



RENO AIR RACING ASSOCIATION, INC., DBA  
NATIONAL CHAMPIONSHIP AIR RACES

**OFFICIAL RULES OF COMPETITION**  
**2011**

**EFFECTIVE DATE June 1, 2011**

**NOTE: All changes/additions/relocations are listed in BOLD RED Font.**

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## DEFINITIONS

**CERTIFIED:** As referred to in the “Official Rules of Competition” and other documents issued by RARA shall apply to a prospective racer that has been deemed “ELIGIBLE” by their respective class AND has:

- Completed “ALL” phases of PRS within the last 24 months; or
- COMPETED in the National Championship Air Races within the past three annual air races.

**CHASE PLANE:** A Chase Plane is any plane, used for observation, photography or any other use, approved by RARA and the respective class flown by a certified pilot or an approved pace pilot. A chase plane shall not go below 200 feet AGL on the course.

**COMPETED:** As referred to in the “Official Rules of Competition” and other documents issued by RARA shall be defined as follows:

- Flown at least one complete lap in an official race in the National Championship Air Races (NCAR); or
- Qualified in an aircraft, to race in the National Championship Air Races, by obtaining a speed qualifying the aircraft to compete in the race progression.
- Note: Flight in the National Championship Air Races during the practice or qualification periods that do not result in securing a qualification time will not be considered “COMPETING” in their race class.
- Certified pilots who have not “COMPETED”, as defined above, but who have had time on the race course at Reno at PRS or during race week during the previous 36 months who wish to maintain the certification as a race pilot, may request of their respective class the opportunity to perform a check ride in accordance with the class requirements as listed in their rules. The pilot shall complete the check ride to the satisfaction of the class. The check ride may extend the pilot’s certification for an additional twelve (12) months. It shall be the sole responsibility of the pilot to inform both RARA and the Class of their intended action to assure that adequate records may be maintained and only documented evidence of such action will be acceptable as proof of the extended certification. This process is good to extend a pilot’s certified status for up to a total of forty eight (48) months after which time if the pilot has not “competed at Reno”, he/she shall be required to attend PRS in order to regain his/her certification.

**CONDITIONAL ENTRIES:** Conditional entries are those entries received AFTER the closing date and time as specified in the entry application. They must comply with the RULES OF COMPETITION and provide all the information specified in the ENTRY FORM. Conditional Entries shall be listed in order of their receipt by RARA which will determine their position or advancement through the following categories.

• **A CONDITIONAL ENTRY TO FILL THE FIELD** is one received after the closing date when the field is not filled in its respective class. The entry shall be advanced to fill said field, shall receive all the rights and privileges of an “on time entry” and be assured of the opportunity to qualify.

1 •A CONDITIONAL ENTRY TO FILL THE FIELD UPON THE FAILURE OF  
2 SUFFICIENT AIRCRAFT TO QUALIFY is a Conditional Entry that shall be allowed to  
3 qualify, if prior to or during the qualification period, if “on time” or “Conditional Entries  
4 to fill the field” are unable to qualify. Should they qualify they shall receive all the  
5 rights and privileges of an “on time entry”.

6 •A CONDITIONAL ENTRY TO FILL THE FIELD IF THE FIELD IS NOT FULL BY  
7 THE FIRST HEAT RACE IN ITS CLASS is a Conditional Entry that has not had the  
8 opportunity to qualify. In the event that other qualified aircraft are unable to start the  
9 first heat race of that class, then it shall be allowed to start as the LAST place aircraft  
10 in medallion, bronze or lowest race in that class. It shall be then allowed to advance  
11 as provided in the class rules of progression and shall receive all the rights and  
12 privileges of an “on time entry”.

13 **DESIGNATED OBSERVATION AREA:** A designated observation area is an area NORTH  
14 of the pit/crowd line approved by the FAA/RARA for maximum of THREE (3) CREW  
15 MEMBERS per aircraft in that race, wearing the proper credentials, to observe that race.  
16 Any violation of the maximum of three (3) crew members shall result in the closure of the  
17 designated observation area to that class for the remainder of the air races for that year.

18 **ELIGIBLE:** As referred to in the “Official Rules of Competition” and other documents issued  
19 by the Reno Air Racing Association (RARA) shall refer to a prospective racer or aircraft that  
20 has met all of the requirements of their respective class.

21 **INSTRUCTORS:** The qualifications for instructors at PRS are as follows.

- 22 • A flying instructor shall be a currently certified racer, approved by the specific Class  
23 and RARA, who is allowed on the race course with or without a student pilot at PRS.
- 24 • A ground school instructor shall be a currently certified or past racer nominated by the  
25 class and approved by RARA.

26 **MAXIMUM RACING ALTITUDE:** The maximum racing altitude, as established in Section IX  
27 Racing, at 350 feet AGL, is not intended to place a ceiling on the pilot’s ability to race in a  
28 safe and prudent manner during competition. Observations of racing aircraft have  
29 established that 350 feet AGL is a reasonable altitude for racing EXCEPT when necessary  
30 to pass, when encountering turbulence or as safety dictates. PLEASE note under Section IX  
31 RACING, page 11, those additional restrictions on racing altitudes at Pylon Outer 8 for the  
32 Unlimited and Jet GOLD racers and at HOME Pylon for ALL racers during qualifications and  
33 on their final lap.

34 **PACE PILOT:** The qualifications for a pace pilot for both Racing and PRS are as follows.

- 35 • The pace pilot for any class shall be a currently certified racer or past racer and  
36 approved by both RARA and the Class for which he/she is to pace.
- 37 • The Pace Pilot shall be trained in pace/safety duties by each class.
- 38 • The Pace Pilot shall not be allowed to go onto the race course unless he/she holds  
39 the qualifications of a certified racer, has had legal time on the race course within the  
40 past twenty-four (24) months, or holds a current aerobatic card.
- 41 • The pace pilot, as such, is not certified to race.

- No more than two (2) people are allowed in a pace/ safety plane unless the corporate owner's safety/operational requirements stipulate two company pilots for safe operation. If this stipulation exists, the aircraft may be operated with three (3) people on board, including the RARA/class approved pace pilot performing his/her duties either from the front seat or from the passenger seat.

**PASSENGER:** For purposes of entering the race course at Reno Stead Airport during any period that the FAA Waiver is in effect, a passenger is defined as any person in any approved race, pace, chase or training aircraft who is not an approved pilot in command of said aircraft in accordance with RARA pilot registration requirements. During PRS an Instructor Pilot authorized by the Class and RARA, or a student dully registered for training are approved passengers.

**PYLON RACING SEMINAR (PRS):** Each year the Reno Air Race Association (RARA) in conjunction with the Racing Classes, presents a seminar for prospective race pilots to acquire the necessary skills to determine their suitability to become a pilot certified to race at Reno. A pilot must be at least EIGHTEEN (18) YEARS OF AGE at the start of PRS. All pilots must have ALL of the class requirements with respect to total hours as pilot in command and in type PRIOR to the start of PRS. The pilot must complete all phases. They shall pass the check ride and be signed off by the class within TWELVE (12) MONTHS in order to become certified to race at Reno.

**TELEMETRY AREA:** A Telemetry Area is an area NORTH of the pit/crowd line approved by the FAA/RARA for the placement of a bona fide telemetry unit of a racing aircraft to receive telemetry from said aircraft during a race. A maximum of THREE (3) CREW MEMBERS of said aircraft who are wearing the proper credentials may be at the telemetry station at any time. Any violation of the number of crew members shall result in the telemetry station for that aircraft being removed from the telemetry area for the remainder of the air races for that year.

**REPLACEMENT AIRCRAFT:** In the event an "ON TIME ENTRY" is unable to compete due to mechanical problems, an application, filling all of the requirements of the ENTRY FORM and Section III., AIRCRAFT ELIGIBILITY, will be accepted by RARA for a REPLACEMENT AIRCRAFT. The application shall be submitted by the owner or pilot of the original aircraft and shall be received by RARA prior to the close of business on the SATURDAY prior to Air Race week. The Replacement Aircraft shall retain its respective order and shall not be bumped by any conditionally approved aircraft. The Replacement application fee shall be \$300.00.



1 **I. PARTICIPATION IN THE NATIONAL CHAMPIONSHIP AIR RACES**

2 PARTICIPATION in the NATIONAL CHAMPIONSHIP AIR RACES (NCAR) is on an  
3 invitation basis and is open to qualified pilots and aircraft meeting the eligibility requirements  
4 of these rules and those of the classes invited to participate.

5 APPLICATIONS for entry must be on the “INVITATION TO PARTICIPATE IN THE  
6 NATIONAL CHAMPIONSHIP AIR RACES” entry form furnished by the RENO AIR RACE  
7 ASSOCIATION, INC. (RARA).

8 ENTRIES shall be addressed to the Reno Air Race Association, Inc., 14501 Mt. Anderson  
9 Street, Reno, NV 89506 or sent by FAX to the Reno Air Race Association, Attn: Pilot  
10 Coordinator at fax number 775-972-6673.

11 ENTRY FORMS received by RARA at their offices prior to the close of business at the date  
12 and time stated on the entry form and complying with the requirements of THE RULES OF  
13 COMPETITION and the ENTRY FORM will be considered “ON TIME” entries and shall be  
14 assured the opportunity to qualify. RARA will be the sole judge of acceptance or rejection of  
15 the application.

16 ENTRIES will not be accepted by RARA unless complete information specified on the entry  
17 form is supplied. An entry that contains any false statement shall be considered void and the  
18 entry fee forfeited and retained by RARA.

19 FEES will not be refunded for any reason other than rejection or refusal of the entry by  
20 RARA. RARA reserves the right to invite or exclude any owner, pilot or aircraft.

21 ENTRIES received after the closing date and time stated in the ENTRY FORM, shall be  
22 considered “CONDITIONAL ENTRIES” and shall be listed in their order of receipt by RARA.  
23 RARA shall notify each CONDITIONAL ENTRANT of their position in the field.

24 THE CONDITIONAL ENTRY classification has been added by RARA in an attempt to  
25 provide a full field of racers in the race classes as outlined below.

- 26
- To fill the field in the event it is not filled by closing time;
  - To fill the field in the event an accepted aircraft is unable to qualify;
  - To fill the field in the event any accepted aircraft is unable to start in the first heat race  
28 of its class.  
29

30 CONDITIONALLY accepted and replacement aircraft applications will be rejected if they  
31 arrive too late for RARA to process insurance and other paperwork.

32 **II. OFFICIALS**

33 AUTHORITY over all practice, qualification and racing events of the NCAR is vested in  
34 RARA through its officials, as listed below, which shall conduct and judge the events in  
35 accordance with The Rules of Competition and the conditions of the FAA waiver.

- The Contest Committee consisting of a Chief Judge and not less than six (6) nor more than eight (8) Contest Committee Judges, a maximum of nine (9):
- Director of Operations/Deputy Director of Operations:
- Air Boss/ Deputy Air Boss:
- Race Control Supervisor and Race Controllers:
- Chief Starter (F-1 and Biplanes) and Assistants
- Chief Timer and Assistants (timers, starters, flaggers & scorer)
- Chief Pylon Judge and Assistants (pylon judges & speed bumps)

•• The Tech/Safety Inspection Committees and the Pilot Qualifications Committees of each Class while performing their duties during the NCAR pursuant to the Rules of Competition for RARA, their respective Race Class rules and the FAA regulations.

NO OFFICIAL shall have a conflict of interest arising from involvement or connection with individual race sponsors, event sponsors or any racing team entered.

THE CONTEST COMMITTEE shall act in a judicial capacity and will be responsible for the interpretation and application of contest rules pertaining to the Air Racing event.

- Each Contest Committee member will act in an observer/umpire capacity during all qualification and racing events and shall station himself best to observe each contest:
- Settle disputes and protests formally presented:
- Determine penalties:
- In consultation with RARA authorize deviations or special provisions to the rules when necessary for safety of spectators and/or contestants.
- May exclude any contestant from participation if the contestant is operating under any physical deficiency making him/her unable to meet the physical requirements for their current medical certificate. They may require a medical examination of any contestant if they deem it necessary.

### III. AIRCRAFT ELIGIBILITY

ALL AIRCRAFT, ON-TIME ENTRIES, CONDITIONAL ENTRIES and REPLACEMENT AIRCRAFT must meet the eligibility requirements for the appropriate class, as stated in the class rules, by reference made a part of these rules.

NO AIRCRAFT may enter to race in more than one (1) race class.

NO AIRCRAFT weighing less than 4,500 pounds empty weight shall be allowed to enter as an Unlimited Racer.

THE FOLLOWING certificates, permits, logs, forms and documentation for an aircraft shall be available for inspection by the FAA and RARA: Registration Certificate, Airworthiness Certificate, Special Flight Permit, Operating Limitations, Airframe and Engine logs.



1 Additional documentation, in particular, notice of any modifications performed on the aircraft  
2 or engine since the last inspection and required by the FAA or Class rules for inspection  
3 purposes shall also be available for examination by the Tech/Safety Inspection Committee  
4 of the class. Specific reference is made herein to:

- 5 • FAR 21 Section 21.93 for clarification of changes in type design;
- 6 • FAR 1.1 to identify major alterations that might appreciably affect weight, balance,  
7 structural strength, performance, power plant operation, flight characteristics, or other  
8 qualities affecting airworthiness;
- 9 • FAR 91 Section 91.9 civil aircraft flight manuals, markings and placard requirements.

