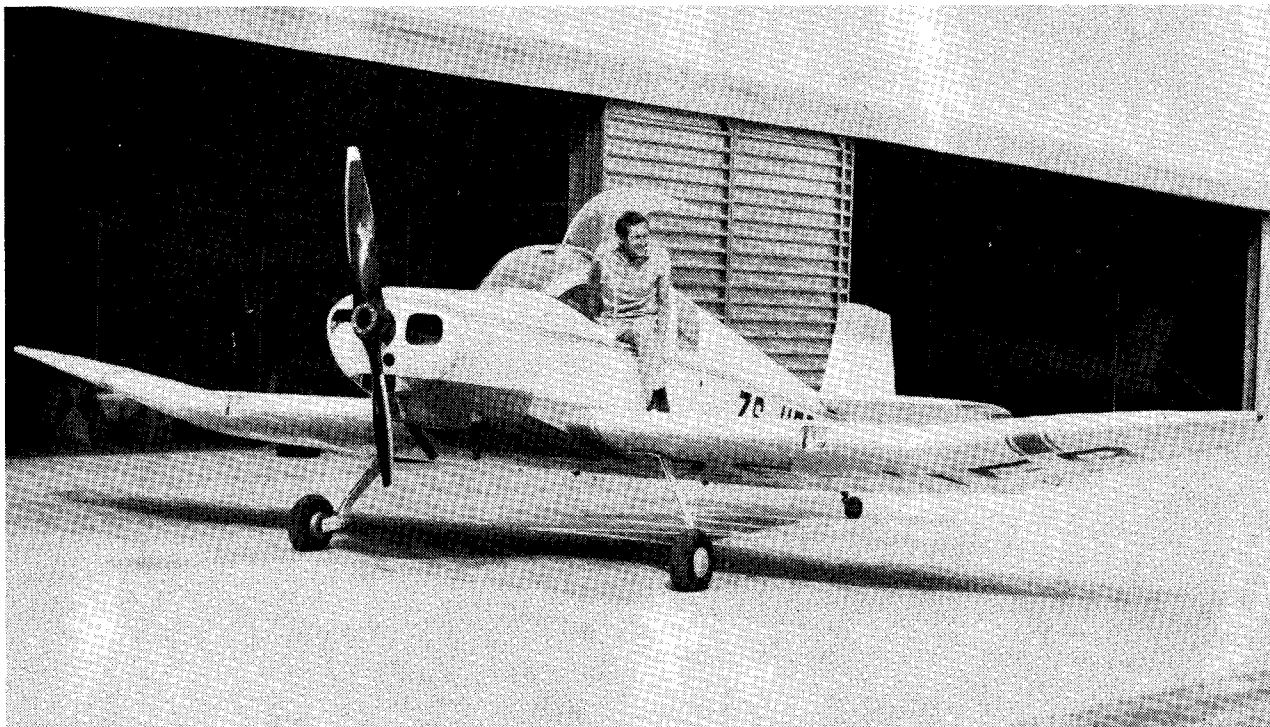


HOMEBUILT

JOURNAL OF THE EXPERIMENTAL AIRCRAFT ASSOCIATION OF SOUTHERN AFRICA



VOLUME 1 - NUMBER 3

MARCH 1973

ON THE COVER

The expression of pleasure on the face of a homebuilder after a successful first flight has been known to remain fixed for up to three weeks! John Buchan has every reason to look pleased as he climbs out of his Jodel F11 after the test flight. Powered by a Lycoming 125 h.p. motor the rate of climb is a healthy 1300 f.p.m. and the cruising speed is 130 m.p.h. With no workshop of his own, and building in his bedroom and then in the basement car-park, John is to be saluted for his determination.

STATEMENT OF POLICY

The Experimental Aircraft Association of Southern Africa is a body representing individuals involved in the construction and operation of homebuilt aircraft and the restoration of antique aircraft.

Subscriptions of R4,00 per year include affiliated membership of the Aero Club of South Africa and quarterly issues of "Homebuilt".

Editor: S. Crutchley

Photographic advisor: T. Wills

Correspondence

All correspondence to the Association should be addressed as follows:

The Secretary, E.A.A. of S.A.,
21 Charles Boniface Rd.,
Bisley,
PIETERMARITZBURG.
Natal.

EDITORIAL

The year has got off to a good start with reports of first-flights coming in from Johannesburg, Port Elizabeth and Pietermaritzburg. In fact there were two first-flights on the same day in Pietermaritzburg, which was no doubt a unique occurrence for the homebuilding movement in this country. Our congratulations go to these members on seeing the job through, and may they have very many happy hours of flying in their homebuilts. Well done Fanie, Hoekie, Owen and John.

Unfortunately there have also been some accidents and certain members have suffered the misfortune of seeing their homebuilts rather badly damaged. To them we offer our sympathy and we trust we shall see their machines in the air again in due course.

The committee would like to extend a special word of thanks to Billy Human and Richard Poppelreuter for their generous donations to Association funds. Their gesture is especially appreciated at this time when financial matters are a source of worry.

