



FAI Sporting Code

*Fédération
Aéronautique
Internationale*

Section 9 – Rotorcraft

Competition Guide Handbook General issue.

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The CIG Guide to Helicopter Championship Organisation Edition 1/20.

To be read in conjunction with the General Section of the Sporting Code and FAI Sporting Code, World and Continental, Rules and Regulations (2019 Edition, version 2).

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Introduction

This document is a guide document and is written based on the current information within the following documents:

- 1. FAI Sporting Code, General Section, 2020 Edition, effective 1st January 2020.**
- 2. FAI Sporting Code, World and Continental Helicopter Championships, Rules and Regulations, 28th March 2019 Edition, effective 28th March 2019 and updated 12th July 2019, Version 2.**

1. General Rules and Regulations

1.1 Participants

Entrants.

An entrant is a person or NAC from whom a completed entry form has been received for participation at a sporting event (pilot and crewman). A competitor is a person entered and competing in a sporting event.

Entrants can be:

- Chief Delegate
- Team Manager
- Pilot (competitor)
- Crewman (competitor)
- Judge
- Assistant judge
- Translator
- Observer
- Engineer
- Press
- Solo pilot (freestyle only) (competitor)

FAI approved judges and assistant judges, a maximum of 10 people. Pilots and crews, a maximum of 7 crews plus 3 all female crews. An additional 3 crews can be entered by the host nation.

Each national team will be composed of a minimum of 2 and a maximum of 5 crews. Team crews must be declared and published not later than 12 hours before the competition starts. Their results will count for both the country team result and individual result.

Each person can only act in one capacity and this must be declared at the time entry is made to the competition. The only exception is the Chief delegate and the Team manager can be the same person.

Defending overall world champions and the defending female world champions are regarded as additional to their country allocation

Each person must have valid health insurance.

1.2 Requirements of a competitor

A competitor must hold a valid FAI sporting licence issued by NAC.

A licence is only valid if it is registered on the FAI sporting licence database. This can be checked by any competitor at www.fai.org. <http://www.fai.org/about-fai/fai-sporting-licences>

A competitor may be asked to produce an official document with photographic proof of identity to validate their sporting licence.

If a competitor has represented a country in a first category event, that competitor must not represent another country in any first category event

during the following twenty four months (as specified by the ASC) (General Section, section 3, sporting licences). This means the competitor cannot fly in another first category event for their country of representation for 24 months if a change of country representation is intended.

Pilots must hold a valid pilots licence and a valid medical certificate from the issuing authority in their country.

Compliance with WADA anti-doping code (FAI Anti-Doping Rules based on Wada's Models of Best Practice for International Federations and the World Anti-Doping Code valid from 1.12.15).

All documents must be in English (or language understood by the organiser) for submission purposes, proof of validity.

1.3 Types of helicopters, licence and documentation requirements.

Helicopters of any type with sufficient characteristics to compete can take part.

Each aircraft must hold a valid certificate of airworthiness; a certificate of registration; a certificate of insurance including any competition/country specific requirements.

For the navigation event, helicopter types will be given a competition speed based on 80% of the maximum safe sustainable cruise speed in straight and level flight with two average weight persons and 1.5 hours fuel on board. See Annex A FAI Sporting Code, World and Continental Helicopter Championships, Rules and Regulations 2018 Edition, Section 9, Chapter 8.

All documents must be in English (or language understood by the organiser) for submission purposes, proof of validity.

1.4 Insurance requirements

All aircraft must be insured for a minimum of 2,000,000 CHF. There may be specific country requirements depending on the venue of the event which must be adhered to in addition to this to be advised by the host nation.

It is the responsibility of each NAC member to ensure health & accident (medical) insurance or equivalent cover and helicopter insurance is in place for each participant.

All documents must be in English (or language understood by the organiser) for submission purposes, proof of validity.

Organiser should consider Public Liability Insurance to protect participants and organisers.

1.5 Entry information

An entry must be made on an official entry form via the country delegation leader and accompanied by the appropriate entry fee. The standard entry fee covers accommodation in a twin room, meals during the event and transportation. Single accommodation will attract a supplement as will all requests other than the standard explained above. Flying crews should expect to pay more than judges. Fees, along with all other event information will be issued by the organiser when the event is announced via Bulletin No 1 within 28 days. Entries fees should be paid two months before the event. Late entries are at the organisers' discretion.

1.6 Programme of events.

First Category event

The events will be:

- Event 1 Navigation
- Event 2 Precision
- Event 3 Fender Rigging
- Event 4 Slalom
- Event 5 Freestyle (optional).

The sequence will be announced at the opening briefing (person to be designated).

