

Biggles News 2011

Having taken over the News from John Cooper last year it is my sad job to bring the News 2011 to publication. Sad because the passing of John Bailey has given all Biggles a subdued air. John and I were at Narrandera, Aus, for the Southern Cross Cup after which John travelled on to NZ for next two internationals in the southern hemisphere; it was the last time I saw John happy, only seeing him once more before his departure. I'll leave the thoughts to Brian and John who were closer to JB than I was but like all of us I will miss him, he was one of those rare people who can be a perfectionist without becoming obsessional about his aeromodelling.

On a more cheerful note we do have contributions from some Biggles, notably Brian Lavis, John Cooper, Andy Crisp and myself. While this is hardly a handful we hope it will give all of our readers some food for thought; plus you also get a 'Full Size Plan' included in your zip file, just like those old days of Model Aircraft and Aeromodeller though this plan is for my Disco Stu DLG so hardly in the classic mould.

It is very pleasing to see how many National (UK) and International fliers ask me for copies of Biggles News so that our small team of enthusiasts have become quite well known across the Free Flight world. I'm back from the Aus Nats held at Dalby a couple of days early to avoid the floods cutting the Warrego Highway, while upstate our new home town of Mundubbera saw the Burnett River rise 20 metres (I kid you not) to flood the town while the rest of Queensland is largely underwater with towns cut off and evacuated. Even in these terrible conditions 'digital delivery' is working to give people the News.

My Aussie mates ask me why don't others embrace this 'digital delivery' such as for the 'Free Flight Symposium' reports, the 'Rubber Model Propellers' book and Gordon Cornell's book on designing competition diesel motors. Here on the other side of the world airmail postage costs an arm and a leg, plus taking forever. So if SAMS 1066 can go completely digital for a big bunch of vintage free flight enthusiasts how come Martyn, Mike and Gordon are still stuck in the old millenium. Making information easily, and free or cheaply, available is a big factor in encouraging continuing participation in Free Flight so come on you guys get 'techy'.

And I suppose I should make a small apology for my 'techy' gps and smart phone article but if you want to know what the 'now' holds for helping model aircraft retrieval it is best to bone up on these new technologies. Next year they might be commonplace with many of us calling our models on our smart phones to ask them where they have flown to. It sounds 'science fiction' but all the tech is out there now at pocket money prices compared to what we already spend on competing in the annual contest calendar.

Wishing you tight lines and great thermals for the 2011 Season.

David Brawn.

Editor Biggles News, Biggles FFT Catering Manager, founder member of Biggles Free Flight Team - we're a small group so everyone has several official handles!

John Bailey - Biggles FFF 1976 to 2010

I'm sure we all have our own memories of John, doubtless some will be common to all of us, whilst others will be unique.

I first met John at Bassingbourn in late 1976, I recollect that he approached Martyn Cowley and myself saying that he was interested in joining Biggles as he had heard that we enjoyed the social side of aeromodelling - i.e. we enjoyed going to the pub!

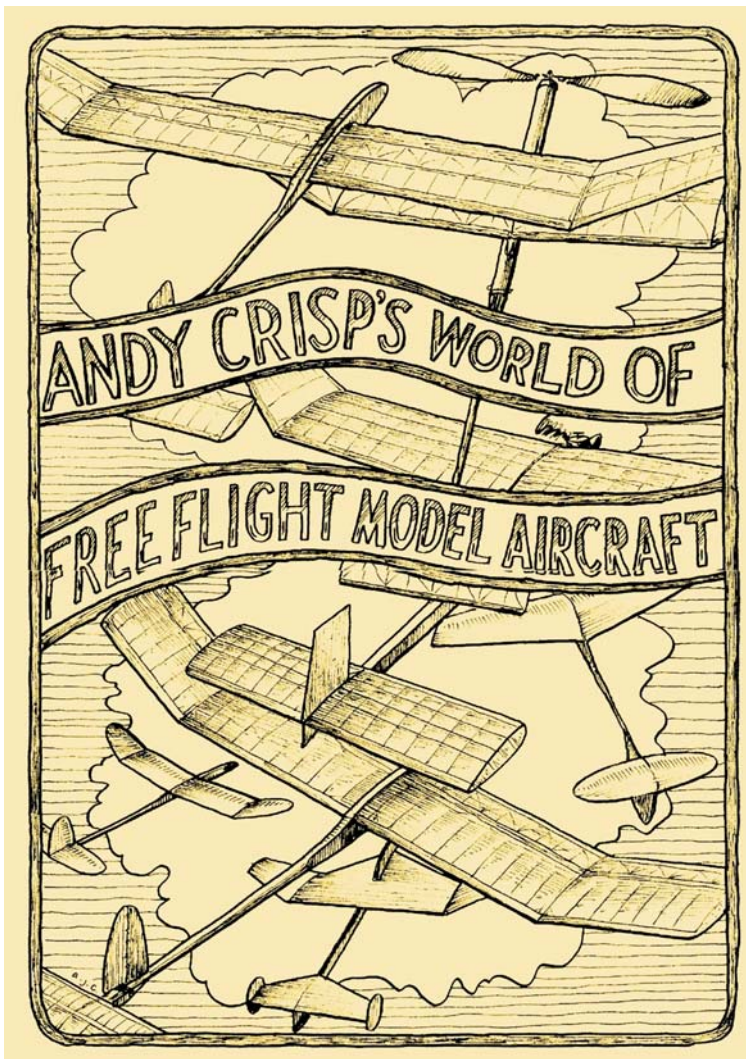
For the next 15 years or so my favourite memory of John is the time spent in his VW camper van having coffee and biscuits (usually digestives) after a meal and drink in a pub at 2 day contests. Many a new model was designed during those sessions - some even got built! The choice of evening location was usually left to John, armed with his CAMRA pub guide. Many's the time that the search for good beer led us to a less than good pub!

