT OR ABOVE FL250

VIA AIRWAYS Y 180/Y 181

FLIGHTS HAVE TO BE ABLE TO CROSS RUDOT AT OR ABOVE FL240

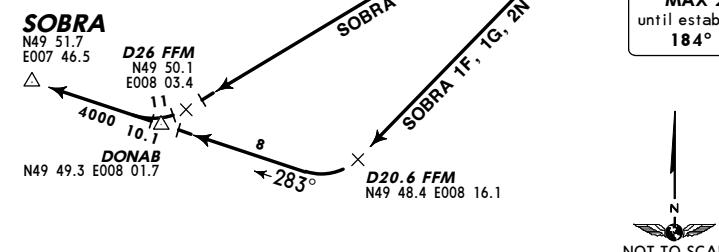
IF UNABLE TO COMPLY, FLIGHT PLAN SHALL READ:

RUDOT FL220 - Y 180 - DIK RFL

NON RNAV (ENROUTE ONLY) EQUIPPED AIRCRAFT  
SHALL USE SIDS WITH DESIGNATOR Q

① ← 199°  
SOBRA 1F, 1G  
② ← 184°  
SOBRA 2N

**SPEED RESTRICTION**  
MAX 250 KT below FL100  
or as by ATC.  
Not applicable within airspace C.



Initial climb clearance 5000'

SID	ROUTING
SOBRA 1F, 1G	Climb on runway track to FFM 4.5 DME or 800', whichever is later, turn LEFT, 199° track, turn RIGHT, intercept FFM R-223, at D20.6 FFM ③ turn RIGHT, 283° track via DONAB to SOBRA.
SOBRA 2N	Climb on runway track to FFM 4.5 DME or 800', whichever is later, turn LEFT, 184° track, intercept FFM R-223, at D20.6 FFM ③ turn RIGHT, 283° track via DONAB to SOBRA.
SOBRA 1P	Climb on runway track to FFM 4.5 DME/FRD 1.5 DME or 800', whichever is later, turn LEFT, 226° track (RWY 25L: 229° track), intercept FFM R-239, at D26 FFM ④ turn RIGHT, 283° track to SOBRA.

After D20.6 FFM ③/D26 FFM ④ BRNAV equipment necessary.

CHANGES: Restrictions.

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28 APR 06 (10-3N2)

SID

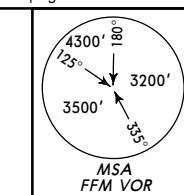
LANGEN Radar 136.12	Apt Elev 364'	Trans level: By ATC Trans alt: 5000' 1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4C). Strict adherence within the limits of aircraft performance is mandatory. 3. EXPECT close-in obstacles. 4. Wind shears and increased turbulences must be expected when winds heavy. 5. For departure designation refer to page 10-4.
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SOBRA TWO LIMA (SOBRA 2L)

SOBRA ONE SIERRA (SOBRA 1S)

SOBRA TWO UNIFORM (SOBRA 2U)

RWY 18 DEPARTURES

FOR FLIGHTS INTENDING TO PROCEED AT OR ABOVE FL250  
VIA AIRWAYS Y 180/Y 181FLIGHTS HAVE TO BE ABLE TO CROSS RUDOT AT OR ABOVE FL240  
IF UNABLE TO COMPLY, FLIGHT PLAN SHALL READ:RUDOT FL220 - Y 180 - DIK RFL  
NON RNAV (ENROUTE ONLY) EQUIPPED AIRCRAFT  
SHALL USE SIDS WITH DESIGNATOR Z

**SPEED RESTRICTION**  
MAX 250 KT below FL100  
or as by ATC.  
Not applicable within airspace C.

**SOBRA**  
N49 51.7 E007 46.5  
At FL100

**DONAB**  
N49 49.3 E008 01.7  
At or above FL110

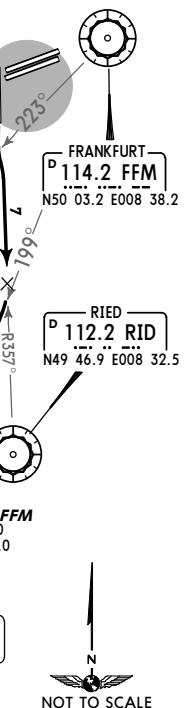
**VETUX**  
N49 47.1 E007 59.9  
At FL100

**PIPPIX**  
N49 42.4 E008 13.4  
At or above FL90

**ROSIG**  
N49 46.1 E008 21.6  
At or above FL90

MAX 250 KT

MAX 250 KT



These SIDs require minimum climb gradients of  
**SOBRA 2L**

456' per NM (7.5%) until passing **FL90** due to  
airspace structure. If unable to comply advise  
FRANKFURT Delivery prior to start-up and ex-  
pect routing via SOBRA 2U.

**SOBRA 2U**  
328' per NM (5.4%) until passing **FL90** due to  
airspace structure. If unable to comply advise  
FRANKFURT Delivery prior to start-up and ex-  
pect routing via ULKIG 3U.

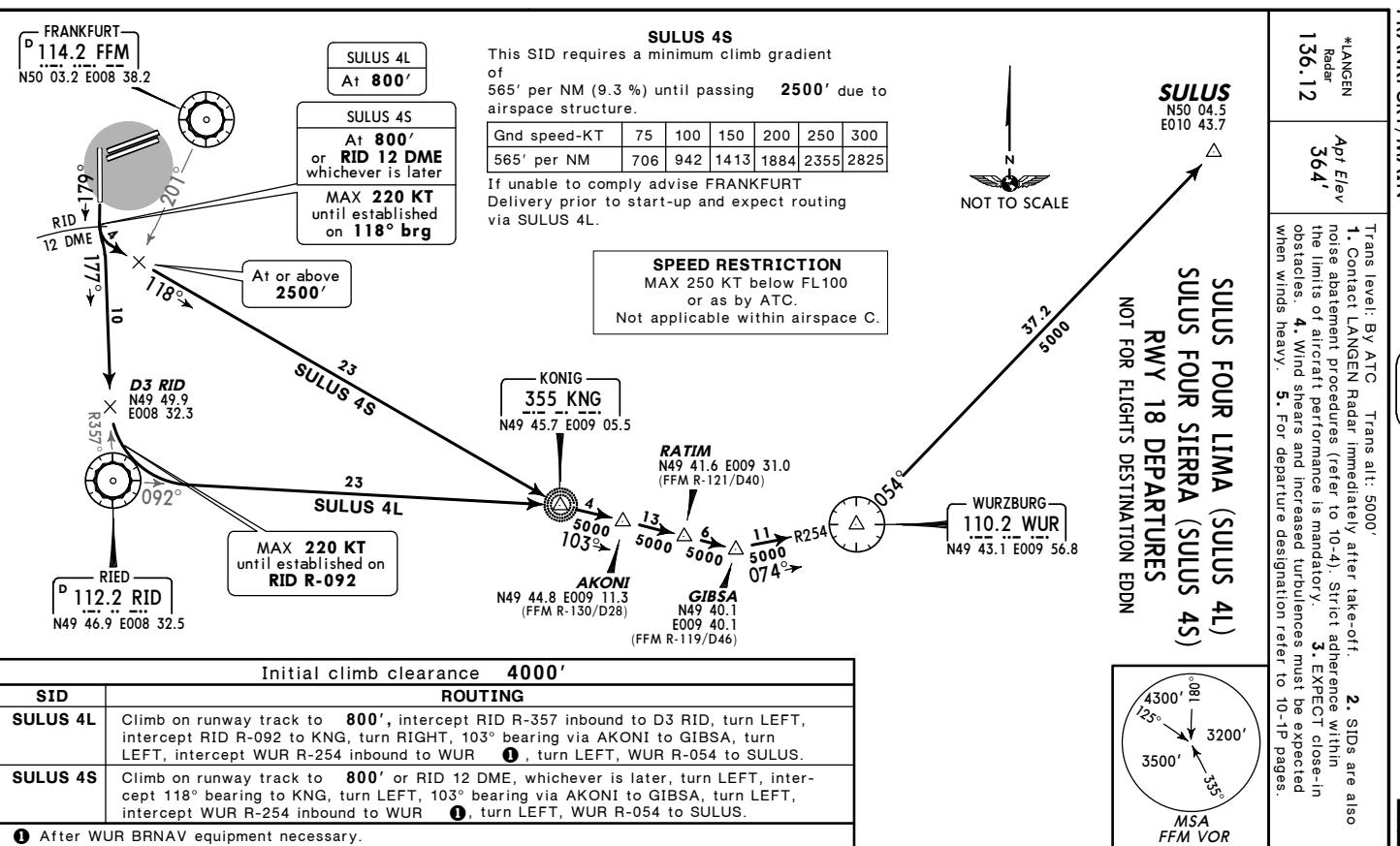
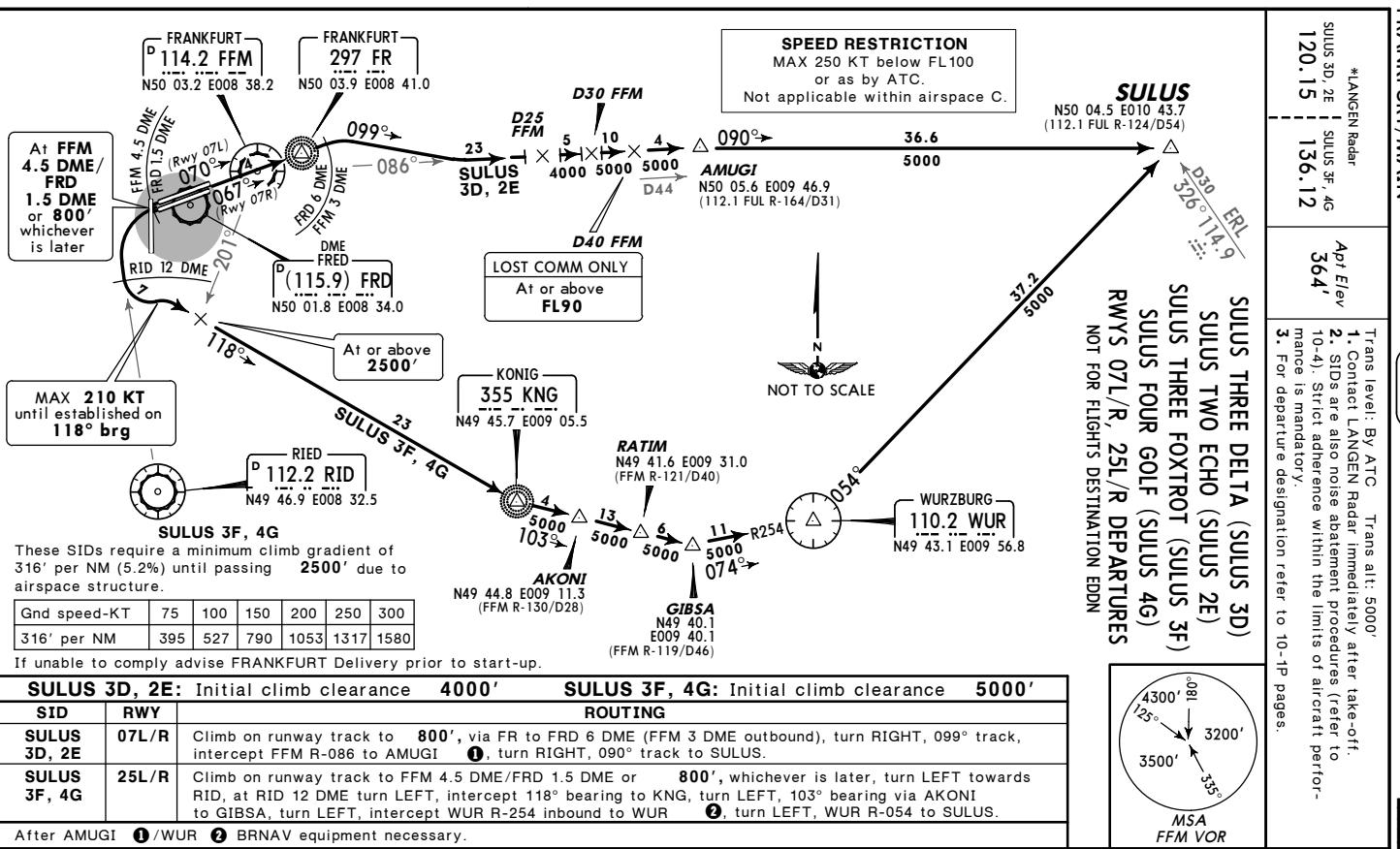
Gnd speed-KT	75	100	150	200	250	300
456' per NM	570	760	1139	1519	1899	2279
328' per NM	410	547	820	1094	1367	1641

Initial climb clearance 4000'

SID	ROUTING
<b>SOBRA 2L</b>	Climb on runway track to 800', intercept RID R-357 inbound to D6.4 RID, turn RIGHT, intercept FFM R-199, at D17.3 FFM ① turn RIGHT, 283° track via ROSIG and DONAB to SOBRA. Will be assigned when landing direction is 07
<b>SOBRA 1S</b>	Climb on runway track to 800', turn RIGHT, intercept FFM R-223, at D20.6 FFM ② turn RIGHT, 283° track via DONAB to SOBRA. Only to be used when landing direction is 25
<b>SOBRA 2U</b>	Climb on runway track to 800', intercept RID R-357 inbound to D6.4 RID, turn RIGHT, intercept FFM R-199, at D14.4 FFM ③ turn RIGHT, 264° track to PIPPIX, turn RIGHT, 297° track via VETUX to SOBRA. After D17.3 FFM ①/D20.6 FFM ②/D14.4 FFM ③ BRNAV equipment necessary.

CHANGES: None.

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EDDF/FRA  
FRANKFURT/MAIN

## JEPPESEN FRANKFURT/MAIN, GERMANY

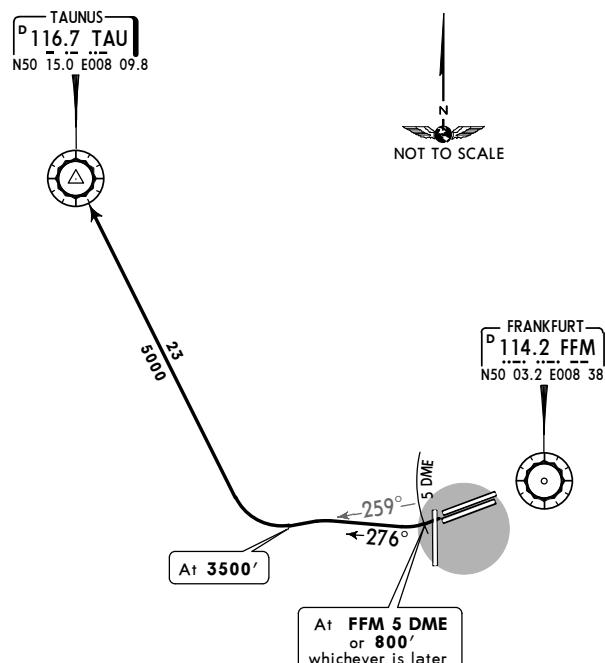
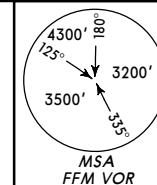
12 OCT 07 10-3N5 Eff 25 Oct

SID

\*LANGEN  
Radar  
120.15Apt Elev  
364'

Trans level: By ATC Trans alt: 5000'  
 1. Contact LANGEN Radar immediately after take-off.  
 2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory.  
 3. For departure designation refer to 10-1P pages.

**TAUNUS ONE QUEBEC (TAU 1Q)**  
**RWYS 25L/R DEPARTURE**  
 NON RNAV (ENROUTE ONLY) EQUIPPED AIRCRAFT ONLY  
 DELAY HAS TO BE EXPECTED  
 FURTHER ROUTING TO DESTINATION SHALL BE BASED ON VOR AND  
 HAS TO BE COORDINATED WITH ATC PRIOR TO START-UP  
 NO RNAV OVERLAY EXISTING  
 MAX FL90 IN GERMAN AIRSPACE  
 SPECIAL PERMISSION NEEDED PRIOR TO FLIGHT  
**SPEED: MAX 250 KT IN GERMAN AIRSPACE**



Initial climb clearance 5000'

## ROUTING

Climb on runway track to FFM 5 DME or 800', whichever is later, turn RIGHT, 276° track (RWY 25L: 279° track), intercept FFM R-259, at 3500' turn RIGHT to TAU, but not before reaching FFM R-259.

CHANGES: Routing text.

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EDDF/FRA  
FRANKFURT/MAIN

## JEPPESEN FRANKFURT/MAIN, GERMANY

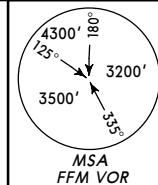
12 OCT 07 10-3N6 Eff 25 Oct

SID

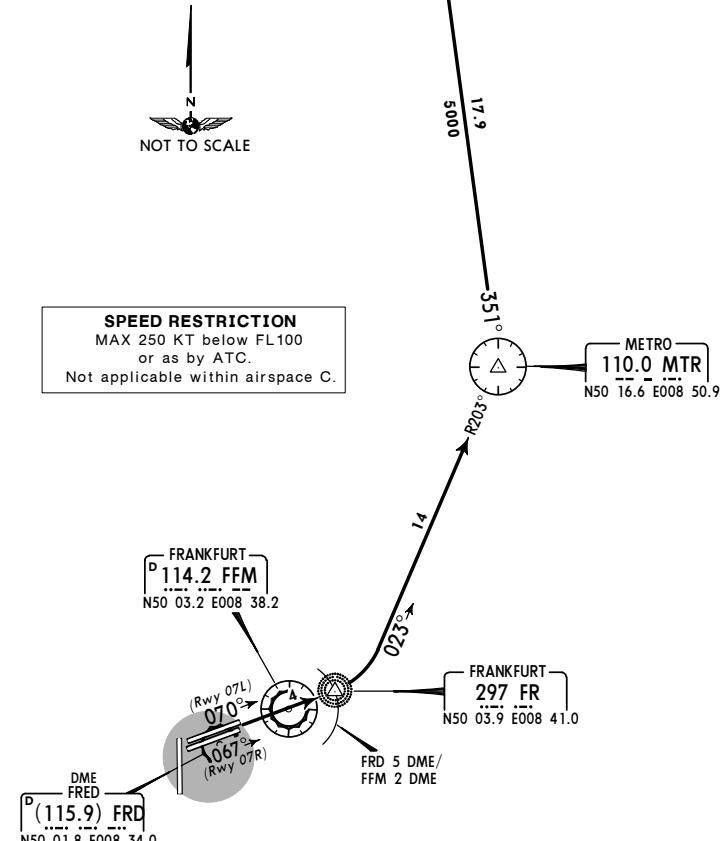
\*LANGEN  
Radar  
120.15Apt Elev  
364'

Trans level: By ATC Trans alt: 5000'  
 1. Contact LANGEN Radar immediately after take-off.  
 2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory.  
 3. For departure designation refer to 10-1P pages.

**TOBAK FIVE DELTA (TOBAK 5D)**  
**TOBAK FIVE ECHO (TOBAK 5E)**  
**RWYS 07L/R DEPARTURES**  
 NOT FOR FLIGHTS CONTINUING VIA  
 AIRWAY Z 10 - GISEM - AIRWAY N 850 - WRB



**TOBAK**  
 $\Delta$  N50 34.3 E008 47.1



**SPEED RESTRICTION**  
 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 (FRD 5 DME/FFM 2 DME outbound), turn LEFT immediately, intercept MTR R-203 inbound to MTR ①, turn LEFT, MTR R-351 to TOBAK.

① After MTR BRNAV equipment necessary.

CHANGES: SIDs renumbered &amp; revised.

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EDDF/FRA  
FRANKFURT/MAIN

## JEPPESEN FRANKFURT/MAIN, GERMANY

12 OCT 07 10-3N7 Eff 25 Oct

SID

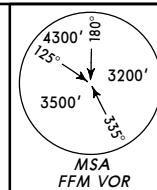
*LANGEN Radar 120.15	Apt Elev 364'	Trans level: By ATC Trans alt: 5000' 1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory. 3. For departure designation refer to 10-1P pages.
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TOBAK TWO FOXTROT (TOBAK 2F)

TOBAK TWO GOLF (TOBAK 2G)

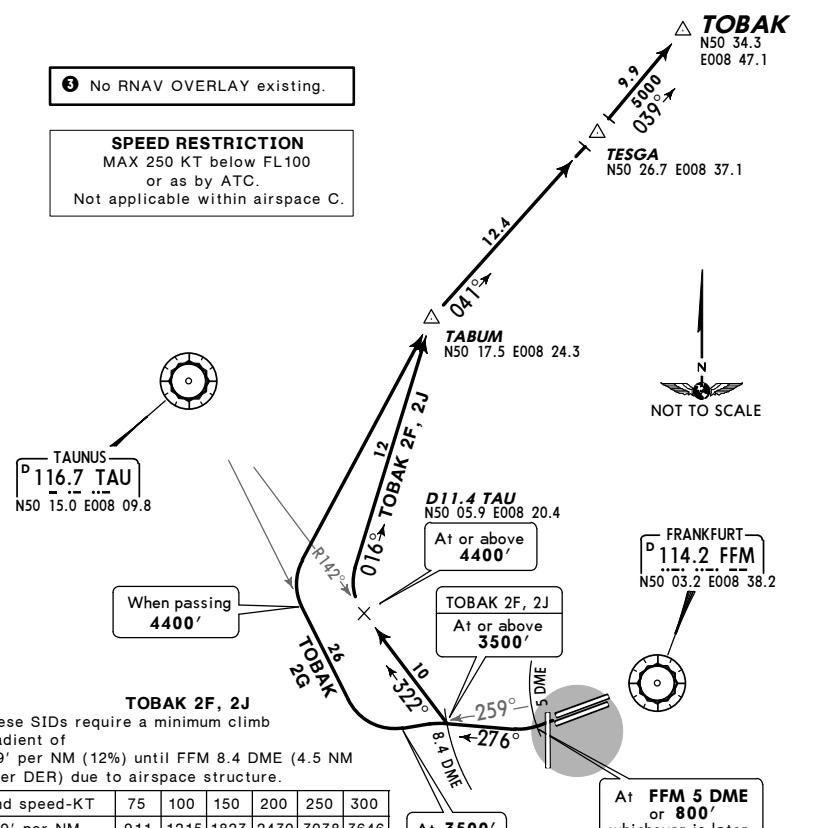
TOBAK TWO JULIETT (TOBAK 2J)

RWYS 25L/R DEPARTURES

NOT FOR FLIGHTS CONTINUING VIA  
AIRWAY Z 10 - GISEM - AIRWAY N 850 - WRB

③ No RNAV OVERLAY existing.

**SPEED RESTRICTION**  
MAX 250 KT below FL100  
or as by ATC.  
Not applicable within airspace C.



Initial climb clearance 5000'

SID	ROUTING
TOBAK 2F, 2J	Climb on runway track to FFM 5 DME or 800', whichever is later, turn RIGHT, 276° track (RWY 25L: 279° track) to FFM 8.4 DME, turn RIGHT, intercept TAU R-142 inbound to D11.4 TAU ①, turn RIGHT, 016° track to TABUM, turn RIGHT, 041° track to TESGA, turn LEFT, 039° track to TOBAK.
TOBAK 2G	Climb on runway track to FFM 5 DME or 800', whichever is later, turn RIGHT, 276° track (RWY 25L: 279° track), intercept FFM R-259, at 3500' turn RIGHT towards TAU, but not before reaching FFM R-259, when passing 4400' ② turn RIGHT to TABUM, 041° track to TESGA, turn LEFT, 039° track to TOBAK.

After D11.4 TAU ① passing 4400' ② BRNAV equipment necessary.

CHANGES: SID TOBAK 2G routing text.

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EDDF/FRA  
FRANKFURT/MAIN

## JEPPESEN FRANKFURT/MAIN, GERMANY

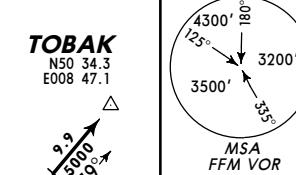
12 OCT 07 10-3N8 Eff 25 Oct

SID

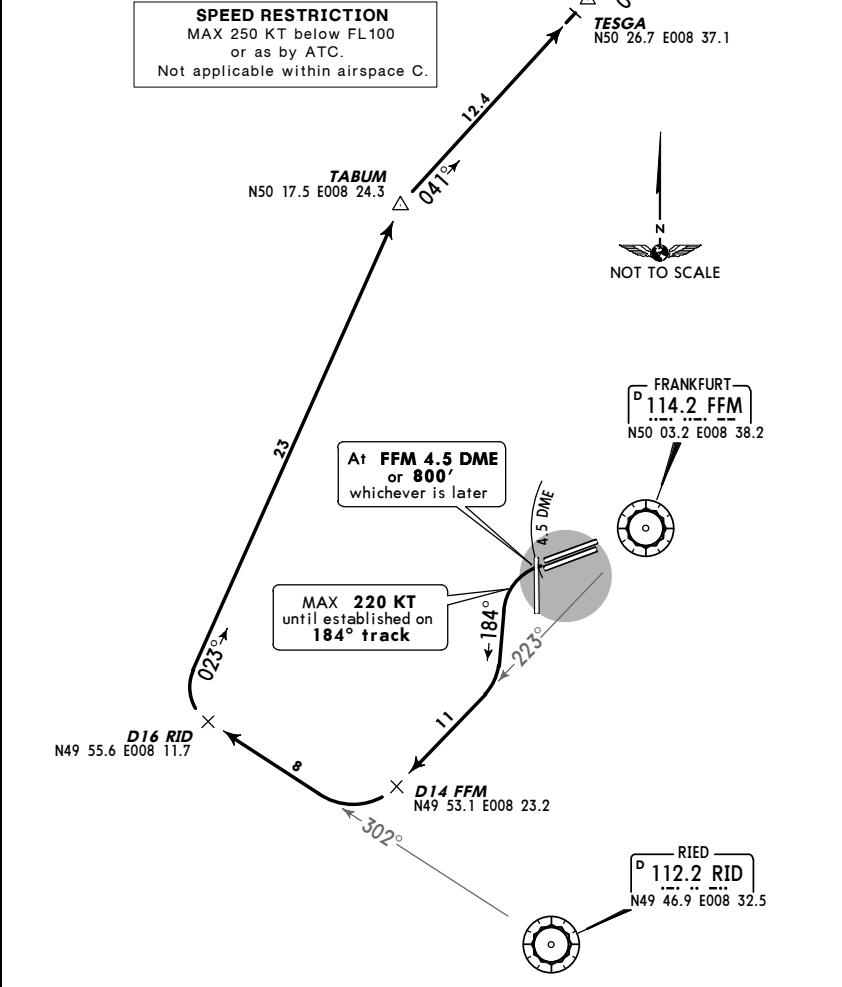
*LANGEN Radar 120.15	Apt Elev 364'	Trans level: By ATC Trans alt: 5000' 1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory. 3. For departure designation refer to 10-1P pages.
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TOBAK THREE NOVEMBER (TOBAK 3N)

RWYS 25L/R DEPARTURE

NOT FOR FLIGHTS CONTINUING VIA  
AIRWAY Z 10 - GISEM - AIRWAY N 850 - WRB

**SPEED RESTRICTION**  
MAX 250 KT below FL100  
or as by ATC.  
Not applicable within airspace C.



Initial climb clearance 5000'

ROUTING
Climb on runway track to FFM 4.5 DME or 800', whichever is later, turn LEFT, 184° track, intercept FFM R-223 to D14 FFM, turn RIGHT, intercept RID R-302 to D16 RID ①, turn RIGHT, 023° track to TABUM, turn RIGHT, 041° track to TESGA, turn LEFT, 039° track to TOBAK.

① After D16 RID BRNAV equipment necessary.

CHANGES: None.

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EDDF/FRA  
FRANKFURT/MAIN

## JEPPESSEN FRANKFURT/MAIN, GERMANY

30 MAR 07 10-3P Eff 12 Apr

SID

\*LANGEN Radar  
TOBAK 2S TOBAK 3T  
120.15 136.12

Apt Elev  
364'

- Trans level: By ATC Trans alt: 5000'  
 1. Contact LANGEN Radar immediately after take-off.  
 2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory. 3. EXPECT close-in obstacles.  
 4. For departure designation refer to 10-1P pages.

