

## **SECTION I - EVENT DETAILS**

### **I. 1 TITLE**

The Event shall be known as the British National Championships 2024.

### **I. 2 SANCTION**

This event is an open championship.

- The competitor with the highest aggregate score will be defined as winner of the 'British National Championships 2024'.

- The British competitor with the highest aggregate score of all in this event competing British pilots will be defined as 'British Champion 2024'.

No separate ranking for the different nationalities will be made.

### **I. 3 ORGANIZATION**

The Event is organised by the BBAC Competitions Club.

### **I. 4 CORRESPONDENCE**

All entries and official correspondence should be addressed to:

Mr. Rupert Stanley - rupert.stanley@googlemail.com

### **I. 5 PERSONNEL**

Event Director : Jonas Maes

Deputy Director : Alison O'dell

Safety Officer : Dave Morgan.

Jury President Will be selected from the non-involved pilots (See specific note on the General Briefing Notes)

### **I. 6 PLACE**

The Event will be held at:

Bristol Grammar School Sports Ground, Clevedon Rd, Failand, Bristol BS8 3TL

### **I. 7 DATES**

The Event will run from 6<sup>th</sup> of August until 11<sup>th</sup> of August.

First flight will be on 6<sup>th</sup> August in the evening. Last flight will be on 11<sup>th</sup> August in the morning.

The last flying day will be 11<sup>th</sup> August in the Morning.

If the minimum tasks under rule 1.2 have not been achieved, no champion will be determined.

### **I. 8 PROTEST FEE**

THE AMOUNT OF THE PROTEST FEE TO ACCOMPANY A PROTEST SHALL BE EUR 100 OR 85 GBP.

IN CASE OF A JOINT PROTEST, EVERY PROTESTING PERSON MUST PAY THE PROTEST FEE. (S1 An3 8.3)

The protest fee is returnable only if the protest is withdrawn before proceedings begin or if the protest is upheld. All non-refunded protest fees will be sent to the Competitions Club Treasurer.

### **I. 9 LANGUAGE )**

I. 9.1 the rules, regulations and information circulated to competitors or issued during the event shall be in English.

I. 9.2 Printed material (e.g. Task Data, Meteorological information etc) shall be in English. The language used verbally during briefings shall be English.

I. 9.3 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 CLOSING ENTRY DATE**

The closing entry date for the Event is 24th July 2024.

**I. 11 RISK**

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

**I. 12 INSURANCE**

Each balloon shall be insured against all claims by third parties to a minimum as required by relevant regulation at the time of the event. The competitor shall produce documentary evidence of this insurance valid for the period of the Event covering any balloon which he may fly.

## **SECTION II - COMPETITION DETAILS**

### **II. 1 CONTEST AREA (7.1)**

A digital map image will be available to each competitor. An electronic file will be available showing the boundaries of the contest area. Electronic files of airspace and PZs will also be available. The combination of the digital map image and the electronic files will form the official competition map and all these files will be published on the official (electronic) notice board except the map image which is too large. A printed version of the official competition map will be available to view on request of the officials and displayed at general briefing.

If there will be any changes, it will be shown on the official competition map at the official notice board, and there will be a notification published on the ENB-Section.

scale 1/50.000

Map datum: The electronic equivalent of the Ordnance Survey 1:50,000 Landranger map used by the competitor.

British National Grid (BNG) grid system

Magnetic Declination: +0.04° E

The contest area is the area contained within the following points: SO 4700 0400, SO 9700 0400, ST 9700 5400, ST 4700 5400

### **II. 2 OUT OF BOUNDS (7.2)**

All active PZs with a severity rating of 1, 2, 3 or 4, any PZs added during the competition and Blue PZs are out of bounds. Penalties will be applied (e.g. Ground contact, Dangerous flying, etc).

EGD148 KEEVIL (only if activated by NOTAM) - 511744N 0021016W - 511937N 0020745W - 512055N 0020410W - 511946N 0020305W - 511705N 0020312W - 511602N 0020657W - 511701N 0020929W - 511744N 0021016W, surface to 3400' AMSL

EGR105 Highgrove House – A circle, 1.5 NM radius, centred at 513720N 0021050W, surface to 2400' AMSL

EGR106 RAYMILL HOUSE, LACOCK - A circle, 1 NM radius, centred at 512523N 0020646W, surface to 1800' AMSL

EGR155 BERKELEY - A circle, 2 NM radius, centred at 514134N 0022936W, surface to 2000' AMSL

EGR154 - A circle, 2 NM radius, centred at 513852N 0023415W, surface to 2000' AMSL

Avonmouth gas venting - A circle, 1 NM radius, centred at ST 54704 81495, surface to 3500' AMSL

Colerne high intensity radar - A circle, 0.9 NM radius, centred at ST 80804 71717, surface to 3700' AMSL

Note that the above areas are included in the electronic files.

