Nur für Simulationszwecke zu verwenden !
Mit freundlicher Genehmigung der DFS
Deutsche Flugsicherung GmbH
für IVAO-DE.

STANDARD DEPARTURE
ROUTES – INSTRUMENT
(SID)

FRANKFURT MAIN
RWY 25L/25R
SIDs with Route Designator FOXTROT

1. **Between 0600 (0500) and 2100 (2000):**
   1.1 SIDs with designator **FOXTROT** may be used by all **MEDIUM** and **LIGHT** aircraft **able to comply** with the climb restrictions;
   1.2 SIDs with designator **JULIETT** shall be used by **HEAVY** aircraft **northbound able to comply** with the climb restrictions;
   1.3 SIDs with designator **GOLF** shall be used by:
   - all aircraft **unable to comply** with climb restrictions in SIDs with designators **FOXTROT or JULIETT**;
   - all **HEAVY** aircraft west-, south- and southeastbound.
   1.4 **EXCEPTION:** Aircraft via **BIBOS** shall use SIDs with designators:
   - **FOXTROT** for **MEDIUM and LIGHT** aircraft;
   - **GOLF** for **HEAVY** aircraft.
2. **Between 2100 (2000) and 0600 (0500):**
   2.1. All 3- and 4-engined jet aircraft, except Avroliner and BAe 146, via **BIBOS, MARUN, TOBAK & SOBRA** shall use SIDs with designator **NOVEMBER**.
   2.2. Single- and twin-engined aircraft shall use SIDs according to paragraphs 1.1. through 1.4. and 3. respectively.
3. SIDs with designator **PAPA** may be used by **single and twin-engined propeller-driven** aircraft and **DASH 7** only.
4. **NON-RNAV (enroute only)** equipped aircraft shall use SIDs with designator **QUEBEC**.

Designator	Route	After Take-Off		Remarks
		Climb to	Contact	
1	2	3	4	5
ANEKI 5F	**ANEKI FIVE FOXTROT** On RWY track to 4.5 DME FFM/1.5 DME FRD or 800, whichever is later; LT, on R357 RID to RID (△), (max. 220 KIAS until established on R357 RID); on R184 RID to ANEKI (△). Cross 4.4 DME RID south of RID at 4500 or above. Cross 6.9 DME RID south of RID at 5000 or above. Cross 11.9 DME RID south of RID at 6000 or above. **GPS/FMS RNAV:** [A800+] - DF134 (25R)[L] / DF135 (25L)[L] - DF141 (25R) / DF142 (25L) - DF143[L] - DF137[K 220-; R] - RID[R] - ANEKI.	5000 ft	Langen Radar 136.125*	
BIBOS 6F	**BIBOS SIX FOXTROT** On RWY track to 5.0 DME FFM or 800, whichever is later; RT MT 276° (RWY 25L: MT 279°), on R259 FFM to 13.7 DME FFM; RT, on track 294° to ESUPI; RT, on track 308° to MASIR; RT, on track 335° via RAVKI and DITAM to ABAXA; LT, on track 328° to BIBOS (△). Cross 13.7 DME FFM at 3600 or above. **GPS/FMS RNAV:** [A800+] - DF234 (25R)[R] / DF235 (25L)[R] - DF133[L] - DF136[A3600+; R] - ESUPI[R] - MASIR[R] - RAVKI - DITAM - ABAXA[L] - BIBOS.		Langen Radar 120.150*	1. PDG 5.8% / 350 ft/NM until passing 3600 due to airspace structure. If unable to comply, advise EDDF DELIVERY prior to start-up. 2. Flights via BIBOS and UZ28/UZ29 to UK or beyond, except for flights terminating within LONDON TMA. 3. Flights via UZ29 have to cross BIBOS at FL 250 or above. If unable to comply, request routing via UZ28 crossing BIBOS at FL 210 or above. 4. Also for flights destination EDDK or continuing VFR after ABAXA/BIBOS. In case of radio communication failure, flights with DEST EDDK shall proceed BIBOS - COL or BIBOS - WYP depending on RWY in use. 5. After 13.7 DME FFM BRNAV equipment necessary.
DKB 2F	**DINKELSBÜHL TWO FOXTROT** On RWY track to 4.5 DME FFM/1.5 DME FRD or 800, whichever is later; LT, inbound RID to 12.0 DME RID; LT, on track 118° to KNG (△) (max. 220 KIAS until established on track 118°); LT, on track 103° KNG to AKONI (△); RT, on R130 FFM/R310 DKB to DKB(△). Cross R201 FFM at 2500 or above. **GPS/FMS RNAV:** [A800+] - DF134 (25R)[L] / DF135 (25L)[L] - DF141 (25R) / DF142 (25L) - DF143[L] - DF137[K220-] - DF159[2500+] - KNG[L] - AKONI[R] - DKB.		Langen Radar 136.125*	1. PDG 5.2% / 315 ft/NM until passing 2500 due to airspace structure. If unable to comply, advise EDDF DELIVERY prior to start-up. 2. Only for flights terminating within EDMM FIR.
MARUN 1F	**MARUN ONE FOXTROT** On RWY track to 5.0 DME FFM or 800, whichever is later; RT MT 276° (RWY 25L: MT 279°) to 8.4 DME FFM; RT, on R142 TAU to 11.4 DME TAU; RT, on track 016° to TABUM; RT, on track 018° to LIKSI; LT, on track 016° via LORPA to MARUN (△). Cross 8.4 DME FFM at 3500 or above. Cross 11.4 DME TAU at 4400 or above. **GPS/FMS RNAV:** [A800+] - DF234 (25R)[R] / DF235 (25L)[R] - DF233[A3500+; R] - DF132[A4400+; R] - TABUM[R] - LIKSI[L] - LORPA - MARUN.		Langen Radar 120.150*	1. PDG 12% / 750 ft/NM to 8.4 DME FFM (4.5 NM after DER+) due to airspace structure. If unable to comply, advise EDDF DELIVERY prior to start-up. 2. After 11.4 DME TAU BRNAV equipment necessary.
NEKOM 1F	**NEKOM ONE FOXTROT** On RWY track to 4.5 DME FFM/1.5 DME FRD or 800, whichever is later; LT, on R357 RID to RID (△), (max. 220 KIAS until established on R357 RID); LT, on R164 RID to NEKOM (△). Cross 4.4 DME RID south of RID at 4500 or above. Cross 6.9 DME RID south of RID at 5000 or above, 11.9 DME RID south of RID at 6000 or above. **GPS/FMS RNAV:** [A800+] - DF134 (25R)[L] / DF135 (25L)[L] - DF141 (25R) / DF142 (25L) - DF143[L] - DF137[K220-; R] - RID[L] - NEKOM.		Langen Radar 136.125*	Only for flights terminating within EDDS Area and destinations LSZH, LSZR and EDNY with access to N850 at FL 90 or below.

