

GEN 4.2 AIR NAVIGATION SERVICES CHARGES**1 COLLECTION OF CHARGES FOR AIR TRAFFIC CONTROL OF EN ROUTE TRAFFIC**

1. Pursuant to the Air Traffic Act (Stb. 1992, 698) the operator of an aircraft, in the sense of the Multilateral Agreement on en route charges, done in Brussels, February 12th, 1981, owes a charge for the air traffic services in the Amsterdam FIR.
2. In an administrative order, rules have been laid down regarding the calculation of the charges, as well as the sort of currency, and the term of payment for the charges.
3. The EUROCONTROL organisation collects the charges and pays them off to Air Traffic Control.
4. The charge is calculated in line with the European Charges Regulation nr. 2019/317. The amount of the charges has to be paid in Euros; for the year 2025 the standard charge is **€136.99**.

Users registered in the Netherlands may pay the amount of the charges in Euros into an EUROCONTROL bank account in the Netherlands.

5. The following flights are exempted from charges:
 - a. Flights performed exclusively for the transport, on official mission, of the reigning Monarch and his immediate family, Head of State, Heads of Government and Government Ministers, in all cases this must be substantiated by the appropriate status indicator on the flight plan.
 - b. Military flights performed by military aircraft.
 - c. Mixed VFR/IFR flights where they are performed exclusively under VFR and VFR flights.
 - d. Flights performed by aircraft of which the maximum take-off mass authorised is less than two metric tons.
 - e. Custom and police flights.
 - f. Search and rescue flights.
 - g. Training flights performed exclusively for the purpose of obtaining a licence or a rating in the case of cockpit flight crew, where this is substantiated by an appropriate remark on the flight plan; flights must be performed solely within the Dutch airspace; flights must not serve for the transport of passengers and/or cargo, nor for positioning or ferrying the aircraft.
 - h. Flights performed exclusively for the purpose of checking or testing equipment used or intended to be used as ground aids to air navigation, excluding positioning flights by the aircraft concerned.
 - i. Flights terminating at the airport from which the aircraft has taken off and during which no intermediate landing has been made.
 - j. Humanitarian flights authorised by the appropriate competent body.
6. Further information concerning the Route Charge System may be obtained from:

Post: EUROCONTROL
CENTRAL ROUTE CHARGES OFFICE
Rue de la Fusée 96
B-1130 Brussels
BELGIUM

Tel: +32 2 729 9011
Fax: +32 2 729 9044

2 CHARGES FOR SERVICES RENDERED BY ATC UNITS**2.1 Local air traffic control services****2.1.1 General**

The charge for local air traffic control services has been determined by the Ministry of Infrastructure and Water Management.

The charge is calculated in line with the European Charges Regulation nr. 2019/317 on the basis of service units.

The charge is due for take-offs from:

- AMSTERDAM/Schiphol (EHAM)
- GRONINGEN/Eelde (EHGG)
- MAASTRICHT/Maastricht Aachen (EBHK)
- ROTTERDAM/Rotterdam (EHRD)

The following flights are (partly) exempted from charges:

- Flights performed exclusively for the transport, on official mission, of the reigning Monarch and his immediate family, Head of State, Heads of Government and Government Ministers, in all cases this must be substantiated by the appropriate status indicator on the flight plan.
- Search and rescue flights.
- Humanitarian flights authorised by the appropriate competent body.
- For training flights at the airports GRONINGEN/Eelde, MAASTRICHT/Maastricht Aachen and ROTTERDAM/Rotterdam 4 touch-and-go's shall be calculated as 1 take-off.

The invoice shall be calculated by EUROCONTROL Central Route Charges Office on behalf of LVNL.

2.1.2 Charge calculation

For the year 2025 the service unit rate is **€292.22**.

The number of service units is calculated with the formula:

$$\text{Number of service units} = (\text{MTOM} / 50)^{0.7}$$

MTOM is the certified maximum take-off weight in metric tons (rounded off to 1 decimal). The outcome of the calculation is rounded off to 2 decimals.

The charge is calculated with the formula:

Charge = number of service units x service unit rate

2.1.3 Calculation example

MTOM = 63.7 metric tons

Number of service units = $(63.7 / 50)^{0.7} = 1.18$

Charge = $1.18 \times \text{€}292.22 = \text{€}344.82$

2.2 North Sea Area Amsterdam

The charge for civil helicopter flights for the use of the North Sea Area Amsterdam has been determined by the Ministry of Infrastructure and Water Management and is for the year 2025 per flight **€369.65**.

3 INTEREST

The interest rate for late payment is 13.79%.

3.2.5.2 Permissions

Permissions to enter military CTRs can be obtained as follows:

- En-route by radio (for the appropriate COM channels see EHEH AD 2.18, EHKA AD 2.18 or MIL CTRs ENR 2.1).
- Before departure, within the operational hours of the MIL aerodrome (see AD 1.1): telephone MIL aerodrome concerned.

Note: on SAT, SUN and legal holidays and MON-FRI daily outside operational hours flying activities on or in the vicinity of the military aerodromes have to be taken into account.

Note: to facilitate glider flying within Deelen CTR at the glider site Terlet the following areas may be activated:

Name and lateral limits	Upper limit Lower limit	Remarks
1	2	3
Terlet 1 520518N 0055603E - 520447N 0055854E - 520223N 0055820E - 520217N 0055505E - 520258N 0055514E - 520341N 0055354E - 520407N 0055409E - 520518N 0055603E.	<u>925 FT AMSL</u> GND	Intensive glider flying can be expected when the area is activated (daily during UDP).
Terlet 2 520341N 0055354E - 521021N 0060046E - 520813N 0055942E - along clockwise arc (radius 6.5 NM, centre 520335N 0055219E) - 515712N 0055414E - 515504N 0055311E - 520341N 0055354E.	<u>3000 FT AMSL</u> <u>925 FT AMSL</u>	Intensive glider flying can be expected when the area is activated (daily during UDP).
Terlet 3 521053N 0055755E - 521021N 0060046E - 520813N 0055942E - along clockwise arc (radius 6.5 NM, centre 520335N 0055219E) - 515712N 0055414E - 515504N 0055311E - 515546N 0054930E - 521053N 0055755E.	<u>3000 FT AMSL</u> <u>925 FT AMSL</u>	Intensive glider flying can be expected when the area is activated (daily during UDP).

3.2.5.3 ATC clearances for crossing traffic

Crossing traffic shall request ATC clearance 2 MIN prior to entering the CTR, by means of "request crossing".

A request for crossing clearance for a CTR shall contain:

- aircraft identification and type
- flight rules
- departure- and destination aerodrome
- position
- request for crossing clearance including route¹⁾ and altitude.

¹⁾ VFR crossing of a CTR shall preferably take place along a route where visual navigation is possible by conspicuous land marks or by continuous route guidance such as: railroads, canals and highways. If such route will be used, it shall be mentioned in the request for crossing clearance.

Note: VFR flights within a CTR may be instructed by ATC to stay clear of specified IFR areas. These areas are indicated on the appropriate charts.

3.2.5.4 VFR flights with radar assistance

Pilots may be instructed by TWR to contact APP for radar assistance. It is however the responsibility of the pilot to maintain at all times visual reference to the ground and keep clear of obstacles. Pilots shall inform the radar controllers if compliance with the above entails a change of heading or altitude.

3.2.5.5 Short approach patterns

For air traffic control purposes or on request TWR may instruct to execute a short VFR approach pattern. These patterns, threshold base leg and midrunway base leg, are established to avoid traffic operation on other runways to expedite traffic and for noise abatement purposes.

3.2.5.5.1 Threshold base leg

An approach pattern of which the base leg is flown at 90° to the runway centre line exactly opposite to the threshold.

3.2.5.5.2 Midrunway base leg

An approach pattern of which the base leg is flown at 90° to the runway centre line and opposite to the approximate middle of the runway.

3.2.5.5.3 VFR missed approach procedure

In case of a missed approach the pilot shall inform ATC immediately while climbing to circuit altitude.

4 VFR FLIGHTS BELOW THE SCHIPHOL TMAs

4.1 VFR flights in the vicinity of AMSTERDAM/Schiphol Airport

Pilots of VFR flights in the vicinity of AMSTERDAM/Schiphol Airport must be aware of the following:

- VFR flights are not permitted in the Schiphol TMAs 1 to 6.
- In the Schiphol TMAs 7 and 8 VFR flights are only permitted with an ATC clearance.
- The lower limit of the Schiphol TMA 1 is 1500 FT AMSL.
- The lower limit of the Schiphol TMAs 7 and 8 is 1300 FT AMSL.
- IFR flights approach AMSTERDAM/Schiphol Airport at 2000 FT AMSL on the extended runway centre line outside the Schiphol CTR and descend through 2000 FT AMSL approximately at the Schiphol CTR boundary.

Considering the above, VFR pilots are highly recommended to gather up-to-date information regarding the runways in use at AMSTERDAM/Schiphol Airport, to stay clear of the IFR traffic on intermediate and final approach.

Furthermore, IFR traffic may be anywhere within the CTR at altitudes below 2000 FT AMSL during radar vectoring for line up final approach to one of the runways at AMSTERDAM/Schiphol Airport; these routes may be situated very close to the CTR boundary. For that reason, the execution of VFR flights in the vicinity of the Schiphol CTR should be avoided.

When flying in class G airspace it is recommended to keep your distance from controlled airspace. Therefore, pilots of VFR flights can comply with TAKE 2:

- Remain 200 FT from the lower limit of controlled airspace, and/or;
- Remain 2 NM from the edge of any controlled airspace.

Complying to these distances will prevent an airspace infringement, but also reduce the risk of a TCAS RA and wake turbulence.

4.2 TMZ Schiphol Area

The purpose of the TMZ Schiphol Area, situated below the Schiphol TMA 1 between 500 and 1500 FT AMSL, is to minimize the risk and reduce the duration and severity of airspace infringements in the Schiphol TMA and CTR. In case of a (potential) airspace infringement, it is important that Amsterdam FIC can reach the pilot immediately.

Therefore, in the TMZ Schiphol Area it is mandatory for pilots of VFR flights to:

- maintain a listening watch on channel 124.300 (Amsterdam Information), and
- set the transponder to the frequency monitoring code 7020 to indicate that the listening watch is applied.

To receive flight information service (FIS), the pilot shall establish two-way radio communication with Amsterdam FIC. The transponder code remains 7020. When leaving the TMZ Schiphol Area the pilot shall change the transponder to the appropriate SSR code.

It remains the sole responsibility of a pilot to avoid infringements of controlled airspaces.

Pilots of the following flights are exempted from the regulations in the TMZ Schiphol Area:

- State flights with dedicated transponder codes;
- Gliders, paragliders, hanggliders, paramotors and model aircraft;
- VFR flights on the MIKE Arrival to Lelystad Airport (EHLE);
- Local VFR circuit traffic at Hilversum Airport (EHHV);
- For flights to and from Middenmeer (EHMM) local agreements have been made between LVNL and Middenmeer Airport.

4.3 VFR flights in the Schiphol CTR

Entering the Schiphol CTR requires a clearance from ATC. Clearance will depend on the location of the intended VFR flight, meteorological circumstances, traffic density and ATC workload. Due to operational capacity limits, VFR flights without an operational purpose are urgently requested to avoid the Schiphol CTR and fly below Schiphol TMA 7 or 8 (at or below 1300 FT AMSL) when crossing the TMZ Schiphol Area in an easterly or westerly direction. Likewise, to cross the TMZ Schiphol Area in a northerly or southerly direction, follow either the coastline or fly east of point VICTOR to avoid crossing the Schiphol CTR.

Finally, it is recommended to avoid the VFR entry point (VICTOR) for the Schiphol CTR as much as possible, since VFR traffic will be holding in the vicinity of this point whenever there is a large volume of traffic.

5 VFR FLIGHTS IN THE NORTH SEA AREA AMSTERDAM AND NORTH SEA AREA V

For VFR flights in the North Sea area Amsterdam and North Sea area V (see ENR 2.2), radio communication with Amsterdam Information is required.

6 VFR FLIGHT LEVELS (SERA Appendix 3)

VFR flights operated in level cruising flight above 3500 FT AMSL shall be conducted at a flight level appropriate to the track as specified in the table of cruising levels (see ENR 1.7), except when otherwise indicated in ATC clearances.

7 FLIGHT PLANNING FOR VFR FLIGHTS

Flight plans for VFR flight shall be filed and submitted in accordance with the rules in ENR 1.10.

8 RECOMMENDATIONS

8.1 VFR flights in TMAs

8.1.1 General

In those TMAs where VFR flights without an ATC clearance are permitted, pilots are encouraged to establish two-way radio communication with the appropriate APP/TWR unit. This will enable ATC to be better informed of all traffic, and, in turn, for pilots to receive more complete information on essential traffic.

Name Lateral limits Vertical limits Class of airspace	Unit providing service	Call sign Languages Area and conditions of use Hours of service	Frequency/ purpose	Remarks
1	2	3	4	5
WORMS North area 505518N 0060331E - along the Dutch-German border - 505442N 0060504E - 505442N 0060343E - 505518N 0060331E. <u>FL 195</u> FL 095 Class of airspace: B <u>FL 095</u> 3000 FT AMSL Class of airspace: D	Langen ACC	Langen Radar En H24	119.110	NIL
WORMS South area 505442N 0060343E - 505442N 0060504E - along the Dutch-German border - 505140N 0060441E - 505442N 0060343E. <u>FL 195</u> FL 095 Class of airspace: B <u>FL 095</u> 1500 FT AMSL Class of airspace: D	Langen ACC	Langen Radar En H24	119.110	NIL
Zeeland A area 512627N 0030740E - 512356N 0030600E - 512223N 0032147E - along the Dutch-Belgian border - 511821N 0033524E - 512014N 0033627E - 512627N 0030740E. <u>FL 055</u> 3500 FT AMSL Class of airspace: E	Oostende APP	Oostende Approach EN H24	120.600	NIL
Zeeland B area 512014N 0033627E - 511436N 0040157E - along the Dutch-Belgian border - 511821N 0033524E - 512014N 0033627E. <u>FL 055</u> 3500 FT AMSL Class of airspace: E	Brussels ACC	Brussels Control En H24	128.805	NIL

1.2 ATS IN AREAS OUTSIDE AMSTERDAM FIR DELEGATED TO THE NETHERLANDS

Name Lateral limits Vertical limits Class of airspace	Unit providing service	Call sign Languages Area and conditions of use Hours of service	Frequency/purpose	Remarks
1	2	3	4	5
Eben area The part of the Brussels FIR enclosed by a line linking the following coordinates: 504935N 0053857E - along Dutch-Belgium border - 504724N 0054146E - 504851N 0053815E - 504935N 0053857E. <u>FL 095</u> 3000 FT AMSL Class of airspace: D <u>3000 FT AMSL</u> GND Class of airspace: C	Beek TWR/APP	Beek Tower En H24 Beek Approach En H24	119.480 PRI 362.875 119.705 Regional Guard 123.980 TAR 340.850 120.205	
GODOS area That part of the London FIR enclosed by a line linking the following coordinates: 534148N 0030000E - 533411N 0034222E - 531029N 0032158E - 531441N 0031102E - 531608N 0030000E - 534148N 0030000E. <u>FL 245</u> FL 195 Class of airspace: C <u>FL 195</u> FL 175 Class of airspace: A	Amsterdam ACC	Amsterdam Radar En H24	123.705	
Kleve HI area The part of the Langen FIR enclosed by a line linking the following coordinates: 514200N 0060142E - 514941N 0062427E - along Dutch-German border - 514200N 0060142E. <u>FL 205</u> FL 145 Class of airspace: C	Amsterdam ACC	Amsterdam Radar En H24	124.880	

Name Lateral limits Vertical limits Class of airspace	Unit providing service	Call sign Languages Area and conditions of use Hours of service	Frequency/ purpose	Remarks
1	2	3	4	5
Kleve Medium area The part of the Langen FIR enclosed by a line linking the following coordinates: 514200N 0060142E - 514941N 0062427E - along Dutch-German border - 514200N 0060142E. <u>FL 145</u> FL 100 Class of airspace: C <u>FL 100</u> FL 095 Class of airspace: E	Amsterdam ACC	Amsterdam Radar En H24	124.880	When NAPRO Low area is active, ATS is provided by MIL-ATCC Schiphol.
	MILATCC Schiphol	Dutch MIL En H24	128.355	
		Dutch MIL Info En H24	132.350	
Kleve LO The part of the Langen FIR enclosed by a line linking the coordinates: 514200N 0060142E - 514941N 0062427E - along Dutch-German border - 514200N 0060142E. <u>FL 095</u> 2500 FT AMSL Class of airspace: E	MILATCC Schiphol	Dutch MIL En H24	128.355	
		Dutch MIL Info En H24	132.350	
Maastricht CTR in Brussels FIR For lateral limits see AIP Belgium. <u>3000 FT AMSL</u> GND Class of airspace: C	Beek TWR/APP	Beek Tower En H24	119.480 PRI 362.875 119.705 Regional Guard	
Maastricht CTR in Langen FIR For lateral limits see AIP Germany. <u>3000 FT AMSL</u> GND Class of airspace: D	Beek TWR/APP	Beek Tower En	119.480 PRI 362.875 119.705 Regional Guard	
Maskirchen A area The part of the Langen FIR enclosed by a line linking the coordinates: 510515N 0060018E - 505518N 0060331E - along Dutch-German border - 510515N 0060018E. <u>FL 095</u> 1000 FT AMSL Class of airspace: E	Beek TWR/APP	Beek Approach En H24	123.980 TAR 340.850 120.205	Excluding Maastricht CTR and Geilenkirchen CTR when active.
		Beek Tower En H24	119.480 PRI 362.875 119.705 Regional Guard	
MOLIX area The part of the London FIR enclosed by a line linking the following coordinates: 532000N 0023000E - 531441N 0031102E - 531029N 0032158E - 523704N 0025356E - 524010N 0023000E - 532000N 0023000E. <u>FL 245</u> FL 195 Class of airspace: C <u>FL 195</u> FL 175 Class of airspace: A	Amsterdam ACC	Amsterdam Radar En H24	123.705	

Name Lateral limits Vertical limits Class of airspace	Unit providing service	Call sign Languages Area and conditions of use Hours of service	Frequency/ purpose	Remarks
1	2	3	4	5
North Sea area V North Sea area V consists of: North Sea area V-A That part of the Scottish FIR enclosed by a line linking the following coordinates: 554552N 0032208E - 551958N 0041955E - 550000N 0050000E - 550000N 0030301E - 554552N 0032208E. North Sea area V-B The part of the London FIR enclosed by a line linking the following coordinates: 550000N 0030301E - 550000N 0050000E - 525552N 0030936E - 531803N 0030319E - 532809N 0030055E - 533503N 0025913E - 534003N 0025719E - 535003N 0025417E - 535535N 0025714E - 541733N 0030112E - 543143N 0025434E - 543338N 0025147E - 543715N 0025349E - 550000N 0030301E. North Sea area V-C The part of the London FIR enclosed by a line linking the following coordinates: 543338N 0025147E - 543143N 0025434E - 541733N 0030112E - 535535N 0025714E - 535003N 0025417E - 535745N 0025155E - 542245N 0024543E - 543338N 0025147E. <u>FL 055</u> ¹⁾ SFC Class of airspace: G	Amsterdam FIC	Amsterdam Information En H24	See ENR 6-2.2	¹⁾ Upper limit North Sea area V-C below EGD323D FL 045. For details about EGD323D see UK AIP. Amsterdam FIC only provides FIS and ALRS.
TEBRO area The part of the Langen FIR enclosed by a line linking the following coordinates: 522045N 0070355E - 522112N 0071938E - 515809N 0070629E - 515144N 0065808E - 514111N 0064055E - 513604N 0062955E - 513511N 0062137E - 513510N 0060801E - 513534N 0060717E - along the Dutch-German border - 522045N 0070355E. <u>FL 245</u> FL 205 Class of airspace: C	Amsterdam ACC	Amsterdam Radar En H24	124.880 128.580	

Name Lateral limits Vertical limits Class of airspace	Unit providing service	Call sign Languages Area and conditions of use Hours of service	Frequency/ purpose	Remarks
1	2	3	4	5
TRA 17 – AWACS area 505957N 0053955E - 505957N 0054601E - along Belgian-Dutch border - 505246N 0053955E - 505957N 0053955E. <u>3500 FT AMSL</u> <u>1500 FT AMSL</u> Class of airspace: G	Beek APP	Beek Approach En H24	123.980 TAR 340.850 120.205	Airspace reserved for IFR approach Geilenkirchen RWY 09. Crossing clearance provided by Beek APP. Activation information provided by Brussels FIC or Steenokkerzeel ATCC.
Twenthe HI area The part of the Bremen FIR enclosed by a line linking the following coordinates: 523959N 0070327E - 522336N 0070340E - along Dutch-German border - 523959N 0070327E. <u>FL 245</u> <u>FL 195</u> Class of airspace: C	Amsterdam ACC	Amsterdam Radar En H24	128.580	
Twenthe Medium area The part of the Bremen FIR enclosed by a line linking the following coordinates: 523959N 0070327E - 522336N 0070340E - along Dutch-German border - 523959N 0070327E. <u>FL 195</u> <u>FL 100</u> Class of airspace: C <u>FL 100</u> <u>FL 095</u> Class of airspace: E	Amsterdam ACC	Amsterdam Radar En H24	128.580	
Twenthe LO area The part of the Bremen FIR enclosed by a line linking the following coordinates: 523959N 0070327E - 522336N 0070340E - along Dutch-German border - 523959N 0070327E. <u>FL 095</u> <u>2500 FT AMSL</u> Class of airspace: E	MILATCC Schiphol	Dutch MIL En H24	128.355	
		Dutch MIL Info En H24	132.350	
Voeren area The part of the Brussels FIR enclosed by a line linking coordinates: 504611N 0054446E - along Dutch-Belgium border - 504513N 0055956E - 504508N 0055956E - 504459N 0055454E - 504519N 0054824E - 504611N 0054446E. <u>FL 095</u> <u>1500 FT AMSL</u> Class of airspace: D <u>1500 FT AMSL</u> <u>GND</u> Class of airspace: G	Beek TWR/APP	Beek Approach En H24 Beek Tower En H24	123.980 TAR 340.850 120.205 119.480 PRI 362.875 119.705 Regional Guard	

2 FREE ROUTE AIRSPACE (FRA)

Name Lateral limits Vertical limits Class of airspace	Unit providing service	Call sign Languages Area and conditions of use	Frequency purpose	Remarks
1	2	3	4	5
MUAC FRA Lateral limits as Amsterdam FIR (see ENR 2.1) excluding the IBNOS and SASKI B area. FL 660 FL 245 Class of airspace: C	Maastricht UAC	Maastricht Radar En H24	See ENR 6-2.4.	MUAC FRA extends over the state territories of Belgium, Luxemburg, the Netherlands and part of Germany. For hours of applicability see ENR 1.3 paragraph 4.2.

3 NORTH SEA OPERATIONS, FLIGHT INFORMATION SERVICE AND ALERTING SERVICE**3.1 GENERAL**

Amsterdam FIC provides FIS and ALRS in the North Sea area Amsterdam and the North Sea area V (see paragraph 2.1) to safeguard military and civil air traffic above the North Sea up to and including FL 055¹⁾. For area boundaries see chart ENR 6-3.1.

¹⁾ Below EGD323D up to and including FL 045.

3.1.1 North Sea area Amsterdam

The North Sea area Amsterdam is an RTMZ (combined RMZ and TMZ). In this area all flights shall file a flight plan for the purpose of receiving flight information service and alerting service.

The North Sea area Amsterdam is depicted on ENR 6-3.1.

ENR 3.3 AREA NAVIGATION ROUTES

1 REMARKS ON CONDITIONAL ROUTES

Conditional routes (CDRs) are non-permanent ATS routes. They are designed to complement the permanent ATS route network and to allow flights to be planned on ATS routes, or portions thereof, that are not always available.

In the ATS route tables hereafter the CDR category is indicated under "Route availability" as "CDR" and is permanently plannable during the times published in the AIP. Due to military or other activities, the route may be closed. The unavailability is published daily in the EAUP/EUUP (European airspace use plan/European updated airspace use plan) in table "ATS Route and CDR Type 1 Closure". The EAUP/EUUP is published on the Network Portal (NOP): <https://www.public.nm.eurocontrol.int/PUBPORTAL/>. In the event of a short notice unavailability of a CDR, rerouting around an associated AMC-Manageable Area will be made on ATC instructions.

Route designator {RNP type}		[Route usage notes]					
	Significant point name	Significant point coordinates				Remarks	
{RNP type}		Initial Track MAG ↓ / ↑	Geodesic Dist (NM)	Upper limit / Lower limit	FL series		Controlling unit [Airspace class] Remarks
					↓	↑	
L17 (-)		Route availability: (1) H24					
Δ	PETIK	52°36'53.68"N 004°12'56.65"E					
(RNAV 5)		- / 105	43.7	FL 245 / FL 055		Odd ⁽¹⁾	Amsterdam ACC [Class C above FL 195 Class A below FL 195]
Δ	MOLIX (FIR BDRY)	52°49'19.20"N 003°04'07.21"E					⁽²⁾
<u>Point/Segment remarks:</u>							
(2) For continuation see AIP United Kingdom.							

Route designator {RNP type}		[Route usage notes]				
	Significant point name	Significant point coordinates				Remarks
{RNP type}		Initial Track MAG ↓ / ↑	Geodesic Dist (NM)	Upper limit / Lower limit	FL series	Controlling unit [Airspace class] Remarks
					↓	
L60 (-)		Route availability: (1) H24				
Δ	BERGI	52°44'55.50"N 004°21'32.15"E				
(RNAV 5)		287 / -	44.4	FL 660 / FL 055	Even ⁽¹⁾	Maastricht UAC above FL 245 Amsterdam ACC below FL 245 [Class C above FL 195 Class A below FL 195]
Δ	ENZEN (FIR BDRY)	525839N 0031157E				⁽²⁾
<u>Point/Segment remarks:</u> (2) For continuation see AIP United Kingdom.						

Route designator {RNP type}		[Route usage notes]					
	Significant point name	Significant point coordinates				Remarks	
{RNP type}		Initial Track MAG ↓ / ↑	Geodesic Dist (NM)	Upper limit / Lower limit	FL series		Controlling unit [Airspace class] Remarks
					↓	↑	
L191 (-)		Route availability: (1) H24					
Δ	PEVAD	511629N 0040317E					
(RNAV 5)		358 / -	12.4	FL 660 / FL 055	Even ⁽¹⁾	Maastricht UAC above FL 245 Amsterdam ACC below FL 245 [Class C above FL 195 Class A below FL 195]	
Δ	VICOT	512854N 0040302E					
<u>Route remarks:</u> Only for traffic with DEP EBAW, EBBR, EBMB and EBLG.							

Route designator {RNP type}		[Route usage notes]					
	Significant point name	Significant point coordinates				Remarks	
{RNP type}		Initial Track MAG ↓ / ↑	Geodesic Dist (NM)	Upper limit / Lower limit	FL series		Controlling unit [Airspace class] Remarks
					↓	↑	
L602 (-)		Route availability: (1) H24					
Δ	RELBI (FIR BDRY)	52°07'06.00"N 006°48'49.00"E				(4)	
(RNAV 5)		294 / -	2.0	FL 660 / FL 065	Even ⁽¹⁾	Maastricht UAC above FL 245 Amsterdam ACC between FL 245 and FL 095 MILATCC Schiphol below FL 095 [Class C above FL 195 Class A between FL 195 and FL 095 Class D below FL 095] (2)	
Δ	REKKEN DME (RKN)	520800N 0064550E					
(RNAV 5)		288 / -	20.2	FL 660 / FL 065	Even ⁽¹⁾	Maastricht UAC above FL 245 Amsterdam ACC between FL 245 and FL 095 MILATCC Schiphol below FL 095 [Class C above FL 195 Class A between FL 195 and FL 095 Class D below FL 095] (2)	
Δ	TENLI	52°14'47.29"N 006°15'00.51"E					
(RNAV 5)		288 / -	25.3	FL 660 / FL 065	Even ⁽¹⁾	Maastricht UAC above FL 245 Amsterdam ACC below FL 245 [Class C above FL 195 Class A below FL 195]	
Δ	FLEVO	52°23'07.26"N 005°36'07.81"E					
(RNAV 5)		287 / -	29.0	FL 660 / FL 065	Even ⁽¹⁾	Maastricht UAC above FL 245 Amsterdam ACC below FL 245 [Class C above FL 195 Class A below FL 195]	
Δ	SPIJKERBOOR DME (SPY)	523225N 0045114E					
(RNAV 5)		303 / -	17.0	FL 660 / FL 055	Even ⁽¹⁾	Maastricht UAC above FL 245 Amsterdam ACC below FL 245 [Class C above FL 195 Class A below FL 195]	
Δ	PREXA	524206N 0042818E					
(RNAV 5)		303 / -	5.0	FL 660 / FL 055	Even ⁽¹⁾	Maastricht UAC above FL 245 Amsterdam ACC below FL 245 [Class C above FL 195 Class A below FL 195]	
Δ	BERGI	52°44'55.50"N 004°21'32.15"E					
(RNAV 5)		298 / -	28.0	FL 660 / FL 055	Even ⁽¹⁾	Maastricht UAC above FL 245 Amsterdam ACC below FL 245 [Class C above FL 195 Class A below FL 195]	
Δ	AMGOD	52°58'30.79"N 003°41'07.40"E					
(RNAV 5)		298 / -	5.0	FL 660 / FL 055	Even ⁽¹⁾	Maastricht UAC above FL 245 Amsterdam ACC below FL 245 [Class C above FL 195 Class A below FL 195]	
Δ	SUPUR	53°00'54.81"N 003°33'52.07"E					
(RNAV 5)		298 / -	10.8	FL 660 / FL 055	Even ⁽¹⁾	Maastricht UAC above FL 245 Amsterdam ACC below FL 245 [Class C above FL 195 Class A below FL 195]	
Δ	MIMVA (FIR BDRY)	53°06'03.21"N 003°18'12.63"E				(3)	
Point/Segment remarks:							
(2) Between FL 140 - FL 160 usable on ATC instructions only.							
(3) For continuation see AIP United Kingdom.							
(4) For continuation see AIP Germany.							

Route designator {RNP type}		[Route usage notes]				
	Significant point name	Significant point coordinates				Remarks
{RNP type}		Initial Track MAG ↓ / ↑	Geodesic Dist (NM)	Upper limit / Lower limit	FL series	Controlling unit [Airspace class]
					↓	↑
M105 (-)		Route availability: (1) H24				
Δ	ANDIK	52°44'21.85"N 005°16'13.76"E				
(RNAV 1)		069 / -	73.3	FL 660 / FL 065	Odd ⁽¹⁾	Maastricht UAC above FL 245 Amsterdam ACC below FL 245 [Class C above FL 195 Class A below FL 195]
Δ	PABCO (FIR BDRY)	530806N 0071046E				⁽²⁾
<u>Point/Segment remarks:</u> (2) For continuation see AIP Germany.						