It is never too soon to start planning for the Annual Fly-In and this is in fact now underway. The dates to remember are Saturday 7th July to Monday 9th July, and the venue will

once again be Oribi Aerodrome, Pietermaritzburg. We can look forward to seeing the biggest gathering of homebuilt aircraft ever to take place in Africa. Don't miss it! Further details will be published in the next magazine.

Ruth Hobbs reports that the Directory of Homebuilts is proving popular. "Tosh" Sillis, who is a discerning buyer, took five copies! For those members who have not yet ordered one, Ruth's address is 77 Rautenbach St., Carletonville, Transvaal. The price is 50 cents for each copy, which consists of seven pages of names and addresses as well as projects in progress. Contact with someone else building a similar aircraft can be of tremendous value and purchase of the Directory is strongly recommended.

The swap/sale column of the magazine has passed away quietly through lack of support. Members are reminded that items such as aircraft spares, components and plans may be advertised free of charge, and even if the swap or sale does not help the advertiser very much, it may well help a fellow homebuilder out of a predicament. Let's try to get it going again.

Members in the Johannesburg area have arranged a fly-in of homebuilts and classic aircraft to be held at Heidelberg airfield. The date is 17th March, starting at 10.00 a.m. and finishing with a braai and party in the evening. All members within range are invited, and, weather permitting, a grand day should be had by all.

There will be an entrance fee in aid of Chapter funds.

LETTER TO THE EDITOR

P.O. Box 4009,
JOHANNESBURG.

Dear Editor,

I enclose your form in respect of E.A.A. of S.A. membership duly completed.

I thank you for the latest copy of "Homebuilt" and I would like to compliment you and your associates on the quality of the magazine. One comment I noticed particularly is that there is still difficulty in obtaining building materials for aircraft.

In this regard I would like to make it known that I am in a position to import all aircraft kits, parts, spares and materials through the firm A.C. Rowe which has acquired permits for this purpose.

We will be pleased to assist any of our members who require this service at a very reasonable cost.

Any enquiries may be directed to me at the above address.

Sincerely,
Jack Ashbury.

TAMMY'S STORY

by Bill Keil

"Tammy" is the name of a "Pitts Special"

Named after "Woody" Woods' eldest grand-daughter, the story of this brightly coloured pipedream that became a reality goes like this . . .

"Grand Central Tower, this is Uniform Sierra Alpha. I'd like to make one more fast taxi-run before attempting a take-off."

"Uniform Sierra Alpha—you're clear for taxi-run on runway 35."

Twelve seconds later—"I'm airborne and climbing! "

Well that's how it flew for the first time. 15.40 Zulu time on October 1st, 1972, the little red "Pitts Special" rocketed with astonishing acceleration into a clear evening sky. It flew! — and flew well. Only very minor adjustments were required for subsequent flights.

It is difficult to express in words the deep sense of delight, satisfaction, relief, nervous-tension, pride, and even astonishment—all rolled into one incredible fifteen-minute experience—that culminates three long years of striving and perseverance. Periods of frustrating disappointment and peaks of high enthusiasm that anyone who has completed a "homebuilt" project will know so well.

It all started back in 1968, at Rockford, Illinois, U.S.A. when "Woody" Woods watched the annual E.A.A. Fly-in. The sporty little "Pitts Specials" stole the show and discussions

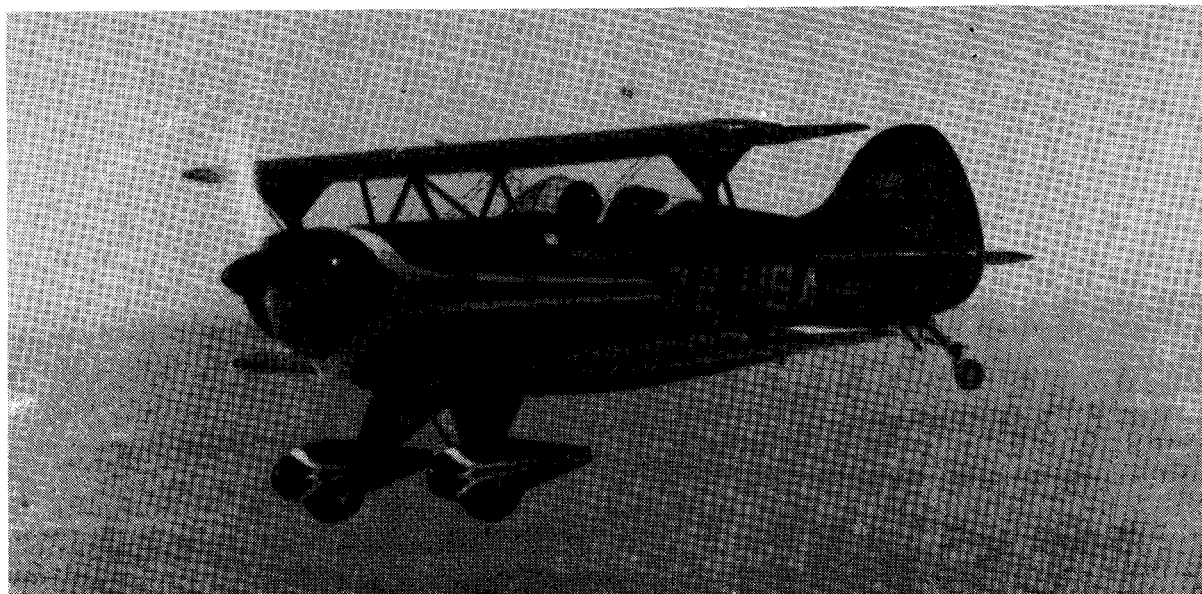
with the people who flew them; Marion Cole, Bob Heuer, "Pa" Pitts himself and others set that little bug gnawing away at "Woody's" mind.

