FAI Sporting Code

Fédération Aéronautique Internationale

Section 10 – Microlights and Paramotors

Class R

To Take Effect on 1st February 2012

Section 10 and General Section combined make up the complete Sporting Code for Microlights and Paramotors

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1 FAI Statutes, Chapter 1, para. 1.6
2 FAI Sporting Code, General Section, Chapter 3, para 3.1.3.
3 FAI Statutes, Chapter 1, para 1.8.1
4 FAI Statutes, Chapter 2, para 2.1.1; 2.4.2; 2.5.2; and 2.7.2
5 FAI Bylaws, Chapter 1, para 1.2.1
6 FAI Statutes, Chapter 2, para 2.4.2.2.5,
7 FAI Bylaws, Chapter 1, para 1.2.3
8 FAI Statutes, Chapter 5, para 5.1.1; 5.5; and 5.6
9 FAI Sporting Code, General Section, Chapter 3, para 3.1.7
10 FAI Sporting Code, General Section, Chapter 1, paras 1.2. and 1.4
11 FAI Statutes, Chapter 5, para 5.6.3
12 FAI Bylaws, Chapter 1, para 1.2.2

SPORTING CODE SECTION 10 - 2012 Edition

This document, the SPORTING CODE - SECTION 10, 2012 Edition, takes effect on the 1st February 2012
This edition differs from the previous edition in those paragraphs with a double vertical bar in the margin.

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Annex 4 to SECTION 10: Task Catalogues for Microlight and Paramotor Championships. *See separate booklet*

Annex 6 to SECTION 10: GNSS Flight Recorders and other electronic devices. *See separate booklet*

ABBREVIATIONS

CIMA: The Microlight and Paramotor Commission of the FAI.
GS: FAI Sporting Code General Section.
BL: FAI By-Laws.
S10: Sporting Code Section 10.
A1: Sporting Code Section 10 Annex 1.
A2: Sporting Code Section 10 Annex 2.
A3: Sporting Code Section 10 Annex 3.
A4: Sporting Code Section 10 Annex 4.
A5: Sporting Code Section 10 Annex 5.
A6: Sporting Code Section 10 Annex 6.
FR: GNSS Flight Recorder.
TBD: to be decided.
DNF: Did not fly.
DSQ: Disqualified.

WORDING

The use of “shall” and “must” implies that the aspect concerned is mandatory; the use of “should” implies a non mandatory recommendation; “may” indicates what is permitted and “will” indicates what is going to happen. Words of masculine gender should be taken as including the feminine gender unless the context indicates otherwise. Italics are used for explanatory notes.

CHAPTER 1

1.1 SECTION 10 SCOPE OF WORK

1.1.1 Section 10 of the Sporting Code deals with records, proficiency badges, and world and continental championships for Microlight and Paramotor aircraft.

1.2 SECTION 10 AUTHORITY

1.2.1 Section 10 is to be used in conjunction with the General Section of the Sporting Code.

1.2.2 The following subjects are detailed in the General Section:

FAI Authority and Responsibility	Chapter 1
Classifications and Definitions	Chapter 2
Drugs, Alcohol, Illness	Chapter 3
Penalties, Protests	Chapter 5
Sporting Licences	Chapter 8
Appeals before FAI	Chapter 9

1.2.3 The following chapters of the General Section contain general principles with the special information for Microlight and Paramotor aircraft in Section 10.

Sporting events	Chapter 3
Observers and officials	Chapter 4
World records	Chapter 6
Flight measurement and control	Chapter 7

1.3 DEFINITION OF A MICROLIGHT OR PARAMOTOR AIRCRAFT

1.3.1 A one or two seat powered aircraft whose minimum speed at Maximum Take Off Weight (MTOW) is less than 65 km/h, and having a MTOW of:

- 300 kg for a landplane flown solo
- 330 kg for an amphibian or a pure seaplane flown solo;
- 450 kg for a landplane flown with two persons
- 495 kg for an amphibian or a pure seaplane flown with two persons

Note. These definitions also apply to foot-launched Microlight and Paramotor aircraft.

1.3.2 The MTOW described in 1.3.1 may be increased by 5% if the aircraft is equipped with a parachute system designed to bring the entire aircraft to the ground if it is deployed.

1.4 TYPES OF MICROLIGHT AND PARAMOTOR AIRCRAFT

1.4.1 A Microlight with movable aerodynamic control is a fixed wing powered aircraft with moveable aerodynamic surfaces for control.

1.4.2 A Microlight with weight-shift control is a flexwing powered aircraft with pilot weightshift as primary method of control

1.4.3 A Paramotor is a powered aircraft which has a wing without any rigid structure and is controlled via movable aerodynamic surfaces and pilot weightshift.

1.4.4 An Autogyro is a powered aircraft, which in flight, derives most of its lift from an autorotating rotor system not provided with any form of direct power drive.

1.4.5 A Landplane is an aircraft only capable of taking off and land on land, ice or snow.

1.4.6 A Seaplane is an aircraft only capable of taking off and landing on water.

1.4.7 An Amphibian is an aircraft capable of taking off and landing on water and land.

1.4.8 A foot-launched Microlight or Paramotor is an aircraft where the main undercarriage consists of the pilot and / or crews legs and is launched on foot without any external assistance during the takeoff run.

1.4.9 A thermal powered Microlight or Paramotor is one with an engine that converts thermal energy to mechanical output, typically by burning a hydrocarbon fuel.

1.4.10 An electrically powered Microlight or Paramotor is one powered exclusively by electricity, typically sourced from a battery, fuel cell or photo-voltaic cell. For the purposes of comparison with other fuel types, the source device shall be considered 'fuel' rather than a 'fuel tank'.

Note. According to the General Section of the Sporting code, Microlight and Paramotor aircraft are defined as class R. To avoid the expression “sub-classes”, which would be the correct definition when dealing with the various classes of aircraft in Section 10, the prefix “sub” has been omitted.

For the purposes of simplification within this document the R is also usually omitted from class names.

1.5 CLASSES OF MICROLIGHT AND PARAMOTOR AIRCRAFT

1.5.1 Organisation of class names.

First character: FAI class	Second character: Type of control system	Third character: Type of landing device	Fourth character: Number of persons	Fifth character: Power source	Sixth character: Gender
R	**A** = Movable aerodynamic control system **W** = Weight-shift control system **P** = Paraglider control system **G** = Autogyro	**L** = Landplane **S** = Seaplane **M** = Amphibian **F** = Foot-launched	**1** = Flown solo **2** = Flown with two persons	**E** = Electric engine **T** = Thermal engine	**m** = Male **f** = Female

1.5.2 Table of Microlight and Paramotor classes

Microlight description	**Class name**
Movable aerodynamic control / Landplane / Flown solo / Thermal engine	RAL1T
Movable aerodynamic control / Landplane / Flown solo / Electric engine	RAL1E
Movable aerodynamic control / Landplane / Flown with two persons / Thermal engine	RAL2T
Movable aerodynamic control / Landplane / Flown with two persons / Electric engine	RAL2E
Movable aerodynamic control / Seaplane / Flown solo	RAS1
Movable aerodynamic control / Seaplane / Flown with two persons	RAS2
Movable aerodynamic control / Amphibian / Flown solo	RAM1
Movable aerodynamic control / Amphibian / Flown with two persons	RAM2
Weight-shift control / Landplane / Flown solo / Thermal engine	RWL1T
Weight-shift control / Landplane / Flown solo / Electric engine	RWL1E
Weight-shift control / Landplane / Flown with two persons / Thermal engine	RWL2T
Weight-shift control / Landplane / Flown with two persons / Electric engine	RWL2E
Weight-shift control / Seaplane / Flown solo	RWS1
Weight-shift control / Seaplane / Flown with two persons	RWS2
Weight-shift control / Amphibian / Flown solo	RWM1
Weight-shift control / Amphibian / Flown with two persons	RWM2
Weight-shift control / Foot-launched / Flown solo / Thermal engine	RWF1T
Weight-shift control / Foot-launched / Flown solo / Electric engine	RWF1E
Weight-shift control / Foot-launched / Flown with two persons / Thermal engine	RWF2T
Weight-shift control / Foot-launched / Flown with two persons / Electric engine	RWF2E
Paraglider control / Foot-launched / Flown solo / Thermal engine / male pilot	RPF1Tm
Paraglider control / Foot-launched / Flown solo / Thermal engine / female pilot	RPF1Tf
Paraglider control / Foot-launched / Flown solo / Electric engine	RPF1E
Paraglider control / Foot-launched / Flown with two persons / Thermal engine	RPF2T
Paraglider control / Foot-launched / Flown with two persons / Electric engine	RPF2E
Paraglider control / Landplane / Flown solo / Thermal engine	RPL1T
Paraglider control / Landplane / Flown solo / Electric engine	RPL1E
Paraglider control / Landplane / Flown with two persons / Thermal engine	RPL2T
Paraglider control / Landplane / Flown with two persons / Electric engine	RPL2E
Autogyro / Landplane / Flown solo	RGL1
Autogyro / Landplane / Flown with two persons	RGL2

Note: This table is not to be regarded as the final number of classes. If other types of aircraft appear that fulfil the requirements for being a Microlight or Paramotor, this table can be extended.

Microlight Autogyros were new in 2010; classes RGL1 and RGL2 are provisional and not eligible to compete in 1st Category Microlight events or claim Microlight records unless stated otherwise at www.fai.org/microlight

1.5.3 A Microlight or Paramotor class is always one where the full class name is used from 1.5.2. However, where it is convenient to refer to groups of classes it is acceptable to use a subset of the designation. *eg AL refers to all types of Microlights with movable aerodynamic control and are landplanes, or PF1 refers to all types of Paramotors which are foot-launched and flown solo.*

1.5.4 Male is an all male crew, or a mixed male & female crew. Female is an all female crew. Where no gender designation is given, the class is unisex.

CHAPTER 2, Diplomas and Badges

2.1 THE COLIBRI DIPLOMA (BL 12.11.1)

2.1.1 This diploma may be awarded each year by the FAI on a proposal from CIMA to an individual who is considered to have made an outstanding contribution to the development of Microlight flying by his action, work, achievements, initiative or devotion.

2.1.2 Each active member of FAI may submit the name of a candidate for consideration by CIMA which must reach the FAI Secretariat at least 2 months before the CIMA plenary meeting for inclusion in the agenda. Proposals cover time up to 31 December of the previous year. Only one diploma is awarded annually.

2.2 THE ANN WELCH DIPLOMA (BL 12.11.2)

2.2.1 Ann Welch, for many years FAI Vice President and Editor of the FAI Bulletin, played leading international roles in the development not only of Microlight and Paramotor aviation, but also of Gliding and Hang-gliding. She was instrumental in creating the FAI Microlight and Paramotor Commission (CIMA) and formulating the Microlight and Paramotor sporting code. She worked tirelessly for many years in the cause of Microlight and Paramotor sport flying.

2.2.2 One Diploma may be awarded each year to the pilot or crew of a Microlight or Paramotor who in the opinion of CIMA made the most meritorious flight which resulted in a Microlight or Paramotor World record claim ratified in the year in question.

