

**"THE U.S. OPEN NATIONAL CHAMPIONSHIPS"**

**"BALLOONING AT ITS BEST"**

***The U.S. Open National Championships***

**(EXAMPLE)**

**ANY TOWN USA**

**ANYTIME 2019 & 2020**

**Official Operations Manual/Waiver/Rule Book**

This operations manual was prepared and is being submitted by The U.S. Open National Championships - As part of the Application for issuance of Certificate of Waiver or Authorization (FAA Form 7711-2). Also included are any attachments, special provisions and rules. Certificate of Waiver or Authorization is intended for a manned free balloon competition at or near the main balloon field located at the location in any city, state. (See map inside manual here in after referred to as Balloon Field).

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**The U.S. Open National Championships - (USO)**

**SECTION I - Official Job Descriptions**

Balloon Event Director (Maury Petrehn) - is responsible for oversight, management, and direct supervision of all balloon events & balloon activities associated with The U.S. Open National Championships (USO). Here in after - (Director) - shall be responsible to the FAA and organizers for overseeing all balloon flying & safety related issues. Director may penalize or disqualify a pilot for misconduct or failure to obey the rules, & shall make such operational decisions as are deemed necessary in accordance with proper operations, safety and the rules.

Assistant Director/Safety Official (tbd) - shall advise the Director on matters of safety, may also act as Weather official, help with flight briefings, may assume all duties of Director or Weather official as/if needed.

Weather Official (tbd) - shall be responsible for acquiring & deciphering all pertinent weather data in order to provide complete weather briefings to race director, staff, & pilots, shall check any/all NOTAM'S in effect, shall advise/brief officials/pilots on data & may serve as Assistant Director/Safety Official as/if needed.

Scoring/Measuring (tbd) - shall be responsible for compiling, submitting & posting of complete and accurate measurements of pilot markers or other results as well as assisting with any gps result readings.

Launch Director(s) - Event Officials, Staff or assigned crew may act as a launch director and may assist in helping to ensure a safe and orderly launch of all balloons from the balloon field.

Rural Relations (tbd) - shall be responsible for assisting pilots, crews, officials & staff in all matters requiring assistance with landowners.

Crowd Control (All Event Officials) - shall assist in all manners of required crowd control (also see page 11).

## **SECTION II - Organization and Responsibilities**

The U.S. Open National Championships - here in after (USO); through its officials, and staff will responsibly attempt to safeguard all persons/property, flight/ground, as best as is reasonably possible during this event. Maury Petrehn - will be the Balloon Event Director; overseeing all ballooning operations and safety aspects of the balloon event. Any change from this person will be coordinated in writing with the Local Flight Standards District Office - (FSDO).

In the event of an accident or incident considered to be the result of an event task deficiency or procedure, flight operations will be canceled until the deficiencies have been corrected and accepted by the Balloon Event Director and any on-site FAA personnel.

Authority to deviate from the Federal Aviation Regulations (FAR's) has been granted to (USO). Failure to comply with the Certificate of Waiver or Authorization (FAA Form 7711-1), Attachment A, and the Special Provisions, may be a violation of issuance & the Federal Aviation Administration has justification for cancellation of the Certificate of Waiver or Authorization.

## **SECTION III - Certificate/Airworthiness Determinations**

Officials from (USO) and/or FAA Personnel may inspect any Pilot/Aircraft documentation at any time during the event to determine aircraft airworthiness and/or pilot qualification.

Compliance with the Federal Aviation Regulations requirements for Pilot Flight Currency and Aircraft Airworthiness Standards are the responsibility of the Pilot in Command (PIC).

All Pilots are responsible for flying within the limitations of their aircraft Operations/Flight Manual.

(USO) will retain the original list of registered aircraft and registered pilots for one (1) year.

Within ten (10) days after the close of the event, a copy of the registered aircraft and registered pilots can be furnished to the local Flight Standards District Office.

## **SECTION IV - Pilot's & Flight Crew's Minimum Qualification/Experience**

Each pilot must hold an appropriate pilot certificate with lighter-than-air category and free balloon class rating, with airborne heater privileges. Student pilots are prohibited from flying as Pilot in Command during this event. Each pilot must show evidence of Private or Commercial Pilot Certificate, with a required (35 Minimum) hours of Pilot-in-Command flight time after achieving their Private Pilot License rating.

Only Flight crewmembers may be carried on board an aircraft operating under the Certificate of Waiver. A minimum of one Flight crewmember (PIC) is required for all events/flights. The maximum number of additional Flight crewmembers allowed for any event will be determined by the (PIC) for the safe operation of their balloon. All additional Flight crewmembers must be designated by the Pilot in Command and given appropriate training in the conduct of their duties. They must also sign a statement that they have been trained in balloon operations, that they understand the limitations under which they are operating, and that they are designated Flight crewmembers for the purpose of that specific flight. The Pilot in Command of each aircraft utilizing additional Flight crewmembers is fully responsible for obtaining, keeping, and returning such statements as needed. (See Form page 17)

Pilots charging additional Flight crewmembers a fee for conducting official duties and/or Pilots selling rides without authorization from (USO) during this event is prohibited.

## **SECTION V - Areas of Operations**

Operations will take place within a 10 Nautical mile radius of the main balloon field also within the confines of the official competition map. Final landings may occur beyond these boundaries, but no pilot-choice takeoffs or mass ascensions will exceed the limits specified in the Certificate of Waiver.

Note: On flights over 10 Nautical miles radius from the main balloon field the waiver is no longer valid. Due to the reduced number of adequate landing areas, the landing distance from the target site to the landing area will be reduced to 500 feet. No one except the landowners, pilots, crewmembers or balloon event officials should be allowed in the launch/landing area.

No free flight balloon operations may take place after sunset, however if conditions allow, operations may continue after sunset if the balloon is tethered and/or taking part in a Night-Glow.

## **SECTION VI - Types of Operations**

Flight events will consist of single and/or multiple tasks/challenges as determined by the Balloon Event Director in consultation with appropriate organization officials. The following is a list of flights, tasks, and challenges that may be chosen during the balloon event:

## **\*CHAPTER 15 - FLIGHTS/TASKS/GOALS/CHALLENGES**

### **15.1: PILOT DECLARED GOAL (PDG)**

**15.1.1:** Competitors will attempt to achieve/create a mark by flying close to a goal selected & declared by themselves before the flight.

**15.1.2:** Task Data:

- a) Method(s) and/or time(s), distance(s), location(s) of declaration(s).
- b) Number of goals permitted - (always 1 - unless changed on task sheet or at briefing)
- c) Minimum and maximum distances of goal from launch point.
- d) Minimum distance of goal from any subsequent goals or targets, if applicable
- e) Goals available for declaration, if applicable

**15.1.3:** Result is distance from mark to the nearest declared goal. Smallest is best.

### **15.2: JUDGE DECLARED GOAL (JDG)**

**15.2.1:** Competitors will attempt to drop a marker, achieve/create a mark by flying close to a set goal chosen by officials before the flight.

**15.2.2:** Task Data:

- a) Position of set goal/target.
- b) Minimum and maximum distances of goal from launch point, if applicable.

**15.2.3:** Result is distance from mark to the target, or goal. Smallest is best.

### **15.3: MULTIPLE JUDGE DECLARED GOAL (MJD)**

**15.3.1:** Competitors will attempt to drop a marker, achieve/create a mark by flying close to one of a number of set goals chosen by officials before the flight.

**15.3.2:** Task Data:

- a) Position of various set goals/targets.
- b) Minimum and maximum distances of goal from launch point, if applicable.

**15.3.3:** Result is distance from mark to nearest target, or goal. Smallest is best.

### **15.4: FLY IN (FIN)**

**15.4.1:** Competitors find their own launch areas and attempt to drop a marker, achieve/create a mark by flying close to a set goal chosen by officials before the flight.

**15.4.2:** Task Data:

- a) Position of set goal/target.
- b) Minimum and maximum distances of launch point to the goal/target

**15.4.3:** Result is distance from mark to the target, or goal. Smallest is best.

### **15.5: FLY ON (FON)**

**15.5.1:** Competitors will attempt to achieve/create a mark by flying close to a goal selected & declared by themselves during the flight.

**15.5.2:** Task Data:

- a) Minimum and maximum distance between previous mark and declared goal, or other goals.
- b) Number of goals permitted - (always 1 - unless changed on task sheet or at briefing)
- c) Method(s) and/or time(s), distance(s), location(s) of declaration(s).

**15.5.3:** Result is distance from mark to the nearest declared goal. Smallest is best.

### **15.6: HARE AND HOUNDS (HNN)**

**15.6.1:** Competitors will follow a hare balloon attempting to drop a marker, achieve/create a mark by flying close to a target/goal set as near to or within three meters of the hare basket after landing.

**15.6.2:** Task Data:

- a) Description of hare balloon
- b) Intended flight duration of hare balloon

**15.6.3:** Result is distance from mark to the target/goal. Smallest is best.

**15.6.4:** Variation from intended flight duration of the hare shall not be grounds for complaint.

**15.6.5:** Hare may deflate after landing and be removed from the field, goal/target remains till close.

### **15.7: MEMORIAL TASK (MLT)**

**15.7.1:** Competitors will attempt to drop a marker, achieve/create a mark by flying within a Scoring Area(s) close to a goal.

**15.7.2:** Task Data:

- a) Position of goal/target
- b) Description of Scoring Area(s)
- c) Minimum and maximum distances of goal from launch point, if applicable

**15.7.3:** Result is distance from mark to the target, or goal. Smallest is best.

### **15.8: CALCULATED RATE OF APPROACH TASK (CRT)**

**15.8.1:** Competitors will attempt to drop a marker, achieve/create a mark by flying within a valid Scoring Area close to a goal. The Scoring Area(s) will have unique times of validity.

**15.8.2:** Task Data:

- a) Position of goal/target.
- b) Description of Scoring Area(s) and their valid times
- c) Minimum and maximum distances of goal from launch point

**15.8.3:** Result is distance from mark to the target/goal. Smallest is best.

**15.8.4:** Competitors must achieve a mark inside a scoring area during its active time of validity.

### **15.9: LAND RUN TASK (LRN)**

**15.9.1:** Competitors will attempt to achieve the greatest area of a triangle ABC.

**15.9.2:** Task Data:

- a) Description and boundaries of scoring area(s)
- b) Description of point/location or mark of point - "A"
- c) Method of determining or description of point/location or mark of point - "B"
- d) Method of determining or description of point/location or mark of point - "C"
- e) Scoring period, if any

**15.9.3:** Result is the area of triangle ABC; greatest result best.

### **15.10: MINIMUM DISTANCE (MIN)**

**15.10.1:** Competitors will attempt to drop a marker(s), achieve/create a mark - inside of set scoring area(s), Close to a goal.

**15.10.2:** Task Data:

- a) Description of the Scoring Area(s) and goal.