I was also lucky enough to travel abroad with John to several French contests and 2 US world Champs. They were always happy trips, with the socialising making up for occasions when our flying was below par.

John had long wanted to attend the 4 back to back Australian and New Zealand World Cup events and it's good that he achieved this, in what was effectively his last flying holiday.

A sad loss to Biggles and Free Flight.

John Cooper



Andy Crisp's World of Free Flight Model Aircraft

Has drawn wide praise from the hundreds of aeromodellers who have purchased the pdf download.

Andy's plans selection continues to be available from:-

www.instant-books.org for just £2.99

Go to the website, then to 'Shop' and select 'Aeromodelling' in the drop down 'Search' box. Click on Andy's book then pay, by PayPal or credit card, then after payment return to the instant-books.org website to download your pdf.

You get the benefits of 'digital' with 'instant delivery' and no postage costs no matter where in the world you are.

Adrian Bryant's Australian Free Flight Plans Collection

Three years ago I met up with Adrian to add a bit of impetus to digitizing his collection of all the Australian Free Flight Plans that have been published. A number of enthusiastic fliers have been involved with Adrian and George Carr shouldering the bulk of the work.

Adrian's Collection is now in the form of a searchable digital database of pdfs which George is hosting at:-

www.kurrawong.net/affp/

with plans dating from 1893 to 2008 searched by 'model name', 'year of publication' and 'designer surname'.

The website can also be accessed via:-

www.nswffs.com.au

scroll down the opening page to the Adrian Bryant link.

Give this great Aussie Plans resource a try, its digital, its fast and its free.

Thanks lads for letting me be involved in this ground breaking project.

David Brawn

Goodbye John

In 1978 I decided to return to modelling after a 25 year lay-off. From the Aeromodeller I found that Biggles was the nearest club and Martin Cowley the contact. He told me to go onto Bassingbourn & make myself known. I did and there was John. He had only recently come to the area and joined the club and we lived just a few miles apart. So, it was natural that we shared transport, flying & drinking. That continued for the 32 years until John so sadly died.

For several years we were able to fly on Henlow any day and all day. So we did. I suppose it was John's holidays from school but I just snuck out of my office. It didn't do much for my business but my flying has never been better. Sadly full-size flying put paid to that but John was always good at finding places to fly. Go round Clophill and you'd think there was no suitable space but over the years I joined him on at 5 nearby fields where we could chuck models in the air. The great advantage was that the Stone Jug was close at hand.

We did go further afield together; to pub car parks all over the country and to Poitou on several occasions. I'll always remember the times we lit the barbecue for the evening meal & went to Lionel's to wait for it to warm up. It had always burnt out by the time we got back and needed reloading.

Away from flying (there is such a thing) Glenys, John, Joan & I shared several evenings together – at home or out. One great memory is of the cross-dressing New Year's eve party at the Stone Jug. Glenys was neatly dressed in a dark suit with a Charlie Chaplin moustache (I think) but John was finely turned out in a blue dress with a large matching handbag over his arm. He was a spitting image of Mrs Thatcher apart from the black beard. So he grew that too! It came as quite a surprise to find that we were the only crossed-dressed couples in the pub. It was a very good evening though.

There are many more memories that will live with me. John was my friend & companion for all my modelling life. I do & will continue to miss him.

Brian

RC Electronic DT timer

Flying in California this year showed me that KSB timers and the Lost Hills dusty soil don't belong together. All timers needed cleaning at the end of each day. The best answer is to fly electronic bunters – especially if you want to win but it would be convenient to improve existing models in the meantime.

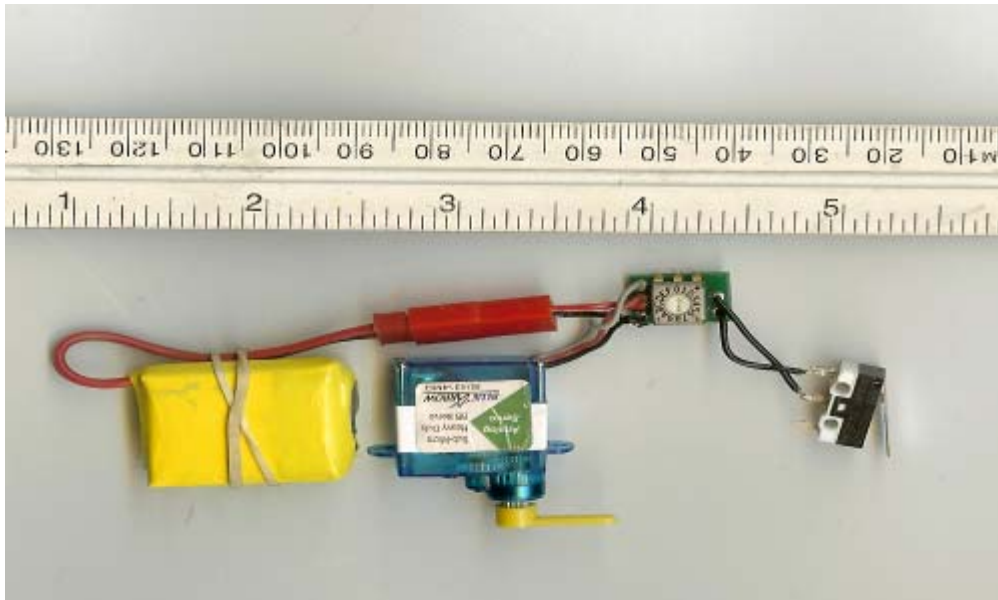
This simple electronic timer is one solution. It includes a rotary DIP switch by which any of 16 pre-programmed DT settings can be chosen. The switch shown on the right is positioned in front of the hook and resets the timer each time the hook swings forward. At the selected DT time the servo arm rotates through about 80 degrees and can be used any way you like. The simplest is to release a tail retaining line but a neater solution would be a swinging arm at the tailplane TE. Thus to reset hold the tail down & pull the hook forward. It is driven by a single LiPo cell; the one in the picture is far larger than needed but I just happen to have it around.

