ENR 1.3 INSTRUMENT FLIGHT RULES

1 ATC CLEARANCES (SERA.8015)

1.1 Off route clearance

During weekends, FRI 1700-MON 0700 (FRI 1600-MON 0600) and night hours, traffic conditions permitting, ATC may clear flights via off route trajectories within controlled airspace, in order to promote economical flight operations (see also ENR 1.10 paragraph 2).

1.2 IFR joining clearance

For an IFR flight intending to depart from an aerodrome without ATC and join controlled airspace, IFR joining procedures are applicable according ENR 1.5 paragraph 3.

An IFR flight intending to join controlled airspace in the Amsterdam FIR shall make a request for joining clearance on the appropriate frequency (see ENR 6-2.2) at least 10 minutes before the aircraft is estimated to reach the joining position. ATS routes may only be joined over a designated reporting point.

A request for joining clearance shall contain:

- aircraft identification.
- aerodrome of departure and destination.
- ATS route.
- joining position and ETA joining position.
- joining level.

1.3 Wake turbulence - ATC separation minima

The wake turbulence separation minima applied by ATC are:

- for Schiphol TMAs and CTR: the RECAT-EU wake turbulence separation minima, based on the EUROCONTROL document 'RECAT-EU European Wake Turbulence Categorisation and Separation Minima on Approach and Departure' (Edition 1.1 – 2015). See EHAM AD 2.22;
- for other areas in the Amsterdam FIR: the ICAO wake turbulence separation minima, based on the 4 categories as described in ICAO Doc 4444-ATM/501 (PANS-ATM) chapter 5.8 and 8.7.3.4.

1.4 Formation flights (SERA.3135)

Formation flights along ATS routes within the Amsterdam FIR, will be accepted, provided that:

a. Aircraft are not carrying passengers for compensation or for hire.
b. Prior arrangements have been made between the pilots concerned.
c. Prior to the execution of such formation flights pilots have received permission from all ATC units concerned. Permission for Amsterdam FIR can be obtained as described in paragraph 1.5 below.
d. The formation will be conform the standard formation criteria. (A standard formation is one in which a proximity of no more than 0,5 NM laterally or longitudinally and within 100 FT vertically from the formation leader is maintained by each aircraft in the formation).
e. The formation leader shall squawk the assigned transponder code.
f. A proper ICAO flight plan has been submitted.

A formation flight will be handled by ATC as a single aircraft, with increased radar separation (1 NM). When individual control is requested, advisory information will be issued to assist pilots in attaining standard ATC separation.

When pilot-reports indicate that standard ATC separation has been established normal ATC clearances will be issued.

Note: separation responsibility between the aircraft within the formation during the formation flight and during transition to individual flight rests with the pilots concerned until standard separation has been obtained.

Note: formation join-up and breakaway will only be conducted when authorisation has been obtained from ATC.

1.5 Co-ordination of flights with a specific character

1.5.1 General

Flight with a specific character, requiring special handling by ATC, such as calibration flights, check flights, test flights, training flights, etc. must be co-ordinated at least 24 HR in advance with:

Post: LVNL
Operational Helpdesk
P.O. Box 75200
1117 ZT Schiphol Airport
Tel: +31 (0)20 406 2201, OPR HR: 0600-1600 (0500-1500)
Email: ops_helpdesk@lvnl.nl
URL: https://en.lvnl.nl/services

Subject flights in the Amsterdam FIR above FL 245 must in addition be co-ordinated at least 24 HR in advance with Maastricht UAC by filling the approval form available via the website https://www.eurocontrol.int/muac#operational-contacts, or by sending an email with equivalent content to masuac.testflights@eurocontrol.int.

Supplementary contact information: Executive Duty Supervisor

Tel: +31 (0)43 366 2022
Fax: +31 (0)43 366 1320

1.5.2 Test flights and training flights procedure

Test flights and training flights shall stringently adhere to the flight plan times provided by LVNL Operational Helpdesk.

In case of delay of more than 10 minutes the pilot shall call LVNL Operational Helpdesk in order to obtain new permission and a new start-up time for the flight.

Note: Delay in start-up may result in a reduced timeframe for the flight or cancellation of the flight.

2 POSITION REPORTING (SERA.8025)

2.1 General

Position reports shall be made:

a. Over compulsory reporting points, unless otherwise instructed (see item b).
b. As instructed by ATC.

Position reports shall contain:

1. Aircraft identification.
2. Position and time.
3. Level, except when the aircraft is in level flight and this level has previously been reported.

In addition after clearance to change level pilots shall report: leaving previously assigned level and reaching cleared level.

2.2 IFR flights operating outside controlled airspace

IFR flights operating outside controlled airspace in the Amsterdam FIR shall:

1. Be capable to establish two-way radio communication with the appropriate ATS unit (see ENR 6-2.2).
2. All motorised aircraft flying below Schiphol TMA 1 are strongly recommended to maintain listening watch on Amsterdam Information 124.300.
3. Pass position reports on entering or leaving the Amsterdam FIR and when so required by the relevant ATS unit (see also ENR 2.2 paragraph 3.4.2 and 3.4.3).