## TOBAK TWO SIERRA (TOBAK 2S)

WILL ONLY BE ASSIGNED  
WHEN LANDING DIRECTION IS RWY 25

## TOBAK THREE TANGO (TOBAK 3T)

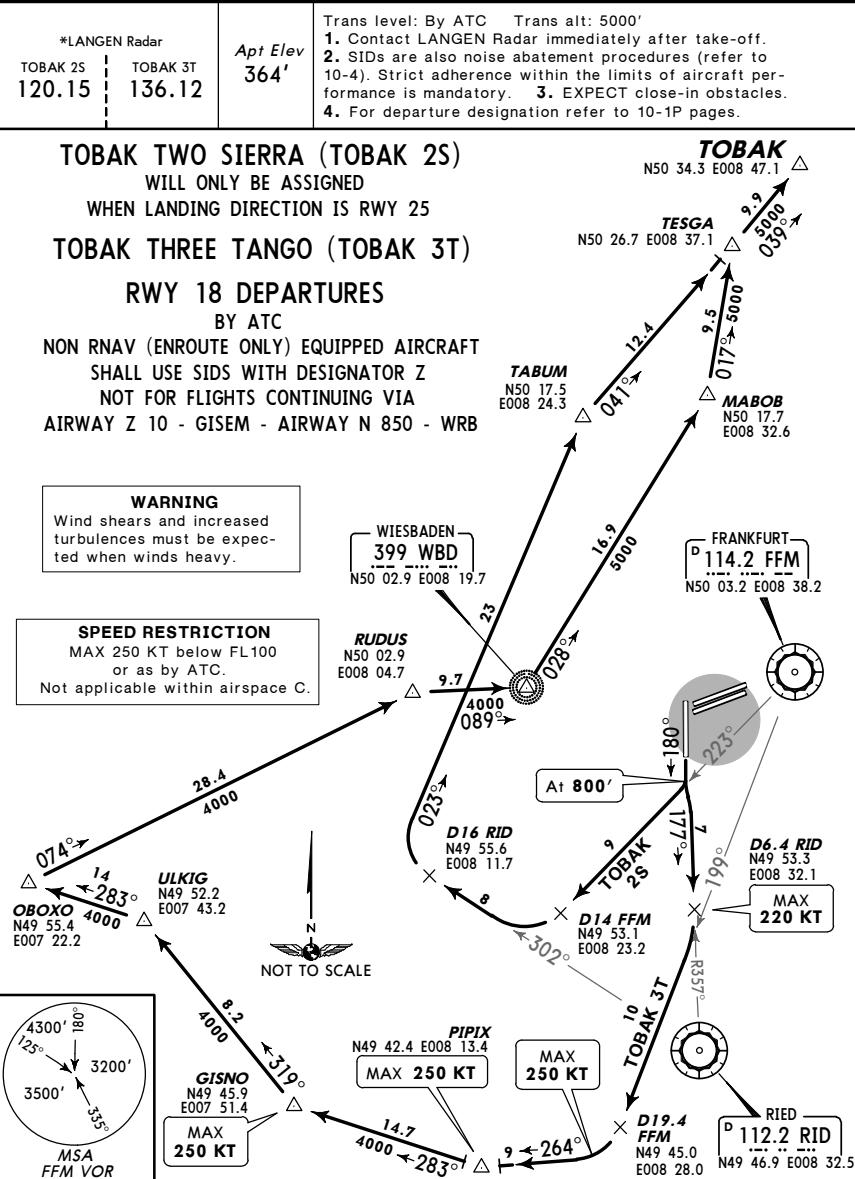
## RWY 18 DEPARTURES

BY ATC

NON RNAV (ENROUTE ONLY) EQUIPPED AIRCRAFT  
SHALL USE SIDS WITH DESIGNATOR Z  
NOT FOR FLIGHTS CONTINUING VIA  
AIRWAY Z 10 - GISSEM - AIRWAY N 850 - WRB

**WARNING**  
Wind shear and increased  
turbulences must be expec-  
ted when winds heavy.

**SPEED RESTRICTION**  
MAX 250 KT below FL100  
or as by ATC.  
Not applicable within airspace C.



After D16 RID ①/D19.4 FFM ② BRNAV equipment necessary.

CHANGES: Restriction in chart heading revised.

EDDF/FRA  
FRANKFURT/MAIN

## JEPPESSEN FRANKFURT/MAIN, GERMANY

30 MAR 07 10-3Q Eff 12 Apr

SID

\*LANGEN  
Radar  
136.12

Apt Elev  
364'

- Trans level: By ATC Trans alt: 5000'  
 1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory. 3. EXPECT close-in obstacles. 4. Wind shear and increased turbulences must be expected when winds heavy. 5. For departure designation refer to 10-1P pages.

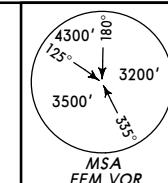
ULKIG THREE UNIFORM (ULKIG 3U)  
RWY 18 DEPARTURE

FOR FLIGHTS INTENDING TO PROCEED AT OR ABOVE FL250  
VIA AIRWAYS Y 180/Y 181

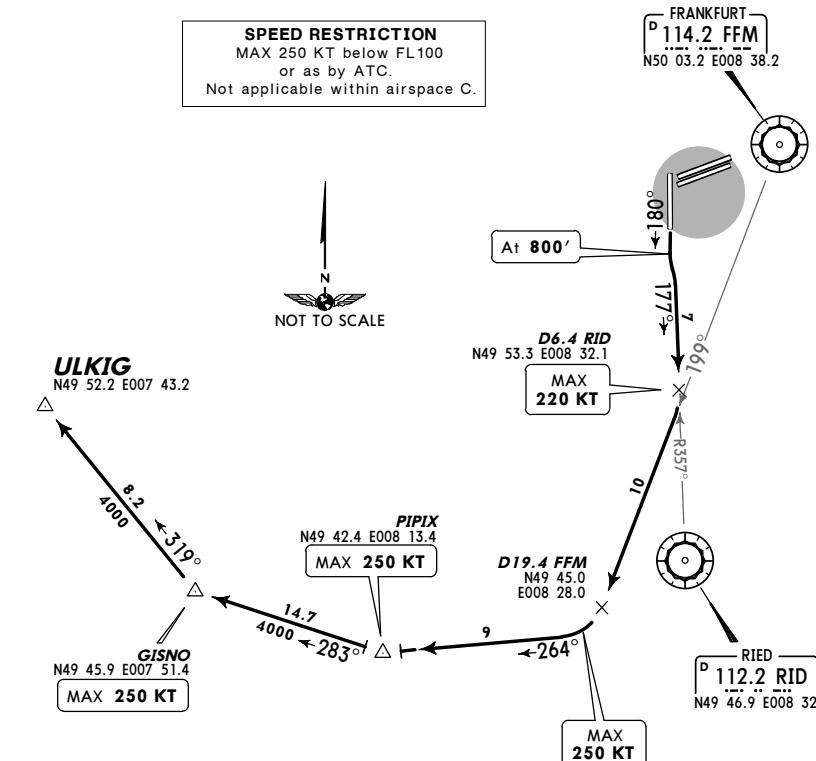
FLIGHTS HAVE TO BE ABLE TO CROSS RUDOT AT OR ABOVE FL240  
IF UNABLE TO COMPLY, FLIGHT PLAN SHALL READ:

RUDOT FL220 - Y 180 - DIK RFL

NON RNAV (ENROUTE ONLY) EQUIPPED AIRCRAFT  
SHALL USE SIDS WITH DESIGNATOR Z



**SPEED RESTRICTION**  
MAX 250 KT below FL100  
or as by ATC.  
Not applicable within airspace C.



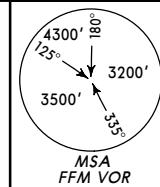
CHANGES: None.

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EDDF/FRA  
FRANKFURT/MAIN**JEPPESEN** FRANKFURT/MAIN, GERMANY  
2 FEB 07 (10-3Q1) Eff 15 Feb RNAV SID (OVERLAY)

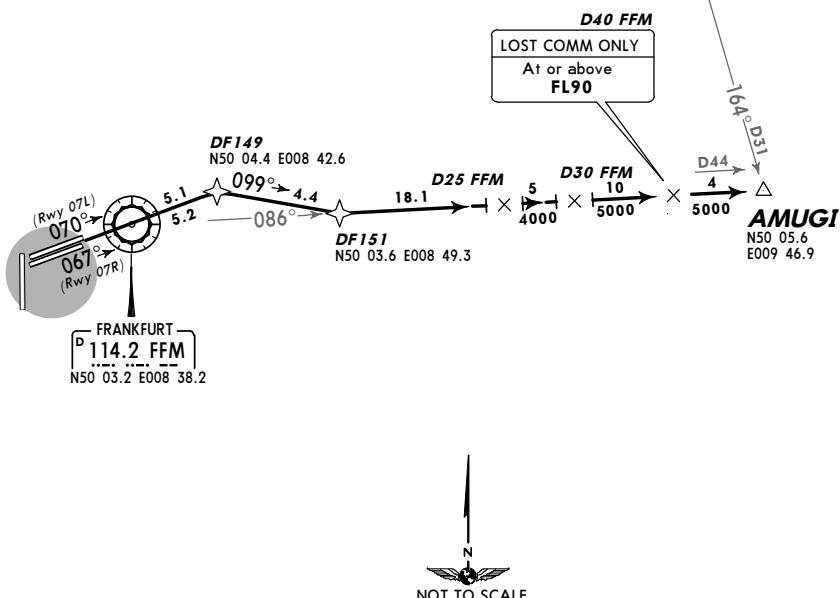
LANGEN Radar 120.15	Apt Elev 364'	Trans level: By ATC Trans alt: 5000' 1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory. 3. For departure designation refer to 10-1P pages.
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**AMUGI ONE DELTA (AMUGI 1D) [AMUG1D]**  
**AMUGI ONE ECHO (AMUGI 1E) [AMUG1E]**  
**RWYS 07L/R RNAV DEPARTURES (OVERLAY 10-3B)**  
ONLY FOR FLIGHTS TERMINATING WITHIN EDDN AREA



**SPEED RESTRICTION**  
MAX 250 KT below FL100  
or as by ATC.  
Not applicable within airspace C.

FULDA  
D 112.1 FUL  
N50 35.5 E009 34.3

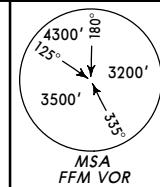
Initial climb clearance **4000'****ROUTING**

(800'+) - DF149 - DF151 - AMUGI.

EDDF/FRA  
FRANKFURT/MAIN**JEPPESEN** FRANKFURT/MAIN, GERMANY  
2 FEB 07 (10-3Q2) Eff 15 Feb RNAV SID (OVERLAY)

LANGEN Radar 136.12	Apt Elev 364'	Trans level: By ATC Trans alt: 5000' 1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory. 3. For departure designation refer to 10-1P pages.
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**ANEKI SIX DELTA (ANEKI 6D)[ANEK6D]**  
**ANEKI EIGHT ECHO (ANEKI 8E)[ANEK8E]**  
**RWYS 07L/R RNAV DEPARTURES (OVERLAY 10-3C)**



FRANKFURT D 114.2 FFM N50 03.2 E008 38.2  
METRO 110.0 MTR N50 16.6 E008 50.9

(Rwy 07L)  
DF144 N50 02.9 E008 35.9  
(Rwy 07R)  
DF145 N50 02.6 E008 36.1  
DF152 N50 04.2 E008 42.5  
DF150 N50 00.6 E008 45.1  
MAX 220 KT

DF154 N49 58.7 E008 35.7  
At or above 2500' MAX 220 KT

DF160 N49 52.4 E008 32.1  
13.5 ANEKI 6D

DF160 N49 46.9 E008 32.5  
13.5 ANEKI 8E

DF157 N49 47.5 E008 40.3  
R-194 MTR

D4.4 RID X  
D6.9 RID X  
D20 FFM

D24 FFM  
D11.9 RID X  
D28 FFM

D28 FFM  
D28 FFM  
D28 FFM

**SPEED RESTRICTION**  
MAX 250 KT below FL100  
or as by ATC.  
Not applicable within airspace C.

NOT TO SCALE

**ANEKI 8E**

This SID requires a minimum climb gradient of 328' per NM (5.4%) until passing 2500' due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
328' per NM	410	547	820	1094	1367	1641

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

**Initial climb clearance 4000'**

SID	ROUTING
ANEKI 6D	(800'+) - DF152 - DF150 (K220-) - DF157 - ANEKI.
ANEKI 8E	(800'+) - DF144 (07L)/DF145 (07R) - DF154 (2500'+; K220-) - DF160 - RID - ANEKI.

EDDF/FRA  
FRANKFURT/MAIN

## JEPPESEN FRANKFURT/MAIN, GERMANY

12 OCT 07 10-3Q3 Eff 25 Oct

RNAV SID (OVERLAY)

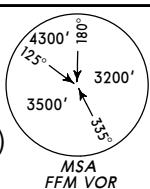
*LANGEN Radar 136.12	Apt Elev 364'	Trans level: By ATC Trans alt: 5000' 1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory. 3. RWY 18: EXPECT close-in obstacles. 4. RWY 18: Wind shear and increased turbulences must be expected when winds heavy. 5. For departure designation refer to 10-1P pages.
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ANEKI FIVE FOXTROT (ANEKI 5F) [ANEK5F]

ANEKI FIVE GOLF (ANEKI 5G) [ANEK5G]

ANEKI FOUR LIMA (ANEKI 4L) [ANEK4L]

RWYS 25L/R, 18 RNAV DEPARTURES (OVERLAY 10-3D)



(Rwy 25R)  
N50 01.7 E008 31.1 (Rwy 25R)  
N50 01.5 E008 31.3 - 249°  
N50 01.1 E008 30.1 (Rwy 25L)  
N50 00.5 E008 29.8 DF143  
N49 59.0 E008 28.9 DF142  
ANEKI 1  
MAX 220 KT

DF134

DF135

DF137

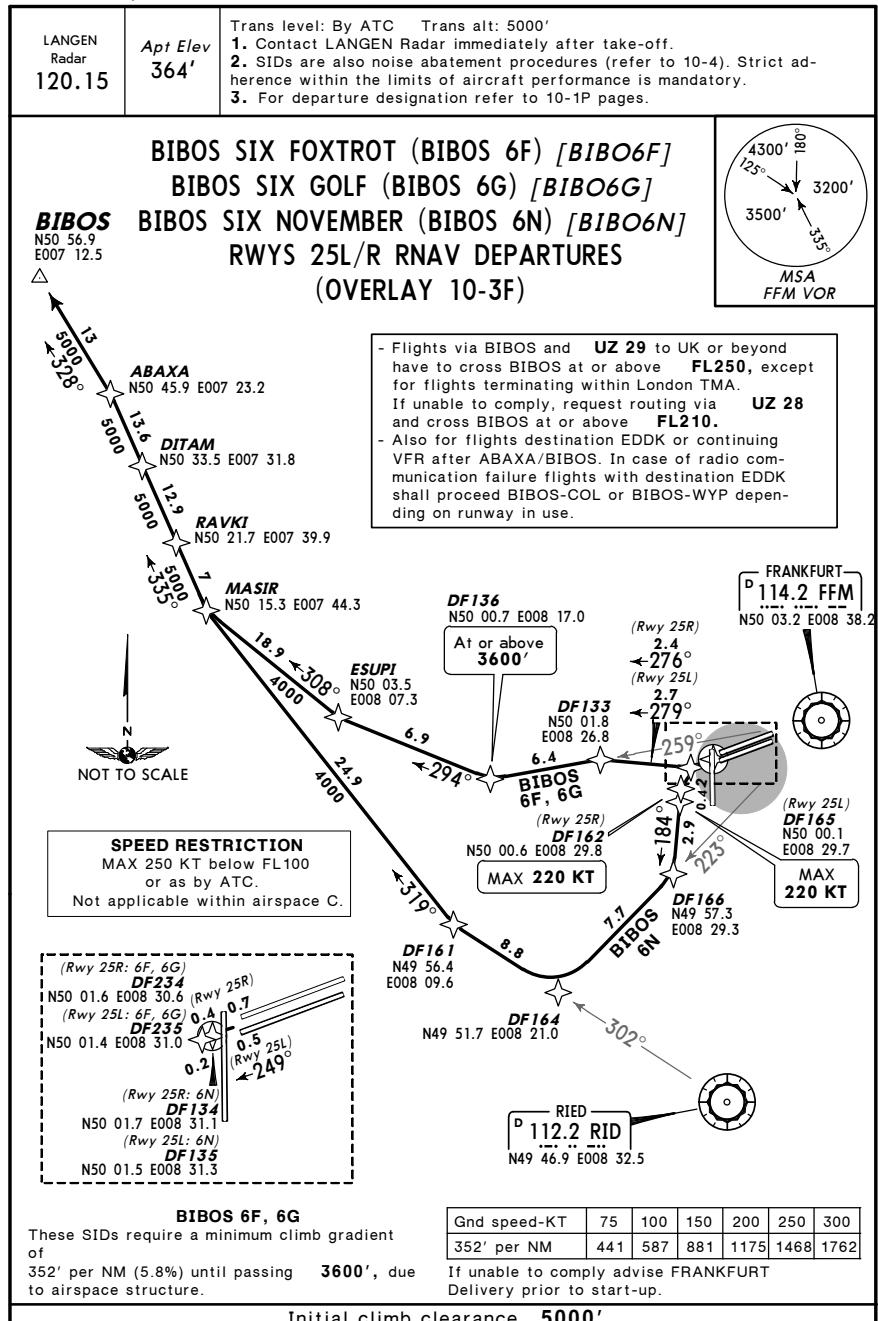
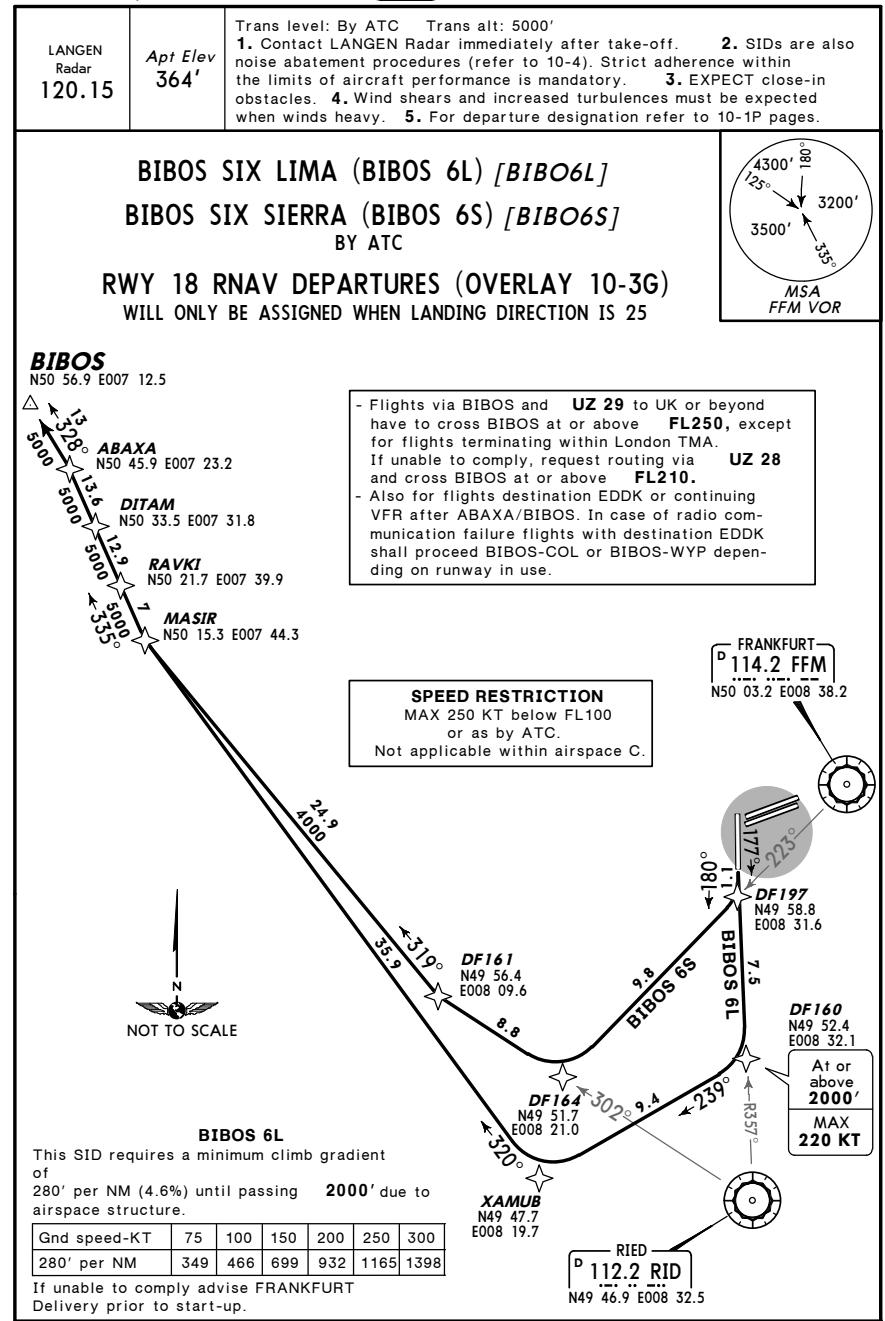
DF141

DF143

DF142

DF141

DF143

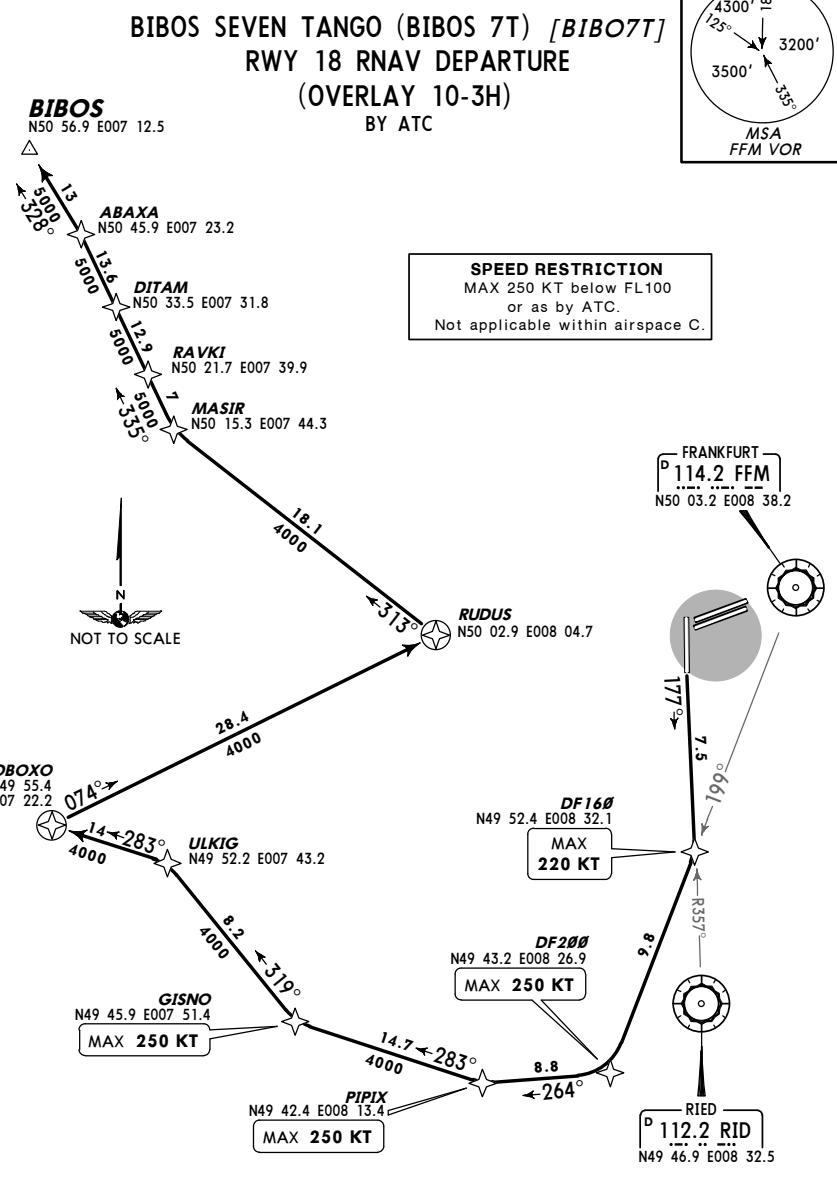
EDDF/FRA  
FRANKFURT/MAIN**JEPPESEN FRANKFURT/MAIN, GERMANY**  
2 FEB 07 (10-3Q5) Eff 15 Feb RNAV SID (OVERLAY)EDDF/FRA  
FRANKFURT/MAIN**JEPPESEN FRANKFURT/MAIN, GERMANY**  
2 FEB 07 (10-3Q6) Eff 15 Feb RNAV SID (OVERLAY)

EDDF/FRA  
FRANKFURT/MAIN**JEPPESEN** FRANKFURT/MAIN, GERMANY

12 OCT 07 (10-3Q7) Eff 25 Oct

RNAV SID (OVERLAY)

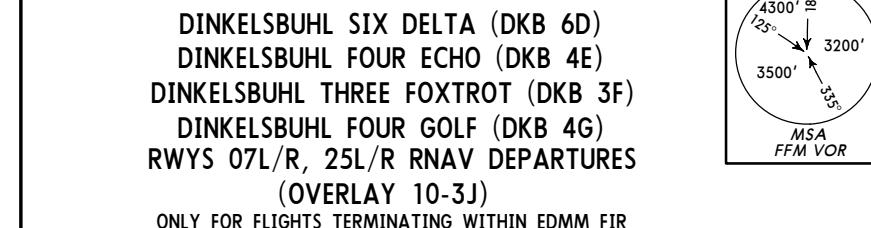
*LANGEN Radar 136.12	Apt Elev 364'	Trans level: By ATC Trans alt: 5000' 1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory. 3. EXPECT close-in obstacles. 4. Wind shears and increased turbulences must be expected when winds heavy. 5. For departure designation refer to 10-1P pages.
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EDDF/FRA  
FRANKFURT/MAIN**JEPPESEN** FRANKFURT/MAIN, GERMANY

12 OCT 07 (10-3Q8) Eff 25 Oct

RNAV SID (OVERLAY)

*LANGEN Radar 136.12	Apt Elev 364'	Trans level: By ATC Trans alt: 5000' 1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory. 3. For departure designation refer to 10-1P pages.
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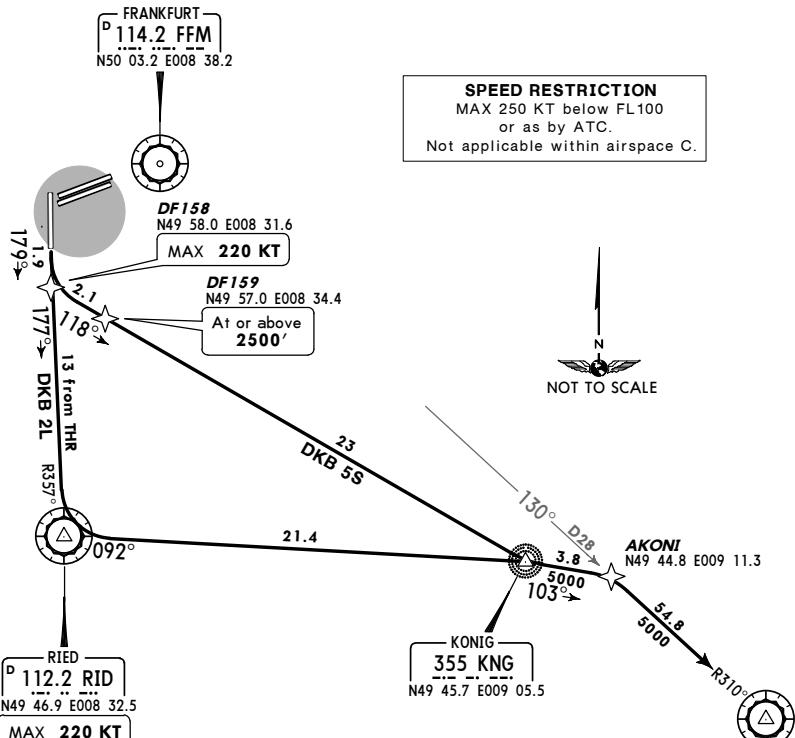
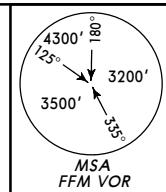
SID	RWY	ROUTING
DKB 6D, 4E	07L/R	(800'+) - DF152 - DF150 (K220-) - DF153 - KNG - AKONI - DKB.
DKB 3F, 4G	25L/R	(800'+) - DF134 (25R)/DF135 (25L) - DF141 (25R)/DF142 (25L) - DF143 - DF137 (K210-) - DF159 (2500'+) - KNG - AKONI - DKB.