Advantages: no problem with dust; cheap at about £15 and a cheap servo can be used; a completely clean fuselage pod with no chunk of machinery poking out except, perhaps, the servo arm; small.- without the battery the shown assembly weighs 6 gm.

Disadvantages: too small – unless you are skilful with a soldering iron & have good eyesight it is quite a pain attaching 7 wires - for gliders it could be much larger and cause no problem; you need to keep a battery charged – the quoted current drain is 1.5 mA so the battery shown will theoretically last for 360 hours if you don't switch it off. If you do, it should need charging just a couple of times a year. The maximum DT setting is 6 mins. Other disadvantages I haven't discovered because I've not yet flown a model fitted with it.

There is a web site for the manufacturer of this timer but I cannot find it again. Anyway you will be referred to the email address of the British agent. I think he lives in Bozeat so quite close at hand.

Email: Martin@eSoaring.co.uk



I haven't fitted a charging/off switch as shown in the circuit shown below

RC Timer module

Figure 1 shows how to connect RC Timer module.

Figure 1. The RC Timer module

Selectable times

0: 15s	8: 140s
1: 30s	9: 180s
2: 50s	A: 200s
3: 60s	B: 240s
4: 80s	C: 260s
5: 90s	D: 300s
6: 110s	E: 320s
7: 120s	F: 360s

Handwritten note: 37s = 4h = 360s.

Specifications

Board Dimensions	14 mm x 9 mm x 7 mm 0.55" x 0.35" x 0.28"
Weight	1 gram
Input Current	-1.5 milliamps
Temperature Range ¹	-10°C...+60°C
Input Voltage Range	2.7 - 5.5 volts DC

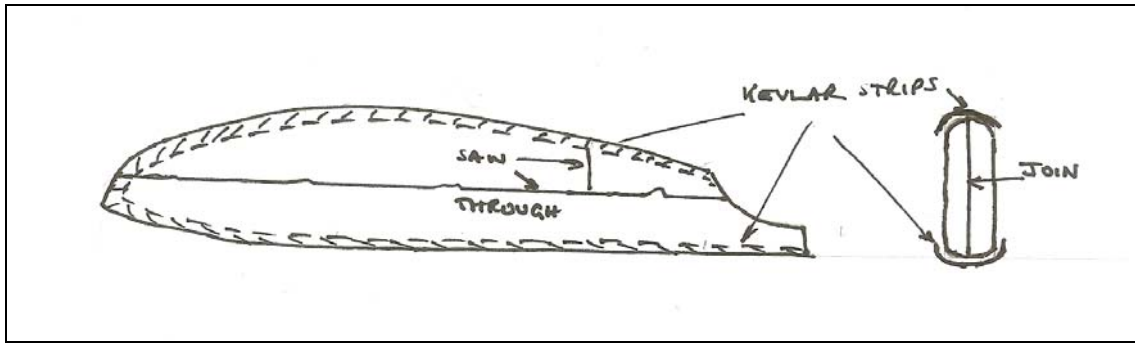
¹ Specifications are taken from component ratings and system limits and may not have been tested to the full extent of the specified ranges.

Handwritten note: RC timer module.

12/7/2007 RC Timer - Electronic timer with pre-programmed times for F1H planes Page 4 of 4

BWL

Joining Fuselage Halves



I've never had a consistent method of joining moulded fuselage halves. Over the years I have used metal, wood, Kevlar, carbon & pre-constructed wing/hook mounts – usually a mixture in each model. This time I decided to do it more tidily. I already had the 2 shells but not the cores round which they were formed. So the first job was to make them: fill each half shell with car body filler and after setting remove and join the two together. Around the top & bottom of this, Kevlar strips (the continental brown cloth) are used to mould a joining tape. I found it easier to wrap the system if I split the core along the length – quite roughly sawn. Normal laminating epoxy is used with Hook film, video tape etc to bind to the cores. When cured and before lifting off, tidy the edges with a knife. I used 15 min Araldite to fit the tape inside the shell. Put the tapes back on the core and insert together. Make sure there is no resin exuded out of edge. The saw cut leaves clearance so that core & tapes can be stuffed in & out. Fix to just one shell. When cured remove core and test that the second shell fits neatly over the tape to match up to the first. You will probably need to trim things a bit around the nose. Then Araldite the rest of the tape, fit the second shell & hold together with masking tape. It is easier if loosely fit some balsa blocks between shells so they do not push in too far. And there you are, a perfect finish. How was it then that wasn't perfect? It will be the next time I do it.

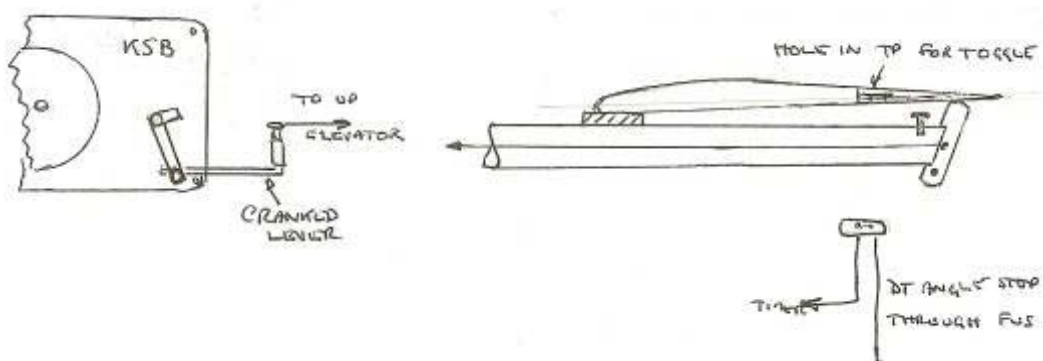
Of course you will use a good release agent won't you? I use Superwax and/or Blue Gloss PVA Liquid release agent both from Trylon at Higham Ferrers.