(Sample: DF134 fly-over way point)

+ DER = Departure End of Runway

* Departure frequency may deviate from the frequency published. Check ATIS for current departure frequency.

Contact LANGEN RADAR immediately after take-off!

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FRANKFURT MAIN
RWY 25L/25R
SIDs with Route Designator FOXTROT

STANDARD DEPARTURE
ROUTES – INSTRUMENT
(SID)

Designator	Route	After Take-Off		Remarks
		Climb to	Contact	
1	2	3	4	5
NOMBO 2F	**NOMBO TWO FOXTROT** On RWY track to 4.5 DME FFM/1.5 DME FRD or 800, whichever is later; LT, inbound RID to 12.0 DME RID; LT, on track 118° to KNG (△), (max. 220 KIAS until established on track 118°); LT, on track 103° KNG to AKONI (△); RT, on R130 FFM outbound FFM to HAREM (△); RT, on track 148° to LAMPU (△); LT, on track 134° to NOMBO (△). Cross R201 FFM at 2500 or above. **GPS/FMS RNAV:** [A800+] - DF134 (25R)[L] / DF135 (25L)[L] - DF141 (25R) / DF142 (25L) - DF143[L] - DF137[K220-] - DF159[A2500+] - KNG[L] - AKONI[R] - HAREM[R] - LAMPU[L] - NOMBO.	5000 ft	Langen Radar 136.125*	1. PDG 5.2% / 315 ft/NM until passing 2500 due to airspace structure. If unable to comply, advise EDDF DELIVERY prior to start-up. 2. After HAREM BRNAV equipment necessary. 3. Not for flights terminating within EDDN Area or EDMM FIR. 4. Not for propeller-driven aircraft. These flights shall file SID RATIM.
RATIM 1F	**RATIM ONE FOXTROT** On RWY track to 4.5 DME FFM/1.5 DME FRD or 800, whichever is later; LT, inbound RID to 12.0 DME RID; LT, on track 118° to KNG (△) (max. 220 KIAS until established on track 118°); LT, on track 103° KNG via AKONI (△) to RATIM (△). Cross R201 FFM at 2500 or above. **GPS/FMS RNAV:** [A800+] - DF134 (25R)[L] / DF135 (25L)[L] - DF141 (25R) / DF142 (25L) - DF143[L] - DF137[K220-] - DF159[A2500+] - KNG[L] - AKONI - RATIM.			1. PDG 5.2% / 315ft/NM until passing 2500 due to airspace structure. If unable to comply, advise EDDF DELIVERY prior to start-up. 2. Only for propeller-driven aircraft (MAX RFL 230) instead of SID NOMBO. 3. Not for flights terminating within EDDN Area or EDMM FIR.
ROTEN 2F	**ROTEN TWO FOXTROT** On RWY track to 4.5 DME FFM/1.5 DME FRD or 800, whichever is later; LT, inbound RID to 12.0 DME RID; LT, on track 118° to KNG (△) (max. 220 KIAS until established on track 118°); LT, on track 103° KNG to AKONI (△); RT, on R130 FFM/R310 DKB to ROTEN (△). Cross R201 FFM at 2500 or above. **GPS/FMS RNAV:** [A800+] - DF134 (25R)[L] / DF135 (25L)[L] - DF141 (25R) / DF142 (25L) - DF143[L] - DF137[K220-] - DF159[A2500+] - KNG[L] - AKONI[R] - ROTEN.			1. PDG 5.2% / 315 ft/NM until passing 2500 due to airspace structure. If unable to comply, advise EDDF DELIVERY prior to start-up. 2. Only for flights terminating within EDDN Area.
