

SCALE NEWS



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The Bi-Monthly Newsletter of the Victorian Flying Scale Aircraft Association.

Sportscale and Scale Rally at Albury

Last November we made our first trip to the Twin Cities club for a weekend flying Sportscale and a Rally. It was reasonably successful for a first visit and we all enjoyed the hospitality of the local members and the use of their fine field.

Returning again in November 2005 we were greeted with a field magnificently prepared for the weekend, after considerable rain in the preceding weeks, and an enthusiastic group of TCMAC members. As usual, we

fly inside your sunnies). Despite this minor problem we had six entries in ARF and six in Scale, all prepared to withstand the flies and hay fever attacks to contest the two events.

Both events were closely fought with Stephen Green, flying a DH 88 Comet, and Brian Green, flying a Giles 202, placing first and second in ARF to repeat their recent placings at the Ballarat ARF event. Local member Chris Henry took third place with a large Extra 300 and Trevor Pugh was a

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stayed at the Australia Park Motel with accommodation organized by Graham Godden.

On arriving at the field on Saturday the weather was fine and warm with a little bit of wind and lots of flies. The flies were a constant source of annoyance and the main duty of the callers became the brushing away of flies from the pilots (it's hard to concentrate on flying a model when you have a

close fourth with his Super Chipmunk. Noel Whitehead had a couple of shakedown flights with his Extra 300 to gain fifth place and David Balfour placed sixth with a Corby Starlet which he had stripped, recovered and painted in a scale finish.

ARF and Scale rounds were alternated using two judging panels and Scale was won by Clive Butler with his 1/3 scale Stearman.

(continued on page 4)

Special Dates and Points of Interest-

VFSAA General Meeting
Thursday December 1st

Scale Rally at Werribee
January 15th

Sportscale Rnd 1 at Northern
January 22nd

Minutes of October General Meeting.

Date: 6-10-05

Location: FNCV

Time: 8.10pm

Attendance: 20

Apologies: Wal & Pearl Schubach, Barry Reaby, Mike Ludbrook.

Visitors: Robyn Sunderland.

Previous minutes: Read

Matters arising: It was advised that Greensborough was not available the first Sunday in any month due to Pony Club activities.

Correspondence in.

- Letters from Dean Erby, Tom Prosser and Alf Williams accepting positions on the Trans Tasman team.
- VMAA newsletters.
- E-mail from Brian Green resigning as CD.
- E-mails from Brian re new scale rules proposal.
- E-mail from Nepean confirming Rally in November.
- E-mail from VMAA confirming \$100 contribution to Trans Tasman.
- Cheque from VMAA. For \$100

Correspondence out.

- Letter to VMAA re funds request.
- Twin Cities reminder and advising change of format for Sportscale.
- Letter to VMAA advising new Committee.
- E-mail to Brian Green acknowledging his resignation.

Treasurer's report.

Opening Balance: \$3061.67

Receipts: \$1380.00

Expenditure: \$242.86

Closing Balance: \$4198.81

Accepted: Trevor Pugh

Seconded: Frank Curzon

CD's report.

- John Lamont reported that Bacchus Marsh day was blown out, but a good turnout.
- The Trans Tasman competition was the best F4C comp. seen in a long time.
- A reminder of the Lilydale Rally, and Albury Sportscale/ Rally in November.

General business.

- Life Membership was awarded to Ian Watts at Shepparton in September.
- New Sportscale rules discussed, and Trevor wanted a copy to post on the Website.
- Trevor thanked Brian for his input, and a general discussion was held on ARF'S.
- Many thanks to Frank Singh for the supper.

Meeting closed: 10.00pm

Show and tell.

- John Lamont showed his new Laser 180 to be fitted in his Percival Gull.
- Gary Sunderland showed his new AlbatrosD3.

PHOENIX FLYERS of Launceston invite interstate enthusiasts to their R/C SCALE AIRCRAFT RALLY at their Panshangar field May 6th & 7th, 2006.

FORMAT - Largely this will be a fly-for-fun weekend. There will be handsome prizes awarded for outstanding models, flights, etc. If there is sufficient interest an open competition (i.e. for all sizes of model) to MAAA Large Scale rules may be flown concurrently.

TRANSPORT - The ferries Spirit One and Two sail from Melbourne boarding at 8:00 pm Friday night and dock at Devonport early Saturday morning. Alternatively, combine the scale rally with a Tasmanian holiday. Phoenix Flyers field is located some 60km south of Launceston, near Longford. A map is available at the club's website - www.tased.edu.au/tasonline/phoenix.

FACILITIES - Phoenix have a level mown strip 150m x 30m with level paddocks all around. There is a large clubhouse, toilets, ample parking, a shade area, setting up tables, running water, BBQ, and hot drinks are available. On the weekend there will be ample refreshments.

AUTHORISATION - The Tasmanian Model Aeronautical Association, the State body, has reserved these dates for the Rally.

WEATHER - Mean daily temperature, 15°C. Mean night temperature, 5°C. Wind speed 9:00am - 5.2 kph, 3:00pm - 9.6kph, mainly North to North-West.

Back to the Oval Office.



In your President's role as Commander In Chief, it is incumbent upon him to keep abreast of advancements in military hardware. That is why I have purchased and assembled an ARF. Some refer to these as Al-Ready Fu...d, but I approached this task with an open mind. After all I have read countless

reviews of these things in countless magazines and they are all wonderful apparently.