It wasn't long before plans were ordered and evenings spent in long study of the profusion of complex drawings. Much of it was disconcerting but most of it was clear and concise. And exciting.

Perhaps the most important item you need when starting a homebuilt project is an understanding wife. It's a dead cert you won't make it beyond square-one without this. Happily this was no problem in the Woods' household and indeed, as the project took shape, the entire family, right down to toddler grand-children became engrossed in "Woody's plane".

Logically, some sort of space was required and an extension to the swimming-pool change-room was started. A large 18 foot push-up door was included with a view to the happy day when the big bird would be wheeled out of its nest. Good lighting was added, since much of the work would be done at night. Broad sturdy work-benches, with ample shelving space, and, of course, several electrical power plugs were provided. The roof was thatched and this proved a blessing,—cool in summer and providing a wealth of strong roof beams from which many of the completed components were to hang over the months and years ahead.

It was as well that this workshop was pleasantly set in a garden, beneath a large shady blue-gum tree, for as the project developed, it became the focal point of the Woods household. Visitors, friends and family became accustomed to sitting around the open door whilst conversation carried on amidst the punctuations of hammering, sawing, buzzing and grinding.



Tammy in Flight

The pool filter became clogged, the tennis-court needed painting, golf handicaps deteriorated appallingly, but the "Pitts" grew, month by month.

Looking back over the years, the kaleidoscope of pitfalls and progress highlights a variety of mileposts. The day the undercarriage was first attached and the wheels slipped onto the axles. For the first time, the bird sat on its own two legs, and it was now possible to climb into that gap in the framework which would eventually become the cockpit. This always brings out the "Walter-Mitty" in every homebuilder and naturally, the very next step was to install a seat so that one might sit in comfort and imagine the roar of the engine and the whistle of the bracing-wires as the wisps of clouds flick past the prop.

The long tedious hours of cover-stripping the wing-ribs and then the covering with "Dacron".

The exacting tedium of rib-stitching every inch and the sore fingers that came with the infernal sein-knot that had to be tied at every carefully spaced stitch.

The astonishment at the high prices quoted for painting the aeroplane, and the apprehension in the decision to tackle this part at home;—then the delight at finding that spray-painting isn't that difficult after all, and the excellent results that could be achieved with a little cunning.

The aching arms and back and the frozen fingers that came from hours and hours of rubbing down paintwork in mid-winter.

The fun in designing the final colour-scheme and the exasperation in the detailed laying of miles of masking tape to achieve what was thought to be a simple colour combination.

The steady stream of visitors to the workshop, some just to gaze and admire, some to help, many to advise.

Perhaps, above all, the burning enthusiasm which builds up towards the end of the job when one recognises that you are now in the final stages of achievement. The almost feverish desire to complete the job, yet the overriding anxiety to ensure that nothing is left unchecked and rechecked.

At last the transportation to the airfield, and getting the bird through those gates—like most things that worry you—they turn out to be less formidable once tackled.

The ride to the airfield turned out to be a cavalcade that would have done credit to the President.

Talking with "Woody", now that the "Pitts" has done some forty hours of flying, his comments are, we hope, typical of what we all feel in the E.A.A. "What a tremendous experience" he said when asked about his building project. Asked if he had any special advice for the homebuilder, his remark echoes the advice he took from "Pa" Pitts—"Measure, twice,—cut once."

And there is that far-off look in his eye which the discerning E.A.A. man can recognise as the sign of another building job—maybe a "Two-Pitts" family! !

WHAT TO BUILD ...?

by Ian Parker

Everyone who intends building an aeroplane will be faced with this rather agonising decision. The results of a wrong decision are usually nothing more than a pile of worthless bits and pieces.

There are literally hundreds of widely differing designs, utilising different basic materials and varying basic configurations, all with their own relative advantages and disadvantages. The ultimate decision (often based on purely subjective considerations) is, of course, the builder's—does he see himself as the fighter ace, zooming through the sky doing victory rolls with gay abandon; or a Snoopy, complete with helmet, goggles and scarf, in his SE 5 duelling with the Red Baron; or the aerobatic fiend who is never happier than when hanging inverted in his straps; or the explorer in his comfortable, well-equipped aircraft setting off for far-away places; or the fun flyer bumbling along just for the sheer joy of flying.

All homebuilders are essentially young at heart, but the flights of fancy must be tempered by sober, practical considerations or the aspiring builder/aviator will never (literally and figuratively) get off the ground.

A basic "check-list" is suggested, to examine the range of possibilities critically and objectively, to narrow the choice down to rather more manageable proportions.