SOBRA 1F	**SOBRA ONE FOXTROT** On RWY track to 4.5 DME FFM or 800, whichever is later; LT, on track 199° to intercept R223 FFM; RT, on R223 FFM to 20.6 DME FFM; RT, on track 283° via DONAB to SOBRA (△). **GPS/FMS RNAV:** [A800+] - DF134 (25R)[L] / DF135 (25L)[L] - DF141 (25R) / DF142 (25L) - DF163[R] - DF201[R] - DONAB - SOBRA.			1. For flights intending to proceed at FL 250 or above via Y180/Y181. Flights have to be able to cross RUDOT at FL 240 or above. If unable to comply, flight plan shall read RUDOT FL 220 - Y180 - DIK RFL. 2. After 20.6 DME FFM BRNAV equipment necessary.
SULUS 2F	**SULUS TWO FOXTROT** On RWY track to 4.5 DME FFM/1.5 DME FRD or 800, whichever is later; LT, inbound RID to 12.0 DME RID; LT, on track 118° to KNG (△) (max. 220 KIAS until established on track 118°); LT, on track 103° KNG via AKONI (△) to GIBSA (△); LT, on R254 WUR to WUR (△); LT, on track 054° to SULUS (△). Cross R201 FFM at 2500 or above. **GPS/FMS RNAV:** [A800+] - DF134 (25R)[L] / DF135 (25L)[L] - DF141 (25R) / DF142 (25L) - DF143[L] - DF137[K220-] - DF159 [A2500+] - KNG[L] - AKONI - GIBSA[L] - WUR[L] - SULUS.			1. PDG 5.2% / 315 ft/NM until passing 2500 due to airspace structure. If unable to comply, advise EDDF DELIVERY prior to start-up. 2. After WUR BRNAV equipment necessary. 3. Not for flights destination EDDN.
TOBAK 2F	**TOBAK TWO FOXTROT** On RWY track to 5.0 DME FFM or 800, whichever is later; RT MT 276° (RWY 25L:MT 279°) to 8.4 DME FFM; RT, on R142 TAU to 11.4 DME TAU; RT, on track 016° to TABUM; RT, on track 041° to TESGA; LT, on track 039° to TOBAK (△). Cross 8.4 DME FFM at 3500 or above. Cross 11.4 DME TAU at 4400 or above. **GPS/FMS RNAV:** [A800+] - DF234 (25R)[R]/DF235 (25L)[R] - DF233[A3500+; R] - DF132[A4400+; R] - TABUM[R] - TESGA[L] - TOBAK.		Langen Radar 120.150*	1. PDG 12% / 750 ft/NM to 8.4 DME FFM (4.5 NM after DER+) due to airspace structure. If unable to comply, advise EDDF DELIVERY prior to start-up. 2. After 11.4 DME TAU BRNAV equipment necessary. 3. Not for flights continuing via Z10 GIN N850 WRB.

(Sample: DF134 fly-over way point)

+ DER = Departure End of Runway

* Departure frequency may deviate from the frequency published. Check ATIS for current departure frequency.

Contact LANGEN RADAR immediately after take-off!

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STANDARD DEPARTURE
ROUTES – INSTRUMENT
(SID)

FRANKFURT MAIN
RWY 25L/25R
SIDs with Route Designator GOLF

1. **Between 0600 (0500) and 2100 (2000):**
   1.1 SIDs with designator **FOXTROT** may be used by all **MEDIUM** and **LIGHT** aircraft **able to comply** with the climb restrictions;
   1.2 SIDs with designator **JULIETT** shall be used by **HEAVY** aircraft **northbound able to comply** with the climb restrictions;
   1.3 SIDs with designator **GOLF** shall be used by:
   - all aircraft **unable to comply** with climb restrictions in SIDs with designators **FOXTROT or JULIETT**;
   - all **HEAVY** aircraft west-, south- and southeastbound.

