IFR Hamburg (EDDH) to Brussels National (EBBR)

A flight plan was generated in SimBrief, with the following route:

EDDH/33 N0467F360 WSN4G WSN N125 EEL N872 LILSI Z310 WOODY WODY4B EBBR/25L

I am using AIRAC 2312, which changes the valid SID from WSN3G to WSN4G, and the valid STAR from WODY3B to WODY4B – they are just newer versions of the same procedures.

The flight plan was downloaded from SimBrief in both 'full' and NoProc versions.
This is how I loaded the generated flight plan into PF3, MSFS and the aircraft FMC:

1) Start PF3 – there are a number of steps to be taken to ensure PF3 works correctly.
   a) I enabled the runways selected in the plan, so under SIDs/STARs:

   For EDDH

Use	Rwy	ILS	Hdg	Alt	Len	SID			STAR
						Name	Alt Comp	MAp Alt	Name
X	5	110.50	49	41	10676		0	0	
X	15	109.55	152	41	12030		0	0	
X	23	111.30	229	41	10676		0	0	
B	33		332	41	12030		0	0	WSN4G

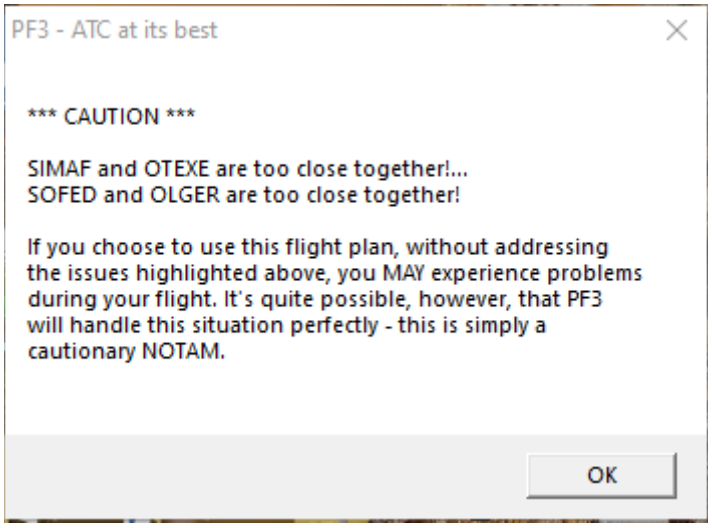
   For EBBR

Use	Rwy	ILS	Hdg	Alt	Len	SID			STAR
						Name	Alt Comp	MAp Alt	Name
X	1	109.90	16	136	9802		0	0	
X	7L		67	136	11938		0	0	
X	7R		72	136	10535		0	0	
X	19	111.15	196	136	9802		0	0	
B	25L	110.35	252	136	10535		0	0	WODY4B
X	25R	108.90	247	136	11938		0	0	

