

FRANKFURT-HAHN
RWY 03

STANDARD DEPARTURE
ROUTES – INSTRUMENT
(SID)

Designator	Route	After Take-Off		Remarks
		Climb to	Contact	
1	2	3	4	5
MAKIK 1T	MAKIK ONE TANGO On track 032° HAN to 11.0 DME HND, LT, on track 213° to ABDAP (Δ), RT, on track 270° to RUDOT (Δ), LT, on track 267° to BITBU (Δ), LT, on track 266° to MAKIK (Δ). Cross 11.0 DME HND at or above 5000 and MAKIK at or above FL160. GPS/FMS RNAV: [A2100+] - FH063[A5000+; L] - FH066 - ABDAP[R] - RUDOT[L] - BITBU[L] - MAKIK[F160+].	5000 ft	Langen Radar 125.600	1. Flights have to be able to cross 11.0 DME HND at or above 5000 and MAKIK at or above FL160. If unable to comply, request MAKIK 1R. 2. PDG 5.5 % (330 ft/NM) or more until passing 5000 due to airspace structure. 3. After 11.0 DME HND BRNAV equipment necessary.
MAKIK 1R	MAKIK ONE ROMEO On track 032° HAN to 11.0 DME HND, LT, on track 213° to ABDAP (Δ), RT, on track 270° to RUDOT (Δ), LT, on track 267° to BITBU (Δ), LT, on track 266° to MAKIK (Δ). Cross MAKIK at or above FL160. GPS/FMS RNAV: [A2100+] - FH063[L] - FH066 - ABDAP[R] - RUDOT[L] - BITBU[L] - MAKIK[F160+].			1. Flights have to be able to cross MAKIK at or above FL160. If unable to comply, request MAKIK 1X. 2. After 11.0 DME HND BRNAV equipment necessary.
MAKIK 1X	MAKIK ONE X-RAY On track 032° HAN to 11.0 DME HND, LT, on track 213° to ABDAP (Δ), RT, on track 270° to RUDOT (Δ), LT, on track 267° to BITBU (Δ), LT, on track 266° to MAKIK (Δ). GPS/FMS RNAV: [A2100+] - FH063[L] - FH066 - ABDAP[R] - RUDOT[L] - BITBU[L] - MAKIK.			After 11.0 DME HND BRNAV equipment necessary.
NOR 5G	NÖRVENICH FIVE GOLF On track 032° HAN to 11.0 DME HND, LT, on R146 NOR to NOR (Δ). Cross 48.0 DME NOR at 5000 or above. GPS/FMS RNAV: [A2100+] - FH065[L] - FH068[A5000+] - NOR.			1. Not to be filed in FPL. 2. Will be assigned by ATC. 3. Not to be used during activity of NLFS. 4. PDG 3.7 % (225 ft/NM) or more until passing 5000 due to airspace structure.
RIDSU 1E	RIDSU ONE ECHO On track 032° HAN to 5.0 DME HND, LT to HAN NDB (Δ); LT, on track 137° to ABSIX (Δ), LT, on track 102° to ULKIG (Δ), RT, on track 103° via SOBRA and DONAB to RIDSU (Δ). Cross 5.0 DME HND at or above 5000. Cross 5.0 NM prior ULKIG at or above FL120. GPS/FMS RNAV: [A2100+] - FH060[A5000+; R] - FH062 - HAN[L] - ABSIX[L] - ULKIG[F120+; R] - SOBRA - DONAB[F120+] - RIDSU.			1. Only available for flights via DONAB at or above FL120. If unable to comply, request alternate departure instructions by ATC. 2. Flights have to be able to cross 5.0 DME HND at or above 5000 and 5.0 NM prior ULKIG at or above FL120. If unable to comply, request RIDSU 1T. 3. PDG 13.5 % (820 ft/NM) or more until passing 5000 due to airspace structure. 4. PDG 4.2 % (255 ft/NM) or more until passing FL120 due to airspace structure. 5. After ABSIX BRNAV equipment necessary.
RIDSU 1T	RIDSU ONE TANGO On track 032° HAN to 11.0 DME HND, LT to HAN NDB (Δ); LT, on track 137° to ABSIX (Δ), LT, on track 102° to ULKIG (Δ), RT, on track 103° via SOBRA and DONAB to RIDSU (Δ). Cross 11.0 DME HND at or above 5000. Cross DONAB at or above FL120. GPS/FMS RNAV: [A2100+] - FH063[A5000+; R] - FH064 - HAN[L] - ABSIX[L] - ULKIG[R] - SOBRA - DONAB[F120+] - RIDSU.			1. Only available for flights via DONAB at or above FL120. If unable to comply, request alternate departure instructions by ATC. 2. Flights have to be able to cross 11.0 DME HND at or above 5000. If unable to comply, request alternate departure instructions by ATC. 3. PDG 5.5 % (330 ft/NM) or more until passing 5000 due to airspace structure. 4. After ABSIX BRNAV equipment necessary.
RUDUS 4E	RUDUS FOUR ECHO On track 032° HAN to 5.0 DME HND, LT to HAN NDB (Δ); LT, on track 137° to ABSIX (Δ), LT, on track 102° to ULKIG (Δ), LT, on track 051° to RUDUS (Δ). Cross 5.0 DME HND at or above 5000. Cross 5.0 NM prior ULKIG at or above FL120 and 9.0 NM prior RUDUS at or above FL140. GPS/FMS RNAV: [A2100+] - FH060[A5000+; R] - FH062 - HAN[L] - ABSIX[L] - ULKIG[F120+; L] - RUDUS[F140+].	1. Only available for flights via RUDUS at or above FL140. If unable to comply, request alternate departure instructions by ATC. 2. Flights have to be able to cross 5.0 DME HND at or above 5000, 5.0 NM prior ULKIG at or above FL120 and 9.0 NM prior RUDUS at or above FL140. If unable to comply, request RUDUS 4T. 3. PDG 13.5 % (820 ft/NM) or more until passing 5000 due to airspace structure. 4. PDG 4.2 % (255 ft/NM) or more until passing FL120 due to airspace structure. 5. After ABSIX BRNAV equipment necessary.		
RUDUS 4T	RUDUS FOUR TANGO On track 032° HAN to 11.0 DME HND, LT to HAN NDB (Δ); LT, on track 137° to ABSIX (Δ), LT, on track 102° to ULKIG (Δ), LT, on track 051° to RUDUS (Δ). Cross 11.0 DME HND at or above 5000. Cross RUDUS at or above FL140. GPS/FMS RNAV: [A2100+] - FH063[A5000+; R] - FH064 - HAN[L] - ABSIX[L] - ULKIG[L] - RUDUS[F140+].	1. Only available for flights via RUDUS at or above FL140. If unable to comply, request alternate departure instructions by ATC. 2. Flights have to be able to cross 11.0 DME HND at or above 5000. If unable to comply, request alternate departure instructions by ATC. 3. PDG 5.5 % (330 ft/NM) or more until passing 5000 due to airspace structure. 4. After ABSIX BRNAV equipment necessary.		

(Sample: FH060 fly-over way point)

Contact Langen Radar immediately after take-off!