Meet Purpose: To have a safe, fair and fun hang gliding competition. We are going to do our best. If you have any special needs or concerns - let us know - we want, you to have a great time.

General:

Sanction The Midwest 2017 Competition is sanctioned by the USHPA and sanctioned Category 2 by CIVL. The USHPA rules governing competition apply except where local rules supersede. Location The competition begins daily at Tween Oaks Airport at Whitewater, WI 53190, USA.

Schedule Contest Dates June 04, 2017 – June 10, 2017.

Activity Date Time Location

Pilot Check-in June 04, 2017 9.00-11.00 am and 4:00 pm to 8:00 pm at Tween Oaks Airport.

Pilot Mandatory Meeting June 04, 2017 8:00 pm at Tween Oaks Airport.

Daily Schedule:

Pilot Meetings Daily 11:00 am

Task Committee Meetings Daily 10:30 am

Launch window open 12.30 pm *

Start window open 1.15 pm*

Launch window close 3.30 pm*

Start Interval TBD

Report Deadline 8.00 pm

Provisional Results 10.00 pm

Awards Night: June 10 - time 8.00 pm*

*Times subject to change to produce optimum results

Entry Fees: All entry fees must be paid during the online registration process by PayPal or by check before May 20, 2017.

However, your place in the competition is not secured until payment is made. Your place may be given to a pilot on the waiting list if fees aren't paid in a timely manner.

<u>Tow Fees:</u> Pilots must pay their competition week tow fees at pilot check-in.

Changes Schedule, rule changes, etc. will be posted to the official notification board.

Competitor Responsibilities:

Skill requirements USHPA Rating (H3), XC, TURB, AT or foreign equivalent.

Pilots must have previously flown in a USHPA aerotow competition or have written approval (acquired prior to registering) from the meet director. Pilots must have successfully aerotowed their glider model in

competition conditions at least 10 times. USHPA rating (H3) and USHPA membership with aerotow sign-off required minimum 7 days prior to the start of the meet.

The meet director/safety director reserves the right to remove (without refund) any pilot who does not demonstrate the appropriate aerotowing skill.

Membership requirements: U.S. pilots must be full members of the USHPA for insurance purposes. International pilots may obtain temporary membership (appropriate membership forms will be available at meet headquarters during check-in). The valid FAI Sporting license will be required to earn WPRS scoring points.

FARs/Clouds FAR 103 (U.S. Airspace Law/ Federal Aviation Administration Air Traffic Rule violations). All competitors are required to comply with FAR 103 at all times. Any verified infraction may result in a penalty for the associated day or possible ejection from the contest. It is illegal and un-sportsmanlike for competitors to fly into clouds. Competitors who fly into clouds will incur a penalty for the day. A competitor is deemed to have flown into a cloud if he/she is observed by a meet personnel or videotaped going into and disappearing into a cloud (as observed from the viewer), or appearing out the side of a cloud, or: If two pilot witnesses near the accused witness the accused going up into the cloud and disappearing from their view, and attest to this fact in writing and if information from the accused and a witness show the accused above the witness at the time of the incident. If the accused cannot produce a barograph trace for that day, only two witness statements are required. It is highly recommended for all competitors to fly with a recording barograph at all times.

<u>Airspaces:</u> Pilots are expected to familiarize themselves with all controlled airspaces in the vicinity of course lines.

<u>Right of Way:</u> Pilots will follow generally accepted right of way rules and thermal/flying etiquette. During the period when the launch and start window is open, pilots within or before the start circle will make all thermaling turns in the direction announced daily. Thermal direction will alternate.

Equipment:

<u>Classes:</u> The Midwest 2017 will score Class 1, Class 2, Class 5 and Sport Class gliders. Separate scoring of these classes will occur. Each Class needs at least 2 pilots to be classified.

<u>Switching Gliders:</u> Pilots may switch gliders within their class with meet director approval.