As an aside, the First Lady and I were clearing out some of the Whitehouse cupboards the other day and I was persuaded to get rid of some RCM magazines from the 1970s. Oh how different were the magazines of those days; full of construction articles, honest reviews and other very useful hints. I was almost surprised to be reminded that many of the techniques I still use today came from those magazines. By comparison, today's mags seem to all be composed on the same word processor, with only the names of the latest ARFs being inserted each month.

Anyhow, back to the point. This is my third ARF stretching back over 20 years. One would have expected the quality to be light years ahead of the early efforts, and while it was sort of all right, the emotion at the end of the project is once again disappointment. I was seriously considering writing an honest review to be published in this newsletter but the minders suggested that honesty in Government is not necessarily considered a virtue, and that I might be sued.

Thinking about the experience, I realized the main problem with these things. While every model has to have hinges and tanks and pushrods etc. installed, with ARFs that's all you get to do. There is none of the sublime joy in turning a piece of balsa into a work of art. There is no creating the sensuous curves of an aeroplane and sitting back and saying "I did that". It is sort of like getting the job of installing the toilets in the Sydney Opera House. The First Lady, whose experience is mainly below the belt, likened the process to artificial insemination. The result works but there is none of the fun in the making.

Nevertheless, we are faced with the cry from the masses these days that people do not have time to build any more. Given the demographics of aeromodellers, it can't be because of work pressures. It can only be because the internet, or cable TV, or home theatres, or touring the country, or playing with grandchildren, or fishing, or second marriages, or reading newspapers, or other inconsequential activities, are more readily available than in the past. (The piffle served up by the modelling press, encouraged by the distributors of ARFs also hardly inspires anyone. I don't know if you are aware that Australia has embraced/fallen for the ARF like no other country. Not something necessarily to be proud of.)

Back to the topic. We know there are a million ARF scale kits sold every month (mainly as replacement for the million that broke last month and can't be repaired) and in order to try to attract these modellers to our fraternity, we have modified our Sport Scale rules to accept ARFs in a class of their own, but in every other way equal to proper scale models. The rules are published elsewhere in this newsletter – please read them. The first event under the new regime, the two day Sport Scale/Scale Rally at Albury on November 12 and 13, will have been run by the time this newsletter is distributed. We hope it was a success.

OK, I think I managed to get through all that without showing any of my biases.

Now November is Thanksgiving time so let's remember our boys in the field. You know, the ones who cut the grass, for without them we would have to do it ourselves.

Till next time,

Missing you already,

Noel W

From the Editors.

While I concede that scale ARF models are here to stay and have some place in our hobby I am concerned that they should not be seen to take the place of scale aircraft constructed in the time honoured way from kit, plan or from scratch.

We now have in existence, on a commercial website, a promotion for a Australian Scale Association which is based solely on ARF scale aircraft and it is important that this site should not be seen by websurfers as the official body representing scale aircraft building and flying in Australia.

We already have in existence a national special interest group, The Australian Flying Scale Aircraft Association, that is registered and incorporated to represent radio controlled flying scale aircraft modellers throughout Australia. The AFSAA has the support of the MAAA and will become the SIG governing, in conjunction with the MAAA and its Scale sub-Committee, radio controlled scale model flying in all of its forms in Australia.

The AFSAA must be the only recognized national association for scale modellers in Australia.

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Sportscale and Scale Rally at Albury

The big radial on the Stearman impressed everyone with its sound and power, pulling the large model through the schedule with ease. Noel Whitehead placed second with his Winjeel and Gary Sunderland took third place with his Fokker D7. This event was even closer than the ARF competition with only 70 points separating first and fourth. Local member Neville Glew was unlucky to damage his new Corsair in an outlanding when the motor failed and David Anderson's retired his DH2 after one flight when the model proved difficult to trim.

After the late start we finished flying around 5:30pm and returned to our motel for a welcome rest before attending a dinner with Twin Cities members at an old woolshed which had been converted to a rustic hotel. The meal was good and we again enjoyed the social gathering, as we usually do on these weekend trips.

Returning to the field on Sunday the weather was even better with little wind but still with lots of flies. The rally was reasonably well attended with the standout effort being the first, and very successful, flight by Ken Osborne's 1/3 scale Facetmobile. Another interesting model was the ARF Corby Starlet of David Balfour. David stripped this model back to the base structure, recovered it, and finished the model in a scale décor to produce a "different" Starlet.

After presenting awards we were on the road home at 2:00pm after a very enjoyable weekend of flying and socialising



Clive Butler's 1/3 scale Stearman was very impressive as the 215cc, five cylinder, radial motor pulled the big airframe around the circuit. Probably the most realistic sound, apart from a jet turbine, that we have yet heard from a model engine.



David Balfour's much modified ARF Corby Starlet flew well on a 0.70 four stroke.



Ken Osborne's 1/3 scale Facetmobile made its maiden flight on the Sunday. After takeoff and a slow climb to altitude the model flew quite well and landed safely.



