

LIGHT Aviation

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THE HOT KIT LIST

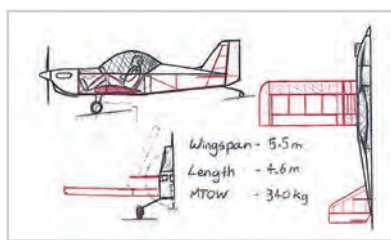


Light Aircraft Association
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A look at what aircraft LAA members have been choosing to build in the last two years...



PROJECT NEWS
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GETTING TO GRIPS WITH AIRCRAFT DESIGN



The hot kits...

Ed Hicks takes a look at what's been heading up new LAA project registrations in the last two years...

How do you find out what's a hot choice for UK kit-builders? Well, in the case of this list, it was just a matter of counting up the new project registrations made between January 2020 and December 2021. A two year snapshot of what's been catching the eye of LAA members. The number of kit starts registered range from 13 for the first two types in the list, all the way through to just a couple each for the types at the very end of the list.

Some are no surprise, and have been steadfast choices of builders for more than 20 years, while others are so new that they're only just being issued with their full LAA approval. That hasn't stopped members from placing their orders though. Quite a number have gone

from kit delivery to first flight in that two years too, which is testament to just how good the quality of the latest kits are. The best of them providing builders with a very complete set of high-quality components that assemble quickly and easily, using methods of construction that are not hard to master.

Like so many things in the world of steadily rising prices, while the older legacy LAA types remain some of the best value ways to getting airborne, the kits you see on the pages that follow, provide a route to getting your hands on some of the best performing and most efficient modern sport aircraft without breaking the bank. Plus, you'll have the pleasure of creating your own personal aircraft just how you want it...

The only question is... which hot kit will you pick?

Sling Aircraft Sling 4 TSi

Kit starts: 13



Specifications

Seats: Four
Wingspan: 31ft 4in (9.54m)
Empty weight: 492kg
Gross weight: 950kg
Fuel capacity: 194ltr / 244ltr optional
Engine: Rotax 915iS, 141hp

Stall speed: 51kt
Cruise speed: 148ktas
Take-off: (over 50ft) 333m
Landing: (over 50ft) 349m
Range: 880nm

One of the hottest and newest kits here, the all-metal Sling 4 TSi has caught many builders attention with its pairing of the powerful and efficient Rotax 915iS with a four-seat cabin, giving a good mix of useful load along with an efficient turn of speed.

The type is just on the cusp of being given its approved type status with LAA, flight testing having been completed last year. UK agent Tim Hardy says that UK buyers have been quick to recognise the TSi's suitability for comfortable long distance travel, thanks to a double skinned and insulated cockpit. He says in South Africa, sectors of six hours and more are not uncommon.

Available as both a regular flatpack for around \$160k (US dollars) or quickbuild kit for around \$175k, while these might seem high, this includes the whole airframe, firewall forward, final assembly and finishing kit, electric constant speed prop, Rotax 915iS engine, Garmin G3X panel including G5 standby instrument, autopilot control panel, radio and transponder, Italian leather interior. Price is net of shipping and VAT.

Order lead times at the moment are four to five months for a flat pack, kit, and around six months for a quickbuild kit. Tim says that the most popular customer options are the quickbuild fuselage and extended range fuel tanks.

Contact slingaircraft.uk

Van's Aircraft RV-8/8A

Kit starts: 13



Specifications

Seats: Two
Wingspan: 24ft (7.3m)
Empty weight: 489kg
Gross weight: 816kg
Fuel capacity: 160ltr
Engine: Lycoming 160-200hp

Stall speed: 50kt
Cruise speed: 180kt
Take-off roll: 175m
Landing roll: 152m
Range: 830nm

A bit of a surprise, as tandem-seating aircraft don't usually attract as wide a following as their side-by-side counterparts, but the most popular two-seater by a nose is the Van's Aircraft RV-8/8A.