Radios and Phones: Radios are not restricted by the competition. Pilots need to obtain a license for the radio that they are using and are responsible for any problems created by their use of radios. The USHPA provides 151.925 for use in hang gliding competition. Pilots are not allowed to use VOX on the official competition frequency (when determined). Penalties apply. All pilots and drivers must submit radio frequency and mobile telephone numbers at the time of registration. This information will only be used for meet purposes. In an emergency situation this information may be distributed.

Helmets: Helmets, see USHPA Competition Rulebook.

<u>Ballast</u>: When carried, if jettisonable, ballast must be either water or dry sand and must be jettisoned over an unpopulated area where there is no danger to persons or property.

<u>Parachutes:</u> A reserve parachute is required. A readily accessible hook knife is strongly recommended.

GPS receivers: Currently, Flytec 5020, 5030, 6020, 6030, or Brauniger Compeo or Compeo+ or Garmin GPSes with serial or USB ports are required for flight verification during the competition. Geko, MLR, Top Navigator, and other GPSes may be supported providing the pilot provides necessary cables and knowledge to the scorekeeper. The mapping datum is based on the WGS 84 Datum and the required format for reporting landing position is (i.e.) N 36 17.888 W 75 12.456. Official meet time is –5 UTC (Central Daylight Time). Backup approved GPS receivers are permitted and recommended. Further information on GPS use and track log setup can be found in the GPS USE appendix in this rule book. Any other equipment not specifically prohibited by the rules is permitted; however the Meet Director and/or Safety Director may prohibit the use of any equipment for safety or fairness reasons.

TASKS:

Task Selection: The Meet Director shall nominate a three-person task committee that shall be voted on by the pilots to serve as the task committee. The competitors may nominate other pilots to the three person committee. The task committee will be determined before the beginning of the competition. Meet director delegates to the Task Committee the responsibility to determine the task, launch window, start interval, start windows, start circle/turn point cylinder circle radius and GAP parameters. Task Committee will call a secondary task if required before the start.

<u>Secondary Task</u>: The task committee may decide to call a secondary task depending on the weather forecast. If a secondary task is necessary, it will normally be presented with the primary task at the pilot meeting. That

decision will be communicated to the pilots prior to any pilot starting the course.

<u>Task Format</u>: All tasks will be cross-country races to goal, with or without turn points. The task committee will attempt to call tasks so that the estimated time of the fastest pilot will be between 1 and 6 hours.

Launch and Start:

Staging: In the event of dangerous overcrowding in the air around launch the competition director may close the launch temporarily until congestion has eased. The daily launch and staging areas will be determined by the Meet Director and Safety and Task Committees after the morning pilots meeting and will be set-up by launch crew as soon as the optimum direction can be determined. For the purpose of expediency, pilots must stay away from the launch crew and are not allowed talk to this launch crew while they are setting up the launch and staging lines. Any pilot who in any way interferes with the launch crew setting up the launch and staging area will be subject to the penalty of having his/her launch delayed or moved to the end of the line. Only after the launch and staging lines have been fully set-up is it permissible for pilots to stage their gliders. For safety all gliders must be in the staging area before towing commences otherwise penalties may be applied. Pilots assigned to the priority area will stage there in no particular order. On the first day these pilots will be a certain number based in their NTSS ranking and after that will be determined by their current overall ranking in the competition. Gliders must be staged as close as possible to the "outside boundary" (as defined by cones). As a courtesy to all pilots, please stage your glider as close as possible to the glider in front of you. Any pilot who stages his glider in a manner other than optimal to other competitors in the designated staging area will be subject to the penalty of having a delay or being moved to the

end of the line. The members of the task committee shall be allowed to place their gliders in the staging line at their discretion.

