



## **OPERATIONS MANUAL**

**September 5-8, 2019**

**Rancho San Rafael Park  
Reno, NV**

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**PURPOSE:**

This manual is submitted as part of an application for a certificate of waiver under Title 14 of the Code of Federal Regulations (14 CFR) Part 91, Sections 91.119(b) and (c) by and for The Great Reno Balloon Race. Specifically, the waiver will allow officially registered balloons to operate at an altitude of no less than 500 feet above the highest obstacle within a 500-foot radius of the balloon within 5 statute miles of the designated launch field. Within 1,000 feet of the launch field, flight is allowed at no less than 75 feet AGL from any open-air assembly of persons. Within 200 feet of the launch field, flight is allowed down to the surface. The waiver will allow flight over open water or sparsely populated areas no closer than 200 feet to any person, vessel, vehicle, or structure. Additionally, Air Traffic Control has authorized operations in the Reno/Tahoe International (airport) Class C airspace without the required communication with the Air Traffic Control Tower (FAR Section 91.130(a), (c) & (d) during GRBR events. This Waiver and Authorization has been issued for aircraft and pilots that are officially registered in the GRBR and participating in any GRBR events.

**RESPONSIBILITIES****LAUNCH COMMANDER:** AARON DIERINGER

The Launch Commander functions as the overall director of flight operations for the event. He coordinates with the FAA and local agencies and has jurisdiction in all matters of flight safety. To ensure smooth operation of the event he will ascertain that all equipment is available for crowd control, communications and flight operations. He will conduct all pilot briefings and after consultation with the Safety Officer and the Scoring Officer will select the task(s) to be flown.

**CHIEF SAFETY OFFICER:** LARRY RATKOVIAK

His duty is to monitor all activities of the event to assure the event is conducted at the highest practical level of safety. In the event of an emergency, Larry Ratkoviak will also act as Emergency Services Director. He will be responsible for all emergency services at the races, and in the event of a large-scale accident or mass casualty incident he will become the overall Incident Commander.

**WEATHER OFFICER:** STEVE BROWN**ASSISTANT WEATHER OFFICERS:** LARRY JENSEN, DAN GUDGEL

Their duties will focus on the local site weather conditions and the expected weather during the flight operations period. Other relevant data and observations will be presented. Weather officer will maintain close coordination with Launch Commander and associated staff members.

**LAUNCH DIRECTORS**

These individuals function as assistant safety officers whose primary duty is the safety of launch operations. They are identifiable to pilots by easily recognizable apparel worn during launch operations. Each pilot must receive permission to lift off from a launch director.

### PILOT IN COMMAND:

All participating pilots are responsible for:

1. The safe operation of their aircraft both in the air and on the ground as it pertains to all applicable portions of 14 CFR, approved waiver and race rules.
2. Briefing all flight and ground crewmembers as to their specific duties including safety, inflation and deflation and all associated operations.
3. Obtaining and providing signed crewmember manifests.
4. Obtain all available weather-related information as defined in 14CFR91.103.
5. All operations shall be conducted in accordance with TC Data Sheet limitations, Approved flight manual limitations and operating limitations.

### FLIGHT CREWMEMBERS:

All event flight crewmembers must have received appropriate training concerning their duties relative to the event and must attend the event pilot and flight crewmember briefing before each event. These crewmembers must sign a statement that they have been briefed and that they are designated event flight crewmembers for the purpose of the specific event for which the waiver was granted. All crewmembers, whether involved with flight or ground operations, will be responsible for inflation, deflation, safety and other duties as designated and briefed by the pilot in command.

### AIRCRAFT AND PILOT REGISTRATION:

All pilots participating in the event will complete all entry forms. These include the registration form, pilot agreement, and pilot acknowledgement forms.

Pilots participating in media day and regular competition flights must be registered by 01 June 2019. To be registered, the pilot should apply online at [renoballoon.net](http://renoballoon.net). Pilots who have been approved to fly will be required to submit the following paper work to GRBR prior to the event. In order to receive propane or any other form of compensation, pilots will be expected to pay an entry fee at registration.