Available in either nosewheel or tailwheel configuration, a standard airframe kit is around \$30k, or there's a quickbuild option for around \$47k. Factor in another \$46k for a 180hp Lycoming and a constant-speed prop – with is a configuration sweetspot for the -8.

With its sliding canopy and centreline seating the RV-8 provides that fighter-like cockpit feeling, and it's got the control-harmony and handling to match those expectations. The wide fuselage and cockpit accommodates larger people in comfort, though you'll need mirrors to maintain the face to face contact the side-by-side crowd manages easily.

The -8 is also the fastest of the RV range, so with 160 litres of fuel and two baggage compartments you've got an aircraft that makes it easy to easily cover some distance if you plan on some touring.

Van's will supply the 210hp Lycoming IO-390A for use on the RV-8, but while you might see it on the order form, keep in mind this engine is currently outside of the LAA approval for the aircraft.

Contact www.vansaircraft.com

Van's Aircraft RV-14/14A

Kit starts: 12



Specifications

Seats: Two
Wingspan: 27ft (8.2m)
Empty weight: 555kg
Gross weight: 929kg
Fuel capacity: 190 ltr
Engine: Lycoming IO-390 210hp

Stall speed: 46kt
Cruise speed: 170kt
Take-off roll: 156m
Landing roll: 167m
Range: 886nm

The newest and most advanced kit from Van's Aircraft, this all-aluminium machine, gained full LAA approval in September 2020. The builder of the first UK example to fly went from a quickbuild kit to flight in 20 months and under 1,500 hours work. With the RV-14, Van's took the best of its engineering experience – it pioneered matched hole construction, i.e. parts that come out of the box and essentially self-jig – and lessons learned from making kits for more than 40 years, and created a very well documented, step-by-step assembly experience, that customers are finishing quicker and more consistently than previous RV models.

The -14's 46in-wide cockpit is a spacious place for two big people, and a tall canopy provides plenty of headroom too. With 190 litres of fuel capacity and 100lb baggage capacity, at 150kt there's enough for nearly 1,000nm range, making the -14 an excellent tourer.

Available as nosewheel or tailwheel, a standard airframe kit is around \$42k, while a quickbuild kit is around \$61k. While more expensive than other Van's kits, it does come with more accessories that were builder-sourced previously.

If you want one, you'll find wait times are long, as Van's is currently dealing with significant demand.

Contact www.vansaircraft.com

Van's Aircraft RV-7/7A

Kit starts: 12



Specifications

Seats: Two
Wingspan: 25ft (7.6m)
Empty weight: 485kg
Gross weight: 852kg
Fuel capacity: 159ltr
Engine: Lycoming 160-200hp

Stall speed: 44kt
Cruise speed: 173kt
Take-off roll: 175m
Landing roll: 152m
Range: 825nm

The two-seat side-by-side RV-7/7A remains a perennially popular kit choice for LAA members, having been introduced in 2001, following in the footsteps of the earlier RV-6, which still holds the record for world's most popular individual kitplane (2,702 completed – the -7 is catching up though at 1,896). There are 204 RV-7s on the LAA books.

Available as nosewheel or tailwheel, and with either a tip-up or sliding canopy, a standard airframe kit is around \$29k, while a quickbuild kit is around \$47k. Double that last figure for a new Lycoming (180hp is a popular choice) and constant speed-prop, and then add more for avionics, upholstery and paint... oh and crating and shipping – and the dreaded VAT.

You'll be dealing direct with the factory in Oregon, USA, as there's no UK agent. Not that you should be worried – Van's have got to their position of being world number one kit provider by being an honest company with products that deliver the numbers promised, for an affordable price. Plus, the RV builders community provides a support network that compliments the factory support. Many UK RV builders have gone on to build a second RV after finishing their first. A handful have even notched up four or five...

Contact www.vansaircraft.com

Aeroprakt A32 Vixxen

Kit starts: 9



The A32 Vixxen is a STOL all-metal, high-wing two-seater that's built in the Ukraine. It's a highly evolved version of the A22 Foxbat which first flew in the mid-1990s, and went on to arrive in the UK in 1999. The A32 was LAA approved in early 2019, and 16 are now on the LAA books.