**15.10.3:** Result is distance between mark(s) and goal. Smallest is best.

**15.10.4:** Competitors will not achieve a result, unless they have achieved a mark in scoring area(s).

**15.11: MAXIMUM DISTANCE (MAX)**

**15.11.1:** Competitors will attempt to drop a marker(s), achieve/create a mark - inside of set scoring area(s), Far from a goal.

**15.11.2:** Task Data:

a) Description of the Scoring Area(s) and goal.

**15.11.3:** Result is distance between mark(s) and goal. Greatest is best.

**15.11.4:** Competitors will not achieve a result, unless they have achieved a mark in scoring area(s).

**15.12: ANGLE TASK (ANG)**

**15.12.1:** Competitors will attempt to achieve the greatest change of flight direction from a set direction. The change of direction is the angle between the set direction and line "A-B".

**15.12.2:** Task Data:

a) Description of points "A" and "B"

b) Set direction (degrees)

c) Minimum and maximum distances from "A" to "B."

d) Scoring period, if any

**15.12.3:** Result is angle between the set direction and the line "A-B"; greatest result best.

A change in flight direction Of 180° is best.

**15.13: ELBOW TASK (ELB)**

**15.13.1:** Each pilot will attempt to achieve the greatest change of flight direction during the flight.

**15.13.2:** Task Data:

a) Description of points "A", "B", and "C"

b) Minimum and/or Maximum distances or times from "A" to "B"

c) Minimum and/or Maximum distances or times from "B" to "C"

d) Scoring period, if any

**15.13.3:** Result is 180 degrees minus the angle ABC; greatest result best.

**15.14: 3-D SHAPE TASK (DDD)**

**15.14.1:** Competitors will attempt to achieve the greatest distance within a set airspace.

**15.14.2:** Task Data:

a) Description of set airspace(s)

b) Scoring period, if any

**15.14.3:** Result is the accumulated horizontal distance measured by valid track points in the set airspace(s); greatest cumulative distance is best.

**15.15: NIGHT GLOW (GLW)**

**15.15.1:** Pilots will display/tether their balloon near sunset - lighting envelope using the burner.

**15.15.2:** Balloons will be tied down at all times and shall not free fly.

**15.15.3:** Points for participation may be available at Directors discretion.

**15.15.4:** Glow shall end at or before the time stated on waiver.

**15.17: NEW TASK (NEW)**

**15.17.1** Any other new task created/flown during event, data from task sheet & flight briefing.

## **SECTION VII - Registration**

All pilots are required at registration to sign a statement indicating that they have read, understand, and will comply with the Certificate of Waiver, Attachment A, the Special Provisions and any listed attachments - (See Form page 18). They must also show all the necessary documentation required in the rules - including license & logbooks with any/all current annuals/inspections, as well as biennial or currency flights & reviews.

Within ten (10) days after the close of the event, a copy of the pilot's signed statements can be furnished to the local Flight Standards District Office.

## **SECTION VIII - Pilot Briefing Procedures**

Before each flight operation/task(s), the Director and his staff will give a pilot briefing. That briefing will consist of all pertinent factors affecting flight operation. No pilot may fly until released by the Balloon Event Director thru answering to a roll call or other means whereby the Director is satisfied that the pilot has received the pertinent briefing information.

## **SECTION IX - Altitudes**

Where applicable, **Federal Aviation Regulations 91.119(b)** and **91.119(c)** will be waived for all properly registered pilots and aircraft participating in this event.

**FAR 91.119(b)** is waived to allow flight by participating balloons over congested areas of a city, town, or settlement or over an open-air assembly of persons at an altitude of 500 feet above the highest obstacle within a horizontal radius of 500 feet of the balloons flying within the confines of the competition map.

Note: Launching a balloon into or over a congested area or an open-air assembly of persons shall require the pilot to be in a continuous normal rate of climb until an altitude of 500 feet is attained above the highest obstacle within a horizontal radius of 500 feet of the balloon.

**FAR 91.119(b)** is also waived to allow flight over, but no closer than 75 feet, to persons in the designated spectator areas which are under the direct control of (USO). 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 while crossing over the designated spectator area. (Once past spectator area(s) in/over a Clear Zone surrounding target(s), balloons may descend to ground unless signaled otherwise.)

**FAR 91.119(c)** is waived to allow flight to ground over open water or sparsely populated areas, but no closer than 200 feet to any person, vessel, vehicle or structure (Except designated officials).

The maximum altitude for flight operations in this event will be (up to 7,500? feet mean sea level) - (MSL). Pilots and/or aircraft not registered for this event and who fly within the confines of the competition map will not be given the privilege of the waiver, and must comply with standard **Federal Aviation Regulations 91.119(b) & (c)**.

## **SECTION X - Weather Requirements**

Flight operations will be conducted during the period from sunrise to sunset and with Visual Flight Rules (VFR) weather conditions as specified in Federal Aviation Regulation 91.155.

Maximum wind velocity for launch during the event will be up to 10 knots. Wind velocity frequently increases after launch and it is the Pilot in Command's responsibility to determine when/where a safe landing should be made. Determination of the wind velocity and direction will be made prior to each pilot briefing.

If the closest weather reporting station to the launch site shows that it is marginal visual flight rules (MVFR) weather or less (MVFR is defined as ceiling 1,000 to 3,000 feet and/or visibility 3 to 5 miles inclusive) an on-site weather observation may be taken if the weather observer is qualified and is acceptable to the Balloon Event Director and to the Flight Standards District Office.

## **SECTION XI - Communication Requirements**

Prior to flight operations, pilots will be briefed and given all updated information appropriate to the task(s) being flown. Flight safety information or cancellation can be given by a public address system (PA) located at the Main Balloon Field.

Pilots will be asked to register a cell phone number for recall purposes. Information may also be disseminated via a local radio station, as identified at the pilot briefing and/or by Aircraft radio - frequency to be determined.

A suitable PA system or visual signals which have the capability of communicating with pilots in flight will be available to advise them the task has been canceled and/or that conditions are unsafe.

## **SECTION XII - Air Traffic Notification**

The Balloon Event Director or appropriate officials can request that the local Flight Service Station (FSS) issue a Notice to Airmen (NOTAM) advising Air Traffic, that numerous hot air balloons will be flying in the vicinity of City - During the dates of ?.

The NOTAM must be filed at least 48 hours prior to the event and must include date, time, place, areas, altitudes and duration of the scheduled event.

In addition, the Balloon Event Director or designee, before each flight operation, can also notify the local Air Traffic - (123.45?) of each flight, including probable flight path/duration/altitudes & direction of that flight.

### **SECTION XIII - Crowd Control Requirements**

Crowd control may be provided by state, county, or local city police in addition to officials/staff from (USO). Temporary markings, grass, rope, lines, other barriers and/or fencing may be used to isolate the spectators from all clear zones (goal/target/launch/landing area) also from pilot briefing areas as needed.

If the wind direction or velocity should significantly change, the on-site FAA personnel and/or officials from (USO) staff can, as/if required, consider moving the crowd control line. This will be accomplished by using the PA system to alert the spectators that for their safety the spectator line must be moved. The line will be moved by personnel from the (USO) staff with the coordination of local law enforcement agencies if needed.

Goal/target areas away from the balloon field will occur in remote rural areas and will attract few, if any spectators. On-hand officials, staff, or balloon crew members will attempt to control any crowd and prevent spectators from entering launching/landing/goal areas.

### **SECTION XIV - Spectator Areas**

Designated spectator area(s) will be maintained at a minimum of a 200-foot radius away from the designated goal/target area(s). This 200-foot minimum Clear Zone shall remain sterile except for any event officials or on-site FAA personnel. The spectator area for this event may be located inside of the event area, near the main balloon field. Spectator traffic will be controlled by local law enforcement, officials and/or personnel from the (USO) staff who will direct them to designated parking areas. (See Map/Diagram on page 20)

If, as pilots approach the target area, there appears to be an unsafe condition existing in the spectator area or the clear zone, it is the Pilot in Command's responsibility to avoid or over-fly that area.

Pilots dropping any markers into the designated spectator area shall be disqualified from that task. Repeat offences may result in expulsion from event.

As additional safety for spectators, crewmembers, pilots, and the general public, (USO) can provide on-site emergency services, ambulance, police, paramedic and/or a fire truck as needed.

State, county, local police, fire, emergency services, (USO) officials, security/staff will be at the balloon field helping to try to assure safety. Only balloon chase vehicles will be allowed on any common launch field.

## **SECTION XV - Clear Zones**

Clear Zones for this event will be at and around the goal/target/launch area located at the Main Balloon Field areas. Only (USO) officials and FAA personnel will be authorized entry into a designated clear zone during flight operations. This will be enforced by event personnel. Minimum altitude in a clear zone shall be the ground. The Balloon Event Director may, in concurrence with any on-site FAA (if present), permit spectators on the launch field during evening takeoffs, tethers or night - glows.

## **SECTION XVI - Landowner Notification**

The general public will be advised of the balloon event/competition by newspaper, radio, television and/or posted local signs and information.

Landowners may request that their property be shown on the competition map as a Prohibited Zone (PZ). The competition map will be updated daily and will be on display at the pilot flight briefing area.

Pilots must obtain permission for all launch or landing on private property to minimize disturbance to the landowner, persons, pets, crops or livestock.

Permission must be received before crew entry onto any private property.

Positive landowner relations are vital to the continuance of the event. There must be an ongoing effort to maintain good landowner relations in this and all other balloon events.

## **SECTION XVII - Appropriate Letters of Agreement**

None on file.

