Revision 8 – August 31, 2022

NATIONAL CHAMPIONSHIP AIR RACES® AND AIR SHOW

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

OFFICIAL RULES OF OPERATIONS AND COMPETITION

OFFICIAL

August 31, 2022

NOTE: All 2022 changes to the Official Rules of Operations and Competition are listed in BOLD RED Font

DISCLAIMER 1

NEW STOL DRAG RACE CLASS

The new STOL Drag Race Class received its FAA Accreditation in Sept. 2020 and thus became the seventh (7^{th}) air racing class in the Reno Air Racing Association (RARA) racing fraternity. However, it must be understood that this new class of racing is unique to the group in that it is not Pylon Racing but a form of timed racing down and back on a straight line course governed by a unique set of race rules significantly different than those for pylon racing. As such the STOL Class Rules of Competition will become Attachment F to the RARA Official Rules of Competition and this addendum will govern their racing competition.

RARA Rules regarding **ALL** common requirements such as PRS and Race Week Registration, Pit Occupancy, Ramp Rules, Race Readiness, PRS Class Room Training, Race Plane Arrival Times, Mandatory Briefing Attendance, Incident/Accident De-Briefs, etc. **Will** apply to the STOL Race Class members.

DISCLAIMER 2

2020 PRS AND NCAR CANCELATIONS

The 2020 COVID Pandemic forced cancellation of both the June Pylon Racing Seminar (PRS) and the September National Championship Air Races (NCARs). As such the Reno Air Racing Association (RARA) is not including the year 2020 in racer currency certification considerations except for the required medical exams.

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

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Log of Revisions

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Original	November 1, 2018	Complete Reissue
Revision 1	February 28, 2019	i, iii, v, vii-viii, ix,1-6,8-13,16-17,19,23-24,28, A1-8, B-1, C1-2, D-1
Revision 2	June 3, 2019	v. B-1, C-1, C-2, C-3
Revision 3	June 14, 2019	v, 3, 4, 5, C-1, C-2, C-3, C-6, C-7
Revision 4	March 1, 2021	I - iii, v, vii - xiii,1-3, 5, 7, 8-10,12 -15, 17,19, 27, 29 A1-3, A5,
Revision 4	March 1, 2021	A6, B1-B13, C1-9, E1-2, F1-30
Revision 5	September 3, 2021	
Revision 6	**May 22, 2022**	**2, 10, 12, 13, 14, 20, 24, A-5, D-1**
Revision 7	**May 31, 2022**	**1, 12, C1, C2, C3, C4, C5, C6, C7, C8, C9**
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ORIGINAL: November 1, 2018

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

OFFICIAL RULES OF OPERATIONS AND COMPETITION

DEFINITIONS

CERTIFIED: As referred to in these "Official Rules of Operations and Competition" and other documents issued by RARA. The term "Certified" shall apply to a prospective race pilot 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 (NCAR) within the past three annual NCAR. NCAR and PRS cancelled due to Covid-19 2020. 2020 is not considered an annual year.

CHASE PLANE: A Chase Plane is any plane used for observation, photography, or any other use, is approved by RARA and the respective class, and is flown by a certified race pilot or an approved pace pilot. A chase plane shall not go below 250 feet AGL on the course.

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

- Flown at least one complete lap in an official race in the NCAR within the past three (3) years; or
- Qualified in an aircraft to race in the NCAR by obtaining a speed qualifying the aircraft to compete in the race progression.
- Note: Flight in the NCAR during the practice or qualification periods that does 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 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 are 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 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. **See Currency Extensions Flight Page 9.**

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 Official Rules of Operations and 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.

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

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

CFR: Crash Fire Rescue

ELIGIBLE: As referred to in the Official Rules of Operations and Competition and other documents issued by the Reno Air Racing Association (RARA) shall refer to a prospective race pilot or aircraft that has met all of the requirements of their respective class.

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

- A flying instructor shall be a currently certified race pilot, approved by the specific Class and RARA, who is allowed on the race course with or without a student pilot at PRS.

- A ground school instructor shall be a currently certified or past race pilot nominated by the class and approved by RARA.

RACING ALTITUDE: The normal race altitude is between 50 feet AGL and 250 feet AGL. The maximum and minimum racing altitudes are discussed in Section IX Racing.

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

- The pace pilot for any class shall be a currently certified class race pilot, certified pace pilot or past race pilot and approved by both RARA and the Class for which he/she is to pace.

- Owner/Operators of aircraft that are providing Pace Aircraft Duties for the Sport or Jet Classes are not required to be a certified race/pace pilot. However, since these specific Pace Aircraft are multi-crewed, there must be a qualified Race/Pace Pilot at the controls while performing pace duties.

- The Pace Pilot shall be trained in pace/safety duties by each class.

- RARA requires each pace pilot to have a current Class I or II Medical Certificate for any NCAR race event.

- The Pace Aircraft for Sport, T-6, and Unlimited, shall not be allowed to go onto the race course. Jet class pace plane can remain on race course from start to guide pylon.

- 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 duly registered for training are approved passengers who, in performing the training/instructing requirements of PRS, are authorized to enter the race course and descend to race course altitude.

PROGRAM LETTER: FAA Program Letters may be required, refer to your FAA issued Operating Limitations attached to your Experimental Airworthiness Certificate and CFR 21.193 (a) through (d). See Attachment E-1 for example of program letter. This is only an example and may not include all the requirements of your Operating Limitations or CFR 21.193.

PYLON RACING SEMINAR (PRS): Each year the Reno Air Racing 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~~ meet the class requirements with respect to total hours as pilot in command and in type PRIOR to flying on the Race Course. The pilot must pass the check ride and be signed off by the class within TWELVE (12) MONTHS in order to become certified to race at Reno. A first-time student will only be trained/certified in one class.

RACE CLASS RULES: These RARA Official Rules of Operations and Competition incorporate the Race Class Rules of each class in their entirety and are included by reference herein. Should a discrepancy exist between the RARA Official Rules of Operations and Competition and the class rules, the RARA Official Rules of Operations and Competition will take precedence.

RACE COURSE SHOW LINE (RCSL): The outer-most limits that an aircraft can fly and remain on the FAA approved race course.

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 to RARA by 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.

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 during their active class races. 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 NCAR for that year.

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

OFFICIAL RULES OF OPERATIONS AND COMPETITION

I. PARTICIPATION IN THE NATIONAL CHAMPIONSHIP AIR RACES

is on an invitation basis and is open to qualified pilots and aircraft meeting the eligibility requirements of these rules and those of the classes invited to participate.

APPLICATIONS for entry must be on the "INVITATION TO PARTICIPATE IN THE NATIONAL CHAMPIONSHIP AIR RACES" entry form furnished by the RENO AIR RACING ASSOCIATION, INC. (RARA).

ENTRIES will be submitted **on-line** per the directions provided **by** the Reno Air Racing Association, Inc**. and** Director of Aviation Resourced/Pilot Registration.

On-line ENTRY FORMS received by RARA **on-line** by 5PM Pacific DST, at the date stated on the **on-line** entry form and complying with the requirements of The Rules of Operations and Competition, the **on-line** ENTRY FORM will be considered "ON-TIME" entries and shall be assured the opportunity to qualify. RARA will be the sole judge of acceptance or rejection of an application.

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

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

ENTRIES received after the closing date and time stated shall be considered "CONDITIONAL ENTRIES" and shall be listed in their order of receipt by RARA. RARA shall notify each CONDITIONAL ENTRANT of their position in the field.

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

- 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 of its class.

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

II. OFFICIALS

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

- The Contest Committee consisting of a Chief Judge and not less than **eight** (**8**) nor more than **eleven** (**11**) Contest Committee Judges, for a maximum of **twelve** (**12**):
- Director of Operations
- Director of Safety
- **Air Boss / Mini-Boss**
- Race Control Supervisor and Race Controllers
- Chief Starter (Formula Ones and Biplanes) and Assistants
- Chief Timer and Assistants (timers, starters, flaggers & scorer)
- Chief Pylon Judge and Assistants (pylon judges, marshals, and flaggers)
- The Class Aircraft Compliance Inspection Teams and their Pilot Qualifications Committees the NCAR pursuant to The Rules of Operation and 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 NCAR event.

- Each Contest Committee member will act in an observer/umpire capacity during all qualification and racing events and shall station himself/herself to best to observe each contest.

- Settle disputes and protests formally presented.

- Determine penalties and/or declare disqualifications as defined in these rules to include Race Course Show Line (RCSL) violations. The Contest Committee Chairman will ensure two Contest Committee Judges are located along the south, east. and west RCSL for all races. A RCSL violation observed by any one Contest Committee Judge must be corroborated by the second Contest Committee Judge on the applicable RCSL and the Chief Judge before a RCSL violation is assessed. A confirmed RCSL violation shall result in a Disqualification for that race. The Chief Judge will contact the Chief Pylon Judge via radio and declare a clean race, a disqualification of Race number ___, or a hold for further contest committee deliberations before the Chief Pylon Judge statuses the final results of each race.

- In consultation with RARA, authorize deviations or special provisions to the rules when necessary for safety of spectators and/or race pilots.

- May exclude any race pilot from participation if the race pilot 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 race pilot if they deem it necessary.

III. AIRCRAFT ELIGIBILITY

All race aircraft must be in-place at Reno-Stead no later than 1200 hours on the Saturday preceding Race Week. Any deviation from the arrival date/time, including weather, must be coordinated by the appropriate class president with the RARA Director of Aviation Resources. Approved late arrivals will retain "on-time" or "conditional" entry status. (Note: Any approved late arrivals must comply with the 1700 Sunday deadline as specified in Section VII: Qualification of Aircraft.) The intent of this rule is to ensure adequate time for the class aircraft compliance inspection teams to complete the required aircraft inspections and associated logbook entries, including any corrective actions, prior to allowing said aircraft on the race course for practicing, qualifying, or racing.

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 race plane.

THE FOLLOWING certificates, permits, logs, forms, and documentation for an aircraft shall be available for inspection by the FAA and RARA: **Aircraft** Registration Certificate, Airworthiness Certificate, Special Flight Authorization, Operating Limitations, Airframe and Engine logs, Program Letter**, and Transponder Check** as required.

Any prospective Experimental race aircraft that has undergone one or more major modifications (14 CFR21 Section 21.93{a}) or major alterations ((14 CFR1.1) (Appendix A to Part 43)), or an aircraft with a new or unique Experimental design or new kit assembly must comply with the following requirements:

No later than May 1st of each year, an owner/operator desiring to participate in that year's NCAR must notify its appropriate Race Class President and RARA that his/her aircraft is a new or unique Experimental design, new kit assembly, or a prior race aircraft with one or more Major Modification(s) or Major Alteration(s). The notification will include the name, telephone number and email address of the FSDO who will be overseeing the flight test, data analysis and certification of a new or modified race aircraft. RARA Operations will notify the Reno FSDO that an aircraft with a new or unique Experimental design or an aircraft with a major modification~~/~~ or major alteration has requested authorization to compete in an upcoming NCAR. This notification will include a copy of the data package provided by the owner/operator and/or the Race Class. The Reno FSDO will establish contact with the geographically responsible FSDO where flight testing will be performed. Together, the FSDO personnel shall ensure the proposed engineering evaluation, including flight demonstrations and analysis within the anticipated flight envelope for the aircraft, will meet the RARA eligibility requirements. If RARA and the Reno FSDO do not

agree that the presented material is adequate for race approval, the owner/operator may be given an opportunity to provide additional justification. All race aircraft seeking authorization to participate in a NCAR must be designed to acceptable structural design criteria to meet the limiting load factors as specified by the appropriate Race Class.

A flight flutter analysis, test plan and test results will be submitted to verify that the aircraft will safely operate within the structural limits and not be in the flutter region at anticipated race speeds and load factors within the anticipated race flight envelope.

Weight and balance for an empty and full race configuration will be required. Weight and balance documentation must include forward and aft center-of-gravity (CG) limits for the potential race aircraft within its flight envelope, at anticipated race speeds, and race power settings.

The flight test results must be documented to confirm that the potential race pilot will be operating within the flight envelope, at anticipated race speeds, and race power settings. Flight testing must be completed, documented**,** and submitted by the race aircraft owner/operator to RARA and the Reno FSDO not later than August 15 each race year prior to any participation in a NCAR event.

If a major modification or major alteration has been incorporated on any aircraft since the last time the aircraft raced at Reno or within the last twelve (12) month period preceding the anticipated race month, all provisions established by the FAA for a major modification or major alteration, through the FAA approved Operating Limitations, must be accomplished, and documented in the aircraft records prior to arrival at Reno/Stead (RTS). Such documentation and related correspondence shall be made available to the FAA and RARA at Pilot Registration and to the Class Aircraft Compliance Inspection Team prior to or during, the inspection of the aircraft.

All primary race pilots **and alternate pilots** must submit a statement signed by the race pilot certifying that, at the anticipated density altitude of the race, the intended race aircraft has demonstrated a true airspeed of 105% of its projected qualifying speed and a turn capability of 150% of the approved race course maximum designed g-load of his/her race class prior to being eligible to race at NCAR. During qualification, any aircraft that exceeds this speed will be required to demonstrate, at the anticipated density altitude of the race, a true airspeed of 105% of the new qualifying speed while at a turn capability of 150% of the approved race course maximum designed g-load. A new statement signed by the race pilot will be submitted to RARA prior to being permitted on the race course. Aircraft not in compliance are subject to disqualification. The air racing flight demonstration specified in written certification may be based on historic flight data (e.g., previous air race) for the same aircraft/primary pilot combination and the aircraft has received no major modifications or major alterations after the flight demonstration date.
The following, or similarly worded statement, submitted to the RARA Director of Aviation Resources, will meet this requirement:

I certify that I have completed an air racing flight demonstration, at the anticipated density altitude of the race, *in [insert registration number/serial number] at a true airspeed of [insert speed] mph and a turning g-load of [insert g-load], and have found the aircraft has no hazardous characteristics or design features and is safe for air race operations. These parameters establish the race aircraft has demonstrated,* at the anticipated density altitude of the race, *a true airspeed of 105% of its projected qualifying speed while demonstrating a turn capability of 150% of the approved race course maximum designed g-load of the [insert applicable race class] race class.*

This aircraft has received no major modifications or major alterations or repairs after the flight demonstration date.

Flight Demonstration Date: _____

Primary Race Pilot Name_____

Signature_____ Date _____

Alternate Race pilot(s) Name _____

I accept the conditions of the above statement Date _____

Signature_____

Note: Alternate race pilots must certify they accept the Primary race pilot's flight demonstration certification, or submit a new certification, prior to being permitted on the race course.

Each Class Aircraft Compliance Inspection Team will be comprised of a minimum of two qualified individuals, one of whom will be designated as the Lead Inspector. The Lead Inspector will be the primary point-of-contact for RARA and the FAA. Each Class will submit the names of their Aircraft Compliance Inspection Team members to RARA, Attention: Director of Aviation Resources, no later than August 1st of each race year. This submittal will include a brief resume of each Inspection Team member's qualifications to include EAA Credentials, FAA Certificates, type, and years of experience with Race Class aircraft or equivalent, and other data deemed relevant by the Class.

Upon completion of the Class Aircraft Compliance Inspection the FAA, in consultation with RARA, shall have the final authority as to the eligibility of an aircraft for competition. Each Race Class is responsible for ensuring that their Class Aircraft Compliance Inspection Team is available in a sufficient amount of time to accomplish the necessary aircraft inspection prior to any aircraft flight at Reno-Stead that supports class pilot qualification, race qualification, racing practice or racing. Discrepancies noted and corrective actions taken to correct such discrepancies must be documented on the aircraft inspection report

prior to any aircraft flight at Reno-Stead that supports class pilot qualification, race qualification, racing practice or racing.

Aircraft Compliance Inspection Records, including discrepancies found and corrective action taken shall be submitted to the Director of Aviation Resources on a timely basis. The RARA Director of Aviation Resources will coordinate the completed inspection and corrective actions (as required) with the Reno FSDO and the RARA Aircraft Maintenance Director prior to the aircraft being released for any flight involving pilot qualification, race qualification, racing practice or racing. Once the Class Aircraft Compliance Inspection Team, the Reno FSDO, and the RARA Aircraft Maintenance Director review have been confirmed by the RARA Director of Aviation Resources, the RARA Director of Aviation Resources will advise the Director of Flight Operations/Race Director that the aircraft is/are released for pilot qualification, race qualification, racing practice or racing. Additionally, during Race Week, RARA encourages active dialogue amongst the race team maintenance personnel and their respective Class Aircraft Compliance Team about the corrective actions taken to resolve aircraft system deficiencies experienced during racing events or discovered while performing pre-flight and post-flight inspections. All aircraft system deficiencies considered flight critical**,** as determined by the Race Team and or the Class Aircraft Compliance Team (e.g., engine change, cylinder change, flight control removal/replacement/re-rigging, etc.) as well as the corrective maintenance actions completed to resolve a declared Mayday recovery will be documented and that documentation reviewed by the Class Aircraft Compliance Inspection Team to ensure that the affected aircraft is safe for flight. The Class Aircraft Compliance Inspection Team will be required to keep an active log up to date that identifies those flight critical corrective actions initiated/completed on each race aircraft in the class. The log will include the aircraft race number, the discrepancy discovered and the corrective action taken place or in progress. The logs will be retained by the race class and made available each morning at the applicable class morning briefing during the scheduled Race Class Briefing Session for RARA and the FAA to review. The review will be separate from, but in the same time frame as, the scheduled Race Class briefing. These logs will also be made available to RARA and FAA should they be required to support any incident/accident investigation.

Any aircraft that is “trucked in” and “assembled” at Reno-Stead shall require the Class Aircraft Compliance Inspection prior to any flight after the Race Aircraft Arrival Deadline—1200 hours on the Saturday preceding Race Week.

After RARA and the FAA concur with the determination of the Class Aircraft Compliance Inspection Team that an aircraft is cleared for flight, the RARA Director of Aviation Resources shall advise the Chief Judge of the Contest Committee that each aircraft has been inspected, corrective action accomplished (if necessary) and that the aircraft, by race number, are cleared for flight.

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

ASSIGNED air race numbers must be properly applied on each racing aircraft prior to flying on the race course- for both PRS and NCAR. The required location is: number(s) painted on the upper left wingtip reading from the leading edge towards the trailing edge, and on the bottom of the right wing (not required for the Biplane or T-6 Class) and on each side of the fuselage clear of the wingtip, in readable block style and in contrasting color to the background on which they are applied. Characters should be AT LEAST THIRTY (30) INCHES HIGH, with minimum stroke of two and one half (2 1/2) inches. If the size of an aircraft prohibits the use of a number of this size, the largest number possible must be applied. The Chief Timer shall have the right to require race pilots to replace or change the size, type, color, or location of their racing numbers. This does not apply to STOL.

OPERATIONAL transmit and receive VHF radios are required for all race classes qualifying and/or racing at Reno. Additionally, each VHF installation will incorporate mechanization that allows keying the VHF microphone from either the throttle or the stick (i.e., Hands on Throttle and Stick or HOTAS mechanization) and incorporate a headset to receive incoming VHF transmissions. The HOTAS requirement is a RARA requirement, which is mandatory for all aircraft participating at Reno in the NCAR. Violations will result in disqualification. Reference STOL Class Rules, Attachment F, for their radio communication requirements.

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

IV. PILOT ELIGIBILITY

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

It shall be the sole responsibility of the race pilot to present his/her credentials to the FAA/RARA representatives and to present the necessary aircraft documents to the Class Aircraft Compliance Inspection Team for review upon arrival at the race site.

THE RESPECTIVE racing class Pilot Qualification Committee shall have final authority as to the eligibility of any race pilot pursuant to its class specifications. Such committees shall be available at the race site no later than 0800 hours on the Sunday beginning race week to pass on the qualification of all race pilots. The decision of the Pilot Qualification Committee relative to the eligibility of any race pilot shall be final. The Pilot Qualification Committee of each class shall advise the RARA Director of Aviation Resources of all pilot eligibility qualifications and the RARA Director of Aviation Resources will advise the **Air Boss**, Chief Judge of the Contest Committee and the RARA Chief Timer. The RARA Director of Aviation Resources will maintain the master file for Class Aircraft Compliance

Inspections and for Class Pilot Qualification documentation. No pilot will attempt to practice, qualify**,** or race until passed by said Pilot Qualification Committee.

Each class shall supply RARA with a list of the members of their Pilot Qualification Committee by **June** 1st of each Race Year.

ALL RACE PILOTS must have at least a Private Pilot Certificate. Race Class rules may require a commercial Pilot Certificate. **All** pilots must provide a current/valid pilot license issued by their country and present photo identification from their country such as a valid Passport or Driver's License. This photo identification must be in the pilot's possession or readily accessible in the aircraft when exercising the privileges of that pilot certificate.

RARA requires each **pylon** race pilot, regardless of class, to have a current Class I or II Medical Certificate issued within six (6) months of any NCAR race event. A current Class I or II is also required for PRS. STOL must have at least a current Valid Medical Certificate (Basic Medical Minimum) for both NCAR and PRS. Additionally, RARA highly recommends that all pylon race pilots complete an EKG and a stress test and document same in the NCAR Race Entry Package.

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

Each class shall supply RARA with a list of the members who can certify pilots to race.

PRS ATTENDANCE will be required for a**ll** pilot**s** or alternate pilot**s** who fall~~s~~ into one of the following categories:

- Never competed in the NCAR
- Never competed in the Race Class, in the NCAR
- Not competed in the Race Class in the National Championship Air Races in the past three Races
- Credentials revoked

PILOTS with past experience competing at Reno in the NCAR may be exempt from the above if:

- A pilot has competed in a similar Class, e.g., Formula One/Biplane; receives a check ride satisfactory to the Class.

- A qualified race pilot seeking to fly in an additional class and who has competed in Reno in the last three (3) years may request from the Class the opportunity to perform a check ride. If the request is granted by the Class; upon completion of a check ride he/she shall be eligible to participate in that class.

PILOTS may enter in a maximum of two (2) race classes~~,~~ if fully certified for each class entered. RARA cannot guarantee that the race schedule will allow for sufficient time between the respective races to allow a safe transition period.

NOTE: The yearly STOL Drag Class Pylon Racing Seminar (PRS) for the National Championship Air Races will be held at the Dead Cow Lake STOL Racing and Training Area 25 Nautical Miles north of the Reno Stead Airport (RTS). Both Ground School and Flight Training activities consistent with the Official RARA Rules of Competition and Operations and the STOL Drag Events LLC Policies and Procedures will be accomplished at this facility. If conflict exists between these two governing documents the RARA Director of Operations will decide which document statement prevails. The RARA PRS Attendance Requirements included in its official rules will apply to the STOL Class members. The yearly NCAR STOL Class PRS session will normally be scheduled for that week in September immediately preceding the NCAR event beginning. Schedule changes, additional sessions or location alternatives must be approved by RARA before they can occur. The FAA Accredited STOL Ground School curriculum for the National Championship Air Races must be presented at approved alternate locations.

A **CURRENCY EXTENSION FLIGHT** is a timed event, flown on the event racecourse during an event qualification period, solely for the purpose of recording a time/speed for the purpose of extending the currency of the pilot.