Position reports shall contain the information as stated in paragraph 2.1 and in addition, when entering the Amsterdam FIR:

- ETA at the destination aerodrome if situated in the Amsterdam FIR, or
- ETA at the intended position of leaving the Amsterdam FIR.

2.3 IFR flights operating in or above RVSM airspace

As specified in the ICAO EUR Regional Supplementary Procedures (Doc 7030/4 - EUR), chapter 1, paragraph 1.1.1.2, flights shall be conducted in accordance with instrument flight rules when operated within or above the EUR RVSM airspace.

Therefore, flights operating as general air traffic (GAT) within the Amsterdam FIR at or above FL 290, as described in ENR 2.1, shall be conducted in accordance with the instrument flight rules.

3 COMMUNICATION FAILURE

3.1 General procedures for IFR flights

3.1.1 Flying in IMC

The pilot shall select transponder code 7600.

← Pilots of an IFR flight in IMC, or choosing not to comply with paragraph 3.1.2, shall maintain the last assigned speed and level, or minimum flight altitude if higher, for a period of 20 minutes following:

- the time the last assigned level or minimum flight altitude is reached; or
- the time the transponder is set to code 7600; or
- the aircraft's failure to report its position over a compulsory reporting point;

whichever is later, and thereafter adjust level and speed in accordance with the filed flight plan as amended by delay and modification messages to the filed flight plan.

When being vectored, the aircraft proceeds in the most direct manner possible to rejoin the current flight plan route. When reaching the STAR or IAF of destination, follow the specific lost communication procedures (see paragraph 3.2).

3.1.2 Flying in VMC

← The pilot of an IFR flight in VMC can:

← - select transponder code 7601;
- continue to fly in VMC;
- land at the nearest suitable aerodrome; and
- report its arrival time by the most expeditious means to the appropriate ATS unit.

← 3.2 Departing/arriving flights

← An IFR flight following a standard instrument departure route or a standard instrument arrival route shall comply with the procedures for radio communication failure specified in the paragraph "Instrument approach procedures" and on the standard instrument departure chart (SID) or standard arrival chart (STAR) when provided (AD 2.22 and AD 2.24).

4 FREE ROUTE AIRSPACE (FRA) - GENERAL PROCEDURES

4.1 Area of application

FRA procedures are available within the lateral limits of the Brussels UIR, the Amsterdam FIR (excluding ATS delegated areas), the Hannover UIR (excluding ATS delegated areas) and those parts of the Rhein UIR where the provision of ATS is delegated to Maastricht UAC between FL 245 and FL 660 (hereafter mentioned MUAC FRA). For detailed lateral and vertical limits see ENR 2.2. Detailed information and charts are available on https://www.eurocontrol.int/service/free-route-airspace-maastricht-uac.

4.2 Time of application

MUAC FRA is available H24.

The ATS route network and RAD annex 3B direct routings (DCTs) are not available above FL 245, except for those segments required for the vertical connection to the lower airspace or for special purposes.

4.3 Eligible flights

Eligible flights are those overflying aircraft that enter and exit MUAC FRA (FL 245-FL 660). Additional eligible flights are those that depart or arrive from/to aerodromes below the lateral area of MUAC FRA or in its proximity and have a requested flight level above FL 245 within MUAC FRA.

4.4 Definitions

FRA (free route airspace)
A specified airspace within which users may freely plan a route between a defined entry point and a defined exit point, with the possibility to route via intermediate (published or unpublished) waypoints, without reference to the ATS route network, subject to airspace availability. Within this airspace, flights remain subject to air traffic control.

FRA horizontal entry point (E)
A published significant point on the horizontal boundary of the FRA from which FRA operations are allowed. The FRA relevance of such points is included in ENR 4.1 and ENR 4.4 columns as (E).

FRA horizontal exit point (X)
A published significant point on the horizontal boundary of the FRA to which FRA operations are allowed. The FRA relevance of such points is included in ENR 4.1 and ENR 4.4 columns as (X).

FRA intermediate point (I)
A published significant point or unpublished point, defined by geographical coordinates or by bearing and distance via which FRA operations are allowed. Intermediate points may be used to connect FRA operations to the ATS route network. If published, the FRA relevance of such points is included in ENR 4.1 and ENR 4.4 columns as (I).

FRA arrival connecting point (A)
A published significant point to which FRA operations are allowed for arriving traffic to specific aerodromes. The FRA relevance of such points is included in ENR 4.1 and ENR 4.4 columns as (A).

FRA departure connecting point (D)
A published significant point from which FRA operations are allowed for departing traffic from specific aerodromes. The FRA relevance of such points is included in ENR 4.1 and ENR 4.4 columns as (D).

4.5 MUAC FRA flight procedures and flight planning

4.5.1 Flight procedures

Within MUAC FRA airspace users may freely plan a route between a defined FRA horizontal entry point (E) and a defined FRA horizontal exit point (X), with the possibility to route via FRA intermediate points (I), without a reference to the ATS route network, subject to airspace availability.

4.5.2 Airspace restrictions and airspace reservations

All airspace utilisation rules and availability as published in the RAD must be adhered to.

