

FIESTA PILOT MANUAL 2024

BRISTOL

international
balloon fiesta

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WELCOME

Soaring to new heights.

It's a pleasure to welcome you, our balloon pilots and crew, to the 46th Bristol International Balloon Fiesta.

The welcome in the Pilot Handbook is normally written by the Lord Mayor of Bristol or another civic dignitary, however I wanted the opportunity to write to you all this year.

For many of us, the Fiesta has become a key part of our year. I'm not a pilot or aviator, but I've had some level of involvement in the Fiesta since 2000. Like many of you, my family have grown up around it, my holidays have been booked around it and many of you have become good friends through it. In a way, and it sounds a bit corny, but we are part of the Fiesta family. We should all be proud of the show we put on for the city of Bristol, its residents and visitors from further afield.

It's no secret that the last few years have been tough times for the Fiesta. Late last year, my fellow Fiesta Directors and I did some pretty hard soul searching. It was heart warming when the results of the independent research we commissioned clearly established that 91% of our visitors rated the Fiesta as "good" or "very good", the impact of our media presence reached 1.2 billion people world wide and £14.7million was contributed to the local economy.

Motivated by these positive signs, we launched our new strategy "Soaring to new heights", to rejuvenate the event as we head towards the 50th anniversary in 2028. Our strategy has four key objectives:

- **Sustainable growth:** innovating new revenue streams, optimizing expenses and building a reserve.
- **Engage:** Expand community involvement across Bristol and beyond.
- **Experience:** Amplify the thrill of ballooning and maintain the vibrant atmosphere throughout the Fiesta.
- **Future-proofing:** Ensuring high quality custodianship, strengthening stakeholder relationships and enhancing the Fiesta's home, Ashton Court Estate

So this is a journey, or flight, towards our 50th anniversary. The first year of our strategy has been incredibly successful, you only have to look at the list of partners and sponsors on the page opposite to see the appetite and eagerness of those across the city to support the Fiesta. We have lots more to do in the coming months and years, but we've made a significant shift that will protect the future of the Fiesta for years to come.

This has taken a huge amount of work to get to this point, it's a team effort, and I want to thank everyone who has been alongside me during this process. There are too many of you to mention, but you all know who you are. I also want to thank you all, our pilots and crew. Each year you turn up, meet your friends and peers, put on a great show and continue to support the Fiesta. It truly is a team effort.

I hope you have a great weekend, enjoy the 46th Fiesta, and I look forward to working with you all in the coming years.

Soft landings



Ben Hardy, Executive Director

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REGISTRATION

Fiesta Welcome & Registration will take place in the Pilot Briefing Marquee. All pilots have declared that their balloon & personal documentation is up to date and that they can operate their balloons legally.

Original Documents must be brought to the Fiesta as random checks will be made by the Fiesta or the CAA.

Balloons may only attend if an acceptance of entry has been issued prior to the Fiesta and the balloon is listed. Pilots must complete a Pilot Declaration Form and conform to its conditions.

PILOT BRIEFINGS

Pre-flight pilot briefings will take place in the Pilot Briefing Marquee on Friday 9th August at 5:45.

Model balloon briefings will take place on Friday at 7:30 and 18:00. All model balloonists must attend a briefing before flying to cover key safety points. If they are unable to do so, please call Dave Boyle (07782262643) before you fly

After each flight, pilots must debrief online or with the debrief team in person, promptly. All pilots must submit a digital flight track.

The Flight Director is responsible for declaring a flight window open or closed. His decision is final.

Online debrief: [LINK](#)

Email address for uploading tracks: tracks@wrbbac.co.uk

PROPANE

Pilots must arrive with full tanks at the start of the Fiesta. Commercial Passenger Balloons will be offered metered refuelling on request. Refuelling will be open at the following times.

Friday 07:00 to 10:00 and 16:00 to 23:00

Saturday 07:00 to 10:00 and 16:00 to 23:00

Sunday 07:00 to 10:00 and 16:00 to 22:00

Refuelling site What 3 Words: wallet, loser, cope

LAUNCH SITE RULES

- 1.** Do not launch unless the signal for launch has been given.
- 2.** Always use an approved quick release system
- 3.** Ensure upwind and above space is clear by using look-outs.
- 4.** Please clear launch site as soon as possible after you have launched.
- 5.** No low level flying over the crowd line.
- 6.** Do not climb rapidly on launch and in the launch field area or in the vicinity of other balloons.
- 7.** No venting of propane
- 8.** Fire extinguishers must be readily available.
- 9.** Monitor 122.480 until clear of field or above 1000' then 125.650
- 10.** All pilots must be qualified PPL/CPL/BPL
- 11.** Three point tethers only and no quick release mechanisms to be used when tethering.
- 12.** Vehicle movements should be kept to a minimum and 5pm max.
- 13.** Use lookouts when reversing
- 14.** Pilots are responsible for their crew and must ensure that young and vulnerable members are adequately supervised.
- 15.** Be patient when leaving or entering the field during mass launches
- 16.** Assist other teams, when required.
- 17.** No landing in arena /showground unless advised during briefing.

