IVAO
NETHERLANDS

ATC Briefing

Schiphol EHAM

1. Introduction

This document will brief Air Traffic Controllers about the procedures of Amsterdam Airport Schiphol to make them familiar with the local and event procedures at Amsterdam Schiphol Airport (EHAM). Due to the high amount of traffic expected, the IVAO Netherlands Division has opted to create specific event procedures between the ATC units in the Netherlands. To make sure this event is a great success and to be able to cope with the expected traffic we require you, the ATCO, to fully read and understand this briefing document.

2. Airport Layout

Schiphol has six runways. Five of these runways are main runways and one is for general aviation (Oostbaan 04/22). During an inbound peak, we can only use 4 runways. 2 for landing and 2 for departure. In normal circumstances, only one runway is used for departure and one for arrival. A staff member can open a second departure/landing runway if needed. Runway 04/22 may always be used by general aviation traffic. When

runway 36C/18C is in use, W5 will be closed for crossing. In case runway 18C is in use for landing, all traffic must taxi via Z. Taxiway Y must be used for taxing traffic in case runway 36C is in use for landing.

3. Schiphol Delivery – Planner

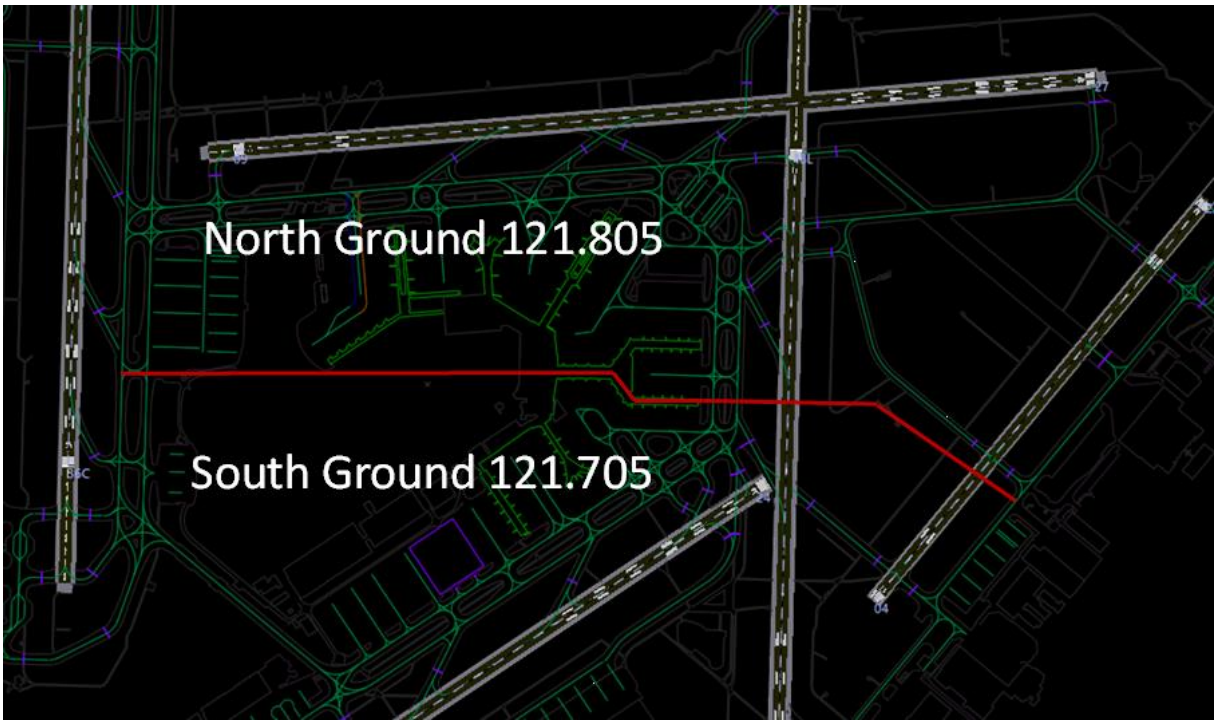
3.1 Responsibilities and tasks

Schiphol Delivery (EHAM_DEL) is responsible for delivering the IFR clearance and VFR startup clearance to outbound traffic. Schiphol Ground (EHAM_N/S_GND) is responsible for start-up (IFR), pushback and taxi. When the amount of outbound traffic rises, Schiphol Planner (EHAM_P_DEL) may be opened. Schiphol planner is responsible for a smooth outbound flow. The main goal of the planner position is to reduce queue at the holding point of the runway. Using expected startup times and slots, the planner must ensure a maximum number of 3 aircraft at the holding point will be present at once.