Route designator {RNP type}		[Route usage notes]					
	Significant point name	Significant point coordinates				Remarks	
{RNP type}		Initial Track MAG ↓ / ↑	Geodesic Dist (NM)	Upper limit / Lower limit	FL series		Controlling unit [Airspace class] Remarks
					↓	↑	
M617 (-)		Route availability: (1) H24					
Δ	ROFAC	505330N 0054118E				(2)	
(RNAV 5)		- / 243	11.4	FL 195 / FL 095		Even ⁽¹⁾	Brussels ACC [Class B]
Δ	MAASTRICHT VOR/DME (MAS)	505819N 0055738E					
Point/Segment remarks: (2) For continuation see AIP Belgium.							

Route designator {RNP type}		[Route usage notes]				
	Significant point name	Significant point coordinates				Remarks
{RNP type}		Initial Track MAG ↓ / ↑	Geodesic Dist (NM)	Upper limit / Lower limit	FL series ↓ ↑	Controlling unit [Airspace class] Remarks
N872 (-)		Route availability: (1) H24				
Δ	WOODY	51°24'20.38"N 004°21'59.33"E				(2)
(RNAV 5)		- / 204	17.4	FL 660 / 3500 ft AMSL		Odd ⁽¹⁾ Maastricht UAC above FL 245 Amsterdam ACC between FL 245 and FL 055 MilATCC Schiphol/Rotterdam APP below FL 055 [Class C above FL 195 Class A between FL 195 and FL 055 Class E below FL 055]
Δ	KUDAD	51°40'02.93"N 004°34'03.41"E				
(RNAV 5)		- / 204	11.1	FL 660 / 3500 ft AMSL		Odd ⁽¹⁾ Maastricht UAC above FL 245 Amsterdam ACC between FL 245 and FL 055 Rotterdam APP below FL 055 [Class C above FL 195 Class A between FL 195 and FL 055 Class E below FL 055]
Δ	LARAS	51°50'04.46"N 004°41'50.37"E				
(RNAV 5)		- / 204	6.0	FL 660 / 3500 ft AMSL		Odd ⁽¹⁾ Maastricht UAC above FL 245 Amsterdam ACC between FL 245 and FL 055 Rotterdam APP below FL 055 [Class C above FL 195 Class A between FL 195 and FL 055 Class E below FL 055]
Δ	LEKKO	51°55'27.03"N 004°46'02.39"E				
(RNAV 5)		- / 204	27.4	FL 660 / 3500 ft AMSL		Odd ⁽¹⁾ Maastricht UAC above FL 245 Amsterdam ACC below FL 245 [Class C above FL 195 Class A below FL 195]
Δ	PAMPUS DME (PAM)	522005N 0050532E				
(RNAV 5)		- / 227	12.6	FL 660 / FL 065		Even ⁽¹⁾ Maastricht UAC above FL 245 Amsterdam ACC below FL 245 [Class C above FL 195 Class A below FL 195]
Δ	LILSI	52°28'23.75"N 005°20'54.00"E				
(RNAV 5)		- / 227	23.2	FL 660 / FL 065		Even ⁽¹⁾ Maastricht UAC above FL 245 Amsterdam ACC below FL 245 [Class C above FL 195 Class A below FL 195]
Δ	SILQI	524340N 0054932E				
(RNAV 5)		- / 228	40.2	FL 660 / FL 065		Even ⁽¹⁾ Maastricht UAC above FL 245 Amsterdam ACC below FL 245 [Class C above FL 195 Class A below FL 195]
Δ	EELDE VOR/DME (EEL)	530951N 0064000E				
(RNAV 5)		- / 227	15.7	FL 660 / FL 065		Even ⁽¹⁾ Maastricht UAC above FL 245 Amsterdam ACC below FL 245 [Class C above FL 195 Class A below FL 195]
Δ	KUBAT (FIR BDRY)	53°20'11.00"N 006°59'37.00"E				(3)
Point/Segment remarks: (2) For continuation see AIP Belgium. (3) For continuation see AIP Germany.						

Route designator (RNP type)		[Route usage notes]					
	Significant point name	Significant point coordinates				Remarks	
{RNP type}		Initial Track MAG ↓ / ↑	Geodesic Dist (NM)	Upper limit / Lower limit	FL series		Controlling unit [Airspace class]
					↓	↑	Remarks
N873 (-)		Route availability: (1) H24					
Δ	HELEN (FIR BDRY)	51°14'07.13"N 003°52'10.96"E				(2) (3)	
(RNAV 5)		023 / -	16.3	FL 660 / 3500 ft AMSL	Even ⁽¹⁾		Maastricht UAC above FL 245 Amsterdam ACC between FL 245 and FL 055 MilATCC Schiphol below FL 055 [Class C above FL 195 Class A between FL 195 and FL 055 Class E below FL 055]
Δ	VICOT	512854N 0040302E					
(RNAV 5)		023 / -	17.2	FL 660 / 3500 ft AMSL	Even ⁽¹⁾		Maastricht UAC above FL 245 Amsterdam ACC between FL 245 and FL 055 MilATCC Schiphol/Rotterdam APP below FL 055 [Class C above FL 195 Class A between FL 195 and FL 055 Class E below FL 055]
Δ	DOFMU	514428.8N 0041436.6E					
(RNAV 5)		024 / -	32.9	FL 660 / 3500 ft AMSL	Even ⁽¹⁾		Maastricht UAC above FL 245 Amsterdam ACC between FL 245 and FL 055 Rotterdam APP below FL 055 [Class C above FL 195 Class A between FL 195 and FL 055 Class A/E below FL 055]
Δ	EKROS	52°14'14.20"N 004°37'10.37"E					
(RNAV 5)		024 / -	20.1	FL 660 / 3500 ft AMSL	Even ⁽¹⁾		Maastricht UAC above FL 245 Amsterdam ACC below FL 245 [Class C above FL 195 Class A below FL 195]
Δ	SPIJKERBOOR DME (SPY)	523225N 0045114E					
(RNAV 5)		050 / -	14.4	FL 660 / FL 065	Odd ⁽¹⁾		Maastricht UAC above FL 245 Amsterdam ACC below FL 245 [Class C above FL 195 Class A below FL 195]
Δ	BETUS	52°41'17.31"N 005°09'45.19"E					
(RNAV 5)		050 / -	5.0	FL 660 / FL 065	Odd ⁽¹⁾		Maastricht UAC above FL 245 Amsterdam ACC below FL 245 [Class C above FL 195 Class A below FL 195]
Δ	ANDIK	52°44'21.85"N 005°16'13.76"E					
(RNAV 5)		050 / -	4.2	FL 660 / FL 065	Odd ⁽¹⁾		Maastricht UAC above FL 245 Amsterdam ACC below FL 245 [Class C above FL 195 Class A below FL 195]
Δ	KEKIX	52°46'56.83"N 005°21'41.37"E					
(RNAV 5)		050 / -	31.8	FL 660 / FL 065	Odd ⁽¹⁾		Maastricht UAC above FL 245 Amsterdam ACC below FL 245 [Class C above FL 195 Class A below FL 195]
Δ	GRONY	53°06'19.69"N 006°03'17.89"E					
(RNAV 5)		051 / -	24.2	FL 660 / FL 065	Odd ⁽¹⁾		Maastricht UAC above FL 245 Amsterdam ACC below FL 245 [Class C above FL 195 Class A below FL 195]
Δ	BEDUM	53°20'53.41"N 006°35'19.92"E					
(RNAV 5)		040 / -	12.1	FL 660 / FL 065	Odd ⁽¹⁾		Maastricht UAC above FL 245 Amsterdam ACC below FL 245 [Class C above FL 195 Class A below FL 195]
Δ	LABIL (FIR BDRY)	53°29'45.00"N 006°48'59.34"E					(4)
Point/Segment remarks:							
(2) COP from Cambrai VORTAC to Spijkerboor DVOR/DME.							
(3) For continuation see AIP Belgium.							
(4) For continuation see AIP Germany.							

Route designator {RNP type}		[Route usage notes]				
	Significant point name	Significant point coordinates				Remarks
{RNP type}		Initial Track MAG ↓ / ↑	Geodesic Dist (NM)	Upper limit / Lower limit	FL series ↓ ↑	Controlling unit [Airspace class] Remarks
P64 (-)		Route availability: (1) H24				
Δ	SONEB	52°01'25.00"N 006°45'51.00"E				
(RNAV 5)		303 / -	23.2 NM	FL 660 / FL 065	Even ⁽¹⁾	Maastricht UAC above FL 245 Amsterdam ACC between FL 245 and FL 095 MILATCC Schiphol below FL 095 [Class C above FL 195 Class A between FL 195 and FL 095 Class D below FL 095]
Δ	TENLI	52°14'47.29"N 006°15'00.51"E				

Route designator {RNP type}		[Route usage notes]					
	Significant point name	Significant point coordinates					Remarks
{RNP type}		Initial Track MAG ↓ / ↑	Geodesic Dist (NM)	Upper limit / Lower limit	FL series		Controlling unit [Airspace class]
					↓	↑	Remarks
P154 (-)		Route availability: (1) H24					
Δ	SPIJKERBOOR DME (SPY)	523225N 0045114E					
(RNAV 5)		- / 099	23.8	FL 660 / FL 055		Odd ⁽¹⁾	Maastricht UAC above FL 245 Amsterdam ACC below FL 245 [Class C above FL 195 Class A below FL 195]
Δ	PETIK	52°36'53.68"N 004°12'56.65"E					

Route designator {RNP type}		[Route usage notes]					
	Significant point name	Significant point coordinates		Upper limit / Lower limit		Remarks	
{RNP type}		Initial Track MAG ↓ / ↑	Geodesic Dist (NM)		FL series		Controlling unit [Airspace class] Remarks
					↓	↑	
Q21 (-)		Route availability: (1) CDR: H24. The non-availability is published in the EAUP/EUUP.					
Δ	INKET	51°48'52.66"N 004°46'19.06"E					
(RNAV 5)		080 / 260	13.7	3500 ft AMSL / 1500 ft AMSL	Even ⁽¹⁾	Odd ⁽¹⁾	MILATCC Schiphol [Class E]
Δ	PELUB	51°50'52.94"N 005°08'12.68"E					
(RNAV 5)		031 / 211	27.2	3500 ft AMSL / 1500 ft AMSL	Even ⁽¹⁾	Odd ⁽¹⁾	MILATCC Schiphol [Class E]
Δ	NYKER	52°13'49.40"N 005°31'43.69"E					

Route designator {RNP type}		[Route usage notes]						
	Significant point name	Significant point coordinates					Remarks	
{RNP type}		Initial Track MAG ↓ / ↑	Geodesic Dist (NM)	Upper limit / Lower limit	FL series		Controlling unit [Airspace class] Remarks	
Q63 (-)		Route availability: (1) H24						
								↓
Δ	GALSO	514358N 0031019E						
(RNAV 1)		261 / -	19.0	FL 660 / FL 215	Even ⁽¹⁾		London AC (Swanwick) [Class C]	
Δ	AMRIV	514119N 0024001E						
(RNAV 1)		261 / -	6.3	FL 660 / FL 055	Even ⁽¹⁾		London AC (Swanwick) above FL 215 London TC (Swanwick) below FL 215 [Class C above FL 195 Class A below FL 195]	
Δ	MOMIC	514025N 0023000E						
(RNAV 1)		261 / -	14.8	FL 660 / FL 055	Even ⁽¹⁾		London AC (Swanwick) above FL 215 London TC (Swanwick) below FL 215 [Class C above FL 195 Class A below FL 195]	
Δ	SUMUM (FIR BDRY)	51°38'14.21"N 002°06'27.74"E					⁽²⁾	
<u>Point/Segment remarks:</u>								
(2) For continuation see AIP United Kingdom								

ENR 3.4 HELICOPTER ROUTES

REMARKS ON CONDITIONAL ROUTES

Conditional routes (CDRs) are non-permanent ATS routes. They are designed to complement the permanent ATS route network and to allow flights to be planned on ATS routes, or portions thereof, that are not always available.

In the ATS route tables here after the CDR category is indicated under "Route availability" as "CDR" and is permanently plannable during the times published in the AIP. Due to military or other activities, the route may be closed. The unavailability is published daily in the EAUP/EUUP (European airspace use plan/European updated airspace use plan) in table "ATS Route and CDR Type 1 Closure". The EAUP/EUUP is published on the Network Portal (NOP): <https://www.public.nm.eurocontrol.int/PUBPORTAL/>. In the event of a short notice unavailability of a CDR, rerouting around an associated AMC manageable area will be made on ATC instructions.

Route designator {RNP type}		[Route usage notes]							
	Significant point name	Significant point coordinates							Remarks
{RNP type}		Track MAG ↓ / ↑	Dist (NM)	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓ ↑	Controlling unit [Airspace class] Remarks
KY601		Route availability: (1) H24 (2) CDR: H24. The non-availability is published in the EAUP/EUUP.							
Δ	XENEV	53°49'03.70"N 006°12'56.99"E							
(RNAV 1)		339 / 159	20.6		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽²⁾ Odd ⁽²⁾	- [Class G]
Δ	XIPTA	54°08'27.24"N 006°01'28.60"E							
(RNAV 1)		310 / 130	16.9		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	XONLO	54°19'47.65"N 005°40'03.60"E							
(RNAV 1)		305 / 125	13.8		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	XEKRI	54°28'02.30"N 005°21'02.89"E							
(RNAV 1)		328 / 147	30.2		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	XIPTI (FIR BDRY)	54°53'55.86"N 004°54'18.89"E							
(RNAV 1)		327 / 147	22.0		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	DIKAT	55°12'40.21"N 004°34'32.13"E							

Route designator (RNP type)		[Route usage notes]								
	Significant point name	Significant point coordinates							Remarks	
{RNP type}		Track MAG ↓ / ↑	Dist (NM)	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓ ↑		Controlling unit [Airspace class] Remarks
KY602		Route availability: (1) H24 (2) CDR: H24. The non-availability is published in the EAUP/EUUP.								
Δ	PENIM	53°29'31.37"N 005°56'25.26"E								
(RNAV 1)		330 / 150	8.8		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	UNATU	53°37'15.54"N 005°49'31.73"E								
(RNAV 1)		330 / 150	8.8		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	ULSED	53°44'58.96"N 005°42'35.97"E								
(RNAV 1)		330 / 150	20.4		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽²⁾	Odd ⁽²⁾	- [Class G]
Δ	UNORA	54°02'58.42"N 005°26'16.15"E								
(RNAV 1)		329 / 149	19.9		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	ULPOM	54°20'19.88"N 005°09'46.43"E								
(RNAV 1)		329 / 149	11.1		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	UNVAR	542959N 0050029E								
(RNAV 1)		329 / 149	30.7		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	AGASO	54°56'40.48"N 004°34'20.96"E								
(RNAV 1)		359 / 179	16.0		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	DIKAT	55°12'40.21"N 004°34'32.13"E								

Route designator (RNP type)		[Route usage notes]							
	Significant point name	Significant point coordinates							Remarks
{RNP type}		Track MAG ↓ / ↑	Dist (NM)	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓ ↑	Controlling unit [Airspace class] Remarks
KY605		Route availability: (1) H24 (2) CDR: H24. The non-availability is published in the EAUP/EUUP.							
Δ	PEROR	53°02'06.43"N 005°01'46.39"E							
(RNAV 1)		050 / 230	25.6		FL 065 / 1500 ft AMSL	FL 050		Even ⁽²⁾ Odd ⁽²⁾	- [Class G]
Δ	PILEV	53°18'00.00"N 005°35'00.00"E							
(RNAV 1)		001 / 181	12.4		FL 065 / 1500 ft AMSL	FL 050		Even ⁽²⁾ Odd ⁽²⁾	- [Class G]
Δ	PODOD	53°30'22.30"N 005°36'01.87"E							
(RNAV 1)		092 / 272	12.2		FL 065 / 1500 ft AMSL	FL 050		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	PENIM	53°29'31.37"N 005°56'25.26"E							
<u>Route remarks:</u> Only available on FL 050 and FL 060.									

Route designator {RNP type}		[Route usage notes]							
	Significant point name	Significant point coordinates							Remarks
{RNP type}		Track MAG ↓ / ↑	Dist (NM)	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓ ↑	Controlling unit [Airspace class] Remarks
KY606		Route availability: (1) H24							
Δ	AMSOT	53°18'47.75"N 004°35'08.74"E							
(RNAV 1)		033 / 213	6.3		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	SITSU	53°24'01.42"N 004°41'04.88"E							
(RNAV 1)		077 / 257	11.5		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	RODIR	53°26'15.62"N 005°00'00.00"E							
(RNAV 1)		077 / 258	21.9		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	PODOD	53°30'22.30"N 005°36'01.87"E							
(RNAV 1)		048 / 228	10.6		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	UNATU	53°37'15.54"N 005°49'31.73"E							
(RNAV 1)		048 / 228	18.3		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	XENEV	53°49'03.70"N 006°12'56.99"E							
<u>Route remarks:</u> Navigational warning GLV XII: low flying military helicopters engaged in dipping operations at an altitude of APRX 60 ft AMSL. Due to military requirements the route may be temporarily closed by NOTAM.									

Route designator (RNP type)		[Route usage notes]							
	Significant point name	Significant point coordinates							Remarks
{RNP type}		Track MAG ↓ / ↑	Dist (NM)	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓ ↑	Controlling unit [Airspace class] Remarks
KY607		Route availability: (1) H24 (2) CDR: H24. The non-availability is published in the EAUP/EUUP.							
Δ	SITSU	53°24'01.42"N 004°41'04.88"E							
(RNAV 1)		033 / 213	13.2		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	SOTAP	53°34'55.32"N 004°53'33.12"E							
(RNAV 1)		033 / 213	34.1		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽²⁾ Odd ⁽²⁾	- [Class G]
Δ	UNORA	54°02'58.42"N 005°26'16.15"E							
(RNAV 1)		024 / 204	18.7		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	XONLO	54°19'47.65"N 005°40'03.60"E							
(RNAV 1)		054 / 234	18.0		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	OTSEL	54°29'50.34"N 006°05'30.71"E							
(RNAV 1)		054 / 234	11.7		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	ELSUR	54°36'22.49"N 006°22'04.40"E							
(RNAV 1)		054 / 234	6.3		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	EPOXU	54°39'54.77"N 006°31'02.30"E							
<u>Route remarks:</u> Navigational warning GLV XII: low flying military helicopters engaged in dipping operations at an altitude of APRX 60 ft AMSL.									

Route designator {RNP type}		[Route usage notes]								
	Significant point name	Significant point coordinates							Remarks	
{RNP type}		Track MAG ↓ / ↑	Dist (NM)	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓ ↑		Controlling unit [Airspace class] Remarks
KY608		Route availability: (1) H24 (2) CDR: H24. The non-availability is published in the EAUP/EUUP.								
Δ	AGISI	53°37'02.89"N 004°32'47.75"E								
(RNAV 1)		049 / 229	10.2		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	TEVKA	53°43'32.22"N 004°46'00.00"E								
(RNAV 1)		049 / 229	30.8		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽²⁾	Odd ⁽²⁾	- [Class G]
Δ	UNORA	54°02'58.42"N 005°26'16.15"E								

Route designator {RNP type}		[Route usage notes]								
	Significant point name	Significant point coordinates							Remarks	
{RNP type}		Track MAG ↓ / ↑	Dist (NM)	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓ ↑		Controlling unit [Airspace class] Remarks
KY609		Route availability: (1) H24								
Δ	ASGOS	53°52'22.18"N 004°33'05.22"E								
(RNAV 1)		030 / 211	11.1		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	TIREP	54°01'45.85"N 004°43'00.14"E								
(RNAV 1)		039 / 219	24.4		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	ULPOM	54°20'19.88"N 005°09'46.43"E								
(RNAV 1)		039 / 219	10.1		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	XEKRI	54°28'02.30"N 005°21'02.89"E								
(RNAV 1)		029 / 209	25.1		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	ABSAM	54°49'32.11"N 005°43'04.87"E								
(RNAV 1)		030 / 210	12.3		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	EBUSA (FIR BDRY)	55°00'00.00"N 005°54'08.92"E								
<u>Route remarks:</u> Due to military requirements the route may be temporarily closed by NOTAM.										

Route designator {RNP type}		[Route usage notes]							
	Significant point name	Significant point coordinates							Remarks
{RNP type}		Track MAG ↓ / ↑	Dist (NM)	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓ ↑	Controlling unit [Airspace class] Remarks
KY610		Route availability: (1) H24							
Δ	ATRIX	53°08'18.52"N 004°37'28.70"E							
(RNAV 1)		351 / 171	10.6		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	AMSOT	53°18'47.75"N 004°35'08.74"E							
(RNAV 1)		354 / 174	18.3		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	AGISI	53°37'02.89"N 004°32'47.75"E							
(RNAV 1)		359 / 179	15.3		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	ASGOS	53°52'22.18"N 004°33'05.22"E							
(RNAV 1)		359 / 179	20.0		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	ADOMI	54°12'20.10"N 004°33'28.31"E							
(RNAV 1)		359 / 179	19.6		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	AKOXA (FIR BDRY)	54°31'51.16"N 004°33'51.25"E							
(RNAV 1)		359 / 179	24.9		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	AGASO	54°56'40.48"N 004°34'20.96"E							
(RNAV 1)		338 / 157	26.0		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	ADIKU	55°20'50.40"N 004°17'59.13"E							
<u>Route remarks:</u> Navigational warning GLV XII: low flying military helicopters engaged in dipping operations at an altitude of APRX 60 ft AMSL. Due to military requirements the route may be temporarily closed by NOTAM.									

Route designator (RNP type)		[Route usage notes]								
	Significant point name	Significant point coordinates							Remarks	
{RNP type}		Track MAG ↓ / ↑	Dist (NM)	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓ ↑		Controlling unit [Airspace class] Remarks
KY615		Route availability: (1) H24								
Δ	AMSOT	53°18'47.75"N 004°35'08.74"E								
(RNAV 1)		336 / 156	23.0		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	BAGOV	53°39'58.93"N 004°20'08.84"E								
(RNAV 1)		336 / 156	22.2		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	BIBIS (FIR BDRY)	54°00'23.72"N 004°05'26.08"E								
(RNAV 1)		336 / 156	7.2		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	BOGTI	54°06'57.36"N 004°00'39.01"E								
(RNAV 1)		358 / 179	23.1		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	BESBU	54°30'00.00"N 004°00'24.53"E								
(RNAV 1)		359 / 179	30.1		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	BENUX	55°00'00.00"N 004°00'05.26"E								
(RNAV 1)		359 / 179	29.2		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	BELAP	55°29'06.30"N 003°59'46.10"E								
<u>Route remarks:</u> Navigational warning GLV XII: low flying military helicopters engaged in dipping operations at an altitude of APRX 60 ft AMSL. Due to military requirements the route may be temporarily closed by NOTAM.										

Route designator {RNP type}		[Route usage notes]							
	Significant point name	Significant point coordinates							Remarks
{RNP type}		Track MAG ↓ / ↑	Dist (NM)	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓ ↑	Controlling unit [Airspace class] Remarks
KY620		Route availability: (1) H24							
Δ	ATRIX	53°08'18.52"N 004°37'28.70"E							
(RNAV 1)		326 / 146	13.9		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	DISRA	53°20'00.00"N 004°25'10.05"E							
(RNAV 1)		326 / 146	14.5		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	DIMOX	53°32'14.31"N 004°12'08.10"E							
(RNAV 1)		316 / 136	17.6		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	DESUL (FIR BDRY)	53°45'04.17"N 003°51'52.94"E							
(RNAV 1)		316 / 135	20.6		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	DEXOR	54°00'00.00"N 003°27'56.26"E							
(RNAV 1)		315 / 135	27.1		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	DEVIG	54°19'29.34"N 002°56'02.89"E							
<u>Route remarks:</u> Navigational warning GLV XII: low flying military helicopters engaged in dipping operations at an altitude of APRX 60 ft AMSL. Due to military requirements the route may be temporarily closed by NOTAM.									

Route designator {RNP type}		[Route usage notes]							
	Significant point name	Significant point coordinates							Remarks
{RNP type}		Track MAG ↓ / ↑	Dist (NM)	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓ ↑	Controlling unit [Airspace class] Remarks
KY623		Route availability: (1) H24							
Δ	ATRIX	53°08'18.52"N 004°37'28.70"E							
(RNAV 1)		301 / 121	9.0		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	GOLOR	53°13'04.16"N 004°24'49.32"E							
<i>Route remarks:</i> Navigational warning GLV XII: low flying military helicopters engaged in dipping operations at an altitude of APRX 60 ft AMSL. Due to military requirements the route may be temporarily closed by NOTAM.									

Route designator {RNP type}		[Route usage notes]								
	Significant point name	Significant point coordinates								Remarks
{RNP type}		Track MAG ↓ / ↑	Dist (NM)	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓ ↑		Controlling unit [Airspace class] Remarks
KY625		Route availability: (1) H24								
Δ	DIMOX	53°32'14.31"N 004°12'08.10"E								
(RNAV 1)		290 / 110	16.7		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	EBAGO (FIR BDRY)	53°38'18.35"N 003°45'57.66"E								
(RNAV 1)		290 / 110	31.3		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	EKDAR	53°49'24.29"N 002°56'37.96"E								
<u>Route remarks:</u> Due to military requirements the route may be temporarily closed by NOTAM.										

Route designator (RNP type)		[Route usage notes]							
	Significant point name	Significant point coordinates							Remarks
{RNP type}		Track MAG ↓ / ↑	Dist (NM)	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓ ↑	Controlling unit [Airspace class] Remarks
KY630		Route availability: (1) H24							
Δ	GIKOV	53°06'35.04"N 004°32'12.38"E							
(RNAV 1)		324 / 144	7.9		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	GOLOR	53°13'04.16"N 004°24'49.32"E							
(RNAV 1)		301 / 120	32.4		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	GIROS (FIR BDRY)	53°30'03.14"N 003°38'47.02"E							
(RNAV 1)		307 / 127	31.7		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	EKDAR	53°49'24.29"N 002°56'37.96"E							
<u>Route remarks:</u> Navigational warning GLV XII: low flying military helicopters engaged in dipping operations at an altitude of APRX 60 ft AMSL. Due to military requirements the route may be temporarily closed by NOTAM.									

Route designator {RNP type}		[Route usage notes]								
	Significant point name	Significant point coordinates								Remarks
{RNP type}		Track MAG ↓ / ↑	Dist (NM)	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit [Airspace class] Remarks
								↓	↑	
KY633		Route availability: (1) H24								
Δ	GIROS (FIR BDRY)	53°30'03.14"N 003°38'47.02"E								
(RNAV 1)		277 / 097	23.6		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	IRDUK	53°33'26.52"N 002°59'36.88"E								
<i>Route remarks:</i> Due to military requirements the route may be temporarily closed by NOTAM.										

Route designator {RNP type}		[Route usage notes]							
	Significant point name	Significant point coordinates							Remarks
{RNP type}		Track MAG ↓ / ↑	Dist (NM)	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓ ↑	Controlling unit [Airspace class] Remarks
KY635		Route availability: (1) H24							
Δ	GOLOR	53°13'04.16"N 004°24'49.32"E							
(RNAV 1)		275 / 095	34.7		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	IBALO (FIR BDRY)	53°16'44.51"N 003°27'19.16"E							
(RNAV 1)		314 / 134	23.5		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	IRDUK	53°33'26.52"N 002°59'36.88"E							
<u>Route remarks:</u> Navigational warning GLV XII: low flying military helicopters engaged in dipping operations at an altitude of APRX 60 ft AMSL. Due to military requirements the route may be temporarily closed by NOTAM.									

Route designator {RNP type}		[Route usage notes]							
	Significant point name	Significant point coordinates							Remarks
{RNP type}		Track MAG ↓ / ↑	Dist (NM)	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓ ↑	Controlling unit [Airspace class] Remarks
KY640		Route availability: (1) CDR: H24. The non-availability is published in the EAUP/EUUP. (2) H24							
Δ	KOLAV	53°01'37.89"N 004°21'00.00"E							
(RNAV 1)		294 / 114	18.0		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	IPVIS	53°09'18.40"N 003°53'59.49"E							
(RNAV 1)		294 / 114	17.7		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	IBALO (FIR BDRY)	53°16'44.51"N 003°27'19.16"E							
(RNAV 1)		272 / 091	14.3		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽²⁾ Odd ⁽²⁾	- [Class G]
Δ	INDEV	53°17'20.14"N 003°03'31.34"E							
<u>Route remarks:</u> Flights on KY640 with permission from MilATCC Schiphol to pass through the activated EHD41 (A/B/C/D) are advised to coordinate with Commandant Zeemacht Nederland, Bureau Operations, tel +31 (0)223 658 220, at least 24 hours PN. Due to military requirements the route may be temporarily closed by NOTAM.									

Route designator {RNP type}		[Route usage notes]								
	Significant point name	Significant point coordinates							Remarks	
{RNP type}		Track MAG ↓ / ↑	Dist (NM)	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓ ↑		Controlling unit [Airspace class] Remarks
KY645		Route availability: (1) H24								
Δ	KOLAV	53°01'37.89"N 004°21'00.00"E								
(RNAV 1)		273 / 093	23.6		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	KONEP	53°03'14.06"N 003°42'04.23"E								
(RNAV 1)		290 / 110	14.2		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	KEROR (FIR BDRY)	53°08'17.10"N 003°20'06.31"E								
(RNAV 1)		290 / 110	9.6		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	KUSON	53°11'40.64"N 003°05'08.06"E								
<u>Route remarks:</u> Due to military requirements the route may be temporarily closed by NOTAM.										

Route designator {RNP type}		[Route usage notes]								
	Significant point name	Significant point coordinates								Remarks
{RNP type}	Track MAG ↓ / ↑	Dist (NM)	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit [Airspace class] Remarks	
							↓	↑		
KY646		Route availability: (1) H24								
Δ	KOPAD	53°07'45.81"N 003°06'14.72"E								
(RNAV 1)		085 / 266	8.4		FL 055 / 1500 ft AMSL	2000 ft AMSL		Odd ⁽¹⁾	Even ⁽¹⁾	- [Class G]
Δ	KEROR (FIR BDRY)	53°08'17.10"N 003°20'06.31"E								
<i>Route remarks:</i> Due to military requirements the route may be temporarily closed by NOTAM.										

Route designator {RNP type}		[Route usage notes]							
	Significant point name	Significant point coordinates							Remarks
{RNP type}		Track MAG ↓ / ↑	Dist (NM)	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓ ↑	Controlling unit [Airspace class] Remarks
KY650		Route availability: (1) H24							
Δ	LUVOR (FIR BDRY)	52°48'23.45"N 003°03'20.62"E							
(RNAV 1)		083 / 263	34.5		FL 055 / 1500 ft AMSL	2000 ft AMSL		Odd ⁽¹⁾ Even ⁽¹⁾	- [Class G]
Δ	LASEX	52°51'54.09"N 004°00'00.00"E							
(RNAV 1)		083 / 263	12.8		3000 ft AMSL / 1500 ft AMSL	2000 ft AMSL		Odd ⁽¹⁾ Even ⁽¹⁾	- [Class G]
Δ	LERGO	52°53'05.16"N 004°21'00.00"E							
<u>Route remarks:</u> Due to military requirements the route may be temporarily closed by NOTAM.									