BWL

Toggle my Tailplane and up it a bit

AIs are notoriously difficult to tow in calm weather & F1Hs are no better. Things are greatly improved with some up elevator. It helps straight tow, circle and increases tension to unlatch the hook. This can be applied easily on a bunt model but the system below can simply be fitted to existing models equipped with KSB timers. I've used it for a few years with no problems. It is simply a swinging arm under the TP trailing edge connected through to a crank arm which lodges under the stop switch on the timer. When the timer starts the arm released & the TP drops to glide position. An adjustable length lever might be better but I simply build in about .5mm at the TE.

Alan Gibbs used an alternative method for years, and with great success, where his lever is connected directly to the hook so applies up only when the hook is forward.



Something else I've used over recent years & expect to in future: instead of fixing the DT line onto a hook on the TP finish the line with a toggle which pushes through a hole. It is simple and the tail stays attached should the bands fail on landing. Whilst at it I always take a second line down & through the fuselage to determine tip angle..

BWL

Andy Crisp Has Designs, and Ideas, on Brit Glider

Family life and health problems have meant that I have done very little flying in general over the latter half of 2010, and virtually no competition work.

However this has not stopped me thinking about things - fishing, pretty girls and model aeroplanes. It is the latter which concerns us here.

British Glider (or whatever its official name is) has chugged along quietly for a few years without much being written about the possibilities allowed by the rules. It seems to me that an obvious, or at least a very good solution to the rules is staring us in the face.

Basically, if you are flying a model glider with moving surfaces other than auto-rudder, i.e. circle tow, bunt, wing wiggler etc, you get 50 metres of towline. If you have just auto-rudder, or even no rudder at all (!), you get 75 metres.

Let's consider some figures. If you took a contemporary F1A, say a Stamov or M&K type "long" model (never mind the flaps!) and towed it up on 50m of line, you might expect 3 min in neutral air. Do the same thing on a 75m line and we're talking 4.5 min. This is what such a model is meant to do from a full bloodied "bunt" launch from 50m of line.

So why aren't we flying performance aircraft with fixed, straight towhooks? The typical aircraft flown on the 75m line in B.M.F.A contests seems to be either a basic beginner's style job, or a Classic design from the '50s. Dare I mention the Inch Worm! An Aeromodeller review when the kit first came out (June 1955) stated that it was "good for the magic two minutes" when flown in reasonable conditions from 50m. Flown on 75m this translates into 3 min, still over the 2.5 min max we fly to mostly, these days.

Of course the weather is rarely still in the horizontal or 'up and down' direction, thus we only have 30 sec worth of down draft to fall below the max. Compare this to a contemporary approach flown on 75m, where we have a whopping 2 minutes to fall before we "drop" a flight. This begs the question - "Why are we not developing tasy straight tow gliders?"

Without being too slavish to modern design concepts, and wishing to exercise a degree of originality in my approach, here are a couple of design possibilities which might fit the "performance" straight tow idea.

Having yacked on about originality, both are in fact blatant copies of other successful models, with structure and details altered to suit my own taste.

Model A (A.J.C.24) is based on Steve Marriot's SM4, which in turn was based on Gerd Erichsens Miss Molly which won the World Champs in 1963, and which was one of the first models published with a solid sheet wing - see also L.Doring & Hofsass Wakefields.

Steve's model was notable for winning F1A at one of the first Poitou events. I remember it well, as I too would have been among the medals had my timekeeper not refused to stand up to see my model coming in to land among the sunflowers. Steve was circling with an offset ping-ring hook and as the day got windier, the stunts got more spectacular! Still it always come off into a thermal and ended up smelling of roses.

My version will use an open structure wing, instead of being sheeted - far better weight distribution - and Bob White truss rib disposition about a carbon composite spar. I have a friend who designs yachts and who passes on to me lots of carbon offcuts, usually .8mm by 3mm and a metre long. Doubling up at the root will give a tapered spar effect.

I will retain the rubber-banded on wing, for ease of construction, and lengthen the nose a little for more timer space.

Steve's design had very short cranked up tips to the wing, which, while being very distinctive (and easy to spot in the air) are probably not as efficient as a slightly longer panel. I will therefore increase the tip length by a bay or two.

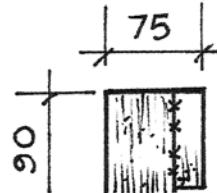
A thought occurs to me that models in this B.M.F.A Glider category don't have to be F1As, so building lighter than the allotted 410 gms may be an advantage, despite what the theorists say.

Model B (A.J.C 25) is a bare-faced crib of Fritz Wilkeirino's Joker, which was developed from his Matlin, which in turn was a more sophisticated version of Matthias Hirschel's 1967 World Champs winner. I like the no-nonsense squared-off lines of the series, and the short moment arm, small stab arrangement, which could be playing with fire, stability wise, but which might give a sharper response to thermals. "Proper" polyhedral, i.e., dihedral on the inner panels as well as the tips might give safer and more tolerant D/Ss.

So there you are - the products of my thoughts, as yet unbuilt but the Swann-Morton is poised!