There are three broad categories of basic construction—
the *all-metal* aircraft—such as the Jeanies Teenie and the Pazmany;
the *all-wood* aircraft—such as the Jodel and the Smith Termite; and
the *wood wing, tubular steel* fuselage aircraft—such as the E.A.A. Biplane and the Wittman Tailwind.

The plastics, fibreglass and carbon-fibre categories are not considered here.

The category of construction should be determined by the builder's natural affinity for different materials, the availability of these materials and the equipment and any special skills that may be involved in working with these materials.

All aircraft utilise steel fittings (usually 4130 grade)—for wing-root fittings, bellcranks and the like. This very tough steel must be cut (on a bandsaw, if you're lucky!), filed, welded and polished, so be prepared for this whatever you build.

All-metal aircraft

Alclad sheet (2024 grade) seems to be fairly readily available (at a price!) A major problem does exist in that some designs call for 'one-off' extrusions (e.g. for main spars) and these are often difficult (and expensive), if not impossible, to obtain locally.

Equipment need not be sophisticated—and hand shear, tinsnips, hand and power drills, a pop-riveter, riveting mandrels and buckling bars, and a small selection of steel and plastic hammers, should suffice. Of course a guillotine, bending brake and pneumatic drill and riveter would be very nice . . . !

As far as actual designs are concerned, unless you are an experienced, well-equipped metal worker, forget about those Thorp T-18's, Midget Mustangs and Pazmanies—these are really not much different (construction and work-wise) from production aircraft such as the Cessna 150. If you don't believe this, ask someone who is building (or trying to build) one of these machines. This leaves one with something of the Jeanies Teenie (preferably Mark II) type—a simple, quite attractive and practical design for the confirmed tin-basher.

All-wood aircraft

Unfortunately grade A spruce seems to become more difficult to obtain and more expensive. The writer found the best way was to secure an import permit and get spruce direct from the U.K. or the States. Some timber merchants carry a stock of quite reasonable spruce which is perfectly acceptable for aircraft construction other than for spares and longerons.

Equipment needed for wooden aircraft construction is fairly elementary—basic woodworking tools plus a power sawbench.

A radial-arm saw, bandsaw and planer would be welcome additions.

Wooden aircraft can be grouped broadly as follows:

1. *Low, one-piece cantilever wing.* Probably the best examples of this category are the Jodel models ranging

upward from the single-seat D9, through the multi-seat F12. This is a straightforward, robust design, with a minimum of metal fittings, and with thousands of hours of flying on the design. One thing—you do need space to build that wing.

2. *Low, two piece cantilever wing.* A very successful design is the Rollason Beta. The main advantage here is that far less building (and ultimately hangar)-space is required. The spar joints need very careful fabrication and fitting, though.
3. *Low, two-piece strut or wire-braced wing.* Two good examples, are respectively, the Volksplane and the Fly-Baby. The main advantage is that a braced wing with solid spars is easier and less critical to construct than a cantilever wing with build-up spars and leading-edge plywood D-box. The wings can also be folded quite easily. Rather more metal fittings are involved but these are not as critical as those on a two-piece cantilever wing.
4. *High, two-piece strut or wire braced wing.* Two examples are, respectively, the Smith Termite and the Flaglor Skyscooter. The necessary cabane strutting does involve more work than were the aeroplane a low wing, but high or low wing is really a matter of personal preference.
5. *Strut- or wire-braced biplane.* Examples are, respectively, the Mong Sport and the Currie Wot. These are for the Snoopy/Red Baron brigade! The main disadvantage is the extra work and cost of a second pair of wings some people are devils for punishment, though.

Wooden wing, steel tube fuselage

Only the fuselage construction need be mentioned here. The main advantage is the ease and speed of construction—a Cassutt being built in Durban had the entire fuselage frame completed in less than a week. The disadvantages are cost (in the region of R1,00 per foot of tubing) and the difficulty of obtaining the correct diameter and wall thickness. Finding an obliging certified welder can also be a problem.

Other considerations

Other major considerations are whether an aero engine (with the problem of cost, spares, etc.) or converted motor car engine should be used or is specified; and the problem of all-up weight. Many small single-place aircraft have a useful load of 200–220 lb. Of this, 40–50 lb. are fuel and oil, and this doesn't leave much for the pilot.

Conclusions

This article is by no means comprehensive but will, I hope, provide a rational basis for choosing a design. Think very carefully and weigh up all the pro's and con's before choosing. Otherwise you may well be a disillusioned, would-have-been, homebuilder.

'N ONDERVINDING BO DIE WOLKE

deur

Toy van Rensburg



Dit het alles seepglad en voor die wind begin met geen aanduiding van katastrofe wat kon opduik nie.

Ek het 'n lang vlug met my Mini Ace beplan en sou kortpad kies oor bergagtige gebied, maar ek het al baie keer daaroor gevlieg en die berge was tog nie baie hoog nie.

Vroeg die oggend het ek die Mini Ace vol brandstof gemaak en alles deurgekyk voordat ek opstyg van Clocolan en koers kies na die suide.

Die vorige week het dit baie gereen, maar soos ek die weer hier ken het alle tekens daarop gedui dat dit aan die opklaar was. Dit was die more nog bewolk maar dit was vol gate met tekens van opklaar.

