

## FLIGHT RULES FMS 18-02-08

### 1 CONDITIONS FOR PERMISSION

- 1.1 Minimum age for FMS membership is 14 years.
- 1.2 On invitation of an FMS-member and with consent of the FMS-management or a “baancommissaris” Steward (maximum 3 times per year).
- 1.3 A valid personal liability insurance.
- 1.4 Transmitters and receiver technology and / or frequencies must be legal in the Netherlands.
- 1.5 Every model pilot must follow these flight rules on the SPAARNWOUDE airfield.
- 1.6 Every model pilot who is flying on the SPAARNWOUDE model airfield accepts the rules and conditions which apply to this airfield. Every member holds a membership card. Every pilot must hold an FMS ‘brevet’ for flying alone.
- 1.7 The recreation area SPAARNWOUDE, part of ‘Recreation North-Holland NV’ is the owner of the model airfield.
- 1.8 Pilots may use the airfield for flying model aircraft only at their own risk.
- 1.9 People interested in becoming a model pilot may be allowed to enter the pits, but only when a “baancommissaris” Steward or a member of the FMS-management grants permission.
- 1.10 Visitors and public have to obey the rules and conditions of use on the model airfield. FMS Management reserves the right to refuse entry to the airfield to those who don’t obey these rules and terms of use.
- 1.11 Public spectators must stand behind the safety cage.

### 2 GENERAL INSTRUCTIONS

- 2.1 Model flying takes place under supervision of a “baancommissaris” Steward. The Stewards have authorisation from the FMS-management.
- 2.2 The authority of the Steward has been accepted by all the model pilots, his instructions must be followed.
- 2.3 In case of disputes between model pilots and the public, the model pilot concerned should consult a member of FMS management or a Steward.
- 2.4 Model pilot’s cars have to be parked at the parking area indicated by the recreation area signage only.
- 2.5 Model pilots are obliged to keep the field tidy and clean. Any aircraft parts must be taken

home. It is forbidden to dump them in the refuse bin.

- 2.6 It is forbidden to place commercial advertisements of any kind on or near the airfield.
- 2.7 A Steward on duty must have authorisation from the FMS-management.
- 2.8 On Saturday, Sunday and festive days an Steward must be present. On other days at least one model pilot with a brevet must be present.
- 2.9 Flying under the influence of alcohol or drugs is forbidden. Also some medicines which may effect the pilots responses are not allowed.
- 2.10 Model pilots are responsible for civil law and the criminal law themselves.
- 2.11 Neither the Recreatieschap nor the FMS-management is responsible for damage to goods, personal harm or other misfortune caused by model flying.
- 2.12 It is forbidden to switch on your transmitter if you do not have the right frequency clip. If the transmitter is not in use, the antenna must be pushed in. For transmitters with a so called 'short antenna', the antenna has to be removed.
- 2.13 You must place a valid FMS-sticker in an visible place on your transmitter.
- 2.14 Only frequencies allowed by the government may be used. Normally, a frequency in the 35 Mhz-band should be used. (These are reserved for flying models).
- 2.15 The model should contain the name and address of the owner in a visible place.
- 2.16 Large models ( more than 5 kg ) may only controlled by transmitters in the 35 MHz-band.
- 2.17 Transmitters in the 2.4 GHz-band may be used, if they are permitted by law. Transmitters for so called 'park flyers' are not allowed.
- 2.18 Any model pilot who does not keep to the rules may be prohibited from flying by the Steward. After that, the FMS-management can forbid access to the airfield to that individual.
- 2.19 Stewards may restrict a maximum of two aircraft in the air at any one time in the interests of safety (for example on Sunday and festive days) For the same reason they can restrict model pilots to a maximum of 8 hours flying time.

### 3 BEHAVIOUR RULES IN THE PITS

- 3.1 The planes are set in a row so there is no hindrance or trouble. The model pilot who comes last joins the row at the end.
- 3.2 Engines may be started in the pits. Planes and helicopters with a fuel engine must be anchored to the ground, or otherwise fixed so they can not move without control

before starting the engine.

