

# OFFICIAL RULES 2025 SEASON

# Safety is our number one priority. If you are in doubt of the rules, ASK QUESTIONS.

All pilots must review these rules in their entirety prior to participation in a National STOL Event. These rules may be changed or modified at any time. National STOL will make every effort to inform participants of rule changes by posting an update on the National STOL website and announcing via social media and/or email listsery to registered participants.

National STOL Officials, Air Bosses, and the Competition Director have authority to disqualify any participant deemed unsafe or in violation of the rules. If you are disqualified over a safety concern or rules violation, your registration fee will not be refunded.

# Registration

- 1. You will select your competition class upon registration. Competition classes are outlined in Appendix A. Please contact us prior to registration if you are unsure of the class in which you should compete.
- 2. Registration will close at 17:00 local time the evening before the official practice day. **No late** registrations will be accepted.
- 3. Registration fees are non-refundable, but may be transferred to a future event upon written request.
- 4. Included in each registration fee for Standard and the Unlimited Class is a \$20 contribution towards a cash prize for the annual points winners. These contributions will be separated by subclass/class and divided amongst the top 3 pilots in each competitive group (1st-50%, 2nd-30%, 3rd-20%).
- 5. Pilots may compete in multiple aircraft, but each aircraft must be in a different class. A registration fee will be charged for each aircraft.
  - a. Each aircraft can only be registered in one class (i.e., Rookies may not register in both the Rookie and a standard class/an aircraft cannot compete in both a standard and the Unlimited class).
- 6. Pilots may share an aircraft, but each pilot's scores will only count for that competitor. Each pilot must pay their own registration fee.
- 7. Each pilot and volunteer must sign a liability waiver prior to each event.
- 8. If a pilot is a first time competitor, or has not competed in more than two years, (s)he must participate in practice day and attend the new competitor safety briefing in order to compete. The exact times will be listed on each event's schedule page.

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# **Event Preparation**

- 1. Upon registration, you will be assigned a race number. This number must be posted in the window of your airplane or on the airplane throughout the event.
- 2. No unapproved race numbers may be displayed on the aircraft. Any number not approved by the National STOL Series shall be covered up by the pilot.
- 3. **Helmets are required for all competitors.** Helmets save lives. If you need a recommendation, speak to a National STOL staff member or returning pilot.
- 4. **Shoulder Harnesses are required for all competitors.** Shoulder harnesses, like helmets, save lives. Devices such as the <u>Hooker Harness Quickie</u>, which slow the forward motion of your torso in the event of a crash, meet the criteria.
- 5. Flight/Race Suits (NOMEX or similar, flame resistant) are required for all Standard and Unlimited Class Competitors, and are recommended for Rookie Class Competitors. Suits may be two piece, but must cover the arms and legs.
- 6. FAA required paperwork (AROW), pilot license, and current medical certificate (if required) must be in your aircraft throughout the event.
- 7. Indexing Tires: Aircraft without wheel pants and tires larger than 12 inches diameter are encouraged to mark their tires with yellow index markings of no less than 3 inches (such as tape) perpendicular to the outside edge of the tire. **This is required for the Unlimited Class.**
- 8. Bring your own chocks and tie downs. Tie downs and chocks are your responsibility. In addition, no hand propping of aircraft without someone at the controls and the wheels chocked or the tail tied down.
- 9. **Plan your fuel**. Maintain reserves that are required by FAA regulations.

# **Event Guidelines and Scoring**

- 1. All pilots participating in an official National STOL practice or competition **must** attend a pre-flight safety briefing <u>each</u> day. **If you miss the safety briefing, you will not be allowed to fly/compete and your registration fee will not be refunded.** Heat and competitor assignments (example: "Heat B Number 3") will be announced at the Safety Briefing, as well as shared via What's App and emailed to registered competitors.
- 2. If a pilot is a first time competitor, or has not competed in more than two years, (s)he **must** participate in practice day and attend the new competitor safety briefing in order to compete. While highly recommended, returning competitors may still compete if they are unable to attend the practice day, provided they arrive in time for the pre-flight safety briefing on competition day.
- 3. Each competitor will fly in a set number of competition rounds (typically 3) during the competition. A round is defined as a takeoff, pattern, and landing. Further details can be found below.
- 4. Scoring will be based on the combined distance of the take off and landing of the best **round**. Takeoffs and landings from different rounds cannot be combined for scoring. **All measurements will be taken from the main gear axle**.