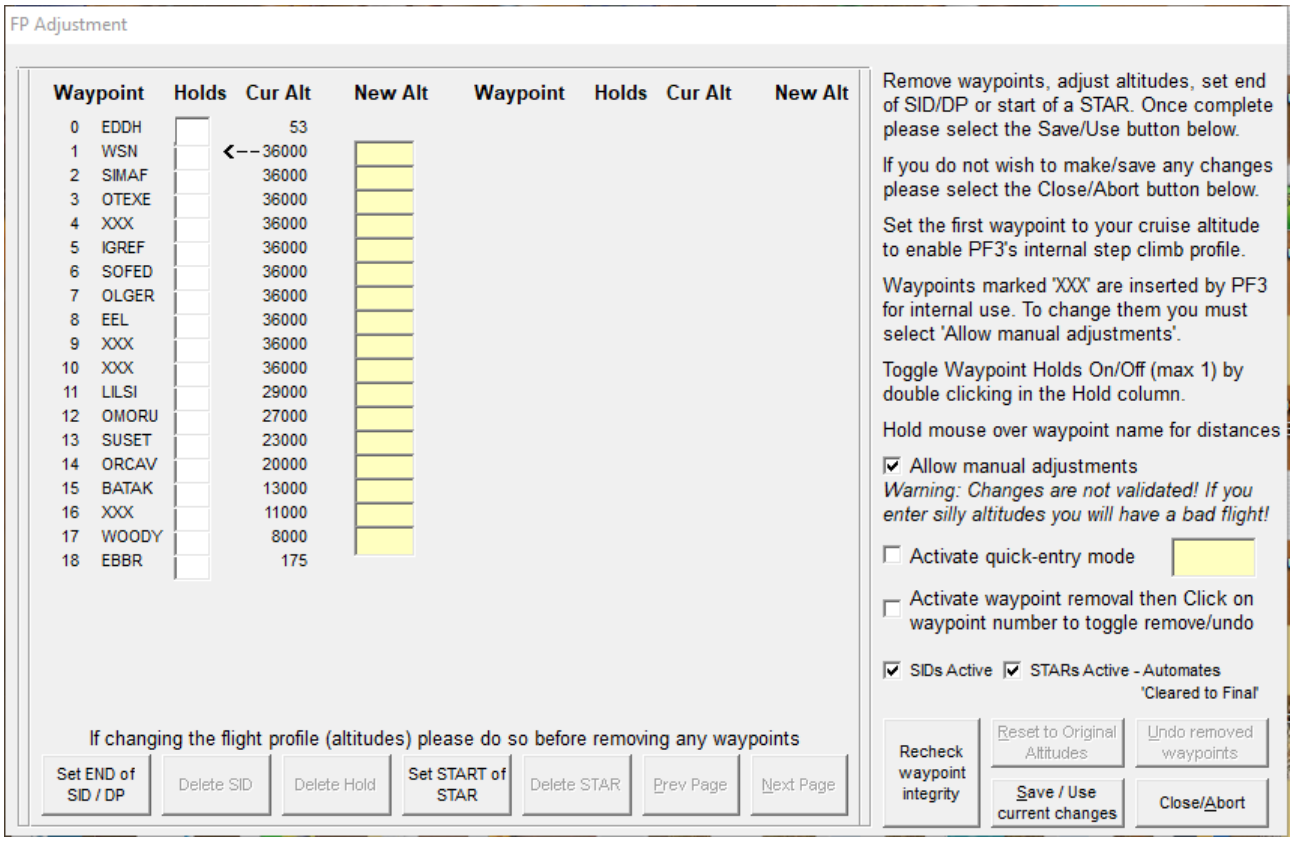
I wouldn't normally do this, I would wait for PF3 to assign runways for takeoff and landing, but in this case I wanted to mimic Luc's flight so chose to force the runway selections.

   b) Under Options #2, Advanced Options:
      Set the Descent Profile to Med(ium)
      Set the FAF Altitude to 2000 feet, the required altitude at GIKNU
      Set the FAF Distance to 11 nm the distance from GIKNU to Runway 25L

c) Select the SB flight plan – you should use the NoProc version (see later).
You will see the following warming about waypoints:

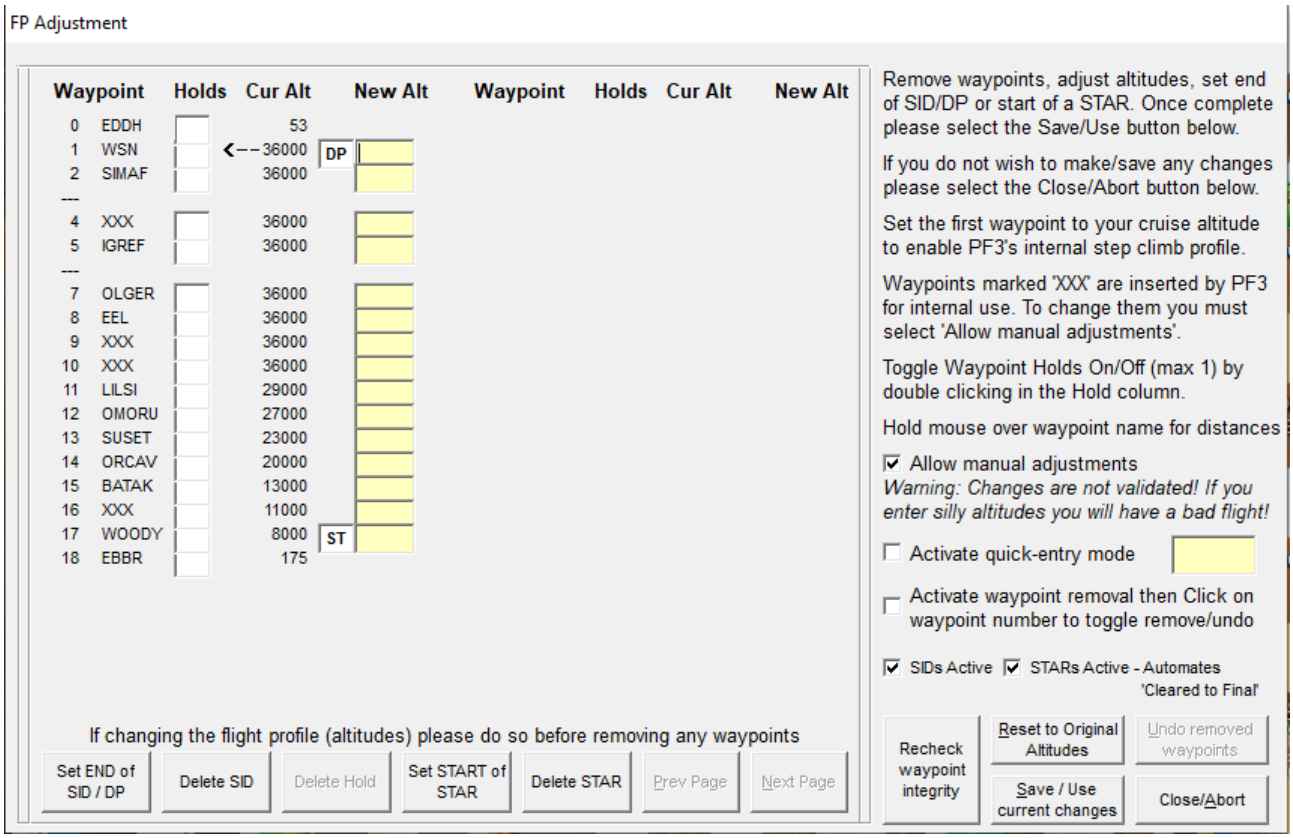


d) Select Adjust Altitudes – this is what you should initially see:



Note: The waypoints between WSN and EEL are different to the ones in Luc's flight plan.
It seems that airway N125 has a different routing with AIRAC 2312; this doesn't alter the validity of this test flight as the descent waypoints between EEL and WOODY are the same.

I marked the SID and STAR, and removed waypoints OTEXE and SOFED, giving this:



The altitudes set by PF3, shown here, should not affect the FMC flight path.
(You probably don't need to delete the 'extra' waypoints, but you should mark DP & ST)

2) Start MSFS, set-up the flight by loading the full SB flight plan from the download.
Add the aircraft position, Parking 95, and select the ILS Z 25L Approach.

3) Select 'Fly' and load the same flight plan into the FMC.
Once loaded you need to select the departure runway and SID, and then the arrival STAR, Approach (ILS Z 25L) and the transition (KERKY). I was using the PMDG 737-600, as this is the aircraft in my standard FS set-up – I believe it is the same for most FMCs.

Note: This was 'fixed' for the purposes of this test flight; normally the SID would be selected once the assigned runway is given with the ATC clearance, and the STAR/Approach set when the destination Approach controller has been contacted, although this can also usually be determined from the destination ATIS information requested during the flight.

I now connected PF3 to MSFS and started my flight; it proceeded normally under FMC control.

Notes:

One thing to remember is that the flight profile in the plan generated by SimBrief is based on a performance calculation held in the Dispatch system, so will probably not match the one that is dynamically calculated by the FMC, and which is the one that you will actually fly. (Having said that, my SB descent and yours pretty well match, with only minor differences in the altitudes)

On the next few pages you will find the SID, STAR and Approach plates for this flight.
Following that you will find details of the path flown, from the PF3 debug log.

Leaving Hamburg you will see that the 'plan' path goes direct from EDDH to WESER (WSN), the path flown follows SID WSN4G.