For aircraft with standard airworthiness certificates:

1. Pilot certificate.
2. Pilot log book showing flight currency per 14 CFR 61.57 applicable for the 5-8 September 2019 flight dates.
3. Pilot log book showing current flight review per 14 CFR 61.56 (if not included in #2 above).
4. Aircraft registration certificate.
5. Aircraft airworthiness certificate.
6. Aircraft logbook showing annual/100 hr. inspection, or for experimental balloons the annual condition inspection, that will be current during the period of the event
7. Photo Identification. (must be current).

If your aircraft has an experimental airworthiness certificate you will also need:

- a. The operating limitations issued with that experimental airworthiness certificate must be submitted as well as the certificate itself, original, (no copies).
- b. A program letter.

These documents will be reviewed by the FAA or their designee prior to the event. Any pilot or aircraft issue not corrected at the registration will prevent that pilot from participation in the event. Those pilots wishing to participate in the Media Day flight must be fully registered prior to that flight. Any open

pilot or aircraft issue must be resolved with the FAA and GRBR prior to pilot briefing on Thursday morning.

FAA inspectors may inspect any aircraft at any time to determine airworthiness and/or pilot qualification. Compliance with Federal Aviation Regulations is the responsibility of the Pilot in Command of the aircraft. Aircraft must have on board current registration and airworthiness certificate, originals no copies, along with the flight manual approved for that aircraft.

Aircrafts must not exceed the number of passengers designated by the operating limitations set forth by the manufacturer of said aircraft.

### **DAMAGE TO A BALLOON:**

Any balloon sustaining damage to the extent of affecting its airworthiness (according to the applicable flight manual), is prohibited from participating or continuing in flight and must land at the first practicable opportunity. If a balloon is damaged during GRBR, it may be flown after damaged components are replaced or repaired and approved for return to service, subject to the approval of the Chief Safety Officer.

The Launch Commander or Chief Safety Officer will notify the FAA whenever there is an incident or accident involving a balloon participating in the event.

The Reno Flight Standards District Office (FSDO) will also investigate noncompliance with any Federal Aviation Regulations (FAR's) and the certificate of waiver issued to the GRBR, in addition to accidents and incidents occurring in conjunction with the event.

### **PILOT:**

Each pilot must hold the appropriate pilot certificate with Lighter-Than-Air Category and Free Balloon Class Rating. Minimum hours as PIC required for participation in the event is 100 hours.

### **CREWMEMBERS:**

All crewmembers, whether involved with flight or ground operations, will be responsible for inflation, deflation, safety and other duties as designated and briefed by the pilot in command.

Event crewmembers carried on board during the event must have been briefed by the pilot in command prior to the flight. Each event crewmember must sign the waiver form supplied by the pilot prior to launch. Each event crewmember must attest that they have attended the applicable briefing by the pilot in command. Only pilots and event flight crewmembers described in this manual may be carried onboard any balloon operating under the Waiver issued to the Event Organizers.

### **PILOT BRIEFINGS:**

All pilots are required to sign a statement indicating that they have read and understand the provisions of the current event waiver and the Great Reno Balloon Race official rules prior to registration. This acknowledgement form (See page 13) must be submitted and be on file with the organizer prior to the pilots' first event flight or registration will not be considered complete. Pilots who do not register will not be allowed to participate in the event.

Before each flight all pilots must attend the flight briefing. The briefing will contain, but not be limited to the following information:

1. Pilot roll call (Daily Roll Call sign in sheets must be signed by PIC.)
2. Meteorological synopsis, surface winds and winds aloft
3. Air traffic and safety information

4. Details of prohibited zones and sensitive zones
5. Emergency procedures on and off the field
6. Launch period
7. Launch area/sequence
8. Time check

### EVENT DOCUMENTATION:

All relevant registration files, pilot registration information, flight crewmember waivers, etc. will be maintained by the Great Reno Balloon Race for at least 30 days after the event and will be made available to the FAA monitor upon request.