EDDF/FRA  
FRANKFURT/MAIN**JEPPESEN** FRANKFURT/MAIN, GERMANY

12 OCT 07 10-3S Eff 25 Oct

RNAV SID (OVERLAY)

*LANGEN Radar 136.12	Apt Elev 364'	Trans level: By ATC Trans alt: 5000' 1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory. 3. EXPECT close-in obstacles. 4. Wind shears and increased turbulences must be expected when winds heavy. 5. For departure designation refer to 10-1P pages.
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DINKELSBUHL TWO LIMA (DKB 2L)  
DINKELSBUHL FIVE SIERRA (DKB 5S)  
RWY 18 RNAV DEPARTURES (OVERLAY 10-3J1)  
ONLY FOR FLIGHTS TERMINATING WITHIN EDMM FIR

**DKB 5S**  
This SID requires a minimum climb gradient of 565' per NM (9.3%) until passing 2500' due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
565' per NM	706	942	1413	1884	2355	2825

If unable to comply advise FRANKFURT  
Delivery prior to start-up and expect routing via DKB 2L.

Initial climb clearance 4000'

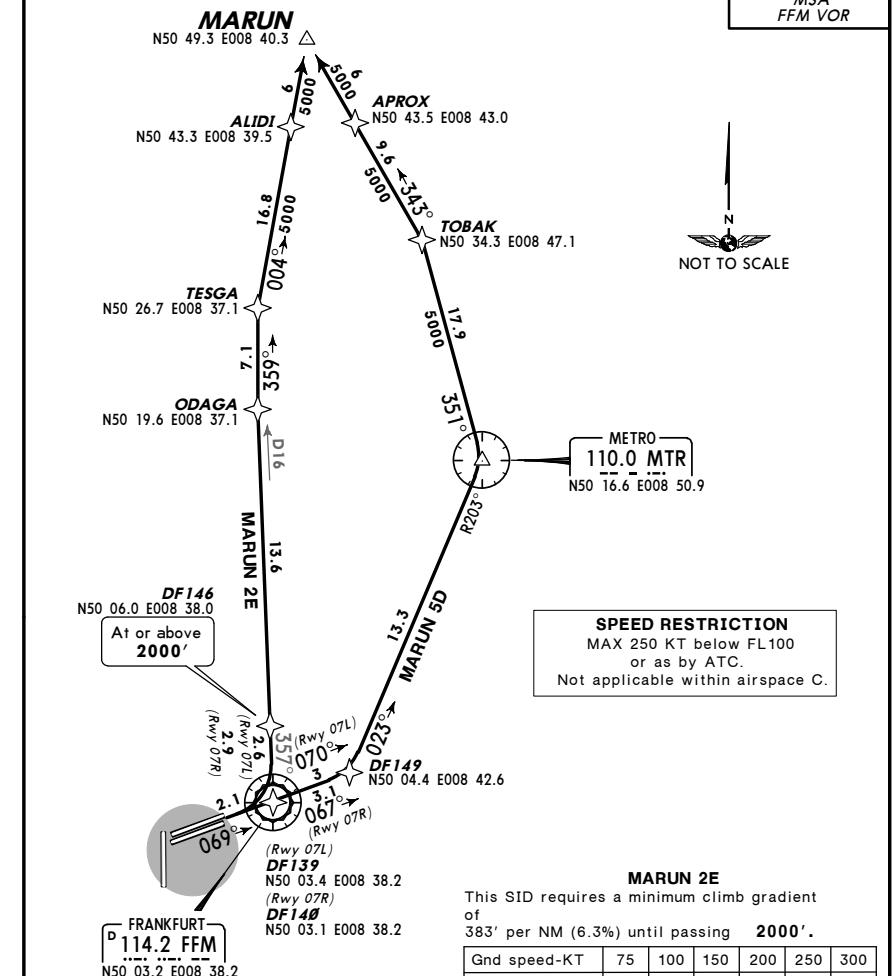
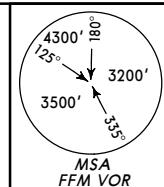
SID	ROUTING
DKB 2L	(800'+) - RID (K220-) - KNG - AKONI - DKB.
DKB 5S	(800'+) - DF158 (K220-) - DF159 (2500'+) - KNG - AKONI - DKB.

EDDF/FRA  
FRANKFURT/MAIN**JEPPESEN** FRANKFURT/MAIN, GERMANY

12 OCT 07 10-3T Eff 25 Oct

RNAV SID (OVERLAY)

*LANGEN Radar 120.15	Apt Elev 364'	Trans level: By ATC Trans alt: 5000' 1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory. 3. For departure designation refer to 10-1P pages.
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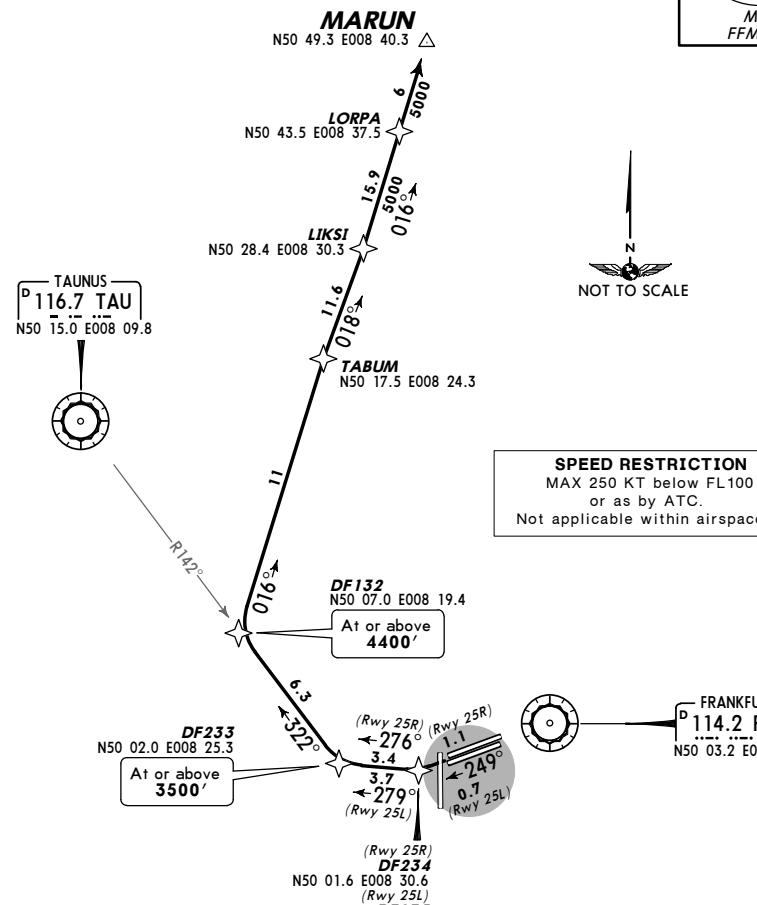
MARUN FIVE DELTA (MARUN 5D) [MARU5D]  
MARUN TWO ECHO (MARUN 2E) [MARU2E]  
RWYS 07L/R RNAV DEPARTURES (OVERLAY 10-3J3)

SID	ROUTING
MARUN 5D	(800'+) - DF149 - MTR - TOBAK - APPROX - MARUN.
MARUN 2E	(800'+) - DF139 (07L)/DF140 (07R) - DF146 (2000'+) - ODAGA - TESGA - ALIDI - MARUN.

EDDF/FRA  
FRANKFURT/MAIN**JEPPESEN** FRANKFURT/MAIN, GERMANY  
8 JUN 07 (10-3T1) RNAV SID (OVERLAY)

*LANGEN Radar 120.15	Apt Elev 364'	Trans level: By ATC Trans alt: 5000' 1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory. 3. For departure designation refer to 10-1P pages.
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MARUN ONE FOXTROT (MARUN 1F) [MARU1F]  
MARUN ONE JULIETT (MARUN 1J) [MARU1J]  
RWYS 25L/R RNAV DEPARTURES (OVERLAY 10-3J4)



Initial climb clearance 5000'

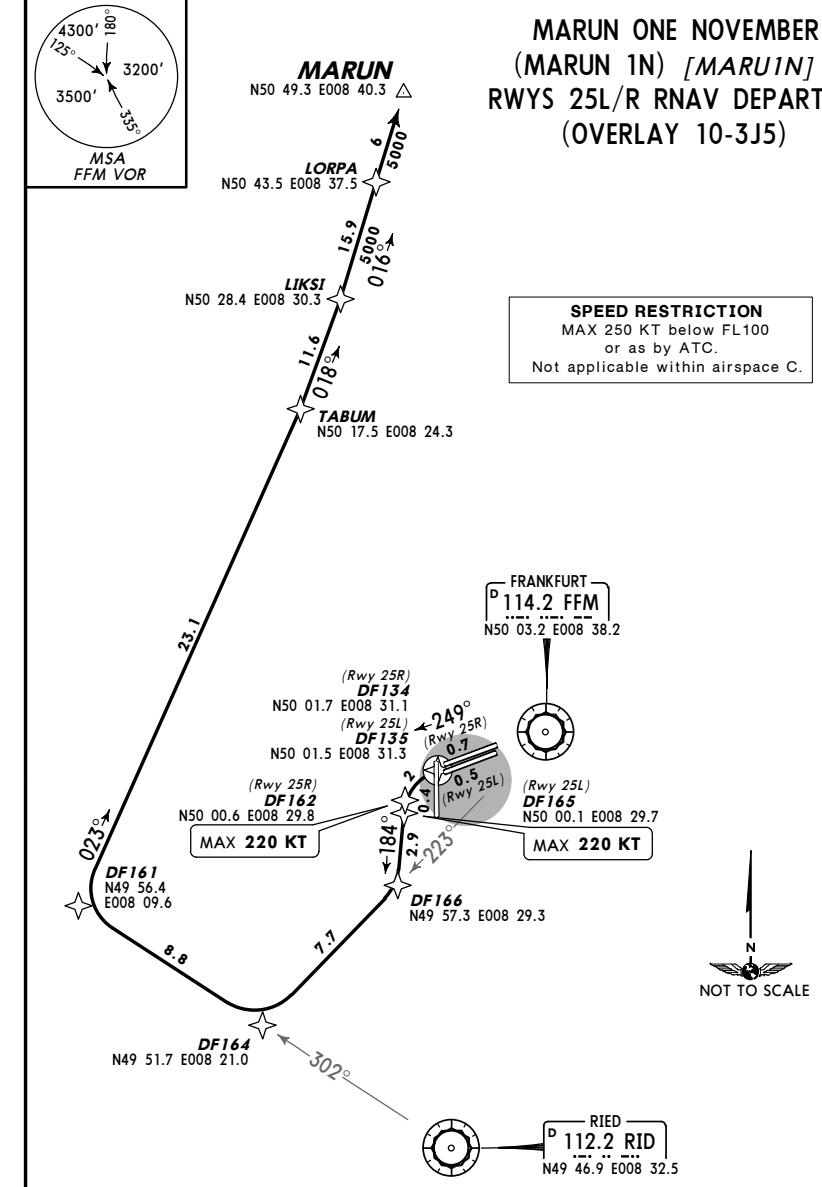
## ROUTING

(800'+) - DF234 (25R)/DF235 (25L) - DF233 (3500'+) - DF132 (4400'+) - TABUM - LIKSI - LORPA - MARUN.

EDDF/FRA  
FRANKFURT/MAIN**JEPPESEN** FRANKFURT/MAIN, GERMANY  
8 JUN 07 (10-3T2) RNAV SID (OVERLAY)

*LANGEN Radar 120.15	Apt Elev 364'	Trans level: By ATC Trans alt: 5000' 1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory. 3. For departure designation refer to 10-1P pages.
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MARUN ONE NOVEMBER (MARUN 1N) [MARU1N]  
RWYS 25L/R RNAV DEPARTURE (OVERLAY 10-3J5)



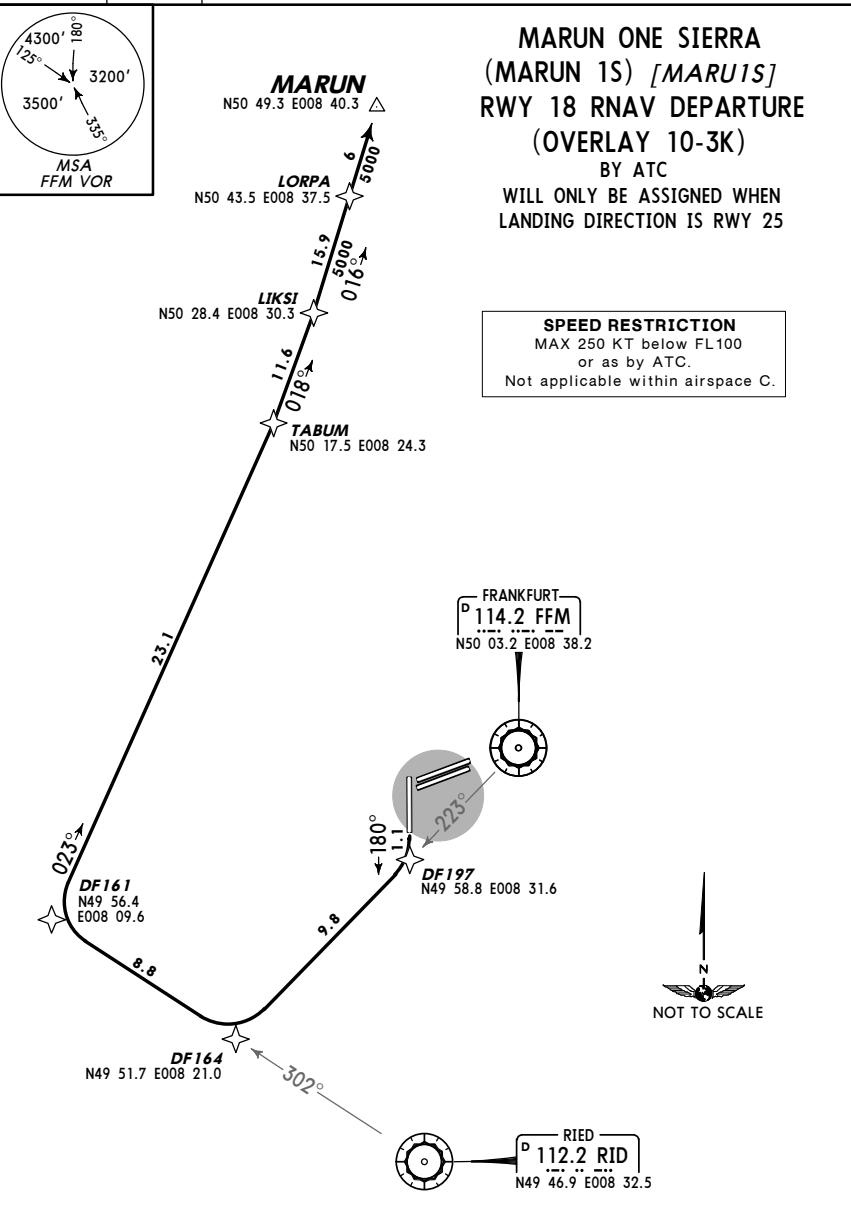
EDDF/FRA  
FRANKFURT/MAIN

## JEPPESEN FRANKFURT/MAIN, GERMANY

10 MAR 06 10-3T3 Eff 16 Mar

RNAV SID (OVERLAY)

LANGEN Radar 120.15	Apt Elev 364'	Trans level: By ATC Trans alt: 5000' 1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4C). Strict adherence within the limits of aircraft performance is mandatory. 3. EXPECT close-in obstacles. 4. Wind shears and increased turbulences must be expected when winds heavy. 5. For departure designation refer to page 10-4.
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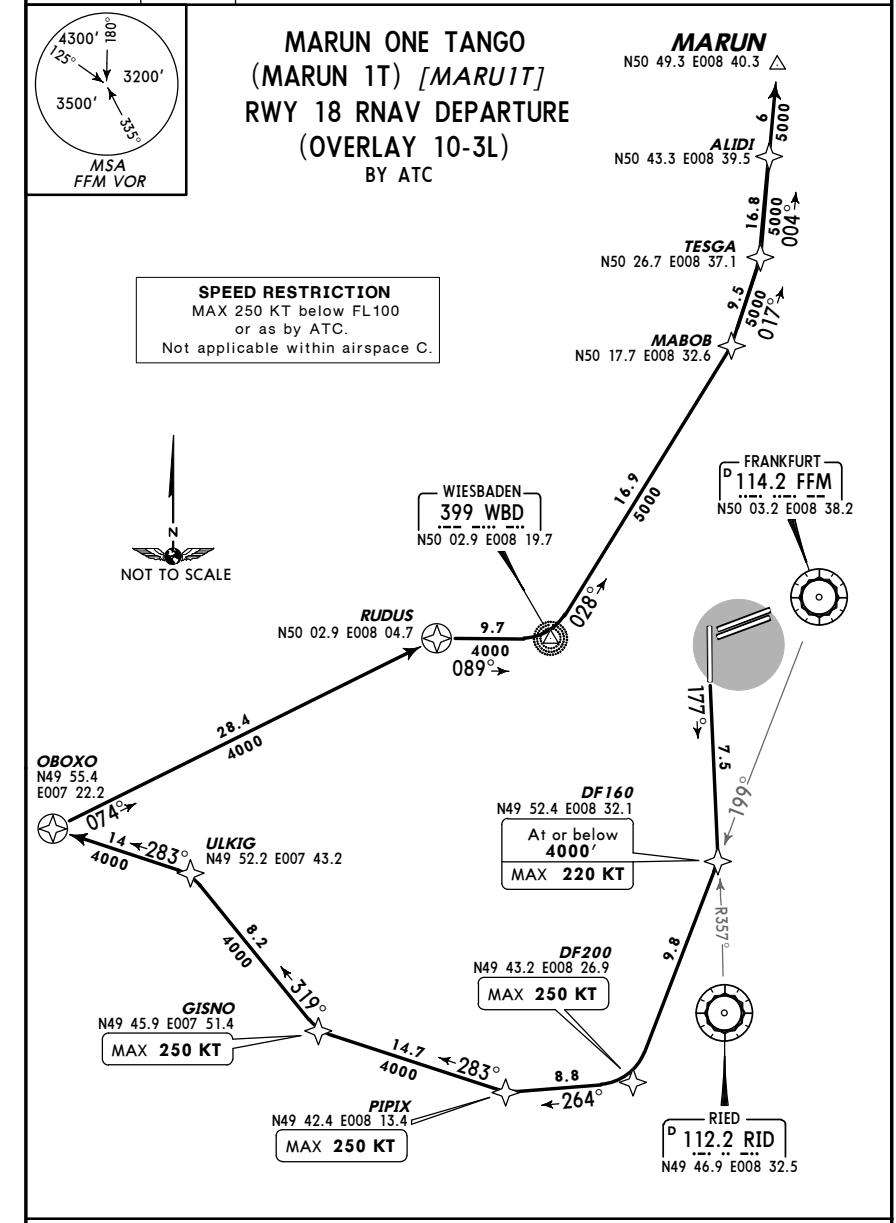
EDDF/FRA  
FRANKFURT/MAIN

## JEPPESEN FRANKFURT/MAIN, GERMANY

10 MAR 06 10-3T4 Eff 16 Mar

RNAV SID (OVERLAY)

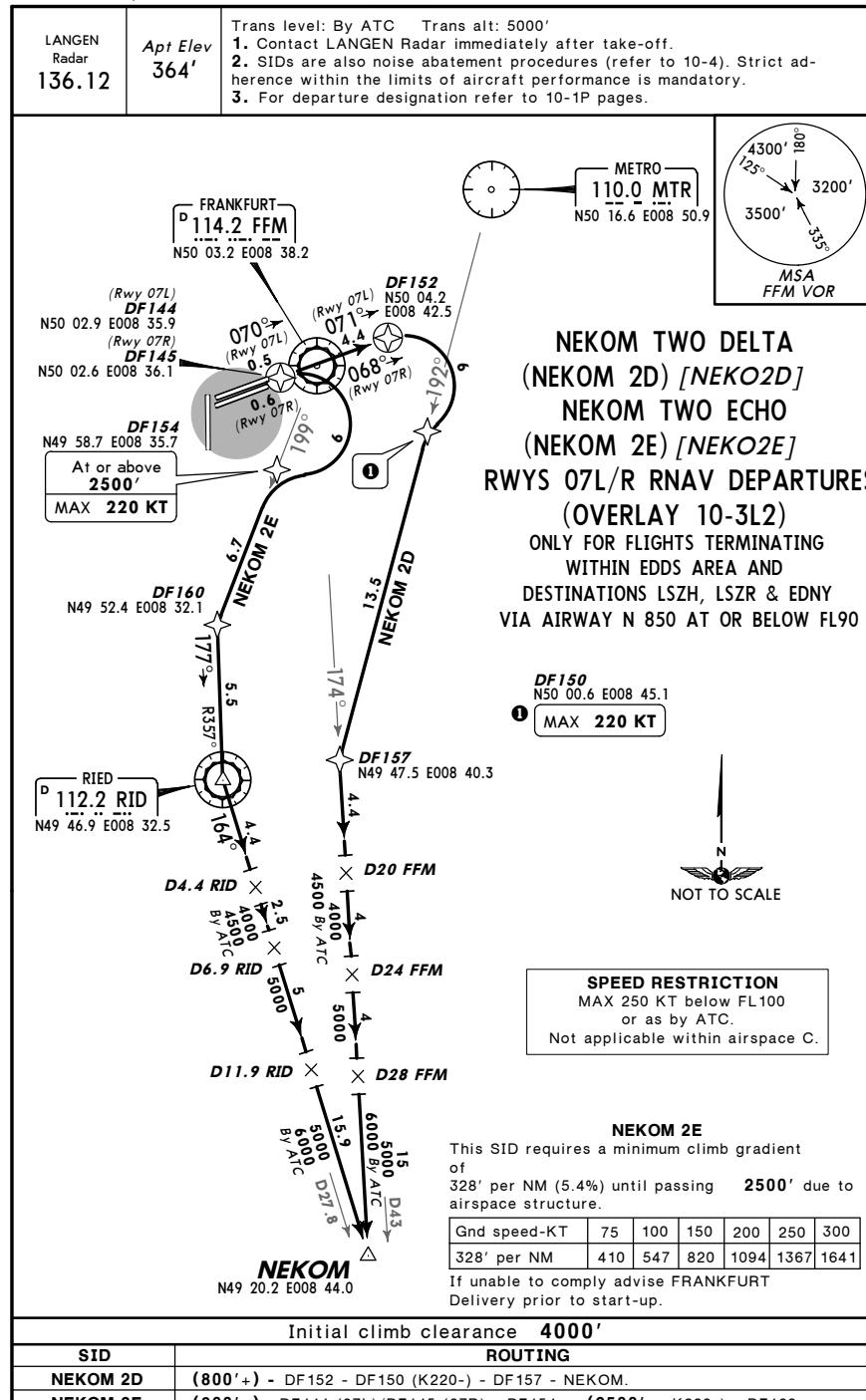
LANGEN Radar 136.12	Apt Elev 364'	Trans level: By ATC Trans alt: 5000' 1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4C). Strict adherence within the limits of aircraft performance is mandatory. 3. EXPECT close-in obstacles. 4. Wind shears and increased turbulences must be expected when winds heavy. 5. For departure designation refer to page 10-4.
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EDDF/FRA  
FRANKFURT/MAIN**JEPPESEN** FRANKFURT/MAIN, GERMANY

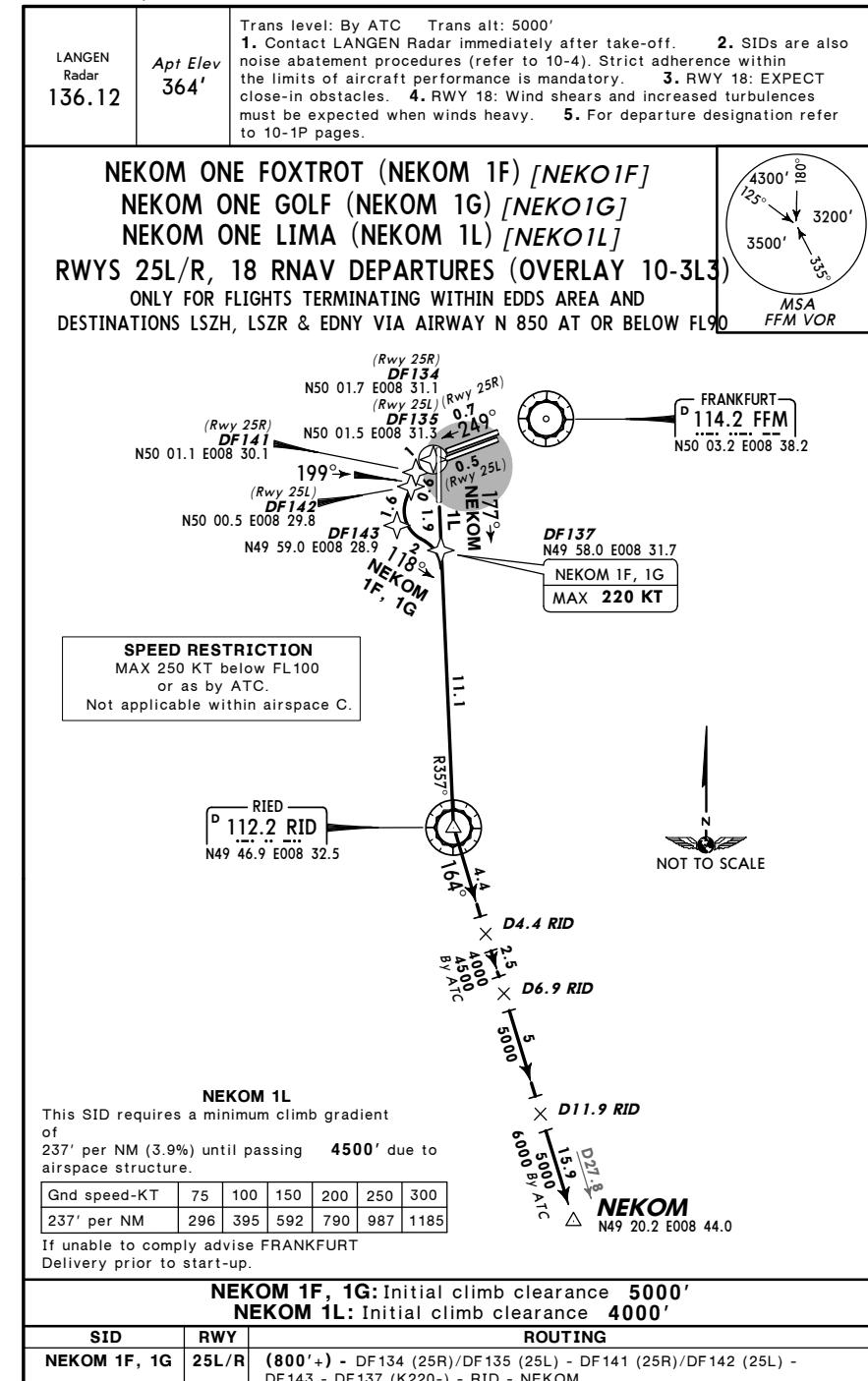
2 FEB 07 (10-3T5) Eff 15 Feb

RNAV SID (OVERLAY)

EDDF/FRA  
FRANKFURT/MAIN**JEPPESEN** FRANKFURT/MAIN, GERMANY

2 FEB 07 (10-3T6) Eff 15 Feb

RNAV SID (OVERLAY)



EDDF/FRA  
FRANKFURT/MAIN**JEPPESEN** FRANKFURT/MAIN, GERMANY

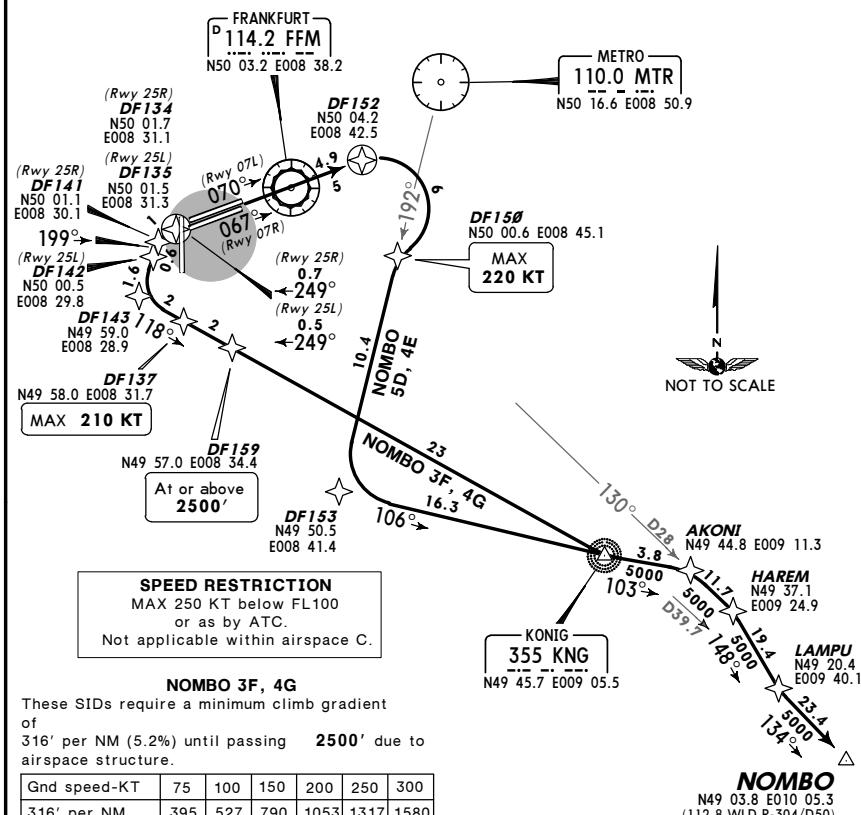
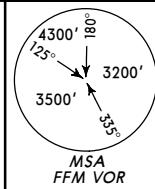
12 OCT 07 (10-3T) Eff 25 Oct

RNAV SID (OVERLAY)

*LANGEN Radar 136.12	Apt Elev 364'	Trans level: By ATC Trans alt: 5000' 1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory. 3. For departure designation refer to 10-1P pages.
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NOMBO FIVE DELTA (NOMBO 5D) [NOMB5D]  
 NOMBO FOUR ECHO (NOMBO 4E) [NOMB4E]  
 NOMBO THREE FOXTROT (NOMBO 3F) [NOMB3F]  
 NOMBO FOUR GOLF (NOMBO 4G) [NOMB4G]  
 RWYS 07L/R, 25L/R RNAV DEPARTURES  
 (OVERLAY 10-3L4)

NOT FOR PROP ACFT, THESE FLIGHTS SHALL FILE RATIM RNAV SIDS  
 NOT FOR FLIGHTS TERMINATING WITHIN EDDN AREA OR EDMM FIR



SID	RWY	ROUTING
NOMBO 5D, 4E	07L/R	(800'+) - DF152 - DF150 (K220-) - DF153 - KNG - AKONI - HAREM - LAMPU - NOMBO.
NOMBO 3F, 4G	25L/R	(800'+) - DF134 (25R)/DF135 (25L) - DF141 (25R)/DF142 (25L) - DF143 - DF137 (K210-) - DF159 (2500'+) - KNG - AKONI - HAREM - LAMPU - NOMBO.