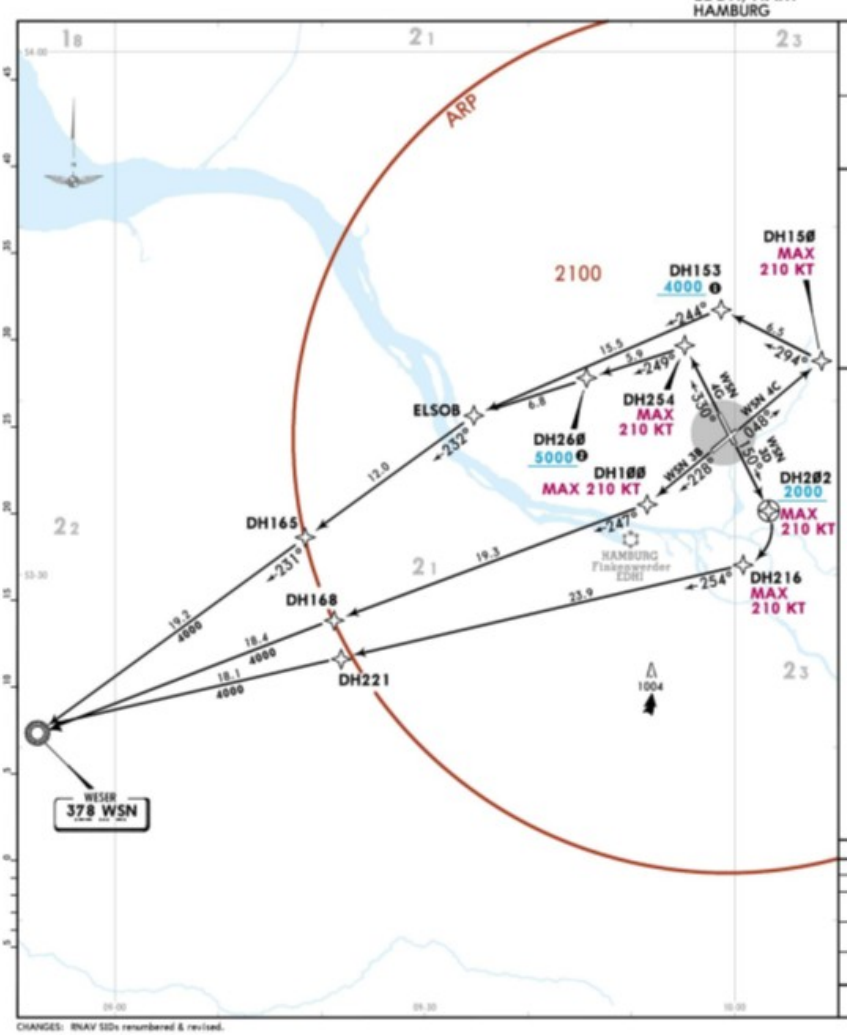
Arriving at Brussels you will see that the 'plan' path goes direct from WOODY to EBBR, the path flown follows STAR WODY4B and the ILS Z 25L Approach.

You can load the full SB flight plan into PF3, but it includes waypoints for the SID and STAR phases which PF3 does not require, and which will be incorrect if the runways assigned by ATC differ from the flightplan. You will also most likely get a number of 'close waypoint' warnings covering the SID and STAR phases, which you will have to manually address; using the 'NoProc' plan is much easier.

I really hope that this helps, but do come back in the forum if you have further questions.

EDDH/HAM
HAMBURG

JEPPESEN HAMBURG, GERMANY
5 AUG 22 (10-3G) Eff 11 Aug RNAV SID



BREMEN Radar (APP) 134.255	Trans alt: 5000 RNAV-1 required. RNAV (GPS, DME/DME/IRU). DME/DME without IRU not authorized. RADAR required.
Apt Elev 53	1. Remain on Tower frequency until passing 2000, then contact BREMEN Radar. 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is mandatory. 3. EXPECT close-in obstacles.

WESER 3B (WSN 3B)
WESER 4C (WSN 4C)
WESER 3D (WSN 3D)
WESER 4G (WSN 4G)
RNAV DEPARTURES
(ALL RWYS)