The airframe kit is well engineered, with lots of thought throughout to quality fit and finish, right down to pre-moulded cockpit trim. Standard engine choice is the Rotax 912ULS, or builders can opt to use the 912iS engine instead. Careful attention to drag reduction including a fully blended monocoque type fuselage and subtly tweaked wings mean the Vixxen manages a significantly faster cruise speed; 115kt, than that of a similarly powered Foxbat, but without sacrificing low speed STOL capabilities. Stall speed with flaps is just 27kt. As Ray Everitt of Foxbat UK, the UK agent points out, the A32 manages to be both faster and slower than it's predecessor.

With a five-hour endurance at a sensible cruise speed, the payload to carry two average-sized crew, plus full fuel and still load 30kg of baggage, makes the Vixxen a capable package. A complete kit with engine and prop, including basic instruments is around €90k inc VAT.

Contact www.foxbataircraft.com

Specifications

Seats: Two
Wingspan: 31ft (9.45m)
Empty weight: 315kg
Gross weight: 600kg
Fuel capacity: 90ltr
Engine: Rotax 912ULS, 100hp

Stall speed: 27kt
Cruise speed: 115kt
Take-off roll: 100m
Landing roll: <100m
Range: 590nm

EuroFOX

Kit starts: 6



Since its introduction to the UK in 2010, the EuroFOX has proven to be a capable STOL machine, capable of getting airborne in 50 metres, landing in 100 metres, and comfortably cruising at 90-95kt at no more than 13 litres an hour.

Until about 18 months ago, the type which was available as nosewheel or tailwheel, with quick-fold wings could be purchased as a kit for construction through the LAA, which is why it appears in our list.

Unfortunately, while the type has been a popular one on the LAA fleet in recent years, with 74 on the LAA's books, Roger Cornwell, the UK agent told me that customer demand for the aircraft has changed, and now the aircraft will only be sold as a ready-to-fly factory built machine in the 600kg category, registered via the British Microlight Aircraft Association.

For a ready to fly aircraft, it's still great value – around £73k inc VAT... but you won't be getting your hands dirty building one if you want your own, but rather just turn the key and fly away...

There is a waiting list though, buy now and you might get your hands on one in 2023.

If you're one of the lucky owners to have a EuroFOX already on an LAA Permit... take care of it!

Contact www.eurofoxaviation.co.uk

Specifications

Seats: Two
Wingspan: 30ft (9.1m)
Empty weight: 289kg
Gross weight: 560kg
Fuel capacity: 86ltr (6ltr header tank)
Engine: Rotax 912 variants

Stall speed: 37kt
Cruise speed: 95kt
Take-off roll: 139m (mtow)
Landing roll: 130m (mtow)
Range: 538nm

Sling Aircraft Sling 2

Kit starts: 5



Introduced to LAA homebuilders in 2016, the Sling 2 is an all-metal aircraft, but unlike the Van's Aircraft kits, is assembled with blind (pulled) rivets. Sling Aircraft, is a South-African company known for its long-distance flight exploits – it's flown their aircraft across the Atlantic to Oshkosh, USA, sell the Sling 2 as both a conventional flatpack or as a quickbuild kit. The former is around \$105k (US dollars) and it's around \$116k for the latter, depending on specification. The price includes all airframe kits, firewall forward, final assembly and finishing kit, electric constant speed prop, Rotax 912iS engine, Garmin G3X panel including G5 standby instrument, autopilot control panel, radio and transponder, and leather interior trim. Price is net of shipping and VAT.

A range of engines – Rotax 912ULS, 912iS or 914UL – can be used, but the 912iS has proved to be a popular option with buyers. The max gross weight of the Sling 2 is a huge 700kg, which means this is one aircraft where two average-sized people can load up with full fuel and some baggage and not exceed max gross weight. Throw in the economic fuel burn of the 912iS and that gives an endurance of around six-and-a-half hours!

So far though, ease of build, operation and good handling have made the Sling 2 a popular choice.