EDDF/FRA  
FRANKFURT/MAIN**JEPPESEN** FRANKFURT/MAIN, GERMANY

12 OCT 07 (10-3T) Eff 25 Oct

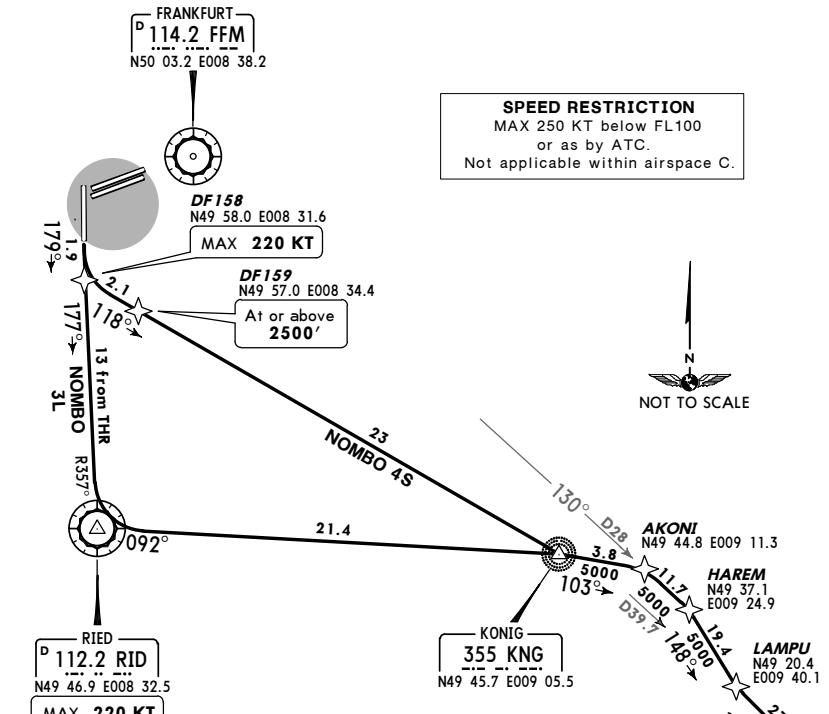
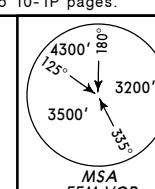
RNAV SID (OVERLAY)

*LANGEN Radar 136.12	Apt Elev 364'	Trans level: By ATC Trans alt: 5000' 1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory. 3. EXPECT close-in obstacles. 4. Wind shears and increased turbulences must be expected when winds heavy. 5. For departure designation refer to 10-1P pages.
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NOMBO THREE LIMA (NOMBO 3L) [NOMB3L]  
 NOMBO FOUR SIERRA (NOMBO 4S) [NOMB4S]

**RWY 18 RNAV DEPARTURES (OVERLAY 10-3L5)**

NOT FOR PROP ACFT, THESE FLIGHTS SHALL FILE RATIM RNAV SIDS  
 NOT FOR FLIGHTS TERMINATING WITHIN EDDN AREA OR EDMM FIR



SID	ROUTING
NOMBO 3L	(800'+) - RID (K220-) - KNG - AKONI - HAREM - LAMPU - NOMBO.
NOMBO 4S	(800'+) - DF158 (K220-) - DF159 (2500'+) - KNG - AKONI - HAREM - LAMPU - NOMBO.

EDDF/FRA  
FRANKFURT/MAIN

## JEPPESSEN FRANKFURT/MAIN, GERMANY

12 OCT 07 10-3U Eff 25 Oct

RNAV SID (OVERLAY)

*LANGEN Radar 136.12	Apt Elev 364'	Trans level: By ATC Trans alt: 5000' 1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory. 3. For departure designation refer to 10-1P pages.
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RATIM TWO DELTA (RATIM 2D) [RATI2D]

RATIM TWO ECHO (RATIM 2E) [RATI2E]

RATIM TWO FOXTROT (RATIM 2F) [RATI2F]

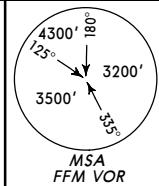
RATIM TWO GOLF (RATIM 2G) [RATI2G]

RWYS 07L/R, 25L/R RNAV DEPARTURES  
(OVERLAY 10-3L6)

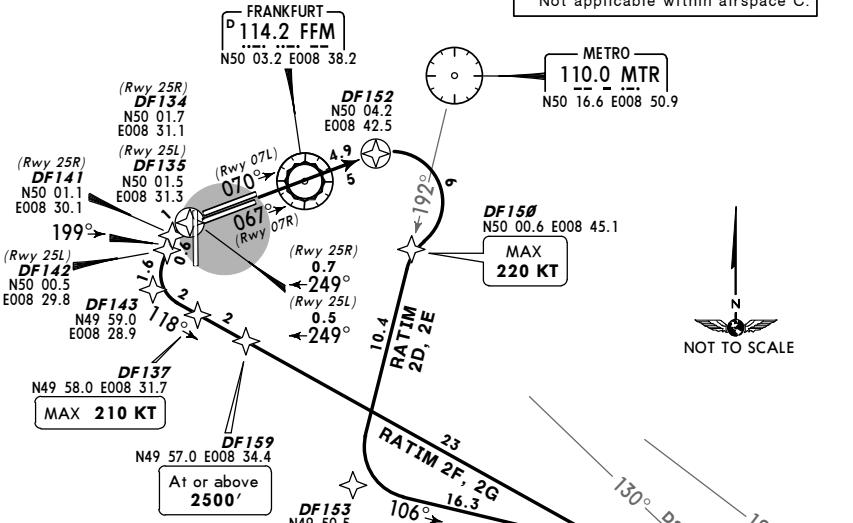
ONLY PROP ACFT WITH MAX FL230 REQUESTED

INSTEAD OF NOMBO RNAV SIDS

NOT FOR FLIGHTS TERMINATING WITHIN EDDN AREA OR EDMM FIR



**SPEED RESTRICTION**  
MAX 250 KT below FL100  
or as by ATC.  
Not applicable within airspace C.



## RATIM 2F, 2G

These SIDs require a minimum climb gradient of 316' per NM (5.2%) until passing 2500' due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
316' per NM	395	527	790	1053	1317	1580

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

RATIM 2D, 2E: Initial climb clearance 4000'  
RATIM 2F, 2G: Initial climb clearance 5000'

SID	RWY	ROUTING
RATIM 2D, 2E	07L/R	(800'+) - DF152 - DF150 (K220-) - DF153 - KNG - AKONI - RATIM.
RATIM 2F, 2G	25L/R	(800'+) - DF134 (25R)/DF135 (25L) - DF141 (25R)/DF142 (25L) - DF143 - DF137 (K210-) - DF159 (2500'+) - KNG - AKONI - RATIM.

CHANGES: SIDs RATIM 1F, 1G renumbered 2F, 2G &amp; revised.

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EDDF/FRA  
FRANKFURT/MAIN

## JEPPESSEN FRANKFURT/MAIN, GERMANY

12 OCT 07 10-3V Eff 25 Oct

RNAV SID (OVERLAY)

*LANGEN Radar 136.12	Apt Elev 364'	Trans level: By ATC Trans alt: 5000' 1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory. 3. EXPECT close-in obstacles. 4. Wind shear and increased turbulences must be expected when winds heavy. 5. For departure designation refer to 10-1P pages.
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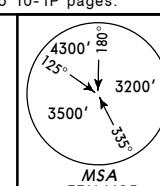
RATIM TWO SIERRA (RATIM 2S) [RATI2S]

RWY 18 RNAV DEPARTURE (OVERLAY 10-3L7)

ONLY PROP ACFT WITH MAX FL230 REQUESTED

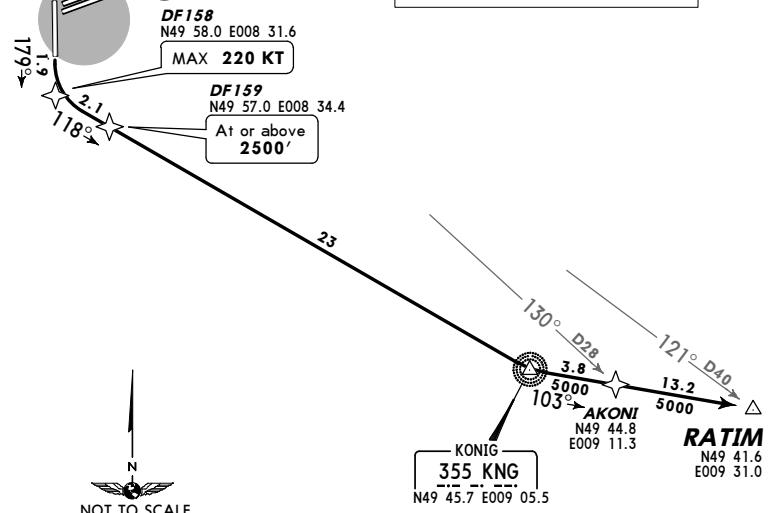
INSTEAD OF NOMBO RNAV SIDS

NOT FOR FLIGHTS TERMINATING WITHIN EDDN AREA OR EDMM FIR



FRANKFURT  
P 114.2 FFM  
N50 03.2 E008 38.2

**SPEED RESTRICTION**  
MAX 250 KT below FL100  
or as by ATC.  
Not applicable within airspace C.



This SID requires a minimum climb gradient of 565' per NM (9.3%) until passing 2500' due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
565' per NM	706	942	1413	1884	2355	2825

If unable to comply advise FRANKFURT  
Delivery prior to start-up and expect alternate routing by ATC.

Initial climb clearance 4000'

## ROUTING

(800'+) - DF158 (K220-) - DF159 (2500'+) - KNG - AKONI - RATIM.

CHANGES: RNAV SID renumbered &amp; revised.

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EDDF/FRA  
FRANKFURT/MAIN**JEPPESEN** FRANKFURT/MAIN, GERMANY  
28 APR 06 (10-3V3) RNAV SID (OVERLAY)

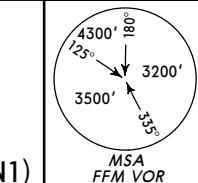
LANGEN Radar 136.12	Apt Elev 364'	Trans level: By ATC Trans alt: 5000' 1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4C). Strict adherence within the limits of aircraft performance is mandatory. 3. For departure designation refer to page 10-4.
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SOBRA ONE FOXTROT (SOBRA 1F) [SOBR1F]  
 SOBRA ONE GOLF (SOBRA 1G) [SOBR1G]  
 SOBRA TWO NOVEMBER (SOBRA 2N) [SOBR2N]  
 SOBRA ONE PAPA (SOBRA 1P) [SOBR1P]  
**RWYS 25L/R RNAV DEPARTURES (OVERLAY 10-3N1)**

FOR FLIGHTS INTENDING TO PROCEED AT OR ABOVE FL250

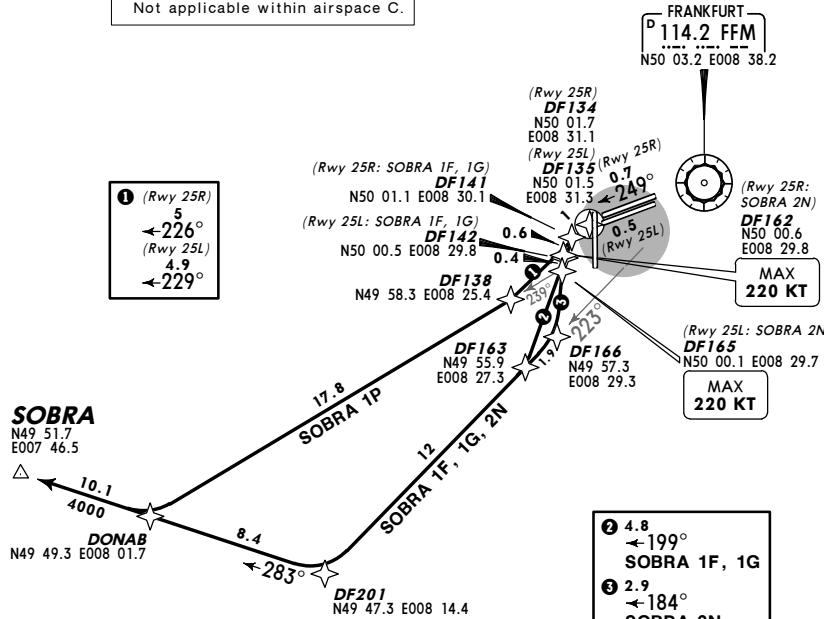
VIA AIRWAYS Y 180/Y 181

FLIGHTS HAVE TO BE ABLE TO CROSS RUDOT AT OR ABOVE FL240

IF UNABLE TO COMPLY, FLIGHT PLAN SHALL READ:  
RUDOT FL220 - Y 180 - DIK RFL

NOT TO SCALE

**SPEED RESTRICTION**  
MAX 250 KT below FL100  
or as by ATC.  
Not applicable within airspace C.



Initial climb clearance 5000'

ROUTING

<b>SOBRA 1F, 1G</b>	(800'+) - DF134 (25R)/DF135 (25L) - DF141 (25R)/DF142 (25L) - DF163 - DF201 - DONAB - SOBRA.
<b>SOBRA 2N</b>	(800'+) - DF134 (25R)/DF135 (25L) - DF162 (25R; K220-) - DF165 (25L; K220-) - DF166 - DF201 - DONAB - SOBRA.
<b>SOBRA 1P</b>	(800'+) - DF134 (25R)/DF135 (25L) - DF138 - DONAB - SOBRA.

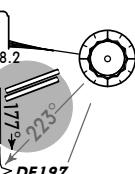
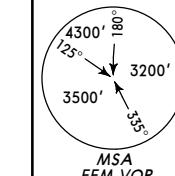
EDDF/FRA  
FRANKFURT/MAIN**JEPPESEN** FRANKFURT/MAIN, GERMANY  
28 APR 06 (10-3V4) RNAV SID (OVERLAY)

LANGEN Radar 136.12	Apt Elev 364'	Trans level: By ATC Trans alt: 5000' 1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4C). Strict adherence within the limits of aircraft performance is mandatory. 3. EXPECT close-in obstacles. 4. Wind shears and increased turbulences must be expected when winds heavy. 5. For departure designation refer to page 10-4.
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SOBRA TWO LIMA (SOBRA 2L) [SOBR2L]  
 SOBRA ONE SIERRA (SOBRA 1S) [SOBR1S]  
 SOBRA TWO UNIFORM (SOBRA 2U) [SOBR2U]  
**RWY 18 RNAV DEPARTURES (OVERLAY 10-3N2)**

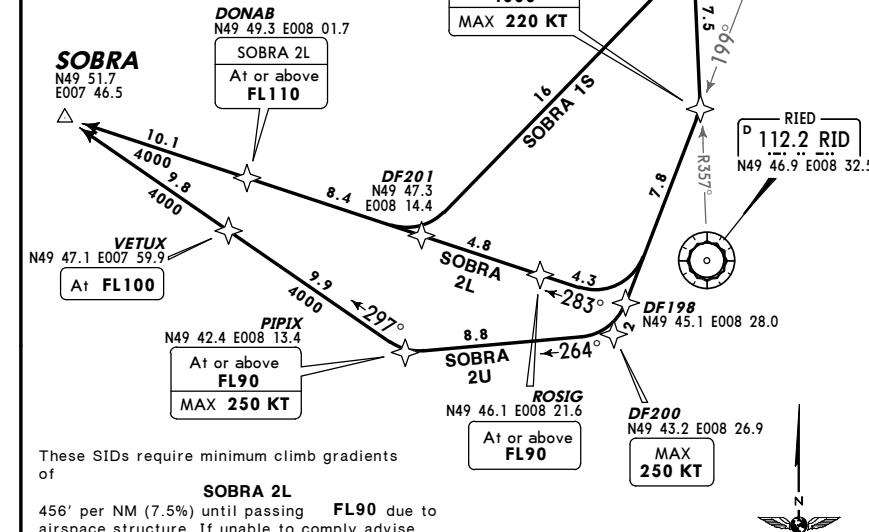
FOR FLIGHTS INTENDING TO PROCEED AT OR ABOVE FL250

VIA AIRWAYS Y 180/Y 181

FLIGHTS HAVE TO BE ABLE TO CROSS  
RUDOT AT OR ABOVE FL240IF UNABLE TO COMPLY, FLIGHT PLAN SHALL READ: N50 03.2 E008 38.2  
RUDOT FL220 - Y 180 - DIK RFL

NOT TO SCALE

**SPEED RESTRICTION**  
MAX 250 KT below FL100  
or as by ATC.  
Not applicable within airspace C.



These SIDs require minimum climb gradients of:

**SOBRA 2L**

456' per NM (7.5%) until passing FL90 due to airspace structure. If unable to comply advise FRANKFURT Delivery prior to start-up and expect routing via SOBRA 2U.

**SOBRA 2U**

328' per NM (5.4%) until passing FL90 due to airspace structure. If unable to comply advise FRANKFURT Delivery prior to start-up and expect routing via ULKIG 3U.

Gnd speed-KT	75	100	150	200	250	300
456' per NM	570	760	1139	1519	1899	2279
328' per NM	410	547	820	1094	1367	1641

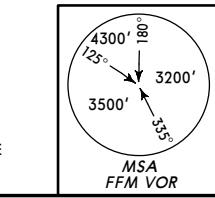
Initial climb clearance 4000'

SID	ROUTING
<b>SOBRA 2L</b>	(800'+) - DF160 (4000'-; K220-) - DF198 - ROSIG (FL90+) - DONAB - SOBRA.
<b>SOBRA 1S</b>	(800'+) - DF197 - DF201 - DONAB - SOBRA.
<b>SOBRA 2U</b>	(800'+) - DF160 (4000'-; K220-) - DF200 (K250-) - PIPIX (FL90+; K250-) - VETUX (FL100) - SOBRA.

*LANGEN Radar	Apt Elev
SULUS 3D, 2E N50 04.5 E010 43.7 120.15	364' 364'

Trans level: By ATC Trans alt: 5000'.  
1. Contact LANGEN Radar immediately after take-off.  
2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory.  
3. EXPECT close-in maneuvering is mandatory.  
4. Wind shear and increased turbulence must be expected when winds heavy.  
5. For departure designation refer to 10-1P pages.

**SULUS**  
N50 04.5 E010 43.7  
(112.1 FUL R-124/D54)  
136.12  
5000

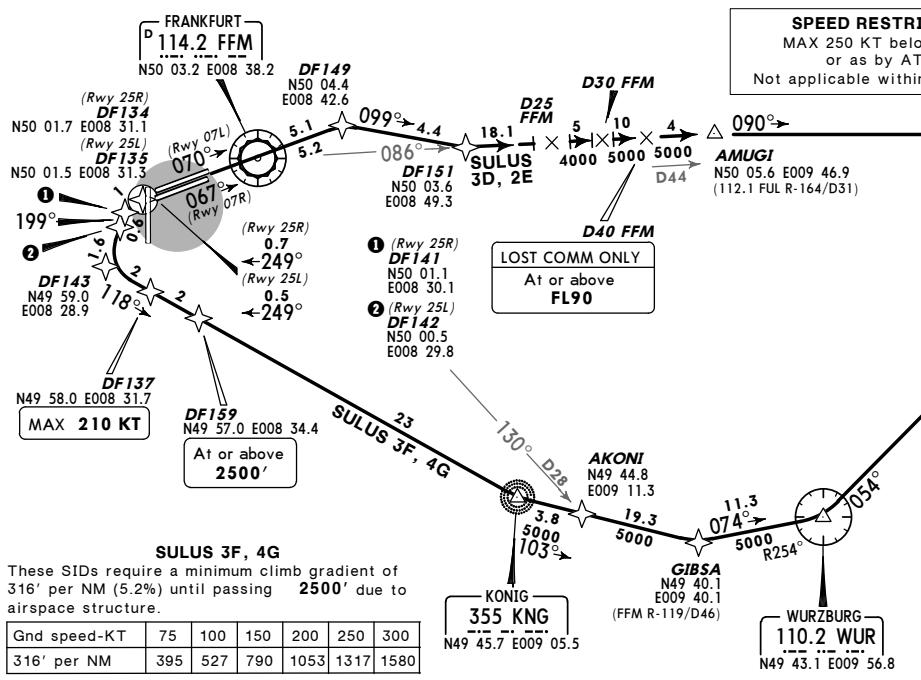


NOT FOR FLIGHTS DESTINATION EDDN

DEPARTURES (OVERLAY 10-3N3)

NOT FOR FLIGHTS DESTINATION EDDN

**SPEED RESTRICTION**  
MAX 250 KT below FL100  
or as by ATC.  
Not applicable within airspace C.



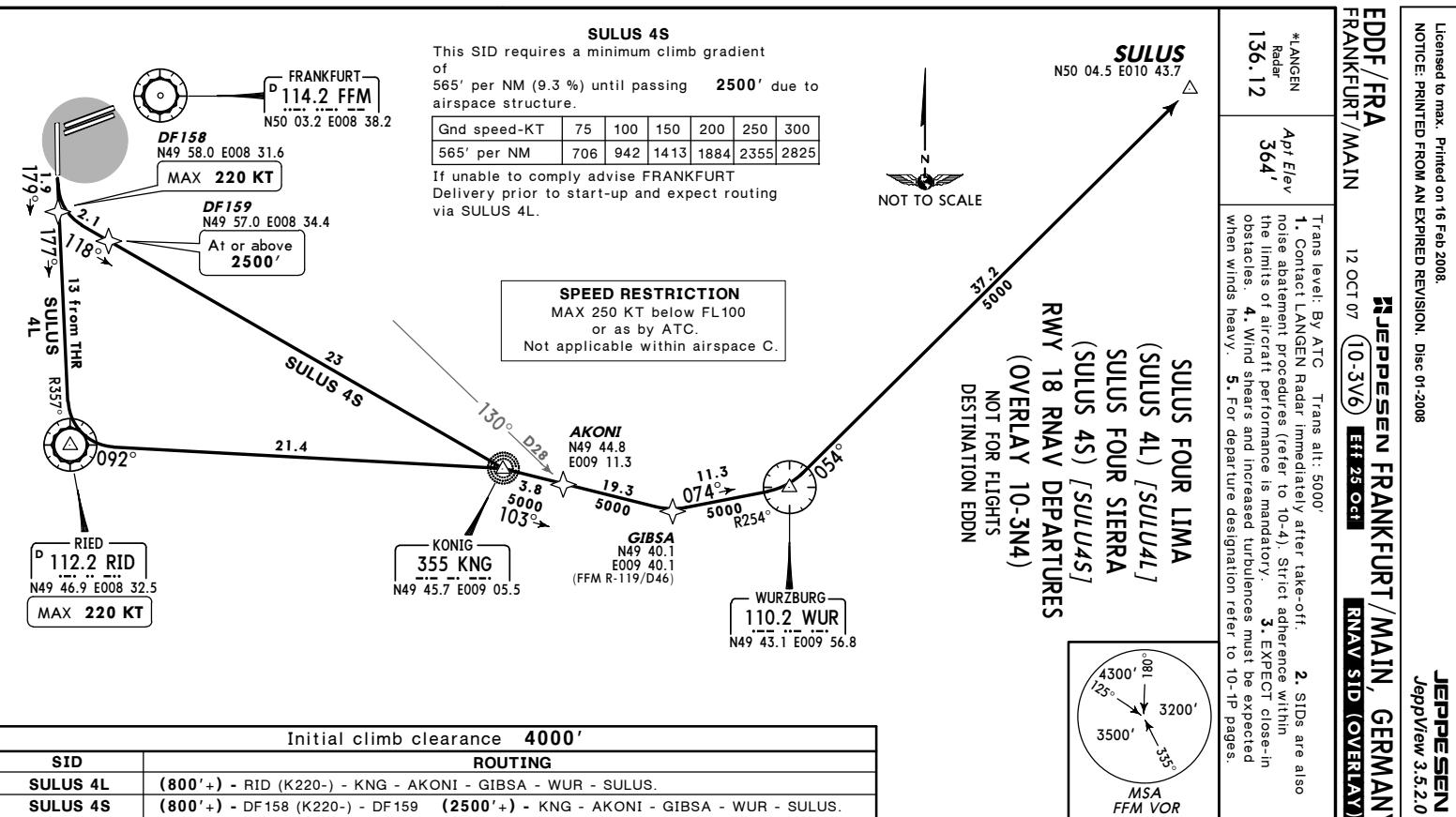
Gnd speed-KT	75	100	150	200	250	300
316' per NM	395	527	790	1053	1317	1580

If unable to comply advise FRANKFURT

Delivery prior to start-up.