### **II. 3 PZ LIST (7.3)**

A printed list has been provided as a separate document and all PZs at the start of the competition have been provided in the electronic files. The electronic files might or might not display the appropriate colours and pilots might wish to check and colour code at least of the Black PZs.

The printed PZ file includes a severity rating (column title: "Sev") which is as follows:

0 – Friendly although a landing fee may be required and do read the notes as some are only friendly if no cattle etc. No penalties provided the conditions have not been broken (eg landing in cattle).

1 – Normal PZ

2 – Normal PZ

3 – Black PZ. These are extremely sensitive area that might be subject to very high landing fees. A special penalty may be applied for contravening a Black PZ – see General Briefing notes

4 – Dyson estate. A special permit is required to land here otherwise a very high landing fee. On a flight by flight basis, it might be possible to land in some of these areas and this will be notified at each flight briefing.

Blue PZs:

The electronic files include the boundaries of the different Blue PZ areas. A printed image will also be provided in the General Briefing. Blue PZs related to Bristol airport may be subject to relaxation on a flight by flight basis as briefed during each task briefing.

<b>Blue PZ area</b>	<b>Description</b>	<b>Altitude AMSL</b>
Area 1	North of line ST 47000 87929 to ST 97000 78580 but excluding area 1a	7,000'
Area 1a	enclosed by 3 points: ST 97000 94372, ST 94117 79105, ST 97000 78580	6,000'
Area 2	enclosed by 4 points: ST 47000 87939, ST 74593 82755, ST 72737 75561, ST 47000 74212	4,400'
Area 3	enclosed by 5 points: ST 74593 82755, ST 94117 79105, ST 77903 65658, ST 75788 75726, ST 72737 75561. Points ST 77903 65658 and ST 75788 75726 connect to each other by an arc based on a 15NM radius from ST 50077 65119	4,800'
Area 4	enclosed by 4 points: ST 47000 73847, ST 50000 74372, ST 50000 69733, ST 47000 68773. Points ST 50000 69733 and ST 47000 68773 connect to each other by an arc which follows the railway line.	1,500' but expected to be lifted as notified on a flight by flight basis
Area 5	enclosed by 4 points: ST 50000 74372, ST 50000 69733, ST 52088 69698, ST 59064 67333. Points ST 50000 69733 and ST 52088 69698 connect to each other by an arc which follows the railway line. Points ST 50000 74372 and ST 59064 67333 connect to each other by an arc based on a 5NM radius from ST 50077 65119.	2,400' but expected to be lifted as notified on a flight by flight basis
Area 6	enclosed by 4 points: ST 50000 74372, ST 59064 67333, ST 66016 70007, ST 63440 75071. Points ST 50000 74372 and ST 59064 67333 connect to each other by an arc based on a 5NM radius from ST 50077 65119. Points ST 66016 70007 and ST 63440 75071 connect to each other by an arc based on a 9NM radius from ST 50077 65119	2,400' but expected to be lifted as notified on a flight by flight basis
Area 7	a circle of 5NM radius with a centre point of ST 50077 65119 but excluding Area 4 and Area 5	0'
Area 8	enclosed by 4 points: ST 59064 67333, ST 66016 70007, ST 64410 56580, ST 51738 56000. Points ST 59064 67333 and ST 51738 56000 connect to each other by an arc based on a 5NM radius from ST 50077 65119. Points ST 66016 70007 and ST 64410 56580 connect to each other by an arc based on a 9NM radius from ST 50077 65119	2,000'
Area 9	enclosed by 4 points: ST 63440 75071, ST 64410 56580,	2,400'

	ST 70766 56885, ST 69797 75406. Points ST 63440 75071 and ST 64410 56580 connect to each other by an arc based on a 9NM radius from ST 50077 65119. Points ST 70766 56885 and ST 69797 75406 connect to each other by an arc based on a 12NM radius from ST 50077 65119	
Area 10	enclosed by 4 points: ST 70766 56885, ST 69797 75406, ST 75788 75726, ST 76748 57200. Points ST 75788 75726 and ST 76748 57200 connect to each other by an arc based on a 15NM radius from ST 50077 65119. Points ST 70766 56885 and ST 69797 75406 connect to each other by an arc based on a 12NM radius from ST 50077 65119	3,800'
Area 11	Enclosed by 4 points: ST 64040 56005, ST 62510 54000, ST 47000 54000, ST 47000 55670	3,400'
Area 12	The bottom right corner of the map, excluding all areas above	10000'

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

TBA during General Briefing, or the Task Briefing of that specific competition flight.

