F7 PROPOSALS FOR 2008 PLENARY MEETING

Volume 7, Lighter-than-Air Submitted by F7 Subcommittee

The whole volume has been restructed and amended.

a) Volume Name **F7 Subcommitee**

Change the name as follows, throughout:

~~Lighter Than Air~~

Aerostat

Reason: To fit FAI definitions

b) 7.1.1 Definition **F7 Subcommitee**

Change as follows

~~7.1.1. Definition~~

7.1.1. General definitions

Reason: To clarify: put all the definitions in a single chapter.

c) 7.1.1.1- Characteristics **F7 Subcommitee**

7.1.1.1- Characteristics

A hot air balloon is ~~a lighter than air model~~ **an aerostat**, supported statically in the air, with no means of propulsion by any power source, which obtains its lift only as a result of heated air.

The envelope may contain no gas other than air and the normal products of combustion.

The hot air is produced by one or several radio-controlled burners using gas provided by onboard cylinders. The cylinders and the radio equipment are most often in a basket (not mandatory).

~~7.1.2 Characteristics~~

The hot air balloons must fit the national regulations for model aircraft (size, weight etc).

~~Hot air balloons above 150 kg are not model airships.~~

~~The weight of gas is limited to 2 kg for balloons under 12 kg (fuel included) and to 5 kg for balloons equal or above 12 kg (fuel included).~~

The **weight of gas is limited to 5 kg whatever the size of the balloon**

Reason: To clarify: place all the definitions in a single chapter.
The limitation to 150 kg is still in the ABR rule.

continued overleaf

continued

The separation between under/above 12 kg is not an international rule (France only) and should be withdrawn. Therefore the limitation to 2 kg gas is no more applicable

d) 7.1.3 Marker, Identification and Target **F7 Subcommittee**

Rebuild the chapter & add a sentence

~~7.1.3 Marker, Identification and Target~~

7.1.1.2 Marker, Identification and Target

~~7.1.3.1 Marker~~

7.1.1.1.1 Marker

~~7.1.3.2 Identification~~

7.1.1.1.2 Identification

The organisers can implement additional identification items for the competitor, his assistant(s) and his balloon(s). **For international contests, each model shall carry a model identification code on the envelope and on the basket (Nationality abbreviation plus FAI or NAC license number of the competitor).**

~~7.1.3 Target~~

7.1.1.2.3 Target

Reason: To clarify and fit the ABR rule.

To avoid confusion between numbering of competitors (and balloons) and international labelling and avoid needless labelling for national contests. The organiser can implement numbers to be on the competitor and/or on the basket. This numbering is not international labelling.

e) 7.1.4 Refuelling area **F7 Subcommitee**

7.1.5 Inflating and take-off area

7.1.6 Flying site

7.1.7 Competition and tasks

Renumber the chapters and change the last sentence of chapter 7.1.7

7.1.2 Competition site and tasks

~~7.1.4 Refuelling area~~

7.1.2.1 Refuelling area

~~7.1.5 Inflating and take-off area~~

7.1.2.2 Inflating and take off area

~~7.1.6 Flying site~~

7.1.2.3 Flight site

~~7.1.7 Competition and tasks~~

7.1.2.4 Competition and tasks

~~Several examples of tasks are provided in paragraph 7.1.15 but any other task can be created provided it is fully explained to the competitors, the judges and the assistants.~~

Several examples of tasks are provided in the last chapter but any other task can be created provided it is fully explained to the competitors, the Jury and the Contest Officials.

Reason: To fit the ABR rule

The "panel of judges" will be replaced by a Jury and composition of it will be refined on a following proposal.

f) 7.1.3 Organisation F7 Subcommitee

Add champter

7.1.3 Organisation

The Organiser must provide suitable sites (outdoor/indoor) allowing flights under any weather conditions, allowing the full performance of competitors and safe recovery.

The Organiser is responsible for the control of the equipment, weight of the balloon (full gas included), safety of equipments, radio frequencies and insurances. This should be undertaken prior to competitors beginning the first task.

Local rules established by the Organiser must be published no later than the latest bulletin made available to all competitors, preferably in advance of entry deadline and early enough to allow each competitor to adapt their balloons.

