

Coshocton Hot Air Balloon Festival
Operations Manual

June 6 - 9, 2024 Coshocton, OH

#### **BALLOON COMPETITION MANUAL**

This manual has been prepared as part of the application for the issuance of a Certificate of Waiver with attachments and special provisions for a Manned Free Balloon Competition on June 7, 8, 9, 2024 at the Coshocton Hot Air Balloon Festival held at the Coshocton County Fairgrounds.

#### **Table of Contents**

- I. Purpose
- II. Responsibilities and Procedures
  - a) Duties of Personnel
  - b) Registration and Air Worthiness Determination
  - c) Pilot
  - d) Letter of Agreement/Statement of Responsibility
  - e) Event Flight Crewmember(s)
  - f) Pilot Briefing Procedures
  - g) Event Documentation
- **III. Ground Operations** 
  - a) Clear Areas
  - b) Spectator Areas
  - c) Crowd Control Requirements
  - d) Landowner Relations/Notification
- **IV. Flight Operations** 
  - a) Areas of Operations
  - b) Types of Operations
  - c) Altitudes
  - d) Weather Requirements
  - e) Communications Requirements
  - f) Air Traffic Coordination
  - g) Emergency Services Requirements

#### Section I.

#### **PURPOSE:**

This manual is submitted as a part of an application for a waiver of Title 14 of the Code of the Federal Regulations (14 CFR) part 91, sections 91.119(b) and 91.119 (c), by the Coshocton Hot Air Balloon Festival Committee for the Coshocton Hot Air Balloon Festival. Specifically, the waiver will allow officially registered balloons to operate from the surface to 10,000' MSL and over a congested area at an altitude of no less than 500 feet above the highest obstacle within a 500-foot radius of the balloon en-route to a target within a 10 nautical mile radius of the designated launch field or goal. It will also allow for officially registered balloons to operate at 75 feet AGL over spectators and to set goals and/or targets at a minimum distance of 200 feet from physical barriers provided for spectator control. The waiver will also allow officially registered balloons to descend to the surface over non-congested areas including declared targets, provided that the operation is conducted without hazard to persons or property on the surface.

No waiver is requested nor is waiver required by 14 CFR for any mass ascensions or pilot choice launches or final landings made in compliance with the BFA/HACD Competition Rules, as they are considered necessary for take-off and/or landing.

# Section II. RESPONSIBILITIES AND PROCEDURES

#### **DUTIES OF PERSONNEL**

- 1) Balloonmeister/Event Director Sean Askren
  - a. Conduct Master Briefing review event rules, policies, sponsor management, FAA waiver.
  - b. Create task sheet with location of targets, number, and color of markers, launch period, scoring period.
  - c. Conduct Pre-Flight Briefing reviews task(s), makes fly/no fly decision.
- 2) FAA Liaison Patricia Cramer
  - a. Prepare FAA Waiver and provide documents requested.
  - b. Assist with pilot registration.
- 3) Weather Officer James Cusick
  - a. Contact Leidos for a Pilot Weather Briefing.
  - b. Use web sites dedicated to the sport of hot air ballooning to prepare weather briefing information for pilots.

- c. Give pre-flight briefing weather synopsis, current wind conditions on the surface and at winds aloft, temperature and dew point, cloud layers and ceilings, probabilities of precipitation, any pertinent SIGMETS, PIREPS, NOTAMs, weather advisories and TFRs
- 4) Safety Officer Chris Jessee, Flying Dan Greathouse, On Ground
  - a. Assist Balloonmeister/Event Director with Pre-Flight planning review task, examine proposed flight path for potential launch and landing sites.
  - b. Monitor weather and flight conditions and report observations to the Balloonmeister/Event Director.
  - c. In the event of an emergency, proceed to the scene and assist as needed.

#### **REGISTRATION AND AIRWORTHINESS DETERMINATION**

Balloons flown at the event must have current certificates of registration and airworthiness, or in place of the latter, an equivalent document from the Federal Aviation Administration. Specific certificate/airworthiness standards are as follows:

The aircraft may be certificated in any category, including experimental, provided the requirements of 14 CFR §91.7, §91.203, and §91.715 are met. FAA personnel may perform spot or ramp inspections.

While operating, the balloon must have within it all documents required by the applicable regulations.