Launch: The launch marshal shall (if possible) use an air horn to announce when window opens or if there has been a change in task so that all pilots are aware. A whiteboard near the front of the staging line will indicate changes in times or task so that all pilots are aware. It is each pilot's responsibility to be alert for any changes. Pilots may enter the launch line starting at fifteen minutes before the start of the launch window and not before. The line leaders will signal when the launch window opens to the pilots near the beginning of the launch lines. At this time (and not before), any pilot who is "ready" may move to the readyto-launch box which will be defined by orange cones. Ready is defined as: Pilot is completely suited up with helmet on, hooked in with vario, GPS and other instruments turned "on." Once in the launch line the pilot must advance forward to the end of the launch line (towards the ready to-launch box). To give adequate space for the tow planes to land, as pilots advance forward to the ready-to launch box, they must stay as close to the staging line as possible. This is very important. Pilots in the staging line have launch priority over all pilots who are behind them in either the staging or launch line. If at any time the launch line overlaps a pilot in the staging line who wants to move into the launch line (and is "ready" to fly), the blocked pilot in the staging line may enter the launch line immediately behind the pilot that is blocking him when the blocking pilot moves forward. Example:: If pilot B is ready to fly and wants to enter the launch line he/she must address pilot C and inform him/her that he/she will be entering the launch line as soon as pilot A moves forward. Pilot C must let pilot B into the launch line in front of pilot C or pilot C will be not be allowed to launch until all other pilots have launched in the current task or for the reminder of the meet. All pilots must stay in their "fore and aft" position while in the staging line. Pilots may only move forward in the launch line. Pilots may not move from the launch line

to the staging line without moving to their original position in the staging line unless given permission by the launch or meet director. If a pilot moves forward in the staging line, that pilot is subject to not being allowed to launch until after all other pilots have launched in that task. Hang glider pilots must release from their tow at or below 2,000' AGL. They must also release when waved off by the tug pilot. Pilots will be released upwind unless they make it known to the tug pilot to take another course. Weak link breaks – pilots will be slotted in for a reflight when they have returned to the line. Pilots who need a reflight must land away from the area where the tugs are approaching and landing.

Start Procedure: At the Midwest 2017, we will be using a start cylinder. This method allows pilots to start when they fly out of or into a predetermined size cylinder that is centered on the start point or first turn point. Multiple starts are permitted. The latest start gate time recorded during the start window will be used. Start times will generally be scored on 15-minute intervals. (Example: 3:19:33 will be scored as 3:15:00) and are applicable to the official start cylinder start times for the daily task.

Pilots may start at any time, but if they start before the first start window their time interval will be "rotated" around the first start time and scored accordingly.

Re-flights Pilots who land at the launch field may relaunch. Relaunching is allowed only during the time the launch window is open.

Finish:

<u>Finish at Goal</u>: While flying the pilot's GPS must cross over the virtual goal line or goal circle. GPS goal crossing times, as determined by verification and scoring software will be used to determine time of crossing. In some cases goal crossing order may be determined by goal official (this may be used in cases of close finishes between pilots less than 500' agl).

<u>Finish Short of Goal:</u> All pilots not completing the task should TURN OFF THEIR GPS after landing. Failure to do this may result in improper scoring and slow downs.

Reporting In: Competitors should report back by the designated time on a daily basis. Pilots are allowed to call into the official listed phone numbers posted to let us know your ok, ONLY if there is a legitimate problem with returning to headquarters in a timely fashion.

<u>Track submitting:</u> Final scoring cannot be completed until a performance is determined for all competitors. Pilots must submit their GPS tracks asap after landing but not latera than 8.00 pm by sending track file *.igc to:

HGmidwest2017@gmail.com

Scoring person has limited time so track submitting timing is very important. We will apply penalty \$10 (first time) and \$20 (next time) for all pilots who are late with submitting .igc file (after 8.00pm)

If pilots will not have chance to e-mail their tracks to shown above e-mail address they needs to bring receivers for downloading to score-keeping headquarter when they report back. All pilots must have GPS track log verifying that each of the required portions of the task was achieved (except as seen below). Landing position, either at goal or landing short may be supported by a track log. Goal crew (when present) may verify goal landings (but not time) and landings short of goal must be supported by track log.

GPS:

Backup GPS A pilot may use multiple GPS's for verification and backup and may submit multiple track-logs to the scorer. The evidence will be chosen so that the pilot's best possible score, from all correctly obtained data, will be taken for flight verification.

