

## I. SPORT CLASS AIR RACING ASSOCIATION

### Purpose

The purpose of the Sport Class Air Racing Association is to highlight new and innovative work being done in the development of high performance kit built aircraft.

### Scope

The Sport Class Air Racing Association has developed a racing format that demonstrates the capabilities of this new breed of aircraft and gives the designers a major air show event to showcase their designs.

### Organization

The Sport Class Air Racing Association is comprised of the following:

#### Board of Directors

President	Lee Behel	(408) 398-7776 E Mail <a href="mailto:leebehel@prodigy.net">leebehel@prodigy.net</a>
Vice President	Craig Sherman	(760) 917-4435 E Mail <a href="mailto:crsherman@mindspring.com">crsherman@mindspring.com</a>
Secretary	Kevin Eldredge	(805) 801-9183 E Mail <a href="mailto:kevin@myairport.com">kevin@myairport.com</a>
Treasurer	Rick Vandam	(775) 742-5640 E Mail <a href="mailto:Renoairboss@aol.com">Renoairboss@aol.com</a>
Advisor	Dave Anders	(530) 347-3438 E Mail <a href="mailto:dandersrv4@sbcglobal.net">dandersrv4@sbcglobal.net</a>
Advisor	Jon Sharp	(661) 824-0333 E Mail <a href="mailto:nemesisnxt@mac.com">nemesisnxt@mac.com</a>
Advisor	C.J. Stephens	(707) 523-4352 E Mail <a href="mailto:simplymag@sbcglobal.net">simplymag@sbcglobal.net</a>
Advisor	Bill Billups	(601) 693-3834 E Mail <a href="mailto:N189wb@aol.com">N189wb@aol.com</a>
Advisor	Rob Monahan	(650) 588-5313 E Mail <a href="mailto:rmonaghan@westernallied.com">rmonaghan@westernallied.com</a>

Pilot Standards/Contest Committee

Chairman	Craig Sherman	(760) 434-4377 E Mail <a href="mailto:crsherman@mindspring.com">crsherman@mindspring.com</a>
	C.J. Stephens	(707) 523-4352 E Mail <a href="mailto:simplymag@sbcglobal.net">simplymag@sbcglobal.net</a>
	Dave Anders	(530) 347-3438 E Mail <a href="mailto:dandersrv4@sbcglobal.net">dandersrv4@sbcglobal.net</a>
	Bill Billups	(601) 693-3834 E Mail <a href="mailto:N189wb@aol.com">N189wb@aol.com</a>
	Rick Vandam	(775) 742-5640 E Mail <a href="mailto:Renoairboss@aol.com">Renoairboss@aol.com</a>

## **II. ADMINISTRATIVE RULES**

- A. The Sport Class Racing Association is based in the State of Nevada as a “Non-Profit” corporation.
- B. The Sport Class Racing Association is registered with the Internal Revenue Service as a “not for profit” organization.
- C. The Board of Directors will serve a term commencing on October 1 and concluding on September 31.
- D. Election of succeeding board members will be held at the Associations Annual Meeting, which will take place during the Annual Reno Air Races.
- E. All committee members will be nominated during this meeting, but will be by volunteers and appointed by the President of the Board of Directors.
- F. Any committee member changes throughout the year will be at the sole discretion of the Board of Directors.
- G. Any requests for changes to the rules must be submitted in writing to the Board of Directors. Any changes will be discussed in an open forum, if possible, before consideration for implementation. In no case will a change to the rules be adopted with less than 60 days notice to the membership.
- H. Business that requires notification of the current membership will be transmitted via e-mail.

### **III. OFFICIAL SPORT CLASS AIR RACING RULES**

- A. The Sport Class Air Racing Association Rules are the only official and approved Rules of Competition for the Sport Class Air Racing Association. The class will be referred to as Sport Class Air Racing. The Sport Class Aircraft Specifications are the official aircraft specifications for the class; the Sport Class Pilot Qualifications are the official pilot requirements for the class. These regulations are the only official rules and will be the rules of competition for the Class.
- B. A sanctioning agreement will be negotiated between the official Air Race organizers and the Sport Class Board of Directors. The sanctioning agreement will include such details as race dates, entry fees, deadlines, race course, aircraft pit configuration, emergency service, required spectator location, air race organization, organizing committees, and prize money. Also included will be any specific requirements of the racers such as insurance requirements, airspace waivers, and any rules of competition. These Sport Class competition rules will be included in and referenced in the competition rules published by the race promoter for each racing event.
- C. The Sport Class Racing Rules will be available via the Sport Class Web site. It is each competitors responsibility to download, read and understand all aspects of the rules prior to competition. If any of the rules are not clear then it is the competitors responsibility to request clarification from the Sport Class Contest Committee. The Contest Committee of each specific event will be responsible for that particular event and that Committee will administer the Sport Class Rules. The Sport Class Board of Directors will be available to assist the Committee in rule interpretation.
- D. These Rules will be the only official rules for the Class.