2.3 COLIBRI PROFICIENCY BADGES

2.3.1 The FAI Colibri badges are standards of achievement that do not require to be renewed. The qualifications are the same in every country.

2.3.2 Each NAC shall keep a register of badge flights that it has validated, and shall inform FAI of the names of pilots gaining the gold badge. FAI shall maintain a register of gold and diamond awards on its website.

2.3.3 QUALIFICATIONS AND REQUIREMENTS

2.3.3.1 Bronze Colibri

a) 20 hours solo on Microlight or Paramotor aircraft including at least 50 flights.

b) 3 precision landings within 10 m of the centre of a given spot or 3 precision landings with engine on in the landing deck, scoring at least 50 points during an official competition (*A4 2.C1*).

c) 1 precision landing within 20m of the centre of a given spot from a height of 300m (1000ft) AGL with the throttle fully closed or 1 precision landing in the landing deck with engine stopped, scoring at least 50 points during an official competition.

d) Two cross country flights of distance dM x 1 over a triangular course, one with an outlanding at a designated point along the route, or achieving a positive score in 2 navigation tasks flown in an official competition.

2.3.3.2 Silver Colibri

a) 100 hours on Microlight or Paramotor aircraft including at least 200 flights.

b) 2 flights to approximately 300m (1000ft) AGL, stop engine(s) complete a 360°turn and land within 5m of the centre of a given spot, or 2 precision landings in the landing deck with engine stopped, scoring at least 200 points during an official competition.

c) Four cross country flights of distance dM x 2 with any landing or turn points pre-declared. The courses may be straight, dog-leg (1 turn point), out and return, or triangular (2 turn points), or achieving a positive score in 4 navigation tasks flown in an official competition.

2.3.3.3 Gold Colibri

a) 300 hours on Microlight or Paramotor aircraft.

b) Have competed in two National or FAI recognised international Microlight or Paramotor competitions as pilot-in-command.

c) Complete a tour of at least the distance dM x 14 to a pre-declared flight plan within 7 consecutive days. The route to contain at least 3 control points which the aircraft is observed to overfly or where a landing is made. Only the final landing of the tour may be made at the initial departure point.

d) Hold one of the following:

National Microlight or Paramotor instructor rating;

National Microlight or Paramotor record (or have held such a record);

National Microlight or Paramotor seaplane rating plus two 75 km cross country flights on a seaplane;

Have participated in an FAI first category event, as pilot-in-command.

2.3.3.4 Diamond Colibri

A CIMA award, with inauguration 1st January 1990, for an outstanding Microlight or Paramotor flying achievement. The following special conditions apply:

a) Applicants or nominees must be qualified to at least silver badge standard.

b) In the case of two person crews, the pilots should have equal or equivalent aviation experience, and both should be necessary crew.

2.3.4 GENERAL CONDITIONS

2.3.4.1 All flights for Colibri badges must be flown on Microlight or Paramotor aircraft (S10 1.3).

2.3.4.2 A pilot must be alone in the aircraft on each flight, other than during navigation tasks in an official competition and for the requirements for the gold and diamond.

2.3.4.3 A flight may count towards any badge or qualification for which it fulfils the requirement.

2.3.4.4 Badges may be awarded only in the correct order: bronze, silver, gold. A diamond may be awarded to silver badge holders.

2.3.4.5 A precision landing is a touchdown and staydown landing with no damage to aircraft or pilot, or in an official competition the first touchdown with no damage to aircraft or pilot. Distance is measured from the touchdown/staydown point of the main wheels or, in the case of landings in a landing deck in an official competition, the first touchdown.

2.3.4.6 To count for badge each leg of a cross-country flight must be completed in not more or less than 15% of the pilot's properly calculated flight time for that leg.

2.3.4.7 Barographs are not required.

2.3.4.8 A Sporting Licence is not required for badge flights.

2.3.4.9 Only a single course may be declared for any flight.

2.3.4.10 dM is the distance the aircraft can fly in nil wind in one hour at the manufacturer’s published cruise speed. Evidence of dM must be provided as part of the application for a Colibri award

2.3.4.11 Evidence during official competitions shall be collected by FR records.

2.3.5 CONTROL OF BADGE FLIGHTS

2.3.5.1 Evidence shall be confirmed by the official observer or the FR record.

2.3.5.2 The number of flights and hours shall be by pilot declaration

CHAPTER 3, Records

RECORDS CLASS R

General Section Reference Chapter 6.

S10 Chapter 5: Control and Measurement.

It is strongly recommended that CIMA type 2 flight recorders (S10 A6) are used in all record attempts except championship records as the evidence from these is much more easily substantiated than by any other method.

3.1 CLASSES

Records are open to all aircraft classes listed in 1.5.2

3.2 RECORD CATEGORIES IN EACH CLASS

3.2.1 DISTANCE IN A STRAIGHT LINE WITHOUT LANDING

3.2.2 DISTANCE IN A STRAIGHT LINE WITHOUT ENGINE POWER

3.2.3 DISTANCE IN A STRAIGHT LINE WITH LIMITED FUEL

3.2.4 DISTANCE IN A CLOSED CIRCUIT WITHOUT LANDING

3.2.5 DISTANCE IN A CLOSED CIRCUIT WITHOUT ENGINE POWER

3.2.6 DISTANCE IN A CLOSED CIRCUIT WITH LIMITED FUEL

3.2.7 ALTITUDE

3.2.8 TIME TO CLIMB TO A HEIGHT OF 3,000 m

3.2.9 TIME TO CLIMB TO A HEIGHT OF 6,000 m

3.2.10 SPEED OVER A STRAIGHT COURSE

3.2.11 SPEED OVER A CLOSED CIRCUIT

3.3 AVAILABILITY OF RECORDS

3.3.1 Solo: The best performance by a solo pilot.

3.3.2 Multiplace: The best performance with two persons on board the aircraft. The age of the navigator shall not be less than 14 years.

3.4 GENERAL RULES FOR RECORDS

3.4.1 The weight of the aircraft at take-off, including the pilot, fuel and all auxiliary equipment shall not exceed the maximum permitted weight limit as defined in S10 1.3.1.

3.4.2 Landing or refuelling during a record attempt either on the ground or in the air is prohibited.

3.4.3 A new record must exceed the previous record by 1% for distance and speed records and by 3% for altitude and height records.

3.4.4 In the measurement of record distance, the error must not exceed 0.5% and for altitude and height records 1%.

3.4.5 No fuel, ballast or other disposable items may be jettisoned after take-off or prior to the completion of the record attempt.

3.4.6 A foot launched Microlight or Paramotor must be foot launched from a surface which has no slope greater than 1% over a radius of 100 m from the take off point.

3.4.7 To obtain a record with an amphibian, it must take-off from land and land on water or vice-versa.

3.4.8 A serviceable barograph and/or a FR shall be carried.

3.4.9 The pilot and crew must hold a FAI sporting licence.

3.5 Special rules for distance in a straight line without landing.

3.5.1 The distance shall be measured as the geodesic joining the take-off point and the landing point.

3.6 Special rules for distance in a straight line without engine power.

3.6.1 A barograph or FR shall be carried which records any use of engine.

3.6.2 The aircraft must have its engine stopped prior to crossing the start line and it must not be re-started until after crossing the finish line.

3.6.3 The altitude of the aircraft at the finish line shall not be less than the altitude of the aircraft at the start line.

3.6.4 The distance shall be measured as the geodesic joining the point the start line was crossed and the point the finish line was crossed.

3.7 Special rules for distance in a straight line with limited fuel.

3.7.1 The aircraft must carry no more than 7.5 kg of fuel which may be used as required.

3.7.2 The altitude of the aircraft at the finish line shall not be lower than the takeoff point.

3.7.3 The distance shall be measured as the geodesic joining the take-off point and the point the finish line was crossed.

3.8 Special rules for closed circuits.

3.8.1 The start and finish lines of a closed circuit course must share a single point which is the start point and finish point of the circuit.

3.8.2 Closed circuits of less than or equal to 100 Km shall be achieved over an out and return or triangular course. Closed circuits of greater distances shall consist of between three and six legs.

3.8.3 All legs of closed circuits must be of equal length with the following permitted deviation:

- 3 legs: all legs must be between 28% and 38% of the total length.
- 4 legs: all legs must be between 20% and 30% of the total length.
- 5 legs: all legs must be between 15% and 25% of the total length.
- 6 legs: all legs must be between 11% and 27% of the total length.

3.8.4 In closed circuits of three or more legs the change in course direction must not exceed 145 deg. at each turnpoint.

3.8.5 The length of a closed circuit shall be measured as the sum of the geodesics joining the start point with the finish point, via the turnpoints in the order flown by the aircraft.

3.8.6 A closed circuit may only be flown once.

3.8.7 A turn point is reached when the FR trace is observed to pass through a quadrant (90°degree secto r) on the ground with its apex at the turn point and orientated symmetrically to and remote from the two legs of the course which meet at the turn point.

3.9 Special rules for distance in a closed circuit without landing.

3.9.1 The altitude of the aircraft at the finish line shall not be less than the altitude of the aircraft at the start line.

3.10 Special rules for distance in a closed circuit without engine power.

3.10.1 The barograph or FR used must be capable of recording any use of engine.

3.10.2 The aircraft must have its engine stopped prior to crossing the start line and it must not be re-started until after crossing the finish line.

3.10.3 The altitude of the aircraft at the finish line shall not be less than the altitude of the aircraft at the start line.

3.11 Special rules for distance in a closed circuit with limited fuel.

3.11.1 The aircraft must carry no more than 7.5 kg of fuel which may be used as required.

3.11.2 The altitude of the aircraft at the finish line shall not be less than the altitude of the aircraft at the start line.

3.12 Special rules for altitude records.

3.12.1 A barograph or FR capable of recording atmospheric altitude must be used and a valid calibration certificate for it must be included with the record claim.

3.12.2 The altitude achieved shall be the true altitude measured from sea level as defined by the national survey in the relevant country.

3.13 Special rules for time to climb records.

3.13.1 A barograph or FR capable of recording atmospheric altitude must be used and a valid calibration certificate for it must be included with the record claim.

3.13.2 The time measured shall be that from a standing start on a horizontal runway to reaching the designated height above takeoff altitude as defined by the national survey in the relevant country.

3.14 Special rules for speed over a straight course.

3.14.1 The course shall be straight with a minimum length of 15 kilometres.

3.14.2 Before crossing the start line the aircraft shall fly level for the last 1,000 metres within a tolerance of 100 metres.

3.14.3 The altitude of the aircraft at the finish line shall not be less than its altitude at the start line.

3.14.4 The speed adopted shall be the average of the two speeds from two consecutive runs over the same course in opposite directions. The two runs must be completed within a maximum elapsed time of 1 hour with no landing between runs.

3.14.5 The altitude at which the aircraft crosses the start line on the second run must be within 100m of the altitude at which it crossed the start line on the first run.