SCALE

ENTRANT	MODEL	RND 1	RND 2	RND 3	TOTAL	
C. BUTLER	STEARMAN PT-17	2347	1765	2539	2393	1
N. WHITEHEAD	WINJEEL	2292	2469	DNF	2380	2
G.SUNDERLAND	FOKKER D7	2166	2382	2286	2334	3
J. LAMONT	J3 CUB	2253	2391	2076	2322	4
N. GLEW	CORSAIR	1695	-	-	847	5
D. ANDERSON	DH 2	829	-	-	414	6

ARF

ENTRANT	MODEL	RND 1	RND 2	RND 3	TOTAL	
S. GREEN	DH 88	2259	2070	2346	2302	1
B. GREEN	GILES 202	2133	2250	2235	2242	2
C. HENRY	EXTRA 300	1989	2070	2355	2212	3
T. PUGH	CHIPMUNK	2193	2061	2187	2190	4
N. WHITEHEAD	EXTRA 300	1932	2208	DNF	2070	5
D. BALFOUR	STARLET	2064	2061	1956	2062	6

RALLY

MILITARY FLYING	R. SARGENT	FOCKE WULF FW -190
MILITARY NON-FLYING	K.PETTS	SPITFIRE MK. IX
CIVIL FLYING	K. OSBORNE	FACETMOBILE
CIVIL NON-FLYING	D. BALFOUR	HANDLEY PAGE HP- 42

A Work in Progress - Barrie Reaby's Heinkel He51C.

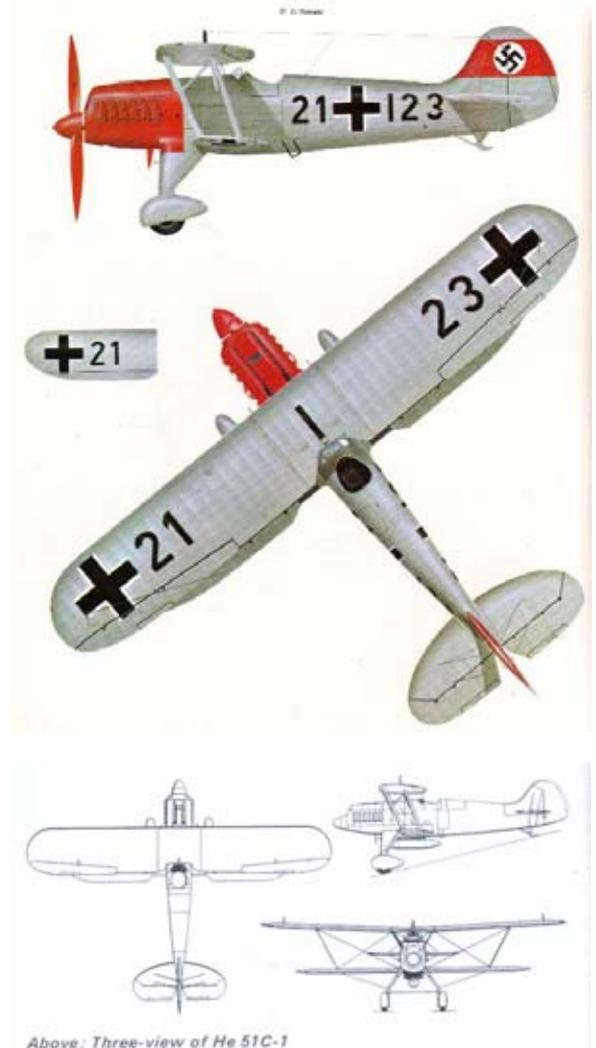
Barrie is becoming as prolific as Gary Sunderland and is also inclined towards aircraft with two wings. Following his very well produced Stearman he is now working on a Heinkel He51C and has provided a few photos to show progress in construction and the set up used to ensure correct incidence angles.



Wing and tail components. Note the use of balsa sheet cores on ailerons and tail assembly. This is a simple and strong means of construction.



The aircraft jugged up for correct setting of wing and tailplane incidence. Barrie has invested heavily in Robart incidence meters.



Above: Three-view of He 51C-1

VFSAA Scale Rally at Lilydale.

The Sportscale event at Lilydale was held successfully despite the poor weather forecast. Attendance by VFSAA members and local members was good with twentyone models entered and others on display. Flying continued throughout the day and the Lilydale club provided a welcome BBQ lunch. Proceedings wound up around 3:00pm when the field was opened for general flying after presentation of awards.



Angelo Favalaro's Stinson Reliant from a Topflite kit. Model is 2.6m span with a Zenoah 26 for power.



Heinkel He 177 by Dean Fisk. Two Saito 85's powered this large model.

AWARDS.

Military Flying	Dean Fisk	Heinkel He 177
Military Non-flying	Ian Bray	Auster AOP9
Civil Flying	David Chivers	Piper Pawnee
Civil Non-flying	Len Rodman	Auster J1

The National Air Tour – USA.



The idea for an Airplane Reliability Tour is credited to Harvey Campbell of the Detroit Board of Commerce. Campbell called it the "Glidden Tour of the Air," having in mind the automobile tours started in 1904 by a man named Charles Glidden. Just as auto tours had publicized highway travel, so Campbell reasoned, aerial tours would promote air travel.

In February 1925, following congressional approval of the Kelly Air Mail Act, a group of Detroit businessmen made plans for an Air Tour. The Kelly Act provided for commercial airline companies to take over the government Air Mail, and now, with the stage set for "commercial aviation," Detroiters talked of building airplanes just as they built automobiles.

Civic and business leaders formed a committee, and Edsel Ford donated a trophy – a beautiful structure of gold and silver four feet high, that cost \$4,850. Called simply the Edsel B. Ford Trophy, it was inscribed, "This trophy is offered to encourage the up-building of commercial aviation as a medium of transportation." Thus was born the "Edsel B. Ford Reliability Tour for the Development of Commercial Aviation." The official name was altered slightly over the years and ultimately became known simply as the "National Air Tour."