The Contest Director is in charge of the organisation. He is responsible for good management and the smooth and safe running of the event. He shall make operational decisions in accordance with the rules of the Sporting Code and competition rules. He must secure a sufficient number of qualified officials (Jury and Contest officials), timely provide necessary measuring equipments (electronic watches, distance measurement units, target equipments, helium balloons, anemometer...), provide gas and nominate a person to be responsible for the refuelling area.

Reason: To refine the responsibility of the organiser compared with the responsibility of the Jury following several concerns raised during 2007 contests. Some sentences are coming from the ABR rules but adapted to fit the Hot Air Balloons specific needs.

g) 7.1.4 Jury F7 Subcommitee

Replace the whole chapter 7.1.8

~~7.1.8 Panel of Judges~~

7.1.4 Jury

7.1.4.1 Composition and Responsibility

The Jury must have a Chairman, a Flight Director and one or more jury members. The Jury is defined prior to the start of the competition.

The members of the Jury should be chosen for their competence in Hot Air Ballooning.

For International competitions, refer to rule ABR, Contest Officials (chapter B4) to refine the nomination and responsibility of the Jury

For national competition, refer to related NAC rules to refine the nomination and responsibility of the Jury.

It is the responsibility of the Jury to control that the competition is conducted in accordance with the rules and to take decisions dictated by any circumstances which may raise and to rule on dispute. He can penalise/disqualify a competitor for misconduct or infringement of the rules.

Any decision from the Jury is obtained by majority vote. In case of tie, the Chairman makes the final decision.

The Jury must display the results of each task throughout the contest and publish the official results afterward. He must display the official results with one month.

7.1.4.2 Flight Director

The Flight Director must be a recognised pilot of radio controlled hot air balloon.

He defines the tasks and flight conditions (take-off area, targets, timing, maximum measured distance, restart allowance...), controls the evolution of the tasks and validates the tasks.

The Flight Director may:

Cancel a task if the weather conditions do not allow a normal and equivalent flight between the competitors,

Not validate a task if all competitors receive a zero flight score.

7.1.4.3 Contest Officials

The Jury get assistance from Contest Officials provided that they are qualified or trained for the ctivity they have to perform.

The contest officials are in charge of distance/time measurements, observation and reporting to the Jury of any deviation occurring during the competition.

Reason: To fit ABR rules

To refine the responsibility of the Jury compared with the responsibility of the Organiser following several concerns raised during 2007 contests.

For national or international competitions (out of CC or WC) , Judges are not mandatory. Contest officials are really timekeepers or measurement officers.

Other information is based on ABR rules.

h) 7.1.9 Competitors and Helpers **F7 Subcommitee**

Replace the whole chapter 7.1.9

~~7.1.9 Competitors and Helpers~~

7.1.5 Competitors and Helpers

It is the competitor's responsibility to obtain the latest issue of the competition rules

Unless specific conditions apply, entry is closed at a date defined by the Organiser.

By his entry, the competitor recognises he accepts, and will comply with, the competition rules and safety rules. The pilot must comply with the national regulations for air models such as (but not limited to): authorisations, pilot degree, insurances, radio equipment, gas handling, balloon features (volume, weight, radio equipment etc). Unless with specific agreement obtained from the authorities, the radio frequencies must fit the regulations of the organising country.

A competitor is taking part of the competition as soon as he takes part in one task.

Each competitor may compete with one or two balloons **but exchanges (such as whole basket or envelope) are not allowed between the two balloons.**

A competitor competing with two balloons may use one frequency only. Only one balloon may be used during a task.

A balloon may not be shared with other competitors.

A competitor may be helped by one or several helper(s). The helpers may act during inflating, take-off or recovery of the balloon but not during flight.

Reason: The closing date is often under the NAC rules which differ from one country to another. The former rule of one day is not applicable.

Medium part of the chapter moved from chapter 7.1.11.2

Exchanges should be considered as structural changes and therefore not allowed.

The remaining part of the new chapter is coming from cut/paste of the older one.

i) 7.1.10 Safety rules **F7 Subcommitee**

Renumber chapter. Modify first sentence chapter 7.1.10.2 (new 7.1.6.2)

~~7.1.10 Safety rules~~

7.1.6 Safety rules

7.1.10.1 ~~Hot~~ Air Balloon

7.1.6.1 Hot Air balloon

~~7.1.10.2 Refuelling area~~

7.1.6.2 Refuelling Area

~~The organiser must nominate a person to be responsible of the refuelling area. This person has full ...~~

The person who is responsible of the refuelling area has full...