1.7 Flight safety

Competitors should adhere to the rules of the air and special regulations in force in the of the host country. Any violation of flying or safety regulations in force could result in disqualification.

All relevant documents, regulations and NOTAMS will be given to the competitors at briefings.

Only judging and authorised individuals are allowed in to the competition areas during the event.

1.8 Determination of world or continental champion.

The crew with the highest score will become overall World or Continental champions.

The all female crew with highest overall score will be called overall World or Continental Ladies Champions.

The Team with the highest score will be called World or Continental Team Champions. The score is calculated from the highest three scoring crews.

1.9 Complaint and protest procedures

There is a short process for complaints and protests.

A dissatisfied competitor/team should within one hour of the preliminary results being published:

- a) Ask the appropriate official for assistance to clarify/respond to the matter.
- b) If dissatisfied, a written complaint should be given to the Event Director.

If still dissatisfied, a further two hour period will be given to lodge a written protest to the Event Director with a 600CHF protest fee by the team manager or delegation leader. The Event Director then passes it to the Jury for a decision. Complaints and protests must be written in English.

The Jury will allow the competitor to give evidence at a meeting that will be convened shortly after the protest has been received.

If the protest is upheld the fee is returned, if it is denied the Jury may order a fee to be partially or totally reimbursed.

Appeals

In the event of an unsatisfactory outcome, an appeal can be made to CASI (The FAI Air Sport General Commission) which must be lodged within 90 days. For further reference see Chapter 6 of the General Section.

1.10 Doping, alcohol, illness and injury

With reference to the General Section Chapter 4, FAI policy on doping is to prevent misuse, malpractice and cheating where doping is concerned. There is a list of prohibited substances to be found at www.wada-ama.org. FAI includes alcohol for flight safety reasons.

It is the responsibility of each competitor entering competitions under FAI rules to submit to and cooperate with doping control measures.

Entrants with a documented medical condition requiring the use of a prohibited substance or a prohibited method must obtain a TUE - therapeutic use exemption in accordance with FAI Anti-doping rules before the event begins. (See WADA Handbook for example).

Any competitor taking drugs or medication; suffering from a medical condition, illness or injury, which might compromise safety or invalidate a licence, must inform the Event Director in writing before competing.

TUE's and how to apply for one.

A TUE ensures an athlete's ability to treat a legitimate medical condition even if the treatment requires a prohibited substance. The TUE process avoids the risk of sanctions due to a positive test.

In the WADA section of the FAI web page www.fai.org/medical, there is a TUE form to be completed and sent to FAI/NAC prior to taking part in a competition. The form is completed by the athlete and their physician.

More information can be found in the FAI CIG WADA Handbook.

2. Competition management

2.1 Competition management and personnel

First Category event officials

Organiser: National Airsports Control

Event Director: Appointed by the organiser, FAI CIG approved.

Role: The Event Director shall be in overall operational charge of the sporting event. He shall have a Deputy Director and Technical Officials to assist him. The Event Director and Deputy shall be approved by the relevant ASC. The Event Director is responsible for good management and the smooth and safe running of the event. He shall make operational decisions in accordance with the rules of the Sporting Code and competition rules. He can penalise or disqualify a competitor for misconduct or infringement of the rules via Chief or Deputy Chief Judge. He shall attend meetings of the International Jury and give evidence if requested. The Event Director shall publish the officially accepted entry list prior to the start of the event, issue daily results and the article on the event from the event Public Relations Officer and send the final entry list, full results and details of protests to the hosting NAC and to FAI within the specified time limits.

Deputy Event Director: Appointed by the organiser, FAI CIG approved

Role: To deputise for the Event Director and assist him/her at all times in accordance with the responsibilities of the Event Director

Chief Judge: Nominated by FAI-CIG, in charge of all judges and scoring of the event

Role: The Chief Judge shall be appointed by the ASC concerned and has the responsibility to organise the work to be carried out by the International Judges and to report results to the Event Director.

Deputy Chief Judge: Nominated by FAI-CIG

Role: To assist the Chief Judge at all times in accordance with the requirements of the above duties.

Technical Officials: Appointed by the organiser.

Role: A team of 3 to 5 people either engineers or mechanics who will scrutinize the aircraft. The technical team also seals the instruments prior to the event commencing and check aircraft documentation.

Safety Officer: Appointed by the organiser

Role: An appointed person who will be working to FAI and National recommendations and will observe and enforce all safety rules applicable to the event. Oversee compliance with all FAI Rules, Sporting codes and the relevant specialist section. Responsible for all safety aspects for the duration of the event. Will be present at all events.