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- 5. The start/finish line ("reference line") is a painted white line, typically 18 inches wide, in which measurements are marked from. On takeoff and landing, distances are measured from the upwind side of the line.
- 6. A **scratch** is defined as a landing in which any part of the tire touches any part of the painted white reference line. Weight on wheels is not required; tire deformation or depression is not required.
- 7. A **scratch** on landing will eliminate the score from that round. If a competitor scratches on all rounds,(s)he will not have a valid score for event or series placements.
- 8. If at any point during landing that the propeller or nose of the aircraft comes in contact with grass, dirt, or ground, the score for that round will be a **scratch** and the competitor will be disqualified from competing for the rest of the competition. Any scores made before this round will be counted.
- 9. Pilots must call ground control in time to join the staging for their heat. Failure to call on time is grounds for a DQ.
- 10. No aircraft may practice or compete unless under observation by a National STOL Official.

# **STOL Competition Round**

#### Take Off

- 1. Taxi into position as directed by line judge, with main gear stopped on the reference line
- 2. The reference line has left and right marked bracket lines. The aircraft's main wheels cannot be on the outside or touching the bracket lines. If a competitor lines up outside of this bracket, they must reposition themselves inside of the bracket before conducting the takeoff roll, or will be called for a scratch. They may reposition themselves down the runway, but may not turn around and reposition themselves without airboss permission.
- 3. The nose of the aircraft cannot be pointed further left or right than the furthest flag on the runway.
- 4. Begin take-off roll after the airboss instructs, "Bravo 1 go." Once the aircraft starts its departure roll, the next aircraft will start their taxi towards the reference line.
- 5. Take-off distance will be measured from the reference line to where the furthest main wheel leaves the ground for the last time.
- 6. NO MAX RATE CLIMBS-Any climb deemed unsafe by National STOL Officials is subject to immediate disqualification.
- 7. The width of the competition area is defined as the area between the feather flags on the reference line. Aircraft wing tips may not extend beyond the feather flags at any point during takeoff or transitioning to the pattern.
- 8. Aborted Takeoffs are common real-world safety decisions. If you abort your takeoff before your tires leave the ground, your takeoff run will not be scored and you may be allowed to reset. If either main tire leaves the ground, and you do not complete a traffic pattern, your run will be ruled as a scratch. The Competition Director has the

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sole discretion to determine if the pilot is abusing this rule and may opt to DQ a pilot who has not left the ground.

#### **Pattern**

- 1. Pattern altitude will vary by event, but is typically 500 ft AGL.
- 2. Follow the person in front of you. Airbosses will give advice and suggestions, but you are ultimately responsible for your aircraft.
- 3. No steep climbs, steep turns, low passes, or abrupt maneuvers.
- 4. No S turns are allowed on final.

#### Landing

- Main gear must land **beyond** the reference line. Main gear touchdown on or prior to the reference line results in a **scratch**. Tailwheel touchdown prior to the reference line is **NOT** a scratch.
- Aircraft must come to a full stop, straight ahead, and remain stopped until judges have had a chance to measure the distance and wave the aircraft clear of the runway. Do not move until cleared ahead by the judge, and then safely and rapidly clear the competition runway.
- 3. Loss of directional control on landing creates a hazardous situation for line judges, camera operators, and the crowd. Loss of directional control may lead to a warning, scratch, and/or disqualification.
- 4. Landing distance will be measured from the reference line to the main gear axle. The measurement will be from the axle furthest from the reference line.
- 5. "Go Arounds" are common real-world safety decisions. If conditions deteriorate on short approach and you are too close to the edge of the safe flight envelope, **GO AROUND**. For the STOL competition, **a** "**Go Around**" is **encouraged and expected**. If no contact of any landing gear has been made, the pilot can circle around for a second landing attempt and still be scored. The Competition Director has the sole discretion to determine if the pilot is abusing this rule and may DQ a pilot for that round.

# **Event Placements**

- 1. Each competition class will have 1st, 2nd, and 3rd place winners (pending sufficient registration) at each event.
- 2. Winners will be based on the lowest combined ROUND (combination of take off and landing) distance.
- 3. Prizes may vary from class to class and event to event.
- 4. The Rookie class has no prizes and no tracking of season standings.