   1.4 **EXCEPTION**: Aircraft via **BIBOS** shall use SIDs with designators:
   - **FOXTROT** for **MEDIUM and LIGHT** aircraft;
   - **GOLF** for **HEAVY** aircraft.
2. **Between 2100 (2000) and 0600 (0500):**
   2.1. All 3- and 4-engined jet aircraft, except Avroliner and BAe 146, via **BIBOS, MARUN, TOBAK & SOBRA** shall use SIDs with designator **NOVEMBER**.
   2.2. Single- and twin-engined aircraft shall use SIDs according to paragraphs 1.1. through 1.4. and 3. respectively.
3. SIDs with designator **PAPA** may be used by **single and twin-engined propeller-driven aircraft** and **DASH 7** only.
4. **NON-RNAV (enroute only)** equipped aircraft shall use SIDs with designator **QUEBEC**.

Designator	Route	After Take-Off		Remarks
		Climb to	Contact	
1	2	3	4	5
ANEKI 5G	**ANEKI FIVE GOLF** On RWY track to 4.5 DME FFM/1.5 DME FRD or 800, whichever is later; LT, on R357 RID to RID (△), (max. 220 KIAS until established on R357 RID); on R184 RID to ANEKI (△). Cross 4.4 DME RID south of RID at 4500 or above. Cross 6.9 DME RID south of RID at 5000 or above. Cross 11.9 DME RID south of RID at 6000 or above. **GPS/FMS RNAV:** [A800+] - DF134 (25R)[L] / DF135 (25L)[L] - DF141 (25R) / DF142 (25L) - DF143[L] - DF137[K220-; R] - RID[R] - ANEKI.	5000 ft	Langen Radar 136.125*	
BIBOS 6G	**BIBOS SIX GOLF** On RWY track to 5.0 DME FFM or 800, whichever is later; RT MT 276° (RWY 25L: MT 279°), on R259 FFM to 13.7 DME FFM; RT, on track 294° to ESUPI; RT, on track 308° to MASIR; RT, on track 335° via RAVKI and DITAM to ABAXA; LT, on track 328° to BIBOS (△). Cross 13.7 DME FFM at 3600 or above. **GPS/FMS RNAV:** [A800+] - DF234 (25R)[R] / DF235 (25L)[R] - DF133[L] - DF136[A3600+; R] - ESUPI[R] - MASIR[R] - RAVKI - DITAM - ABAXA[L] - BIBOS.		Langen Radar 120.150*	1. PDG 5.8% / 350 ft/NM until passing 3600 due to airspace structure. If unable to comply, advise EDDF DELIVERY prior to start-up. 2. Flights via BIBOS and UZ28/UZ29 to UK or beyond, except for flights terminating within LONDON TMA. 3. Flights via UZ29 have to cross BIBOS at FL 250 or above. If unable to comply, request routing via UZ28 crossing BIBOS at FL 210 or above. 4. Also or flights destination EDDK or continuing VFR after ABAXA/BIBOS. In case of radio communication failure, flights with DEST EDDK shall proceed BIBOS - COL or BIBOS - WYP depending on RWY in use. 5. After 13.7 DME FFM BRNAV equipment necessary.
DKB 3G	**DINKELSBÜHL THREE GOLF** On RWY track to 4.5 DME FFM/1.5 DME FRD or 800, whichever is later; LT, inbound RID to 12.0 DME RID; LT, on track 118° to KNG (△) (max. 220 KIAS until established on track 118°); LT, on track 103° KNG to AKONI (△); RT, on R130 FFM/R310 DKB to DKB(△). Cross R201 FFM at 2500 or above **GPS/FMS RNAV:** [A800+] - DF134 (25R)[L] / DF135 (25L)[L] - DF141 (25R) / DF142 (25L) - DF143[L] - DF137[K220-] - DF159[A2500+] - KNG[L] - AKONI[R] - DKB.		Langen Radar 136.125*	1. PDG 5.2% / 315 ft/NM until passing 2500 due to airspace structure. If unable to comply, advise EDDF DELIVERY prior to start-up. 2. Only for flights terminating within EDMM FIR.
MARUN 1G	**MARUN ONE GOLF** On RWY track to 5.0 DME FFM or 800, whichever is later; RT MT 276° (RWY 25L: MT 279°) on R259 FFM to 3500; RT to TAU, but not before reaching R259 FFM; when passing 4400; RT to TABUM; on track 018° to LIKSI; LT, on track 016° via LORPA to MARUN (△).		Langen Radar 120.150*	After 4400 BRNAV equipment necessary.
NEKOM 1G	**NEKOM ONE GOLF** On RWY track to 4.5 DME FFM/1.5 DME FRD or 800, whichever is later; LT, on R357 RID to RID (△), (max. 220 KIASuntil established on R357 RID); LT, on R164 RID to NEKOM (△). Cross 4.4 DME RID south of RID at 4500 or above. Cross 6.9 DME RID south of RID at 5000 or above. Cross 11.9 DME RID south of RID at 6000 or above. **GPS/FMS RNAV:** [A800+] - DF134 (25R)[L] / DF135 (25L)[L] - DF141 (25R) / DF142 (25L) - DF143[L] - DF137[K220-; R] - RID[L] - NEKOM.		Langen Radar 136.125*	Only for flights terminating within EDDS Area and destinations LSZH, LSZR and EDNY with access to N850 at FL 90 or below.

