

KOELN/BONN
RNAV (GPS, DME/DME/IRU) RWY 13L

STANDARD INSTRUMENT DEPARTURE
ROUTES (SID)

Designator			Route		After Take-Off				Procedure remarks		
					Climb to		Contact				
COL 4F			COL FOUR FOXTROT Climb on course 134° to 700. Direct DK130. LT direct to DK141. On course 095° to COL. Climb with 3.8% (235 ft/NM) or more until passing 1400. Cross DK130 at or above 1500. MAX IAS 220 kts until passing DK141.		5000 ft		LANGEN RADAR 135.350 Remain on TWR frequency until passing 2000, then contact Langen Radar.		1. Cross DK130 at or above 1500 to remain in protected airspace. 2. PDG 3.8% (235 ft/NM) due to obstacles.		
Route Type	Path Terminator	Waypoint Identifier	Coordinates	Fly-over	(True Track) MAG Track (°)	Distance (NM)	Turn Direction	Altitude (ft) Flight Level	Speed Limit (kt IAS)	NAV Specification	Remark
Common	CA	-	-	-	(T137.5) 134	-	-	A700+	220-	RNAV 1	-
Common	DF	DK130	N 50 49 30.40 E 007 12 27.72	Y	-	-	-	A1500+	220-	RNAV 1	-
Common	DF	DK141	N 50 48 52.89 E 007 14 18.66	N	-	-	L	-	220-	RNAV 1	-
Common	CF	COL	N 50 47 00.88 E 007 35 38.29	N	(T097.7) 095	-	-	-	-	RNAV 1	-

Designator			Route		After Take-Off				Procedure remarks		
					Climb to		Contact				
COL 4X			COL FOUR X-RAY Climb on course 134° to 700. Direct DK140. LT on course 095° to COL. Climb with 3.8% (235 ft/NM) or more until passing 1400. Cross DK140 at or above 1200. MAX IAS 200 kts until passing DK140.		5000 ft		LANGEN RADAR 135.350 Remain on TWR frequency until passing 2000, then contact Langen Radar.		1. Cross DK140 at or above 1200 to remain in protected airspace. 2. Only for 3-engined HEAVY aircraft. 3. PDG 3.8% (235 ft/NM) due to obstacles.		
Route Type	Path Terminator	Waypoint Identifier	Coordinates	Fly-over	(True Track) MAG Track (°)	Distance (NM)	Turn Direction	Altitude (ft) Flight Level	Speed Limit (kt IAS)	NAV Specification	Remark
Common	CA	-	-	-	(T137.5) 134	-	-	A700+	-	RNAV 1	-
Common	DF	DK140	N 50 50 03.24 E 007 11 41.90	Y	-	-	-	A1200+	200-	RNAV 1	-
Common	CF	COL	N 50 47 00.88 E 007 35 38.29	N	(T097.8) 095	-	L	-	-	RNAV 1	-

Designator			Route		After Take-Off				Procedure remarks		
					Climb to		Contact				
KUMIK 4X			KUMIK FOUR X-RAY Climb on course 134° to 700. Direct DK140. LT on course 095° to COL. To KUMIK. Climb with 3.8% (235 ft/NM) or more until passing 1400. Cross DK140 at or above 1200. MAX IAS 200 kts until passing DK140.		5000 ft		LANGEN RADAR 135.350 Remain on TWR frequency until passing 2000, then contact Langen Radar.		1. Cross DK140 at or above 1200 to remain in protected airspace. 2. Aircraft with RNP-1 and RF-leg functionality shall file QUEBEC-SID. 3. Only for 3-engined HEAVY aircraft. 4. PDG 3.8% (235 ft/NM) due to obstacles.		
Route Type	Path Terminator	Waypoint Identifier	Coordinates	Fly-over	(True Track) MAG Track (°)	Distance (NM)	Turn Direction	Altitude (ft) Flight Level	Speed Limit (kt IAS)	NAV Specification	Remark
Common	CA	-	-	-	(T137.5) 134	-	-	A700+	-	RNAV 1	-
Common	DF	DK140	N 50 50 03.24 E 007 11 41.90	Y	-	-	-	A1200+	200-	RNAV 1	-
Common	CF	COL	N 50 47 00.88 E 007 35 38.29	N	(T097.8) 095	-	L	-	-	RNAV 1	-
Common	TF	KUMIK	N 50 50 11.71 E 008 04 23.97	N	(T079.9) 077	18.5	-	-	-	RNAV 1	-

Designator			Route		After Take-Off				Procedure remarks		
					Climb to		Contact				
KUMIK 8F			KUMIK EIGHT FOXTROT Climb on course 134° to 700. Direct DK130. LT direct DK141. On course 095° to COL. To KUMIK. Climb with 3.8% (235 ft/NM) or more until passing 1400. Cross DK130 at or above 1500. MAX IAS 220 kts until passing DK141.		5000 ft		LANGEN RADAR 135.350 Remain on TWR frequency until passing 2000, then contact Langen Radar.		1. Cross DK130 at or above 1500 to remain in protected airspace. 2. Aircraft with RNP-1 and RF-leg functionality shall file QUEBEC-SID. 3. PDG 3.8% (235 ft/NM) due to obstacles.		
Route Type	Path Terminator	Waypoint Identifier	Coordinates	Fly-over	(True Track) MAG Track (°)	Distance (NM)	Turn Direction	Altitude (ft) Flight Level	Speed Limit (kt IAS)	NAV Specification	Remark
Common	CA	-	-	-	(T137.5) 134	-	-	A700+	220-	RNAV 1	-
Common	DF	DK130	N 50 49 30.40 E 007 12 27.72	Y	-	-	-	A1500+	220-	RNAV 1	-
Common	DF	DK141	N 50 48 52.89 E 007 14 18.66	N	-	-	L	-	220-	RNAV 1	-
Common	CF	COL	N 50 47 00.88 E 007 35 38.29	N	(T097.7) 095	-	-	-	-	RNAV 1	-
Common	TF	KUMIK	N 50 50 11.71 E 008 04 23.97	N	(T079.9) 077	18.5	-	-	-	RNAV 1	-