



10th FAI World Hot Air Airship Championship

15.02.2018 - 22.02.2018

Tegernsee Valley

Version 2017-1

14.09.2017

Contents

INTRO	DUCTION	3
1	EVENT DETAILS	4
2	ENTRY CONDITIONS	6
3	AIRSHIP QUALIFICATIONS	8
4	ORGANIZATION OFFICIALS	9
5	COMPLAINTS AND PROTESTS	10
6	FIELD OFFICIALS AND GPS LOGGERS	12
7	MAPS	13
8	PROGRAMME, BRIEFINGS	14
9	LAUNCH PROCEDURES	16
10	FLIGHT RULES	19
11	LANDINGS	21
12	TARGET, MARKER	22
13	PENALTIES	24
14	SCORING	25
15	TASKS	28
16	STARTS, SCORING LOCATIONS, POINTS	37
TAOK 6	OUEET	40

INTRODUCTION

The rules and regulations for the BX Hot Air Airship competitions consist of:

- These competition rules
- FAI Sporting Code, General Section

1 EVENT DETAILS

1.1 TITLE

The event will be known as: 10 th FAI World Hot Air Airship Championship

1.2 OBJECTIVES (S1: 5.2)

THE OBJECTIVES OF THE EVENT ARE:

- TO DETERMINE THE CHAMPION PILOT:
- TO STIMULATE THE DEVELOPMENT OF AEROSTATION AND INTERNATIONAL COMPARISON OF PERFORMANCE OF PILOTS AND AEROSTATS;
- TO REINFORCE FRIENDSHIP AMONG THE AERONAUTS OF ALL NATIONS.

1.3 **DEFINITION OF A CHAMPION (S1: 5.8)**

- **1.3.1** THE WINNING COMPETITOR SHALL BE THE COMPETITOR WITH THE HIGHEST AGGREGATE SCORE AT THE END OF THE EVENT.
- 1.3.2 TO BE RECOGNIZED AS A FIRST CATEGORY SPORTING EVENT AND FOR A CHAMPION TO BE DECLARED, AT LEAST THREE TASKS MUST HAVE BEEN COMPLETED ON NOT LESS THAN TWO SEPARATE FLIGHTS.

1.4 SANCTION (S1, AN3, 2)

THE EVENT IS AN APPROVED FAI FIRST CATEGORY SPORTING EVENT SANCTIONED BY THE FAI BALLOONING COMMISSION (CIA).

1.5 ORGANIZATION

The event is organized by: Deutscher Freiballonsport Verband e.V.

1.6 CORRESPONDENCE

All entries and official correspondence should be addressed to:

Luftwerbung Helmut Seitz Wucherer 1 D 88353 Kisslegg 0049 7563 9 22 82 office @world-championship.org

1.7 PERSONNEL

Event Director: Helmut Seitz

Assistant Director: Sylvia Meinl

Safety Officer: Harry Roland

Jury President: Jakob Burkard

1.8 PLACE

The Event will be held at D 83087 Tegernsee Valley, near Munich.

1.9 DATES

The Event will run from 15.02.2018.

The last flying day will be 21.02.2018 unless the minimum tasks under <u>rule 1.3.2</u> have not been achieved in which case the last flying day will be 22.02.2018.

1.10 DEPOSIT FEE (\$1, AN3, 8.3)

THE DEPOSIT FEE TO ACCOMPANY A PROTEST SHALL BE 100 EURO OR ITS EQUIVALENT IN LOCALLY RATED CURRENCY

1.11 LANGUAGE (GS: 4.9.5 PART)

- 1.11.1 THE RULES, REGULATIONS AND INFORMATION CIRCULATED TO NAC'S AND COMPETITORS OR ISSUED DURING THE EVENT SHALL BE IN ENGLISH AND GERMAN. IN ALL INTERPRETATIONS THE ENGLISH LANGUAGE VERSION SHALL PREVAIL.
- **1.11.2** Printed material (e.g. Task Data, Meteorological information etc.) shall be in English and may additionally be in German. The language used verbally during briefings shall be English.
- **1.11.3** Shall and Must mean the application is mandatory. Failure to comply will normally lead to penalty, disadvantageous interpretation or other disadvantages.
- **1.11.4** Should: means that the application is recommended. Failure to comply may lead to penalties, disadvantageous interpretation or other disadvantages.
- **1.11.5** May: means that the application is optional.

1.12 DOCUMENTATION

The following documents will be inspected when each competitor registers on arrival at the Event:

- a. Pilot License
- b. Pilot Log Book
- c. Airship Log Book
- d. Airship Registration Document
- e. Airship Airworthiness Document
- f. Certificate of Insurance
- g. FAI Sporting License
- h. Passport or Identity Document

2 ENTRY CONDITIONS

2.1 PARTICIPATION (GS: 4.6.1 PART)

THE EVENT IS OPEN TO ALL NACs WHICH HAVE MET ALL THEIR OBLIGATIONS TO THE FAI.

2.2 COMPETITOR (GS: 4.5.2 PART, S1: 5.5.5)

- 2.2.1 A PERSON ENTERED AND COMPETING IN A SPORTING EVENT.
- 2.2.2 AFTER THE BEGINNING OF THE GENERAL BRIEFING OF A FIRST CATEGORY SPORTING EVENT, NO CHANGE OF COMPETITOR IS PERMITTED.

2.3 COMPETITOR'S RIGHTS OF REPRESENTATION (GS: 4.7.1)

- 2.3.1 IN FIRST CATEGORY INTERNATIONAL SPORTING EVENTS, A COMPETITOR REPRESENTS THE NAC THAT ISSUED HIS FAI SPORTING LICENSE, UNLESS HE BELONGS TO AN INTERNATIONAL TEAM.
- **2.3.2** If a flight crew and/or passenger flying in the car, other than the appointed observer, has competed in any previous national or international competition (events), he must be of the same nationality as the competitor.

2.4 QUALIFICATION

Pilots in command shall have been authorized to act as pilots-in-command of BX class of Aerostat for which the first category event is held, at least 12 months prior to the entry date of the event plus 50 hours as Pilot-in-command, or shall have 200 hours as pilot-in-command for AX balloons plus 25 hours of as pilot-in-command for BA or BX class of aerostat, all prior to entry date.

2.5 SPORTING LICENSE (GS: 3.1.2 PART)

THE HOLDER OF A SPORTING LICENSE ACKNOWLEDGES THAT HE KNOWS AND UNDERSTANDS THE FAI SPORTING CODE AND COMMITS HIMSELF TO ABIDE BY IT.

2.6 ENTRY

The completed entry form and entry fee for each competitor must reach the organizers by the closing entry date, except in the case of extra places offered by the organizers.

2.7 ACKNOWLEDGMENT

A competitor who has not received an acknowledgment of his entry within seven days after the closing date should make inquiries to the organizers.

2.8 CLOSING ENTRY DATE

The closing entry date for the Event is: 30th September 2017.

2.9 ACCEPTANCE OF SPORTING CODE, RULES AND REGULATIONS (GS: 4.11.1)

THE ENTRANTS AND COMPETITORS ARE REQUIRED TO KNOW, UNDERSTAND, ACCEPT AND ABIDE BY THE SPORTING CODE AND THE RULES AND REGULATIONS FOR THE EVENT, AND BY ENTERING ARE DEEMED TO ACCEPT THEM WITHOUT RESERVATION. THEY SHOULD APPRECIATE THAT THEY

REPRESENT THE NATIONAL TEAM OF THEIR NAC, ARE AMBASSADORS FOR THEIR COUNTRY AND THAT THEY SHOULD COMPETE IN A SPORTING MANNER AND THAT THEIR BEHAVIOR MUST BE BEYOND REPROACH.

2.10 WAIVER

By entering the Event, a competitor waives any right of action against the organizer, the owner of any site and their respective members, employees or personnel for any loss or damage sustained by him in consequence of any act or omission on their part, or on the part of other competitors.

2.11 RISK

The airship and other property of a competitor shall be at the risk of the competitor at all times.

2.12 LIABILITY TO THIRD PARTIES

By entering an Event a competitor assumes all liability for injury, loss or damage to third parties or their property caused by himself or his crew.

2.13 INSURANCE

Each competitor shall be insured against all claims by third parties to a minimum of 3.5 Mio EUR. He shall produce documentary evidence of his insurance valid for the period of the Event covering himself and any airship which he may fly.

2.14 SAFETY

Any meteorological report or forecast, or other safety or navigational information, is provided in good faith for the guidance of competitors. Officials will be appointed to regulate the inflation and launching of airships. However, nothing shall diminish the responsibility of competitors under this chapter.

2.15 RESPONSIBILITY (S1, AN3, 3)

ENTRANTS AND COMPETITORS REMAIN COMPLETELY RESPONSIBLE FOR THE SAFE OPERATION OF THEIR AEROSTATS AT ALL STAGES OF INFLATION, LAUNCH, FLIGHT AND LANDING. THEY MUST ENSURE THAT THEIR EQUIPMENT, THEIR CREW AND THEIR OWN LEVEL OF SKILL AND EXPERIENCE ARE SUITABLE FOR THE CONDITIONS IN THEIR OWN JUDGMENT. A COMPETITOR IS RESPONSIBLE FOR ALL THE ACTIONS OF HIS CREW DURING THE EVENT.