A currently certified race pilot, who is listed as an Alternate Pilot on a race application but is in their last year of certification and will lose their certification if they do not race during the current year, may petition the race class in which they presently hold their certification, to complete a “Pilot Currency Extension Flight”. If the flight is approved and completed and a valid time/speed is recorded, the racer’s certification will be extended for an additional 1 year within the race class. The Currency Extension Flight is a one-time only condition between completion of - a race heat or PRS. That request must comply with the following criteria:

1. The Race class petitioned must first validate and approve the request.

2. The Pilot seeking the Currency Extension Flight must already be listed as an Alternate Pilot on the application submitted to RARA for the aircraft they intend to use for the Currency Extension Flight. All documents required of both the pilot and aircraft owner, as required by the RARA to participate in that event, must be on file with RARA.

3. The Race Class will then seek the approval of the RARA Director of Operations of the event and any other personnel deemed appropriate for approval and provide notification to the chief scorer prior to the Currency Extension Flight.

4. If the petition meets the requirements of both the Race Class and RARA as depicted above, the pilot seeking the Currency Extension Flight must then:

a) Complete a timed event that consists of a valid "Official Timed Qualification Lap" in accordance with Event Organizer's Official Rules of Competition. Such an "Official Timed Qualification Lap" will not be counted as an "Official Qualification attempt" against the aircraft's total allowable Qualification Attempts, as allowed by either the Individual Class's Official Rules of Competition or RARA's Official Rules of Competition. Additionally, the time/speed results of the Currency Extension Flight will not be used for any qualification placement or initial pairing of the aircraft.

V. BRIEFINGS

ALL RACE PILOTS and Pace Pilots must attend a General Pilot Briefing before practicing, qualifying**,** or racing on the race course or serving as a Pace Pilot. Owner/Operators of aircraft that are providing Pace Aircraft Duties are encouraged to attend the General Pilot Briefing, although it is not required. However, since these specific Pace Aircraft are multi-crewed, there must be a qualified Race/Pace Pilot at the controls who has attended the General Pilot Briefing. These briefings will be conducted by the **Air Boss** or the **Mini-Boss**. Dates, times, and locations of the General Pilot Briefings will be included in the general instruction letter sent to each Air Race pilot. All pilots must personally attend one of these two briefings and have signed in on the attendance roster. The pilot's signature on the attendance roster verifies that the pilot has read and understands the Rules of Operations and Competition and the Operational Rules and Regulations applying to the Stead Airport. It also signifies that the pilot has been briefed and understands the provisions of operating within the FAA Certificate of Waiver. A requirement that will be covered during the General Pilot Briefing will be a focus on G awareness training and techniques to reduce the potential for G-induced pilot loss of consciousness. Any pilot unable to attend either of these briefs will not be permitted to fly in the waivered airspace.

IN ADDITION to the General Pilots Briefing, there will be a Daily Pilot Class Briefing. This briefing is mandatory for any pilot desiring to fly on the race course and all authorized occupants of the Pace Aircraft. The times of these briefings will be published in the daily schedule for each class. Pilots will be required to sign in on the pilot attendance roster. Any pilot failing to attend the briefing or failing to sign the roster will not be permitted to fly that day. Any pilot who has someone other than him/herself sign in on his/her behalf shall be disqualified from racing for the remainder of that year's racing.

Pilots who miss the mandatory general briefing must watch the video of the general briefing. Pilots who miss the mandatory daily briefings must be briefed in person by the **Air Boss** or his designated representative before they are permitted to fly. Advance coordination with the **Air Boss** is required.

RARA shall hold a **mandatory** CREW CHIEF briefing at a time and place to be announced**.** This briefing will provide the crew chiefs information on aircraft maintenance documentation, corrective action and documentation requirements during the pre-inspection, practice, qualifying, and racing operations. The briefing will include information pertaining to the Ramp and Hangar rules affecting their respective classes.

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

- Time to takeoff, rendezvous area, rendezvous speed and altitude, emergency procedures, VHF Comm. frequency, number of laps for the race AND other procedures as necessary.

- If a Pace Plane is unavailable, it is the responsibility of the pole position pilot to brief the other pilots before the race.

VI. PRACTICE AND QUALIFYING PERIODS

THE PRACTICE and qualifying periods will be controlled by Race Control on the designated Race Control radio frequencies. All Race pilots will be required to fly one practice session prior to qualification. All pilots will fly a minimum of four laps (six laps preferred) in a practice session before attempting to qualify. The purpose of the practice laps is to allow for G tolerance build-up prior to maximum speed qualification attempts. Each pilot will be required to submit a RARA provided form that certifies that at least the minimum number of G tolerance build up laps were flown prior to attempting to qualify. This form must be signed by the pilot and submitted to the RARA Director of Aviation Resources within one hour of the end of the practice/qualifying period during which the laps were flown. Pilots are authorized to qualify the same qualifying period as the G tolerance build up after the four to six G tolerance laps are completed. NOTE: Pilots who are registered to race in more than one class must fly their G tolerance build up laps in the higher performance class aircraft. (Note: For the purpose of defining "performance", RARA will use the G and speed for which each race course is designed.) Using this criteria results in the following order of priority for G tolerance build up laps from the lowest performance to the highest: T-6 Class, Formula One Class, Biplane Class, Sport Class, Unlimited Class and Jet Class.

Any action requested by Race Control must be adhered to or disqualification from further participation may occur. Pilots demonstrating their ignorance of, or disregard for, the Rules of Operations and Competition, the FAA Waiver or FARs will be immediately grounded and referred to the Contest Committee for appropriate action. It is desirable to have the Class President or a Class representative with the timing crew during qualification.

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

AT THE daily brief, each designated class representative will brief the **Air Boss**/ ~~Deputy~~ **Mini-Boss** on the maximum aircraft they desire on the Race Course. If approved by the **Air Boss** / **Mini-Boss**, this information will be passed on to Race Control so they can appropriately manage the number of the aircraft on the Race Course. No more than nine (9) aircraft will ever be allowed on any race course.

WHEN A PILOT has announced his/her intention to qualify, only four (4) aircraft will be permitted on the race course at the same time, with the last aircraft entering the course being directed to pull off the course. During any practice period, preferably after all aircraft in that class have qualified, a maximum of nine (9) aircraft may be permitted on the race course, to simulate actual race conditions, with approval of the respective Class President and Race Control.

VII. QUALIFICATION OF AIRCRAFT

ALL PILOTS must have their aircraft at Reno-Stead, attend the mass in-brief, register, have their aircraft inspected, and be ready to qualify no later than 1700 hours on the first Sunday of race week. On-time aircraft that are registered but undergoing on-field maintenance must be inspected and approved for flight in accordance with these Rules.

CFR AND OPERATIONS personnel will support authorized race aircraft operations, including pilot class certifications and practice flights, from 0800 to 1700 on the first Sunday. Operations personnel will be ready to qualify aircraft from 0800 to 1700 Monday, 0800 to 1700 Tuesday**,** and, normally, 0800-1200 Wednesday of Race week.

QUALIFICATION PERIODS will be posted on the daily schedule and announced at the daily briefing. Qualification periods may be shortened or extended by RARA in the best interest of the NCAR.

ALL AIRCRAFT must qualify to establish starting positions for their respective heats. They will then be eligible to race if their qualification speeds place them within the approved field size for the class. Unqualified aircraft may be authorized by RARA to fill the field.

AIRCRAFT MUST fly at least one level lap before initiating a qualifying attempt; “diving on the course” is not permitted. Pilots will be given flags, described in Section VIII, as they pass Home Pylon.

WHEN READY to initiate qualifying attempts, pilots must contact the timers at the half-way point on their course. The timers will acknowledge radio calls and place the aircraft on the clock as they pass Home Pylon on that lap. Pilots of Formula One and Biplane aircraft may employ the wing-rock method, as they turn toward Home Pylon, if timers do not acknowledge radio calls.

ALL AIRCRAFT on the course may have qualification attempts timed concurrently.

A QUALIFYING attempt consists of one timed lap or two consecutive timed laps. Pilots may request one lap, when they initiate the attempt, or pull off the course after the first lap.

ALL AIRCRAFT will be permitted to make up to two qualifying attempts of one or two laps each **unless further restricted by class rules. Up to three additional attempts may be authorized by the Class President with the concurrence of the Director of Operations.**

ALL QUALIFYING attempts, by primary and alternate pilots, will be included in the allowed attempts, unless Alternate pilot calls for a Currency Extension Flight lap.

A QUALIFYING attempt may be aborted by abruptly pulling off the course without passing the Home Pylon. The pilot must call over the radio to Race Control their race number and aborting status. Qualifying attempts aborted on the second lap will be included in the allowed attempts.

QUALIFYING LAPS will be negated by pylon cuts, or by Class officials, or the Contest Committee for rule infractions. Qualifying attempts in which one or both laps are negated will be included in the allowed attempts.

UNAUTHORIZED QUALIFYING ATTEMPTS beyond two will not be recorded.

THE BEST SPEED of the laps flown without disqualification shall be used as the aircraft's qualification speed.

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

THE AIR BOSS may, at his discretion, grant permission for the performance of "TEST FLIGHTS" during the qualifying period of another class if there is no chance of conflict or hindrance between the race aircraft of the two classes**,** and if such test flights are approved by the Class Presidents of both classes.

VIII. PYLON RACE COURSE

RARA, with coordination of the Race Classes, have elected to present the race course lengths as the Pylon-to-Pylon course distances. This methodology is in alignment with international racing course design and scoring norms and is the preferred method for race timing. Previous race course maps (2003-2016) showed the Optimum Race Path (ORP) as the course length. In 2017, RARA changed the course length designations to reflect the Pylon-to-Pylon distances, as shown on the applicable Race Waiver maps.

The ORP geometry was used, pursuant to FAA Order 8900.1, Vol. 3, Chap. 6, Section 2 course design guidance, to determine the Minimum Turn Radius (r), Scatter Radius (Sr), Scatter Distance (S), and Safety Radius (Sfr). Course geometry used a 25-foot offset (50-foot for Unlimited and Jet Class) to the outside of the pylon to provide for adequate space for the centerline of the aircraft to pass by the pylon without a pylon cut.
The following table presents the race course geometry for all pylon race classes:

1

Class	Speed	Force	Altitude (ft-agl.)[1]	Distance (PTP[7])	Minimum Turn Radius (r)	Scatter Radius "Sr"	Scatter Distance "S"	Safety Radius "Sfr"
	(mph)	(g's)	(max)	P-P (mi)	(ft)	(ft)	(ft)	(ft)
Formula One	250	3	250	3.1193	1,476	2,066	1,445	2,360
Biplane	275	3	250	3.1193	1,786	2,391	1,589	2,693
T6[6]	250	3	250	4.8257	1,476	2,066	1,445	2,360
Sport[4]	375	3	250	6.7757	3,321	3,966	2,167	4,288
Sport Medallion	275	3	250	4.82573	1,786	2,391	1,589	2,693
Sport Gold	425	3	250	7.9107	4,266	4,923	2,456	5,251
Sport Slalom[4]	275	3	1,000	S=5,207 N=5,309[5]	1,786	2,391	1,589	2,360
Unlimited Bronze	350	4	400	7.9107	2,113	3,318	2,559	3,921
Unlimited Silver	425	4	325	7.9107	3,116	4,247	2,885	4,812
Unlimited Gold	500	4	**250**	7.9107	4,312	5,191	2,890	5,630
Jet	525	5	250	7.9107	3,759	4,830	3,034	5,366

Notes:

1- Minimum course altitude for all courses is 50 feet above ground level (agl).
2- Unlimited Gold Max Altitude Varies by Pylon, see race course map.
3- Sport Course (Sport Silver) will run the first lap on the Outer (Unlimited/Jet) Course (7.9107).
4- Sport Medallion Course will run first lap on the Outer Course (7.9107 miles), then on the Sport Medallion Course (same pylons as T6 pylons (4.8257 miles), with the ORP calculated for higher speed, 275 mph vs. 250 mph for T6.
5- The North Sport Slalom Course is 5,309 feet PTP and the South Course is 5,207 feet PTP. Course lengths differ by 102 feet.
6- In addition to the standard T-6 racing, the T-6 Elimination Series Races (Drag Races) concept was evaluated and approved by the FAA and RARA at the 2015 Pylon Racing Seminar (PRS). The Drag Races is a series of races pitting two T-6 racers against each other, starting from Runway 08 with a formation take-off and racing for one lap around the T-6 race course. A field up to eight T-6 aircraft will compete during a series of elimination races heats that will result with one aircraft as the "Drag Race" winner.
7- PTP = Pylon to Pylon Distance. Calculated as the straight line distances between pylons, shown in horizontal feet (no vertical distance shown).

SEE ATTACHMENT B for OPTIMUM RACE PATHS

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

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

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

RED FLAG: Used to signify race cancellation. Race pilots will exit the race course and set up to be sequenced for landing.

YELLOW FLAG: Used to vacate the course due to BLM Operations

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

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

THE SOUTH RACE COURSE SHOW LINE FOR ALL CLASSES SHALL BE THE NORTH EDGE OF RUNWAY 8/26.

IX. RACING

WIND LIMITATIONS: The wind limitations for aircraft operations (practicing, qualifying, and racing) during the NCAR are listed below: (Note: Class Officials and RARA Operations may mutually lower these limitations if, in their collective judgment, safe air and/or ground operations could be compromised.)

Biplane

Max Total Wind	20 Kts
Max Cross Wind	15 Kts
Max Tail Wind for Takeoff	10 Kts
Max Tail Wind for Landing	5 Kts

Formula One

Max Total Wind	35 Kts
Max Cross Wind	20 Kts
Max Tail Wind for Takeoff	10 Kts
Max Tail Wind for Landing	10 Kts

T-6

Max Total Wind	30 Kts
Max Cross Wind	15 Kts
Max Tail Wind for Takeoff	5 Kts
Max Tail Wind for Landing	5 Kts

STOL	
Max Cross Wind	15 mph
Sport	
Max Total Wind	35 Kts
Max Cross Wind	20 Kts
Max Tail Wind for Takeoff	10 Kts
Max Tail Wind for Landing	10 Kts
Jet	
Max Total Wind	35 Kts
Max Cross Wind	25 Kts
Max Tail Wind for Takeoff	10 Kts
Max Tail Wind for Landing	10 Kts
Unlimited	
Max Total Wind	35 Kts
Max Cross Wind	30 Kts
Max Tail Wind for Takeoff	10 Kts
Max Tail Wind for Landing	10 Kts

AIR STARTS will be used for all Unlimited, Jet, Sport and T-6 races. Note: The T-6 Air Start will be conducted from West to East and parallel to R/W 08/26. All aircraft will remain north of the south edge of 08/26.

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

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

THE TIMING LINE for the Unlimited, Jet, and Sport classes is extension to the north edge of runway 8/26 at its intersection with the northbound entry corridor. Lap #1 for these classes shall be from the timing line to the finish line at Home Pylon. Subsequent laps shall be on each class'~~s~~ specific race course.

THE TIMING LINE for the T-6, Formula One and Biplane classes is a line projected south from Home Pylon at right angles to runway 8/26. Prior to the official start of a T-6 Race, all race aircraft must be north of the South Race Course Show Line. Formula Ones and Biplanes on a runway 8 departure must make one lap before the start time begins.

FORMULA ONES and Biplanes will not take-off on runway 26. The alternate start for Formula Ones and Biplanes will be from runway 32. The alternate start procedure will entail a left turn at a TEMPORARY TURN PYLON on Taxiway B. After take-off on runway 32, the aircraft will join the course at pylon 4. Formula Ones and Biplanes will continue around the course until they pass the timing line. Race Control and the respective class will ensure cross wind components for a 32 departure are within the limits established by each class prior to authorizing a 32 launch.

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

ANY AIRCRAFT assigned to compete in a particular race which is unable to join the starting formation or having joined the formation and subsequently drops out for any reason prior to the racehorse start or air start, depending on race class, will not be regarded as a legal start and will not be eligible for prize money or trophies for that race.

AIR STARTS officially start when the Pace Plane Pilot, or if there is not a Pace Plane, when the Pole Position Pilot announces a “race start” over race frequency at a predetermined point on the initial approach to the race course. All aircraft will enter the race course within their race corridor to officially start in a race.

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

- Any pilot participating in a Sport, Unlimited or Jet race is not required to maintain race altitude during the Start Lap from the Start Pylon to Pylon Six while they are maneuvering for race position.

ALTERNATE AIRCRAFT will not takeoff if all assigned aircraft in a race become airborne for a start.

RACE COURSE SHOW LINES (RCSL) are established to ensure all race aircraft remain inside the designated FAA race air space at all times. The South RCSL is defined as the north edge of runway 8/26, over which no aircraft is permitted to cross while racing/qualifying/practicing unless the pilot is clearly performing an "escape maneuver," which is defined as climbing above 1,500 AGL to avoid the spectator area. The East RCSL is marked with white panels visible from the air and are located a minimum of 500 feet west of the east airport fence line until Lemmon Drive. The west RCSL is the west airport fence line from pylon 6 to a point between pylons 6 and 7 where a series of white panels visible from the air are placed on an angle moving the west RCSL 500 feet east of the west airport property fence line. Any aircraft crossing a RCSL will be disqualified by the Contest Committee for not complying with the FAA designated airspace associated with the FAA Waiver. RCSL violations are not subject to protest.

THE MINIMUM RACE ALTITUDE on the Race Course is the Race plane’s cockpit (pilot’s eye level) at the top of the pylons on the Race Course and above the bottom of the “R” in RENO at the home pylon. The responsibility for calling violations of low flying shall vest in the unanimous decision of the Pylon Judges assigned to that pylon that called the low flying violation and the Contest Committee when in position to view a violation. The timers may report to Contest Committee a low flying violation at the Home Pylon, supported by

the video evidence. Violators will be disqualified from the race in which the violation occurred. Repeat violators will be disqualified from future participation.

THE RACE ALTITUDE—The maximum race altitude as stated on applicable race course map.

THE MAXIMUM RACE ALTITUDE—The maximum race altitudes are established on the FAA approved race courses. All race pilots are advised that limited deviations above maximum race altitude will not result in a rules violation if such maneuvering is deemed to be in the interest of flying safety by the pilot in command and judged to be for that reason after review of the altitude deviation by the Contest Committee. **Reasons for maneuvering above the maximum race altitude include, but are not limited to, the following: maneuvering out of jet/prop wash or wake turbulence; as required for safe passing due to an unforeseen change in position of the aircraft being passed; or a momentary loss of situation awareness.** In the interest of safety, such altitude deviations without penalty are authorized if followed by a safe return to the race course. A planned excursion above the maximum altitude solely for the purpose of passing is not acceptable. Alternatively, pilots may execute the escape route as discussed in the following paragraph, "A Primary Escape Route". Oversight of pilot maximum altitude deviations will be provided by the Contest Committee and documented and tracked in the RARA Safety Management System (SMS).

A PRIMARY ESCAPE ROUTE is available for Unlimited, Jet, Sport and T-6 race pilots unable to remain within the boundaries of their race course when approaching the South RCSL, which is the north edge of runway 8/26. They must climb to 1,500 feet AGL while crossing their extended RCSL west of the threshold of Runway 8, then pass behind the spectator area above 1,500 feet AGL then cross the threshold of Runway 26 and rejoin the circuit. Extreme caution is advised as aircraft on the race course have the right of way. Similar Escape Routes are available on the Race Course Boundaries on the west and east sides of the race course. These escape routes are identical to the one over the South RCSL other than the relative position on the race course. No penalty will be incurred for performance of this maneuver.

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

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

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

X. PYLON CUTS/LIGHTING

RACING AIRCRAFT must remain outside of all race course pylons, including guide pylons, during races or during qualification.

TURNING INSIDE of or having any part of the aircraft over a pylon, constitutes a pylon cut and will be called by the unanimous decision of the pylon judges assigned to that pylon. A pilot cutting pylons may continue to race, but will be penalized two (2) seconds times the number of laps in the race for each pylon cut. The penalty time will be added to the actual finish time, with the result used to compute the final race speed.

AIRCRAFT FORCED over or inside a pylon by the illegal flying of another aircraft shall be considered to have suffered a "forced cut". If a cut is forced in the unanimous decision of the pylon judges involved, the aircraft that forced the cut shall be disqualified.

AIRCRAFT WILL not be notified of a pylon cuts until completion of the race. Protests to the Contest Committee will not be allowed for pylon cuts or forced cuts.

PORTABLE LIGHTING is used at selected race course pylons to enhance racing safety by assisting race pilots in quickly determining their appropriate race path towards these important race course markers. Portable lighting at the pylons listed below is considered part of the pylon and must be functioning at the start of a race, qualification period or practice session. Rapid corrective action plans are in place at each of these pylons to quickly service portable lighting deficiencies as they occur. Should lights fail during a race or qualification period, the racing/qualifying will continue and the condition corrected ASAP. All aircraft on race course will be notified by Race Control of any pylon lighting discrepancy.

1. **All** Pylons on **Inner Course (**Biplane & Formula One-Race Course**)**.

2. **Pylon Middle 1 for T-6 Race Course (One Light only).**

3. The Guide Pylon for the Jet, Unlimited and Sport Racers. This pylon is required only for the start of any heat/race that uses the Outer Race Course including the Unlimited, Jet and Sport Classes.

4. **Pylon Sport 1 for Sport Medallion Course (Two Lights).**

5. Outer Pylon 6 **& 7** on the Jet, Unlimited and Sport **Gold** Race Course.

Additional lighting at selected locations (not necessarily at pylons) will be used as recommended by the race classes and or the **Air Boss** but not be considered essential to racing, qualifying, or practicing sessions.

XI. RACE FINISH

THE OFFICIAL FINISH LINE for all races is a line projected from Home Pylon perpendicular to Runway 8/26.

THE OFFICIAL FINISH for any race shall occur when the lead aircraft passes the finish line after completing the required number of laps. All following aircraft will be given the Checkered Flag as they cross the finish line and shall depart the course after receiving the Checkered Flag.

THE SPEED of each aircraft shall be determined by dividing the distance flown by its elapsed time, calculated by subtracting the race start time from the racer's finishing time, adjusted by any pylon cut penalties.

THE FINISHING POSITIONS of aircraft in the field shall be in the following order:

1. Decreasing Speeds
   - All finishing aircraft that are not disqualified are listed in order of decreasing speed.
   - If Class rules allow the race winner to bump to a faster heat and the winner elects to bump, the winner's place will be listed as "Bump" with the following entry 1st Place.
   - In case of a tie, with two or more aircraft having equal speeds, the place is replicated with subsequent places skipped. For example, if two racers tie for 2nd place, both will be listed as 2nd place, followed by 4th place.
2. Racers with no speeds
   - Racers who start the race, but do not finish, are listed as Did Not Finish (DNF) and listed in decreasing order of the number of laps completed. DNF aircraft are listed below aircraft with recorded speeds.
   - Racers who do not start a race, that is, do not participate in the racehorse start or air start, are listed as Did Not Start (DNS), below DNF racers.
   - Disqualified racers are listed below other racers.

IF THE CRITERIA above do not distinguish two or more racers, they are listed in pairing order for that race. Examples include ties, DNF racers who complete the same number of laps and disqualified racers. However, such finishes are considered equal, with the position on the race report irrelevant.

UNOFFICIAL FINAL RESULTS will be posted as soon as practical after race completion. Such results will become official one (1) hour following posting if there are no protests.

XII. EMERGENCY PROCEDURES

WHEN A PILOT declares a “MAYDAY”, Race Control will announce by radio that an emergency is in progress.

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

WHEN A ‘MAYDAY’ has been declared, all other aircraft will continue to race.

