BFA US National Hot Air Balloon Championship

Competition Manual

August 9-15, 2026
Scottsbluff, Nebraska

Table of Contents

Contents

SECTION I – EVENT DETAILS 2
SECTION II – COMPETITION DETAILS 4
SECTION III – RULES 9
CHAPTER 1 - OBJECTIVES 9
CHAPTER 2 – ENTRY CONDITIONS 10
CHAPTER 3 - BALLOON QUALIFICATIONS 12
CHAPTER 4 - ORGANIZATION OFFICIALS 14
CHAPTER 5 - COMPLAINTS & PROTESTS 15
CHAPTER 6 – LOGGERS 18
CHAPTER 7 - MAPS 19
CHAPTER 8 – PROGRAM, BRIEFINGS 20
CHAPTER 9 - LAUNCH PROCEDURES 23
CHAPTER 10 - FLIGHT RULES 26
CHAPTER 11 - LANDINGS 28
CHAPTER 12 – GOAL, TARGET, MARKER, TRACK POINT 29
CHAPTER 13 - PENALTIES 33
CHAPTER 14 - SCORING 34
CHAPTER 15 - TASKS 37
APPENDICES 42
APPENDIX A - CODE OF CONDUCT 42
APPENDIX B - LANDOWNER RELATIONS 43

INDEX 0

SECTION I – EVENT DETAILS

I. 1 TITLE

The Event shall be known as the **BFA US National Championship.**

I. 2 SANCTION

The event is sanctioned by the **Balloon Federation of America Hot Air Competition Division (BFA/HACD). Positional task scores will be submitted for inclusion in the BFA National Eligibility List (NEL).**

I. 3 ORGANIZATION

The event is organized by the **Old West Balloon Fest**.

I. 4 CORRESPONDENCE

All organizer's correspondence should be addressed to:
Colleen Johnson
Old West Balloon Fest
P.O. Box 251
Mitchell, NE 69357
308-225-0128

BFA/HACD sanction correspondence should be addressed to:
Balloon Federation of America
711 N Jefferson Way
Indianola, IA 50125
(515) 961-8809
bfaoffice@bfa.net

I. 5 PERSONNEL

Championship Director:	**Sam Parks**	Chief of Measuring Teams:	**Vince & Vicki Bjorling**
Deputy Director:	**Maury Sullivan**	Chief Scoring Official:	**JC Smith**
Chief Safety Official:	**Mark MacSkimming**	Assistant Scoring Official:	**Patty Cramer**
Steward:	**Jim Cusick**		
Jury President (on-site):	**Mike Gilligan**	Chief Weather Official:	**Don Day**
Jury Member (off-site):	**Gary Britton**	Jury Member (off-site):	**Debbie Spaeth**
Event Chair	**Colleen Johnson**	FAA Liaison	**Colleen Johnson**
Assistant Weather Officer	**Robert Wise**	Assistant Weather Officer	**Duncan Dunavent**

I. 6 PLACE

The Event will be held in Scottsbluff, Nebraska.

I. 7 DATES

The Event dates are August 9-15, 2026
The last competition flight is Saturday, August 15 **(AM).**

I. 8 PROTEST FEE

The protest fee to accompany a protest is $100.00 cash. In case of a joint protest, every protesting person must pay the protest fee.

I. 9 LANGUAGE

In the rules the masculine form is used as a standard. Wherever you find the masculine form, it is implied that the feminine form is included.

I.10 PARTICIPATION

The Event is open to **BFA/HACD member pilots in good standing and limited to a maximum of fifty competitors** who qualify under conditions detailed in the registration materials provided. The Organizer can add up to two additional pilots, that are in good standing with the HACD.

I.11 CLOSING ENTRY DATE

The closing entry date for the Event is May 15, 2026

I.12 ACKNOWLEDGEMENT OF RESPONSIBILITY AND ASSUMPTION OF RISK

I.12.1 A competitor, by entering the event, acknowledges awareness of, and agreement with, the responsibility legally transferred to the pilot in command under the Federal Aviation Regulations (FAR's) about the personal decision to fly his balloon and any bodily injury or property damage resulting therefrom is solely the pilot's liability.

1.12.2 The competitor acknowledges that none of the flights are mandatory and that all flights will be made at the sole discretion of the competitor. Competitor's decisions as pilot in command may affect his standings in competitive events and any awards or prizes to which the competitor might otherwise be entitled if choosing not to fly.

1.12.3 The balloon and other property of a competitor shall always be at risk of the competitor. By entering the Event a competitor agrees to waive all claim for injury to himself or loss or damage to his property.

I.13 INSURANCE

Each balloon and competitor shall be insured against all claims by third parties to a minimum of **$100,000 per passenger, $100,000 property damage and a minimum limit of *$1,000,000* combined single limit** coverage on the operation of their balloon. The competitor shall produce documentary evidence of this insurance and **additional insured endorsements** valid for the period of the event covering any balloon which he may fly.

SECTION II – COMPETITION DETAILS

II. 1 CONTEST AREA (7.1)

The competition map will consist of special editions of maps produced using DeLorme XMap® 6 software licensed for this application. Paper maps, if requested, will be distributed at on-site pilot registration. Digital versions of the competition map will be available for download by July 6, 2026

From the North, grid line 5500
From the West grid line 8600
From the South, grid line 2700
From the East, grid line 2700

II. 2 OUT OF BOUNDS (7.2)

All red and blue PZs are considered out of bounds airspaces for scoring purposes. PZ infringement, ground contact and other penalties will be applied.

II. 3 PZ LIST (II.9, 7.3)

The details of Prohibited Zones will be printed on the Official Competition Map and posted on the Official Notice Board. Written supplements may be distributed at briefings, if necessary, should changes occur.

II. 4 COMMON LAUNCH AREA(S) (9.1.1)

This data is subject to change. Changes to Common Launch Areas will be posted on the Official Notice Board and written supplements may be distributed at briefings, if necessary, should changes occur.

II. 5 COMMON LAUNCH POINT(S) (9.1.2)

This data is subject to change. Changes to Common Launch Points will be posted on the Official Notice Board and written supplements may be distributed at briefings, if necessary, should changes occur.

II. 6 LANDOWNER'S PERMISSION (9.2.2, 11.6)

Landowner's permission must be obtained for each launch/landing and if several competitors launch/land at the same location, each competitor must ask for permission. Pilot must obtain landowner name, address and phone number and provide upon request.

In addition to Rule 9.2.2 the following applies. Public areas such as public parks, schools and industrial areas are considered as places without need for permission for take-offs or landings. Landowner permission is not required if the basket and retrieve vehicle are on a public road or driveway and the envelope is laid out in a field which is not fenced and not cultivated, and no damage is done. Traffic may not be obstructed. Church property may also be used in this manner as long as no basket or retrieve vehicle is on grassy areas.

These provisions and instructions are subject to change before or during the event at any time by announcements by the Championship Director.

II. 7 LIVESTOCK AND CROP (10.6)

Balloons shall not fly closer than 200' from livestock or buildings containing livestock. Any special notes will be made available during the general pilot briefing and on the Official Bulletin Board.

II. 8 DRIVING LAW (10.11)

All participants are required to follow Nebraska laws and regulations. Items of specific interest include:

- Texting and driving are considered a secondary offense (must be accompanied by another charged traffic offense) and is subject to a first offense fine of $200 and a second offense $300.
- For drivers over 21 the legal Blood Alcohol Content is under 0.08%.
- All vehicle occupants must use seat belt when vehicle is in motion (secondary offense).
- Children under the age of 8 years must be in a child safety seat (primary offense).
- All motorcycle operators and passengers must wear a motorcycle helmet.
- Less than 18 years of age may not ride in an open truck bed or trailer

II. 9 AIR LAW (II.3, 10.14)

When flying over congested areas, persons, livestock or property, competitors must follow the restrictions issued by the FAA in the Event Waiver. Violation of this rule will result in a penalty. **The entire contest area will have**

10,000 ft. MSL as a maximum altitude (Blue PZ) during competition flights. This may be subject to change before or during the event by announcements of the Championship Director.

II.10 RECALL PROCEDURE (10.15)

Primary recall will utilize a Multimedia Message Service (MMS). These MMS messages will utilize the cellular numbers of the pilot, crew, officials, organizer and FAA representatives. Additional or backup recall may use aircraft radios (123.45 frequency).

II.11 VERTICAL SPEED

II.11.1 All logger tracks will be checked using the Balloon Safety Analyzer. Competitors track analysis exceeding the limits of vertical speed below will be reviewed and penalized based on the review and the guidance in II.11.2

Limit	3D Proximity	Relative Vertical Speed
Limit 1:	25 m	3 m/s (~590 fpm)
Limit 2:	50 m	5 m/s (~984 fpm)
Limit 3:	75 m	8 m/s (~1575 fpm)

Limit 4: Exceeding the absolute vertical ascent speed of 8 m/s (~1575 fpm) will be penalized.

II.11.2 If penalties regarding violations for vertical speed limits are applied under this rule, the following table will be used as a guide. Should multiple limits be infringed, the highest penalty will be applied.

Limit 4 will be penalized by 250 points per 1 m/s, or part of, exceeding the limit.

Lower Balloon					**Upper Balloon**			
Vertical speed [m/s]	**Limit 1 Penalty**	**Limit 2 Penalty**	**Limit 3 Penalty**		**Vertical speed [m/s]**	**Limit 1 Penalty**	**Limit 2 Penalty**	**Limit 3 Penalty**
					0 ≤ v < -2			
2 ≤ v < 3	50 (WRN)				-2 ≤ v < -3	100 (WRN)		
3 ≤ v < 4	100 (WRN)	50 (WRN)			-3 ≤ v < -4	200	50 (WRN)	
4 ≤ v < 5	300	100 (WRN)	50 (WRN)		-4 ≤ v < -5	400	100 (WRN)	
5 ≤ v < 6	500	300	100 (WRN)		-5 ≤ v < -6	600	200	100 (WRN)
6 ≤ v < 7	700	500	300		-6 ≤ v < -7	800	400	200
7 ≤ v < 8	900	700	500		-7 ≤ v < -8	1000	600	400
8 and more	1000	900	700		-8 and more	1000	800	600

II.12 GOALS SELECTED BY A COMPETITOR (12.2), GOAL CENTER (12.1)

Goals defined by coordinates:

To Identify a goal on the competition map, the competitor must declare it by coordinates to be written in eight-digit format (first four digits west/east and the second four digits south/north. Easting then Northing) or one of the formats as defined in II.25.

Altitudes do not need to be declared unless otherwise stated in the TDS. Altitudes must be indicated with the minimum needed digits.

No goal may be selected within 200m horizontally of:

- A motorway or a road designated to be a motorway status.
- A power line and railway shown on the competition map.
- No goals may be selected in blue or red PZ's.

II.13 LOCATION OF OFFICIAL NOTICE BOARD (5.11)

The Official Notice Board will be available online at Watchmefly.net. Notifications of postings to the Official Notice Board may be sent using MMS.

II.14 COMMUNICATION TIMES (5.3)

Replies to complaints and protests will be posted immediately as available on the ONB. Notifications of postings to the Official Notice Board may be sent using MMS. Timing requirements of 5.6 will start at the time of the ONB posting.

II.15 PUBLICATION TIMES ON THE LAST FLYING DAY (5.6.3)

All scores, complaints, responses to complaints, protests and jury reports will be posted immediately as available. Electronic notifications of postings to the ONB may be made simultaneously using MMS.

II.16 **FLIGHT CREW (Also see Section III, 10.9)**

Flight crew carried on board may assist the competitor with any duties assigned by the pilot in command including manipulating the controls of the aircraft or throw markers.

II.17 DETAILS FOR THE USE OF GPS-LOGGERS (See Chapter 6) a)

Logger:

a) **The Logger used in this Event is the FAI "Balloon Live" Sensor with a Bluetooth connected smart device. The App is available for** iOS and Android and must be installed by each competitor beforehand on his own recording device (smartphone or tablet). The price of the App is approx. $6.

Details and instructions on how to purchase and use can be found on balloonlive.org

b) Change the operation mode:

Start the app "Balloon Live" > Menu > Change mode Select Application mode

Training mode

To test the app in training flights, the mode "TRAINING" must be used to familiarize with the use of the app. In this mode, no competition data (tracks, declarations and marker drops) is stored. Pull down the red label to start a new flight.

Competition Mode

When entering competition mode, the latest competition data is retrieved from the server. To enter this mode, you must enter the competition token sent to you once registered to the event. The device must be online to do this. It is recommended to load the competition data during flight preparation.

The connection of a smart device is mandatory for all flights. Please make sure the sensor (smart device) is connected using Bluetooth before entering competition mode.

To start the flight, the latest flight data must also be loaded from the server. This flight data is valid for 5 hours only. Therefor it is recommended to be online within the last 5 hours before the start of the recording, or just before start, to load the flight data.