**SULUS 3D, 2E:** Initial climb clearance 4000'  
**SULUS 3F, 4G:** Initial climb clearance 5000'

SID	RWY	ROUTING
SULUS 3D, 2E	07L/R	(800'+) - DF149 - DF151 - AMUGI - SULUS.
SULUS 3F, 4G	25L/R	(800'+) - DF134 (25R)/DF135 (25L) - DF141 (25R)/DF142 (25L) - DF143 - DF137 (K210-) - DF159 (2500'+) - KNG - AKONI - GIBSA - WUR - SULUS.



Gnd speed-KT	75	100	150	200	250	300
565' per NM	706	942	1413	1884	2355	2825

If unable to comply advise FRANKFURT  
Delivery prior to start-up and expect routing via SULUS 4L.

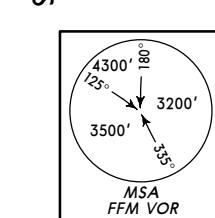
NOT TO SCALE

NOT TO SCALE

NOT FOR FLIGHTS DESTINATION EDDN

NOT FOR FLIGHTS DESTINATION EDDN

**SULUS**  
N50 04.5 E010 43.7  
136.12  
5000



**SPEED RESTRICTION**  
MAX 250 KT below FL100  
or as by ATC.  
Not applicable within airspace C.

SID	ROUTING
SULUS 4L	(800'+) - RID (K220-) - KNG - AKONI - GIBSA - WUR - SULUS.
SULUS 4S	(800'+) - DF158 (K220-) - DF159 (2500'+) - KNG - AKONI - GIBSA - WUR - SULUS.

Trans level: By ATC Trans alt: 5000'.  
1. Contact LANGEN Radar immediately after take-off.  
2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory.  
3. EXPECT close-in maneuvering is mandatory.  
4. Wind shear and increased turbulence must be expected when winds heavy.  
5. For departure designation refer to 10-1P pages.

EDDF/FRA  
FRANKFURT/MAIN**JEPPESEN** FRANKFURT/MAIN, GERMANY

12 OCT 07 (10-3V7) Eff 25 Oct

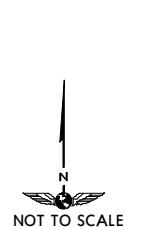
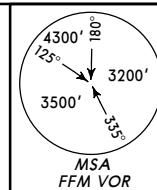
RNAV SID (OVERLAY)

\*LANGEN  
Radar  
120.15Apt Elev  
364'

- Trans level: By ATC Trans alt: 5000'  
 1. Contact LANGEN Radar immediately after take-off.  
 2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory.  
 3. For departure designation refer to 10-1P pages.

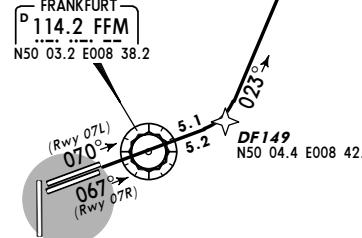
**TOBAK FIVE DELTA (TOBAK 5D) [TOBA5D]**  
**TOBAK FIVE ECHO (TOBAK 5E) [TOBA5E]**  
**RWYS 07L/R RNAV DEPARTURES (OVERLAY 10-3N6)**

NOT FOR FLIGHTS CONTINUING VIA  
 AIRWAY Z 10 - GISEM - AIRWAY N 850 - WRB

**TOBAK**

N50 34.3 E008 47.1

**SPEED RESTRICTION**  
 MAX 250 KT below FL100  
 or as by ATC.  
 Not applicable within airspace C.



Initial climb clearance 5000'

## ROUTING

(800') - DF149 - MTR - TOBAK.

CHANGES: RNAV SIDs renumbered.

EDDF/FRA  
FRANKFURT/MAIN**JEPPESEN** FRANKFURT/MAIN, GERMANY

12 OCT 07 (10-3V8) Eff 25 Oct

RNAV SID (OVERLAY)

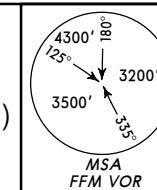
\*LANGEN  
Radar  
120.15Apt Elev  
364'

- Trans level: By ATC Trans alt: 5000'  
 1. Contact LANGEN Radar immediately after take-off.  
 2. SIDs are also noise abatement procedures (refer to 10-4). Strict adherence within the limits of aircraft performance is mandatory.  
 3. For departure designation refer to 10-1P pages.

**TOBAK TWO FOXTROT (TOBAK 2F) [TOBA2F]**  
**TOBAK TWO JULIETT (TOBAK 2J) [TOBA2J]**

**RWYS 25L/R RNAV DEPARTURES (OVERLAY 10-3N7)**

NOT FOR FLIGHTS CONTINUING VIA  
 AIRWAY Z 10 - GISEM - AIRWAY N 850 - WRB

**TOBAK**

N50 34.3 E008 47.1

**SPEED RESTRICTION**  
 MAX 250 KT below FL100  
 or as by ATC.  
 Not applicable within airspace C.

**TESGA**

N50 26.7 E008 37.1

**TAUNUS**D 116.7 TAU  
N50 15.0 E008 09.8**TABUM**

N50 17.5 E008 24.3

**DF132**

N50 07.0 E008 19.4

At or above  
4400'**DF233**

N50 02.0 E008 25.3

At or above  
3500'**FRANKFURT**D 114.2 FFM  
N50 03.2 E008 38.2

These SIDs require a minimum climb gradient of  
 729' per NM (12%) until FFM 8.4 DME (4.5 NM  
 after DER) due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
729' per NM	911	1215	1823	2430	3038	3646

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

Initial climb clearance 5000'

## ROUTING

(800') - DF234 (25R)/DF235 (25L) - DF233 (3500') - DF132 (4400') - TABUM - TESGA - TOBAK.

CHANGES: None.



EDDF/FRA  
FRANKFURT/MAIN

## JEPPESSEN FRANKFURT/MAIN, GERMANY

10 MAR 06 (10-3X1) Eff 16 Mar

RNAV SID (OVERLAY)

LANGEN Radar 136.12	Apt Elev 364'	Trans level: By ATC Trans alt: 5000' 1. Contact LANGEN Radar immediately after take-off. 2. SIDs are also noise abatement procedures (refer to 10-4C). Strict adherence within the limits of aircraft performance is mandatory. 3. EXPECT close-in obstacles. 4. Wind shears and increased turbulences must be expected when winds heavy. 5. For departure designation refer to page 10-4.
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ULKIG THREE UNIFORM (ULKIG 3U) [ULKI3U]  
RWY 18 RNAV DEPARTURE (OVERLAY 10-3Q)

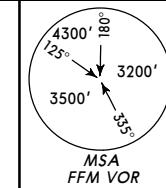
FOR FLIGHTS INTENDING TO PROCEED AT OR ABOVE FL250

VIA AIRWAYS Y 180/Y 181

FLIGHTS HAVE TO BE ABLE TO CROSS RUDOT AT OR ABOVE FL240

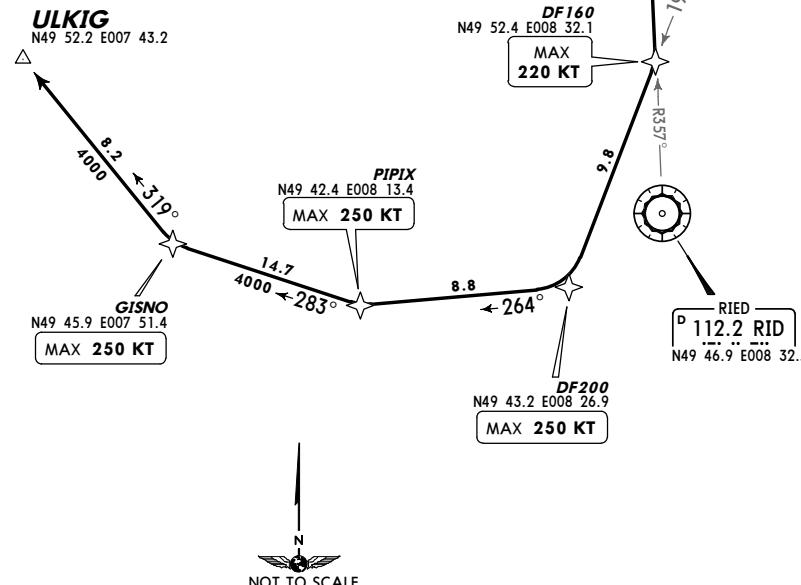
IF UNABLE TO COMPLY, FLIGHT PLAN SHALL READ:

RUDOT FL220 - Y 180 - DIK RFL



FRANKFURT  
114.2 FFM  
N50 03.2 E008 38.2

**SPEED RESTRICTION**  
MAX 250 KT below FL100  
or as by ATC.  
Not applicable within airspace C.



Initial climb clearance 4000'

## ROUTING

(800') - DF160 (K220-) - DF200 (K250-) - PIPIX (K250-) - GISNO (K250-) - ULKIG.

CHANGES: SID renumber; MSA; communications; chart reindexed.

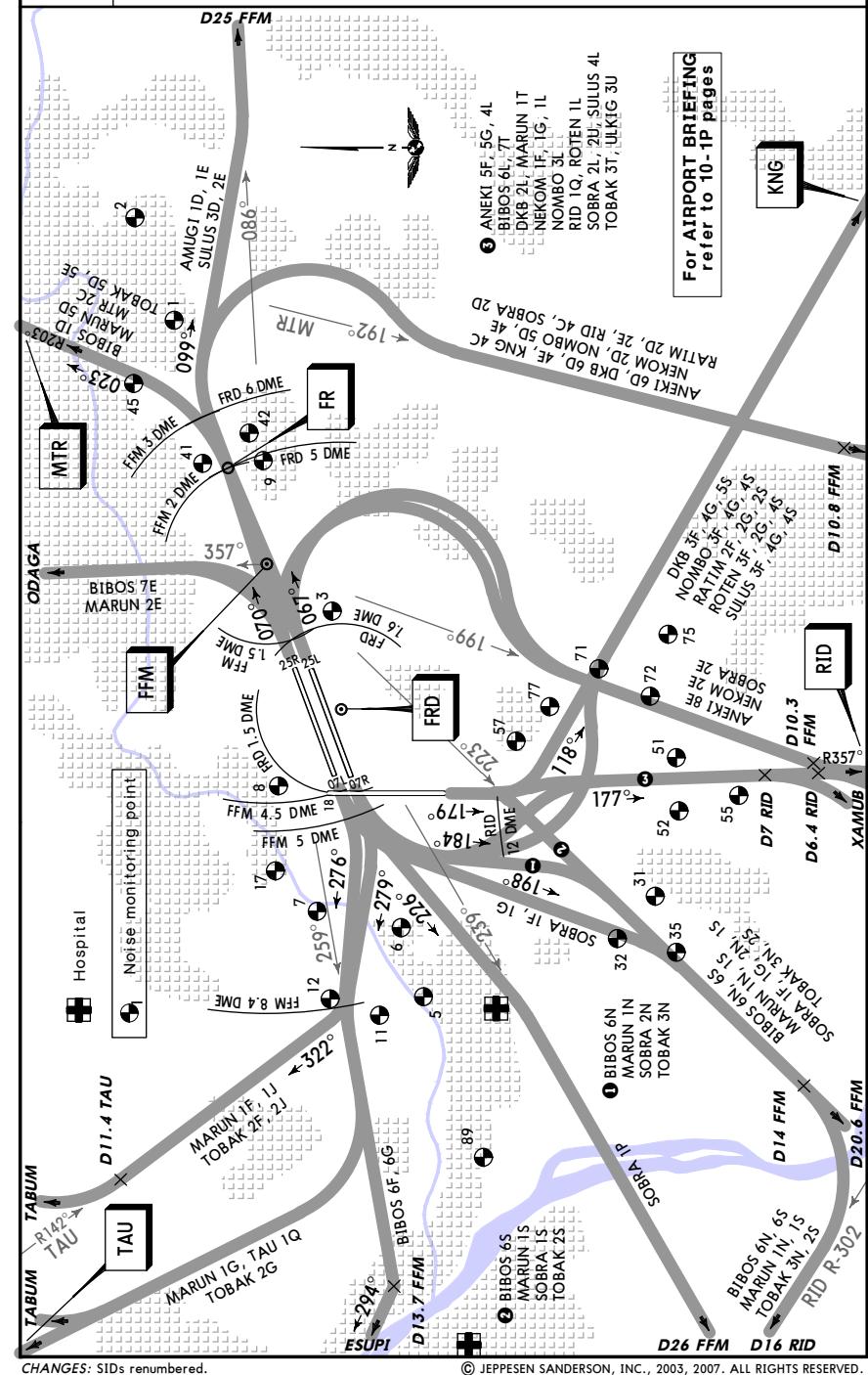
EDDF/FRA  
FRANKFURT/MAIN

## JEPPESSEN FRANKFURT/MAIN, GERMANY

12 OCT 07 (10-4) Eff 25 Oct

NOISE

Apt Elev 364'	NOISE ABATEMENT
------------------	-----------------

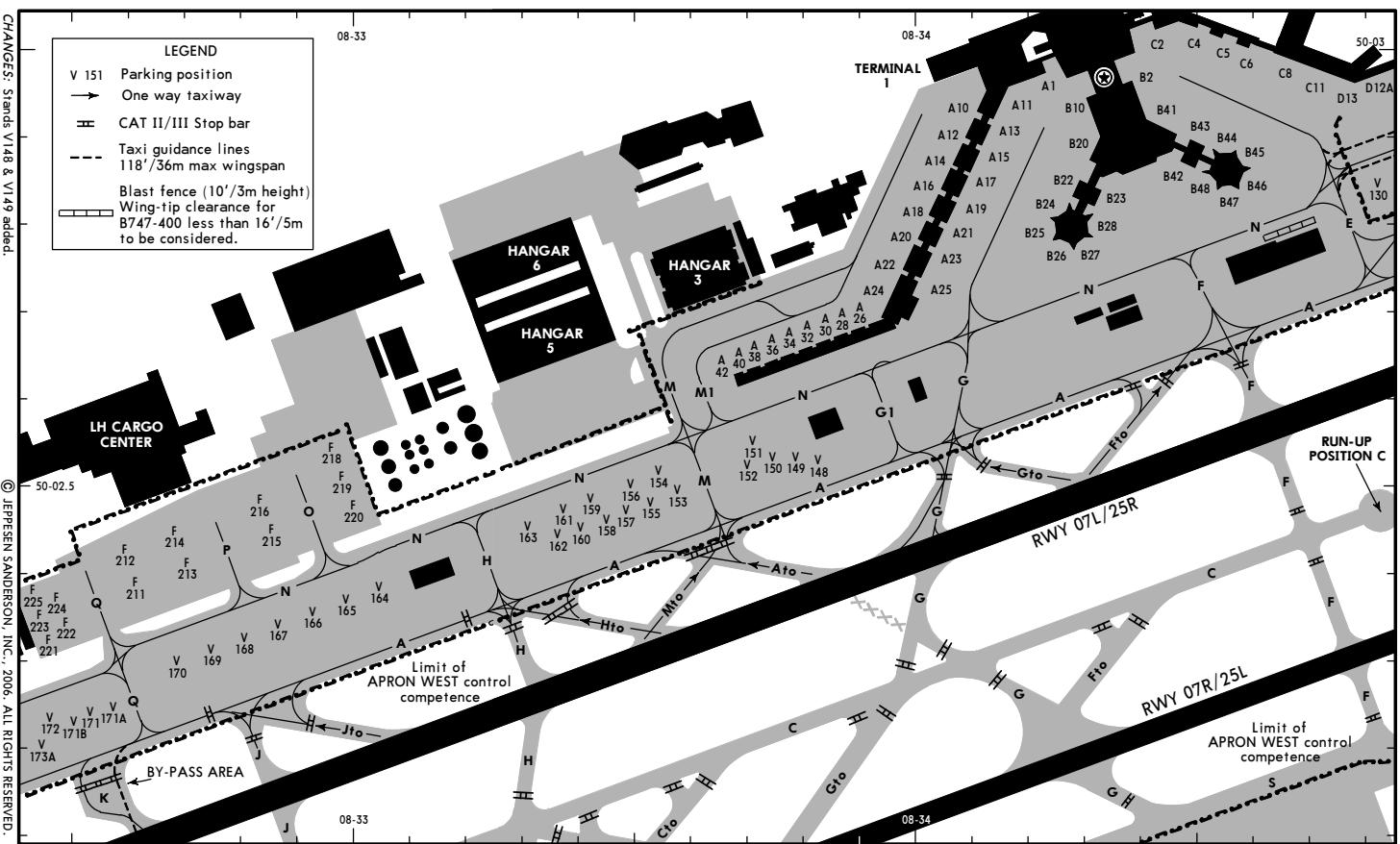
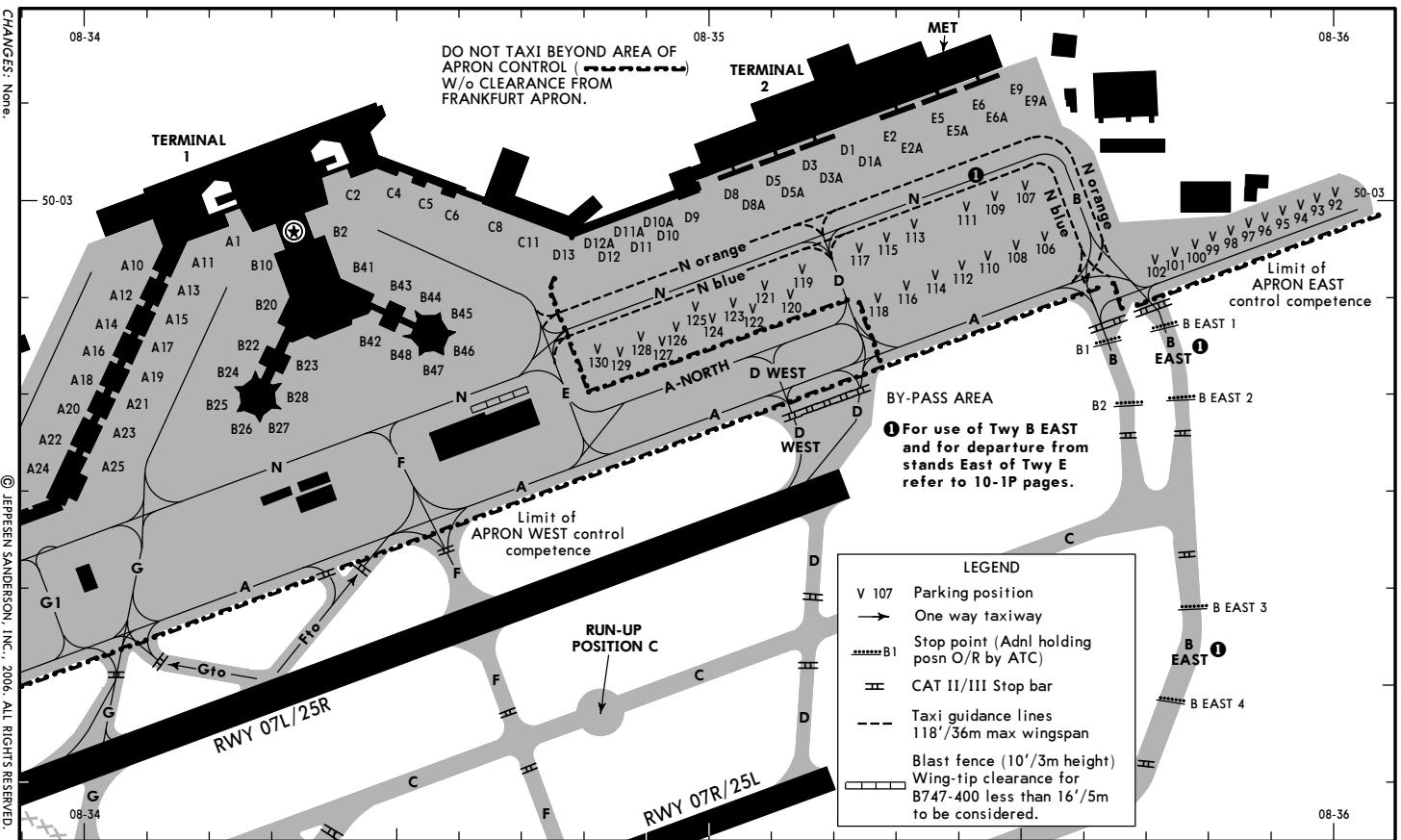


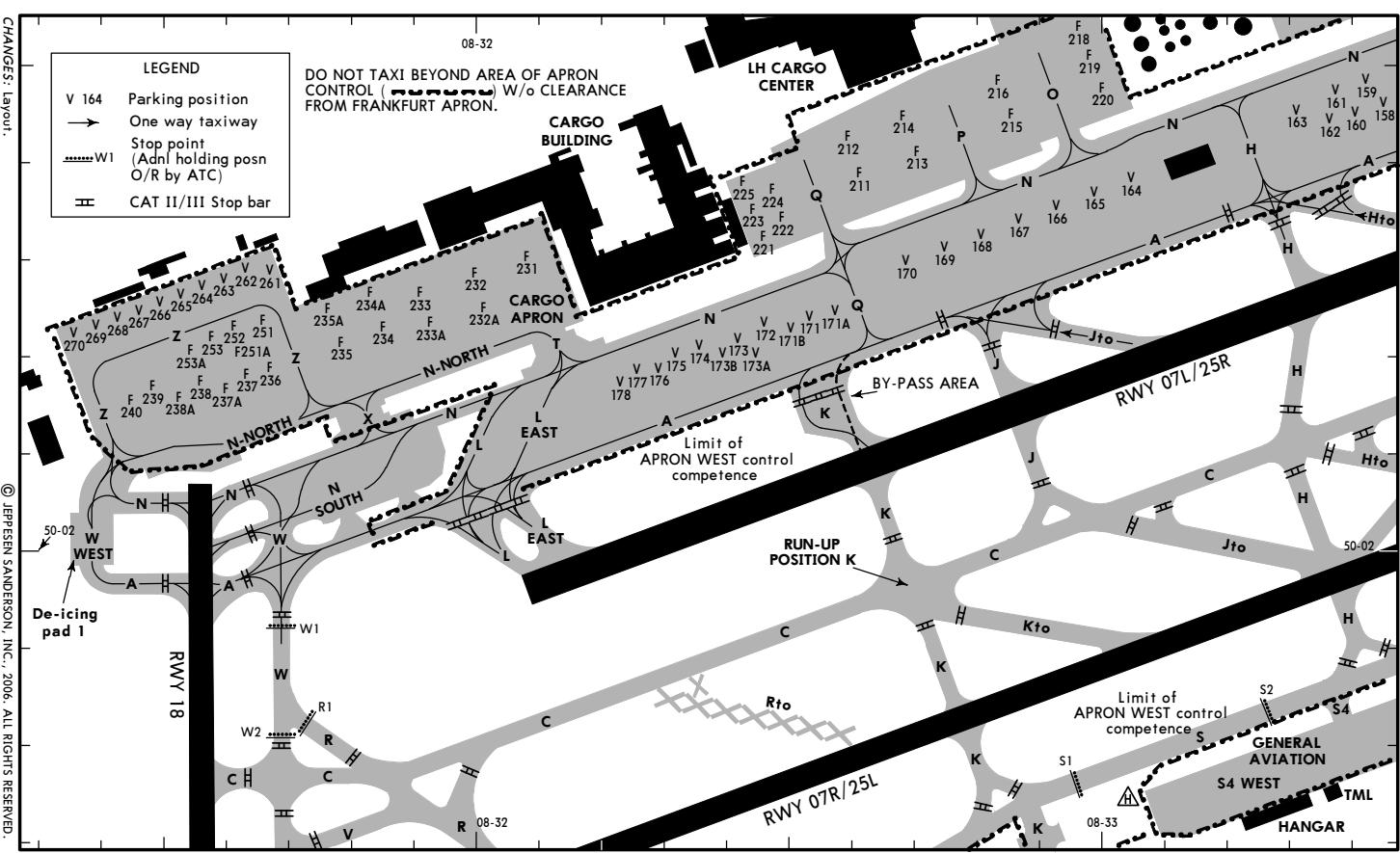
CHANGES: SIDs renumbered.

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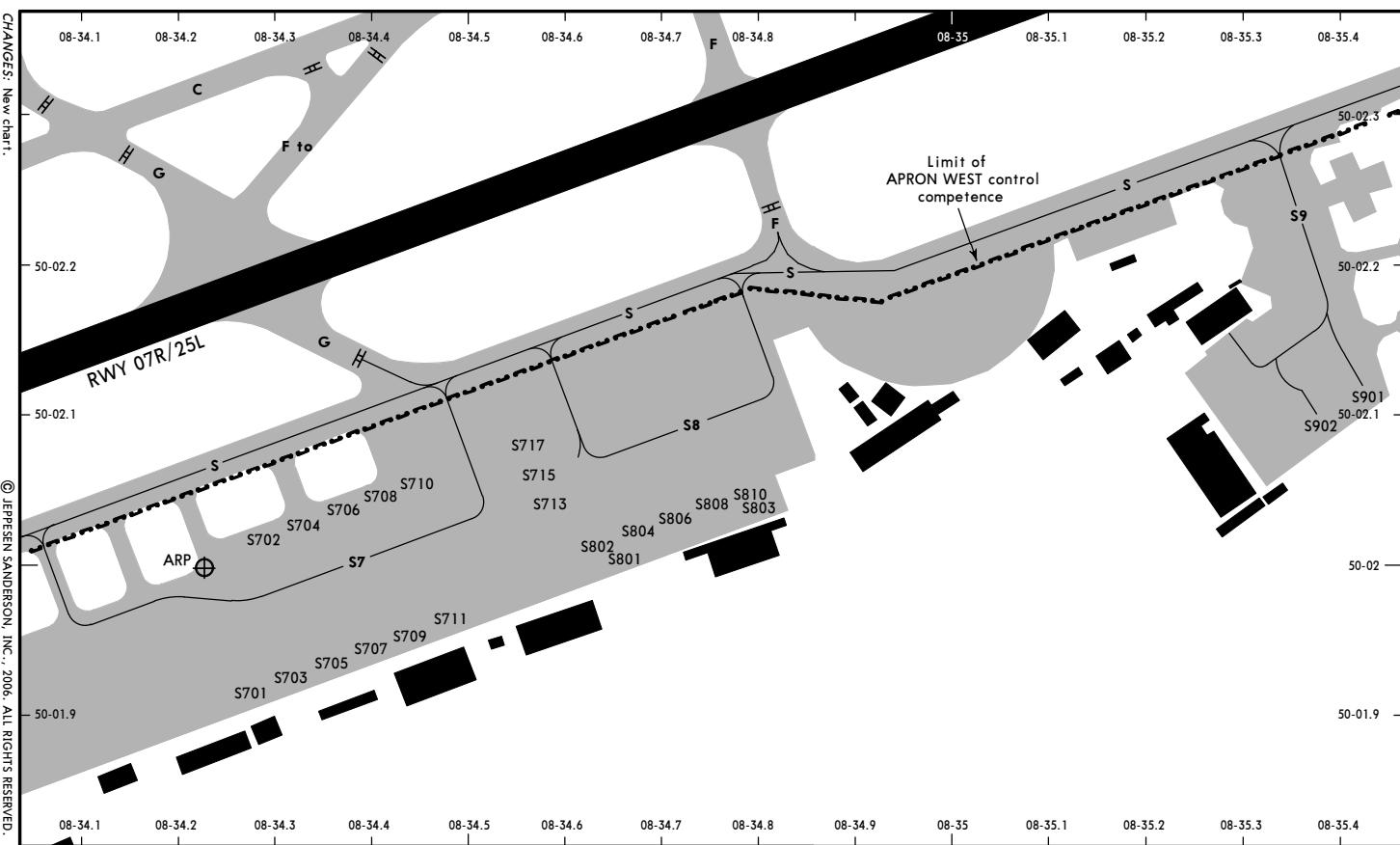
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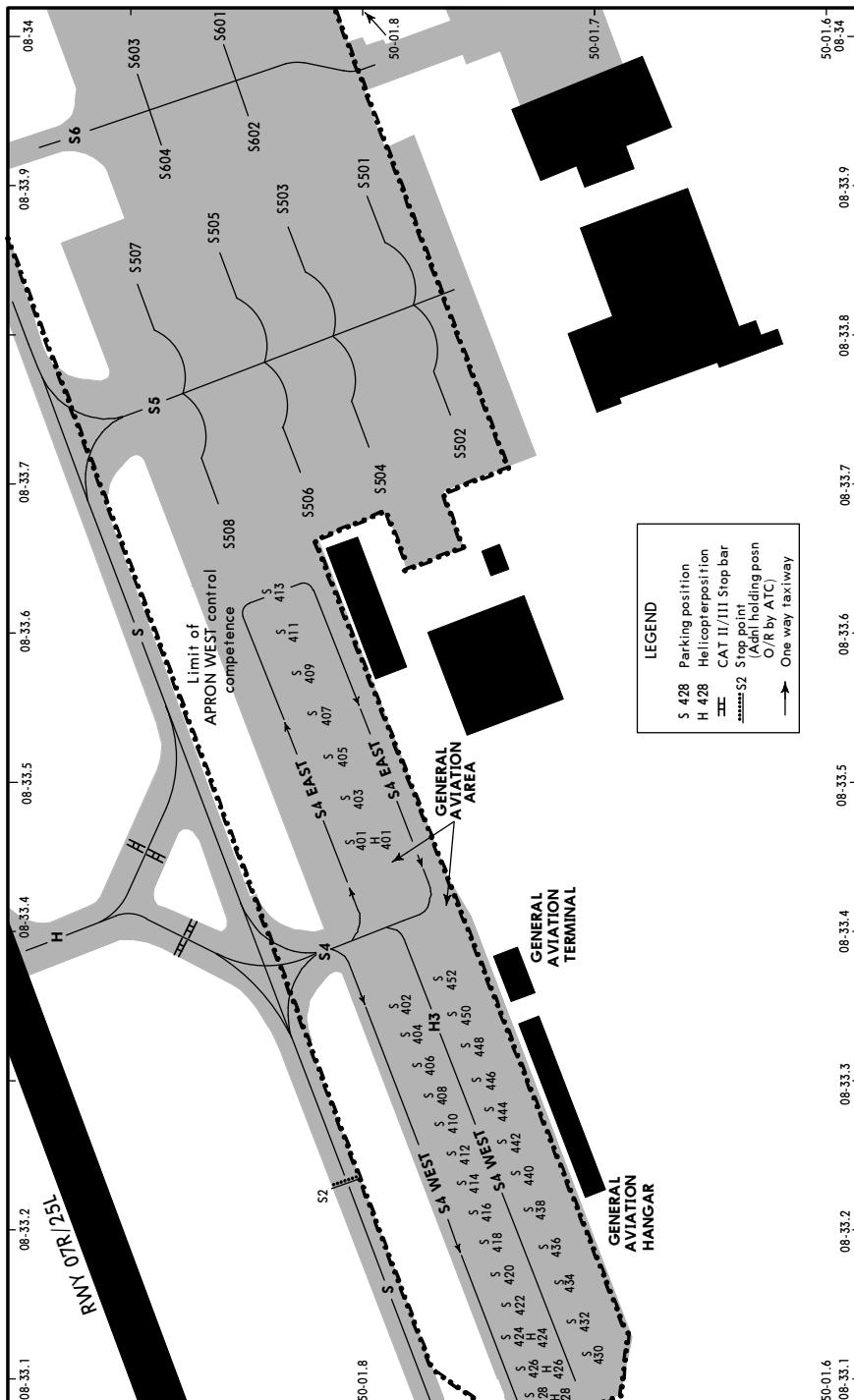
**JEPPESEN**  
JeppView 3.5.2.0

