



SPORT AIR RACING LEAGUE

How the competition works

A professional overview of SARL racing, classes, race-day operations, safety, scoring and season competition.

2026 OVERVIEW

Prepared from current SARL public materials • Scholarship information intentionally omitted



What SARL is — and what makes it different

SARL is a grassroots cross-country air-racing league built around safe, accessible competition between pilots and aircraft.

Accessible

Pilots compete in a broad mix of experimental and factory aircraft, organized into classes designed to reduce inherent equipment advantage.

Safe by design

Racers are not sent into a head-to-head pack race. The league's race format and start procedures are designed to minimize the need for passing.

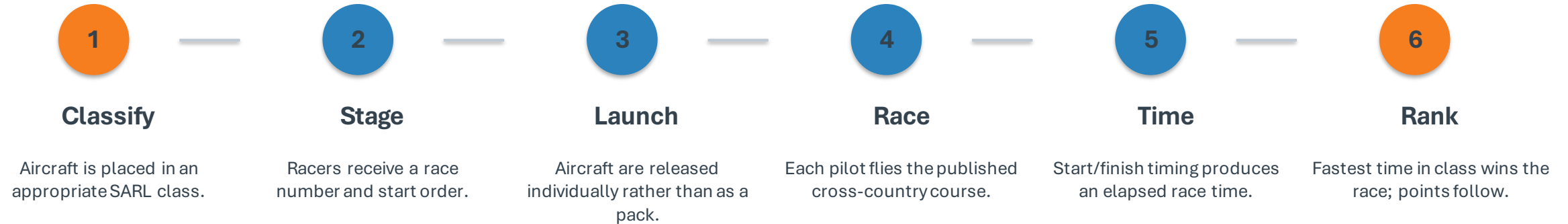
Competitive

A race result matters twice: it determines class placement on race day and contributes points toward the season standings.

The result is closer to a timed motorsport stage in the sky than a traditional wheel-to-wheel race.



The core concept: one course, many aircraft, individual times



Why the format works

The competition rewards pilot execution and aircraft performance without requiring racers to overtake one another in close proximity.



Classes create a fairer playing field

SARL does not treat every aircraft as if it were identical. Instead, aircraft are grouped by configuration and performance-related characteristics.

Experimental

Homebuilts and other experimental aircraft are grouped using factors such as engine displacement, induction, landing gear configuration and aircraft family.

Examples include Sport, Sport-T, Sport FX, RV classes, Sprint and Sportsman classes.

Factory

Production aircraft compete in Factory classes that likewise distinguish meaningful performance/configuration differences.

The current league roster includes classes such as FAC1RG, FAC2RG, FAC3RG and FAC5FX.

65+ RACING CLASSES

Class definitions can evolve; the event's current rules and class list control.



SARL racing classes



Current classes published by SARL • Experimental and Factory categories

EXPERIMENTAL • 30 classes

- Turbine
- Unlimited
- Sport
- Sport-T
- Sport FX
- Sport FX-T
- Biplane Unlimited
- Biplane Sport
- Biplane Blue
- Biplane Red
- RG Blue
- RG-T Blue
- RG Red
- RG-T Red
- FX Gold
- FX Blue
- FX-T Blue
- FX Red
- FX-T Red
- RV Gold
- RV-T Gold
- RV Blue
- RV-T Blue
- RV Red
- RV-T Red
- Sprint
- Sprint-T
- Sportsman
- Sportsman-T
- E-LSA

FACTORY • 28 classes

- Turbine Single
- Turbine Twin
- FAC1RG
- FAC1RG-T
- FAC1FX
- FAC1FX-T
- FAC2RG
- FAC2RG-T
- FAC2FX
- FAC2FX-T
- FAC3RG
- FAC3RG-T
- FAC3FX
- FAC3FX-T
- FAC4RG
- FAC4RG-T
- FAC4FX
- FAC4FX-T
- FAC5RG
- FAC5FX
- FAC6
- LSA
- TWIN1
- TWIN1-T
- TWIN2
- TWIN2-T
- TWIN3
- TWIN3-T

Class definitions can change; current SARL rules and event-specific classifications control.

Before race day: how a pilot enters the system

- 1 Membership** Join SARL as a full member to compete for season points, or use the provisional option for a single race.
- 2 Aircraft + class** Provide aircraft information and select the applicable racing category/class.
- 3 Race number** Full members reserve an aircraft race number; provisional racers are assigned one for the event.
- 4 Insurance** A Certificate of Insurance naming SARL as an additional insured is required before participation.
- 5 Race registration** Register for the individual event and review its published briefing, course and supplementary requirements.

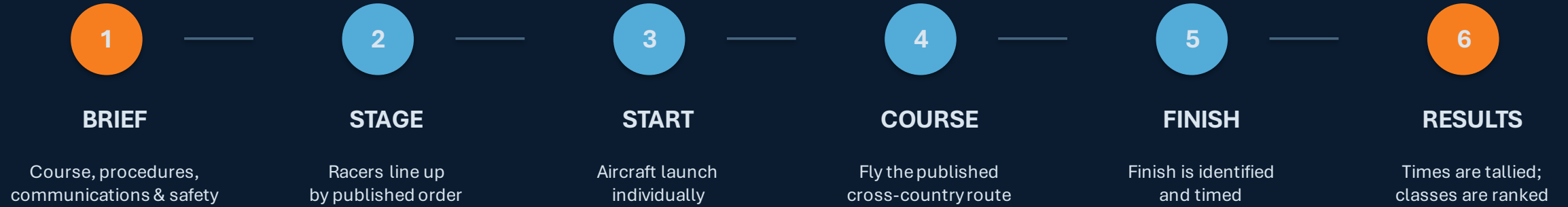
Practical takeaway

SARL is intentionally structured so a newcomer can enter one race, learn the format, and decide whether to become a regular competitor.

