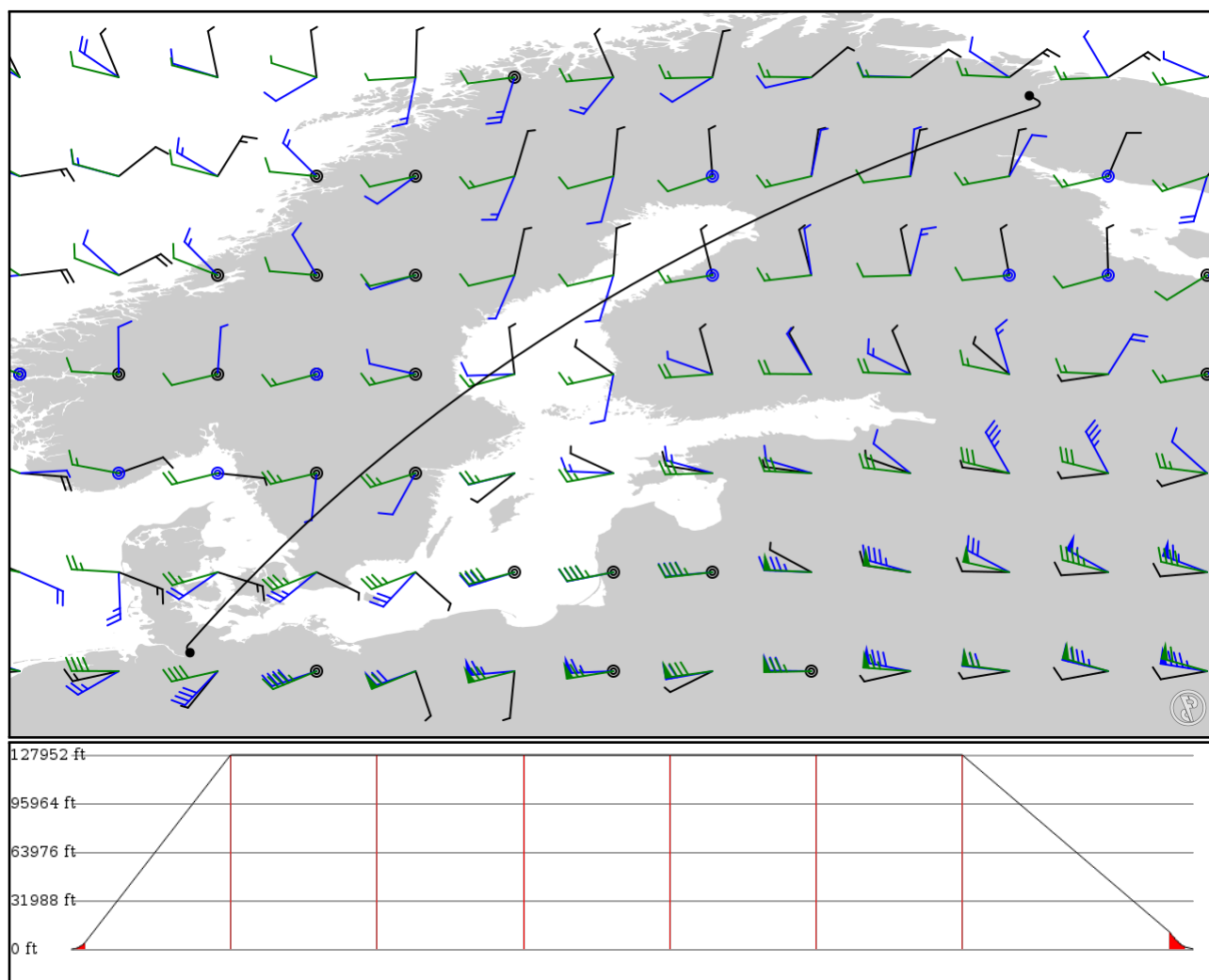


2024/05/05 2224Z

EDDH +53.72_+009.92 +53.73_+009.91 +53.75_+009.90 +53.76_+009.90 +53.77_+009.89 +53.79_+009.89
+53.80_+009.90 +53.82_+009.90 +53.83_+009.90 +53.85_+009.91 +53.86_+009.92 +53.87_+009.93
+56.01_+011.95 +58.12_+014.19 +60.18_+016.72 +62.19_+019.58 +64.13_+022.84 +65.98_+026.58
+68.43_+032.87 +68.44_+032.90 +68.45_+032.93 +68.46_+032.96 +68.47_+032.98 +68.49_+032.00
+68.50_+033.02 +68.51_+033.03 +68.53_+033.04 +68.54_+033.05 +68.55_+033.05 +68.57_+033.05
+68.58_+033.05 +68.60_+033.05 +68.61_+033.04 +68.63_+033.02 +68.64_+033.01 +68.65_+032.99 ULMM

1121.85 nm / 2077.67 km



Notes

Departing runway 33 EDDH. Arriving runway 14 ULMM.