### GROUND OPERATIONS

#### SPECTATOR AREAS:

The primary spectator area is located at the official launch site. Crowd control is initiated by controlled parking under the direction of the parking officials. Spectator pedestrian traffic will be routed toward the launch fields via a separate route than the incoming balloon chase vehicles and crew traffic. A designated "blanket area" will be identified by barrier fence for public to sit down and observe the activities without having to move for balloon operations. Official and balloon chase vehicles are parked in restricted areas. Local police and staff volunteers control traffic. Spectators will be allowed on foot, onto the launch fields at the beginning of the event and throughout the waiver period.

As needed, announcements will be made throughout the event over the public-address system, advising the spectators of the requirements and dangers possible, while being on the field during various balloon operation phases.

**DESIGNATED SPECTATOR AREA (75' MINIMUM FLIGHT)** 14 CFR 91.119(b) is waived to allow flight over, but no closer than 75 feet to persons in the designated spectator area(s) which are under the direct control of the Great Reno Balloon Race. (See the area marked in yellow on the map at the end of this document)

Regarding the 75-foot rule, the balloon must have attained a state of altitude equilibrium at this 75-foot minimum altitude and not be descending below 75 feet while crossing over the designated spectator area(s). In addition, landings into the designated spectator area(s) are not allowed without authorization. This rule is in effect while the waiver is in effect, whether any spectators are present in the area(s).

#### LANDING IN A DESIGNATED SPECTATOR AREA:

Landing in designated spectator area will only be allowed with specific permission. Pilot must call on the aircraft radio (123.75) to request permission to land. Permission will only be granted if the area requested can be secured by Launch Staff and there is enough Launch Staff available to assist in the landing procedure. Driving on the grass in the designated spectator area is not allowed, you will be required to carry all equipment out of the grassy areas.

### **CROWD CONTROL REQUIREMENTS:**

GRBR Rangers, Washoe County Parks Department, UNR ROTC, and Reno Police Department will provide crowd control. At and around the Rancho San Rafael Park property, the GRBR Aeronauts will provide additional crowd control with personnel and appropriate barricades and signage.

### **EMERGENCY PROCEDURES:**

In the event of an emergency, either on the field or off please call 911. If you have an emergency on the field, locate a launch director, or send a crew person to the stage to alert the Launch Commander. All launch and safety personnel have radios, with communication to Emergency Services Director (ESD), Sheriff's Department, REMSA, and RPD, and can get you the appropriate help. In the event of an emergency, depending on the severity, the ESD will take charge. The ESD will contact the appropriate emergency responders and direct them.

GRBR Rangers will be patrolling the field/park and will be first responders to emergency/incidents quickly. If the Reno Fire Department is needed, the RPD sergeant can request their presence via the Emergency Dispatch system. Sheriffs or RPD will assess the situation and contact the appropriate emergency response team as to the location of the emergency and the appropriate gate to be used to get the safety vehicles onto the field nearest the emergency.

Emergency Medical Technicians (EMTs) are available on Rancho San Rafael Park during launches, stationed near the stage on the South side of the park.

During the event a site plan map will be posted on the launch official's trailer, with entrances onto the field, locations of fencing, emergency access lanes, first aid facilities, stage, vendors, toilets, trash containers, and generators.

In the event of an emergency where medical attention is needed, please clear the area, and assist in keeping spectators back so that the emergency personnel can get to the area.

Emergency Response Plan will be initiated at the discretion of the Launch Commander and Chief Safety Officer/Emergency Service Director.

Each morning all Emergency Service personnel will attend a morning briefing covering operation issues.

### **DECLARED EMERGENCY PROCEDURES:**

If you have an emergency or you must make an emergency landing in an unauthorized location, you must report the emergency to the GRBR Staff through the emergency phone number immediately. The FAA will investigate the emergency. You will be required to meet with the FAA directly after the emergency. You must provide them with a written statement of the emergency. This will become a part of your permanent record and will be considered an occurrence unless deemed necessary to upgrade to an incident or accident. Once you declare an emergency, your flight must be terminated.