Route designator {RNP type}		[Route usage notes]								
	Significant point name	Significant point coordinates								Remarks
{RNP type}		Track MAG ↓ / ↑	Dist (NM)	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit [Airspace class] Remarks
								↓	↑	
KY653		Route availability: (1) H24								
Δ	MEBOT	52°45'18.20"N 003°45'22.15"E								
(RNAV 1)		069 / 249	23.0		3000 ft AMSL / 1500 ft AMSL	2000 ft AMSL		Odd ⁽¹⁾	Even ⁽¹⁾	- [Class G]
Δ	LERGO	52°53'05.16"N 004°21'00.00"E								
<i>Route remarks:</i> Due to military requirements the route may be temporarily closed by NOTAM.										

Route designator {RNP type}		[Route usage notes]							
	Significant point name	Significant point coordinates							Remarks
{RNP type}		Track MAG ↓ / ↑	Dist (NM)	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓ ↑	Controlling unit [Airspace class] Remarks
KY660		Route availability: (1) H24							
Δ	NIREX	52°17'25.15"N 003°48'58.21"E							
(RNAV 1)		028 / 208	27.5		3000 ft AMSL / 1500 ft AMSL	2000 ft AMSL		Odd ⁽¹⁾ Even ⁽¹⁾	- [Class G]
Δ	NEKAS	52°41'18.90"N 004°11'04.48"E							
(RNAV 1)		057 / 237	10.3		3000 ft AMSL / 1500 ft AMSL	2000 ft AMSL		Odd ⁽¹⁾ Even ⁽¹⁾	- [Class G]
Δ	NAKON	52°46'45.68"N 004°25'28.68"E							
<u>Route remarks:</u> Due to military requirements the route may be temporarily closed by NOTAM.									

Route designator {RNP type}		[Route usage notes]									
	Significant point name	Significant point coordinates								Remarks	
{RNP type}		Track MAG ↓ / ↑	Dist (NM)	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit [Airspace class] Remarks	
								↓	↑		
KY667		Route availability: (1) H24									
Δ	NEKAS	52°41'18.90"N 004°11'04.48"E									
(RNAV 1)		072 / 253	20.3		3000 ft AMSL / 1500 ft AMSL	2000 ft AMSL		Odd ⁽¹⁾	Even ⁽¹⁾	- [Class G]	
Δ	NEXAR	52°46'56.72"N 004°43'12.85"E									
<u>Route remarks:</u> Due to military requirements the route may be temporarily closed by NOTAM.											

Route designator {RNP type}		[Route usage notes]								
	Significant point name	Significant point coordinates							Remarks	
{RNP type}		Track MAG ↓ / ↑	Dist (NM)	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓ ↑		Controlling unit [Airspace class] Remarks
KY673		Route availability: (1) H24								
Δ	IVNUD	53°47'27.40"N 006°22'01.32"E								
(RNAV 1)		356 / 176	22.6		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	INVIT	54°09'57.42"N 006°20'43.26"E								
(RNAV 1)		026 / 206	2.9		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	IXUTA	54°12'29.27"N 006°22'59.93"E								
(RNAV 1)		008 / 188	6.0		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	IMVUK	54°18'23.01"N 006°24'43.63"E								
(RNAV 1)		008 / 188	15.8		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	INRIP	54°33'56.40"N 006°29'17.24"E								
(RNAV 1)		008 / 188	6.1		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	EPOXU	54°39'54.77"N 006°31'02.30"E								
<u>Route remarks:</u> Due to military requirements the route may be temporarily closed by NOTAM.										

Route designator {RNP type}		[Route usage notes]								
	Significant point name	Significant point coordinates								Remarks
{RNP type}		Track MAG ↓ / ↑	Dist (NM)	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓ ↑		Controlling unit [Airspace class] Remarks
KY674		Route availability: (1) H24								
Δ	UTIRA (FIR BDRY)	53°46'02.05"N 006°30'00.00"E								
(RNAV 1)		285 / 105	4.9		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	IVNUD	53°47'27.40"N 006°22'01.32"E								
(RNAV 1)		285 / 105	5.6		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	XENEV	53°49'03.70"N 006°12'56.99"E								
<u>Route remarks:</u> Due to military requirements the route may be temporarily closed by NOTAM.										

Route designator {RNP type}		[Route usage notes]							
	Significant point name	Significant point coordinates							Remarks
{RNP type}		Track MAG ↓ / ↑	Dist (NM)	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓ ↑	Controlling unit [Airspace class] Remarks
KY675		Route availability: (1) H24							
Δ	SUBEV (FIR BDRY)	54°14'55.30"N 006°30'00.00"E							
(RNAV 1)		316 / 136	4.6		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	IMVUK	54°18'23.01"N 006°24'43.63"E							
(RNAV 1)		314 / 134	16.1		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾ Odd ⁽¹⁾	- [Class G]
Δ	OTSEL	54°29'50.34"N 006°05'30.71"E							
<u>Route remarks:</u> Due to military requirements the route may be temporarily closed by NOTAM.									

Route designator {RNP type}		[Route usage notes]								
	Significant point name	Significant point coordinates							Remarks	
{RNP type}		Track MAG ↓ / ↑	Dist (NM)	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓ ↑		Controlling unit [Airspace class] Remarks
KY676		Route availability: (1) H24								
Δ	INRIP	54°33'56.40"N 006°29'17.24"E								
(RNAV 1)		299 / 118	4.9		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	ELSUR	54°36'22.49"N 006°22'04.40"E								
(RNAV 1)		299 / 118	26.2		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	ABSAM	54°49'32.11"N 005°43'04.87"E								
(RNAV 1)		299 / 118	20.6		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	ADUNU (FIR BDRY)	55°00'00.00"N 005°12'17.00"E								
<u>Route remarks:</u> Due to military requirements the route may be temporarily closed by NOTAM.										

Route designator {RNP type}		[Route usage notes]							
	Significant point name	Significant point coordinates							Remarks
{RNP type}		Track MAG ↓ / ↑	Dist (NM)	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓ ↑	Controlling unit [Airspace class] Remarks
KY678		Route availability: (1) H24							
Δ	IVNUD	53°47'27.40"N 006°22'01.32"E							
(RNAV 1)		074 / 255	4.9		FL 055 / 1500 ft AMSL	2000 ft AMSL		Odd ⁽¹⁾ Even ⁽¹⁾	- [Class G]
Δ	LEKSU (FIR BDRY)	53°48'35.37"N 006°30'00.00"E							
Route remarks: Due to military requirements the route may be temporarily closed by NOTAM.									

Route designator {RNP type}		[Route usage notes]								
	Significant point name	Significant point coordinates							Remarks	
{RNP type}		Track MAG ↓ / ↑	Dist (NM)	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series ↓ ↑		Controlling unit [Airspace class] Remarks
KY680		Route availability: (1) H24								
Δ	TIREP	54°01'45.85"N 004°43'00.14"E								
(RNAV 1)		086 / 266	25.5		FL 055 / 1500 ft AMSL	2000 ft AMSL		Odd ⁽¹⁾	Even ⁽¹⁾	- [Class G]
Δ	UNORA	54°02'58.42"N 005°26'16.15"E								
(RNAV 1)		073 / 254	21.4		FL 055 / 1500 ft AMSL	2000 ft AMSL		Odd ⁽¹⁾	Even ⁽¹⁾	- [Class G]
Δ	XIPTA	54°08'27.24"N 006°01'28.60"E								
(RNAV 1)		080 / 261	11.4		FL 055 / 1500 ft AMSL	2000 ft AMSL		Odd ⁽¹⁾	Even ⁽¹⁾	- [Class G]
Δ	INVIT	54°09'57.42"N 006°20'43.26"E								
(RNAV 1)		087 / 267	5.5		FL 055 / 1500 ft AMSL	2000 ft AMSL		Odd ⁽¹⁾	Even ⁽¹⁾	- [Class G]
Δ	INDIX (FIR BDRY)	54°10'02.00"N 006°30'00.00"E								
<u>Route remarks:</u> Due to military requirements the route may be temporarily closed by NOTAM.										

Route designator {RNP type}		[Route usage notes]								
	Significant point name	Significant point coordinates							Remarks	
{RNP type}		Track MAG ↓ / ↑	Dist (NM)	(COP)	Upper limit / Lower limit	Minimum flight altitude	Lateral limits (KM)	FL series		Controlling unit [Airspace class] Remarks
								↓	↑	
KY683		Route availability: (1) H24								
Δ	XIPTA	54°08'27.24"N 006°01'28.60"E								
(RNAV 1)		016 / 196	6.9		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	OSPAV	54°15'00.00"N 006°05'00.00"E								
(RNAV 1)		359 / 179	14.9		FL 055 / 1500 ft AMSL	2000 ft AMSL		Even ⁽¹⁾	Odd ⁽¹⁾	- [Class G]
Δ	OTSEL	54°29'50.34"N 006°05'30.71"E								
<u>Route remarks:</u> Due to military requirements the route may be temporarily closed by NOTAM.										

ENR 4.4 NAME CODE DESIGNATORS FOR SIGNIFICANT POINTS

Name-code designator	Co-ordinates	ATS route or other route	Remarks
ABNED	515057N 0031019E	L980, Z344	EHBD, EHEH, EHRD: SID FRA (X)
ABSAM	54°49'32.11"N 005°43'04.87"E	KY609, KY676	
ADIKU	55°20'50.40"N 004°17'59.13"E	KY610	
ADOMI	54°12'20.10"N 004°33'28.31"E	KY610	
ADUNU	55°00'00.00"N 005°12'17.00"E	KY676	
AGASO	54°56'40.48"N 004°34'20.96"E	KY602, KY610	
AGISI	53°37'02.89"N 004°32'47.75"E	KY608, KY610	
AGISU	53°52'54.00"N 006°30'00.00"E	Z708	FRA (ID)
AGOGO	522948.5N 0045414.7E		EHAM: APCH
AKOXA	54°31'51.16"N 004°33'51.25"E	KY610	
ALFEN	521024N 0044733E		FRA (IA)
ALINA	523350.5N 0044541.4E		EHAM: APCH
AMADA	55°00'00.00"N 006°21'00.00"E		FRA (EX): FL 245 - FL 285 FRA (I): FL 285 - FL 660
AMEGA	522438.0N 0050606.3E		EHAM: APCH
AMGOD	52°58'30.79"N 003°41'07.40"E	L74, L602	EHAM: SID FRA (I)
AMREG	53°03'34.57"N 006°16'25.67"E		EHGG: APCH
AMRIV	514119N 0024001E	Q63, Z344	
AMSOT	53°18'47.75"N 004°35'08.74"E	KY606, KY610, KY615	
ANDIK	52°44'21.85"N 005°16'13.76"E	M105, N873, Z733	EHAM, EHLE, EHRD: SID FRA (I)
ANETS	505556N 0054412E	UM617	
ANZUL	505030.4N 0055130.9E		EHBK: APCH-STAR
APVUV	515118N 0051551E	T604	
ARBEP	522754N 0060119E		EHLE: SID
ARNEM	52°05'47.21"N 006°04'35.77"E	L620, T196	EHAM, EHLE, EHRD: SID
ARTIP	52°30'40.37"N 005°34'08.69"E		EHAM: STAR- transition; EHGG: SID
ARWIN	522312.5N 0045933.8E		EHAM: APCH
ASBES	522426.2N 0053722.8E		EHLE: APCH - SID
ASGOS	53°52'22.18"N 004°33'05.22"E	KY609, KY610	
ASNOM	525050N 0052307E		EHLE: SID
ASTUW	524628.4N 0045121.1E		EHKD: APCH
ATRIX	53°08'18.52"N 004°37'28.70"E	KY610, KY620, KY623	EHKD: SID-STAR
ATWIT	520240.3N 0043938.0E		EHRD: APCH
BADEX	522632.5N 0062048.7E	T603, T604	EHLE: APCH
BAGOV	53°39'58.93"N 004°20'08.84"E	KY615	
BAHSI	522522.2N 0042920.2E		EHAM, EHLE: SID
BAKLU	52°59'05.85"N 004°46'21.83"E		EHKD: STAR
BANDU	53°04'10.18"N 006°28'28.42"E*		EHGG: APCH
BASGU	51°54'44.29"N 005°50'59.75"E		EHBD, EHBK, EHEH: SID-STAR; EHGG: SID
BASNO	52°21'00.55"N 004°34'30.15"E	L620	EHLE: STAR
BATAK	51°34'16.00"N 004°47'19.88"E	Z310, Z311	FRA (I)
BAXIM	50°57'24.02"N 006°02'50.35"E		EHBK: STAR
BEDUM	53°20'53.41"N 006°35'19.92"E	N873	FRA (ID)
BEKEM	51°25'56.00"N 004°34'48.71"E	Z311	
BEKVU	52°12'50"N 006°44'35"E		EHTW: APCH
BELAP	55°29'06.30"N 003°59'46.10"E	KY615	
BEMTI	50°46'20.00"N 005°46'57.00"E		EHBK: STAR
BENUX	55°00'00.00"N 004°00'05.26"E	KY615	
BERGI	52°44'55.50"N 004°21'32.15"E	L60, L602, M90	EHAM, EHLE: SID FRA (I)
BERIR	50°46'17.28"N 005°47'03.18"E		EHBK: APCH
BESBU	54°30'00.00"N 004°00'24.53"E	KY615	
BESTI	51°38'32.65"N 005°25'39.46"E		EHEH: APCH
BETUS	52°41'17.31"N 005°09'45.19"E	N873	EHAM: SID
BIBIS	54°00'23.72"N 004°05'26.08"E	KY615	
BLUFA	525010N 0062000E	N125, T200	EHAM, EHRD: STAR FRA (IA): FL 175 - FL 660
BLUSY	522607.2N 0045838.6E		EHAM: APCH

Name-code designator	Co-ordinates	ATS route or other route	Remarks
BOBMO	51°06'45.79"N 005°59'48.13"E		EHBK: STAR
BOGRU	510306.9N 0055445.1E		EHBK: APCH
BOGTI	54°06'57.36"N 004°00'39.01"E	KY615	
BOVCO	520124.0N 0044242.9E		EHAM: APCH
BREDA	51°33'37.06"N 004°51'12.00"E		EHBD, EHBK, EHEH: SID FRA (I)
BRIAR	520339N 0054619E	T604	EHLE: SID
BUDIP	512245.4N 0055227.4E		EHBD: STAR FRA (I)
BUROG	53°02'41.21"N 004°46'41.22"E		EHKD: STAR
DANUM	55°00'00"N 005°16'53"E		
DENAG	52°04'56.59"N 003°53'26.87"E		EHAM: SID
DENUT	51°14'10.04"N 003°39'27.36"E	L608, T604	EHAM, EHBD, EHEH, EHRD: STAR FRA (IA)
DERUV	51°26'59.43"N 005°48'29.85"E		EHEH: APCH
DESUL	53°45'04.17"N 003°51'52.94"E	KY620	
DEVIG	54°19'29.34"N 002°56'02.89"E	KY620	
DEVUT	52°15'26.69"N 006°22'53.95"E		EHTE: APCH
DEXOR	54°00'00.00"N 003°27'56.26"E	KY620	
DIBIR	51°16'37.00"N 006°07'28.00"E	L179, T601	EHBD: SID FRA (ID)
DIBRU	523434.6N 0044353.5E		EHAM: APCH
DIKAT	55°12'40.21"N 004°34'32.13"E	KY601, KY602	
DIMOX	53°32'14.31"N 004°12'08.10"E	KY620, KY625	
DINAK	510058.8N 0060000.7E		EHBK: APCH
DISRA	53°20'00.00"N 004°25'10.05"E	KY620	FRA (I)
DIVPA	53°00'08.81"N 006°11'03.92"E		EHGG: SID
DOBAK	53°12'48.00"N 007°13'01.00"E		EHGG: SID-STAR
DOFMU	514428.8N 0041436.6E	N873	EHAM: STAR; EHRD: APCH
DOTIX	522849N 0055010E		EHLE: SID
EBAGO	53°38'18.35"N 003°45'57.66"E	KY625	
EBUSA	55°00'00.00"N 005°54'08.92"E	KY609	
EDFOS	524621.9N 0044326.6E		EHKD: APCH
EDOXO	524600N 0052210E		EHLE: SID
EDUBU	54°11'00.00"N 006°30'00.00"E		
EDUMA	51°05'44.57"N 005°56'03.88"E		EHBD, EHEH: SID-STAR
EDUPO	51°58'31.89"N 005°50'09.37"E	Z739	EHAM: SID
EHOJI	512804.3N 0052341.5E	P57, T605	EHBD, EHBK, EHEH: SID-STAR EHEH: APCH
EKDAR	53°49'24.29"N 002°56'37.96"E	KY625, KY630	
EKNON	524618.2N 0060148.9E	N125, T602, T606	EHLE: APCH FRA (I)
EKROS	52°14'14.20"N 004°37'10.37"E	L980, N873	
ELBED	50°49'05.86"N 006°03'27.51"E		EHBK: SID
ELPAT	52°07'38.71"N 005°57'04.11"E	L620	EHAM: SID
ELSIK	51°11'42.07"N 004°59'55.00"E		EHEH: SID-STAR
ELSUR	54°36'22.49"N 006°22'04.40"E	KY607, KY676	
EMMUN	524000N 0070200E		FRA (I)
ENKOS	52°40'41.26"N 005°14'35.75"E		EHGG:SID; EHRD:STAR
ENZEN	525839N 0031157E	L60	
EPOXU	54°39'54.77"N 006°31'02.30"E	KY607, KY673	
ERMUR	524218N 0053954E		EHLE: SID
ERSUL	511954.3N 0051432.2E		EHEH: APCH
ETEBO	52°08'18.00"N 006°52'31.00"E	L980	
ETPOS	52°35'06.44"N 003°24'51.04"E		EHAM: STAR
EVELI	52°38'25.47"N 003°23'13.20"E		FRA (I)
FAFLO	530450.4N 0045722.9E		EHKD: APCH
FEWEX	525125.5N 0043649.0E		EHKD: APCH
FLEVO	52°23'07.26"N 005°36'07.81"E	L602, L980	EHRD: STAR
GALSO	514358N 0031019E	Q63	FRA (X)
GEMTI	51°32'47.90"N 005°38'46.23"E		EHEH: APCH
GETSI	53°14'12.27"N 006°29'34.41"E		EHGG: APCH
GIKOV	53°06'35.04"N 004°32'12.38"E	KY630	EHKD: SID-STAR
GILIV	51°35'44.10"N 005°32'17.35"E		EHEH: APCH
GILTI	51°34'13.01"N 002°03'18.17"E	L179	
GIROS	53°30'03.14"N 003°38'47.02"E	KY630, KY633	

Name-code designator	Co-ordinates	ATS route or other route	Remarks
GISEB	51°54'04.74"N 004°59'27.00"E		FRA (I)
GOBNO	50°58'56.16"N 005°59'23.04"E	Z717	
GODOS	53°14'56.55"N 003°25'46.79"E	P1	FRA (EX)
GOHEM	530220.1N 0045433.8E		EHKD: APCH
GOLOR	53°13'04.16"N 004°24'49.32"E	KY623, KY630, KY635	
GOTIG	52°07'07.59"N 006°45'50.25"E	P55	
GREFI	55°00'00.00"N 005°51'31.66"E		FRA (EX): FL 245 - FL 285 FRA (I): FL 285 - FL 660
GRONY	53°06'19.69"N 006°03'17.89"E	N873	EHGG: STAR; EHLE: SID
GULTO	53°50'00.00"N 006°17'00.00"E		
HAMZA	514321.8N 0035129.5E		EHAM: STAR; EHBD, EHEH: SID-STAR; EHRD: APCH
HECTI	531255.1N 0064706.6E		EHGG: APCH-STAR
HELEN	51°14'07.13"N 003°52'10.96"E	L179, N873, Y28	EHAM, EHBD, EHEH, EHRD: STAR FRA (I)
HELHO	515152.4N 0041236.8E		EHRD: APCH
HOXZA	525951.0N 0045147.3E		EHKD: APCH
IBALO	53°16'44.51"N 003°27'19.16"E	KY635, KY640	
IBNOS	514857N 0024001E	L980	
IDAKA	531033.9N 0065242.3E		EHGG: APCH
IDGOK	523708.7N 0054847.5E		EHLE: APCH
IDRID	515946N 0032946E	L980, M40	EHAM: SID
IFTAZ	521829.1N 0042937.0E		EHAM: APCH
IMPOH	512656N 0030624E		
IMVUK	54°18'23.01"N 006°24'43.63"E	KY673, KY675	
INBAM	52°21'11.20"N 005°15'10.74"E		EHAM: APCH
INDEV	53°17'20.14"N 003°03'31.34"E	KY640	
INDIX	54°10'02.00"N 006°30'00.00"E	KY680	
INKET	51°48'52.66"N 004°46'19.06"E	P57, Q21	EHBD, EHEH, EHRD: SID-STAR
INLOD	51°34'49.28"N 002°21'32.14"E	L608	
INRIP	54°33'56.40"N 006°29'17.24"E	KY673, KY676	
INVIT	54°09'57.42"N 006°20'43.26"E	KY673, KY680	
IPMUR	515735N 0054149E	T604	EHLE: SID
IPTAS	513816.9N 0050631.7E		EHBD: STAR; EHEH: STAR-APCH
IPVIS	53°09'18.40"N 003°53'59.49"E	KY640	
IRDUK	53°33'26.52"N 002°59'36.88"E	KY633, KY635	
IVLUT	52°14'38.81"N 005°15'25.06"E	Z739	EHAM, EHRD:SID
IVNUD	53°47'27.40"N 006°22'01.32"E	KY673, KY674, KY678	
IXUTA	54°12'29.27"N 006°22'59.93"E	KY673	
JOPFI	530040.9N 0045842.6E		EHKD: APCH
KAKKO	515351.3N 0043315.7E		EHRD: APCH
KAROF	520030.0N 0044504.9E		EHAM: APCH
KEGIT	51°24'25.25"N 003°06'23.75"E	L179, L608	
KEKIX	52°46'56.83"N 005°21'41.37"E	N873, Z708	
KEROR	53°08'17.10"N 003°20'06.31"E	KY645, KY646	
KOKIP	525716N 0035902E		EHLE: SID
KOLAV	53°01'37.89"N 004°21'00.00"E	KY640, KY645	EHKD: SID-STAR
KONEP	53°03'14.06"N 003°42'04.23"E	KY645	
KONOM	53°37'57.79"N 005°29'43.16"E	Z733	FRA (ID)
KOPAD	53°07'45.81"N 003°06'14.72"E	KY646	
KOPFA	525042.6N 0044137.3E		EHKD: APCH
KOZUF	512110N 0033927E		FRA (IA)
KUBAT	53°20'11.00"N 006°59'37.00"E	N872, T200	EHGG: STAR FRA (I)
KUDAD	51°40'02.93"N 004°34'03.41"E	N872	
KUSON	53°11'40.64"N 003°05'08.06"E	KY645	
KUVOS	523509.9N 0054512.6E		EHLE: APCH
LABIL	53°29'45.00"N 006°48'59.34"E	N873	
LAMSO	52°43'58.43"N 002°59'39.68"E	T606	EHAM, EHBD, EHEH, EHRD: STAR FRA (EX)
LANSU	52°24'50.45"N 004°56'47.95"E		EHAM: APCH
LARAS	51°50'04.46"N 004°41'50.37"E	N872	EHAM: SID FRA (I)
LARBO	53°09'57.68"N 006°40'38.63"E		EHGG: APCH
LASEX	52°51'54.09"N 004°00'00.00"E	KY650	
LEGBA	53°04'24.12"N 004°14'14.24"E	M90	

Name-code designator	Co-ordinates	ATS route or other route	Remarks
LEKKO	51°55'27.03"N 004°46'02.39"E	N872, P57	EHAM, EHLE: SID
LEKSU	53°48'35.37"N 006°30'00.00"E	KY678	
LERGO	52°53'05.16"N 004°21'00.00"E	KY650, KY653	EHKD: SID-STAR
LEVKI	522552N 0044306E		EHAM: SID
LIKDO	513104N 0043226E	T604	EHBD, EHEH: STAR
LILSI	52°28'23.75"N 005°20'54.00"E	N872, Z310	EHGG: SID
LISOH	521729N 0044411E		EHAM: SID
LOCFU	530344.8N 0044209.8E		EHKD: APCH
LONAM	53°50'22.50"N 003°56'33.16"E	M90	FRA (EX)
LONLU	52°14'55"N 006°53'03"E		EHTW: APCH
LOPIK	51°55'50.98"N 005°07'44.96"E	N852, T605	EHAM: SID; EHBD, EHEH: STAR
LUNIX	52°06'35.40"N 005°33'55.45"E	Z739	EHAM, EHLE, EHRD: SID
LUSOR	515556N 0024001E	M40	
LUTET	52°16'33"N 006°58'22"E		EHTW: APCH
LUTEX	52°40'53.16"N 003°28'06.77"E		EHAM: STAR
LUTOM	51°15'56.00"N 005°25'15.65"E	N852	
LUVOR	52°48'23.45"N 003°03'20.62"E	KY650	
MAPAD	50°49'46.27"N 006°01'08.66"E	Y868	
MASOS	51°47'57.60"N 003°35'47.29"E		EHRD: STAR
MAVAS	52°23'54.90"N 003°10'00.30"E		FRA (I)
MAXUN	53°32'22.45"N 006°38'35.17"E		FRA (I)
MEBOT	52°45'18.20"N 003°45'22.15"E	KY653	
MIMVA	53°06'03.21"N 003°18'12.63"E	L602	FRA (EX)
MITSA	51°17'07.86"N 005°21'09.82"E		EHEH: APCH
MODRU	51°01'03.00"N 006°05'24.00"E		EHBK: STAR
MOKUM	54°29'03.00"N 006°05'35.95"E		FRA (I)
MOLIX	52°49'19.20"N 003°04'07.21"E	L17, T607	EHAM, EHBD, EHEH, EHRD: STAR
MOMIC	514025N 0023000E	Q63	
MONIL	52°45'38.72"N 003°44'47.91"E	L74, P1, P62, T606, T607	EHAM: STAR
NAKON	52°46'45.68"N 004°25'28.68"E	KY660	EHKD: SID-STAR
NAPRO	51°51'21.00"N 006°03'32.00"E	Z739	EHGG: SID
NARIX	52°39'09.86"N 004°58'34.08"E		EHAM: transition
NARSO	52°42'55.15"N 006°42'34.36"E		EHAM: holding (ATC discretion)
NAVAK	50°49'38.80"N 005°55'05.16"E	Y868, Z283	
NAVPI	52°32'50.00"N 002°50'26.00"E	T601	FRA (EX)
NEKAS	52°41'18.90"N 004°11'04.48"E	KY660, KY667	
NELFE	521058.9N 0043658.1E		EHAM: APCH
NEPTU	515417N 0052245E	T604	EHLE: SID
NETEX	51°19'40.87"N 006°16'16.88"E		EHBK: SID-STAR
NETOM	522520.8N 0042316.5E		EHAM: APCH
NEWCO	520807.1N 0044546.8E		EHAM: APCH
NEXAR	52°46'56.72"N 004°43'12.85"E	KY667	EHKD: SID-STAR
NIDOP	52°45'33.51"N 004°53'01.59"E		EHKD-EHAM: transition
NIGUG	520237N 0051655E		FRA (I)
NIHOF	520034N 0061450E		EHEH, EHGG: SID
NILMI	523357.7N 0060516.9E		EHLE: APCH
NIREX	52°17'25.15"N 003°48'58.21"E	KY660	
NIRSI	52°35'01.96"N 004°30'48.14"E		EHAM: transition
NIXCO	524526.3N 0043844.8E		EHKD: APCH
NOFUD	524813.3N 0043852.1E		EHKD: APCH
NOGRO	515756N 0031019E	M40	FRA (X)
NOLRU	513004N 0061250E		FRA (I)
NOPSU	52°35'12.97"N 004°57'02.89"E		EHAM: SID
NORKU	52°12'56.00"N 006°58'35.00"E		EHAM: STAR FRA (IA)
NOVEN	52°42'36.77"N 005°53'54.43"E		EHAM: STAR; EHGG: SID
NOWIK	510108.7N 0055244.6E		EHBK: APCH
NYKER	52°13'49.40"N 005°31'43.69"E	L620, Q21	EHAM, EHLE, EHRD: SID
OBAGU	52°09'09.21"N 003°44'57.76"E		EHRD: SID
OBILO	52°00'00.00"N 003°00'00.00"E		North Sea pilotage
ODASI	53°30'55.13"N 004°04'07.03"E	M90	
ODVIL	515022N 0035151E		FRA (I)
OGBOL	504918N 0053917E	Y868	
OGINA	52°05'50.92"N 005°03'16.68"E	T605	EHAM: SID
OGOSU	521116N 0044914E		EHAM: SID

TEMPORARY RESERVED AIRSPACE		
Identification, name and lateral limits	Upper limit Lower limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EHTRA15 525959N 0071233E - along Dutch-German border - 521204N 0065811E - 521118N 0064140E - 522149N 0062000E - 524550N 0062000E - 525005N 0062435E - 525959N 0071233E.	<u>FL 195</u> FL 065	AMC manageable area. MON-THU 0700-2300 (0600-2200), FRI 0700-1600 (0600-1500), or when activated via AUP/UUP or NOTAM. Prohibited when activated, unless permission from MILATCC Schiphol. When activated class E. Vertical limits may vary within the area.
EHTRA15A 525959N 0071233E - along Dutch-German border - 522911N 0064151E - along parallel - 522911N 0063942E - 523745N 0062000E - 524550N 0062000E - 525005N 0062435E - 525959N 0071233E.	<u>FL 315</u> FL 195	AMC manageable area. MON-THU 0700-2300 (0600-2200), FRI 0700-1600 (0600-1500), or when activated via AUP/UUP or NOTAM. Prohibited when activated, unless permission from MILATCC Schiphol. When activated class E. Vertical limits may vary within the area.
EHTRA15AZ 530134N 0071747E - 525016N 0062257E - 524608N 0061820E - 523713N 0061820E - 522811N 0063909E - 522810N 0064243E - 523501N 0070518E - 523553N 0070724E - 523715N 0070822E - 530007N 0071838E - 530134N 0071747E.	<u>FL 315</u> FL 195	For IFR flight planning purposes only.
EHTRA58 (Regte Heide) Circle, radius 2 NM, centre 513045N 0050140E.	<u>FL 245</u> GND	Activated by NOTAM. Prohibited when activated, unless permission from MILATCC Schiphol or Gilze-Rijen TWR. Military high altitude parajumping. Vertical limits may vary within the area.
EHTRA59 (Leusderheide) Circle, radius 2 NM, centre 520614N 0052034E.	<u>FL 130</u> GND	Activated by NOTAM. Military parajumping. Prohibited when activated, unless permission from MILATCC Schiphol. Vertical limits may vary within the area.
EHTRA72 (Wamel) 51°52'00"N 005°17'32"E; 51°54'11"N 005°22'48"E; 51°54'38"N 005°30'35"E; 51°52'00"N 005°40'40"E; 51°49'13"N 005°40'44"E; 51°43'52"N 005°22'56"E; to point of origin.	<u>FL 195</u> GND	Activated by NOTAM. Prohibited when activated, unless permission from MILATCC Schiphol. Military exercises. Vertical limits may vary within the area.
EHTRA80 (Deelen Hoog) Circle, radius 6.5 NM, centre 52°03'35.02"N 005°52'18.97"E.	FL 065 3000 ft AMSL	AMC manageable area. Activated via AUP/UUP or NOTAM. Prohibited when activated, unless permission from MILATCC Schiphol. Military exercises.