(Sample: DF134 fly-over way point)

* Departure frequency may deviate from the frequency published. Check ATIS for current departure frequency.

Contact LANGEN RADAR immediately after take-off!

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FRANKFURT MAIN
RWY 25L/25R
SIDs with Route Designator GOLF

STANDARD DEPARTURE
ROUTES – INSTRUMENT
(SID)

Designator	Route	After Take-Off		Remarks
		Climb to	Contact	
1	2	3	4	5
NOMBO 3G	**NOMBO THREE GOLF** On RWY track to 4.5 DME FFM/1.5 DME FRD or 800, whichever is later; LT, inbound RID to 12.0 DME RID; LT, on track 118° to KNG (△), (max. 220 KIAS until established on track 118°); LT, on track 103° KNG to AKONI (△); RT, on R130 FFM outbound FFM to HAREM (△); RT, on track 148° to LAMPU (△); LT, on track 134° to NOMBO (△). Cross R201 FFM at 2500 or above. **GPS/FMS RNAV**: [A800+] - DF134 (25R)[L] / DF135 (25L)[L] - DF141 (25R) / DF142 (25L) - DF143[L] - DF137[K220-] - DF159[A2500+] - KNG[L] - AKONI[R] - HAREM[R] - LAMPU[L] - NOMBO.	5000 ft	Langen Radar 136.125*	1. PDG 5.2% / 315ft/NM until passing 2500 due to airspace structure. If unable to comply, advise EDDF DELIVERY prior to start-up. 2. After HAREM BRNAV equipment necessary. 3. Not for flights terminating within EDDN Area or EDMM FIR. 4. Not for propeller-driven aircraft. These flights shall file SID RATIM.
RATIM 1G	**RATIM ONE GOLF** On RWY track to 4.5 DME FFM/1.5 DME FRD or 800, whichever is later; LT, inbound RID to 12.0 DME RID; LT, on track 118° to KNG (△) (max. 220 KIAS until established on track 118°); LT, on track 103° KNG via AKONI (△) to RATIM (△). Cross R201 FFM at 2500 or above. **GPS/FMS RNAV:** [A800+] - DF134 (25R)[L] / DF135 (25L)[L] - DF141 (25R) / DF142 (25L) - DF143[L] - DF137[K220-] - DF159[A2500+] - KNG[L] - AKONI - RATIM.			1. PDG 5.2% / 315ft/NM until passing 2500 due to airspace structure. If unable to comply, advise EDDF DELIVERY prior to start-up. 2. Only for propeller-driven aircraft (MAX RFL 230) instead of SID NOMBO. 3. Not for flights terminating within EDDN Area or EDMM FIR.
ROTEN 1G	**ROTEN ONE GOLF** On RWY track to 4.5 DME FFM/1.5 DME FRD or 800, whichever is later; LT, inbound RID to 12.0 DME RID; LT, on track 118° to KNG (△) (max. 220 KIAS until established on track 118°); LT, on track 103° KNG to AKONI (△); RT, on R130 FFM/R310 DKB to ROTEN (△). Cross R201 FFM at 2500 or above. **GPS/FMS RNAV:** [A800+] - DF134 (25R)[L] / DF135 (25L)[L] - DF141 (25R) / DF142 (25L) - DF143[L] - DF137[K220-] - DF159[A2500+] - KNG[L] - AKONI[R] - ROTEN.			1. PDG 5.2% / 315 ft/NM until passing 2500 due to airspace structure. If unable to comply, advise EDDF DELIVERY prior to start-up. 2. Only for flights terminating within EDDN Area.
SOBRA 1G	**SOBRA ONE GOLF** On RWY track to 4.5 DME FFM or 800, whichever is later; LT, on track 199° to intercept R223 FFM; RT, on R223 FFM to 20.6 DME FFM; RT, on track 283° via DONAB to SOBRA (△). **GPS/FMS RNAV:** [A800+] - DF134 (25R)[L] / DF135 (25L)[L] - DF141 (25R) / DF142 (25L) - DF163[R] - DF201[R] - DONAB - SOBRA.			1. For flights intending to proceed at FL 250 or above via Y180/Y181. Flights have to be able to cross RUDOT at FL 240 or above. If unable to comply, flight plan shall read RUDOT FL 220 - Y180 - DIK RFL. 2. After 20.6 DME FFM BRNAV equipment necessary.
SULUS 3G	**SULUS THREE GOLF** On RWY track to 4.5 DME FFM/1.5 DME FRD or 800, whichever is later; LT, inbound RID to 12.0 DME RID; LT, on track 118° to KNG (△) (max. 220 KIAS until established on track 118°); LT, on track 103° KNG via AKONI (△) to GIBSA (△); LT, on R254 WUR to WUR (△); LT, on track 054° to SULUS (△). Cross R201 FFM at 2500 or above. **GPS/FMS RNAV:** [A800+] - DF134 (25R)[L] / DF135 (25L)[L] - DF141 (25R) / DF142 (25L) - DF143[L] - DF137[K220-] - DF159[A2500+] - KNG[L] - AKONI - GIBSAL[L] - WUR[L] - SULUS.			1. PDG 5.2% / 315 ft/NM until passing 2500 due to airspace structure. If unable to comply, advise EDDF DELIVERY prior to start-up. 2. After WUR BRNAV equipment necessary. 3. Not for flights destination EDDN.
TOBAK 2G	**TOBAK TWO GOLF** On RWY track to 5.0 DME FFM or 800, whichever is later; RT MT 276° (RWY 25L: MT 279°) on R259 FFM to 3500; RT to TAU, but not before reaching R259 FFM; when passing 4400; RT to TABUM; on track 041° to TESGA; LT, on track 039° to TOBAK (△).		Langen Radar 120.150*	1. After 4400 BRNAV equipment necessary. 2. Not for flights continuing via Z10 GIN N850 WRB.