IN FLIGHT AND LANDING

- Monitor 125.650
- Follow the BBAC/NFU landowner code at all times
- Do not allow crews to enter your landing field without permission
- Only balloon retrieve vehicles to enter landing field, once permission has been obtained.
- Report any Landowner issues immediately by telephone to 07757464470

REQUIRED ON BOARD EQUIPMENT

- **Marked up and current OS Landranger Map 172** - you must also carry any further maps to cover the expected passage of your flight. You must not fly outside sheet 172 unless you are carrying updated marked up copies of the appropriate maps. Digital map users must ensure that their devices are kept up to date with the latest SA information and must always carry a paper or digital back up.
- You must carry a current **Air Chart** covering the flying area unless sufficient information is overprinted on the OS maps.
- **Airband Transceiver** (See active frequencies on page 7)
- Pilots are reminded that they must carry a 2Kg or 2 x 1Kg **fire extinguisher, a fire blanket** measuring at least 1.5m x 1.8m, a 25m dropline (minimum) and a **First Aid kit**. Balloons with rotation vents/partitioned baskets require an approved pilot restraint system.

LANDOWNER RELATIONS

There are a large number of Sensitive Areas on Map 172 and beyond. Pilots must make sure that they have all the latest areas marked on their maps and loaded onto devices.

The SA Master List and digital files are updated as and when new SAs are created and are available to download from the BBAC website.

Information regarding the availability of Dyson property will be available at each briefing.

EVENT TIMETABLE

Thursday 8th August

15:00 - Balloonist's entrance open. Camp site open.

