LUFTFAHRTHANDBUCH DEUTSCHLAND AIP GERMANY

STANDARD DEPARTURE ROUTES – INSTRUMENT

(SID)

FRANKFURT MAIN RWY 07C / 07R SIDs with Route Designator **ECHO**

1. Between 0600 (0500) and 2100 (2000):

1.1 SIDs with designator ECHO may be used by all MEDIUM and LIGHT aircraft able to comply with the climb restrictions;

1.2 SIDs with designator DELTA shall be used by:

- all HEAVY and SUPER aircraft and

- all aircraft **unable to comply** with the climb restrictions in SIDs with designator **ECHO**.

2. Between 2100 (2000) and 0600 (0500) ALL AIRCRAFT shall use SIDs with designator DELTA.

3. NON-RNAV (enroute only) equipped aircraft shall use SIDs with designator CHARLIE.

	Route		After Take-Off		
Designator			Climb to	Contact	Remarks
1		2	3	4	5
ANEKI 2E	$\label{eq:second} \begin{array}{l} \textbf{ANEKI TWO ECHO} \\ \text{On RWY track to 1.6 DME FRD (1.5 DME inbound FFM) or 800, whichever} \\ \text{is later; RT (MAX IAS 220 KT until established on R199 FFM), on R199 } \\ \text{FFM to 10.3 DME FFM; LT, on R356 RID to RID; RT, on R183 RID to } \\ \text{ANEKI } (\triangle). \\ \text{Cross 4.0 DME FFM at 2500 or above.} \\ \text{Cross 3.0 DME RID south of RID at 5000 or above.} \\ \text{Cross 10.0 DME RID south of RID at 6000 or above.} \\ \text{GPS/FMS RNAV: [A800+] - } \underbrace{DE144}_{DE144} (07C) [R] / \underbrace{DE145}_{DE145} (07R) [R] - \\ \text{DF154 } [A2500+; K220; L] - DF160 [L] - RID [R] - ANEKI. \\ \end{array}$		4000 ft	Langen Radar 136.125*	PDG 5.4% / 330ft/NM until passing 2500 due to airspace structure. If unable to comply, advise EDDF DELIVERY prior to start-up.
BIBTI 3E	BIBTI THREE ECHO On RWY track to 1.6 DME FRD (1.5 DME inbound FFM) or 800, whichever is later; LT, on R356 FFM to ODAGA; LT, on track 287° to KUSOM; LT, on track 251° to GUBAX; RT, on track 293° to RAVKI; RT, on track 335° to DIT- AM; LT, on track 326° via OBOKA to BIBTI (△). Cross 2.8 DME FFM north of FFM at 2000 or above. GPS/FMS RNAV: [A800+] - DF139 (07C)[L] / DF140 (07R)[L] - DF146[A2000+] - ODAGA[L] - KUSOM[L] - GUBAX[R] - RAVKI[R] - DITAM[L] - OBOKA - BIBTI		5000 ft	Langen Radar 120.150*	 PDG 6.3% / 380ft/NM until passing 2000 due to obstacle. If unable to comply, advise EDDF DELIVERY prior to start-up. Flights via BIBTI and UZ28/UZ29 to UK or beyond, except for flights terminating within LONDON TMA. Flights via UZ29 have to cross BIBTI at FL 250 or above. If unable to comply, request routing via UZ28 crossing BIBTI at FL 210 or above. Also for flights destination EDDK or continuing VFR after OBOKA / BIBTI. Traffic with DEST EDDK shall file SID BIBTI - OBOKA - DCT. In case of radio communication failure, flights with DEST EDDK shall proceed OBOKA - COL or OBOKA - WYP depending on RWY in use. After ODAGA BRNAV equipment necessary.
DKB 7E	$\begin{array}{l} \textbf{DINKELSBÜHL SEVEN ECHO} \\ On RWY track to 800; via FR to 6.0 DME FRD (3.0 DME outbound FFM) \\ (MAX IAS 220 KT until established on R192 MTR); RT, on R192 MTR to 10.8 DME FFM; LT, on track 105° to AMTIX (\triangle); LT, on track 102° to AKONI (\triangle); RT, on track 130° to DKB (\triangle).GPS/FMS RNAV: [A800+] - DF152[R] - DF150[K220-; L] - DF153[L] - AMTIX[L] - AKONI[R] - DKB. \\ \end{array}$		4000 ft	Langen Radar 136.125*	 Only for flights terminating within EDMM FIR. After 10.8 DME FFM BRNAV equipment necessary.
KOMIB 1E	KOMIB ONE ECHO On RWY track to 800; via FR to 6.0 DME FRD (3.0 DME outbound FFM); RT, on track 099°; LT, intercept R087 FFM to 24.0 DME FFM; LT, on track 060° to AGOLO; RT, on track 089° to OKTUM; RT, on track 129° to KOMIB (\triangle). GPS/FMS RNAV: [A800+] - DF149[R] - DF151[L] - DF169[L] - AGOLO[R] - OKTUM[R] - KOMIB			Langen Radar 120.150*	 Only for flights terminating within EDDN Area After 24.0 DME FFM BRNAV equipment necessary.
MARUN 4E	$\label{eq:marginal_states} \begin{array}{l} \mbox{MARUN FOUR ECHO} \\ \mbox{On RWY track to 1.6 DME FRD (1.5 DME inbound FFM) or 800, whichever} \\ \mbox{is later; LT, on R356 FFM to ODAGA; RT, on track 359° to TESGA; \\ \mbox{RT, on track 004° via ALIDI to MARUN } (\triangle). \\ \mbox{Cross 2.8 DME FFM north of FFM at 2000 or above.} \\ \mbox{GPS/FMS RNAV: [A800+] - DF139 (07C)[L] / DF140 (07R)[L] - \\ \mbox{DF146[A2000+] - ODAGA[R] - TESGA[R] - ALIDI - MARUN.} \end{array}$		5000 ft		 PDG 6.3% / 380ft/NM until passing 2000 due to obstacle. If unable to comply, advise EDDF DELIVERY prior to start-up. After ODAGA BRNAV equipment necessary.
NOMBO 8E	$\label{eq:stability} \begin{array}{l} \textbf{NOMBO EIGHT ECHO} \\ \text{On RWY track to 800; via FR to 6.0 DME FRD (3.0 DME outbound FFM)} \\ (MAX IAS 220 KT until established on R192 MTR); RT, on R192 MTR to 10.8 DME FFM; LT, on track 105° to AMTIX (\triangle); LT, on track 102° to AKONI (\triangle); RT, on track 130° to HAREM (\triangle); RT, on track 148 to LAMPU (\triangle); LT, on track 134° via GEBNO to NOMBO (\triangle). \\ \textbf{GPS/FMS RNAV: [A800+] - DE152[R] - DF150[K220-; L] - DF153[L] - AMTIX[L] - AKONI[R] - HAREM[R] - LAMPU[L] - GEBNO - NOMBO. \end{array}$			Langen Radar 136.125*	 After 10.8 DME FFM BRNAV equipment necessary. Not for flights terminating within EDDN Area or EDMM FIR. Not for propeller-driven aircraft. These flights shall file SID RATIM.
	(Sample: <u>DF144</u> fly-ove	er way point) * Departure frequency may deviate fro Check ATIS for current dep Contact LANGEN RADAR wh	parture freque	ency.	