The pilot requests his IFR clearance at DEL. After the readback, the DEL controller transfers the aircraft to P_DEL. When the pilot reports himself on the P_DEL frequency, planner must say to the pilot: “XXX Report Fully ready”. When the pilot reports fully ready, the aircraft must be ready for startup and pushback at any time. The planner may either choose to keep the traffic on the frequency (if it is too busy) or transferring the aircraft to the proper ground controller.

In order to ensure that no more than 3 aircraft are present at the holding point of the departure runway, ATC tools may be provided. In case these tools are not provided for an event, Schiphol planner need to estimate whether the runway holding point will become too busy. It is also possible that ATC Operations staff members will instruct P_DEL to use a specific time interval between aircraft.

The following figure shows the border between EHAM_S_GND and EHAM_N_GND.



To avoid misconceptions, the following phrase must be inserted in the ATIS remarks of the Schiphol planner controller: “REPORT READY ONLY WHEN FULLY READY FOR STARTUP AND PUSHBACK”. In case no Schiphol Planner is online, Schiphol Delivery takes over the responsibility of Schiphol Planner.

3.2 Labeling method

The following labelling method must be used.

The full SID name and runway must be inserted. This is filled in like this: FIX = BERG4V 36L or FIX = SPY3V 24.

In case a 5 letter SID designator is applicable, the last letter must be deleted. This is to ensure AURORA draws the SID correctly. Most of the times, AURORA processes this automatically, but sometimes it doesn’t. For SID designators with less than 5 letters (SPY for example), no letters must be deleted.

3.3 SID Assignment dual runway OPS

In case of dual runway take-off operations, the most preferable way of assigning the SID to the runway is by separation of west and east.

In case 36L and 36C are in use for take-off

36L: IDRID, BERGI, ANDIK

36C: ARNEM, EDUPO, WOODY, LOPIK

In case runway 36L and 09 are in use for take-off

36L: IDRID, BERGI, ANDIK

09: ARNEM, EDUPO, WOODY, LOPIK

In case runway 18L and 24 are in use for take-off

18L: ARNEM, EDUPO, WOODY, LOPIK, ANDIK (via PAM)

24: IDRID, BERGI, ANDIK (via SPY)