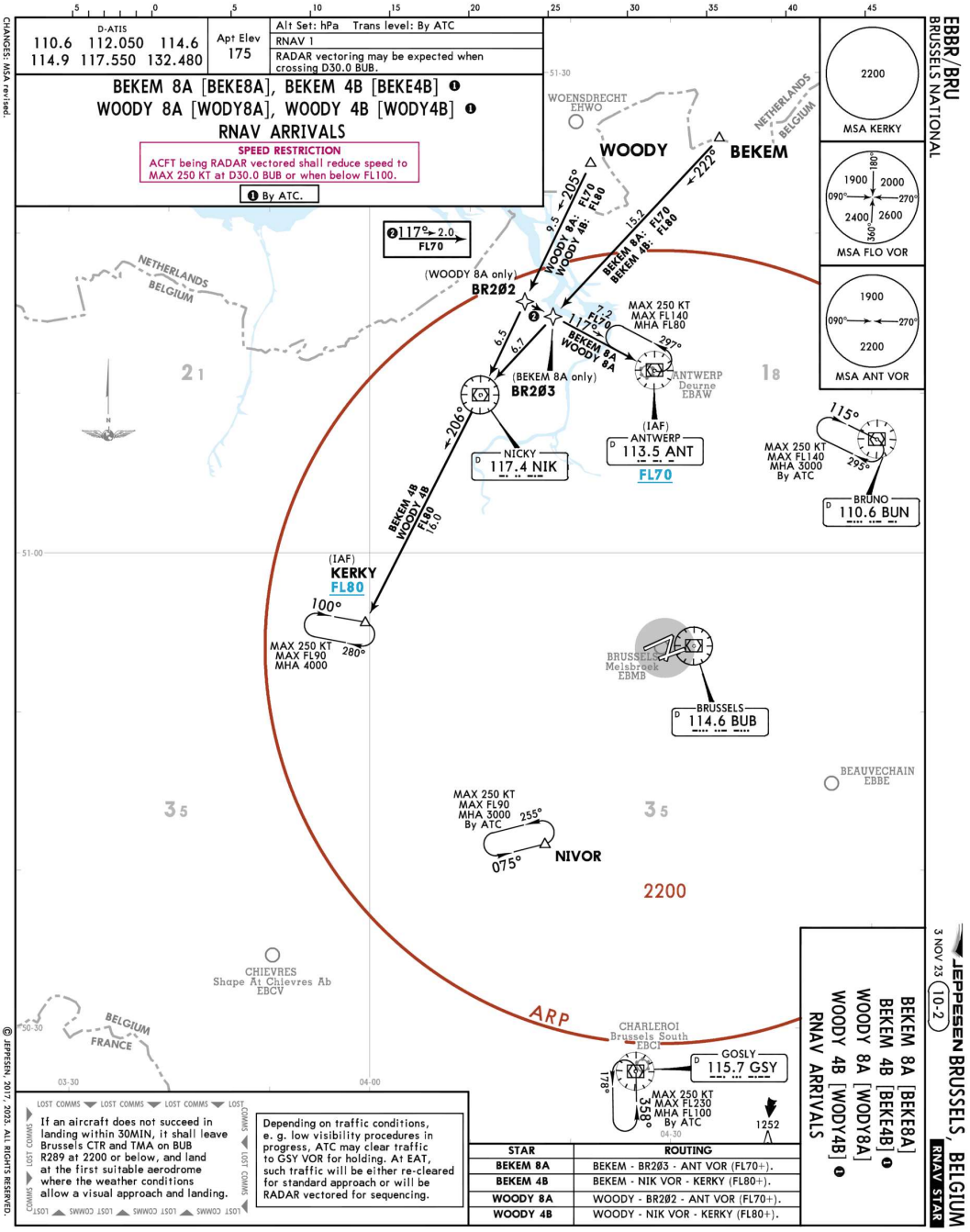
SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC
NOT APPLICABLE WITHIN AIRSPACE C

Initial climb clearance 5000

SID	RWY	ROUTING
WSN 3B	23	(K210-; 500+) - DH100 (K210-) - DH168 - WSN.
WSN 4C	05	(K210-; 500+) - DH150 (K210-) - DH153 (4000+ ❶) - ELSOB - DH165 - WSN.
WSN 3D	15	(K210-; 500+) - DH202 (K210-; 2000+) - DH216 (K210-) - DH221 - WSN.
WSN 4G	33	(K210-; 500+) - DH254 (K210-) - DH260 (5000+ ❷) - ELSOB - DH165 - WSN.

❶ If unable to cross advice ATC upon start -up.
❷ Due to glider area, If unable to comply advice ATC upon start -up.

CHANGES: RNAV SIDs renumbered & revised.



EBBR/BRU
BRUSSELS NATIONAL

JEPPESEN
10 NOV 23 (11-3)

BRUSSELS, BELGIUM
ILS or LOC Z Rwy 25L

BRIEFING STRIP™

D-ATIS Arrival						BRUSSELS Arrival (R)
110.6	112.050	114.6	114.9	117.550	132.480	118.255