All competitive pilots are required to register in the afternoon of June 9, 2024. At this registration, they will be required to show an Annual or 100-hour inspection endorsement and an Aircraft Registration. At this registration, they will be required to show photo ID and currency as well as any missing or outdated items not provided electronically.

The organizer will maintain a roster containing the name, address, certificate number and date of last flight review of each registered pilot and the registration number, manufacturer, model and date of aircraft annual inspection of each aircraft participating in the event. A copy of each list is provided with the attachments and updates will be available at on-site registration. Facilities for FAA personnel to monitor operations during registration and all scheduled balloon events will be provided.

Chapter 3 of the competition rules cover procedures for balloons damaged or otherwise made unairworthy during the event. Throughout the event the Safety Officer or his designees; and appropriate FAA personnel will be consulted as necessary.

#### **PILOT**

Each pilot must hold the appropriate pilot certificate (Private or Commercial) with Lighter-Than-Air Category and Free Balloon Class Rating. Each pilot must show evidence of current Flight Review (14 CFR part 61, section 61.56) and must also show evidence of currency per section 61.57.

# LETTER OF AGREEMENT/STATEMENT OF RESPONSIBILITY

Each pilot has signed a Letter of Agreement and Statement of Responsibility acknowledging their responsibilities under the F.A.R.s as related to the Coshocton Hot Air Balloon Festival.

#### **Acknowledgement**

Pilots must know, understand, and abide by all of 14 CFR, Coshocton Hot Air Balloon Festival/ HACD rules and regulations, including any rules that are added or modified during the event and announced during any official pilot briefing. All pilots, aircraft owners and operators agree to have liability insurance as required by the organizer in effect throughout the event.

## **Release of Liability**

The Participant, by entering the event, agrees that the organizers and sponsors of this event, competition officials, officers, trustees, agents and/or members of these entities are providing the Participant with the facilities and means for participation in this event and in no way do they supersede the responsibility of the pilot in command as stated in 14 CFR, or otherwise

# **Liability to Third Parties**

By entering the event, a Participant assumes all liability for injury, loss, or damage to third parties or their property caused by himself or his crew.

# **EVENT FLIGHT CREWMEMBER(S)**

Only pilot and event flight crewmember(s), as described in the organized manned balloon competition manual, may be carried onboard any balloon operating under the waiver issued to the event organizer.

- a. Only the number of Event flight crewmember(s) (passengers) specified by the respective balloon flight manual may be carried in each balloon during the flight. Event flight crewmember(s)should be kept to a minimum for competitive events.
- b. All event flight crewmember(s) must have received appropriate training concerning their duties relative to the event and must attend the event pilot and flight crewmember(s) briefing before each event. These crewmember(s)

- must sign a statement that they have been briefed and that they are designated event flight crewmember(s) for the specific event for which the waiver was granted.
- c. The PIC of each balloon is responsible for obtaining the signed statements on a form furnished by the event organizer. The PIC will maintain this form during the event and return it to the event organizer and make it available to the FAA upon request.
- d. Balloon event flight crewmember(s) are differentiated from ground support launch and recovery crewmember(s).

#### **PILOT BRIEFING PROCEDURES**

All pilots are required to sign a statement indicating that they have read and understand the provisions of the waiver and the official Coshocton Hot Air Balloon Festival Competition Rules prior to any competitive flight.

Before each flight all pilots must attend the flight safety briefing. Chapter 8 of the competition rules provides details of all briefings and major details of the general and flight briefings are provided here:

# **Briefings**

**General Briefing:** In accordance with the FAA issued Waiver each pilot flying in the event must attend the General Briefing scheduled for 5:45 PM June 9, 2024 at the Coshocton County Fairgrounds. This briefing will review the Waiver and other pertinent information to help ensure safe conduct during the event. An electronic notice board (ENB) will be utilized to assist with outlining the major provisions of this waiver, balloon competition operations manual and competition rules and will be made available for all pilots to view prior to the General Briefing.

**Flight Briefing:** Attendance at the applicable pilot briefings is mandatory and will be conducted as indicated on the attached Pilot Schedule.

# Safety

All meteorological reports, forecasts, and other safety or navigational information are provided in good faith for the guidance of participants. The organizer and official staff assume 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.

# Responsibility

Each Pilot has full and complete authority over the balloon and is responsible for all decisions to be made associated with the balloon on the ground and in the air.

Each Pilot must ensure that his crew, his equipment, and his own level of skill and experience are suitable for the conditions in his own judgment. The Pilot is responsible for all the actions of his crew during the event.

