

## FRANKFURT (Main) (FRA/EDDF)

Elevation 364ft

### CATEGORY A

AV brief – not required

#### Threats

##### CFIT

- RWY 25C ILS False LOC Capture: Pilots should be aware that false localiser capture has been reported and must also satisfy themselves by suitable means that the correct localiser QDM has been captured and established. This problem is most prevalent when capturing from the SOUTH of the centreline. However, caution should be exercised when intercepting from both the NORTH and SOUTH.

### ARRIVAL

#### Diversion Airports

COLOGNE	CGN/EDDK	074 nm/312°T	CAT A
STUTTGART	STR/EDDS	085 nm/162°T	CAT B
DUSSELDORF	DUS/EDDL	102 nm/317°T	CAT A
HANNOVER	HAJ/EDDV	152 nm/016°T	CAT A

Others that may be used include Frankfurt Hahn, Brussels, Munich, Hamburg and Amsterdam.

### Initial Approach

- Expect late changes of landing runway when on approach. As there are multiple arrivals and transitions that are generally runway specific it can be difficult to programme the FMC with the revised arrival or Rwy having already passed beyond a transition point. Consider using RTE 2/SEC F-PLN to set up alternative approaches.
- Please submit an ASR for late Rwy change and to also detail any difficulties in reprogramming the FMS.
- Transition UNOKO 25N/07N (coded in FMC as UN25N/07N) is depicted as the northerly arrival for 25R/07L only but may actually be given for the other runways also. If cleared with this northerly arrival with one of the other runways crews should consider selecting landing runway and constructing applicable STAR, or select cleared arrival and anticipate final approach/runway in RTE 2/SEC F-PLN.

**Note:** Reselecting STAR and Transition will insert many duplicated waypoints for the arrival which may increase workload at a critical stage of flight.

Explanation of the arrival procedure for west arrivals:

- The west (ACC) sector clears all arrivals which are not allowed for Rwy 25R (B747, A388, MD11) on the ONOKO25S transition.
- All other arrivals are cleared on the ONOKO25N.

- At this time, ATC does not differ between 25R Y or 25R Z.
- The ATIS and later the arrival controller informs if Y or Z is in use.
- From the transition clearance the pilot cannot conclude for a Y or Z ILS approach and the ACC controller cannot decide which runway the flight will be cleared later.
- Such questions will be answered with “.. runway decision later with arrival, for the time continue on the transition...”.
- ATC are aware that after a transition clearance, an approach procedure must be programmed into the FMS. However the re-programming after the approach decision Y or Z or the runway decision 25R or 25L and the re-briefing should be routine work. Normally this decision is made about 40 NM before turning onto final approach.
- Changes between the transition for 25R and the landing runway 25L happen often during the day.

#### BAV Crew Reports

- *Late afternoon LHR arrivals tend not to use ONOKO arrivals – we started the ROLIS 3L arrival and were then quickly cleared direct to MTR and then picked off for vectors to the ILS Y 25R.*

## Approach

- 07L/25R have 2 ILS approach procedures, Y and Z. These have different ILS frequencies. As the Y procedure has a 3.2° glide slope angle autolands are not permitted using this ILS for some aircraft types.
- 747 FMC databases only contain the Z procedure. If the Y procedure is flown expect to see an ILS COURSE/FREQUENCY FMC msg as you lock onto the localiser.
- Rwy 07/25L and 07/25C are situated close together, caution is required to land on the correct runway, especially following a NPA.
- When simultaneous parallel approaches are in force, expect landing runway 07/25L&R.
- Expect late changes of landing runway when on approach. As there are multiple arrivals and transitions that are generally runway specific it can be difficult to programme the FMC with the revised arrival or Rwy having already passed beyond a transition point. Consider using RTE 2/SEC F-PLN to set up alternative approaches.
- ATC track shortening is a possibility, this has led to high-energy approaches. Do not expect to fly the entire transition.
- False LOC capture is an issue on Rwy 07C/25C.
- Landing is not permitted on Rwy 18/36.

## Westerly Arrivals

- The ATIS informs which runways are in use, and whether ILS 25R Y or Z (with different glideslopes).
- All arrivals which can use Rwy 25R can expect to be cleared on the UNOKO 2L (to the North of the airfield) STAR followed by a UNOKO25N Transition, coded in FMC as UN25N and shown on the ILS 25R IAC chart.
- Any aircraft unable to use 25R (B747, A388, MD11) can expect a UNOKO 2B (to the south) STAR followed by the UNOKO25S Transition, coded as UN 25S and shown on the ILS 25L IAC chart.
- However, the transition clearance does not define the landing runway or even whether the ILS approach will be a Y or Z. Changes between the UNOKO25N transition for 25R and actual landing on runway 25L happen often during the day.
- Expect clearance onto the Transition (by Direct To one of the waypoints) before reaching ROKIM.