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

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

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

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

XIII. RACE CANCELLATION OR POSTPONEMENT/IMPACT ON PAYOUTS

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

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

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

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

- Only those aircraft competing in the stopped race and who had made an official start will be permitted to restart even if the field is not filled.
- Aircraft that had officially started the race but dropped out of the field before the race was stopped will be allowed to enter the restarted race.
- Aircraft not officially starting the race will not be allowed to enter the restarted race.
- Aircraft disqualified during the completed portion of a stopped race will not be allowed 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

	%
Wednesday	10%
Thursday	15%
Friday	20%
Saturday	25%
Sunday	30%
Total	100%

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 its "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 payout 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 NCAR**.** Any observed or reportable safety event or concern will be reported per the NCAR Safety Management System through the RARA Director of Safety.

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, Mini-Boss, Director of Operations, and Director of Safety may order off the course any pilot who appears to be a menace to himself or to other participants.

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

XV. VIOLATIONS—PENALTIES—FINES

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

- Bribery or an attempt to bribe anyone connected with any competition and/or the acceptance of such offer.
- The intention to enter or to aid in the entry of an unqualified participant or aircraft.
- Failure to give way to an aircraft with an emergency.
- Any action or proceeding prejudicial to the event or to the best interest of air racing.
- Any unsportsmanlike conduct, any protest offensively formulated, any abusive language or threat uttered publicly or otherwise against participants, officials or committee members, before, during or after competition.
- Careless or reckless flying (14CFR 91.13).
- Violations of any FAA rules, regulations or the Waiver.
- Low flying over spectators at any time.
- Failure of pilot or aircraft to conform to regulations set forth in the specifications and Class Aircraft Compliance Inspection Regulations of the racing class involved.
- Attempt to race an unqualified aircraft in a race as substitute for a qualified aircraft.

- Attempting to fly on the race course prior to personally attending and signing in for the required pilot briefing(s).

- Attempting to fly on the race course without an assigned race number correctly applied on the aircraft.

- Any pilot taking an unauthorized passenger on the race course at any time shall be disqualified from racing for that year and/or the following year dependent on the timing of the violation. Should the infraction occur during PRS, the practice period, the qualification period or Wednesday thru Friday of Race Week, the disqualification shall be for the remainder of the current year. Should the infraction occur on Saturday or Sunday of Race Week, the disqualification shall be for the remainder of the current year AND the following year's Air Races.

- Should a pilot not climb to and maintain the 1,500 AGL altitude required by the ESCAPE ROUTE, discussed in the RACING SECTION, he/she will be disqualified for that race, receive last place money for that race and will start in last place for the next race.

- A pilot displaying erratic, reckless, dangerous or unsportsmanlike flying will be ordered off the course by radio and Black Flag. There shall be no right of protest and the pilot shall receive last place money for that race. The pilot will meet with the Contest Committee and the Class Pilot Qualifications Committee after landing to discuss the reason for the erratic behavior.

- Any participant "jumping the start', "slingshoting" or "diving for the deck" at the start of a race will be subject to disqualification and last place money for that race. The Chief Judge of the Contest Committee will be the sole determiner of any of these infractions and no protest may be filed.

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

- The penalty for a pylon cut during a race shall be two (2) seconds times the number of laps in the event for each pylon cut. Protests to the Contest Committee will not be allowed.

- A pylon cut allegedly assigned to the wrong aircraft will be discussed with the Contest Committee and the Chief Pylon Judge through the formal protest process.

- The penalty to the affected class for a violation of the number of credentialed members of that class or the presence of any person not having the appropriate credentials within the "Designated Observation Area" or the "Telemetry Area" shall result in the class' inability to occupy those areas for the remainder of the year's races. Should a violation occur, the class will be directed to immediately correct the situation and if they are able to immediately respond, no penalty will be imposed.

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

- DURING PRACTICE or QUALIFICATION, the Class of the aircraft which the pilot is/was flying when violation is/was discovered and documented shall be fined Five Hundred ($500.00) Dollars for the first violation by that class in that year. The fine shall be doubled for each subsequent violation within the Class.

- DURING A RACING PERIOD, the Class of the aircraft the pilot(s) is/was flying when the violation is/was discovered and documented shall be fined Five Percent (5%) of the total Class Purse for that race day for each violation.

XVI. PROTESTS

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

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

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

- Protests relating to an air racing event and any error or irregularity committed during a competition will be presented to the Contest Committee, which will convene to deal with any issue under their jurisdiction as soon as practicable and in no event later than one (1) hour after finish of competition of the day and will remain in session until all protests have been resolved and the official results posted. The decision of the Contest Committee shall be final and all parties concerned shall be bound by the decision and no further appeal to the decision will be granted.

- A technical protest of racing aircraft will be presented to the Contest Committee and the Chief Aircraft Compliance Inspector of the class. When a protest has been made against the legality of the aircraft, the protestor will be responsible for

the expenses incurred by the party protested against as a result of the protest if the aircraft is found to be legal.

- The Contest Committee shall notify all parties concerned of the time and place of the hearing of any protest. All parties shall be entitled to call witnesses and they and the witnesses shall be given the opportunity to be heard. Persons knowledgeable in specialized areas pertinent to the incident may be called by the Contest Committee to assist in a fair and equitable judgment. The president of the class involved, or his designee, will be notified and may be present at the protest hearing if they wish.

- All prizes won by a competitor who has been protested against will be withheld until a final decision on the protest has been determined.

- Any disputes and/or unresolved conflicts concerning these rules that could directly jeopardize the NCARs shall be resolved at the sole discretion of RARA.

XVII. GENERAL

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

XVIII. SPECIAL RULES

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

Authorization for a passenger ride around the Race Course shall be obtained from the RARA Director of Operations, coordinated with the RARA Director of Aviation Resources and the FAA will be notified. The passenger ride shall be no lower than two hundred fifty feet (250') AGL. Should an infraction of this height limitation occur, the same penalty shall be imposed as that for taking an unauthorized passenger on the Race Course.

Each Class President or designated representative during PRS and NCAR, shall ensure that a Class representative for that class be present in the Tower ("Tower Rep") prior to the aircraft taking to the runway. The Tower Rep roll will be to assist and advise Flight Operations personnel on class racing operations and identify non-standard aircraft configurations. The Tower Rep must therefore possess sufficient expertise in the safe operation of the aircraft entered.

RARA has instituted the following policy to validate Pilot and Aircraft prior to taxi for qualification and racing:

- Each Race Class President or his designated representative shall prior to the initial class briefing of the day, identify a member of their class as the pilot coordinator responsible for ensuring that only those pilots or alternate pilots approved in writing via the RARA Authorized Pilot/Race Aircraft List enter the race course at any time the FAA waiver is in effect. The list is generated, updated, and maintained by the RARA Director of Aviation Resources.

- **Each Class President or designated representative during PRS and NCAR, shall ensure that a Class representative for that class be present in the Tower ("Tower Rep") prior to the aircraft taking to the runway. The Tower Rep roll will be to assist and advise Flight Operations personnel on class racing operations and identify non-standard aircraft configurations. The Tower Rep must therefore possess sufficient expertise in the safe operation of the aircraft entered.**

- Each Class President will be issued a copy of the List on the opening Sunday of race week, prior to the Sunday morning class brief. Updates, as authorized by RARA, will be provided to the Class President during the initial class briefing on the day after the day of approval by RARA.

- The class coordinator will be required to attend the first class briefing of the day and ensure all pilots/alternate pilots who are scheduled to fly, as depicted on the Official Pairing Sheets, sign-in prior to the start of the briefing. Additionally, the class coordinator will identify himself or herself to the RARA Authorized Pilot/Race Aircraft Monitor, who will also attend the first class briefing of the day.

- The RARA Authorized Pilot/Race Aircraft Monitor and the class coordinator will document in writing that all pilot/aircraft combinations contained on the pairing sheets for that race day are consistent with the current RARA Authorized Pilot/Race aircraft List. If a pilot or alternate pilot is not authorized in a given race aircraft consistent with the current RARA Authorized Pilot/Race Aircraft List, the affected aircraft will be removed from the race schedule unless an authorized pilot designated on the list, and who has attended the briefing, is substituted on primary pilot/race aircraft qualification schedule or the pairing sheet. Class coordinators will notify the RARA Scorer immediately via telephone (not later than aircraft taxi) if the primary pilot/race aircraft qualification schedule or the race pairing sheet does not accurately reflect the approved and briefed pilot/race aircraft combination.

- The designated class coordinator is responsible to ensure that only an authorized primary/alternate pilot enters a race plane for either a qualification attempt or a race event. The RARA Authorized Pilot/Race Aircraft Monitor will also be on the ramp

and will visually confirm pilot/race plane compliance to the degree possible consistent with the list.

- It is the responsibility of the Class, through the Class President, to ensure that only pilots that are certified, insured and named, either as the pilot or alternate pilot, fly at Reno in any practice, qualification or racing event. RARA will monitor the briefing sign-ins and the announced pairings; however, should an ineligible pilot be found in an aircraft, flying within the waivered airspace, the Class shall be held accountable for the violation! This is a serious breach of liability rules established by RARA and its insurance carrier and could invalidate said race insurance.

- Any pilot who enters the race course during practice, qualifications, or race periods without being authorized on the RARA Authorized Pilot/Race Aircraft List shall cause the class to be fined in Accordance with VIOLATIONS, PENALTIES AND FINES.

- Alcohol, marijuana and related products, and illegal drugs (to include abuse of prescription drugs) are recognized by RARA as substances that may have a negative effect on the performance of not only race pilots but their mechanics and those crew members with physical interaction with their race aircraft. As a privately operated organization responsible for all those involved with both PRS and NCAR, no alcohol consumption or drug use will be allowed by anyone having the intentional or potential to work on or contact race planes in a capacity that could in any way cause an aircraft to become altered from its tech-inspected state of safe operation. Therefore, RARA bans any persons under the influence of alcohol or drugs from any maintenance or towing operations of any aircraft participating in any RARA sanctioned event. Areas such as pit boxes, towing lanes, etc., where such operations occur, are designated as “alcohol and drug free” areas. The method of enforcement will be at the discretion of the RARA staff and could result in penalties up to and including immediate dismissal from participation of the event with no refunds. RARA will have zero tolerance when it comes to violation of this rule.

XIX. PRIZE MONEY AND PURSE

PRIZE MONEY SCHEDULES for a full field must be delivered to RARA on the Saturday prior to racing.

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

THE RACE CLASS shall provide RARA with either an individual payout schedule with the amount due the Class Participants or an invoice for the total Class Purse based upon a full field of race pilots or based on the actual number of race pilots that qualified. The individual checks will be handed out to the race pilots during the Awards Ceremony and checks for the Race Class will be presented to the Class Representative during the Awards Ceremony

for that Class.

RARA will make every effort to make the checks payable as directed by the Class or the Race pilot. All IRS 1099 forms will be issued to the payee on the check and thus it is the responsibility of the recipient to ensure it is correct prior to it being cashed. **SPECIAL** prizes may be offered through RARA by specific sponsors. Rules governing these prizes will be distributed prior to the races in accordance with RARA rules.

XX. CLASSES—FIELD—RACES

COMPETITION at the NCAR is currently comprised of the following Classes:

Classes	Minimum **# of Aircraft for Full Field****
Unlimited	21 Fastest Qualifiers
T-6	21 Fastest Qualifiers
Sport	24 Fastest Qualifiers (3 heats)/28 Fastest Qualifiers (4 heats)*
Jet	18 Fastest Qualifiers
Formula One	24 Fastest Qualifiers
Biplanes	21 Fastest Qualifiers
STOL	Refer to STOL Rules, Attachment F

** **Minimum** Full Field Size is the basis for distribution of prize money to the respective class.

* For prize money purposes, twenty-eight (28) fastest qualifiers as a full field in the Sport Class will only apply for any new prize money that is allocated to the Sport Class.

The number of race heats for each class will be coordinated between RARA and the Race Class and included in the NCAR Flying Schedule. The number of races scheduled and flown could change due to unforeseen and varying conditions by agreement between RARA and the Race Class.

XXI. MINIMUM/MAXIMUM NUMBER OF AIRCRAFT FOR A RACE

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

Class	**Race Size**		
	Minimum	**Minimum for Silver/Gold Race**	**Maximum**
Biplane	5	7	8
Formula One	5	7	8
Jet	5	7	8
Sport	5	7	**8**
T-6	5	6	7
Unlimited	5	7	9

*Max to safely race on applicable course

STOL – Refer to STOL Rules, Attachment F

Any number of aircraft in a class may qualify; however, the maximum race size per class will not exceed the limits established in the chart above.

Should a Race Class desire to change minimum and/or maximum number of aircraft per any race, they will petition such a change through the RARA Director of Operations.

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ATTACHMENT A- FOR ALL AIRCRAFT

NATIONAL CHAMPIONSHIP AIR RACES
PIT, HANGAR AND RAMP RULES

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 ensure this, we solicit your cooperation and assistance in complying with the following rules, guidelines, and regulations.

PIT RULES

1. **Unless class loading dictates otherwise,** only registered Unlimited, Jet, Sport, T-6, and STOL 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 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. Sport Class racers will be parked on the ramp in designated areas. Pit Parking areas for each class will be assigned by 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 timeframes prescribed in the RARA Official Rules of Operations and Competition, may 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 takeoff 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 takeoff 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 assigned 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 0800 Hrs. on the Friday prior to the start of practice and qualifications. Semi-trailers used as support vehicles must have pads placed under the support feet to protect the ramp asphalt. RVs 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 designated oxygen servicing area.

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

HANGAR RULES

6. Only registered Formula One, Biplane and Sports Class racing aircraft are authorized to park in the hangars (No support aircraft or vehicles). Individual aircraft parking spaces will be allocated by each racing class according to their rules and guidelines. Payment and acceptance of the entry fee does not guarantee a hangar parking space. Priority for hangar 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 hangar area. Aircraft entered but not arriving at Reno-Stead Airport prior to the end of qualifications for the class will lose their hangar parking space. NOTE: Thunder Mustang Sport Class race planes are authorized to park in the American Air Racing hangar.

7. All support vehicles and trailers will be parked in the designated parking area. They are NOT to be parked on the asphalt areas around the hangars.

RAMP RULES

8. FAA rules prohibit any aircraft to have engine power (props turning) on the ramp, south of the NO ENGINE TURN LINE. This rule is in effect 24 hours a day. NO EXCEPTIONS!!

9. All requests for engine runs (high power or low power) during the waiver period of each qualification/race day will be directed to the Ramp Chief and he will direct where the requested engine run can be accomplished

10. Aircraft engine runs are NOT ALLOWED in the Pit Parking Areas. Engine runs will only be accomplished on the ramp, north of the NO ENGINE TURN LINE. For any engine high powered runs, the aircraft will be moved to a designated High Power Run location assigned by the Ramp Chief.

11. All race crews are required to have a fire guard with an approved fire extinguisher at their aircraft whenever engine starts are attempted. For group starts (Sport, Formula One, and Biplane Classes), RARA will provide a CFR vehicle to stand by in the immediate vicinity for fire protection purposes.

12. A tow team and vehicle will be assigned to each Unlimited and T-6 racing aircraft to assist in moving aircraft in or out of the Pits. Tow Teams will have radio contact with Race Control and will coordinate the racing schedule with each crew. The Jet and Sport Class will furnish its own tow crews and equipment. A RARA Jet and Sport Class Coordinator will be assigned to the Jet Pit Area to coordinate the timely movement of aircraft. Timely starting procedures are mandatory.

13. Prior to their scheduled Takeoff times, Unlimited, T-6 and Sport Class Aircraft will be pre-positioned in their designated areas, north of the No Engine Turn Line. Aircraft will be parked on a northwesterly angle. Jet Class aircraft will be parked in their start up area facing in a southerly direction. Special consideration will be given as to the facing direction for those aircraft that are wind sensitive during start.

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

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

15. Children under the age of 14 are not allowed unattended in the pit areas including ramp areas and race aircraft hangar areas.

15a. Air race aircraft crewmembers authorized north of the “No Engine Turn Line” must be 18 years of age or older.

16. The minimum age for pylon visits is 21 years of age per our insurance requirements.

17. Closed-toe shoes must be worn by any race crew member, RARA worker or FAA attendee authorized to be on the north side of the “No Engine Turn Line”.

GENERAL RULES

18. All major aircraft discrepancies discovered after the aircraft’s arrival at Reno must have their corrective actions documented and forwarded for review and approval as described in the RARA Official Rules of Operations and Competition.

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

20. Refueling or de-fueling of aircraft is NOT ALLOWED in the hangars or Pit parking areas.

Aircraft must be moved to the designated refuel/de-fuel area. See Ramp Chief for direction to an approved de fueling area.

21. Race crews bringing their own fuel must make arrangements to store this fuel in the designated fuel storage area. Fuel MUST be in approved containers and will not be stored or dispensed in their assigned aircraft Pit area.

22. Aircraft or engine wash downs WILL NOT be performed on the ramp or in the hangars. The designated wash rack must be used.

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

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

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

    a. Scooters, ATV's, Segways, motorcycles, skateboards, and rollerblades, "razor"-type scooters, **electric bicycles**, or other types of motor run transportation devices (with the exception of wheelchairs) are NOT ALLOWED.

    b. Bicycles and Golf Carts must be individually approved by RARA and must have the proper decal affixed thereto.

    c. Driving any motorized or non-motorized vehicle under the influence of Alcohol, or a controlled substance, as defined by Nevada Revised Statues while within the Reno-Stead Airport grounds during the National Championship Air Races or the Pylon Racing Seminar, will result in Law Enforcement response and potential Criminal charges. In addition, the violator will be subject to immediate ejection from the grounds and will not be allowed to return. In the event the violator is not arrested, he/she may still be subject to enforcement action by RARA such as permanent ejection from the event.

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

27. **Pets, except for Service Animals, are not allowed in the Pit or hangar area.**

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

29. Test flights during normal race hours MUST BE scheduled in advance with the **Air Boss** and cannot conflict with any Air Race or Air Show activity**, in accordance with the Rules and Regulations Section VII.**

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

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

RACE CLASS	**MAXIMUM PERSONNEL**
Unlimited	6
T-6	5
Sport	3
Jet	4
Formula One	3
Biplane	3
STOL	2

These support personnel must wear the proper credentials and must be essential to the operation in progress. They must clear the ramp as soon as possible by returning back behind the Pit/Crowd line or to an authorized observation area. Only specifically designated individual crew members may be in the FAA/RARA telemetry area as defined in the Official Rules of Operations and Competition.

VIOLATIONS OF THESE PROCEDURES WILL RESULT IN PENALTIES AND/OR FINES BEING LEVIED AGAINST THE RACE CLASS INVOLVED AS OUTLINED IN THE "OFFICIAL RULES OF OPERATIONS AND COMPETITION".

32. Please note, until 0800 Sunday morning prior to the beginning of "Race Week", Reno-Stead Airport is an active general aviation facility under the control of Reno-Tahoe Airport Authority (RTAA). All normal airport rules and regulations apply and must be observed. No vehicle or foot traffic is permitted outside of the ramp area. Beginning at

noon (1200) on Friday prior to race week, RARA ramp and security officials will be available to meet arriving aircraft and assist RTAA in controlling Ramp Operations.

33. Please help us prevent unnecessary conflicts by ensuring all race crew members wear the proper credentials at all times. This is most important when crew members are required to go out beyond the crowd line. The appropriate credentials must be worn at all times while in the launch/recovery and fuel/de-fuel areas. NO EXCEPTIONS!! Other required wristbands, vehicle decals, etc. must be properly worn and displayed. Violations of these requirements shall cause the individual's credentials to be revoked and expelled from the pit area.

FIRST AID/EMERGENCIES

First aid stations are located as depicted on the airfield locator maps, published in the "official program". For other emergencies, contact Race Control 775-972-3649, Security 775-560-7139, any air race official or dial 911. A fire station with an Emergency Medical Technician assigned is within three blocks of the airport.