Start a new flight and transmit the track data to the server.

c) **Preconfigured setup for this competition:**

- Competition name: US National Championship
- Logging interval (seconds): 1
- UTC offset (seconds): - 6:00 hours (21,600 seconds)
- Allow multiple marker drops: deactivate
- Allow multiple goal declarations: active
- Declaration format: 4/4
- Altitude mode: GPS feet
- Geodetic system: UTM WGS84

Multiple recording devices may record the flight at the same time. The first started recording will be considered as the primary recording and will be used for scoring.

d) Handling by competitor:

- Throughout the event the competitor is responsible for storing, charging, handling as well as the proper functioning of the devices used (phone, tablet, sensor…).
- The Balloon Live app must be started 5-10 min before the intended take-off to allow proper GPS initialization. The recording must also be started at the same time by initiating the start flight red label.
- The competitor is considered entering the competition flight according to the selected TDS with the start of the track recording and the takeoff.
- During flight the recording device must remain attached to the basket (uprights or basket edge) to ensure optimum GPS reception.
- Declarations must be made in 4/4 format unless otherwise stated in the TDS.
- Altitudes do not need to be declared unless otherwise stated in the TDS. Altitudes must be indicated with the minimum needed digits.
- Goal declarations are registered at the time when the DECLARE button is pushed.
- Electronic marker drops are registered at the time when the DROP button is pushed.
- 5-10 minutes after landing track recording must be stopped by initiating the actions menu (⋮) in the upper right of the Balloon Live app and “Stop Flight”.
- For the transfer of the data, please see under point f) below.

e) Scoring:

- Unless otherwise stated in the TDS, an electronic mark is mandatory for each task where no valid mark has been achieved by physical marker.
- In case the same logger-goal is declared more than once the last declaration in time will be used.
- If an electronic mark is used more than once, the first mark in time will be used.

f) Track data:

The track data is transferred to the server automatically if a data connection is available during flight or when made available after the flight. To resume the data transfer later after the flight, reopen the app and the transmission will start within a minute. Make sure all track points are sent before closing the app or disconnecting the internet connection of the device. The number of unsent track points is shown at the top right (number next to the cloud with the arrow) and will show 0 when all points are transferred.

The track must be transferred to the server not later than 6 hours after the flight has been started. For tracks that are transferred later, the competitor will be penalized by 10 competition points per minute (or part) late in the last task.

The track data remains the property of the competitor but may be made available to the public for live tracking. In such case, explicit permission must be given by the competitor and the publication should have a minimum of 10 min delay.

g) Recommendations:

- Only use recording devices in online mode as the accuracy of the recording is increased and the data transferred immediately.
- Use a power bank to avoid problems with the battery capacity of your device.

Failure to follow the instructions 'Details for the use of GPS Loggers' may be penalized without warning.

II.18 DETAILS FOR TIME LIMITS (rest hours, see 5.6)

The hours between 9:00 PM and 5:00 AM local time will be disregarded for the purpose of the time limits of complaints and protests.

II.19 LOST MARKER

Competitors will be charged $20 for each lost marker. Lost marker fees must be paid prior to the first briefing following the flight in which the marker was lost.

II.20 BALLOON SIZE (3.3)

The maximum size balloon permitted is AX8 (3000cbm/105000cft).

II.21 ALTITUDE (6.9)

The Balloon Live Sensor will use GPS altitude.

II.22 SCORING FORMULA (14.5, Policies Section II (a))

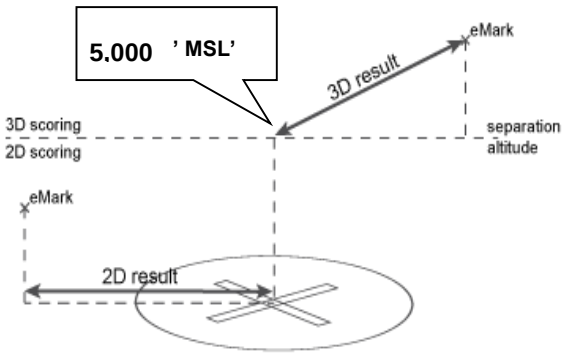
The Event will be scored using Proportional (14.5) scoring.

II.23 2D / 3D SCORING ALTITUDES

The separation altitude between 2D and 3D scoring is 5,000' MSL. When goals or targets on the ground are used, results based on track points will be the:

- 3D-distance to the point at the separation altitude above the goal/target if the track point or electronic mark is above the separation altitude.
- 2D-distance to the goal/target if the track point or electronic mark is at or below the separation altitude.

When goals/targets above the ground are used, results based on track point or electronic mark will be 3D-distance.



II.24 COMPETITION STRUCTURE

The competition will be conducted without observers utilizing track points or electronic mark scoring for all measurements other than direct measurements or physical marker drops inside MMAs or limited scoring areas.

II.25 MAP COORDINATES

The map datum is WGS 84 and UTM coordinates are applied with one (1) km grids; scale 1:40,625 magnetic deviation 7.0 degrees East and Grid N = 0.9° east of True North.

The basic map coordinate of a UTM map with WGS84 datum is:

- 13TS (Zone reference, where 13=zone and T=latitude band)
- 592000 (6-digit Easting)
- 4624000 (7-digit Northing)

To identify a point on the competition map, the coordinates must be written in one of the following formats:

- 4-4 format: this format uses two times four-digits. First four digits easting and the second four digits northing. (e.g. 2976 / 0388), leaving out the 1m digit (1-meter digit is 0).
- A 4-digit goal list number according to the list provided for the competition area.

The competition area is completely in one zone; therefore, the zone reference may be omitted. Eastings must be separated from Northing's by one of the following methods:

- a new line
- a blank space
- a minus character (-) or the slash character (/)

SECTION III – RULES

CHAPTER 1 - OBJECTIVES

1. 1 OBJECTIVES

The objectives of the Event are:

- To determine the Champion Pilot
- To stimulate the development of aerostation by a comparison of performance of pilots and aerostats;
- To reinforce friendship among aeronauts.
- To provide task opportunities for pilots interested in qualifying for the US National Hot Air Balloon Championship through the National Eligibility List System

1. 2 DEFINITION OF CHAMPION

1. 2.1 The Champion shall be the competitor who has the highest aggregate score at the end of the event.

1 2.2 To be recognized as a National Champion a minimum of three (3) tasks and two separate flights must be completed with at least one result from each task for the championship to be valid.

1. 3 INTERPRETATION OF ENGLISH WORDING

1. 3.1 "**Shall"** and **"must"** mean the application is mandatory. Failure to comply will normally lead to a penalty, disadvantageous interpretation, or other disadvantages.

1. 3.2 **"Should"** means that the application is recommended. Failure to comply may lead to penalties, disadvantageous interpretation, or other disadvantages.

1. 3.3 **"May"** means that the application is optional.

1. 4 DOCUMENTATION

The following documents will be inspected when competitors register on arrival at the Event:

a) Pilot Certificate
b) Pilot Logbook
c) Balloon Logbook
d) Certificate of Registration
e) Certificate of Airworthiness
f) Certificate of Insurance

CHAPTER 2 – ENTRY CONDITIONS

2. 1 COMPETITOR

A person entered and competing in the event.

2. 2 COMPETITOR'S RIGHTS OF REPRESENTATION

2. 2.1 Members in good standing and not on probation with the BFA/HACD are eligible to compete in BFA events.

2. 2.2 Women qualifying and stating their intention to use the US Nationals as a qualifier to the Women's World Championship must have only female designated flight crew on board the aerostat.

Juniors qualifying and stating their intention to use the US Nationals as a qualifier to the Junior World Championship must have only junior designated flight crew aged less than 30 years of age at the start of the event (General Briefing) on board the aerostat.

2. 3 QUALIFICATION

Each pilot-in-command shall meet the requirements of the organizer and the BFA/HACD Policies and Regulations. Each pilot-in-command shall have accumulated at least 50 hours as pilot-in-command of aerostats of that sub-class by the closing entry date.

2. 4 SPORTING LICENSE (NOT USED)

2. 5 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. The entry fee may or may not be refundable.

2. 6 ACKNOWLEDGEMENT

A competitor who has not received acknowledgement of their entry within fourteen days after the closing entry date should make inquiries of the organizer.

2. 7 ACCEPTANCE OF CODE OF CONDUCT, RULES AND REGULATIONS

All entrants and competitors are expected to know, understand, and abide by the competition Rules and Regulations for this event. In addition, the competitors are required to know, understand, accept and abide by the Code of Conduct (see APPENDIX A), and by entering are deemed to accept without reservation. They should appreciate that they should compete in a sporting manner and that their behavior must be beyond reproach. Violations will be penalized up to 1000 competition points and may lead to disqualification from the task or Event.

2. 8 RELEASE OF LIABILITY

2.8.1 The competitor, by entering the event, agrees that the organizers and sponsors of this event, competition officials, Balloon Federation of America, BFA/HACD, owner of any site, officers, trustees, agents and/or members of these entities are providing the competitor with the facilities and means for participation in this event and in no way do they supersede the responsibility of the pilot in command as stated in the FAR's, or otherwise.

2.8.2 The competitor releases the aforementioned from liability for their actions or inactions in relation to the event which may arise out of or result from or in any manner relate to the balloon flight or activity in which the competitor participates as a pilot in command.

2. 9 LIABILITY TO THIRD PARTIES

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

2.10 SAFETY

2.10.1 Any meteorological report or forecast, or other safety or navigational information is provided in good faith for the guidance of competitors. The event assumes no responsibility for the completeness or accuracy of such information. It is the competitor's decision whether to rely on that information or acquire additional information.

2.10.2 Officials may be appointed to regulate the inflation and launching of balloons. However, nothing shall diminish the responsibility of each pilot under this chapter.

2.10.3 Recall procedures will be used as described in II.10.

2.11 RESPONSIBILITY

Entrants and competitors remain completely responsible for the safe operation of their aerostats at all stages of inflation, launch, flight and landing. **Competitors** must ensure that their crew, equipment, 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.

2.12 CONDUCT

Competitors and their crew are required to behave in a sportsmanlike manner, follow the Code of Conduct, and comply with the directions of Event Officials. Inconsiderate behavior, profanity, or unsportsmanlike conduct will be penalized up to 1000 competition points and may lead to task disqualification or may be grounds for expulsion of a competitor. (See APPENDIX A for Code of Conduct.)

CHAPTER 3 - BALLOON QUALIFICATIONS

3. 1 DEFINITION OF BALLOON

3. 1.1 Aerostat: a lighter-than-air aircraft
Free Balloon: an aerostat supported statically in the air, with no means of propulsion by any power source.

3. 1.2 Sub-class AX: free balloons which obtain their buoyancy solely as a result of heating air. The envelope may contain no gasses other than air and the normal products of combustion.

3. 1.3 The use of vents which are designed to propel a balloon is prohibited. Turning vents may only be operated in flight for the purpose of orienting the basket. Prolonged or excessive use of the turning vents is prohibited. Penalty 250 to 500 task points

3. 2 FUEL

Each balloon shall carry an adequate fuel supply to ensure completion of the flight with an adequate reserve. The lack of adequate fuel to complete a task shall not be grounds for protest.

3. 3 DESIGNATION OF BALLOON

Each competitor shall designate the balloon he is to fly during the Event. No change of balloon may be made after the start of the first task briefing except as provided in these rules. The maximum size category is designated in II.20.

3. 4 AIRWORTHINESS

Aerostats flown in the Event must have current certificates of registration and airworthiness, or in place of the later, an equivalent document from the FAA. All required instruments under the guidelines of the aircraft operations manual must be on board. The organizers/officials are empowered to visually inspect and/or reject any aerostat which in their opinion is not of a reasonable standard of airworthiness.

3. 5 DAMAGE

3. 5.1 If a balloon 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 Championship Director.

3. 5.2 The pilot of a balloon damaged while in flight, to the extent affecting its airworthiness (according to the individual balloon's flight manual), is prohibited from continuing in the task(s) and must land at the first practical opportunity. The damage must be reported to the Safety Officer per rule 3.5.3

3. 5.3 Any damage to a balloon affecting its airworthiness must be reported to the Safety Officer before it is entered for a further flight, and the balloon may only be flown after appropriate repairs have been made and proper evidence and documentation of such has been provided to the Safety Officer. Penalty: up to 1000 competition points.

3. 6 AUTOMATIC FLIGHT CONTROLS

Any device designed to act as an automatic flight control is prohibited, regardless of the specific nature of the device.

3. 7 ALTIMETER

Each balloon shall carry a serviceable altimeter.

3. 8 COMPETITION NUMBERS

The organizer will provide two banners which will be displayed on opposite sides of the basket during tasks. In addition, all crew vehicles shall be clearly identified on opposite sides with competition numbers, if provided. Penalty is up to 200 competition points applied to the first task of the flight(s).

3. 9 BASKET

The term "basket" includes any crew or passenger compartment, regardless of its construction. All sharp objects must be covered to avoid risk to other balloons. When using nylon straps (Zip Tie Straps) to attach basket banners, they must be set (closed) from the inside of the basket. Fuel tanks attached to the outside of the basket must be protected on the bottom ring to ensure there are no spurs or that the surface is covered to protect against any risk to other balloons.