In case runway 18L and 18C are in use for take-off

18L: ANDIK (TORGA, not BETUS), ARNEM, EDUPO, WOODY, LOPIK

18C: ANDIK (BETUS, not TORGA), IDRID, BERGI

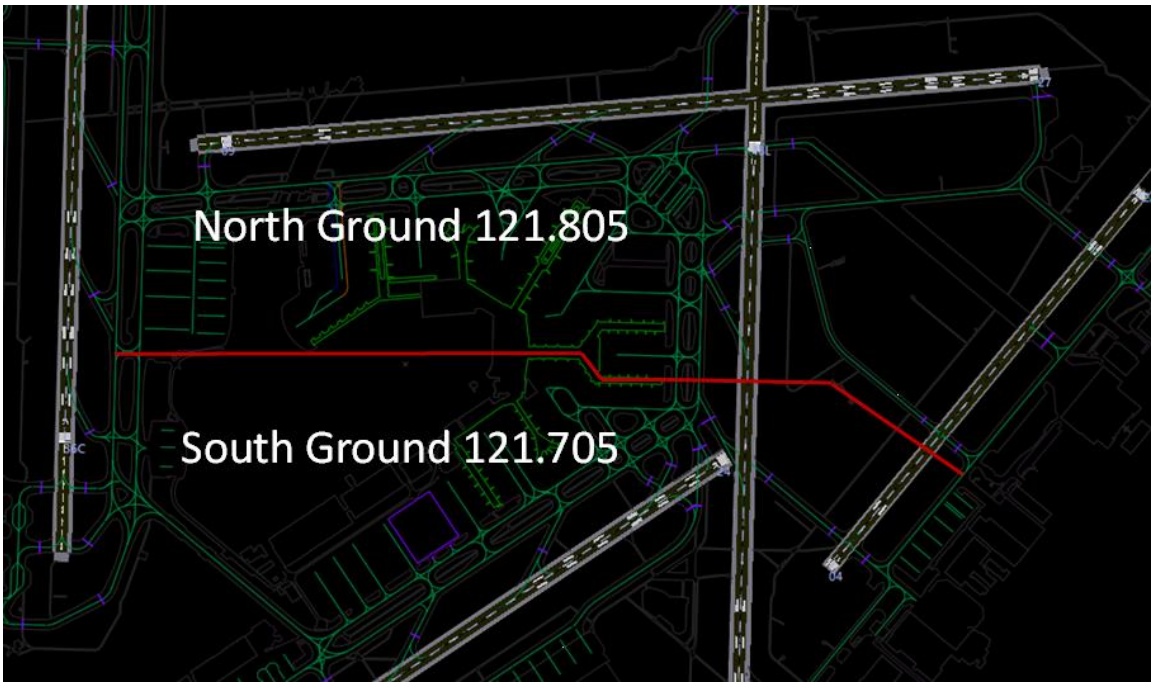
Deviation of this procedure may only occur in case there is a large difference in demand for these SIDs (outbound peak to the west for example) and when coordinated with both Schiphol Approach and Schiphol Tower.

CAUTION: EHAM_DEL and EHAM_P_DEL do **NOT** give start-up or pushback clearance. These controllers only transfer traffic to the ground controller when the pilot is **fully ready** for start-up and pushback.

4. Schiphol Ground

4.1 Sectorization and procedures

In case EHAM_N_GND and EHAM_S_GND are online, the border between these two positions is as indicated in the following figure.



Moving traffic shall be transferred **before** passing the red line to the next ground controller.

R/T = KLM123, standby on 121.705

In case runway 18C or 36C is in use, it is not allowed to cross traffic at W5. In this case, the following procedures apply:

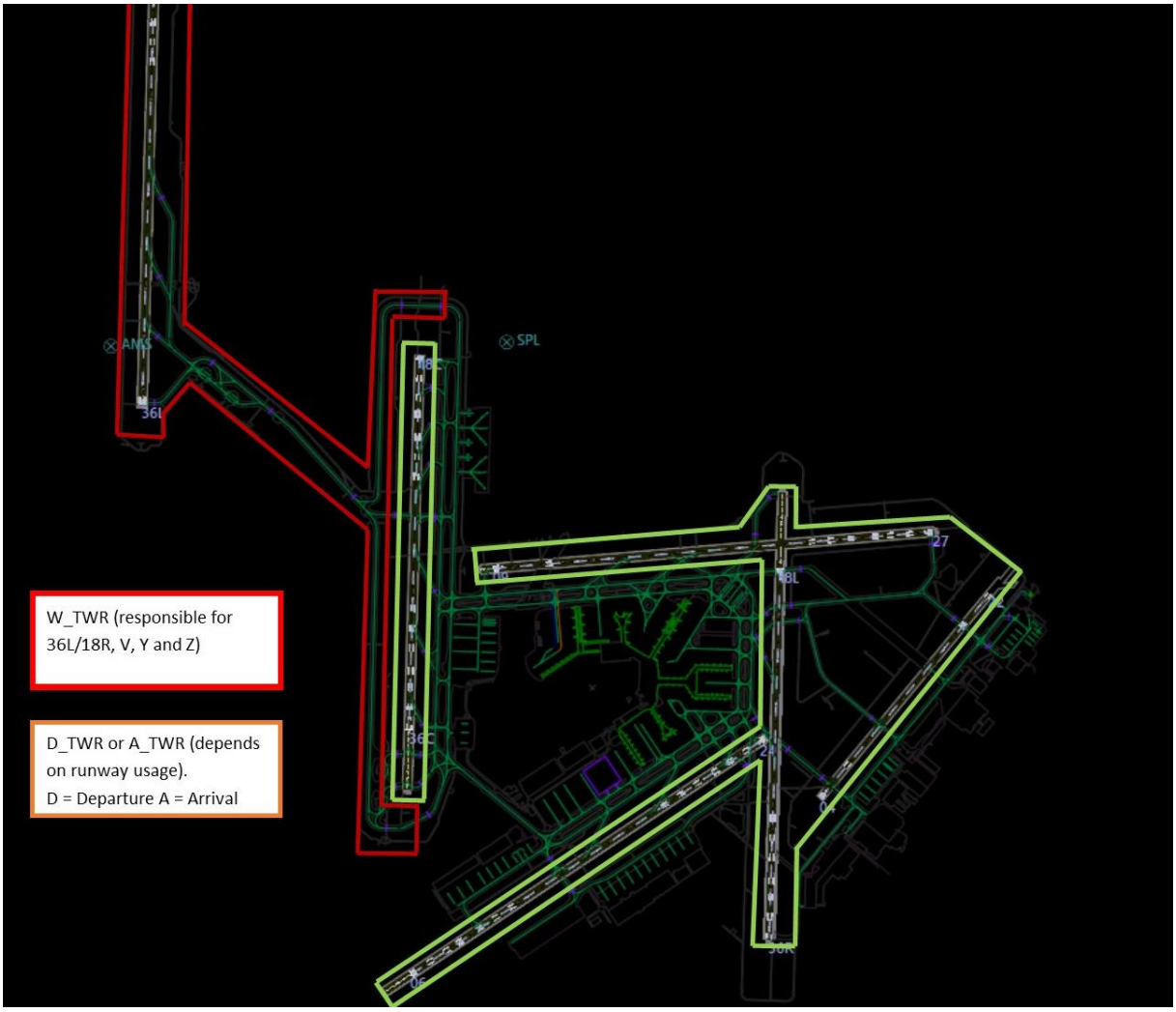
- 36C for departure and 18C for landing, traffic shall taxi via Z
- 18C for departure and 36C for landing, traffic shall taxi via Y

Ground control may **not** grant a crossing clearance for a runway. There is an exception for point Z and Y1. The ground controller need to provide a crossing clearance for runway 18C/36C at Z/Y1. After the runway is "crossed" via these taxiways, ground control needs to hand the aircraft over to appropriate tower controller.

If runway 18C/36C is not active, the ground controller can make an agreement with the tower controller to provide a crossing clearance at W5 and to transfer at VM. This agreement may **only** be made with permission from the tower controller responsible for runway 36L/18R and taxiway V.

4.2 Transfer to tower

The following figure shows to which tower controller the traffic must be transferred.