10 ANY PILOT with a new aircraft not previously inspected by the Technical Inspection  
11 Committee and any pilot whose aircraft has had a “major change” as defined by FAR 21  
12 Sec. 21.93 or a “major alteration” as defined by FAR 1.1 incorporated since the previous  
13 aircraft registration must register and have their aircraft ready for inspection no later than  
14 1200 hours the first Sunday of race week. All FAA approved documentation must be  
15 presented to the Class Tech/Safety Inspection Committee during the inspection of the  
16 aircraft.

17 If any “major change”, as defined by FAR Section 21.93(a) or “major alteration” as defined  
18 by FAR 1.1 have been incorporated on any aircraft since the last time the aircraft raced at  
19 Reno or within the last twelve (12) month period preceding the current race month, all  
20 provisions established by the FAA for a major change or alteration, through the FAA  
21 Approved Aircraft Operating Limitations, must be accomplished and documented in the  
22 aircraft records prior to arrival at Reno/Stead (RTS) and such documentation and related  
23 correspondence shall be made available to the FAA and RARA at Pilot Registration.

24 THE CLASS Tech/Safety Inspection Committee shall have final authority as to the eligibility  
25 of any aircraft for competition. Each Race Class is responsible for insuring that their  
26 Tech/Safety Inspection Committees are available in a sufficient amount of time to  
27 accomplish the necessary aircraft inspections prior to any aircraft flight at Stead that  
28 supports class pilot qualifications, race qualification or racing practice.

29 Should any “on time” or “conditional entry” aircraft in any class arrive prior to the first heat in  
30 their respective class and there are insufficient aircraft in that class to fill the field, that  
31 aircraft if able to have the Tech Committee approve the aircraft, the FAA reviews the  
32 necessary documentation and RARA completes its review, will become a conditional entry  
33 with all the rights and privileges of a regular entry.

34 Any Aircraft that is **“trucked in”** and **“assembled”** at Stead for the NCAR, shall require the  
35 Technical Inspection prior to flying.

36 Each class shall supply RARA with a list of the members of their Tech/Safety Committee by  
37 August 1<sup>st</sup> of each Race year.

38 THE CLASS Tech/Safety Inspection Committee shall advise the Chief Judge of the Contest  
39 Committee and RARA (Pilot Registration) of all aircraft eligibility and safety qualifications.  
40 Each Race Class is responsible for insuring that each racing aircraft has been inspected

1 and approved by their respective Tech/Safety Inspection Committee prior to flying on the  
2 race course. The Race Class shall provide a record of the aircraft inspected to RARA on a  
3 timely basis.

4 THE DECISION of the Tech/Safety Inspection Committee relative to the eligibility of an  
5 aircraft shall be final.

6 ALL RACING aircraft must be issued a race number prior to practice or qualification. The  
7 individual race class organizations will be responsible for control and issuance of race  
8 numbers for their respective race class.

9 ASSIGNED air race numbers must be properly applied on each racing aircraft prior to flying  
10 on the race course. The preferred location is: number(s) painted on the top of the upper left  
11 wing, reading from the leading edge towards the trailing edge, and on the bottom of the right  
12 wing and on each side of the fuselage clear of the wing, in readable block style and in  
13 contrasting color to the background on which they are applied. Characters should be AT  
14 LEAST THIRTY (30) INCHES HIGH, with minimum stroke of two and one half (2 1/2)  
15 inches. If the size of an aircraft prohibits the use of a number of this size, the largest number  
16 possible must be applied. The Chief Timer shall have the right to require contestants to  
17 replace or change the size, type, or location of their racing numbers.

18 OPERATIONAL transmit and receive VHF radios are required for all race classes qualifying  
19 and/or racing at Reno. Additionally, each VHF installation will incorporate mechanization  
20 that allows keying the VHF microphone from either the throttle or the stick (i.e. Hands on  
21 Throttle and Stick or HOTAS mechanization) and incorporate a head set to receive incoming  
22 VHF transmissions. The HOTAS requirement is a RARA requirement which is mandatory for  
23 all aircraft participating at Reno in the NCAR. Violations will result in disqualification.

24 CONTESTANTS shall be responsible for furnishing their own APUs, tractors, and other  
25 ground support equipment. RARA tow vehicles will be available to assist as requested.

#### 26 IV. PILOT ELIGIBILITY

27 PILOTS and alternate pilots must meet the eligibility requirements for the appropriate class,  
28 as stated in the rules for the class, by reference made a part of these rules. There will be no  
29 exceptions for non-compliance with class pilot eligibility requirements. In addition to the  
30 class rules, a pilot must be at least twenty-one (21) years of age in order to fly a racing  
31 aircraft on the Reno race course during race week.

32 It shall be the sole responsibility of the contestant to present his/her credentials to the  
33 FAA/RARA representatives and to present the necessary aircraft documents to the class  
34 Tech/Safety Committee for review upon arrival at the race site.

35 THE RESPECTIVE racing class Pilot Qualification Committee shall have final authority as to  
36 the eligibility of any contestant pursuant to its class specifications. Such committees shall be  
37 available at the race site no later than 0800 hours on the Sunday beginning race week to  
38 pass on the qualification of all contestants. The decision of the Pilot Qualification Committee  
39 relative to the eligibility of any contestant be shall final. The Pilot Qualification Committee of

1 each class shall advise the Chief Judge of the Contest Committee and RARA of all pilot  
2 eligibility qualifications. No pilot will attempt to practice, qualify or race until passed by said  
3 Pilot Qualification Committee.

4 Each class shall supply RARA with a list of the members of their Pilot Qualification  
5 Committee by August 1<sup>st</sup> of each Race Year.

6 ALL CONTESTANTS must have at least a Private Pilot Certificate. Race Class rules may  
7 require a commercial Pilot Certificate. Foreign Pilots must provide a current/valid pilot  
8 license issued by their country and present photo identification from their country such as a  
9 valid Passport or Drivers License. This photo identification must be in the pilot's possession  
10 or readily accessible in the aircraft when exercising the privileges of that pilot certificate.

11 RARA requires each contestant to have a Current Medical Certificate in accordance with  
12 rules of the class in which he/she intends to race.

13 EVERY PILOT flying in the NCAR must be certified. All certifications are approved by the  
14 individual race classes and pilots may be considered for certification if they have competed  
15 in Reno within the past three years or have successfully completed all phases of the PYLON  
16 RACING SEMINAR (PRS) in the previous twenty-four (24) months.

17 PRS ATTENDANCE will be required for a pilot or alternate pilot who falls into one of the  
18 following categories:

- 19 • Never competed in the National Championship Air Races;
- 20 • Never competed in the Race Class, in the National Championship Air Races.
- 21 • Not competed in the Race Class in the National Championship Air Races in the past  
22 three Races.

23 PILOTS with past experience competing at Reno in the National Championship Air Races  
24 may be exempt from the above if:

- 25 • A pilot has competed in a similar Class e.g. Formula One/Biplane; Unlimited/Jet on  
26 the same race course in the past three (3) years and receives a check ride  
27 satisfactory to the Class;
- 28 • A pilot seeking to fly in a slower or similar Class and who has competed in Reno in  
29 the last three (3) years, may request from the slower/similar Class the opportunity to  
30 perform a check ride. Upon completion and approval of the Class, he/she shall be  
31 eligible to participate in that class. E.g. Unlimited to Jet; Sport to T-6; Biplane to  
32 Formula One or visa versa.

33 **PILOTS may enter more than one race class, if fully certified for each class entered.**  
34 **However, RARA cannot guarantee that the race schedule will allow for sufficient time**  
35 **between the respective races to allow a safe transition period.**

1 **V. BRIEFINGS**

2 ALL RACE PILOTS must attend a General Pilot Briefing before practicing, qualifying, or  
3 racing on the racecourse. These briefings will be conducted by the Air Boss or the Deputy  
4 Air Boss. Dates, times and locations of the General Pilot Briefings will be included in the  
5 general instruction letter sent to each Air Race pilot. All pilots must personally attend one of  
6 these two briefings and have signed in on the attendance roster. The pilot's signature on the  
7 attendance roster verifies that the pilot has read and understands the Racing Rules of  
8 Competition and the Operational Rules and Regulations applying to the Stead Airport. It also  
9 signifies that the pilot has been briefed and understands the provisions of operating within  
10 the FAA Certificate of Waiver. Any pilot unable to attend either of these briefs will not be  
11 permitted to fly in the waived airspace.

12 IN ADDITION to the General Pilots Briefing there will be a Daily Pilot Class Briefing. This  
13 briefing is mandatory for any pilot desiring to fly on the race course that day. The times of  
14 these briefings will be published in the daily schedule for each class. Pilots will be required  
15 to sign in on the pilot attendance roster. Any pilot failing to attend the briefing or failing to  
16 sign the roster will not be permitted to fly that day. Any pilot who has someone other than  
17 him/her self sign in on his/her behalf shall be disqualified from racing for the remainder of  
18 that years racing.

19 UNDER SPECIAL circumstances, pilots who miss either the mandatory general briefing or  
20 the daily briefing must be briefed by the Air Boss or a designated representative before they  
21 are permitted to fly.

22 RARA shall hold a CREW CHIEF briefing at a time and place to be announced to provide  
23 the crew chiefs information on matters pertaining to the Ramp and Hanger rules affecting  
24 their respective classes.

25 THE PACE PLANE PILOT, in the Unlimited, Jet, T-6 and Sport Classes, shall brief the pilots  
26 before takeoff for each race and cover the following items:

- 27 • Time to start engines, Time to takeoff, Rendezvous area, Rendezvous speed and  
28 altitude, Emergency procedures, VHF Comm. Frequency, Number of laps for the  
29 race, AND other procedures as necessary.
- 30 • If a Pace Plane is unavailable, it is the responsibility of the pole position pilot to brief  
31 the other pilots before the race.

32 **VI. PRACTICE AND QUALIFYING PERIODS**

33 THE PRACTICE and qualifying periods will be controlled by Race Control on the designated  
34 Race Control radio frequencies. Any action requested by Race Control must be adhered to  
35 or disqualification from further participation may occur. Pilots demonstrating their ignorance  
36 of, or disregard for, the Rules of Competition, the FAA Waiver or FARs will be immediately  
37 grounded and referred to the Contest Committee for appropriate action. It is desirable to  
38 have the Class President or a Class representative with the timing crew during qualification.

1 ALL AIRCRAFT will communicate with Race Control on the Race Control frequency to  
2 obtain permission to take off for practice or qualifying and may be held on the ground or at  
3 the end of the runway if the race course is too crowded. The pilot may request takeoff and  
4 orbit away from the race course and await clearance to enter the race course when a  
5 position is available. The practice and/or qualification order is on a first-come basis after  
6 engine start, unless specific times had been pre-scheduled through Race Control. Formula  
7 and Biplane pilots will abide by the qualifying procedures adopted by their respective class  
8 organizations regarding communications and race course entry/exit during  
9 practice/qualifying periods.

10 NO MORE than four aircraft will be permitted on the race course at the same time during a  
11 practice period, unless authorized by Race Control. The Class President of an individual  
12 racing class may, after approval by the Air Boss, authorize more than four aircraft to occupy  
13 the race course during practice periods only.

14 WHEN A PILOT has announced his/her intention to qualify, only three (3) aircraft will be  
15 permitted on the race course at the same time, with the last aircraft entering the course  
16 being asked to pull off the course.

17 During any practice period, preferably after all aircraft in that class have qualified, a  
18 maximum of eight (8) aircraft may be permitted on the race course, to simulate actual race  
19 conditions, with approval of the respective Class President and Race Control.

## 20 VII. QUALIFICATION OF AIRCRAFT

21 OPERATIONS PERSONEL will be on station and ready to qualify aircraft between the hours  
22 of 0730 -1700 Monday, 0730-1700 Tuesday and 0730-1200 Wednesday of Race week.

23 ALL AIRCRAFT must qualify within the listed qualifying hours unless authorized by RARA to  
24 fill the field. Unless an aircraft can complete his qualification prior to the deadline, it will be  
25 flagged off the course. Official time shall be designated as the U.S. Naval Observatory  
26 atomic clock time. The Chief Timer shall be the sole judge of the time and no protests will be  
27 entertained.

28 QUALIFICATION periods will be scheduled, and the time periods allotted for qualification will  
29 be posted on the daily schedule and announced at the daily briefing. The qualification period  
30 may be shortened or extended by RARA in the best interest of the Air Races.

31 ALL ENTRIES must qualify in order to establish starting positions for their respective heats.

32 UNLIMITED, JET, T-6 AND SPORT aircraft have the option of running one or two timing  
33 laps during their qualification period. When ready to initiate their qualifying attempt,  
34 Unlimited, Jet and Sport Class aircraft must contact the Chief Timer at their pylon #4 to ask  
35 for the clock and communicate their desire to run one lap only or two consecutive laps: T-6  
36 aircraft will make the same call at their pylon #3. The Chief Timer will acknowledge this radio  
37 call and will place the aircraft on the clock when it crosses the start/finish line on that lap.  
38 The speed from the fastest lap will be used for qualification.

1 FORMULA ONE AND BIPLANE aircraft will run two timing laps. Speed from the fastest lap  
2 will be used for qualification. Requests for the clock will be made by VHF radio at pylon # 4  
3 after completing one (1) level lap. If there is no acknowledgement from the Timers of the  
4 request for the clock, the pilot may employ the wing rock method to initiate his/her qualifying  
5 run.