3.15 Special rules for speed over a closed circuit.

3.15.1 Records may be claimed for speed over closed circuits of 50, 100, 500 and 1000 Km.

3.15.2 The length of the closed circuit shall not be less than the record distance being claimed.

3.15.3 Before crossing the start line the aircraft shall fly level for the last 1,000 metres within a tolerance of 100 metres.

3.15.4 The altitude of the aircraft at the finish line shall not be less than its altitude at the start line.

3.15.5 The speed adopted shall be calculated as the speed over the record distance being claimed, not the length of the closed circuit flown.

3.16 RECORD CLAIM PROCEDURE

3.16.1 The procedure for making World record claims is detailed in FAI General section, chapter 6.

3.16.2 A record file shall be compiled for each record claimed. It must consist of the CIMA approved declaration form for the type of record being claimed, fully completed and containing as attachments all additional information necessary to substantiate the flight and the claim. The forms are available at http://www.fai.org/microlight/documents/sc10

3.16.3 All forms and certificates must be signed or countersigned by the official observer(s) controlling the record attempt.

3.17 CHAMPIONSHIP RECORDS

3.17.1 If performance in a task in championship can be directly compared to the performance in a task at a different championship, then World championship records in class may be established for that performance.

3.17.2 Championship records for Microlights and Paramotors can only be established during valid competition tasks by bona-fide competitors at a FAI category 1 Microlight or Paramotor championships or a FAI World Air Games.

3.17.3 A championship record can only be claimed for performances where no penalties or other adjustments were applied to the competitor's task score.

3.17.4 It is the responsibility of the claimant to complete the record claim on the official claim forms. The forms are available at http://www.fai.org/microlight/documents/sc10

3.17.5 If the value of the championship record is an elapsed time normalized to ISA sea level conditions then the elapsed time flown shall be normalized according to the following formula:

$$\text{Elapsed time normalized to ISA sea level conditions, in seconds} = \frac{T_1}{0.5331359\sqrt{\frac{P_1}{t_1+273}}}$$

Where

T1 = Actual pilot performance in seconds.

P1 = Ambient pressure in mb.

t1 = Ambient temperature in degrees Celsius.

3.17.6 Elapsed times (after normalization, if required), if less than five minutes shall be rounded down to the nearest 0.01 second, otherwise to the nearest second. Distances shall be rounded down to the nearest 0.01 Km. A new championship record must simply exceed the previous record.

3.17.7 When a change to the championship rules prevents an equal comparison to a performance in a previous championship then a new record shall be created and the old record retired.

3.17.8 Available Championship records

3.17.8.1 **DISTANCE WITH LIMITED FUEL**

- May be established in any task in the task catalogue where the fuel is measured before takeoff.

- Fuel load at takeoff must not exceed:

  Classes PF1 & PL1: 1.5 Kg
  Classes PF2 & PL2: 4 Kg
  Classes WL1 & AL1: 9 Kg
  Classes WL2 & AL2: 13 Kg

- Distance measured is the distance flown without any intermediate landing in a straight line or around a course, and used in calculating the scoring.
- Pilot performance is expressed as a distance in Km.

3.17.8.2 **ENDURANCE WITH LIMITED FUEL**

- May be established in any task in the task catalogue where the fuel is measured before takeoff.
- Fuel load at takeoff must not exceed:

  Classes PF1 & PL1: 1.5 Kg
  Classes PF2 & PL2: 4 Kg
  Classes WL1 & AL1: 5 Kg
  Classes WL2 & AL2: 8 Kg

- Time measured is the time flown by the pilot without any intermediate landing, and used in calculating the scoring.
- Pilot performance is expressed as an elapsed time.

3.17.8.3 **PRECISION CIRCUIT IN THE SHORTEST TIME** ('Clover leaf slalom')

- Task 3.C7 as defined in the current task catalogue.
- The square pattern of the task must not be less than:
  70.71m for classes PF1 and PL1
  100m for classes PF2 and PL2
- Whilst the pilot is in the course the local wind speed must not have exceeded an average of 10Kt (18 Km/h)
- A pilot only qualifies for a record if his scoring in the task includes NQ = 9.
- Pilot performance is expressed as an elapsed time normalized to ISA sea level conditions.

3.17.8.4 **PRECISION CIRCUIT IN THE SHORTEST TIME** ('Japanese slalom')

- Task 3.C8 as defined in the current task catalogue.
- The grid pattern of the task must not be less than:
  50m for classes PF1 and PL1
  70.71m for classes PF2 and PL2
- Whilst the pilot is in the course the local wind speed must not have exceeded an average of 10Kt (18 Km/h)
- A pilot only qualifies for a record if his scoring in the task includes NQ = 9.
- Pilot performance is expressed as an elapsed time normalized to ISA sea level conditions.

CHAPTER 4, Championships

WORLD AND CONTINENTAL CHAMPIONSHIPS

4.1 GENERAL RULES

Sporting Code General Section References:
Chapter 1: FAI Authority
Chapter 3: Sporting Events
Chapter 4: Control of Sporting Events
Chapter 5: Protests, penalties.

Note that GS reference covers World Air Games etc.

4.2 PURPOSE

4.2.1 The purpose of the Championships is to provide a good and satisfying contest, to determine the World or Continental Champion in each class and to reinforce friendship amongst pilots of all nations.

4.3 VALIDITY OF A CHAMPIONSHIP

4.3.1 World and continental championships may be organised only by a NAC accepted by CIMA as competent to run the event.

4.3.2 For a world or continental championship to be valid there must be competitors from no less than 4 countries in a class, ready to fly the first task, and must start a minimum of one task.

4.3.3 The title of champion shall be awarded only if there have been at least 6 separate valid tasks in the class and at least one task of each type (navigation, economy, precision) has been valid.

4.4 CHAMPIONSHIP BIDS

4.4.1 A preliminary bid should be received by CIMA three years before the event, with the detailed bid including the local regulations (S10 A3) receiving acceptance by CIMA if possible not less than one year before. As soon as possible after acceptance an invitation requesting a reply giving intention to enter should be circulated to all NACs.

4.5 PREPARATION MONITOR

4.5.1 At the time a bid is accepted CIMA shall nominate a monitor to ensure preparations are complete and on time. The monitor shall be a jury member, steward, or person with specialised knowledge of championships. The monitor shall be invited to visit the championship site approximately 6 weeks before the start of the event and any prior rehearsal competition held prior to the event.

4.6 COMPETITION DIRECTOR

4.6.1 Where the candidate competition director for a Cat. 1 championship has not previously organized a successful FAI Category 1 Microlight or Paramotor championship he/she must as a minimum:

1) Have actively participated in an FAI Category 1 Microlight or Paramotor championship as a competitor, team leader or a key person listed in the local regulations, and;

2) Have organized national competitions.

4.6.2 Evidence of this experience shall be provided to CIMA in the form of a comprehensive CV supported by the NAC presenting the bid and verified by the CIMA Bureau or a nominated CIMA representative.

4.7 GENERAL ORGANISATION

4.7.1 Championship flights shall be controlled in accordance with the regulations contained in the Sporting Code, (General Section and Section 10) and the published local regulations for the event. (Refer Model Local Regulations, S10 A3)

4.7.2 The total period of the championships shall not exceed 14 days including the opening and closing ceremonies.

4.7.3 An official practice period of not less than 2 and not more than 5 days immediately preceding the opening of the championship shall be made available to all competitors. All the infrastructure for the competition (camping, maps, offices, scoring...) shall be ready for the first day of the official practice period. If practicable, on at least one practice day a task should be flown under competition conditions to test the integrity of the organisation. The scores thus generated shall not be counted.

4.7.4 To count as a championship task, all competitors in the class shall have been given the opportunity of having at least 1 competition flight in time to carry out the task.

4.7.5 There will normally be a rest day only after 6 consecutive days flying, unless this day is the last one of the championship. The policy for rest days shall be declared by the director at the first briefing.

4.7.6 FAI medals will be awarded to the first, second and third in each class with FAI diplomas for those placed first to tenth. FAI medals will be awarded to national teams placed first, second and third. The organisers may award prizes at their discretion.

4.8 STATUS AND TIMING OF LOCAL REGULATIONS

4.8.1 Local regulations are the rules for a specific event prepared by the organisers. They must use the model document format in S10 A3 and any differences shall be listed separately and submitted to CIMA for approval at least one year before the event. The CIMA Approved local regulations and entry form shall be sent to NACs not less than 6 months before the event stating the amount of the entry fee and what it covers.

4.9 ENTRY FEE

4.9.1 As a minimum the following should be included in the entry fee:

- Use of airfield and task area during the event.
- One copy of official competition map for each pilot and team leader.
- Contest numbers, identity badges, opening and closing ceremonies, and all championship information.

4.9.2 The organisers may supply competitors with a document of supplementary information upon their arrival at the championships site. Any matter intended to have the force of a competition rule must have been approved, as a minimum, by the CIMA Bureau. Only minor matters may be approved by this method. Local regulations and supplementary information must not conflict with the general rules.

4.9.3 Teams wishing to take advantage of the official practice period shall be able to register and get all items mentioned in S10 4.9.1 at least the day before the first official practice starts.

4.9.4 Once competition flying on the first contest day has started, no rules or regulations may be changed. Any additional requirements within the rules needed during the event must not be retrospective.

4.10 INTERNATIONAL JURY

4.10.1 There shall be a nominated jury of 3 persons of different nationalities excluding that of the organisers. The president of the jury shall be appointed by CIMA. The two other jury members shall be confirmed by CIMA.

4.11 RESPONSIBILITIES OF THE ORGANISER AND THE DIRECTOR

4.11.1 The NAC organising the championships shall appoint a championships director acceptable to CIMA not later than 6 months prior to the event. Any change of director must be approved by CIMA.

4.11.2 The director shall take overall operational responsibility for the event, including the programme of tasks to be flown. He is also responsible for publishing a final entry list and the names of key officials by the start of briefing on the first flying day, for issuing the daily results with minimum delay and on demand, make public all the circumstances that have had any bearing on the scoring for the tasks, including the coordinates for turn points, hidden gates, ground markers, etc. and for reporting the full results, including details of protests or serious problems encountered, to his NAC with copies to FAI and the CIMA president (S10 A5, Notes for directors).

4.11.3 The director or his named deputy shall be available at the championship site at all times during the contest flying period. If a championship class is to be flown from a separate site, a director shall be nominated for this class.

4.12 PROGRAMME AND FACILITIES

4.12.1 The organisers shall provide all facilities necessary for the satisfactory operation of the championship, and circulate to each team leader the following information as a minimum, as far in advance as possible (S10 A2 & A3).

- Programme of the championship with dates and times.
- Names of the director, chief officials, jury and stewards.
- General operational information including meteorological and safety arrangements, repair facilities and communication information.
- Information on likely tasks, and airspace and any hazardous considerations.
- Accommodation and food arrangements including facilities for press and visitors.
- Plans of airfields or sites to be used showing flying layout, and location of entrances and administrative and domestic buildings, vehicle parks and campsites.
- Full list of documents and equipment to be provided by competitors.
- A provisional entry list on request.

- Any extra language or interpreting facilities.
- The number of specialists, if any, that may be brought by competitors in addition to the official team crew members.