EDDF/FRA



FRANKFURT/MAIN, GERMANY  
FRANKFURT/MAIN

27 OCT 06 (10-9F)



EDDF/FRA



FRANKFURT/MAIN, GERMANY  
FRANKFURT/MAIN

15 DEC 06 (10-9H)

INS COORDINATES			
STAND No.	COORDINATES	STAND No.	COORDINATES
A1	N50 03.0 E008 34.3	S401, S402	N50 01.8 E008 33.4
A10	N50 02.9 E008 34.1	S403	N50 01.8 E008 33.5
A11	N50 03.0 E008 34.2	S404	N50 01.8 E008 33.4
A12	N50 02.9 E008 34.1	S405	N50 01.8 E008 33.5
A13	N50 02.9 E008 34.2	S406	N50 01.8 E008 33.3
A14, A15	N50 02.9 E008 34.1	S407	N50 01.8 E008 33.5
A16	N50 02.8 E008 34.1	S408	N50 01.8 E008 33.3
A17	N50 02.9 E008 34.1	S409	N50 01.8 E008 33.6
A18, A19	N50 02.8 E008 34.1	S410	N50 01.8 E008 33.3
A20	N50 02.8 E008 34.0	S411	N50 01.8 E008 33.6
A21	N50 02.8 E008 34.1	S412	N50 01.8 E008 33.3
A22	N50 02.7 E008 34.0	S413	N50 01.8 E008 33.6
A23	N50 02.8 E008 34.0	S414	N50 01.8 E008 33.3
A24, A25	N50 02.7 E008 34.0	S416 thru S420	N50 01.8 E008 33.2
A26 thru A30	N50 02.7 E008 33.9	S422, S424	N50 01.7 E008 33.2
A32, A34	N50 02.7 E008 33.8	S426 thru S432	N50 01.7 E008 33.1
A36	N50 02.6 E008 33.8	S434 thru S440	N50 01.7 E008 33.2
A38 thru A42	N50 02.6 E008 33.7	S442 thru S448	N50 01.8 E008 33.3
B2	N50 03.0 E008 34.4	S450, S452	N50 01.8 E008 33.4
B10, B20	N50 02.9 E008 34.3	S501	N50 01.8 E008 33.9
B22 thru B28	N50 02.8 E008 34.3	S502	N50 01.8 E008 33.7
B41 thru B43	N50 02.9 E008 34.5	S503	N50 01.8 E008 33.9
B44 thru B46	N50 02.9 E008 34.6	S504	N50 01.8 E008 33.7
B47	N50 02.8 E008 34.6	S505	N50 01.9 E008 33.8
B48	N50 02.9 E008 34.5	S506	N50 01.8 E008 33.6
C2, C4	N50 03.0 E008 34.5	S507	N50 01.9 E008 33.8
C5, C6	N50 03.0 E008 34.6	S508	N50 01.9 E008 33.6
C8, C11	N50 03.0 E008 34.7	S601	N50 01.9 E008 34.0
D1 thru D3A	N50 03.1 E008 35.2	S602	N50 01.9 E008 33.9
D5 thru D8A	N50 03.0 E008 35.1	S603	N50 01.9 E008 34.0
D9	N50 03.0 E008 35.0	S604	N50 01.9 E008 33.9
D10 thru D11A	N50 03.0 E008 34.9	S701	N50 01.9 E008 34.3
D12, D12A, D13	N50 03.0 E008 34.8	S702	N50 02.0 E008 34.3
E2, E2A	N50 03.1 E008 35.3	S703	N50 01.9 E008 34.3
E5 thru E6A	N50 03.1 E008 35.4	S704	N50 02.0 E008 34.3
E9, E9A	N50 03.1 E008 35.5	S705	N50 01.9 E008 34.4
F211	N50 02.4 E008 32.7	S706	N50 02.0 E008 34.4
F212	N50 02.4 E008 32.6	S707	N50 01.9 E008 34.4
F213, F214	N50 02.4 E008 32.7	S708	N50 02.0 E008 34.4
F215	N50 02.4 E008 32.9	S709	N50 01.9 E008 34.4
F216	N50 02.5 E008 32.8	S710	N50 02.1 E008 34.4
F218 thru F220	N50 02.5 E008 33.0	S711	N50 01.9 E008 34.5
F221 thru F223	N50 02.3 E008 32.5	S713	N50 02.0 E008 34.6
F224, F225	N50 02.4 E008 32.4	S715, S717	N50 02.1 E008 34.6
F231	N50 02.3 E008 32.1	S801	N50 02.0 E008 34.7
F232, F232A	N50 02.3 E008 32.0	S802	N50 02.0 E008 34.6
F233, F233A, F234	N50 02.3 E008 31.9	S803	N50 02.0 E008 34.8
F234A	N50 02.3 E008 31.8	S804	N50 02.0 E008 34.7
F235	N50 02.2 E008 31.8	S806, S808, S810	N50 02.0 E008 34.8
F235A, F236	N50 02.3 E008 31.8	S901, S902	N50 02.1 E008 35.4
F237, F237A, F238	N50 02.2 E008 31.6		
F238A thru F240	N50 02.2 E008 31.5		
H401	N50 01.8 E008 33.4		
H424	N50 01.7 E008 33.2		
H426, H428	N50 01.7 E008 33.1		

EDDF/FRA

JEPPESEN FRANKFURT/MAIN, GERMANY

15 DEC 06 (10-9J)

FRANKFURT/MAIN

## INS COORDINATES

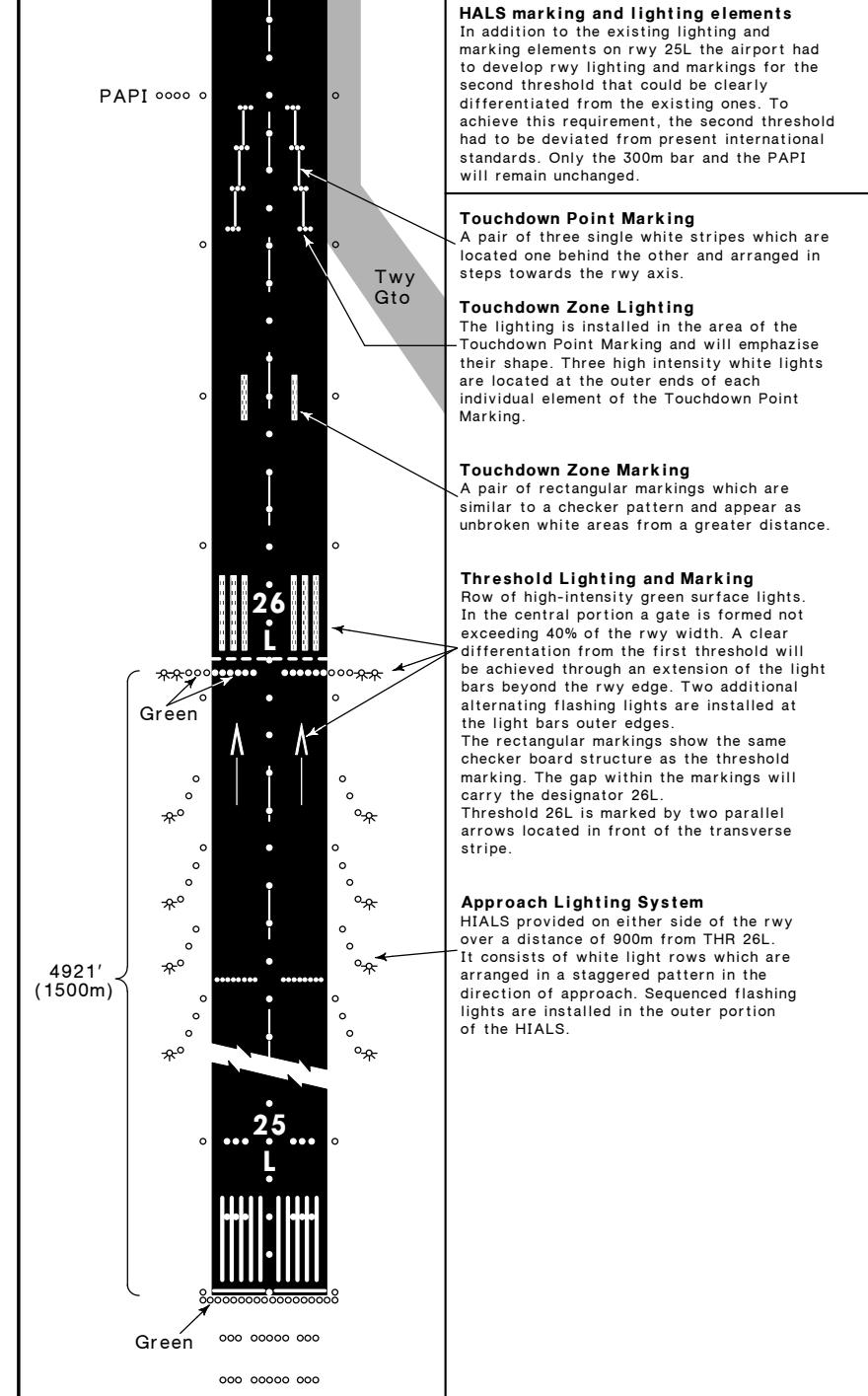
STAND No.	COORDINATES	STAND No.	COORDINATES
V92 thru V94	N50 03.0 E008 36.0	V160 thru V162	N50 02.4 E008 33.4
V95 thru V98	N50 03.0 E008 35.9	V163	N50 02.4 E008 33.3
V99 thru V101	N50 03.0 E008 35.8	V164	N50 02.4 E008 33.1
V102	N50 02.9 E008 35.7	V165	N50 02.3 E008 33.0
V106	N50 03.0 E008 35.6	V166, V167	N50 02.3 E008 32.9
V107 thru V111	N50 03.0 E008 35.5	V168, V169	N50 02.3 E008 32.8
V112, V113	N50 03.0 E008 35.4	V170	N50 02.3 E008 32.7
V114	N50 02.9 E008 35.4	V171 thru V173B	N50 02.2 E008 32.5
V115 thru V118	N50 02.9 E008 35.3	V174	N50 02.2 E008 32.4
V119, V120	N50 02.9 E008 35.2	V175 thru V177	N50 02.2 E008 32.3
V121 thru V123	N50 02.9 E008 35.1	V178	N50 02.1 E008 32.2
V124, V125	N50 02.9 E008 35.0	V251, V251A	N50 02.2 E008 31.7
V126, V127	N50 02.8 E008 35.0	V252, V253, V253A	N50 02.2 E008 31.6
V128 thru V130	N50 02.8 E008 34.9	V261	N50 02.3 E008 31.7
V148, V149	N50 02.5 E008 33.8	V262 thru V264	N50 02.3 E008 31.6
V150	N50 02.5 E008 33.8	V265 thru V267	N50 02.3 E008 31.5
V151, 152	N50 02.5 E008 33.7	V268 thru V270	N50 02.2 E008 31.4
V153 thru 155	N50 02.5 E008 33.6		
V156, V157	N50 02.5 E008 33.5		
V158, V159	N50 02.4 E008 33.5		

EDDF/FRA

JEPPESEN FRANKFURT/MAIN, GERMANY

27 OCT 06 (10-9K)

FRANKFURT/MAIN



EDDF/FRA

JEPPESEN FRANKFURT/MAIN, GERMANY

27 OCT 06 10-9L

FRANKFURT/MAIN

## NOSE-IN PARKING PROCEDURES

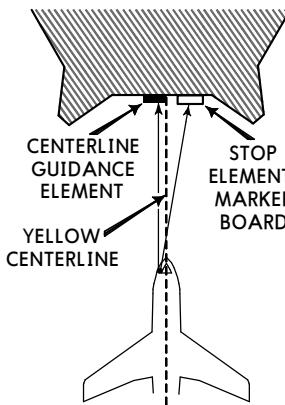
## GENERAL

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

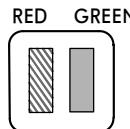
The system is aligned with the LEFT hand pilot seat only. In case of AGNIS failure, nose-in positioning will be guided by marshaller.



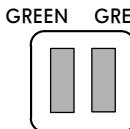
NOTE: Nose-in parking aircraft (on push-back position) have to use towing truck when leaving parking position.

## CENTERLINE GUIDANCE ELEMENT

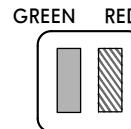
Approach the parking position along the yellow centerline so that both vertical slots in the Centerline Guidance Element show GREEN. Adjustments to the left or right shall always be made towards the GREEN.



LEFT of centerline.  
Turn towards GREEN.  
(RIGHT)



Aircraft on centerline.



RIGHT of centerline.  
Turn towards GREEN.  
(LEFT)

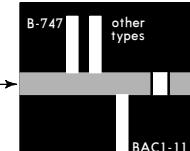
## STOP ELEMENT - MARKER BOARD

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.

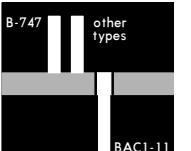
## CAUTION

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.

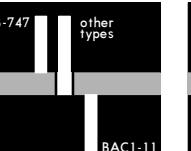
## AGNIS CENTRE LINE GUIDANCE STOP ELEMENT - MARKER BOARD



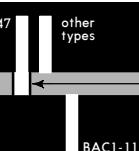
All types  
continue taxiing.



BAC 1-11 stop.  
Other types  
and B-747  
continue taxiing.



Other types stop.  
B-747 continue  
taxiing.



BAC 1-11

LIGHT TUBE

EDDF/FRA

FRANKFURT/MAIN

20 APR 07 11-1

JEPPESEN FRANKFURT/MAIN, GERMANY

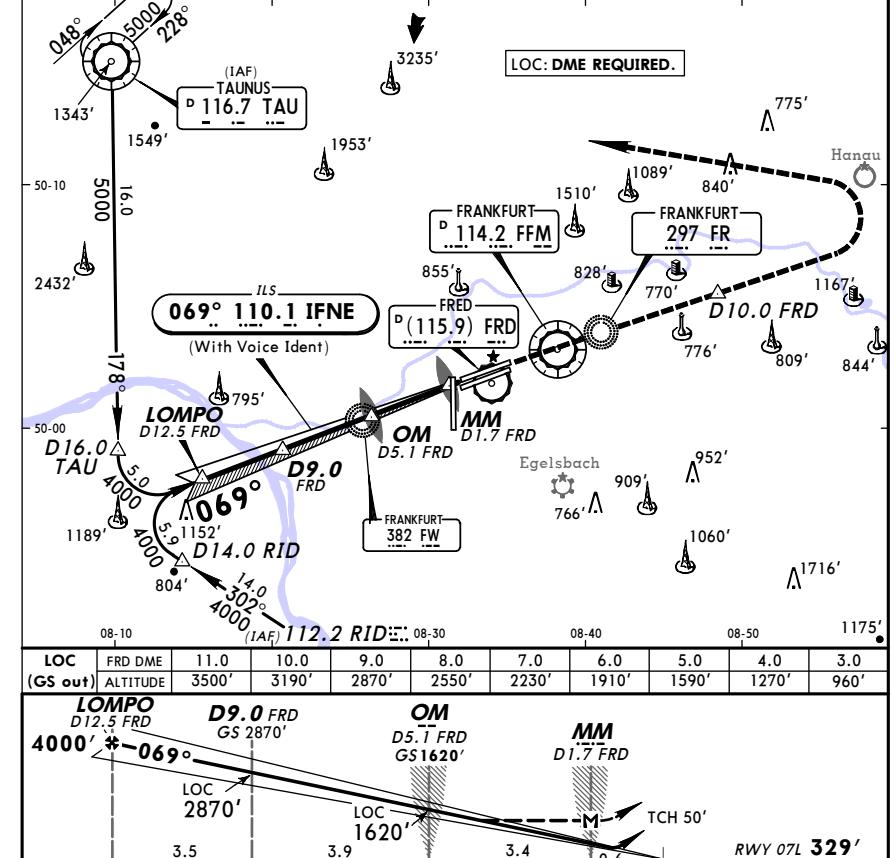
ILS or LOC Rwy 07L

*ATIS Arrival	LANGEN Radar (APP) North	South	*FRANKFURT Director (APP)	FRANKFURT Tower	*Ground
118.02 114.2	120.8	125.35	127.27	119.9	121.8
LOC IFNE 110.1	Final Apch Crs 069°	GS OM 1620' (1291')	ILS DA(H) 529' (200')	Apt Elev 364' RWY 329'	4300' 3200' 3500' 3200' 3235' 3200'

MISSSED APCH: Climb STRAIGHT AHEAD via FR Lctr to D10.0 FRD or 5000', whichever is later, then turn LEFT to TAU VOR maintain 5000'.

Alt Set: hPa (IN on req) Rwy Elev: 12 hPa Trans level: By ATC Trans alt: 5000'

MSA FFM VOR



Gnd speed-Kts	70	90	100	120	140	160	ALSF-II	D10.0 FRD 5000' via FR 297
ILS GS 3.00° or LOC Descent Gradient 5.2%	377	485	539	647	755	862	REIL PAPI	
MAP at MM/D1.7 FRD								
JAR-OPS								
STRAIGHT-IN LANDING Rwy 07L								
ILS								
LOC (GS out)								
DA(H) 529' (200')								
FULL								
ALS out								
RVR 550m								
RVR 1000m								
RVR 1200m								
RVR 1600m								

EDDF/FRA  
FRANKFURT/MAINJEPPESEN FRANKFURT/MAIN, GERMANY  
CAT II ILS Rwy 07L

20 APR 07 (11-1A)

*ATIS Arrival		LANGEN Radar (APP) North	*FRANKFURT Director (APP) South	FRANKFURT Tower	*Ground
118.02	114.2	120.8	125.35	127.27	119.9

LOC IFNE	Final Apch Crs 110.1	GS OM	CAT II ILS RA 100' DA(H) 429'(100')	Apt Elev 364' RWY 329'	3300' 3200' 3500' 3300' 3200'
110.1	069°	1620'(1291')			

MISSED APCH: Climb STRAIGHT AHEAD via FR Lctr to D10.0 FRD or 5000', whichever is later, then turn LEFT to TAU VOR maintain 5000'.  
Alt Set: hPa(IN on req) Rwy Elev: 12 hPa Trans level: By ATC Trans alt: 5000'  
Special Aircrew & Aircraft Certification Required.



EDDF/FRA  
FRANKFURT/MAINJEPPESEN FRANKFURT/MAIN, GERMANY  
CAT II ILS Rwy 25L

12 OCT 07 (11-3A) Eff 25 Oct

BRIEFING STRIP

*ATIS Arrival	LANGEN Radar (APP) North South	*FRANKFURT Director (APP)	*FRANKFURT Arrival (APP)	FRANKFURT Tower	*Ground
118.02 114.2120.8 125.35		127.27	118.5	119.9	121.8

LOC IFSW Final Apch Crs 249° GS LOM CAT II ILS RA 94' DA(H) 462'(100') Apt Elev 364' RWY 362'

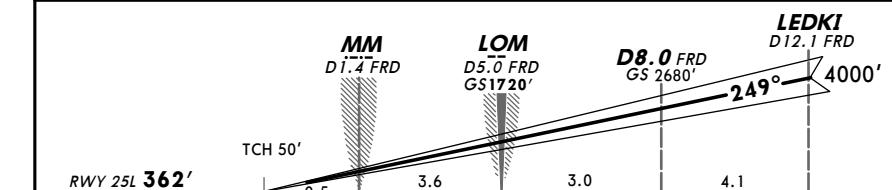
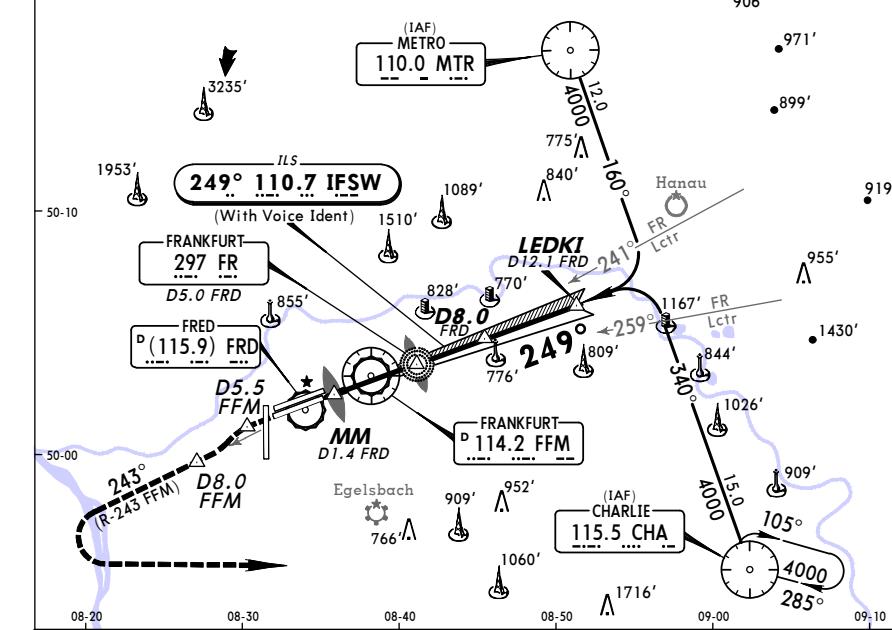
MISSSED APCH: Climb STRAIGHT AHEAD to D5.5 FFM, then turn LEFT to intercept R-243 FFM. Then on R-243 FFM to D8.0 FFM or 5000', whichever is later, then turn LEFT to CHA VOR and maintain 5000'.

Alt Set: hPa (IN on req) Rwy Elev: 13 hPa Trans level: By ATC Trans alt: 5000'

1. CAUTION: Independent taxiing acft on Twy B-EAST underneath short final.

2. Special Aircrew & Acft Certification Required.

MSA FFM VOR



Gnd speed-Kts	70	90	100	120	140	160	ALSF-II	D5.5 FFM
GS	3.00°	377	485	539	647	755	862	

JAR-OPS STRAIGHT-IN LANDING Rwy 25L

CAT II ILS ABCD

RA 94'

DA(H) 462'(100')

RVR 300m 1

Operators applying U.S. Ops Specs: Autoland or HGS required below RVR 350m.

CHANGES: Communications, Missed approach, Procedure.

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EDDF/FRA  
FRANKFURT/MAINJEPPESEN FRANKFURT/MAIN, GERMANY  
ILS or LOC Rwy 25R

21 DEC 07 (11-4)

*ATIS Arrival	LANGEN Radar (APP) North South	*FRANKFURT Director (APP)	*FRANKFURT Arrival (APP)	FRANKFURT Tower	*Ground
118.02 114.2120.8 125.35		127.27	118.5	119.9	121.8

LOC IFNW Final Apch Crs 249° GS LOM ILS DA(H) 564'(200') Apt Elev 364' RWY 364'

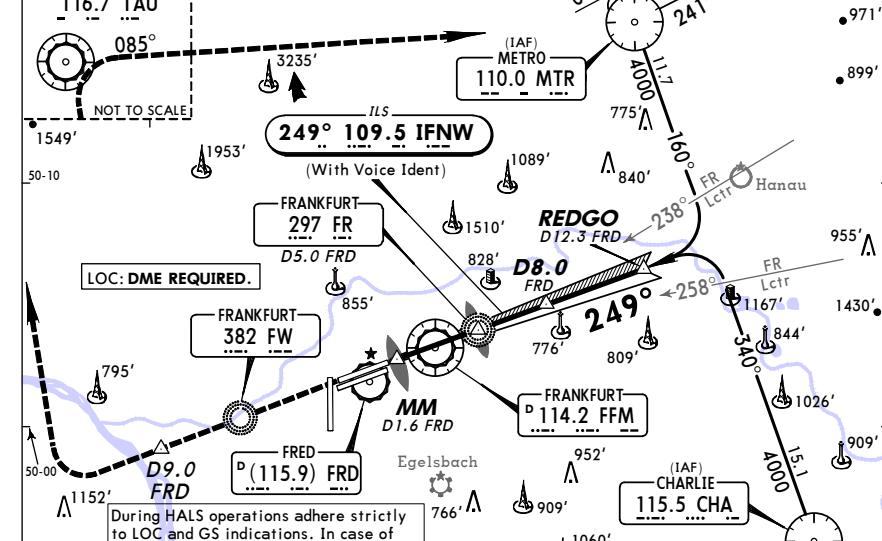
MISSSED APCH: Climb STRAIGHT AHEAD via FW Lctr to D9.0 FRD or 5000', whichever is later, then turn RIGHT to TAU VOR.

Turn RIGHT to intercept R-085 TAU to MTR VOR and maintain 5000'. In case of Missed apch inform ATC immediately.

Alt Set: hPa (IN on req) Rwy Elev: 13 hPa Trans level: By ATC Trans alt: 5000'

CAUTION: Independent taxiing acft on Twy B-EAST underneath short final.

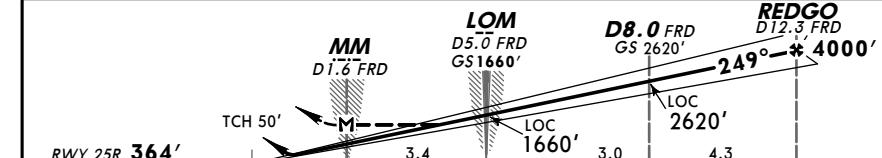
MSA FFM VOR



LOC: DME REQUIRED.