6 All Classes will initiate their timing run from level flight after passing the last pylon on their  
7 respective course preceding the start-finish line (Home Pylon), namely outer eight (8) for the  
8 Unlimited, Jet, T-6 and Sport classes and inner six (6) for the Formula 1 and Biplane  
9 classes.

- 10 • A GREEN FLAG signal will be given the aircraft at the start of the qualification;
- 11 • A WHITE FLAG signal will be given at the end of the first timed lap;
- 12 • A CHECKERED FLAG signal will be given upon completion of the qualification  
13 attempt.

14 ALL PILOTS must register, have their aircraft inspected, and in place and ready to qualify no  
15 later than 1200 hours on Tuesday of race week. Pilots and aircraft failing to meet this  
16 deadline will be considered a “conditional entry” and added to the end of the conditional  
17 entry list. On-time Entries shall always take precedence over a Conditional Entry in the order  
18 of qualification.

19 ALL PILOTS, except unlimited pilots and jet pilots, will be permitted to qualify his/her aircraft  
20 only once, and once so qualified with an official time, will not qualify again for any reason.

21 UNLIMITED and Jet qualifiers shall be allowed a second qualifying attempt provided the  
22 second qualifying attempt takes place at a time when no entrant is ready and waiting to  
23 attempt their initial qualification. The pilot who wished to attempt a second qualifying run  
24 shall indicate in his radio request to the Chief Timer that this is a second qualification  
25 attempt. If two or more pilots wish to make a second qualifying attempt at the same time,  
26 they shall be given an opportunity to re-qualify in the order of their request for a second  
27 qualification. When an entrant completes a second qualification, the best speed of the two  
28 qualification attempts shall be used as that pilot’s qualification speed. No pilot may have  
29 more than one re-qualification attempt.

30 A QUALIFYING attempt may be aborted by abruptly pulling off the course without passing  
31 the home pylon at racing altitude or within reasonable time anytime during the timed laps.  
32 Aircraft should call over the radio to race control on race frequency their race number and  
33 aborting. If the abort was on the first timed lap, the aircraft may either reinitiate a timing run  
34 with the proper communication procedure when desired in that qualifying session or during a  
35 later qualifying session. If the abort was on the second timed lap, the aircraft may either re-  
36 initiate a timing run with the proper communication procedure during that qualifying session  
37 without landing, or land and make a decision within one hour after landing to accept the first  
38 timed lap as its official time. If the first time is rejected as the aircraft’s official time, then that  
39 time is permanently lost and the aircraft must make another attempt to qualify.

40 IF IDENTICAL qualifying speeds are posted by two or more aircraft, their order in  
41 qualification shall be the same order in which they achieved their speeds.

- 1 • A If two (2) laps were timed and a pylon was cut on only one (1) lap, the lap on which  
2 a pylon was not cut shall be used.
- 3 • If only one (1) lap was timed and a pylon was cut on that lap, the aircraft will be given  
4 a second (AND FINAL) opportunity to qualify. The second opportunity to qualify shall  
5 be allowed AFTER all other aircraft ready and waiting to qualify during that particular  
6 qualification period have had an opportunity to qualify.
- 7 • If two (2) laps were timed and pylon cuts were recorded on both laps, the aircraft will  
8 be given a third (AND FINAL) one (1) lap opportunity to qualify, after all other aircraft  
9 in its class have had an opportunity to qualify.
- 10 • If time does not permit another qualification run, a time penalty of four (4) seconds  
11 times the number of pylons cut on either of the qualifying laps will be added to that  
12 specific lap. The best resulting time will be used as the qualifying speed.
- 13 • Cutting inside the race course during a qualification run is not permitted and no time  
14 will be allowed for that lap.

15 THE AIR BOSS may, at his discretion, grant permission for the performance of a “TEST  
16 FLIGHT” during the qualifying period of another class only if there is no chance of conflict or  
17 hindrance between the race aircraft of the two classes. These requests MUST be  
18 coordinated well in advance with the Air Boss and be approved by the Class Presidents of  
19 both classes.

## 20 VIII. RACE COURSE

21 IN 2003, RARA chose to employ an OPTIMUM RACE PATH based upon a speed and G  
22 forces provided by each Race Class to determine the minimum radius turn and a more  
23 representative circuit around the pylons. No pylons were moved at that time, yet the course  
24 lengths increased due to the difference in distance between pylon to pylon (straight line  
25 distances) and a curved track which is more representative of the path that can be flown.  
26 Pylons at the Reno National Championship Race Course have been relocated a number of  
27 times as speeds have increased and to provide additional safety for the pilots, spectators  
28 and surrounding neighbors, changing the course lengths.

29 THE CURRENT RACE COURSE LENGTHS ARE:

- 30 • JET CLASS: The Jet Class course is 8.4703 based upon a speed of 525 MPH and  
31 3.5 to 3.7 Gs.
- 32 • UNLIMITED CLASS: The Unlimited Class course is 8.4333 miles based upon a  
33 speed of 500 MPH and 3.5 Gs.
- 34 • **GOLD SPORT CLASS:** The Gold Sport Class course is 8.35606 miles based upon a  
35 speed of 400 MPH and 3.0 Gs. **(based upon the number of modified aircraft)**  
36 **\*NOTE: Should there be less than five (5) modified (Gold) Sport Class aircraft,**  
37 **all Sport Class races shall be held on the 6.9992 mile course.**

- 1 • **SILVER & BRONZE SPORT CLASS:** The Silver & Bronze Sport Class course is  
2 6.9992 miles based upon a speed of 375 MPH and 3.0 Gs.
- 3 • T-6 CLASS: The T-6 Class course is 5.0693 miles based upon a speed of 225 MPH  
4 and 2.0 Gs.
- 5 • FORMULA ONE CLASS: The Formula One Class course is 3.1875 miles based upon  
6 a speed of 250 MPH and 3.0 Gs.
- 7 • BIPLANE CLASS: The Biplane Class course is 3.1761 miles based upon a speed of  
8 210 MPH and 3.0 Gs.

9 SEE ATTACHMENT B for OPTIMUM RACE PATHS

10 RACE FLAGS, as designated below, will be displayed at Home Pylon during all racing  
11 events.

12 **GREEN FLAG:** Used to start a race or a qualification run.

13 **BLACK FLAG:** Used to signal an aircraft to vacate the course.

14 **WHITE FLAG:** Used to indicate the beginning of the final lap of a race.

15 **CHECKERED FLAG:** Used to indicate the finish of a race or qualification attempt.

16 THE SOUTH DEADLINE FOR ALL CLASSES SHALL BE THE SOUTH EDGE OF  
17 RUNWAY 8/26.

## 18 IX. RACING

19 **WIND LIMITATIONS: Maximum cross wind component for takeoff and maximum**  
20 **allowable racing wind for each race class SHALL be included in each class' race**  
21 **rules, and as such, shall become a part of these rules.**

22 AIR STARTS will be used for all Unlimited, Jet, Sport and T-6 races.

23 A RACEHORSE START will be used for all Formula One and Biplane races.

24 THE STARTING TIME for all aircraft will be the time that the first racing aircraft crosses the  
25 starting line.

26 THE STARTING LINE for the Unlimited, Jet, and Sport Classes is a line parallel to runway  
27 8/26 at its intersection with the northbound entry corridor. Lap #1 for these classes shall be  
28 from the starting line to the finish line at Home Pylon. Subsequent laps shall be on each  
29 class's specific race course.

30 THE STARTING LINE for the T-6, Formula One and Biplanes is a line projected south from  
31 Home Pylon at right angles to runway 8/26. Formula One and Biplanes on a runway 8  
32 departure must make one lap before the start time begins.

33 FORMULA ONES and Biplanes will not take-off on runway 26. The alternate start for  
34 Formula One and Biplanes will be from runway 32. The alternate start procedure will entail a  
35 left turn at a TEMPORARY TURN PYLON on Taxiway B after take-off on runway 32 the



1 aircraft will join the course at pylon 4. Formula One and Biplanes will continue around the  
2 course until the start of the race which will occur when the aircraft pass the FORMULA  
3 ONE/BIPLANE starting line. Race Control and the respective class will ensure cross wind  
4 components for a 32 departure are within the limits established by each class prior to  
5 authorizing a 32 launch.

6 **STARTING POSITIONS:** Qualifying speeds will determine starting positions in accordance  
7 with class rules for the Wednesday and Thursday heat races. The positions for the Friday,  
8 Saturday and Sunday races will be determined by the finishing position from the previous  
9 day or as stated in the class rules of progression.

10 **IN NO CASE** will the start of a race be delayed or expedited for:

- 11 • Orbiting pilots with low-fuel conditions
- 12 • Pilots unable to find the starting formation
- 13 • Pilots with mechanical or physical problems

14 ANY aircraft assigned to compete in a particular race which is unable to join the starting  
15 formation, or having joined the formation subsequently drops out for any reason prior to the  
16 start of the race, will not be regarded as a legal start and will not be eligible for prize money  
17 or trophies for that race.

18 **THE RACE** starts officially when the Pace Plane Pilot, or if there is not a Pace Plane, when  
19 the Pole Position Pilot announces a “race start” over race frequency at a predetermined  
20 point on the initial approach to the race course. All aircraft will enter the race course within  
21 their race corridor to officially start in a race.

- 22 • Entry at any other point will result in disqualification from that event. All aircraft must  
23 have entered the start corridor by the time the pole position aircraft crosses the start  
24 line to start the timing of the race, or they will be disqualified and not be considered  
25 an official starter.

26 **ALTERNATE AIRCRAFT** will not take off if all assigned aircraft in a race become airborne  
27 for a start.

28 **THE MINIMUM RACE ALTITUDE** on the Race Course is the Race plane’s cockpit (pilot’s  
29 eye level) at the top of the pylons on the Race Course and above the bottom of the “R” in  
30 RENO at the home pylon. The responsibility for calling violations of low flying shall vest in  
31 the Pylon Judges at each pylon, the Contest Committee when in position to view a violation  
32 and the Race Control Supervisor. The timers shall report a low flying violation at the Home  
33 Pylon, supported by the video evidence. All low flying violations shall be reported to the  
34 Contest Committee. Violators will be disqualified from the race in which the violation  
35 occurred. Repeat violators will be disqualified from future participation.

36 **THE MAXIMUM RACE ALTITUDE** on the Race Course shall be 350 feet AGL, EXCEPT: 1.)  
37 During the start lap or when necessary to pass a slower aircraft; OR 2.) Any Unlimited or Jet  
38 aircraft with a potential speed in excess of 500 MPH (based upon their qualification speed)  
39 as noted below for **MAXIMUM ALTITUDE AT PYLON OUTER 8**.

1 As all racers are timed using high speed cameras, a maximum of 250 feet AGL MUST be  
2 maintained when passing HOME PYLON during qualifications and on the final lap of any  
3 race. Failure to maintain an altitude at or below 250 AGL MAY result in NO TIME.

4 MAXIMUM RACE ALTITUDE AT PYLON OUTER 8: The following applies to the GOLD  
5 Racers in the Unlimited and Jet Classes. Due to the potential of speeds in excess of 500  
6 MPH attained along the West straightaway from OUTER 6 thru OUTER 8, the maximum  
7 ALTITUDE WHEN PASSING OUTER 8 is restricted to 250 feet AGL. This altitude restriction  
8 is required to ensure that an acceptable Safety (Sfr) and Scatter (Sr) Radii is maintained  
9 during that period of the turn when the aircraft vector is toward the pit/crowd viewing areas.  
10 Aircraft at an altitude in excess of 250 feet AGL OR on aircraft in a climbing attitude thru 250  
11 AGL when passing OUTER 8 may result in that aircraft being disqualified by the CONTEST  
12 COMMITTEE. Should such a breach be observed, the CONTEST COMMITTEE  
13 representative will notify RACE CONTROL immediately via radio. RACE CONTROL will  
14 direct the offending race aircraft to depart the race course and hold until completion of the  
15 race.

16 AN ESCAPE ROUTE is available for Unlimited, Jet, Sport and T-6 racers unable to remain  
17 within the boundaries of their race course when approaching the southern deadline, the  
18 south edge of runway 8/26. They must climb to 1,500 feet AGL while crossing their  
19 extended deadline west of the threshold of Runway 8, then pass behind the spectator area  
20 above 1,500 feet AGL then cross the threshold of Runway 26 and rejoin the circuit. Extreme  
21 caution is advised as aircraft on the race course have the right of way. No penalty will be  
22 incurred for performance of this maneuver.

23 AN AIRCRAFT overtaking a slower aircraft shall not pass between that aircraft and a pylon  
24 and will pass on the outside unless the overtaken aircraft is extremely wide and can be kept  
25 in sight at all times by the overtaking pilot during the pass.

26 THE PILOT of an overtaken aircraft must not in any way impede or interfere with a faster  
27 overtaking aircraft. The overtaking pilot must keep the overtaken aircraft in sight at all times  
28 during the pass.

## 29 X. PYLON TURNS

30 THE ENTIRE AIRCRAFT must remain outside all guide and race course pylons during a  
31 race or during a qualification attempt.

32 TURNING INSIDE of, or having any part of the aircraft over the pylon, constitutes a pylon  
33 cut and will be called by the pylon judges at that pylon. A pilot that has cut a pylon may  
34 continue to race but will be penalized two (2) seconds times the number of laps in the race  
35 for each pylon cut. The penalty time will be added to the actual finish time to arrive at a  
36 revised race time, which will be used to compute the final race speed. Protests to the  
37 contest committee will not be allowed on penalties for pylon cuts.