Route

Ident Type	Via	Lat Lon	Alt	Dist (nm)	Name
EDDH	-	53.65441	0 ft	-	-
APT	-	9.97521	0 m		
+53.72_+009.92	-	53.71881	120 ft	4	-
DME	-	9.91945	37 m		
+53.73_+009.91	-	53.73221	170 ft	0	-
DME	-	9.91024	52 m		
+53.75_+009.90	-	53.74604	230 ft	0	-
DME	-	9.90303	70 m		
+53.76_+009.90	-	53.76019	300 ft	0	-
DME	-	9.89789	91 m		
+53.77_+009.89	-	53.77455	390 ft	0	-
DME	-	9.89485	119 m		
+53.79_+009.89	-	53.78902	480 ft	0	-
DME	-	9.89394	146 m		
+53.80_+009.90	-	53.80347	580 ft	0	-
DME	-	9.89517	177 m		
+53.82_+009.90	-	53.81781	690 ft	0	-
DME	-	9.89853	210 m		
+53.83_+009.90	-	53.83192	810 ft	0	-
DME	-	9.90400	247 m		
+53.85_+009.91	-	53.84569	940 ft	0	-
DME	-	9.91153	287 m		
+53.86_+009.92	-	53.85903	1,070 ft	0	-
DME	-	9.92107	326 m		
+53.87_+009.93	-	53.87182	1,220 ft	0	-
DME	-	9.93254	372 m		
+56.01_+011.95	-	56.01296	39,000 ft	146	-
DME	-	11.94509	11,887 m		
+58.12_+014.19	-	58.11908	39,000 ft	146	-
DME	-	14.19227	11,887 m		
+60.18_+016.72	-	60.18074	39,000 ft	146	-
DME	-	16.71862	11,887 m		
+62.19_+019.58	-	62.18796	39,000 ft	146	-
DME	-	19.57870	11,887 m		
+64.13_+022.84	-	64.12798	39,000 ft	146	-
DME	-	22.83836	11,887 m		
+65.98_+026.58	-	65.98440	39,000 ft	146	-
DME	-	26.57590	11,887 m		
+68.43_+032.87	-	68.43200	3,420 ft	207	-
DME	-	32.86997	1,042 m		
+68.44_+032.90	-	68.44106	3,180 ft	0	-
DME	-	32.90068	969 m		
+68.45_+032.93	-	68.45106	2,950 ft	0	-
DME	-	32.92914	899 m		
+68.46_+032.96	-	68.46195	2,720 ft	0	-
DME	-	32.95513	829 m		
+68.47_+032.98	-	68.47362	2,500 ft	0	-
DME	-	32.97845	762 m		
+68.49_+032.00	-	68.48599	2,290 ft	0	-
DME	-	32.99892	698 m		
+68.50_+033.02	-	68.49897	2,090 ft	0	-
DME	-	33.01638	637 m		
+68.51_+033.03	-	68.51246	1,900 ft	0	-

Ident Type	Via	Lat Lon	Alt	Dist (nm)	Name
DME	-	33.03070	579 m		
+68.53_+033.04	-	68.52635	1,720 ft	0	-
DME	-	33.04177	524 m		
+68.54_+033.05	-	68.54055	1,540 ft	0	-
DME	-	33.04949	469 m		
+68.55_+033.05	-	68.55493	1,380 ft	0	-
DME	-	33.05381	421 m		
+68.57_+033.05	-	68.56940	1,220 ft	0	-
DME	-	33.05468	372 m		
+68.58_+033.05	-	68.58385	1,070 ft	0	-
DME	-	33.05210	326 m		
+68.60_+033.05	-	68.59815	940 ft	0	-
DME	-	33.04608	287 m		
+68.61_+033.04	-	68.61221	810 ft	0	-
DME	-	33.03666	247 m		
+68.63_+033.02	-	68.62592	690 ft	0	-
DME	-	33.02391	210 m		
+68.64_+033.01	-	68.63917	580 ft	0	-
DME	-	33.00792	177 m		
+68.65_+032.99	-	68.65186	480 ft	0	-
DME	-	32.98882	146 m		
ULMM	-	68.77236	0 ft	8	-
APT	-	32.76801	0 m		