BRUSSELS Tower		North Ground	South
118.605	120.780	118.055	121.880

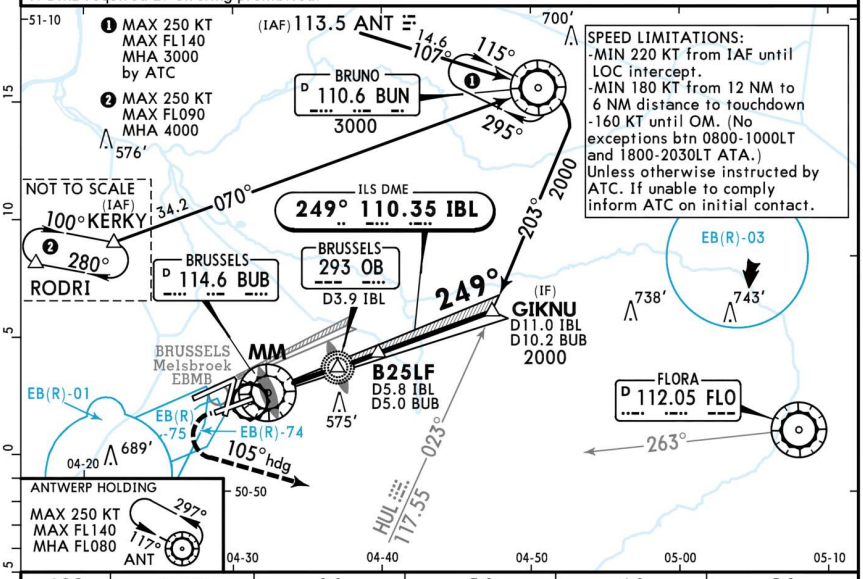
LOC	Final	B25LF	ILS	
IBL	Apch Crs	MANDATORY	DA(H)	Apt Elev 175′
110.35	249°	2000′ (1850′)	350′ (200′)	Rwy 150′

MSA BUB VOR
1800 1900 090° 180° 270° 2200

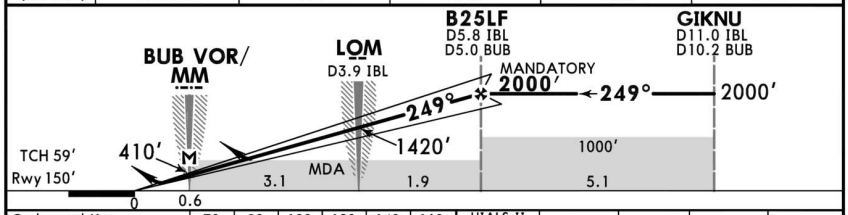
MISSED APCH: Climb on track 249°. At 700′ turn LEFT (MAX 185 KT) on hdg 105° climbing to 4000′, then as directed.
MISSED APCH WITH COMM FAILURE: Climb on track 249°. At 700′ turn LEFT (MAX 185 KT) on hdg 045° to intercept and follow R-263 inbound FLO VOR. Enter FLO holding and/or execute ILS or LOC Y Rwy 25L approach via IAF FLO VOR.

Alt Set: hPa | Rwy Elev: 5 hPa | Trans level: By ATC | Trans alt: 4500′

1. DME required 2. Circling prohibited.



LOC (GS out)	IBL DME	2.0	3.0	4.0	5.0
	ALTITUDE	790′	1110′	1420′	1740′



Gnd speed-Kts		70	90	100	120	140	160
GS	3.00°	372	478	531	637	743	849
MAP at BUB VOR/MM							

HIALS-II
PAPI
700′ on 249°
4000′ LT on 105° hdg

Std/State — STRAIGHT-IN LANDING

	ILS			LOC (GS out) CDFA		
	DA(H) 350′ (200′)			2 DA/MDA(H) 540′ (390′)		
		TDZ or CL out	ALS out		TDZ or CL out	ALS out
A	R550m	1 R550m	R1200m	R1100m		R1500m
B						
C						R1800m
D						

PANS OPS

1 R750m when a Flight Director or Autopilot or HUDLS to DA is not used.
2 VNAV DA(H) in lieu of MDA(H) depends on operator policy.

CHANGES: MSA.


Cuxhaven
Ruhezone I/51
Elmshorn
Bremerhaven
Hamburg
Aurich
210
27
N46
Emden
Seevetal
Leeuwarden
Oldenburg
Papenburg
Bremen
Sneek
Cloppenburg
31
A7
Hoogeveen
Alkmaar
Celle
Zwolle
Lingen
Neustadt am Rübenberge
Hanover
Minden
The Hague
Hildesheim
Hamelin
Rotterdam
Netherlands
Bielefeld
Münster
N57
67
33
2
Hertogenbosch
Paderborn
Göttingen
Dortmund
Eindhoven
Essen
Kassel
Antwerp
Dusseldorf
Germany
Ghent
Brussels
Maastricht
44
Cologne
Marburg
Bonn
Wavre
4