38 AIRCRAFT will not be notified of a pylon cut until completion of the race.

1 AN AIRCRAFT forced over or inside a pylon by the illegal flying of another aircraft shall be  
2 considered to have suffered a “FORCED CUT” and shall not be penalized. The Pylon  
3 Judges shall be the sole judge of whether or not a cut is a “FORCED CUT”. A protest to the  
4 Contest Committee will not be allowed on the determination of whether or not a cut is a  
5 “forced cut”. If a cut is judged to be a “forced cut”, the aircraft flying illegally will be  
6 disqualified from the race in which the violation occurred.

7 SHOULD the pilot of the aircraft that was, in the judgment of the Pylon Judge, forced to cut  
8 a pylon, deliver to the Scorer’s office within one (1) hour of the decision on the forced cut, a  
9 written statement that his/her cut was not forced, then the provisions for a pylon cut will be  
10 enforced on that aircraft and the disqualification of the alleged pilot/aircraft precipitating the  
11 “forced cut” shall be lifted.

12 A TEMPORARY TURN PYLON, when used for the start of a Formula One or Biplane race,  
13 shall be considered part of the Race Course and treated as all other pylons. The provisions  
14 for a pylon cut shall be enforced.

## 15 **XI. RACE FINISH**

16 THE OFFICIAL FINISH LINE for all races is a line projected from Home Pylon at right angles  
17 to Runway 8/26.

18 THE OFFICIAL FINISH for the racers of any race shall occur when the leading aircraft  
19 passes the finish line after completion of the required number of laps. All following aircraft  
20 will then be given the Checkered Flag as they cross the finish line and the unofficial finishing  
21 position will be determined by the number of laps completed by each aircraft crossing the  
22 finish line. The winner shall be determined by the race time, including any added time for  
23 penalties. The winner and the finishing position of all racers in the field shall be determined  
24 by adjusting their unofficial finish time with any penalty time.

25 ALL RACES shall be considered completed upon the receipt of the checkered flag by the  
26 leading aircraft.

27 A SAFETY LAP will not be flown and all aircraft shall depart the course in trail after receiving  
28 the checkered flag.

29 UNOFFICIAL FINAL RESULTS will be posted within one-half (½) hour of the finish of a race.  
30 Such results will become official after one (1) hour following posting if there is no protest.

## 31 **XII. EMERGENCY PROCEDURES**

32 WHEN A PILOT declares a “MAYDAY” or when it is obvious that a racing aircraft is having  
33 an emergency, Race Control will announce by radio that an emergency is in progress.

34 ANY AIRCRAFT declaring “MAYDAY” or obviously leaving the race course for an  
35 emergency condition will not be allowed to re-enter that race and will have terminated the  
36 race at that point.

1 WHEN A 'MAYDAY' has been declared, all other aircraft will continue to race.

2 A SAFE 'MAYDAY' altitude will vary depending on the pilot, the type of aircraft, the course  
3 and other factors. No specific altitude is designated.

4 FAILURE to give way to an aircraft with an emergency will result in a severe penalty.

5 EMERGENCY CONDITIONS will be terminated as soon as possible after the distressed  
6 aircraft has safely landed and shall be decided by CFR. The pilot of a distressed aircraft  
7 may aid in terminating the Emergency by declaring his safety on the runway. Race Control  
8 will notify officials on ground via the operations frequency that the emergency is over.

9 IN THE EVENT that a race must be terminated before its normal end, due to an emergency  
10 condition, Race Control will notify pilots by radio that the race is terminated and a red flag  
11 will be displayed at the Home Pylon. Aircraft shall pull up and off the course in trail at the  
12 Home Pylon as is normally done at the end of a race. Landing instructions will be given as  
13 soon as possible after the race termination. This procedure is to prevent uncoordinated  
14 departures from the race course should a race be terminated.

### 15 XIII. RACE CANCELLATION OR POSTPONEMENT/IMPACT ON PAYOUTS

16 THE RARA Director of Operations/Deputy Director of Operations and the Chief Judge of the  
17 Contest Committee in cooperation with RARA shall have the authority to postpone or delay  
18 any racing for reasons of safety, weather, or course conditions.

19 IN DETERMINING whether a race should be postponed, the Director of Operations/Deputy  
20 Director of Operations shall consult with representatives of the FAA, RARA and the  
21 president(s) of the affected racing class. Any postponement will remain in effect until those  
22 listed above agree to resume the competition. In determining whether a race should be  
23 rescheduled, agreement must be unanimous between the Director of Operations/Deputy  
24 Director of Operations and the Class President.

25 IF AT ANY TIME it becomes necessary to stop a race, and the lead aircraft has completed  
26 **50% or more** of that race, the race shall be declared completed. Finishing positions shall be  
27 determined by the aircraft positions at the time of official race stoppage.

28 IF THE RACE is stopped before the lead aircraft has completed 50% of the race it may be  
29 started again after suitable time has been allowed for contestant preparation.

- 30 • Only those aircraft competing in the stopped race and who had made an official start  
31 will be permitted to restart even if the field is not filled.
- 32 • Aircraft that had officially started the race but dropped out of the field before the race  
33 was stopped will be allowed to enter the restarted race.
- 34 • Aircraft not officially starting the race will not be allowed to enter the restarted race.
- 35 • Aircraft disqualified during the completed portion of a stopped race will not be allowed  
36 to enter a restarted race, but they will receive last place money.

- If the race was not officially started, the aircraft originally scheduled to start the race will be allowed to enter the rescheduled race.

**THE PURSE will constitute the total amount of dollars allocated to the Class for the current year’s event and distributed for Prize Money and Class Expenses. RARA will allocate and fund the Purse, predicated on a full field racing of aircraft as follows.**

**THE PURSE ALLOCATION**

|                      | %                 |
|----------------------|-------------------|
| <b>Wednesday</b>     | <b>10%</b>        |
| <b>Thursday</b>      | <b>15%</b>        |
| <b>Friday</b>        | <b>20%</b>        |
| <b>Saturday</b>      | <b>25%</b>        |
| <b><u>Sunday</u></b> | <b><u>30%</u></b> |
| <b>Total</b>         | <b>100%</b>       |

**FUNDING – The class will be funded by the same formula used for the overall purse. The total funding is determined for the class predicated upon a full field racing. The purse will be adjusted downward if a full field is not qualified and begins racing on Wednesday. If the class withdraws it’s “Administrative” fee there must be adequate funds allocated to the purse to facilitate the payment. Any “off the top” payments to the class may short your prize pay out schedule. All funding for the day will commence at the start of a specific race. If the Race or Heat is not run the purse for that heat may or may not be funded at the discretion of RARA.**

**XIV. SAFETY**

SAFETY IS THE MOST IMPORTANT CONSIDERATION AT THE RENO NATIONAL CHAMPIONSHIP AIR RACES.

RARA AND THE CONTEST COMMITTEE will assure that the provisions of the FAA waiver are adhered to and will cooperate with the designated FAA officials in the interest of spectator and participant safety.

THE CONTEST COMMITTEE, Air Boss or Deputy Air Boss may order off the course, any pilot who appears to be a menace to himself or to other participants.

FIRE RETARDENT flight clothing and gloves are mandatory for all race classes. Helmets and oxygen masks shall be used in accordance with individual class racing rules.

1 **xv. VIOLATIONS – PENALTIES - FINES**

2 THE FOLLOWING shall be deemed violations of these Rules of Competition and will be  
3 grounds for disqualification. The length of a disqualification for any of the following shall be  
4 dependent upon the severity of the violation as determined by RARA in consultation w/ the  
5 Contest Committee and the Class President.

- 6 • Bribery or an attempt to bribe anyone connected with any competition and/or the  
7 acceptance of such offer:
- 8 • The intention to enter or to aid in the entry of an unqualified participant or aircraft:
- 9 • Failure to give way to an aircraft with an emergency:
- 10 • Any action or proceeding prejudicial to the event or to the best interest of air racing:
- 11 • Any unsportsmanlike conduct, any protest offensively formulated, any abusive  
12 language or threat uttered publicly or otherwise against participants, officials, or  
13 committee members, before, during, or after competition:
- 14 • Reckless or dangerous flying:
- 15 • Violations of any FAA rules, regulations or the Waiver:
- 16 • Low flying over spectators at any time:
- 17 • Failure of pilot or aircraft to conform to regulations set forth in the specifications and  
18 Technical Inspection Regulations of the racing class involved:
- 19 • Attempt to race an unqualified aircraft in a race as substitute for a qualified aircraft:
- 20 • Attempting to fly on the race course prior to personally attending and signing in for the  
21 required pilot briefing(s):
- 22 • Attempting to fly on the race course without an assigned race number correctly  
23 applied on the aircraft:
- 24 • Any pilot taking an unauthorized passenger on the race course at any time shall be  
25 disqualified from racing for that year and/or the following year dependent on the  
26 timing of the violation. Should the infraction occur during practice, the qualification  
27 period, or Wednesday thru Friday of Race Week, the disqualification shall be for the  
28 remainder of the current year. Should the infraction occur on Saturday or Sunday of  
29 Race Week, the disqualification shall be for the remainder of the current year AND  
30 the following year's Air Races:
- 31 • Any pilot crossing over a prescribed DEADLINE during participation in any race will  
32 be disqualified from that race with no right of protest and will receive last place money  
33 for that race.
- 34 • Any pilot observed above 250 feet AGL OR at 250 AGL and in a climbing attitude,  
35 when passing PYLON OUTER 8, while participating in any GOLD RACE of the  
36 Unlimited or Jet Classes, may be disqualified from that race with no right of protest  
37 and will receive last place money for that race.

- 1 • Should a pilot not climb to and maintain the 1,500 AGL altitude required by the  
2 ESCAPE ROUTE, discussed in the RACING SECTION, he/she will be disqualified  
3 and receive last place money for that race.
- 4 • A pilot displaying erratic, reckless, dangerous or unsportsmanlike flying will be  
5 ordered of the course by radio and Black Flag. There shall be no right of protest and  
6 the pilot shall receive last place money for that race. The pilot will meet with the  
7 Contest Committee and the Class Pilot Qualifications Committee after landing to  
8 discuss the reason for the erratic behavior.
- 9 • Any participant “jumping the start”, “slingshotting” or “diving for the deck” at the start of  
10 a race will be subject to disqualification and last place money for that race. The Chief  
11 Judge of the Contest Committee will be the sole determiner of any of these  
12 infractions, and no protest may be filed.

13 THE FOLLOWING are deemed penalties and shall not result in a disqualification.

- 14 • The penalty for a pylon cut during a race shall be two (2) seconds per lap for each  
15 pylon cut. A four (4) second penalty shall be applied for each pylon cut during  
16 qualifications should the pilot/aircraft be unable to re-qualify. Protests to the Contest  
17 Committee will not be allowed.
- 18 • A pylon cut allegedly assigned to the wrong aircraft will be discussed with the Contest  
19 Committee and the Chief Pylon Judge, through the formal protest process.
- 20 • The penalty to the affected class for a violation of the number of credentialed  
21 members of that class or the presence of any person not having the appropriate  
22 credentials within the “Designated Observation Area” or the “Telemetry Area” shall  
23 result in the class’ inability to occupy those areas for the remainder of the year’s  
24 races. Should a violation occur, the class will be asked to immediately correct the  
25 situation and if they are able to immediately respond, no penalty will be imposed.

26 A MONETARY FINE shall be assessed to a CLASS should any pilot, in that class, enter the  
27 Race Course in an aircraft, without the appropriate documentation required by RARA and  
28 the FAA, to fly at any RARA sanctioned event. All fines shall be deducted from the annual  
29 Race Purse for the subject Class for that Race Year and retained by RARA.

- 30 • DURING PRACTICE or QUALIFICATION the Class of the aircraft the which the pilot  
31 is/was flying when violation is/was discovered and documented, shall be fined Five  
32 Hundred (\$500.00) Dollars for the first violation by that class in that year. The fine  
33 shall be doubled for each subsequent violation within the Class
- 34 • DURING A RACING PERIOD the Class of the aircraft the pilot(s) is/was flying, when  
35 the violation is/was discovered and documented, shall be fined Five (5%) percent of  
36 the total Class Purse for that race day for each violation.

1 **XVI. PROTESTS**

2 THE RIGHT to protest is vested in the competitors and principal owners of the affected  
3 aircraft only. The Contest Committee may institute a protest by virtue of their judging  
4 authority at any time without the required fee.

5 ALL PROTESTS must be in writing and accompanied by the prescribed Two Hundred  
6 (\$200.00) Dollar protest fee and delivered to the Chief Scorers office within one (1) hour of  
7 the posting of the unofficial race results for protests relating to decisions or actions of the  
8 judges, timers, scorers other officials or participants, and at least four (4) hours before the  
9 first scheduled race in a class in which there is a protest against the validity of an entry  
10 aircraft or qualification of a participant.

11 All contestants shall remain available for a period of one (1) hour after the posting of the  
12 unofficial results of an event for the purpose of receiving notice of a protest should one be  
13 filed. Failure to remain in the area to receive notice of a protest will not stop the hearing of a  
14 protest.

