



2011
16th America's
Challenge
Gas Balloon Race

**RULES FOR THE
2011
16th AMERICA'S CHALLENGE GAS BALLOON RACE**

Chapter 1 Event Details

1.1 Title

This event shall be the 16th *America's Challenge™ Gas Balloon Race.*"

1.2 Objectives

The objectives of the 16th *America's Challenge Gas Balloon Race* are to:

- a. Determine the team flying the greatest distance,
- b. Promote the development of the sport of gas ballooning by an international comparison of pilots' performances, balloon materials, and lifting gases,
- 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.

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 505-821-1100 Fax 505-828-2887

1.6**Personnel**

Event Director	Johnny Petrehn
Deputy Event Director	Sam Parks
Safety Officer	Wally Book
	Cheryl Lété
Launch Master	Stefan Handl
Scoring Officer	Jim Byrd
	Karen Cunningham
Meteorologist	Randy Lefevre
Jury President	Andy Baird
Jury Member	Tarp Head
Jury Member	Richard Sabin
Command Center	Ralph Keyser
Hydrogen Safety Officer	Rocky Sanchez

1.7**Date and place of competition**

The 16th *America's Challenge Gas Balloon Race* will be held October 1 through October 9, 2011 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 other identity document

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

Chapter 2 Entry Conditions**2.1****Participation**

16th 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.

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 right to participate in the America's Challenge. Banner balloons and logo balloons may be subjected to a commercial entry fee of \$3,500.00. All corporate entries must be approved by the Event Director.

2.3 Pilot License and Experience

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 seventy five (75) hours experience as pilot in command of a gas balloon prior to registration at Fiesta. The pilot in command must have experience flying at night. The co-pilot shall have been gas balloon rated for at least twelve (12) months prior to the start of the America's Challenge **or** have at least three hundred fifty (350) hours experience as pilot in command of hot air balloons **and** have at least twenty (20) hours of flight experience in gas balloons **and** hold a fixed wing rating. At least one of the two pilots must be able to communicate with air traffic control in English and have sufficient experience operating navigation aids. The co-pilot may not be changed after the beginning of the master briefing. Only the primary pilot and co-pilot are permitted to fly. Unless authorized by Balloon Fiesta 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, pilot jackets, party and award tickets, VIP passes and any international shipping subsidy provided by Fiesta.

2.4 Fees

\$3500 (USD) for helium balloons, \$500.00 (USD) for hydrogen per team. The fee and the completed entry form must reach the organizer by the closing entry date May 31, 2011.

The entry fee includes:

- 7 hotel nights **or** \$600 hotel allowance per pilot
- Each pilot will receive an America's Challenge jacket with event embroidery on back
- Each team will receive five tickets to the Welcome Party
- Each team will receive five tickets Awards Banquet
- Each team will receive two VIP/Sponsor hospitality passes

2.5 Closing Entry Date

The closing date for the America's Challenge entry is May 31, 2011.

2.6 Acceptance of Rules and Regulations

Pilots and their crews are required to know, understand and accept, and abide by the Rules and Regulations for the 16th *America's Challenge Gas Balloon Race*.

2.7 Waiver

By entering the 16th *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 16th *America's Challenge Gas Balloon Race* products.

2.8 Insurance

Pilots must provide proof that their balloons are insured during the 16th *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 16th *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 to this rule.

3.2 Lifting Gas

Balloons may compete with hydrogen if certified to do so and if registered to fly with hydrogen. All other balloons will compete with helium. Neither hydrogen nor helium balloons will be required to carry non-useable ballast. Differences in performances and/or flight characteristics between hydrogen and helium cannot be protested.

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 organizers are empowered to reject any aerostat which in their 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 will be conducted on the launch field by our safety officials. Hydrogen balloons must meet our specifications for conductivity (these are basically the same procedures as Wöerner balloons). Pilots may be allowed to change to helium if there is sufficient helium to fill the balloons and the additional helium entry fees are paid.

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) Barograph or other altitude recording device (GPS, etc.)
- d) 720 channel VHF radio
- e) Strobe light with minimum brightness required for aircraft
- 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. Organizers shall not publish information regarding balloon 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. Faulty barographs or altitude recording device may be penalized under rule 6.4. In case of suspected altitude violations, barographs or backup altitude recording device (GPS) may be checked. Each balloon should carry a backup GPS that would constitute a back-up tracking log in case of tracker failure.

4.2 TRACKER SIGNAL

If it can be proved that the signal from a balloon Tracker has been modified, or interfered with, then the Competition Director has authority to penalize the balloon pilot's final result

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

16th 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 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.

6.2 Launch

Weather permitting, the balloons will launch after 1830 hours on Saturday, October 1, 2011. The order of departure will be decided by a drawing. A delay, to as late as October 5 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 as long as it is safe to do so. The Launchmaster 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. Pilots may be required to log all ATC clearances given en-route; these must be returned 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.

6.4 Penalties

Penalties are based on the FAI Sporting Code, General Section. A technical infringement of the rules or failure to comply with requirements caused by mistake or inadvertence where no competitive advantage has been attained will, as a guide, result in a distance reduction penalty of not less than 2% of the best distance. Serious infringement, such as dangerous or hazardous actions or repetitions of lesser infringements will be penalized by a reduction of not less than 5% of the best distance. Unsportsmanlike behavior, which includes deliberate attempts to deceive or mislead officials, intentional airspace violations, falsification of documents or repeated serious infringements of rules should, as a guide, result in disqualification.

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 rest 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 trailrope 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 and minutes longitude and latitude. Other evidence may be considered if necessary.

7.3 Verification

Pilots must complete a "Landing Certificate". Landing position should be verified by two witnesses, one of whom should have actually seen the balloon approach and land. These two witnesses shall attest to the landing site and sign the certificate. Witnesses must be adults, and shall include their addresses and telephone numbers so that the Scoring Officer may verify the landing position. One of the witnesses should be a public official of some kind, such as a police officer or fireman.

It is the responsibility of the pilot to provide sufficient evidence and complete documentation of his/her landing position. Additional information, including photographs is encouraged.

7.4 Reporting

Landing position shall be telephoned to the Command Center within four (4) hours of landing. Landing certificates must be turned in at debriefing and faxed to Command Center. The Event Director should 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 limit**

For computation of time limits, scores will be deemed to be posted at 1000 hours following the actual posting of results at the Gas Command Post. The time limit for (complaint) protest 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 first 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 organizers in respect thereof.

9.3

A competitor remains completely responsible for the safe operation of his 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. Officials will be appointed to regulate the inflation and launching of balloons.