#### Conduct

Pilots and their crews are required to behave in a sportsmanlike manner and to comply with the directions of the Event Officials. Profanity or unsportsmanlike conduct directed at any Official or volunteer will be penalized and may be grounds for expulsion of the pilot from the event.

#### **EVENT DOCUMENTATION**

All relevant registration files, task data sheets, pilot registration information, etc. will be maintained by the organizer at least 60 days after the event and will be made available to the FAA monitor upon request. Competition maps and task sheets will be made available to the FAA monitor at the time of the pilot briefing.

# SECTION III. GROUND OPERATIONS

#### **CLEAR AREAS**

Clear Areas are established at each target site. These areas are kept clear of spectators and frequently fenced. Scoring Officials will police target sites to keep unauthorized persons out. In the Minimum Altitude Diagram, this is referred to as the "Target Area".

Certain competitive tasks have predetermined goals associated with the intersection of two minor public roads or a public road and a railroad where strict control by event officials is not maintained since there is no expectation of spectators. **Markers are generally not dropped at these goals,** but results are determined electronically with the use of GPS loggers. Pilots are expected to maintain a 200' vertical clearance over any obstacles on approach or in any area of these pre-determined goals. Chapters 6 and 12 of the rules provide more details about these goals.

#### **SPECTATOR AREAS**

The primary competitive spectator area is located at the main launch site, **Coshocton County Fairgrounds**. Crowd control is initiated by physical barriers around the primary launch site and target areas controlled by the Scoring Officials. Official and balloon recovery vehicles are parked in restricted areas. Traffic is controlled by the Coshocton County Sheriff's Department as required. Use of existing and temporary barriers secure spectators from the briefing area and headquarters and from potential low level flight areas surrounding goals/targets.

It should be noted that the flight of the balloon is occurring at sufficiently slow speeds that people have ample opportunity to move away and stand well clear from approaching balloons as directed by event safety officials.

Competitive goals/targets set outside the primary launch area in remote areas attract few, if any, spectators beyond those involved in race operations (officials and crews). Scoring/measuring officials control these areas as determined by the conditions and will isolate the area surrounding the goal/target from any unauthorized personnel.

## **Method of Public Protection During Launch Field Access**

There may be occasions where the public would be invited onto the launch field. Pilots and crew are responsible for the safe operation of inflator fans at all times. Launch directors would be used to ensure public safety in conjunction with the public-address announcer advising of handling lines/ropes causing possible tripping hazards. All spectators would be required to exit the field prior to deflating the balloons. The public would also be advised that all types of smoking and vaping is prohibited.

#### **CROWD CONTROL REQUIREMENTS**

Crowd control will be provided by the Coshocton County Sheriff's Department, REACT, and/or officials of the balloon event under the direction of the Balloonmeister/Event Director and/or Safety Officer.

Local law enforcement as well as committee security will provide crowd control under the direction of the Balloonmeister/Event Director, Festival Organizer, and/or Safety Officer. Crowd control at the primary launch field is established by a fence line monitored by event officials.

Each Pilot-In-Command (PIC) is responsible for crowd control in the immediate vicinity of his/her balloon during the inflation and launch. The PIC and crew are responsible for the protection of their property. The PIC shall also take measures to protect the public from any dangers associated with balloon operations. Committee members/volunteers will aid in crowd control if an emergency should occur.

An organized system for emergency life, safety and crowd control is coordinated through the central command center using an Incident Command System compliant with the National Incident Management System. This system will marshal police, fire, medical, security, field officials and others as appropriate for the condition that exists. The central command center receives information via telephone and can transmit on telephone and the public address system.

Fire and rescue units with Emergency Medical Technicians may be available at the primary launch site during launches.

# LANDOWNER RELATIONS/NOTIFICATION

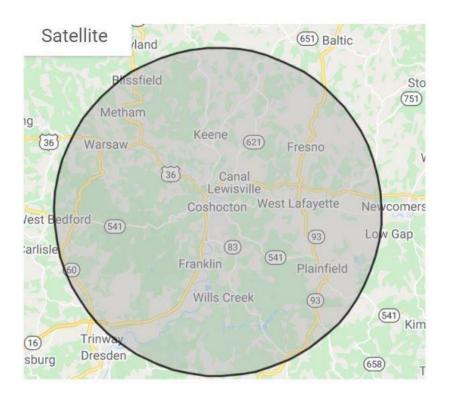
Positive landowner relations are vital to the continuance of balloon events. There is an ongoing effort by all involved persons to maintain good landowner relations for the event. Additionally, as per Rule 9.2.2 pilots must obtain permission for launch from private property; and per Rule 10.5 minimize disturbing landowners. Landowners may request that their property be indicated on the competition map as a Prohibited Zone as per Rule 7.3.