TEMPORARY RESERVED AIRSPACE		
Identification, name and lateral limits	Upper limit Lower limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EHTRA81 (Maas/Waal) 51°53'58.99"N 005°33'26.32"E; 51°52'31.87"N 005°34'47.79"E; 51°52'19.76"N 005°37'16.51"E; 51°48'00.40"N 005°39'00.31"E; 51°46'59.97"N 005°34'59.93"E; 51°47'30.07"N 005°32'30.07"E; 51°46'59.97"N 005°28'59.79"E; 51°45'00.44"N 005°28'59.79"E; 51°45'00.41"N 005°20'13.29"E; 51°44'47.75"N 005°19'29.50"E; 51°44'37.65"N 005°19'02.93"E; 51°44'18.74"N 005°18'21.24"E; 51°44'09.90"N 005°17'53.45"E; 51°44'10.07"N 005°17'36.94"E; 51°44'19.66"N 005°17'06.45"E; 51°44'21.74"N 005°16'46.05"E; 51°44'19.14"N 005°15'56.79"E; 51°44'02.09"N 005°15'23.33"E; 51°43'59.29"N 005°15'06.15"E; 51°43'59.80"N 005°14'42.65"E; 51°44'26.16"N 005°13'49.49"E; 51°44'34.72"N 005°13'12.56"E; 51°44'32.32"N 005°12'52.42"E; 51°44'26.54"N 005°12'26.74"E; 51°44'22.22"N 005°11'59.54"E; 51°44'22.91"N 005°11'32.97"E; 51°44'29.07"N 005°11'03.87"E; 51°44'32.32"N 005°10'36.45"E; 51°44'31.98"N 005°09'53.09"E; 51°44'20.51"N 005°08'27.76"E; 51°44'06.48"N 005°07'09.98"E; 51°43'53.30"N 005°06'18.79"E; 51°43'26.90"N 005°05'15.36"E; 51°43'15.48"N 005°05'01.07"E; 51°42'51.42"N 005°04'31.87"E; 51°42'39.65"N 005°04'00.40"E; 51°42'34.52"N 005°03'43.79"E; 51°42'29.17"N 005°03'18.78"E; 51°42'25.96"N 005°02'45.38"E; 51°42'24.78"N 005°02'18.63"E; 51°42'25.32"N 005°01'54.85"E; 51°42'26.92"N 005°01'23.03"E; 51°42'31.52"N 005°00'40.71"E; 51°42'33.88"N 005°00'26.55"E; 51°42'36.01"N 004°59'50.01"E; 51°42'40.40"N 004°59'15.73"E; 51°42'32.60"N 004°58'07.18"E; 51°42'23.18"N 004°57'33.44"E; 51°42'24.04"N 004°56'56.37"E; 51°42'31.14"N 004°55'53.44"E; 51°42'44.78"N 004°54'58.17"E; 51°42'49.94"N 004°54'24.60"E; 51°42'55.27"N 004°54'06.77"E; 51°43'01.04"N 004°53'54.53"E; 51°43'31.85"N 004°53'57.32"E; 51°43'51.74"N 004°54'42.44"E; 51°44'31.10"N 004°55'26.15"E; 51°45'16.77"N 004°55'59.02"E; 51°45'50.89"N 004°56'04.62"E; 51°46'15.70"N 004°56'06.37"E; 51°47'20.52"N 004°56'23.50"E; 51°47'45.97"N 004°56'19.83"E; 51°48'40.73"N 004°57'53.03"E; 51°49'03.94"N 004°59'35.49"E; 51°49'10.93"N 005°00'24.83"E; 51°48'52.25"N 005°02'14.91"E; 51°49'29.60"N 005°04'49.16"E; 51°49'28.94"N 005°05'35.96"E; 51°48'46.54"N 005°07'34.61"E; 51°48'43.46"N 005°08'28.01"E; 51°48'55.11"N 005°09'55.90"E; 51°48'48.52"N 005°10'59.84"E; 51°48'30.50"N 005°13'10.14"E;	<u>3000 FT AMSL</u> GND	Activated by NOTAM. Prohibited when activated, unless permission from MILATCC Schiphol. Military exercises. Vertical limits may vary within the area.

TEMPORARY SEGREGATED AREAS		
Identification, name and lateral limits	Upper limit Lower limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EHTSA28 (Roermond) Circle, radius 3 NM, centre 511019N 0055934E.	<u>3000 ft AMSL</u> GND	Activated by NOTAM due to memorial ceremony on the first Saturday of September. Prohibited for all traffic except emergency flights by or on behalf of police, trauma teams or SAR.
EHTSA50 (Marne, RPAS) Circle, radius 1.7 NM, centre 532331N 0061528E.	<u>1200 FT AMSL</u> GND	Activated by NOTAM. Prohibited when activated, unless permission from MILATCC Schiphol. Unmanned aircraft systems (UAS).
EHTSA51 (De Haar, RPAS) Circle, radius 0.875 NM, centre 525646N 0063117E.	<u>600 FT AMSL</u> GND	Activated by NOTAM. Prohibited when activated, unless permission from MILATCC Schiphol. Unmanned aircraft systems (UAS).
EHTSA52 (Havelte, RPAS) 524807N 0061031E - 524904N 0061300E - along clockwise arc (radius 1.2 NM, centre 524803N 0061403E) - 524655N 0061442E - 524620N 0061156E - along clockwise arc (radius 1.0 NM, centre 524717N 0061124E) - 524807N 0061031E.	<u>600 FT AMSL</u> GND	Activated by NOTAM. Prohibited when activated, unless permission from MILATCC Schiphol. Unmanned aircraft systems (UAS).
EHTSA53 (Beekhuizerzand, RPAS) Circle, radius 1 NM, centre 521955N 0054029E.	<u>600 FT AMSL</u> GND	Activated by NOTAM. Prohibited when activated, unless permission from MILATCC Schiphol. Unmanned aircraft systems (UAS).
EHTSA54 (Ermelosche heide, RPAS) Circle, radius 1.06 NM, centre 521724N 0054050E.	<u>600 FT AMSL</u> GND	Activated by NOTAM. Prohibited when activated, unless permission from MILATCC Schiphol. Unmanned aircraft systems (UAS).
EHTSA55 (Vlasakkers, RPAS) 520845N 0052009E - 520818N 0052027E - 520740N 0051805E - 520753N 0051748E - 520756N 0051732E - 520758N 0051728E - 520815N 0051727E - 520842N 0051759E - 520839N 0051905E - 520845N 0052009E.	<u>600 FT AMSL</u> GND	Activated by NOTAM. Prohibited when activated, unless permission from MILATCC Schiphol. Unmanned aircraft systems (UAS).
EHTSA56 (Leusderheide, RPAS) Circle, radius 1.2 NM, centre 520622N 0052029E.	<u>600 FT AMSL</u> GND	Activated by NOTAM. Prohibited when activated, unless permission from MILATCC Schiphol. Unmanned aircraft systems (UAS).
EHTSA57 (Rucphense heide, RPAS) Circle, radius 1 NM, centre 513043N 0043211E.	<u>600 FT AMSL</u> GND	Activated by NOTAM. Prohibited when activated, unless permission from MILATCC Schiphol. Unmanned aircraft systems (UAS).
EHTSA67 (Kraggenburg) 524126N 0055208E - 523949N 0055349E - 523914N 0055218E - 524053N 0055039E - 524126N 0055208E.	<u>1200 FT AMSL</u> GND	Activated by NOTAM. Prohibited when activated, unless permission from MILATCC Schiphol. Unmanned aircraft systems (UAS).
EHTSA85 (Deelen Low) 520242N 0054150E - 520450N 0054156E - 520650N 0054312E - 520808N 0054447E - 520920N 0054400E - 521130N 0054700E - 521017N 0055033E - 521206N 0055127E - 521053N 0055755E - 520149N 0055251E - 520242N 0054150E.	<u>3000 FT AMSL</u> GND	Activated by NOTAM. Prohibited when activated, unless permission from MILATCC Schiphol.

TEMPORARY SEGREGATED AREAS		
Identification, name and lateral limits	Upper limit Lower limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EHTSA100 (Combi Recovery Circle) Circle, radius 3 NM, centre 525407N 0065527E.	<u>2000 FT AMSL</u> GND	Activated by NOTAM. Prohibited when activated, unless permission from MILATCC Schiphol. Unmanned aircraft systems (UAS).
EHTSA101 (Emmer-Compascuum) Circle, radius 1.5 NM, centre 524729N 0070013E.	<u>2000 FT AMSL</u> GND	Activated by NOTAM. Prohibited when activated, unless permission from MILATCC Schiphol. Unmanned aircraft systems (UAS).
EHTSA102 (De Krim) Circle, radius 1.5 NM, centre 523950N 0063829E.	<u>2000 FT AMSL</u> GND	Activated by NOTAM. Prohibited when activated, unless permission from MILATCC Schiphol. Unmanned aircraft systems (UAS).

5 CROSS BORDER AREAS (CBA)

Definition: a temporary segregated area (TSA) established over international boundaries for specific operational requirements.

CROSS BORDER AREAS		
Identification, name and lateral limits	Upper limit Lower limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EUCSEA1 545730N 0050235E - along parallel - 545730N 0063000E - along parallel - 545730N 0073322E - 540022N 0071512E - 535656N 0071215E - 535002N 0063000E - 533230N 0044939E - along parallel - 533230N 0034538E - 545730N 0050235E.	<u>FL 660</u> FL 055	AMC manageable area. MON-THU 0700-2300 (0600-2200), FRI 0700-1600 (0600-1500), or when activated via AUP/UUP or NOTAM. Prohibited when activated, unless permission from the military ATS provider. When activated class E. Military exercises. Vertical limits may vary within the area. The part of EUCSEA1 east of meridian 00630E is situated within the Bremen FIR.
EUCSEA1Z 550229N 0045723E - 550230N 0053448E - along parallel - 550230N 0062730E - along parallel - 550230N 0073700E - along parallel - 550230N 0074042E - 550040N 0074320E - 541336N 0072802E - 535845N 0072322E - 535241N 0071811E - 534451N 0063000E - 533542N 0053642E - 532729N 0045053E - along parallel - 532729N 0034058E - 533214N 0033558E - 550229N 0045723E.	<u>FL 660</u> FL 055	For IFR flight planning purposes only. The part of EUCSEA1Z east of meridian 00630E is situated within the Bremen FIR.
EUCSEA1L 545730N 0053820E - along parallel - 545730N 0063000E - along parallel - 545730N 0073322E - 540022N 0071512E - 535656N 0071215E - 535002N 0063000E - 534113N 0053820E - 545730N 0053820E.	<u>FL 660</u> FL 055	AMC manageable area. MON-THU 0700-2300 (0600-2200), FRI 0700-1600 (0600-1500), or when activated via AUP/UUP or NOTAM. Prohibited when activated, unless permission from the military ATS provider. When activated class E. Military exercises. Vertical limits may vary within the area. The part of EUCSEA1L east of meridian 00630E is situated within the Bremen FIR.

CROSS BORDER AREAS		
Identification, name and lateral limits	Upper limit Lower limit	Remarks (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
EUCSEA1LZ 550230N 0053448E - along parallel - 550230N 0062730E - along parallel - 550230N 0073700E - along parallel - 550230N 0074042E - 550040N 0074320E - 541336N 0072802E - 535845N 0072322E - 535241N 0071811E - 534451N 0063000E - 533542N 0053642E 533845N 0052934E - 545934N 0052934E - 550230N 0053448E.	<u>FL 660</u> FL 055	For IFR flight planning purposes only. The part of EUCSEA1LZ east of meridian 00630E is situated within the Bremen FIR.

6 AERODROME TRAFFIC ZONES (ATZ)

Definition: an airspace of defined dimensions established around an aerodrome for the protection of aerodrome traffic.

An ATZ has been established around the following aerodromes. The activities conducted at these aerodromes make it undesirable for other aircraft, not engaged in these activities, to penetrate or otherwise disturb the traffic pattern. In this case, the ATZ is primarily reserved for use by aircraft participating in the activities of the aerodrome. Overflying aircraft are strongly recommended to stay clear of the ATZ

AERODROME TRAFFIC ZONES		
Identification, name and lateral limits	Upper limit Lower limit	Remarks (time of activity, type of restriction)
1	2	3
ATZ Budel - part A 511743N 0053057E - along clockwise arc (radius 5 NM, centre 511421N 0053650E) - 511052N 0054231E - along Dutch-Belgian border - 511152N 0053910E - 511521N 0053324E - along Dutch-Belgian border - 511743N 0053057E.	<u>1200 FT AMSL</u> GND	OPR HR EHBD (see EHBD AD 2.3). ATZ Budel is situated within Kleine Brogel CTR, the air-space classification is class G. ATZ Budel is only for flights to and from Budel AD and circuit flights. Pilots conducting flights within ATZ Budel have to maintain two-way radio contact with the aerodrome authority.
ATZ Budel - part B 511521N 0053324E - 511152N 0053910E - along Dutch-Belgian border - 511521N 0053324E.	<u>600 FT AMSL</u> GND	
ATZ Schinveld 505834N 0055818E - 505848N 0055819E - along Dutch-German border - 505900N 0060136E - along Dutch-German border - 505854N 0060137E - 505856N 0060117E - 505850N 0060058E - 505833N 0060020E - 505834N 0055818E.	<u>up to 3000 FT AMSL</u> GND	OPR HR EHBK during UDP (see EHBK AD 2.3). ATZ Schinveld is situated within Maastricht CTR. All aircraft not participating in the glider activities at or near Schinveld glider site are strongly recommended to stay clear of the ATZ, unless an ATC clearance to cross has been obtained from Beek Tower. This clearance will only be issued when there are no glider activities at Schinveld glider site. ATZ Schinveld is during set time periods subject to local agreement for use by local participants only.
ATZ Teuge 521742N 0060940E - 521353N 0060957E - 521152N 0060252E - 521240N 0060000E - 521354N 0055713E - 521724N 0055829E - 521742N 0060940E.	<u>1500 FT AMSL</u> GND	OPR HR EHTE outside UDP (see EHTE AD 2.3). ATZ Teuge is situated in airspace class G.

AERODROME TRAFFIC ZONES		
Identification, name and lateral limits	Upper limit Lower limit	Remarks (time of activity, type of restriction)
1	2	3
ATZ Twente 521707N 0064436E - 522138N 0065918E - 521849N 0070237E - along Dutch-German border - 521618N 0070155E - 521554N 0070208E - 521037N 0064719E - 521339N 0064312E - 521707N 0064436E.	<u>2200 FT AMSL</u> GND	OPR HR EHTW during UDP (see EHTW AD 2.3). Traffic not in- or outbound ENSCHEDE/Twente is strongly advised not to enter the ATZ. ATZ Twente is situated in airspace class: <ul style="list-style-type: none"> • G GND-1500 FT AMSL; • E 1500 FT AMSL-2200 FT AMSL.
ATZ Veendam 530415N 0064852E - along clockwise arc (radius 0.88 NM, centre 530504N 0064925E) - 530514N 0065051E - 530446N 0065100E - 530444N 0065258E - 530351N 0065225E - 530303N 0065112E - 530323N 0065014E - 530415N 0064852E.	<u>up to 1500 FT AMSL</u> GND	OPR HR EHGG during UDP (see EHGG AD 2.3). All aircraft not participating in the glider activities at or near Veendam glider site are strongly recommended to stay clear of the ATZ. ATZ Veendam is during set time periods subject to local agreement for use by local participants only, exempted from the TMZ Eelde.

7 OTHER PERMANENT HAZARDOUS AREAS

7.1 Low flying areas and low flying routes

Low flying areas and routes in the Amsterdam FIR are solely assigned to certain military and/or civil parties authorised by the appropriate authorities to operate below the minimum height as defined in SERA.3105. The civil and military low flying areas are depicted on chart ENR 6-5.2 (military areas are listed in ENR 5.2).

General remarks:

- Built up areas, populous beaches, crowds, Royal residences, hospitals, health resorts, etc. shall be avoided.
- Aircraft leaving low flying area and/or low flying routes will climb to an altitude designated by ATC.
- Low flying in civil low flying areas (see paragraph 7.3) is only permitted to single engine aircraft for practising go-arounds during training flights under supervision of an instructor.
- Listing of a low flying area or route does not imply any right to a pilot to use that low flying area or route.

Outside designated low flying areas and routes, low flying may take place:

- below 500 FT AGL/AMSL by aircraft of the State Police and by military aircraft in connection with exercises of the Netherlands Forces;
- over water areas by helicopters.

7.2 Intensive military aircraft within and near EHR4 (Vliehors)

- Expect intensive OAT MON-THU 0700-2300 (0600-2200) and FRI 0700-1600 (0600-1500) within and near the restricted area EHR4 between 1000 FT and 1750 FT.
- The OAT route to and from EHR4 is shown on the Aeronautical chart the Netherlands - ICAO 1:500 000.
- Crossing and entering EHR4, EHR4A, EHR4B, EHR4C, EHR4D, EHR4E AND EHR4F (Vliehors) is prohibited to general aviation when active. Police, SAR, HEMS and flights to and from oil platform L15-FA-1 are exempted. These flights must be coordinated with Dutch MIL Info (COM CH 132.350) prior to entry. Airspace classification G is applicable within the above mentioned airspace.
- The range controller does not provide ATC service or clearances to enter EHR4.
- Pilots are responsible for avoiding EHR4 and other traffic.

7.3 Simulated forced landing areas for general aviation

Identification, name and lateral limits	Upper limit Lower limit	Remarks (time of activity, type of restriction)
1	2	3
Area Deventer 52°14'46.88"N 006°08'35.91"E; 52°14'58.54"N 006°09'32.41"E; 52°13'37.07"N 006°11'31.40"E; 52°12'00.46"N 006°11'45.46"E; 52°10'15.82"N 006°13'34.60"E; 52°08'51.63"N 006°12'12.01"E; 52°08'33.33"N 006°11'02.78"E; 52°09'18.35"N 006°08'28.92"E; 52°10'24.04"N 006°08'29.24"E; 52°11'30.33"N 006°07'44.30"E; 52°13'06.34"N 006°08'48.85"E; to point of origin.	<u>500 FT AGL</u> 100 FT AGL ¹⁾	Area assigned to civil light aircraft practising go-arounds; conditions see paragraph 7.1. VMC ¹⁾ The parts over roads, canals and rivers are excluded.

Designation		Type of obstacle	Co-ordinates	HGT/ELEV in FT		OBST LGT
ID	Location			AGL	AMSL	Type/Colour
1		2	3	4		5
568	Wieringermeer, Wind-park Hollands Kroon	7 wind turbines (line)	524943N 0045455E - 524841N 0045536E	584	571	OBST/day FLG W, night R
569	Wieringermeer, Wind-park Hollands Kroon	5 wind turbines (line)	525209N 0045743E - 525153N 0045859E	584	574	OBST/day FLG W, night R
570	Wieringermeer, Wind-park Hollands Kroon	5 wind turbines (line)	525110N 0045440E - 525021N 0045425E	584	574	OBST/day FLG W, night R
571	Wieringermeer, Wind-park Hollands Kroon	6 wind turbines (line)	525132N 0045449E - 525145N 0045509E - 525203N 0045651E	584	578	OBST/day FLG W, night R
322	Witmarsum	4 wind turbines (line)	530540N 0052541E - 530530N 0052634E	390	390	-
183	Wormer	concrete tower with tube mast	522952N 0044746E	468	469	OBST/R
315	Zaandam	wind turbine	522556N 0044454E	443	440	-
316	Zaandam	wind turbine	522604N 0044336E	440	443	-
328	Zaandam	wind turbine	522535N 0044848E	387	390	-
358	Zeewolde	36 wind turbines (area)	521914N 0052556E - 521700N 0052730E - 521649N 0052509E - 521626N 0052428E - 521804N 0052142E - 521847N 0052253E - 521914N 0052556E	492	486	OBST/day W, night R
359	Zeewolde	9 wind turbines (line)	522301N 0053248E - 522255N 0053307E - 522251N 0053328E - 522248N 0053349E - 522248N 0053420E - 522250N 0053443E - 522254N 0053505E - 522300N 0053526E - 522309N 0053546E	492	482	-
414	Zeewolde	6 wind turbines (line)	522337N 0053354E - 522417N 0053502E	328	315	-
493	Zeewolde	antenna mast	522122N 0052024E	394	381	-
511	Zeewolde	antenna mast	522245N 0053453E	354	344	-
475	Zoeterwoude	4 wind turbines (line)	520806N 0043150E - 520749N 0043241E	410	410	-
529	Zoeterwoude	2 wind turbines (line)	520737N 0042917E - 520733N 0042909E	361	354	OBST/day FLG W, night R
534	Zutphen	3 wind turbines (line)	520932N 0061128E - 520952N 0061132E	410	433	-
188	Zwolle	antenna mast	522919N 0060835E	509	509	OBST/R

¹⁾ Flare not included.

²⁾ Excluded flare of 164 FT in extreme circumstances and of 10 FT in normal circumstances.

³⁾ Excluded flare of 197 FT in extreme circumstances and of 3 FT in normal circumstances.

⁴⁾ Excluded flare of 132 FT in extreme circumstances and of 16 FT in normal circumstances.

⁵⁾ Excluded flare of 230 FT in extreme circumstances.

⁶⁾ Excluded flare of 394 FT in extreme circumstances and of 3 FT in normal circumstances.

⁷⁾ Excluded flare of 492 FT in extreme circumstances and of 98 FT in normal circumstances.

⁸⁾ Excluded flare of 198 FT in normal circumstances.

Note: in the Netherlands an 'air navigation obstacle' is defined as any building or structure, including waste heaps, with a height of 328 FT AGL or more. The authority does not guarantee that the details are correct or that the list of obstacles is complete.

OCCASIONAL ACTIVITIES			
Designation and lateral limits	Vertical limits	Operator/User TEL NR	Remarks and time of ACT
1	2	3	4
Eibergen 520631N 0063714E*	NIL	INFO not AVBL	Powered paragliding Daily UDP
Emmer-Compascuum 524853N 0070013E*	NIL	INFO not AVBL	MLA Daily UDP
Empe 520830N 0060618E*	NIL	INFO not AVBL	Powered paragliding Daily UDP
Groot-Ammers 515501N 0044825E*	NIL	INFO not AVBL	Powered paragliding Daily UDP
Grootevast 531130N 0061706E*	NIL	INFO not AVBL	MLA 0700 (0600) - end UDP
Jirnsum 530329N 0054511E*	NIL	INFO not AVBL	MLA and powered paragliding Daily UDP
Kollumerzwaag 531608N 0060323E*	NIL	INFO not AVBL	MLA and powered paragliding Daily UDP
Langezwaag 525818N 0060004E*	NIL	INFO not AVBL	MLA Daily UDP
Loenen 521343N 0050048E*	NIL	INFO not AVBL	MLA Daily UDP
Lunteren 520608N 0053341E*	NIL	INFO not AVBL	Powered paragliding Daily UDP
Molenaarsgraaf 515146N 0044950E*	NIL	INFO not AVBL	Powered paragliding 01 JUN - 01 MAR: during UDP
Nieuwehorne 525629N 0060446E*	NIL	INFO not AVBL	MLA Daily UDP
Nieuwerbrug 520506N 0044848E*	NIL	INFO not AVBL	Powered paragliding Daily UDP
Obdam 524040N 0045559E*	NIL	INFO not AVBL	MLA Daily UDP
Polsbroek 515816N 0045204E*	NIL	INFO not AVBL	MLA Daily UDP
Reeuwijk 520334N 0043959E*	NIL	INFO not AVBL	Powered paragliding Daily UDP
Swolgen 513023N 0060705E*	NIL	INFO not AVBL	Powered paragliding Daily UDP
Terwolde 521530N 0060533E*	NIL	INFO not AVBL	Powered paragliding Daily UDP
Tirns 530321N 0053818E*	NIL	INFO not AVBL	Powered paragliding ³⁾ Daily UDP
Tirns 530318N 0053803E*	NIL	INFO not AVBL	Powered paragliding ³⁾ Daily UDP
Veulen 512832N 0055802E*	NIL	INFO not AVBL	Powered paragliding Daily UDP
Voorst 515227N 0062501E*	NIL	INFO not AVBL	MLA Daily UDP
Warstiens 531009N 0055230E*	NIL	INFO not AVBL	MLA Daily UDP
Wijchen 514951N 0054422E*	NIL	INFO not AVBL	Powered paragliding Daily UDP
Witmarsum 530646N 0052823E*	NIL	INFO not AVBL	Powered paragliding Daily UDP
Ypecolsga 525602N 0053618E*	NIL	INFO not AVBL	MLA ²⁾ Daily UDP
Ypecolsga 525537N 0053608E*	NIL	INFO not AVBL	MLA ²⁾ Daily UDP
Listed aerodromes and sites are for private use by the operator and guests only, with a limited number of users at the same time and a limited number of take-offs and landings each year. This list of occasional activities may not be complete.			
1) Not used simultaneously with another site in Akkrum.			
2) Not used simultaneously with another site in Ypecolsga.			
3) Not used simultaneously with another site in Tirns.			

5 PARACHUTE JUMPING EXERCISE AREAS

PARACHUTE JUMPING EXERCISE AREAS			
Designation and lateral limits	Vertical limits	Operator/User TEL NR	Remarks and time of ACT
1	2	3	4
Ameland Circle, radius 2 NM, centre 532706N 0054038E.	FL 150	Paracentrum Ameland TEL: +31 (0)519 554 880	Daily UDP
Echten Circle, radius 2 NM, centre 524356N 0062557E.	FL 150	Paracentrum Eelde-Hoogeveen TEL: +31 (0)528 271 150	Daily UDP
Hoogeveen Circle, radius 2 NM, centre 524351N 0063058E.	FL 150	Paracentrum Eelde-Hoogeveen TEL: +31 (0)528 271 150	Daily UDP
Oostwold Circle, radius 2 NM, centre 531236N 0070204E.	FL 150	See EHOW AD 2.2.	Daily UDP
Rhoon Circle, radius 2 NM, centre 515107N 0042802E.	FL 120	Skydive Rotterdam TEL: +31 (0)10 415 9450	Daily UDP
Spier Circle, radius 2 NM, centre 524801N 0062819E.	FL 150	Paracentrum Eelde-Hoogeveen TEL: +31 (0)528 271 150	Daily UDP
Teuge Circle, radius 2 NM, centre 521441N 0060248E.	FL 130	Nationaal Paracentrum Teuge TEL: +31 (0)55 323 1604	Daily UDP
Texel Circle, radius 2 NM, centre 530655N 0045001E.	FL 150	Paracentrum Texel TEL: +31 (0)222 311 464	Daily UDP Dimensions climb-out area see EHTX AD 2.23.
Winde Circle, radius 2 NM, centre 530738N 0063151E.	FL 130	Paracentrum Eelde-Hoogeveen TEL: +31 (0)528 271 150	Daily UDP
<ul style="list-style-type: none"> Listed aerodromes and sites are for regular parachute jumping (including free fall parachuting). Listing a site or aerodrome does not imply any right to use that site or aerodrome. Parachute jumping exercise climb-out areas: a radius of 5 NM around the centre point and vertical limits as the exercise area, unless otherwise specified. 			

6 PARACHUTE JUMPING EXERCISE AREAS IN CLUSTERS

PARACHUTE JUMPING EXERCISE AREAS			
Designation and lateral limits	Vertical limits	Operator/User TEL NR	Remarks and time of ACT
1	2	3	4
CLUSTER NOORD-BRABANT			
Bosschenhoofd Circle, radius 2 NM, centre 513331N 0043140E.	FL 100	Skydive ENPC TEL: +31 (0)165 320 955	Daily UDP
Oudenbosch Noord Circle, radius 2 NM, centre 513410N 0043149E.	FL 100	Skydive ENPC TEL: +31 (0)165 320 955	Daily UDP
Oudenbosch Zuid Circle, radius 2 NM, centre 513403N 0043146E.	FL 100	Skydive ENPC TEL: +31 (0)165 320 955	Daily UDP
Rijsbergen Circle, radius 2 NM, centre 5131N 00441E.	FL 100	Skydive ENPC TEL: +31 (0)165 320 955	Daily UDP
Schijf Circle, radius 2 NM, centre 5129N 00435E.	FL 100	Skydive ENPC TEL: +31 (0)165 320 955	Daily UDP
Seppe Airport Circle, radius 2 NM, centre 513315N 0043257E.	FL 100	Skydive ENPC TEL: +31 (0)165 320 955	Daily UDP
CLUSTER UTRECHT			
<ul style="list-style-type: none"> In each cluster only one parachute jumping area (location) can be used at the same time. Listed aerodromes and sites are for regular parachute jumping (including free fall parachuting). Listing a site or aerodrome does not imply any right to use that site or aerodrome. Parachute jumping exercise climb-out areas: a radius of 5 NM around the centre point and vertical limits as the exercise area, unless otherwise specified. 			

EHAM — AMSTERDAM/Schiphol

EHAM AD 2.1 AERODROME LOCATION INDICATOR AND NAME

EHAM — AMSTERDAM/Schiphol

EHAM AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP co-ordinates and site at AD	521829N 0044551E 062 DEG GEO 135 M from TWR.
2	Direction and distance from (city)	4.9 NM SW of Amsterdam.
3	Elevation/reference temperature	-11 FT AMSL/20.4(JUL).
4	Geoid undulation at AD ELEV PSN	142 FT.
5	MAG VAR/annual change	2° E (2020)/11'E.
← 6	AD operator, postal address, telephone, telefax, email, AFS, website	Post: Amsterdam Airport Schiphol P.O. Box 7501 1118 ZG Schiphol Tel: +31 (0)20 601 9111 (Airport all EXT) +31 (0)20 601 2116 (Airport office/Apron Management Service) +31 (0)20 601 2115 (Airport Authority) Email: apron_office@schiphol.nl URL: https://www.schiphol.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. 2. Upon request, contact the flow manager aircraft on channel 130.480 call sign "Airport One" (not monitored H24). 3. Changes in the availability of the runway and taxiway infrastructure at the airport will be promulgated by NOTAM. The NOTAM can refer to the website https://www.eham.aero where visual material relating to this subject will be shown. This material may only be used in combination with the current NOTAM.

EHAM AD 2.3 OPERATIONAL HOURS

1	AD operator	H24
2	Customs and immigration	H24
3	Health and sanitation	H24
4	AIS briefing office	H24 Tel: +31 (0)20 406 2315 URL: https://www.homebriefing.nl
5	ATS reporting office (ARO)	H24 Tel: +31 (0)20 406 2315 URL: https://www.homebriefing.nl
6	MET briefing office	H24
7	ATS	H24
8	Fuelling	Schiphol-Centre: H24. Schiphol-East: normal operating hours 0530-2230 (0430-2130).
9	Handling	Schiphol-Centre: H24. Schiphol-East: normal operating hours 0530-2230 (0430-2130). Between 2230-0530 (2130-0430) PN required from ground handling companies (see EHAM AD 2.23).
10	Security	H24
11	De-icing	H24
12	Remarks	For information regarding slot requests and restrictions on the use of the aerodrome between 2200-0600 (2100-0500) refer to EHAM AD 2.20 paragraph 1.