The Air Tour concept was revisited in 2003 and Vic Larsen sent these photographs, taken when the beautifully restored 1930's aircraft which took part in the Tour passed through Ft. Worth, Texas.

It has taken a while to find the space in our newsletter for these magnificent aeroplanes but here they are. Maybe this will start a resurgence in modelling 1930's aircraft.



◀ Alexander Eaglerock Longwing.

The Eaglerock biplane, made famous by barnstormers during the 1920s, was manufactured in Englewood, Colorado, and later in Colorado Springs, by the Alexander Aircraft Company.

Bellanca Skyrocket. ▶

The Bellanca Skyrocket was a refined Pacemaker with a more powerful 425 hp Pratt & Whitney Wasp and first flew in 1930.



◀ Bird Biplane.

The Brunner Winkle Aircraft Co. of Long Island was reorganized as the BIRD Aircraft Company and produced aircraft from 1929 to 1933.

Buhl Sport Airedan ▶

Manufactured by the Buhl Aircraft Company of Marysville, Michigan in 1929.



◀ Fokker Super Universal.

Ansett Airways Pty Ltd commenced operations in 1936 flying six passengers from Hamilton to Melbourne in a Fokker Universal.

Great Lakes 2T-1A ▶

Originally powered with a Cirrus 90HP engine, the Great Lakes biplanes were manufactured in Cleveland, Ohio, from 1928 through the early 1930's.





◀ Formation flypast.
Sikorski S-39, Waco ASA,
Bird CK and Travel Air.



Bushmaster Tri-motor ▶
The Bushmaster is a
modified Ford 5-AT-5 and
this is one of only two built.



Stinson Tri-motor ▶
The Stinson Model T airliner
was built in 1931 at the
Stinson Aircraft Factory in
Wayne, Michigan. The only
other existing Stinson Tri-motor
is owned by Kermit
Weekes.



◀ Great Lakes 2T-1A .
Taxiing for take off.



◀ Sikorski S-39-C.
The owner spent 40,000
hours over 40 years restoring
this 1931 built aircraft. It is
one of only three in existence.



Ryan M-1 ▶
The Ryan M-1 was America's
first production monoplane
and, in 1926, was the first
commercial plane to fly along
the West Coast of the USA.



Waco UEC ▶
Waco aircraft played a very
prominent role in the develop-
ment of personal aircraft
during the 1930s. John
Swander spent 10 years
rebuilding his 1932 Waco
UEC Cabin Biplane, finishing
in late 1999.



◀ Trimotors.
Ford 5-AT-5 Tri-motor,
Stinson Tri-motor and Bush-
master Tri-motor in formation.



Stearman 4DM Speedmail ▶
The Speedmails were used for
carrying the mail as fast as
possible along the Contract Air
Mail (CAM) routes. From 1931
to 1934, American Airways
operated a fleet of twelve.



◀ Stearman 4E Speedmail.

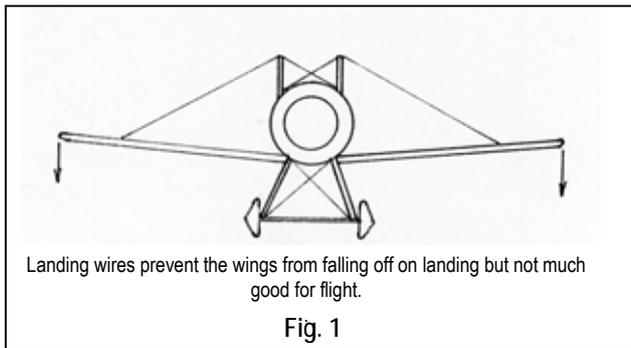
Rigging Biplanes – by Ross Woodcock.

Ross has been kind enough to allow me to re-issue some of his writings on scale modeling. This first offering on scale rigging for biplanes will be followed by others as available.

Many years ago scale models of biplanes predominately had cantilever (self supporting) wings that didn't need any additional support such as rigging except for scale appearance, in fact any rigging that was fitted was usually removed for flight. There are still a few of these designs around today. Because they had been designed to withstand the rigours of flight plus landing without any additional support they were of much more rugged construction which in turn usually means more weight. As the models over the years grew larger it soon became obvious that to design these larger aircraft with the same degree of self supporting ruggedness you were going to get a grossly overweight model that because of its mass stood a far greater chance of destruction, where a lighter aircraft may suffer significantly less damage in the event of a crash.

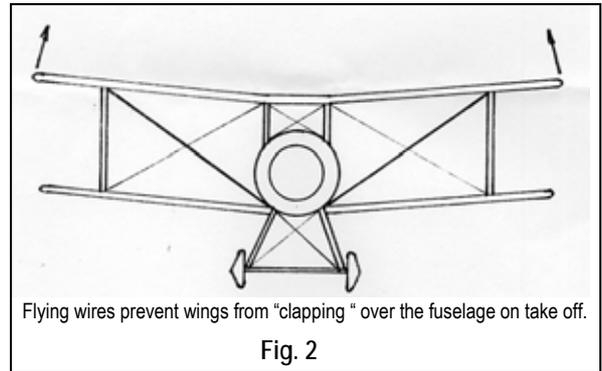
As time progressed so did the desire to build larger and more accurate models, this dictated the use of a scale or scale like wing sections, in many cases undercambered, that needed supportive rigging because it lacked the structural depth that would allow it to be self supportive. There is an old saying, all about reinventing the wheel. There is simply no point, as I see it, but to use the scale rigging and supportive structure (interplane struts) as the original designers did - within reason.