**SECTION XVIII - Sample Official Sunrise & Sunset Times for City.**

<b>Date</b>	<b>Sunrise</b>	<b>Sunset</b>
<b>Friday July 29<sup>th</sup> -</b>	<b>5:51 AM</b>	<b>8:18 PM</b>
<b>Saturday July 30<sup>th</sup> -</b>	<b>5:52 AM</b>	<b>8:17 PM</b>
<b>Sunday, July 31<sup>st</sup> -</b>	<b>5:53 AM</b>	<b>8:16 PM</b>
<b>Monday, Aug 1<sup>st</sup> -</b>	<b>5:54 AM</b>	<b>8:14 PM</b>
<b>Tuesday, Aug 2<sup>nd</sup> -</b>	<b>5:55 AM</b>	<b>8:13 PM</b>
<b>Wednesday, Aug 3<sup>rd</sup> -</b>	<b>5:56 AM</b>	<b>8:12 PM</b>
<b>Thursday, Aug 4<sup>th</sup> -</b>	<b>5:57 AM</b>	<b>8:11 PM</b>
<b>Friday, Aug 5<sup>th</sup> -</b>	<b>5:58 AM</b>	<b>8:10 PM</b>

**SECTION IXX - Official Sample Scheduled Flight Times**

**Morning** flights are scheduled for **Saturday, July 30<sup>th</sup> - Friday, August 5<sup>th</sup> - 2016.**

**Briefings** for morning flights are at **5:00 AM**

**(Mandatory Master Briefing - Friday July 29<sup>th</sup> at 5:00 PM)!**

**Evening** flights are scheduled for **Monday, August 29<sup>th</sup> - Thursday, August 4<sup>th</sup> - 2016.**

**Briefings** for evening flights are at **5:00 PM**

The **FAA WAIVER** shall be in effect with flights scheduled for the following times:

<b>Friday July 29<sup>th</sup> -</b>		<b>6:00 PM - 9:30 PM</b>
<b>Saturday July 30<sup>th</sup> -</b>	<b>06:00 AM - 10:00 AM</b>	<b>6:00 PM - 9:30 PM</b>
<b>Sunday, July 31<sup>st</sup> -</b>	<b>06:00 AM - 10:00 AM</b>	<b>6:00 PM - 9:30 PM</b>
<b>Monday, Aug 1<sup>st</sup> -</b>	<b>06:00 AM - 10:00 AM</b>	<b>6:00 PM - 9:30 PM</b>
<b>Monday, Aug 1<sup>st</sup> -</b>	<b>06:00 AM - 10:00 AM</b>	<b>6:00 PM - 9:30 PM</b>
<b>Tuesday, Aug 2<sup>nd</sup> -</b>	<b>06:00 AM - 10:00 AM</b>	<b>6:00 PM - 9:30 PM</b>
<b>Wednesday, Aug 3<sup>rd</sup> -</b>	<b>06:00 AM - 10:00 AM</b>	<b>6:00 PM - 9:30 PM</b>
<b>Thursday, Aug 4<sup>th</sup> -</b>	<b>06:00 AM - 10:00 AM</b>	<b>6:00 PM - 9:30 PM</b>
<b>Friday, Aug 5<sup>th</sup> -</b>	<b>06:00 AM - 10:00 AM</b>	
<b>Zulu Time -</b>	<b>06:00 - 10:00</b>	<b>&amp; 18:00 - 21:30</b>

## **MINIMUM SAFE ALTITUDE**

### **Section 91.119(b) Minimum Safe Altitude**

**FAR 91.119 (b)** is waived to allow balloon flight over any congested area of a city, town or settlement or over an open air assembly of persons at an altitude of 500 feet above the highest obstacle within a horizontal radius of 500 feet of the balloon within a ten (10) nautical mile radius.

Note: Launching a balloon during the balloon event anywhere in, into, or over a congested area or an open air assembly of persons, shall require the pilot to be in a continuous normal rate of climb. The pilot is required to maintain said rate of climb until an altitude of 500 feet is attained above the highest obstacle within a horizontal radius of 500 feet of the balloon.

In addition, **FAR 91.119 (b)** is also waived to allow flight over but no closer than 75 feet to persons in the designated spectator areas which are under the direct control of the certificate holder.

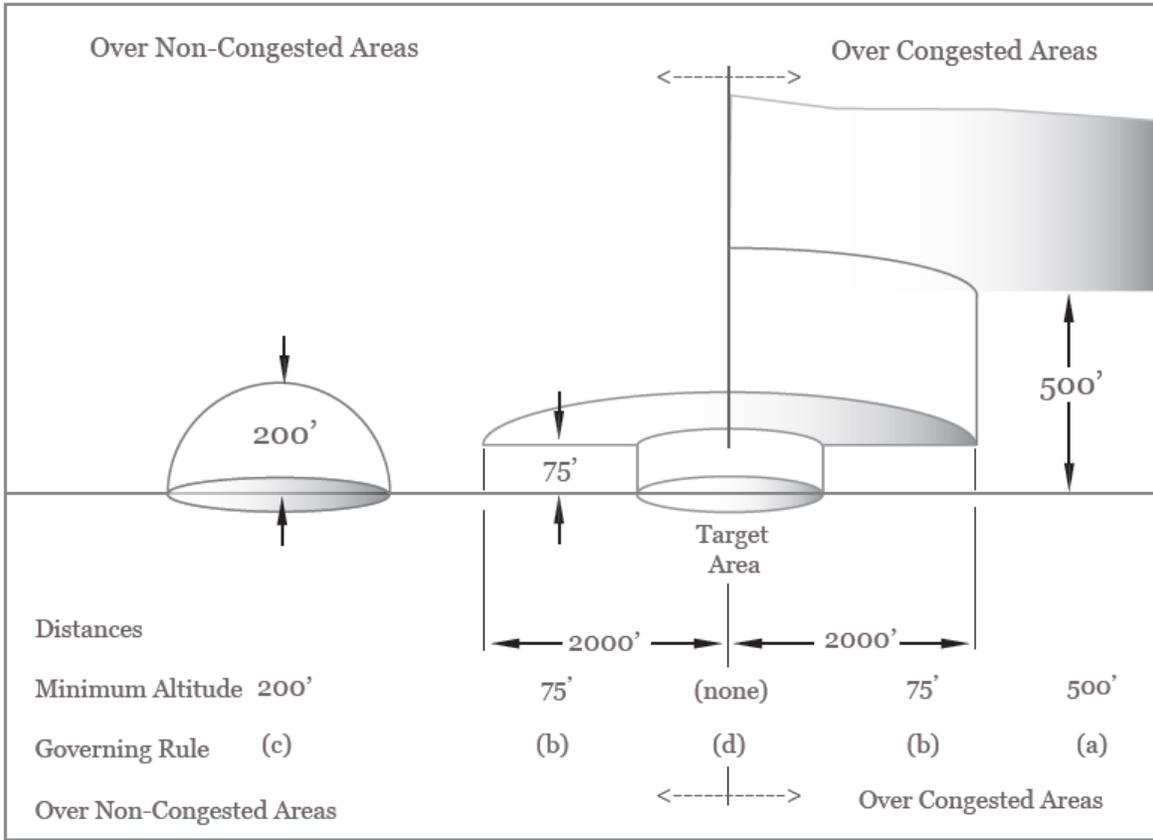
Regarding the 75 foot rule, the balloon must have attained a state of altitude equilibrium at this 75 foot minimum altitude and not be descending while crossing over the designated spectator area.

Note: The designated spectator area shall be a minimum of 200 feet in radius from the designated or declared goal or target.

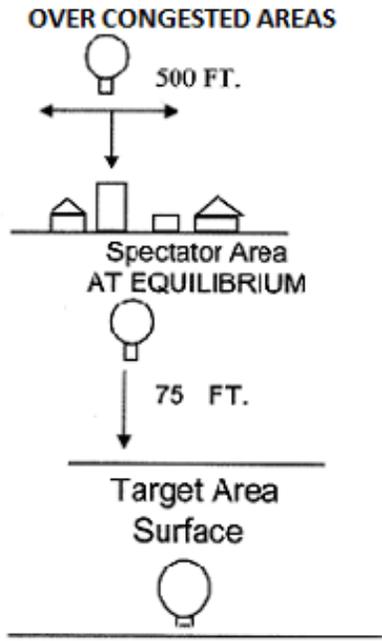
### **Section 91.119 (c) Minimum Safe Altitude**

**FAR 91.119 (c)** is waived to allow flight over open water or sparsely populated areas no closer than 200 feet to any person, vessel, vehicle or structure.

**See Diagrams**



**MINIMUM ALTITUDE DIAGRAM**



## **Additional Authorization**

Flight operations may be conducted into the town state Class "?" airspace. When flight operations are to be conducted, the Balloon Event Director or other appropriate officials may contact Air Traffic Control and advise them of the time of the launch, estimated flight path and altitudes. This authorization covers both radio and transponder requirements. Only those flights conducted during the time the waiver is in effect are covered by this authorization. All other flights must contact Air Traffic Control on an individual basis.

Note: Because radar is unable to identify free balloons in flight, standard traffic separation cannot be made with other air traffic. VFR traffic advisories are available on area common aircraft radio frequency (123.45?).

This authorization is for the dates and times listed on FAA form 7711-1, Certificate of Waiver.

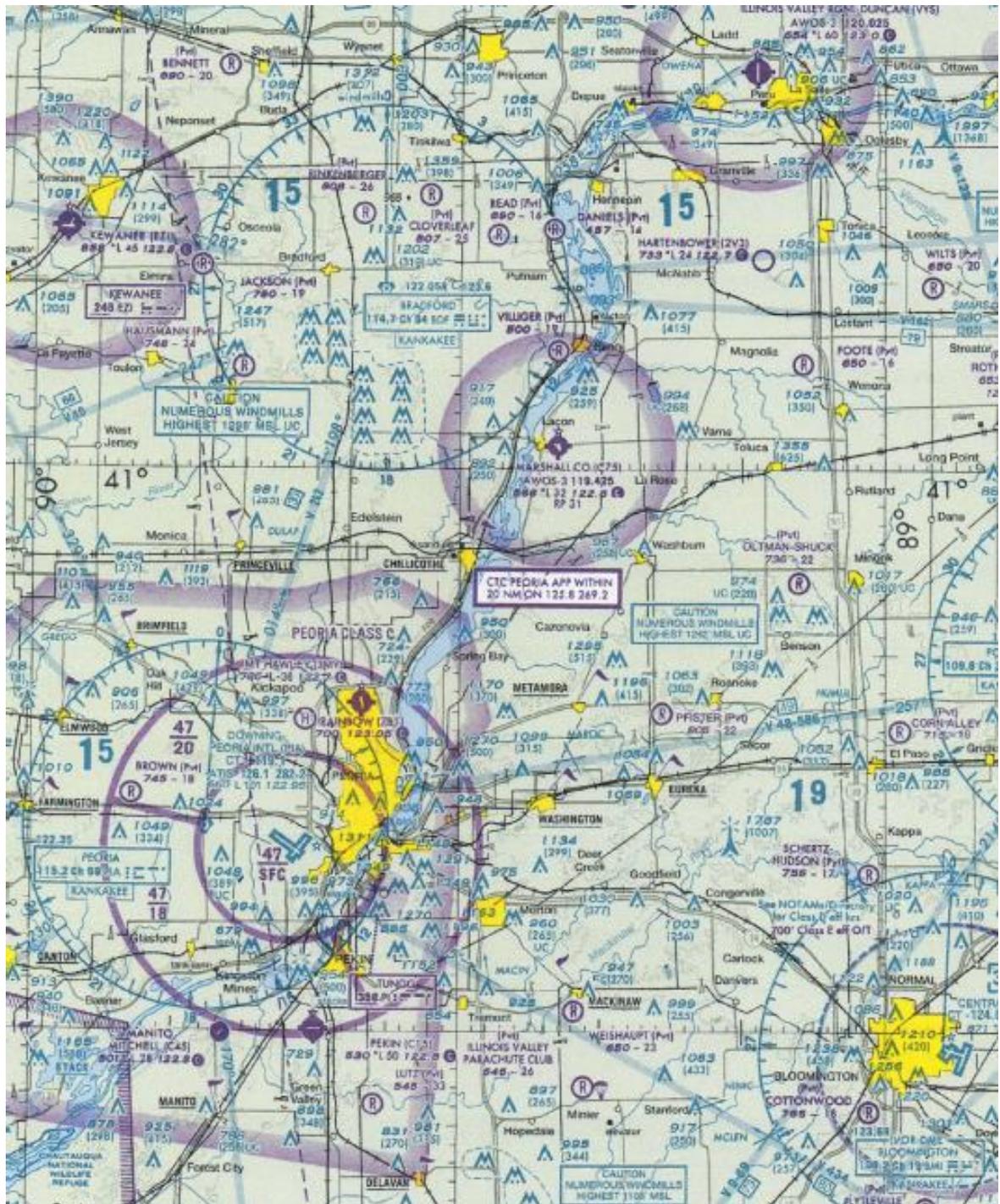
## **Spectators on the Launch Field**

Spectators may also be granted access to a balloon launch field - usually located at the main balloon field - In order to observe balloon operations close up. The decision to grant access will not be treated lightly and will be determined by the following criteria;