- 15 • Protests relating to an air racing event and any error or irregularity committed during a  
16 competition will be presented to the Contest Committee which will convene to deal  
17 with any issue under their jurisdiction as soon as practicable and in no event later  
18 than one (1) hour after finish of competition of the day and will remain in session until  
19 all protests have been resolved and the official results posted. The decision of the  
20 Contest Committee shall be final and all parties concerned shall be bound by the  
21 decision and no further appeal to the decision will be granted.
- 22 • A technical protest of racing aircraft will be presented to the Contest Committee and  
23 the Chief Tech/Safety Inspector of the class. When a protest has been made against  
24 the legality of the aircraft, the protestor will be responsible for the expenses incurred  
25 by the party protested against and/or class as a result of the protest if the aircraft is  
26 found to be legal.
- 27 • The Contest Committee shall notify all parties concerned of the time and place of the  
28 hearing of any protest. All parties shall be entitled to call witnesses and they and the  
29 witnesses shall be given the opportunity to be heard. Persons knowledgeable in  
30 specialized areas pertinent to the incident may be called by the Contest Committee to  
31 assist in a fair and equitable judgment. The president of the class involved, or his  
32 designee will be notified and may be present at the protest hearing if they wish.
- 33 • All prizes won by a competitor who has been protested against will be withheld until a  
34 final decision on the protest has been determined.
- 35 • Any disputes and/or unresolved conflicts concerning these rules that could directly  
36 jeopardize the NCARs shall be resolved at the sole discretion of RARA.



1 **XVII. GENERAL**

2 RARA WILL make available to each participant a copy of these Rules of Competition and  
3 the attached Appendices as well as the FAA Certificate of Waiver and it shall be the  
4 responsibility for each contestant to read and comply with them before flying at Reno.

5 **XVIII. SPECIAL RULES**

6 SPECIAL RULE changes deemed necessary during the event will be approved by RARA in  
7 consultation with the FAA, the Contest Committee and the Class Presidents. Such changes  
8 will be acknowledged by the Director of Operations, Chief Judge of the Contest Committee,  
9 and the President(s) of the classes involved. These changes will be signed by the Chairman  
10 of the Board of RARA and posted in the contestant areas and presented at the pilot  
11 briefings. If a difference exists between any RARA rule and a class rule, RARA will be the  
12 deciding authority.

13 Authorization for a passenger ride around the Race Course shall be obtained from the  
14 RARA Director of Operations and the FAA will be notified. The passenger ride shall be no  
15 lower than two (200) hundred feet AGL. Should an infraction of this height limitation occur,  
16 the same penalty shall be imposed as that for taking an unauthorized passenger on the  
17 Race Course.

18 RARA has instituted the following policy to validate Pilot & Aircraft prior to taxi for  
19 qualification and racing.

- 20 • Each Race Class President or his designated representative shall, prior to the initial  
21 class briefing of the day, identify a member of their class as the class coordinator  
22 responsible for ensuring that only those pilots or alternate pilots approved in writing  
23 via the RARA Authorized Pilot/Race Aircraft List enter the race course at any time the  
24 FAA waiver is in effect. The list is generated, updated and maintained by the RARA  
25 Pilot Coordinator.
- 26 • Each Class President will be issued a copy of the List on the opening Sunday of race  
27 week, prior to the Sunday morning class brief. Updates, as authorized by RARA, will  
28 be provided to the Class President during the initial class briefing on the day after the  
29 day of approval by RARA.
- 30 • The class coordinator will be required to attend the first class briefing of the day and  
31 ensure all pilots/alternate pilots who are scheduled to fly, as depicted on the Official  
32 Pairing Sheets, sign-in prior to the start of the briefing. Additionally, the class  
33 coordinator will identify himself or herself to the RARA Authorized Pilot/Race Aircraft  
34 Monitor who will also attend the first class briefing of the day.
- 35 • The RARA Authorized Pilot/Race Aircraft Monitor and the class coordinator will  
36 document in writing that all pilot/aircraft combinations contained on the pairing sheets  
37 for that race day are consistent with the current RARA Authorized Pilot/Race aircraft  
38 List. If a pilot or alternate pilot is not authorized in a given race aircraft consistent with  
39 the current RARA Authorized Pilot/Race Aircraft List, the affected aircraft will be

1 removed from the race schedule unless an authorized pilot designated on the list and  
2 who has attended the briefing is substituted on primary pilot/race aircraft qualification  
3 schedule or the pairing sheet. Class coordinators will notify the RARA Scorer  
4 immediately via telephone (i.e. not later than aircraft taxi) if the primary pilot/race  
5 aircraft qualification schedule or the race pairing sheet does not accurately reflect the  
6 approved and briefed pilot/race aircraft combination.

- 7 • The designated class coordinator is responsible to insure that only an authorized  
8 primary/alternate pilot enters a race plane for either a qualification attempt or a race  
9 event. The RARA Authorized Pilot/Race Aircraft Monitor will also be on the ramp and  
10 will visually confirm pilot/race plane compliance to the degree possible consistent with  
11 the list.
- 12 • It is the responsibility of the Class, through the Class President, to assure that only  
13 pilots that are certified, insured and named, either as the pilot or alternate pilot, fly at  
14 Reno in any practice, qualification or racing event. RARA will monitor the briefing  
15 sign-ins and the announced pairings to maintain its records, BUT should an ineligible  
16 pilot be found in an aircraft, flying within the waived airspace, the Class shall be  
17 held accountable for the violation! This is a serious breach of liability rules established  
18 by RARA and its insurance carrier and could invalidate said race insurance.
- 19 • Any pilot who enters the race course during practice, qualifications or race periods  
20 without being authorized on the RARA Authorized Pilot/Race Aircraft List shall cause  
21 the class to be fined in Accordance with VIOLATIONS, PENALTIES & FINES.

## 22 **XIX. PRIZE MONEY AND PURSE**

23 PRIZE MONEY SCHEDULES for a full field shall be made available to RARA on the  
24 Saturday prior to racing.

25 IF THERE IS less than a full field in any racing class after the qualification period is  
26 completed, all unearned prize money shown on the prize money schedule shall be retained  
27 by RARA.

28 THE RACE CLASS shall provide RARA with either an individual pay out schedule with the  
29 amount due the Class Participants or an invoice for the total Class Purse based upon a full  
30 field of racers or based on the actual number of racers that qualified. The individual checks  
31 will be handed out to the contestants during the Awards Ceremony and checks for the Race  
32 Class will be presented to the Class Representative during the Awards Ceremony for that  
33 Class.

34 RARA will make every effort to make the checks payable as directed by the Class or the  
35 Race Contestant. All IRS 1099 forms will be issued to the payee on the check and thus it is  
36 the responsibility of the recipient to ensure it is correct prior to it being cashed.

37 SPECIAL prizes may from time to time be offered through RARA by specific sponsors.  
38 Rules governing these prizes will be distributed prior to the races in accordance with RARA  
39 rules.

1 **XX. CLASSES – FULL FIELD – NUMBER OF RACES**

2 COMPETITION at the NCAR is currently comprised of the following Classes, number of  
 3 aircraft in that class’s field and the number of Races for each class.

| <u>CLASSES</u> | <u># OF AIRCRAFT FOR FULL FIELD</u> | <u># OF RACES*</u> |
|----------------|-------------------------------------|--------------------|
| UNLIMITED      | 24 FASTEST QUALIFIERS               | 12                 |
| T-6            | 18 FASTEST QUALIFIERS               | 9                  |
| <b>SPORT</b>   | <b>27 FASTEST QUALIFIERS</b>        | <b>12</b>          |
| <b>JET</b>     | <b>21 FASTEST QUALIFIERS</b>        | <b>12</b>          |
| FORMULA ONE    | 24 FASTEST QUALIFIERS               | 9                  |
| BIPLANE        | 24 FASTEST QUALIFIERS               | 9                  |

4 \*Indicates the current total number of races scheduled for use in determining the “Rules of  
 5 Progression” to the Championship in each class. The actual number of races scheduled and  
 6 flown could change due to unforeseen and varying conditions.

7 **XXI. MINIMUM NUMBER OF RACERS/LAPS TO QUALIFY FOR A RACE**

8 **There shall not be less than five (5) aircraft to qualify for a heat or race. The following**  
 9 **tables shall specify to minimum and maximum heat size for all races with the**  
 10 **exception of the Sunday Gold Races as identified. A minimum of six (6) laps shall be**  
 11 **flown for all Gold Races.**

| Class            | Heat Size |          |
|------------------|-----------|----------|
|                  | Min       | Max*     |
| <b>Biplane</b>   | <b>5</b>  | <b>8</b> |
| <b>F1</b>        | <b>5</b>  | <b>8</b> |
| <b>Jet</b>       | <b>5</b>  | <b>7</b> |
| <b>Sport</b>     | <b>5</b>  | <b>9</b> |
| <b>T-6</b>       | <b>5</b>  | <b>8</b> |
| <b>Unlimited</b> | <b>5</b>  | <b>9</b> |

| Class            | Gold Race Size |           |
|------------------|----------------|-----------|
|                  | Min            | Max*      |
| <b>Biplane</b>   | <b>7</b>       | <b>8</b>  |
| <b>F1</b>        | <b>7</b>       | <b>8</b>  |
| <b>Jet</b>       | <b>7</b>       | <b>8</b>  |
| <b>Sport</b>     | <b>7</b>       | <b>9</b>  |
| <b>T-6</b>       | <b>7</b>       | <b>8</b>  |
| <b>Unlimited</b> | <b>7</b>       | <b>10</b> |

12 **\*Max to safely race on applicable course**

13 **XXII. THE RULES OF PROGRESSION**

14 Attached are the Rules of Progression (Appendices A thru F), as submitted to and approved  
 15 by RARA, and are hereby made a part of these rules, and shall govern the position and  
 16 progression of all aircraft in all races. Should any class chose to submit a revised Rules of  
 17 Progression **prior to September 1 of each year**, based upon the available number of  
 18 aircraft or for any other reason, it must be submitted to and approved by RARA **prior to the**  
 19 **initiation of racing.**





1 Those aircraft that start the Friday Gold race will be in the field for Saturday's Gold  
2 race, with others being in order of finish from Friday's Silver race.  
3

4 2. The seven Silver aircraft include the four last finish places from the first Silver race plus  
5 three aircraft from the first Bronze race. If any of Friday's Silver aircraft fail to start the  
6 Friday Silver race, they will be dropped to Saturday's Bronze race. Those aircraft that  
7 start the Friday Silver race will be in the field for Saturday's Silver race, and if their  
8 finish position is high enough could be in the field for Saturday's Gold race, with others  
9 being in order of finish from Friday's Bronze race.

10  
11 3. The seven Bronze aircraft include the four last finish places from the first Bronze race  
12 plus three aircraft from the Medallion race, and/or any dropped down from Thursday's  
13 Silver race. If any of Friday's Bronze aircraft fail to start the Friday Bronze race, they  
14 will be dropped down to a pool of aircraft allowed to start in Saturday's or Sunday's  
15 Bronze race, depending upon their finish. None of the top 24 qualifiers will drop below  
16 the Bronze level for Sunday's races.  
17

18 4. Starting position in each race will be in order of finishing from the previous day's races.  
19 Aircraft that bump up into or are added to an event are at the bottom position of that  
20 particular race in their order from the previous day's race. Aircraft that are dropped  
21 down from a previous day's race as a result of not starting that race will be dropped to  
22 the bottom position of the race into which they are placed, with the order being the  
23 order in which they would have started the previous day's race (if more than one was  
24 dropped down), and they will be behind the people bumped up into the particular race  
25 as a result of finishing a race in the previous day. This procedure will also apply to  
26 positioning for subsequent days of racing.  
27

28 C. The third day of racing (Saturday) will contain a seven aircraft Gold race, a seven aircraft  
29 Silver race, and a seven aircraft Bronze race.  
30

31 1. The seven Gold aircraft include six aircraft from the Friday Gold race plus the first place  
32 finisher of the Friday Silver race. If any of the Saturday Gold aircraft fail to start the  
33 Saturday Gold race, they will be dropped to Sunday's Silver race; i.e., non-starters drop  
34 only one race in one day. Those aircraft that start the Saturday Gold race will be in the  
35 field for the Sunday Gold race, with others being in order of finish from the Saturday  
36 Silver race.  
37

38 2. The seven Silver aircraft include six aircraft from the Friday Silver race plus the first  
39 place finisher from the Friday Bronze race and/or any dropped from the Friday Gold  
40 race. If any of the Saturday aircraft fail to start the Saturday Silver race, they will be  
41 dropped to the Sunday Bronze race. Those aircraft that start the Saturday Silver race  
42 (except for the winner of Saturday's Silver race), will be in the field for the Sunday  
43 Silver race, with others being in order of finish from the Saturday Bronze race.  
44

45 3. The seven Bronze aircraft include six aircraft from the Friday Bronze race plus one  
46 aircraft from the Medallion race and/or any dropped down from the Friday Silver race. If  
47 any of the Saturday Bronze aircraft fail to start the Saturday Bronze race, they will be

dropped to a pool of aircraft and allowed to start in the Sunday Bronze race. None of the top 24 qualifiers will drop below the Bronze level for the Sunday races.