EHAM AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo-handling facilities	All modern facilities. Transport of persons on the aprons of Schiphol-Centre and Schiphol-East may exclusively take place by means of vehicles of the relevant ground handling company. For addresses and other details of ground handling companies see EHAM AD 2.23.
2	Fuel/oil types	Jet A-1/All kinds.
3	Fuelling facilities/capacity	Schiphol-Centre: Jet A-1 unlimited. Schiphol-East: Jet A-1 (by truck).
4	De-icing facilities	De-icing equipment AVBL.
5	Hangar space for visiting aircraft	O/R, limited.
6	Repair facilities for visiting aircraft	Major repairs to all types of aircraft. Spares AVBL.
7	Remarks	Oxygen and related servicing unlimited.

EHAM AD 2.5 PASSENGER FACILITIES

1	Hotels	At AD: 2 hotels (322 beds). In the close vicinity of the airport: 3 hotels (1274 beds). At Amsterdam: unlimited.
2	Restaurants	At AD, near vicinity and in the city: unlimited.
3	Transportation	Train, buses, taxis and rental cars.
4	Medical facilities	First aid treatment. Two motor ambulances. Hospitals at Amsterdam (12 KM distance).
5	Bank and post office	AVBL
6	Tourist office	AVBL
7	Remarks	NIL

EHAM AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting	CAT 10.
2	Rescue equipment	9 crash trucks equipped with 13.300 liters of water, 1.600 liters of foam (level C) and 250 KG of dry chemical powder, 1 rescue-pumper vehicle, 1 truck with rescue equipment, 1 all-terrain vehicle and 1 rescue stair; allocated to 3 fire stations.
3	Capability for removal of disabled aircraft	Coordinated by airport authority in consultation with outside partners.
4	Remarks	Airport Fire Officer, callsign Fire Rescue 1 or Fire Rescue 2, available via 130.480 when fire fighting vehicles are attending an aircraft on ground in case of an emergency.

EHAM AD 2.7 SEASONAL AVAILABILITY - CLEARING

1	Types of clearing equipment	16 snowsweep combinations with ploughs, 5 snowblowers, 8 spray vehicles, 16 ramp ploughs, 5 compact-sweepers.
2	Clearance priorities	RWY, TWY and apron simultaneously.
3	Remarks	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 KFOR. SAND only locally used at aprons. 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 on the runway condition is published by: a. SNOWTAM via the international NOTAM office at Schiphol. b. RCR (only mandatory items) via ATIS. c. RCR (only RWYCC) via RTF on TWR frequency.

3	Stop bars	<p>Runway entries and TWY Y and Z where an aircraft may infringe an obstacle limitation surface and/or an ILS critical/sensitive area, are safeguarded by a stop bar (see charts AD 2.EHAM-ADC and AD 2.EHAM-GMC.1). Stop bars will be illuminated:</p> <ul style="list-style-type: none"> if associated with an active runway during reduced and low visibility circumstances (TDZ RVR ≤ 1500 M and/or ceiling ≤ 300 FT); H24 at dedicated runway crossings to avoid runway incursion in all visibility conditions; H24 at the "NO ENTRY" TWY E1, G3, W6 and N9; on TWY Y (Y1 and Y2) and TWY Z (Z1 and Z2), depending on the use of RWY 18C/36C; on RWY 09, west of the intersection with RWY 18L/36R, depending on the use of RWY 18L/36R. <p>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.</p>
4	Remarks	<ol style="list-style-type: none"> ¹⁾ For parking guidance on K-apron contact the handler. ²⁾ RWY designation marking: character height of 18 M. ³⁾ RWY holding position marking is applied over the full width of RWY 09/27, west of RWY 18L, to safeguard RWY 18L from taxiing aircraft crossing RWY 09/27 via TWY N2. ⁴⁾ No RWY turn pad LGT provided at the end of RWY 24 and RWY 36L (see EHAM AD 2.23). ⁵⁾ To avoid misguidance when taxiing in opposite direction. See EHAM AD 2.23 par. 3. ⁶⁾ To indicate TWYs where operations are limited to aircraft not exceeding the maximum wingspan specified. ⁷⁾ Based on the principle of cockpit over centre line for all aircraft types, except A340-600, A350-1000, A380, B777-300 and larger. For those aircraft oversteering is required. ⁸⁾ For the configuration of CL lights on RWY entries, exits and crossings including when used during low visibility, see EHAM AD 2.23 paragraph 2 and 3. ⁹⁾ These intersections may however be used at night. Edge LGT, (enhanced) CL marking, runway guard lights and signs normally provide adequate guidance at night.

EHAM AD 2.10 AERODROME OBSTACLES

Area 2					
OBST ID/ Designation	OBST Type	OBST Position	ELEV/HGT in FT		Markings/ LGT Type, Colour
			AMSL	AGL	
1	2	3	4		5
EHAM001 ¹⁾	crane	522127.9N 0044822.4E	240	243	Flag/night R
EHAM002 ²⁾	crane	522126.5N 0044823.3E	197	201	Flag/night R
EHAM003 ³⁾	crane	522035.8N 0045049.6E	197	197	Flag/night R
EHAM004 ⁴⁾	2 cranes	521743.6N 0044203.0E	230	243	Flag/night R
EHAM006 ⁵⁾	2 cranes	521749.6N 0044225.3E	253	266	Flag/night R
EHAM007 ⁶⁾	crane	521746.7N 0044208.3E	230	244	Flag/night R
EHAM008 ⁷⁾	crane	521705.9N 0044553.5E	119	132	Flag/night R
EHAM009 ⁸⁾⁹⁾	crane	BTN 521709.3N 0044552.5E and 521705.4N 0044559.7E	125	138	Flag/night R

Remarks
6
<ol style="list-style-type: none"> ¹⁾ EHAM001: true bearing from ARP 027 DEG, DIST 6180 M. ²⁾ EHAM002: true bearing from ARP 028 DEG, DIST 6150 M. ³⁾ EHAM003: 4360 M before THR RWY 22 and 80 M left of EXT D RCL. ⁴⁾ EHAM004: 1774 M before THR 06 and 1838 M left of EXT D RCL. ⁵⁾ EHAM006: true bearing from ARP 253 DEG, DIST 4080 M. ⁶⁾ EHAM007: true bearing from ARP 250 DEG, DIST 4390 M. ⁷⁾ EHAM008: 2075 M beyond TORA RWY 22 and 141 M left of EXT D RCL. ⁸⁾ EHAM009: 2055 M beyond TORA RWY 22 and 88 M left of EXT D RCL. ⁹⁾ EHAM009: MON-FRI 0600-1700 (0500-1600). <p>No obstacle data sets AVBL for area 2 and 3.</p>

All obstacles in take-off area are marked and lighted day and night. See:

- AD 2.EHAM-AOC-04-22
- AD 2.EHAM-AOC-06-24

- AD 2.EHAM-AOC-09-27
- AD 2.EHAM-AOC-18C-36C
- AD 2.EHAM-AOC-18L
- AD 2.EHAM-AOC-36L

EHAM AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET office	De Bilt
2	Hours of service MET office outside hours	H24 -
3	Office responsible for TAF preparation Periods of validity	De Bilt 30 HR
4	Trend forecast Interval of issuance	TREND Every 30 minutes for international METAR, maximum 30 minutes for local display and broadcast on ATIS.
5	Briefing/consultation provided	Briefing on request from MWO-De Bilt by telephone after self-briefing (see item 10).
6	Flight documentation Language(s) used	Reports, forecasts, charts. English, Dutch.
7	Charts and other information available for briefing or consultation	S, P, W, T
8	Supplementary equipment available for providing information	WXR, APT
9	ATS units provided with information	Amsterdam ACC and FIC, Schiphol TWR, Schiphol APP. ¹⁾
10	Additional information (limitation of service, etc.)	<p>TEL: +31 (0)30 220 6721 Staff</p> <p>TEL: 0900 202 3341 Briefing low level flights (IFR/VFR).</p> <p>TEL: 0900 202 3343 Briefing IFR flights above FL 100.</p> <p>TEL: 0900 202 3340 Briefing balloon flights within Amsterdam FIR.</p> <p>Note: charge for tel. briefings and consultations is € 0,50/MIN.</p> <p>Note: due to environmental influences the windreport for RWY 36R is not representative for the wind conditions at TDZ; wind speed from sector 080-120 DEG is underestimated up to 15 percent.</p> <p>¹⁾ Also service to JRCC Den Helder.</p>

EHAM AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	True BRG	Dimensions of RWY (M)	Strength (PCN) and sur- face 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
04	041.25°	2020 x 45 ⁶⁾	79/F/C/W/T ASPH/PFC ^{1) 2) 7)}	521801.35N 0044700.55E 521850.51N 0044810.90E 142 FT	-13.1 FT NA
22	221.27°	2020 x 45 ⁶⁾	79/F/C/W/T ASPH/PFC ^{1) 2) 7)}	521850.51N 0044810.89E 521801.38N 0044700.60E 142 FT	-13.7 FT NA
06	057.92°	3439 x 45	89/F/C/W/T ASPH/PFC ^{1) 3) 4) 7)}	521720.78N 0044414.01E 521815.66N 0044636.93E 142 FT	-11.0 FT -11.6 FT
24	237.95°	3439 x 45	89/F/C/W/T ASPH/PFC ^{1) 3) 5) 7)}	521815.66N 0044636.93E 521716.57N 0044403.07E 142 FT	-11.6 FT NA
09	086.78°	3453 x 45	89/F/C/W/T ASPH/PFC ^{1) 3) 7)}	521900.09N 0044451.57E 521906.16N 0044748.83E 142 FT	-12.1 FT NA
27	266.82°	3453 x 45	89/F/C/W/T ASPH/PFC ^{1) 3) 7)}	521906.16N 0044748.88E 521859.92N 0044446.83E 142 FT	-12.0 FT -12.2 FT
18C	183.22°	3300 x 45	89/F/C/W/T ASPH/ ^{1) 3)}	521953.04N 0044424.11E 521806.42N 0044414.32E 142 FT	-12.1 FT -12.0 FT
36C	003.22°	3300 x 45	89/F/C/W/T ASPH/ ^{1) 3)}	521820.99N 0044415.69E 521953.04N 0044424.11E 142 FT	-12.0 FT -12.0 FT

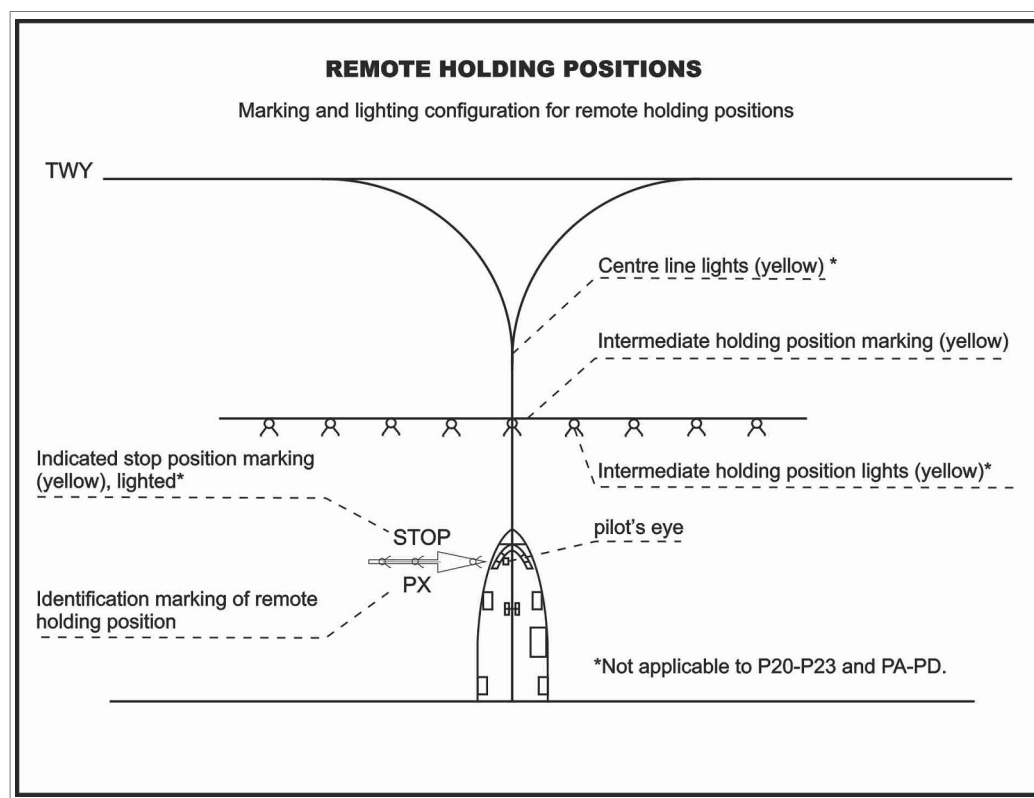
9.2 Remote holding positions

The following apron positions are available for remote holding:

Apron	Location	Positions	Max wingspan	Remarks
P-holding	Between TWY A12 and TWY A13	P1	69 M	Either P1 AVBL or PA and PB AVBL. Either P3 AVBL or PC and PD AVBL.
		P2	36 M	
		P3	Not applicable	
		PA, PB, PC, PD	36 M	
On R-apron	Adjacent to TWY R	P20	36 M	Enter via TWY R. Centre line and designated stop position not lighted ¹⁾ .
		P21	36 M	
	Adjacent to TWY Q and TWY R	P22	36 M	Enter via TWY A or TWY Q and P23. Centre line and designated stop position not lighted.
		P23	36 M	
On TWY VS	East of holding RWY 36L	P6	Not applicable	Either P6 AVBL or P6A and P6B AVBL.
		P6A	36 M	
		P6B	36 M	
		P7	Not applicable	Either P7 AVBL or P7A and P7B AVBL.
		P7A	36 M	
		P7B	36 M	

¹⁾ At the end of the combined lead-in line of remote holding position P20 and P21 pilots shall turn 180 degrees left for P20, or 180 degrees right for P21 to hold nose out at the designated stop position.

9.3 Guidance and markings at remote holding positions



9.4 Towing to a remote holding position (outbound aircraft)

9.4.1 Push-back and towing

- Flight crew follows truck driver's instruction and does not contact Schiphol Ground.
- Transponder and engines remain switched off.
- Anti-collision lights switched on.

9.4.2 On remote holding position

- Anti-collision lights remain switched on.
- Flight crew activates the transponder with the transponder code received from Schiphol Delivery.

- Flight crew contacts Schiphol Planner and confirms positioned at the remote holding position.
- Schiphol Planner will confirm transponder on radar and will instruct flight crew to monitor Schiphol Ground (monitor Schiphol Planner on the second communication set for possible reclearances).
- Flight crew instructs the truck driver to disconnect and awaits the "ALL CLEAR" signal from ground crew.
- Engines remain switched off; no prior approval required to use the APU.

Note: no ground power unit available at the remote holding position.

9.4.3 Taxi-out

- Flight crew contacts Schiphol Ground in TSAT window for start-up and taxi instruction.
- Flight crew receives ATC instruction to taxi-out.

9.5 Towing to another aircraft stand (outbound aircraft)

Note: see paragraph 9.6 for towing to aircraft stand G71.

9.5.1 Push-back and towing

- Flight crew follows truck driver's instruction and does not contact Schiphol Ground.
- Transponder and engines remain switched off.
- Anti-collision lights switched on.

9.5.2 On stand

- Anti-collision lights switched off, to be switched on just prior to push-back.
- Tow truck remains connected.
- Flight crew contacts Schiphol Planner and confirms positioned at the new aircraft stand.
- Engines remain switched off; no prior approval required to use the APU.
- Flight crew contacts Schiphol Planner in TSAT window.

Note: no ground power unit available.

9.6 Towing to aircraft stand G71 (outbound aircraft)

9.6.1 Push-back

- Aircraft is pushed onto aircraft stand G71, positioned nose-out.
- Transponder and engines remain switched off.

9.6.2 On stand

- Flight crew holds brakes; no chocks required.
- Anti-collision lights remain switched on to ensure ground crew stays clear of the aircraft stand.
- Flight crew receives "ALL CLEAR" signal from ground crew.
- Engines remain switched off; no prior approval required to use the APU.

9.6.3 Taxi-out

- Engine start-up on stand only after start-up approval from ATC.
- Cross-bleed start is prohibited.
- Flight crew receives ATC instruction to taxi-out.

10 DE-ICING

10.1 General

Non KLM de-icing customers will be instructed by their specific ground handling company, see EHAM AD 2.23. KLM de-icing customers will be instructed by Snowdesk, see Snowdesk de-icing procedures below.

Note:

- Tactile checks must be performed at the gate/aircraft stand.
- Technical de-icing (landing gear, brakes, inside LE- or TE-flaps, under wing, engine inlets, fan blades, sensors and static ports/pitot probes) requires de-icing at the gate/aircraft stand, supervised by an aircraft maintenance technician (AMT). The aircraft operator is responsible for providing an AMT. If a regular de-icing treatment is still required afterwards, coordinate this with your ground handling company or Snowdesk, whichever is applicable.

10.2 Snowdesk de-icing procedures

1. Contact Snowdesk at earliest opportunity by ACARS (preferential) or voice for de-icing request. Additional requests (e.g. fuselage de-icing) should be made on initial contact. Inform Snowdesk immediately when de-icing is not required anymore.
2. Request ATC clearance from 20 MIN before TOBT or 35 MIN before CTOT.
3. Snowdesk will assign remote de-icing at the J-apron. In case gate/aircraft stand de-icing is assigned, flight crew will specifically be informed as such by Snowdesk via VHF.
4. Monitor Snowdesk as well as Schiphol Planner for any changes in the de-icing planning, until the ready call to Schiphol Planner is made.
5. Report READY:
 - For taxiing to the J-apron:
Report READY to Schiphol Planner when:
 - fully ready (push-back truck available, if applicable);

- within TSAT window (TSAT +/- 5 MIN).
- For de-icing at the gate/aircraft stand:
When all doors are closed, report READY to Snowdesk regardless of TSAT window.
Report READY to Schiphol Planner when de-icing is completed and when:
 - fully ready (push-back truck available, if applicable);
 - within TSAT window (TSAT +/- 5 MIN).

10.3 Remote de-icing

10.3.1 General

The following apron positions are available for remote de-icing:

Apron	Location	Position	Max wingspan	Remarks
J-apron	Between TWY A20 and TWY A24	P10	MAX wingspan 68.5 M	Enter via TWY A20
		P12	MAX wingspan 65 M	
		P14 and P16	MAX wingspan 80 M	

- Taxiway A between TWY A19 and A20 may be used as holding position for de-icing operations at the J-apron. Avoid holding on the upslope between A19 and A20 to prevent unintentional backward movement of the aircraft. High power settings may cause jet blast damage. Advise ATC if unable to comply with taxi clearances.
- On taxiway A20 pilots shall use minimum breakaway thrust when turning right onto P10, P12, P14 and P16 to avoid jet blast hazard at adjacent aircraft stands.
- The J-apron, including adjacent TWY A20, is not controlled by ATC. Pilots shall maintain separation from other aircraft at their own discretion. Padcontrol is responsible for sequencing and spot assignment only.
- Pilots shall monitor Schiphol Ground at all times.

When instructed by Schiphol Ground, contact Padcontrol with call sign. Follow Padcontrol instructions and continue with the signboard procedure below.

10.3.2 Signboard and voice only procedure

When instructed by Schiphol Ground, contact Padcontrol with call sign. Follow Padcontrol instructions and continue with the signboard procedure below. If Padcontrol indicates the signboards to be U/S, continue with the voice only procedure below.

10.3.2.1 Signboard procedure

- When instructed by Padcontrol, contact Iceman with call sign and report additional requests (e.g. fuselage de-icing) if applicable.
- Iceman will instruct: "ENTER (P10, P12, ...)".
- Hold position, monitor Iceman COM channel and signboard for current treatment, start time and anti-icing code.
- Treatment is completed when anti-ice code is displayed on signboard. Cockpit preparations and flight control checks may now be performed.
- Hold position until STOP on sign board is extinguished. Iceman will advise when clear and to contact Schiphol Ground for taxi instructions.

Signboard examples

ICEMAN XXX.XXX	CALLSIGN CALL PARKING BRAKES SET
STOP X STEP TYPE X CALL READY	STOP DE-ICING IN PROGRESS
STOP TYPE X START XX:XX LT	STOP TYPE X START XX:XX LT
CALLSIGN CONTACT GROUND 121.905	

10.3.2.2 Voice only procedure

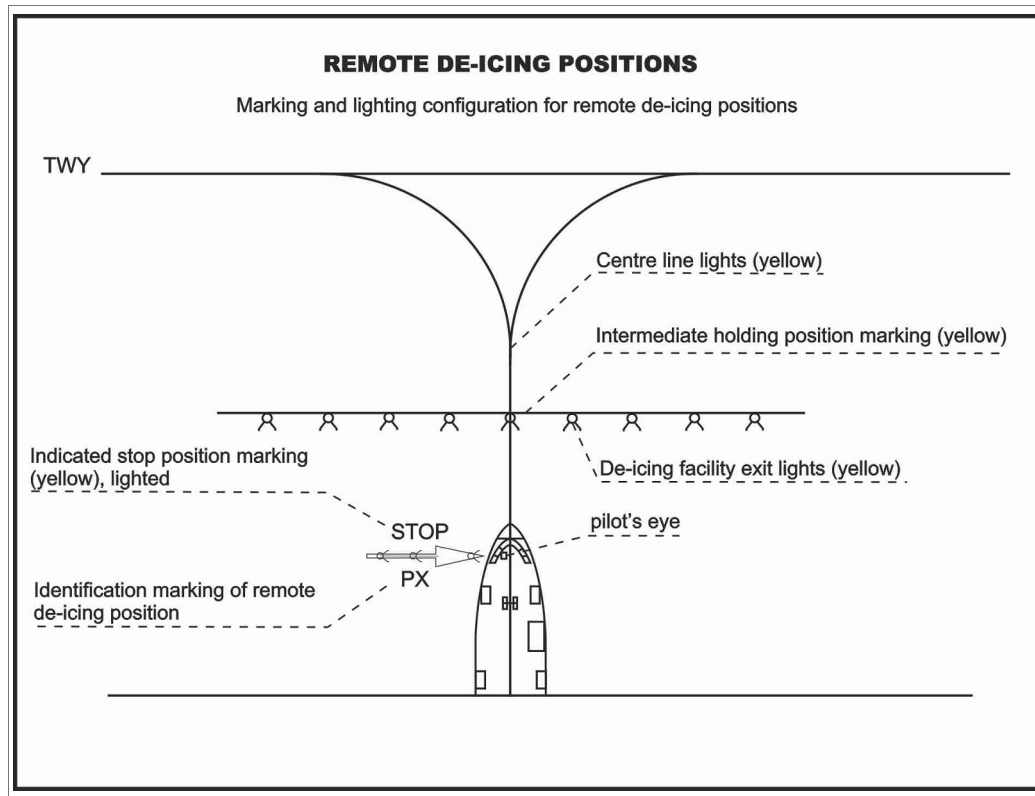
- When instructed by Padcontrol, contact Iceman with aircraft registration.
- Iceman will instruct: "ENTER (P10, P12, ...)".
- Hold position, monitor Iceman COM channel for current treatment, anti-icing code and start time.
- Hold position until Iceman gives the "ALL CLEAR" signal.
- Cockpit preparations and flight control checks may now be performed.
- Iceman will advise when clear and to contact Schiphol Ground for taxi.

10.4 Communication channels

Snowdesk	121.305
Schiphol Planner	121.655
Schiphol Ground	121.905
Padcontrol	121.605
Iceman	see electronic signboard.

Note: monitor Schiphol Ground at all times.

10.5 Guidance and markings at remote de-icing positions P10-P16



11 J-APRON PROCEDURES

11.1 General

The J-apron, including adjacent TWY A20, is not controlled by ATC. Pilots shall maintain separation from other aircraft at their own discretion. Procedures for entering and leaving the J-apron are detailed below, for de-icing procedures at the J-apron refer to paragraph 10.

11.2 Entering the J-apron

ATC instructs pilots entering the J-apron at TWY A20 to contact Apron Control 121.880 and follow the marshaller to the allocated aircraft stand.

11.3 Leaving the J-apron

1. Contact Schiphol Planner for start-up approval.
2. If parked at aircraft stand P10, P12, P14 or P16 and facing TWY A, contact Schiphol Ground for taxi clearance.
3. In all other situations, including aircraft parked at aircraft stand J80 – J87, contact Apron Control (121.880) to reposition the aircraft near the ATC service boundary on TWY A20.
4. Hold at the ATC service boundary on TWY A20 and contact Schiphol Ground (121.905) for taxi instructions.

Note: taxiing is only allowed after the "ALL CLEAR" signal from the push-back crew and clearance from Schiphol Ground have been obtained.

12 K-APRON PROCEDURES

12.1 General

The K-apron is not controlled by ATC; ground handling companies (see EHAM AD 2.23) handle the aircraft and allocate aircraft stands. The K-apron is open H24, for operating hours ground handling companies see EHAM AD 2.3. For aircraft stands and wingspan restrictions see AD 2.EHAM-APDC.2.

12.2 Entering the K-apron

Pilots shall enter the K-apron via intermediate holding position GL.

1. At intermediate holding position GL, contact Schiphol Amsterdam General Aviation (121.930) for aircraft stand allocation.
2. Self parking on all aircraft stands; nose in parking is mandatory. Contact ground handler if assistance is required.
3. A 180° turn using aircraft thrust is prohibited on all aircraft stands; aircraft will be turned by tow truck.

12.3 Leaving the K-apron

Pilots shall leave the K-apron via intermediate holding position GD.

1. IFR flights contact Schiphol Planner for start-up approval; VFR flights contact Schiphol Delivery for start-up approval.
2. Contact Schiphol Amsterdam General Aviation (121.930) to obtain approval to taxi to intermediate holding position GD.
3. Hold at intermediate holding position GD and contact Schiphol Ground (121.805) for further taxi instructions.

Note:

On arrival, after being transferred from Amsterdam Radar to Schiphol Approach, the pilot must inform ATC if greater wake turbulence separation is required than the RECAT-EU minima specified below.

RECAT-EU scheme		Follower					
		Super heavy (A)	Upper heavy (B)	Lower heavy (C)	Upper medium (D)	Lower medium (E)	Light (F)
Leader	Super heavy (A)	3 NM	4 NM	5 NM	5 NM	6 NM	8 NM
	Upper heavy (B)	-	3 NM	4 NM	4 NM	5 NM	7 NM
	Lower heavy (C)	-	-	3 NM	3 NM	4 NM	6 NM
	Upper medium (D)	-	-	-	-	-	5 NM
	Lower medium (E)	-	-	-	-	-	4 NM
	Light (F)	-	-	-	-	-	3 NM

2.3 Radar procedures

Executive control of traffic in the Schiphol TMAs is exercised by radar controllers. During the peak hours inbound traffic will be handled by a TMA-west controller (Schiphol Approach 121.205) and a TMA-east controller (Schiphol Approach 119.055). Outside peak hours one radar controller is responsible for the provision of approach/departure control service simultaneously in the Schiphol TMA on both channels.

2.4 ATC sequence planning

2.4.1 Designation landing runway(s)

Schiphol APP designates the landing runway and, during inbound peak hours, a second landing runway in accordance with the rules specified in EHAM AD 2.21 paragraph 4. During the use of dependent landing runways pilots will be informed by ATC about simultaneous approaches.

2.4.2 Runway assignment

When 2 landing runways are in use the assigned landing runway will depend on the TMA entry-point or arrival route (e.g. traffic via ARTIP will be directed to RWY 27 and traffic via SUGOL and RIVER will be directed to RWY 18C). For tactical reasons Schiphol APP may, after consulting the pilot, change the assigned landing runway during the initial approach phase.

2.4.3 Expected approach time (EAT)

The expected approach time (EAT) is determined as soon as possible after FIR entry. The EATs are computer calculated, based on the predicted time over the touchdown point and the required landing interval.

2.4.4 Flow exclusion

During severe (cross)wind conditions the capacity of the secondary landing runway will likely be restricted and ATFCM measures may therefore be applied.

Flights can be excluded from ATFCM measures by means of flow exclusion. Flow exclusion can be applied on request of the aircraft operator when a pilot decides to accept the crosswind for the secondary landing runway prior to departure, and commences the flight knowing that the approach will only be allowed on the secondary runway.

When the excluded flight is not able to land on the secondary runway because of changed crosswind conditions, it will divert to its alternate and not re-enter the normal arrival sequence.

Flow exclusion may only be applied if the aircraft operator has a service level agreement (SLA) with LVNL. The SLA can be obtained from LVNL, for details see ENR 1.9.

2.4.5 Request for delay due to landing slot management

ATC does not allow vectoring, speed reduction and/or holding for purposes of slot management request by the pilot.

2.5 Arrival

2.5.1 Arrival clearance

While being transferred to Amsterdam ACC, initial contact shall be restricted to AMSTERDAM RADAR + CALLSIGN only in order to avoid channel congestion. In specific situations, pilots may be requested to report additional information to Amsterdam ACC in the initial contact.

At, or before, entering the Amsterdam Control Area, an arrival clearance will be issued by Amsterdam ACC containing:

- Standard arrival route¹⁾ or direct route.
- Main landing runway²⁾.
- Level instructions (normally descent instructions).
- Any other necessary instructions or information.

¹⁾ when cleared via a standard arrival route (STAR), the clearance limit is the initial approach fix (IAF). A special procedure will be applied for the holding fix NARSO (see paragraph 2.5.3).

²⁾ issued by ATIS (see EHAM AD 2.18) or ATC.

Note: if traffic permits profile descents may be executed in order to optimise fuel efficiency. Authorisation may be given by ATC either at the initiative of the controller or after a request by the pilot. Distance to touchdown will be provided by ATC as often as possible.

2.5.2 Speed and level restrictions

The published level restrictions shall be applied by all aircraft with destination Schiphol Airport, in order to ease the traffic handling. If unable to comply, inform ATC immediately.

Actual descent clearances will be as directed by ATC. Additionally, ATC may request specific speeds for accurate spacing. In the event of a new (non speed related) ATC instruction being issued (e.g. an instruction to descend on ILS), pilots shall continue to maintain the previously allocated speed. Comply with any level or speed adjustment as promptly as feasible within operational constraints. Aircraft unable to conform to these speeds, required level or speed changes due to safety-related reasons shall inform ATC as soon as possible. Furthermore:

1. Cross the IAF (ARTIP, RIVER and SUGOL) at or below FL 100 unless otherwise instructed.
2. Below FL 100 maximum 250 KIAS unless otherwise instructed by ATC.
3. 250 KIAS to 220 KIAS from the IAF or holding facility during the initial approach phase.
4. 180 KIAS on interception heading to final approach.
5. Between 180 KIAS and 160 KIAS when established on final approach or maintain instructed speed until descent on the glidepath.
6. Speed reduction to MNM 160 KIAS is allowed without ATC approval when descending on the glidepath.
7. Maintain MNM 160 KIAS until 4 NM before threshold. WTC super heavy (CAT A, e.g. aircraft type A380) maintain instructed speed/160 KIAS until 5 NM before threshold.
8. Speed > 220 KT accurate within 10 KT; speed < 220 KT accurate within 5 KT.