3.10 RETRIEVE

3.10.1 Retrieve Crew shall not be within any MMA or within 100m radius of a target except with permission and in the presence of an official. Crews are not allowed to make permanent marks on an intersection (temporary marks are permitted, e.g. paper, chalk).

3.10.2 All vehicles used to aid the retrieval of a balloon shall be marked with the competition number.

3.10.3 Retrieve vehicles shall not be parked within any MMA or within 100m of a goal/target set by the Championship Director or selected by the competitor.

CHAPTER 4 - ORGANIZATION OFFICIALS

4. 1 CHAMPIONSHIP DIRECTOR

4. 1.1 The Championship Director will be in overall charge of balloon operations of the event. He may have a deputy director and technical officials to assist him.

4. 1.2 The Championship 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 Event. He may penalize or disqualify a competitor for misconduct or infringement of the rules. He shall attend meetings of the jury and give evidence if requested.

4. 1.3 In the rules the word "Director" may be used instead of "Championship Director."

4. 1.4 The responsibility of the Championship Director is limited to competition operations and the operation of the event in accordance with the Code of Conduct. The responsibility does not include any other activity within the event not related to competition operations.

4. 2 STEWARDS

4. 2.1 Stewards are advisors to the Director and, if used, shall:

- Watch over the conduct of the event and report any unfairness or infringement of the regulations or behavior prejudicial to the safety of other competitors or the public or in any way prejudicial to the sport.
- Address competitor requests for assistance and inquiries, process complaints and discuss issues with appropriate officials and report findings to the competitor.
- Investigate protests and assemble information and facts concerning matters to be considered by the Jury.
- Advise on the interpretation of the rules and regulations and to advise on penalties.

4. 2.2 A steward has no executive powers; he must not be a member of the organizing committee. A steward may attend a meeting of the Jury as an observer or witness.

4. 3 JURY DUTIES AND COMPOSITION

4. 3.1 Matters of advice, arbitration or rule interpretation shall be the responsibility of the Jury President and the Jury having been appointed in accordance with 4.3.3.

4. 3.2 During the event, the Jury deals with protests made by competitors. A Jury member must possess a thorough knowledge of the rules and regulations for the Event. At least one Jury member is to be on site during the competition operations.

4. 3.3 The Jury shall be composed of three members: an on-site independent Jury President approved by the HACD, and two independent jury members to be either on-site or off-site.

4. 3.4 In addition to being Chairman at jury meetings, the Jury President has the right to require the Organizer to abide by the published rules and regulations for the Event. If the Organizer fails to do so, the Jury President has the power to stop the Event until a jury meeting has considered the situation.

4. 4 CHIEF SCORER

The Chief Scorer shall be responsible for collecting results and producing scores using Watchmefly.net or some other valid method.

4. 5 SAFETY OFFICER

The Safety Officer shall give advice to the Director on any matters regarding safety and will be in consultation on weather forecasts and briefings as well as report on any noted changes in weather conditions as noted throughout the flight period. Mandatory operational procedures for the safety officer are contained in the Safety Officer's Handbook (SOH).

4. 6 TECHNICAL SUPPORT OFFICERS

Technical Support Officers are competition officials who are responsible to the Chief Scorer. If utilized, they are responsible for reviewing the records of each pilot's flight track. Their duties may include recording relevant information regarding their flight and performance during the task for the Chief Scorer.

CHAPTER 5 - COMPLAINTS & PROTESTS

5.1 ASSISTANCE

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. If still dissatisfied, a complaint may be made by the competitor to the Director or his designated official.

5.1.2 COMPLAINT

The purpose of a complaint is to obtain a correction without the need to make a formal protest. A complaint is a request by a competitor to the director to investigate any matter in which the competitor is dissatisfied. A complaint shall concern only one matter. In case of different matters, separate complaints must be made.

5.1.3 COMPLAINT FORM

Complaints shall be made in writing. A joint complaint must be signed by all the complainants

5.1.4 COMPLAINT PROCEDURE

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.

5.1.5 TIME LIMITS FOR COMPLAINTS

Complaints must be submitted as soon as possible after the event giving rise to the complaint and must be dealt with expeditiously.

Complaints concerning scoring must be made to the 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.

Publication of a new version of official scores will only extend the complaint time in the matter concerned.

5.1.6 SHORTENED TIME LIMITS FOR COMPLAINTS

Complaints made on or after the last flying day of the event, must be submitted to the Director within one hour of publication of the official scores.

The Director shall announce the publication times for all task scores on the last flying day.

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.

5.1.7 COMMUNICATION AND PUBLICATION

Replies to complaints shall be posted on the official notice board at fixed times, announced in advance by the director. The event director shall publish the complaint and its ruling.

When the results of an event may be affected by the ruling of a complaint, they shall not be considered as final until the complaint has been ruled upon.

5.2 PROTESTS (as per S1 An3 8) (COH 2.11)

NOT USED

5.2.1 PROTEST

If dissatisfied with the decision on a complaint made during the event, a competitor has the right of protest. A protest shall concern only one matter. In case of different matters, separate protests must be made.

5.2.2 PROTEST FORM

Within one hour of the reply to his complaint, the competitor shall declare his intention to protest to the event director. A protest shall only deal with one single matter.

Within 8 hours of the reply to his complaint, the competitor shall submit his protest in writing accompanied by the protest fee.

5.2.3 **PROTEST FEE**

The amount of the protest fee to accompany a protest shall be $100. In case of a joint protest, every protesting person must pay the protest fee.

5.2.4 **PROTEST PROCEDURE**

Declarations of intention to protest, and protests with protest fees, shall be handed or transmitted by the competitor to the event director, who will acknowledge receipt and record the time of receipt.

The event director must present any protest to the jury president without delay.
The president shall schedule a meeting of the jury within 24 hours of receiving a protest.

The jury shall hear all involved parties on the matter of any protest, applying the relevant regulations and the rules for the event.

The president of the jury shall report the result and a summary of any relevant considerations in writing to the event director without delay, who shall make public the president's report.

5.2.5 **TIME LIMITS FOR PROTESTS**

Declarations of intention to protest and protests must be submitted within set time limits (see 5.2.2).

The rest hours defined in the competition details will be disregarded for the purpose of the time limits.

5.2.6 **SHORTENED TIME LIMITS FOR PROTESTS**

Protests made on or after the last flying day of the event, must be submitted within one hour of the reply to a complaint.

The Director shall announce the publication times for all task scores on the last flying day.

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.

5.2.7 **PUBLICATION**

The text of all protests and the decisions of the jury shall be posted on the official notice board.

5.2.8 **RIGHT OF HEARING**

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 advisor of his choice during this meeting.

5.2.9 **PROOF OF RULES VIOLATION**

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.

5.2.10 **APPEAL OF DECISION OF THE PROTEST JURY**

5.2.10.1 The decision of the Jury or Disqualification may be appealed to the HACD Board, provided:

a) The competitor initiated a complaint and formal protest in accordance with the above rules and in accordance with time limits at the event level
b) The appeal is in writing
c) The appeal includes all written material related to the original protest and the name of the Jury President, Director and Chief Scorer involved in the original decision as well as any material relating to any disqualification, if applicable. Only the original protest and materials presented to the Protest Jury will be considered.
d) Information on the selection of the Jury members along with the names of jurors involved in the decision is submitted with the appeal
e) The appeal is sent to the Chairman of the HACD within 72 hours of the decision of the Jury or the disqualification decision

5.2.10.2 The appeal will only consider questions and concerns that impact scores being submitted to the National Eligibility List System

5.2.10.3 The Chief Scorer and Director shall be immediately informed that an appeal has been filed.

5.2.10.4 The decision of the HACD Board shall be rendered within 30 days of receipt of the appeal.

5.2.10.5 The decision will be relayed by telephone, US mail or e-mail to persons directly affected.

5.3 FURTHER RULES REGARDING COMPLAINTS AND PROTESTS

5.3.1 RETURN OF PROTEST FEE

The protest fee is returnable only if the protest is withdrawn before proceedings begin or if the protest is upheld. (gs 6.3 part)

5.3.2 JURY APPROVAL OF SCORES & PRIZEGIVING

The last action of the jury is to verify and approve the competition results of the event and declare the event valid providing it has been conducted in accordance with the rules and the decisions of the jury. (gs 5.2.4.7 part)

The scores of the event shall be final only after all protest have been dealt with by the jury and the jury has ceased its functions. The final scores must be made public before the prize-giving is held. (s1 an3 9)

The Jury shall verify and sign the final total scores before they are made public.

5.3.3 OFFICIAL NOTICE BOARD

The Official Notice Board (ONB) is the place where all results, scores, replies to complaints and protests, and other official communications directly relating to the event will be published. It should be marked OFFICIAL NOTICE BOARD.

All information posted shall be dated and timed.

The ONB will either be on-line or in paper format.

All information posted on the paper ONB will be additionally signed.

In case of unavailability of the on-line ONB, a fallback paper ONB will be installed and competitors shall be notified. In case of conflict between the on-line ONB and the paper ONB the paper ONB will prevail.

CHAPTER 6 – LOGGERS

6. 1 GPS-LOGGERS

A GPS Data Logger is a device that logs track and altitude of a balloon. The track points of the log will specify the position (latitude/longitude), the altitude (barometric or GPS altitude as specified in II.22), and a time stamp. Devices enabling competitor's input may additionally be available depending on the type of logger. GPS-loggers may be used in competition as an observation tool to monitor compliance with the rules, for task setting and for achieving a score or result. Competitors must comply with the operational instructions on their use (see II.17).

6.2 HANDLING (II.17)

6.2.1 Rules on the handling of loggers are specified in Section II.

6.3 FLIGHT REPORT FORM (FRF)

6.3.1 A Flight Report Form (FRF) stating the take-off and landing place and time, estimated task results, landowner related issues, and other relevant data shall be completed and signed by the competitor.

6.3.2 The competitor will return the:

- FRF (electronically via WatchMeFly)
- Logger (SD card upon request)
- Any unused markers
- Any undue delay in returning the above objects may result in a penalty.

6.3.3 Any undue delay in submitting the FRF may be penalized up to 100 task points.

6.4 GPS-LOGGER FAILURE (II.17)

6.4.1 Reported malfunctions are considered failures only when they can be reproduced after flight. When a failure is found, the officials may ask the competitor to provide his GPS equipment to substitute the missing track information.

6.4.2 In case both the official track log and the competitor's GPS are not providing the necessary information to establish a result, the competitor will not receive a result based on track points. It is therefore in the competitor's interest to equip himself with a GPS that provides track information usable for scoring (position, altitude and time in accordance with II.22) and use the same set-up (sampling time interval, map datum, minimum track point memory, etc. in accordance with II.17) as the official logger.

6.4.3 An electronic mark recorded by a competitor's GPS equipment can only be used if the equipment has been approved by the Director before the flight or specific rules under Section II have been followed. Otherwise, the competitor will be scored to his nearest electronic mark of the official logger, nearest physical mark or landing position, whichever is best. A score to a track point will not be made.

CHAPTER 7 - MAPS

7. 1 CONTEST AREA (II. 1)

An area defined by reference to the official competition map published at the start of the Event. Tasks will not be set, and results will not be measured outside this area.

7. 2 OUT OF BOUNDS (II. 2) (OFB)

The Director may define areas or airspaces as out of bounds. Take-offs or contest landings in OFB areas are prohibited and the competitor will achieve no result in the relevant task. Goal declarations in OFB areas or airspaces will be considered invalid. Competitors cannot achieve a valid mark, valid track point or result in OFB areas or airspaces.

7. 3 PROHIBITED ZONES (PZ's) (II.2 and II. 3)

7. 3.1 The Director may define airspace or other areas as prohibited. A mark or track point inside a 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 There are Three classifications of PZs: Red, Yellow and Blue.

7. 3.3 A Red PZ is restricted airspace and will include an upper altitude limit which a competitor shall not fly below. Ground contact of the inflated balloon is not permitted.

7. 3.4 A Red Road PZ identifies restricted airspace surrounding major roadways or interstates. It is measured from the centerline (expressed as a tunnel around the axis) of an interstate or other major highways identified as Red roads.

7. 3.5 A Yellow PZ is a restricted area where no take-offs, landings or ground handling 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. The Blue PZ is considered OFB and infractions will be penalized under Rule 10.14.2

7. 4 PZs 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 offense. See COH for official guidance on calculation of PZ infringement penalty violations.

7. 6 MAPS

A competitor is required to carry a competition map, paper or digital, in the basket. All published PZ's, whether in force for the task, and all out-of-bounds areas shall be clearly and accurately marked on the map. An adequate map of aeronautical restrictions must be carried, unless these are also marked on the competition map. A competitor violating this rule will be penalized up to 250 competition points.

7. 7 EARTH TO BE FLAT

For scoring purposes, the earth is flat, and calculations based on the map datum and grid system as specified in Section II will be taken as accurate without rounding. Distance calculations will be made in 2-D except for results explicitly defined otherwise in the TDS.