- 3.3 Running engines for a long time in the pits is not allowed. In this situation, you must go to a quiet corner of the airfield.
- 3.4 The model pilot is responsible to ensure there is no hindrance or danger caused for others by the running of engines, propellers or smoke.
- 3.5 Taxiing in, out of or into the pits is not allowed.  
After starting the engine:
  - a) Pick up the plane, or
  - b) Hold the plane by the tail, until the plane is safely outside the pits.
- 3.6 Helicopters (particularly with running internal combustion engines) must ensure that the rotor blade braking system is held (and if possible also activate throttle hold on the transmitter) until the hovering area is reached to prevent the rotor blades turning unexpectedly.

#### 4 FLIGHT INSTRUCTIONS

- 4.1 According to the regulation of the Recreatieschap, aircraft may be flown from 09.00 until 22.00 hours, or until sunset. Aircraft with internal combustion engines may be flown from 10.00 until 21.00 hours.
- 4.2 The maximum number of airplanes simultaneously allowed in the air may be:
 

until 19.00 hours	4 planes
from 19.00 hours	2 planes

 The maximum number of helicopters simultaneously allowed in the air is:
 

At any time	2 helicopters
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- 4.3 The modelpilot must keep themselves up to date with the instructions and definitions of the law applying to model airplanes. These definitions are currently:  
Maximum height is 100 m  
Maximum weight of the model airplane is 20 Kg.
- 4.4 Model aircraft with an internal combustion engine must have a good quality silencer installed.
- 4.5 The maximum sound level allowed 80 dB(A) at 7 metres, measured according to the FAI rules.
- 4.6 The model aircraft must have a sound level certificate. Uncertified aircraft may not fly. Stewards, who are authorized by the FMS-management, may do the sound measuring and sign the report.
- 4.7 The minimum flying height outside the start and landing area is 25 metres, except for starting and landing.
- 4.8 Flying above and in the direction of the public is absolutely forbidden.

- 4.9 Pilots, when not flying, are normally in the pits
- 4.10 After the model pilot has retrieved a frequency clip from the board, he can go to the pilot stand, to start with the flying preparations. The post-flight activities also take place here. After suitably warning the other pilots, he/she should go straight to the pits with the model.
- 4.11 The specified flying areas for different aircraft types is shown on the ground-plan.
- 4.12 Take off and landing must be clearly announced to the other pilots who are flying.
- 4.13 You need permission from the other flying pilots, before you go on the runway.
- 4.14 Pre-flight checks of the transmitter and the functions of the flight surfaces must be carried out before every flight.
- 4.15 Helicopters may be started in the pits. Helicopters (particularly with continuously running internal combustion engines) must ensure that the rotor blade braking system is held (and if possible also activate throttle hold on the transmitter) until the hovering area is reached to prevent the rotor blades turning unexpectedly.
- 4.16 Helicopters must take off and land in the helicopter hover area, as specified on the ground plan.
- 4.17 It is forbidden to fly helicopters above the pits, the public and the pilot stand areas.
- 4.18 A beginner helicopter pilot must be accompanied by a Steward or an approved helicopter instructor.
- 4.19 It is not allowed to fly above the pedestrian and cycle paths on the north side of the flying area. When there are no people on the path, fixed wing models may cross the path at a minimum height of 25 metres.
- 4.20 The transmitter must be turned off. The antenna must be pushed in or removed. A so called 'short antenna' must always be removed.
- 4.21 When necessary in the interests of safety, the Steward(s) may prescribe a temporary fixed circuit.
- 4.22 When planes and helicopters are flying simultaneously, the pilots have to pay extra attention to the area above the high grass. By preference, the planes fly above the helicopters.
- 4.23 After the flying session and the transmitter has been turned off, the frequency clip has to put back on the board.

## 5 DIVISION FLIGHT AREA

- 5.1 For the division of the flying areas see the ground plan appendix 1.