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

TBA during General Briefing, or the Task Briefing of that specific competition flight.

**II. 6 LANDOWNER'S PERMISSION (9.2.2)**

Competitors must ensure permission has been obtained from the landowner or occupiers before driving into, 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.

When competitors put their basket - during inflation or recovering - on the road or on the border of a land, laying out the envelope into the field, without making any damage AND without disturbing traffic AND making sure that there aren't any cattle near the balloon less than 500m, landowner's permission will not be necessary, however it will still be recommended.

**II. 7 LIVESTOCK AND CROP (10.6)**

Balloons shall not fly closer than 500ft from livestock or buildings containing livestock.

**II. 8 DRIVING LAW (10.11)**

<https://www.gov.uk/browse/driving/highway-code-road-safety>

**II. 9 AIR LAW (10.14)**

Flights over congested or built up areas (shown as continuous pink blocks on the map) shall not fly below a height of 1,000 feet above the highest fixed obstacle within a horizontal radius of 600 metres of the aircraft.

Outside congested or build up area, an aircraft shall not be flown closer than 500 feet to any person, vessel, vehicle or structure.

An exception to the above rules applies when landing in an open space or landing when becalmed.

**II. 10 RECALL PROCEDURE (10.15)**

Sending short messages (SMS or WhatsApp) to the competitors' mobile phones will be used as recall procedure. The number and phone may be tested at registration.

The competitor's phone must be switched on at all times. Minor task changes may be sent out by SMS or WhatsApp, before the launch period, in case of unexpected problems with goals or other safety matters.

The SMS message service will be backed up by broadcast by the event director on 122.480MHz if balloons are already flying.

**II. 11 VERTICAL SPEED (10.2)**

All logger tracks will be checked using the Balloon Safety Analyzer. Competitors exceeding the limits of vertical speed below will be penalized:

The limits apply to a certain difference in vertical speed at a 3D-distance between balloons.

Limit 1: more than 3m/s at less than 25m

Limit 2: more than 5m/s at less than 50m

Limit 3: more than 8m/s at less than 75m

Limit 4: more than 8m/s vertical speed

(Limit 4 must be violated for a consecutive 5s or more to be triggered.)

The Director may vary the above limits for safety reason, any such variation will be briefed per flight in the task briefing.

Scoring policy: As above, the penalties mentioned in the table below are guidance therefore different penalties may be applied following review of specific cases.

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
				$0 \leq v < -2$			
$2 \leq v < 3$	50(WRN)			$-2 \leq v < -3$	100 (WRN)		
$3 \leq v < 4$	100(WRN)	50(WRN)		$-3 \leq v < -4$	200	50(WRN)	
$4 \leq v < 5$	300	100(WRN)	50(WRN)	$-4 \leq v < -5$	400	100(WRN)	
$5 \leq v < 6$	500	300	100(WRN)	$-5 \leq v < -6$	600	200	100(WRN)
$6 \leq v < 7$	700	500	300	$-6 \leq v < -7$	800	400	200
$7 \leq v < 8$	900	700	500	$-7 \leq v < -8$	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)**

Goal 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.23.

Competitors will not be asked to select or determine the center of crossroads, but always a valid 4/4 coordinate.

**II. 13 LOCATION OF OFFICIAL NOTICE BOARD (5.3.3)**

<https://watchmefly.net/events/event.php?e=britishnationals2024&v=enb>

**II. 14 COMMUNICATION TIMES (5.1.5+5.2.5)**

Replies to general inquiries or notification of replies to complaints will be posted immediately as available on the ONB. An electronic notification may be made using a text messaging system (SMS or WhatsApp). Timing requirements of 5.1.5+5.2.5 will start at the time of the ONB posting.

**II. 15 PUBLICATION TIMES ON THE LAST FLYING DAY (5.1.6+5.2.6)**

All scores, complaints, responses to complaints, protests and jury reports will be posted immediately as available. Electronic notification of postings to the ONB may be made simultaneously using a text messaging system (SMS or WhatsApp).