15:00 – 19:00 Crew welcome and Pilot registration

Friday 9th August

05:15 – Registration/ Debrief open

05:45 – Pilot Briefing

06:30 – mass ascent

07:00 – Debrief Open

8:00 – 8:30 – Model Balloon Display

8:30 – 8:45 – changeover period

8:45 – 9:45 – Historic Balloon Display

9:45 – 10:15 – changeover period

10:30 - Debrief Closes

11:00 – 11:30 – Thatcher's Big Apple race

11:30 – 12:00 – changeover period

12:00 – 12:30– Solent stars, youth motorcycle stunt team

12:30– 12:45 – changeover period

12:45 – 13:45 – Historic Balloon Display

13:45 – 14:45 – Bristol Bears

14:45 – 15:15 – Inflation race heat 1

15:15 – 15:30 – changeover period

15:30 – 16:00 – meet the teams

16:00 – 16:15 – changeover period

16:30 – Glow practice and briefing

16:15 – 16:45 – Model planes display

16:45 – 17:00 – changeover period

17:15 – 18:00 – Debrief open

17:00 – 17:30 – Solent stars, youth motorcycle stunt team

17:30 – 17:45 – changeover period

18:00 Pilot Briefing

17:30 – 18:30 – mass ascent set up

18:30 – 19:00 – Mass ascent

19:15 – 19:45 – Bloco B Samba Band

19:45 – 20:00 – changeover period

20:00 – 21:00 – Nightglow preparation/ model balloons glow

21:00 – 21:45 – NIGHTGLOW

21:45 - Debrief Open

23:00 - Debrief Closes

Saturday 10th August

05:15 – registration/ Debrief Open

06:00 – Pilot Briefing

06:30 – mass ascent

07:15 – Debrief Open

8:00 – 8:30 – Model Balloon Display

8:30 – 8:45 – changeover period

8:45 – 9:45 – Historic Balloon Display

9:45 – 10:15 – changeover period

10:00 – 10:30 – Thatchers Big Apple race

10:45 – 11:30 – Police dogs display

11:45 – 12:00 – changeover period

12:00 – 12:30 – Solent stars, youth motorcycle stunt team

12:15 – 1:15 – changeover period

12:45 – 13:30 – Historic Balloon Display

14:30 – 15:00 – inflation race heat 2

15:30 – 16:00 – meet the teams

16:15 – 16:45 – model plane display

16:45 – 17:00 – changeover period

16:30 – Glow practice and briefing

17:00 – 17:30 – Solent stars, youth motorcycle stunt team

17:30 – 17:45 – changeover period

17:15 – Debrief open

18:00 – Pilot Briefing

17:30 – 18:30 – mass ascent set up

18:30 - 19:00 – mass ascent

19:15 – 20:00 – Bloco B samba band

19:30 – De brief open

20:00 – 21:00 – Nightglow prep/ model balloons glow

21:00 – 21:45 – NIGHTGLOW

Sunday 11th August

05:15 – registration/ Debrief Open

06:00 – Pilot Briefing

06:30 – mass ascent

07:15 – Debrief Open

8:00 – 8:30 – Model Balloon Display

8:30 – 8:45 – changeover period

8:45 – 9:45 – Historic Balloon Display

9:45 – 10:00 – changeover period

10:00 – 10:30 – Thatchers Big Apple race

10:45 – 11:30 – Police dogs display

11:30– 12:00 – changeover period

12:00 – 12:30 – Solent stars, youth motorcycle stunt team

12:30 – 12:45 – changeover period

12:45 – 13:30 – Historic Balloon Display

13:30 – 14:30 – changeover period

14:30 – 15:00 – inflation race - the final

15:00-15:30 - changeover period

15:30 - 16:00 – meet the teams

16:00 – 16:15 – changeover period

16:30 – Glow practice and briefing

17:00 – 17:30 – Solent stars, youth motorcycle stunt team

17:30 – 17:45 – changeover period

17:15 – Debrief open

18:00 – Pilot Briefing

17:30 – 18:30 – mass ascent set up

18:30 - 19:00 – mass ascent

FREQUENCIES/NUMBERS/LINKS/EMAILS

Retrieve Frequency : 122.480

Bristol Radar : 125.650

Event Control: 01179307399

Flight Control: 07757464470

Safety Officer : 07771 765083

Flight track email : tracks@wrbbac.co.uk

LRO issues: LRO@wrbbac.co.uk

Landing form link: Page 14

COMPETITIONS

Thank you to Creative Construction for their continued sponsorship of the: Creative Construction Long Distance Race - Prize £250
There will be a number of other light hearted competitions throughout the event.

The Thatcher's Hare and Hound Race will take place over the weekend with a prize donated by Thatchers.

PERSONNEL

Flight Director - Clive Bailey

Flight Control Committee - Pete Dalby, Clive Bailey, Ian Martin, Paul Burrows, Don Cameron.

Safety Officers - Paul Burrows

Night Glow Maestro - Ian Martin

Landowner Relations - Flight Control Committee

Debrief Team - Teresa Witchell, Sally Adie, Sue Martin, Peter Gray

Model Balloons - Dave Boyle




REFERENCE DOCUMENTS

All balloon pilots attending the Fiesta and the Media launch are exempt from holding a Display Authorisation. (Ref: ORS4 No. 15621427)

Tethered flights in balloons do not require a Display Authorisation.

The reference document for ballooning is the [Balloons Rulebook](#).

LAUNCH FIELD STATUS

-  Red - No movement in the arena. Await instructions from Flight Control or Event Control.
-  Amber - Limited access to the arena for personnel qualified to be there.
-  Green - Launch field open. Free access to all with correct accreditation.

A launch signal (siren) will be given prior to each mass launch. No free flight is allowed prior to this signal except with the permission of the Flying Display Director.

Announcements over launch field facing loudspeakers, during the launch period, will be used in the event of incidents or accidents on the launch field. No further launches are permitted & pilots should monitor 122.480 for further information. Crew members should stop all inflation fans and vehicle engines. Further instructions or the all clear will be given on this frequency and over the tannoy.

LAUNCH FIELD INCIDENT/ACCIDENT

All pilots and balloon crew are expected to be aware of what's happening in the immediate vicinity of their launch position. Any incident or accident which carries the potential for injury or damage should be brought to the attention of the Safety Officer by the quickest means possible. The Safety Officer will assess the situation and issue instructions commensurate with the severity of the incident. His instructions must be obeyed and have the support of the Flying Control Committee.

In the case of a major incident which carries the risk of severe injury or loss of life, all launch field personnel may be asked to leave the launch field on foot and via the nearest exit.

Pilots must be aware that the launch field status can change at any time and it is imperative that a listening watch is maintained, up to the point of clearing the launch field.

LAUNCH FIELD PATROL AND MONITORING

The Safety Officer and designated assistants will be patrolling and monitoring launch field activity whenever the launch field is open. Any action or lack of, which he deems to carry any associated risk will be noted and may be reported to the Flying Control Committee. The Safety Officer is authorised by the FCC to bring any such behaviour to the attention of the pilot and crew concerned and to stop any further activity, if necessary.

MAJOR HAZARDS

The following is a list of the main potential hazards on the launch field, with an assessment of the associated risks and mitigating factors that already exist.