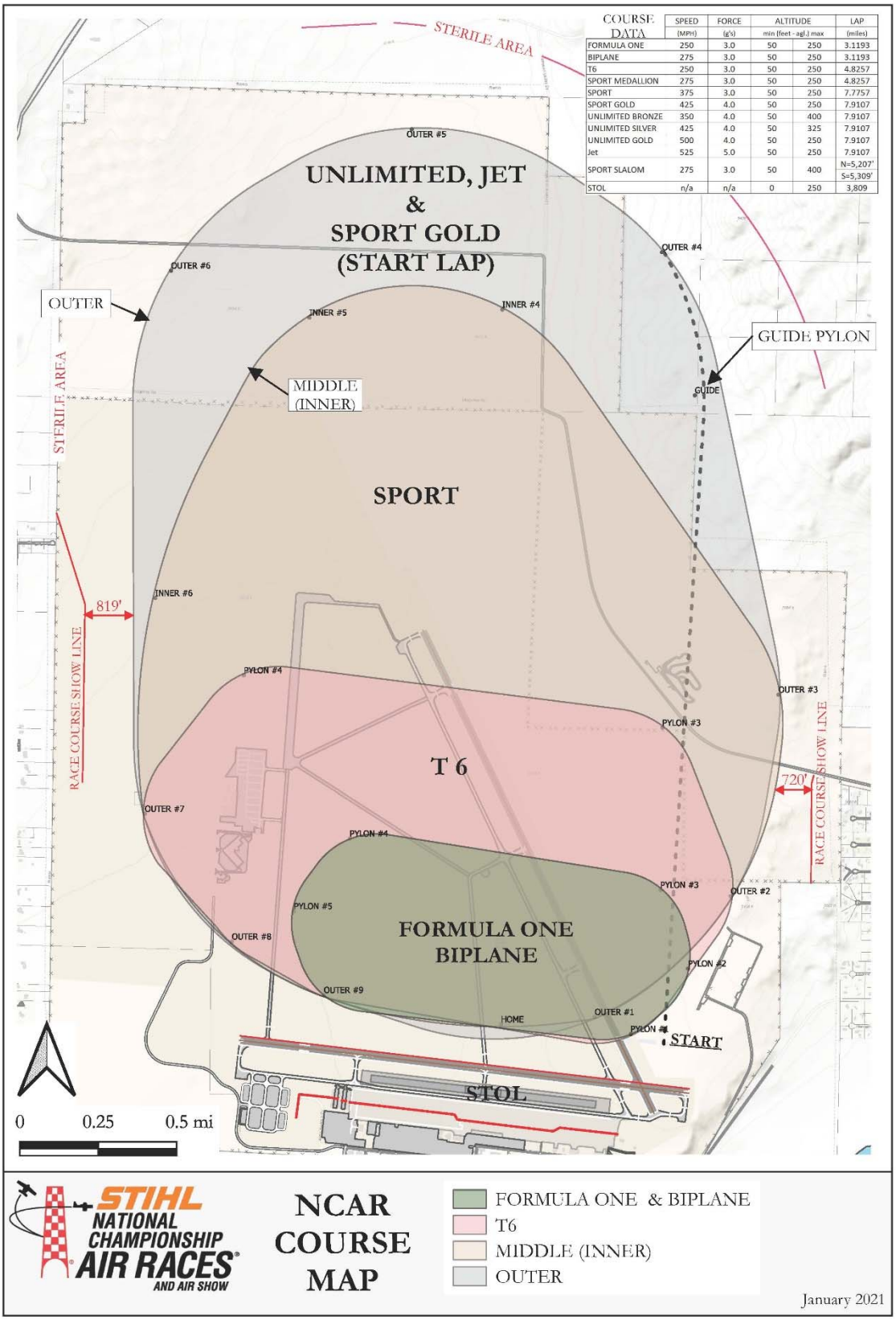
MAINTENANCE SUPPORT

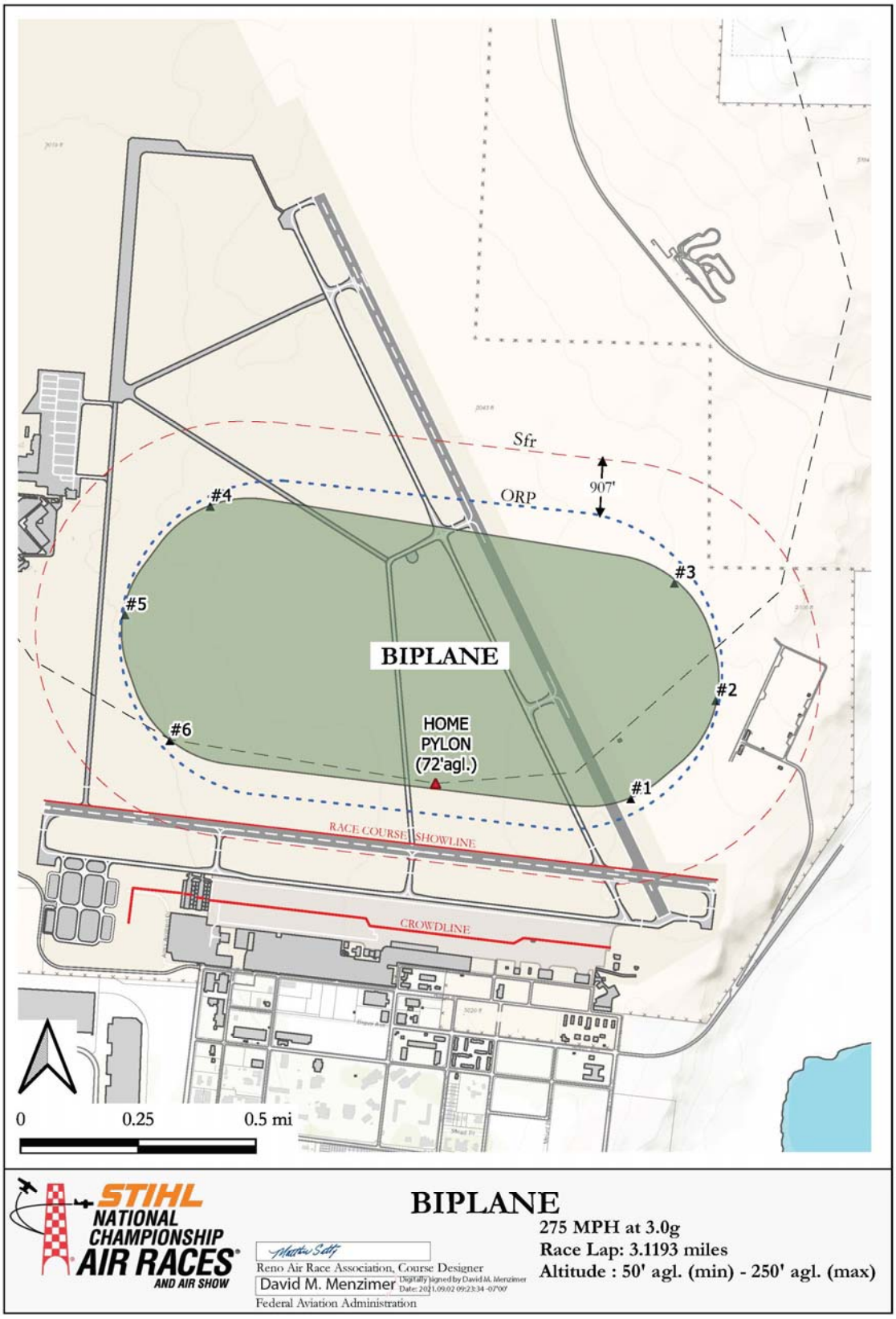
The following Aircraft Repair Facilities are located at the Reno-Stead Airport:

Aviation Classics, Inc.	East End	(775) 972-5540

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

ATTACHMENT B


COURSE DATA
SPEED (MPH)
FORCE (g's)
ALTITUDE min (feet - agl.) max
LAP (miles)
FORMULA ONE 250 3.0 50 250 3.1193
BIPLANE 275 3.0 50 250 3.1193
T6 250 3.0 50 250 4.8257
SPORT MEDALLION 275 3.0 50 250 4.8257
SPORT 375 3.0 50 250 7.7757
SPORT GOLD 425 4.0 50 250 7.9107
UNLIMITED BRONZE 350 4.0 50 400 7.9107
UNLIMITED SILVER 425 4.0 50 325 7.9107
UNLIMITED GOLD 500 4.0 50 250 7.9107
Jet 525 5.0 50 250 7.9107
SPORT SLALOM 275 3.0 50 400 N=5,207' S=5,309'
STOL n/a n/a 0 250 3,809
STERILE AREA
UNLIMITED, JET & SPORT GOLD (START LAP)
OUTER #5
OUTER #6
OUTER #4
OUTER
INNER #5
INNER #4
GUIDE PYLON
GUIDE
MIDDLE (INNER)
STERILE AREA
SPORT
819'
INNER #6
RACE COURSE SHOW LINE
PYLON #4
OUTER #3
PYLON #3
T 6
720'
RACE COURSE SHOW LINE
OUTER #7
PYLON #4
PYLON #3
OUTER #2
PYLON #5
FORMULA ONE BIPLANE
OUTER #8
PYLON #2
OUTER #9
HOME
OUTER #1
PYLON #1
START
STOL
0 0.25 0.5 mi
STIHL NATIONAL CHAMPIONSHIP AIR RACES AND AIR SHOW
NCAR COURSE MAP
FORMULA ONE & BIPLANE
T6
MIDDLE (INNER)
OUTER
January 2021



STIHL NATIONAL CHAMPIONSHIP AIR RACES AND AIR SHOW

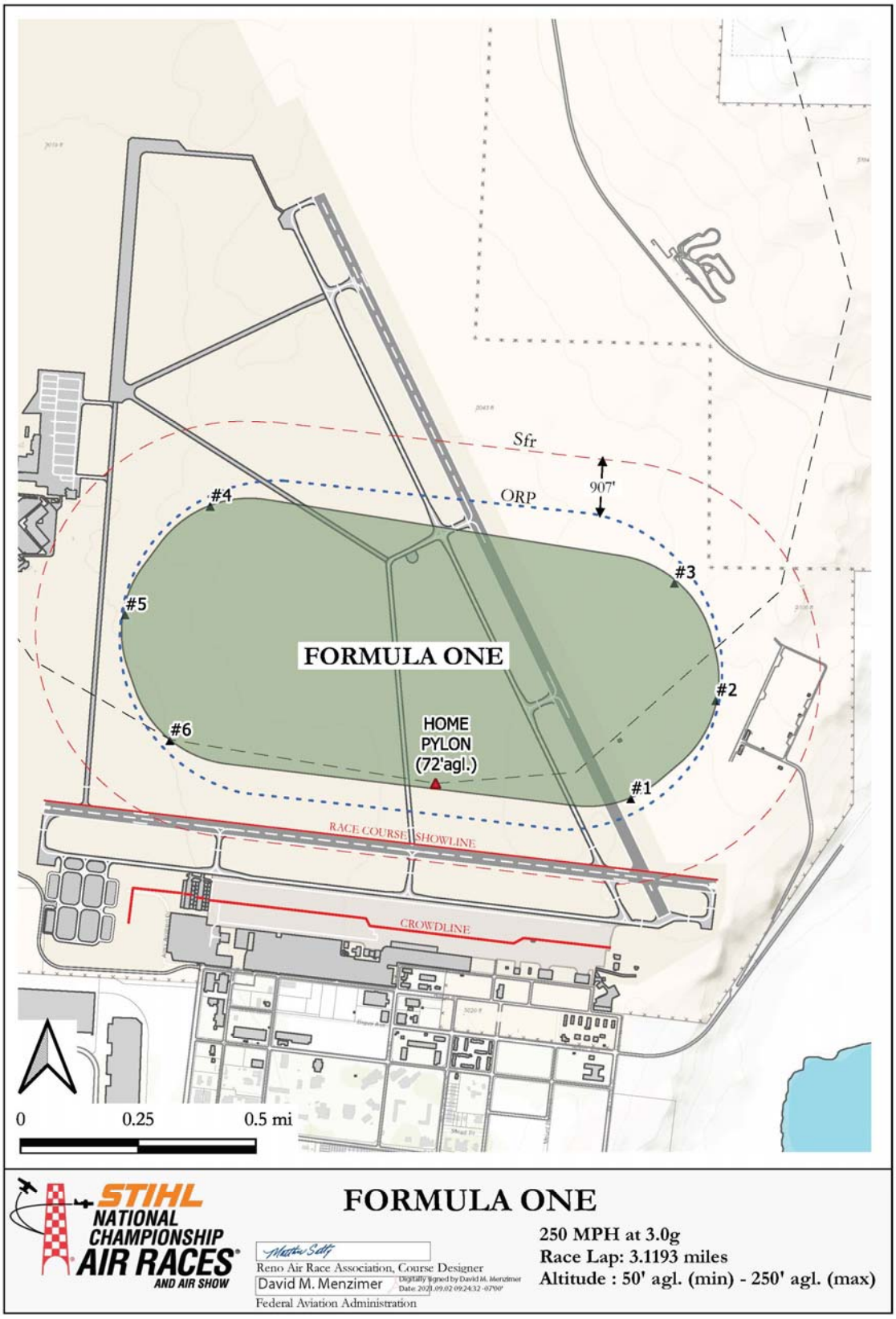
Reno Air Race Association, Course Designer

David M. Menzimer Digitally signed by David M. Menzimer Date: 2021.09.02 09:23:34 -07'00'

Federal Aviation Administration

BIPLANE

275 MPH at 3.0g
Race Lap: 3.1193 miles
Altitude : 50' agl. (min) - 250' agl. (max)



STIHL NATIONAL CHAMPIONSHIP AIR RACES AND AIR SHOW

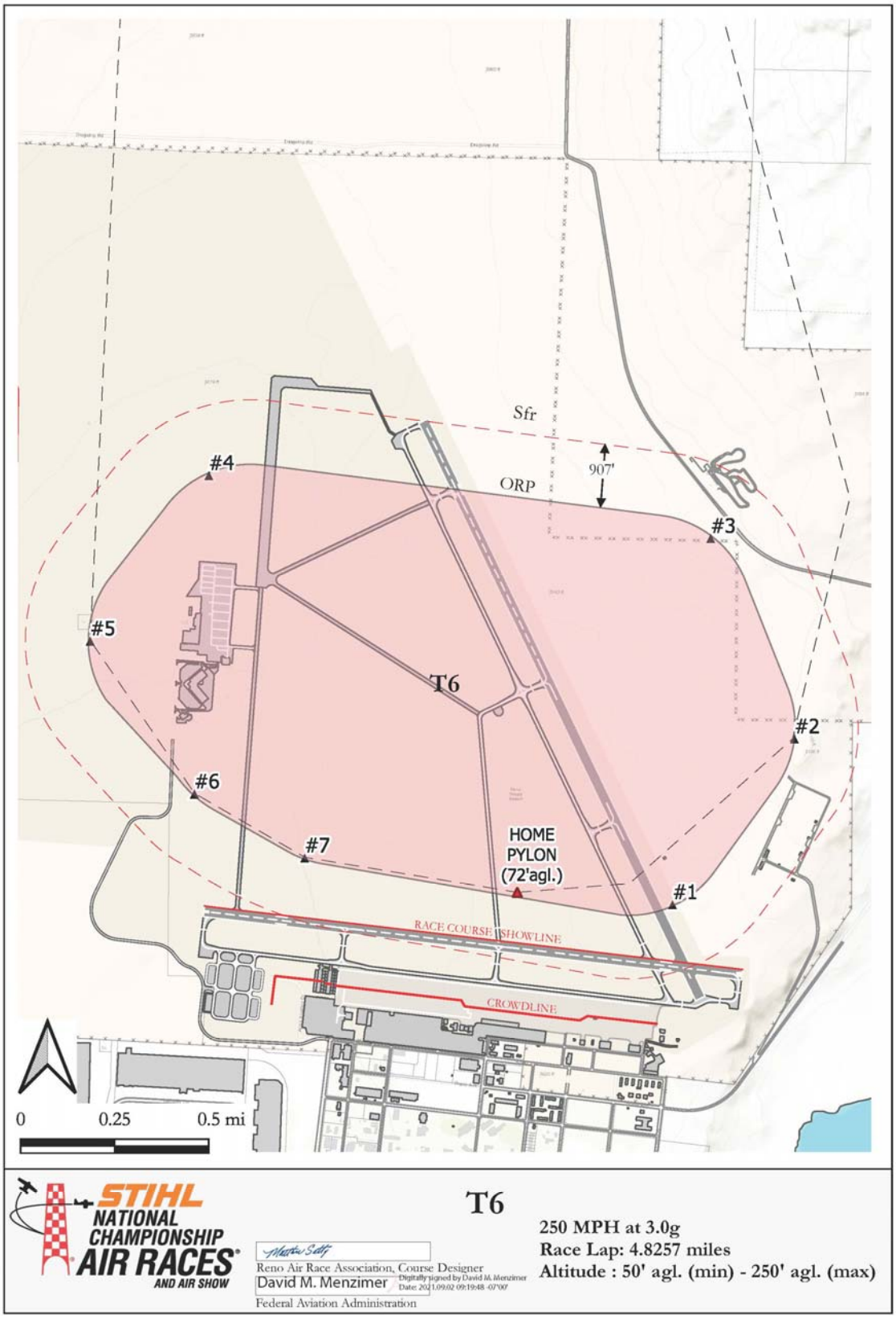
FORMULA ONE

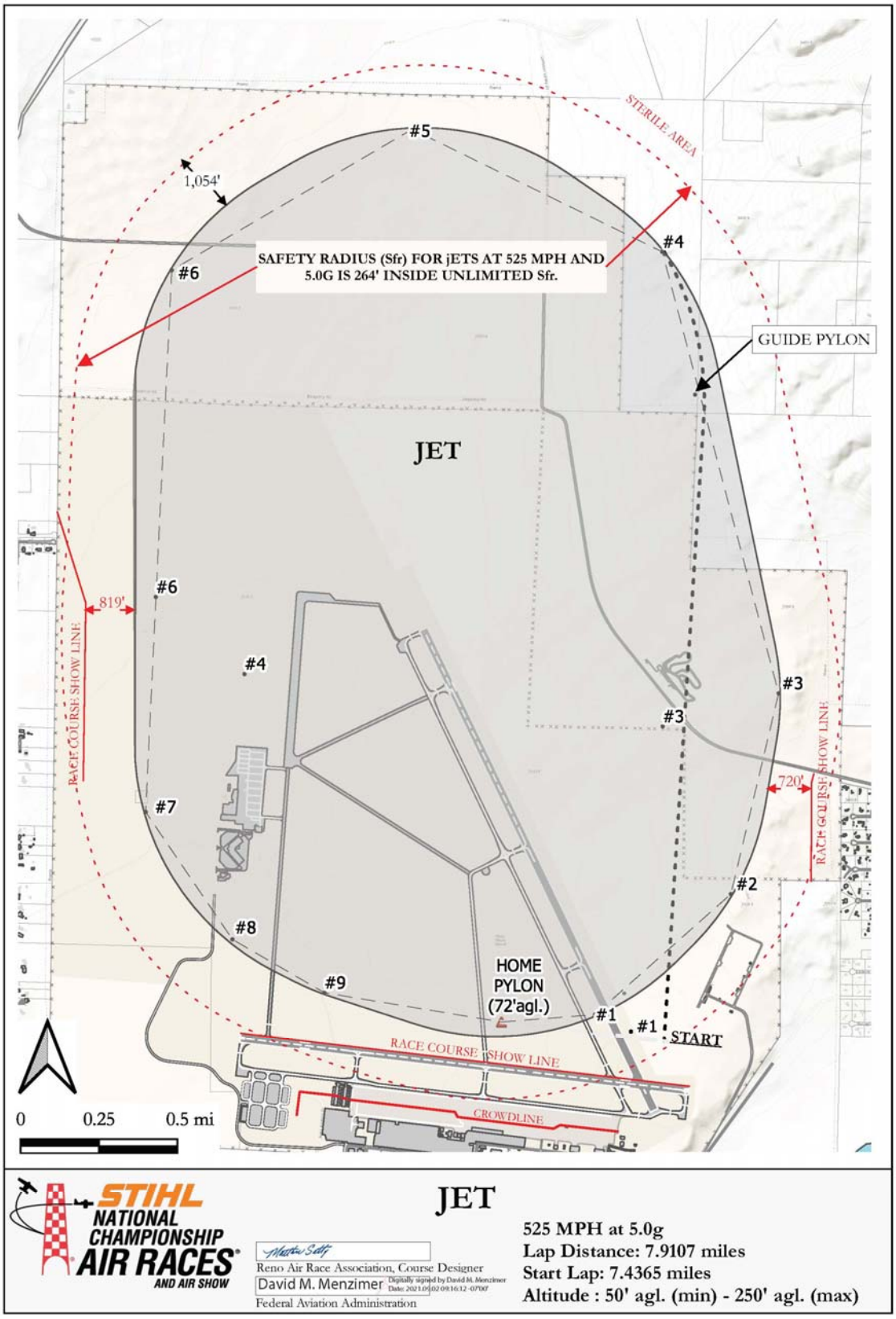
Reno Air Race Association, Course Designer

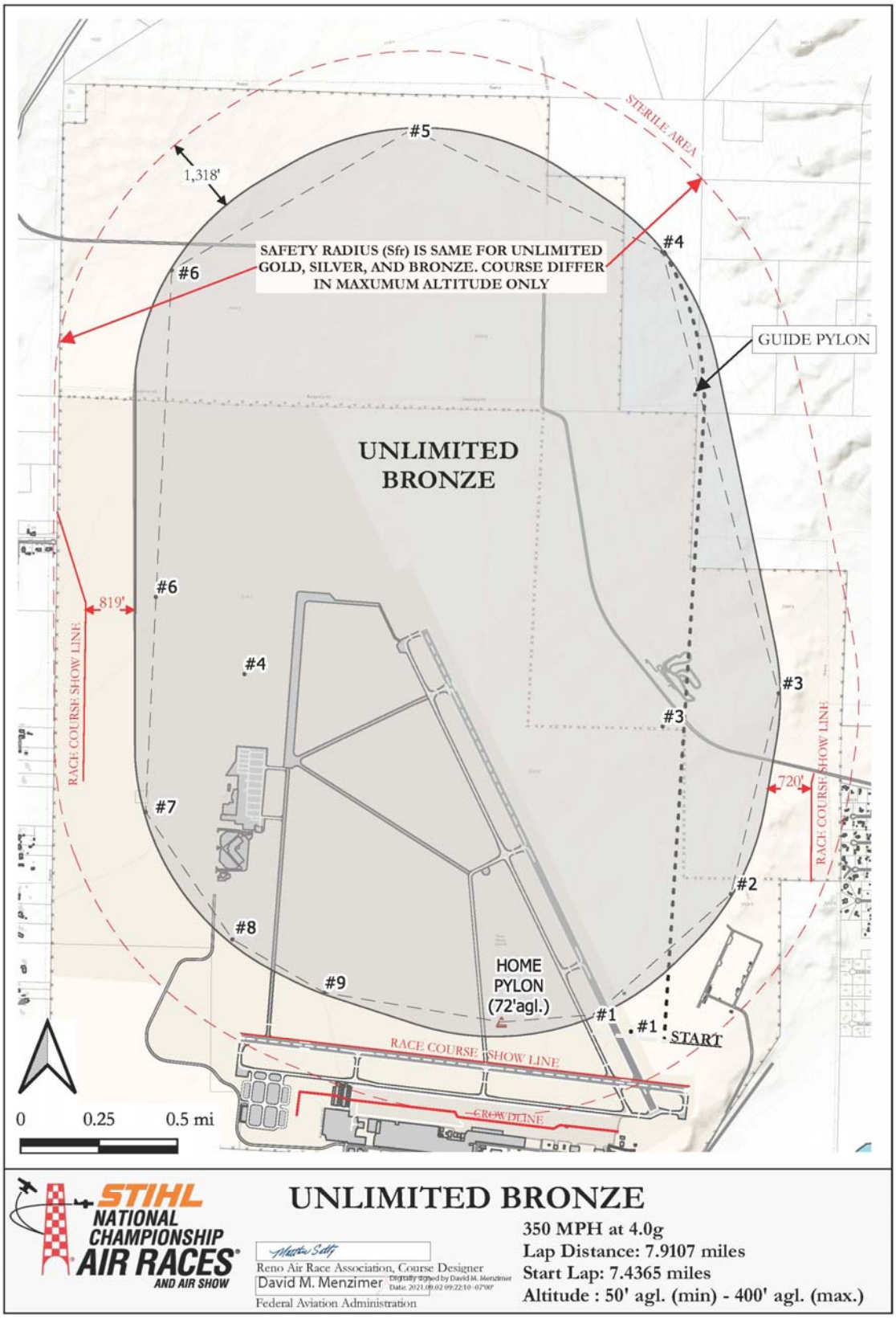
David M. Menzimer
Digitally signed by David M. Menzimer
Date: 2021.09.02 09:24:32 -07'00'