(Sample: DF134 fly-over way point)

* Departure frequency may deviate from the frequency published. Check ATIS for current departure frequency.

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STANDARD DEPARTURE
ROUTES – INSTRUMENT
(SID)

FRANKFURT MAIN
RWY 25L/25R
SIDs with Route Designator JULIETT & PAPA

1. **Between 0600 (0500) and 2100 (2000):**
   1.1 SIDs with designator **FOXTROT** may be used by all **MEDIUM** and **LIGHT** aircraft **able to comply** with the climb restrictions;
   1.2 SIDs with designator **JULIETT** shall be used by **HEAVY** aircraft **northbound able to comply** with the climb restrictions;
   1.3 SIDs with designator **GOLF** shall be used by:
   - all aircraft **unable to comply** with climb restrictions in SIDs with designators **FOXTROT or JULIETT**;
   - all **HEAVY** aircraft west-, south- and southeastbound.
   1.4 **EXCEPTION**: Aircraft via **BIBOS** shall use SIDs with designators:
   - **FOXTROT** for **MEDIUM** and **LIGHT** aircraft;
   - **GOLF** for **HEAVY** aircraft.
2. **Between 2100 (2000) and 0600 (0500):**
   2.1. All 3- and 4-engined jet aircraft, except Avroliner and BAe 146, via **BIBOS, MARUN, TOBAK & SOBRA** shall use SIDs with designator **NOVEMBER**.
   2.2. Single- and twin-engined aircraft shall use SIDs according to paragraphs 1.1. through 1.4. and 3. respectively.
3. SIDs with designator **PAPA** may be used by **single and twin-engined propeller-driven aircraft** and **DASH 7** only.
4. **NON-RNAV (enroute only)** equipped aircraft shall use SIDs with designator **QUEBEC**.