Jury: Nominated by FAI-CIG, consisting of three members including a Jury President. Appointed to deal with protests and to oversee the event in general.

Role: The International Jury is responsible for dealing with protests. It monitors the Championship in accordance with the Sporting Code, General Section and will intervene if the FAI Rules are not respected.

Other officials: Air Traffic control
Weather official

Commentator: Appointed by the organiser.

Second Category event officials

Scorer: Nominated by FAI-CIG, in charge on scoring at the event

Role: The Scorer shall be appointed by the FAI-CIG and has the responsibility of recording immediate scoring from the scoring judges on the competition field on the competition field.

Chief Judge: Nominated by FAI-CIG, in charge of all judges at the event

Role: The Chief Judge shall be appointed by the FAI-CIG and has the responsibility to organise the work to be carried out by the International Judges and to responsible for the smooth running of judging and scoring.

Jury: Nominated by FAI-CIG, consisting of one member. Appointed to deal with protests and to oversee the event in general.

Role: The International Jury monitors the event in accordance with the Sporting Code, General Section and will intervene if the FAI Rules are not respected.

2.2 The function of the Jury at events.

The International Jury is approved by FAI - CIG. It is responsible for upholding the all rules and regulations as described in the Sporting Code, General Section, Statutes and By Laws and will intervene if the FAI rules are not upheld. The President can stop the event at any time until a Jury meeting considers the situation.

The Jury is composed of one Jury President and two members, each one representing a different country and all be members of CIG. None can be connected to their national team at the event. All must be present at the venue and the President must declare his whereabouts so he may receive any protest during the allotted period.

The Jury must act in accordance with the FAI document "International Jury Handbook" or see above "role of the jury".

In line with the General Section, the Jury at Category 2 events need not be of international composition but consist of one person appointed by FAI-CIG. At Category two events, the complaint must be made before the next heat of the competition commences. The complaint would initially be made to the Chief Judge. The Jury member must be on the field at all time for immediate deliberation if required.

3. **COMPETITIONS**

3.1 Competition rules

There are two types of competition recognised by FAI, first category events and second category events.

It is the responsibility of the competitors and judges to understand the rules and regulations and there can be no defence for not complying with these rules as listed in the FAI Sporting Code Section 9, Chapter 8.

A list of competition rules can be found in Chapter 2, Section 13.

3.2 Measuring equipment

General:

The judgements in the competition that may require the use of equipment for calculating:

- speed
- height
- distance

- direction
- time (measured by a clock or watch)

The organiser may use technical equipment in addition to the judgement of the judges.

If equipment is being used for a particular measurement, it must be described in full to the FAI - CIG at the annual CIG meeting prior to the Championship for approval in accordance with 12.6, Chapter 2.

Navigation:

Mandatory Equipment

Master Clock, Start Line Clock, Search Box Exit Clock, Gate A Clock.
(The Organiser must demonstrate that the timepieces are of sufficient quality and that they can be synchronized to the Master Clock to an accuracy of 0.01 seconds).

GPS-based Data Loggers for measurement of the track, times and speed on the course. Loggers will be provided by the Organiser.

Optional Equipment

For measurement of height at targets in the dropping zone and at Line A and F.

For measurement of speed and 30 degree variation on final leg.

To avoid potential complaints and protests, the organiser should ensure that there is some clear indication of the last 2 km to the judges.

TP1 Clock, TP2 Clock, TP3 Clock.

Event 2

Plumb bob and tape measure

Event 3

No specialist equipment

Event 4

Tape measure

3.3 Scoring

Category 1 Events

Judges and assistant judges score the event on behalf of the Chief Judge.

For each event, the Chief Judge or Deputy Chief Judge will allocate the tasks to be performed by each judge/assistant judge at specific judging points of each course. There is to be a maximum of three persons per judging point.

The judging points are identified in Annex TBC as the standardised judging points for each discipline.

The Chief Judge or Deputy Chief Judge will allocate all tasks and issue these tasks to the Event Director at least one hour before the discipline is due to commence.

Category 2 Events.

Judges and assistant judges score the event on behalf of the Chief Judge.

For each event, the Chief Judge or Deputy Chief Judge will allocate the tasks to be performed by each judge/assistant judge at specific judging points of each course. The standard is one judge per gate or container. The scoring team consists of the Chief Scorer and two course judges.

3.4 Timing

All times are to be measured to an accuracy of at least one tenth of a second and to one hundredth of a second where possible. The personnel responsible for calculating and collating scores will round the scores to the nearest tenth of a second before allocating penalty points. Times from 0.01 to 0.04 of a second will be rounded down to the previous tenth of a second whereas times from 0.05 to 0.09 of a second will be rounded up to the next tenth of a second.