- 1. Pilots may submit evidence for a flight using data from two (or more) GPS units, each covering part of the flight as long as the Competition Director is satisfied that the data is genuine. IGC Standard Equipment. Competitors who wish to use IGC standard equipment are welcome to so, provided the competitor provides all necessary hardware and software, and all IGC standards are properly followed. Pilots may just submit their IGC files. Registering GPS Units 1. Pilots may be required to register the make, model and serial number of all GPS devices that they intend to use during the competition with the competition scorer. If the device a pilot registered is damaged during the competition the pilot may wish to use an alternative device. Alternative devices have to be registered prior to a pilot launching to fly a round for which the pilot hopes to use the device's tracklog for verification.
- 2. The meet director may ensure that each pilot has a unique make, model and serial number combination (i.e. no pilots are sharing devices) and they or their assistants must check the device's make, model and serial number prior to every task verification. Any GPS submitted which does not match the lodged information will be rejected for verification. Cylinder sectors 1. Cylindrical sectors will be used in competition. The radius of the sectors will be publicized at the general briefing, and if this is to be changed during the competition, the new radius will be publicized at the pilot briefing prior to the task.

Track log:

- 1. The pilot must provide an unambiguous track log that shows without doubt that the data was collected; by the pilot of the hang glider on the flight in question, of the declared turn point from the correct location in the correct sequence, between the takeoff and landing, with all relevant information being present on the track log.
- 2. The track log must show for any start, goal or turn point that is claimed for the flight, one of the following: a point within the sector, a pair of points or a point and a way-point not more than 10 seconds apart for which a straight line drawn from the first point to the second point passes through the allowable sector. Mark/enter of waypoints inside of cylinders is allowed if backed up by a supporting track log.
- 3. Where the point being claimed is a start point (and the task allows the pilot to choose their start time) and the track-log has 2 points either side of the start or goal line at most 10 seconds apart, then the start or end time is then interpolated from these points (constant speed being assumed). Otherwise a start time is taken from the last (in time) point within sector of the start point.
- 4. The goal time will be interpolated from the pair of track-log points prior to and after crossing the edge of sector gate (a constant speed is assumed), or from the extrapolation of a pair of points immediately prior to the goal, provided that the extrapolation crosses the goal line (a constant speed is assumed).

Errors in Coordinates: Start point and turn point coordinates may be named in any way the competition organizer deems appropriate. If any are named for nearby physical features, the coordinates and NOT the physical feature will define the turn point location. Goals will be based on the

coordinates. Changes to turn point coordinates may be made or new turn points added at or prior to the task briefing.

General Verification Rules

- 1. The track-log must contain an average at least 1 point for every five minutes of on course flying time (points taken prior to the start and after goal are not counted). e.g. a 2-hour flight must contain at least 24 track-log points between the start (launch or start point) and goal or the end of the flight.
- 2. The verification software will confirm that all points used to verify the flight occurred at reasonable times (e.g. on the day in question, between the start of the task and the end of the task, and showing the correct chronology of start and turn points).

Claiming best distance on task

A pilot not landing in goal will be scored distance according to their best inflight track log point or their landing point, whichever gives a better result. In either case, the timestamp of this point must be consistent with the flight being claimed and any "land by" times that may be in force.

Rejection of track log

The meet director has the discretion to reject any track-log, or part thereof; if she/he feels it does not show sufficient evidence that the claimed data is genuine.

Stopping the task

If a task is stopped, the pilots will still be scored up to the point in time the task was stopped. For those pilots, not in goal at the task stop time, distance points will be awarded based on best inflight track log point or landing point recorded prior to or at the stop time. No other means of flight verification will be accepted if the task is stopped. Pilots without a valid GPS track will be at a disadvantage.