#### **IV. AIRCRAFT ELIGIBILITY**

It is the intent of the Sport Class Air Racing Association to promote the manufacturers of kit/ amateur built aircraft.

A. Aircraft eligible for competition within the Sport Class shall be:-

Sport aircraft shall be any kit or amateur built aircraft that is certificated by the FAA and has completed a phase 1 flight test. Aircraft are to be powered by an internal combustion engine or engines totaling no more than 1000 cu in. and capable of a 200 MPH minimum qualification lap speed.

The specifications listed herein will be the only specifications of the Sport Class Air Racing Association. Any entered aircraft may be required by the Board of Directors and/or technical committee to perform a demonstration flight to substantiate the speed and G requirements for racing conditions before being allowed on the race course. Aircraft not in compliance will be disqualified from the competition. The Sport Class Board of Directors will implement disqualification upon due consideration along with recommendation of the Technical Committee and/or the Contest Committee.

- B. All aircraft must have a current FAA issued airworthiness certificate. All certification, registration and current maintenance records must accompany the aircraft and be available for inspection by the Technical Committee, the Contest Committee, the race organizers, or the FAA.
- C. All aircraft must display its assigned racing number on each side of the fuselage or vertical stabilizer and on the lower surface of the right wing and the upper surface of the left wing. The number must be as close to 30 in. high as the surface and practicality permit and be of high contrast so that it is readily readable by race officials.
- D. The Sport Class will assign race numbers upon application by eligible pilots or aircraft owners and upon receipt of the annual \$ 50 race number retention fee.

## **V. AIRCRAFT EQUIPMENT**

- A. All aircraft must have a current airworthiness certificate issued by the FAA. All certification, registration, and current maintenance records must be available for inspection by the Technical Committee, Contest Committee, the FAA and or the air race organizers.
- B. All aircraft must be equipped with an operable VHF radio capable of two-way radio communication with race control. The radio will be tuned to race control during all practices, qualifications, and racing. A pilot must use a second radio if he desires to communicate with his respective ground crew during any practice, qualification, or race.
- C. All aircraft must be equipped with an operable seat belt and shoulder harness.
- D. All aircraft must pass an inspection by the Technical Committee prior to qualification or any time at the discretion of the Technical Committee.
- E. Aircraft must be able to demonstrate adequate maneuverability and controllability at race speeds and altitudes. This will be determined during qualification by the Contest Committee.
- F. All aircraft will be equipped with, and have readily available to the pilot, a cockpit located fire extinguisher.
- G. All aircraft must have completed the phase 1 flight test requirements and have adequate proof that this has been accomplished prior to attempting to qualify.
- H. All experimental aircraft must have their current operating limitations available for inspection. Their respective operating limitations must not prohibit air racing.
- I. All aircraft must have a minimum of \$1,000,000 of liability insurance. The insurance policy rider must be valid for air racing and name the air race organizers as also insured. Each participant must have proof of this insurance prior to flying on the race course.

## VI. SPORT CLASS RACING PILOT QUALIFICATIONS

These Sport Class Air Racing Association Specifications are the only officially sanctioned and approved pilot qualification requirements. They comprise a specific part of the Official Sport Class Racing Competition Rules and apply to all Pilots and designated Alternate Pilots participating in Sport Class Racing Sanctioned Events. Failure to comply with these rules will result in disqualification of pilot and/or aircraft from competition. Disqualification procedures will be implemented by the Board of Directors of the Sport Class Racing Association upon recommendation of the Pilot Standards/Contest Committee.