7. 8 MAP COORDINATES

To identify a point on the competition map, the coordinates must be written in eight-digit format (first four digits west/east and the second four digits south/north - Easting then Northing) or one of the formats as defined in Section II. For goal declaration of pre-defined goals, the complete goal number of the published list may be used. Penalty for inappropriate but unambiguous declarations is up to 100 task points.

7. 9 DEGREE REFERENCE

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

CHAPTER 8 – PROGRAM, BRIEFINGS

8. 1 TASK PROGRAM

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

8. 2 VALID TASK

8. 2.1 A valid task is defined as one in which all entered competitors were given a fair opportunity to make a valid takeoff, unless they had withdrawn or had been disqualified.

8. 2.2 The Director has the authority to cancel a task(s) for safety reasons and for reasons out of the control of the director at any time before the official status task scores are published.

8. 2.3 Tasks are not valid if less than 50% of the competitors take off.

8. 3 TASK SELECTION

The Director shall select tasks from those described in Chapter 15. Particular tasks may be set more than once or not at all.

8. 4 MULTIPLE TASKS

8. 4.1 The Director may set more than one task to be performed on one flight. The tasks will be scored separately, with a winning score of 1000 points (or best positional score per 14.6.2) before penalties for each task. The combination of tasks should aim at the possibility of winning each task independently.

8. 4.2 Unless otherwise specified, tasks in a multiple task flight shall be flown in the order indicated in the Task Data, penalty up to 1000 task points in each task.

8. 4.3 When markers are used, dropping the marker(s) of a task inside the set MMA indicates the completion of that task and the start of the following task, if applicable. Ground contact penalties of Rule 11.5 within an MMA will be assessed to the task of the MMA.

8. 4.4 Competitors missing the MMA or choosing not to drop their marker(s) or when scoring by track point is indicated, are considered flying in the follow-on task if they cross the boundary line (area, grid line, arc, etc.) or boundary time of the follow-on task.

8. 4.5 If electronic marks are used to determine the transition point from one task to another, then their use is mandatory as specified in Section II and/or the GB.

8. 4.6 Penalties related to the take-off will normally be applied in the first task. Penalties related to the landing will normally be applied in the last task. Other penalties should be applied in the task in which they were incurred unless this is impossible, in which case they will be divided equally over more than one or all tasks.

8. 4.7 Unless track points electronic marks are used the task data shall specify for each task the marker(s) and/or electronic marks to be used. If no competitive advantage is gained, the penalty for releasing the wrong marker or dropping the wrong electronic mark is 25 task points per task. If more than the allowed number of physical markers are released in a task, the competitor will be scored by track point (if used) or electronic mark (if used). If an electronic mark is dropped more than once or if an extra electronic mark is dropped in an additional numbered slot, the first electronic mark in time will be scored and excess electronic mark(s) in time will be ignored.

8. 4.8 If more than the allocated number of physical markers is released and achieve a valid mark in the task, the competitor will be scored by electronic mark. If an electronic mark is dropped more than once, the first electronic mark in time will be scored.

8. 5 MODIFICATION OF RULES

8. 5.1 No further modification, after approval by the BFA/HACD Board, shall be permitted during the Event unless approved by the on-site Jury President and off-site Jury Members. No such rule addition or modification shall be retroactive.

8. 5.2 The task rules of Section I, II, and III, Chapter 15 are defined as variable rules and changes to those may be made without authorization.

8. 5.3 Variations to task rules shall be provided individually to each competitor in writing.

8. 6 GENERAL BRIEFING

A General Briefing on the rules, regulations and all major aspects of the Event will 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 practical 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 President, but before the publication of the first scores.

8. 7 TASK BRIEFING

8. 7.1 Task briefings will be called by the Director at times published on the Official Notice Board. Alternative methods may be used as announced in the General Briefing. 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) Task Data

8. 7.2 Where written information is supplied, adequate study time should be allowed before the briefing proceeds (as specified in the COH).

8. 8 TASK DATA

8. 8.1 At task briefings the Task Data, preferably in writing, shall be given to competitors. The Task Data sheets (TDS) will contain flight data related to all tasks and individual Task Data.

8. 8.2 Flight data:

a) Date
b) Official sunrise/sunset c) PZs in force
d) Launch area
e) Minimum distance from ILP to all goals/targets set by director (if applicable)
f) Launch period
g) Provisional time and place of next briefing
h) Solo flight (if directed)
i) Search period
j) QNH/Barometric Pressure (if needed for logger scoring)

8. 8.3 Individual Task Data:

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

8. 9 SUPPLEMENTARY BRIEFING

If it should be necessary to publish additional or revised information to competitors at the common launch area, a pink flag will be raised at the signals point before the start of the launch period. 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 balloon and obtain the signature of the competitor or crew member.

8.10 SUPPLEMENTARY INFORMATION BY ELECTRONIC COMMUNICATION TOOLS

For individual launch areas and as a further possibility for common launch area, electronic communication tools may be used to publish additional or revised information to competitors. At a common launch area competitor will be informed on the change by a method defined in the general briefing.

Safety related announcements (cancellations, danger warnings) can be made anytime using electronic communication tools.

Minor amendments to task data can be made provided the electronic communication is made at least 20 minutes before the start of the launch period at ILP's and at least 10 minutes before the start of the launch period at CLA's.

Any other task changes must be made at in-person briefings or supplementary briefings.

8.11 ENTRY FOR TASKS

A competitor shall enter a task by answering his name or competition number at roll call at the task briefing. Alternative methods of checking the competitor's attendance may be used.

8.12 LATE ENTRY

8.12.1 A competitor may make a late entry at the signals point with a penalty of 50 task points up to five minutes before the start of the launch period, or 100 task points thereafter. Officials will not be available to give a personal briefing except for Air Traffic, safety matters, and PZ's.

8.12.2 In tasks where competitors select their own launch areas, late entries shall be made by contacting an official and making arrangements on where to be briefed and receive a task sheet, GPS-logger, weather sheet and markers.

8.13 OFFICIAL TIME

The official time is GPS time corrected for the local time offset.

CHAPTER 9 - LAUNCH PROCEDURES

9. 1 COMMON LAUNCH AREA(S) (CLA) (II. 4)

9. 1.1 One or more areas defined by the Organizer and used when the task requires all pilots to launch from a common area. A competitor taking off outside the prescribed common launch area (CLA) will not achieve a result for any of the tasks of that flight. Once his balloon is inflated a competitor may not move his balloon on the CLA except for safety reasons and only after approval from a responsible official.

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 balloons. (II. 5)

9. 2 INDIVIDUAL LAUNCH AREAS (ILA)

9. 2.1 Individual launch areas are selected by the competitors. The boundary of the Launch Area is a circle of 100meter radius from the position of the basket at the start of hot inflation.

9. 2.2 Competitors must ensure permission has been obtained from the landowner or occupants before driving onto, or launching from, any land which is enclosed or cultivated, or apparently private, or used for agricultural purposes. Penalty for infringement is up to 250 task points.

9. 2.3 In tasks where competitors select an individual launch area, the Individual Launch Point (ILP) is the position of the basket at take-off. Unless otherwise stated in the TDS only one take-off is permitted.

9. 2.4 In tasks where multiple take-offs are allowed, unless the balloon is deflated, the landing position of the discontinued flight is considered the ILP for the next take-off.

9. 2.5 Individual launch areas shall not be selected outside the contest area. Penalty: no result in the first task of that flight.

9. 2.6 A balloon 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 PROCEDURES (II.6)

9. 3.1 The launch director may allocate to each competitor a space in which to prepare and inflate his balloon. He has the authority to regulate the operation of all balloons and vehicles in the launch area. Penalty is up to 200 task points.

9. 3.2 Quick-release tie-offs must be used for all balloons inflating in a common launch area and are recommended in individual launch areas.

9. 4 VEHICLES

9. 4.1 Not more than one vehicle per balloon may be present in the common launch area during the launch period. Penalty: 100 task points.

9. 4.2 Vehicles must be driven at suitably reduced speeds within the launch area. The Safety Officer and the Launch Directors may bar from the area any vehicle that is driven inconsiderately.

9. 4.3 No vehicle may enter the common launch area after the advance yellow warning flag has been raised except by permission of a Launch Director or other official. Penalty: 100 task points.

9. 5 COLD INFLATION

Burners may be briefly tested, and cold air may be induced into the envelopes for rigging and inspection, but before permission for hot inflation has been given, there must be no hot inflation, no use of powered fans, and no part of the envelope fabric may be more than two meters off the ground. Fans may be tested or used before the launch period until a flag of any color has been raised. This rule does not apply to ILA.

9. 6 SIGNALS POINT

One or more points at the launch area where flag signals may be displayed and competitor’s task declarations, late entries and supplementary briefings take place. Competitors are responsible for keeping observation on the signals point, and its obscuration shall not be grounds for complaint.

9. 7 LAUNCH SIGNALS

9. 7.1 Colored flags shall have the following meanings when displayed at the signals point:

RED	No inflation or take-off permitted. Previous permission to take-off cancelled.
GREEN	General permission to all balloons to begin hot inflation.
BLUE	Permission to 'blue' wave (odd numbered balloons) to begin hot inflation.
WHITE	Permission to 'white' wave (even numbered balloons) to begin hot inflation.
YELLOW	Five-minute warning.
PINK	Supplementary or amended briefing information available at signals point.
BLACK	Task cancelled.
VIOLET	(Reserve) Meaning as notified at task briefing for a particular task.

9. 7.2 An audible signal may be given to draw attention to changes of flag signals.

9. 8 PUBLIC-ADDRESS

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

9. 9 LAUNCH PERIOD

Take-off may not be made before or after the launch period. Any take-off made outside the launch period, except under rule 9.12, will be subject to a penalty of 50 task points per minute or partial minute early or late. The yellow warning flag will be raised five or more minutes before the end of the launch period (for launches from a CLA)

9.10 OBSTRUCTION

Once his balloon is fully inflated a competitor may not unnecessarily remain in position where his balloon obstructs another.

9.11 ADEQUATE TIME

A competitor who has been given permission to begin hot inflation 20 or more minutes before the end of the announced launch period is deemed to have adequate time, even if the launch period is curtailed for any reason.

9.12 EXTENSION OF TIME

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

9.13 LAUNCHING ORDER

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

9.14 LAUNCH DIRECTORS

9.14.1 Launch directors are officials designated by the Director to regulate the operation of all balloons and vehicles in the launch area and to assist in launching of balloons from CLAs.

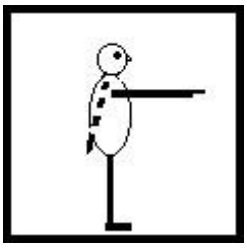
9.14.2 The Director can make the use of launch directors compulsory for all competitors or optional.

9.15 PROCEDURES WHEN LAUNCH DIRECTORS ARE COMPULSORY

9.15.1 When a competitor is completely ready for take-off, and has positive buoyancy, he should wave a white flag to indicate his readiness to the launch director. When the launch director has acknowledged this signal, the competitor should leave the flag displayed on the edge of the basket and await further instructions while maintaining his readiness to take off. The launch director will, as far as possible, launch balloons in the order of signaling their readiness. Competitors should equip themselves with a suitable white flag about 50 cm square (handkerchief) for this purpose.

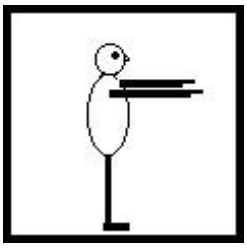
9.15.2 To avoid congestion, extension of time will not be granted when competitors wave their white flag within the last ten minutes of the launch period.

9.15.3 The launch director will give each competitor permission to take-off according to the signals as published. The competitor may then take-off at will, subject to any instructions from the launch director at the time.

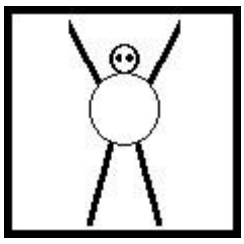


I acknowledge your white flag.

Stay on ground; follow instruction of my right hand.



I'm going to clear you for take-off.



Clear for take-off

Cancel all previous instructions. Wait.

9.15.4 This permission does not relieve the competitor of complete responsibility for his take-off, including adequate lift to clear obstacles and other balloons, and to continue safely in flight. A competitor taking off without permission, whether due to loss of control or any other reason, may be penalized up to 500 competition points

9.15.5 If the balloon does not take off within 30 seconds, permission to take off may be cancelled by the launch director.

9.16 PROCEDURES WHEN LAUNCH DIRECTORS ARE OPTIONAL

When a competitor is completely ready for take-off, he should have an experienced crew member advise him when the airspace above and upwind is clear for launch. Alternatively, he may ask an available launch director or official to clear him for launch.

9.17 LOSS OF CONTROL

A competitor losing control of his balloon shall deflate immediately or take other appropriate action.

9.18 TAKE-OFF (T/O)

The point and/or time at which an aerostat first becomes airborne.

An aerostat is airborne when its envelope, gondola, crew and all substantial parts of its equipment and payload have no contact with the ground or water surface or anything attached or resting on the ground or water.

