

DUESSELDORF  
RWY 23R

STANDARD INSTRUMENT DEPARTURE  
ROUTES (SID)

Pilots of GPS/FMS-RNAV-equipped aircraft shall, if possible, use the supplementary GPS/FMS RNAV procedures which are described following the text "GPS / FMS RNAV;" and charted in addition on "CHART – INSTRUMENT (OVERLAY)". When using these supplementary GPS/FMS RNAV procedures, the pilot shall check and ensure that the underlying conventional flight procedures are adhered to by monitoring the information of the ground-based navigation aids. The ground-based navigation aids required for the use of the respective conventional flight procedure and the associated aircraft equipment shall remain in operation at all times.

Designator	Route	After Take-Off		Remarks
		Climb to	Contact	
1	2	3	4	5
<b>MODRU 2H</b>	<b>MODRU TWO HOTEL</b> On track 227° DY to 3.3 DME DUS (3.5 DME IDNE); RT, on track 318° to UBORO(Δ); LT, via NETEX(Δ) on track 197° to MODRU(Δ). Climb with 7% (425ft/NM) or more until passing 3000. <b>GPS/FMS RNAV:</b> [A600+] - DL247[K210-; R] - UBORO[L] - NETEX[K250-] - MODRU[F210+].	5000 ft	Langen Radar 121.355	<ol style="list-style-type: none"> <li>1. PDG due to airspace structure. If unable to comply, advise Delivery on start-up request.</li> <li>2. Only for flights with RFL 210 and above. Flights shall cross MODRU at FL 210 or above. If unable to comply, advise Clearance Delivery upon start-up request.</li> <li>3. After passing 3.3 DME DUS (3.5 DME IDNE) BRNAV equipment necessary.</li> <li>4. MAX IAS 210 KT until established on track 318°.</li> <li>5. MAX IAS 250 KT until established on track 197°.</li> </ol>
<b>NETEX 1U</b>	<b>NETEX ONE UNIFORM</b> On track 227° DY to 3.3 DME DUS (3.5 DME IDNE); RT, on track 318° to UBORO(Δ); LT, direct NETEX(Δ). Climb with 7% (425ft/NM) or more until passing 3000. <b>GPS/FMS RNAV:</b> [A600+] - DL247[K210-; R] - UBORO[L] - NETEX[K250-].			<ol style="list-style-type: none"> <li>1. PDG due to airspace structure. If unable to comply, advise Delivery on start-up request.</li> <li>2. Only for flights with further routing DCT RASCA or DCT DELOM. In case of radio com failure proceed with DCT.</li> <li>3. After passing 3.3 DME DUS/3.5 DME IDNE BRNAV equipment necessary.</li> <li>4. MAX IAS 210 KT until established on track 318°.</li> <li>5. MAX IAS 250 KT until passing NETEX.</li> </ol>
<b>NETEX 3H</b>	<b>NETEX THREE HOTEL</b> On runway track to 1.1 DME DUS (1.3 DME IDNE) or 600 ft, whichever is later; RT, on track 295° LMA to 13.4 DME DUS (13.3 DME IDNE); LT, on track 238° LMA to NETEX(Δ). Climb with 7% (425ft/NM) or more until passing 3000. <b>GPS/FMS RNAV:</b> DL237[A600+; R] - LMA[L] - NETEX.			<ol style="list-style-type: none"> <li>1. PDG due to airspace structure. If unable to comply advise Delivery on start-up request.</li> <li>2. For flights with RFL from 100 to 200 or flights via Z282 DIBIR L179 (if available).</li> <li>3. Not available for flights with further routing via NETEX DCT RASCA or NETEX DCT DELOM.</li> </ol>
<b>KUMIK 4H</b>	<b>KUMIK FOUR HOTEL</b> On track 227° DY to 4.5 DME DUS (4.7 DME IDNE); LT, on heading 171° until crossing R268 GMH (21.5 DME NVO); LT, on track 083° to ELBAL(Δ); on track 084° to DEGOM(Δ); RT, on track 139° to KUMIK(Δ). Climb with 8.2% (495 ft/NM) or more until passing 3000. Pass 4.5 DME DUS (4.7 DME IDNE) at or above 2300. Cross DEGOM at FL150 or above. <b>GPS/FMS RNAV:</b> [A600+] - DL240[A3000+; L] - DL241[L] - ELBAL - DEGOM[F150+; R] - KUMIK.			<ol style="list-style-type: none"> <li>1. PDG due to traffic at EDLN. If unable to comply, advise Delivery on start-up request.</li> <li>2. After crossing R268 GMH (21.5 DME NVO) BRNAV equipment necessary.</li> <li>3. Only for flights with RFL 150 or above.</li> <li>4. Normally not available for flights above FL250 via BOMBI, except Prop/Turbo Prop type aircraft. Flights unable to cross DEGOM at FL 150 or above shall advise clearance Delivery upon start-up request.</li> </ol>
<b>COL 4H</b>	<b>COLA FOUR HOTEL</b> On track 227° DY to 4.5 DME DUS (4.7 DME IDNE); LT, on heading 171° until crossing R268 GMH (21.5 DME NVO); LT, on R263 GMH to 32.0 DME GMH (crossing R201 BAM); RT, on track 101° to intercept and follow R325 COL to COL(Δ). Climb with 8.2% (495 ft/NM) or more until passing 3000. Pass 4.5 DME DUS (4.7 DME IDNE) at or above 2300. Intercept R325 COL (LIPMI) at FL150 or above. <b>GPS/FMS RNAV:</b> [A600+] - DL240[A3000+; L] - DL241[L] - DL244[R] - LIPMI[F150+; R] - COL.			<ol style="list-style-type: none"> <li>1. PDG due to traffic at EDLN. If unable to comply, advise Delivery on start-up request.</li> <li>2. Flights unable to cross LIPMI at FL 150 or above shall advise clearance Delivery upon start-up request.</li> </ol>

(Sample: UBORO fly-over way point)

Remain on TWR-Frequency until passing altitude 2000 ft, then contact Langen Radar.