



Official Rules

24th America's Challenge Gas Race Itinerary 2021

Schedule of Events	Date	Time
Event Registration Sid Cutter Pilots' Pavilion	Thursday, September 30	1000 hrs. – 1900 hrs.
	Friday, October 1	1000 hrs. – 1200 hrs.
General Briefing Crowne Plaza	Friday, October 1	1300 hrs. – 1400 hrs.
Welcome Party Crowne Plaza	Friday, October 1	1400 hrs. – 1600 hrs.
Pilot Briefing Balloon Fiesta Office	Saturday, October 2	1200 hrs. – 1330 hrs.
Inflations Begin (Weather Permitting)	Saturday, October 2	1400 hrs.
Start of Launch (Weather Permitting)	Saturday, October 2	1800 hrs.
End of Launch	Wednesday, October 6	2359 hrs.
2021 Awards Dinner Crowne Plaza	Saturday, October 9	1800 hrs. – 2100 hrs.

**RULES FOR THE
2021
24th AMERICA'S CHALLENGE GAS BALLOON RACE**

Chapter 1 Event Details

1.1 Title

This event shall be the 24th *America's Challenge*[™] *Gas Balloon Race*.”

1.2 Objectives

The objectives of the 24th *America's Challenge Gas Balloon Race* are to:

- a. Determine the team (including the pilot-in-command and co-pilot) flying the greatest distance,
- b. Promote the development of the sport of gas ballooning by an international comparison of pilots' performances, & Balloon Materials,
- c. Promote international relations and friendships among all ballooning nations and pilots.

1.3 Definition of the winner

The winner shall be the team covering the greatest distance as measured in Section 5.1 below.

1.4 Organizer

The organizer is Albuquerque International Balloon Fiesta, Inc. (AIBF).

1.5 Correspondence

All entries and official correspondence should be addressed to:

Albuquerque International Balloon Fiesta
4401 Alameda Blvd. NE
Albuquerque, New Mexico 87113 USA
Tel 505-821-1000 Fax 505-828-2887

1.6 Personnel

Event Director	Sam Parks
Deputy Event Director	John Petrehn
Safety Officers	Wally Book Chuck Raskob
Launch Master	Tomas Hora
Scoring Officer	Jim Byrd
Meteorologists	Randy Lefevre Brad Temeyer
Jury President	TBD
Jury Member	TBD
Jury Member	TBD
Command Center	Ruth Lind

1.7 Date and place of competition

The 24th *America's Challenge Gas Balloon Race* will be held between October 2 and October 9, 2021, and will launch in Albuquerque, New Mexico, USA.

1.8 Documents

The following documents will be inspected when pilots register on arrival at registration:

- a. Pilot certificate
- b. Pilot log book
- c. Balloon registration document
- d. Balloon airworthiness document
- e. Certificate of insurance
- f. Passport or another approved identity document

Race officials are authorized to inspect any of these documents at any time.

Chapter 2 Entry Conditions

2.1 Participation

24th America's Challenge Gas Balloon Race is open to all countries. Total number of balloons is limited by availability of gas. Mixed nationality flight crews are acceptable. Hydrogen will be the only lifting gas used. The entry fee is \$500 and will be refunded upon safe return of the tracker after the flight.

2.2 Corporate Balloons

If your balloon contains any logos, trademarks or words, you must submit a photograph or description of the logos, trademarks and words along with your application. Failure to do so may result in cancellation of your participation in the America's Challenge. Banner balloons and logo balloons may be subjected to a commercial entry fee of \$4,000.00. All corporate entries must be approved by the Event Director.

2.3 Pilot Certificate and Experience

Each team in the America's Challenge must have a pilot-in-command and a co-pilot in the balloon during the flight. The pilot in command must have been gas balloon rated for at least twelve (12) months prior to the start of the America's Challenge and must have a minimum of fifty (50) logged hours experience as pilot in command of a gas balloon prior to the General Briefing scheduled for October 1, 2021. The pilot in command must have experience flying at night.