The bottom wing of a biplane is usually attached to the bottom of the fuselage and the attachment brackets are so arranged as to dictate the angle of incidence. The wing is then supported by wires from about 2/3 its span to a centre fitting (centre section struts) above the fuselage (Fig.1). These wires support the wing on landing and stop the wing from falling off on landing, it does nothing to stop the wing from flapping up in flight. These wires are of course called landing wires.

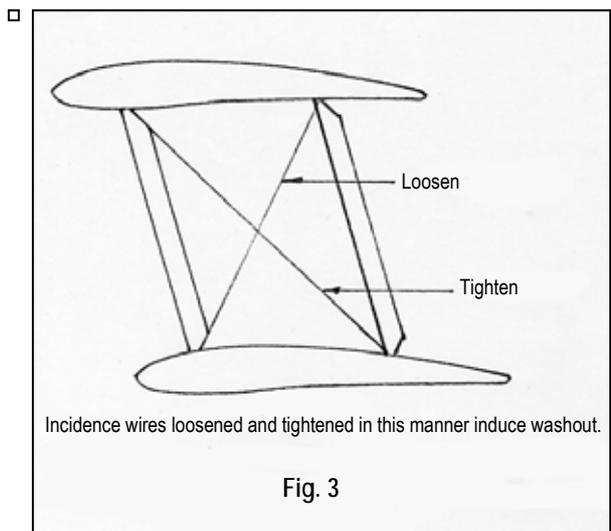


The top wing usually sits on top of the centre section struts whose predetermined length, fore and aft, dictate the upper wing incidence. The upper wing is then supported by the interplane struts that are located approximately at the 2/3 span point. Some early biplanes had an additional set of interplane struts for each wing at approximately 1/3 span. One set of struts per wing is known as a single bay biplane and of course two sets per wing is known as a double bay biplane. Most Sopwith aircraft were single bay. AVRO 504, DH4, DH9, F2b Bristol Fighter etc. were double bay aircraft.

Now, the landing wires will support this entire structure while the aircraft remains static. Once the aircraft commences to move forward there is nothing to prevent the wings from raising at the tips and ultimately clapping over the centre of the fuselage. To prevent this happening we must add flying wires (Fig.2).



As stated before, the fuselage attachment of the lower wing and the fore and aft length of the centre section struts dictates the wing's incidence. Mind you this is not always the same and it's common to have an angular difference between the upper and lower wing. This angular difference is known as decalage. Decalage is often misquoted as the angular difference between the wing and tailplane, which is in fact longitudinal dihedral. The interplane struts on early biplanes are also wire braced and by adjusting the tension of this bracing you can alter the incidence of the wing at the strut location, inducing wash-in or wash-out (Fig.3).



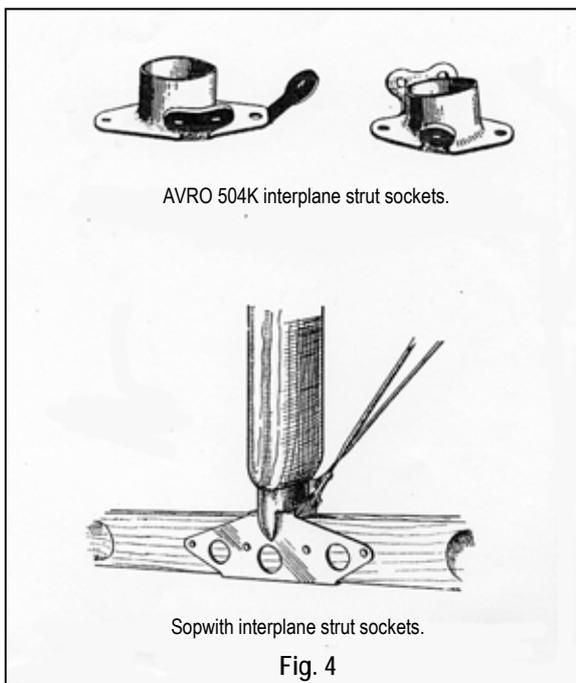
You can also alter the wing stagger which really induces internal stresses, remember the root of the wings are attached to the fuselage and centre section struts. These can be tilted forward or aft by adjusting their incidence wires, you may also have to alter the strut length to maintain the predetermined incidence. As you can see it's no wonder that this process required the dedicated attention of a trade person that's almost non-existent to-day— the Aircraft Rigger.

Having rigged a number of double bay biplanes I can attest to it being a dedicated task for I can assure you that every turn of a single turnbuckle can have a considerable effect on more than just the wire to which that particular turnbuckle is attached .