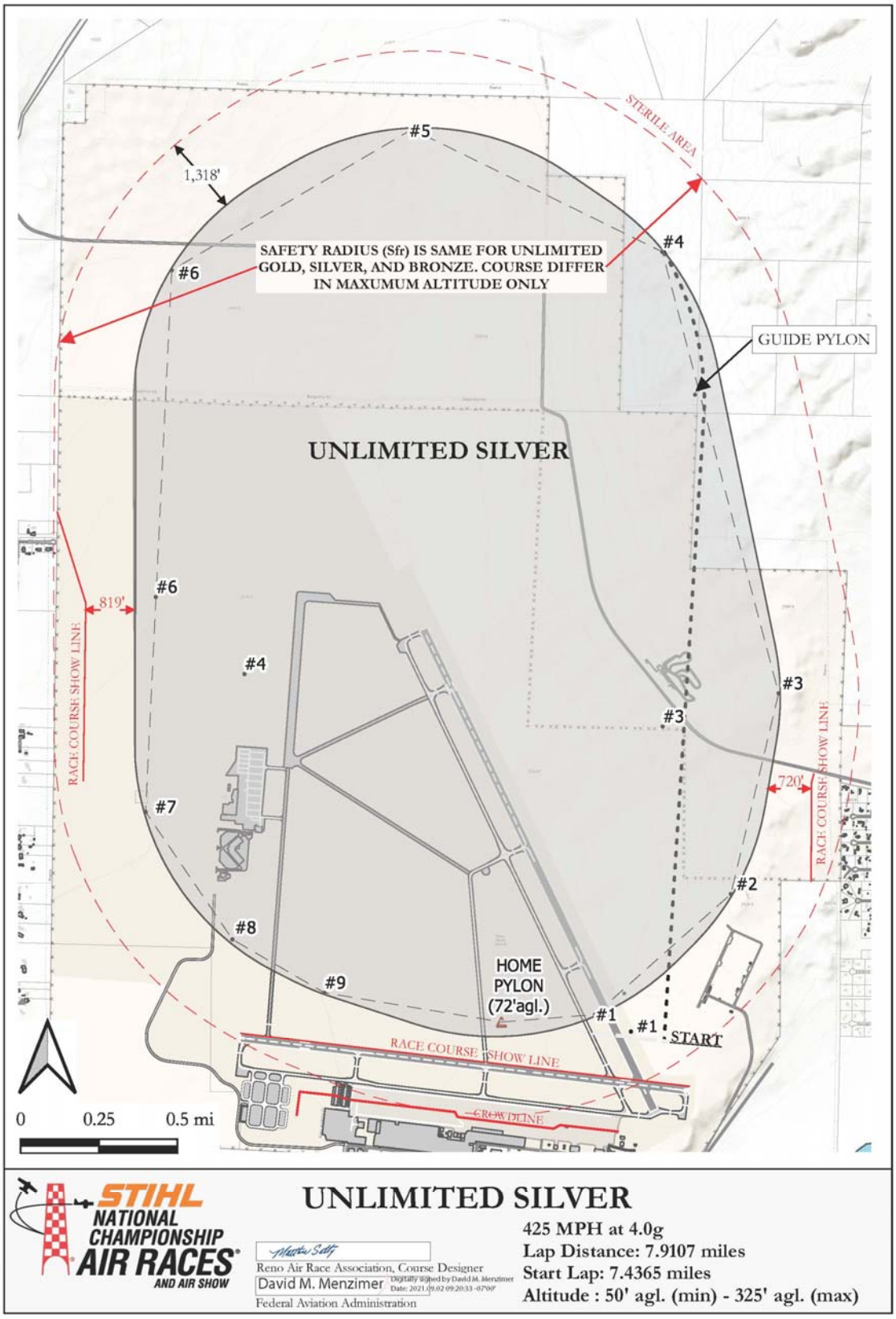
Federal Aviation Administration

250 MPH at 3.0g
Race Lap: 3.1193 miles
Altitude : 50' agl. (min) - 250' agl. (max)


Sfr
ORP
907'
#1
#2
#3
#4
#5
#6
#7
T6
HOME
PYLON
(72'agl.)
RACE COURSE SHOWLINE
CROWDLINE
0
0.25
0.5 mi
STIHL
NATIONAL
CHAMPIONSHIP
AIR RACES
AND AIR SHOW
Reno Air Race Association, Course Designer
David M. Menzimer
Digitally signed by David M. Menzimer
Date: 2021.09.02 09:19:48 -07'00'
Federal Aviation Administration
T6
250 MPH at 3.0g
Race Lap: 4.8257 miles
Altitude : 50' agl. (min) - 250' agl. (max)


STERILE AREA
#5
1,054'
#4
#6
SAFETY RADIUS (Sfr) FOR jETS AT 525 MPH AND
5.0G IS 264' INSIDE UNLIMITED Sfr.
GUIDE PYLON
JET
#6
819'
RACE COURSE SHOW LINE
#4
#3
#3
720'
RACE COURSE SHOW LINE
#7
#2
#8
#9
HOME
PYLON
(72'agl.)
#1
#1
START
RACE COURSE SHOW LINE
CROWDLINE
0
0.25
0.5 mi
STIHL
NATIONAL
CHAMPIONSHIP
AIR RACES
AND AIR SHOW
Reno Air Race Association, Course Designer
David M. Menzimer
Digitally signed by David M. Menzimer
Date: 2021.07.02 09:16:12 -07'00'
Federal Aviation Administration
JET
525 MPH at 5.0g
Lap Distance: 7.9107 miles
Start Lap: 7.4365 miles
Altitude : 50' agl. (min) - 250' agl. (max)


STERILE AREA
#5
1,318'
SAFETY RADIUS (Sfr) IS SAME FOR UNLIMITED GOLD, SILVER, AND BRONZE. COURSE DIFFER IN MAXUMUM ALTITUDE ONLY
#4
#6
GUIDE PYLON
UNLIMITED BRONZE
#6
819'
RACE COURSE SHOW LINE
#4
#3
#3
720'
RACE COURSE SHOW LINE
#7
#2
#8
#9
HOME PYLON (72'agl.)
#1
#1
START
RACE COURSE SHOW LINE
CROWD LINE
0
0.25
0.5 mi
STIHL NATIONAL CHAMPIONSHIP AIR RACES AND AIR SHOW
UNLIMITED BRONZE
Reno Air Race Association, Course Designer
David M. Menzimer
Digitally signed by David M. Menzimer
Date: 2021.09.02 09:22:10 -07'00'
Federal Aviation Administration
350 MPH at 4.0g
Lap Distance: 7.9107 miles
Start Lap: 7.4365 miles
Altitude : 50' agl. (min) - 400' agl. (max.)



STIHL NATIONAL CHAMPIONSHIP AIR RACES AND AIR SHOW

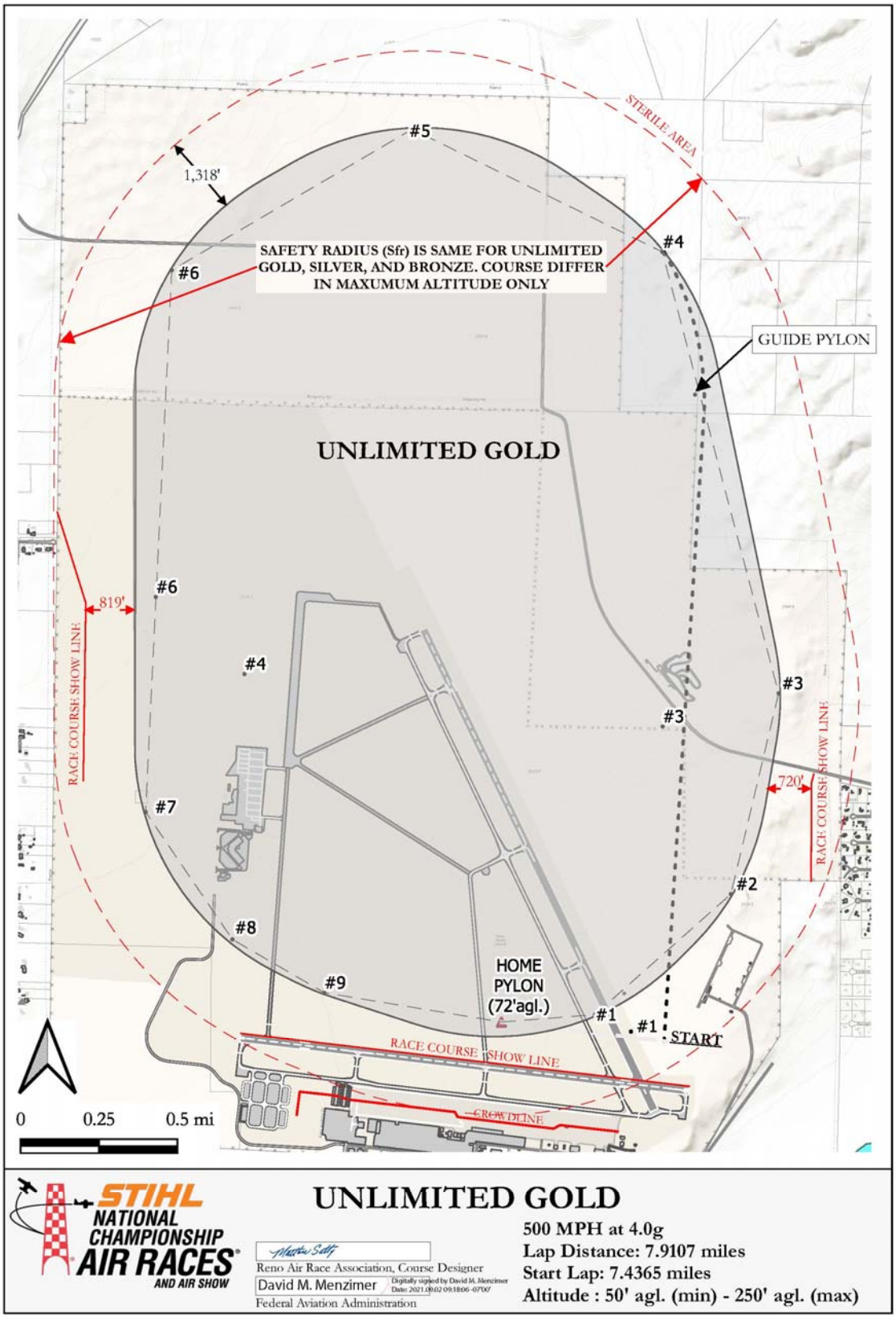
UNLIMITED SILVER

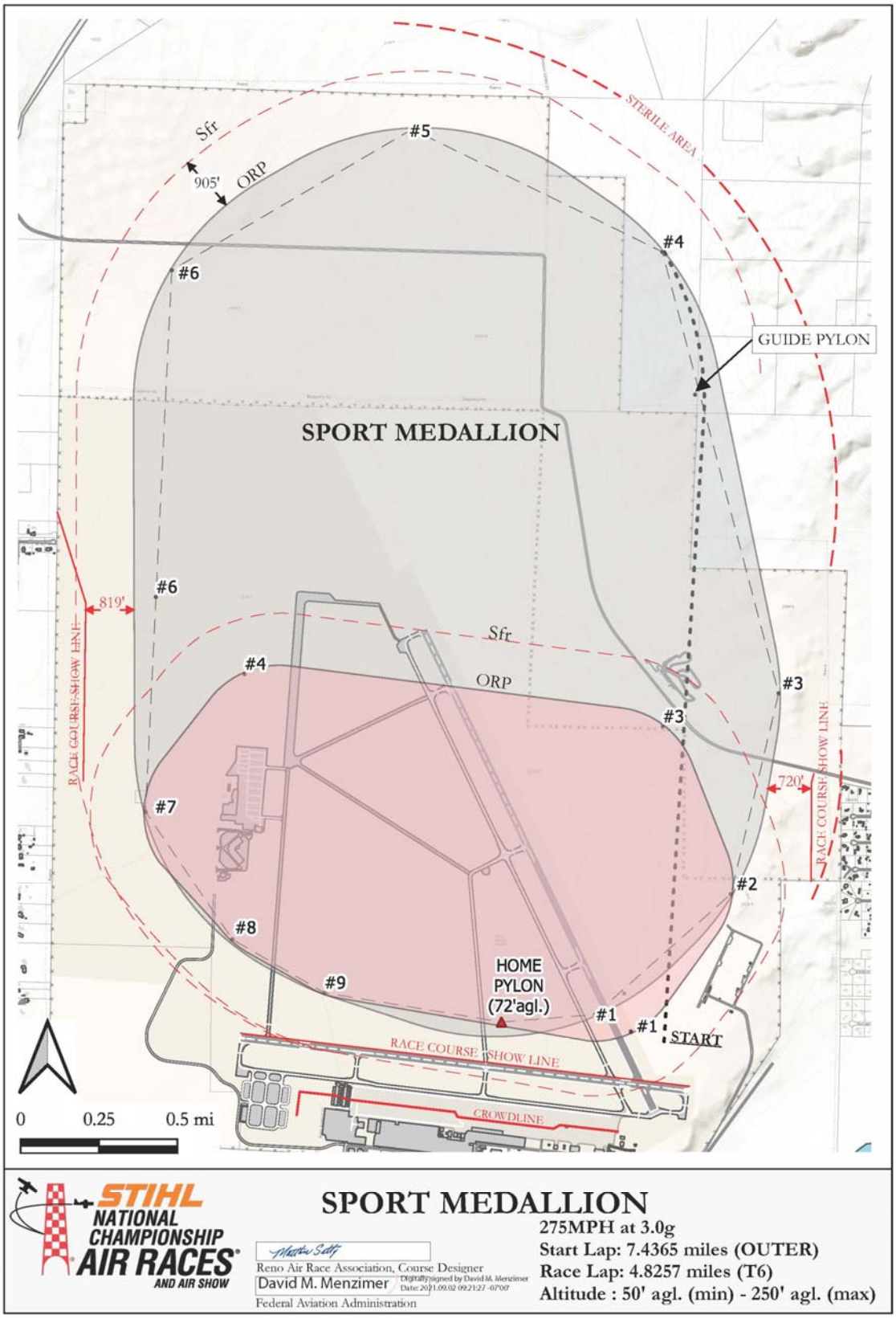
Reno Air Race Association, Course Designer

David M. Menzimer Digitally signed by David M. Menzimer Date: 2021.09.02 09:20:33 -07'00'

Federal Aviation Administration

425 MPH at 4.0g
Lap Distance: 7.9107 miles
Start Lap: 7.4365 miles
Altitude : 50' agl. (min) - 325' agl. (max)


STERILE AREA
#5
1,318'
SAFETY RADIUS (Sfr) IS SAME FOR UNLIMITED GOLD, SILVER, AND BRONZE. COURSE DIFFER IN MAXUMUM ALTITUDE ONLY
#4
#6
GUIDE PYLON
UNLIMITED GOLD
819'
#6
RACE COURSE SHOW LINE
#4
#3
#3
720'
RACE COURSE SHOW LINE
#7
#2
#8
#9
HOME PYLON (72'agl.)
#1
#1
START
RACE COURSE SHOW LINE
CREW LINE
0
0.25
0.5 mi
STIHL NATIONAL CHAMPIONSHIP AIR RACES AND AIR SHOW
Reno Air Race Association, Course Designer
David M. Menzimer
Digitally signed by David M. Menzimer
Date: 2021.09.02 09:18:06 -07'00'
Federal Aviation Administration
UNLIMITED GOLD
500 MPH at 4.0g
Lap Distance: 7.9107 miles
Start Lap: 7.4365 miles
Altitude : 50' agl. (min) - 250' agl. (max)



STIHL NATIONAL CHAMPIONSHIP AIR RACES AND AIR SHOW

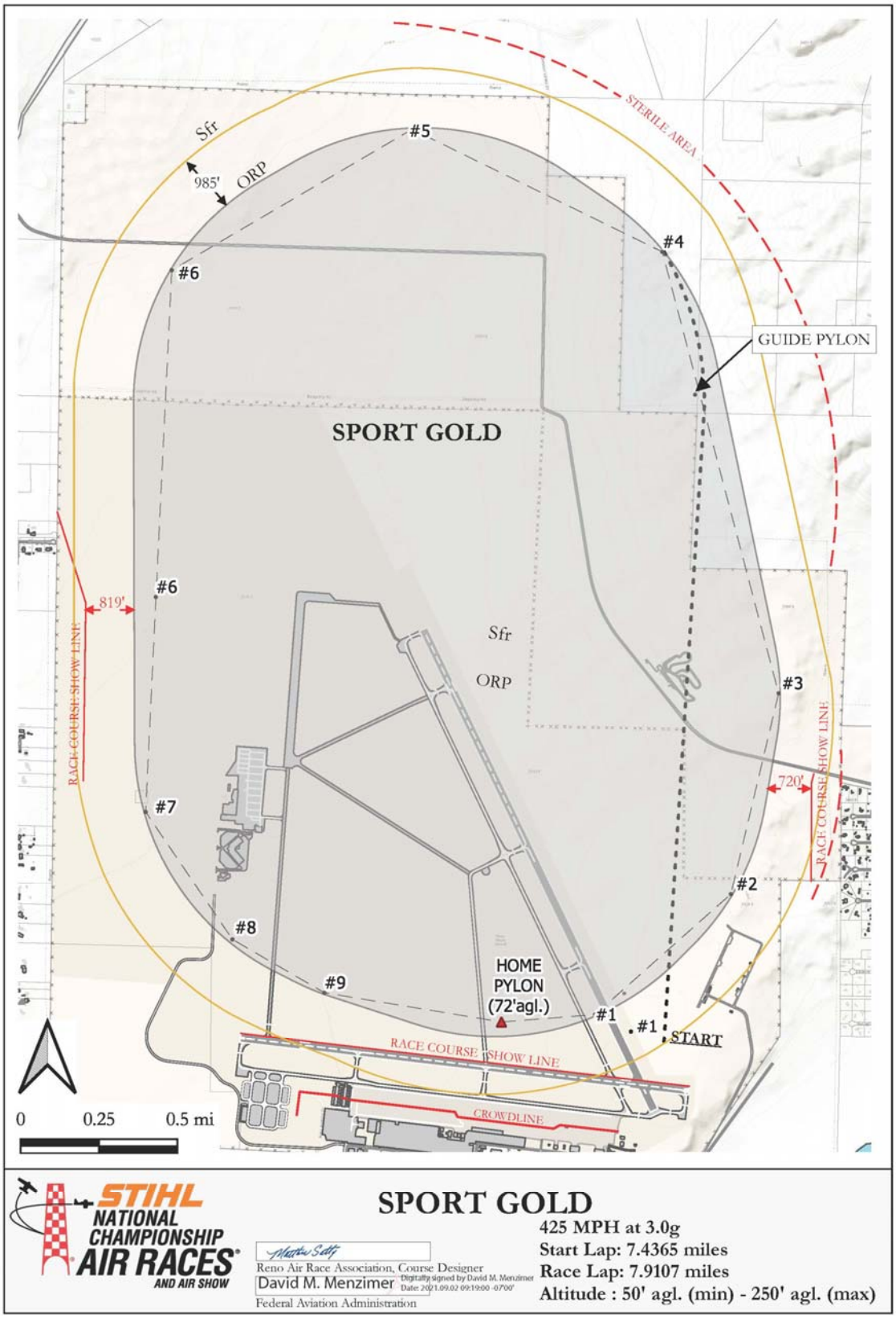
SPORT MEDALLION

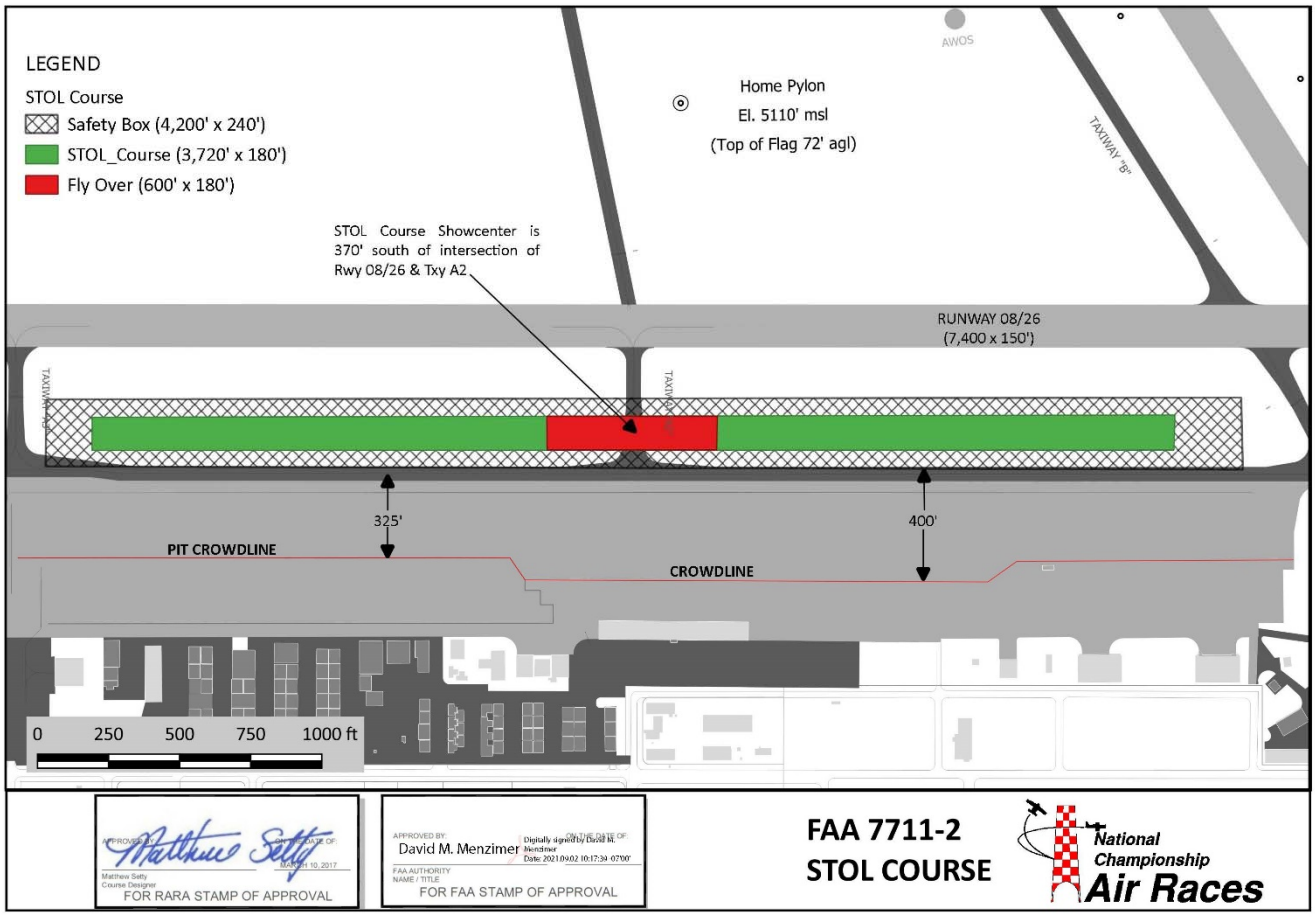
Reno Air Race Association, Course Designer

David M. Menzimer
Digitally signed by David M. Menzimer
Date: 2021.09.02 09:21:27 -07'00'

Federal Aviation Administration

275MPH at 3.0g
Start Lap: 7.4365 miles (OUTER)
Race Lap: 4.8257 miles (T6)
Altitude : 50' agl. (min) - 250' agl. (max)


STERILE AREA
Sfr
985'
ORP
#5
#4
#6
GUIDE PYLON
SPORT GOLD
#6
819'
RACE COURSE SHOW LINE
Sfr
ORP
#3
720'
RACE COURSE SHOW LINE
#7
#2
#8
#9
HOME
PYLON
(72'agl.)
#1
#1
START
RACE COURSE SHOW LINE
CROWDLINE
0
0.25
0.5 mi
STIHL
NATIONAL
CHAMPIONSHIP
AIR RACES
AND AIR SHOW
SPORT GOLD
425 MPH at 3.0g
Start Lap: 7.4365 miles
Race Lap: 7.9107 miles
Altitude : 50' agl. (min) - 250' agl. (max)
Reno Air Race Association, Course Designer
David M. Menzimer
Digitally signed by David M. Menzimer
Date: 2021.09.02 09:19:00 -07'00'
Federal Aviation Administration


LEGEND
STOL Course
Safety Box (4,200' x 240')
STOL_Course (3,720' x 180')
Fly Over (600' x 180')
AWOS
Home Pylon
El. 5110' msl
(Top of Flag 72' agl)
TAXIWAY "B"
STOL Course Showcenter is 370' south of intersection of Rwy 08/26 & Txy A2
RUNWAY 08/26
(7,400 x 150')
325'
400'
PIT CROWDLINE
CROWDLINE
0 250 500 750 1000 ft
FOR RARA STAMP OF APPROVAL
David M. Menzimer
FOR FAA STAMP OF APPROVAL
FAA 7711-2
STOL COURSE
National Championship Air Races