Designator	Route	After Take-Off		Remarks
		Climb to	Contact	
1	2	3	4	5
MARUN 1J	**MARUN ONE JULIETT** On RWY track to 5.0 DME FFM or 800, whichever is later; RT MT 276° (RWY 25L: MT 279°) to 8.4 DME FFM; RT, on R142 TAU to 11.4 DME TAU; RT, on track 016° to TABUM; RT, on track 018° to LIKSI; LT, on track 016° via LORPA to MARUN (△). Cross 8.4 DME FFM at 3500 or above. Cross 11.4 DME TAU at 4400 or above. **GPS/FMS RNAV:** [A800+] - DF234 (25R)[R] / DF235 (25L)[R] - DF233[A3500+; R] - DF132[A4400+; R] - TABUM[R] - LIKSI[L] - LORPA - MARUN.	5000 ft	Langen Radar 120.150*	1. PDG 12% / 750 ft/NM to 8.4 DME FFM (4.5 NM after DER+) due to airspace structure. If unable to comply, advise EDDF DELIVERY prior to start-up. 2. After 11.4 DME TAU BRNAV equipment necessary.
TOBAK 2J	**TOBAK TWO JULIETT** On RWY track to 5.0 DME FFM or 800, whichever is later; RT MT 276° (RWY 25L: MT 279°) to 8.4 DME FFM; RT, on R142 TAU to 11.4 DME TAU; RT, on track 016° to TABUM; RT, on track 041° to TESGA; LT, on track 039° to TOBAK (△). Cross 8.4 DME FFM at 3500 or above. Cross 11.4 DME TAU at 4400 or above. **GPS/FMS RNAV:** [A800+] - DF234 (25R)[R] / DF235 (25L)[R] - DF233[A3500+; R] - DF132[A4400+; R] - TABUM[R] - TESGA[L] - TOBAK.			1. PDG 12% / 750 ft/NM to 8.4 DME FFM (4.5 NM after DER+) due to airspace structure. If unable to comply, advise EDDF DELIVERY prior to start-up. 2. After 11.4 DME TAU BRNAV equipment necessary. 3. Not for flights continuing via Z10 GIN N850 WRB.
SOBRA 1P	**SOBRA ONE PAPA** On RWY track to 4.5 DME FFM/1.5 DME FRD or 800, whichever is later; LT, on track 226° (RWY25L: track 229°) to intercept R239 FFM to 26.0 DME FFM; RT, on track 283° to SOBRA (△). **GPS/FMS RNAV:** [A800+] – DF134 (25R)[L] / DF135 (25L)[L] – DF138[R] - DONAB[R] – SOBRA.		Langen Radar 136.125*	1. For flights intending to proceed at FL 250 or above via Y180/Y181. Flights have to be able to cross RUDOT at FL 240 or above. If unable to comply, flight plan shall read RUDOT FL 220 - Y180 - DIK RFL. 2. After 26.0 DME FFM BRNAV equipment necessary.

(Sample: DF134 fly-over way point)

+ DER = Departure End of Runway

* Departure frequency may deviate from the frequency published. Check ATIS for current departure frequency.

Contact LANGEN RADAR immediately after take-off!

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Nur für Simulationszwecke zu verwenden !
Mit freundlicher Genehmigung der DFS
Deutsche Flugsicherung GmbH
für IVAO-DE.

FRANKFURT MAIN
RWY 25L/25R
SIDs with Route Designator NOVEMBER

STANDARD DEPARTURE
ROUTES – INSTRUMENT
(SID)

1. **Between 0600 (0500) and 2100 (2000):**
   1.1 SIDs with designator **FOXTROT** may be used by all **MEDIUM** and **LIGHT** aircraft **able to comply** with the climb restrictions;
   1.2 SIDs with designator **JULIETT** shall be used by **HEAVY** aircraft **northbound able to comply** with the climb restrictions;
   1.3 SIDs with designator **GOLF** shall be used by:
   - all aircraft **unable to comply** with climb restrictions in SIDs with designators **FOXTROT or JULIETT**;
   - all **HEAVY** aircraft west-, south- and southeastbound.
   1.4 **EXCEPTION:** Aircraft via **BIBOS** shall use SIDs with designators:
   - **FOXTROT** for **MEDIUM and LIGHT** aircraft;
   - **GOLF** for **HEAVY** aircraft.
2. **Between 2100 (2000) and 0600 (0500):**
   2.1. All 3- and 4-engined jet aircraft, except Avroliner and BAe 146, via **BIBOS, MARUN, TOBAK & SOBRA** shall use SIDs with designator **NOVEMBER**.
   2.2. Single- and twin-engined aircraft shall use SIDs according to paragraphs 1.1. through 1.4. and 3. respectively.
3. SIDs with designator **PAPA** may be used by **single and twin-engined propeller-driven** aircraft and **DASH 7** only.
4. **NON-RNAV (enroute only)** equipped aircraft shall use SIDs with designator **QUEBEC**.