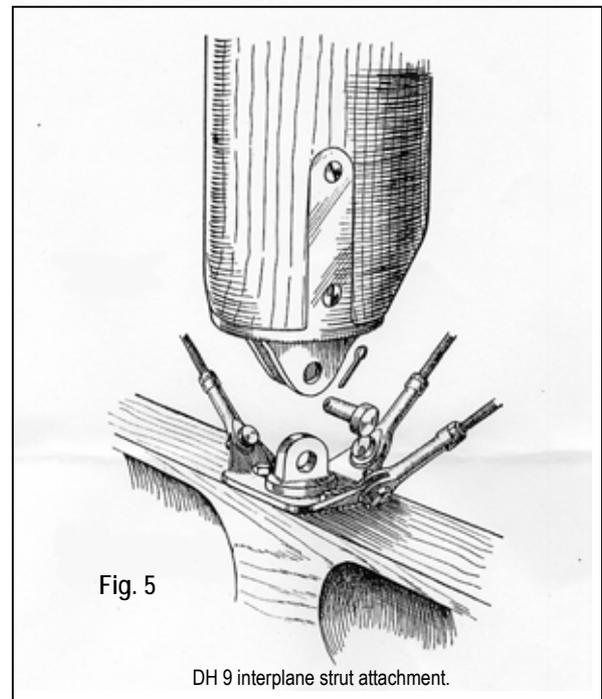
When it comes to duplicating scale rigging you must first decide "How much scale". There was a book published in England some years ago, I hope you can still obtain a copy today for I regard it as the scale modeler's Bible. The book is called "Radio Controlled Scale Aircraft Models for Every Day Flying, by Gordon Whitehead. This book covers just about all aspects of practical scale. Chapter 9 - Flying Surface Construction and Attachment - devotes a good deal of space to "Practical points regarding working wire bracing". As you can imagine it's aimed at simplifying the whole attachment and rigging area of biplanes, it's more than adequate for Stand Off Scale and sports aircraft. But if you have the desire to "get down to it" you should first, where possible, establish just how it was done on the original aircraft.

To digress for a moment, I had a good lesson in scale some years ago— in fact many years ago. The last control line scale model I built was a Cessna 336 Skymaster to 1/8 scale. Contrary to many beliefs control line scale in 1965 was quite sophisticated, but I became stumped as to how I was going to latch the cabin door. I played around with all manner of options for days even to using magnetic strips, none of which I was happy with. Then outside our hangar door arrived a 336. In those days the International terminal at Mascot was where the Qantas domestic terminal is today and this aircraft had just flown in on a delivery flight from the US and had to clear customs so, armed with pencil, paper and rule, I made a beeline to this aircraft to look at the door latch. Then it dawned on me, the best way was Cessna's way, as I said before "why reinvent the wheel". It wasn't all that hard to scale down the actual latch and it worked fine. So the moral is that if it's good enough for Sopwith, DeHavilland, Bristol, etc. it's good enough for us.

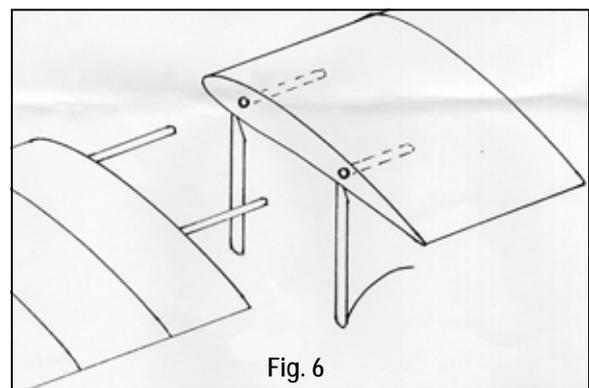
Now to be practical we may have to cheat or deviate a little to simplify what in miniature may be very complex, too fiddly or too light to stand up to the rough and tumble of every day flying. Firstly how are the interplane struts attached to the wing? In many cases they aren't — attached that is. On many Sopwith and AVRO's the strut sits in a socket that is bolted to the wing (Fig.4).



The incidence wires, together with the landing and flying wires, create sufficient up and down loads to maintain the struts in the sockets. The DH9A interplane strut is attached as per (Fig.5).

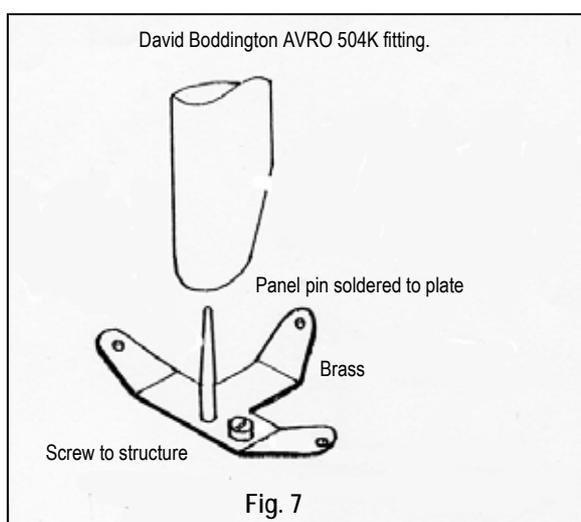


Depending on the scale of the model this arrangement isn't hard to reproduce. The biggest problem would be assembly and disassembly on the flying field. In most cases the wings can remain assembled as what is known as a "boxed set". On double bay aircraft this isn't a problem but on single bay aircraft such as the Tiger Moth you must have some jury structure that can support the inboard end when the wings are removed from the aircraft. Full size biplanes rarely have big beefy fittings where the wings attach to the centre section or fuselage, in fact on some aircraft the attachment brackets look particularly fragile. Bear in mind that this attachment isn't designed to support the wings, that's the job of the flying and landing wires, etc. The most common form of wing attachment for model biplanes is a wire rod into a brass or aluminium tube (Fig.6).