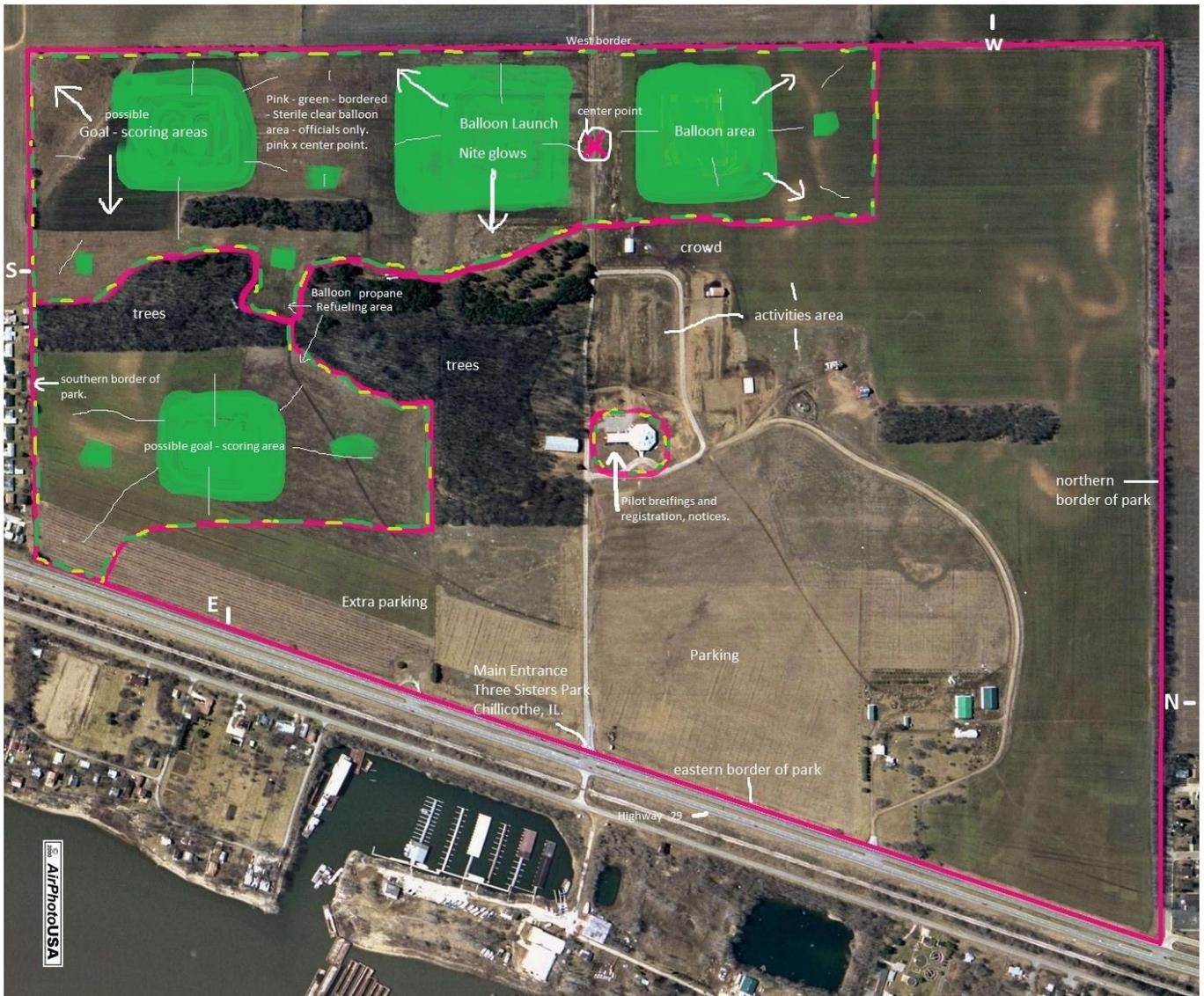
- 1.** Considered only for evening Launch, Tethers, or Night Glows.
- 2.** Wind speeds will be 5 kts or under.
- 3.** Pilots will be responsible for the safe operation of inflator fans, tie offs, equipment etc... at all times.
- 4.** There will be approximately 15 meters or roughly 50 feet minimum between gondolas.
- 5.** If conditions are such, the Balloon Event Director, Safety Officer, (USO) Officials, Pilots, & any on-site FAA personnel may together make the decision to allow spectators on a launch field.
- 6.** Prior to any balloon landing on the field, all spectators should be removed.







**(EXAMPLE) Three Sisters Park**  
17189 N. Rt. 29 - Chillicothe, IL 61523  
Lat: N 40° 53' 37  
Long: W - 89° 30' 35  
040\* / 22.5 NM off the PIA VOR



**"The U.S. Open National Championships"**

**City, state.**

**Dates:**

## OFFICIAL RULES

### SECTION 1 -THE EVENT

**A: EVENT:** Shall be known as; "*The U.S. Open National Championships*" - (USO).

**B: EVENT:** Organized by **Beyond Inc.**

**C: CORRESPONDENCE:** [www.Open-Championships.com](http://www.Open-Championships.com)

**D: OFFICIALS:**

Balloon Event Director - (Maury Petrehn)

Assistant Director/Safety Official - (tbd)

Scoring Official - (tbd)

Weather Official - (tbd)

**E: LOCATION:** The U.S. Open National Championships will take place in CITY, STATE. USA.

**F: DATES AND INFORMATION:** The official dates for the event are to be determined.

No balloon may carry a sign without the authorization of The U.S. Open National Championships.

Pilots are prohibited from providing additional Flight crewmembers or any individual with rides, which are in any way paid for, without the complete authorization of the (USO).

Balloons bearing advertisement shall not have priority or special consideration in flight.

All participants must be registered for/at/with The U.S. Open National Championships.

**G: PARTICIPATION:** The U.S. Open National Championships will be open to all pilots who meet qualifications. Dangerous, inconsiderate pilots who reflect poorly on the event or the sport may not be allowed participation. Violations of any rule(s) may result in penalties up to expulsion from this event & future events, forfeiture of show up money, prize money or winnings & other items or services that might also be due without such action.

**H: CLOSING ENTRY DATE:** Closing entry date for the event is left to the discretion of the Balloon Event Director.

**I: RISK:** The balloon shall at all times and in every aspect, be the responsibility of the pilot in command.

The pilot shall be deemed by their entry to thus agree to release (USO), and their respective officials, staff, members, employees, personnel, or any other parties from liability for their actions as they relate to (USO).

**J: CERTIFICATE OF INSURANCE:** A blanket insurance policy may be in effect during this event covering the organizers and affiliates only. Pilots must also have a valid insurance policy & shall carry Third Party Liability limits of at least \$300,000 Combined Single Limits (CSL) & if flight crew are to be carried at any time during (USO), pilots must have a Passenger Liability Limit of at least \$100,000 per passenger. Said policy of insurance must be in full force during the duration of (USO) & must not expire prior to 48 hours after the official close of (USO). Proof of insurance must be provided before/at registration.

All pilots shall be required to sign a responsibility statement issued by the event organizers.

### SECTION II - COMPETITION DETAILS

**K: CONTEST AREA:** An area defined by reference to the Official Competition Map(s), & published at the start of the event. Tasks will not be set, & results will not be measured or scored outside this area.

**L: OUT OF BOUNDS:** The Director may define areas as out of bounds; a mark, track or contest landing in such areas will not achieve a result. Any PZ's are also considered out of bounds for scoring purposes.

**M: PROHIBITED ZONE LIST:** The details of Prohibited Zones will be printed on the Official Competition Map and changes will be posted on the Official Notice Board and/or written supplements may be distributed at task briefings if/as changes occur.

**N: LANDOWNER PERMISSION:** Permission must be obtained from the landowner and/or tenant to launch a balloon... if they are not available you may not launch! If you land and they are not available - Fly on, or You Must Carry Out of any private property to retrieve the balloon. **Pilots who do not secure permission will be penalized competition points and/or disqualified from the event.** No landings will be permitted on (Highways) unless an emergency exists. Emergency conditions must be reported to (USO) Officials immediately. Failure to report said emergency conditions might result in a penalty and/or disqualification from event. Non-emergency landings may be analyzed by event officials for disciplinary purposes as well.

**O: LIVESTOCK AND CROP:** Balloons shall not fly closer than 500 feet from livestock or buildings containing livestock, and shall not damage crops except where given permission by the landowner. Inconsiderate behavior by pilots or crewmembers or reckless flying may be penalized and/or disqualified from event.

## **CHAPTER 1 - OBJECTIVES**

**1.1: OBJECTIVES:** The objectives of The U.S. Open National Championships are:

- To stimulate the development of Aerostation (Ballooning) by a comparison of performance of Aeronauts (Pilots) & Aerostats (Balloons); as well as helping to improve Pilots skills, safety, abilities & flight proficiency thru an array of flights, tasks and challenges.
- To reinforce friendships among aeronauts, spectators or anyone who wishes to learn & enjoy the sport.

**1.2: CHAMPION:** The Overall winner(s) shall be the balloonist(s) with the best aggregate score at the end of the event(s). To be recognized as a Competition & for a Champion to be declared, Single event only winners require at least (1) task in (1) flight. Multiple events; at least (7) tasks must be completed in at least (3) separate flights.

**\* ~ During all competition flights/tasks - only the Registered Pilot - (PIC) - can handle all controls, drop markers or create a mark to receive a score - this is a true challenge of the pilot's skill, concentration, focus & ability ~ \***

**1.3: LANGUAGE:** The official language of the event will be English.

**1.4: DOCUMENTATION:** The following documents must be available for inspection when each pilot registers on arrival and/or at any time during the event.

- A:** Pilot License - current and up to date
- B:** Pilot Log Book - showing biennial and currency flights/reviews
- C:** Balloon Log Book - showing current annual/inspection
- D:** Certificate of Airworthiness - current and up to date
- E:** Certificate of Registration - current and up to date
- F:** Certificate of Insurance - current and up to date
- G:** Aircraft Flight/Operations Manual - current and up to date

**1. 5: CLARIFICATION:** Terms "they", "their", "pilot", "competitor" etc... etc... Shall mean any being of whatever gender registered as a pilot participating in the event as it pertains to these rules, task sheets & briefings.

