## EHBK — MAASTRICHT/Maastricht Aachen

Note: the following sections in this chapter are intentionally left blank: $A D 2.16$.

## EHBK AD 2.1 AERODROME LOCATION INDICATOR AND NAME

EHBK — MAASTRICHT/Maastricht Aachen

EHBK AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

| 1 | ARP co-ordinates and site at AD | 505457N 0054637E <br> $081^{\circ}$ GEO 599 M from TWR. |
| :---: | :---: | :---: |
| 2 | Direction and distance from (city) | 5 NM NE from Maastricht. |
| 3 | Elevation/reference temperature | 375 FT AMSL/21.7 ${ }^{\circ} \mathrm{C}$ (JUL). |
| 4 | Geoid undulation at AD ELEV PSN | 150 FT . |
| 5 | MAG VAR/annual change | $2^{\circ} \mathrm{E}$ (2020)/9'E. |
| 6 | AD operator, postal address, telephone, telefax, email, AFS, website | Post: Maastricht Aachen Airport <br> P.O. Box 1 <br>  6199 ZG Maastricht Airport <br> The Netherlands <br> Tel: $+31(0) 433589999$ <br>  <br> +31 (0)43 3589750 (airport authority) <br> Fax: <br> +31 (0)43 3589977 (airport authority) <br> Email: airportauthority@maa.nl <br> AFS: EHBKYDYX <br> URL: https://www.maa.nl |
| 7 | Types of traffic permitted (IFR/VFR) | IFR/VFR |
| 8 | Remarks | 1. Airport for use by national and international civil air transport with all types of aircraft. <br> 2. Upon request, contact airport authority on channel 131.505. |

EHBK AD 2.3 OPERATIONAL HOURS

| 1 | AD operator | MON-SUN: 0500-2200 (0400-2100) ${ }^{12 / 233}$. <br> Daily 2200-2300 (2100-2200) for traffic in extension only. |
| :---: | :---: | :---: |
| 2 | Customs and immigration | Customs: H24. Immigration: AD OPR HR. |
| 3 | Health and sanitation | AD OPR HR; 1 HR PN ${ }^{4}$. |
| 4 | AIS briefing office | H24  <br> Tel: +31 (0)20 4062315 <br> URL: https://www.homebriefing.nl |
| 5 | ATS reporting office (ARO) | Competent ATS unit: ARO Schiphol, see EHAM AD 2.3. |
| 6 | MET briefing office | OPR HR, outside OPR HR: MWO De Bilt (see EHBK AD 2.11). |
| 7 | ATS | AD OPR HR |
| 8 | Fuelling | AD OPR HR |
| 9 | Handling | AVBL, for details see EHBK AD 2.20 and EHBK AD 2.23. |
| 10 | Security | AVBL |
| 11 | De-icing | AVBL O/R |
| 12 | Remarks | ${ }^{1)}$ Cargo flights MON-SUN: 0600-2200 (0500-2100). <br> 2) MIL flights PPR from airport authority. <br> ${ }^{3)}$ ACFT requiring maintenance need 6 HR PPR from airport authority. <br> 4) PN means permission from and/or in case of customs etc. notification other than by (VFR) flight plan to aerodrome authority as appropriate. |

## EHBK AD 2.4 HANDLING SERVICES AND FACILITIES

| 1 | Cargo-handling facilities | All modern facilities. |
| :--- | :--- | :--- |


| $\mathbf{2}$ | Fuel/oil types | AVGAS 100LL, Jet A-1/80, W80, W100, 15W50. |
| :--- | :--- | :--- |
| $\mathbf{3}$ | Fuelling facilities/capacity | Unlimited during OPR HR. |
| $\mathbf{4}$ | De-icing facilities | AVBL |
| $\mathbf{5}$ | Hangar space for visiting aircraft | O/R via contractors. |
| $\mathbf{7}$ | Repair facilities for visiting aircraft | Limited O/R. |
| Remarks | For addresses and other details of ground handling companies see EHBK <br> AD 2.23 paragraph 4. |  |

EHBK AD 2.5 PASSENGER FACILITIES

| $\mathbf{1}$ | Hotels | Accommodation unlimited in Maastricht and vicinity. |
| :--- | :--- | :--- |
| $\mathbf{2}$ | Restaurants | At the airport, in vicinity of the airport and in Maastricht. |
| $\mathbf{3}$ | Transportation | Bus and taxi. |
| $\mathbf{4}$ | Medical facilities | First aid treatment, hospitals in Maastricht (7 NM) and Sittard (8 NM). |
| $\mathbf{5}$ | Bank and post office | Cashpoint AVBL. |
| $\mathbf{6}$ | Tourist office | AVBL |
| $\mathbf{7}$ | Remarks | NIL |

## EHBK AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

| $\mathbf{1}$ | AD category for fire fighting | CAT 7 passenger flights and CAT 8-9 cargo flights AVBL. <br> CAT 8-9 passenger flights after 48 HR prior request on email: airportauthor- <br> ity@maa.nl. |
| :--- | :--- | :--- |
| $\mathbf{2}$ | Rescue equipment | 4 crash-tenders equipped with 700 litres of foam (AFFF) and 250 KG of dry <br> chemical powder, 1 light truck (4x4) with rescue equipment and 1 all-terrain <br> vehicle (on scene commander). |
| $\mathbf{3}$ | Capability for removal of disabled aircraft | Mobile jack for ACFT up to MTOM 2000 KG. Other equipment via contractors. |
| $\mathbf{4}$ | Remarks | NIL |

EHBK AD 2.7 SEASONAL AVAILABILITY - CLEARING

| $\mathbf{1}$ | Types of clearing equipment |
| :--- | :--- |
| $\mathbf{2}$ | Clearance priorities |
| $\mathbf{3}$ | Remarks |
|  |  |
|  |  |
|  |  |
|  |  |

5 snow sweep combinations with plough, 2 snow blowers, 2 de-icing trucks. RWY, TWY and apron simultaneously if possible.

1. Responsible authority: Airport Authority.
2. No specially prepared winter runways AVBL.
3. Methods of snow removal: snowploughs and sweeping machines.
4. Chemical treatment of runway surface by KAC.
5. Assessment and measuring of contamination: observation by own experienced staff.
6. Runway condition is determined and reported according to the global reporting format and broadcast via ATIS.
7. Information of the runway condition is published by:
a. SNOWTAM via the international NOTAM office at Schiphol;
b. RCR via ATIS and RTF on TWR COM channel.

EHBK AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA

| $\mathbf{1}$ | Apron surface and strength | Surface: ASPH, CONC. <br> Strength: PCN 71/F/C/X/T. |
| :--- | :--- | :--- |
| $\mathbf{2}$ | Taxiway width, surface and strength | Width: 23 M. <br> Surface: ASPH, CONC. <br> Strength: PCN 71/F/C/X/T. |
| $\mathbf{3}$ | Altimeter checkpoint location and elevation | Location: apron. <br> Elevation: 375 FT AMSL. |
| $\mathbf{4}$ | VOR checkpoints | Not AVBL. |
| $\mathbf{5}$ | INS checkpoints | See AD 2.EHBK-APDC. |

\(\left.$$
\begin{array}{|l|l|l|}\hline 6 & \text { Remarks } & \begin{array}{l}\text { 1. TWY W3 and W4 restricted to aircraft with MAX wingspan } 36 \mathrm{M}, \text { except } \\
\text { when instructed by ATC. }\end{array}
$$ <br>
\& 2. A-apron: commercial PAX ACFT and general aviation ACFT. Jet ACFT <br>

with MTOM>50000 KG park nose-in.\end{array}\right\}\)| 3. B-apron: cargo ACFT. Jet ACFT park nose-in. |
| :--- |
| 4. C-apron: general aviation ACFT and all ACFT requiring maintenance. |
| 5. D-apron: cargo ACFT. Jet ACFT park nose-in. |

## EHBK AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

| 1 | Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system at aircraft stands | TWY guide lines <br> - follow-me cars are AVBL on request for guidance on aprons and TWYs. <br> Visual docking/parking guidance system <br> - guidance to the parking position on all aprons is executed by marshallers. |
| :---: | :---: | :---: |
| 2 | RWY and TWY markings and LGT | RWY markings <br> - RWY 03: DTHR, designation, TDZ, aiming point, CL, edge, start position ${ }^{11}$. <br> - RWY 21: DTHR, designation, TDZ, aiming point, CL, edge, turn pad marking. <br> RWY LGT <br> - RWY 03: THR, CL, edge, RWY end. <br> - RWY 21: THR, TDZ, CL, edge, RWY end, turn pad blue edge and green CL. <br> TWY markings <br> - CL. <br> - All HLDG positions: RWY HLDG position pattern A; information and mandatory instruction signs. Additional pattern B at stopbar TWY E2, W3 and W4. <br> TWY LGT <br> - Green CL: <br> - BTN stopbar TWY E1 and RCL; BTN stopbar TWY W1 and RCL. <br> - from stopbars TWY E2, W3 and W4 for 90 M. <br> - Green/yellow CL on exits E1, E2, W1 and W4. <br> - Edge. <br> - RWY guard lights at E1 and W1. |
| 3 | Stop bars | Each active runway entry and ILS critical/sensitive area is safeguarded by a stop bar (see AD 2.EHBK-ADC). Stop bars shall be illuminated during: <br> - Low visibility circumstances when visibility <= 2000 M , or RVR $<=1500 \mathrm{M}$ and/or ceiling <= 300 FT. <br> - OPR HR at intensive runway crossings to avoid runway incursion in all visibility circumstances. <br> Crossing of illuminated stop bars is prohibited. Aircraft and vehicles may cross stop bars only when ATC has given permission to proceed and the stop bar lights are switched off. |
| 4 | Remarks | ${ }^{1)}$ Start position marked by dashed white line. See also EHBK AD 2.23. |

EHBK AD 2.10 AERODROME OBSTACLES

| Area 3 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OBST ID/ <br> Designation | OBST Type | OBST Position | ELEV/HGT in FT |  | Markings/ <br> LGT Type, <br> Colour |  |  |
|  |  |  | AMSL | AGL |  |  |  |
| $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ |  |  |  |
| EHBK001 | Control tower | $505454.0 N$ 0054606.3E | 473.0 | 96.6 | - / Low intensity type A, R |  |  |


|  | Remarks |
| :--- | :---: |
| - No obstacle data sets AVBL for area 3. | $\mathbf{6}$ |