2.5.3 The use of holding pattern over NARSO

Normally ATC will issue a clearance via the BLUFA 1A Arrival, RKN 2A Arrival or NORKU 2A Arrival to the IAF ARTIP. In case of a high traffic load over the IAF ARTIP, ATC can issue a clearance to the holding fix NARSO. The following procedure has to be executed:

- proceed to NARSO and intercept the holding pattern.
- an EFCT for NARSO will be issued by ATC.
- a clearance has to be received before leaving the NARSO holding pattern to the IAF ARTIP.

2.5.4 Transfer to ACC/stack control

Transfer to the ACC/stack controller takes place after initial descent clearance has been issued and the aircraft is clear of en-route traffic.

2.5.5 Stack control

2.5.5.1 Instructions

The ACC/stack controller will issue additional instructions with respect to:

- a. (further) descent.
- b. EAT, if delay is effected by holding over the IAF.

Note: an initial approach clearance must be received before leaving the IAFs ARTIP, RIVER and SUGOL.

2.5.5.2 Holding awaiting weather improvement

Aircraft awaiting weather improvement in the holding area will be stacked from FL 070 upward. When approaches are possible again, new EATs will be assigned based on the original sequence of arrival. The sequence may be adjusted in order to provide for differences in landing criteria, e.g. ILS CAT II approaches against ILS CAT I approaches. ATC may initially allocate more favourable (higher) holding levels when the number and types of aircraft involved in holding allows this procedure.

2.5.5.3 Initial approach clearance

After the initial approach clearance (including clearance limit and level instructions) the minimum IFR flight level for all traffic inbound AMSTERDAM/Schiphol airport proceeding via the STAR is FL 070 at the TMA Schiphol boundary. IFR flights inbound AMSTERDAM/Schiphol airport departing from aerodromes situated in the AMSTERDAM FIR and intending to operate at 3000 FT AMSL or below should obtain an EAT from Schiphol Approach before departure. The holding fix shall be left at the time specified in the clearance or, if no time specified, as soon as possible.

2.5.5.4 Transfer to Schiphol Approach

Transfer to the approach controller takes place when the aircraft is clear of the holding area at the IAF. Inbound traffic via ARTIP will be transferred to Schiphol Approach on 119.055. Inbound traffic via SUGOL and RIVER will be transferred to Schiphol Approach on 121.205.

While being transferred from Amsterdam Radar to Schiphol Approach, initial contact shall be restricted to SCHIPHOL APPROACH + CALL SIGN only in order to avoid channel congestion. In specific situations, Amsterdam Radar may request pilots to report additional information to Schiphol Approach in the initial contact.

2.5.6 STAR and holding descriptions

2.5.6.1 STAR descriptions

See chart AD 2.EHAM-STAR.

BLUFA 1A	RNAV 1 required. MAX FL 260 30 NM before BLUFA.			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[BLUF1A]	BLUFA, below FL 260	BLUFA [F260-]	IF	N
	To ARTIP, MAX 250 KIAS, between FL 100 and FL 070	ARTIP [K250-, B F100 F070]	TF	N

DENUT 3A	RNAV 1 required.			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[DENU3A]	DENUT, at or below FL 240	DENUT [F240-]	IF	N
	To YENZO	YENZO	TF	N
	To RIVER, MAX 250 KIAS, between FL 100 and FL 070	RIVER [K250-, B F100 F070]	TF	N
HELEN 2A	RNAV 1 required.			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[HELE2A]	HELEN, at or below FL 240	HELEN [F240-]	IF	N
	To HAMZA	HAMZA	TF	N
	To RIVER, MAX 250 KIAS, between FL 100 and FL 070	RIVER [K250-, B F100 F070]	TF	N
LAMSO 2A	RNAV 1 required.			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[LAMS2A]	LAMSO, at or below FL 230	LAMSO [F230-]	IF	N
	To ETPOS	ETPOS	TF	N
	To SUGOL, MAX 250 KIAS, between FL 100 and FL 070	SUGOL [K250-, B F100 F070]	TF	N
MOLIX 2A	RNAV 1 required.			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[MOLI2A]	MOLIX, at or below FL 230	MOLIX [F230-]	IF	N
	To LUTEX	LUTEX	TF	N
	To ROBVI	ROBVI	TF	N
	To SUGOL, MAX 250 KIAS, between FL 100 and FL 070	SUGOL [K250-, B F100 F070]	TF	N
NORKU 2A	RNAV 1 required.			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[NORK2A]	NORKU, between FL 280 and FL 200	NORKU [B F280 F200]	IF	N
	To SONSA	SONSA	TF	N
	To ROBIS	ROBIS	TF	N
	To OSKUR	OSKUR	TF	N
	To ARTIP, MAX 250 KIAS, between FL 100 and FL 070	ARTIP [K250-, B F100 F070]	TF	N
PESER 3A	RNAV 1 required.			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[PESE3A]	PESER, at or below FL 070	PESER [F070-]	IF	N
	To DOFMU	DOFMU	TF	N
	To RIVER, MAX 250 KIAS, between FL 100 and FL 070	RIVER [K250-, B F100 F070]	TF	N
REDFA 1A	RNAV 1 required.			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[REDF1A]	REDFA, at or below FL 230	REDFA [F230-]	IF	N
	To SULUT	SULUT	TF	N
	To SUGOL, MAX 250 KIAS, between FL 100 and FL 070	SUGOL [K250-, B F100 F070]	TF	N
RKN 2A	RNAV 1 required.			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[RKN2A]	RKN, at or below FL 180	RKN [F180-]	IF	N
	To OSKUR	OSKUR	TF	N
	To ARTIP, MAX 250 KIAS, between FL 100 and FL 070	ARTIP [K250-, B F100 F070]	TF	N

TOPPA 2A	RNAV 1 required.			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[TOPP2A]	TOPPA, at or below FL 250	TOPPA [F250-]	IF	N
	To MONIL	MONIL	TF	N
	To ROBVI	ROBVI	TF	N
	To SUGOL, MAX 250 KIAS, between FL 100 and FL 070	SUGOL [K250-, B F100 F070]	TF	N

2.5.6.2 Holding descriptions

Holding identification	Holding fix	Inbound track MAG	MAX KIAS	MNM altitude	MAX altitude	Time	Turn	NAV specification
ARTIP	ARTIP	252°	250	FL 070	-	1 MIN	R	RNAV 1
NARSO	NARSO	355°	220	FL 200	-	1 MIN	L	RNAV 1
RIVER	RIVER	041°	250	FL 070	-	1 MIN	R	RNAV 1
SUGOL	SUGOL	110°	250	FL 070	-	1 MIN	R	RNAV 1

2.6 Initial approach

2.6.1 Additional approach instructions

Additional approach instructions issued by APP/approach controller will contain as applicable:

- Clearance limit and level instructions.
- Runway in use¹⁾.
- Type of approach.
- QNH.
- Transition level¹⁾.
- MET information¹⁾.
- Runway condition¹⁾.

¹⁾ items b, e, f and g will only be given when ATIS (see EHAM AD 2.18) is out of service.

2.6.2 Turn to downwind

Instructions to turn on downwind heading will be issued by the approach radar controller using radar vectors.

2.6.3 Transfer to Schiphol Arrival

Transfer to the arrival controller takes place before the aircraft enters the final approach vector area.

While being transferred from Schiphol Approach to Schiphol Arrival, initial contact shall be restricted to SCHIPHOL ARRIVAL + CALL SIGN only in order to avoid channel congestion.

2.7 Intermediate approach

The arrival controller will issue instructions for descent and interception of final approach. Traffic sequencing will be established and maintained on the basis of pre-planned slots for the final approach gate (see paragraph 2.4).

2.7.1 Independent parallel operations

When parallel approaches to RWY 18R and 18C or RWY 36C and 36R are used, this will be broadcast on ATIS. For safe convergence towards ILS interception different altitudes will be used. Expect to be aligned and level no later than 2 NM before the following fixes:

- RWY 18C: SIDNI at 3000 FT AMSL;
- RWY 18R: PEVOS at 2000 FT AMSL;
- RWY 36C: 12.4 MSA at 4000 FT AMSL;
- RWY 36R: NEWCO at 3000 FT AMSL.

Although the transition altitude is 3000 FT AMSL, for separation purposes, intercepting RWY 36C ILS is at 4000 FT AMSL.

2.7.2 RNAV procedures

2.7.2.1 General

The RNAV operations in the Schiphol TMA are developed in accordance with ICAO PANS-OPS criteria with the following safeguards:

- The RNAV section of the inbound route is situated above the initial segment of the initial approach procedure above MSA/MFA/MRVA.
- The RNAV part is complete on entering the intermediate segment in which ILS-LOC or RNP interception takes place.
- The operations are strictly monitored by ATC.

2.7.2.2 Transitions during night 2130-0530 (2030-0430)

For environmental reasons the night transition procedures to RWY 06, RWY 18C or RWY 18R must be executed by all jet aircraft at night.

Clearances and constraints:

- Between the IAFs (ARTIP, RIVER and SUGOL) and the final approach interception of the relevant runway, aircraft must follow published night transition procedures if so instructed by ATC.
- A clearance for the transition contains only the lateral path of the procedure.

- A clearance to "descend via" the transition contains the lateral, vertical and speed profiles of the procedure. In this case, the pilot is free to optimise descent and speed within the constraints as laid down in the procedure. The objective is to establish a low noise continuous descent approach.
- When night transitions are active, the altitude over the IAFs is by ATC discretion and the altitude window on the night transition charts are expected altitudes, that may be overruled at ATC discretion.
- For sequence reasons ATC may deviate from the pre-defined routes by giving radar vectors. ATC may instruct to join the approach procedure again at a specified point.
- Strict adherence to the prescribed procedure, including the correct altimeter settings (standard or QNH) is mandatory, unless ATC instructs to deviate. Advise ATC when unable to comply with the procedure constraints.

Further details are published in paragraph 2.11.2 and the relevant instrument approach charts.

Exemptions: aircraft with a cruising altitude below FL 070 and/or a cruising speed less than 250 KIAS are exempted from the procedure. As a rule, these aircraft will be offered an ILS approach beginning at 3000 FT AMSL.

2.7.2.3 Transitions during day 0530-2130 (0430-2030)

On initiative of ATC, aircraft with assigned landing RWY 36R may be instructed to follow an RNAV transition onto the final approach, enabling subsequent interception of ILS RWY 36R. The transition provides a pre-defined lateral RNAV route starting at ARTIP. At ATC discretion aircraft may be instructed to proceed directly to INBAM and start the transition from here.

Clearances and constraints:

- Altitudes will be instructed by ATC.
- The following speed limits must be adhered to:
 - a. ARTIP: MAX 250 KIAS;
 - b. AM665: MAX 220 KIAS;
 - c. AM668: MAX 180 KIAS.
- ATC may instruct additional speed limitations.
- For the ILS approach to RWY 36R a separate clearance will be issued.

Further details are published in paragraph 2.10.2, 2.10.3 and on instrument approach chart AD 2.EHAM-IAC-36R.1.

2.7.2.4 Aircraft requirements for TMA RNAV procedures

In order to enable their pilots to accept the TMA RNAV procedures, operators must be approved for RNAV 1 operations by their state of registry.

Aircraft that are not equipped or approved for TMA RNAV procedures are only allowed inbound Schiphol by exemption. This exemption must be obtained prior to dispatch of the flight. Requests shall be made at pbn@ilent.nl. However, be advised that in accordance with CAA The Netherlands policy only in rare cases exemptions are issued.

Pilots of aircraft that are RNAV unable, e.g. due to in-flight failure or exemption, shall inform ATC by use of the phrase "UNABLE RNAV" if instructed to fly an RNAV procedure. These aircraft will be guided by radar vectors or will be rerouted via conventional navigation aids.

2.8 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).

2.8.1 Final approach procedure

2.8.1.1 ILS approach

During day 0530-2130 (0430-2030), the final approach will normally be conducted on the ILS of the main landing runway. Alternatively, an RNP approach may be used on pilot request or as instructed by ATC. The second landing runway will preferably, but not necessarily, be an ILS runway.

During night 2130-0530 (2030-0430) an RNP approach will be conducted on the main landing runway. If unable, advise ATC and expect an ILS approach. When RVR ≤ 1500 M and/or the cloud base ≤ 300 FT, an ILS final approach will be provided at ATC discretion.

2.8.1.2 ILS operations

2.8.1.2.1 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.

2.8.1.2.2 Practice ILS approaches

Pilots who wish to practise ILS CAT II or CAT III approaches have to use the phrase "Request practice CAT II or CAT III approach", on initial contact with Schiphol APP.

Note: when LVP are not in force, protection of the ILS sensitive area cannot be guaranteed; therefore fluctuations in the ILS signal may occur.

2.8.1.3 Visual approach

To minimise noise nuisance, aircraft executing a visual approach shall intercept the final approach leg at an altitude of at least 1000 FT AMSL, unless residential areas can be avoided.

Note: the attention of pilots on finals of RWY 04 or 22 is drawn to the size and appearance of the parallel taxiway which is, under certain weather conditions, more conspicuous than the runway.

2.8.1.4 Circling approach

For each available landing runway at Schiphol a circling approach may be allowed or offered. For OCA (OCH) see relevant instrument approach chart on pages AD 2.EHAM-IAC-xx.x.

2.8.1.5 Time based separation on final approach

Enhanced TBS minima are in use for wake turbulence separation instead of fixed distance based rules. These are based on RECAT-EU wake turbulence minima, and include reduced separation in medium and strong headwind conditions.

No special crew procedures apply, and the importance of speed conformance adherence as described in paragraph 2.5.2 remains.

When in stronger headwind conditions, a moderate reduction in separation distances from lead and follower aircraft may be observed in comparison to RECAT-EU distance based wake turbulence minima.

2.8.2 Transfer to Schiphol Tower

Transfer to Schiphol Tower takes place after the aircraft is established on final approach. Pilots of arriving aircraft will be instructed by Schiphol Approach/Arrival which channel they shall use.

While being transferred from Schiphol Approach/Arrival to Schiphol Tower, initial contact shall consist of SCHIPHOL TOWER, CALL SIGN and RUNWAY.

Note: in addition to departing and arriving traffic, also aircraft crossing the runway and vehicles on the runway will have contact with the tower controller on the tower channel.

Note: during peak hours air traffic services for arrivals on RWY 18R will normally be provided from TWR-W.

2.8.2.1 Jet blast hazard

A jet blast hazard exists when the following runway combinations are in use:

1. Landing RWY 09 and departure RWY 18L ATC will time departures from RWY 18L to avoid jet blast on RWY 09.
from intersection TWY E5:
2. Landing RWY 27 and departure RWY 18L ATC will time departures from RWY 18L to avoid jet blast on RWY 27.
from intersection TWY E5:
3. Landing RWY 36R and departure RWY 24: ATC will time departures from RWY 24 to avoid jet blast on RWY 36R.

2.8.2.2 ATC wind reporting during final approach

When issuing the landing clearance, ATC shall inform pilots about the current surface wind direction and speed (including gusts ≥ 5 KT). When the current surface wind speed is 20 KT or more, ATC shall report this information also at 4 NM from touchdown. However, in case RTF load becomes excessive, ATC may not report this information to aircraft facing a crosswind (including gusts) less than 20 KT upon landing.

2.8.2.3 Minimum runway occupancy time

ATC maintains separation to achieve maximum runway utilisation, whilst ensuring safe separation (including wake turbulence separation) and adequate runway spacing.

It is important for the validity of safe separation, and in order to achieve optimum runway capacity, that runway occupancy time is kept to a minimum consistent with the prevailing conditions. A key element in consistent runway occupancy times is the predictable use of runway exits, i.e. the runway exits used by the pilots are as anticipated by ATC.

To ensure minimum runway occupancy time, pilots should vacate the runway via the first practicable (rapid) exit taxiway corresponding to operational requirements, or as instructed by ATC. ATC anticipates that aircraft will exit according to the table below. The indicated runway exits per RECAT-EU wake turbulence category in the table are anticipated to be used after landing during nominal conditions.

Anticipated runway exits after landing		RECAT-EU wake turbulence CAT					
		Super heavy (A)	Upper heavy (B)	Lower heavy (C)	Upper medium (D)	Lower medium (E)	Light (F)
Runway	22	G6	G6	G6	G6	G6	G7
	06	S4	S4	S4	S4	S3	S3
	09	N1	N1	N1	N9	N9	N9
	27	N4	N3	N3	N3	N2	N2
	18C	W7	W7	W7	W7	W6	W6
	36C	W3	W3	W4	W4	W5	W5
	36R	E5	E2	E2	E2	E1	E1
	18R	V2	V2	V2	V2	V1	V1

Note: for Airbus A380 specific RWY vacating procedures, see AD 2.23 paragraph 6.2.

2.8.3 Transfer to Schiphol Ground

Pilots shall contact Schiphol Ground (without ATC instructions) immediately after vacating the landing runway on the following channels, depending on the landing runway used as follows (see AD 2.EHAM-GMC.1):

RWY	Channel
04/22	121.805

RWY	Channel
06/24	121.705
09/27	121.805
18C/36C	121.905
18R	121.560
36R	121.805

2.8.4 Schiphol Ground

During peak hours (normally when a second departure runway or a second landing runway is in use) 4 ground controllers may be active, each on their own channel. During these hours ground control service for traffic to and from RWY 18R/36L will also be provided from TWR-W. Pilots may expect instructions to change ground control channel (see EHAM AD 2.18 and AD 2.EHAM-GMC.1). Pilots shall not change channel without ATC instructions. During off-peak hours one ground controller may be responsible for all areas, but ground control service will be provided on the 4 separate channels simultaneously. Therefore these channels will be combined by ATC.

Pilots will receive information concerning the stand (entry, pier and number, see aircraft parking / docking charts). Aircraft shall follow the main taxi lines and adhere to the route-indications for the apron and the stand. Aircraft may only leave the taxiway centre line after visual contact with the marshaller or the activated visual docking guidance system has been established (see EHAM AD 2.20 paragraph 3).

2.9 Missed approach procedure

The runways are used according to a preferential runway system (EHAM AD 2.21 paragraph 4). This system allows simultaneous use of several runway combinations, therefore it is important that in case of a missed approach, pilots **inform ATC immediately** and are prepared to receive amended missed approach instructions. When no instructions are received, adhere strictly to the published missed approach procedures.

2.9.1 Missed approach procedure during instrument approach

- Inform ATC immediately.
- Unless otherwise instructed by ATC, see relevant instrument approach chart AD 2.EHAM-IAC-xx.x.

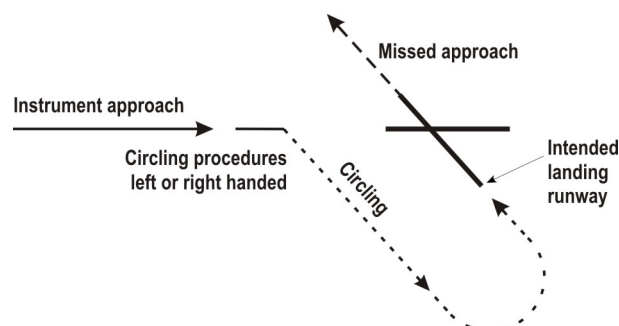
2.9.2 Missed approach procedure during visual approach

- For all runways, except RWY 04, execute the published missed approach for that runway (see relevant IAC).
- For RWY 04: maintain runway track and climb to 2000 FT AMSL.

2.9.3 Missed approach while circling to land

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

- Complete the turn to the intended landing runway (see figure).
- For all runways, except RWY 04, intercept the MAG track of the intended landing runway and execute the published missed approach for that runway (see relevant IAC).
- For RWY 04: maintain runway track and climb to 2000 FT AMSL.



2.10 Communication failure

2.10.1 General

- Select transponder code 7600.
- If possible call Amsterdam ACC Supervisor on telephone number +31 (0)20 406 3999.

Note: Use telephone connection to mitigate COM failure only. All telephone calls will be automatically recorded.

- If telephone connection is disconnected prematurely (before read-back), revert to general communication failure procedure.

For the general procedures for IFR flights see ENR 1.3 paragraph "Communication Failure". In addition, for arriving flights, the following communication failure procedures apply.

2.10.2 Arrival clearance not received

- Proceed according the current flight plan to the appropriate holding fix (ARTIP, RIVER and SUGOL).
- Maintain the last cleared and acknowledged flight level.
- After arrival over the fix, intercept the holding pattern.
- Commence descent to FL 070 at or as near as possible to the ETO over the holding fix.
- After reaching FL 070 leave the holding fix, proceed direct SPL VOR and carry out an instrument approach procedure to the received and acknowledged runway, or to the main landing runway according ATIS (see AD 2.EHAM-IAC-xx.x).

2.10.3 Arrival clearance received

2.10.3.1 Traffic via standard arrival route

- Proceed according the current flight plan to the appropriate holding fix (ARTIP, RIVER and SUGOL).
- Maintain the last cleared and acknowledged flight level.
- After arrival over the fix, intercept the holding pattern.
- Commence descent to FL 070 at the EAT last received and acknowledged.
- When no EAT has been received and acknowledged, commence descent to FL 070 at or as near as possible to the ETO over the holding fix.
- After reaching FL 070 leave the holding fix, proceed direct SPL VOR and carry out an instrument approach procedure to the assigned landing runway, or to the main landing runway according ATIS (see AD 2.EHAM-IAC-xx.x).

2.10.3.2 Traffic cleared to holding fix NARSO

- Proceed to NARSO.
- Maintain the last cleared and acknowledged flight level.
- After arrival over NARSO, intercept the holding pattern.
- Commence descent to FL 070 at the expected further clearance time (EFCT) last received and acknowledged.
- When no EFCT has been received and acknowledged, commence descent to FL 070 at or as near as possible to the ETO over NARSO.
- After reaching FL 070 leave NARSO and intercept SPL R-070 inbound to ARTIP.
- Without delay at ARTIP, proceed direct SPL VOR and carry out an instrument approach procedure to the assigned landing runway, or to the main landing runway according ATIS (see AD 2.EHAM-IAC-xx.x).

2.10.3.3 Traffic outside standard arrival route

- Proceed to the SPL VOR along the route specified in the arrival clearance.
- Maintain the last cleared and acknowledged flight level.
- After arrival over the SPL VOR intercept the holding pattern to the received and acknowledged runway, or to the main landing runway according ATIS.
- In the holding descend to FL 070, if applicable.
- After reaching FL 070, leave the holding and carry out an instrument approach procedure to the assigned landing runway (see AD 2.EHAM-IAC-xx.x).

2.10.3.4 Traffic on a transition during night 2130-0530 (2030-0430)

- a. With clearance for a transition, execute the cleared night transition and appropriate final approach procedure.
- b. Without clearance for a transition, and the last received and acknowledged runway is 06, 18C or 18R:
 - proceed via the applicable transition to the RNP or ILS approach of the received and acknowledged runway.
- c. Without clearance for a transition, and the last received and acknowledged runway being any other runway:
 - proceed to SPL VOR.
 - maintain the last cleared and acknowledged flight level.
 - after arrival over SPL VOR, intercept the holding pattern to the received and acknowledged runway.
 - in the holding descend to FL 070, if applicable.
 - after reaching FL 070, carry out an instrument approach procedure to the runway concerned (see AD 2.EHAM-IAC-xx.x).

2.10.3.5 Traffic on a transition during day 0530-2130 (0430-2030)

- a. With clearance for the approach, execute the cleared approach.
- b. Without clearance for approach:
 - proceed to SPL VOR to cross SPL at FL 070.
 - after arrival over SPL VOR intercept the holding pattern, if applicable.
 - carry out an instrument approach procedure to RWY 36R in accordance with instrument approach chart AD 2.EHAM-IAC-36R.1.

2.10.3.6 Traffic vectored on an arrival route

Proceed in the most direct manner to the route specified in the arrival clearance and carry out one of the procedures as specified in paragraph 2.10.3.

2.10.3.7 Traffic vectored to final approach

- Proceed to the final approach beacon or intermediate approach fix (IF) of the assigned landing runway.
- Maintain the last received and acknowledged level.
- When arriving over the final approach beacon or IF, start an outbound turn, descend to 2000 FT AMSL and intercept final approach.

2.10.4 Missed approach during communication failure

2.10.4.1 Missed approach procedure during instrument approach

See the relevant instrument approach chart (see AD 2.EHAM-IAC-xx.x).

2.10.4.2 Missed approach procedure during visual approach

- For all runways, except RWY 04, execute the published missed approach in case of communication failure for that runway (see relevant IAC).
- For RWY 04: maintain runway track and climb to 2000 FT AMSL.

EHDR — DRACHTEN/Drachten

Note: the following sections in this chapter are intentionally left blank:
AD 2.4, AD 2.7, AD 2.11, AD 2.14, AD 2.16, AD 2.19, AD 2.20, AD 2.21.

EHDR AD 2.1 AERODROME LOCATION INDICATOR AND NAME

EHDR — DRACHTEN/Drachten

EHDR AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP co-ordinates and site at AD	530705N 0060745E Middle of runway.
2	Direction and distance from (city)	1 NM NE from Drachten.
3	Elevation/reference temperature	14 FT AMSL/20.5°C.
4	Geoid undulation at AD ELEV PSN	Information not AVBL.
5	MAG VAR/annual change	2°E (2020)/10'E.
6	AD operator, postal address, telephone, telefax, email, AFS, website	Post: Municipality of Smallerland Gauke Boelensstraat 2 9203 RM Drachten The Netherlands Tel: +31 (0)512 581 234 (flight notification, information and administration) +31 (0)512 513 245 (airport authority) during OPR HR. URL: https://www.ehdr.aero
7	Types of traffic permitted (IFR/VFR)	VFR
8	Remarks	1. Aerodrome available for national and international civil air traffic with business-like purposes with all types of aircraft up to 6000 KG AUW, including a limited use by MLA. 2. Importation and exportation of merchandise, except travellers luggage, not allowed.

EHDR AD 2.3 OPERATIONAL HOURS

1	AD operator	AD PPR. • MON, WED, FRI, SUN: 1100-1800 (1000-1700) but within UDP; • SAT: 0800-1800 (0700-1700) but within UDP; • Other days and times O/R.
2	Customs and immigration	NIL
3	Health and sanitation	NA
4	AIS briefing office	H24 Tel: +31 (0)20 406 2315 URL: https://www.homebriefing.nl
5	ATS reporting office (ARO)	Competent ATS unit: ARO Schiphol, see EHAM AD 2.3.
6	MET briefing office	NA
7	ATS	NA
8	Fuelling	NA
9	Handling	NA
10	Security	NA
11	De-icing	NA
12	Remarks	¹⁾ PN means permission from and/or in case of customs etc. notification other than by (VFR) flight plans to aerodrome authority as appropriate.

EHDR AD 2.5 PASSENGER FACILITIES

1	Hotels	Accommodation in Drachten.
2	Restaurants	In Drachten.

3	Transportation	Taxi (on request).
4	Medical facilities	First aid treatment; hospital in Drachten.
5	Bank and post office	In Drachten.
6	Tourist office	In Drachten.
7	Remarks	NIL

EHDR AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting	NIL
2	Rescue equipment	Information not AVBL.
3	Capability for removal of disabled aircraft	Information not AVBL.
4	Remarks	NIL

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

1	Apron surface and strength	ASPH/CONC 6000 KG.
2	Taxiway width, surface and strength	Width: 8 M. Surface: grass. Strength: Not AVBL.
3	Altimeter checkpoint location and elevation	NIL
4	VOR checkpoints	NIL
5	INS checkpoints	NIL
6	Remarks	NIL

EHDR 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	NIL
2	RWY and TWY markings and LGT	RWY markings <ul style="list-style-type: none"> RWY 07: DTHR, designation, CL, edge. RWY 25: DTHR, designation, CL, edge.
3	Stop bars	NIL
4	Remarks	NIL

EHDR AD 2.10 AERODROME OBSTACLES

For obstacles at and in the vicinity of the aerodrome see AD 2.EHDR-ADC.

EHDR AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	True BRG	Dimensions of RWY (M)	Strength (PCN) and sur- face 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
07	077°	954 x 24	6000 KG ⁽¹⁾⁽²⁾ ASPH/CONC	Information not AVBL	NA
25	257°	954 x 24	6000 KG ⁽¹⁾⁽²⁾ ASPH/CONC	Information not AVBL	NA

Designations RWY NR	Slope of RWY- SWY	SWY dimensions (M)	CWY dimensions (M)	Strip dimensions (M)	OFZ
1	7	8	9	10	11
07	NA	NA	NA	NA	NA
25	NA	NA	NA	NA	NA

EHEH — EINDHOVEN/Eindhoven

Note: the following sections in this chapter are intentionally left blank:
AD 2.16.

EHEH AD 2.1 AERODROME LOCATION INDICATOR AND NAME

EHEH — EINDHOVEN/Eindhoven

EHEH AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP co-ordinates and site at AD	512700N 0052228E 300° GEO 320 M from TWR.
2	Direction and distance from (city)	4 NM west from Eindhoven.
3	Elevation/reference temperature	74 FT AMSL/22.3°C (JUL).
4	Geoid undulation at AD ELEV PSN	144 FT.
5	MAG VAR/annual change	2°E (2020)/11'E.
6	AD operator, postal address, telephone, telefax, email, AFS, website	Post: Eindhoven Airport N.V. Luchthavenweg 13 5657 EA Eindhoven The Netherlands Tel: +31 (0)40 291 9823 Email: operations@eindhovenairport.nl AFS: EHEHYDYX URL: http://www.eindhovenairport.nl
7	Types of traffic permitted (IFR/VFR)	IFR/VFR
8	Remarks	1. Military administration: Post: RNLAF Vliegbasis Eindhoven MPC 87A P.O. Box 8762 4820 BB Breda The Netherlands Tel: +31 (0)40 289 6240 (OPS, H24) Tel: +31 (0)40 289 6314 (Handling, during office HR) Fax: +31 (0)40 289 6466 AFS: EHEHZTX 2. For MIL PPR: send email to amc.occ@mindef.nl, or call OPS or Handling.

EHEH AD 2.3 OPERATIONAL HOURS

1	AD operator	0600-2300 (0500-2200); BTN 2200-2300 (2100-2200) only for preplanned ARR TFC.
2	Customs and immigration	AD OPR HR
3	Health and sanitation	AD OPR HR
4	AIS briefing office	H24 Tel: +31 (0)20 406 2315 URL: https://www.homebriefing.nl
5	ATS reporting office (ARO)	H24, for details see ENR 1.10 paragraph 1.1.2.4.
6	MET briefing office	NIL
7	ATS	AD OPR HR
8	Fuelling	AD OPR HR
9	Handling	AD OPR HR
10	Security	AD OPR HR
11	De-icing	AD OPR HR
12	Remarks	1. AD PPR and slot co-ordinated for CIV ACFT (see EHEH AD 2.20 paragraph 1). 2. AD AVBL as preplanned alternate for CIV ACFT. PPR.