## **CHAPTER 2 - ENTRY CONDITIONS**

**2.1: QUALIFICATION:** Each (PIC) pilot-in-command shall meet the requirements of the organizer by completing all necessary entry forms, enclosing the proper entry fee, meeting the needed hour requirement, returning all registration and paperwork by any postmarked deadline.

**2.2: ACKNOWLEDGMENT:** A pilot who has not received an acknowledgment of their entry before the event dates should make inquiries to The U.S. Open National Championships.

**2.3: ACCEPTANCE OF THE RULES AND REGULATIONS:**

**2.3.1:** A pilot is expected to know, understand, & abide by all of the event Rules & Regulations issued for (USO). (If a pilot is unsure of a rule, it's the pilot's responsibility to gain clarification before a task in which rule is used).

**2.3.2:** All competing pilots may be given the opportunity to register their hand held GPS unit(s) which can log tracks & altitudes of their balloon. By doing so, they may use the registered unit(s) for possible scoring purposes or to dispute any flight penalty that they may incur. Track points of the log must be capable of specifying the position in (latitude/longitude), the altitude (barometric or GPS), As well as a digital local time stamp.

The Event Map/GPS Datum is: UTM/WGS 84 (3 - 5 second track pts. suggested) Metric measurements for distances & Feet measurements for altitudes. The Competitor must provide any/all of the required necessary computer cables/discs to allow for uploading/downloading of data.

**2.4: WAIVER:** A pilot, by entering, thereby waives any right of action against (USO), their respective members, volunteers, employees, or personnel for any damages sustained by them in consequence of any act or omission on the part of said bodies, officials, members, representatives or by other pilots.

**2.5: LIABILITY TO THIRD PARTIES:** By entering the event, a pilot/competitor assumes all risks & liability for injury, loss or damage to third parties or their property which may be caused by themselves or their crew.

**2.6: SAFETY:** Any/All meteorological reports, forecasts and/or other safety information will be provided in good faith for the pilots to use at their own discretion. Officials may be appointed to help regulate the inflation and launching of balloons. However, nothing shall diminish the responsibility of the pilots under this chapter.

Recall Procedures may also be used as described.

**2.7: RESPONSIBILITY:** Each pilot (PIC) shall be completely responsible for the safe operation of their balloon at all stages of inflation, take-off, flight, landing, transport, fueling, storage etc. They must ensure that their crew, equipment, & own level of skill are suitable for the conditions in their own best judgment throughout the event.

**2.8: CONDUCT:** Pilots & their crews are required to behave in a sportsmanlike manner at all times & comply with the directions of the (USO) officials. Profanity or un-sportsmanlike conduct directed at any officials, or any violation of the FAA Waiver can be grounds for point penalties up to expulsion from event(s). Pilot/crew shall be ambassadors of this event, shall act professional, courteous & positive for the event to all people & at all times.

### **CHAPTER 3 - BALLOON QUALIFICATIONS**

**3.1: DEFINITION OF BALLOON:** A hot air balloon is defined as a non-dirigible aerostat, which derives buoyancy or lift solely as a result of heating of the ambient air. No means of propulsion by any power source is allowed.

**Motion/Navigation shall be attained strictly from the available wind conditions at different altitudes.**

**3.2: FUEL SUPPLY:** Each balloon shall carry an adequate fuel supply to ensure safe completion of a flight with an adequate reserve. The lack of adequate fuel to complete a flight shall not be grounds for protest.

**3.3: DESIGNATION OF BALLOON:** Each pilot shall designate the balloon they are to fly during the event. No change of balloon may be made after the start of the first flight/task briefing except as provided in these rules.

**3.4: AIRWORTHINESS:** Aerostats (Balloons) flown in the event must have current certificates of registration and airworthiness, Or in place of the latter, equivalent documentation from the Federal Aviation Administration. The Organizers and/or officials are empowered to reject any aerostat, which in their opinion is not of a safe reasonable standard of airworthiness.

**3.5: DAMAGE TO A BALLOON:** If a balloon is damaged during the event, it may be repaired or replaced, however a complete envelope/system may be replaced only at the Directors discretion.

**3.5.1:** The pilot of a balloon, damaged while in flight, to the extent of affecting its airworthiness, (According to each balloon's operations/flight manual), is prohibited from continuing in the flight(s) and must land at the first practicable opportunity. The damage must be reported to the Safety Officer.

**3.5.2:** Any damage to a balloon affecting its airworthiness must be reported to the Safety Officer before it is entered for a further flight, and the balloon may only be flown after proper/approved repairs have been completed. A copy of Documentation of the approved repairs will be given to the Event Officials.

Penalty could be up to disqualification from the event.

**3.6: AUTOMATIC FLIGHT CONTROLS:** Any device designed to act as an automatic flight control is prohibited, regardless of the specific nature of the device.

**3.7: ALTIMETER:** Each balloon must carry a functioning altimeter in airworthy and good operating condition.

**3.8: COMPETITION NUMBERS:** (USO) registration numbers and/or basket banners must be attached and visible at all times during flight. All crew vehicles, including trailers, shall be clearly identified with the registration numbers as directed. Any penalty for failure to comply shall be applied to the first task of each flight(s).

**3.9: BASKET:** The term "basket" includes any crew or passenger compartment, regardless of its construction.

**3.10: RETRIEVE VEHICLE: PRIMARY:** The Primary retrieve vehicle is the vehicle which transports the balloon and its accessories or equipment. Only the primary retrieve vehicle will be allowed on (USO) common launch fields. Only one vehicle per balloon may be driven into any launch or landing area. Repeat violations of this rule may result in penalties up to expulsion from the event.

**3.10.1: SECONDARY:** Secondary retrieve vehicles are auxiliary vehicles used to aid in the retrieval etc...

As deemed necessary by the competitor. These vehicles must be similarly marked as the primary vehicle.

Primary or Secondary vehicles or the crew assigned to them may not be within a 100 Meter radius of a goal, target or marker/mark (of a competitor), as defined in the rules... Except with permission from officials, or if GPS is to be used to score that goal(s). (Not allowed in launch/landing areas) Penalty points can be applied.

#### **CHAPTER 4 - ORGANIZATION OFFICIALS**

**4.1: BALLOON EVENT DIRECTOR (Director):** The Balloon Event Director is responsible for the management, oversight & safe running of the balloon event. They may penalize/disqualify a pilot for misconduct or failure to obey the rules. They shall make decisions as they see fit in accordance with the rules. The Balloon Event Director shall oversee all balloon activities & shall have *The Final Say* on All Balloon Event related decisions.

**4.2: JURY:** A jury *can* be composed of jury members chosen at the start of the event.

Any/All registered Pilots and/or Officials at the event are eligible for these positions.

**4.3: DUTIES:** During the event, the jury *may* deal with protests/questions/complaints made by the pilots. Jury members shall have a thorough knowledge of the rules and regulations governing the event.

**4.3.1:** The quorum for a Jury meeting is at least two thirds of its total membership and from that a final vote shall require *more than* three fourths of its present membership quorum for a decision.

Or on the last day only, after the last flight/task only, it may be any/all members/officials still present.

**4.4: SAFETY OFFICIAL:** The Safety Official shall advise the Director on all matters of safety and will be in consultation on all weather forecasts and flight briefings.

#### **CHAPTER 5 - COMPLAINTS AND PROTESTS**

**5.1: ASSISTANCE:** A pilot dissatisfied on any matter should ask the Director or officials to assist them.

**5.2: COMPLAINT:** The purpose of a complaint is to obtain a correction without the need to make formal protest.

**5.2.1:** A complaint is a request by a pilot to the Balloon Event Director or officials to investigate any operational matter in which the pilot is dissatisfied. If after investigation, the complainant is still not satisfied, they may make a formal protest. (We can/will correct any/all officials' *mistakes* at *any* time we become aware of them).

**5.3: PROTESTS:** If dissatisfied with the Balloon Event Director's reply to a complaint, a pilot may protest to the Jury. The Pilot must, within one hour of receiving a reply to the complaint, declare intention to protest.

**5.3.1:** Time Limits: Unless otherwise stated, complaints must be made to the Director within 2 hours after the publication of the Official scores of any task, or within 1 hour of the publication of the Official scores of the final flight/task(s). Scores/Rankings will be posted as Preliminary/Official/Final. (No protests allowed after Final).

- 5.3.2:** Time Limits for Protests: Unless otherwise stated, within one hour of the reply to their complaint, A pilot must declare their intention to protest to the Director.
- 5.3.3:** Unless otherwise stated, within 2 hours of reply to a complaint the pilot must submit a protest in writing.
- 5.3.4:** Only a registered pilot flying in the event has the right of protest.
- 5.4: PROTEST PROCEDURE:** Intent to protest shall be stated and/or turned into the Balloon Event Director. A protest may be made only after the Event has begun, and a competition flight with tasks has occurred.
- 5.5: RIGHT OF HEARING:** A pilot who has protested must be available to make a verbal presentation of their case to the director, officials or to a Jury - In addition to any written statements & additional evidence.
- 5.6: MEETING OF JURY:** The Director may call a meeting of a Jury within hours of receiving a protest or at the next flight briefing if applicable. Decisions will be reached by a ¾ + majority.
- 5.6.1:** The Jury can hear both sides of the matter of any formal protest & may apply correctly the relevant rules for the event, enforcing any penalties if penalty is upheld, or helping resolve any problem/issue if overturned.

## **CHAPTER 7 - MAPS**

- 7.1: CONTEST AREA:** An area defined by reference to the Official Competition Map(s), & published at the start of the Event. Tasks will not be set, and results will not be measured outside this area.
- 7.2: OUT OF BOUNDS:** The Balloon Event Director may define areas as out of bounds; a mark, track or contest landing in such areas may not achieve a result. Any PZ's are also considered out of bounds for scoring purposes.
- 7.3: PROHIBITED ZONES (PZ's):** The Balloon Event Director may define airspace or landing areas as Prohibited Zones (PZ), they will be defined on the official competition map. New Prohibited Zones will be given verbally at a briefing or by posted notices. A map reference, the boundaries, and upper limit in feet above ground level will be published for each PZ. Pilots receiving a penalty for a balloon entering a PZ must meet with the Director to discuss the infringement. Failure to meet this requirement will incur - no result and/or possible grounding for the next scheduled flight(s) or task(s) or event(s).
- 7.3.1:** A pilot whose map does not show clearly the PZ's published by the Director will not be permitted to fly or having flown can be disqualified from the task(s) or event(s).
- 7.3.2:** Color codes added to the map have the following meanings: (all subject to amendment as/if needed)
- A: GRAY** - 1,000 feet AGL (PZ)
  - B: RED** - 500 feet AGL (PZ)
  - C: ORANGE** - 250 feet AGL (PZ)
  - D: YELLOW** - No Launch or Landing (PZ) - (fly through ok)
- 7.3.3:** The airspace above the waiver ceiling (7,500 MSL?) is a **Blue** (PZ).
- 7.3.4:** Balloons entering a PZ may be penalized competition points up to disqualification from event.
- 7.3.5:** All pilots are required to carry a competition map in the basket, making sure that all published PZ's & all out-of-bounds areas are clearly and accurately marked on that map. An adequate map of aeronautical restrictions must also be carried, *unless* the restrictions are also marked on the official competition map. A pilot violating this rule will not be permitted to fly the task(s), or having flown, May be penalized competition points or may be disqualified from the task(s) or event(s).
- 7.4: EARTH TO BE FLAT:** For scoring purposes, the earth is flat; unless otherwise stated on a task sheet or at a briefing, then all map calculations etc... shall be based on the **Competition Map** & will be taken as accurate.
- 7.5: MAP COORDINATES:** To identify a point of the competition map, coordinates will be written in an eight-digit format, First four digits west/east, second four digits south/north. (Easting then Northing) (Read right up). Competition Map/GPS Datum shall be - UTM / WGS 84 - metric for distance, feet for altitude.