### A. Responsibilities:

1. The Pilot Standards/Contest Committee will be responsible for developing, documenting, and maintaining the standards and procedures used in determining pylon race pilot competency.
2. The committee will be responsible for evaluating the experience of applicants for race participation credentials and their conformance with the requirements for participation.
3. The committee will be responsible for the evaluation and qualification of applicants in accordance with current Sport Class Racing Pilot Qualification Test Standards, outlined in part C of this section.
4. The committee will be responsible for issuance of credentials to applicants who meet the requirements for race participation as outlined in part B of this section.
5. The committee will be responsible for observing the performance of pilot participants in race events, for counseling performance that is questionable or fails to fully meet standards, and for withdrawing the credentials of those who exhibit unsatisfactory performance.
6. The committee will review the credentials of race entrant pilots and designated alternate pilots to ascertain the currency of experience, requirements, and credentials.
7. The Chairman of the Pilot Standards/Contest Committee will appoint Sport Class Instructor/Evaluator Pilots who will make recommendation for issuance of a **Sport Class Pylon Racing License**.
8. The committee will maintain all appropriate records necessary in observance of these responsibilities.

B. Race Qualification Entrance Requirements:

Pilots and designated Alternate Pilots must provide the Pilot Standards/Contest Committee evidence of the following requirements before participating in any Sport Class Racing sanctioned Pylon Race or Race Qualification event.

1. A current fixed-wing pilot certificate. (Private or better)
2. A current Medical Certificate.
3. A valid Pylon Racing License issued by the Sport Class Racing Association.
4. Pilots must be able to demonstrate all formation skills that would be required for FAST certification.
5. All pilots must have a minimum of 500 hours of documented pilot-in-command flying time in fixed-wing aircraft.
6. All pilots must have documented 10 hours pilot-in-command flying time and 10 takeoffs and landings in the type of aircraft to be raced and 3 hours and 3 full stop landings in the specific racing aircraft prior to flying the race course.
7. All pilots must have a minimum of 3 takeoffs and landings in the type aircraft to be raced within the preceding 90 days.
8. All pilots must be familiar with, and abide by, the rules and regulations governing Closed Course Pylon Air Racing as set forth in the Official Sport Class Racing Competition Rules.
9. All pilots are required to wear fire protective clothing and helmets when practicing, test flying, qualifying, or racing in race controlled airspace.

C. Pilot Qualification Flight Evaluations:

All pilots and designated alternate pilots must demonstrate the following standards to the Sport Class Pilot Standards/Contest Committee prior to recommendation for the issuance of a Pylon Racing License.

1. Oral evaluation:
  - (a) Provide evidence of minimum pilot flight time and requirements as outlined in part B above, excluding item 3.
  - (b) Discuss aircraft speed and load factor (“g”) limitations, engine and propeller limitations, weight and balance limitations, and takeoff/landing limitations.

- (c) Discuss Density Altitude considerations.
- (d) Demonstrate knowledge of Official Sport Class Racing Competition Rules and Regulations.
- (e) Race staging, start, and pylon procedures.
- (f) Passing procedures.
- (g) Method of communicating emergency-in-progress information to participants and required responses.
- (h) Method of declaring emergencies and actions for various types of emergencies.
- (i) Method of communicating emergency termination of race to participants and required responses.
- (j) Normal race termination procedures.
- (k) Pre-Race briefing requirements and outline of contents.

- (1) FAA regulations and waivers applicable to air racing.
- (2) Air race radio control frequencies.
- (3) Crowd and Race show line requirements.
- (4) Race schedules and relation to staging.
- (5) Aircraft ground safety precautions.
- (6) Race pylon locations.
- (7) Course and airfield obstructions.
- (8) Emergency landing facilities.
- (9) Coordination with fire/rescue personnel.

2. General pre-flight procedure for qualification evaluation:

- (a) Sufficient fuel and oil for proposed time of flight.
- (b) Seat belts and harness restraints.
- (c) Loose objects in aircraft.
- (d) Canopy and access latches.
- (e) Controls and aircraft structure.

3. Qualification flight evaluation procedures:

The following checkout flight maneuvers will be demonstrated by the race pilot prior to recommendation for the issuance of a Pylon Race Pilot License, these maneuvers will be witnessed by a member of the Sport Class Pilot Standards/Contest Committee while flying with the pilot seeking qualification. Upon successful completion, all recommendations for the issuance of Pylon Race Pilot Competency Letters will be forwarded to the Pilot Standards/Contest Committee Chairman for review and approval.