5. Schiphol Tower

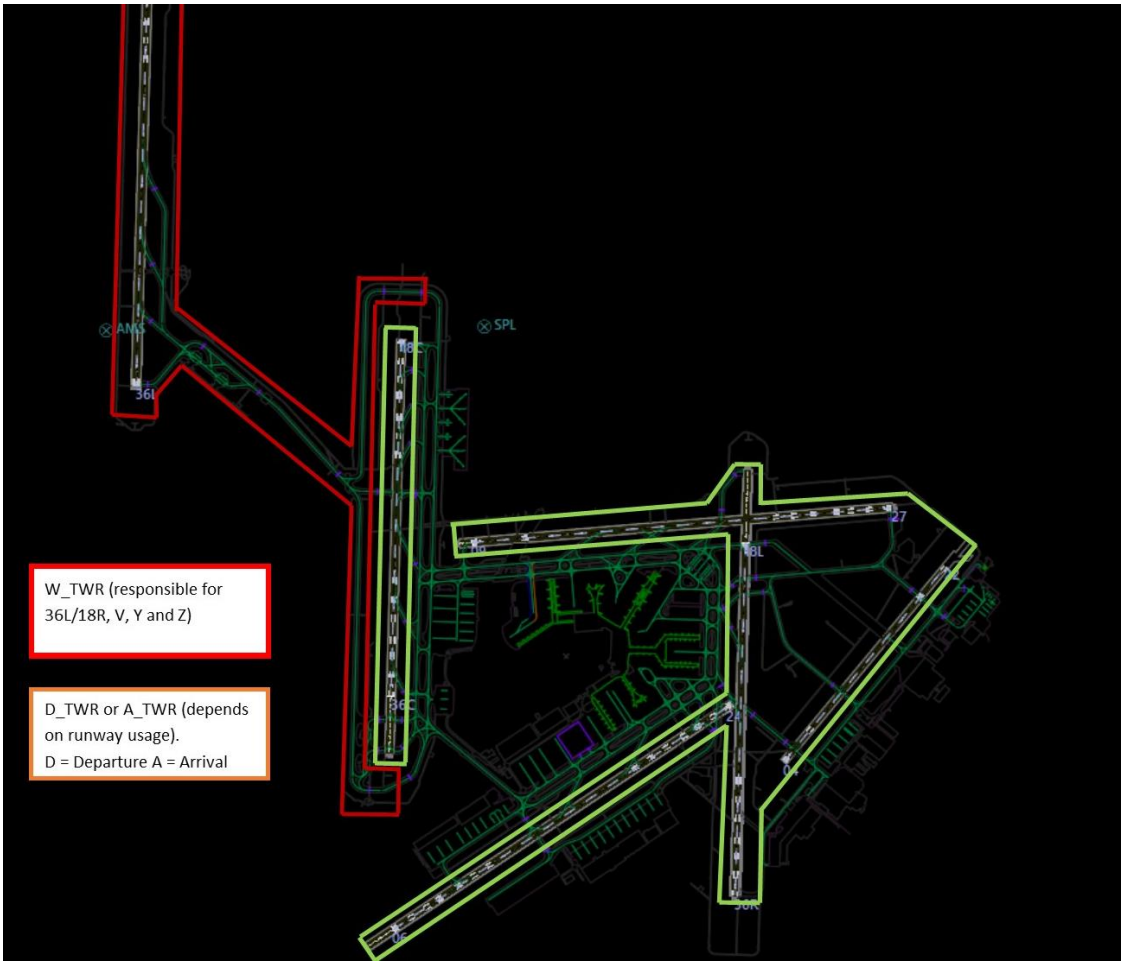
5.1 Sectorization and procedures

During an event at Schiphol, a maximum number of 3 tower controllers can be active.

- EHAM_W_TWR is responsible for 18R/36L and taxiway V, Z and Y.
- EHAM_D_TWR is responsible for the departure runway(s).
- EHAM_A_TWR is responsible for the landing runway(s).

Note that it is possible that these responsibilities deviate from as stated above. This however will always be communicated via a supplemental ATC briefing or other channels.

The following figure shows the sectorisation of the tower controller positions.



Depending on the runway usage, EHAM_D_TWR and EHAM_W_TWR will only open with permission of an ATC Operations staff member.

If runway 18C/36C is active, the same procedures apply as indicated in section 4.1. However, EHAM_W_TWR clears traffic to Y2/Z2.

In case runway 18C/36C is in use, it is no longer allowed to cross traffic at W5. In this case, the following procedures apply:

- 36C for departure and 18C for landing, traffic shall taxi via Z
- 18C for departure and 36C for landing, traffic shall taxi via Y

5.2 Optimal usage of the runway capacity

In case there is a queue at the runway holding point, the runway capacity must be used as optimal as possible. This means that the following time separation must be used strictly.

Lower wake category aircraft behind a higher wake category aircraft: traffic must be separated with an interval of 2 minutes.

Lower wake category aircraft behind a higher wake category aircraft **at an intersection holding position:** traffic must be separated 3 minutes.

In case two aircraft of the same wake category (both medium for example) will depart in sequence, no wake turbulence separation need to be applied. However, there must be separation provided to prevent a possible collision at the approach sector.

In case the succeeding traffic will fly the same track after departure as the preceding aircraft, the succeeding traffic can be granted take off clearance when the preceding aircraft passed 2 NM **from the runway strip.**

In case of diverging tracks after departure between two aircraft, take off clearance to the succeeding traffic may be granted when the preceding traffic passed 1 NM **from the runway strip.**

These two above described separation methods may **not** be used between aircraft where the succeeding traffic has a lower wake turbulence category then the preceding traffic.