## CHAPTER 8 - COMPETITION BRIEFING

**8.1: DEFINITION OF THE COMPETITION:** The U.S. Open National Championships (USO) will consist of a series of flights/tasks. The number/frequency of the tasks shall be at the discretion of the Balloon Event Director.

**8.2: VALID TASK:** A valid task is defined as one in which all entered pilots were given an equal & fair opportunity to make a proper start/launch/attempt at a result, unless they had withdrawn or had been disqualified.

**8.3: TASK SELECTION:** The Director shall select tasks from those published, also according to the prevailing conditions from flight to flight. Particular tasks may be set more than once or not at all. Any combination of tasks may be set by the Director for multiple task flights. At the flight briefing preceding the task(s), the Director shall announce which task(s) and in what order are to be flown.

**8.4: MULTIPLE TASKS:** The Director may set multiple tasks to be carried out consecutively during the same flight. Each task shall be scored separately; some defined tasks/mark may also affect the results of other tasks.

**8.5: TASK BRIEFINGS:** A briefing on the major aspects of (USO) will be held before the event begins. Briefings for flights will be held as published. Any variations in times will be announced/posted. At the briefing, the following information may be given verbally, and/or by a written data task sheet, and/or by posted notices, as/if needed.

**A:** Roll call.

**B:** Meteorological synopsis, winds, surface & aloft, as/if needed.

**C:** Air traffic & safety information.

**D:** Details of Prohibited Zones (PZ's).

**E:** Any amendment(s) to the rules.

**F:** Detailed task data and/or task sheet.

**G:** Time/place of next briefing.

**H:** Location of Signal Point (if applicable).

**I:** Time check if needed... (Local GPS time is Always the Official time)

**8.6: SUPPLEMENTARY BRIEFING:** If it should be necessary to publish additional or revised information to pilots at the launch field, a flag can be raised at a signals point. (Each pilot should attend in person).

Information will be given verbally and/or a written copy may also be displayed or handed out.

All pilots will be deemed to have proper notice of the information. Alternatively, Officials may circulate a written notice to each balloon & obtain the signature of the pilot or crewmember.

**8.7: ENTRY FOR TASKS:** A pilot shall enter a task by answering to their name and/or assigned number at a roll call for that flight/task briefing.

**8.8: LATE ENTRY:** A pilot who does not enter the task at the briefing may make a late entry with a penalty of task points up to five minutes before the actual start of the launch period, or other task points thereafter. They should report to the officials at the Signals Point & request a late entry. Officials may not be available to give a personal briefing except in regard to safety matters and PZ's. In tasks where pilots select their own launch areas, late entries shall be made at the briefing area to an official.

**8.9: OFFICIAL TIME:** Official time is always GPS time corrected for local time offset as needed.

## CHAPTER 9 - LAUNCH PROCEDURES

**9.1: LAUNCH AREA:** A launch area is defined as an area in which a balloon may take off for a flight. If the launch area is the same for all pilots, the Director may allocate to each pilot a space in which to prepare/inflate their balloon. The launch area/point should be recorded in writing and/or by GPS/map coordinates. Launch/Landing "permission" from "public" places is not required (schools, parks, clear roads or right of ways, parking lots etc...)

**9.1.1:** For each task not requiring a common launch area, where permission is required to launch, it must be individually secured from the landowner, tenant, occupant or Rural Relations. This permission **must** be obtained before driving into, inflating, launching, landing or packing up on private land. \* (~ No Exceptions ~) \*

**Pilots who do not secure permission will be penalized competition points and/or disqualified from the event!**

**9.1.2:** The boundary of the launch area is the physical boundary of the field or a circle of radius 100 Meters from the inflation point, whichever is less. (If possible or desired, you may walk the balloon inside of this boundary).

**9.1.3:** A pilot taking off outside the prescribed distances, the contest area, or out of bounds may achieve a - No result for the first task and/or possibly all tasks for that flight.

**9.2: LAUNCH POINT:** A launch point is a common point published by the Director in or near the launch area, from which all angles/distances etc... are measured irrespective of the take-off points of individual balloons. (Not applicable to tasks that do not have a common launch point.)

**9.2.1:** No more than one vehicle per balloon may be present in a common launch area during the launch. There can be a penalty for infringement and repeat violations may result in expulsion from the event.

**9.3: PREPARATION OF BALLOONS:** Officials may allocate a space to each balloon in common launch areas in which to prepare & inflate. They have the authority to regulate operations of all balloons, vehicles, pilots & crews in any common launch area.

**9.3.1:** Quick-release tie-offs **must** be used on all launches from a common launch area, they are also highly recommended in individual launch areas... (*Please - Do Not tie off to trailers!*) Penalty is possible.

**9.4: COLD INFLATION:** Burners may be briefly tested & cold air may be introduced into the envelope only as necessary for rigging/inspection, but fans may not be run continuously or hot inflation may not take place before the signal to commence inflation is given. Penalty for infringement of this rule may be points.

**9.5: SIGNALS POINT:** The Signals Point is a point at the launch area at which flag signals can be displayed. Also where pilots can make task declarations, late entries, or supplementary briefings take place. If the Director calls a supplementary briefing, it will be held at the announced location. Pilots are responsible for watching the signals point for flag signals. Obscuring of the Signals Point by other balloons shall not be grounds for protest.

**9.6: LAUNCH SIGNALS:** *Colored flags* displayed at the signal point will have the following meanings:

**RED** - Waiting, No inflation permitted.

**YELLOW** - Five minute warning for launch to begin or end.

**GREEN** - Permission for all balloons to begin hot inflation/launch.

**PINK** - Supplementary/amended briefing information available at signals point.

**BLACK** - Task(s) canceled - all flight(s) canceled.

**WHITE** - Task(s) canceled - conditions are flyable, Pilot's discretion to fly.

**BLUE** - Reserved for special use.

**9.7: LAUNCH PERIOD:** No take-off may be made outside the permitted launch period. The yellow flag may be raised 5 minutes before the end of the launch period, penalty for this rule is point(s) per minute early or late.

**9.8: ADEQUATE TIME:** A pilot who has been given permission to commence inflation 20 or more minutes before the end of the announced launch period is deemed to have adequate time to Launch.

**9.9: EXTENSION OF TIME:** A competitor may request an extension of time from Officials and they may be granted an extension if satisfied that the competitor was delayed by the action of officials or other competitors, or by causes outside their control.

**9.10: LAUNCHING ORDER:** Where conditions do not allow all balloons to inflate simultaneously, balloons may be allotted an order of priority, which may be rotated from one task to the next. Pilots may commence hot inflation when the appropriate flag signal is hoisted or when given official permission.

Penalty for infringement of this rule may be competition points.

**9.11: READINESS FOR TAKE-OFF:** When a pilot is completely ready for take-off they may wave a white towel or otherwise indicate to the Launch Director or assigned crew their readiness to take off. When acknowledged, the pilot may leave the towel displayed on the front of the basket. The Launch Director or assigned crew will, as best as possible, launch the balloons in order of signaling their readiness. Pilots may equip themselves with a suitable white towel or cloth roughly 8 to 18 inches for this purpose. Pilots who take off without proper permission can be penalized task points or may be excused from the event.

**9.11.1:** To avoid congestion, extension of time may not be granted when competitors are ready, or wave their towel etc... within the Last ten (10) minutes of the launch period.

**9.12: TAKE-OFF PROCEDURE:** The Launch Director or assigned crew can give pilots permission to launch, whereby the pilot may then take off. The pilot always maintains the full responsibility for their take-off, including adequate lift to clear obstacles, other balloons and to continue on safely in flight. If the balloon does not clear the ground within 60 seconds, take off may be canceled, the pilot may also be required to deflate and/or move their balloon. Pilots who fail to follow launch directions may be penalized competition points.

**9.13: TAKE-OFF:** A balloon is considered to have taken off & is flying once it passes over the boundary of that launch area. Unless otherwise defined at a task briefing, any/all timing is from the moment of the lift off from the ground & release from the crew or quick release. (Unless otherwise described, only 1 take off is allowed).

**9.14: ABORTED TAKE-OFF:** A pilot may abort their take-off for safety reasons and must clear their balloon as quickly as possible. They may attempt further take-off from the same launch area, if able to do so within any time limit set also without obstructing any other balloons.

**9.15: CLEARING LAUNCH AREA:** After the basket first leaves the ground, a pilot shall pass over the boundary of the launch area or 100 meters in any direction, and/or shall have climbed to 500 feet AGL within 5 minutes.

## **CHAPTER 10 - FLIGHT RULES**

**10.1: MID AIR COLLISION:** A pilot is responsible for avoiding collision between non-fabric parts of the balloon & the envelope of any other balloon. When two balloons are converging, the pilot of the higher balloon shall give way, climbing if necessary to avoid any collision. In case of collision, both pilots may be penalized, not necessarily by the same amount. Penalty may be points, up to disqualification from task(s) or event(s).

**10.1.1:** No pilot shall initiate or maintain a fast climb unless they are certain that their own envelope obscures no higher balloon. Recommended maximum ascent/descent rate in congested areas or airspace is 300 feet per minute. Penalty for infringement of this rule may be competition points up to disqualification from the event.

**10.1.2:** Competitors causing a collision may be penalized competition points. Any repeated offense and that competitor may be grounded for the next flight(s) or disqualified from the event.

**10.2: RECKLESS FLYING:** Reckless flying - (flying which creates unnecessary risk to other balloons or people on the ground), Not necessarily causing any collision - may be penalized up to disqualification from the event.

**All Pilots are responsible for flying within the limitations of their own aircraft operations/flight manual.**

**Pilots Must be Under Full & Total Control of their Aircraft at All times!** \* (~ No Exceptions ~) \*

**10.3: CLEARING GOAL AREA:** Pilots that have completed a task shall clear the target or goal area as quickly as reasonably possible. They shall give way to pilots that have not yet dropped their markers or scored. Penalty for infringement may be task points up to disqualification.