- (a) Normal ground operating and taxi procedures.
- (b) Normal takeoff procedures.
- (c) Demonstrate 180 degree turns at 50% placard “g” without significant gain or loss of altitude. (+/- 100 feet)
- (d) Demonstrate a 180 degree roll and recovery with minimum loss of altitude
- (e) Demonstrate formation join-up and formation flying.
- (f) Demonstrate a race start.
- (g) Demonstrate a minimum of three laps on a racecourse with other aircraft.
- (h) Demonstrate proper passing procedures on a racecourse.
- (i) Demonstrate simulated engine failure procedures and approach.
- (j) Demonstrate a power-off landing.
- (k) Demonstrate Normal landings.

Sport Class Race Pilot Qualifications will remain valid provided the pilot meets requirements and remains active in recognized Sport Class Racing events. Any previously qualified pilot that has not participated in a recognized event within the proceeding two calendar years must re-qualify with the Pilot Standards/Contest Committee prior to participating in any Sport Class Racing sanctioned event. Pilots who have had racing

infractions may be required to re-qualify at the discretion of the Pilot Standards/Contest Committee, or the Sport Class Racing Board of Directors.

## **VII. RACE QUALIFICATION AND RACECOURSE PROCEDURES**

### **A. Pilot Briefing:**

1. Race pilots must attend the daily pilot briefing on any day that the pilot intends to fly or is scheduled to fly. Any attempt to fly without attending the daily flight briefing will result in disqualification from the applicable race.
2. If the use of an alternate pilot is anticipated the alternate pilot must have attended the daily brief.
3. Pilots arriving at the race site prior to a race event must be briefed prior to flying on or practicing on the racecourse.
4. Weather Minimums. For the purpose of qualification and racing the minimum weather for flight operations shall be 3000 ft vertical from any cloud base, visibility of 6NM and the winds must not exceed 30kts with gusts not to exceed 40kts.

### **B. Practice Periods:**

1. Practice periods will be scheduled in advance of the race event to allow each competitor adequate time to become familiar with the racecourse.
2. Aircraft will be allowed on the racecourse on a first come first serve basis and will be controlled by race control.
3. Race control will be the sole controlling authority and their decisions on the control of aircraft will be final.

### **C. Qualifying Periods:**

1. Qualification periods will be scheduled in advance and will allow every aircraft a fair chance to qualify.
2. All entries must qualify in order to establish their respective eligibility and starting positions for their respective race.
3. All qualification periods will be monitored and controlled by the Contest Committee, race timers, and pylon judges.

4. Race control will be the controlling authority for all qualification periods.
5. Race control will control all aircraft from takeoff until landing and will permit aircraft onto the racecourse on a first come first serve basis.
6. A maximum of three aircraft will be permitted on the racecourse during qualification.
7. Aircraft waiting for entry onto the racecourse will either wait on the ground or orbit the racecourse in a counterclockwise direction above 2000ft AGL.

#### D. Qualification of Aircraft:

1. In order to qualify for a race, all aircraft are required to fly one or two consecutive official qualification laps. These laps must be timed and recorded by the official race event timer in accordance with the rules and procedures set forth by the race organizer. The resultant derived speed for the fastest lap will determine qualification and race pairing order for subsequent race heats.
2. Pylon cuts will be given a penalty of four seconds for each cut.
3. A contestant desiring to attempt to qualify will notify the starter by radio prior to passing a designated pylon. The starter will acknowledge the call, if it is not acknowledged, race control may attempt to notify the starter of the qualifying attempt. The qualifying lap will start only upon receiving a green flag from the starter prior to crossing the home pylon.
4. At the end of the first lap of the qualifying attempt the starter will give the racer a white flag to signify one lap remaining.
5. At the completion of the timed one or two lap qualification, the starter will give a checkered flag to the racer to mark the end of the qualifying attempt. If there are other racers awaiting a qualifying attempt, the racer completing qualifying shall exit the course and return to the queue to await confirmation of a valid time. Actual qualifying speeds will not be transmitted to the racer but will be posted following the session.
6. If a valid qualifying time is not received, the racer may elect to try another attempt.
7. If the racer is still on the course the racer may start a second attempt at that time. If the racer has already exited the course the racer may try another attempt after being sequenced back onto the course by race control.
8. Race control will be the sole authority on control of the racecourse and be responsible for the sequencing all racers onto the racecourse.

