



FAI Sporting Code

*Fédération
Aéronautique
Internationale*

Section 9 – Rotorcraft

**Event handbook
Competition checklists
Equipment specifications**

(will require minor revision when new OA confirmed)

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The CIG Guide to Helicopter Championship Organisation Edition 1/17.

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1.1 Championship checklists

1.1.1. This section gives details of the people that are involved in the organisation of an event. It lists a full schedule of items required for the operation of an event along with the key stages that are required to present a course ready for each discipline.

Below is a list of the organising team and the championship management. This consists of but is not limited to:

1. Event Director
2. Deputy Event Director
3. International Jury
4. Chief Judge
5. Deputy chief judge
6. Judging personnel
7. **Scoring personnel**
8. Courses manager and ground crew
9. Navigation course designer
10. Safety Officer
11. Weather official
12. Technical Official and engineering team
13. Airfield Manager
14. Administration staff
15. Transportation staff
16. On site catering staff
17. Commentator
18. Media & PR Manager
19. Any other as appointed by Event Director

1.1.2 Authorities (local and international) required either to be co-operated with or informed of the event. Some may require to be present at the event:

NAC; National, Regional, Local Government; CAA; Police; Military Etc.

1.1.3 NAC delegations are made up of several categories as listed in the entry form and are as follows:

1. Chief delegate.
2. Team manager.
3. FAI approved judges and assistant judges, a maximum of 10 people.
4. Pilots and crews. A maximum of 7 crews plus 3 all female crews.
5. Mechanics/engineers.
6. Interpreter.
7. Additional people can attend if the category is specified on the entry form such as observer.
8. A country can enter an unlimited amount of entrants to the Freestyle event, this event is flown solo.

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.

Countries with less than three crews cannot enter the team event and are scored as individual crews.

1.1.4 General public

Must be contained in designated areas.

1.1.5 Facilities/services to be provided either on or off site as required for the duration of the event:

1. Accommodation and off site catering
2. Provision of on site catering
3. Provision of off site lunches for navigation judges
4. Availability of drinking water at all times
5. Welfare facilities at the airfield, sufficient for all individuals
6. Transport (to and from accommodation)
7. Transport - Chief & Deputy Chief judges and Jury (**independent**)
8. Transport - for off site judging positions for navigation
9. On site miscellaneous services such as WIFI, fuel and fire/ambulance

1.1.6 On site requirements:

1. Main office
Must always be open for general enquiries.
2. Registration point
3. Customs point
If not on site, competitors must be advised where to clear customs
4. Judges office
Must be provided for the Chief Judge, the Deputy Chief Judge, the scoring and judging personnel. There must be WIFI and adequate seating and desks to contain the function of the office.
5. Jury office
Must be available for the sole use of the Jury members.
6. Briefing tent/room for all briefings
Of sufficient size to hold all participants for all briefings. Adequate seating must be provided. Must have WIFI. Must have a loud speaker system to ensure the briefings can be heard throughout the briefing area.
7. Official notice board
Of suitable size to display the following:
 - The variables of the competition after they are announced at the general briefing.
 - List of competitors.
 - **The master clock.**

- Event running orders
 - Additional information - briefing times, transportation times, contact numbers, etc.
8. Quarantine facility to hold all returning competitors from the navigation event. Lunch and refreshments to be available all day.
 9. Toilet and welfare facilities for all attendees.
 10. On site facility to play national anthems at prize giving i.e. suitable PA system.
 11. Suitable on site facility to fly the flags of participating nations and FAI.
 12. Press office
A separate office style room to be available for the press to use with seating and desk space. WIFI is essential.
 13. WADA (if notified)
Provision of separate room with WC facilities to be provided.

1.1.6.1 Off site locations will also be required for the positioning of panels and other items for the navigation exercise.

1.1.7 Competition equipment

All equipment as detailed in the Section 9, Chapter 8, Rules and Regulations must be present at the competition site three days before the event to allow the International Jury to inspect the equipment. All equipment must be prepared in line with the Standards of Performance Section for equipment specification in the CIG Handbook. Competition maps are classed as equipment.

Competition numbers shall be supplied to the competitors and must be clearly visible on the left & right hand side and under the front of the helicopter for the duration of the Championship. Numbers will 30 x 30cms (or as large as is reasonably possible). The numbers must be black on a white or yellow background.

1.1.8 Weather minima

Events 1 and 5: Minimum cloud height of 300 metres and minimum horizontal visibility 2 kilometres or the minimum legal flying conditions of the host country whichever is the greater.