**10.4: DROPPING OBJECTS:** No objects (except small pieces of paper, shaving cream, etc...) other than official markers shall be dropped from the balloon. Penalty can be competition task points up to expulsion from event.

**10.5: FLYING BEHAVIOR:** Balloons shall not fly closer than 500 feet from livestock or buildings containing livestock, & shall not damage crops except where given permission by the landowner. Inconsiderate behavior, Reckless flying etc... by pilots/crewmembers may be penalized points or may be excused from the event.

- 10.6: LANDOWNER:** For competition purposes the term "Landowner" means the person who is responsible for property or any crop/livestock on the land, not necessarily the legal owner of the land itself. Launch/Landing "permission" from "public" places is not required (schools, parks, clear roads or right of ways, parking lots etc...)
- 10.7: COLLISION:** A pilot whose balloon is in a collision with power or telephone lines, or their supports, at any time between inflation to the completion of the final landing, may be penalized competition points. You must inform officials if such activities occur, collisions may additionally be penalized under the rule for reckless flying.
- 10.8: FLIGHT CREW:** Unless required to fly solo, a pilot may carry additional Flight crew (of their own choice) during a Flight/task - they may carry out any duties assigned to them, except act as pilot-in-command.
- 10.9: GROUND CREW:** Each pilot shall ensure that they have sufficient crew to operate their balloon and retrieval vehicle. The pilot shall ensure safe operations & is responsible for the actions of their crew at all times.
- 10.10: DISEMBARKATION:** No one may enter or leave the basket between take-off thru the completion of all competition tasks on any particular flight, penalty may be applied.
- 10.11: ASSISTANCE:** In competitive tasks, any physical assistance from persons on the ground prior to completing the task(s) - Is not permitted, except during take-off or final landing.
- 10.12: AIR LAW:** Infringement of the FAA Event Waiver may be penalized points, up to event disqualification.
- 10.13: RECALL PROCEDURE:** Cancellation of a flight or task(s) due to deterioration of weather etc... will involve a recall to be made by use of aircraft radio, cell phone, or other means - details will be given at the briefings.

## **CHAPTER 11 - LANDINGS**

- 11.1: LANDINGS:** All tasks are completed when the pilot lands after dropping their final marker or after otherwise achieving their final result. The pilot may land at their discretion subject to any distances required by the task sheet/rules. The landing area/point should be recorded in writing and/or by GPS/map coordinates. In some instances tasks may require/allow a contest landing with a marker and/or GPS to create a mark.
- 11.1.1:** All pilots must have landed by sunset as published and/or announced at the task briefing. Penalty for this rule may be task points per minute or part thereof up to expulsion from event.
- 11.2: GROUND CONTACT 1:** After passing over the boundary of any launch area, no part of the balloon or anything attached to it may make any uncontrolled contact with the ground or water surface or anything resting on or attached to the ground, until last task has been completed. Penalty may be competition points. Note: contact is if, as a result, a true change of motion/direction of the basket/envelope is created or observed.
- 11.3: GROUND CONTACT 2:** No part of the balloon or anything attached to it may make any uncontrolled contact with the ground or water surface or anything resting on or attached to the ground (except marker) within the marker measuring scoring area or within 100 meters of any goal/target set by the Director or selected by a competitor. Penalty for contact may be competition points. Note: Competitors will not be penalized under both rules for any single contact - 1 per contact.
- 11.4: GROUND:** Ground includes any water surface & anything attached to or resting on the earth.
- 11.5: PERMISSION TO RETRIEVE:** Permission must be obtained from the landowner and/or tenant prior to driving on to private property to retrieve the balloon. **If unavailable - Fly on, or You Must Carry Out!**
- Pilots who do not secure permission will be penalized competition points and/or disqualified from the event!**
- No landings will be permitted on Highways, unless emergency conditions exist. Emergency conditions must be reported to (USO) Event Officials immediately. Failure to report said emergency condition might result in a penalty of competition points. Non-emergency landings will be analyzed by race officials for possible disciplinary actions and/or penalties. (If allowed to land in any scoring/target area - You Must stay clear of goal & Do Not interfere with other competitors still attempting to achieve a mark/result! No Exceptions or Excuses!) Launch/Landing "permission" from "public" places is not required - schools, parks, clear roads or right of ways, parking lots etc... But, if you are officially told you **cannot** launch/land there you must comply with that request.

## **CHAPTER 12 - GOAL/TARGET/MARKER/MARK/FLIGHT REPORT FORM**

**12.1: GOAL:** A coordinate grid reference point on the competition map set by the officials or chosen by pilot.

**12. 2: GOAL DECLARATIONS BY COMPETITORS:** A competitor shall identify a goal by map coordinates.

(For goal declaration from an official pre-defined goals list, the 1, 2, 3, - digit goal number may be used).

**12.2.1:** In tasks where a competitor is required to declare their goal(s) or other declarations according to time, the declaration shall be made before such time ends at the place(s) specified in the briefing data, clearly identifying pilot name/competition number etc... (PDG goal(s) may be allowed anywhere on the map).

**12.2.2:** A competitor who wishes to revise their declaration may deposit a further declaration, within the declaration time, provided that it is clearly marked to distinguish it from any previously made declaration(s). An official will close the declarations precisely at the end of the declaration period. They may accept late goal declarations, and may write the time on them. Penalty for late declarations may be task points per minute or - no result. **(Times and/or distances may apply to all declarations)**

**12.2.3:** If the declaration has to be made before takeoff and the competitor fails to do so, they will not achieve a result for the task(s). **(Times and/or distances may apply to all declarations)**

**12.2.4:** Declarations will be accepted in the form of written paper turned into official(s) before the flight or task as directed in briefing, each declaration must be signed or pre-signed by the pilot.

**12.2.5:** Declarations may also be accepted if written on the tail of an official marker used in a task according to the briefing/task data. **(Times and/or distances may apply to all declarations)**

**12.2.6:** Declarations may also be accepted in the form of a digital signature device such as a cell phone text message or some other form or device that has an actual digital time stamp may also be used to declare a goal.

**12.2.7:** Any/all declarations made & turned in must be done in the order and/or fashion described in the task data according to the rules, task sheet, & briefing information before each flight.

**12.3: TARGET:** The target is usually made from bright contrasting colored material placed in the form of a rectangular cross displayed in the vicinity of a goal. Where a target is used, measurements are made from the center of the target, not from the goal, unless otherwise specified during the task briefing. A pilot reaching a goal where an expected target is not displayed should aim for the goal coordinates. Once placed, a Target may not be moved for any reason after any competitor has verified its location. (Task will be thrown out!)

**12.3.1:** Various colors, shapes and sizes of targets are permitted at the Balloon Event Directors discretion.

**12.4: MARKER:** A marker is a weighted streamer supplied by the organizer for a given task(s).

The pilot is responsible for collecting/returning all the necessary marker(s) before/after each flight/task.

A marker's streamer must be unfurled before release. Penalty for infringement of this rule may be task points.

**12.4.1:** Pilots who throw modified or unauthorized markers may be penalized task points or receive no result.

**12.4.2:** The pilot is responsible for insuring that their competition number is already written on the marker. Failure to do so may incur - no result. (only the PIC can drop a marker and/or achieve/create a mark - rule 1.2)

**12.4.3:** Pilots who drop or throw markers that land in the spectator area shall be disqualified from that task.

Repeated violation (more than one time) of this rule shall be cause for disqualification from the event.

**12.5: MARKER RELEASE:** The marker may be thrown if a Gravity Drop is not specified on the task sheet. (12.7)

**12.6: GRAVITY MARKER DROP:** For a Gravity Marker Drop the pilot must hold an unfurled marker & release the marker. Gravity shall be the only means for the marker to drop. No horizontal motion shall be applied to the marker. Penalty for infringements with no competitive advantage may be task points.

A marker thrown into a scoring area might be considered a valid result and a penalty may be applied.

**12.7: THROWN MARKER DROP:** Thrown Marker Drop, Pilot must be standing with both feet on the floor of the basket, no mechanism besides pilot may be used to propel the marker. Penalty may be task points or no result. (The option to allow only certain types of "throwing" - is left up to the discretion of the Balloon Event Director).

~ Example ~ Pilots may only throw over and/or under hand & not "wind" or "windmill" baggie before release ~

**12.8: MARK:** A mark is the point of the *ground* vertically below where an official marker comes to rest after dropping from the balloon, or a waypoint/track point from a GPS reading if a marker is not used. **(PIC Only! 1.2)**

**12.9: OBSERVED MARK:** An observed mark is a mark, which has been measured/certified as correct by a scorer; Measurements will be made to the point of the weighted bag portion of the marker. The pilot may provide assistance to scorers in locating the marker/certifying the mark. Only authorized officials, appointed scorers, may touch/interfere with marker on the ground. It is the pilots responsibility to get marker into scoring areas!

**12.10: LOST MARKERS:** The result of a pilot, whose dropped markers were observed by an official & then subsequently lost, will be assessed a result in accordance with whatever evidence is available to the scorers. All of the supported evidence of pilot/crew etc... may be included & used as proof for this purpose. There will be a \$25.00 charge to replace any/each lost marker!

**12.11: SCORING PERIOD:** A time period defined for a particular task outside which results cannot be achieved.

**12.12: LIMITED AREA SCORING:** The Director may use limited area scoring for any/all task(s) called. A description of the scoring area(s) shall be provided either verbally and/or in writing at the task briefing. Pilots who do not achieve a mark in the announced scoring area(s) may not achieve a result. **(Also See 14.3.1)**

**12.13: FLIGHT REPORT FORM:** A Flight Report Form stating the location(s) & time(s) of take-off/landing, estimated marks or actual task results, landowner related issues, & any other relevant data shall be completed, signed & turned in by the Pilot/competitor after each flight.

**12.13.1:** The Pilot/competitor will return the form along with any unused markers/GPS tracks, etc... to the area designated at the briefing - any undue delay in returning the above items may result in a penalty. An extension of time may also be granted at the discretion of the Balloon Event Director for any/all scoring purposes.

## **CHAPTER 13 - PENALTIES/FUELING**

**13.1: DISHONESTY:** A pilot who deliberately & knowingly attempts to deceive or mislead the officials, and/or interferes with any other pilot/property etc... will be penalized competition points and/or may be disqualified from the task(s) or from the event instantly - without protest! **Lying or cheating will not be tolerated - period!**

**13.2: UNSPECIFIED PENALTIES:** A pilot infringing on any rule(s) for which a penalty is not specified, may be penalized at the full discretion of the Director; deducting from task or competition points, or disqualifying them from any task(s) or from the event. At the Director's discretion, a warning may also be given for any offense.

**13.3: LAUNCH AREA VIOLATIONS:** When the launch area is common for all pilots, a pilot taking off outside the permitted launch area or launch period may be penalized task points or disqualified from that task, and/or possibly any/all tasks for that flight.