[^0]EHBK AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

| $\mathbf{1}$ | Associated MET office | De Bilt |
| :--- | :--- | :--- |
| $\mathbf{2}$ | Hours of service <br> MET office outside hours | H24 |
| $\mathbf{3}$ | Office responsible for TAF preparation <br> Periods of validity | De Bilt <br> 30 HR |
| $\mathbf{4}$ | Trend forecast <br> Interval of issuance | TREND <br> MON-SUN: 0455-2155 (0355-2055) |
| $\mathbf{5}$ | Briefing/consultation provided | Self-briefing; briefing on request from MWO-De Bilt by telephone after self- <br> briefing (see item 10). |
| $\mathbf{6}$ | Flight documentation <br> Language(s) used | Reports, forecasts, charts. <br> English, Dutch. |
| $\mathbf{7}$ | Charts and other information available for brief- <br> ing or consultation | S, W, T |
| $\mathbf{8}$ | Supplementary equipment available for providing <br> information | WXR, APT |
| $\mathbf{9}$ | ATS units provided with information | Beek TWR, Beek APP |
| $\mathbf{1 0}$ | Additional information (limitation of service, etc.) | Tel: 09002023341 Briefing low level flights (IFR/VFR). <br> Tel: 09002023343 Briefing IFR flights above FL 100. <br> Tel: 09002023340 Briefing balloon flights within Amsterdam FIR. <br> Note: $\quad$ charge for TEL briefings and consultations is $€ 0,50 /$ MIN.. <br> 1) <br> Weather bulletin (Dutch language) and METARs via Dutch public television <br> 'Teletekst' page 707. |

## EHBK AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

| Designations RWY NR | True BRG | Dimensions of RWY (M) | Strength (PCN) and surface of RWY and SWY | THR co-ordinates RWY end co-ordinates THR GUND | THR elevation and highest elevation of TDZ of precision APCH RWY |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 03 | $032.62^{\circ}$ | $2750 \times 45$ | 88/F/B/X/T ASPH | 505406.65N 0054536.21E 505514.79N 0054645.21E 150 FT | $\begin{aligned} & 365.5 \mathrm{FT} \\ & 369.4 \mathrm{FT} \end{aligned}$ |
| 21 | $212.63^{\circ}$ | $2750 \times 45$ | $\begin{aligned} & 88 / F / B / X / T \\ & \text { ASPH } \end{aligned}$ | 505507.97N 0054638.31E 505359.84 N 0054529.31 E 150 FT | $\begin{aligned} & 370.7 \mathrm{FT} \\ & 377.0 \mathrm{FT} \end{aligned}$ |


| Designations RWY NR | Slope of RWYSWY | SWY dimensions <br> (M) | CWY dimen- sions (M) | Strip dimensions (M) | RESA dimensions (M) | Location and type of arresting system | OFZ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 03 | Not AVBL | NIL | NIL | $2870 \times 300$ | $240 \times 150$ | NIL | AVBL |
| 21 | Not AVBL | NIL | NIL | $2870 \times 300$ | $240 \times 150$ | NIL | AVBL |


| Remarks |  |
| :--- | :--- |
| - When temperature is $18^{\circ} \mathrm{C}$ or above, $180^{\circ}$ turn not allowed on RWY 03/21 for ACFT with MTOM $>=50000 \mathrm{KG}$. |  |
| - Jet ACFT doing a $180^{\circ}$ turn on turn pad must keep power setting below breakaway thrust to avoid jet blast on the adjacent public road. |  |
| - ACFT doing a $180^{\circ}$ turn on turn pad shall turn anticlockwise. |  |

## EHBK AD 2.13 DECLARED DISTANCES

| RWY Designator | TORA (M) | TODA (M) | ASDA (M) | LDA (M) | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 03 | 2500 | 2500 | 2500 | 2500 | DTHR 250 M . |
|  | 1152 | 1152 | 1152 | NA | Take-off from intersection with TWY W4. |
| 21 | 2500 | 2500 | 2500 | 2500 | DTHR 250 M . |
|  | 1963 | 1963 | 1963 | NA | Take-off from intersection with TWY E2. |
|  | 1624 | 1624 | 1624 | NA | Take-off from intersection with TWY W3. |
|  | 1221 | 1221 | 1221 | NA | Take-off from intersection with TWY W4. |


| RWY Designator | TORA (M) | TODA (M) | ASDA (M) | LDA (M) | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 |

- For determination of the datum line for intersection take-offs, see EHBK AD 2.23.
- For local aerdrome restrictions on intersection take-offs, see EHBK AD 2.20 paragraph 5 .


## EHBK AD 2.14 APPROACH AND RUNWAY LIGHTING

| RWY Designator | APCH <br> LGT <br> type, length, INTST | THR LGT colour, WBAR | VASIS (MEHT) PAPI | TDZ LGT length | RWY centre line LGT length, spacing, colour, INTST | RWY edge LGT length, spacing, colour, INTST | RWY end LGT colour, WBAR | SWY LGT length, colour |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 03 | CAT I 608 M LIH | $\mathrm{G}$ | PAPI left/3 ${ }^{\circ}$ (64 FT) | NIL | $\begin{aligned} & 2500 \mathrm{M} \\ & 15 \mathrm{M} \\ & 1) \\ & \text { LIH } \end{aligned}$ | $\begin{aligned} & 2500 \mathrm{M} \\ & 60 \mathrm{M} \\ & \text { 2) } \\ & \text { LIH } \end{aligned}$ | $\mathrm{R}$ | NIL |
| 21 | CAT III 855 M LIH | $\mathrm{G}$ | PAPI left/3 ${ }^{\circ}$ (64 FT) | 900 M | $\begin{aligned} & 2500 \mathrm{M} \\ & 15 \mathrm{M} \\ & 1) \\ & \mathrm{LIH} \end{aligned}$ | $\begin{aligned} & 2500 \mathrm{M} \\ & 60 \mathrm{M} \\ & \text { 2) } \\ & \text { LIH } \end{aligned}$ | $\mathrm{R}$ | NIL |


| Remarks |
| :--- |
| 10 |
| White from THR to 900 M from RWY-end; white/red from 900 M from RWY-end to 300 M from RWY-end; red from 300 M from RWY- |
| 2) end to RWY-end. |
| Red BTN beginning of RWY pavement and DTHR; white BTN DTHR and 600 M from RWY-end; last 600 M to RWY-end yellow. |
| Note: For runways for landing, RWY end LGT are situated at the end of LDA. |

EHBK AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

| $\mathbf{1}$ | ABN/IBN location, characteristics and hours of <br> operation | NIL |
| :--- | :--- | :--- |
| $\mathbf{2}$ | LDI location and LGT <br> Anemometer location and LGT | NIL <br> Anemometers: GEN 3.5 paragraph 3. |
| $\mathbf{3}$ | TWY edge and centre line lighting | See EHBK AD 2.9. |
| $\mathbf{4}$ | Secondary power supply <br> Switch-over time | AVBL <br> 0 seconds. |
| $\mathbf{5}$ | Remarks | NIL |

## EHBK AD 2.17 ATS AIRSPACE

| 1 | Designation and lateral limits | MAASTRICHT CTR: <br> - In Amsterdam FIR: <br> 510201N 0055238E - <br> along Dutch-German border - <br> 505442N 0060506E - <br> 505445N 0055840E - <br> 505125N 0055513E - <br> along clockwise arc (radius 6.5 NM, centre 505457N 0054637E) - <br> 504829N 0054538E - <br> 504637N 0054343E - <br> 504724N 0054146E - <br> along Dutch-Belgian border - <br> 505956N 0054601E - <br> 510317N 0054932E - <br> 510201N 0055238E. <br> - In Brussels FIR: <br> See AIP Belgium. <br> - In Langen FIR: <br> See AIP Germany. |
| :---: | :---: | :---: |
| 2 | Vertical limits | - In Amsterdam FIR and Brussels FIR: GND to 3000 FT AMSL. <br> - In Langen FIR: GND up to and including 3000 FT AMSL. |


| $\mathbf{3}$ | Airspace classification | - In Amsterdam FIR and Brussels FIR: C <br> - In Langen FIR: D |
| :--- | :--- | :--- |
| $\mathbf{4}$ | ATS unit call sign <br> Language(s) | Beek Tower) <br> English |
| $\mathbf{5}$ | Transition altitude | IFR: 3000 FT AMSL; VFR: 3500 FT AMSL. |
| $\mathbf{6}$ | Hours of applicability | MON-SUN: 0500-2300 (0400-2200). |
| $\mathbf{7}$ | Remarks | 1) $^{1 /}$ Outside OPR HR contact Dutch MIL INFO on 132.350. |

## EHBK AD 2.18 ATS COMMUNICATION FACILITIES

| Service designation | Call sign | Channel(s) | SATVOICE NR | Logon address | Hours of operation | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| APP | Beek Approach | 123.980 | INFO not AVBL | INFO not AVBL | MON-SUN: 0500-2300 (0400-2200) | TAR. |
|  |  | 340.850 | INFO not AVBL | INFO not AVBL |  |  |
|  |  | 120.205 | INFO not AVBL | INFO not AVBL | O/R | O/R or at ATC discretion. |
| TWR | Beek Tower | 119.480 | INFO not AVBL | INFO not AVBL | MON-SUN: 0500-2300 (0400-2200) | Primary. VDF, bearings Class B. |
|  |  | 362.875 | INFO not AVBL | INFO not AVBL |  | NIL |
|  |  | 119.705 | INFO not AVBL | INFO not AVBL | O/R | Regional Guard. O/R or at ATC discretion. |
|  |  |  |  |  |  | Outside OPR HR contact Dutch MIL INFO on 132.350. |
|  | Beek Delivery | 121.830 | INFO not AVBL | INFO not AVBL | MON-SUN: 0500-2300 (0400-2200) | Start-up control and clearance delivery. <br> Pre-flight information. IFR/VFR traffic (incl. training flights). <br> VDF, bearings Class B. |
| ATIS | Maastricht Information | 124.580 | INFO not AVBL | INFO not AVBL | MON-SUN: 0500-2300 (0400-2200) | NIL |
| - | As appropriate. | 121.500 | INFO not AVBL | INFO not AVBL | As appropriate. | Emergency. VDF, bearings Class B. |

