

Sailplanes: Kings of the Clouds



Tower Hobbies® Vista ARF
See page 77.

1 Sailplane Basics A tendency for slow, stable flight makes sailplanes ideal trainers and first airplanes. Powered sailplanes can remain aloft for 10-15 minutes at a time. Flight times for unpowered models start at the 4-5 minute range, but increase with pilot skill.

One way to identify sailplanes is by the source of their lift. Some are named for rising masses of warm air called "thermals." With thermal sailplanes, slow, lazy flights are the norm. Flight times depend largely on the pilot's skill for "reading" and using lift.

Slope soarers, on the other hand, get their lift from air that flows up the side of a hill. The lift created lasts only as long as the wind blows. Compared to thermal riders, slope soarers tend to "penetrate" better and fly faster, which enables them to fly in wind conditions that would ground other planes.

2 Design & Construction Sailplane classes are defined by wingspan. In general, sailplanes with shorter wings are more affected by wind. Planes with longer wings offer greater lift, but are slower to respond and more complex to build.

- 1. Small** — Wingspan: 60" or less. "Mini" or "micro" radio systems are usually required. Launch by: hand, high-start.
- 2. 2-meter** — Wingspan: 72-79". These generally offer low cost, easy building, stable flying and fairly quick response. An excellent choice for beginners. Launch by: hand, high-start, winch.
- 3. Standard** — Wingspan: 100". Launch by: high-start, winch.
- 4. Unlimited**: Wingspan: 100", plus. Ideal for endurance contests, cross-country events and intermediate to expert pilots. Launch by: high-start.

Say "sailplane," and most people think of a plane high among the clouds. However, sailplanes can also offer high speeds and advanced aerobatics. Piloting skill is a major factor in performance; competition for top pilot honors is common — and intense. But whether you're looking for competition, or the quiet solitude of solo flight, sailplanes are a natural choice.

3 Tail Configurations

Conventional: Common, effective and easy to build. Features a vertical fin and horizontal stabilizer.

T-tail: Here, the stabilizer is on top of the fin, and above the turbulence created by the main wing. A full flying stabilizer is common.

Mid-tail: A blend that offers T-tail benefits with conventional building ease. Often includes a full flying stabilizer.

V-Tail: In a V-tail, the rudder disappears and the stabilizers are angled upward. Stabilizer halves can be operated independently (for right-left "aileron" control) or moved together for up/down (elevator) control.

4 Launching Made Easy

A. Hand-launch — Toss your sailplane into the "lift," and watch it fly. Great for small slope soarers, and thermal pilots who can "read" the lift.

B. Hand-tow — Just like flying a kite. Good for small sailplanes.

C. Hi-Start — R/C's most popular method. The hi-start (basically a huge slingshot) is pointed into the wind. The elastic is stretched back and released with the sailplane attached. The plane flies up, the elastic drops off and floats to earth on its own parachute.

D. Winch Launch — The ultimate launching system for competitors. Uses an electric motor and a spool and pulley system to pull craft up for high-altitude starts!

HOUSE OF BALSA® 2X4 KIT

• A strong buy for the fledgling builder and flier.

Created for the first-time flier and builder, the 49.5" span 2x4 is strong, simple and inexpensive. Light ply and balsa provide the strength; design cuts building time to as little as 4-6 hours and leaves room for standard-size gear. Equally at home in playgrounds, parks and wide-open spaces, the 2x4 features a flat-bottom, polyhedral wing that eases the transition from ground-pounder to pilot. Launches by hand or hi-start. Requires a 2-channel radio w/2 servos. Wing Area: 409 sq in; Length: 38.5 in.



HOUA1026	K26 2x4 Sailplane Kit 49.5"	RETAIL 44.95	TOWER 29.99
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LANIER U-2 FREE FLIGHT KIT

• Smooth lines and impressive dimensions



Its size is impressive, but it's the U-2's ultra-low cost that's most remarkable. Made of durable, injection-molded foam, the U-2 spans a full 74" (that's over 6 feet!) — yet weighs only 18 oz — light enough for a child to launch into short, satisfying flights. There's no extra equipment to buy, and simple, band-on assembly makes it extra-easy to build. Great for children as young as 6 years old — but fun for first-time fliers of any age! Wing Area: 629 sq in; Length: 56 in.

LANA1900	92213 U-2 Free Flight Glider 74"	RETAIL 29.95	TOWER 22.99
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MULTIPLEX® EP EASY GLIDERS

The Easy Glider Kit (214205) can be aero-towed, hand-towed with the supplied towline or hand-launched from a slope.

Easy Glider Electric Kit (214207) features a geared Permamax Speed 400 motor with a folding propeller. This power combination allows quick climbs to altitude and gentle glides back to earth. **RR versions** (26405, 264207) come receiver ready, with servos already installed. All span 71", offer elevator, rudder and aileron control and have a detachable two-piece wing for easy transport. Easy Gliders requires a 3-channel radio w/4 micro servos. Easy Gliders Electric requires a 4-channel radio w/4 micro servos and an ESC. Easy Glider weight: 25 oz; Easy Glider Electric Weight: 35 oz; Wing Area (both): 650 sq in; Length (both): 44.3 in.



MPUA2105	214205 Easy Glider Kit 71"	RETAIL 105.95	TOWER 69.99
MPUA2107	214207 Easy Electric Glider Kit 71"	125.95	79.99
MPUA2605	26405 Easy Glider RR Prebuilt w/Servos 71" ..	199.95	129.99
MPUA2607	264207 Easy Glider Electric RR ARF 71"	249.95	159.99

LANIER RB-1 KING CONDOR KIT

• 74" span can be flown free-flight for up to 1/2 mile flights



Simple, band-on assembly makes this free-flight a first-timer favorite for ease and economy, but it's only the start of the RB-1's charms. Tough, featherweight foam keeps weight to just 25 oz. and makes its amazing, 74" wingspan possible; a 16" prop and 12-strand rubber band propel it up to 75' in the air, for flights that can stretch to half a mile. Length: 56 in.

LANA1800	92211 RB-1 King Condor 74"	59.95	44.99
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MEGATECH® PROWLER EP RTF



With the Prowler, streamlined looks and sophisticated, low-drag design go hand-in-hand. The transition from the bullet nose to the pod to the tail boom is a smooth, sinuous curve. The under-cambered, polyhedral wing features a gentle upsweep and a high-aspect ratio for maximum stability and lift. A T-Tail puts the stab up into "clean" air, out of the main wing's wake and the prop folds back to extend flight and protect itself. Band on the wing, and assembly is virtually complete. Includes a 3-channel transmitter, flight pack and charger. Requires 8 "AA" batteries. Wingspan: 51 in; Length: 31.5 in

MTCAG945	9945 Prowler 3-Channel RTF Glider 51"	290.00	229.99
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SIG® RISER KIT

• A versatile value for the beginner or sport flier!



The 78" span Riser is gentle for novices, versatile for sport fliers and a solid value for both. A generous hardware pack cuts costs; balsa parts offer lightweight strength from nose to tail. A flat-bottom, polyhedral wing turns launch energy into long, easy climbs and lazy loops. The Riser thermals with the help of a hi-start or power pod and soars the slopes with a hand launch and light winds. Requires a 2-3 channel radio w/standard servos and hi-start. (Call for requirements on power pod option.) Weight: 24-28 oz; Wing Area: 620 sq in; Length: 41.5 in.

SIGA6145	RC52 Riser Kit 78"	67.49	47.99
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