2.16 <u>CONDUCT (S1, AN3, 4)</u>

ENTRANTS AND COMPETITORS AND THEIR CREWS ARE REQUIRED TO BEHAVE IN A SPORTSMANLIKE MANNER, AND TO COMPLY WITH THE DIRECTIONS OF THE EVENT OFFICIALS. IN CONSIDERATE BEHAVIOR OR AIRSPACE VIOLATIONS SHALL BE PENALIZED BY THE EVENT DIRECTOR.

3 AIRSHIP QUALIFICATIONS

3.1 **DEFINITION OF AN AIRSHIP** (GS: 2.3.3; S1: 2.2.1, 2.2.1.2)

- 3.1.1 AEROSTAT AN AIRCRAFT LIGHTER THAN AIR
- **3.1.2** AIRSHIP OR DIRIGIBLE AN AEROSTAT, EQUIPPED WITH MEANS OF PROPULSION AND STEERING.
- 3.1.3 SUB-CLASS BX AIRSHIPS WHICH OBTAIN THEIR STATIC BUOYANCY SOLELY AS A RESULT OF HEATING AIR. THE ENVELOPE MAY CONTAIN NO GASES OTHER THAN AIR AND THE NORMAL PRODUCTS OF COMBUSTION.

3.2 FUEL

Each airship shall carry sufficient fuel to complete the flight with an adequate reserve. Lack of fuel to complete the flight shall not be grounds for protest. Refueling during specific flights may be permitted and is subject to information given at flight briefings.

3.3 NOMINATION OF AIRSHIP

Each competitor shall nominate the airship he is to fly during the Event. No change of airship may be made after the start of the first flight briefing except by permission of the Director or as provided in these rules.

3.4 AIRWORTHINESS (S1: 5.5.3)

AEROSTATS FLOWN IN A FIRST CATEGORY SPORTING EVENT MUST HAVE CURRENT CERTIFICATES OF REGISTRATION AND AIRWORTHINESS, OR IN PLACE OF THE LATTER, AN EQUIVALENT DOCUMENT FROM THE RECOGNIZED AUTHORITY OF THE NATION CONCERNED. THE ORGANIZERS ARE EMPOWERED TO REJECT ANY AEROSTAT WHICH IN THEIR OPINION IS NOT OF A REASONABLE STANDARD OF AIRWORTHINESS.

3.5 DAMAGE

- **3.5.1** If an airship is damaged during the Event, it may be repaired. Damaged components may be replaced or repaired, except that a complete envelope may be replaced only at the discretion of the Director.
- **3.5.2** Any damage to an airship affecting its airworthiness must be reported to the Director before it is entered for a further flight, and the airship may only be flown after his approval of any repairs.

Penalty: no score for the flight.

3.6 <u>AUTOMATIC FLIGHT CONTROLS (S1 5.9.2)</u>

ANY DEVICE DESIGNED TO ACT AS AN AUTOMATIC FLIGHT CONTROL IS PROHIBITED, REGARDLESS OF THE SPECIFIC NATURE OF THE DEVICE.

3.7 COMPETITION NUMBERS

The organizers will provide adhesive numbers which must be displayed on the airship car in such a position that they can be easily seen from the ground. All crew vehicles including trailers shall be clearly identified with competition numbers.

3.8 <u>CAR</u>

The term "car" includes any crew or passenger compartment regardless of its construction.

4 ORGANIZATION OFFICIALS

- **4.1 EVENT DIRECTOR** (GS: 5.5.1.1 AND 5.5.1.2)
- 4.1.1 THE EVENT DIRECTOR SHALL BE IN OVERALL OPERATIONAL CHARGE OF THE SPORTING EVENT. HE SHALL HAVE A DEPUTY DIRECTOR AND TECHNICAL OFFICIALS TO ASSIST HIM. THE EVENT DIRECTOR AND DEPUTY SHALL BE APPROVED BY THE CIA.
- 4.1.2 THE EVENT DIRECTOR IS RESPONSIBLE FOR THE GOOD MANAGEMENT, SMOOTH AND SAFE RUNNING OF THE EVENT. HE SHALL MAKE OPERATIONAL DECISIONS IN ACCORDANCE WITH THE RULES OF THE SPORTING CODE AND COMPETITION RULES. HE CAN PENALIZE OR DISQUALIFY A COMPETITOR FOR MISCONDUCT OR INFRINGEMENT OF THE RULES. HE SHALL ATTEND MEETINGS OF THE INTERNATIONAL JURY AND GIVE EVIDENCE IF REQUESTED.
- **4.1.3** In the rules the word "Director" may be used instead of "Event Director".
- **4.2 STEWARDS** (GS: 5.5.2.1 AND 5.5.2.2)
- 4.2.1 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 BEHAVIOR 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.

They advise the Event Director on interpretation of the rules and regulations and on penalties.

- 4.2.2 A STEWARD HAS NO EXECUTIVE POWERS. HE MUST NOT BE A MEMBER OF THE ORGANIZING COM- MITTEE. A STEWARD MAY ATTEND A MEETING OF THE INTERNATIONAL JURY AS AN OBSERVER OR WITNESS.
- 4.3 DUTIES OF THE INTERNATIONAL JURY (GS 5.4.1, 5.4.2, S1 5.10 PART)
- 4.3.1 MATTERS OF ADVICE, ARBITRATION OR RULE INTERPRETATION, SHALL BE THE RESPONSIBILITY OF THE INTERNATIONAL JURY HAVING BEEN APPOINTED OR APPROVED BY THE CIA.
- 4.3.2 IN ADDITION TO BEING CHAIRMAN AT JURY MEETINGS, THE JURY PRESIDENT HAS THE RIGHT TO REQUIRE THE ORGANIZER TO ABIDE BY THE FAI SPORTING CODE AND THE PUBLISHED RULES AND REGULATIONS FOR THE EVENT. IF THE ORGANIZER FAIL TO DO SO, THE PRESIDENT OF THE JURY HAS THE POWER TO STOP THE EVENT UNTIL A JURY MEETING HAS CONSIDERED THE SITUATION
- 4.3.3 THE JURY HAS THE RIGHT TO TERMINATE THE EVENT IF THE ORGANIZER FAIL TO ABIDE BY THE FAI SPORTING CODE AND PUBLISHED REGULATIONS. THEY MAY RECOMMEND TO THE FAI SECRETARIAT THAT ALL ENTRY FEES BE RETURNED.
- 4.3.4 A JURY MEMBER MUST POSSESS A THOROUGH KNOWLEDGE OF THE RELEVANT SPORTING CODES AND THE RULES AND REGULATIONS FOR THE EVENT. AT LEAST ONE JURY MEMBER IS TO BE ON SITE DURING COMPETITION OPERATIONS.
- **4.4 SAFETY OFFICER** (S1, 5.11)
- **4.4.1** THE SAFETY OFFICER SHALL BE APPOINTED BY THE ORGANIZERS AND APPROVED BY THE CIA.
- **4.4.2** THE SAFETY OFFICER SHALL GIVE ADVICE TO THE EVENT DIRECTOR ON ANY MATTERS REGARDING SAFETY.

OPERATIONAL PROCEDURES FOR THE SAFETY OFFICER ARE CONTAINED IN THE "SAFETY OFFICER HANDBOOK" APPROVED BY THE CIA

5 COMPLAINTS AND PROTESTS

5.1 ASSISTANCE (S1, AN3, 7.1)

A COMPETITOR WHO IS DISSATISFIED ON ANY MATTER SHOULD FIRST ASK THE APPROPRIATE OFFICIAL TO ASSIST HIM. HE MAY ASK FOR HIS RESULT OR POINTS SCORE TO BE CHECKED, OR THE CALCULATION TO BE EXPLAINED.

- **5.2 COMPLAINTS** (GS: 6.1.1; S1, AN3, 7)
- 5.2.1 THE PURPOSE OF A COMPLAINT IS TO OBTAIN A CORRECTION WITHOUT THE NEED TO MAKE A FOR- MAL PROTEST.
- **5.2.2** A COMPLAINT IS A REQUEST BY A COMPETITOR TO THE DIRECTOR TO INVESTIGATE ANY MATTER IN WHICH THE COMPETITOR IS DISSATISFIED.
- 5.2.3 A FORMAL COMPLAINT MUST BE SUBMITTED IN ENGLISH AND IN WRITING AND WILL RECEIVE A WRITTEN REPLY.
- 5.2.4 COMPLAINTS SHALL BE HANDED OR TRANSMITTED BY THE COMPETITOR TO THE EVENT DIRECTOR OR HIS DESIGNATED OFFICIAL, WHO WILL ACKNOWLEDGE RECEIPT AND RECORD THE TIME OF RECEIPT.
- **5.3 COMMUNICATION** (\$1, AN3, 7.7)

REPLIES TO COMPLAINTS SHALL BE POSTED ON THE OFFICIAL NOTICE BOARD AT FIXED TIMES, ANNOUNCED IN ADVANCE BY THE DIRECTOR.

5.4 PUBLICATION (S1, AN3, 7.7)

THE DIRECTOR MAY AT HIS DISCRETION PUBLISH THE TEXT OF ANY FORMAL COMPLAINT TOGETHER WITH HIS REPLY. IF REQUESTED BY THE COMPETITOR HE MUST DO THIS.