Ek het geklim tot ses-vyf en was toe tussen twee lae wolke. Die boonste laag het op die bergtoppe gelê en altwee lae was vol gate. Geen probleme, en ek het verder gevlieg.

Die boonste laag miswolke, wat op die berge lê, het my genoodsaak om draaie te vlieg om weg te bly van die hange. Ek het gemerk dat die twee lae wolke nie so dik was nie en die boonste laag was in elk geval nie baie hoog nie. Ek besluit toe dat dit mos makliker sou wees om nog 'n duisend voet of wat te styg, dan kon ek mos bo oor die spulletjie vlieg. Ek lig toe die Mini Ace se neus deur 'n gat en kom bo uit.

Dis op 'n more soos daardie dat mens darem bly is om te kan vlieg. Die helderblou lug en sonskyn bo en die spierwit wolke soos 'n ysveld by die suidpool onder, met die bergspitse van die Malutiberge wat in die verte bo die wolke uittroon soos eilande in 'n yssee. 'n Wonderlike gesig!

Onder my kon ek deur die gate die berge en mistige valleie hier en daar sien deurskemer. So het ek aangevlieg vir 'n uur of wat. Partykeer was dit toe onder en dan weer was daar weer gate in die wolke, maar die tekens was steeds dat dit opklaar.

Ek merk toe later dat die wolklaag net soos koppe begin uitdruk na bo en dat die hele massa besig was om op te kom, dan het ek maar nog so 'n bietjie gestyg. So het dit aangegaan en dit het nie dadelik tot my deurgedring dat die gate al minder begin word het nie. So het ek aangehou totdat ek my al amper op twaalfduisend voet bevind met die wolklaag wat nog steeds besig was om my op te druk. Daar was nou rede tot kommer want so 'n wolkmassa kon maklik tot dertigduisend voet opgaan. My vliegtuigie het skielik baie klein en eensaam begin word daarbo.

Dadelik besluit ek om deur die eerste die beste gat deur die wolke af te daal. 'n Paar myl vorentoe het dit in elk geval gelyk asof daar 'n gat was, maar toe ek daar aankom moes ek vind dat dit maar net nog 'n wolkformasie was.

Oor die radio hoor ek toe die verkeersleier op Bloemfontein 'n weerberig aan 'n S.A.L. Boeing aflees: "Wolke ag-agstes oor die Vrystaat met 'n basis tweehonderd voet bo grondvlak": Met 'n warm kieweling het ek besef dat ek in 'n lelike penarie beland het. Dit was geen grap nie.

As ek sou probeer om deur die wolke af te daal kon dit maklik eindig in 'n spiraal duik, meer ervare loodse is al so daarmee heen. Boonop was ek oor bergagtige gebied. Om toe te draai sou ook nie gehelp het nie, agter my kon dit ook toe wees.

Om helder te dink onder sulke omstandighede verg doelbewuste inspanning. Ek moes myself dwing om nie paniekerige draaie te begin vlieg nie en reguit aan te hou totdat ek 'n logiese plan kon beraam. Volgens my vlugplan moes ek oos van Zastron gewees het, en in hierdie omgewing is daar hoë berge.

Ek het nog vier uur se brandstof oorgehad en besluit toe dat, as ek wes sou vlieg, kon ek ver oor die Wesvrystaat kom waar ek tenminste weg van bergagtige gebied kon probeer afdaal.

Ek merk toe die tyd en draai na wes. Wat 'n verligting toe ek 'n klein wasige opening opmerk! Baie vinnig, voor dit kon toegaan, duik ek daardeur en merk gelukkig toe 'n opening in die onderste laag. Soos 'n valk is ek ook hierdeur en was onder die wolke – skaars honderd voet bo die grond. Zastron was naby en met die grootste verligting kon ek daar neerstryk.

Veilig op moeder aarde het ek plegtig belowe om nie meer in so 'n strik te beland nie. Ek het 'n goeie les geleer en was net gelukkig om heelhuids daarvan af te kom.

E.A.A. PERSONALITY

"Woody" Woods – Vice Chairman



Mr. E. C. Woods

E. C. Woods won a Natal Mercury Flying Scholarship at the age of 17 and started flying with Natal Aviation at the old Stamford Hill Aerodrome, Durban, in 1937.

When World War II broke out he was called up and started flying at Randfontein in 1940. After getting his wings he became a flying instructor at Baragwanath, then Vereeniging and, later, as a staff instructor with the Central Flying School at Tempe, Bloemfontein.

Woody went into ops on Marauders with 24 Squadron at the beginning of 1944. He became a Flight Commander and was awarded the D.F.C. in 1945.

After the war he took up the Chief Flying Instructor's duties with the Northern Rhodesia Flying School in Kitwe.

Woody has many thousands of hours total flying and over two thousand hours as an instructor. He has flown over fifty different types of aircraft from the D.H. Gypsy Moth to the Pitts S.1 S. which he and his son, John, have just finished building.

Today, Woody is the Managing Director of the 3M Company in South Africa.