4.13 STEWARDS

4.13.1 The organisers shall appoint not less than 2 stewards. If Microlights and Paramotors are competing in the same venue at the same time, there will be a minimum of 3 stewards.

4.13.2 All stewards will be of different nationalities excluding that of the organiser, except that in the event of a last minute failure to attend a replacement steward of any nationality and acceptable to the other stewards may be invited.

4.13.3 Stewards must be able to speak a common language, preferably English, and have extensive experience of international Microlight or Paramotor or other FAI competitions.

One steward should if possible be able to speak the language of the organisers.

One steward should if possible be a pilot of the type of aircraft being flown in the championships preferably with experience as a competitor in that type at an international level.

4.13.4 At least 1 steward shall be present at each championship site or contest area throughout all operational activities (GS 4.3.4.2).

4.14 NATIONAL TEAMS

4.14.1 The organizers shall state in the local regulations the maximum number of Microlight and Paramotor aircraft which may be entered by a NAC and the maximum number a NAC may enter in any class. Each national team shall have a nominated team leader.

4.14.2 A change from one class to another is not permitted after the closing date unless the entry is restricted or the championship is not held in a class.

4.14.3 Each NAC shall select its own team leader, deputy team leader, competitors and crews, provided that they qualify under the rules. No more than 1 pilot or 1 crew is permitted for each competing aircraft. Ground crews may be of any nationality.

4.14.4 The team leader may be a competitor or crew but it is strongly advised that he/she should be additional to them. If not a competitor the team leader may be of any nationality. If a class is to be flown separately, a deputy team leader should be nominated for it.

4.14.5 NAC's may enter one extra all female team crew per class above the maximum number stated by the organizer in the local regulations.

4.14.6 NAC's may enter one extra disabled (wheel chair bound) team pilot in the PL1 class above the maximum number stated by the organizer in the local regulations.

4.15 TEAM LEADER RESPONSIBILITIES

4.15.1 The team leader is the liaison between the organisers and his team and is responsible for the proper conduct of his team members, for ensuring that competitors do not fly if ill or suffering from any disability which might endanger the safety of others and that they have read and understand the rules.

4.16 PILOT AND NAVIGATOR QUALIFICATIONS

4.16.1 A competing pilot shall be of a sufficient standard to meet the demands of an international championship and hold a valid pilot licence or certificate.

4.16.2 Each competing pilot and navigator shall hold a valid FAI sporting licence issued by his own NAC. A navigator shall have reached the age of 14 years.

4.17 AIRCRAFT AND ASSOCIATED EQUIPMENT

4.17.1 Aircraft and other equipment which are provided by the competitors must be of a performance and standard suitable for the event. An aircraft that does not comply with the Microlight or Paramotor aircraft definition (S10 1.3) may not fly in the competition.

4.17.2 Each competing aircraft must possess a valid certificate of airworthiness or permit to fly not excluding competition flying. This document must be issued or accepted by the country of origin of the aircraft, or the country entering the aircraft, or the country of the organisers.

4.17.3 All aircraft must be made available to the organisers during the period of registration for an acceptance check in the configuration in which they will be flown.

4.17.4 An aircraft shall fly throughout the championships as a single structural entity using the same set of components used on the first day. However, propellers may be changed to enhance performance providing that the weight limit of the aircraft is not exceeded, and that the certificate of airworthiness is not prejudiced.

4.17.5 An emergency parachute in Paramotors is not to be considered as a part of the structural entity.

4.17.6 The organizers have the right to inspect for airworthiness and if necessary, ground for safety reasons, any competing aircraft at any time during the championships.

4.17.7 Competing aircraft in classes AL, WL and GL shall have a still-air range of not less than 250 km. Classes WF, PF and PL shall have a still-air range of not less than 100 km.

4.17.8 A WF or PF must be foot launched for all tasks.

4.17.9 If there is no separate class for aircraft with electric engines there shall be no fuel limit for them in any task.

4.18 INSURANCE

4.18.1 Documentary proof of insurance as specified by the organiser on the entry form or in the local regulations shall be made available to the organisers before starting to fly from the competition site(s).

4.19 CONTEST NUMBERS

4.19.1 The organisers shall allocate numbers or letters to each competing aircraft which shall normally be displayed on the underside of the right wingtip with the top of the numbers or letters towards the leading edge. The same numbers or letters should also be displayed on the pilot's helmet. On Paramotors the number shall be placed centrally on the underside of the canopy, top towards the leading edge.

4.19.2 The size of the figures and the area on the wing to be kept clear for this purpose shall be not less than 0.5m tall. National registration letters or numbers shall not be obscured.

4.20 REGISTRATION

4.20.1 On arrival at the championships site each team leader and the team members shall report to the registration office to have their documents checked and to receive any supplementary regulations or information. The local regulations shall state the times of the opening and closing of the registration office.

4.20.2 After registration no changes of crew member or aircraft may be made.

4.20.3 Registration information may be available to team leaders on request until the start of flying on the first contest day.

4.21 BRIEFING

4.21.1 The organisers shall hold a briefing for team leaders and/or competitors as a minimum on each flying day at which full meteorological and operational information concerning the tasks shall be given. Task, weather, airspace information and any special requirements shall be in writing either on a large permanent display briefing boards or as printed handouts to team leaders, jury members and stewards.

4.21.2 Briefings shall be recorded by notes, tape recorder or similar. Recordings shall be kept intact for not less than 6 months.

4.21.3 Flight safety requirements given at briefing shall carry the status of regulations.

4.21.4 Briefing may be postponed from the set time in the event of bad weather and further briefings given. This information must be prominently displayed.

4.22 TEAM LEADERS' MEETINGS

4.22.1 Communication between the organisers and competitors is, in addition to daily briefing, normally through team leaders' meetings. These shall be held at the director's initiative but shall also be held within 18 hours if 5 or more team leaders request a meeting.

4.23 OPERATIONAL REGULATIONS

4.23.1 **Compliance with the law**. Each competitor is required to conform to the laws and to the rules of the air of the country in which the championship is held.

4.23.2 **Airworthiness**. Each aircraft shall be flown within the limitations of its certificate of airworthiness or permit to fly. Any manoeuvre hazardous to other competitors shall be avoided. Jettisonable ballast is prohibited on Paramotors.

4.23.3 **Preparation for flight**. Each aircraft shall be given a daily pre-flight check by its pilot and shall not be flown unless it is serviceable.

4.23.4 **Damage to a competing aircraft**. Any damage shall be reported to the organisers without delay and the aircraft may then be repaired. Any replacement parts must be replaced by an identical part, except that major parts such as a wing for a Paramotor may be replaced by a similar model or one of lesser performance.

Note. Change of major parts may incur a penalty.

4.23.5 **Replacing of an aircraft**. An aircraft may only be replaced (temporarily or permanently) if damage has resulted through no fault of the pilot. If permission is given to replace the aircraft it may be replaced only by an identical make and model or by one of similar performance and eligible to fly in the same class.

4.24 FLIGHT SAFETY

4.24.1 **Safety systems**. A protective helmet must be worn on all flights unless this restricts vision from within an enclosed cockpit canopy with supine seating. An emergency parachute is highly recommended, and in Paramotors is mandatory.

4.24.2 **Other safety systems**. Other safety systems may be detailed in the local regulations. These shall be complied with unless they invalidate the airworthiness certification of the aircraft.

4.24.3 **Fitness**. A pilot shall not fly unless he is fit. Any injury, drugs, or medication which might affect the pilot's performance in the air must be reported to the director before flying.

4.24.4 **Collision Avoidance**. Circuit and landing patterns shall be complied with and a proper look out kept at all times. An aircraft joining another in a thermal shall circle in the same direction as that established by the first regardless of height separation.

4.24.5 **Collision**. A competitor involved in a collision in the air must not continue the flight if the structural integrity of his aircraft is in doubt.

4.24.6 **Cloud flying**. Cloud flying is prohibited and aircraft shall not carry gyro instruments or other equipment permitting flight without visual reference to the ground. The organisers may include special instruments by type or name under this prohibition.

4.24.7 **Aerobatics**. Unauthorised aerobatics are prohibited.

4.24.8 Any infringement of any safety rule shall result in penalty.

4.25 TEST OR OTHER FLYING

4.25.1 No competitor shall take off during a competition day from the competition site without the permission of the director. This may be given for test flying except that if the task for that class has started the pilot must land and make a competition take-off on the task. Practising prior to a precision landing task is forbidden.

4.26 EXTERNAL AID TO COMPETITORS

4.26.1 The following limitations are so that, as far as possible, the contest shall be between individual competitors, neither helped nor controlled by external aids.

4.26.2 Any help in navigation or thermal location by any non-competing aircraft including competing aircraft not in the act of carrying out the task of their own class, is prohibited.

4.26.3 Pilots must be qualified for flight planning in navigation or economy tasks. Competition directors are encouraged to run some of the navigation or economy tasks in a way that pilots must prepare their flight plans individually.

4.27 ELECTRONIC EQUIPMENT

4.27.1 CIMA approved GNSS flight recorders and ELT's without voice transmission capability are permitted and may be carried. Sealed mobile phones, switched off, may be carried for use after landing or in an emergency. Only materials issued by the organizer, mathematical calculators without any capability for any data transfer, and clocks may be used for preflight preparation and flight control.

Unless otherwise briefed, then in the period between entering quarantine before flying a task and leaving quarantine after flying a task no other electronic devices with real or potential communication and/or navigation capabilities shall be available to, or accessed by the pilot or crew. Breaking of this rule may result in disqualification.

4.27.2 The director will establish a document-based method for sealing and unsealing that will enforce seal checking after each task.

4.28 CHAMPIONSHIP CLASSES

4.28.1 The championships shall be held in one or more of the championship classes (S10 1.5) as approved by CIMA.

4.28.2 If a championship is held in more than one class, each class shall be regarded as a championship in its own right and the organisers must, as far as possible, avoid interference of one class by another.

4.28.3 Each competing aircraft will be subject to inspection for compliance with class rules at any time during the championship.

4.29 CHAMPIONSHIP TASKS

4.29.1 On each flying day a task shall be set chosen from A4, unless prevented by the weather. A precision task may be combined with a cross-country task or set separately as specified at briefing. If possible, two tasks should be set on each day for each class.

4.29.2 The tasks to be used shall be chosen from the Task Catalogue defined by the Director, based on the Master Task Catalogue, S10 A4. The Task Catalogue shall be approved by CIMA and precisely set out in the local regulations together with the method of scoring.

4.29.3 Tasks shall, as far as practicable, conform to the following guidelines in standard championships:

For Microlight aircraft classes AL, WL WF and GL

A Tasks for flight planning, navigation, etc with no fuel limit: 55% of the total value of the tasks flown.

B Tasks for fuel economy, speed, duration, etc with limited fuel: 30% of the total value of the tasks flown.

C Precision tasks: 15% of the total value of the tasks flown.

For Paramotor aircraft classes PF and PL

A Navigation: 33% of the total value of the tasks flown.

B Economy: 33% of the total value of the tasks flown.