**II. 16 DETAILS FOR TIME LIMITS (rest hours) (5.1.5+5.2.5)**

The hours between 22PM and 4AM and between 12PM and 15PM local time will be disregarded for the purpose of the time limits of complaints and protests. The total rest period per day shall be a minimum of 8 hours and may be divided into two parts, depending on the daylight period.

**II. 17 FLIGHT CREW (2.2.2)**

Rule 2.2.2 is not applicable. Pilots may fly their crew or other passengers unless otherwise set in the task data.

**II. 18 DETAILS FOR THE USE OF GPS LOGGERS (6)**

The following are rules proposed for the Balloon Live App:

**a) Logger:**

*The Logger used in this Event is the FAI "Balloon Live" app with a connected Balloon Live sensor. The app is available for iOS and Android and must be installed by each competitor beforehand on his own recording device (smartphone or tablet). Details and instructions on how to purchase and use can be found on [balloonlive.org](http://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 familiarise 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 Balloon Live sensor is mandatory for all flights. Please make sure the sensor 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. Therefore 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.

Pull down the red label to start a new flight and transmit the track data to the server.

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

- Competition name: britishnationals2024
- Logging interval (seconds): 1
- UTC offset (seconds): 0
- Allow multiple marker drops: inactive
- Allow multiple goal declarations: active
- Declaration format: 4/4
- Altitude mode: Barometric Feet
- Geodetic system: British National OGB1936

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 pulling down the red label.
- The competitor is considered entering the competition flight according to the selected TDS with the start of the track recording and the take off.
- 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 5/4 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 and safe balloon handling the track recording should be stopped by pulling down the green label in the Balloon Live app.  
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 valid declaration will be used.
- If an electronic mark is used more than once, the first mark 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 latest 6 hours after the flight has been started. For tracks that are transferred later, the competitor will be penalised 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.. Tracks where competitors have given explicit permission will be published.

The publication will have a minimum of 10 min delay. No publication of a track should be made before the end of the launch period.

**g) Recommendations:**

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

**Flight Report Forms must be completed on Watchmefly.net as quick as possible and maximum NINETY (90) minutes after the landing of that specific flight !! When there are problems during your retrieve, please contact the competition director and ask for an 'extension of time' : +32 477.16.02.73.**

**If the FRF is received too late without an extension of time you may be penalized up to 1000 points!**

**II. 19 BALLOON SIZE (3.3)**

No limits.

**II. 20 ALTITUDE (14.6.4)**

All altitudes in this event are described in feet AMSL.

The logger's measured Barometric altitude will be used for scoring.

**II. 21 2D/3D SCORING METHODS (12.15)**

The separation altitude between 2D and 3D scoring in this event is 700t AMSL

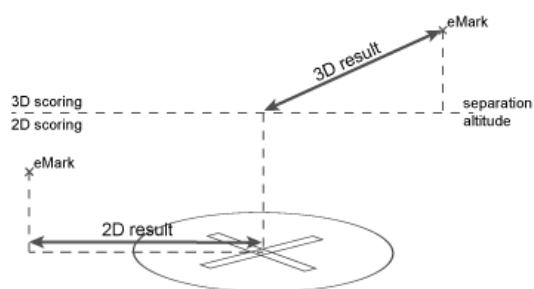
When goals or targets on the ground are used, results based on electronic marks will be the:

- 3D-distance to the point at the separation altitude above the goal/target if the electronic mark is above the separation altitude

or

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

When goals/targets above the ground are used, results based on electronic marks will be the 3D-distance \*>



**II. 22 COMPETITION STRUCTURE**

The competition will be conducted using markers in MMA and logger-scoring only.

**II. 23 MAP COORDINATES (7.8)**

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

4-4 format: this format uses two times four-digits. First four digits easting and the second four digits northing. (e.g. 5857-5226), leaving out the 1m digit.

Easting's may be separated from Northing's by: a blank space, by the minus character or the slash character. In all cases the parts of the coordinates shall be clearly separated and with Easting's first.

**II. 24 AXMER VERSION**

AXMER 2024

**II. 25 SAFETY (10.1)**

All pilots are required to carry a serviceable airband radio with which they can broadcast and receive radio transmissions on 122.480. Whilst this frequency may be used by pilots and crews for communication, the primary purpose within the competition is to avoid midair collisions by pilots' communication between themselves and asking whether they are clear to climb.