

GORDON BENNETT Berne 2018



EXECUTIVE SUMMARY GORDON BENNETT BALLOON RACE

- Scheduled start Friday September 28th 2018 17:30 UTC, Berne / Switzerland alternative starts up to October 1st 2018, early morning
- Destination unknown (depending on weather / wind conditions)
- Approximately 21 contenders from 11 countries
- 2 pilots on-board each gas balloon
- Two-way 8.33 MHz VHF radios
- Transponder Mode S
- GPS equipped
- Strobes and beam lights
- Oxygen supply
- Survival equipment for oversea flights
- ELT (emergency locator transmitter)
- From HQ live tracking and constant communication with gas balloons
- Established centralized command & operations centre in Berne / Switzerland (24hours each day flight supervision)
- Satellite GSM communication device
- FPL filing per gas balloon in advance, no AFIL
- Entry & overflying permission requests to all possibly concerned European countries and Kaliningrad FIR
- Request permission for all FIR's
- If deemed necessary NOTAM publication by respective countries

INTRODUCTION

In the Aerostation world, a prestigious long distance & international championship for gas balloons (FAI competition) exists since 1906. This race is known as the Coupe Aéronautique Gordon Bennett. *The race takes place every year.* The winner is the balloon having travelled the longest distance in a straight line between departure- and landing site. The winning team has to organize the event in its country 2 years later.

Gas balloon endurance can exceed 70 hours and the flight altitude of a gas balloon is generally above the inversion layer. Usually the flights stay below FL150 and pilots actually prefer to fly as low as possible to increase their endurance.

(Do not mix up with Hot Air balloons which have a couple of hours endurance and fly near the ground).

1. GB 2018

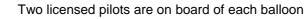
A Swiss balloon having won the 2016 edition, the 2018 race starts from Switzerland with a maximum number of 21 gas balloons from 11 countries

- a. The launch place is located at Berne the capital of Switzerland, between Geneva and Zurich airport
- b. Launch date and time: September 28th 2018 at 17:30 UTC depending on weather conditions

However a delay up to October 1st 2018 may alternatively be used if necessary to assure a safe and successful race start (exact day & time window decided by the event director)

2. BALLOON CHARACTERISTICS

- a. <u>Balloon</u>:
 - Volume: 1000 m3 max, basket : 2 passengers/pilots
 - Strobe and beam LIGHTS / life survival equipment for OVERSEA flight / ELT / Oxygen supply
- b. <u>Crew</u>:



c. <u>NAV/COM</u>:

Equipment on board is fulfilling the night and day VFR requirements to travel through airspaces

- Radio 8.33 MHz VHF
- TRANSPONDER Mode S
- GPS
- Aeronautical maps and documents with ATC com Frequencies

All gas balloons shall apply visual flight rules according to the regulation (EU) No. 923/2012 "SERA" (Standardised European Rules of the Air).

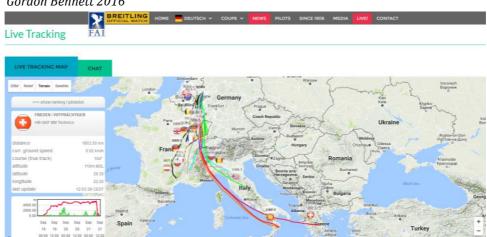
3. SUPPORT TEAM

- a. Headquarter (HQ)
 - 24h operation:
 - Berne «Allmend» (N46°57'44''/E007°28'22")
 - Staff: competition director, weather expert, ATC coordinator, flight handler
- b. <u>Chase</u>:
 - Each balloon owns its ground crew which follows the balloon with a car and trailer, in order to reach the landing site as soon as possible after landing.



4. FLIGHT AND ROUTE PROFILE

Decisions about Route and Flight altitude are taken and communicated a few hours in advance. The Route and Flight altitude depend on weather/wind conditions



Gordon Bennett 2016

5. GORDON BENNETT and AIR TRAFFIC CONTROL

The main goal of the race is travelling the longest distance. Therefore, balloons need ATCclearances for airspace class B, C, D and E, in night and day VFR. However, the Flight Event requests balloon teams to keep constant radio contact with air traffic controllers also in airspace class F and G (night and day).

Being able to fly VFR during the night is essential for the success of this race as the balloons are not able to land and continue the race the next day.

The vertical flight path of a gas balloon is commonness stable with smooth variations only due to day heating or night cooling. As balloons can't manage their drift direction differently by changing altitude, the simplest way to ensure separation is to request the balloon to maintain a specific altitude and veer off other airplanes and airspace users.

However, please note that due to the fact of the competitor's various race strategies and different useable wind streams, it is most likely that only 5-10 gas balloons will be entering your respective airspace within approximately the same time frame. Past race trackings have shown that the balloons will be entering at different times.

Strategic coordination (Planning phase) :

- **Diplomatic clearances**
- ATC requests: VFR in A,B,C,D,E airspace / VFR in military airspace / VFR by night Tactical coordination (in flight)
 - **FPL/NOTAM**
 - FPL filing per gas balloon in advance, no AFIL
 - Switzerland will publish a NOTAM for this event

- Direct contact to ATC:
 - The Flight Event Office at Berne includes ATC-experts (experienced former air traffic controllers from Geneva AirControlCenter (ACC) and procedural experts) who will continuously conduct the surveillance of each in-flight team through the live tracking system (www.gordonbennett.org, window "Live Tracking") and communication to the balloon's own command centre.
 - Permanent high-profile weather-analysis are made so that the HQ is able to know at least
 12 hours in advance which countries and airspaces are most likely to be penetrated.
 - The ATC-Team in the HQ can be reached 24/24 during the race (dedicated phone number communicated later)

6. → REQUESTS

The Flight Event team kindly requests to obtain the following permissions:

- a. Entry permission into your airspace
- b. Night VFR permission (means exemption in case of prohibition in national rules)
- c. VFR flight up to FL140 in all classes of airspace (A-G)
- d. Crossing of special use areas like R-and D- areas (i.e. military areas)

7. CONTACT GORDON BENNETT

- Flight Event Director, Mr. Markus HAGGENEY: <u>markus.haggeney@gordonbennett2018.ch</u> mobile phone: +41 (0) 78 616 33 25
- ATC-Coordinator, Mr. Niklaus Gerber : <u>niklaus.gerber@gordonbennett2018.ch</u> mobile phone: +41 (0) 76 376 42 94

8. CONTACT of NATIONAL ANSP and CAA

We kindly request you to forward to us for both, National Air Navigation Service Provider and Civil Aviation authority

- the contact person which will be in charge of coordinating the requests (pt 6 above)
- phone numbers of the supervisor position in your ATC units for smooth tactical coordination during the race.

If this message/letter with our permission request is addressed to the incorrect department, we kindly ask you to forward it to the appropriate department and provide us with the correct contact info (telephone number, email-address and AFTN).

For further information or any other questions or concerns, please do not hesitate to contact one of the above mentioned persons. Thank you very much in advance for your kind assistance & cooperation and we gladly hope to obtain the granted permissions for this very special and exiting international event. A smooth, coordinated and safe operation is our main objective.