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#### **Protests**

- 1. Competitors may file a protest regarding a score (measurement of a takeoff/landing; foul line disqualifications) or the violation of a rule by a competitor.
- 2. The individual initiating the protest must submit it in writing and pay a protest fee of \$125.
- 3. In the event the competition was recorded, replay video will be used in determining the result of the protest.
- 4. All reviews from a protest are final and at the sole discretion of National STOL Officials.

#### **Scoring Protest**

- 1. Scoring protests must be filed within 4 hours of the scoring issue.
- 2. Protests must include adequate detail to find the issue and the round in question (Touring, Cessna 182, Black and Red, #04, First Run, Landing "I believe it was not a foul").
- 3. A protest is for a single event, and each discrepancy requires a separate protest to be filed.
- 4. There are 3 possible outcomes from a scoring protest:
  - a. If the protest is sustained, the original call is overturned. The protest fee will be refunded and the event result will be updated with the change.
  - b. If the protest is inconclusive, whereas there is not enough evidence to overturn the ruling, the protest fee will be refunded and the result will remain the same as called at the time of the event.
  - c. If the protest is unfounded, whereas the evidence supports the original scoring decision, the original scoring stands. The protest will be dismissed and the protest fee is retained by National STOL.

#### **Rules Protest**

- 1. A competitor may protest a rule violation by another competitor, but may only file one protest per rule violation (a pilot may not file one protest for multiple rules broken, but may file multiple protests).
- 2. Protests for rules violations shall include any supporting evidence, such as photos, videos, or specific details that can be used to identify the rule violation.
- 3. A rule violation protest follows the same scheme as a scoring violation:
  - a. If the protest is sustained, the matter is referred to National STOL Officials for a Rule Violation. The protest fee will be refunded and National STOL will determine discipline for the violation.
  - b. If the protest is inconclusive, whereas there is not enough evidence to overturn the ruling, the protest fee will be refunded and no action will be taken.
  - c. If the protest is unfounded, whereas the evidence supports no rule violation, no action is taken. The protest will be dismissed and the protest fee is retained by National STOL.
- 4. Discipline for rule violations may result in being disqualified from an event, a warning letter, a warning letter with a corrective action required, event scoring or standings change, or disqualification from the series. Violations may result in other action being taken by National STOL Officials.

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# **Annual Points System**

At the end of the season, an annual champion will be named in each competition class. The annual champion is determined by the number of points accumulated throughout the year, as outlined below.

Please note: 80% (in 2025, 8) of the regular season events will count towards annual points. If you participate in more than 8 regular season events, your top 8 finishes will be counted. Lonestar STOL (Friday) is considered a regular season event. The National Finals for pilots who qualify will be held Saturday of the same weekend and count as separate and DOUBLE points. You do not have to be present at the final event weekend to win; however, points earned at this event will be added to the existing standings.

Point Earned by Placement (Within Class)									
1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
25	18	15	12	10	8	6	4	2	1

Each competitor will accumulate season points for the Class(es) in which they compete. Points do not transfer between classes. If a competitor moves back and forth between the Unlimited and Standard Classes throughout the season, they will accumulate points in both Classes. For example, if a competitor competes in the Unlimited Class and places 1st, they would earn 25 points in the Unlimited Class. If they compete and place 2nd in their Standard Class at the next event, they would have 25 points in the season standing for the Unlimited Class and 18 points in their Standard Class.

Competitors that change aircraft during the season will retain their points as long as they remain in the same class.

The most consistent competitor of the event will earn 1 additional point toward the season standings. Most consistent is determined by the competitor with the lowest average variation between all rounds AND no scratches or DQs. If a competitor does not compete in a round, that would count as a scratch for the purpose of this rule.

Effort will be made to have the pilots at the top of the season points standings compete in the same heat as one another within each class, as well as to have the highest ranking pilot choose where in the heat they wish to fly (subject to airboss approval).

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# **Appendix A-Competition Classes**

Standard Competition classes are defined by airplane make, model, certification type, and weight. Please read below for further details. If you are unsure of what class you fall into, contact National STOL in advance of your registration.

- 1. There must be at least two aircraft in a class for the class to compete.
- 2. Gliders, unmanned aerial vehicles, rotorcraft, powered parachutes, weight-shift, and lighter-than-air craft may not compete.
- 3. National STOL Officials will make all class determinations, which are final.
- 4. **Subclasses**: Aircraft may be broken up into subclasses within a standard class. A subclass will be defined in the rules at the start of the season. Each subclass will earn annual points on their own (in addition to the main class) for the annual championship. At each event, a subclass award will be presented to the winner only of the subclass.