9.19 VALID TAKE-OFF

A balloon is considered to have taken off and to be flying the task(s) if a mark has been achieved or if the balloon passes over the boundary of any launch area.

9.20 ABORTED TAKE-OFF

9.20.1 A competitor may abort his take-off for safety reasons but must avoid the obstruction of other balloons. He may attempt further take-off(s) inside the launch period.

9.20.2 At a Common Launch Area he must inflate in his originally allocated space, except by permission of the Launch Director, and must again obtain permission to take-off.

9.21 CLEARING LAUNCH AREA

Within three minutes of his basket first leaving the ground, a competitor shall have passed over the boundary of the launch area or shall have climbed to 500 feet AGL, regardless of the end of the launch period. He shall not re-enter the launch area below 500 ft. AGL before the end of the launch period or until after all balloons have taken off, whichever is earlier.

CHAPTER 10 - FLIGHT RULES

10. 1 BALLOON COLLISION

10. 1.1 When two balloons are converging in flight, both competitors are responsible to avoid collision. The competitor of the higher balloon shall give way and shall climb if necessary. A basket to envelope contact will be penalized regardless of vertical speed.

10. 1.2 Competitors shall not initiate or maintain a vertical speed exceeding 1.5 m/s (300 ft./min) unless they are certain that no balloon is in their flight path.

10. 1.3 Competitors causing a collision, in the air or on the ground, will be penalized by up to 1000 competition points. The penalty will be doubled for each repeated offence in subsequent flights and the competitor may be grounded for the next flight(s)

10. 1.4 Envelope to envelope contact in approximate level flight will generally not be penalized.

10. 1.5 In case the competitor suffering the collision is not able to fly further tasks after the collision, the Director may award him points for the lost tasks in that flight. (COH)

10. 2 DANGEROUS FLYING

10.2.1 Dangerous flying (e.g. any flying creating an unnecessary risk to other balloons or people on the ground), not necessarily causing a collision, will be penalized up to disqualification from the event. The penalty will be doubled for each repeated offence in subsequent flights and the competitor may be grounded for the next flight(s)

10.2.2 Exceeding the vertical speed limits as defined in Section II will be penalized in accordance with parameters published and may additionally be penalized under 10.2.1.

10. 3 CLEARING GOAL/TARGET AREA

A competitor who has dropped his marker shall clear the vicinity of the goal/target as quickly as reasonably possible.

10. 4 DROPPING OBJECTS

No objects may be dropped from the balloon except for official markers, or small pieces of paper or similar lightweight materials for navigational 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 and the code of conduct. Inconsiderate behavior by competitors or crew members, or endangering the public during flight, may be penalized up to 1000 competition points. Repeated violations may result in disqualification from the event.

10. 6 LIVESTOCK AND CROP (II. 7)

Balloons must not fly closer than defined in Section II from livestock or buildings containing 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 competition 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 balloon is in collision with power or telephone lines 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 PERSONS ON BOARD (Section II.16)

10. 9.1 Competitors may carry other crew during a flight, and they may perform any duties he wishes to assign to them, except to act as pilot-in-command.

10. 9.2 The total number of persons on board (including competitor) shall not exceed 3.

10. 9.3 The Event is operating under a standard FAA Waiver and flight crew are required to sign ‘designated flight crew’ forms.

10. 9.4 Competitors may be required to perform a flight “solo” as specified in the Task Data. Penalty: the competitor will not receive a result.

10.10 GROUND CREW

10.10.1 Crew are those persons associated with the launch and retrieval of the balloon and those providing the pilot with information about the tasks such as weather, position of other balloons during the competition.

10.10.2 Each competitor will ensure that he has sufficient crew to operate his balloon and retrieve vehicle. He will ensure that all those involved with his balloon are adequately briefed on safety.

10.11 DRIVING (II. 8)

Vehicles must be driven safely during retrieving and comply with local driving laws. Penalty up to 500 competition points.

Summary of certain Texas driving laws (This is not all inclusive)

- Texting and driving are prohibited.
- It is illegal to have an open container of alcohol in the passenger area of a vehicle. This includes the glove compartment, center console, or anywhere else that is within reach of the driver or passengers. The only exception to this rule is if the open container is stored in the trunk of the car.
- Every person who is traveling inside of a vehicle must wear a seat belt.
- All children younger than eight years old, unless they are taller than 4 feet 9 inches, be secured in a child safety seat whenever they ride in a vehicle. Older children who have outgrown a booster seat must be buckled with a seat belt.
- Motorcyclists must wear a helmet if you are under 21. You may ride without a helmet over 21 if you meet all eligible helmet exemptions.
- Texas law does not forbid anyone over the age of 18 from riding in the open bed of a truck or trailer. Under the age of 18 may not ride in the bed of a truck or trailer.

10.12 DISEMBARKATION

No person may enter or leave the basket between take-off and completion of the final task of that flight.

10.13 ASSISTANCE

The use of handling lines or any handling assistance from persons on the ground is forbidden during flight.

10.14 AIR LAW (II. 9)

Infringements of air law impacting the safety of the competitor, other competitors or the general public, or providing a competitive advantage, may be penalized up to 1000 points or may result in disqualification from the flight or event at the discretion of the Director.

10.15 RECALL PROCEDURE (II.10)

The organizer’s recall procedure is defined in Section II.10.

CHAPTER 11 - LANDINGS

11. 1 LANDINGS

A competitor may land at will when he has completed all tasks during flight.

11. 2 LANDING AT WILL

11. 2.1 When a competitor makes a landing at will, the landing point is the final resting place of the basket after landing.

11. 2.2 All pilots must have landed by sunset as published or announced at the task briefing. Penalty for infringement of this rule is 100 task points per minute or part thereof.

11. 2.3 Unless otherwise stated in the Task Data, a landing at will is not permitted within 50m of an MMA where a target is displayed, or if no MMA is set, within 200 meters of any goal/target set by the Director or selected by the competitor or any physical mark of the competitor or any physical mark of the competitor (for penalty see distance infringements).

11. 3 CONTEST LANDING

11. 3.1 The scoring position for a contest landing is the final resting place of the basket. Published scoring periods and search periods apply.

11. 3.2 No handling assistance may be received from anyone on the ground and no one of the flight crew may leave the basket before the basket has reached its final resting place.

11. 3.3 Any retained marker must be handed over to an official at the earliest opportunity.

11. 3.4 Unless otherwise stated in the Task Data, a contest landing is not permitted within 50m of an MMA or if no MMA is set, within 200 meters of any goal/target set by the Director or selected by the competitor. (Rule 13.3.4 distance infringements)

11. 4 GROUND CONTACT 1

After passing over the boundary of any launch area, no part of the balloon or anything attached to it may make solid contact with the ground or water surface or anything resting on or attached to the ground, until the last task has been completed. Penalty for each contact is 200 task points.

- Note 1: Contact is solid if it is prolonged or results in a change of motion of the basket or the envelope.
- Note 2: Incidental contact with grass or leaves will not be penalized

11. 5 GROUND CONTACT 2

No part of the balloon or anything attached to it may contact the ground or water surface or anything resting on or attached to the ground (marker excepted) within the Marker Measuring Area or within 200 meters of any goal/target set by the Director or selected by a competitor. Penalty for each contact is 100 task points if light and 500 task points if solid. The penalty is applied to the task of the goal/target involved. A contact is solid if it is prolonged or results in a change of motion of the basket or the envelope.

- Note 1: Contact is solid if prolonged or results in a change of motion of the basket or the envelope.
- Note 2: Incidental contact with grass or leaves will not be penalized.
- Note 3: Competitors will not be penalized under both rules for any single contact. If a landing occurs within an MMA, the competitor will be penalized under Rule 13.3.4 distance infringements.

11. 6 PERMISSION TO RETRIEVE

Competitors must ensure that permission has been obtained from the landowner or occupier before driving onto any land that is enclosed or cultivated or apparently private or used for agricultural purpose. Penalty is up to 250 task points.

CHAPTER 12 – GOAL, TARGET, MARKER, TRACK POINT

12. 1 GOAL (II.11)

12. 1.1 A place defined by grid reference on the competition map, set by the Director or chosen by the competitor.

12. 1.2 A competitor arriving at an expected goal that was rebuilt or moved should aim for the closest replaced goal within 100 meters. If the goal has ceased to exist and no similar goal is seen within 100 meters, the competitor should aim for the coordinates and make an electronic mark. The MMA rule 12.22.3 does not apply. These coordinates will also be taken to calculate/measure any other related tasks of that flight.

12. 1.3 The Director may provide a list with predetermined goals. The goals are numbered followed by the map coordinates.

12. 2 GOAL SELECTED BY A COMPETITOR (II.12)

12. 2.1 Unless otherwise restricted in the TDS or Section II, any point on the competition map may be used for a competitor selected goal. According to the Task Data, competitors may be required to choose one or more goals from the list of predetermined goals or as listed in the TDS.

12. 2.2 Measurements will be made from the properly formatted goal declaration to the competitor's mark or closest track point as recorded in the official logger. (see Section II.11).

.

12. 3 DECLARATIONS BY COMPETITORS (II.12)

12. 3.1 A competitor shall identify his goal by map coordinates. For goal declaration of pre-defined goals, the goal number may be used.

12. 3.2 A goal declaration violating the restrictions of Section II or the TDS will be considered invalid and the competitor will not achieve a result. In case the competitor is allowed to declare more than one goal in a task and one or more goals are invalid, the competitor will be scored to the nearest valid goal if any.

12. 3.3 In tasks where a competitor is required to declare his goal(s) or other declarations according to the TDS, he shall do so in writing and his declaration shall be deposited before declaration time at the place of the declaration box specified in the briefing data, clearly identified with his name and/or competition number. If more goals or declarations are made than permitted, the competitor will be scored to the least advantageous goal.

A competitor who wishes to revise his declaration may deposit a further declaration, within the declaration time, if it is clearly marked to distinguish it from any previous declaration(s).

The timekeeper/official will close the declaration box precisely at the declaration time, and will accept late goal declarations, writing the time in minutes and seconds on each.

12. 3.4 Penalty for late declarations that must be made a specified time before take-off is 50 task points per minute or part minute late. If the competitor fails to declare before take-off, he will not achieve a result.

12. 3.5 If a declaration may be made in flight before a defined time, point or boundary and the competitor fails to do so, the declaration will be invalid and he will not achieve a result.

12. 3.6 Goals not meeting distance or relative altitude limitations will be scored according to the rule on distance infringements. Declarations not meeting boundaries or absolute altitude limits will be invalid.

12. 3.7 If the competitor doesn't have a valid declaration, he will not achieve a result.

12. 3.8 All declarations made before take-off will be assumed at take-off in time, position and altitude for any limit verifications.

12. 4 TARGET

A prominent cross intended to be displayed within 100 meters of a goal or at a specified coordinate. Where a target is displayed, any measurements are made from the target, not from the goal. If no target is displayed within 100 m of the specified coordinates the competitor should aim for the coordinates and make an electronic mark. The MMA rule 12.18.3 does not apply. These coordinates will also be taken to calculate/measure any other related tasks of the flight.

12. 5 MARKER

Markers (as specified in the COH) supplied by the organizer will be used for scoring purposes to create a physical mark. Competitors are responsible for collecting the necessary marker(s) before the task. The marker must not be modified in any way. Penalty for modified or unauthorized markers is up to 250 task points.

12. 6 MARKER RELEASE

The marker may be thrown by hand unless a Gravity Marker Drop is specified on the TDS.

12. 7 GRAVITY MARKER DROP (GMD)

12. 7.1 In a GMD, no horizontal motion shall be applied to the marker in relation to the basket and gravity shall be the only means for the marker to drop. The person releasing the marker must hold the unrolled marker by the tail. The person's hand holding the tail of the marker shall not be outside the basket.

Penalty for violating this rule, unless otherwise stated on the TDS:

- Minor infringements with no competitive advantage: 50 task points
- Infringements with competitive advantage: 50 meters will be added to the competitor's result in the least advantageous direction.

12. 7.2 Unless otherwise stated on the TDS, a marker thrown into a MMA or scoring area under limited scoring will be regarded as a valid result and the penalty will be applied.

12. 8 FREE MARKER DROP (FMD)

The marker must be completely unrolled prior to coming to rest on the ground. No mechanism may be used to propel the marker. The person releasing the marker must stand on the floor of the basket. Penalty for minor infringement with no competitive advantage: 50 task points; otherwise 250 task points for a competitive advantage.

12. 9 MARK (12.20 and 12.21)

12. 9.1 A physical mark is the point on the ground vertically below the weighted part of the official marker where it comes to rest after falling from the balloon. If the marker has been moved after landing and there is indisputable evidence available showing its original position, measurements will be based on the evidence. If the marker is displaced after coming to rest or disappears subsequently from view (e.g. beneath water level), the earliest position an official or observer has seen the marker in ground contact, or having come to rest, will be taken with the accuracy available. Same applies if the marker is carried on top of another balloon, automobile, train, etc.

12. 9.2 An electronic mark is a track point specially identified for scoring purposes. The technical details and procedures are defined in Section II. If the scoring criteria defined in the TDS are not met, the competitor will not achieve a result in the relevant task.