Source: SARL — Membership, Why Insurance Is Required and 2026 Race Registration & Refund Policy; accessed August 2026.

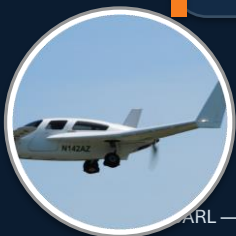


Race day: from briefing to finish



Start order is a safety feature

SARL guidance uses speed order, with the fastest aircraft starting first. That creates separation rather than a compressed launch into a pack.



Safety is built into the race format

THE OBJECTIVE

**Go fast.
Fly precisely.
Keep the race
predictable.**

Competition is designed around disciplined
airmanship rather than close-formation
racing.

1

No head-to-head racing

The league's public description emphasizes a format that removes the need for passing and prevents head-to-head racing.

2

Briefing first

Race hosts brief the course, finish line, communications, emergency procedures and start order.

3

Tracking + timing

Current host guidance references ForeFlight for racer position/progress and timekeeping plus spotters at start/finish.

4

Race-specific rules

Each event may publish supplementary procedures to fit its course and local environment.



The course: long enough to reward performance, practical enough to manage

100–400

miles is the league's typical race range.

Typical course guidance

**Destination races can be exceptions,
with a longer point-to-point route.**

Faster aircraft

Recommended course range: roughly 120–200 miles.

Slower aircraft

Recommended course range: roughly 60–100 miles.

Design target

Hosts generally aim for competitors to complete the race in under about 90 minutes, limiting refueling needs and reducing exposure to changing weather.



Scoring: race placement + the aircraft you beat

Finish	Base points	Formula
1st	100	+ 10 per class aircraft beaten
2nd	80	+ 10 per class aircraft beaten
3rd	60	+ 10 per class aircraft beaten
4th	55	+ 10 per class aircraft beaten
5th	50	+ 10 per class aircraft beaten
6th+	45 → 0	decreases by 5 points per place

Example

A racer finishes 1st in class and beats two other aircraft in that class:

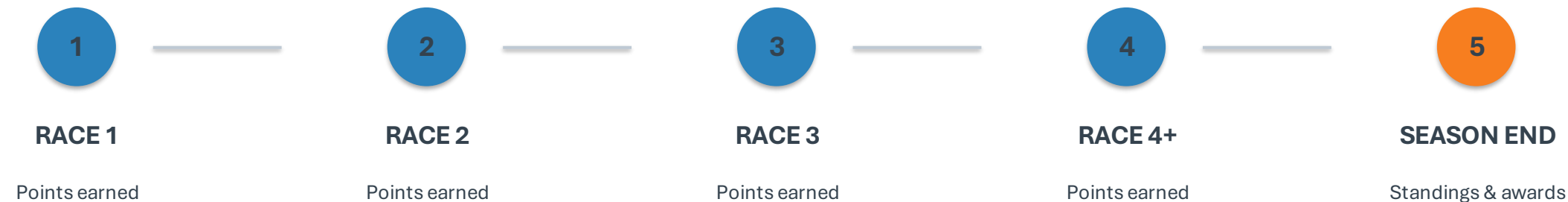
100 base points + 20 bonus = 120 season points.

Why this matters

The system rewards both finishing position and the depth of competition in the class. A strong field can increase the value of a race result.



The season: every sanctioned race can build the championship



Class standings

Race points accumulate within the racer’s class across the season.

National recognition

The league recognizes top point earners and class achievements at season’s end.

Live context

The official website publishes current events, rosters and leaderboard totals.



Illustrative season structure — the exact calendar and sanctioned races change from year to year.

The league is an ecosystem, not just a race



Hosts typically rely on a small volunteer team for ground operations and timing.



How a new racer gets started

01

Join

Choose full or provisional membership.

02

Class

Identify the correct aircraft class.

03

Insure

Provide the required COI.

04

Register

Enter a sanctioned race.

05

Brief

Learn the course and procedures.

06

Race

Fly your line, fly the course, get timed.

The simplest mental model:

CLASS → STAGE → FLY → TIME → SCORE → REPEAT

For an event-specific briefing, always follow the current race materials and supplementary regulations.



Sources & important note

This presentation is a league-level explanation, not a substitute for the current SARL rules or the supplementary regulations for a specific race.

Sport Air Racing League — About

sportairrace.org/about/

Sport Air Racing League — Points System

sportairrace.org/points-system/

Sport Air Racing League — Membership

sportairrace.org/membership/

Sport Air Racing League — Experimental Classes

sportairrace.org/experimental-classes/

Sport Air Racing League — Race Hosts / Course / Timing

sportairrace.org/race-hosts/

Sport Air Racing League — Rules & Regulations

sportairrace.org • Rules & Regulations

Sport Air Racing League — 2026 registration/refund policy

sportairrace.org • 2026 Race Registration & Refund Policy

Prepared for presentation use