## EHBK AD 2.19 RADIO NAVIGATION AND LANDING AIDS

| Type of aid, MAG VAR, <br> Type of supported OPS (VOR/ILS/MLS: declination) | ID | Frequency CH service provider and reference path identifier | Hours of operation | Position of transmitting antenna co-ordinates | Elevation of DME transmitting antenna or GBAS: elevation, ellipsoid height of reference point SBAS: ellipsoid height of LTP/FTP | Service volume radius from the GBAS reference point | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| VOR/DME <br>  | MAS | $\begin{aligned} & 108.600 \mathrm{MHz} \\ & \mathrm{CH} 23 \mathrm{X} \end{aligned}$ | H24 | $\begin{aligned} & \text { 505819.0N } \\ & 0055737.5 \mathrm{E} \end{aligned}$ | 300 FT | NA | Designated operational coverage: 40 NM/FL 250. |
| $\begin{aligned} & \text { LOC } 03 \\ & \text { ILS CAT I/C/1 } \\ & \left(2^{\circ} \mathrm{E} / 2020\right) \end{aligned}$ | BKZ | 111.550 MHz | H24 | $\begin{aligned} & 505519.4 \mathrm{~N} \\ & 0054649.9 \mathrm{E} \end{aligned}$ | NA | NA | NIL |
| DME 03 | BKZ | CH52Y | H24 | $\begin{aligned} & 505520.6 \mathrm{~N} \\ & 0054647.2 \mathrm{E} \end{aligned}$ | 400 FT | NA | NIL |
| GP 03 | - | 332.750 MHz | H24 | $\begin{aligned} & 505417.4 \mathrm{~N} \\ & 0054539.8 \mathrm{E} \end{aligned}$ | NA | NIL |  |
| L 21 | NW | 373 kHz | H24 | $\begin{aligned} & \text { 510109.7N } \\ & 0055242.0 \mathrm{E} \end{aligned}$ | NA | NA | Designated operational range: 25 NM. |
| LOC 21 <br> ILS CAT III/E/4 ( $2^{\circ} \mathrm{E} / 2020$ ) | BKN | 111.550 MHz | H24 | $\begin{aligned} & 505356.7 \mathrm{~N} \\ & 0054526.2 \mathrm{E} \end{aligned}$ | NA | NA | NIL |
| DME 21 | BKN | CH52Y | H24 | $\begin{aligned} & 505520.6 \mathrm{~N} \\ & 0054647.1 \mathrm{E} \end{aligned}$ | 400 FT | NA | NIL |


| Type of aid, MAG VAR, <br> Type of supported OPS (VOR/ILS/MLS: declination) | ID | Frequency CH service provider and reference path identifier | Hours of operation | Position of transmitting antenna co-ordinates | Elevation of DME transmitting antenna or GBAS: elevation, ellipsoid height of reference point SBAS: ellipsoid height of LTP/FTP | Service volume radius from the GBAS reference point | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| GP 21 | - | 332.750 MHz | H24 | $\begin{aligned} & 505502.1 \mathrm{~N} \\ & 0054625.1 \mathrm{E} \end{aligned}$ | NA | NA | NIL |
| GPS | NA | $\begin{aligned} & \mathrm{L} 1 \\ & 1575.42 \mathrm{MHz} \end{aligned}$ | H24 | NA | NA | NA | NIL |
| EGNOS | NA | $\begin{aligned} & \mathrm{L} 1 \\ & 1575.42 \mathrm{MHz}^{1)} \end{aligned}$ | H24 | NA | 1) | NA | ${ }^{1)}$ See EHBK AD 2.22 for FAS data block |

## EHBK AD 2.20 LOCAL AERODROME REGULATIONS

## 1 RESTRICTIONS

1. Flights with non noise certificated aircraft are not allowed
2. So called "short approaches" to RWY 21 are not allowed within a distance of 4 NM.
3. ATC is not allowed to approve deviations from the SIDs except:
a. In emergency.
b. When the aircraft has reached an altitude of 3500 FT AMSL for propeller aircraft and FL 060 for jet aircraft.
4. Flights during night hours 2200-0500 (2100-0400) are not allowed without prior permission from the airport authority.
5. Visual approaches are not allowed during night hours 2200-0500 (2100-0400). ATC may allow or offer a visual approach:
a. In case of emergency
b. If no instrument approach is available.
c. In exceptional cases to avoid a complicated air traffic flow

## 2 TRAINING FLIGHTS

1. Military training flights not allowed.
2. Circuit training only allowed MON-FRI (EXC HOL) between 0800-1800 (0700-1700). Additionally, circuit training for propeller powered aircraft with a MTOM <= 6000 KG , is allowed on MON-FRI (EXC HOL) 1800-2200 (1700-2100) after prior permission from airport authority.
3. Local IFR training flights shall file in item 15 the route description: DCT NOWIK.

## 3 BANNER TOWING FLIGHTS

Dropping or picking-up banners is not allowed.

## 4 FORMATION TAKE-OFFS AND LANDINGS

Formation take-offs and landings are not allowed except with a pre-arranged operational agreement with ATC. Contact atmproceduresservices@lvnl.nl for such an agreement

## 5 TAXI PROCEDURES

1. Before starting their engines pilots shall request start-up clearance from Beek Delivery.
2. Pilots of aircraft intending to taxi on the taxiways shall obtain a clearance from Beek TWR.
3. Aircraft not maintaining two-way radio communication and intending to taxi on the apron must obtain prior permission from the airport authority.

## 6 RESTRICTIONS FOR INTERSECTION TAKE-OFF

In general, an intersection take-off via TWY E2, W3 and W4 is only allowed for operational reasons. Furthermore the following restrictions apply for an intersection take-off via TWY W3 and W4:

RWY 03 (W4) or RWY 21 (W3 and W4):

- Single engine MTOM <= 6000 KG . No push propeller or jet engine (turbo fan)
- Multi engine MTOM <= 2000 KG . No push propeller.


## 7 GROUND HANDLING

Due to security reasons, handling is compulsory for all non based aircraft at Maastricht Aachen Airport.
For handling companies see EHBK AD 2.23 paragraph 4.

## 8 USE OF APU

The APU should be shut down as soon as practicable following actual in-block time, but not later than 15 MIN after parking brakes set. Departing aircraft may start APU no earlier than 15 MIN prior to actual off-block time in order to start engines.

For exemptions: PPR via airport authority, TEL +31 (0)43 3589750

## 9 USE OF TRANSPONDER

Aircraft identification should be entered before the transponder is activated (see also ENR 1.6 paragraph 2.1.1). Pilots must use the ICAO defined format as specified in ENR 1.10 paragraph 3.2.1 for entry of the aircraft identification.

All pilots shall select the assigned mode A (squawk) code and activate the mode S transponder:

- from request of push-back or taxi whichever is earlier;
- after landing, continuously until the aircraft is fully parked on stand. The transponder shall be deactivated immediately after parking.

Note: activation of the mode S transponder means selecting AUTO mode, ON, XPNDR, or the equivalent according to specific installation. Selection of the STAND-BY mode will NOT activate the mode S transponder. Depending on the hardware configuration, selecting ON could overrule the required suppression of SSR replies and mode $S$ all-call replies when the transponder is on the ground.
To ensure that the performance of systems based on SSR frequencies (including airborne TCAS units and SSR radars) is not compromised, TCAS should not be selected before receiving the clearance to line up. For arriving aircraft, TCAS should be deselected as soon as possible after vacating the runway.

## 10 DEVIATIONS FROM EASA REGULATIONS

### 10.1 Commission Regulation (EU) No 139/2014 - Certification Specifications

| Reference | Deviation | Related AIP section |
| :---: | :---: | :---: |
| 1 | 2 | 3 |
| Longitudinal slope changes on runway |  |  |
| CS ADR-DSN.B. 065 (c)(1) | At RWY 03 and 21 the longitudinal slope locally exceeds $0.1 \%$ per 30 M. | EHBK AD 2.12 |
| Sight distance for slopes on runways |  |  |
| CS ADR-DSN.B. 070 (b)(1) | From start of RWY 21 no unobstructed line of sight at 3 M . | EHBK AD 2.12 |
| Distance between slope changes on runways |  |  |
| CS ADR-DSN.B. 075 | Deviation on curve is smaller than requirement due to geographical position of the aerodrome. | EHBK AD 2.12 |
| Transverse slopes on runway |  |  |
| CS ADR-DSN.B. 080 (b)(1) | At RWY 03 and 21 the concrete part of the transverse slope is less than 1\%. | EHBK AD 2.12 |
| CS ADR-DSN.B. 080 (d) | At RWY 03 and 21 where concrete meets asphalt no even slope will be maintained. Will change from $1,5 \%$ for asphalt to $\sim 1 \%$ for concrete. | EHBK AD 2.12 |
| Slopes on runway turnpads |  |  |
| CS ADR-DSN.B. 100 | The slope on runway turnpad is sufficient for the drainage of water. However the slope of the turnpad is opposite to that of the runway pavement surface. | EHBK AD 2.12 |
| Objects on runway strips |  |  |
| CS ADR-DSN.B. 165 (a) | Public roads and frangible airport fences are located in the runway strip. | EHBK AD 2.24 |
| Longitudinal slopes on runway strips |  |  |
| CS ADR-DSN.B. 180 (b)(1) | The longitudinal slope on third-party territory along a portion of the strip exceeds $1.5 \%$. | EHBK AD 2.24 |
| Objects on runway end safety areas |  |  |
| CS ADR-DSN.C. 220 | Frangible airport fence, public road and service road are located in the runway end safety area of RWY 21. | EHBK AD 2.12 |
| General - Colour and conspicuity |  |  |
| CS ADR-DSN.L. 520 (a) | To denote the 2500 M point to the pilot MAA has placed a dashed white line on the beginning of RWY 03. | EHBK AD 2.9 |
| Precision approach Category I lighting system |  |  |
| CS ADR-DSN.M. 630 (b)(1) | Total length of lighting system is 608 M instead of 900 M . | EHBK AD 2.14 |
| Precision approach Category II and III lighting system |  |  |
| CS ADR-DSN.M. 635 (a)(1) | Total length of lighting system is 855 M instead of 900 M . | EHBK AD 2.14 |
| CS ADR-DSN.M. 685 (b)(1) | Runway end lights are not positioned at the end of the runway. | EHBK AD 2.14 |
| Electrical power supply systems |  |  |
| CS ADR-DSN.S. 880 (d)(5) | Apron lights are not connected to the emergency power supply. | EHBK AD 2.15 |
| CS ADR-DSN.S. 880 (d)(6) | Apron lights are not connected to the emergency power supply. | EHBK AD 2.15 |
| Electrical systems - Monitoring |  |  |
| CS ADR-DSN.S. 890 (d) | No automatic relay to maintenance crew. Relay is via ATC. | NIL |
| CS ADR-DSN.S. 890 (e) | No automatic relay to maintenance crew. Relay is via ATC | NIL |

## EHBK AD 2.21 NOISE ABATEMENT PROCEDURES

## 1 ARRIVALS

### 1.1 Continuous descent operation

Inbound aircraft shall adopt a continuous descent profile - to the greatest possible extent compatible with safe operation of the aircraft by employing minimum engine thrust, ideally in a low drag configuration, prior to the FAF/FAP.
When cleared to descend via a standard arrival route, execute the lateral, vertical and speed profiles of the arrival procedure. In this case, the pilot is free to optimize descent and speed within the constraints as laid down in the procedure. The objective is to establish a low noise continuous descent approach.

### 1.2 Landing

Full reverse thrust should not be used due to noise abatement. Full reverse thrust shall only be used when required for safety reasons.

## EHBK AD 2.22 FLIGHT PROCEDURES

## 1 INSTRUMENT DEPARTURE PROCEDURES

### 1.1 Introduction

The instrument departure procedures are based on ICAO Annex 2 and on ICAO Documents 4444-ATM/501 (PANS-ATM), 7030 (SUPPS) and $8168-O P S / 611$ (PANS-OPS). With respect to procedures extending outside the Maastricht TMA 1, special arrangements have been made between Beek APP/TWR and the appropriate German and Belgian ATC units.