Reason: Eliminate repetition. Designation still said in new chapter 7.1.3

j) 7.1.11 Competition Rules **F7 Subcommitee**

Delete whole chapter.

Reason: Eliminate repetition.

Information moved in new chapters 7.1.3 (Organisation) or 7.1.5 (Competition and Helpers)

k) 7.1.12 General rules during tasks **F7 Subcommitee**

Amend chapter

~~7.1.12 General Rules during tasks~~

7.1.7 General Rules during tasks

~~7.1.12.1 Hot Air Balloon~~

7.1.7.1 Hot Air Balloon

~~7.1.12.2 Flight Rules~~

7.1.7.2 Flight rules

The Flight Director shall clearly inform the Contest officials and the Competitors of the timing of the flight: take-off opening and closing, target opening and closing.

Unless otherwise advised by the Flight Director prior to the beginning of a task, the competitor may restart his flight provided ~~the target is still open, the marker has not been dropped and no landing has taken place~~ **he clearly announces his intention prior dropping or landing and he respects the timing of the flight.**

Reason: Change of title of officials

Even if some timing can be identical, the Flight Director should avoid any misunderstanding. To restart his flight, the competitor must recover his balloon and this should not be considered as a voluntary contact.

l) 7.1.12.2 Flight rules **F7 Subcommitee**

~~Contact with trees, poles, lines or buildings.... is zeroing the flight score.~~

Contact with obstacles which may affect the normal evolution of the balloon (such as trees, poles, buildings...) is not considered as a ground contact. The first contact induces one penalty, the second two penalties (and so on). Deliberate contact used for the strategy of the flight is zeroing the flight score.

During a flight, deliberate **vertical** contact.... up to zeroing the flight **score** of the offending competitor can be applied.

Reason: In comparison with the rules for large balloons, contacts with obstacles are not zeroing the flight but induce severe penalties. Therefore, penalties are entered in our rules.

Nevertheless, such contacts used for the strategy of the flight (such as wait and re-fly) are zeroing the flight...

Horizontal contact between balloons is frequent but not affecting the flight. Vertical contact can dramatically change the flight of balloons or even affect security. Evaluation by the Contest officials is needed to evaluate the intention of the offender.

Precision to the "flight score" and not to the flight (total of take-off + bonuses + penalties + flight score)

m) 7.1.12.2 Flight rules **F7 Subcommitee**

Amend chapter

The position of the ground contact by the balloon is solely the decision of the ~~judge(s)~~ **Contest officials**

Any displacement.... competition

~~This disqualification will appear in the results published by the Jury of the competition.~~

Reason: To reflect the title of the Jury and Contest officials

General rules don't call for publishing disqualification.

n) 7.1.12.3 Tasks **F7 Subcommitee**

Suppress part of chapter

~~The Flight Director may:~~

~~Cancel a task if the weather conditions do not allow a normal and equivalent flight between the competitors,~~

~~Not validate a task if all competitors receive a zero flight score (see chapter 7.1.13.1)~~

Reason: This part has been moved to the new chapter 7.1.4.2 (Flight director)

o) 7.1.13 Explanations and Protests **F7 Subcommitee**

Renumber and amend chapter

~~7.1.13 Explanations and Protests~~

7.1.8 Explanations and Protests

He may present a protest to the ~~Panel of Judges~~ **Contest Director**. This protest must be in writing and accompanied by a fee ~~equal to the amount of the competition entry fee.~~ **of 35 Euros.**

~~A protest related to the final results should be submitted by the competitor two weeks, at the latest, after the publication of the results.~~

Before the opening of the contest, protest must be lodged at least one hour before opening of the contest. During the contest, protests

should be submitted immediately (prior starting the next task). After announcement of the results, any protest should be submitted by the competitor within 15 days after the announcement of the results.

Reason: To fit the ABR rules. Added sentence is a copy/paste of the ABR rules (out of the addition "prior starting of the next task" which is Balloons tasks related).

p) 7.1.14 Results **F7 Subcommitee**

Renumber and amend chapter

~~7.1.14 Results~~

7.1.9 Results

For each task, the competitor gets a basic score which is the total of the flight score ~~and~~ **,** of several bonuses (one take-off bonus, one or several intermediate bonus(es) and one precision bonus) **and of penalties**. The basic score cannot be negative.