E. Race Course:

1. A chart of the racecourse will be made available to all pilots.
2. All racecourse markings will be readily visible to the pilots.
3. The Gold/ A Heat will race daily on the Unlimited Race Course, all other Races will be on the Sport Class Race Course.

F. Race Starting Procedures:

1. Air starts will be used for all Sport Class Pylon Racing events. A designated pace plane will be utilized when available.
2. The Pace Pilot will be responsible for conducting the pre-race pilot briefing. When a pace plane is not available, the poll position pilot will assume the duties of the pace pilot.
3. The Pace Plane will provide all guidance and function as the flight lead during the formation join-up and will be responsible for proper line-up of aircraft coming down the chute.
4. The start will be from a descending flight path at the required pre-briefed drop off airspeed. The drop off airspeed will be determined by the qualifying speed for the heat and agreed upon during the morning briefing.
5. During the start, any attempt to slingshot the start will result in a 10- second penalty. Either the Contest Committee or the Pace Pilot will determine if a slingshot was attempted. If a slingshot is determined, no protests will be entertained.
6. During the start any attempt to dive from the release will be grounds for disqualification. This may be determined by the Pace Pilot, the Sport Class

Contest Committee or by RARA's Contest Committee. The observation shall be reported to the Class Pilot Standards/Contest Committee, for disciplinary action.

7. In the event of a pylon cut a penalty of 2 seconds per lap for each lap of the race will be assessed. This will be added to the racer's total race time to determine race speed.
8. The Pace Pilot will signify the release and race start by broadcasting the statement "Gentlemen, you have a race" over the race control frequency. In the event of radio failure the pace pilot will signify release and race start by making an abrupt pull-up and turn away from the race formation.

#### G. Race Alignment:

1. After qualification, the racers will be aligned in decreasing order by speed. The aircraft will be divided into three heats consisting of from 7 to 9 aircraft per heat. The fastest aircraft will be designated the Gold/ A Heat and will fly on the Unlimited Race Course. The next group will be designated the Silver/ B Heat, the last group will be designated the Bronze/ C Heat. In the event that there is an additional racer, that racer will be designated as an alternate and will taxi and lineup with the Bronze/ C Heat and be available to fill into the heat if one of the other racers aborts. ( See Section X "Sport Class Racing Venue")
2. The racers will taxi, line-up on the runway, takeoff, and rejoin on the right wing of the Pace Plane in this order for each respective heat. This will serve to position the fastest qualifier closest to the inside of the racecourse.
3. If a plane is unable to taxi with the respective heat, he may be permitted to rejoin the heat, in pairing position, prior to lineup with the permission of the pace aircraft or flight lead in the absence of a pace plane. After Lineup on the runway, no attempt to rejoin or re-align the aircraft for takeoff will be permitted. After lineup, if, for any reason, a plane is unable to takeoff in proper sequence, he will call "aborting" and clear to the cold side of the runway, exit at the nearest taxiway, and return to the ramp. No attempt to rejoin the flight is permitted.
4. The succeeding day's alignment will again be determined by the fastest speeds from the previous day's events and separated into respective A, B, and C Heats in descending order.
5. This method will be used for all subsequent day's race alignment.

#### H. Pylon Turns:

1. All aircraft will remain outside of a line drawn that visually connects the racecourse pylons at all times during a race.

2. A pylon cut will be called anytime an aircraft, or portion of an aircraft, passes inside or over a pylon.
3. The respective pylon judges will determine a pylon cut. A cut called by the pylon judge is a judgment call, deemed official, and protests will not be entertained.
4. In the event of a pylon cut, the racer will be assessed a 2-second per lap penalty, which will be added to his total race time to determine race speed.
5. In the event of a forced cut, (aircraft being forced to the inside by another aircraft), no penalty will be assessed to the aircraft cutting the pylon. A 10-second penalty will be given to the aircraft that caused the cut. This determination will be at the sole discretion of the pylon judge. No protests will be entertained.
6. Minimum altitude on the course will be no lower than the height of a pylon (approximately 40 feet). Violations may result in disqualification.