### 1.2 Instrument departure procedures

### 1.2.1 Start-up permission

Pilots of aircraft must have obtained start-up permission from ATC before starting their engines. A request for start-up shall be made to Beek Delivery after all preparations for departure have been made (doors closed etc.) and shall include:

- aircraft identification (e.g. TRA2345).
- position (e.g. opposite tower).
- ATIS information (e.g. information "J").
- flight rules (e.g. IFR).
- destination (e.g. Malaga).
- request start-up (request start-up).

Due to the short flying time to the FIR boundary, pilots of aircraft departing direction Belgium and Germany may request start-up permission before all preparations have been made, indicating the time at which they will be ready to start engines: "...... destination ..... ready to start engines at ......".

Permission for start-up will be issued as soon as possible after the request has been made to Beek Delivery. The pilot shall be able to comply with the start-up and taxi permission, since ATC planning of outbound traffic (involving en-route clearance and co-ordination with adjacent ATC units) is based on the start-up time. Any delay in start-up or taxiing shall be immediately reported to ATC. In case of indefinite delay the probable duration of the delay will be given.
During the hours of the ATIS broadcast no MET information will be issued to departing aircraft except RVR (see EHBK AD 2.18).

### 1.2.2 En-route clearance

### 1.2.2.1 Contents

The en-route clearance will be issued after start-up clearance has been given by Beek Delivery. An en-route clearance contains:
a. Clearance limit: airport of destination
b. Standard instrument departure (SID).
c. Level instructions if applicable.
d. SSR code
e. Departure instructions if applicable.
f. CTOT if applicable.

Example of an en-route clearance: "TRA2345 cleared to Malaga, OLNO 2A Departure, squawk 0121, slot 25".

### 1.2.2.2 Standard instrument departures

The instrument departure procedures are laid down in standard instrument departures (SIDs). SIDs are designated in accordance with ICAO Annex 11. SID designation is composed of the following elements:

- a basic indicator, i.e. a significant point.
- a validity indicator, i.e. a number from 1 to 9 indicating the valid version of a specific SID.
- a route indicator, i.e. a letter representing the runway where the SID begins.

SIDs are published for RWY 03 and 21.

### 1.2.2.3 Departure instructions (paragraph 1.2.2.1, item e.)

Instructions containing deviations from the standard instrument departure may be added to the en-route or take-off clearance. These instructions may comprise an opposite turn after take-off, maintaining a specified heading or temporary altitude restrictions; they amend the relevant part of the SID only.

### 1.2.2.4 General instructions

a. Climb as rapidly as practicable to at least 2000 ft AMSL
b. VOR radial interception angle: in principle $45^{\circ}$. If the indicated angle exceeds $45^{\circ}$ initiate turn in due time in order not to overshoot the radial.

### 1.2.3 Taxi procedures

Aircraft shall request taxi clearance on the TWR channel (see EHBK AD 2.18).

### 1.2.4 En-route communication

Pilots shall contact the adjacent ATC unit as soon as possible after they have been so instructed by ATC.

### 1.3 Communication failure

See ENR 1.3.

### 1.4 SID descriptions

### 1.4.1 General remarks

- Transition altitude: 3000 FT AMSL.
- Pilots of departing aircraft shall remain on the TWR channel until passing 2000 FT AMSL. When passing 2000 FT AMSL pilots shall change to the APP channel and report the altitude in order for ATC to verify mode C.
- Initiate turns in due time in order not to overshoot radials.
- Turn radii based on a $25^{\circ}$ bank angle.
- Radial interception angle: $45^{\circ}$.
- The SIDs are based on an average climb rate of 2000 FT/MIN.
- SIDs have to be considered as minimum noise routings which shall be strictly adhered to.
- MAX 250 KIAS below FL 100 unless otherwise instructed.
- RNAV: The Netherlands encourages the use of RNAV routes stored in a pre-programmed navigation database on board of aircraft. Although there may be differences between the RNAV and conventional description of a route (vertically: turn altitudes and/or laterally: turn anticipation effects), the resulting flight paths are considered identical by ATC. Therefore, flying the route using the RNAV coding from the navigation database will not result in route violations.
Furthermore:
- Connect FMS as early as possible.
- The BK-waypoints shall not be used in RTF procedures.
- Turn anticipation is mandatory for all waypoints except those which are underlined, these waypoints shall be overflown.
- The navigation aid (e.g. VOR) mentioned in the column "Expected path terminator" is for selection of MAG station declination only.


### 1.4.2 Specific remarks

1. Pilots unable to comply with the crossing condition BK317 (2.5 MAS R-248) at or above 3500 FT AMSL, have to inform ATC before departure. The minimum climb gradient of 10.3 percent is required due to glider activities in ATZ Schinveld.
2. Pilots unable to comply with the crossing condition at or above FL 045 or FL 060 , have to inform ATC before departure. The minimum climb gradient is required due to the airspace structure.
3. Only for aircraft with destination EHGG and EHLE, MAX FL 095.
4. Only for aircraft with destination EHAM, MAX FL 075.
5. Only for aircraft with destination EDDK.
6. RNAV 1 required.
7. SIDs RWY 21: early autopilot connection might result in turn initiation below 760 FT AMSL. If applicable, continue on track $211^{\circ} \mathrm{MAG}$ beyond 9.5 MAS to prevent turning below 760 FT AMSL.

### 1.4.3 SIDs RWY 03

See chart AD 2.EHBK-SID-03.

| LNO 4A | See paragraph 1.4.2 specific remark: 2. <br> Minimum climb gradient: 5.8\% to FL 060. <br> Passing 2000 FT AMSL contact Beek APP 123.980. <br> After departure climb to FL 060. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| ARINC designator | Formal description | Abbreviated description | Expected path terminator | Fly-over required |
| [LNO4A] | Climb on course $031^{\circ} \mathrm{MAG}$, at or above 750 FT AMSL turn right | [M031; A750+; R] | CA | N |
|  | Direct to BK316 at or above 2000 FT AMSL, MAX 220 KIAS | => BK316 [A2000+; K220-] | DF | N |
|  | To BK318 | BK318 | TF | N |
|  | To ULPEN at or above FL 060 | ULPEN [F060+] | TF | N |
|  | To LNO | LNO | TF | N |
| Conventional description | Lateral: Track $031^{\circ}$ MAG. At 750 FT AMSL turn right to track $045^{\circ} \mathrm{MAG}$. At 5.6 MAS turn right to track $155^{\circ} \mathrm{MAG}$ (MAX 220 KIAS) to intercept LNO R-037 inbound to LNO VOR. <br> Vertical: Cross 5.6 MAS at or above 2000 FT AMSL; 13.1 LNO at or above FL 060. |  |  |  |
| NETEX 2A | See paragraph 1.4 .2 specific remark: 1, 2. <br> Minimum climb gradient: $10.3 \%$ to 3500 FT AMSL and $5.8 \%$ to FL 060. <br> Passing 2000 FT AMSL contact Beek APP 123.980. <br> After departure climb to FL 060. |  |  |  |
| ARINC designator | Formal description | Abbreviated description | Expected path terminator | Fly-over required |
| [NETE2A] | Climb on course $031^{\circ} \mathrm{MAG}$, at or above 750 FT AMSL turn right | [M031; A750+; R] | CA | N |
|  | Direct to BK315 | => BK315 | DF | N |
|  | To BK317 at or above 3500 FT AMSL | BK317 [A3500+] | TF | N |
|  | To MAS | MAS | TF | N |
|  | To PIMIP at or above FL 060 | PIMIP [F060+] | TF | N |
|  | To NETEX | NETEX | TF | N |
| Conventional description | Lateral: Track $031^{\circ}$ MAG. At 750 FT AMSL turn right to track $045^{\circ}$ MAG to intercept MAS R-248 inbound to MAS VOR to intercept MAS R-027 to NETEX (24.4 MAS). <br> Vertical: Cross 2.5 MAS R-248 at or above 3500 FT AMSL; 4.7 MAS R-027 at or above FL 060. |  |  |  |


| NVO 3A | See paragraph 1.4.2 specific remark: 2, 5, 6 . Minimum climb gradient: $7.0 \%$ to 2000 FT AMSL and $5.5 \%$ to FL 060. Passing 2000 FT AMSL contact Beek APP 123.980. After departure climb to FL 060. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| ARINC designator | Formal description | Abbreviated description | Expected path terminator | Fly-over required |
| [NVO3A] | Climb on course $031^{\circ}$ MAG, at or above 750 FT AMSL turn right | [M031; A750+; R] | CA | N |
|  | Direct to BK316 at or above 2000 FT AMSL, MAX 220 KIAS | => BK316 [A2000+; K220-] | DF | N |
|  | To BK319 | BK319 | TF | N |
|  | To ELBED at or above FL 060 | ELBED [F060+] | TF | N |
|  | To NVO | NVO | TF | N |


| OSGOS 2A | See paragraph 1.4.2 specific remark: 1, 6. Minimum climb gradient: $10.3 \%$ to 3500 FT AMSL. Passing 2000 FT AMSL contact Beek APP 123.980. After departure climb to FL 060. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| ARINC designator | Formal description | Abbreviated description | Expected path terminator | Fly-over required |
| [OSGO2A] | Climb on course $031^{\circ} \mathrm{MAG}$, at or above 750 FT AMSL turn right | [M031; A750+; R] | CA | N |
|  | Direct to BK315 | => BK315 | DF | N |
|  | To BK317 at or above 3500 FT AMSL | BK317 [A3500+] | TF | N |
|  | To MAS | MAS | TF | N |
|  | To OSGOS at or above FL 060 | OSGOS [F060+] | TF | N |


| PESER 4A | See paragraph 1.4.2 specific remark: 1, 4, 6 . Minimum climb gradient: $10.3 \%$ to 3500 FT AMSL. Passing 2000 FT AMSL contact Beek APP 123.980. After departure climb to FL 060. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| ARINC designator | Formal description | Abbreviated description | Expected path terminator | Fly-over required |
| [PESE4A] | Climb on course $031^{\circ} \mathrm{MAG}$, at or above 750 FT AMSL turn right | [M031; A750+; R] | CA | N |
|  | Direct to BK315 | => BK315 | DF | N |
|  | To BK317 at or above 3500 FT AMSL | BK317 [A3500+] | TF | N |
|  | To MAS | MAS | TF | N |
|  | To OSGOS at or above FL 060 | OSGOS [F060+] | TF | N |
|  | To SOPVI | SOPVI | TF | N |
|  | To EHOJI | EHOJI | TF | N |
|  | To BREDA | BREDA | TF | N |
|  | To PESER | PESER | TF | N |


| TENLI 2A | See paragraph 1.4.2 specific remark: 1, 3, 6 . Minimum climb gradient: 10.3 \% to 3500 FT AMSL. Passing 2000 FT AMSL contact Beek APP 123.980. After departure climb to FL 060. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| ARINC designator | Formal description | Abbreviated description | Expected path terminator | Fly-over required |
| [TENL2A] | Climb on course $031^{\circ} \mathrm{MAG}$, at or above 750 FT AMSL turn right | [M031; A750+; R] | CA | N |
|  | Direct to BK315 | => BK315 | DF | N |
|  | To BK317 at or above 3500 FT AMSL | BK317 [A3500+] | TF | N |
|  | To MAS | MAS | TF | N |
|  | To OSGOS at or above FL 060 | OSGOS [F060+] | TF | N |
|  | To SOPVI | SOPVI | TF | N |
|  | To RUMER | RUMER | TF | N |
|  | To BASGU | BASGU | TF | N |
|  | To NIHOF | NIHOF | TF | N |
|  | To TENLI | TENLI | TF | N |