The maximum Flight score is 1000 points. The bonuses are 100 points each. **The penalties are 250 points each.**

The flight score is zero if:

Take-off out of the take-off area,

Take-off out of the take-off opening time,

Drop...

~~The distance is rounded to the closest rounding.~~

The distance is rounded or not to the closest precision unit according to the calculation means.

In the table, delete ~~rounding~~ and replace by **Minimal precision**

The time is calculated using only entire **obtained** tenth of a second.

~~7.1.14.2 Calculated score~~

7.1.9.2 Calculated score

Reason: Introduction of penalties in the flight rules (new chapter 7.1.7.2 Flight rules. Value of penalties should be set.

Take-off opening time is not always the same as target closing time.

The rounding was based on the minimal precision. The rounding is not needed even if a higher precision is obtained. More precise calculations can then be obtained. Time is not rounded.

q) 7.1.14.3 General ranking **F7 Subcommitee**

Amend chapter. Delete chapter 7.1.14.4

~~7.1.14.3 General ranking~~

7.1.9.3 Competition score and ranking

If the competition has ~~three~~ **four** or more tasks, the lowest ~~normalised~~ **calculated** score of each competitor is discarded. Otherwise, all the ~~normalised~~ **calculated** scores are retained.

The competition score is the total of the **retained** scores **divided by the number of retained tasks**.

The ~~general~~ **competition** ranking is obtained from the ~~total of all the retained calculated scores~~ **competition scores.**

The yearly total of the competition scores of a competitor can be used (per se or not) for an annual ranking of the competitors.

~~7.1.14.4 Competition points~~

~~For each competition in which .... annual ranking of the competitors~~

Reason: Avoid repetitions and simplify presentation.

r) 7.1.15 Potential tasks **F7 Subcommitee**

Amend chapter

7.1.15 Potential tasks

7.1.10 Potential tasks

~~7.1.15.1 Target~~

7.1.10.1 Target

~~7.1.15.2 Hesitation Waltz~~

7.1.10.2 Hesitation Waltz

~~7.1.15.3 Back Home~~

7.1.10.3 Back Home

~~7.1.15.4 Fox~~

7.1.10.4 Fox

A first balloon (fox) is provided and flown by the Organiser (not by a competitor). ~~The fox takes off when all the competitors are ready for take-off.~~ **Minimum 10 minutes before the time he plans the fox to take-off, the Flight Director advises the competitors and Contest officials of the time the fox will take off.**

~~7.1.15.5 Line~~

7.1.10.5 Line

Prior to the flight, the Flight Director defines the target as a physical line on the ground and **advises the competitors and the Contest officials if the drop/landing should be performed before, after or before and after the line.**

~~7.1.15.6 Area~~

7.1.10.6 Area

~~The maximal distance (decimetres) is not limited. The distance to the target is directly used to get the points of flight.~~ **The distance between the marker and the landing (unit to be advised) is directly used to get the flight score.**

~~7.1.15.7 Stationary~~

7.1.10.7 Stationary

~~7.1.15.8 Circle~~

7.1.10.8 Circle

A circle is marked on the ground (~~10 meters diameter indoor and 20 m diameter outdoor~~). **The diameter of the circle should allow a normal run of the competitor (3 times the diameter as free area).** For indoor task **5 or** 10 m diameter is suggested and 10 m diameter for outdoor task.

The target ... circle. **The height of the container should not exceed 5 cm.**

~~The rope is fixed to the basket... than at the end (flight score = zero).~~

One end of the rope is fixed to the basket. The competitor is not allowed to enter the circle or to hold the rope in any other way than the end of the rope (one penalty for each infraction).

~~7.1.15.9 Combined tasks~~

7.1.10.9 Combined tasks

Combined tasks are made up of several tasks performed during the same flight. **The failure to a task should not avoid the competitor to perform the following task.**

For each task, the 3 types of bonuses **and the penalties** are applicable...

Reason: Renumbering of chapters

Improvements based on competition concerns and proposals from competitors or Jury members.

Fox: Competitors will know the time of the take-off of the fox and 10 minutes are enough to be ready.

Line: The Flight director can decide to measure only before the line or only after the line or to measure both sides.

Area: The previous wording was wrong.

Circle: A circle of 10 m diameter is not always possible to allow a normal run. Zeroing a flight is a too sharp decision and should be replaced by penalties.

End