



Aircraft ownership for under £20K

Brian Hope looks at aircraft ownership. Part One reviews what is on offer, and also considers Group ownership...

Pictures by **Ed Hicks, Neil Wilson** and **Nigel Hitchman**

I wrote a piece for *FLYER's Learn to Fly Guide* earlier this year, which I opened with the premise that when we learn to drive, we quite naturally buy a car, if not immediately then pretty soon after. Fact is, it is a logical progression. Why then, when we have invested so much time, commitment and money into learning to fly, does the same logic not apply?

OK, that's obviously more than a little glib, I'll admit that. We all have responsibilities to our families that mean we can't only think of ourselves when it comes to committing what, for most of us, are far from unlimited finances, but the fact is that a good many pilots never seriously consider ownership, because if they did, they would realise that it really isn't as far-fetched a dream as they might think.

Today we're going to look at what you can do with

Above The Aeronca Chief is one of many delightful Classics available for well under £20K.

£20K, and before you write that off as unattainable, more importantly that includes what you can do for a damn site less than that. So, unless you're the kind of person that will only settle for owning the latest fully loaded mean machine outright or forget it, then read on. You might be surprised by what is achievable when it comes to getting more bang for your aviation buck with a bit of effort and a little compromise.

You've already taken the first step, you're either a member of the LAA or somebody has kindly passed on our monthly magazine, so you know we exist and that we are passionate about helping ordinary people like you fly affordably. I say again, that's not a pipe dream, I certainly consider that I, and many of my friends are living proof that it is possible, as indeed are thousands of LAA members.

So, we have a choice of outright ownership or shared ownership. Clearly sharing an aeroplane is a much more affordable option, both for purchase of – as well as operation of – any aircraft. I asked Duncan Campbell, who has a fifth share in a Luscombe Silvaire, if he would kindly pen a few words about how they operate, and later in the article you can read how that works for them. From the Association's data, we know that a growing number of members are sharing aircraft, and though the financial implications are a major reason for that, it is certainly not the only advantage. And consider that if you can afford to spend our full £20K budget, a group of three or four people doing the same is into affording examples of pretty well anything on the LAA fleet.

Let's get started!

OK, enough of the waffle. Let's look at some aeroplanes. I have decided to confine our market to two-seaters, which are by far the most popular choice among members and, not surprisingly, by far the most prevalent types on the fleet. Of those, the majority within the £20 bracket are orphan types, factory-built aircraft that no longer have manufacturer backup so have come under the LAA's wing for continuing airworthiness support. Basically, other than deregulated microlights, all aircraft in the UK must have a responsible entity to oversee an airworthiness regime for them. And many of these orphans are of American extraction.

The Aeronca Chief and Champ

Personally, I think the Aeronca is one of the best kept secrets in aviation. It comes in two forms, the tandem-seated Champ, and the side by side Chief. The Chief entered the US market, in the late 1930s, and the Champ in 1940, long enough after the ubiquitous Piper Cub to benefit from a number of improvements, which make them a little faster and somewhat more refined. They are, however, more affordable than a Cub, most falling into the low teens and rarely exceeding our budget. They follow the classic steel tube fuselage, strutted high skeletal alloy wing, the whole 'covered in fabric' format that depicts affordable American mass-produced light aeroplanes of the period. The original company folded in 1951 although the Champ, and variants of it, has enjoyed more than one arising from the ashes over the years.

Aeronca Chief



Piper Cub

Realistically, you'll be lucky to get much of a Cub for £20K. The aeroplane is something of an enigma and I guess it comes down to whether you buy into its historical aspects. It has undoubted charm and was the first success of this breed of machine, going into production as the J-2 in 1930, as the J-3 in 1938 and the L-4 military 'Grasshopper' in 1940. It is also the most plentiful, with

20,000-plus being produced. Practically all of its contemporaries outshine it as a basic flying machine, but just as many of us have a thing about old motorbikes and cars, the Cub enjoys an almost messianic following, and that is unfortunately reflected in their prices. You might be lucky though...

Piper Cub



The Vagabond

After the end of the war, many of the US aircraft factories were hit with a huge slump in sales, and the Vagabond was Piper's answer to producing an affordable aeroplane for former airmen and new flyers to enjoy civilian flying. They used a number of existing Cub components to produce this basic, side by side machine of which 600 were built over two years, 1948/49, before the type was developed into the Clipper, Pacer, Tri-Pacer etc. The PA-15 had the Lycoming 65hp engine and the -17 the Continental A-65 plus a few refinements, such as dual controls, but most examples now feature these upgrades. Expect to pay mid-teens.