### 1.4.4 SIDs RWY 21

See chart AD 2.EHBK-SID-21.

| LNO 3B | See paragraph 1.4 .2 specific remark: 2, 7. <br> Minimum climb gradient: 6.6\% to FL 060. <br> Passing 2000 FT AMSL contact Beek APP 123.980. <br> After departure climb to FL 060. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| ARINC designator | Formal description | Abbreviated description | Expected path terminator | Fly-over required |
| [LNO3B] | To BK321 on course $211^{\circ} \mathrm{MAG}$ | BK321 [M211] | CF (MAS) | N |
|  | To BK323 | BK323 | TF | N |
|  | To ULPEN at or above FL 060 | ULPEN [F060+] | TF | N |
|  | To LNO | LNO | TF | N |
| Conventional description | Lateral: Track $211^{\circ}$ MAG. At 9.5 MAS turn left to track $106^{\circ}$ MAG. At LNO R-026 turn right to intercept LNO R037 inbound to LNO VOR. <br> Vertical: Cross 13.1 LNO at or above FL 060. |  |  |  |


| NETEX 2B | See paragraph 1.4.2 specific remark: 2, 7. Minimum climb gradient: $4.5 \%$ to FL 060. Passing 2000 FT AMSL contact Beek APP 123.980. After departure climb to FL 060. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| ARINC designator | Formal description | Abbreviated description | Expected path terminator | Fly-over required |
| [NETE2B] | To BK320 on course $211^{\circ} \mathrm{MAG}$ | BK320 [M211] | CF (MAS) | Y |
|  | To MAS on course $037^{\circ} \mathrm{MAG}$, at or above FL 045 | MAS [M037; F045+] | CF (MAS) | N |
|  | To PIMIP at or above FL 060 | PIMIP [F060+] | TF | N |
|  | To NETEX | NETEX | TF | N |


| Conventional <br> description | Lateral: Track $211^{\circ}$ MAG. At 9.5 MAS turn left to intercept MAS R-217 inbound to intercept MAS R-027 to NETEX <br> (24.4 MAS). <br> Vertical: Cross MAS at or above FL 045; 4.7 MAS R-027 at or above FL 060. |
| :--- | :--- |


| NVO 3B | See paragraph 1.4.2 specific remark: 2, 5, 6, 7. <br> Minimum climb gradient: 6.4\% to FL 060. <br> Passing 2000 FT AMSL contact Beek APP 123.980. <br> After departure climb to FL 060. |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ARINC designator | Formal description | Abbreviated description | Expected path <br> terminator | Fly-over <br> required |
| [NVO3B] | To BK321 on course $211^{\circ}$ MAG | BK321 [M211] |  |  |
|  | To BK319 | BK319 | CF (MAS) | N |
|  | To ELBED at or above FL 060 | ELBED [F060+] | TF | N |
|  | To NVO | NVO | TF | N |


| OSGOS 2B | See paragraph 1.4.2 specific remark: 2, 6, 7. <br> Minimum climb gradient: 4.2\% to FL 045. <br> Passing 2000 FT AMSL contact Beek APP 123.980. <br> After departure climb to FL 060. |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| ARINC designator | Formal description | Abbreviated description | Expected path <br> terminator | Fly-over <br> required |
| [OSGO2B] | To BK320 on course $211^{\circ} \mathrm{MAG}$ | BK320 [M211] | CF (MAS) | Y |
|  | To MAS on course $037^{\circ} \mathrm{MAG}$, at or above <br> FL 045 | MAS [M037; F045+] | CF (MAS) | N |
|  | To OSGOS at or above FL 060 | OSGOS [F060+] | TF | N |


| PESER 4B | See paragraph 1.4.2 specific remark: 2, 4, 6, 7 . Minimum climb gradient: $4.2 \%$ to FL 045. Passing 2000 FT AMSL contact Beek APP 123.980. After departure climb to FL 060. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| ARINC designator | Formal description | Abbreviated description | Expected path terminator | Fly-over required |
| [PESE4B] | To BK320 on course $211^{\circ} \mathrm{MAG}$ | BK320 [M211] | CF (MAS) | Y |
|  | To MAS on course $037^{\circ}$ MAG, at or above FL 045 | MAS [M037; F045+] | CF (MAS) | N |
|  | To OSGOS at or above FL 060 | OSGOS [F060+] | TF | N |
|  | To SOPVI | SOPVI | TF | N |
|  | To EHOJI | EHOJI | TF | N |
|  | To BREDA | BREDA | TF | N |
|  | To PESER | PESER | TF | N |


| TENLI 2B | See paragraph 1.4.2 specific remark: 2, 3, 6, 7 . Minimum climb gradient: 4.2\% to FL 045. Passing 2000 FT AMSL contact Beek APP 123.980. After departure climb to FL 060. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| ARINC designator | Formal description | Abbreviated description | Expected path terminator | Fly-over required |
| [TENL2B] | To BK320 on course $211^{\circ} \mathrm{MAG}$ | BK320 [M211] | CF (MAS) | Y |
|  | To MAS on course $037^{\circ}$ MAG, at or above FL 045 | MAS [M037; F045+] | CF (MAS) | N |
|  | To OSGOS at or above FL 060 | OSGOS [F060+] | TF | N |
|  | To SOPVI | SOPVI | TF | N |
|  | To RUMER | RUMER | TF | N |
|  | To BASGU | BASGU | TF | N |
|  | To NIHOF | NIHOF | TF | N |
|  | To TENLI | TENLI | TF | N |

## 2 INSTRUMENT APPROACH PROCEDURES

### 2.1 Introduction

The arrival, instrument approach and holding procedures are based on ICAO Annex 2 and on ICAO Documents 4444-ATM/501 (PANS-ATM), 7030 (SUPPS) and 8168-OPS/611 (PANS-OPS). During initial and intermediate approach to Maastricht Aachen Airport radar services may be provided by Beek APP. With respect to procedures extending outside the Maastricht TMA 1, special arrangements have been made between Beek APP/TWR and the appropriate German and Belgian ATC units.

### 2.2 Arrival

### 2.2.1 Inbound clearance

Upon initial contact at or before entering the Maastricht TMA 1, Beek APP will issue an inbound clearance containing:
a. Standard arrival route (STAR, see AD 2.EHBK-STAR. 1 (RWY 03) and AD 2.EHBK-STAR. 2 (RWY 21)).
b. Level (flight level or altitude).
c. Approach instructions (see paragraph 2.3.2).
d. Expected approach time (EAT), when a delay of 30 minutes or more is expected.

When cleared to descend via a standard arrival route (STAR), establish a continuous descent path.

### 2.2.2 STAR descriptions

### 2.2.2.1 Specific remarks

1. RNAV 1 required.
2. Only for flights DEP EDLN.
3. Only for flights DEP within Amsterdam FIR.
2.2.2.2 STARs RWY 03

| LNO 1T | See paragraph 2.2.2.1 specific remark: 1. |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| ARINC designator | Formal description | Abbreviated description | Expected path <br> terminator | Fly-over <br> required |
| [LNO1T] | LNO | LNO | IF | N |
|  | To BERIR at or above 3000 FT AMSL | BERIR [A3000+] | TF | N |


| MODRU 1T | See paragraph 2.2.2.1 specific remark: 1, 2. |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| ARINC designator | Formal description | Abbreviated description | Expected path <br> terminator | Fly-over <br> required |
| [MODR1T] | MODRU | MODRU | IF | N |
|  | To ANZUL at or above 3500 FT AMSL | ANZUL [A3500+] | TF | N |


| NVO 1T | See paragraph 2.2.2.1 specific remark: 1. |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| ARINC designator | Formal description | Abbreviated description | Expected path <br> terminator | Fly-over <br> required |
| [NVO1T] | NVO | NVO | IF | N |
|  | To BAXIM at or above 4000 FT AMSL | BAXIM [A4000+] | TF | N |
|  | To ANZUL at or above 3500 FT AMSL | ANZUL [A3500+] | TF | N |


| NETEX 1T | See paragraph 2.2.2.1 specific remark: 1. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| ARINC designator | Formal description | Abbreviated description | Expected path terminator | Fly-over required |
| [NETE1T] | NETEX | NETEX | IF | N |
|  | To BOBMO | BOBMO | TF | N |
|  | To ANZUL at or above 3500 FT AMSL | ANZUL [A3500+] | TF | N |
| OSGOS 1T | See paragraph 2.2.2.1 specific remark: 1, 3. |  |  |  |
| ARINC designator | Formal description | Abbreviated description | Expected path terminator | Fly-over required |
| [OSGO1T] | OSGOS | OSGOS | IF | N |
|  | To BOGRU | BOGRU | TF | N |
|  | To ANZUL at or above 3500 FT AMSL | ANZUL [A3500+] | TF | N |
| RUMER 1T | See paragraph 2.2.2.1 specific remark: 1. |  |  |  |
| ARINC designator | Formal description | Abbreviated description | Expected path terminator | Fly-over required |
| [RUME1T] | RUMER | RUMER | IF | N |
|  | To SOPVI | SOPVI | TF | N |
|  | To OSGOS | OSGOS | TF | N |
|  | To BOGRU | BOGRU | TF | N |
|  | To ANZUL at or above 3500 FT AMSL | ANZUL [A3500+] | TF | N |

### 2.2.2.3 STARs RWY 21

| LNO 2M | See paragraph 2.2.2.1 specific remark: 1. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| ARINC designator | Formal description | Abbreviated description | Expected path terminator | Fly-over required |
| [LNO2M] | LNO | LNO | IF | N |
|  | To BERIR | BERIR | TF | N |
|  | To DINAK at or above 4000 FT AMSL | DINAK [A4000+] | TF | N |


| MODRU 2M | See paragraph 2.2.2.1 specific remark: 1, 2. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| ARINC designator | Formal description | Abbreviated description | Expected path terminator | Fly-over required |
| [MODR2M] | MODRU | MODRU | IF | N |
|  | To BOGRU at or above 3000 FT AMSL | BOGRU [A3000+] | TF | N |
| NVO 3M | See paragraph 2.2.2.1 specific remark: 1. |  |  |  |
| ARINC designator | Formal description | Abbreviated description | Expected path terminator | Fly-over required |
| [NVO3M] | NVO | NVO | IF | N |
|  | To BAXIM | BAXIM | TF | N |
|  | To DINAK at or above 4000 FT AMSL | DINAK [A4000+] | TF | N |


| NETEX 2M | See paragraph 2.2.2.1 specific remark: 1. |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| ARINC designator | Formal description | Abbreviated description | Expected path <br> terminator | Fly-over <br> required |
| [NETE2M] | NETEX | NETEX | IF | N |
|  | To BOBMO | BOBMO | TF | N |
|  | To BOGRU at or above 3000 FT AMSL | BOGRU [A3000+] | TF | N |


| OSGOS 2M | See paragraph 2.2.2.1 specific remark: 1,3. | ARINC designator Formal description Abbreviated description Expected path <br> terminator <br> Fly-over    <br> required    |  |  |
| :--- | :--- | :--- | :--- | :--- |
| [OSGO2M] | OSGOS | OSGOS | IF | N |
|  | To BOGRU at or above 3000 FT AMSL | BOGRU [A3000+] | TF | N |


| RUMER 3M | See paragraph 2.2.2.1 specific remark: 1. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| ARINC designator | Formal description | Abbreviated description | Expected path terminator | Fly-over required |
| [RUME3M] | RUMER | RUMER | IF | N |
|  | To SOPVI | SOPVI | TF | N |
|  | To OSGOS | OSGOS | TF | N |
|  | To BOGRU at or above 3000 FT AMSL | BOGRU [A3000+] | TF | N |

### 2.3 Initial and intermediate approach

### 2.3.1 Holding and entry procedures

Holding and entry procedures and the calculations of the associated protected areas are in accordance with PANS-OPS Volume II, part 4. Since separation is based on the calculated areas, compliance with these in-flight procedures is essential.