### **LANDOWNER RELATIONS/NOTIFICATION:**

All pilots must obtain permission for landing and launches if private property is involved. Landowners may request that their property be indicated on the official map as prohibited zones or sensitive zones.



## **FLIGHT OPERATIONS**

### **AREA OF OPERATIONS:**

The operations will occur within a 5-mile radius of the launch field located at Rancho San Rafael Park in Reno, Nevada as indicated on the official map. Final takeoffs and landings may occur beyond these boundaries. Headquarters for the event will be located at the park.

### **TYPE OF OPERATIONS:**

This event is a fiesta type event, no competition.

### **COMMUNICATIONS REQUIREMENTS:**

The Launch Commander will establish a central control point at the main announcer's platform, from which she or her representative will direct the event and be immediately available for those periods for coordination with the FAA Representative.

### **AIR TRAFFIC NOTIFICATION:**

The Launch Commander and/or Chief Safety Officer will ensure that notification is made to the Lockheed Martin Flight Services Automated Flight Services Station (AFSS) of the date, time, place, areas, altitudes, nature of the activity, and duration of the operation and request that a Notice to Airman (Notam) be issued. Such notice shall be accomplished by providing the Lockheed Martin Flight Services Station (AFSS) with a copy of the Certificate of Waiver or Authorization, if requested, at least 48 hours before the event and no more than 72 hours before the event. Notification to the AFSS should be made at 877-487-6867 or FAX 928-772-4390.