- **5.5 PROTEST** (S1, AN3, 8)
- 5.5.1 IF DISSATISFIED WITH THE DECISION ON A COMPLAINT MADE DURING THE EVENT, A COMPETITOR HAS THE RIGHT OF PROTEST.
- 5.5.2 DECLARATIONS OF INTENTION TO PROTEST, AND PROTESTS WITH DEPOSITS, SHALL BE HANDED OR TRANSMITTED BY THE COMPETITOR TO THE EVENT DIRECTOR, WHO WILL ACKNOWLEDGE RECEIPT AND RECORD THE TIME OF RECEIPT.
- 5.5.3 A COMPETITOR WHO HAS MADE A PROTEST HAS THE RIGHT TO MAKE A VERBAL PRESENTATION OF HIS CASE TO THE JURY. HE MAY BE ASSISTED BY AN INTERPRETER OR ADVISOR OF HIS CHOICE DURING THIS MEETING.
- 5.5.4 THE TEXT OF ALL PROTESTS AND THE DECISIONS OF THE JURY SHALL BE POSTED ON THE OFFICIAL NOTICE BOARD.
- 5.6 <u>TIME LIMITS</u>
- **5.6.1** TIME LIMITS FOR COMPLAINTS (GS 6.1, S1 An37)
- 5.6.1.1 COMPLAINTS MUST BE SUBMITTED AS SOON AS POSSIBLE AFTER THE EVENT GIVING RISE TO THE COMPLAINT AND MUST BE DEALT WITH EXPEDITIOUSLY.
- **5.6.1.2** Complaints concerning scoring must be made to the Event Director within eight hours of publication of the official scores for a task. The rest hours defined in the competition details will be disregarded for the purpose of the time limits.
- **5.6.1.3** Publication of a new version of official scores will only extend the complaint time in the matter con- cerned.
- 5.6.2 TIME LIMITS FOR PROTESTS (GS 6.3, S1 An3 8)

- 5.6.2.1 A competitor intending to protest, SHALL, WITHIN ONE HOUR OF THE REPLY TO HIS COMPLAINT, DE- CLARE HIS INTENTION TO PROTEST TO THE EVENT DIRECTOR.
- 5.62.2 WITHIN 8 HOURS OF THE REPLY TO HIS COMPLAINT THE COMPETITOR SHALL SUBMIT HIS PROTEST IN ENGLISH AND IN WRITING ACCOMPANIED BY THE PROTEST FEE. The rest hours defined in the competition details will be disregarded for the purpose of the time limits.
- **5.6.3** SHORTENED TIME LIMITS FOR COMPLAINTS AND PROTESTS (S1 An3 7.6, 8.6 part)
- **5.6.3.1** COMPLAINTS MADE ON OR AFTER THE LAST DAY OF THE EVENT, MUST BE SUBMITTED to the Director within one hour of publication of the official scores.
- 5.6.3.2 PROTESTS MADE ON OR AFTER THE LAST DAY OF THE EVENT, MUST BE SUBMITTED WITHIN ONE HOUR OF THE REPLY.
- **5.6.3.3** The Event Director shall announce the publication times for all task scores on the last flying day.
- **5.6.3.4** Time limits applying to scores published after 1300 on the day before the last flying day will also be reduced to one hour on or after the last flying day of the event.
- 5.7 TREATMENT OF PROTESTS (GS 6.4)
- 5.7.1 THE EVENT DIRECTOR MUST PRESENT ANY PROTEST TO THE JURY PRESIDENT WITHOUT DELAY. THE PRESIDENT SHALL CALL A MEETING OF THE INTERNATIONAL JURY WITHIN 24 HOURS OF RECEIVING A PROTEST.
- 5.7.2 THE JURY SHALL HEAR BOTH SIDES OF THE MATTER OF ANY PROTEST, APPLYING THE RELEVANT FAI REGULATIONS AND THE RULES FOR THE EVENT.
- 5.7.3 THE PRESIDENT OF THE JURY SHALL REPORT THE RESULT AND A SUMMARY OF ANY RELEVANT CON- SIDERATIONS IN WRITING TO THE EVENT DIRECTOR WITHOUT DELAY. WHO SHALL MAKE PUBLIC THE PRESIDENT'S REPORT.
- **5.8 RETURN OF DEPOSIT** (GS: 6.3.3, 6.3.4)
- 5.8.1 NORMALLY THE DEPOSITED FEE IS RETURNABLE ONLY IF THE PROTEST IS UPHELD, OR IS WITHDRAWN PRIOR TO THE HEARING BY THE JURY.
- 5.8.2 ALL NON-REFUNDED DEPOSIT FEES FROM PROTESTS WILL BE SENT BY THE JURY TO THE FAI, TO THE ATTENTION OF THE SECRETARY GENERAL, WITHIN 28 DAYS OF THE CONCLUSION OF THE EVENT. THE FEE WILL THEN BE SEGREGATED FOR THE USE OF THE CIA.
- 5.9 JURY APPROVAL OF RESULTS AND PRIZE GIVING (GS: 4.16.1)
- 5.9.1 THE RESULTS OF THE EVENT SHALL BE FINAL ONLY AFTER ALL PROTESTS HAVE BEEN DEALT WITH BY THE JURY AND THE JURY HAS CEASED ITS FUNCTIONS. THE FINAL RESULTS MUST BE MADE PUBLIC BEFORE THE PRIZE GIVING IS HELD.
- **5.9.2** The Jury shall verify and sign the final total scores before they are made public.
- 5.10 OFFICIAL NOTICE BOARD

The Event Director will announce at the General Briefing the place where the Official Notice Board is located. This should be marked OFFICIAL NOTICE BOARD and is the place where all results, scores, replies to complaints and protests, and other official communications directly relating to the event will be published. All information posted shall be signed, dated and timed.

6 FIELD OFFICIALS AND GPS LOGGERS

6.1 FIELD OFFICIALS

Field official are impartial competition officials working for the Event Director. They observe and record competitors' performance at various Scoring Locations, such as Gates, Pylons and Targets. They measure results and record them and competitors' performance in writing. As a backup the field official may also use a camera. They must know the competition rules, the task at hand and their duties at the Scoring Location. They install scoring structures at scoring location points

6.2 GPS LOGGERS (not used in this competition)

A GPS logger is a device that logs the flight path of the airship. The track points of the log will specify the position (latitude and longitude), the altitude (barometric or GPS altitude) and a time stamp.

Loggers are used for checking if the flight path is in harmony with what is required in the task.

6.3 LOGGER HANDLING

The logger will be handed out to competitors together with the markers at briefing time. The competitor will take the logger with him after briefing, switch it on and attach it to his airship before take-off on the appropriate spot, on or as close as possible to the propeller guard axis. After landing he will detach the logger, switch it off and return it to the competition center. At no time is the competitor allowed to open or interfere with the logger or its operation other than specifically instructed by the Director. Competitors are recommended to hang their own GPS logger as a backup on a spot within one meter from the official logger, and set it up the same way the official logger is set up (WGS84/UTM and same recording interval).

7 MAPS

7.1 CONTEST AREA

An area defined by reference to the competition map, and published at the start of the Event. Flights will not be set, and results will not be measured, outside this area. Contest area may be altered for specific flights by notification at the flight briefing.

7.2 OUT OF BOUNDS

The Director may define areas as out of bounds. Results will not be measured in these areas.

7.3 PROHIBITED ZONES (PZ'S)

- **7.3.1** The Director may define airspace or areas as prohibited. A mark or track point inside red, yellow or blue PZ is valid unless the area is defined as OFB. The boundaries and, if applicable, the altitude limits in feet MSL, shall be published in writing for each PZ.
- **7.3.2** Circular PZ's shall be defined by the center point map reference and radius in meters. PZ's with natu- ral boundaries shall be defined by marked copies of the competition map to each competitor individ- ually.
- **7.3.3** There are three classifications of PZ's, Red, Yellow and Blue.
- **7.3.4** A RED PZ is a restricted airspace and will include an upper altitude limit which a competitor shall not fly below.
- **7.3.5** A YELLOW PZ is a restricted area where no take offs or landings are permitted.
- **7.3.6** A BLUE PZ is a restricted airspace and will include a lower altitude limit which a competitor shall not fly above.

7.4 PZ'S IN FORCE

At each task briefing PZ's will be published as in force or not in force for competition purposes in that flight. This does not necessarily describe their operational activity or status for other aviation purposes.

7.5 PZ INFRINGEMENT

A competitor violating a PZ in force will be penalized by up to 1000 competition points, proportionally to the offence. The normal penalty is up to 500 points. The amount should be doubled if there is a complaint from the 'owner' of the PZ or if officials witnessed actual disturbance of animals.

7.6 <u>MAPS</u>

A competitor is required to carry an official competition map in the car on which all out of bounds areas shall be clearly and accurately marked.

7.7 EARTH TO BE FLAT

For scoring purposes the earth is flat. Calculations based on the competition map will be taken as accurate.

7.8 MAP CO-ORDINATES

To identify a point on the competition map, the co-ordinates will be written in eight-digit format. First four digits west/east and the second four digits south/north. (Easting then Northing.)