12.10.3 If no mark has been achieved the competitor will be scored to their next mark in time or landing position, whichever is best.

12. 10 INTERFERENCE WITH MARKER

No person other than an official may touch or interfere with a marker on the ground. Any marker moved must be replaced to its original position based on the best evidence available.

12. 11 SEARCH PERIOD

12. 11.1 Competitors have a specified period from the actual start of the launch period in which to find their marker(s).

12. 11.2 The choice between searching for the marker and first recovering the competitor rests with the competitor or his crew.

12. 12 LOST MARKERS

12. 12.1 A marker, dropped within the Marker Measuring Area, is considered lost if it is not found and in possession of Officials within the time limit specified. Competitors may inquire with the measuring officials at a target or goal if they have doubt that their marker will be found. Competitors will not be allowed to search for markers in the MMA without the presence of an official. If a marker dropped, or allegedly dropped, in the MMA is considered lost the competitor will be scored by electronic mark as if the competitor had missed the MMA.

12. 12.2 If the marker has earlier been seen by an official on the ground and is estimated within the Marker Measuring Area, the official's evidence, together with the logger's data, will be used to determine the competitor's result based on the least advantageous interpretation of evidence available.

12. 12.3 Competitors are required to pay for any marker damaged, not reusable, lost or not brought back in time. Charges for lost or damaged markers are stipulated in Section II. Competitors are responsible for returning markers dropped outside the MMA.

12. 13 SCORING PERIOD (SCP)

12. 13.1 When defined by the Director in the task briefing, the scoring period is the time limits, within which a goal/target or scoring area is valid.

12. 13.2 A competitor will only score if his marker or any subsequent marker is on the ground or he has landed, within the set time limit. Otherwise he will be scored by electronic mark.

12. 13.3 A competitor who does not achieve a scoring position within the scoring period (if set) or within the search period (if no scoring period is set) will not achieve a result.

12. 13.4 Under all circumstances, scoring with less than 15 minutes prior to official sunset will not be permitted.

12. 14 SCORING AREA (SCA)

12. 14.1 An area or areas, defined by the Director in the Task Data within which a valid mark or track point can be achieved. Unless otherwise stated in the Task Data, the boundary will be the inner hard-surface or gravel edge of a road, the inner bank of a river, or other defined marked area. Any part of the weighted bag that is on the inner edge will be considered valid.

12. 14.2 A competitor who does not achieve a scoring position inside the scoring area(s) will not achieve a result.

12. 15 SCORING AIR SPACE

An air space or spaces defined by the Director in the Task Data within which a valid track point can be achieved. Unless otherwise stated in the Task Data, the boundary will be defined by coordinate lines. The altitude limits are defined by altitude as recorded by the logger and under Rule II.21. Any recorded track point exactly on the line or altitude limit will be considered valid.

12. 16 MARKER MEASURING AREA (MMA)

12. 16.1 The MMA is an area defined by a radius around a goal/target or an otherwise clearly defined area within which results will be achieved by markers.

12. 16.2 The MMA will be provided for each task in which markers are used.

12. 16.3 Competitors not achieving a physical mark within the MMA will be scored according to the TDS.

12. 17 VALID MARK

12. 17.1 A physical mark is considered valid if it is within the MMA or scoring area and within the scoring period if set.

12. 17.2 An electronic mark is considered valid if the recorded track point meets all scoring criteria defined in the TDS.

12. 17.3 A valid physical mark shall have precedence over any track point or electronic mark.

12. 17.4 Measurements will be made to the closest point of the weighted bag portion of the marker.

12. 18 TRACK POINT

12. 18.1 A track point is defined by recorded date / time, coordinates, and altitude of a point of the track of a GPS logger.

12. 18.2 When goals or targets are used, results based on electronic marks will be the 2D, modified 3D or 3D-distance from the goal/target to the electronic mark. Shortest distance is best. Details specified in Section II.

12. 18.3 A competitor's result based on an electronic mark cannot be better than the worst possible result in the MMA.

12. 18.4 In tasks without goals or targets, the horizontal distance (2D-distance) between points will be used to calculate results.

12. 19 VALID TRACK POINT

A valid track point is a track point meeting all scoring criteria set in the Task Data such as scoring area, and/or scoring airspace, and/or scoring period.

12. 20 TARGET OFFICIALS

Target Officials are assigned to establish the competitor's results and possible rule violations. In general, in all tasks having set goals or targets, the Target Officials will measure the results by tape or surveyor equipment within the Marker Measuring Area (MMA) or Scoring Area.

CHAPTER 13 - PENALTIES

13. 1 SERIOUS INFRINGEMENTS, UNSPORTING BEHAVIOR

13. 1.1 Serious infringements include dangerous or hazardous actions or repetitions of lesser infringements and will be penalized according to the appropriate rule.

13. 1.2 Dishonesty 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.

Unsporting behavior is deemed as conduct by a participant who violates the generally accepted rules of sportsmanship and fair play, falsification of documents, use of forbidden equipment or prohibited drugs, See 2.12.

13. 2 UNSPECIFIED PENALTIES

13. 2.1 A competitor infringing any rule for which a penalty is not specified in the rules may have a penalty (distance, angle, or time) applied to his result or a deduction of points.

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 for infringing a rule for which the penalty is not specified, 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 DISTANCE INFRINGEMENTS (also see II.12)

13. 3.1 Where the individual launch point, a goal selected by a competitor, a mark, or a final landing infringes a distance or altitude limit at any time, the competitor will be penalized.

13. 3.2 If a launch point infringes a natural set boundary, the infringement is the distance to the closest correct point.

13. 3.3 Competitors landing within 50m of an MMA or if no MMA is set, landing within 200 meters of goals/targets or any physical mark of the competitor will be penalized up to 200 task points.

13. 3.4 Where the penalty relates to landing too close to a goal/target or mark, the competitor will only receive a penalty for the greater infringement.

13. 3.5 The penalty will be waived if the competitor can show that he was unable to comply because of safety reasons, or because of light winds (unable to clear area within 10 minutes).

13. 3.6 For competitors taking off too close to a goal or target, declaring a goal outside the limits specified in the TDS or otherwise abusing the set distance or altitude limits of a task, the penalty will be 2 task points per 0.1% infringement. Above 25% infringement the competitor will be scored in group B.

For Elbow, Angle and Land Run Tasks, the percent infringements will be the sum of the percent infringements of each ‘leg’, unless otherwise defined in the TDS.A competitor penalized under this rule cannot achieve a score less than Group B because of the distance infringement penalty.

13. 4 PENALTY POINTS

13.4.1 There are two kinds of point penalties: task points and competition points.

13.4.2 Task point penalties are subtracted from a competitor’s task score, which cannot be reduced below zero (0). Competition point penalties are also 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. 5 FARs

It is the responsibility of competitors to follow the requirements of the Federal Aviation Regulations and any waiver for the event. In all cases involving violation of air traffic rules and air safety noted by the assigned FAA monitor, the Director or his delegated official will act in concert with the FAA Monitor.

CHAPTER 14 – SCORING

14. 1 RESULT

A competitor's result is the achieved outcome in a task including result penalties. Results should be expressed in meters, square kilometers, feet, minutes, with an accuracy of two decimal places. Degrees will be measured to an accuracy of one or two decimal places depending on the distance defined in the TDS. See COH 6.9.2 for guidance.

14. 2 SCORE

A competitor's score in the Event is the total of all the points achieved in a task when applying the appropriate formulas. Task or competition penalties may be applied according to the rules.

14. 3 PUBLICATION OF SCORES

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, penalties followed by the kind of penalty, a rule reference, and a brief description.
c) The fixed data used in the Scoring Formulas (P, A, M, RM, W, and SM) and the checksum
d) Publication date and time and version number
e) If more than one score sheet version is published for a task, the changes from the previous issue shall be marked and the different versions shall be numbered in sequence.

14. 3.3 Task score sheets will have the following status:

PROVISIONAL RESULTS Provisional result scores are published for information only and have no validity for timing purposes. They serve the purposes of allowing competitors check their pending result before penalty or result mistakes (if any) are placed into the scoring software for assignment of points.

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

FINAL Official scores automatically 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. 3.4 Total score sheets shall include:

a) Event name
b) For each competitor, his: rank, competition number and name, total score and task scores
c) Task checksums

14. 3.5 Total scores are for information only and will not carry a signature.

14. 4 RANKING ORDER

14. 4.1 Competitors will be ranked in order of performance according to the rules for each task, after adjustment for any penalties. Competitors will be ranked in the following groups for each task:

GROUP A Competitors whose results have been measured or have been assessed under the rule for lost markers.

GROUP B Competitors flying the task but not achieving a result. They will be scored equally using Formula Three, or share equally the remaining points using Formula Two, whichever is the higher.

GROUP C Competitors not making a valid launch or disqualified in the event, all scoring zero points~~.~~ Competitors not making a valid launch or disqualified in the event, will not be ranked in all tasks of that flight.

14. 4.2 After calculating the points score with the applicable formula, any penalty points will be subtracted to obtain the competitors final task score. The competitor's final task scores will be ranked again before being published.

14. 5 POINTS FORMULA - PROPORTIONAL SCORING

14. 5.1 Each competitor will be awarded a number of points according to his performance. The formula to be used will depend on the competitor's place in the ranking order for the task.

14. 5.2 The best result can be awarded up to 1000 points before deduction of any penalty points.

14. 5.3 The superior half of the results will receive a score between 1000 and approximately 500 points, in proportion to their performance using Formula One.

14. 5.4 The inferior half of the results will receive a score between approximately 500 points and 0 points according to their relative position in the ranking order using Formula Two.

14. 5.5 FORMULA ONE: (superior half of performances):

$$1000 - [(1000 - SM) / (RM - W)] \times (R - W)$$

FORMULA TWO: (inferior half of performances):

$$1000 \times (P + 1 - L) / P$$

FORMULA THREE: (competitors in Group B):

$$1000 \times [(P + 1 - A) / P] - 200$$

P ~~=number of competitors~~ number of competitors ranked in the flight
M = P/2 (rounded to the next higher number) (Median Rank)
R = competitor's result (meters, etc.) if in the superior half.
RM = result achieved by the median ranking competitor.
L = competitor's ranking position if in the inferior portion.
W = the winning result of the task.
A = number of competitors in Group A
SM = rounded points score of the median ranking competitor, calculated under formula two.

14. 5.6 If fewer than half of the competitors achieve a result in the task, the following changes in definition will apply:

RM = lowest ranking result in Group A.
SM = rounded score of the lowest ranking competitor in Group A, calculated under Formula Two.
M = lowest ranking competitor in Group A.

14. 5.7 In tasks where no competitor achieves a result, all competitors in Group B will receive a score of 500 points before any penalty points.

14. 5.8 Points scores will be rounded to the nearest whole number.

14. 6 PRECISION

14. 6.1 Results will be established with the highest precision available.

14. 6.2 The following standards will be used:

Result Method	Precision	Example (m)
Tape / surveying	Centimeters	1.23 m
Map coordinate	Decameters	1250.00 m
Track point - GPS	Meters	1231.00 m

Any combination of result methods will revert to the lowest precision method used.

If positions can be determined relative to a common coordinate with a more accurate method, the precision of that method will be used.

Interpolation between track points may be used to establish the scoring position.

When establishing distances or positions, rounding should only be made at the end of calculations but not in intermediate steps.

14. 6.3 Results are considered tied when the outcome is the same after applying the above-mentioned principles. Competitors whose results are tied will share equally between them the points, which they would have received had they not been so tied.

14. 6.4 The altitude used in the Event is specified in Section II..

14. 7 TOTAL SCORES

14. 7.1 The Total Score is the addition of the individual task scores.

14. 7.2 Where two competitors have equal total scores in an Event, the competitor with the smaller difference between their best and worst scores will be ranked higher.

CHAPTER 15 - TASKS

15. 1 PILOT DECLARED GOAL (PDG)

15. 1.1 Competitors will attempt to achieve a mark close to a goal selected and declared by him before take-off.

15. 1.2 Task Data:

a) Method of declaration (also see Section II.12 and 12.3)
b) Number of goals permitted
c) Goals available for declaration
d) Minimum and maximum distances of goal(s) from CLP or ILP as per TDS
e) Minimum distance of goal(s) from any subsequent goals or targets, if applicable

15. 1.3 The result is the distance from the mark to the nearest valid declared goal. Smallest result is best.

15. 2 JUDGE DECLARED GOAL (JDG)

15. 2.1 Competitors will attempt to achieve a mark close to a set goal.

15. 2.2 Task Data:

a) Position of set goal/target

15. 2.3 Result is distance from the mark to the target, if displayed, or goal. Smallest result is best.

15. 3 HESITATION WALTZ (HWZ)

15. 3.1 Competitors will attempt to achieve a mark close to one of several set goals.

15. 3.2 Task Data:

a) Position of various set goals/targets

15. 3.3 The result is distance from the mark to the nearest target, if displayed, or goal. Smallest result is best.