*Andrew Crisp
November 2010*

+2° C.G. 50%



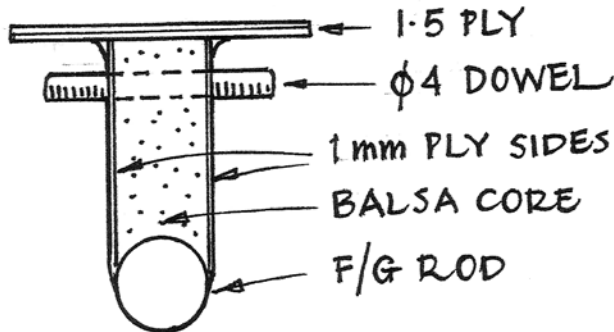
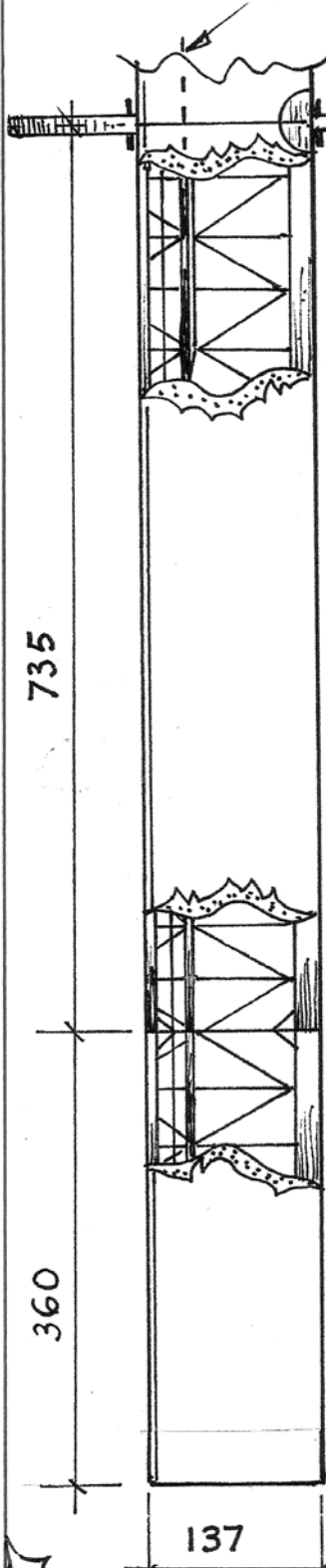
FIN ~ 3 mm ø gn.
-1°

100 137

620

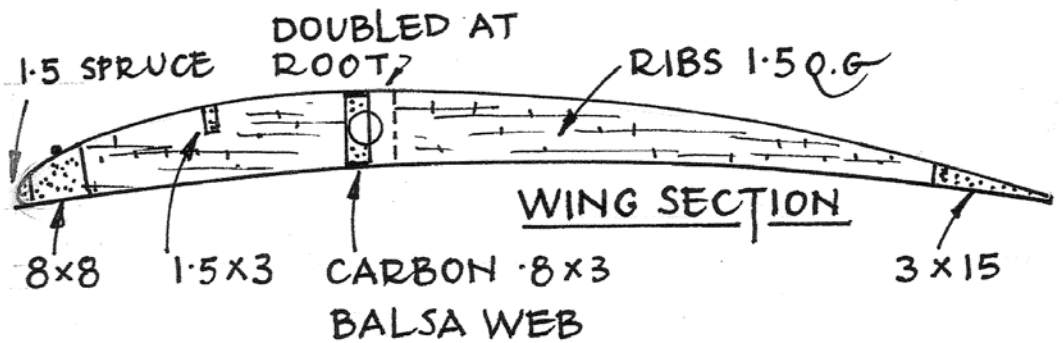
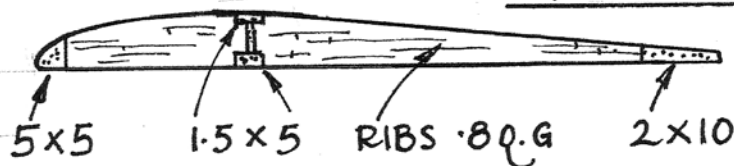
90