C Precision: 33% of the total value of the tasks flown.

4.29.4 In “Precision championships” for Paramotors 100% of the tasks will be precision tasks.

4.29.5 The task for each class may be different and a task may be set for one class only.

4.29.6 The director shall state at briefing the times of take-off, and the times at which any turn points or finish line closes and the time at which aircraft must land, as appropriate. If a start is delayed, given times for turn points or finish lines will be delayed a corresponding amount, unless specifically briefed to the contrary.

4.29.7 Where possible and practicable, the task director should try set an additional or alternative task at briefing for use, should the weather conditions change from those forecast at the time of the briefing.

4.30 START OF A TASK

4.30.1 The order in which competitors shall take-off shall be given at briefing or may be left free within an open window period. Take offs shall normally be made from the marked deck.

4.30.2 A competitor shall be permitted more than one start for a task if specified in the task description however each task may be flown only once. A failed take-off shall count as one of the permitted number of starts unless the cause was the fault of the organisers. In this case the director shall authorise a further start.

4.30.3 A competitor may return to the airfield within 5 minutes of take-off for safety reasons or in the event of a FR failure. In this case a further start may in principle be made without penalty but equally the competitor must not benefit in any way from restarting. Exceptions and penalties will be specified in the task description.

4.30.4 Pilots in Paramotors may have 3 attempts at take-off in tasks where the take-off order is given.

4.30.5 After take-offs have started the organisers may suspend flying if to continue is dangerous. If the period of suspension is sufficiently long to give an unfair chance to any competitor the director shall cancel the task. Once all competitors in a class have taken off, or had the opportunity to take off, the task may not be cancelled other than for reasons of force majeure.

4.31 FLYING THE TASK

4.31.1 Fuelling arrangements shall be given to competitors at first briefing.

4.31.2 A set course shall be flown in the direction specified at briefing.

4.31.3 Control at turn points shall be by FR.

4.31.4 A speed task, or speed section of a task, shall be timed from take-off or by a line on the ground using official observers, or by a timed touch and go, or from FR evidence as given at briefing.

4.31.5 Take-offs and landings by Microlights in all tasks shall be completed within a 100 x 25 m landing deck, or for the task “Short take off and landing over obstacle”, within a deck 150 m x 25 m. Aircraft not capable of taxiing unaided from the deck after landing score zero. Landing provisions in the case of an emergency shall be specified at briefing. Failure to comply with instructions regarding emergency shall incur a penalty.

Deck length shall be corrected for altitude at the rate of a 7% increase for every 300m of elevation, rounding the result to the nearest integer metre. The width of the deck may be decreased to be adjusted to the width of the existing runway (S10 4.31.5).

4.31.6 Precision landing tasks and their control shall be detailed in the local regulations.

4.32 OUTLANDINGS

4.32.1 Evidence of the landing place must be obtained from FR evidence. On return to base the pilot must go immediately to control with his evidence. Failure to follow this procedure without good reason may result in the pilot not being scored for the task, or charged for any rescue services which have been called out, or disqualification.

4.32.2 After landing, a Paraglider canopy must be folded to indicate that the pilot does not need help.

4.33 FLIGHT BOUNDARIES

4.33.1 Flights terminating beyond the boundaries of the organiser's country shall score only to the point where a straight line between the start point or last turn point and the landing place last cuts the boundary, unless permission is given to cross such boundaries in the local regulations.

4.33.2 The organisers shall specify in the local regulations or at briefing controlled airspace or other areas where flight by competing aircraft is prohibited or restricted. Such areas shall be precisely marked on competition maps.

4.34 SCORING

4.34.1 The scoring system to be used shall be approved by CIMA and attached to the local regulations.

4.34.2 Score sheets shall state the date when the task took place, and the date and time when the score sheet was issued, the task number, classes involved in the task, competitor names, country, competitor number and score.

4.34.3 Score sheets shall be marked Provisional, and Official, or if a protest is involved, Final. A provisional score sheet shall only become official after all complaints have been answered by the director. Scores shall not be altered when the provisional sheet is made official.

4.34.4 The time of issue is the moment when a score sheet is posted on the official score board and carries the time when this is done, together with the signature of the championship director. In the case of an electronic score publishing system, the director's signature won't be necessary as long as the publishing system is directly managed by the director and his scoring team.

4.34.5 The provisional score sheet must be posted within 6 hours after finishing the task. The official score sheet must be posted as soon as possible thereafter. In the case of the last task, the time limit is 2 hours after the posting of the provisional score sheet.

4.34.6 Overall scores will be posted as soon as the provisional scores for the second task are available.

4.34.7 Team scores will be posted as soon as the provisional scores for the first task are available.

4.34.8 Overall scores and team scores will be updated at least:

- When the first provisional scores for a new task are posted.
- When a task scoring goes official or final.
- Once a day if there are changes in provisional scores.

4.34.9 Overall scores will reflect the status of each individual task (provisional, official, final).

4.34.10 The overall results shall be computed from the sum of the task scores for each competitor, the winner having the highest total score in the class.

4.34.11 The team score shall be computed from the sum of the scores of the top three pilots of each country in each class in each task grouped together in:

- Classes AL1, AL2, WL1, and WL2
- Each valid Paramotor class which has a minimum of 8 pilots.

4.34.12 The task score for which a pilot was disqualified shall not count for team scoring. Other valid tasks flown by this pilot are not affected.

4.34.13 A score given to a competitor shall be expressed to the nearest whole number, 0.5 being rounded up.

4.34.14 All distances not obtained from FR's shall be calculated from the official map and rounded up to the next 0.5 km.

4.34.15 A pilot who did not fly scores zero and is indicated DNF or "Did Not Fly" on the score sheet. A pilot who is disqualified will be indicated DSQ or "Disqualified" on the score sheet.

4.34.16 Deduction of penalty points for a task shall be made after scoring is completed.

4.34.17 In Paramotors, if less than 50% of pilots in class start a task then after all penalties have been applied each pilot score for the task will be reduced on a pro-rata basis according to the following formula:

Pilot final task score = Ps*(MIN(1,(Ts/Tc)*2))

Where

Ps = Pilot task score after all penalties Etc. are applied.

Ts = Total started; total number of pilots in class who started the task *(ie properly, beyond 5 minute rule).*

Tc = Total class; total number of pilots in class.

4.34.18 If a pilot's score is for any reason negative, including penalties, his score for that task shall be taken as zero. Negative scores shall not be carried forward.

4.34.19 If a failure in FR flight analysis or scoring is discovered before the end of the championship and the failure is due to a technical error which emanates from the equipment being used for the FR flight analysis or scoring, this failure must be corrected regardless of time limits for complaints and protests in S10 and the local regulations.

4.34.20 The track logs used to score a task should be made available to all competitors as soon as possible.

4.35 COMPLAINTS

(Ref. GS, Chapter 5)

4.35.1 A competitor who is dissatisfied on any matter may, through his team leader, make a complaint in writing to the director.

4.35.2 Complaints must be presented not later than 6 hours after the respective provisional score sheet has been published, not counting the time between 22:00 and 07:00, except for the tasks of the last competition day, or for provisional score sheets published on or after the last competition day, when the time limit is 2 hours.

4.35.3 Complaints shall be made and dealt with without delay. A complaint that could affect a task result, must be dealt with and answered in writing before any official score sheet is issued. The complaint and its response must be published on the official notice board.

4.36 PROTESTS

(Ref. GS, Chapter 5)

4.36.1 If a competitor is dissatisfied with the decision about its complaint, the team leader may make a protest to the director in writing and accompanied by the protest fee. The fee is returnable if the protest is upheld or withdrawn before the start of the proceedings. A protest may be made only against a decision of the championship director.

4.36.2 A protest must be presented not later than 6 hours after the respective official score sheet has been published, except for the tasks of the last competition day, or for official score sheets published on or after the last competition day, when the time limit is 2 hours. The night time between 22:00 and 07:00 is never included.

4.36.3 The amount and currency of the protest fee shall be stated in the local regulations.

CHAPTER 5, Control & Measurement

CONTROL AND MEASUREMENT OF FLIGHTS

Sporting Code General Section References:

Chapter 4 - Observers, Officials

Chapter 7 - Measurement Requirements.

5.1 CONTROL OF FLIGHTS

Control of flights shall be effected by official observers (GS 4.2).

5.1.2 For Records, evidence of the landing place shall include signatures and addresses of at least two independent witnesses, or flight recorder evidence. (S10 A6).

5.1.3 In Championships, verification of outlanding places shall be made by flight recorder evidence.

5.1.4 In championship precision tasks, any conclusive video evidence may be used to verify a pilot's performance.

5.2 MEASUREMENT

5.2.1 **Weighing equipment.** The scales used to establish the weight of an aircraft entering a competition, shall have an accuracy of not less than 0,2% when weighing up to 472.5 kg. The calibration of the scales shall have taken place within a year from the date of the weighing. All scales used shall carry a certificate indicating weighing accuracy and the time of the latest calibration of the scales. For records it is sufficient that the weighing rules of the airworthiness certifying body, of the country where the aircraft is registered, are followed.

5.2.2 Weighing. When an aircraft is up on the scales for weighing, the reading of the scales give the weight of the aircraft. No deduction of the figures is allowed.

5.2.3 **Distance.** All distances shall be measured by determining the geodesic between each point, based on the WGS84 ellipsoidal world model (GS 7.3.1.1).

5.2.4 **Map.** In championships the scale of the official map will be stated in the local regulations.

5.2.5 **Speed.** The average speed of a flight is the total course distance divided by the elapsed time from Departure Point to Finish Point.

5.2.6 **Standard units of measurement.** The unit system used in championships for any purpose (eg Task definition, pilot estimations, etc.) shall be as follows:

- Time: UTC adjusted to local time - HH:MM:SS
- Time interval: hours, minutes and seconds - HH:MM:SS
- Date: Day, Month, Year - DD:MM:YY
- Distance: Kilometres to two decimal places, meters and centimetres.
- Speed: Kilometres per hour to two decimal places.
- Altitude and Height: Metres and centimetres, or feet.
- Vertical Speed: meters per second or feet per minute.
- Heading: Degrees and decimal degrees geographic (measured on the official map) - DDD[ddd]
- Direction: Degrees and decimal degrees true - DDD[ddd]
- Latitude: Degrees, minutes and decimal minutes with N,S designators - DDMMmmmN
- Longitude: Degrees, minutes and decimal minutes with E,W designators - DDDMMmmmE
- Pressure: Millibars or Hectopascal to two decimal places.
- Weight: Kilograms to two decimal places and grams.
- Volume: Litres to two decimal places.
- Temperature: Degrees Celsius.

Any other unit shall conform to FAI GS 7, the ICAO units system and the International Metric System in this order of relevance.

5.2.7 **Exceptional units of measurement**.

Timed precision tasks in championships shall be rounded down to an accuracy of 1/10th of a second if manual timing is used, or rounded down to an accuracy of 1/100th of a second if an approved electronic timing system is used.