Time based dispute

- 1. If the launch is within the start sector, and a pilot fails to provide proper evidence of his start time, but there is sufficient evidence that a pilot launched during the launch window and did not start prior to the opening of the start window, then the pilot is awarded a start time equal to the start window open time. The pilots elapsed flight time is then moved so that it begins at the time of the first start time of the pilots in goal (so that the Departure Point system is not compromised). If the pilot's new (artificial) goal time is outside of the advertised goal closing time, the pilot is awarded goal distance only.
- 2. If a pilot cannot provide evidence that he launched and or started during the start time window, either by correctly obtained GPS evidence or by the records of the competition, then the pilot is awarded minimum distance for the round.
- 3. If a pilot fails to provide evidence of finish time when required, then, the pilot is awarded distance points only. If a "land by time" is in effect, any pilots still in the air at the land by time will be scored distance according to their best in-flight track log point prior to the land by time. Performance Measurements Performance measurement will be by **GAP2015**. Flight distances will be in kilometers.

Penalties and disqualifications

A penalty may be assessed or a competitor disqualified, for violation of any rule contained, announced or referred to in the rulebooks that pertain to this meet. The Meet Director at his discretion will assess penalties.

Complaints, Protests and Appeals: Before the first task, a protest committee, nominated by the Meet Director will be voted on by the pilots. All complaints must be in writing to the meet director. The meet director will attempt to rule on a complaint within 1 hour of receiving it. No fee is required for a complaint. All protests must be in writing accompanied by \$250 cash protest fee. The protest committee will rule on the protest in timely fashion. If the protest is upheld, the \$250 protest fee will be returned to the protesting pilot. If the protest fails, the protest fee will be donated to Cloudbase Fundation. All failed protests may be appealed to the USHPA competition committee. Protest must be made in writing no later than 8.00 am following day the incident being protested.

<u>Safety Advisory Committee</u>: The Meet Director shall nominate three pilots to form a Safety Advisory Committee. The pilots at the first pilots meeting shall vote to determine the members of this committee. Pilots may nominate different pilots to form the committee.

The task of this Committee shall be to determine if the task called by the task committee and the alternate task if chosen are safe to fly. It shall also be their task to determine if it is safe to launch before launch begins. The Meet Director and Safety Director shall consult with this committee. The safety committee has no function after the launch begins.

Day Cancellation and Task Stoppage

The Meet Director has the sole authority to cancel the contest day in the event of perceived unflyable conditions or other unforeseen difficulties, before any pilots have taken off. The Meet Director has the authority to cancel the contest day, after pilots have launched, in the event of his becoming aware (in his opinion) dangerous conditions that have developed on or near the course-line. The announcement to cancel a task after all or part of the field has launched but before the task has started will be made by the meet director on the official meet frequency as well as the frequencies provided by pilots at the time of registration.

PLEASE NOTE: The Meet Director cannot be responsible for canceling the contest day or stopping the task in every case of potentially dangerous flying conditions. Pilots are solely responsible for keeping themselves safe at all times by using sound judgment and airmanship.

If it becomes necessary for the Meet Director to stop the day's task after the task has started, each pilot's position at the time of the FIRST announcement (that the tasked has been stopped) may be used for scoring. Listen for the voice of the Meet Director as notification of cancellation or stoppage. Pilots are requested to communicate to other pilots that the task has been cancelled or stopped by unzipping their harness and hanging their legs out while flying. It is highly recommended that pilots land at the first safe landing position if dangerous weather is in the area.

Pilot Protest Committee

The Meet Director shall nominate three pilots and one alternate to form a Pilot Protest Committee. All officials given the responsibility of forming a protest committee by USHGA rules shall assign the responsibility to this committee. The alternate shall be used in the case of a conflict of interest.

Minimum/Maximum Rounds

A minimum of 2 round is necessary to declare a winner. There will be a maximum of 7 rounds. The official cumulative scores at the end of the last valid contest day will be considered final.

Daily Score

The scorekeeper will determine a competitor's score based on distance flown as reported by GPS coordinates and/or the time based on the goal official's records. Each pilot's daily score will be computed using GAP2015.