During HALS operations adhere strictly to LOC and GS indications. In case of deviation inform ATC immediately.

LOC	FRD	DME	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0
(GS out)	ALTITUDE		1020'	1340'	1660'	1980'	2300'	2620'	2930'	3250'	3570'



Gnd speed-Kts	70	90	100	120	140	160	ALSF-II	LOC 2620'
ILS GS 3.00° or LOC Descent Gradient 5.2%	377	485	539	647	755	862		

MAP at MM/D1.6 FRD

JAR-OPS STRAIGHT-IN LANDING Rwy 25R

ILS DA(H) 564'(200')

LOC MDA(H) 790'(426')

FULL ALS out ALS out

A	B	C	D	RVR 900m	RVR 1500m
				RVR 1000m	RVR 1800m
				RVR 1400m	RVR 2000m

CHANGES: Missed approach.

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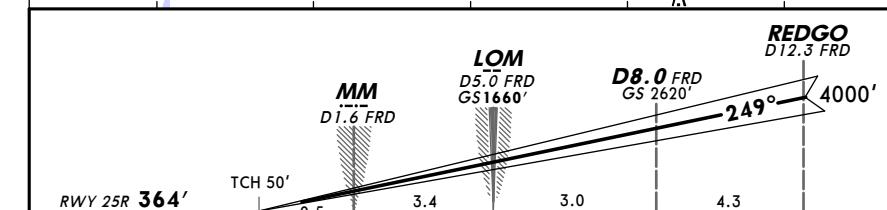
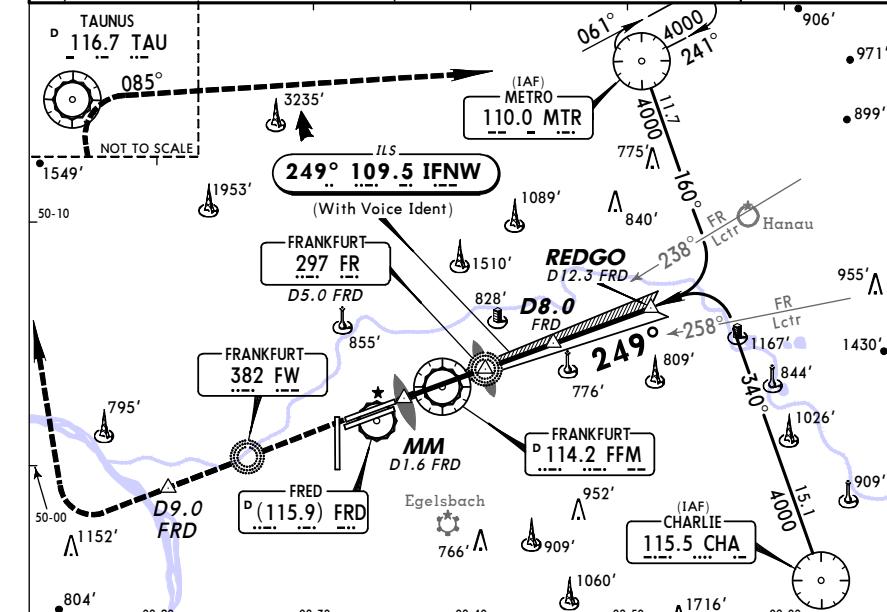
EDDF/FRA  
FRANKFURT/MAINJEPPESEN FRANKFURT/MAIN, GERMANY  
CAT II ILS Rwy 25R

21 DEC 07 (11-4A)

*ATIS Arrival	LANGEN Radar (APP) North	*FRANKFURT Director (APP)	*FRANKFURT Arrival (APP)	FRANKFURT Tower	*Ground
118.02	114.2 120.8 125.35		127.27	118.5	119.9 121.8

**BRIEFING STRIP**  
MISSSED APCH: Climb STRAIGHT AHEAD via FW Lctr to D9.0 FRD or 5000', whichever is later, then turn RIGHT to TAU VOR. Turn RIGHT to intercept R-085 TAU to MTR VOR and maintain 5000'. In case of Missed apch inform ATC immediately.

Alt Set: hPa (IN on req) Rwy Elev: 13 hPa Trans level: By ATC Trans alt: 5000'  
1. CAUTION: Independent taxiing acft on Twy B-EAST underneath short final.  
2. Special Aircrew & Aircraft Certification Required.



Gnd speed-Kts	70	90	100	120	140	160		ALSF-II	Inform ATC	D9.0 FRD whenever later	5000'
GS	3.00°	377	485	539	647	755	862				

JAR-OPS	STRAIGHT-IN LANDING RWY 25R									
CAT II ILS	ABCD									
RA 98'	DA(H) 464'(100')									
RVR 300m	I									

Operators applying U.S. Ops Specs: Autoland or HGS required below RVR 350m.

CHANGES: Missed approach.

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EDDF/FRA  
FRANKFURT/MAINJEPPESEN FRANKFURT/MAIN, GERMANY  
ILS Rwy 26L

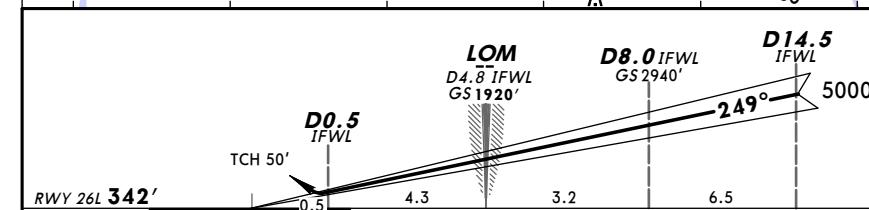
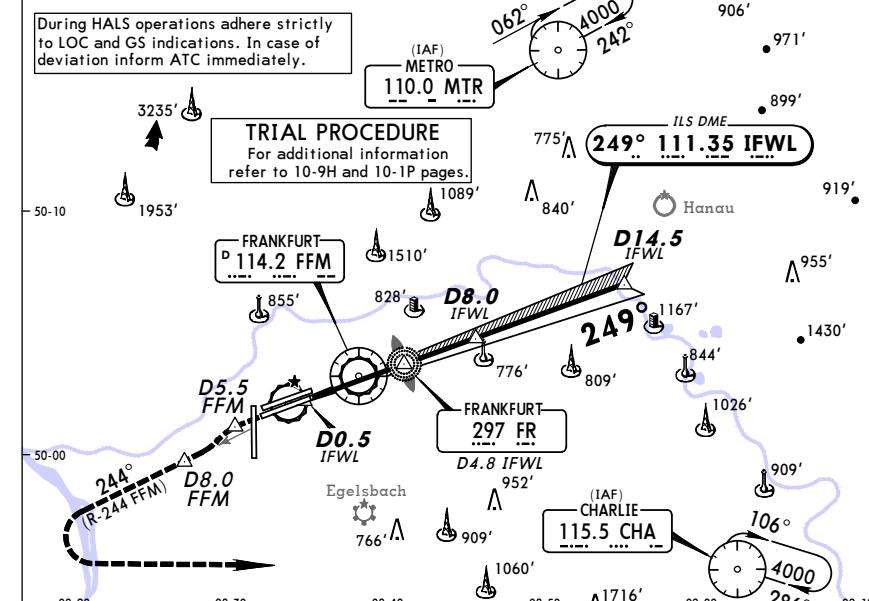
20 APR 07 (11-5)

*ATIS Arrival	LANGEN Radar (APP) North	*FRANKFURT Director (APP)	FRANKFURT Tower	*Ground
118.02	114.2 120.8 125.35		127.27	119.9 121.8

LOC IFWL	Final Apch Crs 249°	GS LOM	ILS DA(H)	Apt Elev 364'
111.35		1920' (1578')	542' (200')	RWY 342'

**BRIEFING STRIP**  
MISSSED APCH: Climb STRAIGHT AHEAD to D5.5 FFM, then turn LEFT to intercept R-244 FFM. Then on R-244 FFM to D8.0 FFM or 4000', whichever is later, then turn LEFT to CHA VOR climb and maintain 5000'. In case of Missed apch inform ATC immediately.

Alt Set: hPa (IN on req) Rwy Elev: 12 hPa Trans level: By ATC Trans alt: 5000'  
1. DME REQUIRED. 2. Radar vectoring will be provided onto final approach track.  
3. Ignore MM indications. 4. ILS DME reads zero at rwy 26L threshhold. 5. ILS GS utilization permitted at an angle of 6° horizontally centerline up to a range of 15 NM.



Gnd speed-Kts	70	90	100	120	140	160		ALSF-II	Inform ATC	D9.0 FRD whenever later	5000'
GS	3.00°	377	485	539	647	755	862				

JAR-OPS	STRAIGHT-IN LANDING RWY 26L									
CEILING REQUIRED	ILS DA(H) 542' (200') FULL									
	LOC (GS out)									

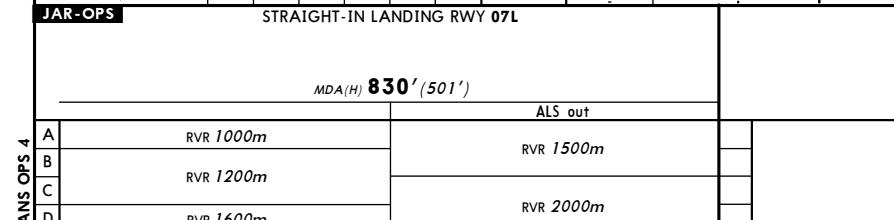
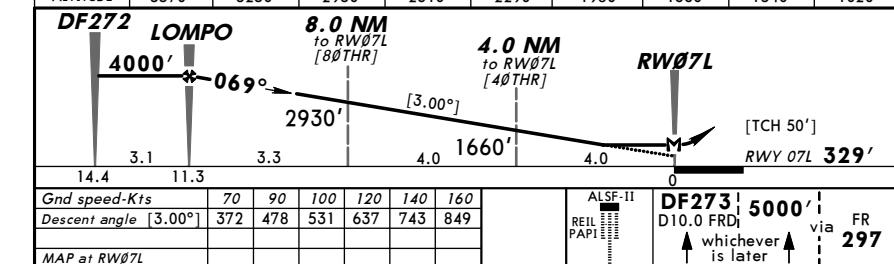
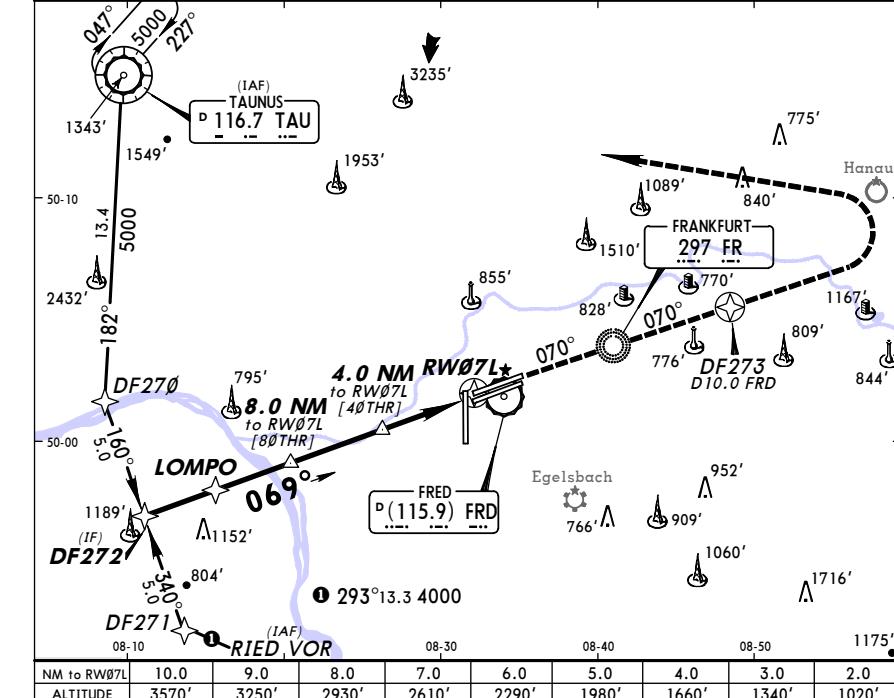
CHANGES: Communications.

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EDDF/FRA  
FRANKFURT/MAINJEPPESEN FRANKFURT/MAIN, GERMANY  
RNAV (GPS) Rwy 07L

*ATIS Arrival	LANGEN Radar (APP) North South	*FRANKFURT Director (APP)	*FRANKFURT Arrival (APP)	FRANKFURT Tower	*Ground
118.02 114.2 120.8 125.35		127.27	118.5	119.9	121.8

**BRIEFING STRIP**  
**MISSSED APCH RNAV:** Climb on track 070° via FR Lctr to DF273 or 5000', whichever is later, then turn LEFT to TAU VOR maintain 5000'.  
**NON-RNAV:** Climb STRAIGHT AHEAD via FR Lctr to D10.0 FRD or 5000', whichever is later, then turn LEFT to TAU VOR maintain 5000'.  
Alt Set: hPa (IN on req) Rwy Elev: 12 hPa Trans level: By ATC Trans alt: 5000'



**PANS OPS 4**  
A RVR 1000m  
B RVR 1200m  
C RVR 1600m  
D RVR 2000m

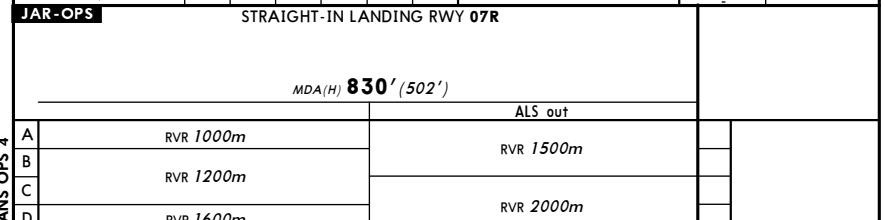
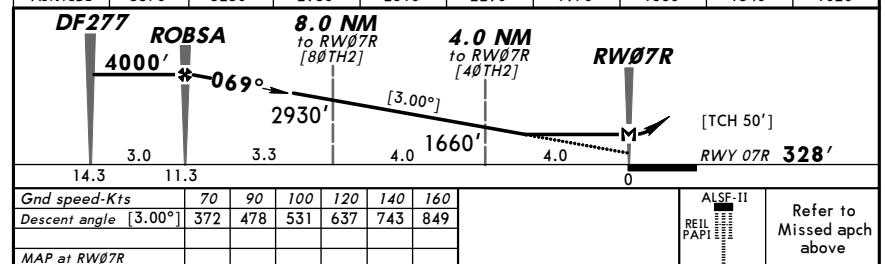
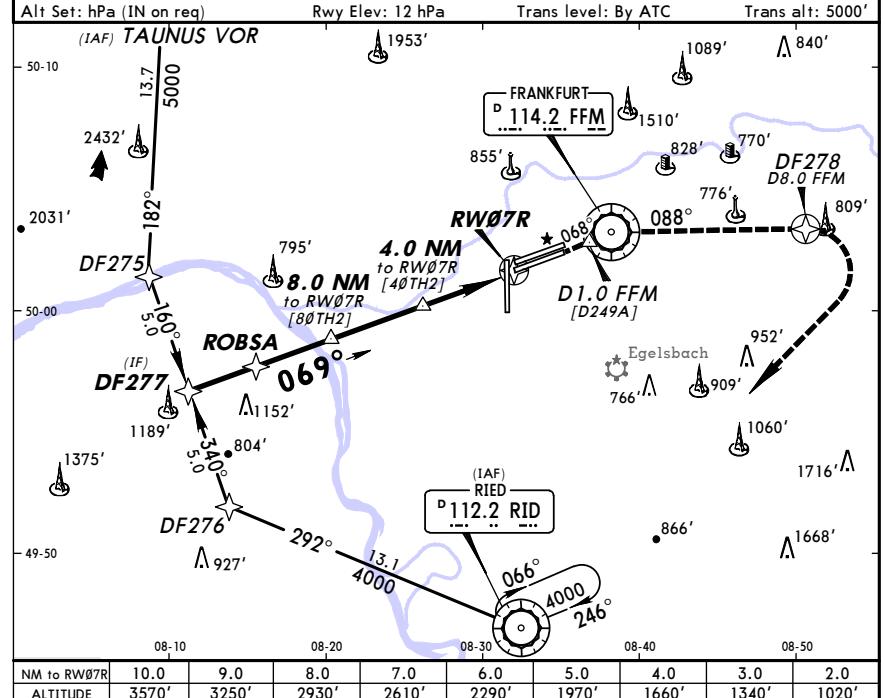
**CHANGES:** Fix designation withdrawn.

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EDDF/FRA  
FRANKFURT/MAINJEPPESEN FRANKFURT/MAIN, GERMANY  
RNAV (GPS) Rwy 07R

*ATIS Arrival	LANGEN Radar (APP) North South	*FRANKFURT Director (APP)	*FRANKFURT Arrival (APP)	FRANKFURT Tower	*Ground
118.02 114.2 120.8 125.35		127.27	118.5	119.9	121.8

**BRIEFING STRIP**  
**MISSSED APCH RNAV:** Climb on track 068° to FFM VOR, then turn RIGHT on track 088° to DF278 or 5000', whichever is later, then turn RIGHT to RID VOR and maintain 5000'. **NON-RNAV:** Climb STRAIGHT AHEAD to D1.0 inbound FFM. Turn RIGHT to intercept R-088 FFM outboard to D8.0 FFM or 5000', whichever is later. Turn RIGHT to RID VOR and maintain 5000'.



**PANS OPS 4**  
A RVR 1000m  
B RVR 1200m  
C RVR 1600m  
D RVR 2000m

**CHANGES:** Fix designation withdrawn.

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EDDF/FRA  
FRANKFURT/MAINJEPPESEN FRANKFURT/MAIN, GERMANY  
RNAV (GPS) Rwy 25L

21 DEC 07 (12-3)

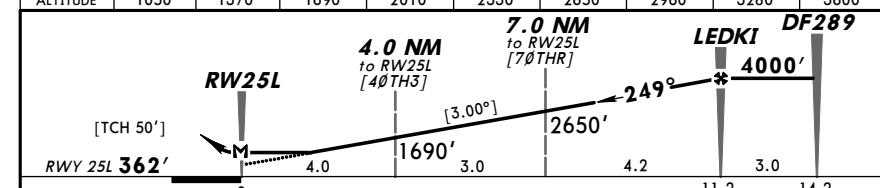
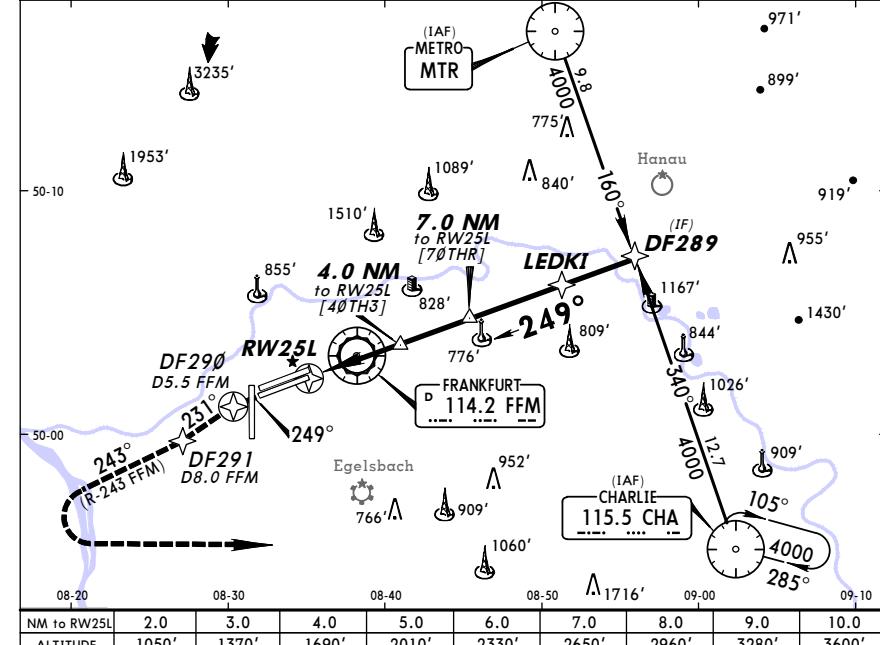
BRIEFING STRIP

*ATIS Arrival	LANGEN Radar (APP) North	*FRANKFURT Director (APP)	*FRANKFURT Arrival (APP)	FRANKFURT Tower	*Ground		
118.02	114.21	120.8	125.35	127.27	118.5	119.9	121.8

RNAV	Final Apch Crs	Minimum Alt LEDKI	MDA(H)	Apt Elev	364'	RWY 362'
249°	4000' (3638')	830' (468')				

**MISSSED APCH RNAV:** Climb on track 249° to DF290, then turn LEFT on track 231° to DF291. Then turn RIGHT on track 243° climb to 5000', then turn LEFT to CHA VOR and maintain 5000'. **NON-RNAV:** Climb STRAIGHT AHEAD to D5.5 FFM, then turn LEFT to intercept R-244 FFM. Then on R-244 FFM to D8.0 FFM or 5000', whichever is later, then turn LEFT to CHA VOR and maintain 5000'.

Alt Set: hPa (IN on req) Rwy Elev: 13 hPa Trans level: By ATC Trans alt: 5000'



Gnd speed-Kts	70	90	100	120	140	160	ALSF-II	REIL PAPI	DF290
Descent angle [3.00°]	372	478	531	637	743	849			D5.5 FFM

MAP at RW25L

JAR-OPS STRAIGHT-IN LANDING RWY 25L

MDA(H) 830' (468')

ALS out

A	RVR 1000m		
B	RVR 1200m		
C			
D	RVR 1600m		

EDDF/FRA  
FRANKFURT/MAIN

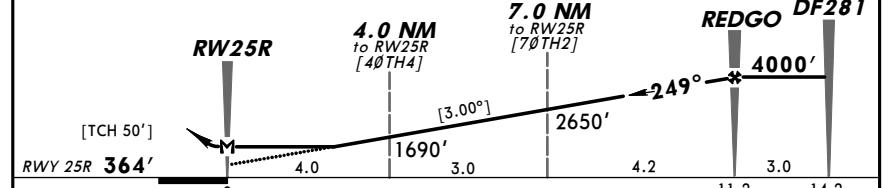
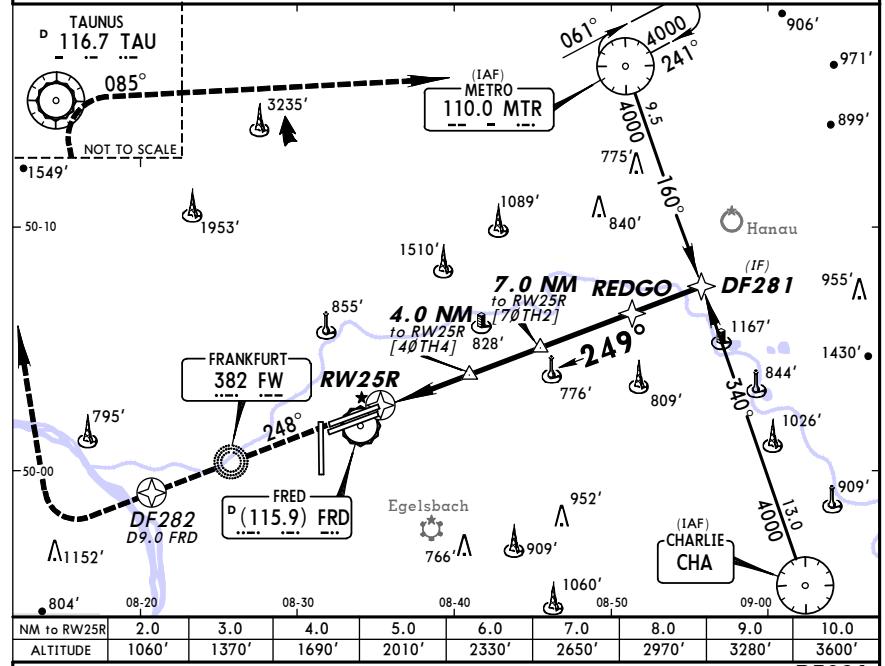
21 DEC 07 (12-4)

*ATIS Arrival	LANGEN Radar (APP) North	*FRANKFURT Director (APP)	*FRANKFURT Arrival (APP)	FRANKFURT Tower	*Ground		
118.02	114.21	120.8	125.35	127.27	118.5	119.9	121.8

RNAV	Final Apch Crs	Minimum Alt REDGO	MDA(H)	Apt Elev	364'	RWY 364'
249°	4000' (3636')	830' (466')				

**MISSSED APCH RNAV:** Climb on track 248° via FW Lctr to DF282 or 5000', whichever is later, then turn RIGHT to TAU VOR. Turn RIGHT on 085° to MTR VOR and maintain 5000'. **NON-RNAV:** Climb STRAIGHT AHEAD via FW Lctr to D9.0 FRD or 5000', whichever is later, then turn RIGHT to TAU VOR. Turn RIGHT to intercept R-085 TAU to MTR VOR and maintain 5000'.

Alt Set: hPa (IN on req) Rwy Elev: 13 hPa Trans level: By ATC Trans alt: 5000'



Gnd speed-Kts	70	90	100	120	140	160	ALSF-II	REIL PAPI	DF282
Descent angle [3.00°]	372	478	531	637	743	849			5000'

MAP at RW25R

JAR-OPS STRAIGHT-IN LANDING RWY 25R

MDA(H) 830' (468')

ALS out

A	RVR 1000m		
B	RVR 1200m		
C			
D	RVR 1600m		

EDDF/FRA  
FRANKFURT/MAINJEPPESEN FRANKFURT/MAIN, GERMANY  
VOR Rwy 07L

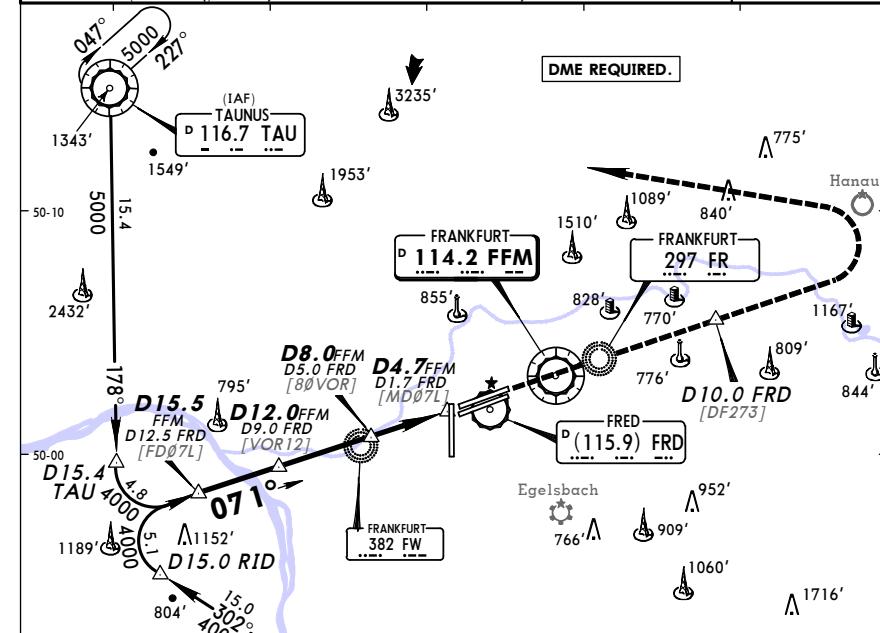
12 OCT 07 (13-1) Eff 25 Oct

*ATIS Arrival	LANGEN Radar (APP) North South	*FRANKFURT Director (APP)	*FRANKFURT Arrival (APP)	FRANKFURT Tower	*Ground
118.02	114.2 120.8 125.35	127.27	118.5	119.9	121.8

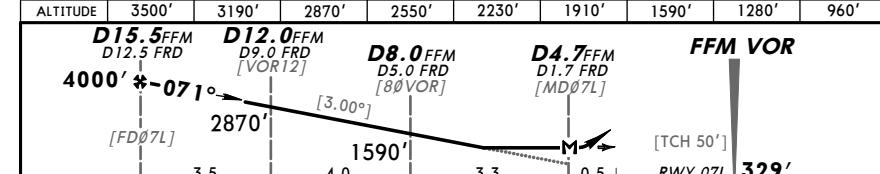
VOR FFM	Final Apch Crs	Minimum Alt D15.5 FFM	MDA(H) 830' (501')	Apt Elev 364'	RWY 329'
114.2	071°	4000' (3671')			

**MISSING APCH:** Climb STRAIGHT AHEAD via FR Lctr to D10.0 FRD or 5000', whichever is later, then turn LEFT to TAU VOR maintain 5000'.