Piper Vagabond



The Taylorcraft

The Taylorcraft is the last of this American genre I'll mention, and again it is a very 'Cub like' machine in terms of general layout, other than it is a side by side. Like the Aeronca Chief, it features yokes rather than sticks, which was generally the European preference of the period, and like the Aeronca it is also more refined than the Cub. Low to mid-teens and up.

All of the above are reasonably available, as there are numbers of them in the UK. Looking at them purely as machines, they are all much of a muchness in terms of ownership (that's me done at the next Aeronca/Cub/Taylorcraft fly-in!). They perform in the 65-80kt regime, generally on Continental 65hp engines that use around 16 litres per hour, have relatively sedate climb rates and very reasonable strip performance. They are mechanically simple, like most aircraft of the period, in fact they're pretty agricultural, as a general rule not having electrical systems and the facility of an electric starter. They don't even have flaps either, relying on their generous wing

areas to provide good slow flight characteristics. But they are tremendous fun to fly, and in aircraft terms low cost to operate because although some parts might be difficult to obtain, what isn't easily available can be made from readily sourced materials. There are also active type clubs and/or fellow enthusiastic owners to help and advise you.



The Luscombe 8 Silvaire

Although also an American design, the Luscombe Silvaire was something of a peek into the future when it came onto the scene in 1937. Don Luscombe produced the first seriously successful light aircraft to feature an all-aluminium, monocoque airframe, albeit that early examples featured fabric covered wings. Almost 6,000 were built before production ceased in 1949, although as is the way with many old aviation companies, various enthusiastic attempts to restart production have produced a few examples but have ultimately failed.

Again, there is a helpful and friendly UK type club, there are several expert repairers and most parts are available. Power is courtesy of either a 65, 85 or 90hp Continental, the 90s featuring electrical starters. The 65s cruise at night on 100mph and the 90s up to 100kts.



The Cessna 120

The Cessna C120 is pretty much ditto the above, except for the insight in its design. The 120 and its 'deluxe' variant, the 140, went into production in 1946 and is considered by many to be a Luscombe copy, other than they featured Cessna's sprung steel main gear. The follow-on tricycle geared C150 superseded them in 1950, by which time nearly 7,000 had been produced. Only the C120 is an LAA aeroplane, the 140 remains on a CoA. No, I don't get it either! They feature 85 and 90hp Continental powerplants, and like the Luscombes run from the mid-teens up, with exceptional examples more than busting our £20K budget.



The European Scene

In Europe, wooden, low-wing airframes were far more prevalent than the US response to light aircraft design. Apart from, that is, the British Auster, but that was initially a spin-off from the American Taylorcraft anyway.

Austers

Austers are a magazine article on their own and enjoy a strong following and an active type club. There are numerous models, some available in the sub £20K bracket, but at the risk of alienating myself from the Auster community, I would not recommend the type for a first foray into outright ownership unless it had a Continental engine, and they are few and far between in the UK. The main problem is that the majority of them have Cirrus or DH Gypsy engines, and they are mercilessly expensive to overhaul.

If you are buying into a group, and that group has sound mechanically capable members it's a different matter, by all means go for it because the Auster is a very charismatic aircraft that holds a place in British hearts akin to the Piper Cub, but for an inexperienced sole owner they can be a financially risky enterprise. There are a few Lycoming engine examples, albeit the O-290 type engine that has been out of production for a while. These are perhaps a safer bet, but mid- to late-teens on up seems to be the sort of money that Austers start at, so for our budget you need to be particularly careful.



Jodels

If you are talking classic post-war European two-seater, then you are talking Jodel. A French type that flew for the first time as a single-seater in 1948 and its direct descendants are still being manufactured today as the DR400/500 Robin. Our budget will buy us a two-seat D11 series machine, pretty much all of which fall into the £10k to £20K bracket. They were built by two main French factories, SAN as the D112 and D117, and Wassmer as the D112 and D120 in the late fifties to early sixties, but there are a fair number of homebuilt examples around as well. The various models have subtle differences but ostensibly all have the same core airframe. The 112s

have 65hp and the rest 90hp Continentals, but some 112s have been upgraded engine-wise. Good load capability, nice handling and good field performance are their merits, but the cons are that they are a bit on the snug side, particularly for taller or long-legged people. There is a very good virtual club for all Jodels and Robins.

Jodel



The Condor

The Druine D60 Condor is also a French design although practically all those in the UK were British built by Rollasons as the D62 Condor in Croydon in the 1960s. Predominantly powered by the 100hp Continental O-200, it has a wider cabin than the Jodel and features flaps in all but a few early examples. Performance is similar to the Jodel, although strip performance is not as good. Prices are generally in the £12-16K range.