7.9 **DEGREE REFERENCE**

Unless otherwise stated, directions are expressed in degrees referenced to the grid system printed on the competition map.

8 PROGRAMME, BRIEFINGS

8.1 FLIGHT PROGRAMME

The Event will consist of a series of flights. The number and frequency of flights and rest periods are at the discretion of the Director. At the first flight briefing on the day before the last planned flying day the Director shall publish the remaining flying program.

8.2 **VALID FLIGHT (S1: 5.9.1)**

- 8.2.1 A VALID FLIGHT IS DEFINED AS ONE IN WHICH ALL ENTERED COMPETITORS WERE GIVEN A FAIR OP- PORTUNITY TO MAKE A PROPER START, UNLESS THEY HAD WITHDRAWN OR HAD BEEN DISQUALIFIED.
- **8.2.2** The Director has the authority to cancel a task(s) for Safety reasons at any time before the flight results are published.

8.3 TASK SELECTION

The Director shall select tasks from those described in chapter "15 TASKS" & chapter "16 STARTS, <a href="SCORING LOCATIONS, POINTS. Particular tasks may be set more than once or not at all.

Racing Tasks are not allowed to be chosen as tasks more than two times in a row and maximum three times out of every six tasks.

8.4 MULTIPLE TASKS

The Director may set more than one task to be performed on one flight.

8.5 MODIFICATION OF RULES (GS: 4.9.1 PART)

- 8.5.1 COMPETITION RULES FOR A PARTICULAR EVENT SHALL NOT CONFLICT WITH THE SPORTING CODE. THEY SHALL BE APPROVED IN ADVANCE BY THE CIA AND MUST NOT BE CHANGED THEREAFTER.
- 8.5.2 The flight rules of <u>chapter "15 TASKS"</u> & <u>chapter "16 STARTS</u>, <u>SCORING LOCATIONS</u>, <u>POINTS"</u> are de- fined as variable rules and minor changes to those may be made without authorization.
- 8.5.3 Variations to task rules shall be notified individually to each competitor in writing.

8.6 GENERAL BRIEFING (S1, AN3, 6)

A GENERAL BRIEFING ON THE RULES, REGULATIONS AND MAJOR ASPECTS OF THE EVENT SHALL BE HELD BEFORE THE START OF THE EVENT. ATTENDANCE AT THE GENERAL BRIEFING IS COMPULSORY FOR ALL ENTRANTS AND OFFICIALS. THE OFFICIAL COMPETITORS LIST, COMPILED FROM THE ROLL CALL OF THE ENTRANTS TAKEN AT THE GENERAL BRIEFING, SHALL BE PUBLISHED AS SOON AS PRACTICABLE AFTER THE GENERAL BRIEFING BUT BEFORE THE FIRST TASK BRIEFING. WHERE A JUSTIFIABLE REASON EXISTS, A LATE ENTRY MAY BE ACCEPTED BY THE DIRECTOR IN CONSULTATION WITH THE JURY, BUT BEFORE PUBLICATION OF THE FIRST SCORES.

8.7 FLIGHT BRIEFINGS

- **8.7.1** Flight briefings will be called by the Director at times published on the official notice board. At the briefing the following information will be given verbally, by written circular, or by posted notices:
 - a. Meteorological information
 - b. Air traffic and safety information (if any)
 - c. Time check
 - d. Flight data
- **8.7.2** Where written information is supplied, five minutes study time will be allowed before the briefing proceeds.

8.8 TASK DATA

8.8.1 At task briefings the task data, preferably in writing, shall be given to competitors. They shall contain flight data related to all tasks and individual task data.

8.8.2 Flight data:

- a. Date
- b. Official sunrise/sunset
- c. PZ's in force
- d. Launch area
- e. Launch period
- f. QNH
- g. Provisional time and place of next briefing
- h. Solo flight (if directed)
- i. Search period.

8.8.3 Individual task data:

- a. Marker(s) color to be used
- b. Task/Marker order (if other than normal)
- c. Dropping method (if gravity drop directed)
- d. Scoring period, scoring area and/or scoring airspace (if set)
- e. Task data as per task rule

8.9 SUPPLEMENTARY BRIEFING

- **8.9.1** If it should be necessary to publish additional or revised information to competitors at the launch field, a pink flag will be raised at the signals point. The competitor should attend in person or send a responsible crew member to the signals point. The information will be given verbally and a written copy may be displayed. All competitors will be deemed to have proper notice of the information. Alternatively, an official may circulate a written notice to each airship and obtain the signature of the competitor or crew member.
- **8.9.2** If it should be necessary to provide additional or revised information to competitors at a compulsory pit stop this will be given in writing to each competitor by a competition official whilst the airship is at rest with propulsion engines switched off.

8.10 ENTRY FOR FLIGHT

A competitor will enter the flight by answering his name or competition number at the roll call at the flight briefing.

8.11 LATE ENTRY

- **8.11.1** A competitor may make a late entry at the signals point with a penalty of 50 points up to 5 minutes before the start of the launch period, and 100 points thereafter. Officials will not be available to give personal briefing except for Air Traffic and safety matters.
- **8.11.2** In tasks where competitors select their own launch areas, late entries shall be made at the Competition Centre.

8.12 OFFICIAL TIME

The official time is GPS time corrected for the local time offset. Competitors and officials not using GPS must ensure to set their watches to GPS time

9 LAUNCH PROCEDURES

9.1 COMMON LAUNCH AREA(S)

- 9.1.1 One or more areas defined by the organizer and used when the task requires all competitors to launch from a common area. A competitor taking off outside the prescribed Common Launch Area will not achieve a result in all tasks of that flight.
- 9.1.2 The COMMON LAUNCH POINT (CLP) is a point in or near the launch area, physically marked on the ground before the beginning of the Event, from which all angles and distances are measured, irrespective of the take-off points of individual airships.
- 9.1.3 The Director may establish an improvised CLA by a radius around a coordinate or clearly bordered area. Competitors will select their own launch positions within this area. The use of launch masters and relevant rules is at the Directors discretion. Competitors must take-off within the set launch pe- riod or if flag signals are used within the period indicated by the flag signals. The Director will declare the CLP used for this CLA at the task briefing.

9.2 INDIVIDUAL LAUNCH AREAS

- **9.2.1** Individual launch areas are selected by the competitors. The boundary of the launch area is a circle of 100-meter radius from the individual launch point or the physical boundary of the area if closer.
- 9.2.2 In tasks where competitors select an individual launch area, the INDIVIDUAL LAUNCH POINT (ILP) is the position of the car at the start of hot inflation.
- **9.2.3** Individual launch areas shall not be selected outside the contest area.

Penalty: no result in the first task of that flight.

9.2.4 An airship inflated in an individual launch area shall not be moved and take-off outside of it unless it is deflated, moved to another launch area and re-inflated.

Penalty: no result in the first task of that flight.

9.3 LAUNCH POINT OR LAUNCH LINE

A point or a line in or near the launch area from which all times and distances are measured, irrespective of the take-off points of individual airships. The location of a launch point or line, if any, shall be defined for each flight and will be clearly identified on the ground.

9.4 LANDOWNER PERMISSION

Competitors must ensure permission has been obtained from the landowner or occupiers before driving onto, or launching from, any land which is enclosed or cultivated or apparently private or used for agricultural purposes. The permission must be obtained in the presence of an official or observer.

Penalty: up to 250 task points.

9.5 VEHICLES

Not more than two vehicles per airship may be present in the launch area during the launch period.

Penalty: 100 task points.

9.5.1 Vehicles must be driven at suitably reduced speeds within the launch area. The Safety Officer and the Launch Masters may bar from the area any vehicle that is driven inconsiderately.

9.6 LATE VEHICLES

No vehicles may enter the launch area before the red flag has been raised except by permission of a Launch Master.

Penalty: 100 task points.

9.7 PREPARATION OF AIRSHIPS

The Launch Master may allocate to each competitor a space in which to prepare and inflate his airship. He has authority to regulate the operation of all airships and vehicles on the launch area. A competitor must use the space allocated and obey the instructions of the Launch Master.

Penalty: up to 200 task points.

9.8 <u>INFLATION</u>

Inflation may start after blue flag has been raised

9.9 SIGNALS POINT

A point at the launch area where flag signals are displayed, and competitor's task declaration, late entries and supplementary briefings take place. Competitors are responsible for keeping observation on the signals point, and its obscuring shall not be a reason for complaint.

9.10 LAUNCH SIGNALS

Colored flags or equivalent shall have the following meanings when displayed at the signals point:

Permission to enter the launch area and ready the airship for flight, but no

inflation of any kind permitted.

BLUE Inflation permitted

GREEN Permission for start of flight

YELLOW 5 minutes (or more) warning

PINK Supplementary or amended briefing information available.

WHITE End of launch period

BLACK Flight or competition canceled.

Non-observance of red flag is subject to penalty up to no score.

Procedure may be modified during task briefing (ex. "16.1.3 Le Mans Start" *)

9.11 PUBLIC ADDRESS

Unless the Director has specified at the flight briefing that the public address will be used, any information given over the public address system is of no effect for competition purposes.

9.12 LAUNCH PERIOD

No take-off may be made before the launch period, and any take-off made after the launch period, except under <u>rule 9.14</u>, may be subject to a penalty. The yellow warning flag will be raised 5 or more minutes before the end of the launch period.