I. Passing:

1. Any aircraft overtaken must not in any way impede or interfere with a faster overtaking plane. The overtaking pilot must keep the overtaken aircraft in sight at all times during the pass.
2. After passing an aircraft, any attempt to cut back in front of the passed aircraft until at least 100 feet of nose-tail clearance has been obtained may result in disqualification.
3. At no time will a preceding aircraft fly a wide course to allow another aircraft to pass on the inside of a turn or straightaway.
4. The aircraft radio may be used to inform the preceding aircraft of an intended pass, but radio chatter must be kept to a minimum.
5. In the interest of Safety, the visual requirement of the passing aircraft shall be paramount. Any pass that causes the passed aircraft to alter flight path may be an illegal pass and may result in disqualification or other action as the Contest Committee deems appropriate.

J. Emergencies:

1. Any aircraft experiencing a problem that is unable to continue the race will announce over the radio "MAYDAY" and the aircraft race number. The intended landing runway and additional information will follow the call if known at that time.
2. After calling "MAYDAY", the aircraft will pull off the racecourse and climb to an initial altitude commensurate with a low key.

3. If an immediate landing is not required, the aircraft will climb to an altitude of 2000 Feet AGL or above, notify Race Control, and orbit in a counter clockwise pattern over the racecourse.
4. If an immediate landing is required, the aircraft will once again call "MAYDAY", race number, and when possible the planned landing runway.
5. In the event of an emergency, the race will continue unless, at the discretion of Race Control, a condition exists that would be hazardous to the other racers.

K. Race Finish:

1. The race will end when the first aircraft crosses the finish line at the completion of the required number of laps.
2. Each following aircraft will then complete the current lap, and after crossing the home pylon, pull up and off the racecourse into the cool down area for sequencing to land. Any aircraft that does not complete the required amount of laps will be given a speed based on total laps flown divided by total time to complete those laps.
3. After crossing the finish line on the final lap each aircraft will climb to an altitude of 2000 feet AGL or above. (Cool Down Area)
4. The aircraft will start a left-hand orbit, keeping the preceding aircraft in-sight.
5. After cool down, aircraft will contact Race Control for landing sequence.

L. Landing:

1. Race Control is the controlling authority for landing.

2. Once sequenced for landing, the aircraft will enter a normal downwind, base, and final approach for landing.
3. On the base leg of the approach, each aircraft will call race number, base, and gear checked. (I.E. "Race 5, Base, Gear") Race control will then acknowledge, and issue clearance to land.
4. All aircraft will land on the side of the runway opposite of the turnoff (hot side). Once the aircraft has slowed to a controllable speed it will move over to the turnoff side (cold side) of the runway and exit in sequence at the taxiway in use.

#### M. Race Flags:

1. The following flags will be utilized during all practices, qualifications, and race events. The location of the flag will be at the timers booth at the base of the Start/Finish Pylon. The yellow flag may be displayed at any pylon.
2. **Black Flag:** Aircraft disqualified. Aircraft will exit the racecourse and will be sequenced to land as soon as possible.
3. **Yellow Flag:** Emergency in progress. Racers will continue but use extreme caution.
4. **Red Flag:** Race Cancellation. Racers will exit the racecourse and set up to be sequenced for landing.
5. **Green Flag:** Start of race. Continue to race.
6. **White Flag:** Start of final lap.

7. Checkered Flag: End of race. Racers should exit course and proceed to cool-down for landing sequence.

N. Penalties:

1. In addition to other offenses included herein, the following shall be deemed violations of the rules and will be grounds for fines or disqualification.
2. Any action or proceeding harmful to the integrity of the sport, or not in the best interests of air racing.
3. Any unsportsmanlike conduct formulated against participants, officials, or committee members.
4. Reckless or dangerous flying as determined by race officials, who include the Contest Committee, Race Officials, or Race Control, will be grounds for disqualification.
5. Penalties may range from fines, to disqualification, to revocation of racing credentials.
6. Any contestant determined to have intentionally violated class rules may be permanently excluded from Sport Class competitions at the discretion of the Sport Class Pilots Standards/Contest Committee.

O. Protests:

1. Any protest must be filed by written notification to the Contest Committee as per the sanctioning authority.

P. Race Cancellation or Postponement:

1. In the event that the race is postponed, all racers will be notified as early as possible and given a reasonable time to prepare for a re-schedule.
2. If the race is cancelled for a particular day, that day's format will progress to the next day's race,
3. If the race is cancelled after takeoff but prior to start, the race may be re-scheduled with the same format.
4. If the race is cancelled after start, the race will be considered a complete race and race results will be determined by the order of the aircraft at the time that the race was cancelled. The racers speed over the course will then become the total time flown divided by the number of laps flown.