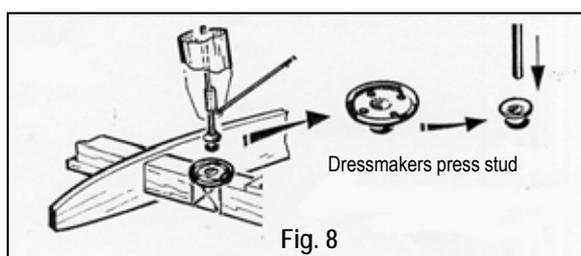


Centre section struts are load bearing, usually structural and play a significant part in the biplane structure, it's the heart of the biplane. These struts, along with the fuselage attachment, set the wing's incidence and locate the wings. On the majority of model biplanes the centre section struts are usually fabricated from wire from 3mm upwards (we are talking about models of a minimum 1/8 scale). These wire struts are then faired with balsa to an airfoil shape to duplicate the original aircraft's structure and on small biplanes this can be both fiddly and frustrating. On larger model biplanes its less fiddly but just as frustrating to get an acceptable scale-like finish.

The interplane struts can also be a trial, for regardless of how accurately you build the wing, the struts are seldom interchangeable. Not that we want to interchange them but it would be nice to be able to use one as an exact pattern for the rest. A ROBART style incidence meter is a good tool to have when tackling this job, however I hasten to add that I didn't have one up until some five years ago, in fact I made a similar unit utilising a builders string line bubble. On my AVRO 504 I used gelutong to make the interplane struts. I couldn't use spruce because I couldn't get any with a fine enough grain. This I know sounds trite but if you give it some thought it looks out of place to use full size grain trying to look like 1/6 scale. I must admit I am not happy with the gelutong as it's too clear. The AVRO 504 was built from the Boddington plan and it's a good Stand Off Scale. David Boddington originally designed the 504 to fly in the "Wings" TV series produced in England in the late 1970's. It's a practical design and as such quite a few liberties were taken with its rigging. David's method of interplane strut attachment is to bolt a lugged plate to the wing. The plate has a panel pin protruding from it to engage the strut (Fig.7).

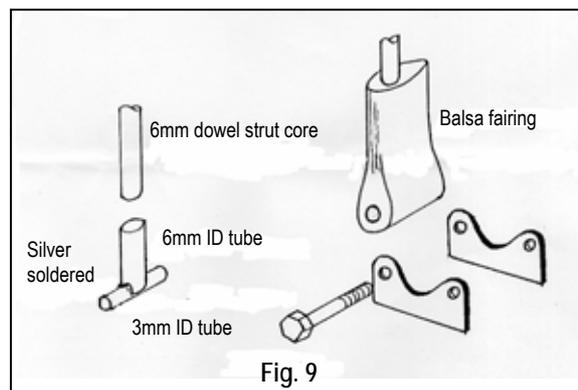


I went to a lot of trouble to locate the nuts within the wing structure to bolt this plate onto the wing, only to find when I became involved in building two full size AVRO's that the strut sockets were not only completely different to David's design but were in fact bolted onto the wing with the bolts going right through the wing and the nuts on the outside. Try as I might I couldn't get any definitive photographs of the Hawker Woodcock's interplane strut attachment. As a result I chose to use a dress makers press stud (Fig.8).



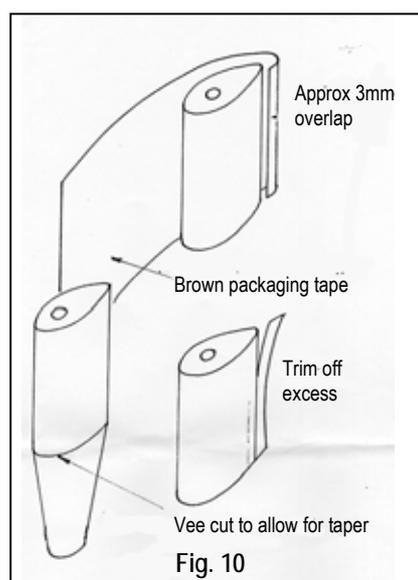
The female portion is attached to the spar and the modified male portion is soldered to a piece of 16swg wire that is the core of the strut. The Ansaldo is somewhat different in its interplane strut attachment in as much as the attach bolt passes through the end of the strut in a fore and aft plane.

This requires the manufacture of a "T" fitting from steel or brass tube (Fig.9).



The horizontal tube is to take the mounting bolt and the vertical tube is to accommodate the 6mm dowel that is the structural core of the strut. Both on the Woodcock and the Ansaldo the core of the struts are encased in soft balsa shaped to represent the air-foiled strut. This soft balsa would then be a real bear to fill and finish by any normal method however I have a different approach which I pinched from Martin Fardell in England.

After the strut shape has been achieved I give the strut a single coat of dope. When dry I sand the strut again, mainly to remove the fuzz. I then wrap the strut with a paper packaging tape, the lick and stick type 50mm wide (actually 2"). This tape is probably hard to get to-day however I managed a few years ago to obtain a roll which I store in a sealed plastic bag because the previous roll was spoiled by just the moisture in the air. The tape is stuck to the strut from the trailing edge right around and back to the trailing edge where any excess is trimmed off. A couple of good heavy coats of dope and talc are applied and allowed to dry, don't be afraid to sand the doped tape, and its ready to undercoat and paint. This method sure eliminates the labour and time used by any other method to effect an acceptable finish, particularly to soft balsa (Fig.10).