# **Exhibition Class-No Prizes or Season Standings**

Any FAA certificated Single engine aircraft models as determined by gross weight over and including 5,801 lbs, Twin Engine Aircraft, or other aircraft that are not covered by the classes below.

# **Rookie Class-No Prizes or Season Standings**

The Rookie class is an optional, relaxed class for all aircraft models and types (as long as they fit into a traditional standard class, i.e., no helicopters or twins) for new competitors. Rules in the rookie class are slightly relaxed and additional support is available. However, pilots in this class must practice during the scheduled practice day ahead of the competition, as well as participate in the new competitor safety briefing.

Competitors may continue to participate in the Rookie class until they place first in the class. Rookies cannot compete in any other class concurrently. The Rookie class has no prizes and will not accrue season points.

The goal of the Rookie class is to educate newcomers to the series and encourage them to grow as pilots. While pilots should be experienced aviators in their aircraft type, this will help them learn the National STOL competition format and standards in a fun, low-stress environment. Mentorship from experienced National STOL pilots is available to Rookies before and during the event weekends.

#### **Unlimited Class**

- An open class for any pilot for all aircraft models and types (as long as they fit into a traditional standard class, i.e., no helicopters or twins).
- The class is scored in feet (distance) and follows traditional scoring.
- Each aircraft gets at least 3 runs to score the shortest total distance.
- Tires must be marked with a yellow line, such as tape, no less than 3 inches long, perpendicular to the edge of the tire.

The Unlimited Class is the premier class for prizes and awards. Those competing in a purpose-built race aircraft should highly consider competing in the Unlimited Class.

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#### **Standard Classes**

#### **Touring Class**

- Cessna C-180, C-182, C-185, C-205, C-206, C-210, Maule M-6, M-7, M-9
- If not listed: FAA **Certified** ASEL models as determined by gross weight from 2,301 lbs to 5,800 lbs

#### Wilderness Class

- Murphy Moose, Murphy Rebel, Backcountry BOSS, Bearhawk 4, Bearhawk 5
- If not listed: other FAA certificated ASEL as **Experimental** with a gross weight from 2,301 lbs to 5,800 lbs

#### **Backcountry Class**

- Citabria; Huskies; Scout; Stinson 105, Stinson 108-2; T-Craft (over 1,320 lbs); Cessna 170, C-172, C-175, C-177, C-150, C-152, Maule M-4, M-5
- If not listed: other FAA **certified** ASEL models as determined by gross weight from 1,321 to 2,300 lbs.

#### **Adventure Class**

- Bearhawk Patrol; Carbon Cub EX, Carbon Cub FX; Dakota Super 18; Legend (EAB); Savage
   Outback Shock; Super Cruiser; PA-12, 14, 18, and PA-22, Top Cub; Tern X Cub; Zenith 750SD
- If not listed: other FAA certificated ASEL as **Experimental** with a gross weight of 1,321 lbs. to 2,300 lbs.

#### **Cub Class**

Cub or Cub-like aircraft models with naturally aspirated engines rated at 180 horsepower or less, without Nitrous-Oxide  $N_2O$  or similar injection. Aircraft must be equipped with a stock wing. VGs and/or Wing cuffs are allowed. No modified lift devices, slats, spoiler, drag devices, or wing extensions.

Examples of aircraft that qualify for this class include: PA-12, PA-14, PA-18, PA-22, CSport Cub S2, Carbon Cub SS.

Aircraft that do not meet the engine and airframe specification rules of this class would revert to their standard class (Sport or Adventure), by weight.

#### **Vintage Cub Subclass**

Cub Class aircraft 100 hp and under without flaps or pilot-operated lifting devices. – i.e. PA-11, PA-12, J3, AL-3, Aeronca Champ

## **Sport Class**

- CSport Cub S2; Rans S-7LS; Super Legend; T-Craft (1,320 lbs); Bearhawk LSA; Carbon Cub SS; Carbon Cub UL; Dakota Super 18-LT; Legend (ELSA); Rans (ELSA); Just Aircraft Highlander & SuperSTOL
- If not listed: other FAA certificated ASEL as determined by a maximum gross weight **up to and including** 1,320 lbs.

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