5. If the race is cancelled after the start of the race, all racers will continue around the course until passing the start finish line, at which time they will pull off the course and proceed to cool down for sequencing for landing.

Q. Special Rules:

1. It shall be permitted for the air race organizers to formulate rules, which will apply to a specific event. These rules supplement, and apply to the Sport Class rules listed here.
2. In the event additional rules apply, a copy of these rules must be provided by the race organizers to each racer.

R. Prize Money:

1. All prize money must be put in escrow by the event organizer prior to the race event to ensure fair pay out to the racers.
2. The purse will be divided among the qualifiers and starters of the various heats at the conclusion of the event.
3. A copy of the prize money payout scale will be made available to the racers prior to the race event.

## **VIII. PILOT BRIEFINGS**

A. Event Briefings:

1. Upon arrival at a race, all racers will receive an indoctrination briefing. This briefing will include at a minimum:
  - a. FAA Waiver and Special Operating Rules.
  - b. Local Operating Procedures.
  - c. Racecourse layout and markings.
  - d. Pit Procedures.

- e. Scheduled Practices and Qualifying races.
  - f. Race Officials and Organization.
  - g. Other information helpful to the racers.
2. The Operations Officer or the Air Boss must personally brief any racer unable to attend this briefing

B. Daily Briefing:

1. Each pilot intending to fly that day must attend the daily brief.
2. Any pilot not attending the brief and caught attempting to fly will be disqualified.
3. The daily brief will include at a minimum:
  - a. Daily Schedule.
  - b. Daily Weather Forecast.
  - c. Any Special Subjects.
  - d. Questions.

C. Post Race Debrief:

1. At the conclusion of a race, all pilots involved in the race will meet at a designated area for the race debrief.
2. A member of the Pilot Standards Committee will also attend this debriefing.
3. The purpose of this debriefing will be a formal get together to discuss details of the race. Any comments towards race officials, other pilots, or comments in general should be discussed at this time.

D. Pace Pilot Briefing:

1. Start Engine Time.
2. Takeoff Time.
3. Takeoff Position.
4. Takeoff runway and rendezvous turn.
5. Rendezvous speed and altitude.
6. VHF radio frequency.
7. Number of laps in race.
8. Emergency procedures.

9. Other procedures as necessary.
10. Questions.

## **IX. REQUIRED EVENT DOCUMENTS**

### **A. Aircraft:**

1. Current Airworthiness Certificate
2. Aircraft Registration
3. All Maintenance Logbooks
4. Operating Limitations
5. Phase 1 Flight Test Signoff

### **B. Pilot:**

1. Current Fixed-wing Flight Certificate

2. Current Medical, Class 3 or higher
3. Flight Logs establishing 500 Hours minimum

C Insurance:

1. Proof of insurance with \$1,000,000 Liability
2. Additional rider permitting Air Racing
3. Additional rider naming covered Event Organizers

**X. SPORT CLASS RACING VENUE AND RACE HEAT PAIRING**

- A. Sport Class Air Racing intends to advocate fair competition among race contestants and allow each participant maximum opportunity to compete in race heats based on performance through qualification speeds and subsequent race results. The class will field 28 Qualified Racers for sanctioned events.
- B. The Heat Races will take place before Sunday's Championship Races, and will be conducted as follows: After all official qualification times are established, the racers will be aligned in decreasing order of 1-28 according to speed. The racers will be divided into three race heats consisting of from 7-9 aircraft per heat. The fastest

speeds will be paired for the “A” Heat of each day the second fastest paired for the “B” Heat and the third fastest paired for the “C” Heat.

- C. The number of aircraft per heat will be determined by the number of available race aircraft. The emphasis will be to insure that the maximum number of racers will be allowed to race. Therefore all qualifying aircraft will be divided into three heats based upon qualifying speed, the heats will be evenly divide with from 7-9 aircraft per heat. In the event that the heats are not evenly divided, the preference will be for the greater number to go to the faster heat.
- D. The race lineup for the subsequent days racing will be determined after the days racing has been completed. Based upon the number of race eligible aircraft, the next days heats will be paired by the following schedule;

Race Eligible Aircraft	Gold/A Heat	Silver/B Heat	Bronze/C Heat
21	7	7	7
22	8	7	7
23	8	8	7
24	8	8	8
25	9	8	8
26	9	9	8
27	9	9	9