**13.3.1:** Where a pilot's choice launch area violates any of the prescribed time/distance limits etc... The pilot may be penalized task points or disqualified from that task, and/or all tasks for that flight.

**13.4: PENALTY POINTS:** Point penalties are adjusted into a pilot's score, and may affect their total combined score/ranking for that event. Penalties are enforced 1 flight at a time, and cannot be used or applied on the next flight to come. (We can/will correct any/all officials' *mistakes* at *any* time we become aware of them).

**13.5: FAR'S - FEDERAL AVIATION REGULATIONS:** It is the responsibility of pilots to follow the requirements of the Federal Aviation Regulations & any waiver thereof for (USO). In all cases involving air traffic rules & air safety, the Balloon Event Director or delegated official will act in consultation with FAA personnel.

**13.6: FINAL LANDING DISTANCE LIMITS:** (Unless otherwise stated) Landing distance is always: 457+ meters (1500+ feet) away from the last target/goal. Where a final landing violates a prescribed distance limit, the pilot may be penalized task points. The penalty may be waived if the pilot can show they were unable to comply with the distance within 15 minutes due to light wind and/or travels less than 500 feet for safety concerns. All evening tasks will end at least 15 minutes prior to Sunset.

**13.7: VENTING OF RAW PROPANE:** For Obvious Safety Reasons - Do Not vent raw propane on the launch field or any areas outside of the Launch field! (Other than at refueling)

**13.8: PROPANE REFUELING:** When refueling Please follow these guidelines - **COMMON SENSE!**

1. Have refueling adapters hooked up prior to entering the fueling area. After fueling, leave the area to complete the removal of adapters or any other housekeeping required. BE SMART! BE SAFE!
2. Only 2 people per vehicle in the fueling area.
3. Disarm strikers and remove them from the basket.
4. Cell Phones OFF and left in vehicle.
5. All vehicles must be turned off with windows down.
6. No standing inside of basket during fueling.
7. No refueling inside of enclosed trailers or vans.
8. No Smoking!
9. All persons helping/working in the fueling area are officials of the event and Rule 2.8 may apply.

## **CHAPTER 14 - RANKING/RESULTS/SCORING/POINTS**

**14.1: RANKING ORDER:** Competitors will be ranked in order of performance & results according to the rules set for each task; Scores shall be posted only after any adjustments have been made for penalties. Results/Scores are posted as - (Preliminary/Official/Final). (No protests will be accepted after "Final" scores are posted).

**14.2: MEASURING RESULTS:** Any/All goals scored on the surface of the earth shall be directly measured in meters from the center of a target, or if GPS is used for scoring - from a set of goal coordinates to the mark of competitor. Any/All goals scored above the surface of the earth using GPS will be measured in meters from the goal coordinates & if needed, adding in any altitude(s) as described in scoring rules or task data to create a direct measurement straight distance to the selected goal/mark of competitor = (Pythagorean/Hypotenuse).

**14.3: SCORING AREA:** Each goal/target will have a defined scoring area(s) &/or distance applicable to each task. Competitors shall be measured/scored based on those scoring areas as defined in rules/task sheets/briefings.

**14.3.1** Scoring Areas will also be defined as anything below 18 inches. Unless otherwise stated at the briefing or on the task sheet, a baggie above that height, located on **Any** obstacle shall be a no result! The intent is to make it the pilots' responsibility to get their marker on the **Ground** in described scoring areas - even if it means maybe sacrificing a better result, still better than no result. (structures, trees, bush, picnic table, swing set, fence, cars, other balloons etc...) A baggie located inside of anything over that height will be considered no result (crops, big rock, long "thick" grass, trash can, car window, baby stroller, bush etc...) No baggies will be scored in water. Depending on how a particular task is called, a GPS/track point may still create a "Mark" to achieve result/score.

**14.4: RESULTS:** A result is the distance from a mark achieved by the pilot on each task as it relates to a task/goal. (Results may also be rounded up or down). The results shall be the basis for the following scores.

**14.4.1:** There shall always be scoring values/areas for each task; point values of zero up to a maximum of 7 ½ points. Any/all pilots who fly but fail to achieve a result on any given task shall receive 7 ½ points. **And/or** (Placement/Percentage Scoring may also be used by the Director) - (Also see rule 12.12: limited area scoring).

**14.4.2:** Any pilot who chooses to compete in the event and does not fly for whatever reason in any or all tasks shall receive a score of (11) eleven points for each task not flown on any flight not flown.

**14.4.3:** Whenever it is possible, direct measurement to a mark will be taken to determine the result/score. For all other scores, GPS can be included in the determination of the result & subsequent score. We will try to always measure up to 100 meters with a tape (inside of the defined scoring area), then up to 100 meters more with a GPS (inside of the defined scoring area), then pilots GPS tracks may be used after that. Remember that no pilot GPS track/mark result can be better than any result taken on the ground by officials - (add 1 meter). (We can/will correct any/all officials' mistakes at any time we become aware of them).

**14.5: SCORING:** Scoring will be created from the best result possible according to each task & shall be cumulative for all of the overall competitive tasks called/flown/scored during the duration of the event(s).

**14.5.A: \*Scoring Option A:** is a direct measurement from a target/goal to a mark created from a marker dropped by a pilot out of their balloon during a flight or task. (GPS may or may not be used for mark, if missed)

**14.5.B: \*Scoring Option B:** is a GPS reading directly from a goal/target to a mark created from a marker or a GPS waypoint/track point flown in/on a balloon. (this option may or may not involve an altitude in the result)

**14.6: SCORES:** Scores are the totals of the point values given to a competition result from a task or tasks throughout the event; they will be adjusted by point penalties if/as needed.

The point value system must stay the same throughout the duration of the entire event(s).

**14.6.1:** The lowest point total from all scores received shall determine the ranking order for the event(s). Ties are not broken but are accepted as a tie & performance of equal skill or ability for that task/event(s).

**14.6.2:** All competitors are responsible for making sure their score reflects the results they have achieved. Scores will be posted as Preliminary/Official/Final. Once a score is Final it may not be protested.

**14.7: POINTS:** Are the value that is given to a result achieved on a task or tasks throughout the event(s).

**14.7.1: \*Point Option 1:** scoring will have areas defined as - Inside of: 1 meter = 0 point score (Best)

2 meters = ½ point score, 4 meters = 1 point score, 7 meters = 1 ½ point score, 11 meters = 2 pts, 15 meters = 2 ½ pts, 20 meters = 3 pts, 25 meters = 3 ½ pts, 35 meters = 4 pts, 50 meters = 4 ½ pts, 75 meters = 5 pts, 100 meters = 5 ½ pts, 150 meters = 6 pts, 200 meters = 6 ½ pts, 300 meters = 7 pts, Outside of 300 meters = 7 ½ points, no flight = 11 pts. (Also see placement scoring)

**14.7.2: \*Point Option 2:** scoring will have areas defined as - Inside of: 4 meters = 0 point score (Best)

7 meters = ½ pt, 11 meters = 1 pt, 15 meters = 1 ½ pts, 25 meters = 2 pts, 35 meters = 2 ½ pts, 50 meters = 3 pts, 75 meters = 3 ½ pts, 100 meters = 4 pts, 150 meters = 4 ½ pts, 200 meters = 5 pts, 250 meters = 5 ½ pts, 300 meters = 6 pts, 400 meters = 6 ½ pts, 500 meters = 7 pts, Outside of 500 meters = 7 ½ points, no flight = 11 points. (Also see placement scoring)

**14.7.3:** All Point/Scoring areas may be adjusted if needed as long as there are always 0 to 7 ½ points.

They may also be defined as Inside of: Radius or a Diameter - for each scoring option on each task flown.

If Not defined - it is always the default distance - Inside a Radius of:

**14.8: Placement Scoring: (PLC)** Pilots are scored based on their position in relation to the results of each other. Best result/1<sup>st</sup> place = 0 points, 2<sup>nd</sup> = ½ pt, 3<sup>rd</sup> = 1, 4<sup>th</sup> = 1½, 5<sup>th</sup> = 2, 6<sup>th</sup> = 2½, 7<sup>th</sup> = 3, 8<sup>th</sup> = 3½, 9<sup>th</sup> = 4, 10<sup>th</sup> = 4½, 11<sup>th</sup> = 5, 12<sup>th</sup> = 5½, 13<sup>th</sup> = 6, 14<sup>th</sup> = 6½ pt, 15<sup>th</sup> place = 7 points, all pilots outside of 15<sup>th</sup> place = 7½ points. Ties are scored as ties. No results = 7 ½ points, or average of best/worst place remaining scores. No fly = 11 points.

**14.9: Percentage Scoring (%):** If no pilot enters either of the 2 different types of scoring areas which may be chosen - Option 1: 300 meters, Option 2: 500 meters, then the possibility of using Percentage scoring becomes available at the discretion of Balloon Event Director. Simply put, scored results will be based on your result as compared to the best result achieved by any pilot.

**14.9.1: % Example:** best result = 1742 meters, anyone within 2% of that result gets the same score 0 pts. (Best) 1742m + 1.999 % = 1777 meters (rounded) any pilot inside of this distance receives the best score. Anyone within 4% gets the ½ point score - 1742 + 3.999 % = 1812 meters (Inside of: the distance) Then percentages within - 7% = 1 pt, 11% = 1 ½ pts, 15% = 2 pts, 20% = 2 ½ pts, 25% = 3 pts, 30% = 3 ½ pts, 35% = 4 pts, 40% = 4 ½ pts, 45% = 5 pts, 50% = 5 ½ pts, 60% = 6 pts, 70% = 6 ½ pts, 85% = 7 pts, Last example: 1742 + 84.999 % = inside of 3223 meters = 7 point score - Outside of 85 % = 7 ½ point score - (average, "pool" points) No flight = 11 pts.

**\*Chapter 15 - FLIGHTS/TASKS/GOALS/CHALLENGES - See Pages 6 - 7 - 8 ~ Also See Scoring Diagrams ~**

## **“The U.S. Open National Championships”**

### **Overall Competition Prize Money Breakdown - 2020**

**(EXAMPLE) City, State.**

*1<sup>st</sup> - \$50,000*

*2<sup>nd</sup> - \$35,000*

*3<sup>rd</sup> - \$25,000*

*4<sup>th</sup> - \$15,000*

*5<sup>th</sup> - \$10,000*

*6<sup>th</sup> - \$9,000*

*7<sup>th</sup> - \$8,000*

*8<sup>th</sup> - \$7,000*

*9<sup>th</sup> - \$6,000*

*10<sup>th</sup> - \$5,000*

*11<sup>th</sup> - 50<sup>th</sup> = \$3,500*

*Show Up \$ & Top 3 pilots from the State compete for \$\$\$ & Trophies.*

*Plus pole grabs = (\$50,000) & Teams = (\$50,000!) =*

***\$500,000 dollars in total Prize money!***

**(EXAMPLE)**