JOINER ~ 6 S.W.G 150 LONG



SECTION AT POD

TAIL SECTION



WING SECTION

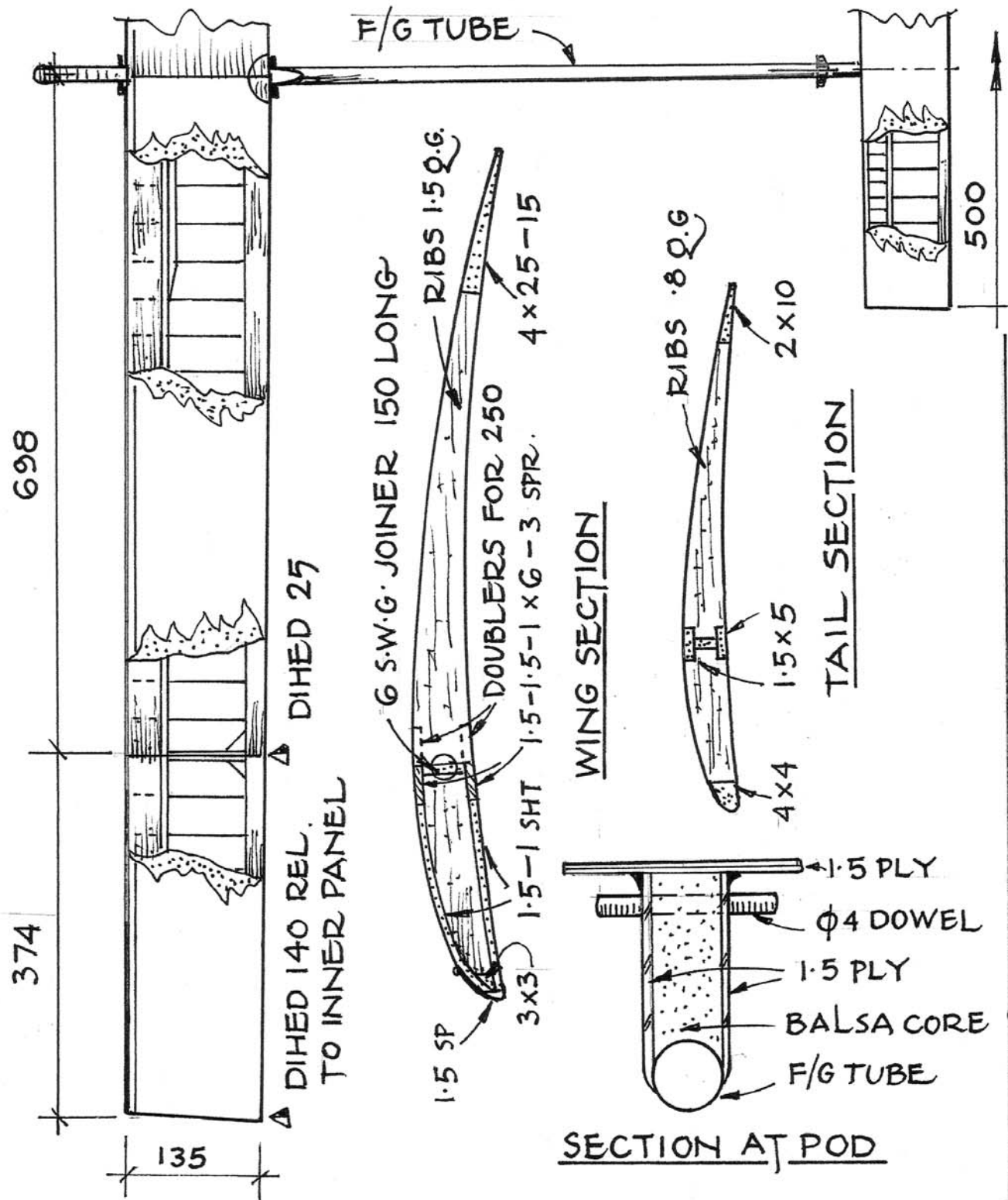
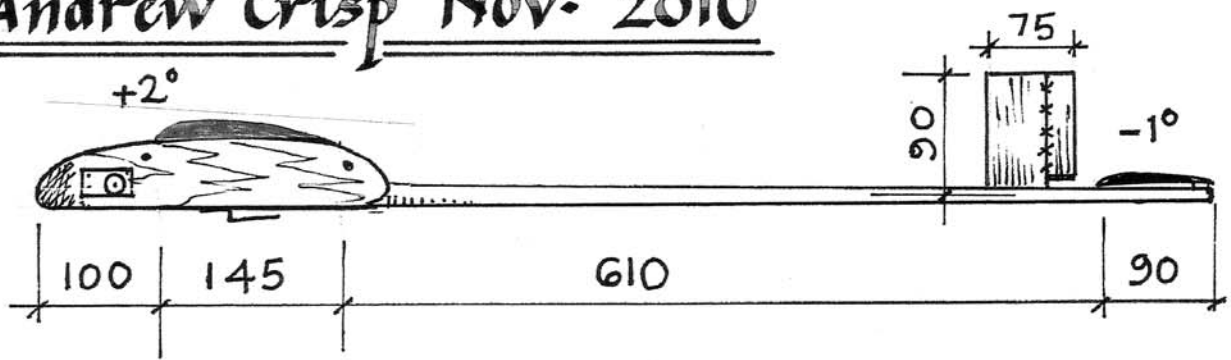
150 TIP DIHED.
CENTRES FLAT

SCALE 1:6

A.J.C.24 ♦ ♦ ♦
 a straight-tow glider
 by ANDREW CRISP
 NOV 2010

A.J.C 25 - a straight tow glider

Andrew Crisp Nov. 2010



'Disco Stu' and some thoughts on Chuck Glider Flying by David Brawn

In 2009 I arrived back from Oz with two Morris Dancer (MD) models given to me by Peter Lloyd (designer) and Albert Fathers (frustrated builder). To fit the Biggles hard shell golf case I had to cut off the long noses of both models and reattach them before any UK flying. I had been given some advice by Lloyd in Aus, and some better advice from Dave Ackery (NZ) on how to trim DLGs, so while I had blown up two of my own MDs in trimming at Narrandera I still felt confident at achieving some success in the 'box' against the established UK experts. Taking a break in glider flying Andy Crisp and I arrived at the Brit Nats 'Box' where Mick Page and Mark Benns expressed interest in the big DLGs casually dangling on our right arms. A quick 'How do you fly these things?' question, then a couple of practice half spins and I threw a test DLG flight of over three minutes that D'd down a few metres away - I was in heaven but it was not to last. I couldn't repeat my first launch apart from a last flight max and finished well down the list below Andy (see his plan in Biggles News 2010).

Next contest was Andy's famous Oxford Comp for the Saturday night HLG against Steve Brewer and Pete Solhurst. Here my spinning throw was even more erratic, ending with a fast low level wingover stance by the MD before a wingtip clipped the ground resulting in a spectacular wing burst worthy of a WWI movie. I put the bits in a carrier bag and retired to think about DLG.

Here are the thoughts from 2009:-

1. DLG working well means that almost any flier can get good flight times without having to have a rangy athletic body like Andy Crisp or Len Switees, or the youth of Steve Brewer; think Mick Page and myself. Now should you be such an athlete with javelin experience to County/State standard you might want to stick to conventional HLG which can have equivalent performance to a DLG design because.....
2. DLG models are big and do not pack away easily, an MD is three foot span and nearly three feet long and while you can disconnect the tail boom it is still attached by its DT line. Even in a big car transporting these DLGs is troublesome plus they take up a lot of space in your modelling room.
3. Launch Peg (left tip) releases seem problematical, along with the drag plus a balancing weight (right tip) giving a combination of inconsistent releases along with reduced performance (extra weight and drag) - not that Mick Page or Peter Lloyd exhibit these symptoms but then they have had a lot of practice and they don't tell you about the failures!
4. HLG/DLG is the purest form of free flight where the flier's ability (physical and mental) combine directly with the model's dynamic ability. A successful HLG/DLG is as much about the designer/flier as it is about the model, which is why few fliers can replicate the performances of the original designer/flier/model combination.