EHEH AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo-handling facilities	Cargo and passenger handling AVBL (see EHEH AD 2.23 paragraph 4).
2	Fuel/oil types	Jet A-1/15W50 AERO.
3	Fuelling facilities/capacity	Jet A-1: unlimited.
4	De-icing facilities	Equipment AVBL, de-icing fluid Type I Killfrost DF plus, Type II Killfrost ABC-K plus and Type II Killfrost ABC-K plus (75/25) ¹⁾ .
5	Hangar space for visiting aircraft	Limited O/R.
6	Repair facilities for visiting aircraft	Limited O/R.
7	Remarks	¹⁾ No de-icing allowed on civil apron stands E2, S11, S12, S13, S14 and GA1 and GA2 (general aviation demarcated area).

EHEH AD 2.5 PASSENGER FACILITIES

1	Hotels	<ul style="list-style-type: none">At the airport: Tulip Inn Eindhoven Airport (120 rooms). Tel: +31 (0)40 303 0615 Email: info@tulipinneindhovenairport.comNumerous hotels in Eindhoven.
2	Restaurants	At the airport and numerous in Eindhoven.
3	Transportation	Buses and taxis.
4	Medical facilities	First aid treatment and first responders on site. Hospitals in Eindhoven (8 KM).
5	Bank and post office	Bank (and ATM) at the airport, post office in Eindhoven city.
6	Tourist office	In Eindhoven city.
7	Remarks	NIL

EHEH AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting	CAT 8: AD OPR HR
2	Rescue equipment	AVBL
3	Capability for removal of disabled aircraft	AVBL
4	Remarks	Higher fire fighting category on request 48 HR prior ETA.

EHEH AD 2.7 SEASONAL AVAILABILITY - CLEARING

1	Types of clearing equipment	Civil: 3 snowploughs, 1 spreader. Military: 2 snowplough combinations with liquid spreader, 2 spreaders, 3 snow brushes and 2 rollbars.
2	Clearance priorities	Civil: civil apron. Military: RWY and TWYs are cleaned simultaneously.
3	Remarks	Snow clearance information promulgated by SNOWTAM.

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

1	Apron surface and strength	Civil apron	Apron east	Apron west
		Surface	CONC	CONC
		Strength	PCN 53/R/B/W/T PCR 650/F/A/W/T	PCN 61/R/B/W/T PCR 681/R/B/W/T

INTERSECTION TAKE-OFF					
RWY Designator	TWY	TORA (M)	TODA (M)	ASDA (M)	Remarks
03	L5/R5	1920	1980	1920	For determination of the datum line for intersection take-off, see EHEH AD 2.23 paragraph 2.
	R6	2757	2817	2757	
21	L2/R2	2757	2817	2757	
	L3/R3	2250	2310	2250	
	L4/R4	2015	2075	2015	

EHEH AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY Des-ignator	APCH LGT 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 892 M LIH	G -	PAPI left/3° (54 FT)	NA	NIL	3000 M 30 M ¹⁾ LIH	²⁾ -	NIL
21	CAT I 869 M LIH	G -	PAPI left/3° (54 FT)	NA	NIL	3000 M 30 M ¹⁾ LIH	²⁾ -	NIL

Remarks

10

¹⁾ REDL: red from beginning of RWY to DTHR;
white from DTHR to 600 M before RWY end;
yellow last 600 M before RWY end.

²⁾ RENL: 3 red, 1 green, 3 red (for military reasons).

EHEH AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	NIL
2	LDI location and LGT Anemometer location and LGT	LDI: NIL. Anemometer: several on the airfield; 125 M NW of TWR, 50 M NW of THR RWY 03 and 50 M NW of THR RWY 21; not lighted.
3	TWY edge and centre line lighting	AVBL, for details, see EHEH AD 2.9.
4	Secondary power supply Switch-over time	AVBL Within 1 second.
5	Remarks	NIL

EHEH AD 2.17 ATS AIRSPACE

1	Designation and lateral limits	EINDHOVEN CTR: 513853N 0052323E - 512734N 0054129E - 512121N 0053130E - along clockwise arc (radius 8 NM, centre 512700N 0052228E) - 513239N 0051324E - 513853N 0052323E.
2	Vertical limits	GND to 3000 FT AMSL.
3	Airspace classification	D
4	ATS unit call sign Language(s)	Eindhoven TWR English
5	Transition altitude	IFR: 3000 FT AMSL; VFR: 3500 FT AMSL.
6	Hours of applicability	0600-2300 (0500-2200)
7	Remarks	NIL

EHEH 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	RAPCON South	123.180	INFO not AVBL	INFO not AVBL	MON-FRI: 0700-1545 (0600-1445)	Primary VHF.
		122.100				Primary UHF.
	Eindhoven Arrival	388.525	INFO not AVBL	INFO not AVBL	0600-2300 (0500-2200)	Primary VHF. VDF.
		124.530	INFO not AVBL	INFO not AVBL		VFR traffic crossing Eindhoven TMA.
		122.100	INFO not AVBL	INFO not AVBL		Primary UHF.
TWR	Eindhoven Tower	132.530	INFO not AVBL	INFO not AVBL	0600-2300 (0500-2200)	Primary VHF. VDF.
		265.975	INFO not AVBL	INFO not AVBL		Primary UHF.
		131.005	INFO not AVBL	INFO not AVBL		Primary UHF.
GND	Eindhoven Ground	122.100	INFO not AVBL	INFO not AVBL	0600-2300 (0500-2200)	Primary VHF. VDF.
		241.550				Primary UHF.
ATIS	Eindhoven Information	121.930	INFO not AVBL	INFO not AVBL	TWR OPR HR	Coverage 60 NM/20 000 FT.
-	As appropriate	335.750	INFO not AVBL	INFO not AVBL	As appropriate	Emergency

EHEH AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aid, MAG VAR, 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
DVOR/DME (1°E/2020)	RTM	110.400 MHz CH41X	H24	515825.3N 0042851.5E	0 FT	NA	Designated operational coverage: BTN 030°-240° MAG 50 NM/FL 250; BTN 240°-030° MAG 100 NM/FL 250.
TACAN	EHV	117.200 MHz CH119X	H24	512653.4N 0052229.8E	100 FT	NA	RNLAF. Designated operational coverage: 150 NM/FL 600.
LOC 03 ILS CAT I/C/1 (2°E/2020)	EHZ	109.750 MHz	H24	512745.01N 0052318.19E	NA	NA	430 M from THR RWY 21.
DME 03	EHZ	CH34Y	H24	512634.2N 0052206.4E	100 FT	NA	Situated on GP 03. One direction only.
GP 03	-	333.050 MHz	H24	512634.18N 0052206.36E	NA	NA	363 M past THR RWY 03.
LOC 21 ILS CAT I/C/1 (2°E/2020)	EHO	109.750 MHz	H24	512615.09N 0052137.39E	NA	NA	462 M from THR RWY 03.
DME 21	EHO	CH34Y	H24	512722.3N 0052301.6E	100 FT	NA	Situated on GP 21. One direction only.
GP 21	-	333.050 MHz	H24	512722.30N 0052301.56E	NA	NA	358 M past THR RWY 21.
GPS	NA	L1 1575.42 MHz	H24	NA	NA	NA	NIL
EGNOS	NA	L1 1575.42 MHz	H24	NA	NA	NA	NIL

4.2.2 Aircraft with a MTOM < 2000 KG

Unless otherwise instructed or approved climb to 1000 FT AMSL.

1. ZULU Departure.
 - After take-off follow the VFR route via MIKE and VICTOR to ZULU.
2. ECHO Departure.
 - After take-off follow the VFR route via MIKE and VICTOR to ECHO.
3. WHISKEY Departure.
 - After take-off follow the VFR route via HOTEL and OSCAR to WHISKEY.
4. TANGO Departure.
 - After take-off follow the VFR route via HOTEL and OSCAR to TANGO.
5. For other directions.
 - Departure instructions will be given.

4.2.3 Aircraft with a MTOM >= 2000 KG

Unless otherwise instructed or approved climb to 1000 FT AMSL.

1. Aircraft have to remain on runway track to at least:
 - 3 DME EHV after departure from RWY 21.
 - 4 DME EHV after departure from RWY 03.
2. Left or right turn only after approval of Eindhoven TWR.

4.3 Visual approach procedures

4.3.1 Aircraft with a MTOM < 2000 KG

1. Contact Eindhoven TWR 2 minutes before reaching the CTR boundary for permission to enter the CTR.
2. Enter the CTR at 1500 FT AMSL and maintain this altitude.
3. Proceed via an indicated VFR route (ZULU, ECHO, WHISKEY or TANGO) unless otherwise instructed.
4. Join the circuit as instructed by ATC.

4.3.2 Aircraft with a MTOM >= 2000 KG

In order to avoid noise nuisance aircraft with a MTOM >= 2000 KG shall perform a straight-in approach.

4.4 VFR traffic circuits

4.4.1 Aircraft with a MTOM < 2000 KG

Circuit direction (unless otherwise instructed by Eindhoven TWR):

- RWY 21 righthand.
- RWY 03 lefthand.

Circuit altitude: 1000 FT AMSL.

4.5 Missed approach procedures

In case of a missed approach climb straight ahead to 1000 FT AMSL and inform Eindhoven TWR.

4.6 Communication failure procedures

4.6.1 General

- Select transponder code 7600.
- If possible call Amsterdam ACC Supervisor on telephone number +31 (0)20 406 3999.
 - Note:** Use telephone connection to mitigate COM failure only. All telephone calls will be automatically recorded.
- If telephone connection is disconnected prematurely (before read-back), revert to communication failure procedures below.

4.6.2 VFR outbound

In case of communication failure adhere strictly to the departure instructions. If the departure instructions contain a clearance limit in the CTR, act in accordance with paragraph 4.6.4.

4.6.3 VFR inbound

4.6.3.1 Via ZULU or ECHO Arrival

1. In case of communication failure before passing reporting point VICTOR act in accordance with paragraph 4.6.4.
2. In case of communication failure after passing reporting point VICTOR descend to 500 FT AMSL and start orbiting on downwind. After green light from TWR complete the circuit as short as practicable. Make a full stop landing and vacate the runway as soon as possible. In case of go-around execute a similar circuit.

4.6.3.2 Via TANGO or WHISKEY Arrival

1. In case of communication failure before passing reporting point OSCAR act in accordance with paragraph 4.6.4.
2. In case of communication failure after passing reporting point OSCAR descend to 500 FT AMSL and start orbiting on downwind. After green light from TWR complete the circuit as short as practicable. Make a full stop landing and vacate the runway as soon as possible. In case of go-around execute a similar circuit.

4.6.3.3 Via a different route to the field

1. In case of communication failure before joining the circuit act in accordance with paragraph 4.6.4.
2. In case of communication failure over or after a position from where to join the circuit, descend to 500 FT AMSL and start orbiting on downwind. After green light from TWR complete the circuit as short as practicable. Make a full stop landing and vacate as soon as possible. In case of go-around execute a similar circuit.

4.6.4 VFR crossing the CTR

In case of communication failure:

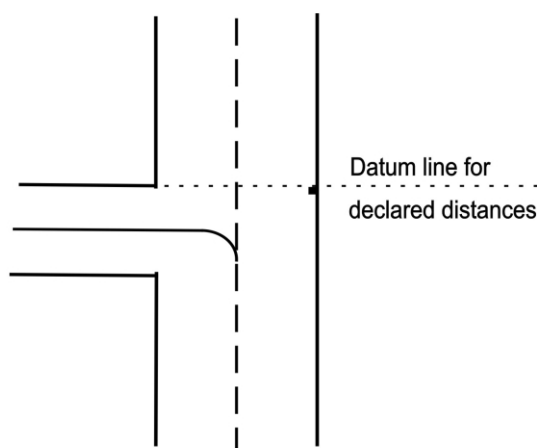
1. Leave the CTR via the shortest route.
2. Maintain altitude until outside the CTR.
3. Do not cross runway centre lines or IFR areas.
4. Proceed to an appropriate aerodrome.

EHEH AD 2.23 ADDITIONAL INFORMATION

1 CAUTIONS AND ADDITIONAL INFORMATION

1. Bird-scare patrols are active during AD OPR HR and use various equipment, including flare shellcrackers, alternating bird dispersal guns and amplified cries of distress.
2. General aviation crew: walking to and from aircraft is prohibited without assistance of ground handling. Please contact TEL +31 (0)6 2707 3658 or TEL +31 (0)40 258 1152.
3. High visibility vests are mandatory on the civil apron.

2 DETERMINATION OF DATUM LINE FOR INTERSECTION TAKE-OFF



For declared distances see EHEH AD 2.13.

3 GROUND HANDLING COMPANIES

1. Passenger ground handling

Post: Viggo Eindhoven Airport B.V. (passenger & AC handling including de-icing)
Jan Hilgersweg 2
5657 ES Eindhoven
Tel: +31(0)40 258 1141
Email: quality.safety@viggo.eu

Note: Viggo Eindhoven channel 131.405.

Post: Skytanking Netherlands B.V. (passenger & AC handling including de-icing)
Luchthavenweg 25
5657 EA Eindhoven
Tel: +31(0)6 4164 6209
Email: OPS: ops.ein@skytanking.com
Email: service requests: geoffrey.vandijk@skytanking.com

Note: Skytanking Netherlands channel 131.985

2. Cargo handling

EHLE — LELYSTAD/Lelystad

Note: the following sections in this chapter are intentionally left blank:
AD 2.21.

EHLE AD 2.1 AERODROME LOCATION INDICATOR AND NAME

EHLE — LELYSTAD/Lelystad

EHLE AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP co-ordinates and site at AD	522712N 0053050E 249 DEG GEO 755 M from TWR.
2	Direction and distance from (city)	3.5 NM SSE from Lelystad
3	Elevation/reference temperature	-12 FT AMSL/22°C (JUL/AUG)
4	Geoid undulation at AD ELEV PSN	141 FT
5	MAG VAR/annual change	2° E(2020)/0°09' E
6	AD operator, postal address, telephone, telefax, email, AFS, website	Post: Lelystad Airport P.O. Box 2201 8203 AE Lelystad The Netherlands Tel: +31 (0)88 600 9770 Email: operations@lelystadairport.nl URL: https://www.lelystadairport.nl
7	Types of traffic permitted (IFR/VFR)	IFR/VFR
8	Remarks	1. The aerodrome is available for national and international civil air traffic with a maximum wingspan up to 36 meters. PPR for aircraft with a wingspan of 24 meters or more. 2. PPR for aircraft with a MTOM of 100.000 KG or more. 3. IFR OPS 24 HR PPR via operations@lelystadairport.nl. 4. AD not AVBL as commercial alternate. 5. The import and export of cargo and cargo in transit is not allowed.

EHLE AD 2.3 OPERATIONAL HOURS

1	AD operator	MON-SUN: 0600-2100 (0500-2000).
2	Customs and immigration	AD OPR HR, 3 HR PN. ^{1) 2)}
3	Health and sanitation	NA
4	AIS briefing office	H24 Tel: +31 (0)20 406 2315 URL: https://www.homebriefing.nl
5	ATS reporting office (ARO)	Competent ATS unit: ARO Schiphol, see EHAM AD 2.3.
6	MET briefing office	H24
7	ATS	AD OPR HR.
8	Fuelling	AD OPR HR.
9	Handling	Limited by AD authority, O/R.
10	Security	NA
11	De-icing	NA
12	Remarks	¹⁾ PN means notification other than by flight plans (IFR/VFR) to aerodrome authority as appropriate. ²⁾ All general aviation flights to and from the non-Schengen countries shall submit a general declaration at least 2 hours prior departure/arrival via www.gendec.eu. See GEN 1.2.

EHLE AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo-handling facilities	NIL
2	Fuel/oil types	AVGAS UL94, AVGAS 100LL, Jet A-1/NIL.

3	Fuelling facilities/capacity	Fuel station Charlie AVGAS UL94: self-service with debit card or credit card (VISA, Mastercard). Fuel station Delta AVGAS 100LL: self-service with debit card or credit card (VISA, Mastercard). Jet A-1: self-service with debit card or credit card (VISA, Mastercard); by truck (with pressure refuelling). AVBL MON-SUN 0700-2100 (0600-2000) O/R via AD OPS, TEL +31 (0)88 600 9792. D-Apron Two charging facilities AVBL (MAX 60 KWH), O/R.
4	De-icing facilities	NA
5	Hangar space for visiting aircraft	Limited, O/R.
6	Repair facilities for visiting aircraft	Limited AVBL, O/R.
7	Remarks	NIL

EHLE AD 2.5 PASSENGER FACILITIES

1	Hotels	Sufficient accommodation in Lelystad and Harderwijk.
2	Restaurants	In Lelystad and Harderwijk.
3	Transportation	Rental cars, buses and taxis. Limited AVBL (and O/R).
4	Medical facilities	First aid treatment, hospital in Lelystad and Harderwijk.
5	Bank and post office	AVBL in Lelystad and Harderwijk.
6	Tourist office	AVBL in Lelystad and Harderwijk.
7	Remarks	NIL

EHLE AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting	CAT 5 ¹⁾
2	Rescue equipment	2 crash-tenders.
3	Capability for removal of disabled aircraft	Hoist and lift capacity limited AVBL.
4	Remarks	¹⁾ CAT 6 and 7 AVBL 72 HR PPR.

EHLE AD 2.7 SEASONAL AVAILABILITY - CLEARING

1	Types of clearing equipment	2 snowsweep combinations with ploughs, 2 snowploughs, 2 snowblowers, 2 de-icing cars.
2	Clearance priorities	RWY including run-up areas, TWY, apron.
3	Remarks	1. Material for movement area surface treatment: KFOR. 2. No specially prepared winter runways AVBL.

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

1	Apron surface and strength	Apron Surface Strength	D, F and H Asphalt and concrete PCN 19/F/D/W/T	L Concrete PCN 65.0/R/B/W/T
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2	Vertical limits	<ul style="list-style-type: none"> LELYSTAD CTR 1: GND to 1500 FT AMSL LELYSTAD CTR 2: GND to 2500 FT AMSL
3	Airspace classification	D
4	ATS unit call sign Language(s)	Lelystad Tower English
5	Transition altitude	IFR: 3000 FT AMSL; VFR: 3500 FT AMSL.
6	Hours of applicability	AD OPR HR, see EHLE AD 2.3.
7	Remarks	NIL

EHLE 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	Lelystad Arrival	134.530 120.830	INFO not AVBL INFO not AVBL	INFO not AVBL INFO not AVBL	See AD 2.3 OPR HR.	Primary. At ATC discretion.
TWR	Lelystad Tower	135.180 123.830	INFO not AVBL INFO not AVBL	INFO not AVBL INFO not AVBL	See AD 2.3 OPR HR.	Primary. At ATC discretion.
	Lelystad Delivery	123.680 123.830	INFO not AVBL INFO not AVBL	INFO not AVBL INFO not AVBL	See AD 2.3 OPR HR.	Start-up control and clearance delivery. Preflight information IFR/VFR (incl. training flights). VDF. At ATC discretion.
ATIS	Lelystad Information	120.730	INFO not AVBL	INFO not AVBL	H24	ATIS remains operational outside AD OPR HR.
-	As appropriate.	121.500 243.000	INFO not AVBL INFO not AVBL	INFO not AVBL INFO not AVBL	As appropriate.	Emergency.

EHLE AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aid, MAG VAR, 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
LOC 05 ILS CAT 1/C/1 (2°E/2020)	ILSN	108.550 MHz	H24	522741.7N 0053146.3E	NA	NA	NIL
DME 05	ILSN	CH22Y	H24	522652.2N 0053027.2E	0 FT	NA	Distance DME antenna/THR 05 is 349 M.
GP 05	-	329.750 MHz	H24	522652.2N 0053027.2E	NA	NA	NIL
Lelystad DME	FRO	CH51X	H24	522709.2N 0053029.0E	0 FT	NA	NIL
GPS	NA	L1 1575.42 MHz	H24	NA	NA	NA	NIL
EGNOS	NA	L1 1575.42 MHz ¹⁾	H24	NA	¹⁾	NA	¹⁾ See EHLE AD 2.22 for FAS data block

EHLE AD 2.20 LOCAL AERODROME REGULATIONS

1 IFR ROUTE AVAILABILITY

The IFR departure and arrival routes are **not available** for scheduled and non-scheduled passenger flights UFN. Business aviation and GA operators shall contact airport authority.

2 RUNWAY RESERVATIONS

For more information on the usage of LARSA (Lelystad airport runway scheduling application), see <https://www.lelystadairport.nl>.

3 RESTRICTIONS ON VFR TRAINING FLIGHTS

Use of the VFR training circuit is limited to MON-SUN: 0600-1800 (0500-1700) during UDP.

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 GROUND MOVEMENT OPERATIONS

Follow-me service is mandatory on:

- TWY S for aircraft with wingspan >24 M;
- TWYs S1, S5 and S7 for aircraft with outer main gear wheel span >9 M.

EHRD AD 2.13 DECLARED DISTANCES

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
06	2199	2259	2199	2004	Take-off from RWY extremity. (DTHR 195 M)
	2004	2064	2004	NA	Take-off from intersection with TWY V2.
24	2199	2259	2199	2002	Take-off from RWY extremity. (DTHR 197 M)
	2002	2062	2002	NA	Take-off from intersection with TWY V5.
	1500	1560	1500	NA	Take-off from intersection with TWY V4.

For determination of the datum line for intersection take-off, see EHRD AD 2.23 paragraph 2.

EHRD AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY Des-ignator	APCH LGT 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
06	CAT I 450 M LIH	G -	PAPI left/3° (51 FT)	NIL	2200 M 15 M ¹⁾ LIH	2200 M 30 M ²⁾ LIH	R -	NIL
24	CAT I 780 M LIH	G -	PAPI left/3° (51 FT)	NIL	2200 M 15 M ¹⁾ LIH	2200 M 30 M ²⁾ LIH	R -	NIL

Remarks**10**

- ¹⁾ 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-end to RWY-end.
- ²⁾ White; last 600 M yellow.
1. RWY 06: LED lights used for APCH, THR, CL, edge and end lights.
RWY 24: LED lights used for APCH, THR, CL, edge and end lights.

EHRD AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	NIL
2	LDI location and LGT Anemometer location and LGT	LDI not AVBL. Anemometer: see GEN 3.5 paragraph 3.
3	TWY edge and centre line lighting	See EHRD AD 2.9.
4	Secondary power supply Switch-over time	RWY/TWY: generator. RWY: within 8 SEC, when RVR < 800 M within 1 SEC. TWY: within 8 SEC.
5	Remarks	Lighted WDI at position 100 M in front of THR RWY 06 and THR RWY 24 (left side).

EHRD AD 2.17 ATS AIRSPACE

1	Designation and lateral limits	ROTTERDAM CTR: 515052N 0041850E - 514822N 0041239E - 515323N 0040721E - 515553N 0041333E - along clockwise arc (radius 8 NM, centre 515725N 0042614E) - 515052N 0041850E.
2	Vertical limits	GND to 3000 ft AMSL.
3	Airspace classification	C

4	ATS unit call sign Language(s)	Rotterdam Tower English
5	Transition altitude	IFR: 3000 ft AMSL; VFR: 3500 ft AMSL.
6	Hours of applicability	H24
7	Remarks	NIL

EHRD 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	Rotterdam Approach	122.990	NIL	NIL	MON-SUN: 0600-2200 (0500-2100)	TAR. Doppler VDF, bearings Class B.
		315.825	NIL	NIL		
		131.155	NIL	NIL	O/R	O/R or at ATC discretion.
TWR	Rotterdam Tower	118.205	NIL	NIL	H24	Primary. Doppler VDF, bearings Class B.
		362.875	NIL	NIL		NIL
		119.705	NIL	NIL		Regional Guard. O/R or at ATC discretion. Doppler VDF, bearings Class B.
	Rotterdam Delivery	122.180	NIL	NIL	H24	Start-up control and clear- ance delivery.
ATIS	Rotterdam Information	128.565	NIL	NIL	H24	NIL
-	As appropriate.	121.500	NIL	NIL	As appropriate.	Emergency. Doppler VDF, bearings Class B.

EHRD AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aid, MAG VAR, 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: eleva- tion, ellipsoid height of refer- ence point SBAS: ellips- oid height of LTP/FTP	Service volume radius from the GBAS reference point	Remarks
1	2	3	4	5	6	7	8
DVOR/DME (1°E/2020)	RTM	110.400 MHz CH41X	H24	515825.3N 0042851.5E	0 FT	NA	Designated operational cover- age: BTN 030°-240° MAG 50 NM/FL 250; BTN 240°- 030° MAG 100 NM/FL 250.
LOC 06 ILS CAT I/C/1 (1°E/2020)	ROS	109.100 MHz	H24	515749.9N 0042727.8E	NA	NA	410 M from THR RWY 24.
DME 06	ROS	CH28X	H24	515719.9N 0042601.1E	0 FT	NA	DME reads zero at THR RWY 06. Distance DME antenna/THR is 0.18 NM.
GP 06	-	331.400 MHz	H24	515719.9N 0042601.1E	NA	NA	NIL
LOC 24 ILS CAT I/C/1 (1°E/2020)	RSV	110.900 MHz	H24	515702.1N 0042528.1E	NA	NA	503 M from THR RWY 06.
DME 24	RSV	CH46X	H24	515740.3N 0042652.2E	0 FT	NA	DME reads zero at THR RWY 24. Distance DME antenna/THR is 0.18 NM).
GP 24	-	330.800 MHz	H24	515740.3N 0042652.2E	NA	NA	NIL
GPS	NA	L1 1575.42 MHz	H24	NA	NA	NA	NIL

- The aircraft must be equipped with an FMS comprising a pre-loaded navigation database and a navigation display.
- The aircraft FMS must be capable of processing the RF path terminator.
- The aircraft FMS must use GNSS as the primary navigation sensor.
- The operator must be approved for RNP 1 operations by their state of registry.

1.4.2 Specific remarks

1. RWY 06 SOMEL or TULIP SID: in addition to the standard coding [SOME2A] or [TULI4A], an alternative coding [SOM2AY] and [TUL4AY] comprising radius to fix (RF) turns is available. See paragraph 1.4.1.4 for requirements to use the RF coding version. Due to noise abatement aircraft with the appropriate equipment and approval are encouraged to fly the RF procedure.
2. RWY 24: for relevant SIDs, e.g. COA 2B SID, in addition to the standard coding [COA2B] an alternative coding [COA2BY] is available for exclusive use by WTC L and M aircraft. As resulting flight paths of standard and alternative coding are considered identical by ATC, only the standard (unchanged) designator will be used in the ATC clearance (see also paragraph 1.4.1.4). Due to noise abatement considerations, pilots of WTC L and M aircraft are encouraged to select the alternative coding version.
3. RNAV 1 required.
4. Close-in obstacles up to 110 FT shortly after RWY end (see EHRD AD 2.10).

1.4.3 Continuous routings for SIDs with crossing conditions on ATS routes as applicable

Note: aircraft may only continue to climb above 3000 FT AMSL after an ATC clearance has been received.

Note: REF EHRD AD 2.22 paragraph 1.2.2 "En-route clearance": if not able to comply with the crossing conditions prescribed in the SIDs, inform Rotterdam Delivery before take-off.

ARNEM Departures

L620 If the requested flight level is above FL 245, cross OLDOD at or above FL 250.

INKET Departures

Q21 IFR flights to EHLE with requested flight level below FL 055 shall file ATS route Q21 when available at 2000 FT AMSL.

LUNIX Departures

Z739 If the requested flight level is above FL 245, cross AMOSU at or above FL 250.

NEPTU Departures

T604 IFR flights to EHLE with requested flight level above FL 055 shall file ATS route T604 to BADEX.

1.4.4 SIDs RWY 06

See charts AD 2.EHRD-SID-06.1 and AD 2.EHRD-SID-06.2.