9.13 ADEQUATE TIME

A competitor who is given permission to begin hot inflation 30 or more minutes before the end of the launch period is deemed to have adequate time, even if the launch period is curtailed for any reason.

9.14 EXTENSION OF TIME

A competitor may request an extension of time from the Launch Master. The Launch Master may grant an extension if he is satisfied that the competitor was delayed by the action of officials or other competitors, or by other causes outside his control (equipment malfunction excluded).

9.15 LAUNCHING ORDER

Airships may be allotted an order of priority for inflation, which will be rotated from one flight to the next. Competitors may commence hot inflation according to the flag signal or when given individual permission by a Launch Master.

9.16 OBSTRUCTION

Once an airship is fully inflated and/or airborne, a competitor may not unnecessarily remain in a position where his airship obstructs another.

9.17 TAKE-OFF PERMISSION

9.17.1 There are two types of take-off permission, individual and general. The type applicable to a given flight will be declared at the flight briefing. In neither case does take-off permission relieve the competitor of complete responsibility for his take-off, including adequate lift to clear all obstacles and other airships, and to continue safely in flight.

9.17.2 INDIVIDUAL TAKE-OFF

Competitors, when completely ready to take-off and having positive buoyancy should wave a white flag. The Launch Master will then give each competitor permission to take-off with the words "Number clear to take-off".

The competitor may then take-off at will subject to any instructions from the Launch Master at the time. If the airship does not take off within 1 minute, permission to take-off may be canceled by the Launch Master.

9.17.3 GENERAL TAKE-OFF

Competitors may take-off at will on or after a general signal has been given without any further permission.

9.18 LOSS OF CONTROL

A competitor losing control of his airship shall deflate immediately or take other appropriate action. A competitor taking off without permission, whether due to loss of control or any other reason, may be penalized up to 500 points.

9.19 ABORTED TAKE-OFF

- **9.19.1** An airship is considered to have taken off and started the flight if it passes over the boundary of the Launch Area or Launch Site, or the starting line. A competitor may abort his take-off for safety rea- sons but must avoid the obstruction of other airships.
- **9.19.2** At a Common Launch Area, he may attempt a further take-off within the launch period. He must inflate in his originally allocated space, except by permission of the Launch Master, and must again obtain permission to take-off.

9.20 CLEARING LAUNCH AREA

A competitor, unable to clear the launch area or the starting line within three minutes, shall climb to at least 500 feet above ground level.

9.21 TAKE-OFF (S1 3.2.6.2 3.2.6.6)

THE POINT AND/OR TIME AT WHICH ALL PARTS OF AN AEROSTAT OR ITS CREW CEASE TO BE IN CONTACT WITH OR CONNECTED TO THE GROUND OR WATER.

10 FLIGHT RULES

10.1 RATE OF CLIMB

A competitor shall not initiate or maintain a fast climb unless he is completely certain that no higher airship is in his ascent path.

10.2 RIGHT OF WAY

The RIGHT OF WAY RULES are SAFETY RULES. Any exploitation of these rules for reasons other than flight safety and accident avoidance will result in no score for the task.

- **10.2.1** A competitor is responsible for avoiding collision between his airship and any other airship at all times in flight or on the ground.
- **10.2.2** When two airships at different altitudes are converging in flight, approaching head on, or approach- ing a target, goal or landing area the pilot of the higher airship shall hold its position or give way by climbing as necessary to avoid collision.
- 10.2.3 When two airships are converging in flight at similar altitudes the one which has the other on its starboard (right hand) side shall give way.
- **10.2.4** When two airships are approaching head on at similar altitudes each shall alter course to starboard (the right).
- **10.2.5** An airship overtaking another at similar altitude shall alter course to starboard (the right) or port (the left) as defined in the task briefing.
- **10.2.6** In case of collision, both competitors may be penalized, not necessarily by the same amount.
- 10.2.7 When competitive advantage results from a collision between two airships, the competitor who was responsible shall receive no score for the flight, and the competitor who has been disadvantaged shall have a compensation of 50 points added to his score.
- **10.2.8** Dangerous flying (e.g. any flying creating an unnecessary risk to other airships, or people on the ground), not necessarily causing a collision, will be penalized up to disqualification from the event.

10.3 <u>CLEARING AREA OF SCORING OPTION</u>

A competitor who has scored shall clear the vicinity of the scoring option or the arrival line as quickly as reasonably possible.

10.4 DROPPING OBJECTS

No object may be dropped from the airship except for official markers, or objects used for scoring purposes.

10.5 BEHAVIOR

Competitors are required to fly with proper consideration for persons and livestock on the ground and to follow good landowner relations etiquette or code of conduct when provided. Inconsiderate behavior by competitors or crew members, or endangering the public during flight, may be penalized by up to 1000 competition points.

10.6 LIVESTOCK AND CROP

Airships shall not fly closer than 250 feet from livestock and competitors and crews must not damage crops unless given permission by the landowner or person responsible for the crop.

Penalty: up to 1000 points.

10.7 LANDOWNER

In these rules the term "landowner" means the person who is responsible for any crop or livestock on the land, not necessarily the legal owner of the land itself.

10.8 COLLISION

A competitor whose airship is in collision with any structure, power or telephone wires or their supports, at any time between inflation and completion of final landing will be penalized up to 500 competition points. Collisions may additionally be penalized under the rule for dangerous flying.

10.9 FLIGHT CREW AND PASSENGERS

Competitors may be required to perform a particular task solo. The Director shall use his discretion to ensure a fair balance between mandatory solo flights and flights with the option to carry a passenger. This balance should also apply to the number of points which can be earned in the two types of flights. When a competitor is permitted to carry other crew during a flight, they may perform any duties he wishes to assign to them, except to act as pilot in command (operating the engine, the burner and the rudder).

10.10 GROUND CREW

Each competitor shall ensure that he has sufficient crew to operate his airship and retrieve vehicles. He shall ensure that all those involved with his airship are adequately briefed on safety. A competitor is responsible for all the actions of his crew during a competition.

10.11 DRIVING

Vehicles must be driven at suitable speeds within the Launch Area. The Safety Officer or Launch Master may ban any vehicle driven inconsiderately from the area. Vehicles must be driven safely during the retrieve and comply with local driving laws.

Penalty: up to 500 competition points

10.12 DISEMBARKATION

No person may enter or leave the car between take-off and final landing.

10.13 ASSISTANCE

Except for take-off and landing, physical assistance in handling the airship by ground crew or other persons on the ground is only permitted during an authorized PIT STOP or REFUELING STOP.

Penalty: 200 points for each infringement.

10.14 <u>AIR LAW</u>

Infringements of air law which do not contravene the rules of the Event or provide competition advantage will not be penalized by the Director except in cases of damage, disturbance or reasonable complaint from persons not connected with the Event.

10.15 RECALL PROCEDURE

A recall procedure will be announced at the General Briefing

11 LANDINGS

11.1 LANDING AREA

A landing area may be defined for certain flights. In this case airships must land and come to a complete stop within the defined boundaries of the landing area.

11.2 **GROUND CONTACT**

No part of the airship car may make contact with the ground (or water surface, or anything resting on or attached to the ground) within 200 meters of any scoring option, except for TOUCH & GOES (<u>rule 16.2.7</u>), PIT STOPS (<u>rule 16.2.10</u>) and REFUELING (<u>rule 16.3</u>). Touching of grass may be acceptable according to information at the flight briefing.

Penalty: 200 task points of the approached target unless otherwise declared at the flight briefing.

11.3 PERMISSION TO RETRIEVE

Competitors must ensure that permission has been obtained from the landowner before driving onto any land which is enclosed or cultivated or apparently private or used for agricultural purpose.

Penalty: up to 250 task points.

12 TARGET, MARKER

12.1 MARKER

A weighted streamer or any other device declared as a marker during the flight briefing supplied by the organizers. Competitors are responsible for collecting the necessary markers before a flight. The marker must not be modified in any way. Marker dimensions are 9 x 4 cm for the bag weighted with 75 g (tolerance plus / minus 10 g), 50 cm for the tail. They can be made from anti-slippage tissue.

12.2 TYPES OF MARKER DROP

12.2.1 Gravity Marker Drop

The marker must be completely unrolled when released. The tail may be loosely collected in the hand of the pilot. Gravity shall be the only means for the marker drop. No horizontal motion shall be applied to the marker in relation to the airship.

The pilot releasing the marker must sit in the gondola.

A marker thrown into a scoring area will be regarded as a valid result and penalty will be applied.

Result will be reduced by 50% if horizontal motion, in relation to the airship is added, or Pilot is not in a sitting position.

12.2.2 Free marker drop

Before the first flight, the Pilot has to declare the side of gondola where he drops the marker during the competition. (Organizer may provide a sticker to mark the "dropping side"). If he wants to change the "dropping side" it must be approved by the event director.

The marker may be thrown by hand. No devices for propelling markers are permitted. Marker must be unfurled when thrown or dropped from the airship car. It must be released from hand before the weighted part touches ground, otherwise the case shall be regarded as a ground contact.

No score if marker is not dropped from the "dropping side".

12.2.3 Penalties

- No score for a competitor using his marker to move another competitor's marker from its position.
- No score if marker is dropped or thrown by another person than the competing pilot.