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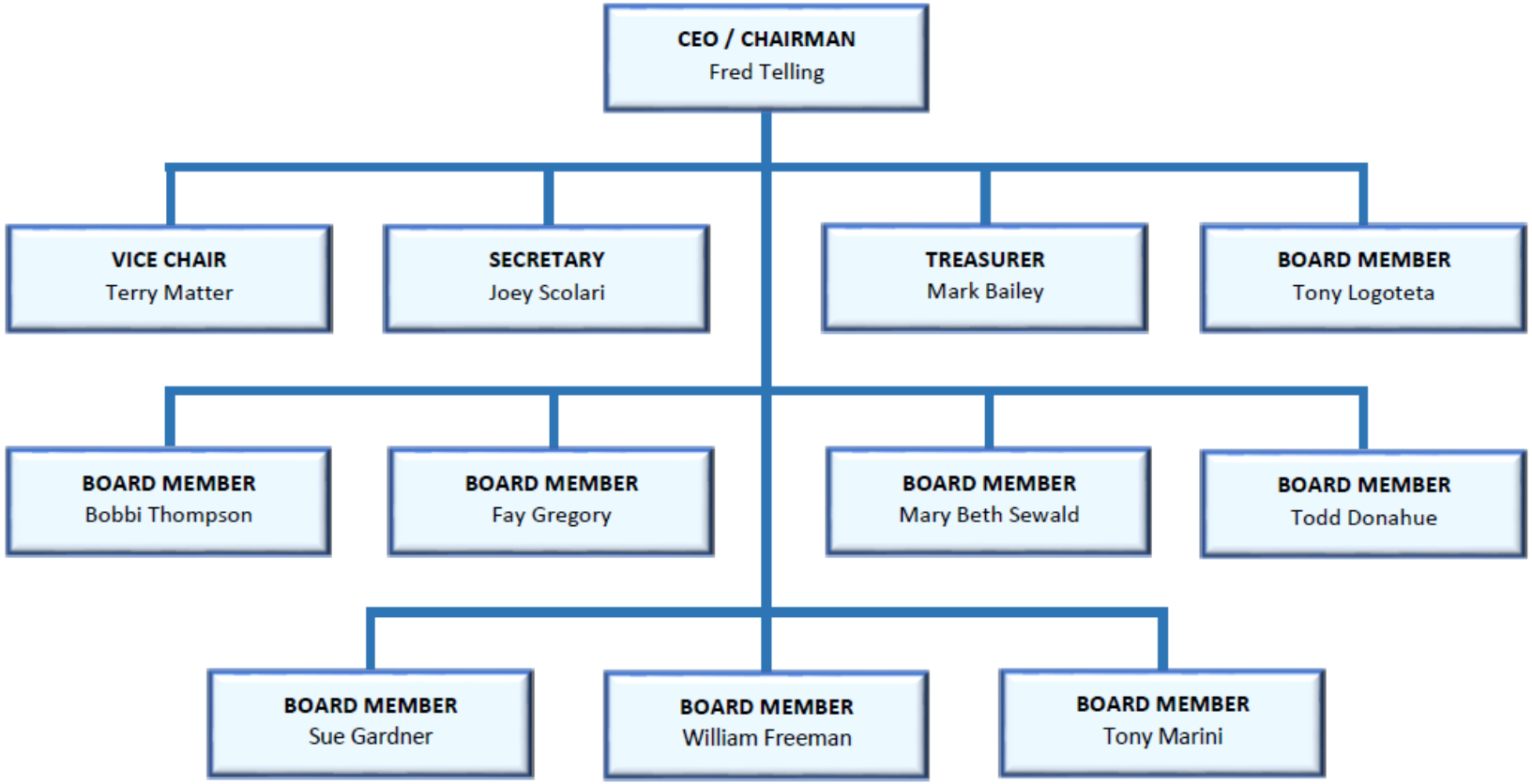
ATTACHMENT C

Changes in organizational structure have been made to improve operating efficiency.