- C. After the days’ race heats have been completed, all 28 times will be re-aligned for the following day’s heats. This process will be repeated each day for subsequent race heats. A racer will always carry forward his most recent speed for alignment in subsequent heats, not necessarily the fastest. In the event that a racer flies in more than one heat race in one day, the racer will carry forward their fastest speed of the day.
- D. In the event that there are 28 race eligible aircraft for the subsequent days races, the following rule will apply to ensure that every eligible racer gets to race. If there are 28 aircraft available for the first day of racing the number 25 qualifier will act as the alternate aircraft. For the second day of racing the number 26 qualifier will act as the alternate aircraft. For the third day of racing the number 27 qualifier will act as the alternate aircraft. For the Championship Race the number 28 qualifier will act as the alternate aircraft.
- E. The designated alternate aircraft will brief spot and taxi with the respective heat. The alternate will be prepared to fill in for any racer that is unable to takeoff when the Pace Aircraft is ready for Takeoff. This will be determined by the Pace Pilot after getting a “thumbs up” from each respective racer. In the event that a racer is unable to give the Pace Pilot a “thumbs up”, the Pace Pilot will direct the alternate aircraft to fill in the last position and move any other aircraft forward in the lineup. Unless necessary for safety the aborting aircraft will remain in position until all aircraft have taken off, then will coordinate with Race Control for the return to the Ramp.
- F. If a Racer determines that they will be unable to race after the Race Lineup has been published but prior to the aircraft being spotted for the respective Race. The Alternate

aircraft will be spotted and fill in at the back of the heat. Then the second place finisher will move to the Alternate position. This may be repeated to fill the field if more aircraft are unable to Spot for a respective race. The flying of the Alternate Aircraft will always be voluntary and will not result in any penalty or loss of prize money.

- G. In the event of an in-flight mechanical or other problem resulting in an early landing, (did not finish a Race, known as a DNF), that Racer will be placed in the bottom of the heat for which his initial qualifying time originally placed him for the subsequent day's heat.
- H. Failure to start a race, (known as a DNS), will also place a racer in the bottom of the heat for which his initial qualifying time originally placed him for the subsequent day's heat. A DNS will always line up behind a DNF in the event that both apply. Failure to start two consecutive days' race heats will result in disqualification from all subsequent race heats. A race start is defined as crossing the start line (extended centerline of the runway) in the race heat formation.
- I. A DNF will be paid according to his finishing position, the last DNF placing higher than a preceding DNF in the same heat. A DNS will not be paid for the heat as the alternate will be paid instead. If an alternate does not start, the vacated purse will be allocated to the Class administrative fund. If the alternate is from an earlier heat of the same day he will be awarded the prize money accorded his finishing position as an alternate. His vacated purse from the previous heat will be allocated to the Class administrative fund. No alternate will be awarded multiple purses from the same day of racing.
- J. On Sunday, Gold, Silver and Bronze Sport Championships Races will be held. Again using each racer's most recent speed, per Rule C above, the top qualifying Sport Aircraft will compete for the Gold Sport Championship. The 2<sup>nd</sup> heat of Sport Aircraft will compete for the Silver Sport Championship and the last group will compete for the Bronze Championship. In the event that any racer flies in a heat and subsequently flies in an additional heat, the racer will only be awarded the higher of the two payouts for their respective finishing position. In addition, for any Championship Race, if a racer flies in two Championship Races, the Racer will be awarded the higher of the two payouts but will still be awarded the Trophy and any additional prizes that the racer may have earned in the previous Race.
- K. In the event that a circumstance occurs that is not previously covered, the BOD reserves the right to decide the issue. In all cases the BOD will consider safety and then the best interests of the Class when rendering a decision.

## **XI. AIRCRAFT FUELS AND ADDITIVES**

- A. Sport aircraft will be allowed to use any fluid, liquid or gas, sprayed externally or internally to promote engine performance.

## **XII. RULES CLARIFICATIONS AND ADDENDUM'S**

- A. This section is included to highlight any Clarifications or Addendum's incorporated in the existing rules within the past year as a result of the previous year's critique. Its intent is to provide the user with a "quick reference" section to familiarize themselves with all recent modifications, including a short synopsis of the modification, as well as a reference to the specific section in which the modification has been incorporated. Subsequent years' will be posted in this section on an annual basis.
  
- B. New section when rule changes are complete.