The succeeding traffic may always be lined up behind the preceding aircraft while using the following R/T:

"XXX, behind the departing [company name and type], line up and wait [runway and intersection] behind."

5.3 Procedures after departure

The following handoff procedures apply when two approach controllers, east and west, are online simultaneously. When this is not the case, traffic always need to be transferred using the auto-handoff procedure.

Departures via BERGI, BETUS, DENAG, IDRID, VALKO, VOLLA and WISPA must transfer by themselves (auto-handoff) to EHAM_W_APP at 121.205.

Departures via ANDIK, SPY, ARNEM, EDUPO, ELPAT, IVLUT, KUDAD, LARAS, LOPIK, NOPSU, NYKER, OGINA, RENDI, ROVEN, TORGA and WOODY must be switched manually by the tower controller to EHAM_E_APP at 119.055. Before departure, the following R/T must be used within the take-off clearance.

"XXX, wind XXX/XXX, runway XX, cleared for take-off, remain on frequency". The traffic must be switched to East Approach at approximately 1500 ft. Traffic for W_APP must be transferred by the pilots themselves. The following information must be inserted in the tower controller remarks:

"AT 2000 FT CONTACT EHAM_W_APP FREQ 121.205 UNLESS OTHERWISE INSTRUCTED"

5.4 VFR Traffic

VFR traffic is allowed at events at Schiphol. However, with a large volume of IFR traffic at the event, this traffic can intervene with VFR traffic. Therefore, it is the task of the controller to keep the VFR traffic clear from the IFR traffic as much as possible. If it is too busy to cross the CTR, tell the pilot that it is not possible. Keep VFR traffic away as much as possible from the active IFR

areas. The best way to do this is to keep VFR traffic within the "Amsterdam VFR sector" (do not confuse this with the Amsterdam Sector).

Police, lifeliner and coastguard traffic is also allowed at event at Schiphol. If the route to the destination of these traffic will cross active IFR areas, try to keep them clear from these areas as much as possible. In case the traffic will block the IFR area for several minutes, coordinate with the ATC Operations staff and the Schiphol Approach sector.

6. Schiphol Approach – Arrival

6.1 Responsibilities and procedures

During the event, an arrival controller (EHAM_A_APP) position can be opened. The arrival controller is responsible for creating a sequence near the ILS. EHAM_W_APP is responsible to create a sequence and separation from the IAFs until a separated position on downwind. When the inbound traffic is clear from other traffic, it should be transferred to EHAM_A_APP as soon as possible.

EHAM_W_APP and EHAM_A_APP will make a mutual agreement about the arrival route (For example: ARTIP DCT SPL or RIVER HDG 025). This agreement should also be coordinated with the concerning Radar position.

In order to reduce the frequency time at Schiphol Arrival, the following sentence must be included in the handoff from Approach to Arrival:

"Contact Schiphol Arrival 118.405, report callsign only"

Schiphol Arrival must include the following phrase in the ATIS remarks:

"REPORT CALLSIGN ONLY AT INITIAL CONTACT"

6.2 Parallel approach procedures

In case the parallel approaches of runway 18C and 18R or runway 36C and 36R are in use, arrival must be sure that the aircraft are tuned in on the right ILS frequency. Therefore, the following R/T must be used:

"XXX, Independent parallel approaches in use expect runway 18C, check frequency 109.50"

The frequency list of the possible parallel ILS approaches is indicated below:

ILS	Frequency	Interception altitude [ft]
18C	109.50	2000/3000
18R	110.10	2000
36C	108.75	2000
36R	111.95	2000/3000

The interception altitude of two aircraft, both joining a parallel ILS approach, may **never** be the same. In case one aircraft crosses the localizer accidently, there will be a collision. In order to prevent this from happening, two aircraft which are joining a parallel approach must firstly be cleared for the localizer. After the aircraft is fully established on the localizer, the aircraft can be cleared for the ILS (LOC and GP).

In case of high volumes of traffic, it is very important to use the airspace and runway capacity as effectively as possible. Therefore, the lateral separation must not be too far from the minimum.