That's enough this time, next time I will discuss rigging. wires and turnbuckles etc..

Changes to VFSAA Scale Events.

With the ever increasing numbers of ARF scale models available through our hobby stores and the interest shown by club members in flying these models, the VFSAA Committee has decided to make some changes to the format of our Sportscale events.

As you should be aware, the Sportscale event was held in two sections - Secondary and Unlimited. The Secondary section was intended primarily to attract the members of the club at which the event was held and was a flying only event with no static judging and a reduced flying schedule. ARF Models were always welcome in this class, The Unlimited section was flown to the current FAI scale flying schedule and the models were intended to be static judged. It was effectively a stand off scale event with the static judging held at the start of the annual flying program and these scores used at each competition. For the last couple of years however, no static judging has been done due to difficulties assembling all models at one venue and all events have been flying competitions only.

The Committee believes the reduced flying schedule for the Secondary class is no longer appropriate, as on those occasions where we have combined the two classes, everyone has been happy to

fly the full FAI schedule.

Future Sportscale events will still be held in two sections, to be designated Scale and ARF Scale. The ARF Scale section, open to all MAAA members, will be restricted to ARF models. The Scale section will also be open to all members of the MAAA and is for aircraft built by the flyer from plans, kit or from scratch. Both sections will fly the normal FAI flight schedule, and neither class will be static judged at Sportscale events.

Additionally, a new ARF Scale event will be flown at both the State Championships and VFSAA Trophy.

Static judging of Scale class models will still take place at the State Championships and VFSAA Trophy, and VFSAA members will have these static scores applied to their Sportscale results to determine the winner of the point score Hargrave Trophy for the year.

These changes will be trialled at the event in Albury on November 12th -13th and will apply to the series of Sportscale events for 2006.

Can a PUP be Throttled?

(David Anderson)

After attending the closely fought Trans Tasman at Shepparton, I heard a comment asking the question of the New Zealand entrant Neil Schrader's Sopwith Pup .. "Could a rotary engine be throttled or was a blip button used?" All this for scale authenticity! So I duly checked my 1st World War literature, and the following should be of interest to WWI pilots!

Contrary to popular opinion, rotary engines of the two lever type, such as fitted to the Pup, can be modulated over a range of rpm. In practice this is about 700 to 1150rpm on the ground, noted on the cockpit rpm gauge, which equates to about 50 to 100% of available power respectively. The trick for safe operation of a rotary is to know when the engine is running rich or weak, and what to do if it is.



Finally, the engine suite is completed by a single ignition system with magneto on/off switch on the instrument panel and a blip button on the control column, which cuts out the ignition when depressed.

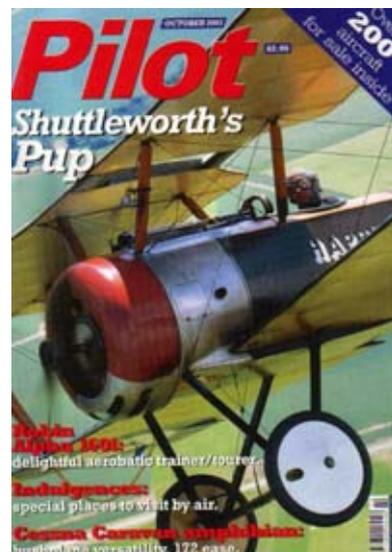
Although the engine can be modulated by judicious use of the blip switch, it is not recommended as a primary engine control. The engine is 'shock' loaded every time the blip switch is pressed and continuous flight with ignition switch off, leads to oiled and fuel fouled plugs.

Better to use the petrol lever to modulate the engine over its limited range - or if even less thrust is required, to shut the engine down completely by selecting the petrol lever to the fuel off position.

I will not bore you with all the technics required to adjust the fuel mixture control on the rotary engine, however engine management almost required an engineering degree to keep the plane in the air.

The abovementioned section of an article was written by Andy Sephton and appeared in the October, 2001 edition of "Pilot" magazine after he had flown the Shuttleworth collection's Sopwith Pup, with it's Le Rhone rotary engine. He finishes this article with the following comments: "I've now flown several sorties in the Pup and what a marvelous machine she is. The handling qualities are superb for a machine of her era .. but there are enough interesting characteristics to require a certain amount of piloting skill to achieve safe flight".

It is no wonder the Scout pilots of the RFC and RNAS held the machine in high regard. As for me, well, the vision still hasn't burst!!"



WHAT'S ON?

December 1st	VFSAA General Meeting	FNCV
January 19th	Scale Rally	WERRIBEE
January 22nd	Sportscale Rnd 1 (ARF and Scale sections)	STATE FIELD
February 2nd	VFSAA General Meeting	FNCV
February 5th	Scale Rally	TBA
February 19th	Scale Rally	CHAMPS
February 26th	Monty Tyrell Memorial Scale Rally	P&DARCS

NEXT MEETING

General meeting, Thursday, December 1st, 2005, commencing at 8:00 pm at the headquarters of the Field Naturalist Club of Victoria, 1 Gardinia Street, Blackburn. Visitors and guests are welcome to attend.

Committee meetings, Wednesday, December 7th, and January 11th, 2006, commencing at 8:00 pm at the home of Noel Whitehead, 13 Seattle Street, North Balwyn.

NEWSLETTER

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