Contact slingaircraft.uk

Specifications

Seats: Two
Wingspan: 30ft 1in (9.1m)
Empty weight: 360kg
Gross weight: 700kg
Fuel capacity: 146ltr usable
Engine: Rotax 912ULS/912iS/914UL

Stall speed: 40kt
Cruise speed: 115kt
Range: 750nm

Bristell NG5

Kit starts: 4



First coming to the attention of UK homebuilders in 2013, the Bristell NG5 Speedwing has proven to be popular, as in that time 46 Bristells have come onto the LAA books (projects/completed aircraft).

The aircraft's designer, Milan Bristela, had previously worked on the SportCruiser and felt that he could come up with a better wing... he was successful and produced an aircraft that marries benign flying qualities with enjoyable handling and a miserly fuel burn. It's not the quickest two-seat Rotax aircraft out there, but its cabin is probably one of the biggest of any LAA type, at 1.3m or just over 51 inches wide. That's a bit wider than a certified Cirrus SR22 and nearly nine inches wider than a Van's RV-7!

Kits are created by taking airframes off the Bristell production line, and the basic airframe is very complete. Basic kit price is around £40k, to which you must add an engine and firewall forward kit to suit, avionics and pay shipping. Builders can choose between a fixed tricycle undercarriage with steerable nosewheel or a tailwheel option, plus there are a number of other airframe options including the ability to fit a ballistic parachute.

A few Bristell customers have even started a second one, after finishing their first.

Contact bristelluk@yahoo.co.uk

Specifications

Seats: Two
Wingspan: 26ft 8in (8.13m)
Empty weight: 310kg
Gross weight: 600kg
Fuel capacity: 120ltr
Engine: Rotax 912ULS/912iS, J3300A

Stall speed: 25kt
Cruise speed: 110kt
Range: 700nm

KFA Safari

Kit starts: 3



Specifications

Seats: Two
Wingspan: 30ft 6in (9.34m)
Empty weight: 390-410kg
Gross weight: 700kg
Fuel capacity: 125ltr
Engine: Rotax 914/ 912 VZ conversion

Stall speed: 40kt
Cruise speed: 110kt
Take-off roll: 40m (solo)
Landing roll: 80m (solo)
Range: 660nm

The KFA (Kitplanes For Africa) Safari is a tube-and-fabric, high-wing two-seater that's been designed with rough-field use in mind. In a world where price can be a big factor, the Safari has been designed to use cost effective materials and processes to create an aircraft that can be completed without breaking the bank. The wings can also be folded to help with hangarage.

While it looks Kitfox-esque, it's actually quite a bit bigger, so KFA recommend the Italian VZ turbo conversion which takes a standard 100hp Rotax 912ULS to 135hp. With an empty weight of 405kg, and a fuel capacity of 125 litres, the Safari can carry two crew each weighing 86kg, a hefty 37kg of baggage, and full fuel (90kg) and remain within its legal 'max gross'.

Graham Smith of Sprite Aviation led the approval process for the Safari in the UK. While he converted his own used 912ULS (around £5,200 plus VAT for the VZ conversion kit) he suggests that some builders might decide to buy a new VZ motor which costs about the same as a new 912ULS. Graham reckons frugal builders could complete a Safari for around £45-50k all in, which makes it one of the best value options for a new LAA aircraft. Buyers have certainly caught onto this, as he has sold seven kits now.

Contact www.spriteaviation.co.uk

Zenith CH 750/Cruzer

Kit starts: 3



Specifications

Seats: Two
Wingspan: 29ft 9in (9.1m)
Empty weight: 780lb (354kg)
Gross weight: 1,433lb (650kg)
Fuel capacity: 120ltr (with header tank)
Engine: Rotax 912ULS, UL Power 350

Stall speed: 34kt
Cruise speed: 103kt
Take-off roll: 107m
Landing roll: 107m
Range: 452 mi

The Zenith CH 750 STOL is an all-metal two-seater, with excellent STOL capability. Inspired by the popular STOL CH 701 design from Chris Heintz, the STOL CH 750 design incorporates all of the 701's amazing short-field capabilities, while maximising cabin size and load carrying capability. To quote Jonathan Porter from Zenith's UK agent Metal Seagulls, "It's a big plane, with a big cockpit and a big door."