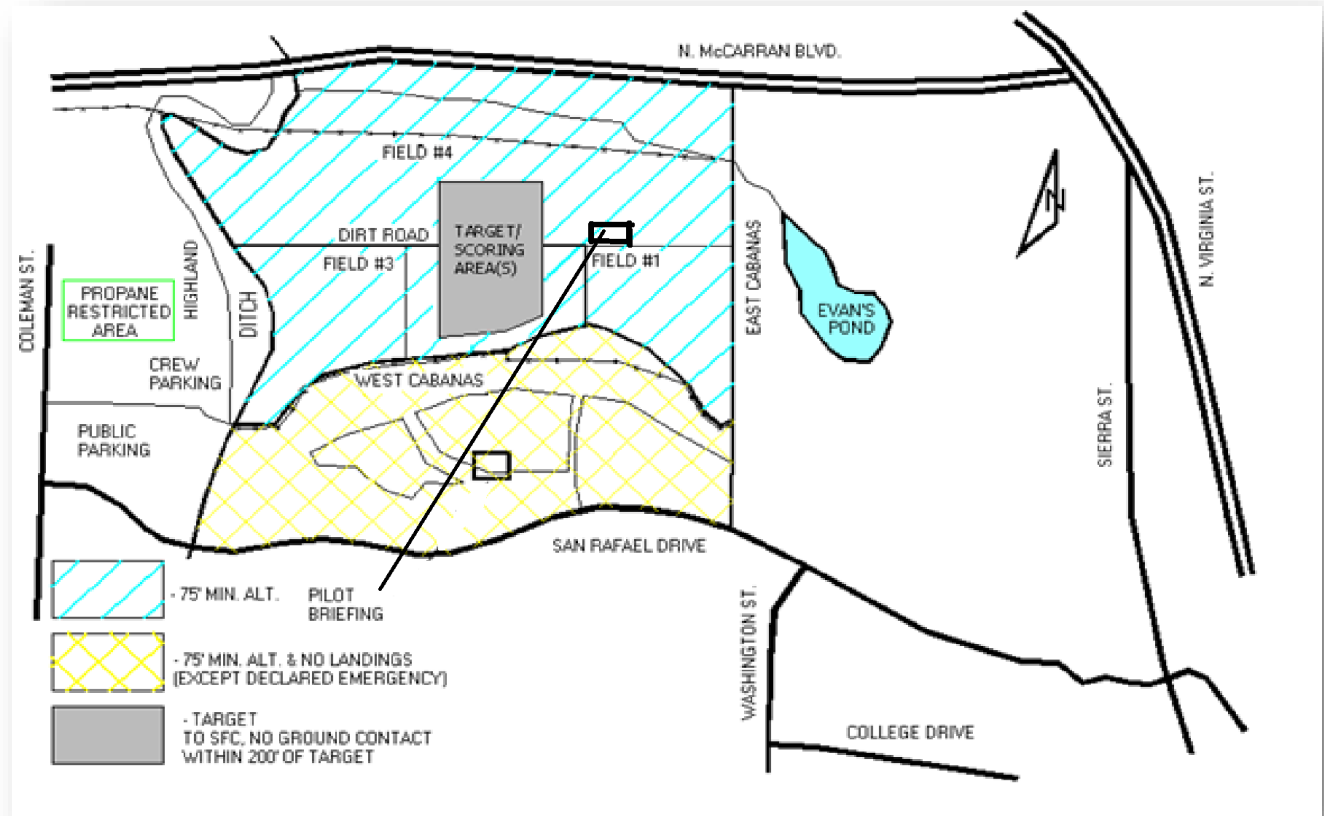
### **WEATHER REQUIREMENTS:**

The basic requirements will be VFR per 14 CFR 91.155. The event is not authorized if visibility is less than 3 miles or the ceiling is less than 2,000 ft. AGL at the time of intended launch. Launch will not be started if the surface winds are greater than 8 MPH. It is the responsibility Safety/Weather Officials to consult with the FSS concerning the meteorological outlook. However, immediate local conditions will determine on-site operations rather than sole reliance on FSS information. The decision for flight is the sole responsibility of the Pilot in Command and the decision of whether or not to halt the event is the sole responsibility of the Launch Commander after consultation with appropriate safety officials.

## **GENERAL RULES**

1. Only registered pilots may fly in the event. Only alternate pilots who have submitted their paperwork and been approved to fly in the event are allowed.
2. All registered pilots must attend the morning preflight briefings.
3. A Launch Director must launch all on-field balloons. The Launch Director will collect the flight crewmember waiver card(s) and validate the pilot's launch just prior to lift off. Pilots launching without validation will not be covered by the waiver and will be penalized.
4. Unless otherwise directed by officials, balloons may launch only from their assigned launch site.
5. Launch Directors will launch only those balloons that are at equilibrium and ready for immediate take off. Therefore, after the pilot's launch is validated, you will have a reasonable amount of time to launch. If you do not get off the ground within the allowed time, your launch will be invalidated, and you will be asked to deflate.
6. Any balloon boxing back to the field, must maintain a height of no less than 200 ft AGL while balloons are still in launch mode on the field. A penalty will be assessed for balloons flying below 200 ft over the launch field before all balloons are launched.
7. All balloons must not exceed 300 feet per minute ascent or descent rate in any area of flight congestion.
8. Pilots are required to carry a minimum of one and one-half hours of fuel on board for each flight. Low fuel will not be accepted as grounds for declaration of an emergency and landing in any of the sensitive or prohibited zones.
9. Lower and downwind balloons have the right of way.
10. All balloons are to be down by 10:30 a.m. local time daily.
11. All aircraft must be equipped with an operational aircraft radio.
12. If the event is cancelled after the launch has begun, a recall notice will be issued on the aircraft radio (123.75) and on the public-address system.
13. Due to congestion on the field, and in the interest of safety, all balloons must be tied off during inflation.
15. Rules are subject to change or alteration by the Officials due to changes in flight conditions, weather conditions, and other considerations. Any changes will be announced at the pilot briefing.
16. All participating pilots will be provided one refueling per day. Dawn patrol pilots will be allowed an additional refueling.
17. There will be no venting of raw propane on the launch field at any time.
19. No Smoking permitted on launch field or refueling area.
20. Reckless flying will result in penalties or possible removal from the event.