A CLASSIC AIRCRAFT



Auster Mk. 5

THE AUSTER by Dr. Hans van Gemert

One of the great classics of all times, although not so well known, is the Auster. Many versions of this aircraft have been produced but they all have basically the same characteristics and the same speeds. The Auster factory at Rearsby, Leicester, started before World War 2 building Taylorcraft under licence—some of these are still around—but soon

started producing its own breed. Yet the Taylorcraft left its traces on most models: the NACA 23012 airfoil section and on some models the separate trim tabs on the side of the fuselage under the elevators.

Whereas most models were brought out with British engines, Cirrus or Gipsy, there were three models with American engines: the Auster Arrow, two seater with 75 HP Continental

the only flapless Auster, and the Mark 4 and Mark 5 with 125 HP Lycoming. The latter models are the most remarkable specimens of the breed: 12 lb per HP for only 10 lb per square foot and a payload of over 700 lb.

The Mark 5 is a three seater, two in front, one seat sideways in the back, sideways to keep the C. of G. within limits. The standard tank in front contains 15 imp. gallons and a blister tank of 12 imp. gallons can be fitted under the fuselage giving a total endurance of 4½ hours. Cruising speed 93 KTS at 2 400 r.p.m. Stalling speed, clean, no engine: 33 KTS., BUT with full flaps and full throttle the aircraft can be flown at 23 KTS! and with that it still climbs.

The STOL performance of this aircraft can be evaluated with the following figures: on take-off it can be safely pulled off the ground at 35 KTS and if the pilot maintains the angle of climb at which he left the ground, the aircraft will climb away AND accelerate to 60 KTS. With a full load on an aerodrome at 5 000 feet A.S.L. the take-off speed is generally reached in less than 150 yards. A safe approach speed is 45 KTS, landing roll is minimal.

In the days that Auster were still in production, I ferried the odd specimen across the Channel to a new happy customer on the continent. I once told Mr. Porteous of Auster: "A pity that it has the reputation of having killed so many pilots". All I got back was a frown and: "Killed what?" True, all those that I saw go in were either "going round" on finals or they were in the process of "shooting up" with turns close to the ground.

"WUN BLERRY GOOD SKRIK! ! ..."

by Pookie

Like my maat always says, "One blerry good skrik is worth four hours dual".

Just some little time ago me and my maat was indulging in our favourite pastime of shopping for second-hand vliegies. Since neither of us has got no geld we confine our activity to kicking the tyres and insulting the salesmen. For you ous that havn't tried this for a week-end sport, I can tell you that it's almost more lekker than girls.

Anyway, we got the cold shoulder from one bunch of ous who got stroppe because we charms we want to scale a demonstration ride in a new Bonanza, so we moves on to the next hangar.

Then we checks this other little vliegje, parked in the corner, and man, it looks real snaaks. So we stand and look and in no time our expected salesman makes the scene. This is one of those "Jolly" ous who tells us that this is a Jolly fine little aeroplane, going Jolly cheap and is Jolly economical to run. (The fact that the Jolly old log books is lost and the fabric has got the Jolly ringworm doesn't appear to be of much consequence! —)

Here are some tricks:

1. Flying slow is flying at a high angle of attack. With the Auster these values go to their extremes as with any NACA 23012 but an increase in angle of attack due to a turn becomes more critical in such extreme conditions. You can't turn at the speed you can fly at.
2. Even with 125 HP, on 2nd or 3rd position flap the Auster will not accelerate beyond 40 KTS without losing height. Try it with the 95 HP Cirrus and you have an instant funeral.
3. Aerodynamic forces on the elevator are minimal, therefore the pilot does not "feel" the aircraft half as well as with any other type. This explains why some people ran out of speed in tight turns without noticing it. It takes a long time for a newcomer to get familiar with the effortless elevator control.
4. The Auster has no tendency to ground-loop, even with a free-castering tail wheel, but on the ground use must be made of aileron drag to keep direction. Unfortunately these reflexes are not cultivated any more in modern flight schools.
5. In a landing with more than 150 ft/min sinking speed the bungees will catapult the whole aircraft up again.
6. In a landing where the main wheels touch first the tail goes down and the angle of attack of the 23012 gives instant lift.
7. Don't use flaps over 50 KTS, you may find worn linkages before the time.

And buy yourself a pair of good ear muffers and you will enjoy many hours of cheap flying.

So we stand and chaaf this ou and we can see him signalling his china behind his back to bring the order-book. He comes over all polite and charms we should drink some of his diabolical coffie while he finds the hand-book on how to fly this "Sleek eagle of the skies".

Just now he produces a thing like a dog-eared old comic that has done the rounds in the back row of the Bio Cafe. Now this chronicle gives us certain facts, such as this bird has got a seventy-five horse-power engine, and from what we can see, the first sixty horses is stone-blerry-dead, and the remainder is struck with the rinderpest. It also states that the engine will run on as little as six quarts of oil. Well, we got good news for the editor of this manual because right now it appears to be running on about eight pints of pure bitumen!

Now by this time our little game of giving the salesman a charge is wearing thin, but this ou is not going to let us go so easy. This is possibly due to my maats comment about maybe we should sell out "West Dries" for some petty cash. (The only part of West Dries we got is mine-dump sand in the hair!)