12.3 **MARK**

Mark is a point on the ground, vertically below the weighted part of the marker, where it comes to rest after falling from the airship.

12.4 OBSERVED MARK

- **12.4.1** A mark which has been observed or measured by a competition official
- **12.4.2** Measurements will be made to the closest point of the weighted bag portion of the marker. Results is 0,0 cm, if any part of the weighted bag covers the center of target.

12.5 <u>INTERFERENCE WITH MARKER</u>

No person other than an official may touch or interfere with a marker on the ground.

12.6 SCORING PERIOD

Scoring Period is the period during which results and points can be achieved. Scoring Period begins and ends at the same time for all competitors. Different scoring periods may be defined for different scoring locations.

12.7 MAXIMUM TIME FOR TASK

Maximum Time for Task (MTT) may be set. MTT begins when airship's propeller guard clears Start Gate and ends when it clears Finish Gate. Scores achieved after MTT has passed are not valid but scores achieved before end of MTT are. Competitor is deemed to finish the task when airships propeller guard clears Finish Gate even in case it happens after MTT has passed.

12.8 <u>TASK AREA:</u>

The task area is an area defined by a radius around a goal / target or an otherwise clearly defined area where no one inside except the assigned officials are allowed. The task area will be provided for each task where necessary (i.e. Marker tasks and Touch and go).

13 PENALTIES

13.1 UNSPORTING BEHAVIOR (GS 5.2 6.2)

- **13.1.1** Serious Infringements includes dangerous or hazardous actions or repetitions of lesser infringements, and will be penalized according to the appropriate rule.
- 13.1.2 CHEATING OR UNSPORTING BEHAVIOR, INCLUDING DELIBERATE ATTEMPTS TO DECEIVE OR MISLEAD OFFICIALS, WILLFUL INTERFERENCE WITH OTHER COMPETITORS, FALSIFICATION OF DOCUMENTS, USE OF FORBIDDEN EQUIPMENT OR PROHIBITED DRUGS, OR REPEATED SERIOUS INFRINGEMENTS OF RULES SHOULD, AS A GUIDE, RESULT IN DISQUALIFICATION FROM THE EVENT.

13.2 UNSPECIFIED PENALTIES

- **13.2.1** A competitor infringing any rule for which the penalty is not specified may have a penalty applied to his result up to no score for the flight.
- 13.2.2 Where safety is not an issue, and no competitive advantage has been gained he will normally receive a warning in the first instance.
- 13.2.3 A competitor may not be penalized under this rule if he has already been penalized under the same rule in a previous task, but has not been informed of the fact before the beginning of the task in question, except for follow-on tasks in the same flight.

13.3 PENALTY POINTS

Penalty points will be subtracted from a competitor's task score and may result in a negative score, which will be set against his total score in the Event.

13.4 PROOF OR RULES VIOLATION (S1, AN3, 8.9)

THE PRODUCTION AND DEMONSTRATION OF EVIDENCE FOR ANY ALLEGED INFRINGEMENT BY A COMPETITOR ALWAYS RESTS ENTIRELY WITH THE EVENT OFFICIALS. RULES SHALL NOT BE WRITTEN IN ORDER TO OBLIGE THE COMPETITOR TO PROVE HIS COMPLIANCE WITH THE RULES OR HIS INNOCENCE IN CASE OF ALLEGED INFRINGEMENT.

14 SCORING

14.1 RESULT

A competitor's result is the achieved outcome in a task. Cross target results will be expressed in centimeters, with one decimal accuracy and speed event results in minutes and seconds.

14.2 TASK SCORE, SCORING LOCATION SCORE, VALID SCORE, NO SCORE

A competitor's Task Score is the number of points achieved in a Task after penalty points have been subtracted. Scoring Location Score is the number of points achieved at Scoring Location. When a Competitor performs in a Task or at a Scoring Location according to the pertinent rule, his performance is valid and he achieves a valid score. No score means zero points.

14.3 PUBLICATION OF SCORES (S1: 5.9.4 PART)

- **14.3.1** THE scores OF EACH TASK SHALL BE PUBLISHED WITH THE MINIMUM OF DELAY on the Official Notice Board.
- **14.3.2** Task score sheets shall include:
 - a. EVENT NAME, TASK DATE and time, TASK SEQUENCE NUMBER, TASK NAME AND RULES reference.
 - b. For each competitor his rank, competition number and name, result, score and if applicable, penal- ties followed by a rule reference and a brief description.
 - c. Publication date and time, version number and signature of the Director.
 - d. IF MORE THAN ONE score SHEET VERSION IS PUBLISHED FOR A PARTICULAR TASK, THE CHANGES FROM THE PREVIOUS ISSUE SHALL BE MARKED AND THE DIFFERENT VERSIONS SHALL BE NUM- BERED IN SEQUENCE.
- **14.3.3** Task score sheets will have the following status:

PROVISIONAL Provisional scores are published for information only and have no validity

for timing purposes.

OFFICIAL Time periods for complaints/protests start from the publication of official

scores.

Official scores become final after all relevant time periods have expired.

The jury may require a correction of the results and/or penalties prior to

approving and signing the final scores.

- **14.3.5** Total score sheets shall include:
 - a. Event name

FINAL

- b. For each competitor his rank, competition number and name, total score and task scores
- c. Task checksums
- d. Total scores are for information only and will not carry a signature.

14.4 SCORING METHODS

14.4.1 Scoring by Ranking Order

When points will be awarded according to ranking order of results, the maximum points for ranked results are either 1000, 500 or 250, as specified in task rules and <u>rule 15.2</u>.

Ranked results will be awarded points according to the following table:

Position	Points			
1	1000	500	250	
2	900	450	225	
3	800	400	200	
4	700	350	175	
5	600	300	150	
6	500	250	125	
7	400	200	100	
8	300	150	125	
9	200	100	50	
10	100	50	25	
11	50	25	10	

14.4.2 Scoring by Dynamic Scoring

The scores are calculated by relative distance/time to each other.

14.4.2.1 Formula max 250 points

Score is 250 - [225 / (Max Result - Min Result) x (Result Competitor - Best Result)]

14.4.2.2 Formula max 500 points

Score is 500 - [450 / (Max Result - Min Result) x (Result Competitor - Best Result)]

14.4.2.3 Formula max 1000 points

Score is 1000 - [900 /(Max Result - Min Result) x (Result Competitor - Best Result)]

Max and Min Result

Max. Result is the worst valid (measured) result.

If one or more Pilots are out of the measuring area - max. result is the size of the measuring area i.e. 2,00m

Min Result is the best Result

Last competitor in measuring area receives 25 points if maximum is 250, 50 points if maximum is 500 and 100 points if maximum is 1000.

This formula also works with time- tasks. It's just another unit to calculate with.

14.5 SCORES BY PERFORMANCE AT SCORING LOCATIONS

When points achievable in a task at various Scoring Locations are given either in chapter "15 TASKS" and chapter "16 STARTS, SCORING LOCATIONS, POINTS" or at task briefing, the achieved points shall be added up in order to find the competitor's Task Score. Fixed Scoring Location Scores, such as

for clearing Start Gate and Finish Gate, shall be added to scores awarded by ranking order, when applicable.

14.6 TIED TOTAL SCORES

Where two competitors have equal total scores in the Event, the competitor with the smaller difference between his best and worst scores will be ranked higher.

15 TASKS

15.1 TASKS AND TASKS TYPE

For each competition flight competitors will be set a number of tasks. The tasks may be set in any order and in any combination as deemed appropriate by the Director. During any competition flight the minimum points available to competitors is 1000. Tasks are of four types: Racing Tasks, Precision Tasks, Precision Race Tasks, and Long Distance Tasks.

15.2 RACING TASKS, FLIGHT TIME POINTS

Racing Tasks are timed speed events where the competitor tries to achieve maximum amount of points for Shortest Time and for Declared Time, if so set in task briefing.

Shortest Time points The competitor who completes the task in shortest time is

the winner.

declared time is the winner. Declaration details to be

included with task data at briefing.

TimingAll times are taken when airship's propeller guard crosses

appropriate line.

Scores When either Shortest Time or Declared Time is used alone, the

maximum score for best result is 500 points

When Shortest Time and Declared Time are used in

combination, the maximum score for best result in each part is 250 points except for Cross Country tasks for which 500 points may be available for fastest time as well as for closest declared

time.

Scores for other ranks are as per rule 14.4.1 for Shortest Time

and rule 14.4.2 for Declared Time.

Exception Scoring for Shortest Time points on SLALOM task shall be

by Dynamic Scoring (see rule 14.4.2).

15.2.1 Pylon Race

Pylon Race is a timed speed event of one or more laps over a short course consisting of a Start Gate, two or more Turning Pylons, and a Finish Gate. The course must be flown in designated sequence and Turning Pylons must be passed in required manner, otherwise no score for Shortest Time and Declared Time.

	Check	Points	Remark
			S
Passing Start Gate	Х	100	
Passing Finish Gate	Х	100	
Points for Shortest Time	Х	rule 15.2	
Points for Declared Time	Task briefing	rule 15.2	
Scoring Period (SP)	Task briefing		No scores can be achieved outside SP

Overtaking will normally be as defined in <u>rule 10.2.5</u> and the task briefing, except that where an airship is more than 100 m off the ideal minimum track, overtaking can be between that airship and the pylon or ideal track.