EHAM_A1_APP (primary) controls the sequencing to the primary runways: 18R, 06 and 36R (in case 36C is in use).

EHAM_A2_APP (secondary) controls the sequencing to the secondary runways: 18C, 36R (if runway 06 is in use), 36C and 27

7. Amsterdam radar

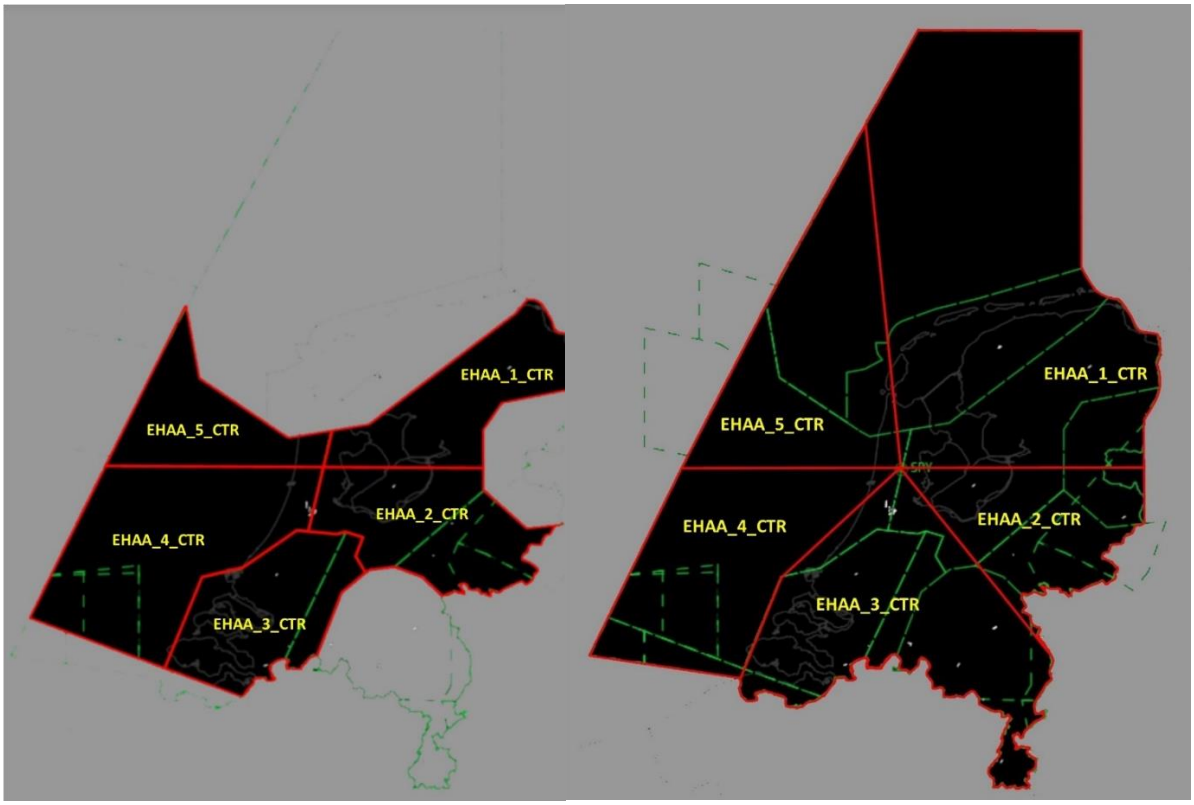
7.1 Procedures and sectorization

Usually there is only 1 radar (EHAA_CTR) online. In case EHAM_W_APP is online, EHAA_CTR can be split in EHAA_SW_CTR and EHAA_NE_CTR. On ATC Operations staff discretion, the radar sectors can be split further. The

individual radar sectors have the following logon codes: EHAA_X_CTR where X is replaced by the sector number (EHAA_4_CTR for example).

In case this level of sectorization is achieved, Amsterdam ACC only has the responsibility over the designated CTAs (see sectorisation document), the responsibilities of the other civil and military airspaces and aerodromes by Amsterdam Radar (in case EHMC is offline) will be omitted, as well as FSS. It could also be possible that only one sector is online, accompanied by EHAA_CTR or a combination of EHAA_NE_CTR and EHAA_SW_CTR. The sectorisation is shown in the images below.