# SECTION IV. FLIGHT OPERATIONS

#### **AREA OF OPERATION**

The operations will occur in a 10 nautical mile radius of the launch field located at Coshocton County Fairgrounds as indicated on the official competition map. Final landings may occur beyond these boundaries, but no pilot-choice take-offs or mass ascensions will exceed these boundaries. Headquarters for the event operations will be located at the Coshocton County Fairgrounds.

#### 10 NM from Common Launch Point

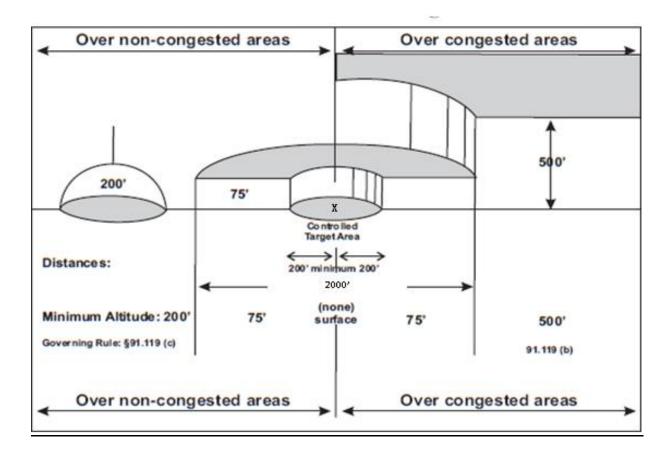


### **TYPES OF OPERATIONS**

The event will consist of single and multiple tasks as called by the Director after consulting with other approved competition officials, as appropriate, considering the conditions at hand and forecast to develop during the anticipated flight times. The tasks will include all those listed in Chapter 15 of the competition rule book.

#### MINIMUM ALTITUDE DIAGRAM

# Minimum Altitude Diagram



#### **ALTITUDES**

The waiver provides that registered balloons will be allowed to make approaches to targets and/or goals within the designated areas. Balloons making these approaches will be permitted to fly at altitudes as follows:

- a) Over congested areas, and other than during take-off and landing operations, at altitudes of not less than 500 feet above the highest obstacle within a 500-foot horizontal radius of the balloon
- b) Within 2000 feet of a target or goal site, allow flight above, but not less than 75 feet above, any open-air assembly of persons (designated spectator area) under the direct control of the event organizer. The balloon must have attained a state

- of altitude equilibrium at this 75-foot minimum altitude and shall not descend while passing over spectator areas.
- c) To allow flight over open water or sparsely populated areas (non-congested areas), no closer than 200 feet horizontally to any person, vessel, vehicle, or structure. Balloons may descend to the surface over non- congested areas but must remain at least 200 feet from occupied buildings and spectators not in the immediate vicinity of the event locations.
- d) No balloon shall descend faster than 300 feet per minute while below 200 above ground level.
- e) At any altitude within controlled target area or corridor cleared of spectators

To provide the highest possible level of safety for spectators, the scoring officials will cause scoring/measuring officials to be positioned among the spectators to allow crowds to be shifted as necessary and to provide warning regarding any markers that may be dropped in the spectator areas. Announcements over the public address systems will also advise the spectators of the possibilities of both low flying balloons over the area and of markers being dropped in this area.

#### **WEATHER REQUIREMENTS**

No Operations can be conducted under a waiver except while in VFR conditions during the time from published sunrise to sunset, as specified in section 91.155. Maximum demonstrated surface winds will be ten (10) knots per hour or less.

The decision for flight is the sole responsibility of the Pilot and the decision of whether to hold a task is the sole responsibility of the Director after consultation with appropriate safety officials.