15. 4 FLY IN (FIN)

15. 4.1 Competitors find their own launch areas and attempt to achieve a mark close to a set goal or target.

15. 4.2 Task Data:

a) Position of set goal/target

15. 4.3 The result is the distance from the mark to the target, if displayed, or goal. Smallest result is best.

15. 4.4 Only one scoring attempt (marker drop) may be made.

15. 5 FLY ON (FON)

15. 5.1 Competitors will attempt to achieve a mark close to a goal selected and declared by them before take-off or during flight.

15. 5.2 Task Data:

a) Method of declaration (also see Section II.12 and 12.3)
b) Number of goals permitted
c) Goals available for declaration
d) Declaration point requirement
e) Minimum and maximum distance between declaration point and declared goal(s)
f) Minimum and maximum distances of declared goal(s) from any other targets noted on TDS.

15. 5.3 The result is the distance from the mark to the nearest valid declared goal. Smallest result is best.

15 .5.4 Rules governing the declaration methods are in Section II.12 and shall be detailed on the TDS.

15. 6 HARE AND HOUNDS (HNH)

15. 6.1 Competitors will follow a hare balloon and attempt to achieve a mark close to a target displayed by the hare no more than two meters upwind of the basket after landing.

15. 6.2 Task Data:

a) Description of hare balloon(s)
b) Intended flight duration of hare balloon(s)

15. 6.3 The result is the distance from the mark to the target. Smallest result is best.

15. 6.4 Variation from intended flight duration of the hare shall not be grounds for complaint.

15. 6.5 The hare may deflate after landing and may be removed from the field.

15. 6.6 The hare balloon may display a banner hanging below his basket. No competitor shall display any banner hanging below the basket during this task.

15. 7 WATERSHIP DOWN (WSD)

15. 7.1 Competitors will fly to the launch point of a hare balloon, follow the hare, and attempt to achieve a mark close to a target displayed by the hare no more than two meters upwind of the basket after landing.

15. 7.2 Task Data:

a) Description of hare balloon
b) Location of the launch point of the hare balloon
c) Set take-off time of the hare balloon
d) Intended flight duration of the hare balloon

15. 7.3 The result is the distance from the mark to the target. Smallest result is best.

15. 7.4 If the hare balloon does not take off within five minutes after the set time then this task is considered cancelled.

15. 7.5 Variation from the intended flight duration of the hare shall not be grounds for complaint.

15. 7.6 The hare may deflate after landing and may be removed from the field.

15. 7.7 The hare may display a banner hanging below his basket. No competitor shall display any banner hanging below the basket during this task.

15. 8 GORDON BENNETT MEMORIAL (GBM)

15. 8.1 Competitors will attempt to achieve a mark within a scoring area(s) close to a set goal.

15. 8.2 Task Data:

a) Position of goal/target
b) Description of scoring area(s)

15. 8.3 The result is the distance from the mark to the target, if displayed, or goal. Smallest result is best.

15. 9 CALCULATED RATE OF APPROACH TASK (CRT)

15. 9.1 Competitors will attempt to achieve a mark within a valid scoring area close to a set goal. The scoring area(s) will have unique times of validity.

15. 9.2 Task Data:

a) Position of goal/target
b) Description of scoring area(s) and their validity times

15. 9.3 The result is the distance from the mark to the target. Smallest result is best.

15. 9.4 A competitor who does not achieve a mark (marker on the ground) inside a scoring area during the time of validity will not achieve a result.

15. 10 RACE TO AN AREA (RTA)

15. 10.1 Competitors will attempt to achieve a mark or valid track point, as specified in the Task Data in the shortest time within a scoring area(s) or airspace(s).

15.10.2 Task Data:

a) Arrangements for timing
b) Description of Scoring Area(s)

15. 10.3 The result is the elapsed time from the initial timing point to the mark or first valid track point. Shortest time is best.

15. 10.4 Timing ends at the moment the marker is on the ground as seen by the officials, the electronic mark is dropped (Flytec loggers only) or at the moment of the first valid track point in the scoring area if track points only were set.

15. 11 ELBOW (ELB)

15. 11.1 Competitors will attempt to achieve the greatest change of direction in flight.

15. 11.2 Task Data: (If no markers are used)

a) Description of point “A”
b) Description of point “B”
c) Description of point “C”

15. 11.3 The result is 180 degrees minus the angle ABC. Greatest result is best.

15. 12 LAND RUN (LRN)

15. 12.1 Competitors will attempt to achieve the greatest area of a triangle ABC.

15. 12.2 Task Data:

a) Location of point "A"
b) Method of determining point "B"
c) Method of determining point "C"
d) Description of scoring area(s)

15. 12.3 The result is the area of triangle ABC. Greatest result is best.

15. 13 MINIMUM DISTANCE (MDT)

15. 13.1 Competitors will attempt to achieve a mark or valid track point close to the reference point, after flying a minimum set time or distance.

15. 13.2 Task Data:

a) Arrangements of timing
b) Minimum set time or distance
c) Reference point

15. 13.3 The result is the distance from the mark or closest valid track point to the common reference point. Smallest 2D result is best.

15. 13.4 The scoring position is the mark or best track point after the minimum time or distance has elapsed. Otherwise the scoring position will be the landing position, provided that the balloon has been seen by an official to be still airborne after the minimum time

15. 14 SHORTEST FLIGHT (SFL)

15. 14.1 Competitors will attempt to achieve a mark or valid track point within a set scoring area(s) close to the reference point.

15. 14.2 Task Data:

a) Description of scoring area(s)
b) Reference point

15.14.3 The result is the distance from the mark or best valid track point to the reference point. Smallest result is best.

15. 15 MINIMUM DISTANCE DOUBLE DROP (MDD)

15. 15.1 Competitors will attempt to achieve two marks or valid track points close together in different scoring areas.

15. 15.2 Task Data:

a) Description of the scoring areas

15. 15.3 The result is the distance between the marks or track points. Smallest result is best.

15. 15.4 Competitors will not achieve a result, unless they have valid track points or marks in different scoring areas as per the TDS.

15. 16 MAXIMUM DISTANCE TIME (XDT)

15. 16.1 Competitors will attempt to achieve a mark or valid track point far away from the common reference point, within a maximum set time.

15. 16.2 Task Data:

a) Maximum set time
b) Arrangements for timing
c) Reference point

15. 16.3 The result is the distance from the mark or furthest valid track point to the reference point. Greatest result is best.

15. 17 MAXIMUM DISTANCE (XDI)

15. 17.1 Competitors will attempt to achieve a mark or valid track point within a set scoring area(s) far away from the common reference point.

15. 17.2 Task Data:

a) Description of scoring area(s)
b) Reference point

15. 17.3 The result is the distance from the mark or valid track point to the reference point. Greatest distance is best.

15. 18 MAXIMUM DISTANCE DOUBLE DROP (XDD)

15. 18.1 Competitors will attempt to achieve two marks or valid track points far apart in the scoring area(s).

15. 18.2 Task Data:

a) Description of Scoring Area(s)

15. 18.3 The result is the distance between the marks or farthest valid track points. Greatest result is best.

15. 19 ANGLE TASK (ANG)

15. 19.1 Competitors will attempt to achieve the greatest change of direction from a set direction. The change of direction is the angle between the set direction and line “A-B”.

15. 19.2 Task Data:

a) Description of points “A” and “B”
b) Set direction (degrees)
c) Minimum and maximum distances from “A” to “B”

15. 19.3 The result is the angle between the set direction and the line “A-B”. Greatest result is best.

15.20 3-D SHAPE TASK (3DT) (for events with logger scoring)

15.20.1 Competitors will attempt to achieve the greatest distance within a set airspace.

15.20.2 Task Data:

a) Description of set airspace(s)

15.20.3 The result is the accumulated horizontal distance between valid track points in the set airspace(s). Greatest result is best.

15.21 Altitude Profile Task (APT)

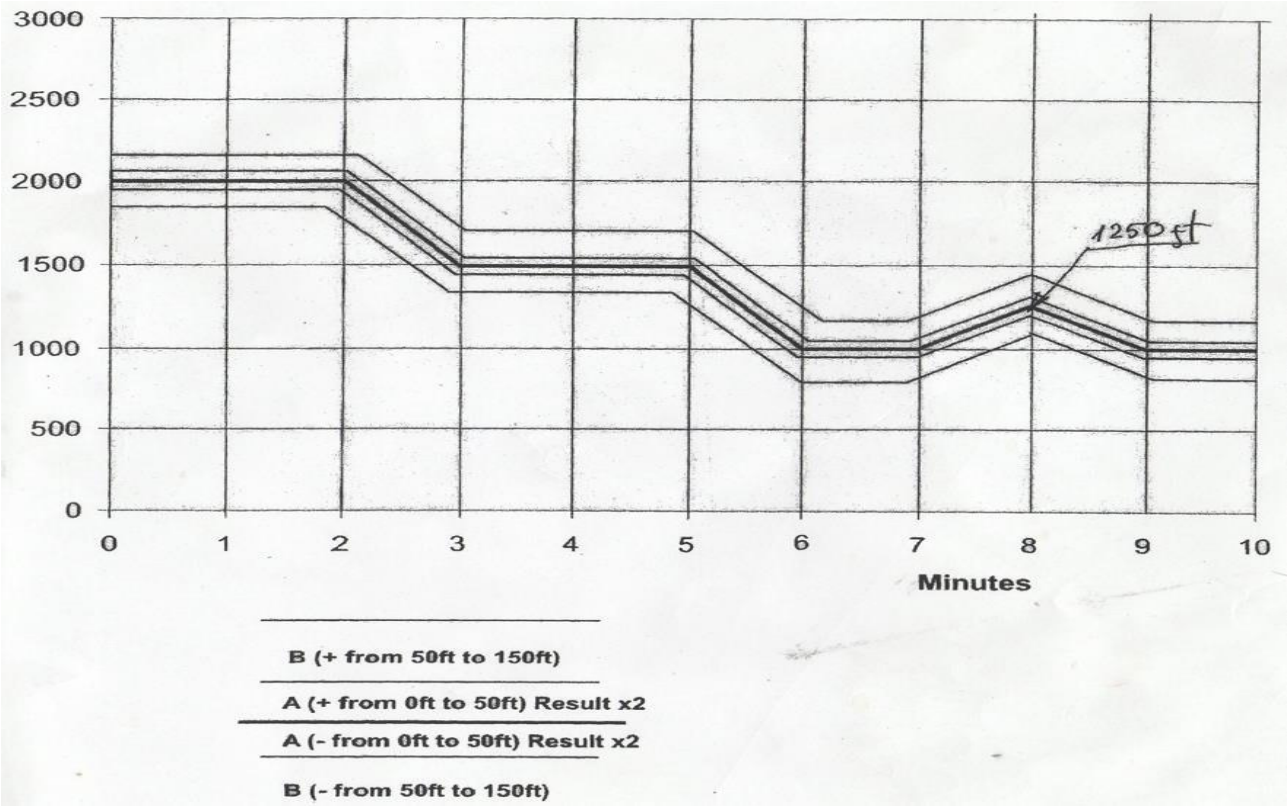
15.21.1 Competitors will attempt to achieve the greatest time within a set airspace. The airspace is defined by one or two bands around a given altitude profile where the time within the inner band counts 2x, the time within the outer band counts 1x and the time outside the outer band does not count. The task will be started with an electronic mark.

15.21.2 Task Data:

a) Description of set airspace(s) (see sketch)

15.21.3 The result is the accumulated time in the set airspace(s). Greatest result is best.

Example sketch



APPENDICES

APPENDIX A - CODE OF CONDUCT

All **OFFICIALS, PILOTS/COMPETITORS AND CREWS** are required to comply with the Code of Conduct. In addition to the excerpts from the Competition Rules shown below, competitors and crews are expected to conduct themselves in a manner that promotes the sport of hot air ballooning while behaving in a sportsmanlike manner. All participants will treat fellow pilots, crews, officials, sponsors, etc. with respect at all times. Repeated violations may result in disqualification from the event.

2.12 CONDUCT

Competitors and their crew are required to behave in a sportsmanlike manner, follow the Code of Conduct, and comply with the directions of Event Officials. Inconsiderate behavior, profanity, or unsportsmanlike conduct will be penalized up to 1000 competition points and may lead to task disqualification or may be grounds for expulsion of a competitor.

10.5 BEHAVIOR

Competitors are required to fly with proper consideration for fellow competitors, persons and livestock on the ground and to follow good landowner relations etiquette and the code of conduct. Inconsiderate behavior by competitors or crew members, or endangering the public during flight, may be penalized up to 1000 competition points. All pilots and their crews will conduct themselves in such ways as their actions will be a credit to and in the best interests of hot air ballooning and the Event, its officials and staff, and its Event sponsors.

13. 1 SERIOUS INFRINGEMENTS, UNSPORTING BEHAVIOR

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 will be penalized up to 1000 competition points and may be disqualified from the task or Event. Pilots/crews found to misappropriate propane during the event would be penalized and/or disqualified.