5.3 WEIGHT

5.3.1 The empty weight of the aircraft is its weight ready to fly except for the pilot, fuel and supplementary items.

5.3.2 The take-off weight is the weight of the aircraft ready to fly including pilot, fuel and any supplementary equipment.

5.3.3 Items included in the empty weight:

- Flight and engine control instruments and associated equipment including batteries, essential to their operation;
- Fixed ballast;
- Canopies, fairings and pilot harness.

5.3.4 Supplementary items are items not fixed to the aircraft such as:

- Cushions, maps, hand held computers, food and drink, extra clothing;
- Parachute and its activating devices;
- Barograph or flight recorder;
- Reserve fuel, lubricants and cooling liquids which are not connected to the motor and which cannot be connected in flight.

5.4 FUEL

5.4.1 The maximum amount of fuel, which may be carried for records, is stated in S10 Chapter 3. Fuel shall be measured by mass, or volume. For Championships, the maximum amount of fuel permitted for limited fuel consumption tasks is 15 kg for aircraft flown solo and 22 kg for aircraft flown with two people, or the equivalent in litres, although lesser amounts may be stated at briefing.

5.4.2 The permitted amount of fuel shall be put into the aircraft tank when it is empty.

5.4.3 An official observer must control fuelling. In championships this may also be done by a competitor or team leader from a rival team.

5.4.4 An official observer must seal the tank. In championships, sealing of tanks is optional if aircraft are moved under supervision of officials directly to the take off place.

5.5 BAROGRAPHS AND FLIGHT RECORDERS

5.5.1 A serviceable barograph or FR (S10 A6) must be used for record flights. They are not required for a record claim based on a task score in a world or continental championship.

5.5.2 The barogram or print-out must show that no intermediate landing was made and must generally substantiate the flight.

5.5.3 It must not be possible to adjust the recording function of the barograph or FR without this being apparent to the observer.

5.5.4 The barograph or FR must be sealed and unsealed only by an official observer. The print-out must be observed.

5.5.5 Where no height or altitude performance is involved no barograph calibration is required.

5.5.6 Where height or altitude performance is involved, an atmospheric altitude calibration certificate for the barograph or FR is required. It must be dated within the period 24 months prior to the flight to 2 months after the flight and show corrections to the ISA standard atmosphere across the full range of altitude relevant to the performance.

5.6 START AND FINISH GATES

5.6.1 Start and finish lines are gates of maximum 1 km in width and of unlimited height. For championships any dimension or orientation shall be detailed in the local regulations or given at briefing.

5.7 GNSS FLIGHT RECORDERS IN CHAMPIONSHIPS

5.7.1 Only CIMA approved FR's may be used and they must be operated in strict accordance with their approval documents. (S10 A6)

5.7.2 The status of FR evidence relative to other forms of evidence (eg. observers) must be detailed in the local regulations.

5.7.3 The scoring sector size shall be stated in the local regulations. At the scale of the official map the minimum size of scoring sectors shall be 1mm radius for circular sectors and 2mm width for gates.

Annex 1 to SECTION 10

CONFORMATION REQUIREMENTS for MICROLIGHTS

1 AIRCRAFT MINIMUM SPEED

1.1 Aircraft which were foot-launched on a flight, and all Paramotors, are deemed to automatically meet the minimum speed requirement. All other aircraft shall be demonstrated to comply with the minimum speed definition (S10 1.3.1) by one of the following methods:

1.2 The national airworthiness system of the nation in which the aircraft is registered requires the aircraft to have been demonstrated to have a minimum level speed, corrected to standard conditions, at MTOW, equal to or less than that required in S10 1.3.1

1.3 The manufacturer of the aircraft provides a Declaration of Minimum Flight Speed stating the aircraft has a minimum level speed, corrected to standard conditions, at MTOW, equal to or less than that required in S10 1.3.1

1.4 The aircraft is shown to have a minimum level speed at MTOW, equal to or less than that required in S10 1.3.1 by a flight demonstration over a 500 m course.

1.5 The aircraft must be flown level at a safe height in opposite directions. The speed will be measured during each run by the use of a FR and the average of the two speeds shall be calculated. The component of the wind perpendicular to the course must not exceed 10 km/h. The measured speed will be corrected for air density (15℃, 1013.2mb, AMSL).

Note: Pilots wishing to attempt records or compete in championships will need one of these proofs.

2 CORRECTION TO STANDARD CONDITIONS

2.1 Correction of speed to standard conditions is calculated as follows:

$$\text{Speed in Km/h normalized to ISA conditions} = 3.6 \times \frac{D_0}{\left(\frac{T_1}{0.5331359 \sqrt{\frac{P_1}{t_1 + 273}}} \right)}$$

Where

D_0 = Leg length in metres.

T1 = Actual leg time in seconds.

P1 = Ambient pressure at test altitude in mb.

t1 = Ambient temperature at test altitude in degrees Celsius.

MICROLIGHT PERFORMANCE DECLARATION

NATIONALITY OF MANUFACTURER: .....

NAME OF MANUFACTURER: .....

ADDRESS OF MANUFACTURER: .....

.....

.....

.....

MICROLIGHT OR PARAMOTOR TYPE: .....

MODEL OR SERIES Nº: .....

MANUFACTURER'S DECLARATION OF MINIMUM FLIGHT-SPEED CHARACTERISTICS OF THE MICROLIGHT

The above type of aircraft, of our design and manufacture, has been flight tested and has demonstrated the following minimum flight-speed characteristics:

Minimum Flying Speed: ..... Km/h

MTOW: ..... Kg

Air temperature ..... ℃

Ambient pressure .....Mb

Altitude: ..... m

Signed: .....

Name (in print): .....

Position in above-named manufacturing Organisation: .....

Date: .....

Checked and accepted
on behalf of CIMA by: .....

Name (in print): .....

Date: .....

Annex 2 to SECTION 10

GUIDE FOR CHAMPIONSHIP ORGANISERS - CHECKLISTS FOR BID PREPARATION

Note: Where it is used in the bid process, the final arbitrator of the word 'significant' shall be CIMA. If in doubt, the bidder should include the information or it may be required to be appended to the bid at short notice.

1 THE PRELIMINARY BID

1.1 The purpose of the preliminary bid is for NACs to make CIMA and FAI aware that they will be making a firm bid to host a championship at the appropriate time. Preliminary bids are made at the CIMA plenary, advance notification is desirable but not required. The CIMA plenary may choose to select a preliminary bid as the sole contender for a firm bid or leave it open to competition between other firm bids.

1.2 A preliminary bid should be made to CIMA 3 or more years ahead and contain as a minimum the following information:

1.2.1 Title of championship and proposed classes.

1.2.2 Assurance that the event will be open to any FAI Member.

1.2.3 Proposed dates: year and time of year.

1.2.4 Location or choice of locations with general terrain.

1.2.5 Assurance there will be no significant problems with suitable maps or airspace.

1.2.6 Assurance there will be enough money or sponsorship to run the event.

1.2.7 Indication of entry fees and costs to competitors generally.

1.2.8 Indication of the style of the event (eg, camping on-site, staying in hotels, a mobile championships).

1.3 The CIMA Bureau must be informed immediately a NAC realizes it will be unable to carry on with a preliminary bid.

2. THE FIRM BID

2.1 The purpose of firm bids is so the CIMA plenary can select a single contender to host a championship and issue a formal sanction to the host NAC. A firm bid is considered a commitment to organise the championship properly and to be ready on time.

2.2 A firm and detailed bid should follow as near as possible to two years ahead. Copies of the firm bid must be sent to the CIMA bureau in advance of the plenary meeting in time for inclusion with the agenda.

2.3 The firm bid must contain as a minimum the following information but the bidder should have considered all the items in the Checklist of items for CIMA *(available at www.fai.org/microlight)* and must raise any significant issues in the bid.

2.3.1 An outline of all the proposed significant differences from the Model local regulations (A3) and task catalogue (A4).

2.3.2 Outline of the conditions of entry: Entry fee, permitted number of competitors in each team in each class, confirmation the event will be open to any FAI member.

2.3.3 Outline of the style of the event (eg, camping on-site, staying in hotels, a mobile championships).

2.3.4 Proposed dates: year and time of year.

2.3.5 Proposed airfield(s) with an outline of the Suitability and availability of buildings and facilities.

2.3.6 Outline of significant airspace limitations over expected task area and national low flying rules.

2.3.7 Sample of official maps to be used by competitors.

2.3.8 Outline of task area. Suitability for outlandings.

2.3.9 Weather. Expected wind, temperatures, rainfall etc. Provision of forecasts during championships. On site meteorologist?

2.3.10 Overview of proposed Medical services and rescue arrangements. Availability of doctor, ambulance, helicopter. Distance to hospital. On site First Aid.

2.3.11 Overview of the local availability of insurances for competitors and public liability for the organizer.

2.3.12 Overview of airworthiness requirements; any special arrangements, requirements or charges for foreign registered aircraft or foreign licensed pilots.

2.3.13 Confirmation there will be enough money or sponsorship to run the event.

2.3.14 Overview of championships HQ. Description of building and location. Briefing room, offices for admin, scoring, Jury etc. Office equipment (telephones, TV video, PCs, copiers, email, Internet access etc.)

2.3.15 Overview of local facilities. Hotels, campsites, restaurants, shops, workshops, garages, liaison with local tourist board.

2.3.16 Names of key officials, at a minimum the overall organizer and the competition director with contact details.

2.3.17 Overview of the availability, number and experience of administrative, scoring and marshalling staff.

2.3.18 Overview of accommodation arrangements for staff and helpers, including International Officials.

2.3.19 Time scale. Preparation schedule with completion dates.

2.4 The CIMA bureau must be informed immediately a NAC makes significant changes to any items it presented in a successful firm bid.

3. THE FINAL PRESENTATION

3.1 The purpose of the final presentation is so the CIMA plenary can be fully informed in detail of progress and planning in the last few months before the championship when most of the work will take place. It is within the remit of the CIMA plenary to withdraw a sanction if there is evidence to suggest the championships will not be a success.

3.2 The final presentation shall be made at the CIMA plenary meeting immediately preceding the championships. A copy must be sent to the CIMA Bureau in time for inclusion with the agenda.

3.3 The final presentation must contain as a minimum the information presented in the firm bid but in detail rather than overview or outline form, plus:

3.3.1 Confirmation the organizer agreement is signed and has been returned to FAI secretariat.

3.3.2 All additions, alterations or deletions to the model local regulations in S10 A3 and task catalogue S10 A4 must be listed separately. A detailed explanation of significant differences together with the principles and reasoning must be included.

3.3.3 Confirmation that all items in the Checklist of items for CIMA championships *(available at www.fai.org/microlight)* have been considered and that significant issues are included in the presentation.

3.3.4 Exact dates: practice and competition.

3.3.5 Airfield: Details of the aircraft parking and flying areas, the buildings and facilities. Briefing room, offices for admin & scoring, office equipment (telephones, PCs, copiers, email), wireless internet access, jury room, hangarage, equipment storage, team tents, camping area, toilets, washing facilities, security, Etc. Large scale maps or diagrams to be provided.