Co-pilot must be gas rated with at least 20 logged hours of gas flight experience. If co-pilot's gas rating was obtained less than 12 months prior to the start of the event, a minimum of 350 logged hours experience in hot air balloons as pilot in command is required. Both pilots must be able to communicate with air traffic control in English, have experience communicating with air traffic control and balloon operations within controlled airspace and be able to operate the required navigational aids.

The co-pilot may not be changed after the beginning of the General briefing. Only the pilot in Command and co-pilot are permitted to fly. Unless authorized by the Event Director, no additional passengers are permitted.

If the pilot and/or co-pilot fail to meet the entry requirements, they will not be allowed to register, thus forfeiting all entry fees, hotel nights / hotel allowances, apparel, party and award tickets, Sponsor Hospitality passes and any international shipping subsidy provided by AIBF.

2.4 Fees

\$500.00 (USD) per team.

The entry fee includes:

- 7 hotel nights **or** \$700 hotel allowance per pilot
- Each pilot will receive America's Challenge jacket or apparel
- AIBF pilot pack including \$100 gas card and \$100.00 in U.S. Dollars
- Each team will receive five tickets to the Welcome Party
- Each team will receive two Sponsor Hospitality passes

2.5 Closing Entry Date

The closing entry date for the America's Challenge entry is 11:59 PM MDT, April 30, 2021.

2.6 Acceptance of Rules and Regulations

Pilots and their crews are required to know, understand, accept and abide by the Rules for the 24th *America's Challenge Gas Balloon Race*.

2.7 Waiver

By entering the 24th *America's Challenge Gas Balloon Race*, all pilots waive any right of action against: the Organizer, event staff and officials, the owner of the launch site and their respective members, employees and personnel for any loss or damage sustained by the pilot in consequence of any act or omission on their part or on the part of other pilots.

The Organizer reserves all rights concerning media reports, images, and the license of 24th *America's Challenge Gas Balloon Race* products.

2.8 Insurance

Pilots must provide proof that their balloons are insured during the 24th *America's Challenge Gas Balloon Race* for at least 1,000,000 (USD) for third party liability. Insurance cannot be purchased from the Organizer.

Chapter 3 Balloon Qualifications

3.1 Definition of a balloon

For the 24th *America's Challenge Gas Balloon Race* a gas balloon is defined as an aircraft lighter than air, supported statically in the air, with no means of propulsion by a power source and which obtains the buoyancy solely as a result of the difference in weight of the lifting gas and the surrounding air. The envelope may not be pressurized. The maximum volume of the envelope is 1000 cubic meters with a 5% tolerance. Organizers are empowered to inspect any aerostat that they suspect is in violation of this rule.

3.2 Lifting Gas

Balloons will compete with hydrogen gas as provided by Organizer.

Each balloon will only have the opportunity to inflate one time. If, for some reason you abort your inflation, gas may not be available for a second attempt.

3.3 Airworthiness

Aerostats flown in the America's Challenge must have current certificates of registration and airworthiness, or in place of the latter, an equivalent document from the recognized authority of the nation concerned. The organizer is empowered to reject any aerostat which in its opinion is not of a reasonable standard of airworthiness. In order to receive hydrogen, balloons must be hydrogen certified and able to pass a conductivity test prior to inflation. The conductivity test may be conducted on the launch field by Organizer's safety officials. Hydrogen balloons must meet our specifications for conductivity (these are basically the same specifications as Wörner balloons).

3.4 Ballast

Every balloon must be equipped with the necessary amount of ballast for inflation and flight. At launch each balloon must carry at least 20 liters of water for ballast over airports, crowds, highways or other sensitive areas.

3.5 Identification:

Each balloon will be given a small banner with its competition number. The banner must be attached to a suspension cable so it is visible to the launch team.