So if you can't replicate a successful model then where do you go?

I wanted a simple DLG that would provide consistent flights without the dramas most DLGs experience; think nose up at end of climb, followed by steep dive into hard ground and wings bursting - as Andy said you get a lot of broken models! So here is the thinking behind Disco Stu the Beginner's DLG:-

- A. Compact size of 24 inch flat span wing, which is under 50% of the wing/fus size of a three foot MD.
- B. Detachable wing for easier transport and storage.
- C. A minute plus standard performance; well dream on as this is a beginners model so think 30-50 seconds dead air performance.
- D. Plenty of in-built stability, even at the expense of performance, so that I could simply replicate average flights.



D took priority over C in so much that I would give away (some) performance, think extreme model designs, in favour of having a model that flew again and again consistently without damage - if this was an F1A think Flashback/Pink Elephant, or open power a Dixielander where if you wanted to go for extreme contest performance you would build in the John West modifications. I saw the critical part of a DLG's flight as the point at which the

throw runs out and the glide starts, even successful flier/model combinations coming to grief at times with a plunge earthwards. At this critical phase airspeed drops to zero. So what does your model do? Most just stop, let gravity take over and before the flying surfaces get up to working speed you are in the ground - hopefully soft!

My approach to this critical phase is to make sure the 'centre of lift' is well above the 'centre of gravity'. As the DLG slows the CG rights the model while the CL well above the CG keeps it flying, instead of stalling. So in comes six panel wing (just because we all do it) with plenty of dihedral, add a droopy nose with the lead as low as possible (think Mick's Butterfly design) so as to maximise the stabilising rolling moments when airspeed drops. Throw in three degrees decalage (standard towline glider) for stall recovery along with shorter tail moment but bigger tail and fin than the extreme models and a moderate nose moment to keep the model reasonably sized. Instead of a peg I would have one inch diameter circles of 180 yellow grit 'wet & dry' carborundum paper (don't stint on this) and no balancing weight would be necessary.

I got out the roll of cartridge paper and drew up a full size prototype plan ready for Biggles Big Din, hosted by John and Glynis Bailey at a Bedfordshire bistro pub, where I reasoned that a few Biggles critical comments would iron out anything I had forgotten. Over coffees Andy Crisp and Steve Brewer got into analysing (criticising) my Disco Stu. I listened carefully to all the comments, sifted their thoughts, and then threw them all away - because as I saw it they were coming from the 'expert/extreme model' thinking rather than the beginner's model concept I had in mind.

Disco Stu - Does it Work?

No and Yes, or perhaps Yes after a minor material glitch.

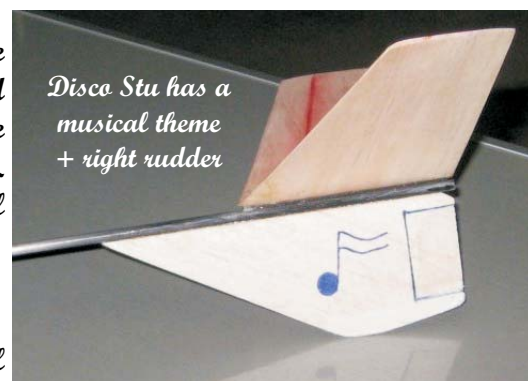
How much energy you can put into your DLG (think potential energy on launch) depends on the velocity on release; faster spin means more energy but the amount can defeat your basic concept. So it proved with Disco Stu at the Queensland State Champs where my 3mm spruce wing mount simply could not cope with the potential energy and split along the grain. Back in UK I replaced the spruce with Maplins glass fibre circuit board (2mm) plus 0.8 birch ply overlaid on. Now I had a model that stayed together, threw itself into the glide every flight (has never plunged to earth) and has drawn admiring comments from Mick Page and Steve Brewer who I think have both thrown it with abandon. DS doesn't get as high as the extreme models, that three degree decalage showing in a roll at the top of the climb - Steve says drop the decalage to 1.5-2 degrees for a higher pull out.

Results have been good, just look back at the 2010 results. While the experts have lightweight booms I'm on standard 3mm carbon boom and heavy, big, tail. But while the expert models are very good indeed I have a model with replicatable performance every flight without any damage. All I need to do now is pick some better air than the experts so that I'll turn those 2010 seconds and thirds into firsts in 2011.

DLG - Get out there in the Box.

Disco Stu is the beginner's DLG. It works. Has good performance. So if you want a low cost/impact start to flying DLG I'd certainly say get your DS up and away for 2011 and don't worry about your physical attributes because this is one model you can have great fun with without having to have the usual javelin thrower physique required by conventional HLG. Enjoy.

Cheers David Brawn (Biggles FFI Catering Manager)



GPS Assisted Off-Field Recovery Developments 2010

Following on from my original article on gps retrieving the technical world is moving along at breakneck pace, but first a few tips on what is now the 'classic' retrieval method:-

Reduce Errors

Compasses, including marine sighting binoculars, are not 100% accurate so remember you are subject to +/- 3 degrees to the reading you see on your compass. This error increases if you forget a few simple precautions such as:-

Don't stand on the metal reinforced runway, try to be five metres off the runway when taking a sighting.

Metal objects about your person and especially those near your binoculars will alter your compass reading so leave your watch in the car and even steel framed glasses can affect your compass by another +/- 3 degrees.