Flights may plan through AMC manageable RSAs according to EAUP/EUUP; subject rules are specified in RAD annex 2C.

In case of ad-hoc activations of RSA, and where crossing is not possible, airspace users shall expect a tactical re-routing/vectoring by ATC.

4.5.3 Flight planning

4.5.3.1 General

Within MUAC FRA aircraft shall comply with aircraft equipment requirements as specified in GEN 1.5.

Within MUAC FRA, airspace users will be able to flight plan direct routes freely, according to the table below, while obeying the corresponding times of availability.

From	To	Procedure
FRA horizontal entry point (E)	FRA horizontal exit point (X) FRA arrival connecting point (A) FRA intermediate point (I)	Flight plan direct or via one or several FRA intermediate points
FRA departure connecting point (D)		
FRA intermediate point (I)		

Relevant points available for flight planning are described in ENR 4.1 and ENR 4.4.

Restrictions on the availability for flight planning are detailed in the RAD. Filing of unpublished points, defined by geographical coordinates or by bearing and distance, is not permitted in the flight plan within the MUAC FRA area.

The airspace users may use any published FRA significant point for indicating changes of level and speed.

For flights operating within free route airspace, the route shall be indicated as follows:

- FRA significant points shall be described using the standard ICAO format;
- Route portions between FRA significant points shall be indicated by means of DCT (direct).
  Within MUAC FRA, DCT segments shall not be planned closer than 2.5 NM to the MUAC FRA lateral border.

4.5.3.2 Overflying traffic

Except for segments defined in ATS routes, RAD annex 3B and SID/STAR lateral entry and exit to/from MUAC FRA shall be planned using the published FRA horizontal entry and FRA horizontal exit points only. For exceptions see paragraph 4.5.3.4.

Unless otherwise stated for a specific FRA horizontal entry point or FRA horizontal exit point in the RAD, flight planning shall follow the ICAO semi-circular rules as described in ENR 1.7.

4.5.3.3 Access to/from terminal airspace

Except for segments defined in ATS routes, RAD annex 3B and SID/STAR vertical entry and exit to/from MUAC FRA shall be planned using the published FRA departure and FRA arrival connecting points only. The available connecting routes are published in RAD annex 2B.

4.5.3.4 Cross-border application

Except for segments defined in ATS routes, RAD annex 3B and SID/STAR:

- the planning of DCT segments that are partially outside the vertical and lateral limits of MUAC FRA (re-entry segments) is not allowed;
- the planning of DCT segments across the MUAC FRA border (cross border DCT) is not allowed, except to/from those FRA relevant significant points that are located outside the MUAC FRA but depicted with FRA relevance in ENR 4.1 and ENR 4.4.

4.5.3.4.1 MUAC FRA and DK-SE FAB FRA

Between MUAC FRA and DK-SE FAB FRA there is no need to file a FRA horizontal entry or exit point (E, X) for certain flows. For details on the eligible flows refer to the RAD.

The use of a FRA intermediate point (I) situated on the boundary and published in ENR 4.1 or ENR 4.4, is possible if necessary.

It is not allowed to plan from a FRA significant point inside MUAC FRA to a location described by geographical coordinates inside DK-SE FAB FRA, only significant points as published in AIP Denmark ENR 4.1 or ENR 4.4 and AIP Sweden ENR 4.1 or ENR 4.4 are permitted.

4.5.3.4.2 MUAC FRA and DFS FRA

Between MUAC FRA and DFS FRA cells EDUU West, EDUU East and EDUU North there is no need to file a FRA horizontal entry or exit point (E, X).

The use of a FRA intermediate point (I) situated on or near the boundary and published in ENR 4.1 or ENR 4.4 is possible, if necessary. The conditions for the use of these points are defined in the RAD.

All cross-border DCT segments require at least one published FRA significant point within MUAC FRA and one within DFS FRA. The explicit rules and eligible significant points can be retrieved from the RAD.

At border sections with a higher traffic density and/or complexity, traffic is structured through so-called gates. These gates are published in AIP Germany ENR 2.2 and the conditions for the use are defined in the RAD.

It is not allowed to plan from a FRA significant point inside MUAC FRA to a location described by geographical coordinates inside DFS FRA and vice versa. Only significant points as published in ENR 4.1 or ENR 4.4 are permitted.

4.5.3.4.3 MUAC FRA and France FRA

Between MUAC FRA and France FRA East Cell (LFFRAE) there is no need to file a FRA horizontal entry or exit point (E, X).

The use of a FRA intermediate point (I) situated on or near the boundary and published in ENR 4.1 or ENR 4.4 is possible, if necessary. For this, the conditions for the use of these points are defined in the RAD.

It is not allowed to plan from a FRA significant point inside MUAC FRA to a location described by geographical coordinates inside France FRA East Cell (LFFRAE) and vice versa. Only significant points as published in AIP ENR 4.1 or ENR 4.4 are permitted.

4.6 Route availability document (RAD)

For specifications, availability and restrictions regarding FRA see European RAD: https://www.nm.eurocontrol.int/RAD/index.html.