EVENT ETIQUETTE

Pilots and crew are expected to treat our event hosts, community, volunteers, hotel staff and anyone associated with the event in a professional and polite manner.

Pilots registering for and attending events are expected to be present for the General Briefing and attend all flight briefings. In circumstances requiring a participating pilot to miss a briefing or flight, the pilot is responsible to notify the organizer and Director of their situation. Violations of normally accepted conduct will result in a warning and possible expulsion from the Event.

Penalty for violation, regardless of NEL standing, may include DQ from State, Regional, National and International competition for the next year.

Pilots will be responsible for operating within both the letter <u>and</u> spirit of the Event Competition Rules.

APPENDIX B - LANDOWNER RELATIONS

All competitors and crews are reminded of the importance of Landowner Relations and that the countryside is the farmer's livelihood. It is important to remember that good rural relations are essential to our sport. Grass is a crop, cattle, pigs and horses are easily frightened and farmers depend on electric power for many purposes not the least of which is for their milking plant.

Please remember these guidelines when dealing with our landowners:

1. Always be COURTEOUS and respectful of the fact that you are trespassing unless invited onto the property.
2. Select a landing site that will cause the least possible inconvenience to the farmer. Select a field FREE OF CROPS and be particularly CAREFUL OF ANIMALS on the approach and on possible overshoot.
3. After landing, DISCOURAGE ONLOOKERS from coming onto the land unless the owner is there, and they have his permission.
4. ALWAYS obtain permission BEFORE you bring the retrieve vehicle into the field.
5. Ensure farm FENCES are NOT DAMAGED and gates are left as you find them.
6. DO NOT let anyone LITTER the property.
7. If damage is caused, or the farmer wishes to take further action, exchange names and addresses and report the facts to race officials upon your return.
8. Remember not to use the "ran out of fuel" excuse if you do damage. It is a violation of the FARs to run out of fuel.

INDEX

2

2D / 3D SCORING ALTITUDE BANDS 8
2D / 3D SCORING ALTITUDES 8

A

ACCEPTANCE OF CODE OF CONDUCT, RULES AND REGULATIONS 10
ACKNOWLEDGEMENT 10
ACKNOWLEDGEMENT OF RESPONSIBILITY AND ASSUMPTION OF RISK 3
AIR LAW 4, 27
AIRWORTHINESS 12
ALTIMETER..... 12
ALTITUDE 8
APPEAL OF DECISION OF THE PROTEST JURY 16
ASSISTANCE, COMPLAINTS AND PROTESTS..... 15
ASSISTANCE, FROM PERSONS ON THE GROUND 27
AUTOMATIC FLIGHT CONTROLS 12

B

BALLOON COLLISION..... 26
BALLOON SIZE 7
BALLOON, DEFINITION OF 12
BALLOON, DESIGNATION OF 12
BASKET..... 12
BEHAVIOR .....
26, 42 BLUE PZ ..... See Prohibited Zones boundary of the Launch Area ..... See Individual Launch Area
BRIEFING, GENERAL..... 21
BRIEFING, SUPPLEMENTAL 21
BRIEFING, TASK 21

C

CHIEF SCORER..... 14
CLEARING ..... See Launch Area Clearing
CLEARING GOAL/TARGET AREA 26
CLOSING ENTRY DATE 2
Code of Conduct ..... See Conduct and Appendix A
CODE OF CONDUCT 42, See Conduct and Appendix A
CODE OF CONDUCT, RULES AND REGULATIONS 10
COLD INFLATION 23
COLLISION..... 26
COMMON LAUNCH AREA(S)
Description 4
COMMON LAUNCH AREA(S) (CLA)
LAUNCH PROCEDURES 22
COMMON LAUNCH POINT(S) 4
COMMUNICATION..... 15
COMMUNICATION TIMES..... 6
COMMUNICATION, REPLIES TO A COMPLAINT 15
COMPETITION DIVISION CORRESPONDENCE 2
COMPETITION NUMBERS 12
COMPETITION POINT PENALTIES . See Penalty Points
COMPETITION STRUCTURE..... 8
COMPETITOR 10
COMPETITOR'S RIGHT TO COMPETE 10
COMPETITOR'S RIGHTS OF REPRESENTATION10
COMPLAINT 15
CONDUCT 11, 42
CONTEST AREA 4, 19
CONTROL ..... See Loss of Control 25
CORRESPONDENCE 2
CREW, GROUND 27
CREW, PERSONS ON BOARD 26

D

DAMAGE, REPORTING OF 12
DAMAGE, TO A BALLOON 12
DATES 2
DECLARATIONS BY COMPETITORS 29
DECLARATIONS, LATE 29
DECLARATIONS, REVISED 29
DEFINITION OF CHAMPION 9
DEGREE REFERENCE 19
DISEMBARKATION 27
DISTANCE INFRINGEMENTS 33
DOCUMENTATION 9
DRIVING 27
DRIVING LAW 4
DROPPING OBJECTS 26

E

EARTH TO BE FLAT 19
ENGLISH WORDING, INTERPRETATION OF 9
ENTRY 2, 10, 20
ENTRY ACKNOWLEDGEMENT 10
ENTRY FOR TASK 20
ENVELOPE TO ENVELOPE CONTACT 26
EVENT DIRECTOR 14
EVENT ETIQUETTE ..... See Code of Conduct

F

FARs 33
FEMALE ..... See Special invitational sporting events
FLIGHT CREW 6
FLIGHT REPORT FORM (FRF), ... 18
FLOWN IN ORDER 20
FUEL 12

G

GOAL CENTER 5
GOAL SELECTED BY A COMPETITOR 29
GOAL, DEFINITION 29
GOAL/TARGET ..... See Clearing Goal/Target Area
GOALS SELECTED BY A COMPETITOR 5
GOALS, PREDETERMINED 29
GPS FINANCIAL RESPONSIBILITY 18
GPS LOGGERS 6
GPS LOGGERS, HANDLING OF 18
GPS-LOGGER, FAILURE OF 18

GPS-LOGGERS 18
GROUND CONTACT 1 28
GROUND CONTACT 2 28
GROUP A ..... See Ranking Order
GROUP B ..... See Ranking Order
GROUP C ..... See Ranking Order I

INDIVIDUAL LAUNCH AREAS (ILA) 23
Individual Launch Point (ILP) 23
INSURANCE..... 3
INVALID GOAL 29

J

JURY APPROVAL OF SCORES AND PRIZE GIVING 17
JURY DUTIES AND COMPOSITION 14

L

LANDING AT WILL 28
LANDING BEFORE SUNSET 28
LANDING IN MMA 28
LANDING NEAR GOALTARGET 28
LANDING, CONTEST..... 28
LANDINGS 28
LANDOWNER ..... See Permission to Retrieve
LANDOWNER RELATIONS 43
LANDOWNER, DEFINITION 26
LANDOWNER'S PERMISSION..... 4, 23
LATE ENTRY..... See Entry
Late take-off ..... See Launch Period
LAUNCH AREA, CLEARING 25
LAUNCH DIRECTORS 24
LAUNCH PERIOD 24
LAUNCH PROCEDURES..... 23
LAUNCH, PROCEDURES WHEN DIRECTORS ARE OPTIONAL 25
LAUNCH, PROCEDURES WITH COMPULSORY DIRECTORS 24
LAUNCHING ORDER..... 24
LIABILITY TO THIRD PARTIES 10
LIABILITY, RELEASE OF 10
LIVESTOCK AND CROP..... 4, 26
LOCATION OF OFFICIAL NOTICE BOARD 6
LOSS OF CONTROL..... 25
LOST MARKER 7

M

MAP COORDINATES..... 8, 19
MAPS..... 19
MARK, DEFINITION OF 30
MARK, VALID 31
MARKER MEASURING AREA (MMA) 31
MARKER ORDER 20
MARKER RELEASE 30
MARKER, DEFINITION 30
MARKER, FREE DROP 30
MARKER, GRAVITY DROP 30
MARKER, INTERFERENCE WITH 30
MARKER, LOST 30
MARKER, SEARCH PERIOD..... 30
MEASURING 35
MODIFICATION OF RULES..... 20

N

NATIONAL ELIGIBILITY QUALIFICATION 2
NATIONAL RANKING SYSTEM.....10, 34

OBJECTIVES 9
OBSTRUCTION 24
OFFICIAL NOTICE BOARD 6, 17
OFFICIALS ..... See Target Officials
ORGANIZATION 2
OUT OF BOUNDS 4, 19

P

PARTICIPATION 2
PENALTIES ..... See Distance Infringements
PENALTIES RELATED TO THE LANDING 33
PENALTIES RELATED TO THE TAKE OFF 19, 23, 33
PENALTIES, SERIOUS INFRINGEMENTS UNSPORTING BEHAVIOR 33
PENALTIES, UNSPECIFIED 33
PENALTY POINTS 33
PERMISSION TO RETRIEVE 28
PERSONS ON BOARD ..... See Crew
PLACE 2
POINTS FORMULA, POSITIONAL SCORING 35
POINTS FORMULA, PROPORTIONAL SCORING 35
POSITIONAL SCORING ..... See Points Formula
PRECISION 35
PROHIBITED ZONES 19
PROOF OF RULES VIOLATION 16
PROPORTIONAL SCORING ..... See Points Formula
PROTEST 15
PROTEST FEE 16
PROTEST FEE, RETURN OF 17
PROTEST, TREATMENT OF 16
PUBLIC ADDRESS 24
PUBLICATION TIMES ON THE LAST FLYING DAY 6
PUBLICATION, OF A COMPLAINT 15
PZ INFRINGEMENT 19
PZ LIST 4
PZs, IN FORCE 19

Q

QUALIFICATION 10
QUICK RELEASE TIE OFFS 23

R

RANKING ORDER 34
RECALL PROCEDURE 5, 27
RED PZ ..... See Prohibited Zones
RELEASE OF LIABILITY 10
RESPONSIBILITY 3, 11
RESULT 34
RETRIEVE 13
RETRIEVE CREW 13
RETRIEVE VEHICLES 13

RULES ..... See Modification of Rules
RULES, VARIABLE 21

S

SAFETY 10
SAFETY OFFICER 14
SANCTION 2
SCORE, DEFINITION OF..... 34
SCORE, PROVISIONAL, OFFICIAL, FINAL 34
SCORE, PUBLICATION OF 34
SCORES, TOTAL 36
SCORING AIR SPACE 31
SCORING ALTITUDES ..... See 2D/3D Scoring Altitudes
SCORING AREA 31
SCORING FORMULA 8
SCORING PERIOD 31
SERIOUS INFRINGEMENTS, UNSPORTING BEHAVIOR ..... See Code of Conduct
SHARP OBJECTS 12
SHORTENED TIME LIMITS FOR COMPLAINTS AND PROTESTS.....15,16
SIGNALS POINT 23
SIGNALS, LAUNCH 24
SOLO FLIGHT 27
STEWARDS 14

T

TAKE-OFF, ABORTED..... 25
TAKE-OFF, POINT 25
TAKE-OFF, VALID..... 25
TARGET 29
TARGET OFFICIALS..... 32
TASK POINT PENALTIES..... See Penalty Points
TASK PROGRAM 20
TASK SELECTION 20
TASK, DATA 21
TASK, VALID 20
TASKS, 3-D SHAPE TASK (3DT) 41
TASKS, ANGLE TASK (ANG) 40
TASKS, CALCULATED RATE OF APPROACH TASK (CRT) 38
TASKS, ELBOW (ELB) 39
TASKS, FLY IN (FIN)..... .. 37
TASKS, FLY ON (FON) 37
TASKS, GORDON BENNETT MEMORIAL (GBM) 38
TASKS, HARE AND HOUNDS (HNH) 38
TASKS, HESITATION WALTZ (HWZ) 37
TASKS, JUDGE DECLARED GOAL (JDG) 37
TASKS, LAND RUN (LRN) 39
TASKS, MAXIMUM DISTANCE (XDI) 40
TASKS, MAXIMUM DIStT DOUBLE DROP (XDD)..... 40
TASKS, MAXIMUM DISTANCE TIME (XDT) 40
TASKS, MINIMUM DISTANCE (MDT) 39
TASKS, MINIMUM DISTANCE DOUBLE DROP (MDD) 40

TASKS, ALTITUDE PROFILE TASK……41

TASKS, MULTIPLE 20
TASKS, PILOT DECLARED GOAL (PDG) 37
TASKS, RACE TO AN AREA (RTA) 39
TASKS, SHORTEST FLIGHT (SFL) 39
TASKS, WATERSHIP DOWN (WSD) 38
TECHNICAL SUPPORT OFFICERS 14
TIME LIMITS 7, 15
TIME LIMITS FOR COMPLAINTS 15
TIME LIMITS FOR PROTESTS 16
TIME, ADEQUATE 24
TIME, EXTENSION OF 24
TIME, OFFICIAL 22
TITLE 2
TRACK POINT, DEFINITION OF 31
TRACK POINT, VALID 32

V

VEHICLES 23
VERTICAL SPEED 5

Y

YELLOW PZ ..... See Prohibited Zones