Designator	Route	After Take-Off		Remarks
		Climb to	Contact	
1	2	3	4	5
BIBOS 6N	**BIBOS SIX NOVEMBER** On RWY track to 4.5 DME FFM or 800, whichever is later; LT, on track 184° to intercept R223 FFM (max. 220 KIAS until established on track 184°); on R223 FFM to 14.0 DME FFM; RT, on R302 RID to 16.0 DME RID; RT, on track 319° to MASIR; RT, on track 335° via RAVKI and DITAM to ABAXA; LT, on track 328° to BIBOS (△). **GPS/FMS RNAV:** [A800+] - DF134 (25R)[L] / DF135 (25L)[L] - DF162 (25R)[K220-] / DF165 (25L)[K220-] - DF166[R] - DF164[R] - DF161[R] - MASIR[R] - RAVKI - DITAM - ABAXA[L] - BIBOS.	5000 ft	Langen Radar 120.150*	1. Flights via BIBOS and UZ28/UZ29 to UK or beyond, except for flights terminating within LONDON TMA. 2. Flights via UZ29 have to cross BIBOS at FL 250 or above. If unable to comply, request routing via UZ28 crossing BIBOS at FL 210 or above. 3. Also for flights destination EDDK or continuing VFR after ABAXA/BIBOS. In case of radio communication failure, flights with DEST EDDK shall proceed BIBOS - COL or BIBOS - WYP depending on RWY in use. 4. After 16.0 DME RID BRNAV equipment necessary.
MARUN 1N	**MARUN ONE NOVEMBER** On RWY track to 4.5 DME FFM or 800, whichever is later; LT on track 184° to intercept R223 FFM, (max. 220 KIAS until established on track 184°); on R223 FFM to 14.0 DME FFM; RT, on R302 RID to 16.0 DME RID; RT, on track 023° to TABUM; LT, on track 018° to LIKSI; LT, on track 016° via LORPA to MARUN (△). **GPS/FMS RNAV:** [A800+] - DF134 (25R)[L] / DF135 (25L)[L] - DF162 (25R)[K220-] / DF165 (25L)[K220-] - DF166[R] - DF164[R] - DF161[R] - TABUM[L] - LIKSI[L] - LORPA - MARUN.			After 16.0 DME RID BRNAV equipment necessary.
TOBAK 3N	**TOBAK THREE NOVEMBER** On RWY track to 4.5 DME FFM or 800, whichever is later; LT on track 184° to intercept R223 FFM, (max. 220 KIAS until established on track 184°); on R223 FFM to 14.0 DME FFM; RT, on R302 RID to 16.0 DME RID; RT, on track 023° to TABUM; RT, on track 041° to TESGA; LT, on track 039° to TOBAK (△). **GPS/FMS RNAV:** [A800+] - DF134 (25R)[L] / DF135 (25L)[L] - DF162 (25R)[K220-] / DF165 (25L)[K220-] - DF166[R] - DF164[R] - DF161[R] - TABUM[R] - TESGA[L] - TOBAK.			1. After 16.0 DME RID BRNAV equipment necessary. 2. Not for flights continuing via Z10 GIN N850 WRB.
SOBRA 2N	**SOBRA TWO NOVEMBER** On RWY track to 4.5 DME FFM or 800, whichever is later; LT on track 184° to intercept R223 FFM, (max. 220 KIAS until established on track 184°); on R223 FFM to 20.6 DME FFM; RT, on track 283° via DONAB to SOBRA (△). **GPS/FMS RNAV:** [A800+] - DF134 (25R)[L] / DF135 (25L)[L] - DF162 (25R)[K220-] / DF165 (25L)[K220-] - DF166[R] - DF201[R] - DONAB - SOBRA.		Langen Radar 136.125*	1. For flights intending to proceed at FL 250 or above via Y180/Y181. Flights have to be able to cross RUDOT at FL 240 or above. If unable to comply, flight plan shall read RUDOT FL 220 - Y180 - DIK RFL. 2. After 20.6 DME FFM BRNAV equipment necessary.

(Sample: DF134 fly-over way point)

* Departure frequency may deviate from the frequency published. Check ATIS for current departure frequency.

Contact LANGEN RADAR immediately after take-off!

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STANDARD DEPARTURE CHART - INSTRUMENT (SID)

TRANSITION ALTITUDE 5000
VAR 1° E

ATIS	118.725	GROUND	121.800
DELIVERY (Initial Call)	121.900	TOWER	119.900
APRON	121.700	LANGEN RADAR (N, NW)	120.150
	121.850	LANGEN RADAR (W)	136.125
	121.950		

FRANKFURT MAIN (NORTH)
RWY 25L/25R
FOXTROT/GOLF/JULIETT/NOVEMBER

Correction: Editorial.

STANDARD DEPARTURE CHART - INSTRUMENT (SID)

TRANSITION ALTITUDE 5000
VAR 1° E

ATIS	118.725	APRON	121.700	GROUND	121.800
DELIVERY (Initial Call)	121.900		121.850	TOWER	119.900
			121.950	LANGEN RADAR	136.125

FRANKFURT MAIN (SOUTH)
RWY 25L/25R
FOXTROT / GOLF / PAPA

Correction: FRD DME renamed to FRED.