Events 2, 3 and 4: maximum wind speed of 15 knots (unless all team managers unanimously agree otherwise at the event briefing).

Event 5, maximum wind speed of 8 knots.

1.1.9 Task allocation

Specific tasks must be completed by the nominated individuals in preparation of each event. There are checklists to accompany this in the annexes to this document. Following these procedures will ensure the

correctly laid out course is delivered on time to the Event Director to ensure smooth and efficient running of the event.

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1.2 Competition checking sequence for each event

1.2.1 The navigation event

Before flying commences, the setting and checking of the course is carried out as follows:

Event briefing carried out the day prior.

Aircraft prepared by technical team.

The course is set by the navigation course designer.

The course is laid out by the course manager and ground staff.

The course is checked by the designer and the course manager and signed off as completed and handed to the Event Director to commence the discipline at least one hour before the first aircraft take off time.

All judges and assistant judges have been allocated to their judging points and issued with relevant judging sheets.

The running order is completed by the Event Director taking aircraft sharing in to consideration.

The locations of MFO 1 and MFO 2 will be published at the general briefing.

All equipment for competitors to be at the preparation line.

Loggers already installed in aircraft and technical team ready to remove at completion of the event and taken for analysis.

Flying the event.

During the navigation, judging sheets can be collected and delivered to the scorers before the completion of the event.

End of flying.

Prior to leaving the designated ten metre landing area, each crew will hand over their envelope to an official.

After landing, crews are escorted from their aircraft to the quarantine position without contact with any other crews.

Loggers removed from the aircraft by the technical team to take for download.

Competition seals inspected to ensure they are intact.

Illegal or barred equipment check.

10% of competitors randomly inspected.

Scoring

Scores sheets collected from judges and given to the event scorers with the logger download to determine the score for each crew.

Scoring information stored in preparation of any complaint or protest.

Preliminary scores issued no later than three hours of the event finishing and signed by the Chief Judge and a time is printed on the document, the complaint one hour window commences at this time.

Complaints/protests

Complaints are handled by the Chief Judge.

An unsatisfied complaint changes to an official protest.

A protest and the protest fee will be delivered to the jury as soon as it is received by the Event Director.

A check will be made to ensure the protest has been received prior to the expiry deadline. It will be signed, dated and a time printed on it.

Final scores

Final scores are put up on the event notice board (subject to any outstanding protests)

Scores must be declared final by the Chief Judge with date, time and signature.

End of event

Course manager and ground crew to ensure all equipment is collected and returned to the airfield to be stored.

All judging personnel accounted for.

1.2.2 The parallel precision event

Before flying commences, the setting and checking of the course is carried out as follows:

Event briefing carried out the day prior.

The course is laid out by the course manager and ground staff.

The course is checked by the course manager and signed off as completed and handed to the Event Director to commence the discipline at least one hour before the first take off time.

All judges and assistant judges have been allocated to their judging points and issued with relevant judging sheets.

The running order is completed by the Event Director taking aircraft sharing in to consideration.

The direction of the turning points has been issued

All equipment for competitors to be at the preparation line.

Flying the event.

Ensure all judges and officials are in place.

End of flying.

Competitors return to their parking place unless handing the aircraft over to another competitor. The procedure for shared aircraft and refuelling will be briefed.

Scoring, complaints and final scores

Same as navigation above

1.2.3 The parallel fender event

Before flying commences, the setting and checking the course is carried out as follows:

Event briefing carried out the day prior.

The course is laid out by the course manager and ground staff.

The course is checked the course manager and signed off as completed and handed to the Event Director to commence the discipline at least one hour before the first take off time.

All judges and assistant judges have been allocated to their judging points and issued with relevant judging sheets.

The running order is completed by the Event Director taking aircraft sharing in to consideration.

The direction of flight through gates has been issued

All equipment for competitors to be at the preparation line.

Flying the event.

Ensure all judges and officials are in place.

End of flying.

Competitors return to their parking place unless handing the aircraft over to another competitor. The procedure for shared aircraft and refuelling will be briefed.

Scoring, complaints and final scores

Same as navigation event

1.2.4 The parallel slalom event

Before flying commences, the setting and checking of the course is carried out as follows:

Event briefing carried out the day prior.

The course is laid out by the course manager and ground staff.

The course is checked the course manager and signed off as completed and handed to the Event Director to commence the discipline at least one hour before the first take off time.

All judges and assistant judges have been allocated to their judging point and issued with relevant judging sheets.

The running order is completed by the Event Director taking aircraft sharing in to consideration.