- The ACC controller cannot decide which runway the flight will be cleared later. Any questions will be answered with “.. runway decision later with arrival, for the time continue on the transition...”.
- ATC are aware that after a transition clearance, an approach procedure must be programmed into the FMS. However the re-programming after the transition decision (N or S) or the runway decision (25R or 25L) or the approach type (Y or Z) and the re-briefing should be routine work. Normally this decision is made about 40 NM before turning onto final approach leaving time for Approach Prep update and Approach Checklist

**Note:** Reselecting STAR and Transition may insert many duplicate waypoints for the arrival which may increase workload at a critical stage of flight.

#### A380

- Runway 25L is commonly used for landing.

**CAUTION: RET M21 is not approved for A380 use.**

- RET M23 is approved and commonly used by other A380 operators.
- Expect a taxi routing via taxiway Mike, with a possible crossing of 25C at M8, followed by an entry to the apron at N3 followed by a right turn onto taxiway November.

**CAUTION 1: The November centreline must be used and the coloured offset taxiway markings are not approved for A380 use.**

**CAUTION 2: Lima-North is not approved for A380 use and can easily be mistaken for Lima.**

- For Easterly arrivals, expect 07R.

**CAUTION: RET M15 is not approved for A380 use.**

- RET M13 is approved and commonly used by other A380 operators.
- As with a 25 arrival, a taxi routing via Mike with a crossing of 07C can be expected.

## GROUND

#### ALL

- The apron and taxiways have many roadways crossing them. Vehicles do not always give way with adequate clearance to aircraft. Taxi with caution.

#### A32N

FRA are now regularly assigning parking stands V94 to V97 on taxiway L, for A319 and A320.

Taxiing is VERY tight, in particular:

- When on the centreline, clearance between main gear and taxiway edge lights/grass on TWY L is less than 1 m.
- There is no way to avoid infringing the runway hold short markings at T2 and U2.
- A very sharp 140° left turn is required onto stand.
- Consider keeping both engines running.

- On departure, there is not enough clearance to turn left from Twy L to Twy U without infringing Twy T. Be very careful of the inset edge lights on this corner.



View from Twy L and the junction with Twy U (facing west).

A380

## Parking

- Expect stand E2 which has a SafeDock parking system and is fully A380-compatible.
- Four external ground power connections will be provided.
- Due to the high APU fuel burn, please shut down the APU as soon as possible after arrival on stand.
- If cabin cooling is required, portable PCA units are available and should be used as these are half the price of running the APU.
- If the PCA units cannot satisfactorily control the cabin temperature and the APU has to be started, please feed this back to the Flight Technical Manager.

**CAUTION: The high number of vehicle movements in and around the FRA apron area.**

ALL

## DEPARTURE

- Standard Taxi Route, Rwy 18 departure: Familiarisation with Transition 1 to Rwy 18 is recommended (See Lido AOI-2).
  - Transition 1 to RWY 18: Stop U2 via TWY U, S, S11, R, S28, S to stop S.
  - Additional taxi clearance required to cross stops U2 and U6.
  - If unable to follow the standard taxi route Transition 1, inform TWR about this during initial call.
- German ATC uses a distance-based system for Wake-Vortex separation on take-off, which does not conform to the requirements of ICAO PANS ATM. If cleared for take-off with less than the required time separation (LIDO Gen Part 1.5.2.12.4.2) behind a preceding aircraft, crews must refuse the clearance and report via ASR.

A380

- For Westerly operations, ask the TRC to request runway 25C for departure via BA Operations.

**CAUTION: The short taxi time for a Runway 25C departure.**

- Runway 18 is also available for departure but involves a lengthy taxi.
- For Easterly operations expect Runway 18 or Runway 07C.
- PDC clearances are available at FRA via the Company Com.

ALL

**OPERATIONAL INFORMATION**

<b>Handling Agent</b>	Menzies (TRC/Psgr Handling) + Wisag (Ramp)
<b>Handling Agent VHF</b>	131.9
<b>Potable Water</b>	Uplift Permitted

<b>IF ONLY Electrical Power is required</b>	Use for "pre-paid" time ONLY (3hrs), then use APU
<b>If BOTH electrical power and air conditioning is required:</b>	Use APU (but also use GPU for "pre-paid" time ONLY to reduce APU fuel burn (As stated abv))