15.2.2 Point to Point Race

Point to Point Race is a timed distance speed event consisting of Start Gate, one or more Turning Pylons and/or Turning Gates (no other en-route Scoring Locations permitted), and Finish Gate in a different place from the Start Gate. The course must be flown in designated sequence, and Turning Pylons and Turning Gates must be passed in required manner, otherwise no score for Shortest Time and Declared Time.

	Check	Points	Remark s
Passing Start Gate	Х	100	
Passing Finish Gate	Х	100	
Points for Shortest Time	Х	rule 15.2	
Points for Declared Time	Task briefing	<u>rule 15.2</u>	
Scoring Period (SP)	Task briefing		No scores can be achieved outside SP

Overtaking will normally be as defined in <u>rule 10.2.5</u> and the task briefing, except that where an airship is more than 100 m off the ideal minimum track, overtaking can be between that airship and the pylon or ideal track.

15.2.3 Racing Task Penalties

	Penalty	Remark
		s
Missing Turning Gate	No score	For Shortest Time and Declared Time
Missing Turning Pylon		
Flying other sequence		

A competitor will be deemed to have passed a Pylon if the airship's car rounds the pylon in the required manner and deemed to have passed a Gate if the airship's car passes between the poles in the required manner.

15.3 PRECISION TASKS

Precision Tasks are medium distance tasks that require precision flying at Scoring Locations set by the Director. Ground contact penalties shall apply during the tasks.

15.3.1 Mixed Salad Task

Mixed Salad Task is a Precision Task consisting of Start Gate, Finish Gate and any combination and number of following Scoring Locations:

- Cross Target,
- Bull's Eye Target,
- Wading Pool,
- Object Collection,
- Object Delivery,
- Glass tube.
- Touch and Go,
- Pit Stop.

Competitors try to get one valid score in each type of Scoring Location. There may be more than one Scoring Location of each type in order to avoid waiting lines.

Start Gate must be cleared first and Finish Gate last, but otherwise the scoring order is free.

	Check	Points	Remark s
Passing Start Gate	X	100	One attempt only may be made to pass through the Start Gate. No score in task if the attempt fails.
Passing Finish Gate	X	100	
Maximum Time for Task (MTT)	Task briefing		Scores achieved after MTT has passed are not valid but scores achieved before end of MTT are.
Scoring Period (SP)	Task briefing		No scores can be achieved outside SP

Points for each valid performance at other Scoring Locations: as set in <u>chapter "16 STARTS, SCORING LOCATIONS, POINTS"</u>.

Penalties for ground contact apply.

MTT begins when airship's propeller guard clears Start Gate and ends when it clears Finish Gate.

Scores achieved after MTT has passed are not valid but scores achieved before end of MTT are. Competitor is deemed to finish the task when airship's propeller guard clears Finish Gate even in case it happens after MTT has passed.

15.3.2 Toma-Hawk Task

Toma-Hawk is a timed Precision Task. Airships shall be individually timed through Start Gate and Finish Gate. Competitors attempt to achieve a valid score at maximum number of Scoring Locations of various merit set by the Director.

Scoring Locations can be scored upon once or a specified number of times, but only one marker per approach will achieve points in marker drop Scoring Locations.

	Check	Points	Remark
			S
Passing Start Gate	Х	100	One attempt only may be made to pass through the Start Gate. No score in task if the attempt fails.
Passing Finish Gate	Х	100	
Maximum Time for Task (MTT)	Task briefing		Scores achieved after MTT has passed are not valid but scores achieved before end of MTT are.
Scoring Period (SP)	Task briefing		No scores can be achieved outside SP
Bonus Score points		500	All competitors who have achieved a valid score within Scoring Period and MTT at all the Scoring Locations, including the Finish Gate

Points for each valid performance at other Scoring Locations: as set in <u>chapter "16 STARTS, SCORING LOCATIONS, POINTS"</u>.

MTT begins when airship's propeller guard clears Start Gate and ends when it clears Finish Gate. Scores achieved after MTT has passed are not valid but scores achieved before end of MTT are.

Competitor is deemed to finish the task when airship's propeller guard clears Finish Gate even in case it happens after MTT has passed.

Ground contact penalties shall apply during the task.

15.3.3 Line Task

Line Task is a Precision Task consisting of Start Gate, Finish Gate, and 4 - 8 Scoring Locations, such as about 1 by 1 meter boxes, wading pools about 1 m diameter, object delivery or object pick-up on a line that is approximately parallel to low level wind.

Scoring locations can be on the ground or can be elevated.

Competitors try to drop or throw one marker inside each Scoring Location or to pick or to deliver objects in sequence starting from the end designated in task briefing.

	Check	Points	Remarks
Passing Start Gate	Х	100	One attempt only may be made to pass through the Start Gate. No score in task if the attempt fails.
Passing Finish Gate	Х	100	
Maximum Time for Task (MTT)	Task briefing		Scores achieved after MTT has passed are not valid but scores achieved before end of MTT are.
Scoring Period (SP)	Task briefing		No scores can be achieved outside SP
Points for each valid performance at other Scoring Locations		Task briefing	Minimum of 1000 points for the task must be available.

Penalties for ground contact and retreat apply.

Continuous forward movement towards next Scoring Location is required and compliance is checked from GPS logger track. When airship's flight path makes a loop (360 degrees), it is a clear example of infringement of this rule.

Penalty: for each occurrence of retreat: 200 points. Distance between Scoring Locations: 50 - 250 m.

A corridor along the prescribed track of a certain width may be defined in the briefing information

MTT begins when airship's propeller guard clears Start Gate and ends when it clears Finish Gate. Scores achieved after MTT has passed are not valid but scores achieved before end of MTT are.

Competitor is deemed to finish the task when airship's propeller guard clears Finish Gate even in case it happens after MTT has passed.

Signals at Start gate

Colored flags or equivalent shall have the following meanings when displayed at the signals point:

RED	Task closed, wait for your turn (Permission to enter is denied when another airship is approaching the first				
	Scoring Location)				
	(Permission will be given when the first Scoring Location is free)				
GREEN	Permission for start of flight				

15.3.4 Curve Task

Curve Task is a timed and/or Precision Task consisting of Start Gate, Finish Gate, and 4 - 6 circular or rectangular Scoring Locations (about 1 by 1 meter boxes or wading pools about 1 m diameter) set on segment of circle arch.

Competitors try to drop or throw one marker inside each Scoring Location in sequence starting from the end designated at task briefing. For each target missed competitor will be given a time penalty to be added to his time between start and finish gate. Time penalties as set in the task briefing.

	Check	Points	Remarks
Passing Start Gate	Х	100	One attempt only may be made to pass through the Start Gate. No score in task if the attempt fails.
Passing Finish Gate	Х	100	No score in case of failure to pass finish gate.
Maximum Time for Task (MTT)	Task briefing		Scores achieved after MTT has passed are not valid but scores achieved before end of MTT are.
Scoring Period (SP)	Task briefing		No scores can be achieved outside SP
Points for each valid performance at other Scoring Locations		Task briefing	Minimum of 1000 points for the task must be available.
Points for Shortest Time	Task briefing	<u>rule 15.2</u>	

Penalties for ground contact and retreat apply.

Continuous forward movement towards next Scoring Location is required, and compliance is checked from GPS logger track. When airship's flight path makes a 360-degree loop, it is a clear example of infringement of this rule. One maneuver between two consecutive Scoring Locations for gaining headwind approach is permitted, but making a 360-degree loop or drifting downwind without steering and power is not permitted.

Penalty: for each occurrence of retreat: 200 points. Distance between Scoring Locations: 50 - 250 m.

A corridor along the prescribed track of a certain width may be defined in the briefing information.

MTT begins when airship's propeller guard clears Start Gate and ends when it clears Finish Gate. Scores achieved after MTT has passed are not valid but scores achieved before end of MTT are.

Competitor is deemed to finish the task when airship's propeller guard clears Finish Gate even in case it happens after MTT has passed.

Signals at Start gate

Colored flags or equivalent shall have the following meanings when displayed at the signals point:

RED	Task closed, wait for your turn (Permission to enter is denied when another airship is approaching the first Scoring Location)				
	(Permission will be given when the first Scoring Location is free)				
GREEN	Permission for start of flight				

15.3.5 SLALOM

A combined precision and speed task over a slalom course consisting of start gate, up to 10 Slalom poles and finish gate spaced between 50 and 100 m. Gates to be 10 m wide. Airships must pass between gate poles and outside each slalom pole in sequence. Poles and gates will be 3 m high. Task to be set in calm conditions or set to be flown on straight course in direction parallel to wind direction. A maximum flight height maybe set.

	Check	Points	Remarks
Passing Start Gate	Х	100	One attempt only may be made to pass through the Start Gate. No score in task if the attempt fails.
Passing Finish Gate	Х	100	No score in case of failure to pass finish gate.
Passing pole	Х	20	For each successfully passed gate or pole
Points for Shortest Time	Task briefing	rule 14.4.2	

Points for each valid performance at other Scoring Locations: as set in <u>chapter "16 STARTS, SCORING LOCATIONS, POINTS"</u>.