## **COMMUNICATIONS REQUIREMENTS**

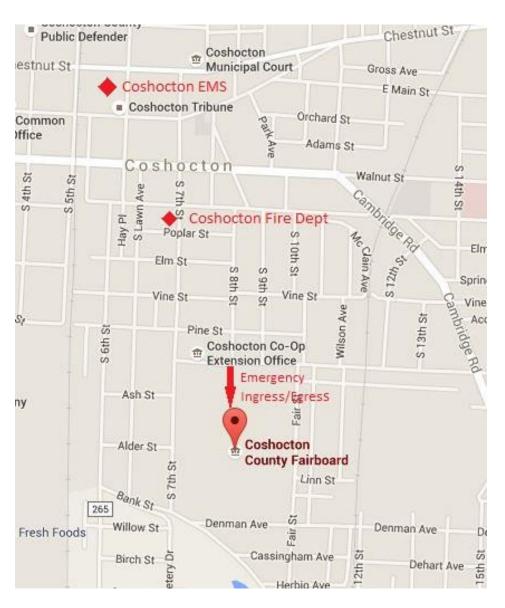
Primarily by required pilot briefing, however, supplementary information is also given using a mobile texting service, Remind, and on the public address system. Pilots will be asked to register their cell phone number and that of their crew chief with the Remind texting system. While the primary use of the number is for Emergency Recall, it may also be used to make contact to resolve flight or scoring issues, follow up on missing markers, and propane refueling status. Most pilots carry either FM, CB or aircraft radios and some communication is possible by radio.

#### AIR TRAFFIC COORDINATION

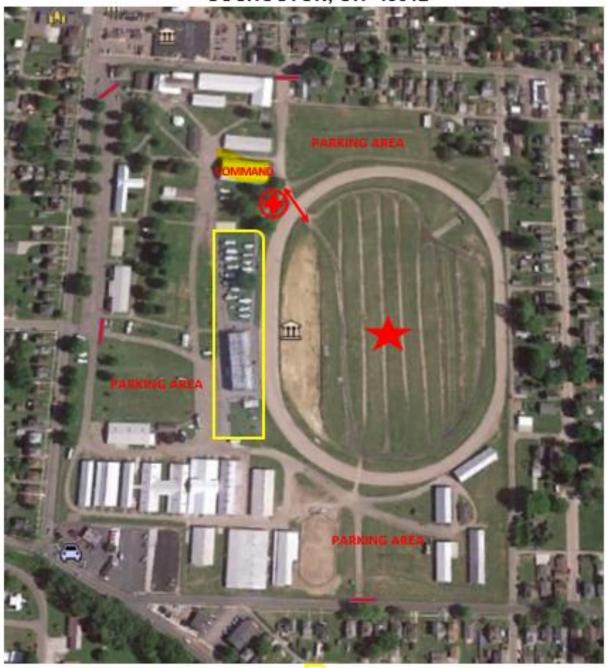
A NOTAM will be requested from Leidos at 1-877-487-6867 advising of air traffic of numerous balloons in the Coshocton County area at varying altitudes through June 9 to June 11, 2024, during the four hours immediately after sunrise and three hours prior to sunset.

### **EMERGENCY SERVICE REQUIREMENTS**

On site emergency services may include fire equipment provided by Coshocton City Fire Department or Three Rivers Volunteer Fire Department and ambulance by Coshocton County EMS. The Coshocton City Fire Department is located approximately 0.5 miles from the fairgrounds and will provide backup services as needed. The Coshocton County EMS headquarters is approximately .5 mile away. Emergency equipment will enter and exit the launch field through the 8<sup>th</sup> Street gate and the access lane across the racetrack. 911 will be the contact number for all emergency personnel.



# COSHOCTON COUNTY FAIRGROUNDS 707 KENILWORTH AVE COSHOCTON, OH 43812





# **SCHEDULE OF FLIGHT ACTIVITIES**

Thursday Evening	18:30	Media Flight – 3 Balloons
June 6		NO WAIVER REQUESTED
Friday Evening	15:30 – 17:30	Pilot Registration – Fairgrounds
June 7	17:45	MANDATORY Pilot Briefing
	18:30	Fun Flight with Sponsor
	21:15 – 21:45	Night Glow
Saturday Morning	05:45	Pilot Briefing (Coffee & sweet rolls)
June 8	06:15	1 <sup>st</sup> Competitive Flight
Saturday Evening	18:00	Pilot Briefing
June 8	18:30	2 <sup>nd</sup> Competitive Flight
Sunday Morning	05:45	Pilot Briefing (Coffee & sweet rolls)
June 9	06:15	3 <sup>rd</sup> Competitive Flight