Condor



Piel Emeraude

The Emeraude, like the Condor is somewhat scarcer than many of the types mentioned thus far but they do come up for sale occasionally. Another all wood low winger, they have been factory produced in smallish numbers and as a homebuilt. The type went on to spawn the highly regarded aerobatic Mudry CAP10 aerobatic trainer, which last year was touted at AERO as returning to production. Chunkier than the Jodels, again it is not as sprightly out of a short strip, but they do feature flaps and are generally O-200 powered, although there are a handful with the long out of production Potez engine.

Piper Emeraude



The three wooden types mentioned represent the most numerous of the breed, but to them can be added the Yves Gardan designed, SIPA S90, and its slightly smaller sibling, the Minicab. Both designs date from the late 1940s and enjoyed limited production, the latter also being quite popular as a homebuilt.

Wooden aeroplanes are generally straightforward to repair, aviation approved glue, wood and ply being relatively easy to source, and although some parts for the A65s are becoming rarer, C90 and O-200 engine spares are generally readily available.

The Homebuilts

Rans S6 Coyote

Sub £20K two-seat homebuilts tend to be either fairly limited in availability, or at the lightweight end of the market. Of the more numerous varieties, the Rans S6 Coyote can be had from about £8K up with a two-stroke Rotax engine, maybe £13K up with a Jabiru and a little more with a Rotax 912. Their construction is a steel tube forward fuselage and aluminium tube rear, empennage and wing structure, all covered in pull-on 'socks' of microlight style synthetic sailcloth. The fact that they can also be had with a tricycle undercarriage is also appealing to many. Later models will certainly break our budget, the final models featuring conventional fabric covering, 100hp Rotax 912S motors and much more refined cockpits and instrumentation. Although now out of production, the type remains well-supported by the factory.

Rans S6 Coyote



The Kitfox

It was the Kitfox and the very similar Avid Flyer that started the kit aircraft revolution in the UK, being competitively priced and pretty well 'an aeroplane in a box' that only needed putting together. Early models, Mk I and II examples were two stroke Rotax powered and quite skittish for pilots used to the typical club trainer. Later III and especially IV and onwards are much more refined and generally have Rotax 912 four stroke engines, which is reflected in their resale value. Nonetheless, a Mk IV might come within the budget, and earlier marks can sometimes be had from under £10K. Steel tube fuselage and empennage, alloy tube wing and fabric covered. Available as a taildragger or a trike and featuring a foldable wing. The Rotax 912 can also be very frugal if you don't cane it.

Kitfox



Jabiru

Sneaking in under the £20K threshold is the two seat Jabiru, an all composite two-seater with its own manufacture four stroke engine. They come solely as trikes but in both the microlight and SEP/SSEA variants, although some of the non-microlights are also restricted to 450kg, which limits their load carrying capability somewhat. They're a nice little aeroplane but you need to treat the engine with a degree of empathy. They perform very well, a friend of mine used to throttle his back and burn about 12 litres an hour at 90kt.

OK, I'm aware that words and space are running away, so I think we're going to have to have a Part Two to do this subject justice. The above should give you some ideas on what is out there, though of course, this list isn't exhaustive, but it does cover most of the more numerous types in the sub £20K price range.

Next month we can take a look at what you should do once you have convinced yourself that you want to own, or part own an aircraft. Don't start thinking too deeply beyond that at the moment, it is too easy to talk yourself out of it before you have even done any research or properly understand what is involved. I reckon you need to tackle becoming an aircraft owner by adopting an adage my dear old mum used to use: Don't wonder how you are going to do it, do it and wonder how you did it. That is exactly the attitude I adopted when I bought my first Jodel, and I have never regretted it for a moment.

I'll leave you with Duncan's tale about group ownership, the ultimate low-cost solution. If his figures don't convince you, nothing will!

In praise of group therapy...

By Duncan Campbell

I suspect that, like many of us, my flying training started in a club on a 'proper' airfield. For some years after, armed with PPL and assorted ratings, my pilot buddies and I struck out across the UK and to the furthest reaches of France in rented aircraft. Friendships I made back then endure to this day.

You'll have sensed a 'but' coming, and you'd be right. I was in a rut. Rental costs had increased, landing fees and fuel costs were climbing, and my disposable income seemed to be heading in the opposite direction. I was flying less, and I could see erstwhile club colleagues falling by the wayside and turning to other pursuits. It also rankled that I could often not hire my favourite mount (never let anyone tell you that all PA28s are the same!), and routinely had to clear the cockpit of discarded sweet wrappers, tissues and bits of broken pen. I also had a yearning to have a go at taildragger flying, a legacy of childhood on an RAF base where an aeroplane with a wheel at the front was a rare sighting.