The direction of flight and position of gates has been issued

All equipment for competitors to be at the preparation line.

Flying the event.

Ensure all judges and officials are in place.

End of flying.

Competitors return to their parking place unless handing the aircraft over to another competitor. The procedure for shared aircraft and refuelling will be briefed.

Scoring, complaints and final scores

Same as navigation event.

1.2.5

Freestyle Event

not in current Section 9, advise which format being referred to

1.2.6

Parallel Slalom Heli-Race - in progress

1.2.7

Parallel Fender Heli-Race- in progress

1.2.8

Parallel Relay Combination Heli-Race- in progress

1.3 All checklist for events

1.3.1 Equipment specifications

- 3.2.1 Navigation skittle
- 3.2.2 Navigation rice bag
- 3.2.3 Navigation search box entry and exit gates
- 3.2.4 Navigation search box panels
- 3.2.5 Navigation turning point triangles
- 3.2.6 Navigation dog house
- 3.2.7 Navigation arrival line
- 3.2.8 Navigation departure line
- 3.2.9 Navigation "F" line
- 3.2.10 Navigation preparation line
- 3.2.11 Navigation rice bag targets
- 3.2.12 Competition poles
- 3.2.13 Parallel precision chains
- 3.2.14 Parallel precision chain attachment points
- 3.2.15 Parallel event preparation line
- 3.2.16 Parallel event departure line
- 3.2.17 Parallel precision competition corridors
- 3.2.18 Parallel precision "A" line
- 3.2.19 Parallel precision landing area
- 3.2.20 Competition fender
- 3.2.21 Parallel fender container
- 3.2.22 Parallel fender course boundary markings
- 3.2.23 Parallel fender exit gate
- 3.2.24 Parallel event entrance and departure gates
- 3.2.25 Parallel slalom table with target
- 3.2.26 Parallel slalom water container
- 3.2.27 Parallel slalom bucket
- 3.2.28 Parallel slalom heli-race bucket
- 3.2.29 Black "disqualification" flag
- 3.2.30 Judges competition flags
- 3.2.31 Starter flag

1.3.2 Competition course layout checklists

- 3.3.1 Navigation course layout
- 3.3.2 Parallel precision course layout
- 3.3.3 Parallel fender course layout
- 3.3.4 Parallel slalom course layout
- 3.3.5 Freestyle course layout
- 3.3.6 Parallel Slalom Heli-Race
- 3.3.7 Parallel Fender Heli-Race
- 3.3.8 Parallel Relay Combination Heli-Race

1.3.3 Competition course checklists

- 3.4.1 Checklist for the navigation event
- 3.4.2 Checklist of parallel precision event.
- 3.4.3 Checklist for parallel fender event
- 3.4.4 Checklist for parallel slalom event.

- 3.4.5 Checklist for freestyle
- 3.4.6 Checklist for parallel slalom heli-race
- 3.4.7 Checklist for parallel fender heli-race
- 3.4.8 Checklist for parallel combination heli-race

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1.4 Measuring equipment

1.4.1 General:

The judgements in the competition that may require the use of equipment are 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

1.4.2 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.

1.4.3 Judges sheets

- 3.6.1 Judges scoring sheets for navigation event
- 3.6.2 Judges scoring sheets for parallel precision event
- 3.6.3 Judges scoring sheets for parallel fender event
- 3.6.4 Judges scoring sheets for parallel slalom event
- 3.6.5 Judges scoring sheets for freestyle.
- 3.6.6 Judges sheets for parallel slalom heli-race event
- 3.6.7 Judges sheets for parallel fender heli-race event

1.5 Ceremonies

Before any ceremony can begin, all final scores will be published and all outstanding protests are satisfied.

The final action of the jury is to verify and approve the competition results of the event. The Jury must present the Event Director with the "Jury Final Report Form" (see International Jury Members Handbook, Appendix A).

At First Category Events, the FAI flag must be flown and the FAI Anthem played. The flags of the countries of the competitors placed first, second and third in each class must be flown and the national anthem of the countries of the champions must be played.

Sufficient medals and diplomas as well as any Organisers gifts to be purchased by the Organiser for the prize giving in line with the FAI requirements as laid down the General Section (Section 4) and the Section 9, Chapter 8, Rules and Regulations of the Sporting Code (Section 7).

At second category events - ??

PLEASE NOTE THERE IS NOTHING SPECIFIED FOR ANY CATEGORY TWO EVENT PROCEDURE FROM FAI.

ANY OTHER REQUIREMENTS?????