Chapter 4 Instruments and Equipment

4.1 Flight Instruments

Each balloon must carry at least the following equipment:

- a) Altimeter
- b) Variometer
- c) Backup barograph or other altitude recording device (e.g. GPS, etc.) Altitude recording GPS units must record data points every 10 minutes or less
- d) VHF radio capable of receiving and transmitting on aviation frequencies
- e) Night position lights (14 CFR 91.209)
- f) Beam light for night landing

- g) Electronic Navigational Aid or GPS
- h) Transponder with Mode C and 4096 codes or Mode S Transponder
- i) Emergency Locator Transmitter: (406 MHz)

Additionally, each balloon will carry a GPS logger/tracking device provided by the Organizer. Organizer will publish balloon positions with altitudes during the flight.

There is no restriction in the use of navigation aids and flight control instruments. Every balloon should be equipped with sufficient oxygen and appropriate distribution system to be used at altitudes greater than 12,500 feet MSL.

Each balloon must carry a backup barograph or other altitude recording device that would operate as a backup logger/tracker in case of Organizer GPS logger/tracker failure. In the case of suspected altitude violations, backup barograph or altitude recording device may be checked. Faulty backup barograph or altitude recording device may be penalized under rule 6.4.

4.2 TRACKER SIGNAL

If it can be proven that the signal from the Organizer provided GPS logger/tracker has been modified, or interfered with, the Event Director has authority to penalize the pilot's final result. If Organizer provided GPS logger/tracker is not reporting properly, teams shall call or text their position to the command center every 2 hours.

4.3 Maps

The official competition map will be the appropriate aeronautical charts for United States and Canada.

4.4 Balloonmeisters

The competitors are responsible for making their own arrangements for balloonmeisters.

Chapter 5 Race and Prizes

5.1 Type and purpose of race

The *24th America's Challenge* is a distance flight. Distance shall be calculated from the official launch point to each balloon's official landing point. The distance will be calculated by determining the arc of the great circle in accordance with the Section 1 of the FAI Sporting Code.

5.2 Publication of results and prize giving

The preliminary race results will be published on the official notice board within 24 hours after the Command Center has been notified of the landing of the last balloon.

Chapter 6 Flight Rules

6.1 Flight conditions

All flights will be carried out under Visual Flight Rules. Flight above 17,999' MSL is not allowed.

6.2 Launch

Weather permitting, the balloons will launch after 1800 hours on Saturday, October 2, 2021. The order of departure will be decided by a drawing. A delay, to as late as Wednesday, October 6 at 2359 hours, will be used if necessary to assure a safe and successful launch. All balloons will launch within a time window fixed by the Event Director. As a guide, balloons will be launched at intervals between three and five minutes if safe to do so. The Launch Master will launch all balloons. Permission to launch does not relieve the pilots of complete responsibility for their take-off, including adequate lift to clear all obstacles and other balloons, and to continue safely in flight. All balloons shall be ready for launch at the start of the launch period. A pilot not prepared for take-off shall move to the end of the launch order.

6.3 Airspace

Pilots must be familiar with and abide by the applicable aviation regulations of the countries in which they are flying. Pilots are required to log all ATC clearances given en-route; these must be returned if requested to the Event Director in a sealed envelope for investigation in case of suspected violations. Infringements of Aviation regulations are in the first instance a matter between the pilot and the Aviation Authorities. If the Director receives information from an Aviation Authority that air law may have been violated, he should investigate and take action as appropriate. Pilots who are not able to comply with ATC instructions will be penalized under 6.4.

6.3.1

ATC has authorized a deviation to 14 CFR, section 91.225 (d)(1) for all aircraft entered in the America's Challenge Balloon Race. This authorization is subject to the following terms and conditions:

1. Each participant in the America's Challenge Balloon Race will have a minimum of an operable mode C transponder and VHF radio on board.
2. The America's Challenge command center will provide at least 4 hours advanced notification to each ATC facility controlling Class B or Class C airspace when it is reasonably possible that one of the competitors may need to enter the Class B or C airspace.
3. Each participant in the America's Challenge Balloon Race will notify the appropriate ATC facility approximately 30 minutes before entering Class B or Class C airspace. This notification will be made by VHF radio.
4. In the event that ATC is unable to accommodate the balloon at the requested time and/or altitude, entry into Class B or Class C airspace will not be authorized. In this situation, the pilot must remain clear of the Class B or Class C airspace or land.