So, to cut a long story up, in spite of a good argument, I was sitting in the right-hand seat of this creaking white-ant-menu with this eager-beaver salesman assuring me that one circuit would Jolly well convince me that this birdie was exactly what I Jolly needed! My maat, as usual, has talked himself out of the scene and is standing there laughing like a jakals at my predicament.

I was just beginning to hope that maybe the whole concert would end because the engine wouldn't start, but, dammit, on the last kick of the battery the whole box-of-tricks sprang to life and my last reprieve was gone. The vibration was out of this world and the noise was earth-shaking. The instruments (both of them) disappeared in a blur and a spring in my seat worked its way up through the upholstery. Now, if there's one thing that's likely to make a ou sit up and take notice, it's a spring in the dingus!

My sudden forward and upward motion was mis-interpreted by this salesman ou as astonishment at the pure beauty of the smooth-running engine so he smiles and shouts "Jolly good eh! " We are shortly airborne. It crosses my numbed brain that we didn't do any run-up or pre-flight check. This is probably based on the belief that 'what you don't know won't kill you.' During the take-off run we have become familiar with about 180 degrees of the horizon on account of the brakes on one wheel is a bietjie vrot.

As we are climbing up at nearly 50 ft. per minute, this ou shouts "You've got it! "—Thinking he was referring to the spring in my seat I tells him "You blerry right I got it! " However when I sees his hooks are off the controls I catches on Jolly quick and grabs the pole.

Now while we are boring our way through the ozone on the down-wind leg, the plumbing at the front takes a turn for the worse and, man, the vibration gets real 'going'. So now this Jolly ou on my left seems like he has also got a spring in the seat because now his little white hands is going round the cockpit like he's playing 'Tico-tico' on the theatre organ. Mixture rich; Mags on both; Fuel switches on; Trim; Fuses; Straps tight; Doors open; Ash-trays empty; etc. etc. Meanwhile, our 'Sleek eagle' is developing all the flying characteristics of a home-sick anvil.

Lucky for us there was a mossie sitting on the fence and he was just heavy enough to hold that top strand of wire down and we made it back onto the airfield.

Like I says to my maat over the second bottle of 'do' when we got home . . . "They aught to make a law against these dam salesman people that can RUIN A OUS WEEKEND SPORT! " . . .

PROVINCIAL NEWS

EASTERN CAPE by Ron Sillis

"Hoekie" Baldwin flew his Turbulent for the first time recently and he says that with his head down it cruises at 135 m.p.h.! It is powered by a VW 1600 motor. This is his second homebuilt—the first being a very good looking Smith Termite.

Harry Huyzers has resprayed his Ercoupe yellow and black. He towed it on its wheels from Uitenhage to Port Elizabeth

where he sprayed it, and then towed it back. It looks a bit like a potato-bug! Harry is also working on his Teenie Two. (Spurred on by Hoekie who is now without a project).

On the home front, I have now started covering the Termite and the tail-section and fuselage are already finished. Oribi 1973 here we come!

(Seeing is believing, Tosh! —Ed.)



Ron Sillis' Termite ready for cover

WESTERN CAPE by Ruth Hobbs

During a recent visit to the Cape I managed to see a few of the projects.

The Volksplanes of Avron Bane and Geoff Ritchie are progressing well, with fuselages partly complete and empennages complete except for covering.

'Doc.' Bergamasco and Kevin Powell expect to finish their BD-4 very soon—in time to attend the Fly-In. They were busy with the electrical wiring when I visited them, and virtually all that's left to do is the painting. The cabin and instrument panel look really professional.

Oliver Morton and Michael Mullis are working hard on their Aeronca. They have decided to do more than the bare minimum—"One thing leads to another"—and the aircraft should look very smart when it flies again.

TRANSVAAL by Barrie Walker

Fanie van Rensburg's Taylor Titch has flown at last, and what a phenomenal performance! It is powered by a 100 horse power Lycoming motor and the rate of climb is unbelievable—something like 2 000 feet per minute. Downwind the A.S.I. showed 160 m.p.h. on the first flight! Aureno Proto has his Continental 85 h.p. E.A.A. Biplane almost ready to fly and, at Grand Central, Bill Keil is adding the final touches to his Taylor Titch. This machine was brought out from Rhodesia and has not yet been flown in this country. Godfrey Knight has his modified Turbi ready for covering. It has been converted from the standard tandem seating arrangement to a side-by-side configuration. In addition the fuselage structure has been converted from wood to welded steel tube. It also features a detachable wing. The Woods' Pitts Special continues to clock up the hours and Johnny Woods has impressed everyone with his aerobatic skills. This is a pilot/plane combination to be watched! There are also three more Pitts Specials in a fairly advanced stage of construction at Baragwanath. Dennis Lee is progressing well with his Sirocco. Anyone in desperate need of 4130 steel plate or tube may contact him for some expert assistance at 2 Austin Street, Brenthurst, Brakpan. My own E.A.A. Biplane has now flown with the 150 h.p. Continental motor and the rate of climb even at this altitude is very satisfactory.

P.S. Don't forget the E.A.A. (Johannesburg Chapter) Fly-In at Heidelberg on 17th March.