Diagram 2: MINIMUM ALTITUDES OVER RANCHO SAN RAFAEL PARK



### **LOCAL AIRPORT INFORMATION**

#### **Reno/Tahoe International (RNO)**

RENO, NV  
Publicly Owned, Public Use  
3.0 mi. SE of city.  
N39-29.95 W119-46.09  
Mag Var: 16 deg E  
Phone: 775-328-6400  
Fax: 775-328-6510

[www.renoairport.com](http://www.renoairport.com)  
[mmora@renoairport.com](mailto:mmora@renoairport.com)

#### **Communication Freqs:**

Unicom - 122.95  
TWR - 118.7  
GND - 121.9  
DEP - 126.3  
CLNC DEL - 124.9  
FSS- RENO 122.5 122.2

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The Great Reno Balloon Race

**Approach Freqs:** Reno:119.2 ; Reno:126.3 ;

**WX Contact:** ATIS 135.8 775-348-1550; ASOS 775-324-6659;

**FSS:** RENO 800-992-7433

**Elevation:** 4415 MSL

**Hours:** 24

**Tower Hours:** 24 hrs.

**Fees:** None

**Charts:** SAN FRANCISCO;

**Traffic Pattern:** Light Aircraft: 5212 MSL; Heavy Aircraft: 5412 MSL;

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## Reno/Stead (RTS\4SD)

RENO, NV

Publicly Owned, Public Use

10.0 mi. NW of city.

N39-40.04 W119-52.57

Mag Var: 16 deg E

Phone: 775-328-6570

Fax: 775-677-1393

[www.renoairport.com](http://www.renoairport.com)

[spolak@renoairport.com](mailto:spolak@renoairport.com)

**Communication Freqs:**

Unicom - 122.7

CTAF - 122.7

FSS- RENO 122.5

**Approach Freqs:** Reno:126.3 ;

**WX Contact:** AWOS 135.175 775-677-0589;

**FSS:** RENO 800-992-7433

**Elevation:** 5050 MSL

**Hours:** daylight; night on req

**Fees:** None

**Charts:** SAN FRANCISCO;

**Traffic Pattern:** Light Aircraft: 5800 MSL; Heavy Aircraft: 6200 MSL; Multiengine Aircraft: 6000 MSL;

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## Spanish Springs (N86)

RENO, NV

Publicly Owned, Public Use

7.0 mi. N of city.

N39-39.99 W119-43.39

Mag Var: 16 deg E

Phone: 775-772-8049

Fax: 775-425-4268

[www.spanishspringsairport.org](http://www.spanishspringsairport.org)

[n86aviation@msn.com](mailto:n86aviation@msn.com)

**Communication Freqs:**

CTAF - 122.9

FSS- RENO 122.5 122.2

**Approach Freqs:**

**FSS:** RENO 800-992-7433

**Elevation:** 4600 MSL

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The Great Reno Balloon Race

**Hours:** 9 am to 6 pm

**Fees:** None

Charts: SAN FRANCISCO;

**Traffic Pattern:** Multiengine Aircraft: 5600 MSL; Light Aircraft: 5400

PILOT WAIVER ACKNOWLEDGEMENT STATEMENT

All pilots who register to participate in the 2019 GRBR will be required to submit and electronically signed statement that follows as part of the online registration process.



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AS A PARTICIPATING PILOT IN THE GREAT RENO BALLOON RACE I HAVE READ, UNDERSTAND, AND AGREE TO ABIDE BY THE 2019 OPERATIONS MANUAL, EMERGENCY RESPONSE PLAN, THE APPLICABLE CERTIFICATE OF WAIVER, ANY SPECIAL PROVISIONS AND ALL OTHER RULES AND REGULATIONS PERTAINING TO THE EVENT. I ALSO UNDERSTAND THAT MY VIOLATION OF THE WAIVER AND/OR RULES MAY AFFECT MY STANDINGS IN THE EVENT AND/OR THE STATUS OF MY AIRMAN CERTIFICATE IN THE EVENT OF AN FAA RULING.

\_\_\_\_\_  
PRINT NAME

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
DATE

**PILOTS, without a completed form on file prior to the event, you will not be able to participate in the event.**