Since January 2, 2021 ALL aircraft operating within Class A, Class B or Class C airspace area: and below the altitude of the ceiling of a class B or class C airspace Area designated for an airport, or 10,000 feet MSL, whichever is lower must be ADS-B equipped.

6.4 Penalties (per FAI Sporting Code, General Section)

Penalties may be imposed for Technical Infringements (including, but not limited to, failure to comply with rules caused by mistake or other inadvertence), Serious Infringements (including, but not limited to, dangerous or hazardous behavior or actions) and Unsporting Behavior (including, but not limited to, cheating or unsporting behavior including deliberate attempts to deceive or mislead officials, bringing AIBF into disrepute, willful interference with other competitors, falsification of documents, use of forbidden equipment or prohibited drugs and violations of airspace) at the discretion of AIBF.

Chapter 7 Landing

7.1 Definition of Landing

The precise point at which any part of the aerostat's basket, car or gondola comes to a final stop on the ground or makes more than brief contact with any water surface, or anything attached to, or resting on, the ground or water is the landing point. Momentary contact with the ground or water does not constitute a landing, nor does contact between a trail rope and the ground, unless the aerostat is moored. Pilots landing on water such as lakes, seas, or rivers will not receive a result.

7.2 Calculation of Landing Position

The point of landing will be defined by the geographic co-ordinates in degrees, minutes, seconds and decimal-seconds longitude and latitude. Other evidence may be considered if necessary.

7.3 Verification

It is the responsibility of the pilot to gather sufficient evidence and document his/her landing position with photographs, witnesses and any other means available. This evidence may be requested by the officials after landing or during flight debriefing.

7.4 Reporting

Landing position & time shall be reported to the Command Center within four (4) hours of landing. Pilots must provide all requested landing evidence, return Organizer provided GPS logger/tracking device and debrief with scoring officer within 48 hours of landing. The Event Director may grant an extension in case of extenuating circumstances.

Chapter 8 Complaints and protests

8.1 Complaint

Complaints concerning any matter should be made to the Event Director. Complaints should be in writing, in English and will receive a written reply.

8.2 Protest

If dissatisfied with the Event Director's reply to a complaint, a competitor has the right to make a protest to the Jury. Protests should be handed in at the Command Center to an

official who will record the time of receipt. A deposit of 100.00 (USD) shall accompany protests. A competitor presenting a protest may make a verbal presentation of his case in addition to his written statement.

The verbal presentation may not exceed fifteen minutes, except by permission of the Jury. An interpreter may assist a competitor not fluent in the English language. The deposit will be returned only when the protest is upheld.

8.3 Time limits

For computation of time limits, scores will be deemed to be posted at 1000 hours following the actual posting of results on the official notice board. The time limit for complaints is four hours after publication of official results. Pilots will be notified that official results have been posted by text message to a phone number provided by the pilot. Protests must be handed in within two hours of reply to a complaint.

Chapter 9 Liability and Safety

9.1 The balloon and other property of a competitor shall be at the risk of the competitor at all times. By entering the America's Challenge, a competitor agrees to waive all claims for injury to himself or loss or damage to his property.

9.2 By entering the America's Challenge a competitor assumes all liability for injury, loss or damage to third parties or their property and agrees to indemnify the organizer and Organizer's personnel in respect thereof.

9.3 A competitor remains completely responsible for the safe operation of his/her balloon at all stages of inflation, launch, flight and landing. He must ensure that his equipment, his crew and his own level of skill and experience are suitable for the conditions in his own judgment.

9.4 All meteorological reports and forecasts and other safety or navigational information is provided in good faith for the guidance of competitors. AIBF assumes no responsibility for the completeness or accuracy of such information. It is the pilot's decision whether to rely on that information or acquire additional information pursuant to 14 CFR 91.103.

Officials will be appointed to regulate the inflation and launching of balloons. The final decision to launch is the responsibility of the Pilot.