Penalty: for not observing sequence = no result

A corridor along the prescribed track of a certain width may be defined in the briefing information.

10th FAI World Hot Air Airship Championship - Eventrules

Signals

Colored flags or equivalent shall have the following meanings when displayed at the signals point:

RED	Course closed
GREEN	Permission to enter course
BLUE	Successful pass through gate or rounding of pole

15.4 PRECISION RACE TASKS

Precision Race Tasks are timed speed events where competitors try to achieve maximum amount of points for Shortest Time, and for Declared Time, if so set in task briefing. Competitors try also to achieve maximum amount of points at each Scoring Location along the course set by the Director. Ground contact penalties shall apply during the tasks.

15.4.1 Target Race Task

Target Race is a combined precision and speed event over a target course consisting of Start Gate, Finish gate, and 2 - 8 circular or rectangular Scoring Locations (about 1 by 1 meter boxes or wading pools about 1 m diameter) spaced between 200 m and 400 m apart.

Competitors try to achieve maximum amount of points for Shortest Time, and also for Declared Time, if so set in task briefing. Competitors try also to achieve maximum amount of points at each Scoring Location along the course set by the Director.

	Check	Points	Remarks
Passing Start Gate	Х	100	One attempt only may be made to pass through the Start Gate. No score in task if the attempt fails.
Passing Finish Gate	Х	100	
Points for Shortest Time	Х	rule 15.2	
Points for Declared Time	Task briefing	<u>rule 15.2</u>	
Scoring Period (SP)	Task briefing		No scores can be achieved outside SP

Points for each valid performance at other Scoring Locations: as set in <u>chapter "16 STARTS, SCORING LOCATIONS, POINTS"</u>.

Penalties for ground contact and retreat apply.

The course must be flown in designated sequence, otherwise no score for Shortest Time and Declared Time.

Continuous forward movement towards next Scoring Location is required and compliance is checked from GPS logger track. When airship's flight path makes a loop (curves over itself), it is a clear example of infringement of this rule. One maneuver between two consecutive Scoring Locations for gaining headwind approach is permitted, but making a 360-degree loop or drifting downwind without steering and power is not permitted.

Penalty: for each occurrence of retreat: 200 points.

Signals at Start gate

Colored flags or equivalent shall have the following meanings when displayed at the signals point:

RED	Task closed, wait for your turn (Permission to enter is denied when another airship is approaching the first Scoring Location) (Permission will be given when the first Scoring Location is free)
GREEN	Permission for start of flight

15.5 LONG DISTANCE TASKS

Long Distance Tasks cover usually more than 10 km over a designated course. Course must be flown in designated sequence.

15.5.1 Cross Country Task

Cross Country Task consists of a timed long distance flight usually of more than 10 km over a designated course with 2 or more Scoring Locations (known or secret).

	Check	Points	Remarks
Passing Start Gate	Х	100	Two attempts only may be made to pass through the Start Gate. No score in task if both attempts fail.
Passing Finish Gate	Х	100	
Points for Shortest Time	Х	rule 15.2	
Points for Declared Time	Task briefing	rule 15.2	
Scoring Period (SP)	Task briefing		No scores can be achieved outside SP

Scoring Locations must be flown in sequence.

Points for each valid performance at other Scoring Locations: as set in <u>chapter "16 STARTS, SCORING LOCATIONS, POINTS"</u>.

Timing. All times are taken when airship's propeller guard crosses appropriate line.

15.5.2 Long Distance Task Penalties

	Penalty	Remark
		s
Missing Turning Gate	No score	For Shortest Time and Declared Time
Missing Turning Pylon		
Flying other sequence		

A competitor will be deemed to have passed a Pylon if the airship's car rounds the pylon in the required manner and deemed to have passed a Gate if the airship's car passes between the poles in the required manner.

15.6 TASK BRIEFING INFORMATION

At task briefings competitors will receive:

- 1. A map or diagram showing locations of Start Gate, Scoring Locations, and Finish Gate, with an indication of the direction and sequence in which they are to be flown. Refueling areas and other relevant places will also be shown.
- 2. Details of each task
 - Name and rule number of task
 - Type of start, Start Gate location and opening time
 - Name and rule number of Scoring Locations (except for secret ones)
 - Scoring Period and Maximum Time for Task, if set
 - Altitude requirements, if any
 - Right of way when overtaking
 - Finish Gate location
 - Maximum points achievable in the task
 - Refueling arrangements
 - Number of markers
 - Marker release method
 - Specific task penalties if any
 - Information about next briefing

16 STARTS, SCORING LOCATIONS, POINTS

16.1 TYPES OF START

16.1.1 Individual Start

Competitors start at their individual time of crossing start line between Start Gate poles.

16.1.2 Racing Start

All competitors attempt to cross the start line as near as possible to its opening time.

16.1.3 Le Mans Start

Inflated airships ready to fly are lined up on flags. On start signal competitors run forward 20 meters, collect the token, return to airship and take-off.

16.2 SCORING LOCATIONS AND ACHIEVABLE POINTS

16.2.1 Start Gate

Two 3 m poles placed at least 50 m apart in designated position between which airships car must pass in the designated direction. Flashing yellow beacon indicates that the gate is OPEN.

Score: 100 points.

16.2.2 Turning Pylon

A single 3 m pole with flashing yellow beacon or another designated marker. Airships car must pass to the left of the pylon on a clockwise circuit or the right of the pylon on an anticlockwise circuit in order to get a valid score in the task that requires passing a pylon.

No points are awarded for passing the pylon.

16.2.3 Turning Gate

Two 3 m poles placed 50 m apart between which airship's car must pass in the designated direction in order to get a valid score in the task that requires passing through Turning Gate.

No points are awarded for passing through Turning Gate.

16.2.4 Wading Pool, Box, or other designated structure

A children's wading pool, a box, or other place in which a competitor must drop a marker in order to score.

Score: 100 points unless stated otherwise at task data.

16.2.5 Cross Target

A white or orange cross with arms 2 m long x 50 cm wide. Scoring by dropping a marker, closest to center wins. No score for markers more than 2 m from center of cross.

Marker should be dropped using Gravity Drop as per <u>rule 12.2</u>. Scoring as per <u>rule 14.4.2</u>, maximum for best result 500 points.

16.2.6 Bull's Eye Target

A 2.8 m diameter circle with 4 graduated scoring rings. Scoring by dropping marker on target and by its final position on rings. No score for markers outside of target. The target may be set on elevated platform or stand.

Marker should be dropped using Gravity Drop as per rule 12.2.

Scores: Red = 360 points, Yellow = 200 points, Blue = 100 points, White = 50 points.

16.2.7 Touch and Go

A canvas circle (equipped with means to fix it on ground) with radius of 2.5 m inside which the competitor must touch ground with his airship's car. Touching inside the circle and taking off or dragging through far side is a valid performance. A circle with radius of 25 m from inner circle's center shall be marked on ground.

Touching more than 25 m but less than 200 m from center of circle is ground contact; <u>rule 11.2</u> applies. Propulsion engine must not be switched off whilst airship's car is inside the 25 m circle, except for a short period when the airship's car touches ground. The short period when propulsion engine is allowed to be switched of is defined as earliest <u>7 seconds before</u> ground contact and latest <u>20 seconds after takeoff</u> and only one time.

Propulsion engine shall be considered as started when propeller is turning, by force from electric start engine or propulsion engine.

Penalty: stopped propulsion engine outside of allowed period or more than one time=no score. <u>Scoring</u>:

- 400 points for ground contact only inside the circle.
- 300 points for first ground contact inside the circle (dragging through the far side permitted).
- 150 points for first ground contact with at least one wheel inside of circle but other wheels outside of circle (sequence does not matter but rolling into circle doesn't count)
- 50 points for first ground contact outside of inner circle but within 25 m of its center.
 Touching first outside of the inner circle and rolling or dragging inside is a special case of the last situa- tion but brings only 50 points.

If airship's car makes more than one contact with ground inside the 25 m circle, only the first touch and go achieves points.

16.2.8 Object Collection

Competitor is required to collect an object from an official in a designated place without ground contact by airship. Successful pickup is valid performance.

Score: 100 points.

16.2.9 Object Delivery

Competitor is required to deliver an object without ground contact by object or airship. Successful delivery of intact object is valid performance.

Score: 100 points.

16.2.10 Pit Stop

All competitors must land in a designated and marked area and come to a complete stop with propulsion engines switched off. Generally refueling is permitted as well as other technical maintenance. A supplementary task briefing in writing covering additional tasks may be handed to competitor by an official.

Score: 100 points.

16.2.11 Glass tube

Competitor to deliver a marker or specified equivalent into a 3 m long vertical transparent tube of 10- 20 cm in diameter.

Score: 200 points

16.2.12 Finish Gate

Two 3 m poles set at least 50 m apart in designated position between which airship's car must pass in the designated direction. Flashing yellow beacon indicates that the gate is open.

Score: 100 points.

16.3 <u>REFUELING</u>

At will: Designated areas for refueling during task as required in task briefing. Refueling is not permitted within 200 m of a Scoring Location or other designated competition area.

Penalty: 200 points for each infringement.

Prohibited: Refueling is not permitted during task and/or flight.

Penalty: no score for the task.

TASK SHEET