### 2.3.2 Approach instructions

Approach instructions are included in the inbound clearance issued on initial contact (see paragraph 2.2.1). Approach instructions will contain as applicable:
a. Additional instructions with respect to clearance limit, route and level.
b. Approach procedure.
c. Runway in use ${ }^{11}$.
d. EAT, if holding procedures are applied.
e. QNH.
f. Transition level ${ }^{1}$.
g. MET information ${ }^{1)}$
h. Runway condition ${ }^{11}$.
${ }^{1)}$ during the hours of ATIS broadcast (see EHBK AD 2.18), item may be omitted as far as it is included in the ATIS broadcast.

### 2.3.3 Conventional ILS approaches

Navigation in the initial and intermediate approach segments is primarily based on vectors provided by ATC. Conventional initial and intermediate approach procedures to RWY 03 are available and will be used during COM failure or at ATC discretion.

There is no ILS approach with conventional initial and intermediate approach segment available to RWY 21. Non-RNAV 1 traffic should expect vectors provided by ATC to the final approach published on the ILS $X$ chart AD 2.EHBK-IAC-21.1.

### 2.3.4 ILS approaches with RNAV 1 segments

### 2.3.4.1 Genera

Navigation in the initial and intermediate approach segments is primarily based on RNAV 1, followed by an ILS final approach. These can be initiated by ATC in order to reduce noise nuisance, fuel consumption, and to provide flexible and efficient ATC dispatch. The following ILS approaches with RNAV 1 segments are available:

- ILS X or LOC X RWY 03 (CDO);
- ILS X or LOC X RWY 21 (CDO).

These procedures are developed in accordance with ICAO PANS-OPS criteria with the following safeguards:

- The RNAV segments are situated above MSA/MFA/MRVA;
- ILS-LOC interception takes place in the intermediate segment;
- The operations are strictly radar monitored by ATC.


### 2.3.4.2 Approach clearances and altitudes

These approaches start at the IAF of the procedure and provide a lateral route onto the final approach. Altitudes and IAS will be as instructed by ATC. The approach clearance includes clearance to execute the ILS approach and intercept the glide path from the last instructed altitude. Further details are published on the relevant instrument approach charts.
2.3.4.3 Non-RNAV 1 equipped aircraft

Aircraft unable to meet the mentioned requirements shall react with the phraseology "UNABLE RNAV" if instructed to fly RNAV approach segments. These aircraft will be guided by vectors or rerouted via conventional navigation aids.

### 2.3.5 RNP approach

### 2.3.5.1 General

RNP approaches to LNAV, LNAV/VNAV and LPV minima are available for RWY 21.

### 2.3.5.2 Aircraft requirements

For the use of an RNP approach it is required that the operator holds an RNP APCH operations approval issued by their State of registry. The approval should be compliant with EASA PART-ACNS or equivalent.

### 2.3.5.3 Non-RNP approach equipped aircraft

Aircraft unable to meet the mentioned requirements shall react with the phraseology "UNABLE RNP (APCH)" if instructed to fly RNP approach procedures. These aircraft will be guided by vectors, rerouted via ILS approaches or via conventional navigation aids

### 2.4 Final approach

Note: an aircraft vectored to intercept final approach shall report to ATC when established on the final approach track (ICAO Doc 4444-ATM/501 (PANS-ATM) chapter 8.9.4.1).

### 2.4.1 Instrument approaches

In principle the final approach will be conducted on the ILS of the main landing runway. Instrument approaches to RWY 03 and 21 can be made with the assistance of ILS, LOC, NDB (RWY 03 only) or RNP (RWY 21 only).

### 2.4.2 ILS operations

### 2.4.2.1 Clearances

ATC will apply safeguards and procedures for ILS operations in relation to weather conditions to facilitate CAT I, CAT II and CAT III operations. However, it will be applied irrespective of the actual category of operations flown, which is on pilot's decision. As a consequence the approach clearance provided by ATC is based on traffic only. During the approach pilots will be informed of:

- any known unserviceabilities of aids and/or downgrading when applicable.
- significant changes in surface wind (speed and direction).
- changes in RVR.


### 2.4.2.2 Practice ILS approaches

Pilots who wish to practise ILS CAT II or CAT III approaches have to request this on initial contact with Beek APP using the phrase: "Request practice CAT II or CAT III approach".

### 2.4.3 Approach angle RWY 21

Due to possible roof top damage caused by aircraft on short final RWY 21, it is emphasized that no instrument and/or visual approach shall be made at an angle less than the ILS glide path or less than $5.2 \%$ (3.0 DEG) if no ILS is available.

### 2.4.4 Visual approach

To minimise noise nuisance, aircraft executing a visual approach shall intercept the final approach leg at an altitude of at least 1400 FT AMSL, unless residential areas can be avoided. Visual approaches during night hours are not allowed, see EHBK AD 2.20 paragraph 1.

### 2.4.5 Circling approach

For each available landing runway at Maastricht Aachen Airport a circling approach may be allowed or offered. For OCA (OCH) see relevant instrument approach chart AD 2.EHBK-IAC-xx.x.

### 2.5 Missed approach procedure

### 2.5.1 General

All turns shall be the shortest turn and in case of a $180^{\circ}$ turn that turn shall be to the left, unless otherwise specified below or instructed by ATC.

### 2.5.2 Missed approach procedure during instrument approach

See relevant instrument approach chart AD 2.EHBK-IAC-xx.x.

### 2.5.3 Missed approach procedure during visual approach

Turn to the intended landing runway, intercept the runway track MAG of that runway while:
a. When visual:

- remain visual and inform ATC or
b. When unable to remain visual:
- climb to 2000 FT AMSL and inform ATC.


### 2.5.4 Missed approach while circling to land

Note: This procedure is different from ICAO Doc 8168 Volume I (PANS-OPS).

1. Inform ATC immediately.
2. Start climbing and complete the turn to the intended landing runway (see figure).
3. Intercept the MAG track of that runway while climbing to 2000 FT AMSL.


### 2.6 Communication failure

### 2.6.1 General

The pilot of an IFR flight shall follow the general procedures for IFR flights (see ENR 1.3 paragraph "Communication Failure"). In addition, the below communication failure procedures apply for RNAV 1 traffic (paragraph 2.7.2) and non-RNAV 1 traffic (paragraph 2.7.3). See also paragraph 2.7.4 for missed approach procedures in case of communication failure.

### 2.6.1.1 All traffic via IAF or IF

Traffic cleared inbound an IAF or IF or cleared for an ILS or RNP APCH shall proceed to the IAF or IF and execute the approach procedure in accordance with the applicable instrument approach chart (see AD 2.EHBK-IAC-xx.x).

### 2.6.2 RNAV 1 traffic

### 2.6.2.1 Inbound clearance not received

1. Proceed direct to NOWIK and hold. Maintain the last cleared and acknowledged flight level.
2. Commence descent to 3000 FT AMSL (transition altitude) as near as possible to the ETO over NOWIK.
3. After reaching 3000 FT AMSL, leave NOWIK and proceed direct to the IAF or IF of an instrument approach procedure to the received and acknowledged runway, or to the landing runway according to ATIS (see AD 2.EHBK-IAC-xx.x).
4. Carry out the instrument approach procedure.

### 2.6.2.2 Inbound clearance received

### 2.6.2.2.1 Traffic via standard arrival route

1. Proceed direct to NOWIK. Maintain the last cleared and acknowledged flight level.
2. Commence descent to 3000 FT AMSL (transition altitude) at the EAT last received and acknowledged.
3. When no EAT has been received and acknowledged, commence descent to 3000 FT AMSL at or as near as possible to the ETO over NOWIK.
4. After reaching 3000 FT AMSL, leave NOWIK and proceed direct to the IAF of an instrument approach procedure to the assigned runway, or to the landing runway according to ATIS (see AD 2.EHBK-IAC-xx.x).
5. Carry out the instrument approach procedure.

### 2.6.2.2.2 Traffic outside standard arrival route

1. Proceed direct to NOWIK and hold.
2. Maintain the last cleared and acknowledged flight level.
3. Commence descent to 3000 FT AMSL (transition altitude), if applicable.
4. After reaching 3000 FT AMSL, leave NOWIK and proceed direct to the IAF of an instrument approach procedure to the assigned runway, or to the landing runway according to ATIS (see AD 2.EHBK-IAC-xx.x).
5. Carry out the instrument approach procedure.

### 2.6.2.2.3 Traffic vectored to final approach

1. Maintain the last cleared and acknowledged level or climb to 3000 FT AMSL (minimum flight altitude), if applicable.
2. Proceed to NOWIK.
3. When over NOWIK, descend in the holding to 3000 FT AMSL (transition altitude), if applicable.
4. After reaching 3000 FT AMSL, leave NOWIK and proceed direct to the IAF of an instrument approach procedure to the assigned runway or to the landing runway according to ATIS (see AD 2.EHBK-IAC-xx.x).
5. Carry out the instrument approach procedure.

### 2.6.3 Non-RNAV 1 traffic

### 2.6.3.1 Traffic vectored to final approach RWY 03

1. Maintain the last cleared and acknowledged level or MNM 3500 FT AMSL.
2. Proceed to MAS VOR/DME.
3. When over MAS VOR/DME descend, if applicable, to 3000 FT AMSL (transition altitude) while performing a left turn to intercept MAS R-215 and execute the instrument approach procedure again as depicted in AD 2.EHBK-IAC-03.1.

### 2.6.3.2 Traffic vectored to final approach RWY 21

1. Maintain the last cleared and acknowledged level or MNM 3000 FT AMSL.
2. Proceed to MAS VOR/DME.
3. When over MAS VOR/DME descend, if applicable, to 3000 FT AMSL (transition altitude) while intercepting MAS R-028 to DINAK (3.1 DME MAS).