- D. The fourth day of racing (Sunday) will contain an eight aircraft Gold race, an eight aircraft Silver race, and an eight aircraft Bronze race.
- The eight Gold aircraft include seven aircraft from the Saturday Gold race plus the first place finisher of the Saturday Silver race. Those aircraft that start the Saturday Gold will be in the field for the Sunday Gold race, with others being in the order of finish from the Saturday Silver race.
  - The eight Silver aircraft include six aircraft from the Saturday Silver race plus the first and second place finishers from the Saturday Bronze race and/or any dropped down from the Saturday Gold race. Those aircraft that start the Saturday Silver race will be in the field for the Sunday Silver race and if their finish position is high enough could be in the field for the Sunday Gold race, with others being in order of finish from the Saturday Bronze race.  
 \*\*\*The winner of the Sunday Silver race may elect to advance to the Gold race and when the election is made will forfeit his position and prize money as the winner of the Silver race. The forfeited prize money will become the 9<sup>th</sup> place price money in the Gold race.
  - The eight Bronze aircraft include five aircraft from the Saturday Bronze race plus three aircraft from the Medallion race and/or any dropped down from the Saturday Silver race. None of the top 24 qualifiers will drop below the Bronze level for the Sunday race.  
 \*\*\*The winner of the Sunday Bronze race may elect to advance to the Silver race and when the election is made will forfeit his position and prize money as the winner of the Bronze race. The forfeited prize money will become the 9<sup>th</sup> place price money in the Silver race.

|                  |                | <b>2011 Race Progression (24-Plane Field)</b> |        |          |        |
|------------------|----------------|---|--------|----------|--------|
|                  |                | <b>12 Races in 4/5 Days of Racing</b>         |        |          |        |
|                  |                | Wednesday<br>Thursday                         | Friday | Saturday | Sunday |
| <b>Gold</b>      | <b>(1-4)</b>   |   | 6      | 7        | 8      |
|                  |                |   | 6      | 7        | 8      |
| <b>Silver</b>    | <b>(5-10)</b>  | 6   | 7      | 7        | 8      |
|                  |                | 6   | 7      | 7        | 8      |
| <b>Bronze</b>    | <b>(11-17)</b> | 7   | 7      | 7        | 8      |
|                  |                | 7   | 7      | 7        | 8      |
| <b>Medallion</b> | <b>(18-24)</b> | 7   |        |          |        |
|                  |                | 7   |        |          |        |
|                  |                | 20  | 20     | 21       | 24     |

# **APPENDIX A-1 - UNLIMITED CLASS PROGRESSION**

## **(27 Aircraft Field)**

### **I. GENERAL**

- A. There are no lock-ins or assured positions for the Sunday Gold Championship race.
- B. The starting order for the first day of competition will be by the order of qualifying time.
- C. The starting order in all races after the first day of competition will be determined by the previous day's finishing positions as defined below (Refer to enclosed Figure A-1, "Race Progression Chart")

#### 1. Disabled Aircraft

If any aircraft scheduled to race on a given day are permanently disabled, other aircraft will move up one slot starting from the dropout's last starting position, and the first available aircraft (the next qualified aircraft) will move into the last starting position in either the Bronze or Medallion race, depending on which day of racing is underway. The disabled aircraft will be bumped down one race for the next day's race.

#### 2. Finish Position

Finishing position is as specified in Section VIII, paragraph H.2.

### **II. EXAMPLE OF RACE PROGRESSION**

An example of a typical racing event is included. The example is for a four day racing event, where 27 aircraft advance to the Sunday Championship races. Figure A-1 (included in the Unlimited Class Race Rules) shows a typical race progression chart which will be explained in detail in the following paragraphs.

- A. The first day of racing (Thursday) will contain a seven aircraft Silver race, a seven aircraft Bronze race, and a seven aircraft Medallion race. The Silver race will contain qualifiers 7 through 13, the Bronze race will contain qualifiers 14 through 20, and the Medallion race will contain qualifiers 21 through 27.

- B. The second day of racing (Friday) will contain a seven aircraft Gold race, a seven aircraft Silver race, and a seven aircraft Bronze race.

- 1. The seven Gold aircraft include the six fastest qualifiers and the winner of Thursday's Silver race. If any of Friday's Gold aircraft fail to start the Friday Gold race, they will be dropped to Saturday's Silver race; i.e., non-starters drop only one race in one day. Those aircraft that start the Friday Gold race will be in the field for Saturday's Gold race, with others being in order of finish from Friday's Silver race.

- 2. The seven Silver aircraft include the six last finish places from Thursday's Silver race plus the winner of Thursday's Bronze race. If any of Friday's Silver aircraft fail to start the Friday Silver race, they will be dropped to Saturday's Bronze Race. Those aircraft that



1 start the Friday Silver race will be in the field for Saturday's Silver race, and if their finish  
2 position is high enough could be in the field for Saturday's Gold Race, with others being in  
3 order of finish from Friday's Bronze race.

- 4 3. The seven Bronze aircraft include the six last finish places from Thursday's Bronze race  
5 plus the winner of Thursday's Medallion race, and/or any dropped down from Thursday's  
6 Silver race. If any of Friday's Bronze aircraft fail to start the Friday Bronze race, they will  
7 be dropped down to a pool of aircraft allowed to start in Saturday's or Sunday's Bronze  
8 race, depending upon their finish. None of the top 27 qualifiers will drop below the Bronze  
9 level for Sunday's races.

- 10 4. Starting position in each race will be in order of finishing from the previous day's races.  
11 Aircraft that bump up into or are added to an event are at the bottom position of that  
12 particular race in their order from the previous day's race. Aircraft that are dropped down  
13 from a previous day's race as a result of not starting that race will be dropped to the  
14 bottom position of the race into which they replaced, with the order being the order in  
15 which they would have started the previous day's race (if more than one was dropped  
16 down), and they will be behind the people bumped up into the particular race as a result of  
17 finishing a race in the previous day. This procedure will also apply to positioning for  
18 subsequent days of racing.

- 19 C. The third day of racing (Saturday) will contain an eight aircraft Gold race, an eight aircraft Silver  
20 race, and an eight aircraft Bronze race.

- 21 1. The eight Gold aircraft include seven from the Friday Gold race plus the first place finisher  
22 of the Friday Silver race. If any of the Saturday Gold aircraft fail to start the Saturday Gold  
23 race, they will be dropped to Sunday's Silver race; i.e., non-starters drop only one race in  
24 one day. Those aircraft that start the Saturday Gold race will be in the field for the  
25 Sunday Gold race, with others being in order of finish from the Saturday Silver race.

- 26 2. The eight Silver aircraft include six aircraft from the Friday Silver race plus the first two  
27 finishers from the Friday Bronze race and/or any dropped from the Friday Gold race. If  
28 any of the Saturday aircraft fail to start the Saturday Silver race, they will be dropped to  
29 the Sunday Bronze race. Those aircraft that start the Saturday Silver race (except for the  
30 winner of Saturday's Silver Race), will be in the field for the Sunday Silver race, with  
31 others being in order of finish from the Saturday Bronze race.

- 32 3. The eight Bronze aircraft include five from the Friday Bronze race plus three aircraft from  
33 the Thursday Medallion race and/or any dropped down from the Friday Silver race. If any  
34 of the Saturday Bronze aircraft fail to start the Saturday Bronze race, they will be dropped  
35 to a pool of aircraft and allowed to start in the Sunday Bronze race. None of the top 27  
36 qualifiers will drop below the Bronze level for the Sunday races.

- 37 D. The fourth day of racing (Sunday) will contain a nine aircraft Gold race, a nine aircraft Silver  
38 race and a nine aircraft Bronze race.

- 39 1. The nine Gold aircraft include eight from the Saturday Gold race plus the first place  
40 finisher of the Saturday Silver race. If any of the Saturday Gold aircraft fail to start the  
41 Saturday Gold race, they will be dropped to the Sunday Silver race i.e., non-starters  
42 drop only one race in one day. Those aircraft that start the Saturday Gold will be in

the field for the Sunday Gold race, with others being in the order of finish from the Saturday Silver race.

\*\*\* The winner of the Sunday Silver race may elect to advance to the Gold race and when the election is made will forfeit his position and prize money as the winner of the Silver race. The forfeited prize money will become the 9<sup>th</sup> place prize money in the Gold race.

2. The nine Silver aircraft include the seven from the Saturday Silver race plus the first and second place finishers from the Saturday Bronze race and/or any dropped down from the Saturday Gold race. If any of the Saturday Silver aircraft fail to start the Saturday Silver race, they will be they will be dropped to the Sunday Bronze race. Those aircraft that start the Saturday Silver race will be in the field for the Sunday Silver race and if their finish position is high enough could be in the field for the Sunday Gold race, with others being in order of finish from the Saturday Bronze race.

\*\*\* The winner of the Sunday Silver race may elect to advance to the Gold race and when the election is made will forfeit his position and prize money as the winner of the Silver race. The forfeited prize money will become the 9<sup>th</sup> place prize money in the Gold race.

3. The nine Bronze aircraft include six from the Saturday Bronze race plus three aircraft from the Thursday Medallion race and/or any dropped down from the Saturday Silver race. If any of the Saturday Bronze aircraft failed to start the Saturday Bronze race, they will be allowed to start in the Sunday. Bronze race. None of the top 27 Qualifiers will drop below the Bronze level for the Sunday race.

| 2011 Race Progression (27-Plane Field) |  | 12 Races in 4/5 Days of Racing |        |          |        |
|--|--|--------------------------------|--------|----------|--------|
|  |  | Wednesday<br>Thursday          | Friday | Saturday | Sunday |
| Gold (1-6)                             |  |                                | 7      | 8        | 9      |
|  |  |                                | 7      | 8        | 9      |
| Silver (7-13)                          |  | 7                              | 7      | 8        | 9      |
|  |  | 7                              | 7      | 8        | 9      |
| Bronze (13-18)                         |  | 7                              | 7      | 8        | 9      |
|  |  | 7                              | 7      | 8        | 9      |
| Medallion (19-27)                      |  | 7                              |        |          |        |
|  |  | 7                              |        |          |        |
|  |  | 21                             | 21     | 24       | 27     |

# **APPENDIX B - T-6 CLASS PROGRESSION**

## **Qualifiers:**

The twenty one (21) fastest qualifiers will be used for the Heat Races, and subsequently, the Medal Races. The next qualifiers (22-23) will be used as alternates, as required. There will be six (6) heat races that will qualify for the Medal Races (Gold, Silver, and Bronze).

## **Heat Races:**

Racers will be assigned to Heat Races based on their qualification speeds, as follows:

Gold Heat 1A will consist of the seven (7) fastest qualifiers.

Silver Heat 1B will consist of the next seven (7) fastest qualifiers.

Bronze Heat 1C will consist of the next seven (7) fastest qualifiers.

Gold Heat 2A will consist of the seven (7) fastest racers of Heat 1A.

Silver Heat 2B will consist of the seven (7) fastest racers of Heat 1B.

Bronze Heat 2C will consist of the seven (7) fastest racers of Heat 1C.

Line-up for the Heat Races 1A, 1B and 1C will be based on qualification speeds in descending order, i.e., fastest qualifier on the pole position.

Line-up for Heat Races 2A, 2B and 2C will be determined by finishing position in the previous heat races 1A, 1B and 1C.

## **Medal Races:**

The Gold Race will consist of the seven (7) fastest racers of Gold Heat 2A.

The Silver Race will consist of the seven (7) fastest racers of Silver Heat 2B.

The Bronze Race will consist of the seven (7) fastest racers of Bronze Heat 2C.

Line-up for the Medal Races will be based on the finishing position of each racer in Gold, Silver and Bronze Heat 2 with the fastest in the pole position and progressing outward in descending order.

## **Alternates:**

Alternates for each of Medal Races will be taken from the next fastest qualified racer in descending order. An alternate will be used in the event of a Do Not Start.

1 Any open position in a race due to a “Do Not Start” (DNS) will be filled from the remaining  
2 unused qualified racers in sequence of the then current race position or filled on a voluntary  
3 basis. Voluntary racers will start in the last position, if this occurs in a heat race the  
4 Alternate will start the next heat race in his/her prior position (unless the DNS pilot was  
5 disqualified). If a racer Does Not Start a Medal Race, the racer will not be awarded any  
6 money or trophy. The alternate racer (the next fastest racer) will not forfeit his/her prior  
7 winning trophy and will only be awarded one prize money check equal to the higher finishing  
8 position in that Medal Race and all other price money will be accordingly adjusted to the  
9 other racers in sequence with the last place money not being distributed.

10 **Did Not Finish (DNF) and Did Not Start (DNS):**

11 Racers that Did Not Finish or Did Not Start a Heat Race he/she will be realigned in the next  
12 scheduled race in the last position of their qualification class.

13 If a racer Did Not Finish two consecutive Heat Races, they will be disqualified from the  
14 Medal Races and the next fastest aircraft will be moved up in sequence to race in that Class  
15 as will all other racers in sequence be advanced. The next fastest aircraft that did not qualify  
16 will be placed last in Bronze

17 DNF is defined as not completing all scheduled laps in a scheduled event.

18 DNS is defined as not passing Home Pylon at the start entering the course.

19 **MANIPULATING SPEED (SANDBAGGING):**

20 Defined as - to change or present something in a way that is false but personally  
21 advantageous.

22 In the spirit of fairness in competition, all competitors are expected to operate their aircraft  
23 so as to extract maximum speed during qualifying and racing. Manipulating speed for  
24 personal advantage, i.e. sandbagging, will not be tolerated and may result in disqualification.

25 Competitors will be monitored for inconsistent lap times, sudden bursts of speed or slowing,  
26 and other intentional acts to gain or maintain a personally advantageous position.