NATAL by Bruce Vivian

In Durban Bob Gainsford is progressing well with his Taylor Titch and he has the basic fuselage finished as well as most of the wing ribs. Carel van der Merwe had a most unfortunate accident while landing his Beta and is now busy with extensive repairs. It will be some time before it flies again. Clive Rautenbach will soon have his Cassutt racer flying. Other projects in the Durban area are Tom Slabbert's Taylor Titch, Robin Stayt's Taylor Monoplane, Arthur Southam's Turbulent and my own Turbulent.

Pietermaritzburg

Boxing Day, coming just after the festivities and activities of Christmas Day, is a time to relax and recuperate. However for the local fraternity peacefully basking in the afternoon sun at Oribi Aerodrome, this is not to be. The silence is shattered by aircraft engines starting up. Opening bleary eyes our bystanders in disbelief, see one, or is it two—yes it's two—wood and fabric objects taxi past, and, my goodness, they're heading for the runway! Surely they're not serious. The determined looks on the faces of our aspiring aviators, though, tells us that they are. They push in the throttles and then hang on gamely as their mounts lurch along gathering speed. Then it happens! They leave the ground. Yes they're actually flying! Can't believe it.

Yet this unusual event of having two homebuilts being launched on the same afternoon took place when Owen Pilcher (Smith Termite) and John Buchan (Jodel F-11) carried out the first flights. These two, which now join Tony Wills' Fly Baby in operating out of Oribi, are performing well and giving their owners a great deal of pleasure.

While recovering from the above, the local aerodrome community found there was still another surprise in store. During a recent weekend they witnessed a group of wild-eyed individuals rushing past holding aloft a most startling creation. Only great-grandfather was able to make a positive identification and his audience was shattered by the revelation—this was a flying machine more primitive than the Wright Brothers original! It was in fact the Oribi Mark I Hang-glider. With much enthusiasm it was carried to the nearest slope and there with a combination of panting and frenzied whooping the inventor/builders took turns in sprinting down the slope, retracting undercart, and, for a brief but sublime moment, defying gravity and experiencing the sensation of flight.

MAYDAY! MAYDAY! MAYDAY!

Articles are urgently required for the next issue of Homebuilt.
Black and white photographs of about post card size are also needed desperately.
This news magazine cannot exist without your support.

REPUBLIC **A**IRCRAFT **P**ARTS

(PTY) LTD.

The ONESTOP parts
organisation for all your
aviation requirements.

WONDERBOOM AIRPORT

Note new Telephone
No. 57-2451
P.O. Box 23185
PRETORIA

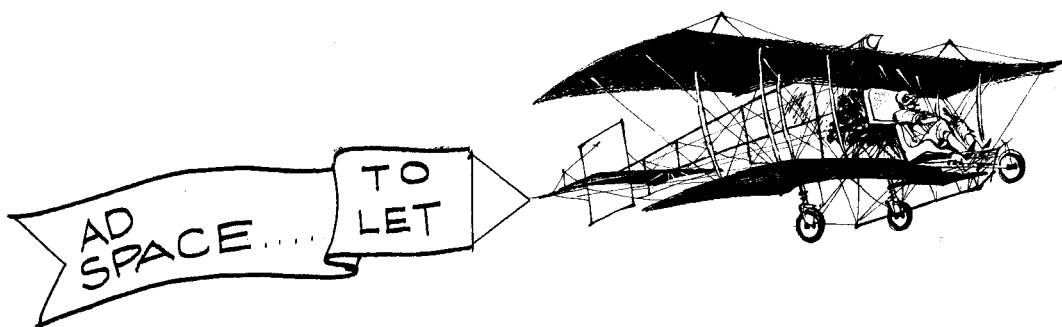
Sole Owners: Eddie and Marie Pelcher



CARLETONVILLE TRANSPORT (PTY) LTD.

Republic Wide Furniture Removals

18 Railway Street, Oberholzer.



**AVIATION INSURANCE
BROKERS**

R.W. SUTCLIFFE (PTY) LTD.

INSURANCES FOR:—

- AIRCRAFT GLIDERS
- ULTRA LIGHT AIRCRAFT
- BALLOONS PILOTS
- PARACHUTISTS
- EQUIPMENT
- THIRD PARTY LIABILITIES

* * *

75 Salisbury House, Smith Street,
Phone: 316994 / 316998
P.O. Box 1603 : Durban.

**BUY THE ALPHA TEN
VHF RADIO**

R272

WITH ONE CHANNEL

ADD UP TO TEN FREQUENCIES
OF YOUR OWN CHOICE

D.C.A. APPROVED

FIELD AVIATION

P.O. RAND AIRPORT PHONE 51-8961

SOLE DISTRIBUTORS

3M SOUTH AFRICA (PTY) LTD.

***MANUFACTURERS OF AVIATION
QUALITY***

**ADHESIVES
ABRASIVES
DECORATIVE MARKING AND
STRIPING FILMS**

***FOR THAT EXTRA HIGH CLASS FINISH TO YOUR
"HOME-BUILT"***

OFFICES AT: JOHANNESBURG • CAPE TOWN • PORT ELIZABETH
EAST LONDON • BLOEMFONTEIN • PRETORIA • DURBAN • WINDHOEK