3.3.6 Requirements and special arrangements for personnel and equipment to enter the country (letters of invitation, customs), and depart after the championship.

3.3.7 List of key personnel with contact information: Organizer, competition director, deputy director, chief marshal,

3.3.8 Names of candidate stewards.

3.4 If the CIMA plenary endorses the championship it shall appoint a championship monitor, jury president and two jury members.

3.5 The CIMA approved local regulations and entry form shall be sent to NACs not less than 6 months before the event. (S10 4.8.1)

4. CHAMPIONSHIP STAFF STRUCTURE

4.1 To have any chance of success, a championship organisation must have sufficient staff/officials in place in time to carry out the large amount of essential work. This means at least 6 months before competitors arrive. Staff/officials should be given their own work and responsibilities in writing by the director. They should preferably find their own helpers according to their needs.

4.2 General manager

Carries overall responsibility for the event on behalf of his/her NAC and FAI to assemble and manage the team which will plan and deliver a successful championships on time and within budget.

4.3 Competition director

Has to be involved in planning and layout of the championship site, planning the tasks to be flown and making sure the overall preparations for the flying competition are progressing to schedule. Once the championships starts he is responsible for the actual running of the competition, including briefing pilots and officials, making sure the tasks are run correctly to the rules and are scored accurately, and dealing with complaints and protests.

4.4 Deputy Competition director

Must be able to take over any work or responsibility at short notice in support of the competition director. He should have some special responsibilities, such as arranging the opening and closing ceremonies, organising jury meetings etc.

4.5 Chief Marshal

Responsible for airfield layout, decks and markings, task arrangements, time keepers, video operators, assistant marshals, windsocks, compliance by competitors with flying regulations etc., etc. Liaison with meteorologist, chief scorer, FR data analyst, medical services and airfield manager.

4.6 Chief scorer

Responsible for ensuring the data needed to arrive at a score is collected, analysed and collated accurately, and quickly published.

4.7 Administration Manager

Responsible for processing all paperwork generated by the championships. This includes registration and collection of entry fees from competitors, team leaders and assistants, checking entry paperwork and FAI licences, official entry lists, lists of officials, ID tags, organisation of notice boards, distribution of paperwork to teams, jury and stewards, lost and found, office equipment (PCs, copiers, fax, telephones and office supplies generally), liaison with Treasurer/Accountant and NAC. etc.

4.8 Other Key Officials

A specialist key official is needed to take charge of the following departments:

- The airfield and ground services
- Airfield equipment
- Computer network, server, intranet and internet reliability and functionality.
- Accounts
- Public relations and publicity
- Safety Officer

However the work is divided up, the key officials' responsibilities have to be covered. They include:

4.8.1 Airfield Manager

The work and responsibilities will depend on whether or not there is an existing airfield management structure in operation but none the less is responsible for liaison between the championship organizer and the airfield operator and with police and local authorities. He will, need to liaise on matters such as hangar and workshop space, camp sites and car parks.

4.8.2 Equipment manager

Responsible for ensuring all the hardware required to run the championships is prepared, available and in place when required. (notice boards, tables and chairs, scales, white line machines, slalom poles, electronic timing systems, landing accuracy video cameras etc). Liaises with the chief marshal and the airfield manager.

4.8.3 P R & Publicity Manager

Responsible for presentation of the events to the public and aviation press, to the competitors and visiting VIPs. Issue of invitations, social arrangements, flags, anthems, public face of opening ceremony and prize-giving, programme brochure, mementoes. Liaison with local tourist board, assistance to visiting reporters. Liaison with Championship director over arrangements.

4.8.4 Safety Officer

Responsible for the security of the facilities and for the safety of all ground and flight operations. Responsible for preparing a detailed risk analysis before the championships, Liaison with the Airfield Manager in matters such as airfield security, public access and control, signposts and safety notices and with the Competition director and Chief Marshal in matters such as aircraft movement around the airfield, deck operations, and everything else concerning the safety of competitors, team members, officials or spectators.

4.9 Conclusion:

Circumstances may dictate different arrangements from the above. The essential points are that the preparatory work is always greater than expected and failure to get a championships ready on time is the most common reason for a badly run or failed championship.

5. INFORMATION DOCUMENTS TO BE PROVIDED DURING THE EVENT

5.1 CONFIRMED ENTRY LIST and LIST OF TEAM LEADERS

5.1.1 To contain:

- Competitor(s) name
- Nationality abbreviation
- Competition number
- Type of aircraft, wing and engine
- Class entered

5.1.2 To be given to team leaders, jury members and stewards within 24 hours of close of registration, together with list of team leaders.

5.2 SCORE SHEETS

5.2.1 Must satisfy all the requirements of S10 4.34 plus:

- Heading with CHAMPIONSHIP, TASK details CLASS, TASK NUMBER and time and date when the score sheet was issued.
- Complaints deadline. (taking into account the 22:00 – 07:00 complaints curfew).
- Scores to be given in descending order in all score sheets.

5.2.2 When a task includes navigation, the director's task map or electronic specification should be published and pictures of turnpoints, ground markers and photos to be identified etc. should be included.

5.3 DAILY BRIEFING SHEET

5.3.1 **TASK**: To include:

- Name, date and reference number (if any) of the Task.
- Task description and details.
- Take-off window, control point, closing times, etc.
- Last landing time.
- Special instructions, penalties, etc.

5.3.2 **WEATHER**: To include as much relevant information as can be provided, with information on updates.

5.3.3 **AIRSPACE RESTRICTIONS:** This sheet is required only for special or complicated restrictions or prohibitions, and should include map or diagram. Any STANDING airspace restrictions should be displayed throughout the event.

5.3.4 Briefing sheets to be available to Team Leaders Jury Members and Stewards, as a minimum, by start of Briefing.

6. DOCUMENTS AND FORMS

6.1 All need to be prepared or obtained well ahead of the event. There are too many other matters to attend to in the last few preparatory weeks.

6.2 REGISTRATION FORMS

To check that all items as required in the model Local Regulations AN3 are present and valid for each competitor.

6.3 IDENTITY TAGS FOR COMPETITORS AND OFFICIALS

6.3.1 These should be of different colour for each function. Tags should contain name, nationality and function (Steward, Marshall, director, Visitor, Press etc;). Their attachment should be good enough to last through the competition period.

6.3.2 A printed request in the local language requesting help for competitors may be useful, including telephone number.

6.4 MAPS

6.4.1 All pilots must be supplied with air maps of between 1:100,000 and 1:250,000 scale (Microlights) or between 1:50,000 and 1:100,000 scale (Paramotors) to cover the whole task area. Jury Members and Stewards need copies of the same maps. A wall map of the same scale should be on permanent display.

6.4.2 The organisers should have larger scale maps for use in locating pilots who have landed out.

6.4.3 A glossary in English including frequent terms found on the official map is highly recommended.

6.5 TIME SHEETS

6.5.1 The following are required as a minimum:

- Take-off order/time sheets.
- Finish/landing time sheets.
- Pilot flight report forms.
- FR flight analysis assessment forms.

6.5.2 All these forms must have space for date and compiler's name. Start and finish forms are easier to use if compiler writes the competition number and time in order of appearance of the aircraft instead of searching a pre-printed list to find the correct competition number.

6.5.3 Officials compiling time sheets must have clocks or watches corrected to the official time clock.

6.5.4 Timekeepers should be equipped with good clipboards and pens, chair and weather protection.

7 REPORTING

7.1 The officially accepted entry list and results of a first category event shall be sent electronically to the FAI secretariat if possible before the prize-giving and in any case within 24 hours of the end of the event. (GS 3.16.2.1)

7.2 The results of any FAI air sport event shall be given in writing to the host NAC, all competitors and the NACs they represent and for first category events to the FAI secretariat without delay. (GS 3.16.2.2)

7.3 A final report giving results of the championships, with note of any protests or problems must be sent to FAI secretariat, the organiser's NAC and the CIMA president within 48 hours of the end of the event.

Annex 5 to SECTION 10

NOTES FOR DIRECTORS, INTERNATIONAL OFFICIALS AND OFFICIAL OBSERVERS

1. THE CHAMPIONSHIP DIRECTOR

The success or failure of an international championship depends on the quality of its competition director. A good director will keep a championship together even with insufficient helpers and poor weather, but an inadequate director can ruin the whole event even when supported by good staff and fine weather.

1.1 SELECTION OF A DIRECTOR

1.1.1 The director of a championship is selected by the NAC (or delegated national association) organising the event with the nomination approved by CIMA.

1.1.2 If the director cannot be named at the time of making a preliminary bid, it is essential that he should be in position at least one year ahead of the event. He must have enough time to look after all organisational aspects of the preparation, but may well have to make adjustments to his own life or work. This is often forgotten. Any financial and material support arrangements between the NAC and the director should be finalised before the director is expected to start work.

1.1.3 Sometimes confusion is caused by having more than one person in the organisation called director. The administration chief, for example, could be called manager.

1.1.4 It should not need saying that the director must have a wide experience of the sport, including having considerable knowledge of its technicalities, operation and needs. It is not enough for the director ,just to be an excellent pilot.

1.1.5 The director must want to do the job, be prepared for an immense amount of hard work, and have the health and stamina to complete it. Wanting to do the job means having affection for the sport and respect for the people who do it. This may seem obvious but in a recent championships the director considered himself superior to the competitors and to the FAI rules and in another the director made it known that he had no liking for the type of flying or the people involved. Both events ended with frustration and unhappiness.

1.2 WORK OF A DIRECTOR

1.2.1 The responsibility and work of a director starts with his appointment and continues through the whole preparatory period, followed by 2-3 weeks of 24 hour a day responsibility - though hopefully not work. There will also be a clearing up period at the end.

1.2.2 If the championship is to succeed all its departments must complement each other and be efficiently run. This will involve many people in a big event so the initial planning has to be well thought through. This is the first job of the director and includes:

a) Layout of the flying area, location of administration and reception offices, accommodation, car parks, social areas, workshops, stores etc so that they conveniently relate to each other. The championship site should be considered as a working village.

b) Deciding how work will be divided, into what departments, and deciding who will be in charge of each. For example, airfield marshals, observers and timekeepers, scorers, administration including production of score sheets and briefing notes as well as normal office work, technical officials, accountants, medical and SAR services, PR with local authorities and residents and the press, restaurant, bar, and social arrangements etc as required (S10 A2).

1.2.3 It is important for the director to have a small and secluded personal office. It must be possible to have private talks with members of staff and VIPs etc, as well as having somewhere to keep spare clothes, cameras, etc.

1.3 DELEGATION

1.3.1 It is absolutely essential that the director is willing and able to delegate. This means deciding on the best officials for the jobs and giving them responsibility. Officials and their helpers will also have to work hard and their reward is a successful and happy championship. A director who tries to do all the work himself or who interferes unnecessarily prevents this. During the championship the director should have time not only to keep a supervisory eye on the whole operation but to talk to competitors and interested visitors.