Alt Set: hPa (IN on req) Rwy Elev: 12 hPa Trans level: By ATC Trans alt: 5000' MSA FFM VOR



FFM DME	14.0	13.0	12.0	11.0	10.0	9.0	8.0	7.0	6.0
ALTITUDE	3500'	3190'	2870'	2550'	2230'	1910'	1590'	1280'	960'



Gnd speed-Kts	70	90	100	120	140	160		ALSF-II	D10.0 FRD	5000' via FR
Descent Gradient	5.24%	or								
Descent angle	[3.00°]		372	478	531	637	743	849		

MAP at D4.7 FFM/D1.7 FRD

JAR-Ops STRAIGHT-IN LANDING RWY 07L

MDA(H) 830' (501')

ALS out

A	RVR 1000m		
B	RVR 1200m		
C			
D	RVR 1600m		

EDDF/FRA  
FRANKFURT/MAINJEPPESEN FRANKFURT/MAIN, GERMANY  
VOR Rwy 07R

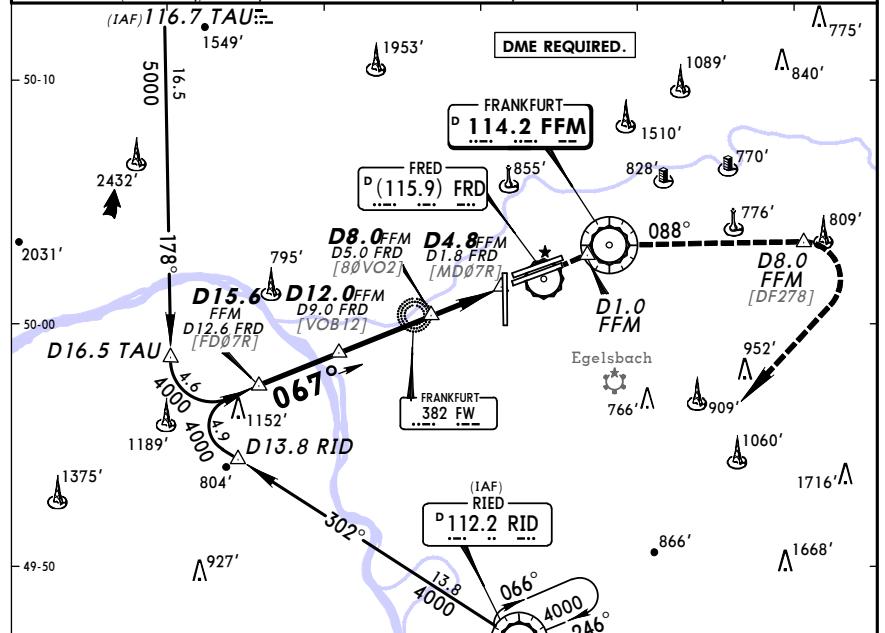
12 OCT 07 (13-2) Eff 25 Oct

*ATIS Arrival	LANGEN Radar (APP) North South	*FRANKFURT Director (APP)	*FRANKFURT Arrival (APP)	FRANKFURT Tower	*Ground
118.02	114.2 120.8 125.35	127.27	118.5	119.9	121.8

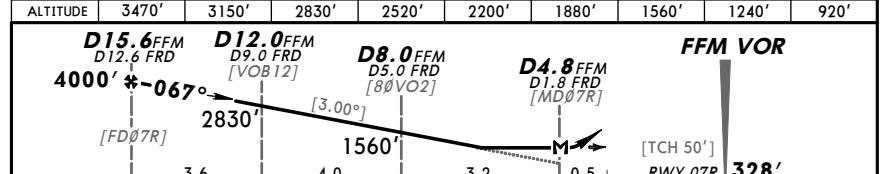
VOR FFM	Final Apch Crs	Minimum Alt D15.6 FFM	MDA(H) 830' (502')	Apt Elev 364'	RWY 328'
114.2	067°	4000' (3672')			

**MISSING APCH:** Climb STRAIGHT AHEAD to D1.0 inbound FFM, then turn RIGHT to intercept R-088 FFM outbound to D8.0 FFM or 5000', whichever is later, then turn RIGHT to RID VOR and maintain 5000'.

Alt Set: hPa (IN on req) Rwy Elev: 12 hPa Trans level: By ATC Trans alt: 5000' MSA FFM VOR



FFM DME	14.0	13.0	12.0	11.0	10.0	9.0	8.0	7.0	6.0
ALTITUDE	3470'	3150'	2830'	2520'	2200'	1880'	1560'	1240'	920'



Gnd speed-Kts	70	90	100	120	140	160		ALSF-II	D1.0	inbound FFM
Descent Gradient	5.24%	or								
Descent angle	[3.00°]		372	478	531	637	743	849		

MAP at D4.8 FFM/D1.8 FRD

JAR-Ops STRAIGHT-IN LANDING RWY 07R

MDA(H) 830' (502')

ALS out

A	RVR 1000m		
B	RVR 1200m		
C			
D	RVR 1600m		

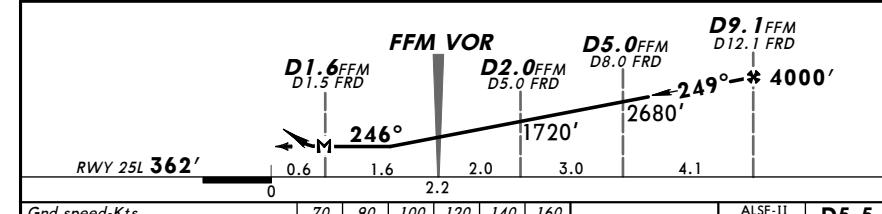
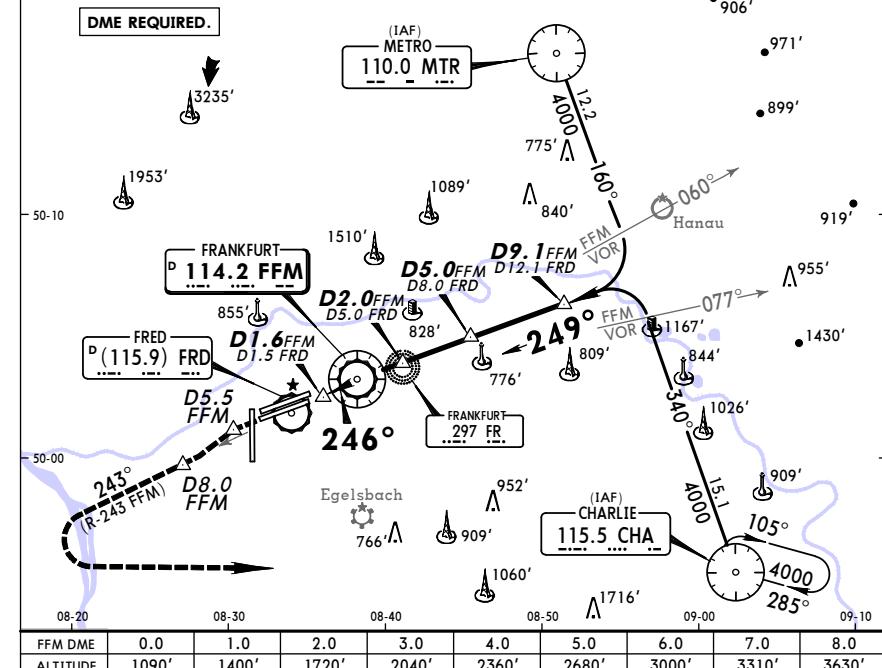
EDDF/FRA  
FRANKFURT/MAINJEPPESEN FRANKFURT/MAIN, GERMANY  
VOR Rwy 25L

21 DEC 07 (13-3)

*ATIS Arrival	LANGEN Radar (APP) North South	*FRANKFURT Director (APP)	*FRANKFURT Arrival (APP)	FRANKFURT Tower	*Ground
118.02	114.2 120.8 125.35	127.27	118.5	119.9	121.8
VOR FFM <b>114.2</b>	Final Apch Crs See Below	Minimum Alt <b>D9.1 FFM</b> <b>4000' (3638')</b>	MDA(H) <b>840' (478')</b>	Apt Elev 364' <b>RWY 362'</b>	3200' 3500' 3300' 3200' 3500'

**MISSED APCH:** Climb STRAIGHT AHEAD to D5.5 FFM, then turn LEFT to intercept R-243 FFM. Then on R-243 FFM to D8.0 FFM or 5000', whichever is later, then turn LEFT to CHA VOR climb and maintain 5000'.

Alt Set: hPa (IN on req) Rwy Elev: 13 hPa Trans level: By ATC Trans alt: 5000' DME REQUIRED.



JAR-OPS STRAIGHT-IN LANDING RWY 25L

A	RVR 1000m	ALS out
B	RVR 1200m	
C	RVR 1600m	
D	RVR 2000m	

CHANGES: None.

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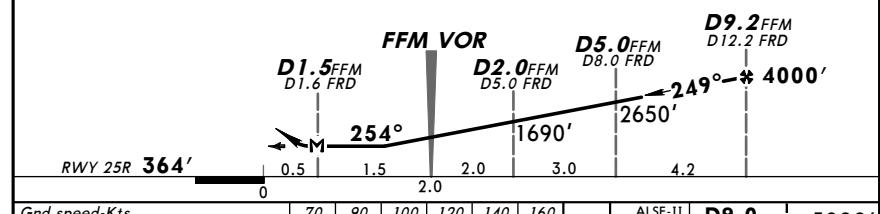
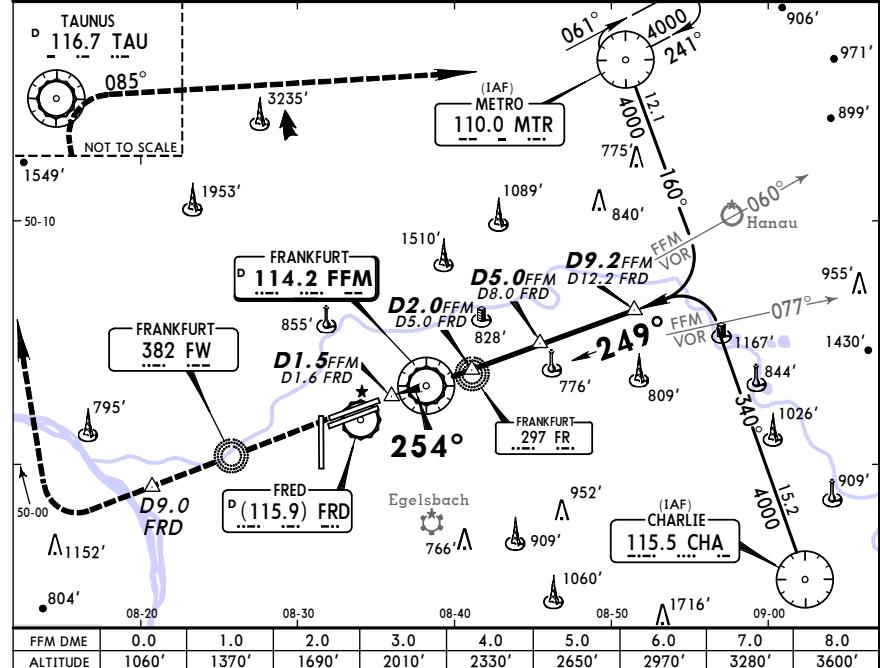
EDDF/FRA  
FRANKFURT/MAINJEPPESEN FRANKFURT/MAIN, GERMANY  
VOR Rwy 25R

21 DEC 07 (13-4)

*ATIS Arrival	LANGEN Radar (APP) North South	*FRANKFURT Director (APP)	*FRANKFURT Arrival (APP)	FRANKFURT Tower	*Ground
118.02	114.2 120.8 125.35	127.27	118.5	119.9	121.8
VOR FFM <b>114.2</b>	Final Apch Crs See Below	Minimum Alt <b>D9.2 FFM</b> <b>4000' (3636')</b>	MDA(H) <b>820' (456')</b>	Apt Elev 364' <b>RWY 364'</b>	3200' 3500' 3300' 3200' 3500'

**MISSED APCH:** Climb STRAIGHT AHEAD via FW Lctr to D9.0 FRD or 5000', whichever is later, then turn RIGHT to TAU VOR. Turn RIGHT to intercept R-085 TAU to MTR VOR and maintain 5000'.

Alt Set: hPa (IN on req) Rwy Elev: 13 hPa Trans level: By ATC Trans alt: 5000' DME REQUIRED.



JAR-OPS STRAIGHT-IN LANDING RWY 25R

A	RVR 1000m	ALS out
B	RVR 1200m	
C	RVR 1600m	
D	RVR 2000m	

CHANGES: Missed approach.

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EDDF/FRA

## JEPPESEN FRANKFURT/MAIN, GERMANY

FRANKFURT/MAIN

12 OCT 07 16-1 Eff 25 Oct

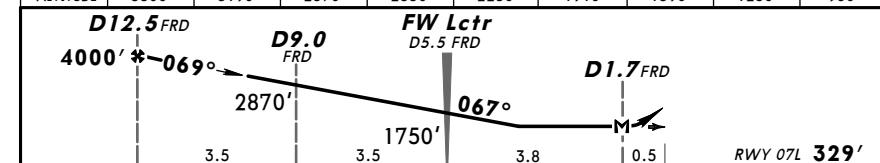
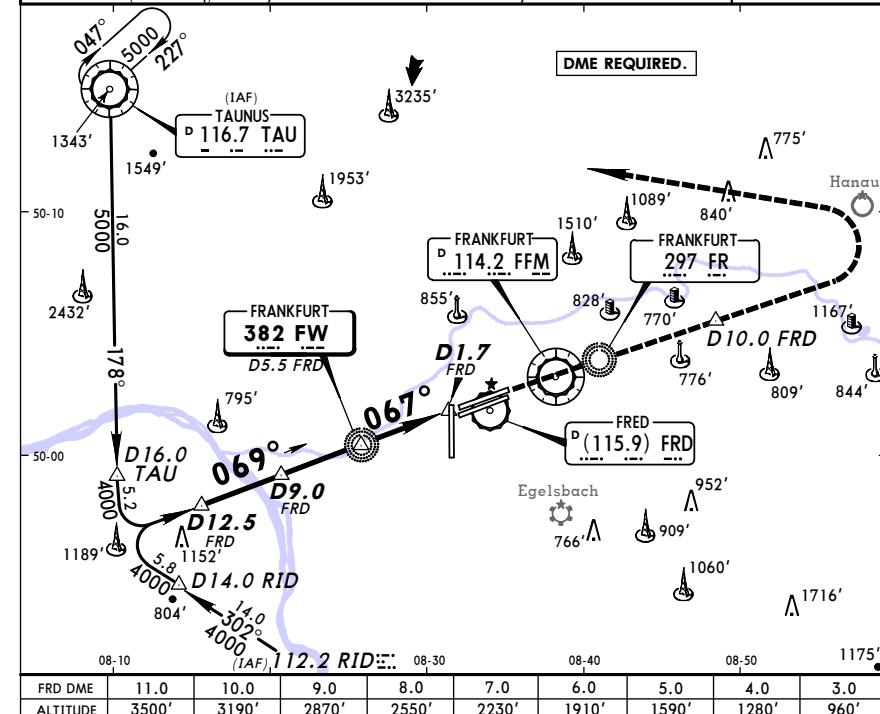
NDB Rwy 07L

*ATIS Arrival	LANGEN Radar (APP) North	*FRANKFURT Director (APP)	*FRANKFURT Arrival (APP)	FRANKFURT Tower	*Ground
118.02	114.2 120.8 125.35	127.27	118.5	119.9	121.8

Lctr FW 382	Final Apch Crs See Below	Minimum Alt D12.5 FRD 4000' (3671')	MDA(H) 830' (501')	Apt Elev 364' RWY 329'	4300' 3500' 3200'

**BRIEFING STRIP**

**MISSSED APCH:** Climb STRAIGHT AHEAD via FR Lctr to D10.0 FRD or 5000', whichever is later, then turn LEFT to TAU VOR maintain 5000'.  
Alt Set: hPa (IN on req) Rwy Elev: 12 hPa Trans level: By ATC Trans alt: 5000' MSA FFM VOR



Gnd speed-Kts	70	90	100	120	140	160		ALSF-II	D10.0 FRD	5000' via FR 297
Descent Gradient	5.2%	369	474	527	632	737	843			
MAP at D1.7 FRD										

JAR-OPS STRAIGHT-IN LANDING RWY 07L

MDA/H, 830' (501')

ALS out

A	RVR 1000m	B	RVR 1200m	C	RVR 1600m
	RVR 1500m		RVR 2000m		

EDDF/FRA

FRANKFURT/MAIN

12 OCT 07 16-2 Eff 25 Oct

NDB Rwy 07R

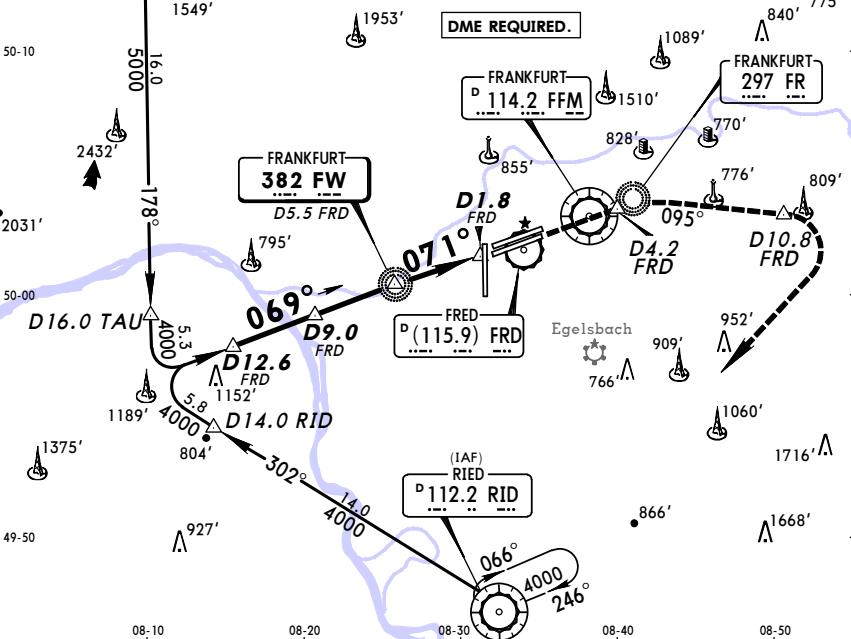
*ATIS Arrival	LANGEN Radar (APP) North	*FRANKFURT Director (APP)	*FRANKFURT Arrival (APP)	FRANKFURT Tower	*Ground
118.02	114.2 120.8 125.35	127.27	118.5	119.9	121.8

Lctr FW 382	Final Apch Crs See Below	Minimum Alt D12.6 FRD 4000' (3672')	MDA(H) 830' (502')	Apt Elev 364' RWY 328'	4300' 3500' 3200'

**BRIEFING STRIP**

**MISSSED APCH:** Climb inbound FR NDB to D4.2 FRD, then turn RIGHT on 095° outbound FR NDB to D10.8 FRD or 5000', whichever is later, then turn RIGHT to RID VOR, climb and maintain 5000'.  
Alt Set: hPa (IN on req) Rwy Elev: 12 hPa Trans level: By ATC Trans alt: 5000' MSA FFM VOR

(IAF) 116.7 TAU 1549' 1953' 3235' DME REQUIRED.



D12.6 FRD	4000' #	069°	D9.0 FRD	D5.5 FRD	D1.8 FRD	RWY 07R 328'

Gnd speed-Kts	70	90	100	120	140	160		ALSF-II	D4.2 FRD
Descent Gradient	5.2%	369	474	527	632	737	843		
MAP at D1.8 FRD									

JAR-OPS STRAIGHT-IN LANDING RWY 07R

MDA/H, 830' (502')

ALS out

A	RVR 1000m	B	RVR 1200m	C	RVR 1600m
	RVR 1500m		RVR 2000m		

EDDF/FRA  
FRANKFURT/MAINJEPPESEN FRANKFURT/MAIN, GERMANY  
NDB Rwy 25L

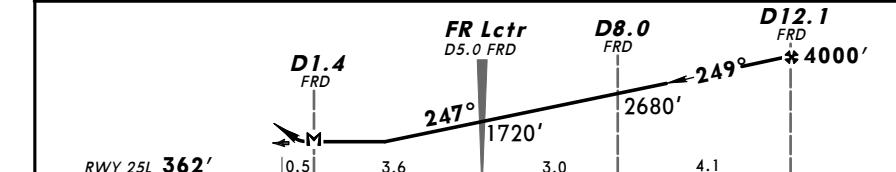
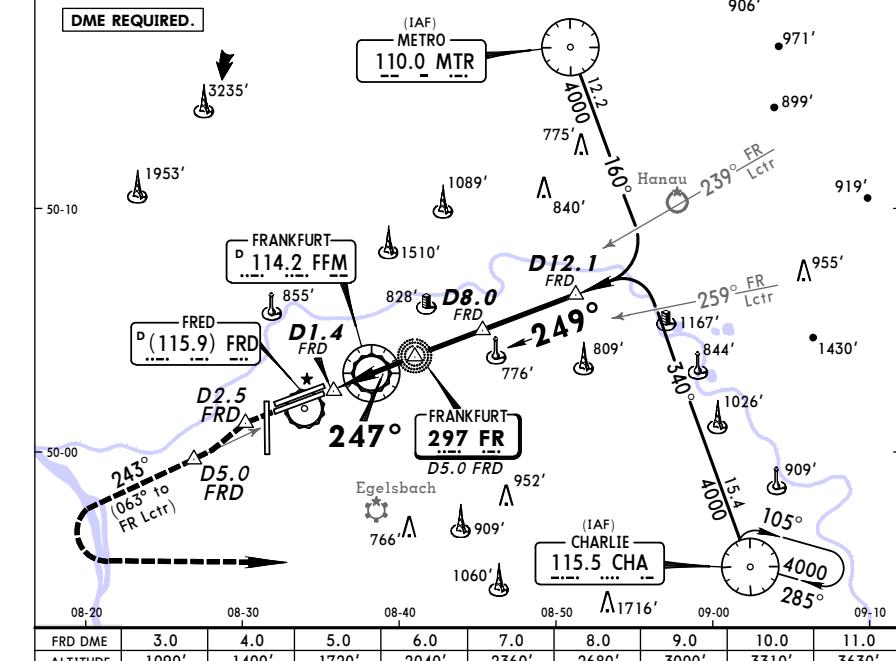
21 DEC 07 (16-3)

*ATIS Arrival	LANGEN Radar (APP) North South	*FRANKFURT Director (APP)	*FRANKFURT Arrival (APP)	FRANKFURT Tower	*Ground
118.02 114.2 120.8 125.35		127.27	118.5	119.9	121.8

Lctr FR <b>297</b>	Final Apch Crs See Below	Minimum Alt <b>D12.1 FRD</b> <b>4000'</b> (3638')	MDA(H) <b>820'</b> (458')	Apt Elev <b>364'</b> <b>RWY 362'</b>	3200' 3500' 3200' 3500'
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**MISSING APCH:** Climb STRAIGHT AHEAD to D2.5 FRD, then turn LEFT on track 243° outbound FR NDB to D5.0 FRD or 5000', whichever is later, then turn LEFT to CHA VOR and maintain 5000'.

Alt Set: hPa (IN on req) Rwy Elev: 13 hPa Trans level: By ATC Trans alt: 5000' DME REQUIRED.



Gnd speed-Kts	70	90	100	120	140	160		ALSF-II	
Descent Gradient	5.2%	369	474	527	632	737	843		
MAP at D1.4 FRD								REIL PAPI	

JAR-OPS STRAIGHT-IN LANDING RWY 25L

MDA(H) <b>820'</b> (456')		ALS out
A	RVR 1000m	
B	RVR 1200m	
C	RVR 2000m	
D	RVR 1600m	

CHANGES: None.

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EDDF/FRA  
FRANKFURT/MAIN

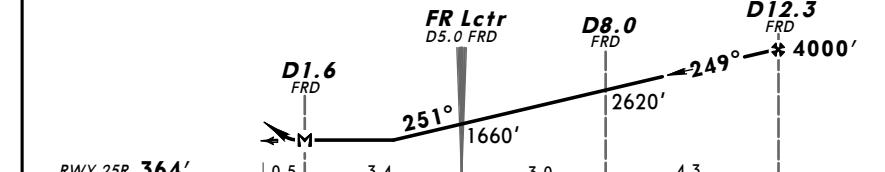
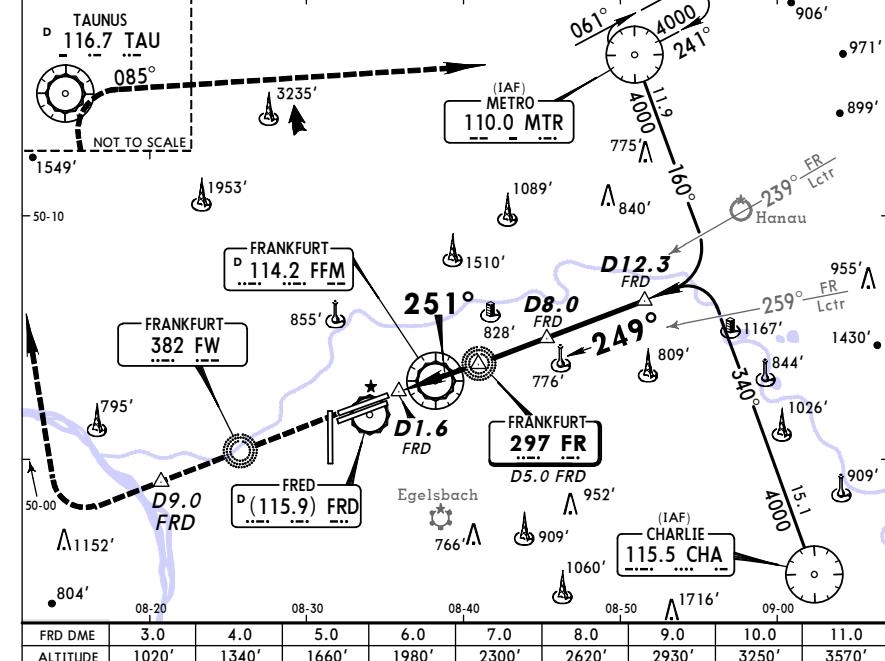
21 DEC 07 (16-4)

*ATIS Arrival	LANGEN Radar (APP) North South	*FRANKFURT Director (APP)	*FRANKFURT Arrival (APP)	FRANKFURT Tower	*Ground
118.02 114.2 120.8 125.35		127.27	118.5	119.9	121.8

Lctr FR <b>297</b>	Final Apch Crs See Below	Minimum Alt <b>D12.3 FRD</b> <b>4000'</b> (3636')	MDA(H) <b>820'</b> (456')	Apt Elev <b>364'</b> <b>RWY 364'</b>	3200' 3500' 3200' 3500'
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**MISSING APCH:** Climb STRAIGHT AHEAD via FW Lctr to D9.0 FRD or 5000', whichever is later, then turn RIGHT to TAU VOR. Turn RIGHT to intercept R-085 TAU to MTR VOR and maintain 5000'.

Alt Set: hPa (IN on req) Rwy Elev: 13 hPa Trans level: By ATC Trans alt: 5000' DME REQUIRED.



Gnd speed-Kts	70	90	100	120	140	160		ALSF-II	
Descent Gradient	5.2%	369	474	527	632	737	843		
MAP at D1.6 FRD								REIL PAPI	

JAR-OPS STRAIGHT-IN LANDING RWY 25R

MDA(H) <b>820'</b> (456')		ALS out
A	RVR 1000m	
B	RVR 1200m	
C	RVR 2000m	
D	RVR 1600m	

CHANGES: Missed approach.

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