The aircraft features fixed leading-edge slats for high lift, and full-span flaperons. Jonathan describes the CH 750 kit as easy to build, with matched-hole tooling allowing parts to be clecod together out of the box, and says UK 750 builders are typically completing aircraft in around one to two years.

The CH 750 Cruzer is a derivative of the CH 750 STOL, and described as the 'on-airport' version. Among detail changes to the tail surfaces, the Cruzer also uses a different airfoil wing supported by a single stream-lined strut, and has no leading edge slats.

Cost in the UK for a 750 Cruzer complete firewall-aft kit, is from £27k, which is ex-works from Metal Seagulls HQ in Haverfordwest. Add another £1k to that price if you'd like the 750 STOL. The most popular engine option with UK-builders is the 130hp UL Power 350.

Contact metalseagulls.biz

TL Sting S4

Kit starts: 3



One of only two composite kits that features in our list, the Sting S4's carbon airframe comes pre-finished in white, that might seem like a small point, will save a builder the additional cost of painting when the aircraft is complete. The low-wing, side-by-side two-seater can be powered by the Rotax 912ULS or 912iS. The tapered wings are detachable, glider-style.

The UK agent tells me the price is around £105k (plus vat) for a complete kit... but this is the same price as they can sell you a ready-to-fly BMAA-registered example with Garmin glass panel and autopilot. So the only question is, do you want to build or just go and fly...?

Contact stingaircraft.co.uk

Specs

Seats: Two

Wingspan: 27ft 6in (8.4m)

Empty weight: 297kg

Gross weight: 600kg

Fuel capacity: 75ltr

Engine: Rotax 912ULS, 912iS 100hp

Cruise speed: 146kt

Range: 809nm

Kitfox Mk-7 Super Sport

Kit starts: 3



The Kitfox has been on the LAA fleet since the 1990s in various forms as the design evolved and new models were released. While popularity of the aircraft waned a bit in the 2000s, the type has seen a resurgence thanks to the growth of interest in STOL flying, fuelled by YouTube pilots like Trent Palmer... Google him if you haven't seen his videos yet.

There's no UK agent, so you have to deal with the factory direct, and due to popularity, there's a bit of a wait for new orders. An airframe kit is around \$35k. One note though, if you decide you'd like the Series 7 STi version, then be aware that it's not currently LAA-approved.

Contact kitfoxaircraft.com

Specs

Seats: Two

Wingspan: 31ft (9.4m)

Empty weight: 340kg

Gross weight: 635kg

Fuel capacity: 102ltr

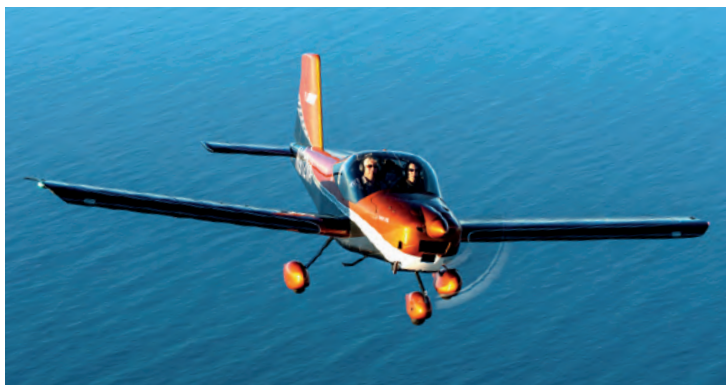
Engine: Rotax 912-ULS and 914-UL

Cruise speed: 100kt

Range: 600nm

Van's Aircraft RV-12iS

Kit starts: 3



Introduced in mid-2017, the RV-12iS was a revised version of the original RV-12. The -12iS was designed specifically to meet the US Light Sport Aircraft regulations, and for a 100hp sport aircraft, delivers some great numbers. With its 336kg empty weight, you can carry two 90kg crew, full fuel (75 litres), and still bring some baggage and not exceed max gross weight.