1.3.2 For the whole championship period, plus any official practice days, the director is on duty and will probably find each day longer than expected. For example, early morning task setting and weather assessment, attending evening jury meetings or helping sort out scoring computer breakdown at midnight. If he does not organise himself properly, he will, and many directors have, become burnt out before the finish. it may seem simplistic but self organisation is about getting regular meals and enough sleep. A director who walks about eating a sandwich in the afternoon because he missed breakfast and lunch, or who falls asleep on the scoring office floor at 2 am does no service to himself or the competition. The director becomes a zombie and the organisation risks falling apart. It has happened.

1.4 THE DEPUTY DIRECTOR

1.4.1 Any wise director will insist on having, and using, a deputy director. This person must be capable and available though need not be on duty to the same extent as the director. The deputy director is not only an insurance, should the director fall ill or have a personal emergency, but it is an extension of his eyes and ears, as well as looking after non-routine matters as the unexpected arrival of VIPs, arranging jury meeting paperwork, and ensuring that the prise giving takes place without problems.

2. THE INTERNATIONAL JURY

2.1 JURY OBJECTIVES

2.1.1 To apply the rules of the FAI Sporting Code General Section, Section 10 and the Local Regulations and come to a decision based on these rules as they are written. The "spirit" of the rules and of "sportsmanship" should not be considered if they conflict with the written rules and their intention.

2.2 PROCEDURE

2.2.1 The Jury should accept a protest, which must be in writing, only via the director or deputy director. The protest must be given to the jury president although another jury member may accept it on his behalf.

Remember that protests are made against a decision of the director, so if he has not yet made one there are no grounds yet for a protest.

2.2.2 Check with the director that the protest was made within the permitted time limit, and that the director has received and is holding the fee.

2.2.3 Read the protest carefully to ensure that it:

A) states the reason for the protest, and

B) states what the protester wants from the result.

2.2.4 If it is not clear what the protest is about, return it via the director to the protester asking for clarification. If necessary give extra protest time (e.g.: 1 hour) for the protest to be rewritten. It is not possible to deal effectively with a protest which is just a general grumble against the organisers.

2.2.5 On accepting a protest the 3 jury members should:

A) Read it carefully,

B) Decide what rules are involved and read all of them carefully,

C) Agree the best way to deal with the protest.

This may involve interviewing witnesses, obtaining evidence from the director, and/or studying papers, photographs and FR evidence. Since the competition has to continue while this is going on it may be sensible to see people separately rather than hold a formal "court" involving several key officials at the same time. However, it may be essential to see the director and protester together and hear their evidence directly.

2.2.6 When the 3 jury members are agreed on how they want to handle the protest, they should arrange with the director for a meeting with the officials and witnesses they wish to see.

If the Jury decides to hold a formal court, seats should be arranged for the director to sit to one side and the protester to the other. Both should be allowed to bring an interpreter, or an expert witness of their own choosing to answer questions. The jury may itself require the presence of other officials, witnesses or papers.

There is no reason why the stewards should not be present as observers, used as information gatherers, or appear as witnesses.

2.2.7 When all the necessary evidence has been obtained the jury may either announce their decision, or end the meeting and on their own further consider the evidence and come to a decision. The jury decision shall be put in writing and signed by all 3 members. Copies shall be made for the 3 jury members, the director, the protester, the notice board, and for the files.

If the protest is from the same country as one of the jury members it is usual for this member to abstain from any vote, and for this to be noted on the protest result.

2.2.8 The decision of the jury is final and applies for the remainder of the competition. If the NAC of the protester is unsatisfied, it may appeal to FAI, but this can be a long process. If the jury understands and interprets the rules properly and makes the correct decision it is extremely unlikely that the NAC will enter an appeal or that FAI would accept it.

2.3 PENALTIES

2.3.1 Unless a specific penalty for an offence is stated in the Local Regulations, the jury should study the penalty guidelines in the General Section and apply these appropriately without fear or favour. However, occasionally a penalty may be too severe for the circumstances. To take an example: it is normal that if a pilot does not cross a finish line he will not receive speed points. But if he crossed with sufficient height

and speed but just on or beyond the end of the line, because several other aircraft were crossing at the same time and he believed there was risk of collision, taking away all speed points is very harsh although the infringement took place.

2.3.2 In such a case the jury could look into any ameliorating circumstances very carefully. Should they find, for example, that the only reason for crossing just beyond the end of the line was because the collision risk was real, it would not be unreasonable to allow the speed points and consider the infringement as a technical offence. The penalty could be in accordance with the guidelines in the General section. The pilot would still lose points but fewer than the loss of all speed points. The protest would still be lost because the infringement had taken place and the protest fee would be forfeited, but the penalty would be more reasonable.

2.4 DISQUALIFICATION

2.4.1 The General Section guidelines are clear enough, but the Jury may have to decide whether disqualification should be for the rest of the competition or for only the day of the offence and/or the following day. (If, e.g., the pilot for any reason scored few or no points on the day of the infringement.)

2.5 OTHER WORK OF THE JURY

2.5.1 The jury has a commitment to ensure that the director obeys the rules of the FAI and of the competition. If the jury finds that this is not the case, they are empowered, after warnings, to actually suspend or stop the event.

2.5.2 Detailed instructions of the Jury work and the Jury Presidents checklist is to be found in the FAI document "International Jury Members Hand Book."

FINALLY, IT IS SENSIBLE FOR AT LEAST ONE JURY MEMBER TO CARRY ALL THE RULES, THE CONTEST AREA MAP, LIST OF COMPETITORS AND THE LATEST SCORE SHEETS AT ALL TIMES.

3 STEWARDS

Appointment & Qualifications: S10 4.13

3.1 THE STEWARDS OBJECTIVES

3.1.1 Stewards are advisers to the event director. They watch over the conduct of the event and report any unfairness or infringement of the Rules and Regulations or behaviour prejudicial to the safety of other competitors or the public or in any way harmful to the sport. They assemble information and facts concerning matters to be considered by the International Jury. (GS 4.3.4.2)

3.1.2 As stewards should be able to easily communicate with the organizers and should be experienced in competing themselves, preferably in the types of aircraft being flown in the championships, then they are expected to provide independent advice to the organizers on 'normal practice' in the way tasks are designed and run and the interpretation of the rules, regulations and penalties.

3.2 THE STEWARDS' ROLE

To be effective a steward must:

1) Be aware that he has no formal power or authority to make decisions. His role is one of providing advice and/or SUPPORT to the director, the International Jury, the Team Leaders AND the competitors.

2) Possess a thorough understanding of the FAI Sporting Code General Section, Section 10 and the local regulations and have these documents available at all times during the event. As he must advise the director on rule interpretation, it is preferable that he has been present at the CIMA meeting where the local regulations were approved. It is helpful if he has had experience in the interpretation of complex documents.

3) Be able to anticipate, and recognise in advance issues that may cause competitors to consider that they have not been treated fairly by the organiser. The steward should ensure that the information given to team leaders and competitors is unambiguous. He must be aware of difficulties created by language. He should ask himself "Was that briefing clear? How could the information be misinterpreted? Was the briefing consistent with the regulations? Were any changes, from what was required yesterday, clearly defined as different? Were all the items that were supposed to be covered, mentioned?" He should back up his judgement in these matters by enquiring of team leaders and/or competitors of their understanding. In addressing such issues he must not reduce the credibility of the director.

4) Be prudent in answering questions from team leaders and competitors - His answers must be consistent with the rules and regulations and what the director has stated, or will state at briefings. If the steward is unclear in any detail, he MUST confer with the director.

5) Be able to establish a good working relationship with the organisers, the team leaders and competitors. By recognising potential problems in advance he should take steps to avoid them

becoming issues. Many problems arise from a breakdown in communications. He should be aware of the strengths and weaknesses of the director and his organisation.

6) Be experienced in sporting events at the highest level and the stress under which all involved operate. He must be sensitive to the human aspects.

7) Not take it for granted that all things are happening in accordance with the rules and/or the way they appear on the surface. He should be looking at the systems the organiser has in place to make sure that they are robust. "Are the scores being calculated correctly and is all the required information being presented in daily score sheets? How is FR data being checked? What security is in place to ensure that FR data cannot be tampered with? How are any official timepieces synchronised? What systems are in place to make sure a pilot's timings are always recorded?" These and a multitude of other questions should be asked continuously.

8) Be visible, watchful and observant. Take notes of incidents that may be unsafe or cause for complaint or protest. Record time of briefings, launch opening, complaints or protests being submitted. Be able to provide objective, accurate and factual evidence.

3.3 AFTER A CHAMPIONSHIP

3.3.1 For first category events, the FAI secretariat shall be advised by the president of the jury, within a maximum of eight days of the end of the event, of the number of protests made, together with the numbers of protests withdrawn, upheld or failed, and the respective jury decisions. (GS 3.16.2.3)

3.3.2 The stewards should review the event in writing, looking in particular at:

- Problems that arose;
- Situations that could have developed; and
- The successes of organiser and/or the organisation.

3.3.3 The jury and stewards should propose to CIMA modifications to the sporting code (or other documentation) so that for future championships problems are avoided (minimised), and successes repeated.

4. OFFICIAL OBSERVERS

4.1. AUTHORITY

4.1.1 Official Observers are appointed by a NAC (or its delegated National Association). They are empowered to control and certificate flights for FAI records, badges, championships and competitions in their own country and in another country if its NAC gives permission.

4.2. REGISTER

4.2.1 The NAC or its delegated national association is responsible for keeping a register of its Official Observers, for providing briefing or instruction and ensuring that access to changes to the Sporting Code is available to them. The national register should be reviewed and updated at intervals of not more than 5 years.

4.3. QUALIFICATIONS

4.3.1 Official Observers must know the Sporting Code General Section and Section 10 and have the integrity to control and certificate flights without favour.

4.3.2 Official Observers may not act as such for any flight in which they are pilot or passenger or have a personal, financial or business interest. (Owning or part owning the aircraft is not of itself considered financial interest.). If in doubt the countersignature of an independent Official Observer should be obtained.

4.4. CONTROL

4.4.1 Control means observing of take off, departure, finish and landing; sealing, unsealing and download and/or print-out of barograph and FR data, taking photos and videos and generally collecting enough evidence as may be required to substantiate a flight, and the signing of all certificates verifying the authenticity of that evidence.

4.5. CERTIFICATION

4.5.1 Official Observers may only certificate an event at which they were present, except that they may certificate an outlanding if they arrive soon afterwards and there is no doubt about the position of the landing.

4.5.2 Air Traffic Controllers on duty are considered Official Observers for observation of take off, start and finish lines, turn and control points and landing.

4.5.3 Championship officials are considered as Official Observers for a record or badge flight made during the event and for which the documentation is data used for scoring a valid task.

4.5.4 Independent witnesses may certificate an outlanding in the absence of an Official Observer. They must give their names, addresses, telephone numbers (if any) and state precisely the place and time of landing.

4.5.5 All certificates by people other than registered Official Observers must be countersigned as correct by the Official Observers controlling the flight.

4.6. SUSPENSION OR CANCELLATION OF AUTHORITY

4.6.1 FAI, CIMA or the NAC may suspend or cancel the authority of an Official Observer for negligent certification or wilful misrepresentation.