RENO AIR RACING ASSOCIATION
BOARD OF DIRECTORS
Effective Date: 5/1/2022

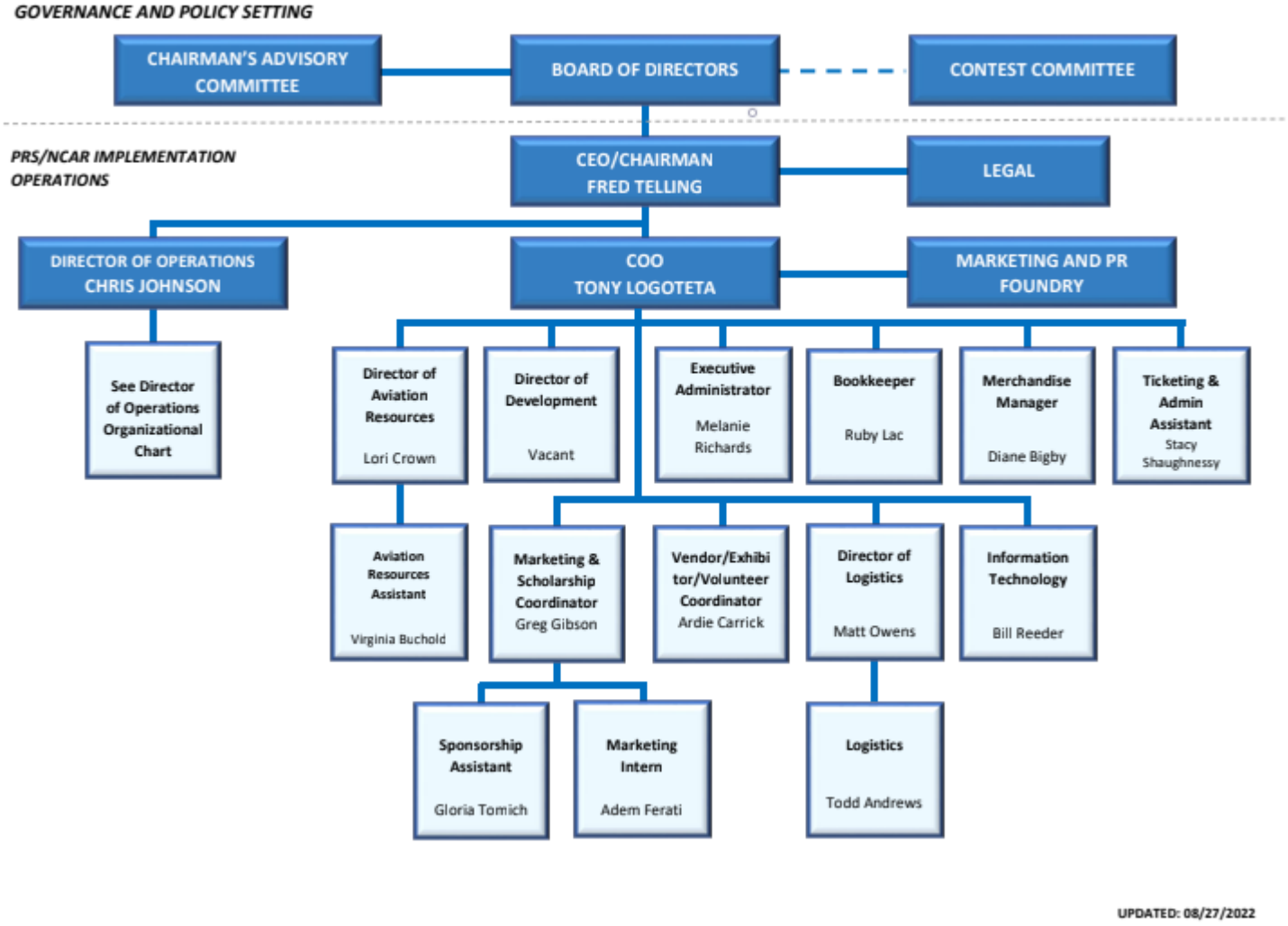
Governance and Fundraising



UPDATED: 5/31/2022

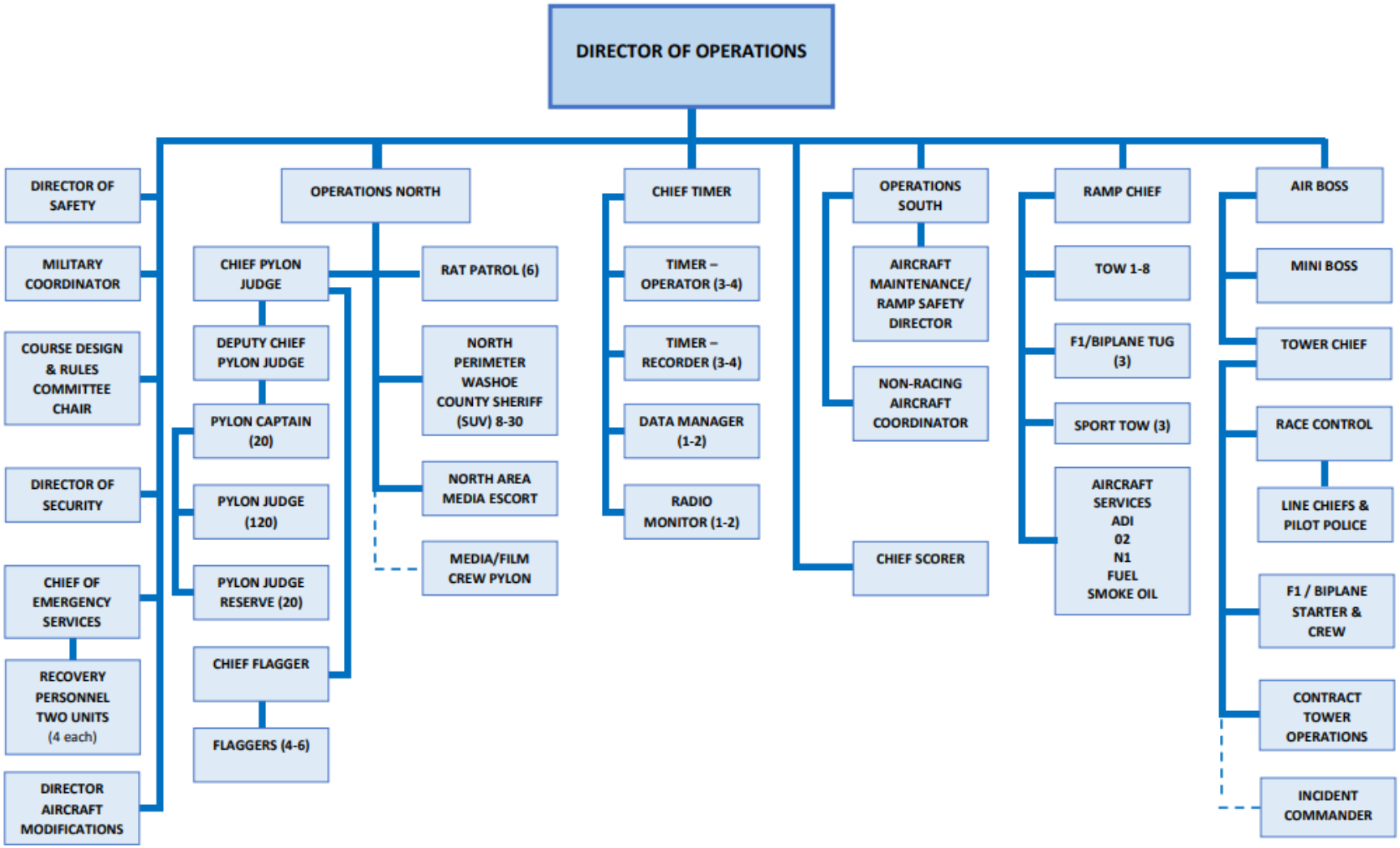
RENO AIR RACING ASSOCIATION ORGANIZATION CHART

Effective Date: 08/27/2022



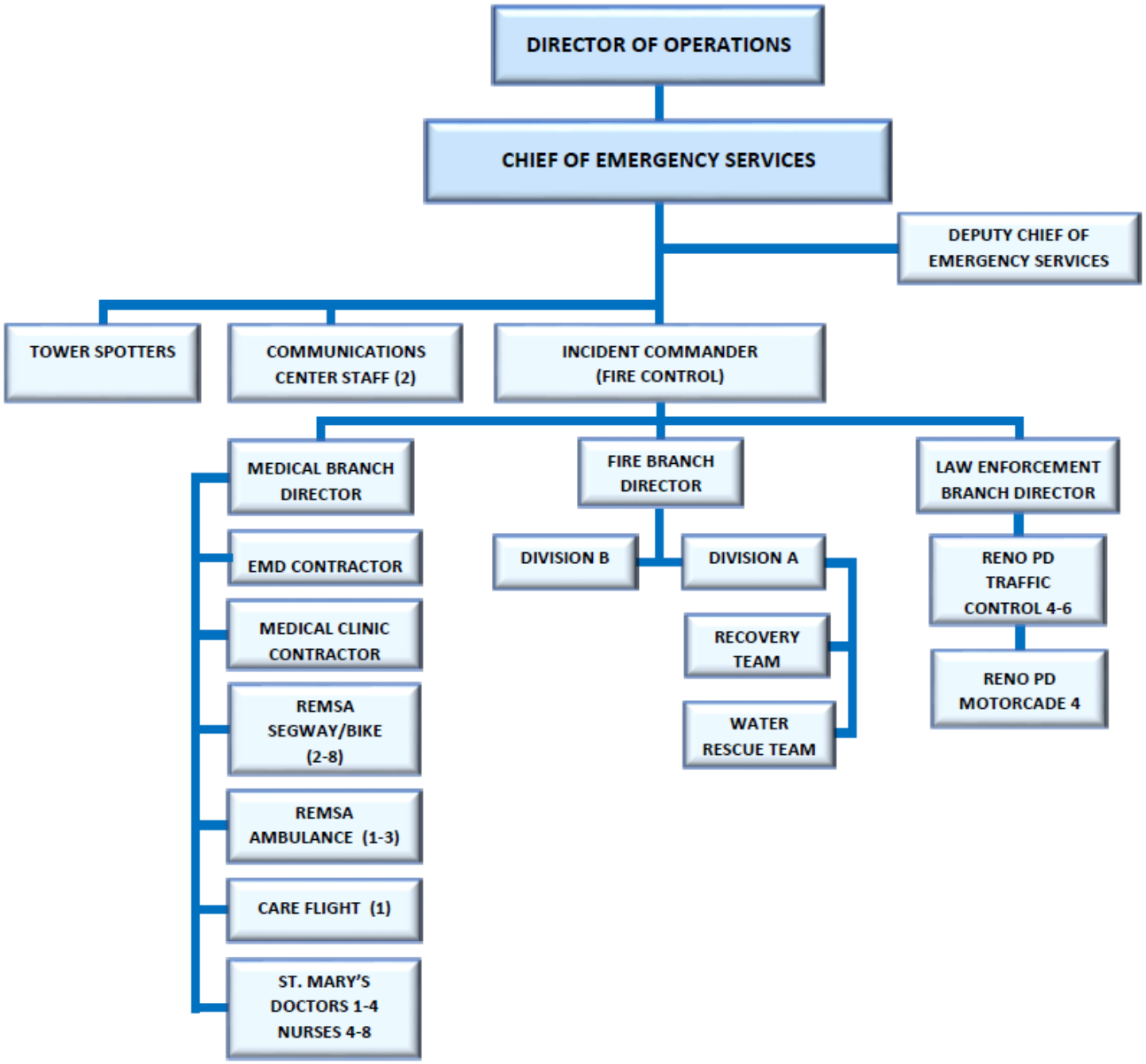
UPDATED: 08/27/2022

RENO AIR RACING ASSOCIATION ORGANIZATION CHART
DIRECTOR OF OPERATIONS



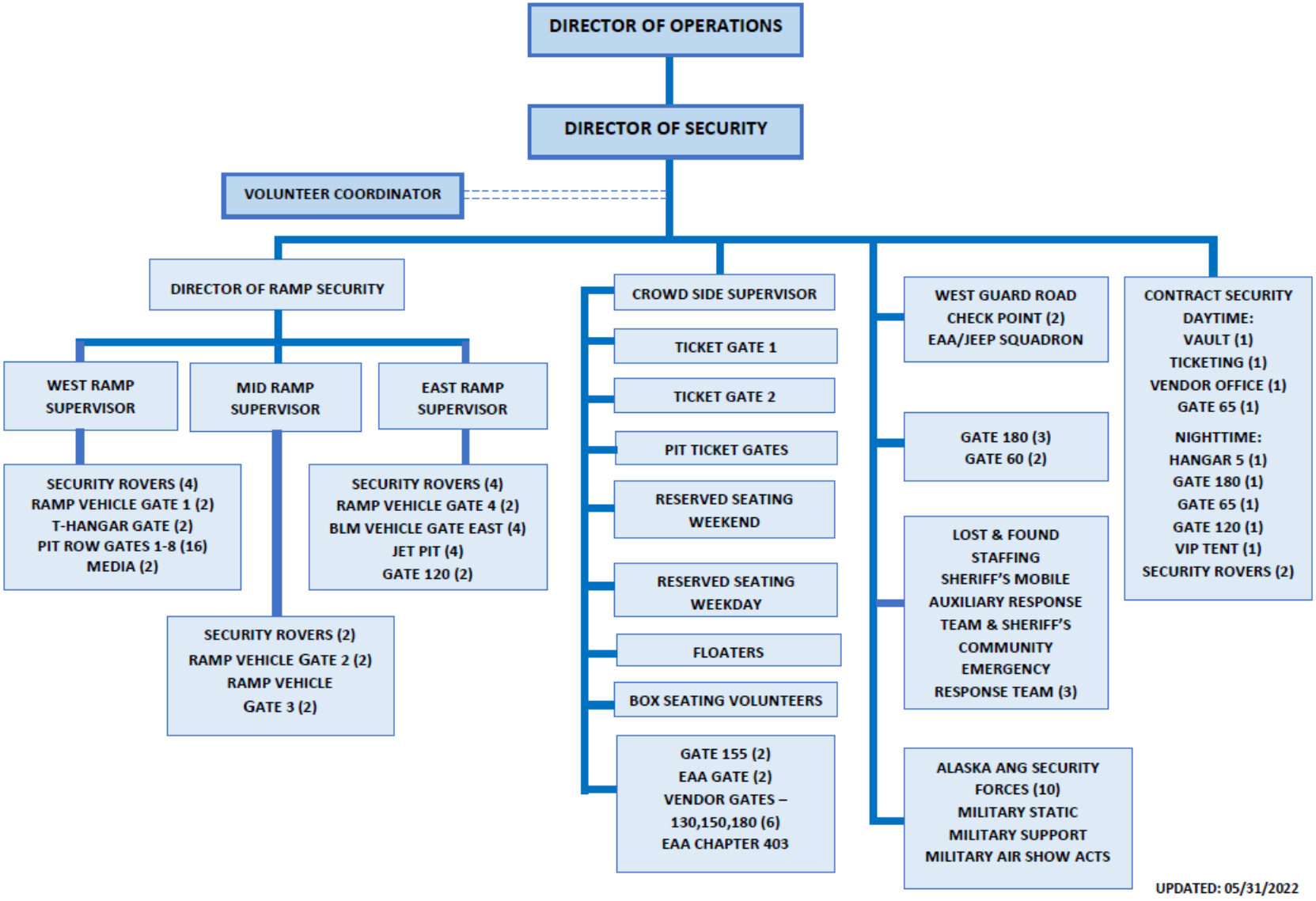
Revised: 05/31/2022

RENO AIR RACING ASSOCIATION ORGANIZATON CHART
CHIEF OF EMERGENCY SERVICES

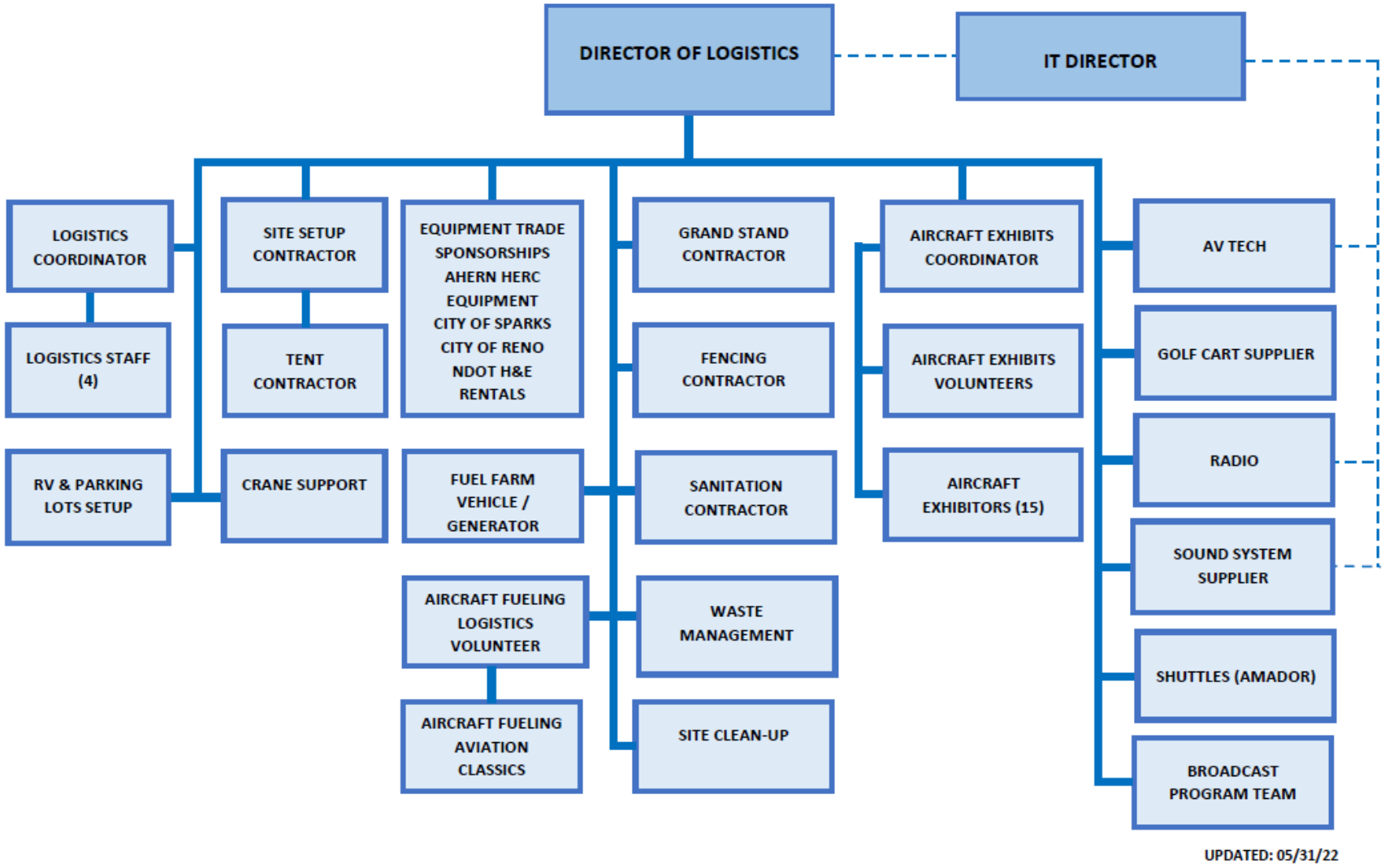


UPDATED: 05/31/2022

RENO AIR RACING ASSOCIATION ORGANIZATION CHART
DIRECTOR OF SECURITY



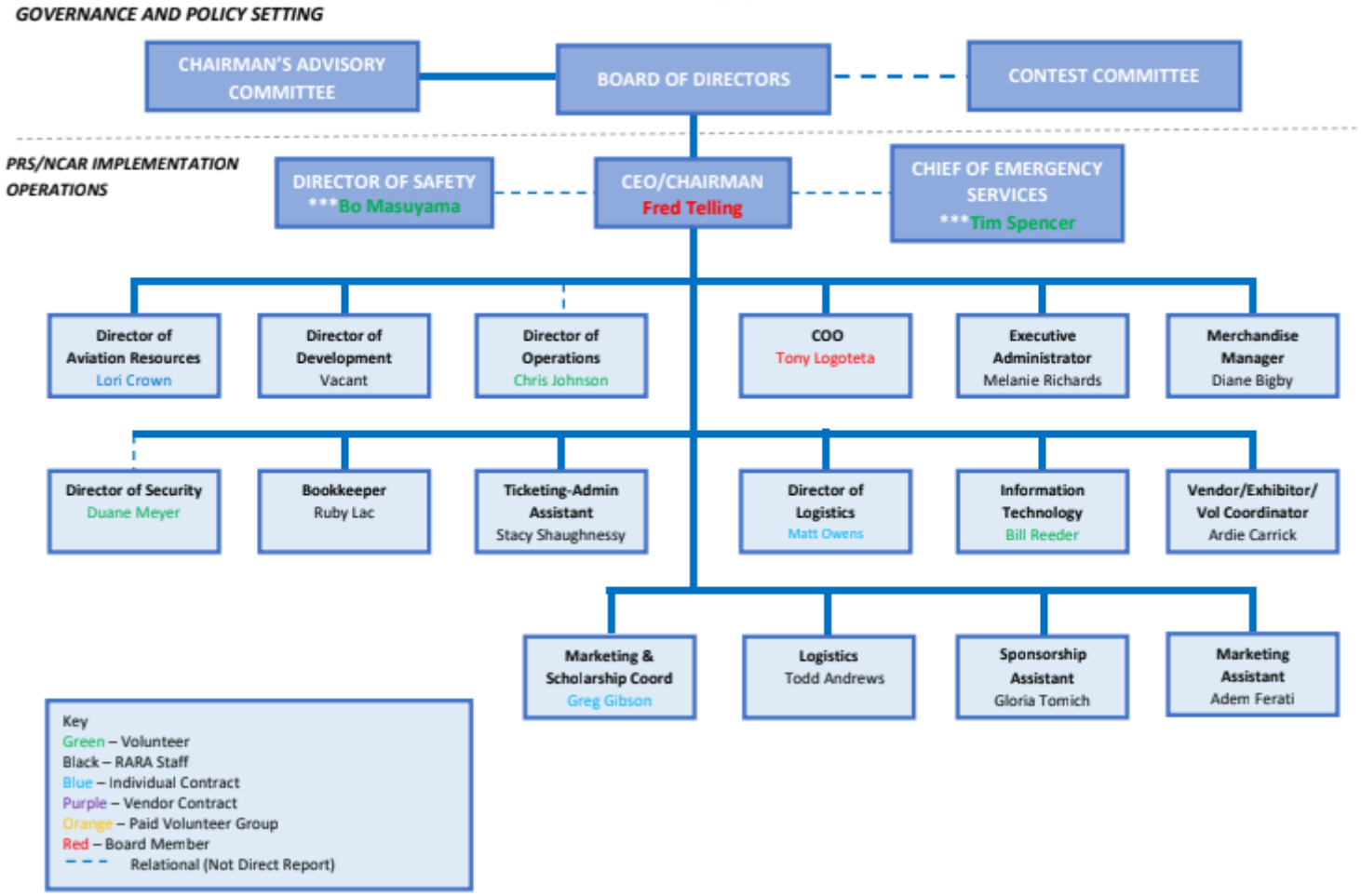
RENO AIR RACING ASSOCIATION ORGANIZATIONAL CHART
DIRECTOR OF LOGISTICS



RENO AIR RACING ASSOCIATION ORGANIZATION CHART

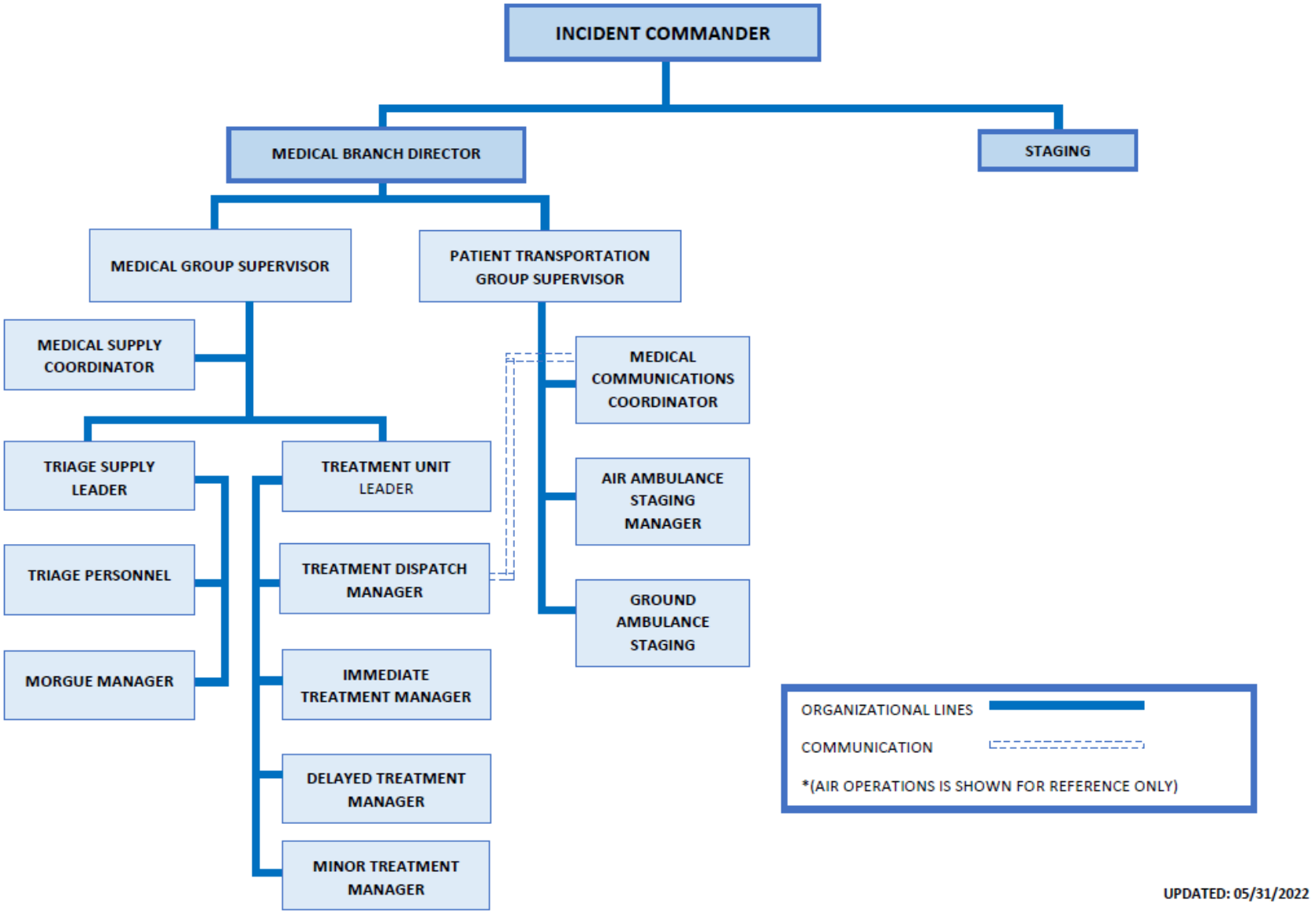
***Under Mass Casualty Procedures

Effective Date: 08/27/2022



UPDATED: 08/27/2022

INCIDENT COMMAND ORGANIZATION CHART FOR A MEDICAL BRANCH FULL RESPONSE LEVEL* (AIR OPERATIONS IS SHOWN FOR REFERENCE ONLY)



UPDATED: 05/31/2022

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ATTACHMENT D

AIRCRAFT MAJOR MODIFICATIONS or ALTERATION DATA (STRUCTURAL)

Any prospective Experimental race aircraft that has undergone one or more major modifications (14 CFR Section 21.93{a}) or major alterations ((14 CFR 1.1) (Appendix A to Part 43)) since the last time the aircraft raced at Reno or any new or unique race aircraft that is a new Experimental design or new kit assembly must comply with new requirements. Please refer to the 2021 Official Rules of Operations and Competition, Section III – AIRCRAFT ELIGIBILITY, pgs 3-7, for further information.

Has this aircraft raced at Reno before? ❑ Yes - proceed to #1. ❑ No - proceed to to #2.

1. THIS AIRCRAFT *HAS* RACED AT RENO Year last raced at Reno _____

a. **❑ Yes or ❑ No Have any "major modifications"or "major alterations" been incorporated since the last time the aircraft raced at Reno? (For Special Airworthiness Certificates—refer to your FAA-issued Operating Limitations for FAA procedural requirements)**

i. **If "Yes" – Have you complied with the notification requirements under Section III- AIRCRAFT ELIGIBILITY, pgs 3-7 in the RARA 2021 Official Rules of Operation and Competition?**
❑ Yes or ❑ No If "No", contact your appropriate Race Class President and RARA *immediatley*.

ii. **If "Yes"- Has a Flight Demo Test been completed since "major modification" or "major alteration"?**
❑ Yes or ❑ No If "No", complete the flight test a minimum of 30 days prior to the event.

iii. **If "Yes" – Do your Operating Limitations state, "Any major change to this aircraft as defined by FAR 21.95, invalidates the Special Airworthiness Certificate issued for this aircraft"?**
❑ Yes or ❑ No If "Yes", contact your local FSDO to have your Operating Limitations reissued.

2. THIS AIRCRAFT *HAS NOT* RACED AT RENO

a. **❑ Yes or ❑ No Is this aircraft a new or unique Experimental design or new kit assembly?**

i. **If "Yes" – Have you complied with the notification requirements under Section III – AIRCRAFT ELIGIBILITY, pgs 3-7, in the RARA 2021 Official Rules of Operations and Competition?**
❑ Yes or ❑ No If "No", contact your appropriate Race Class President and RARA *immediatley*.

b. **❑ Yes or ❑ No Have any "major modifications" or "major alterations" been incorperated into the aircraft? (For Special Airworthiness Certificates – refer to your FAA issued Operating Limitations for FAA procedural requirements)**

i. **If "Yes" – Have you complied with the notification requirements under Section III- AIRCRAFT ELIGIBILITY, pgs 3-7 in the RARA 2021 Official Rules of Operation and Competition?**
❑ Yes or ❑ No If "No", contact your appropriate Race Class President and RARA *immediatley*.

ii. **If "Yes"- Has a Flight Demo Test been completed since "major modification" or "major alteration"?**
❑ Yes or ❑ No If "No", complete the flight test a minimum of 30 days prior to the event.

iii. **If "Yes" – Do your Operating Limitations state, "Any major change to this aircraft as defined by FAR 21.95, invalidates the Special Airworthiness Certificate issued for this aircraft"?**
❑ Yes or ❑ No If "Yes", contact your local FSDO to have your Operating Limitations reissued.

Print Pilot Name _____Pilot Signature_____

Date _____Race Class _____Race# _____Registration#_____

ATTACHMENT E

SAMPLE PROGRAM LETTER SPECIAL AIRWORTHINESS CERTIFICATE

EXPERIMENTAL EXHIBITION

PROGRAM LETTER SPECIAL AIRWORTHINESS CERTIFICATE

Experimental Exhibition

1. Registered Owner (as shown on Certificate of Aircraft Registration)		
Name:		
Address:		
City:	State:	Zip:
Phone Number:		
2. Aircraft Description		
a. Registration Mark: N	b. Aircraft Builder Name (Make):	c. Year Mfg.:
d. Aircraft Serial No.	e. Aircraft Model Designation:	
f. Aircraft's home base:	g. Name of the person responsible for the operation and maintenance of the aircraft:	
	Operation Name:	
	Maintenance Name:	
3. The estimated time or number of flights and purpose, see CFR 21.193. Also Order 8130.2J Appendix C, C-2 (b)		
4. List the airshows, airports in which the aircraft will be Exhibited.		

	Name of Event	Location and State	Month
1			
2			
3			
4			
5			
6			
7			
8			
9			

EXAMPLE

Page 1 of 2

SAMPLE - PROGRAM LETTER - EXPERIMENTAL EXHIBITION

PROGRAM LETTER SPECIAL AIRWORTHINESS CERTIFICATE

Experimental Exhibition

5. Describe the geographical areas in which the flights are to be conducted.
Date:
Print Name:
Print Title:
Signature:

Page 2 of 2

EXAMPLE

ATTACHMENT F

STOL Rules

STOL Drag Events LLC.

Policies and Procedures 2021

February 01, 2021 - Current Version February 01, 2021
NOTE: All future changes will be noted to the STOL Drag Events LLC., Inc. Policies and Procedures and will be listed and dated.

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These policies and procedures are hereby approved by the STOL Drag Events LLC., Board of Directors, as the only source document for Policies and Procedures to be used at the Reno **National Championship Air Races and ANY OTHER air races sanctioned by STOL Drag Events LLC., in conjunction with the most current Technical Specifications. Only 3 accepting (president plus 2 signatures) needed to approve a change.**

Approved by:
Kevin Quinn, STOL Drag President, Director, Instructor

_____

John Walker, Operations Director

_____

Kyle Bushman, Pitt / Technical Director

_____

Tim Howes, International Director

_____

Jessica Quinn, Secretary

_____

2nd Version: Feb01, 2021 Log of Revisions

Revision Date Revised Pages

Feb 1st, 2021. **Only changes are the changes in Directors. We removed Cory Robin, Trent Palmer, Jeremy Young and added John Walker and Kyle Bushman as Directors
**See page 14 for rule change regarding complete stop at halfway point. Some events will require the complete stop. TBD by the STOL Drag Board of Directors

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Introduction

STOL Drag Events LLC., is the only recognized body authorized to certify racers for STOL DRAG.

These policies and procedures are intended for the use and compliance of all owners and pilots intending to race their aircraft at the Reno National Championship Air Races (NCAR) and / or any other air show and or air race sanctioned by STOL Drag Events LLC.

These rules seek to establish a basis for fair competition in the STOL Drag arena and are subject to revision by the STOL Drag Board of Directors, as duly noted by the majority vote of active members of STOL Drag Events LLC. The philosophy of the STOL Drag Event is to:

- Maintain the Bush Class as the "Unlimited Bush"[1] class while maintaining standards for off-airport capability and, within prescribed limits, the spirit of competition. The mechanical and airframe specifications that are permissible to race are contained in the **most current Technical Specifications.**

- Each owner/pilot is responsible and will be held accountable for the airworthiness of their aircraft as established by the Code of Federal Regulations (CFR). Any changes or modifications from the original design configurations will be subject to CFRs, as it applies to their specific airworthiness certificate. STOL Drag Events will not specifically determine the airworthiness of a particular aircraft. However, at any time, any known airworthiness or safety issues will be brought to the attention of the owner, and it will be the aircraft owner's responsibility to correct any safety issue prior to entering the race course.

- These rules are established in conjunction with the Reno Air Racing Association (RARA) Rules of Competition, and are approved by the current RARA Rules Committee. Therefore, any conflict between these rules and the RARA Rules of Competition will be presented by the President and all available Board of Directors of STOL Drag Events LLC. Ruling will be made by majority.

- These rules are the only rules of STOL Drag Events LLC. These rules supersede all other previous rules, memos, and understandings, and will remain in effect until revised in writing by STOL Drag Events LLC., President and/or Board of Directors.

[1] "Unlimited Bush" is defined as any configuration of aircraft which, at the time of race, must be capable of its intended purpose. FAA authorized modifications are acceptable.

Safety Requirements

STOL Drag Events Board of Directors in cooperation with RARA, may cancel or postpone any race or disqualify any individual racer. This decision will take into consideration the apparent safety of spectators or other racers, the number of eligible racers for an event, or other safety concerns of scheduled aircraft or pilots.

1. All pilots will be pre qualified and certified for the event location prior to entering any race course.
2. All pilots must have previous race experience prior to racing at any sanctioned STOL DRAG EVENT.
3. Helmets will be worn by all pilots when racing.
4. All aircraft will be maintained in accordance with their respective airworthiness certification.
5. STOL Drag Events LLC., is not responsible for inspecting an aircraft for compliance with any FAR.
6. STOL Drag Events LLC., does keep all pilot information on file for access.
7. Liability Insurance is required for all aircraft participating.
8. To participate in Reno, ALL pilots must attend PRS and qualify to participate.

Pilot Qualification

The Board of Directors will establish a Pilot Qualifications Committee (PQC) each year which will consist of the President of STOL Drag Events LLC., its Board of Directors, and the lead PRS Instructor Pilot (PRS Lead). No pilot will attempt to enter an approved race course until certified by the current PQC. The PQC will present, in writing, a list of all certified pilots to RARA and the FAA Representative at the race site.

Prior to qualification or competition, each pilot must meet the following requirements:

All pilots must be members of STOL Drag Events LLC., and in good standing for the current year. Members in good standing are those members who have experience at a sanctioned STOL Drag Event prior to qualification race.

All pilots must possess a Private Pilot Certificate, with a valid medical.

All pilots must have logged a minimum of 250 hours Pilot-in-Command (PIC) time in a single-engine land airplane, and have logged a minimum of 150 hours in a tailwheel aircraft and at minimum a 50 hours within the last 6 months prior to any racing event.

A pilot must be approved by the STOL Drag Board Instructor.

Reno: ALL pilots must attend PRS.

With emphasis on safety and proficiency, all pilots must satisfactorily demonstrate to the PQC their ability to perform the following skills including, but not limited to:

A. Good understanding of STOL skills. Expert in spot landing skills along with Power and energy management.

B. At least five consecutive satisfactory runs on the race course. The emphasis will be on flying the designated STOL Drag course, safe and predictable flying, slips, remaining inside the race course boundaries, aborting and/or discontinuing the race course from race altitude demonstrating a successful simulated power-off landing on a designated runway.

C. Successfully complete the STOL Drag Training or any of the STOL Drag Training Seminars within the last year.

D. Prior race experience at previous STOL Drag events offers racers Accreditation. All pilots must attend PRS in order to race in NCAR.

Race Qualification

- Each owner will be afforded an opportunity to qualify their aircraft. To qualify, an aircraft must be cleared onto the race course by Race Control and have at least two runs officially timed by STOL Drag Events. After the racer's attempted qualification lap(s), the timers will confirm that they "have a time". The official qualifying time will not be posted until the Chief Timer has been advised whether there were any DQ's imposed. A qualification attempt is to be started from the designated start line. The time is measured on a down and back or one straight and level drag to a finish (no turn around) (to be determined on race day).
- To obtain a qualification time, you must abide by STOL Drag rules for the given course and location.
- A qualifying attempt consists of one timed lap or and combination of two consecutive timed laps.
- All aircraft will be permitted to make up to two qualifying attempts.
- Alternate pilots are not included in the two allowed attempts.
- Practice laps are made by all pilots prior to races by rotation.
- A qualifying attempt may be aborted abruptly. The pilot must call over the radio to Race Control their race number and aborting status.
- Qualifying laps will be disqualified by pre starts, non stops at the halfway points, by not staying inside the race course, or by officials or the Contest Committee for other infractions. Qualifying attempts in which one or both laps are disqualified will be included in the two allowed attempts.
- Qualifying attempts beyond two will not be recorded.
- The best time of the 2 laps flown without disqualification shall be used as the aircraft's qualification speed. At some locations the combined 3 attempts time will be utilized.
- Upon completion of the qualifying lap(s), exit the race course and return to the holding area per directions of race officials.

- All qualification laps flown will be closely monitored by the STOL Drag Safety Committee and the RARA Contest Committee.
- Exit the race course only at the designated areas. This applies during all race events, except an emergency.
- Racer Qualification times seed pilots into the correct classes based time. GOLD, SILVER AND BRONZE CLASSES

Technical Inspection

The Board of Directors will establish a STOL Drag **Technical Inspection Committee (TIC)** each year. This committee will consist of the Chief Technical Inspector and any others designated by the Board of Directors. The TIC will have final authority as to the eligibility of any aircraft for qualification or competition. The TIC will be available at the race site and be prepared to inspect aircraft no later than five days prior to a racing event.

No owner will attempt to enter an approved race course until the aircraft has been approved by the TIC. The TIC will present, in writing, a list of all approved aircraft to RARA. Only aircraft on that list will be allowed to enter the approved race course.

Each aircraft owner, or their designated representative, will present the following items at registration sign-in with RARA and will be made available to the TIC, if requested.

- A valid airworthiness certificate, allowing for the intended operation (CFR 21.191),
- A current registration certificate (CFR 21),
- A current annual/100 Hour/Progressive inspection statement. A copy of this statement is acceptable if certificated by the inspecting Inspection Authorization (IA) showing Registration Number, TTAF, TTE, and date of inspection.
- Experimental decal, if appropriate (CFR 45.23(b)).
- FAA Form 337 for any major alterations to standard certificated aircraft or experimental aircraft that were previously certificated as Standard (CFR 43.1)
- Statement of Airworthiness as required by FAA Flight Standards Handbook Bulletin for Airworthiness (HBAW) 00-17 of FAA Order 8300.10, Appendix 3.
- Appropriate operating limitations, if applicable.

- Private Pilot certificate (Private Pilot,consistent with STOL Drag Policies and Procedures).
- Current Medical Certificate
- Meet all requirements of STOL Drag Events LLC., Technical Specifications.
- Approved and visible race number
- Tires are properly marked for visual stop reference

Disputes and Protests

Disputing the qualification or action(s) of another aircraft or pilot is well within the civil rights of each current and qualified racer. In the interest of fair competition, all disputes will be handled in accordance with the rules and regulations governing the racing event. However, in order to maintain some semblance of order within the racing event, the following additional rules will apply:

All disputes will be in accordance with the STOL DRAG EVENTS and its Rules of Competition, except that all disputes will be presented, to either a STOL Drag Event Board Member or the President within 10 minutes of the questioned event.

Only the STOL Drag Board of Directors and the President will go over disputes .

Any awards or prize money that would have been awarded will be held by the Board until the dispute is settled.

In addition to other offenses included herein, the following list shall be deemed violations and will be grounds for disqualification.

- Any action or proceedings prejudicial to the integrity of the event or in the best interest of air racing.
- Bribery or attempts to bribe anyone connected with any competition and/or acceptance of such offers.
- Any unsportsmanlike conduct, any offensively formulated protest, or any abusive language or threats uttered publicly or otherwise against participants, officials, or committee members, before, during, or after a race event.
- Reckless or dangerous flying.
- Violation of any FAR not specifically waived for the event or any STOL Drag Event Policies and Procedures.
- Low flying over spectators.
- Attempting to race an unqualified aircraft as a substitute for a qualified aircraft.

- Attempting to fly on the race course prior to personally attending and signing in for the required RARA *and* STOL Drag pilot briefings.
- Presenting disputes to anyone other than a member of the STOL Drag Events Board of Directors and/or President.