4. At BOGRU, turn left to execute the instrument approach procedure again.

### 2.6.4 Missed approach procedure in case of communication failure

### 2.6.4.1 General

All turns shall be the shortest turn and in case of a $180^{\circ}$ turn that turn shall be to the left, unless otherwise specified below or instructed by ATC.

### 2.6.4.2 Missed approach procedure during instrument approach

See relevant instrument approach chart AD 2.EHBK-IAC-xx.x.

### 2.6.4.3 Missed approach procedure during instrument approach RWY 21 (non-RNAV 1 traffic)

1. Track $211^{\circ} \mathrm{MAG}$ and climb to 3000 FT AMSL.
2. At 3.4 BKN beyond the runway turn left track $130^{\circ}$ MAG.
3. When passing 2300 FT AMSL turn left to cross MAS VOR/DME at 3000 FT AMSL.
4. When over MAS VOR/DME intercept MAS R-028 to DINAK (3.1 DME MAS).
5. Turn left track 301${ }^{\circ}$ MAG to BOGRU (5.1 DME MAS).
6. At BOGRU turn left to execute the instrument approach procedure again.

### 2.6.4.4 Missed approach procedure during visual approach

Turn to the intended landing runway, intercept the runway track MAG of that runway while:
a. When visual:

- Remain visual and execute another circuit for that runway, or
b. When unable to remain visual:

1. Climb to 3000 FT AMSL.
2. When passing 2300 FT AMSL start the shortest climbing turn to NOWIK.
3. Cross NOWIK at 3000 FT AMSL and hold, or proceed direct to the IAF of an instrument approach procedure as depicted on the relevant instrument approach chart AD 2.EHBK-IAC-xx.x.
4. Carry out the instrument approach procedure.

### 2.6.4.5 Missed approach while circling to land

Note: This procedure is different from ICAO Doc 8168 Volume I (PANS-OPS).

1. Start climbing and complete the turn to the intended landing runway (see figure).
2. Intercept the MAG track of that runway while climbing to 3000 FT AMSL.
3. When passing 2300 FT AMSL start the shortest climbing turn to NOWIK.
4. Cross NOWIK at 3000 FT AMSL and hold or execute the instrument approach procedure again.


### 2.7 Instrument approach descriptions

### 2.7.1 Instrument approach segments

Note: recommended navaid for selection of MAG station declination only.
Note: for positions of BK waypoints see relevant instrument approach charts.

### 2.7.1.1 RWY 03

### 2.7.1.1.1 ILS $X$ approach RWY 03 (CDO)

| Serial <br> number | Path <br> descriptor | WPT ident | Fly- <br> over | Course/Track <br> ${ }^{\circ}$ MAG $/\left({ }^{\circ} \mathbf{T}\right)$ | Recom. <br> navaid | Dist. <br> $($ NM $)$ | Turn | Altitude <br> $($ (FT / FL) | Speed <br> (KIAS) | VPA ( ${ }^{\circ}$ )/ <br> TCH (FT) | NAV spe- <br> cification |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 001 | IF | ANZUL | - | - | - | - | - | +3500 | - | - | - |
| 002 | TF | BERIR | - | $212 /(213.9)$ | - | 5.1 | - | +3000 | - | - | RNAV 1 |
| 003 | TF | BK302 | - | $303 /(304.8)$ | - | 5.0 | - | - | -210 | - | RNAV 1 |
| 004 | CF | BK303 | - | $031 /(032.6)$ | BKZ | 1.6 | - | +1800 | - | - | - |
| 005 | CF | THR 03 | Y | $031 /(032.6)$ | BKZ | 4.4 | - | - | - | $-3.00 / 50$ | - |
| 006 | FM | - | - | $031 /(032.6)$ | MAS | - | - | $@ 2000$ | - | - | - |

### 2.7.1.2 RWY 21

### 2.7.1.2.1 ILS X approach RWY 21 (CDO)

| Serial <br> number | Path <br> descriptor | WPT ident | Fly- <br> over | Course/Track <br> ${ }^{\circ} \mathbf{M A G} /\left({ }^{\circ} \mathbf{T}\right)$ | Recom. <br> navaid | Dist. <br> $(\mathbf{N M})$ | Turn | Altitude <br> (FT / FL) | Speed <br> (KIAS) | VPA ( $\left.{ }^{\circ}\right) /$ <br> TCH (FT) | NAV spe- <br> cification |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 001 | IF | DINAK | - | - | - | - | - | +4000 | -185 | - | - |
| 002 | CF | BOGRU | - | $301 /(302.8)$ | - | 3.9 | - | +3000 | -185 | - | RNAV 1 |
| 003 | CF | BK306 | - | $211 /(212.7)$ | BKN | 3.0 | - | +2500 | - | - | - |
| 004 | CF | THR 21 | Y | $211 /(212.7)$ | BKN | 6.5 | - | - | - | $-3.00 / 50$ | - |
| 005 | FM | - | - | $211 /(212.7)$ | MAS | - | - | $@ 2000$ | - | - | - |

### 2.7.1.2.2 RNP approach RWY 21

| Serial <br> number | Path <br> descriptor | WPT ident | Fly- <br> over | Course/Track <br> ${ }^{\circ}$ MAG $/\left({ }^{\circ} \mathbf{T}\right)$ | Recom. <br> navaid | Dist. <br> $(\mathbf{N M})$ | Turn | Altitude <br> $($ (FT $/$ FL) | Speed <br> (KIAS) | VPA ( $\left.{ }^{\circ}\right) /$ <br> TCH (FT) | NAV spe- <br> cification |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 001 | IF | DINAK | - | - | - | - | - | +4000 | -185 | - | - |
| 002 | TF | BOGRU | - | $301 /(302.8)$ | - | 3.9 | - | +3000 | -185 | - | RNP APCH |
| 003 | TF | BK201 | - | $211 /(212.7)$ | - | 3.9 | - | +2200 | - | - | RNP APCH |
| 004 | TF | THR21 | Y | $211 /(212.7)$ | - | 5.6 | - | - | - | $-3.00 / 50$ | RNP APCH |
| 005 | TF | BK202 | - | $211 /(212.6)$ | - | 5.8 | - | $@ 2000$ | - | - | RNP APCH |

Input data

| Operation Type | 0 |
| :--- | :--- |
| SBAS Provider | $1 \quad$ (EGNOS) |
| Airport Identifier | 3HBK |
| Runway | 21 |
| Runway Letter | 0 (None) |
| Approach Performance Designator | 0 |
| Route Indicator |  |
| Reference Path Data Selector | 321 A |
| Reference Path Identifier | 505507.9700 N |
| LTP/FTP Latitude | 0054638.3100 E |
| LTP/FTP Longitude | 158.8 |
| LTP/FTP Ellipsoidal Height (metres) | 505359.8345 N |
| FPAP Latitude | -68.1355 |
| Delta FPAP Latitude (seconds) | 0054529.3235 E |
| FPAP Longitude | -68.9865 |
| Delta FPAP Longitude (seconds) | 50.0 |
| Threshold Crossing Height | 0 (feet) |
| TCH Units Selector | 3.00 |
| Glidepath Angle (degrees) | 105.00 |
| Course Width (metres) | 0 |
| Length Offset (metres) | 40.0 |
| HAL (metres) | 35.0 |
| VAL (metres) |  |

Output data

| Data Block | $\begin{array}{llllllllll} 10 & 0 B & 02 & 08 & 05 & 15 & 00 & 00 & 01 & 31 \\ 32 & 05 & 84 & 1 D & \text { DA } & 15 & \text { CC } & \text { B6 } & 7 A & 02 \\ 34 & 1 A & \text { B1 } & \text { EB } & \text { FD } & 0 B & \text { E5 } & \text { FD } & \text { F4 } & 01 \\ 2 C & 01 & 64 & 00 & C 8 & \text { AF } & 27 & 41 & 6 E & 65 \end{array}$ |
| :---: | :---: |
| Calculated CRC Value | 27416E65 |

## Required Additional Data

| ICAO Code | EH |
| :--- | :--- |
| LTP/FTP Orthometric Height (metres) | 112.9 |

## 3 LOW VISIBILITY PROCEDURES

During periods of limited visibility the overall ATC capacity is reduced. To guarantee aircraft safety and optimal use of ATC capacity, Maastricht Aachen Airport uses ATC low visibility procedures. These procedures are based on ICAO DOC 9476/1 (Surface Movement Guidance and Control Manual) and ECAC DOC 17 (Ground operations in limited visibility conditions).

The ATC low visibility procedures are categorised in four phases (A, B, C, and D), that are based on visibility or RVR values and ceiling. The ATC low visibility procedures become effective when the general visibility equals or drops below 2000 M or when the lowest RVR equals or drops below 1500 M and/or ceiling is equal to or less than 300 FT .

First, the minimum separation for arriving aircraft and the departure interval will be increased. Next, runway use will be restricted.
Pilots should not request start-up permission unless the RVR values for the take-off runway are above the take-off limits for the flight. Pilots should be informed about the RVR minima that apply to their flight, so that they can readily respond to requests about these minima.
If the runway stop bars are out of service, additional restrictions apply.
During LVP all runway entries and runway crossings are safeguarded by switchable (remote controlled) or fixed stop bars (see AD 2.EHBK-ADC). Crossing of activated stop bars is prohibited. Traffic may proceed only after ATC clearance and when the stop bar lights are switched off (ICAO Annex 2).

| Phase | Conditions | Procedure |
| :--- | :--- | :--- |
| A | $550 \mathrm{M}<=$ VIS $<=2000 \mathrm{M}$ <br> (or $550 \mathrm{M}<=$ lowest $\mathrm{RVR}<=1500$ <br> M) <br> and/or $200 \mathrm{FT}<=$ ceiling $<=300 \mathrm{FT}$ | No conditional clearances. No intersection take-offs. |
| B | Lowest RVR $<550 \mathrm{M}$ <br> and/or ceiling $<200 \mathrm{FT}$ |  |
| C | Lowest RVR $<350 \mathrm{M}$ | One aircraft movement allowed at a time. |
| D | Lowest $\mathrm{RVR}<200 \mathrm{M}$ |  |

## 4 VFR FLIGHT PROCEDURES AND REGULATIONS

Note: for visual approach chart and visual traffic circuits see AD 2.EHBK-VAC. 1 and AD 2.EHBK-VAC. 2