27 The BOD will act on all suspected incidences of sandbagging.

## APPENDIX C –SPORT CLASS PROGRESSION

- 1
- 2
- 3 A. Sport Class Air Racing intends to advocate fair competition among race contestants and  
4 allow each participant maximum opportunity to compete in race heats based on  
5 performance through qualification speeds and subsequent race results. The class will  
6 field 28 Qualified Racers for sanctioned events.  
7
- 8 B. The Heat Races will take place before Sunday’s Championship Races, and will be  
9 conducted as follows: After all official qualification times are established, the racers will  
10 be aligned in decreasing order of 1-28 according to speed. The racers will be divided into  
11 three race heats consisting of from 7-9 aircraft per heat. The fastest speeds will be  
12 paired for the “A” Heat of each day the second fastest paired for the “B” Heat and the  
13 third fastest paired for the “C” Heat.  
14
- 15 C. The number of aircraft per heat will be determined by the number of available race  
16 aircraft. The emphasis will be to insure that the maximum number of racers will be  
17 allowed to race. Therefore all qualifying aircraft will be divided into three heats based  
18 upon qualifying speed, the heats will be evenly divide with from 7-9 aircraft per heat. In  
19 the event that the heats are not evenly divided, the preference will be for the greater  
20 number to go to the faster heat.  
21
- 22 D. The race lineup for the subsequent days racing will be determined after the days racing  
23 has been completed. Based upon the number of race eligible aircraft, the next days  
24 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             |

- 33 C. After the days’ race heats have been completed, all 28 times will be re-aligned for the  
34 following day’s heats. This process will be repeated each day for subsequent race heats.  
35 A racer will always carry forward his most recent speed for alignment in subsequent  
36 heats, not necessarily the fastest. In the event that a racer flies in more than one heat  
37 race in one day, the racer will carry forward their fastest speed of the day.  
38

- 1 D. In the event that there are 28 race eligible aircraft for the subsequent days races, the  
2 following rule will apply to ensure that every eligible racer gets to race. If there are 28  
3 aircraft available for the first day of racing the number 25 qualifier will act as the alternate  
4 aircraft. For the second day of racing the number 26 qualifier will act as the alternate  
5 aircraft. For the third day of racing the number 27 qualifier will act as the alternate  
6 aircraft. For the Championship Race the number 28 qualifier will act as the alternate  
7 aircraft.  
8
- 9 E. The designated alternate aircraft will brief spot and taxi with the respective heat. The  
10 alternate will be prepared to fill in for any racer that is unable to takeoff when the Pace  
11 Aircraft is ready for Takeoff. This will be determined by the Pace Pilot after getting a  
12 “thumbs up” from each respective racer. In the event that a racer is unable to give the  
13 Pace Pilot a “thumbs up”, the Pace Pilot will direct the alternate aircraft to fill in the last  
14 position and move any other aircraft forward in the lineup. Unless necessary for safety  
15 the aborting aircraft will remain in position until all aircraft have taken off, then will  
16 coordinate with Race Control for the return to the Ramp.  
17
- 18 F. If a Racer determines that they will be unable to race after the Race Lineup has been  
19 published but prior to the aircraft being spotted for the respective Race. The Alternate  
20 aircraft will be spotted and fill in at the back of the heat. Then the second place finisher  
21 will move to the Alternate position. This may be repeated to fill the field if more aircraft  
22 are unable to Spot for a respective race. The flying of the Alternate Aircraft will always be  
23 voluntary and will not result in any penalty or loss of prize money.  
24
- 25 G. In the event of an in-flight mechanical or other problem resulting in an early landing, (did  
26 not finish a Race, known as a DNF), that Racer will be placed in the bottom of the heat  
27 for which his initial qualifying time originally placed him for the subsequent day’s heat.  
28
- 29 H. Failure to start a race, (known as a DNS), will also place a racer in the bottom of the heat  
30 for which his initial qualifying time originally placed him for the subsequent day’s heat. A  
31 DNS will always line up behind a DNF in the event that both apply. Failure to start two  
32 consecutive days’ race heats will result in disqualification from all subsequent race heats.  
33 A race start is defined as crossing the start line (extended centerline of the runway) in  
34 the race heat formation.  
35
- 36 I. A DNF will be paid according to his finishing position, the last DNF placing higher than a  
37 preceding DNF in the same heat. A DNS will not be paid for the heat as the alternate will  
38 be paid instead. If an alternate does not start, the vacated purse will be allocated to the  
39 Class administrative fund. If the alternate is from an earlier heat of the same day he will  
40 be awarded the prize money accorded his finishing position as an alternate. His vacated  
41 purse from the previous heat will be allocated to the Class administrative fund. No  
42 alternate will be awarded multiple purses from the same day of racing.  
43
- 44 J. On Sunday, Gold, Silver and Bronze Sport Championships Races will be held. Again  
45 using each racer’s most recent speed, per Rule C above, the top qualifying Sport Aircraft

1 will compete for the Gold Sport Championship. The 2<sup>nd</sup> heat of Sport Aircraft will  
2 compete for the Silver Sport Championship and the last group will compete for the  
3 Bronze Championship. In the event that any racer flies in a heat and subsequently flies  
4 in an additional heat, the racer will only be awarded the higher of the two payouts for  
5 their respective finishing position. In addition, for any Championship Race, if a racer flies  
6 in two Championship Races, the Racer will be awarded the higher of the two payouts but  
7 will still be awarded the Trophy and any additional prizes that the racer may have earned  
8 in the previous Race.  
9

10 K. In the event that a circumstance occurs that is not previously covered, the BOD reserves  
11 the right to decide the issue. In all cases the BOD will consider safety and then the best  
12 interests of the Class when rendering a decision.

## **APPENDIX D - JET CLASS PROGRESSION**

- 1
- 2 A. JET Class Air Racing intends to advocate fair competition among race contestants and
- 3 allow each participant maximum opportunity to compete in race heats based on
- 4 performance through qualification speeds and subsequent race results. The class will
- 5 field 18 Qualified Racers for sanctioned events, 16 Primary and 2 Alternate Racers to
- 6 compete in heats of 8 aircraft each.
- 7 B. After all official qualification times are established, the racers will be aligned in
- 8 decreasing order of 1-18 according to speed. The fastest 8 speeds will be paired for the
- 9 "A" Heat of each day the second fastest 8 paired for the "B" Heat.
- 10 C. After the days' race heats have been completed, all 18 times (16 primary and 2
- 11 alternate) will be re-aligned for subsequent heats. This process will be repeated each
- 12 day for subsequent race heats. A racer will always carry forward his most recent speed
- 13 for alignment in subsequent heats, not necessarily the fastest.
- 14 D. In the event of an in-flight mechanical or other problem resulting in an early landing, (did
- 15 not finish a Race, known as a DNF), that Racer will be placed in the bottom of the heat
- 16 for which his initial qualifying time originally placed him for the subsequent day's heat.
- 17 E. Failure to start a race, (known as a DNS), will also place a racer in the bottom of the
- 18 heat for which his initial qualifying time originally placed him for the subsequent day's
- 19 heat. A DNS will always line up behind a DNF in the event that both apply. Failure to
- 20 start two consecutive days' race heats will result in disqualification from all subsequent
- 21 race heats. A race start is defined as crossing the start line (extended centerline of the
- 22 runway) in the race heat formation.
- 23 F. A DNF will be paid according to his finishing position, the last DNF placing higher than a
- 24 preceding DNF in the same heat. A DNS will not be paid for the heat as the alternate will
- 25 be paid instead. If an alternate does not start, the vacated purse will be allocated to the
- 26 Class administrative fund. If the alternate is from an earlier heat of the same day he will
- 27 be awarded the prize money accorded his finishing position as an alternate. His
- 28 vacated purse from the previous heat will be allocated to the Class administrative fund.
- 29 No alternate will be awarded multiple purses from the same day of racing.



# **APPENDIX E - FORMULA ONE CLASS PROGRESSION**

Basis: 9 races available, 24 aircraft field

Format: Qualifying, Heat set 1 (1A, 1B, and 1 C), Heat set 2 (2A, 2 B and 2 C), Silver Final, Gold Final

A. Qualifying: Points will be awarded in order of speed. Fast qualifier gets 1 point, slow qualifier gets 24 points. In the event of identical times being recorded, the tie breaker is the first to have posted the time. A Did Not Qualify (DNQ) will result in last place (maximum) points being awarded.

B. Heat Set 1(8 laps, 8 aircraft maximum per heat): Assignments for Heat Set 1 are based on qualifying times. Qualifying times are 1-8 are assigned to Heat 1A, times 9-16 to Heat 1-B and times 17-24 to Heat 1C. Starting grid positions are determined by choice in order of qualifying speed - faster qualifier in race gets first choice, slow qualifier gets last choice.

Points will be awarded in order of race speed. Fast race speed of Heat Set 1 gets 1 point, slow race speed of Heat Set 1 gets 24 points.

C. Heat Set 2 (8 laps, 8 aircraft maximum per heat): Assignments for Heat Set 2 are based on race speeds recorded for Heat Set. Heat Set 1 speeds 1-8 are assigned to Heat 2A speeds 9-16 to heat 2B and speeds 17-24 to Heat 2C. Starting grid positions are determined by choice in order of Heat Set 1 speed - fast Heat Set 1 speed in race gets first choice, slow Heat Set 1 speed in race gets last choice. Points will be awarded in order of race speed Fast race speed heat of Heat Set 2 gets 1 point; slow race speed of heat Set 2 gets 24 points.

D. Gold and Silver Finals (8 laps, 8 aircraft per race): Aircraft are assigned to the Gold and Silver Finals by virtue of their fastest heat speed from either Heat Set 1 or Heat Set 2, Fast heat speeds 1-8 will be assigned to the Gold Final. Fast heat speeds 9-16 will be assigned to the Silver Final. Last heat speeds 17-24 are eliminated from further assigned competition and will be paid as if a Bronze final as flown, based on total points accrued through qualifying and Heat Sets 1 and 2, providing a green start flag was taken for Heat Set 2 (i.e., the aircraft would be capable of competing if a Bronze final would be flown). Starting grid positions are determined by total points accrued - lowest point total in race gets first choice, highest point total in race gets last choice. Payout for Finals based on order of race finish.

E. Miscellaneous:

1. Aircraft can only drop down one bracket for heat Set 2. Example: An aircraft that qualifies in the top eight but is a DNS for Heat 1 A will receive last place points, but is assigned to Heat 2B, not Heat 2C.

2. Points are awarded to the aircraft, not the pilot.

1 3. A Did Not Start (DNS) for any Heat event will result in last place (maximum) points  
2 awarded. If more than one DNS is recorded for a given race set, all will be awarded  
3 maximum points. Starting grid choice for aircraft in Heat Set 2 that were a DNS in  
4 Heat Set 1 will be determined by a qualifying speed - DNS aircraft with fastest  
5 qualifying speed will choose position ahead of other DNS aircraft. A DNS for a Final  
6 Event will pay out last place for that event. For multiple aircraft that DNS a final  
7 event, fewest total points accrued will be used to determine finishing order.

8  
9 4. A Did Not Finish (DNF) for any Heat event will result in placement and points  
10 awarded between finishing aircraft and DNS aircraft based on event flown and  
11 number of laps completed. Aircraft that DNF in a higher event will be placed higher  
12 and awarded less points than aircraft that DNF in a lower event for a given Heat Set  
13 (i.e/ Heat 1A vs. Heat 1C). For multiple DNF aircraft from the same heat, the number  
14 of laps flown will determine placement and points awarded. If two or more aircraft  
15 are a DNF on the same lap of the same heat, qualifying speed will be used to  
16 determine placement and points awarded. A DNF in a Final Event will result in  
17 placement and payout between finishing aircraft and DNS aircraft for that event.  
18 Multiple DNF aircraft in a Final Event will be placed in order of number of laps  
19 completed. For multiple aircraft that DNF on the same lap, fewest total points  
20 accrued will be used to determine finishing order.

## **APPENDIX F - SPORT BIPLANE CLASS PROGRESSION**

- 1
- 2 A. Aircraft will be assigned to “medal groups” according to their qualifying speeds.  
3 Assuming that 24 entrants post qualifying speeds, the fastest 8 qualifiers go into medal  
4 group “Gold”, the second fastest 8 qualifiers go into medal group “Silver”, and the  
5 remaining 8 into medal group “Bronze”. Each entrant will remain within his medal group  
6 for the remainder of the week’s racing. \*In order to encourage qualifying speeds that are  
7 a representative of an entrant’s true potential, one half the prize money will be awarded  
8 based on the qualifying speed. The other half of the prize money will be awarded in  
9 accordance with the biplane purse distribution schedule and the results of the last race  
10 in each medal group judged by the sanctioning body to be complete.
- 11 B. Positioning for the first heat race in each medal group will be according to qualifying  
12 times, with the fastest qualifier on the inside of the first row, next fastest on his/her right,  
13 3<sup>rd</sup> fastest completing that row on the right side. The second row will be comprised of the  
14 4<sup>th</sup> fastest on the inside and 5<sup>th</sup> fastest on the outside. The third row will be as the first  
15 row – fastest to slowest, inside to outside.
- 16 C. Positioning for subsequent heat races or medal races will be according to finishing  
17 position in the previous race in the manner prescribed in Section B.
- 18 D. For safety considerations, final grid configuration will be left to the discretion of the class  
19 president.
- 20 E. Any aircraft moving forward an appreciable amount after being positioned on the runway  
21 for start will be penalized by having 30 seconds added to his/her race time.
- 22 F. Should an entrant drop out of competition, all competitors behind said entrant move up  
23 one position regardless of medal group placement.  
24

# ATTACHMENT A- FOR ALL AIRCRAFT

## 2011 NATIONAL CHAMPIONSHIP AIR RACES PIT, HANGAR & RAMP RULES (Changes in BOLD RED Font)

On behalf of the Reno Air Racing Association (RARA), we welcome you to the National Championship Air Races (NCAR). We hope your participation in our event is successful, rewarding, memorable and most of all, SAFE! To help insure this, we solicit your cooperation and assistance in complying with the following rules, guidelines and regulations.