Resolution of Disputes

Upon presentation of any dispute of a STOL Drag race, specific race, or other allegation, the Board of Directors and the President will gather all evidence and make a final decision. A final decision will be reached and given to the racers prior to the next racing event for the pilot or plane's group. The resolution decision of the Board of Directors is final and is not subject to dispute. The President and/or Board of Directors will brief the given Contest Committee on all disputes and their respective decisions.

Upon request, all parties concerned will have the opportunity to personally present their case to the STOL Drag Events Board of Directors.

STOL Drag Race Progression

A full field for the STOL Drag is considered to be 16 aircraft for each class; however up to 21 aircraft may be qualified and no fewer than 6 aircraft. Each of the 3 classes must have at minimum 3 aircraft to qualify as a race

Qualifiers

The sixteen (16) fastest qualifiers will be used for the Heat Races, and subsequently, the winner moves on. The next qualifiers (17,18,19, 20 and 21) will be used as alternates, as needed/required. All races are head-to-head bracket style with single and/or double elimination.

Heat Races

Racers will be assigned to Class Heat Races based on their qualification speeds. Races are head to head with the fastest qualifier either racing #16 or gets a bye depending on the actual number of racers at each location.

Alternates

Alternates for each of the Heat 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 or cannot compete by another racer.

Any open position in a race due to a "Do Not Start" (DNS) will be filled from the remaining unused qualified racers in sequence of the then current race position or **if none,** filled on a voluntary basis. Voluntary racers will start in the last position, if this occurs in a heat race the Alternates will start the next heat race in his/her prior position (unless the DNS pilot was disqualified). If a racer Does Not Start a Heat Race, the racer will be considered DQ'd. The alternate racer (the next fastest racer) is then assigned the race spot.

Overview of STOL Drag Rules

START / FINISH Line

The start and finish line for the STOL Drag (down and back format) is the same. Racers line up on the line and start on the drop of an arm or descending "light tree". Pilots fly down to the halfway point (never above 40'), **land on or after the halfway point line and slows the aircraft to ground maneuvering speed for ground handling (ground loops = DQ). **Some events will require the complete stop at the halfway point prior to the turn around.** The pilot then turns his/her aircraft 180 degrees on the ground and adds power to the far start line that now becomes the finish. (same line rules apply). This time **the first aircraft to make a complete stop on heading with the tail down wins.** Same rules would apply in the event the race was one way / one direction.

HALFWAY Line / FINISH Line

The halfway line is just that, the halfway point of the race. In some occasions, the halfway line can be turned into the finish line. In the event winds / weather do not allow for a down and back run, the halfway line can be utilized as the finish line. This would create a straight drag race to a complete stop at the halfway / finish line.

Did Not Finish (DNF) and Did Not Start (DNS)

- Racers that Did Not Finish (DNF) or Did Not Start (DNS) are DQ'd.
- If a racer is DQ'd during Heat races, they will be disqualified from the Races. If a racer is DQ'd during the qualifications (2 times), the next fastest aircraft (alternate) will be moved up in sequence to race as will all other racers in sequence be advanced. The next fastest aircraft in alternate status will be placed last in.

Manipulating Speed (Sandbagging)

- Defined as "to change or present something in a way that is false, but personally advantageous."
- In the spirit of fairness in competition, all competitors are expected to operate their aircraft so as to extract the maximum speed during qualifying and racing. Manipulating speed for personal advantage, (i.e. sandbagging), will not be tolerated and may result in disqualification.

- Competitors will be monitored for inconsistent lap times, sudden bursts or reductions of speed and any other intentional acts to inappropriately gain or maintain a personally advantageous position.

- STOL Drag LLC., Board of Directors will act on all observed incidences of sandbagging.

STOL Aircraft Racing

For the 2021 RARA event, the STOL Drag Board must approve a series of Unlimited STOL / BUSH Class aircraft to qualify for the race. Philosophically both the pilot and the aircraft need to meet all of the specifications outlined in the most recent STOL Drag Policy & Procedures (Feb, 2021).
If less than 6 qualifying aircraft are qualified those aircraft that did not qualify will be lined-up and raced head to head in random order. Winner moves on single or double elimination TBD at time of race and location.

Concept

STOL Drag Elimination Series ("DRAG RACING")

STOL Drag Events LLC., in conjunction with RARA and the FAA, has initiated a safe and entertaining series of "two-plane, one-run single or double elimination races." The winner of each 2-ship race would advance to the following round until one Racer was determined to be the overall winner. (See attached charts, Options A or B). These races will operate within the existing STOL Drag rules, procedures and training. These rules and training materials are based on the experience gained during the **all of the races performed previously at the High Sierra Fly-in** since inception of STOL Drag in 2014.

Operating Assumptions

- Participation is voluntary and will be approved once the pilot completes the prescribed training.
- Only experienced (trained), certified racers (i.e., "No Rookies Rule") may participate.
- Each one-run race would end at the start/finish or mid way point to be determined pre race with normal pull-up and landing procedures observed per STOL Drag.

Training

All participating pilots in the STOL Drag Series Races must meet the following requirements:

- Be a certified and experienced pilot (i.e., "No Rookies Rule") who is cleared for racing in the relevant year.
- Fly an aircraft which has met the STOL Drag inspection requirements.
- Participate in a ground briefing covering the relevant rules and training material given by the Lead STOL Drag Instructor or through STOL Drag Training participation in the relevant training module.
- Demonstrate successful completion of at least one practice lap to the satisfaction of the Lead STOL Drag PRS Instructor and the STOL Drag Events LLC., President.
- Once qualified, a pilot's qualification follows the same rules as STOL Drag Events Policies and Procedures for maintaining currency in the Series Races.

Selection and Race Order: 2 options

The accepted, qualified racers in any given year will each draw a number from a hat indicating their race position for the Series.

- Start: Two aircraft would be staged on alternate sides of the start finish line.
  - The faster aircraft (based on qualifying speeds) will be given the pole or choice of lane position.
  - A starter flagman (out of harm's way) would visually signal "spool up" and then release the Racers who would perform a takeoff and maintain their respective sides of the runway.
  - During the takeoff, both aircraft shall advance to full power and remain in the chosen lane. Both aircraft are safely airborne (low level).
  - The flagman's **signal** may be augmented by a "pyrotechnic signal" **(simultaneously coordinated by direct radio contact)** (pending approval from the Fire Department and Race location officials).

The next pairing of Aircraft are in the hold position waiting to move to race position upon direction

- Recovery: The standard STOL Drag recovery profile is planned and briefed per the race location, but this profile could be modified and expedited, if necessary.

Additional Issues / Clarifications:

- Given the course layout, the STOL Drag Elimination Series Races will only operate when wind conditions favor a given runway. Drags can be either one way or down and back

- There are a variety of scheduling options which have been discussed with the STOL Drag Board of Directors, but to provide some flexibility for unfavorable wind conditions during the race week, the current plan will allow us to be flexible given winds and weather elements that may come into play. Ideally, morning races each day are prime.

- Scheduling will be de-conflicted to the best extent possible for the Elimination Series Racers and their relevant STOL Drag Heat races and their required briefings / debriefings.

RACE OPTION A

STOL Drag Elimination Series Racing Brackets with Round of 14

Qualifying

This flying session is completed in head-to-head heats; each pilot will have a minimum of two mandatory qualifying sessions. Best time counts. Results of the Qualifying session determine the order of racing for the Round of 14.

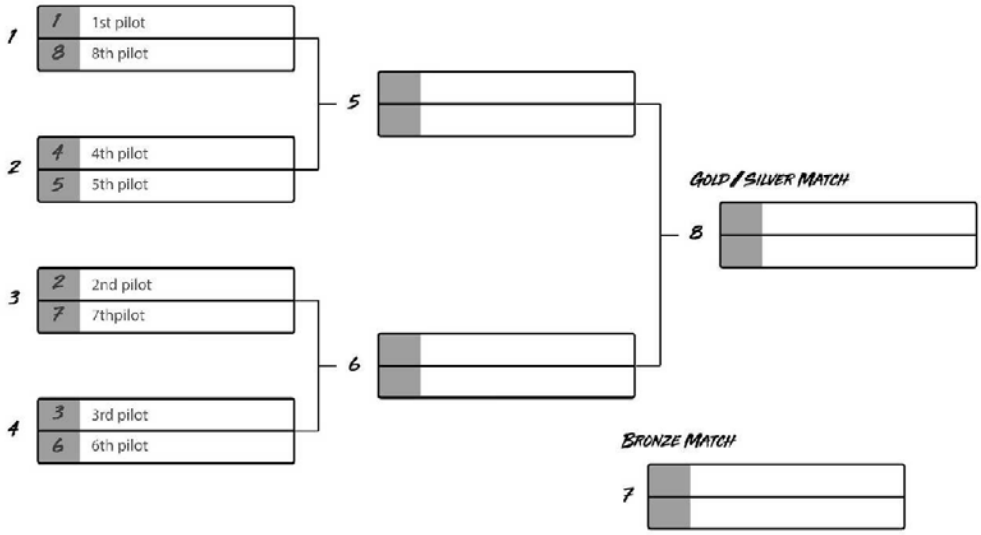
Races - Round Of 14

This flying session is completed in head-to-head heats; the seven winners plus the Fastest Loser move forward to the Final 8 single elimination bracket. The head-to-head pairings are based on the qualifying session results.

Heat 1, 10th vs 5th Qualifying
Heat 2, 11th vs 4th Qualifying
Heat 3, 9th vs 6th Qualifying
Heat 4, 12th vs 3rd Qualifying
Heat 5, 8th vs 7th Qualifying
Heat 6, 13th vs 2nd Qualifying
Heat 7, 14th vs 1st Qualifying

Races - Final 8 Bracket

The remaining races are in a traditional bracket format as outlined in the graphic below:



Total number of Races 15

Day 1, Quals, Day 2 Round of 14, Day 3 Bracket Races 1-4, Day 4 Race 5 6 Bronze and 7

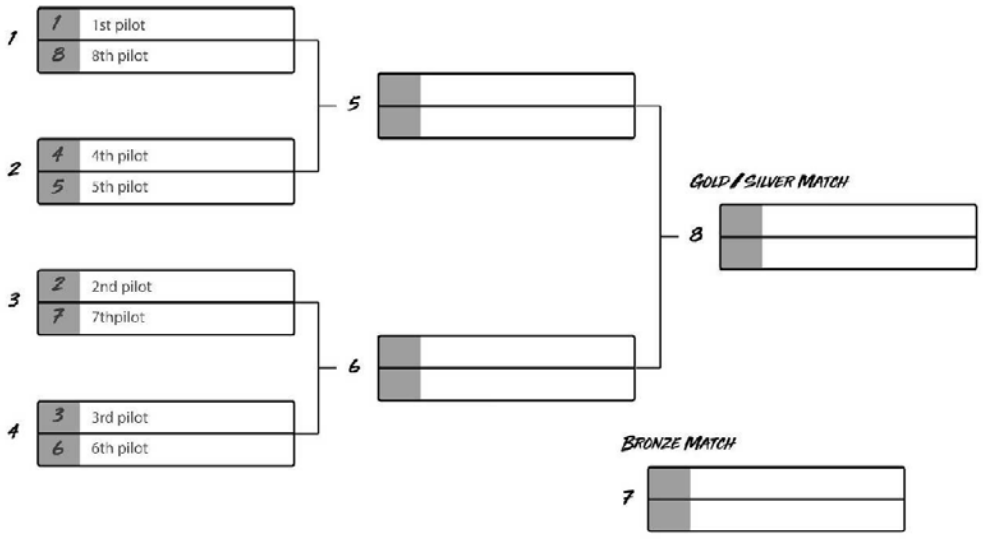
RACE OPTION B

8 pilot bracket

Qualifying

This flying session is completed in head-to-head heats; each pilot will must have a minimum of two mandatory qualifying sessions. Best time counts. Results of the Qualifying session determine the final 8 pilots and the order of racing for the 8 pilot bracket.

SIMPLE STOL Drag Elimination Series Racing Brackets 8 pilot format



Total of Races 8 (7 elimination races and a bronze race)

STOL Drag Events LLC., Feb01, 2021 Page 21

STOL DRAGOPS,Tech Inspection, Reno Air Races

Race Course

- Race course judges 25 minutes prior to heat race will in a group on a golf cart head to the race course for race prep. STOL Midway will call on FM1 to request a crew movement to the race course from the pits. FM1 "STOL Midway requesting permission to drive cart to STOL Drag course for race course preparation"
- STOL Midway will drop off the different line judges and timers in their specific locations.
- STOL Midway will be responsible for parking the golf cart at the midway location just off the edge of the alpha taxiway and clear of race course.
- During this time that crew will put up the four corner flags and midway flag. As needed reapply chalk lines
- All communication between judges will happen on handheld walkie talkies
- Flags will be removed between races by STOL midway and brought back to the pitts area.

Pits: (see Drawing)

- Each Pit will be responsible for, and have their own pit area within the STOL Drag Coral.
- No Fueling or de-fueling within the pit/coral area
- Coral is a "no prop turn' area
- All race teams need to be mindful of spectators walking around in the pitts and keep area clear of tripping hazards, FOD, and other items that could create a hazard to spectators.

PRE-Flight Brief:

- Prior to Leaving the pits. Starting order and taxi procedure will be briefed by **STOL Line**
- Course being used will be briefed (Two Way, One way , direction) all which are wind dependant.

PRE-Flight, Engine Start:

- STOL Line will call race control on FM1 to get clearance to push airplanes across the blue line movement area to staging "STOL Line requesting to push a flight of 8 aircraft across the HOT LINE"
- Pilots/planes for an upcoming heat will push their plane from the pits north, across the movement area (Blue taxiway line) Across the HOT LINE
- All aircraft will face nose toward the pits area to mitigate prop blast back towards the crowd
- Once in the Staging/warm up/cooldown area(Across the hot line), only idle power runs are permitted.
- All times during engine starts fire extinguishers will be in staging area near starting aircraft.

STOL DRAGOPS,Tech Inspection, Reno Air Races

Communications:

- All Communications for STOL Heats will be on 121.05 for Taxi, T/O, Taxi Back.
- NO Frequency Changes will be necessary for pilots
- -All Communications are to "Race Control" (STOL President, STOL Line)
- Communication between judges will be done on handheld walkie talkies.
- STOL Drag A/C call signs are "STOL XX" where XX is their Race #

FM 1

Kevin Quinn	Stol President
John Walker	Stol Ops
Kyle Bushman	Stol Line
Juan Browne	Stol Midway
TBD	Stol Announcer

STOL DRAGOPS,Tech Inspection, Reno Air Races

Taxi:

- Pilots will line up in heat order and taxi single file. All Pilots will monitor 121.05
- STOL President will call Race Control for Taxi Clearance. Once clearance is given, STOL Line will give clearance to the current group for the flight to taxi from the staging area to the course Entry

- A golf cart with STOL President/ STOL Line will lead the airplanes out to the course.
- Each heat pairing will consist of 2 planes, the lead plane of each pairing will take the outside lane .
- Lead plane for the Heat will taxi (TAIL DOWN) at slow pace dictated by the lead plane.
- Planes will taxi approximately 50' past the start/finish line and stay on the pavement until STOL President calls for them to enter the course.
- Each succeeding plane will pull to fill in the spot of the previous plane(s)
- STOL President calls Race Control 121.05 for T/O and blanket clearance is given. A/C now controlled by STOL President to T/O and land
- Next heat planes do not enter the course until the course is cleared and STOL President calls them to the start.

POST Heat:

- After each heat race, once both planes have come to a full stop and the judges have scored, the plane FURTHEST down the landing area from the start finish line will turn and taxi to the pavement.
- If at anytime there is confusion if the racer is cleared to turn across his lane to taxi to pavement, racer is permitted to ask on 121.05 if other aircraft is at a full stop.
- Once both planes are back on pavement, they will hold and allow the remaining heats to run (engine shutdown is allowed).

Inflight Emergency/go around procedure

- In the event of a go around or Mayday. Racer will contact race control on 121.05 with race number and request what they are needing.
- Inflight emergency contact race control on 121.05 if possible land the aircraft straight ahead on STOL drag course. If landing on course is not a possibility climb to pattern altitude and race control will take over on getting racer down on the ground safely.
- If the need for a go around or over run, pilot will add power, climb to traffic pattern altitude, turn to the north (away from grandstands), and contact tower for runway assignment.

STOL DRAGOPS,Tech Inspection, Reno Air Races

Taxi Back:

- Once all heats are complete, and all planes are on pavement, STOL Line will Call Race Control for taxi clearance.
- STOL President calls RC 121.05 for taxi back as flight
- STOL Line will give clearance for the STOL flight to taxi back to pits
- STOL President/STOL line in a golf cart will lead the flight of aircraft back to Hot Line
- A/C can call RC 121.05 for taxi back individually if they need to
- Taxi Back order may differ from the initial taxi order based on the order the planes pulled off the course

Cool Down:

- Planes will enter the HOT LINE area where they will shut down all engines
- Pilots will have time to relax outside the Hot line area prior to re-entering the pits
- To Re-Enter the pits, Pilots (with Ground Crew Assist) will push planes across the movement area into the pits to designated parking. After getting clearance on FM1 race control to push aircraft from staging to pits

Fueling plan

- After each heat race starting on Thursday a fuel truck will be in the staging area giving the pilots the ability to get fuel.
- NO defueling aircraft at anytime anywhere at the Reno air races.

Racing: See Diagrams for reference

- Pilots will be called out onto the course in there resp[ective lanes.
- Each plane will be lined up on the start finish line.

START / FINISH Line

- The start and finish line for the STOL Drag (down and back format) is the same. Racers line up on the line and start on the drop of an arm or descending "light tree". Pilots fly down to the halfway point (never above 40'), **land on or after the halfway point line, slows to a safe speed.** The pilot then turns his/her aircraft 180 degrees on the ground and adds power to the far start line that now becomes the finish. (same line rules apply). This time **the first aircraft to make a complete stop on heading with the tail down wins.** Same rules would apply in the event the race was one way / one direction.

HALFWAY Line / FINISH Line

- The halfway line is just that, the halfway point of the race. In some occasions, the halfway line can be turned into the finish line. In the event winds / weather do not allow for a down and back run, the halfway line can be utilized as the finish line. This would create a straight drag race to a complete stop at the halfway / finish line.

Did Not Finish (DNF) and Did Not Start (DNS)

- Racers that Did Not Finish (DNF) or Did Not Start (DNS) are DQ'd.

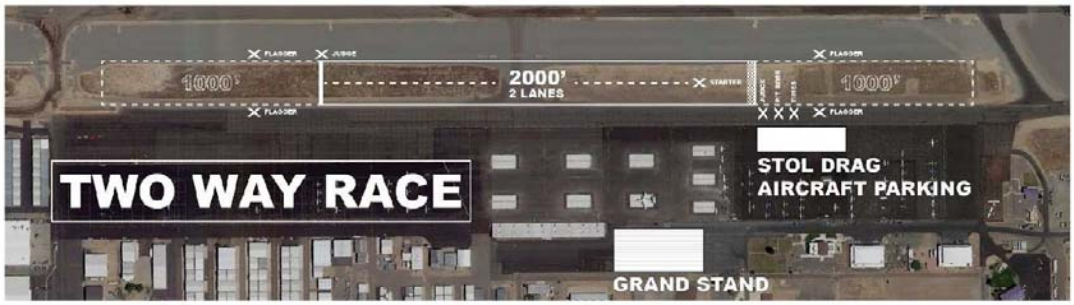
- If a racer is DQ'd during Heat races, they will be disqualified from the Races. If a racer is DQ'd during the qualifications (2 times), the next fastest aircraft (alternate) will be moved up in sequence to race as will all other racers in sequence be advanced. The next fastest aircraft in alternate status will be placed last in.

Manipulating Speed (Sandbagging)

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

STOL DRAGOPS,Tech Inspection, Reno Air Races

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



STOL DRAGOPS,Tech Inspection, Reno Air Races

STOL DRAG TECH INSPECTION

Date of Inspection:

Race Class: STOL DRAG

Aircraft:

Registration Number:

Race Number:

Aircraft Documentation:

Aircraft Maintenance Records (airframe, propeller and engine logbooks, as applicable)

Maintenance Manual / Technical Data for Maintenance and Inspection are to be with the individual Race Team

Current Weight and Balance that includes any modifications or repairs.

SAFETY EQUIPMENT:

Helmet System

COCKPIT:

Communication Equipment – One System operational

Seat Belt / Shoulder Harness – condition, security & operation, metal to metal buckle

Proper operation of the following:

STOL DRAGOPS,Tech Inspection, Reno Air Races

Engine Controls

Flight Controls

Fuel System Shutoff

Seat(s) Condition and Security

No foreign objects / loose equipment

POWERPLANT:

Installation and security

Engine Mount Condition (if accessible)

Exhaust system components, condition and security

Turbocharger security (as applicable)

Hoses, condition / security

Engine Controls, attachment & full travel

Fuel System and components

Electrical System

PROPELLER / SPINNER (AS APPLICABLE):

Condition / Security

FUSELAGE:

Overall Condition

Battery(s), security

Ballast Type and security

Panels / doors / fairings; condition and security

WINGS:

Proper operation and security of the following:

Ailerons, condition and security

Trim Tab(s), condition and security

Flaps, condition and security

Panels / doors / fairings, condition and security

EMPENNAGE:

Proper operation and security of the following:

Elevators, condition and security

Rudder, condition and security

Trim Tab(s), condition and security

LANDING GEAR:

Overall condition

Landing Gear Doors; condition, security (as applicable)

July 1st, 2021

***Addendum to STOL Drag Events Procedures and Policies**
***Racer Certification and Racing at Reno and future events**

On April 28, 2021, The Federal Aviation Administration (FAA) met with all of the representatives of STOL Drag Events LLC., and reviewed its Operations Manual, Procedures and Policies, it's Training Course, Qualifications, Testing and Currency program for the STOL Drag Racing Class.

The FAA determined that STOL Drag Events is qualified to run its own events and certify its own pilots. They accepted all of the Policies and Procedures, its training course, It's NCARS OPS Rev 2 Doc., for the Reno Air Races and any future events. National Accreditation was given at that time and is to be renewed every two years following.

All certified racers participating in the Reno Air Races and or any other new location must abide by the standards set in place by the Reno Air Racing Association and require that any new certified rookie pilot must meet the event requirements of ground training specific to the location and track time for the given locations and follow the procedures in place to the specific event. STOL Drag has the authority to certify its own pilots, but all pilots MUST be given proper ground and practice track time at the given locations for familiarization of the various differences of the given track location.

STOL Drag Events LLC and Kevin Quinn and its officers are qualified to be the responsible persons / party of an STOL Drag race event and may apply for a certificate of Waiver (CoW) using FAA Form 7711-2, Application for Certificate of Waiver or Authorization of an Aviation Event.

Addendum July 1, 2021 – Accreditation, Training and Pilot Certification – David Menzimer FAA

STOL Drag Events LLC has the authority to issue and sign air race pilot certificates for the STOL Drag Racing Class to its pilots that comply with the qualification and currency requirements of its program and its documents as described above in paragraph 1 and 2.

Unless sooner superseded or rescinded. The STOL Drag Events LLC accreditation and air racecourse will remain valid until April 30, 2023. The current and valid STOL Drag Events LLC – STOL Drag Racing Class certificates issued by STOL Drag Events LLC shall be accepted by all FAA Flight Standards Offices as meeting the qualification required by the FAA Order 8900.1, Volume 3, Chapter 6, Section 2. Per David M Menzimer – Manager, AFS-840 Technical Branch,