### 4.1 General

1. All VFR flights within the Maastricht CTR and the Maastricht TMA 1 shall submit a flight plan (see ENR 1.10).
2. Flying within the Maastricht CTR and the Maastricht TMA 1 is restricted to aircraft maintaining two-way radio communication with ATC, unless prior permission from ATC has been obtained. Such permission will only be given in extraordinary cases.
3. Prior permission is required from Beek APP for all VFR operations in Maastricht TMA 1.
4. Prior permission is required from Beek TWR for all VFR operations in the Maastricht CTR.
5. VFR flights to and from Maastricht Aachen airport shall be carried out via the approach/departure routes unless otherwise instructed by ATC or when approved by ATC on pilot's request.
6. Noise abatement has been included in the procedures.
7. Built-up areas shall be avoided as much as possible.
8. Marked areas shall be avoided.
9. Schinveld ATZ is situated within the Maastricht CTR, for detailed information see ENR 5.1.
10. Schinveld sector B (situated within the Maastricht CTR) will during set time period subject to local agreement be used by motorised local participants exempted from the mandatory transponder usage. VFR flights within the CTR may be instructed to stay outside the Schinveld sector B.
11.IFR areas: VFR flights within the CTR may be instructed by ATC to stay clear of the specified IFR area. The IFR areas are indicated on the chart.
12.VFR traffic instructed by ATC to squawk a specific SSR transponder code, shall maintain this squawk within the lateral limits of Maastricht TMA 1.
13.VFR traffic following the Albert canal shall respect the Maastricht CTR boundary and contact Beek TWR for an entry clearance.
14.Under the part of the Liège TMA Two in the Amsterdam FIR, FIS is provided by Brussels Information 126.900.
15.VFR reporting points positions:

| VFR reporting point | Position |
| :--- | :--- |
| BRAVO | 510327 N 0054831E |
| GOLF | 505526 N 0054425 E |
| HOTEL | 505301 N 0055235 E |
| INDIA | 505339 N 0054222 E |
| PAPA | 504855 N 0054129 E |
| ROMEO | 505308 N 0054625 E |
| SIERRA | 505816 N 0054500E |
| UNIFORM | 505237 N 0055724 E |
| VICTOR | 505133 N 0053831 E |
| ZULU | 504638 N 0054400 E |

Note: pilots operating outside the CTR should avoid crossing the final approach area of the instrument RWY 21 at altitudes at or near the initial approach altitude (3000 FT AMSL).

Note: pilots are urgently requested not to execute VFR flights in the vicinity of the published instrument arrival and departure routes within the Maastricht TMA 1, which are published in EHBK AD 2.24.

### 4.2 Visual departure procedures for light aircraft

1. Pilots must have obtained start-up clearance from ATC before starting engines. A request for start-up shall be made to Beek Delivery; clearance for start-up will either be issued immediately or at a specified time depending on traffic. A request for start-up shall include:

- aircraft identification and type (e.g. PHGON Cessna 172).
- position (e.g. hangar 1).
- ATIS information (e.g. information "P").
- flight rules (e.g. VFR).
- destination (e.g. Rotterdam).
- request start-up (request start-up).

2. Taxiing on taxiways: pilots of aircraft intending to taxi on the taxiways shall obtain a clearance from Beek TWR.
3. Taxiing on the apron: aircraft not maintaining two-way communication and intending to taxi on the apron must obtain prior permission from the airport authority.
4. Departing aircraft shall climb as soon as possible and do not turn before passing the departure end of the runway.
5. Leave the CTR via an indicated route at 1300 FT AMSL.

RWY 03 BRAVO Departure After take-off turn left towards the canal and follow the VFR route to SIERRA and BRAVO.
ZULU Departure After take-off turn left and follow the VFR route via GOLF, INDIA, VICTOR, PAPA to ZULU. Do not report over GOLF unless otherwise instructed by ATC.
UNIFORM Departure After take-off turn right to follow the high tension line to HOTEL, then continue the route to UNIFORM.
RWY 21 BRAVO Departure After take-off turn right and follow the VFR route via GOLF to BRAVO. Do not report over GOLF unless otherwise instructed by ATC.
ZULU Departure After take-off turn right towards the canal and follow the VFR route via INDIA, VICTOR, PAPA to ZULU.
UNIFORM Departure After take-off turn left and follow the VFR route via ROMEO to UNIFORM. Do not report over ROMEO unless otherwise instructed by ATC.

### 4.3 Visual approach procedures for light aircraft

1. Contact Beek TWR 2 minutes before reaching the controlled airspace boundary, for permission to enter Maastricht TMA 1 and CTR. Note: Maastricht TMA 1 airspace class D; two-way radio contact and entry clearance required.
2. Enter the CTR at 1800 FT AMSL and maintain this altitude, proceed via an indicated VFR route (BRAVO, UNIFORM or ZULU) unless otherwise instructed.
3. Pilots may be instructed to hold over the points SIERRA, HOTEL or INDIA.
4. Join the circuit as instructed by ATC.
5. In case of a missed approach climb straight ahead to 1300 FT AMSL and inform ATC.

### 4.4 Visual traffic circuits

### 4.4.1 Visual traffic circuits for single-engine propeller aircraft (MTOM < 2000 KG)

1. RWY 03: righthand circuit at 1300 FT AMSL.
2. RWY 21: lefthand circuit at 1300 FT AMSL.

Note: western traffic circuit must be avoided as much as possible due to noise abatement; for traffic reasons pilots may be instructed to fly a western circuit.

### 4.4.2 Visual traffic circuits for small jets (MTOM < 5700 KG) and multi-engine propeller aircraft

1. RWY 03: righthand circuit at 1800 FT AMSL.
2. RWY 21: lefthand circuit at 1800 FT AMSL.

### 4.5 Communication failure procedures

### 4.5.1 General

Select SSR code 7600.

### 4.5.2 VFR outbound

In case of communication failure adhere to the departure instructions if the departure instructions contain a clearance limit in the CTR, act in accordance with paragraph 4.5.4.

### 4.5.3 VFR inbound

### 4.5.3.1 Via BRAVO and ZULU Arrival

a. In case of communication failure before joining the circuit, leave the CTR according to the BRAVO or ZULU Departure and divert to an appropriate aerodrome.
b. In case of communication failure over or after a position from where to join the circuit (this is past the compulsory reporting point GOLF), execute a circuit for the last received and acknowledged runway as short as practicable. Make a full stop landing and vacate as soon as possible. In case of go-around execute a similar circuit (be aware of the fact that your flight path could interfere with the flight path of other aerodrome traffic).

### 4.5.3.2 Via UNIFORM Arrival

a. In case of communication failure before joining the circuit, leave the CTR according to the UNIFORM Departure and divert to an appropriate aerodrome.
b. In case of communication failure over or after a position from where to join the circuit (this is past compulsory reporting point ROMEO), act in accordance with paragraph 4.5.3.1, item b.

### 4.5.3.3 Via a different route to the aerodrome

a. In case of communication failure before joining the circuit, act in accordance with paragraph 4.5.4.
b. In case of communication failure over or after a position from where to join the circuit, act in accordance with paragraph 4.5.3.1, item b.

### 4.5.4 VFR crossing the CTR

In case of communication failure leave the CTR via the shortest route, maintain altitude until outside the CTR, do not cross runway centre lines or the IFR areas of RWYs 03 and 21 and proceed to an appropriate aerodrome.

## EHBK AD 2.23 ADDITIONAL INFORMATION

## 1 CAUTIONS AND ADDITIONAL INFORMATION

1. Pilots shall be aware that in the vicinity of the aerodrome ATC gives priority to:

- aircraft in state of an emergency;
- hospital and police aircraft with the status priority or scramble;
- aircraft engaged in SAR operations.

2. Bird-scare patrols are active MON-SUN: 0500-2200 (0400-2100) and use various equipment, including remote control gas cannons, flare shell crackers, alternating bird dispersal guns and amplified cries of distress.
3. When lightning discharges are observed in the vicinity of the airport, the airport authority officer (AAO) will announce that all ground handling and re-fuelling operations are prohibited until further notice. When it is safe to do so, the AAO will declare that ground handling and re-fuelling operations can be resumed.
4. High visibility clothing is mandatory on all aprons.

## 2 DETERMINATION OF DATUM LINE FOR TAKE-OFF

### 2.1 Determination of datum line for start position take-off RWY 03

The datum line for take-off RWY 03 is located 150 M before threshold RWY 03. A dashed white line is placed 65 M in front of datum line to indicate starting position for take-off RWY 03. Aircraft shall not apply take-off thrust before passing the datum line.


### 2.2 Determination of datum line for intersection take-off

The datum line from which the reduced runway declared distances for take-off should be determined is defined by the intersection of the downwind edge of the specific TWY with the runway edge. The loss of runway length due to alignment of the aircraft prior to take-off shall be taken into account by the operators for the calculation of the aircraft's take-off mass (Annex 6, Part 1, paragraph 5.2.8).


## 3 RUNWAY TURN PAD

There is a runway turn pad situated at the runway extremity of RWY 21.
The turn pad is marked by a yellow guidance line, unidirectional green centre line lights and blue edge lights outside the edge of the turn pad. In the area of the turn pad, the edge of the runway is equipped with inset edge lights.

## 4 GROUND HANDLING COMPANIES

1. Commercial passengers and cargo

| Post: | Maastricht Aachen Airport B.V. <br> Handling Department <br>  <br>  <br> Vliegveldweg 90 |
| :--- | :--- |
|  | 6199 AD Maastricht Airport |
| Tel: |  |

## EHBK AD 2.24 CHARTS RELATED TO AN AERODROME

| Type of chart | Page |
| :--- | :--- |
| Aerodrome chart | AD 2.EHBK-ADC |
| Aircraft parking / docking chart | AD 2.EHBK-APDC |
| Aerodrome obstacle chart type A RWY 03/21 | AD 2.EHBK-AOC-03-21 |
| Precision approach terrain chart RWY 21 | AD 2.EHBK-PATC-21 |
| Standard instrument departure chart | AD 2.EHBK-SID-OVERVIEW |
| Standard instrument departure chart RWY 03 | AD 2.EHBK-SID-03 |
| Standard instrument departure chart RWY 21 | AD 2.EHBK-SID-21 |
| Standard arrival chart CDO RWY 03 | AD 2.EHBK-STAR.1 |
| Standard arrival chart CDO RWY 21 | AD 2.EHBK-STAR.2 |
| ATC surveillance minimum altitude chart | AD 2.EHBK-SMAC |
| Instrument approach chart ILS Z or LOC Z RWY 03 | AD 2.EHBK-IAC-03.1 |
| Instrument approach chart ILS Y or LOC Y RWY 03 | AD 2.EHBK-IAC-03.2 |
| Instrument approach chart CDO approaches to ILS X or LOC X RWY 03 | AD 2.EHBK-IAC-03.3 |
| Instrument approach chart NDB RWY 03 | AD 2.EHBK-IAC-21.1 |
| Instrument approach chart CDO approaches to ILS X CAT II \& III or | AD 2.EHBK-IAC-21.2 |
| LOC X RWY 21 | AD 2.EHBK-VAC.1 |
| Instrument approach chart CDO approaches to RNP RWY 21 | AD 2.EHBK-VAC.2 |
| Visual approach chart/VFR procedures |  |
| Visual approach chart VFR traffic circuits |  |






HORIZONTAL SCALE 1:3500














[^0]:    All obstacles are marked and lighted day and night. For obstacles in take-off area see AD 2.EHBK-AOC-03-21.