### PIT RULES

1. Only registered Unlimited, Jet and T-6 Racing Aircraft are authorized to park in the pit parking area. (No support aircraft). Ramp space for each of the above racing classes will be assigned by the RARA. Individual Pit parking spaces for each racing aircraft will be assigned by each Racing Class's selected representative according to their rules and policies, except for the Unlimited Race Class. Pit Parking spaces for the Unlimited Aircraft will be assigned by the RARA. Payment and acceptance of the entry fee does not guarantee a Pit parking space. Priority for Pit parking spaces will be given to those aircraft qualifying to race. If you do not qualify, your airplane may be required to be removed from the Pit Area. Aircraft entered, but not arriving at Reno-Stead Airport prior to the end of qualifications for the class will lose their Pit Parking space.
2. **All Racing Aircraft assigned a parking space in the pits will make reasonable efforts to remain in the pits unless required maintenance deems it necessary for the Race Aircraft to be moved to a hangar better suited to perform said maintenance. Aircraft removed from the pits must be repositioned in their pit space not later than 2 hours prior to take off for its scheduled race, or they will be officially scored as a "Did Not Start" for that race. Should an aircraft undergoing maintenance outside the pits determine that the aircraft will not be in the pits two hours prior to take off for its scheduled race, that team must contact the RARA Scorer and indicate that they are officially withdrawing from their scheduled race and will be awarded a "Did Not Start" standing for the scheduled race. Future pairings will be in accordance with the Class Rules of Progression as incorporated in the NCAR Rules of Competition.**
3. All support vehicles and trailers must be parked within the allocated Pit parking space boundaries. They will not be allowed to park on the Ramp until after noon (1200Hrs) on Friday prior to the start of time trials and qualifications. Semi-trailers used as support vehicles must have pads placed under the support feet to protect the ramp asphalt. RV's used as support vehicles cannot use any propane appliances while parked on the Ramp/Pit and must have the propane system turned off at the tank.
4. Oxygen servicing is NOT ALLOWED in the Pit parking area. Aircraft must be moved to a

1 designated oxygen servicing area.  
2

- 3 5. Vehicle traffic within the Pit area must be kept to an absolute minimum. Only authorized  
4 vehicles with the proper decals attached will be allowed in the Pit area, and must be parked  
5 within the assigned pit parking square. Fire lanes, tow lanes and hangar access taxiways  
6 MUST be kept clear. Any unauthorized or improperly parked vehicles will be towed at the  
7 owner's expense.  
8

9 HANGAR RULES

- 10  
11 6. Only registered F-1, Biplane and Sports Class racing aircraft are authorized to park in the  
12 hangars (No support aircraft or vehicles). Individual aircraft parking spaces will be allocated  
13 by each racing class according to their rules and guidelines. Payment and acceptance of the  
14 entry fee does not guarantee a hangar parking space. Priority for hangar parking spaces will  
15 be given to those aircraft qualifying to race. If you do not qualify, your airplane may be  
16 required to be removed from the hangar area. Aircraft entered but not arriving at Reno-  
17 Stead Airport prior to the end of qualifications for the class, will lose their hangar parking  
18 space.  
19  
20 7. All support vehicles and trailers will be parked in the designated parking area. They are NOT  
21 to be parked on the asphalt areas around the hangars.  
22

23 RAMP RULES

- 24  
25 8. FAA rules prohibit any aircraft to have engine power (props turning) on the ramp, south of  
26 the NO ENGINE TURN LINE. This rule is in effect 24 hours a day. NO EXCEPTIONS!!  
27  
28 9. Aircraft engine runs are NOT ALLOWED in the Pit Parking Areas. Engine runs will only be  
29 accomplished on the ramp, north of the NO ENGINE TURN LINE. For any engine high  
30 powered runs, the aircraft will be moved to a designated High Power Run location.  
31  
32 10. All Race Crews are required to have a Fire Guard with an Approved Fire Extinguisher at  
33 their Aircraft whenever Engine Starts are attempted. For Group Starts (Sport, Formula 1  
34 and Biplane Classes), RARA will provide a Crash Fire Vehicle to stand by in the immediate  
35 vicinity for Fire Protection purposes.  
36  
37 11. A tow team and vehicle will be assigned to each Unlimited and T-6 racing aircraft to assist in  
38 moving aircraft in or out of the Pits. Tow Teams will have radio contact with Race Control  
39 and will coordinate the racing schedule with each crew. The Jet Class will furnish its own  
40 tow crews and equipment. A RARA Jet Class Coordinator will be assigned to the Jet Pit  
41 Area to coordinate the timely movement of aircraft. Please ensure your aircraft is ready  
42 prior to race time. Timely starting procedures are very important.  
43  
44 12. Prior to their scheduled Take Off times, Unlimited; T-6 and Sport Class Aircraft will be pre-  
45 positioned in their designated areas, north of the No Engine Turn Line. Aircraft will be

1 parked on a northwesterly angle. Jet Class Racers will be parked in their start up area facing  
2 in a southerly direction. Special consideration will be given as to the facing direction for  
3 those aircraft that are wind sensitive during start. These deviations must be submitted to the  
4 RARA in advance for their review and approval.

5  
6 After Race completion, aircraft will return to the same designated area and park facing  
7 south. All aircraft will be removed from this area as soon as possible after race completion.  
8 Aircraft will not remain in these areas overnight.

- 9  
10 13. Media wearing a "Ramp Vest" will not proceed past of the No Engine Turn Line when in the  
11 vicinity (four to six airplane lengths or 100 feet) of airplanes that have engines running.  
12 Media will refrain from approaching Race Pilots until after they have finished with their post  
13 flight cockpit work and have debriefed with their ground support crews.

14  
15 GENERAL RULES

- 16  
17 14. Smoking, or the use of any flame-producing device is NOT ALLOWED on the ramp, on the  
18 open floor areas within the RARA Hangars, or within 50 ft. of any aircraft. Smoking may be  
19 allowed in designated areas within the VIP/Sponsor Chalet area or behind the RARA  
20 hangars, provided there are no aircraft within 50 feet of these areas.

- 21  
22 15. Refueling or De-fueling of aircraft is NOT ALLOWED in the hangars or Pit parking areas.  
23 Aircraft must be moved to the designated refuel/de-fuel area.

- 24  
25 16. Race crews bringing their own fuel must make arrangements to store this fuel in the  
26 designated fuel storage area. Fuel MUST be in approved containers, and will not be stored  
27 or dispensed in the aircraft Pit area.

- 28  
29 17. Aircraft or engine wash downs WILL NOT be performed on the ramp or in the hangars.  
30 Designated wash racks must be used.

- 31  
32 18. Waste drain oil containers are available in the Pit parking areas and near the hangars.  
33 PLEASE ensure all waste drain oil is properly collected and disposed of in the IDENTIFIED  
34 CONTAINERS. All other waste petroleum products, solvents, anti-freeze, etc. must be  
35 properly collected and not mixed with the engine waste drain oil. Specially identified  
36 containers are available for their disposal. SPECIAL EFFORT MUST BE MADE TO  
37 PREVENT ANY WASTE PETROLEUM PRODUCTS OR ANY OTHER HAZARDOUS  
38 MATERIALS FROM ENTERING THE STORM DRAINS ON THE RAMP!!

- 39  
40 19. Each aircraft crew is responsible for the general housekeeping and cleanliness of their  
41 respective Pit or hangar parking area. We also appreciate any help you can give us in  
42 keeping the overall ramp and surrounding areas clean and free of debris.

1 20. Vehicular Traffic in the Pit area has become extremely hazardous and the following  
2 restrictions have been implemented:

- 3  
4 a. Scooters, Segways, motorcycles, skateboards, and rollerblades or “razor” type  
5 scooters are NOT ALLOWED.  
6  
7 b. Bicycles, Golf Carts and ATVs must be individually approved by RARA and must have  
8 the proper decal affixed thereto.  
9

10 21. Sitting on ice chests, chairs, benches, etc. is NOT ALLOWED along the crowd line or in any  
11 of the aircraft taxi/access ways.  
12

13 22. Pets, except for Service Animals, are not allowed in the Pit or hangar area.  
14

15 23. In the event an aircraft becomes disabled on any airport runway or taxiway, ONLY RARA  
16 DESIGNATED tow vehicles will respond for the recovery. If your aircraft requires special  
17 towing equipment, please be sure to inform your assigned RARA tow crew. The RARA Jet  
18 Class Coordinator will make advance arrangements with the Jet Class maintenance  
19 representative and will escort their tow crew to any disabled Jet Racer for prompt recovery.  
20 Race crew personnel and vehicles are NOT ALLOWED beyond the aircraft start/recovery  
21 area or to the East ramp area without a RARA tow vehicle escort. NO EXCEPTIONS!!  
22

23 24. Test flights MUST BE scheduled in advance with the Air Boss and cannot conflict with any  
24 Air Race or Air Show activity.  
25

26 25. Race crew support aircraft MUST have prior approval from the RARA. They will not be  
27 allowed to park in the Pit area and they MUST observe the NO ENGINE TURN LINE. Due  
28 to limited parking space and air race traffic at Reno-Stead, support aircraft are discouraged.  
29

30 Each Race Class is authorized to have a designated maximum number of aircraft support  
31 crew members beyond the crowd line during any Race Aircraft launch/recovery; fuel/de-fuel;  
32 engine runs or any other maintenance actions. The maximum number of support crew  
33 members per Race Aircraft is as follows:  
34

| <u>RACE CLASS</u> | <u>MAXIMUM PERSONNEL</u> |
|-------------------|--------------------------|
| Unlimited         | 6                        |
| T-6               | 5                        |
| Sport             | 3                        |
| <b>Jet</b>        | <b>4</b>                 |
| Formula 1         | 3                        |
| Biplane           | 3                        |

42  
43 These support personnel must wear the proper credentials and must be essential to the  
44 operation in progress. They must clear the ramp as soon as possible by returning back  
45 behind the Pit/Crowd line or to an authorized observation area. Only specifically designated

1 individual crew members may be in the FAA/RARA telemetry area as defined in the Official  
2 Rules of Competition.  
3

4 **VIOLATIONS OF THESE PROCEDURES WILL RESULT IN PENALTIES AND/OR FINES**  
5 **BEING LEVIED AGAINST THE RACE CLASS INVOLVED AS OUTLINED IN THE**  
6 **“OFFICIAL RULES OF COMPETITION”**  
7

- 8 26. Please note, until 0800 Sunday morning prior to the beginning of “Race Week”, Reno-Stead  
9 Airport is an active general aviation facility under the control of Reno Tahoe Airport Authority  
10 (RTAA). All normal airport rules and regulations apply and must be observed. No vehicle or  
11 foot traffic is permitted outside of the ramp area. Beginning at noon (1200) on Friday prior to  
12 race week, RARA ramp and security officials will be available to meet arriving aircraft and  
13 assist RTAA in controlling Ramp Operations.  
14
- 15 27. Please help us prevent unnecessary conflicts by insuring all race crew members wear the  
16 proper credentials at all times. This is most important when crew members are required to  
17 go out beyond the crowd line. The appropriate credentials must be worn at all times while in  
18 the launch/recovery and fuel/de-fuel areas. NO EXCEPTIONS!! Other required wristbands,  
19 vehicle decals, etc. must be properly worn and displayed. Violations of these requirements  
20 shall cause the individual’s credentials to be revoked and expelled from the pit area.  
21

22 **FIRST AID/EMERGENCIES**  
23

24 First aid stations are located as depicted on the airfield locator maps, published in the  
25 “official program”. For other emergencies, contact any air race official or dial 911. A fire  
26 station with an Emergency Medical Technician assigned is within three blocks of the airport.  
27

28 **MAINTENANCE SUPPORT**  
29

30 The following Aircraft Repair Facilities are located at the Reno-Stead Airport:  
31 Aviation Classics, Inc. East End (775)972-5540  
32 American Air Racing West End (775)677-4860  
33 J & J Aviation Mid Ramp (775)972-1767  
34

35 As professionals in your field, we know you realize and understand the necessity of these  
36 requirements and will help us in ensuring their compliance. If you have any questions,  
37 please contact your Race Class Official or any RARA operations staff personnel.  
38



# ATTACHMENT B

## OPTIMUM RACE PATHS

- T-6 COURSE  
5.0693 MILES
- FORMULA ONE COURSE  
3.1875 MILES
- BIPLANE COURSE  
3.1761 MILES
- UNLIMITED COURSE  
8.4333 MILES  
START LAP = 7.9581 MI
- JET COURSE  
8.4703 MILES  
START LAP = 7.9523 MI.
- SPORT COURSE  
6.9992 MILES  
START LAP = 7.8496 MI.
- SUPER SPORT COURSE  
8.3506 MILES  
LAP 1 = 7.8623 MI.