- 5.2 Pilots who are flying must stand together on the pilots' place. This place is marked with a pylon.
- 5.3 Helicopter pilots must stand on the place for helicopter pilots when hovering or flying.
- 5.5 Flying outside the limits of the flight area is forbidden. See the ground-plan.

## 6 TASK DEFINITION FOR STEWARDS

- 6.1 Look to fulfil the flight rules.
- 6.2 When there are multiple transmitters with the same frequency, the Steward is authorised to impose a time limit on the use of the frequency clip.
- 6.3 The Steward must report serious contraventions to the FMS-management.
- 6.4 Any disputes between Stewards and Members must be reported to the FMS-management. If this doesn't resolve the issue, the decision of the office of the Recreatieschap is final.
- 6.5 Control of the FMS-membership.
- 6.6 Control of issuing of sound level certificates.
- 6.7 The Stewards, who are authorized by the FMS-management as examiner, may undertake an examination, and sign the form.
- 6.8 The Stewards, who are authorized by the FMS-management, may take a sound measurement and sign the report.
- 6.9 Models, who satisfy the sound rules, but make noise at high frequencies at a very high level, may be prohibited from flying.
- 6.10 Appealing against the prohibition is possible by writing to the FMS-management. The decision of the FMS-management is final.

## 7 SOUND MEASUREMENTS ACCORDING FAI RULES

- 7.1 For radio controlled models the maximum average sound level is 80 dB(A) at 7 metres. For sound with one tone, the maximum average has to decrease by 5 dB.
- 7.2 Standard measuring
  - The model is placed on a turning platform, at 1 metre above ground level.
  - The microphone is placed on 7 m downwind, also at 1 metre height.
  - With engine on maximum power the platform is turned through 360 degrees. At every 45 degrees it is stopped for a measurement.
  - The average of eight measurements is the sound level of the model. The measurements are accepted if the wind speed is less than 5 m/sec ( 3-4 on the Beaufort scale).

- The measurement takes place above short grass.
- Objects, which can reflect the sound must be more than 30 m from the model and microphone.

### 7.3 Quick measurement

- A quick check can be made with model on the ground with the nose into the wind. The engine is running on maximum power.
- The microphone is held at 3 metres distance and 30 cm above ground level.
- The measurement takes place perpendicular of the flight direction on the exhaust side and at the height of the engine.
- Above hard surface (e.g. tile) the maximum allowed sound level is 95 dB(A).
- Above grass 93 dB(A).

## 8 BREVET DEMANDS

### 8.1 Brevet M fixed wing motor models

To obtain the flight brevet M fixed wing, you have to control the following figures.

1. The start of the model airplane with a straight rising flight.
2. Procedure turn.
3. Two loops.
4. A horizontal eight.
5. A spin or spiral flight of three turns.
6. Circuit with go-around.
7. Landing with engine stand still (simulated with engine idle).
8. Landing circuit.
9. Landing with engine idle within a circle of 30 m.
10. General safety of flight and model.

### 8.2 Brevet Z sailplane

To obtain the flight brevet Z, you have to control the following figures.

1. A straight start with a line or with an electro motor.
2. A sailing flight with a landing circuit of at least 3 minutes.
3. Landing within a circle of 30 m.
4. General safety of flight and model.

### 8.3 Brevet H for helicopter models

1. Hover flight side-in left and right-handed.
2. Hover flight tail-in diagonal forwards and backwards.
3. Hovering M.
4. Horizontal hovering figure of eight.
5. Hovering circle with tail-in.
6. Landing from 15 m and a height of 10 m.
7. General safety of flight and model.

### 8.4 Brevet J for jet models with gas turbine.

To obtain flight brevet J, the candidate must have a brevet M, and control the following figures.

1. The start of the jet model with a straight rising flight.
2. Procedure turn.

3. One looping.
4. A horizontal eight.
5. One horizontal roll.
6. Circuit with go-around.
7. A landing attempt with gas turbine idle.
8. Circuit with landing
9. General safety of flight and model.