Some months later, taildragger differences training and 10 solo tailwheel hours under my belt, I started looking for a way forward. Running my own aeroplane from my own sun-soaked strip was out of the financial question, so I scoured the ads in the various aviation publications, I asked questions at my local Strut and I

Jabiru





wrote to anyone I could think of who might have known of an aeroplane or a pilot or a group desperate enough to want a partner. Then, in June 2009, I was invited to join four pilots and their 1941 Luscombe, G-AGMI, operating on a Permit out of a farm strip in Sussex.

I could cut this tale short right now by saying that this move cut my flying costs immediately, gave access to increased learning opportunities and that (no exaggeration here) this is when I really started to learn how to fly. But this would be to skim over what continues to be a very rich and affordable experience, and I think it deserves a little more detail. I joined when the group was preparing Mike India for her annual permit inspection. I had never seen an aeroplane broken down into so many pieces – I had very little experience of aeroplane care and attention but being a dab hand at chipping insect corpses off PA28 wing leading edges, I got to sit on the grass and clean the prop.

Routine maintenance

Looking back now, some 11 years on, I realise that there is very little in the way of aeroplane fettling that I have not been involved in, and I am not just talking about routine maintenance. The wings, tail, fin, undercarriage and engine have all been off and delved into for one reason or another. Before this gets too alarming, I should say that our beautiful Luscombe will be 80 on her next birthday. Although I am not yet that far advanced chronologically, I seem to require fairly frequent bodywork, skeletal and plumbing maintenance myself, so I don't begrudge the time we spend on Mike India.

Once upon a time, this depth of mechanical involvement would have seemed a frightening prospect, but the guidance of our inspector, and the group working parties have made it a cost-saving, gentle and enjoyable learning experience for us all. I even attended an LAA metal working course! I also believe that the deeper understanding of the workings has made me much more aware of the demands my control inputs make on the aeroplane.

We are five very different people, bound by the love of flying, and simple online booking and financial systems take away much of the potential for stress. Booking clashes are unknown. We each pay a standing contribution of £70 a month to cover hangarage, insurance and permit renewal costs. This also leaves a little towards our maintenance fund. When we fly, we

Above The Luscombe Silvaire of which Duncan has owned a fifth share for 11 years.

charge ourselves £40 an hour, less the cost of fuel we put in. Roughly £15 of that £40 also goes into our maintenance fund. In the past 11 years, only one small call for extra cash has had to be made. A monthly Excel spreadsheet shows us where we are and who owes what.

That's the boring bit over – almost. Now the maths. I know that if I were to hire a PA28 for one hour a month locally, it would cost me £160 plus £30 to land back... plus VAT at 20%, giving an outlay of £228. If I were to fly our own aeroplane for just one hour a month, it would cost me £110, and if I flew five hours in that month, the hourly cost to me would be £54, a considerable saving whichever way you look at it!

The benefits of being in a group extend way beyond the obvious one of cost. A group can operate from anywhere, but we choose to base our aeroplane on a farm strip in a hangar with eight other residents. We have the use of a concrete floor, power, lighting, water and a fine array of hoists, jacks and general tools and equipment, plus tea and biscuits, all willingly shared, making maintenance easy.

Our Luscombe can fly on either avgas or mogas. We choose to fly on mogas, but we could, if we wished, join the hangar avgas syndicate.

Choosing a farm strip also necessitates the general honing of skills. With only air-to-air communication, non-radio aircraft about and nearby terrestrial neighbours, observation, consideration and general airmanship of a high order are essential. Our runways, surrounded by natural and man-made features that give every possible permutation of crosswind, curl-over and wind-shear, require good airspeed management skills. We lose the strip in the winter but, on the upside, we are open from dawn to dusk and pay no landing fees.

We try to play to our strengths within the group. The ever-unpopular accountancy role currently falls to Richard. Chris keeps the airframe and logbooks up to date and oversees our Tailored Maintenance Schedule. Andy, being a flying instructor, is our handy onboard go-to resource for biennials and skills brush-up. Tony brings added value through his membership of a Chipmunk syndicate. As for me, the longest standing member of the group, I have the oversight of everything, deal with hangar liaison for the group and, being local, do the lion's share of ongoing titivating and in-depth cleaning.

The result? A beautiful vintage aircraft devoid of insect carcasses and tissues... and five very happy custodians. ■