The -12's handling also retains all the RV magic that other aircraft in the range are known for. A VERY complete kit (just add paint!) is around \$91k.

Last but not least, if you're trying to save on hangar space, the -12's wings can be removed in five minutes.

Contact www.vansaircraft.com

Specs

Seats: Two

Wingspan: 25ft 9in (7.8m)

Empty weight: 336kg

Gross weight: 599kg

Fuel capacity: 75ltr

Engine: Rotax 912iS, 100hp

Cruise speed: 118kt

Range: 547nm

Lambert Mission M108

Kit starts: 3



The Mission M108 is available as a complete kit, the basic price for which starts at €61,500 ex.VAT. For that you get a complete package including airframe, systems, powerplant and propeller. All fuselage welding is done and powder coated, and the wing structure is partially assembled. Once the airframe is complete, it's time to use your fabric-covering skills.

An advanced kit option has the builder attend eight days of intensive training at the Mission Builder Centre in Belgium, and if you fancy more help, a build assist programme is also available where the builder must attend a further two weeks at the Builder Centre.

Contact www.flym108.co.uk

Specs

Seats: Two

Wingspan: 31ft 4in (9.6m)

Empty weight: 375kg

Gross weight: 600kg

Fuel capacity: 78ltr (110ltr opt)

Engine: Rotax 912iS, 100hp

Cruise speed: 95kt

Range: 450 mi (680nm opt)

Van's Aircraft RV-10

Kit starts: 3



With a huge useful load, phenomenal short field performance, and an exceptional turn of speed, the RV-10 delivers the sort of capability that will cost over £600K if you went looking for similar performance in the certified new aircraft world, and even then you'd struggle to get it all...

This is a big homebuilding project to take on, both in the physical and financial sense - a standard kit is around \$61k, while a quickbuild is \$81k. Engine and prop alone will add another \$66k. That said, those who have finished and flown their RV-10s all speak incredibly highly of them, and completed examples very rarely come up for sale.

Contact www.vansaircraft.com

Specs

Seats: Four

Wingspan: 31ft 9in (9.6m)

Empty weight: 689kg

Gross weight: 1,224kg

Fuel capacity: 227ltr

Engine: Lycoming O-540 260hp

Cruise speed: 175kt

Range: 868nm

Europa NG

Kit starts: 2



Specs

Seats: Two

Wingspan: 27ft (8.2m)

Empty weight: 242kg

Gross weight: 620kg

Fuel capacity: 68ltr (105 opt)

Engine: Rotax 912ULS, 100hp

Cruise speed: 140kt

While it may not be one of the most popular choices of LAA kit-builders any more, the Europa – Classic, XS and NG variants still holds the top spot for as most numerous LAA type – there's 372 on the LAA books (projects/completed aircraft). A premoulded kit, the NG is available in either monowheel or trigear format. Kit price is around £40k, while the Europa XS LWI (Motorglider) comes in around £45k. Builder needs to add engine, prop, instruments, upholstery and paint (prices plus VAT).

Contact www.europa-aircraft.com

Sherwood Ranger

Kit starts: 2



Specs

Seats: Two

Wingspan: 26ft (7.9m)

Empty weight: 182kg

Gross weight: 450kg

Fuel capacity: 43ltr

Engine: DMotor. Rotax 582 or Jabiru 2200

Cruise speed: 70kt

The only option here that offers that 'wind-in-your-hair' open-cockpit experience, the Sherwood Ranger from The Light Aircraft Company is also the only biplane. Despite its old-school vibe, it's a thoroughly modern kit. Available in ST (Microlight) or XP variants, they vary in wing span (7.92m vs 7m), while having the same MTOW, meaning the XP has increased wing loading and a higher stall speed.

The basic airframe kit is around £16k excluding VAT.

Contact www.g-tlac.com

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