ANDIK 2A	See paragraph 1.4.2 specific remark: 3, 4. After departure climb to 3000 FT AMSL.			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[ANDI2A]	Climb on course 056° MAG, at or above 500 FT AMSL turn right	[M056; A500+; R]	CA (RTM)	N
	To RD153 on course 063° MAG	RD153 [M063]	CF (RTM)	N
	To RD151	RD151	TF	N
	To RD150	RD150	TF	N
	To PAM	PAM	TF	N
	To ANDIK	ANDIK	TF	N

ARNEM 3A	See paragraph 1.4.2 specific remark: 3, 4. After departure climb to 3000 FT AMSL.			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[ARNE3A]	Climb on course 056° MAG, at or above 500 FT AMSL turn right	[M056; A500+; R]	CA (RTM)	N
	To RD153 on course 063° MAG	RD153 [M063]	CF (RTM)	N
	To RD151	RD151	TF	N
	To RD150	RD150	TF	N
	To IVLUT	IVLUT	TF	N
	To NYKER	NYKER	TF	N
	To ARNEM	ARNEM	TF	N

COA 2A	See paragraph 1.4.2 specific remark: 3, 4. After departure climb to 3000 FT AMSL.			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[COA2A]	Climb on course 056° MAG, at or above 500 FT AMSL turn right	[M056; A500+; R]	CA (RTM)	N
	To RD157 on course 063° MAG	RD157 [M063]	CF (RTM)	N
	To RD161	RD161	TF	N
	To RD154	RD154	TF	N
	To COA at or below FL 050	COA [F050-]	TF	N

INKET 2A	See paragraph 1.4.2 specific remark: 3, 4. After departure climb to 3000 FT AMSL.			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[INKE2A]	Climb on course 056° MAG, at or above 500 FT AMSL turn right	[M056; A500+; R]	CA (RTM)	N
	To RD157 on course 063° MAG	RD157 [M063]	CF (RTM)	N
	To INKET	INKET	TF	N

LUNIX 2A	See paragraph 1.4.2 specific remark: 3, 4. After departure climb to 3000 FT AMSL.			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[LUNI2A]	Climb on course 056° MAG, at or above 500 FT AMSL turn right	[M056; A500+; R]	CA (RTM)	N
	To RD153 on course 063° MAG	RD153 [M063]	CF (RTM)	N
	To RD151	RD151	TF	N
	To RD150	RD150	TF	N
	To IVLUT	IVLUT	TF	N
	To LUNIX	LUNIX	TF	N

NEPTU 2A	See paragraph 1.4.2 specific remark: 3, 4. After departure climb to 3000 FT AMSL.			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[NEPT2A]	Climb on course 056° MAG, at or above 500 FT AMSL turn right	[M056; A500+; R]	CA (RTM)	N
	To RD157 on course 063° MAG	RD157 [M063]	CF (RTM)	N
	To INKET	INKET	TF	N
	To PELUB	PELUB	TF	N
	To NEPTU	NEPTU	TF	N
SOMEL 2A	See paragraph 1.4.2 specific remark: 3, 4. Minimum climb gradient 8.0% to 500 FT AMSL. After departure climb to 3000 FT AMSL.			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[SOME2A]	Climb on course 056° MAG, at or above 500 FT AMSL turn right	[M056; A500+; R]	CA (RTM)	N
	Direct to <u>RD181</u>	=> <u>RD181</u>	DF	Y
	To RD186 on course 215° MAG, MAX 220 KIAS	RD186 [M215; L; K220-]	CF (RTM)	N
	To SOMEL	SOMEL	TF	N
	To ABNED	ABNED	TF	N
[SOM2AY]	RNP 1 required. See paragraph 1.4.2 specific remark: 1, 4. Minimum climb gradient 7.5% to 400 FT AMSL. After departure climb to 3000 FT AMSL.			
	To RD182 on course 056° MAG	RD182 [M057]	CF (RTM)	N
	Turn right with 4.780 NM radius to RD183, arc centre RD187	RD183 [R, 4.780, arc centre RD187]	RF	N
	Turn left with 1.600 NM radius to RD184, arc centre RD188, MAX 210 KIAS	RD184 [L, 1.600, arc centre RD188; K210-]	RF	N
	Turn left with 1.880 NM radius to RD185, arc centre RD189, MAX 210 KIAS	RD185 [L, 1.880, arc centre RD189; K210-]	RF	N
	To RD186	RD186	TF	N
	To SOMEL	SOMEL	TF	N
	To ABNED	ABNED	TF	N
	Waypoints: RD182 RD183 RD184 RD185	Co-ordinates: 515819.8N 0042842.6E 515846.8N 0043009.0E 515923.7N 0043123.5E 520135.1N 0042627.3E		
	RF arc centres: RD187 RD188 RD189	Co-ordinates: 515419.1N 0043253.9E 520016.4N 0042913.7E 520025.6N 0042851.0E		

TULIP 4A	See paragraph 1.4.2 specific remark: 3, 4. Minimum climb gradient 8.0% to 500 FT AMSL. After departure climb to 3000 FT AMSL.			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[TULI4A]	Climb on course 056° MAG, at or above 500 FT AMSL turn right	[M056; A500+; R]	CA (RTM)	N
	Direct to <u>RD181</u>	=> <u>RD181</u>	DF	Y
	To RD186 on course 215° MAG, MAX 220 KIAS	RD186 [M215; L; K220-]	CF (RTM)	N
	To SOMEL	SOMEL	TF	N
	To OBAGU	OBAGU	TF	N
	To TULIP	TULIP	TF	N
[TUL4AY]	RNP 1 required. See paragraph 1.4.2 specific remark: 1, 4. Minimum climb gradient 7.5% to 400 FT AMSL. After departure climb to 3000 FT AMSL.			
	To RD182 on course 056° MAG	RD182 [M056]	CF (RTM)	N
	Turn right with 4.780 NM radius to RD183, arc centre RD187	RD183 [R, 4.780, arc centre RD187]	RF	N
	Turn left with 1.600 NM radius to RD184, arc centre RD188, MAX 210 KIAS	RD184 [L, 1.600, arc centre RD188; K210-]	RF	N
	Turn left with 1.880 NM radius to RD185, arc centre RD189, MAX 210 KIAS	RD185 [L, 1.880, arc centre RD189; K210-]	RF	N
	To RD186	RD186	TF	N
	To SOMEL	SOMEL	TF	N
	To OBAGU	OBAGU	TF	N
	To TULIP	TULIP	TF	N
	Waypoints: RD182 RD183 RD184 RD185	Co-ordinates: 515819.8N 0042842.6E 515846.8N 0043009.0E 515923.7N 0043123.5E 520135.1N 0042627.3E		
	RF arc centres: RD187 RD188 RD189	Co-ordinates: 515419.1N 0043253.9E 520016.4N 0042913.7E 520025.6N 0042851.0E		

WOODY 2A	See paragraph 1.4.2 specific remark: 3, 4. After departure climb to 3000 FT AMSL.			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[WOOD2A]	Climb on course 056° MAG, at or above 500 FT AMSL turn right	[M056; A500+; R]	CA (RTM)	N
	To RD157 on course 063° MAG	RD157 [M063]	CF (RTM)	N
	To RD161	RD161	TF	N
	To RD154	RD154	TF	N
	To WOODY	WOODY	TF	N

1.4.5 SIDs RWY 24

See charts AD 2.EHRD-SID-24.1 and AD 2.EHRD-SID-24.2.

ANDIK 2B	See paragraph 1.4.2 specific remark: 3, 4. Minimum climb gradient 4.5% to 500 FT AMSL. After departure climb to 3000 FT AMSL.			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[ANDI2B]	To RD159 on course 236° MAG	RD159 [M236]	CF (RTM)	Y
	Climb on course 236° MAG, at or above 500 FT AMSL turn right	[M236; A500+; R]	CA (RTM)	N
	Direct to RD207, MAX 230 KIAS	=> RD207 [K230-]	DF	N
	To RD163	RD163	TF	N
	To RD150	RD150	TF	N
	To PAM	PAM	TF	N
	To ANDIK	ANDIK	TF	N

ARNEM 3B	See paragraph 1.4.2 specific remark: 3, 4. Minimum climb gradient 4.5% to 500 FT AMSL. After departure climb to 3000 FT AMSL.			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[ARNE3B]	To <u>RD159</u> on course 236° MAG	<u>RD159</u> [M236]	CF (RTM)	Y
	Climb on course 236° MAG, at or above 500 FT AMSL turn right	[M236; A500+; R]	CA (RTM)	N
	Direct to RD207, MAX 230 KIAS	=> RD207 [K230-]	DF	N
	To RD163	RD163	TF	N
	To RD150	RD150	TF	N
	To IVLUT	IVLUT	TF	N
	To NYKER	NYKER	TF	N
	To ARNEM	ARNEM	TF	N

COA 2B	See paragraph 1.4.2 specific remark: 2, 3, 4. Minimum climb gradient 6.3% to 400 FT AMSL. After departure climb to 3000 FT AMSL.			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[COA2B]	To <u>RD166</u> on course 236° MAG	<u>RD166</u> [M236]	CF (RTM)	Y
	Climb on course 236° MAG, at or above 400 FT AMSL turn right	[M236; A400+; R]	CA (RTM)	N
	Direct to RD158, MAX 220 KIAS	=> RD158 [K220-]	DF	N
	To RD156	RD156	TF	N
	To COA at or below FL 050	COA [F050-]	TF	N
[COA2BY]	To <u>RD159</u> on course 236° MAG	<u>RD159</u> [M236]	CF (RTM)	Y
	Direct to RD158, MAX 220 KIAS	=> RD158 [K220-]	DF	N
	To RD156	RD156	TF	N
	To COA at or below FL 050	COA [F050-]	TF	N

INKET 2B	See paragraph 1.4.2 specific remark: 2, 3, 4. Minimum climb gradient 6.3% to 400 FT AMSL. After departure climb to 3000 FT AMSL.			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[INKE2B]	To <u>RD166</u> on course 236° MAG	<u>RD166</u> [M236]	CF (RTM)	Y
	Climb on course 236° MAG, at or above 400 FT AMSL turn right	[M236; A400+; R]	CA (RTM)	N
	Direct to RD158, MAX 220 KIAS	=> RD158 [K220-]	DF	N
	To RD164	RD164	TF	N
	To RD165	RD165	TF	N
	To INKET	INKET	TF	N
[INK2BY]	To <u>RD159</u> on course 236° MAG	<u>RD159</u> [M236]	CF (RTM)	Y
	Direct to RD158, MAX 220 KIAS	=> RD158 [K220-]	DF	N
	To RD164	RD164	TF	N
	To RD165	RD165	TF	N
	To INKET	INKET	TF	N

LUNIX 2B	See paragraph 1.4.2 specific remark: 3, 4. Minimum climb gradient 4.5% to 500 FT AMSL. After departure climb to 3000 FT AMSL.			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[LUNI2B]	To <u>RD159</u> on course 236° MAG	<u>RD159</u> [M236]	CF (RTM)	Y
	Climb on course 236° MAG, at or above 500 FT AMSL turn right	[M236; A500+; R]	CA [RTM]	N
	Direct to RD207, MAX 230 KIAS	=> RD207 [K230-]	DF	N
	To RD163	RD163	TF	N
	To RD150	RD150	TF	N
	To IVLUT	IVLUT	TF	N
	To LUNIX	LUNIX	TF	N

NEPTU 2B	See paragraph 1.4.2 specific remark: 2, 3, 4. Minimum climb gradient 6.3% to 400 FT AMSL. After departure climb to 3000 FT AMSL.			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[NEPT2B]	To <u>RD166</u> on course 236° MAG	<u>RD166</u> [M236]	CF (RTM)	Y
	Climb on course 236° MAG, at or above 400 FT AMSL turn right	[M236; A400+; R]	CA (RTM)	N
	Direct to RD158, MAX 220 KIAS	=> RD158 [K220-]	DF	N
	To RD164	RD164	TF	N
	To RD165	RD165	TF	N
	To INKET	INKET	TF	N
	To PELUB	PELUB	TF	N
	To NEPTU	NEPTU	TF	N
[NEP2BY]	To <u>RD159</u> on course 236° MAG	<u>RD159</u> [M236]	CF (RTM)	Y
	Direct to RD158, MAX 220 KIAS	=> RD158 [K220-]	DF	N
	To RD164	RD164	TF	N
	To RD165	RD165	TF	N
	To INKET	INKET	TF	N
	To PELUB	PELUB	TF	N
	To NEPTU	NEPTU	TF	N

SOMEL 2B	See paragraph 1.4.2 specific remark: 2, 3, 4. Minimum climb gradient 6.3% to 400 FT AMSL. After departure climb to 3000 FT AMSL.			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[SOME2B]	To <u>RD166</u> on course 236° MAG	<u>RD166</u> [M236]	CF (RTM)	Y
	Climb on course 236° MAG, at or above 400 FT AMSL turn right	[M236; A400+; R]	CA (RTM)	N
	Direct to RD158, MAX 220 KIAS	=> RD158 [K220-]	DF	N
	To SOMEL	SOMEL	TF	N
	To ABNED	ABNED	TF	N
[SOM2BY]	To <u>RD159</u> on course 236° MAG	<u>RD159</u> [M236]	CF (RTM)	Y
	Direct to RD158, MAX 220 KIAS	=> RD158 [K220-]	DF	N
	To SOMEL	SOMEL	TF	N
	To ABNED	ABNED	TF	N

TULIP 3B	See paragraph 1.4.2 specific remark: 2, 3, 4. Minimum climb gradient 6.3% to 400 FT AMSL. After departure climb to 3000 FT AMSL.			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[TULI3B]	To <u>RD166</u> on course 236° MAG	<u>RD166</u> [M236]	CF (RTM)	Y
	Climb on course 236° MAG, at or above 400 FT AMSL turn right	[M236; A400+; R]	CA (RTM)	N
	Direct to RD158, MAX 220 KIAS	=> RD158 [K220-]	DF	N
	To SOMEL	SOMEL	TF	N
	To OBAGU	OBAGU	TF	N
	To TULIP	TULIP	TF	N
[TUL3BY]	To <u>RD159</u> on course 236° MAG	<u>RD159</u> [M236]	CF (RTM)	Y
	Direct to RD158, MAX 220 KIAS	=> RD158 [K220-]	DF	N
	To SOMEL	SOMEL	TF	N
	To OBAGU	OBAGU	TF	N
	To TULIP	TULIP	TF	N

WOODY 2B	See paragraph 1.4.2 specific remark: 2, 3, 4. Minimum climb gradient 6.3% to 400 FT AMSL. After departure climb to 3000 FT AMSL.			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[WOOD2B]	To <u>RD166</u> on course 236° MAG	<u>RD166</u> [M236]	CF (RTM)	Y
	Climb on course 236° MAG, at or above 400 FT AMSL turn right	[M236; A400+; R]	CA (RTM)	N
	Direct to RD158, MAX 220 KIAS	=> RD158 [K220-]	DF	N
	To RD164	RD164	TF	N
	To HELHO	HELHO	TF	N
	To RD162	RD162	TF	N
	To WOODY	WOODY	TF	N
[WOO2BY]	To <u>RD159</u> on course 236° MAG	<u>RD159</u> [M236]	CF (RTM)	Y
	Direct to RD158, MAX 220 KIAS	=> RD158 [K220-]	DF	N
	To RD164	RD164	TF	N
	To HELHO	HELHO	TF	N
	To RD162	RD162	TF	N
	To WOODY	WOODY	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 Rotterdam Airport radar services may be provided by Schiphol APP.

Note: in the Rotterdam TMAs VFR flights without ATC clearance are permitted. For such flights radio communication is not compulsory.

2.2 Arrival

2.2.1 Arrival clearance

At, or before, entering the Amsterdam Control Area, an arrival clearance will be issued by Amsterdam ACC containing:

- Standard arrival route¹⁾ or direct route.
- Main landing runway²⁾.
- Level instructions (normally descent instructions).
- Any other necessary instructions or information.

¹⁾ when cleared via a standard arrival route (STAR), the clearance limit is the initial approach fix (IAF).

²⁾ issued by ATIS (see EHRD AD 2.18) or ATC.

2.2.2 Level restrictions

The following level restrictions shall be applied by aircraft with destination Rotterdam AD. If unable to comply, inform ATC immediately.

- Flights via ENKOS or FLEVO should comply with the following crossing condition: cross ENKOS or FLEVO at FL 070.
- Flights via COA, DENUT or HELEN should comply with the following crossing condition: cross DOFMU at FL 060 or below, unless otherwise instructed.
- Flights via LAMSO, MOLIX, REDFA or TOPPA should comply with the following crossing condition: cross MASOS at FL 060 or below, unless otherwise instructed.

2.2.3 Transfer of control

- To Schiphol APP: inbound traffic via ENKOS or FLEVO will be transferred to Schiphol APP.
- To Rotterdam APP: transfer to Rotterdam APP will normally take place when entering Rotterdam TMAs.
- To Rotterdam TWR: transfer to Rotterdam TWR will normally take place after intercepting final approach.

2.2.4 STAR descriptions

See charts AD 2.EHRD-STAR.

BLUFA 1R	RNAV 1 required			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[BLUF1R]	BLUFA	BLUFA	IF	N
	To FLEVO, at FL 070	FLEVO [F070]	TF	N
	To PAM	PAM	TF	N
	To KAKKO	KAKKO	TF	N
	To DOFMU, between FL 060 and FL 050	DOFMU [B F060 F050]	TF	N

COA 2R	RNAV 1 required			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[COA2R]	COA, at or below FL 050	COA [F050-]	IF	N
	To DOFMU	DOFMU	TF	N

DENUT 2R	RNAV 1 required.			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[DENU2R]	DENUT	DENUT	IF	N
	To RIMBU	RIMBU	TF	N
	To DOFMU, at or below FL 060	DOFMU [F060-]	TF	N

ENKOS 3R	RNAV 1 required			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[ENKO3R]	ENKOS, at FL 070	ENKOS [F070]	IF	N
	To PAM	PAM	TF	N
	To KAKKO	KAKKO	TF	N
	To DOFMU, between FL 060 and FL 050	DOFMU [B F060 F050]	TF	N

HELEN 4R	RNAV 1 required.			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[HELE4R]	HELEN	HELEN	IF	N
	To RIMBU	RIMBU	TF	N
	To DOFMU, at or below FL 060	DOFMU [F060-]	TF	N

INKET 2R	RNAV 1 required			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[INKE2R]	INKET	INKET	IF	N
	To KAKKO	KAKKO	TF	N
	To DOFMU, between FL 060 and FL 050	DOFMU [B F060 F050]	TF	N

LAMSO 3R	RNAV 1 required			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[LAMS3R]	LAMSO	LAMSO	IF	N
	To MASOS, at or below FL 060	MASOS [F060-]	TF	N

MOLIX 3R	RNAV 1 required			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[MOLI3R]	MOLIX	MOLIX	IF	N
	To MASOS, at or below FL 060	MASOS [F060-]	TF	N

REDFA 3R	RNAV 1 required			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[REDF3R]	REDFA	REDFA	IF	N
	To MASOS, at or below FL 060	MASOS [F060-]	TF	N

RKN 3R	RNAV 1 required			
ARINC designator	Formal description	Abbreviated description	Expected path terminator	Fly-over required
[RKN3R]	RKN	RKN	IF	N
	To TENLI	TENLI	TF	N
	To FLEVO, at FL 070	FLEVO [F070]	TF	N
	To PAM	PAM	TF	N
	To KAKKO	KAKKO	TF	N
	To DOFMU, between FL 060 and FL 050	DOFMU [B F060 F050]	TF	N

4 VFR FLIGHT PROCEDURES AND REGULATIONS

Note: for visual approach chart and visual traffic circuits see AD 2.EHRD-VAC.1, AD 2.EHRD-VAC.2 and AD 2.EHRD-VAC.3.

4.1 General

1. All VFR flights within the Rotterdam CTR shall submit a flight plan (see ENR 1.10).
2. Prior permission is required from Rotterdam TWR for all VFR operations in the CTR.
3. The use of RWY 06/24 is restricted to aircraft maintaining two-way radio contact with TWR.
4. Pilots shall adhere to the approach or departure route as indicated on the charts, unless otherwise instructed by ATC.
5. Pilots shall strictly adhere to the circuits as indicated on the charts, unless otherwise instructed by ATC.
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. Standard circuit altitude is 1000 FT AMSL for inbound VFR traffic. Standard altitude for VFR training circuit is 500 FT AMSL.
10. IFR areas: VFR flights within the CTR may be instructed by ATC to stay clear of the specified IFR areas. These areas are indicated on the chart.
11. VFR reporting points positions:

VFR reporting point	Position
FOXTROT	515428N 0043258E
HOTEL	515818N 0040736E
MIKE	515954N 0043905E
OSCAR	515656N 0043150E
PAPA	515626N 0042802E
ROMEO	515125N 0043550E
SIERRA	515822N 0041903E
TANGO	515824N 0042347E
WHISKEY	515820N 0041323E

4.2 Visual departure procedures

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

- aircraft identification (e.g. PHSPY).
 - position (e.g. opposite tower).
 - ATIS information (e.g. information J).
 - flight rules (e.g. VFR).
 - destination (e.g. Hilversum).
 - request start-up.
1. **MIKE Departure:** after take-off follow the VFR route via OSCAR (or ABM OSCAR) to MIKE while climbing to 1000 FT AMSL and keep 500 M to the right-hand side of the railway.
 2. **ROMEO Departure:** after take-off follow the VFR route via OSCAR (or ABM OSCAR) and FOXTROT to ROMEO while climbing to 1500 FT AMSL and keep 500 M to the right-hand side of the highway.
 3. **HOTEL Departure** (ATC discretion only): after take-off follow the VFR route via TANGO, SIERRA to WHISKEY in the direction HOTEL while climbing to 1000 FT AMSL. (This VFR route coincides with RTM VOR radial 271).
 4. **For other directions.** Departure instructions will be given.

4.3 Visual approach procedures

1. Contact Rotterdam TWR 2 minutes before reaching the CTR boundary for permission to enter the CTR.
2. **MIKE Arrival:** enter the CTR via MIKE at 1000 FT AMSL; follow the VFR route via OSCAR (or ABM OSCAR) to PAPA and keep 500 M to the right-hand side of the railway.
3. **ROMEO Arrival:** enter the CTR via ROMEO at 1500 FT AMSL; follow the VFR route via OSCAR (or ABM OSCAR) to PAPA and keep 500 M to the right-hand side of the highway.
4. **HOTEL Arrival** (ATC discretion only): enter the CTR via WHISKEY at 1500 FT AMSL; follow the VFR route via SIERRA to TANGO. (This VFR route coincides with RTM VOR radial 271).
5. Pilots may be instructed to hold over ROMEO, FOXTROT, ABM MIKE, ABM OSCAR, WHISKEY, SIERRA or TANGO.
6. When instructed to approach via ABM PAPA the following applies for RWY 06/24:
 - a. Join the circuit as instructed by ATC.
 - b. Maintain 1000 FT AMSL (MIKE Arrival) or 1500 FT AMSL (ROMEO Arrival).
 - c. After passing ABM PAPA cross the runway in the middle and join the downwind leg as instructed by ATC.
7. In case of an overshoot enter the relevant traffic circuit and inform ATC.

4.4 VFR traffic circuits

4.4.1 General

RWY 06: a lefthand circuit at 1000 FT AMSL.

RWY 24: a righthand circuit at 1000 FT AMSL, maintain 1000 FT AMSL until turning base leg.

Note: for traffic reasons pilots may be instructed to extend the downwind leg.

4.4.2 VFR training circuits

To avoid noise in the villages north of RWY 24, a VFR training circuit has been established at 500 FT AMSL within a designated area. For these flights the threshold RWY 24 has been displaced 800 metres beyond the normal threshold RWY 24 indicated by white marking and red/white markers on the right side of the runway.

4.4.2.1 RWY 06

1. Always stay inside the designated circuit area.
2. Lefthand circuit, altitude 500 FT AMSL.
3. After passing the red/white markers along the runway turn to crosswind leg.
4. Downwind leg is marked by the orange coloured VHF COM station.
5. Turn base leg after passing the Delftsche Schie.
6. Touchdown at threshold RWY 06.

4.4.2.2 RWY 24

1. Always stay inside the designated circuit area.
2. Righthand circuit, altitude 500 FT AMSL.
3. Turn crosswind leg after passing the Delftsche Schie.
4. Downwind leg is marked by the orange coloured VHF COM station.
5. Turn base leg abeam the normal threshold RWY 24.
6. Touchdown at displaced threshold.

Note: for traffic reasons pilots may be instructed to hold in area ALPHA or BRAVO within the designated circuit area. Both areas are separated by the area between highway A13 and the Delftsche Schie.

4.5 Communication failure procedures

4.5.1 General

- Select transponder code 7600.
- If possible call Amsterdam ACC Supervisor on telephone number +31 (0)20 406 3999.
Note: Use telephone connection to mitigate COM failure only. All telephone calls will be automatically recorded.
- If telephone connection is disconnected prematurely (before read-back), revert to communication failure procedures below.

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 ROMEO and MIKE Arrival

- a. In case of communication failure before joining the circuit leave the CTR according to the ROMEO or MIKE 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 reporting point PAPA) 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 HOTEL Arrival

- a. In case of communication failure before joining the circuit leave the CTR according to the HOTEL 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 TANGO) act in accordance with paragraph 4.5.3.1 item b.

4.5.3.3 Via a different route to the field

- 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 line or IFR areas and proceed to an appropriate aerodrome.

EHRD AD 2.23 ADDITIONAL INFORMATION

1 CAUTIONS AND ADDITIONAL INFORMATION

1. Pilots are urgently advised to maintain two-way radio communication within the Rotterdam TMAs. When operating in Rotterdam TMA 1 and 2 or in the vicinity of Schiphol TMA 1 and below Rotterdam TMA 1 and 2, the use of a frequency monitoring code as outlined in ENR 1.2 is strongly recommended.
2. For details of the low flying areas and routes see ENR 5.2.
3. VFR flights shall not be operated in the Schiphol TMAs, unless authorised by the appropriate ATS authority (see ENR 1.2).
4. Pilots are urgently requested not to execute VFR flights in the vicinity of the published instrument arrival and departure routes within the Rotterdam TMA, see EHRD AD 2.24.

EHSE AD 2.22 FLIGHT PROCEDURES**1 VFR FLIGHT PROCEDURES AND REGULATIONS****1.1 General**

1. The circuit area may not be overflown below an altitude of 1030 FT AMSL (1000 FT AAL).
2. The circuit altitude is 730 FT AMSL (700 FT AAL).
3. Joining and leaving the circuit area shall take place as depicted on AD 2.EHSE-VAC.
4. The visual traffic circuit must be carried out within the lateral limits of the circuit area as depicted on AD 2.EHSE-VAC.
5. On final landing lights must be switched on.
6. Built-up areas shall be avoided as much as possible.
7. Pilots are urgently advised to adhere strictly to the prescribed procedures and to keep a sharp lookout for military aircraft approaching Woensdrecht MIL AD. These aircraft cross the circuit area at a minimum altitude of 1500 FT AMSL.
8. Expect helicopters executing short circuits.
9. Anticipate slower speed and more spacing when in sequence behind gyrocopter approaches.
10. VFR reporting points positions:

VFR reporting point	Position
ECHO	513353N 0043533E
WHISKEY	513246N 0043050E
ZULU	513138N 0043253E

1.2 Visual departure procedures**1.2.1 RWY 06**

- Leave the circuit area via ECHO.

1.2.2 RWY 24

- After take-off, turn left to maintain track 239° MAG on take-off leg due to noise abatement.
- Leave the circuit area via WHISKEY.
- When leaving the traffic circuit via WHISKEY, be aware and avoid parachute dropping zone located at APRX 1 NM NW of AD.

1.3 Visual approach procedures

- Approach altitude at ZULU shall be 730 FT AMSL (700 FT AAL).
- From ZULU maintain track 340° MAG until joining downwind.

Note: when RWY 06 is in use expect short downwind leg: perform downwind checks before ZULU.

2 RADIO PROCEDURES

1. Arriving traffic contact Seppe Radio 5 MIN before ETA and departing traffic before taxiing.
2. Report ZULU when joining the circuit, downwind and final. When continuing with touch-and-go landings, report half-way downwind and turning final.
3. Report leaving the circuit area at ECHO or WHISKEY.
4. For increased situational awareness of other AD traffic in the circuit and near the aerodrome the following applies:
 - Helicopters shall use call sign with prefix HELI;
 - Gyrocopters shall use callsign with prefix GYROCOPTER;
 - Student pilots flying solo shall use prefix SOLO.
5. Two-way radio contact with the AD office is mandatory for all aircraft taxiing north and south of the runway, for crossing the runway and when lining up RWY 06/24.

EHSE AD 2.23 ADDITIONAL INFORMATION**1 CAUTIONS AND ADDITIONAL INFORMATION**

1. Parachute jumping may take place as stated in ENR 5.5 and/or as promulgated by NOTAM.
2. Visiting aircraft shall park north of the runway, adjacent to the AD office. The designated parking area is marked by blue flags.
3. Parking and taxiing south of the runway is for visiting aircraft PPR only.
4. The grass strip south and adjacent to the asphalt RWY 06/24 is for exclusive use by aircraft fitted with tail skid.

EHSE AD 2.24 CHARTS RELATED TO AN AERODROME

Type of chart	Page
Aerodrome chart	AD 2.EHSE-ADC
Visual approach chart	AD 2.EHSE-VAC

EHTE — DEVENTER/Teuge

Note: the following sections in this chapter are intentionally left blank:
AD 2.7, AD 2.16, AD 2.20.

EHTE AD 2.1 AERODROME LOCATION INDICATOR AND NAME

EHTE — DEVENTER/Teuge

EHTE AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP co-ordinates and site at AD	521441N 0060248E
2	Direction and distance from (city)	3.0 NM W from Deventer; 1.5 NM NE from Apeldoorn.
3	Elevation/reference temperature	17 FT AMSL/21.0°C.
4	Geoid undulation at AD ELEV PSN	142 FT.
5	MAG VAR/annual change	2°E (2020)/10'E.
6	AD operator, postal address, telephone, telefax, email, AFS, website	Post: Teuge Airport De Zanden 103 7395 PG Teuge The Netherlands Tel: +31 (0)55 323 8586 Email: ops@teuge-airport.nl URL: https://www.teuge-airport.nl
7	Types of traffic permitted (IFR/VFR)	IFR/VFR ¹⁾
8	Remarks	1. Aerodrome available for national and international civil air traffic with all types of aircraft, with wing span up to but not including 24 M and/or outer main gear wheel span up to but not including 6 M on the designated runways, and gliders on the indicated glider strips. 2. The import and export of cargo and cargo in transit is allowed. ¹⁾ IFR only allowed outside UDP BTN 0600-2200 (0500-2100).

EHTE AD 2.3 OPERATIONAL HOURS

1	AD operator	MON-FRI: UDP BTN 0700-1900 (0600-1800); SAT: UDP BTN 0800-1900 (0700-1800); SUN, HOL: UDP BTN 0900-1900 (0800-1800). All flights outside OPR HR 24 HR PPR ¹⁾ .
2	Customs and immigration	Customs: as AD OPR HR. Outside OPR HR 24 HR PPR. Immigration: as AD OPR HR. Outside OPR HR 24 HR PPR.
3	Health and sanitation	SR-SS 1 HR PN ²⁾ .
4	AIS briefing office	H24 Tel: +31 (0)20 406 2315 URL: https://www.homebriefing.nl
5	ATS reporting office (ARO)	Competent ATS unit: ARO Schiphol, see EHAM AD 2.3.
6	MET briefing office	NA
7	ATS	NA
8	Fuelling	During AD OPR HR.
9	Handling	During AD OPR HR.
10	Security	On request 1 HR PN ²⁾ .
11	De-icing	NA
12	Remarks	1. Jet aircraft and aircraft with MTOM above 6000 KG: 1 HR PPR. ¹⁾ IFR flights only allowed outside UDP BTN 0600-2200 (0500-2100), slots will be allocated by AD authority. ²⁾ PN means notification other than by (VFR) flight plans.

EHTE AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo-handling facilities	NIL
2	Fuel/oil types	AVGAS 100LL, Jet A-1/-.
3	Fuelling facilities/capacity	AVGAS 100LL: 50 000 litres, Jet-A1: 50 000 litres.
4	De-icing facilities	NIL
5	Hangar space for visiting aircraft	Limited AVBL.
6	Repair facilities for visiting aircraft	Major repairs to aircraft up to 6000 KG.
7	Remarks	NIL

EHTE AD 2.5 PASSENGER FACILITIES

1	Hotels	At the aerodrome.
2	Restaurants	At the aerodrome.
3	Transportation	Bus to Apeldoorn and taxi (on request).
4	Medical facilities	In Deventer, Apeldoorn.
5	Bank and post office	In Twello, Deventer, Apeldoorn.
6	Tourist office	In Twello, Deventer, Apeldoorn.
7	Remarks	NIL

EHTE AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting	CAT 1; CAT 2 or CAT 3 on request (12 HR PPR).
2	Rescue equipment	NIL
3	Capability for removal of disabled aircraft	Hoist and lift capacity AVBL.
4	Remarks	NIL

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

1	Apron surface and strength	Surface: paved, ASPH, grass. Strength: ACFT up to 12 000 KG AUW.
2	Taxiway width, surface and strength	Width: MAX 10 M. Surface: ASPH. Strength: ACFT up to 12 000 KG AUW.
3	Altimeter checkpoint location and elevation	NIL
4	VOR checkpoints	NIL
5	INS checkpoints	NIL
6	Remarks	NIL

EHTE 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 (yellow).
2	RWY and TWY markings and LGT	RWY: THR, RWY designators, centre line, RWY 26 aiming point. THR lights, edge lights and end lights. TWY: centre lines, holding points, mandatory instruction signs at taxi holding point, blue retro-reflective edge markers.
3	Stop bars	NIL
4	Remarks	Landing area: yellow markers to separate aeroplane and glider area.

EHTE AD 2.10 AERODROME OBSTACLES

For obstacles in the vicinity of the aerodrome see AD 2.EHTE-ADC.
For obstacles in the take-off area see AD 2.EHTE-AOC-08-26.