4. JUDGES

4.1 Appointment of international judges

Judges are pointed in line with the Sporting Code, General Section, Chapter 5.

5.4.3 FAI JUDGES

5.4.3.1 ASCs shall appoint Judges for events requiring, in whole or in part, subjective evaluation of a performance or for other duties as specified in the specialised sections of the Sporting Code.

5.4.3.2 The ASC concerned shall decide upon the qualifications, experience and knowledge of rules and regulations required for its Judges.

5.4.3.3 NACs shall submit to the ASC concerned the names of candidates for recognition as International Judges. Upon recognition the ASC will make available to FAI a list of those Judges.

5.4.3.4 The Chief Judge shall be appointed by the ASC concerned and has the responsibility to organise the work to be carried out by the International Judges and to report results to the Event Director.

The FAI Sporting Code, World and Continental Helicopter Championships, Rules and Regulations 2019 Edition, Section 9, Chapter 8, describes the standard required for rotorcraft competition.

4.2 Validity of judges status

All participating judges are registered with FAI CIG on an annual basis and must be an approved judge to take part. Judges are also subject to the conditions under Section 4, Criteria and approval of judges, Sporting Code Rules and Regulations.

All current judges are listed on the FAI website and can be checked to ensure participating judges are registered:

<http://www.fai.org/cig-about-us/cig-officials-experts>

4.3 Standards required to become and international judge

The requirements of the FAI Sporting Code, World and Continental Helicopter Championships, Rules and Regulations 2019 Edition, Section 9, Chapter 8, are as follows:

An international judge and assistant judge must be capable of remaining out in the field for at least 10 hours. They must also be sufficiently mobile to move fast within the competition area.

Eyesight: To be able to read two numbers each 30cm x 30cm as described in 13.9 of Chapter 2, from a distance of 15 metres or 50 feet.

Hearing: To be able to hear a helicopter approaching in still air conditions from a distance of 1 NM.

A holder of a valid aviation medical of any class will be assumed to meet these criteria.

Stopwatch Usage:

To be able to demonstrate familiarity with a stopwatch of his choice, or the approved *NAC* stopwatch and to be able to measure a time to an accuracy of 0.25 of a second.

Clock Usage:

To be able to synchronize a clock to a Master Clock to an accuracy of 0.1 of a second and to time an event to an accuracy of 0.25 of a second.

Speed, Height, Course judgement:

To be able to determine a course change of over 30 degrees, a ground speed of less than 30 kph (16 kts), and a height of 10 metres (33 feet).

Judges must have a full knowledge of the Current Rules of the FAI Sporting Code, World and Continental Helicopter Championships, Rules and Regulations 2019 Edition, Section 9, Chapter 8 and the regulations of the Sporting Code General Section.

4.4 Judges handbook

Reserved for future use.

4.5 The function of Judges at event Category 1.

The Chief Judge or the Deputy Chief Judge:

- will be present in the competition area at all times.
- organise the workload of the judges and assistant judges.
- deal with complaints regarding the rules, judging matters and penalties.

The Chief Judge holds a briefing conference for all judges the day before the first flight, it is compulsory for all judges and assistant judges to attend. The Chief Judge must participate in a general briefing prior to the event commencing and a daily briefing for each discipline.

The general briefing will include the Chief Judge issuing the variable parts of the events, which must be carried out at the general briefing at the beginning of the event:

Event 1	MFO 1 & 2
Event 2	turning points
Event 3	direction of flight through the gates
Event 4	direction of flight through gates
Event 4	exact position of Gates 5 + 6.

The event briefings, held by the Event Director, must include:

- Role call
- Weather/meteorology
- Any airspace restrictions
- Any air traffic instructions
- Details of the event to be flown
- Any event variables to be re-iterated
- Take off times
- Running order and any alterations
- Special instructions
- Date and time of next briefing
- Opportunity for questions from competitors

The function of Judges at event Category 2.

The Chief Judge:

- will be present in the competition area at all times.
- organise the workload of the judges and assistant judges.
- deal with complaints regarding the rules, judging matters and penalties.

The variables to be drawn at the briefing are:

Slalom: position of gate 6 and direction of flights
Fender: order of the containers

The Chief Judge holds event briefings for all judges and competitors for each of the events within a Category 2 competition.

The briefing held by the Chief Judge must include:

- Role call
- Weather/meteorology
- Any airspace restrictions
- Any air traffic instructions
- Details of the event to be flown
- Any event variables to be re-iterated
- Take off times
- Running order and any alterations
- Special instructions
- Date and time of next briefing
- Opportunity for questions from competitors