EDDH

Region: GERMANY - CIVIL
Timezone: EUROPE/BERLIN
Runways: 2

Elevation: 53 ft / 16 m
Location: 53.633700 9.985260
Magnetic Var: 3.689 E

METAR

EDDH 052150Z AUTO 25007KT 220V280 CAVOK 10/07 Q1008 NOSIG

TAF

TAF TAF EDDH 051700Z 0518/0624 26012G22KT 9999 SCT030 BECMG 0518/0520 26006KT BECMG 0610/0612 33007KT BECMG 0618/

Frequencies

REC - 123.12 MHz - EDDH ATIS	GND - 121.80 MHz - HAMBURG GND
GND - 121.70 MHz - HAMBURG APRON	GND - 121.97 MHz - HAMBURG APRON
TWR - 121.27 MHz - HAMBURG TWR	TWR - 126.85 MHz - HAMBURG TWR
APP - 118.20 MHz - HAMBURG DIRECTOR	APP - 124.62 MHz - HAMBURG APP
APP - 134.25 MHz - BREMEN RADAR	APP - 136.67 MHz - BREMEN RADAR

Runways

Ident	Width	Length	Bearing (true) (mag)	Surface	Threshold Offset	Overrun Length
05	151 ft	10,647 ft	50.18	ASPHALT	978 ft	194 ft
	46 m	3,245 m	46.50		298 m	59 m
23	151 ft	10,647 ft	230.22	ASPHALT	509 ft	239 ft
	46 m	3,245 m	226.53		155 m	73 m
15	151 ft	12,013 ft	152.89	ASPHALT	0 ft	194 ft
	46 m	3,662 m	149.20		0 m	59 m
33	151 ft	12,013 ft	332.91	ASPHALT	1,463 ft	164 ft
	46 m	3,662 m	329.22		446 m	50 m

Approach Nav aids

Runway	Type	Ident	Frequency	Range	Bearing (true) (mag)	Slope	Elevation
05	LOC-ILS	IHHE	110.50 MHz	18 nm	50.21	-	53 ft
				33 km	46.52		53 m
15	LOC-ILS	IHHS	109.55 MHz	18 nm	152.91	-	53 ft
				33 km	149.22		53 m
23	LOC-ILS	IHHW	111.50 MHz	18 nm	230.21	-	53 ft
				33 km	226.52		53 m
33	LOC-LOC	IHHN	109.90 MHz	18 nm	332.91	-	53 ft
				33 km	329.22		53 m
05	GS	IHHE	110.50 MHz	10 nm	50.21	3.00	53 ft
				19 km	46.52		53 m
15	GS	IHHS	109.55 MHz	10 nm	152.91	3.00	53 ft
				19 km	149.22		53 m
23	GS	IHHW	111.50 MHz	10 nm	230.21	3.00	53 ft
				19 km	226.52		53 m
33	GS	IHHN	109.90 MHz	10 nm	332.91	3.00	53 ft
				19 km	329.22		53 m

ULMM

Region: RUSSIA
Timezone: EUROPE/MOSCOW
Runways: 1

Elevation: 266 ft / 81 m
Location: 68.781800 32.751300
Magnetic Var: 17.237 E

METAR

ULMM 052200Z 30004MPS 6000 -SHSN BKN014CB M02/M05 Q1013 R31/290048 TEMPO 0300 +SHSN RMK QFE752

TAF

TAF ULMM 051955Z 0521/0621 34005G10MPS 2100 -SHSN BKN016CB TEMPO 0521/0606 0300 +SHSN VV007 BECMG 0606/0607 03003

Frequencies

APP - 127.40 MHz - MURMANSK APP ATIS

TWR - 120.30 MHz - MURMANSK TOWER

Runways

Ident	Width	Length	Bearing (true) (mag)	Surface	Threshold Offset	Overrun Length
13	148 ft	8,195 ft	146.21	ASPHALT	0 ft	0 ft
	45 m	2,498 m	128.97		0 m	0 m
31	148 ft	8,195 ft	326.24	ASPHALT	0 ft	0 ft
	45 m	2,498 m	309.00		0 m	0 m

Approach Nav aids

Runway	Type	Ident	Frequency	Range	Bearing (true) (mag)	Slope	Elevation
13	LOC-ILS	IPF	110.30 MHz	18 nm	146.23	-	266 ft
				33 km	128.99		266 m
31	LOC-ILS	IRD	108.50 MHz	18 nm	326.23	-	266 ft
				33 km	308.99		266 m
13	GS	IPF	110.30 MHz	10 nm	146.23	3.00	266 ft
				19 km	128.99		266 m
31	GS	IRD	108.50 MHz	10 nm	326.23	3.00	266 ft
				19 km	308.99		266 m