Two radar positions online below FL195 (left) and between FL195-FL245



Multiple radar postions online below FL195 (left) and above FL195 (right)

In case sector 1 and 2 and sector 4 and 5 are split, coordination between the two stations is required in case that stack control is not online.

For more information about the sectorisation of Amsterdam ACC, view the sectorisation document:
https://nl.ivao.aero/downloads/atcops/EHAA_sectorisation.pdf

7.2 Holding procedures

For holdings at the IAFs, stack control positions are available: EHAA_ATP_CTR, EHAA_SUG_CTR and EHAA_RIV_CTR. EHAA_ATP_CTR is responsible for separating traffic in the hold at ARTIP, EHAA_SUG_CTR is responsible for holdings at SUGOL and EHAA_RIV_CTR for the holdings at RIVER.

If the capacity of the holdings at the IAFs is fully used, additional (non-published) holding patterns can be opened at HSD, NARSO, SULUT, and MONIL in coordination with the ATC Operations staff. EHAA_ATP_CTR will be responsible for the holding over NARSO in that case in coordination with the responsible ATCO. In case those holding patterns will not cope with the high volume of inbound traffic, ATC Operations staff may open more additional holdings at the FIR entry points in coordination with the neighbours ATCC.

The following R/T must be used for non-standard holding procedures:

"XXX, report ready to copy non-standard holding procedures"

"Ready to copy, XXX"

"XXX, proceed direct HSD and hold, inbound course 360, 1.5 minute (one-point-five) legs, right hand turns"

The following table shows the non-standard holdings that can be used during the events:

Holding	Inbound course	Turning direction
HSD	360	Right hand
NARSO (published)	356	Left hand
SULUT	060	Right hand
MONIL	170	Left hand

Below FL140, the leg duration is 1 minute. One holding takes exactly 4 minutes.

Above FL140, the leg duration is 1.5 minutes. One holding takes exactly 6 minutes.

Within the hold, only vertical separation is possible. The traffic will go down like a spiral and the lowest traffic within the hold will leave every time. Good coordination with approach and the neighbour ATCCs is required.

8. Final information

8.1 Links

The Netherlands AIP - https://www.lvnl.nl/eaip/2020-08-27-AIRAC/html/index-en-GB.html

The Netherlands Division – http://nl.ivao.aero

8.2 Position overview

Station	Callsign	Frequency
Amsterdam Radar	EHAA_CTR	125.750
	EHAA_NE_CTR	124.880
	EHAA_SW_CTR	123.850
	EHAA_W_CTR	123.705
	EHAA_1_CTR	134.375
	EHAA_2_CTR	128.580
	EHAA_3_CTR	130.955
	EHAA_4_CTR	136.650
	EHAA_5_CTR	119.175
	EHAA_SUG_CTR	118.805
	EHAA_ATP_CTR	120.555
	EHAA_RIV_CTR	127.780
Schiphol Approach/Departure	EHAM_W_APP	121.205
	EHAM_E_APP	119.055
Schiphol Arrival	EHAM_A1_APP	118.405
	EHAM_A2_APP	126.680
Schiphol Tower	EHAM_A_TWR	119.230

	EHAM_D_TWR	118.105
	EHAM_W_TWR	118.280
	EHAM_C_TWR	135.110
Schiphol Ground	EHAM_N_GND	121.805
	EHAM_S_GND	121.705
	EHAM_C_GND	121.905
	EHAM_W_GND	121.560
Schiphol Planner	EHAM_P_DEL	121.655
Schiphol Delivery	EHAM_DEL	121.980

8.3 Navaids

ILS

Runway	Frequency	Identifier	Course
06	110.55	KAG	058
18C	109.50	ZWA	183
18R	110.10	VPB	183
22	109.15	SCH	221
27	111.55	BVB	267
36C	108.75	MSA	003
36R	111.95	ABA	003

VOR's

Identifier	Frequency
SPL	108.40
AMS	113.95
SPY	113.30
PAM	117.80
HSD	114.15

NDB's and locators

Identifier	Frequency
OA	395.0
NV	332.0
CH	388.5

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