FIRE

With such a large amount of propane within a relatively small area during launch periods, this represents the biggest hazard and risk to life should there be an uncontrolled release of liquid propane. The risk is mitigated in a number of ways and so far, in the history of the Fiesta, there has never been an incident of this severity. However, we should not be complacent and must remain aware of the potential consequences of such a release.

MITIGATING FACTORS

- Properly maintained and tested fuel systems
- Pilot qualifications and training
- Safe propane handling techniques
- Fire extinguishers

After consultation with Nigel Jagger, Avon & Somerset Fire Brigade Safety Officer, the following recommendations are to be implemented:

- Appliance access is via Gate 6 to the 'D' with cleared access to the launch field beside the Members' enclosure.
- In the event of propane cylinders being exposed to a prolonged heat source with the possibility of a BLEVE (Boiling Liquid Expanding Vapour Explosion) the launch field and surrounding public enclosure should be evacuated as quickly as possible.
- Announcements via the PA system will be used to evacuate the site.

INADVERTENT RELEASE OF A BALLOON

It's not inconceivable to imagine that during inflation, especially in gusty conditions, a balloon's restraint could fail, causing the balloon to be released prematurely. Another possibility is that a balloon takes off with false lift and subsequently descends into the crowd.

MITIGATING FACTORS

- Correct use and maintenance of Quick release and restraint systems
- Pilot training
- Monitoring of weather conditions and subsequent closure of launch site, if required
- Phased launch procedure introduced at Pilot Briefing if weather conditions dictate

VEHICLE MOVEMENTS

Injury resulting from vehicle movements on the launch site is a real and present danger. Although vehicles are generally moving slowly, a combination of congestion and the fact that many vehicle movements are backwards with trailers attached can result in poor visibility for the driver.

MITIGATING FACTORS

- Speed restrictions apply on the launch field
- Experienced crew to move vehicles
- Employ a lookout to aid the driver
- Restrict vehicle movements

HAZARD IDENTIFICATION

The Bristol Balloon Fiesta Safety Management protocol uses a Hazard Identification and Risk assessment process which identifies, assesses and mitigates major launch field hazards. This is an ongoing process and is kept constantly under review. Initially each hazard's likelihood of occurring needs to be estimated followed by the severity of the risk associated with the hazard. The likelihood and severity are then plotted in the Risk Matrix.

Likelihood of hazard occurring	
1: Extremely Improbable	Inconceivable
2: Improbable	Very unlikely
3: Remote	Unlikely but possible
4: Occasional	Likely to occur sometimes
5: Frequent	Likely to occur many times

Severity of Consequences	
5: Catastrophic	Accident - death or very serious injury - destruction of equipment
4: Hazardous	Serious injury - equipment damage
3: Major	Serious incident or injury
2: Minor	Results in minor incident
1: Negligible	Nuisance of very little consequence

Risk Matrix					
Risk Severity	5	4	3	2	1
Risk Likelihood					
5	Unacceptable	Unacceptable	Unacceptable	Review	Review
4	Unacceptable	Unacceptable	Review	Review	Review
3	Unacceptable	Review	Review	Review	Acceptable
2	Review	Review	Review	Acceptable	Acceptable
1	Review	Acceptable	Acceptable	Acceptable	Acceptable

RISK ASSESSMENT

Hazard	Existing Mitigation	Likelihood	Severity of consequences	Acceptability	Further mitigation if required by review	Severity of consequences
Uncontrolled propane leak, leading to fire on the ground	Equipment inspection and certification. Pilot & crew training. Safe propane handling. Fire extinguishers	Improbable	Catastrophic	Review		
Inadvertent launch	Approved quick release systems/tether equipment used at all times. Launch conditions monitored.	Remote	Hazardous	Review		
Inflator fan contact/disintegration	Crew training. Gloves worn. Briefings.	Remote	Major	Review		
Balloon/basket/vehicle movement during inflation	Crew & passenger briefings	Remote	Major	Review		
General vehicle movements	On site speed restriction. Use of lookouts when reversing. Minimise vehicle movements	Remote	Major	Review		
Contact with ropes under tension	Crew training. Restraint ropes kept to minimum length. Briefings.	Occasional	Minor	Review		

RISK ACCEPTABILITY

As can be seen from the above chart, all the major launch field risks have been identified as needing to be kept under review. The Fiesta Flying Control Committee, in conjunction with the Safety Officer will review each of these items on a per launch basis. Any further mitigation deemed necessary to further reduce the risk level will be implemented prior to the next launch period.

BALLOON LANDING REPORT FORM



**LOOK OUT FOR
EACH OTHER
AND
TRUST YOUR
INSTINCTS**

If you see something that
doesn't feel right,
report it in confidence

[gov.uk/ACT](https://www.gov.uk/ACT)

You won't be wasting our time

In an emergency, call 999