Improve Reception

Both your tracker and gps receivers will benefit from using external aerials to increase their received signal strength.

For your gps get a magnetic aerial that will clip on the roof of your car so you can use your gps in-car without having to hold it against the windscreen - £10/\$16A on eBay but make sure you get one with the correct connector for your gps..

Trackers work on line of sight transmissions so the higher the tip of your aerial the further your receiver can 'see'. Roof mounted magnetic aerial is the one to go for. Brian Lavis' metre high roof aerial gives us excellent reception, especially when we used to use it atop my Discovery, but you do need to remember that this is a high aerial on a magnetic mount at Moncontour/Poitou we had the aerial swept off the roof by overhanging trees, plus losing it off the roof when braking, John Cooper's new car bearing the scars of our French learning curve. Once we have maximum signal on the roof aerial then it is out of the car and on with the Yagi.

New Technology in 2010.

So far our off-field recovery uses well tried old technology; a simple eTrex, aerials, Ruyter trackers, but we are about to benefit from technology advances that could make retrieval both easier and more certain.

Calling Your Model. (CYM)

Picture this scenario you model flies away into the great blue yonder and before you set off in pursuit you simply ask your model 'Where are you?'. When it tells you where it is then you simply go there and pick it up. Science fiction it might seem but in 2010 this is a reality.

The latest gps tracker units do not require expensive subscriptions, they consist of a phone chip linked to a gps chip (typically SirFIII) along with a patch aerial and a lipo battery plus a clip-in SIM phone card. These new 'personal trackers' are already available but with their packaging weigh in at around 30 grams, though when stripped down to basics it seems we will see 10 gram units before too long.

Once you have clipped in a pre-paid PAYG SIM card your tracker has a phone number. So when your model disappears downwind you keep watching it as long as possible and when you think it has landed, this could be an hour or more later, you simply phone the number of your gps tracker and it texts you back the grid coordinates of where it is yes it really does this!

Then you simply input those coordinates into your gps as a waypoint, use the GoTo function and head off directly to the model.

A major advantage of these gps tracker units is that they will work anywhere that has mobile phone coverage, your model could be tens or hundreds of kilometres away but as long as there is a phone signal it will tell you where it is.

These 'Super-Spy' units are now becoming widely available at a range of prices from £20/\$35A upwards. Check out these websites, just a few of many, for more info:-



2010 'CYM' unit

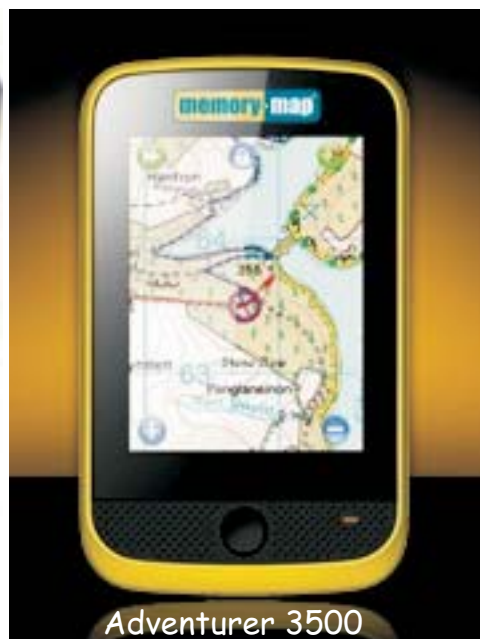
http://www.spy-craft.co.uk/gps_tracking_equipment.htm a bit pricey
http://www.chinavasion.com/product_info.php/pName/global-gps-tracker-with-two-way-calling-sms-alerts/
<http://www.chinavasion.com/index.php/cName/electronic-gadgets-gps-gadgets/> where you will find some very reasonably priced units intended for domestic rather than M15 use.

Mapping GPS Units

I am currently trialing a new Lowrance Sierra mapping gps unit supplied by Mapyx Quo see <http://www.mapyx.com/> for details of these units which come with OS mapping so you can see where you are on a map rather than the usual gps blank map screen. These gps units mean that when you CYM then input the coordinates into your Sierra you can see on the OS map exactly where your model is. Memory Map have the Adventurer 2800 and Adventurer 3500 mapping gps units also loaded with OS mapping having similar features. See <http://www.memory-map.co.uk/> for more info.

In Australia you have already had these mapping benefits with the Hema Navigator combined car Sat-Nav and handheld gps unit where it runs memory Map software.

These units are not cheap, weighing in at between £300-500 but compared to the cost of one bought FAI model would be a small price to pay if they assisted your recoveries. Compared to the non-mapping gps units most of us use they represent a quantum jump, 'Vorsprung Technik', in the usability of a gps unit and are expected to be a big seller as Christmas presents for 'outdoor adventurers' in which category I include free flight aeromodellers even though they might not look too adventuresome.



Smart Phones (SP)

iPhone has led a rush of new Smart Phones onto the market in 2010. One of the advances is that most of these include gps chips (SirFIII again) and Apps running mapping software. Another advance is that these phones are more like PDAs in their computing power so that you can run the apps without having the phone connected.

This means that you can CYM and gps retrieve on the same unit. In the long run this latest generation of SPs might decimate the traditional gps unit market as we switch to multi application PDA style phones.

What mapping you have in your SP can depend on what phone you have Memory Map already have an App to use their OS mapping in the iPhone but for everyone using an Andriod App you should have a look at my mate John Thorn's website where he is making available his powerful Mapc2Mapc software for just £10/\$16A and amongst the many things Mapc2Mapc will do is convert a digital map into the digital map tiles required by your Android App in a single click operation see:- <http://www.the-thorns.org.uk/mapping/index.html>



While iPhones and Smart Phones had been priced in the hundreds of pounds along come Orange with their new San Francisco gps equiped model which is selling in their shops for just £99 with a minimum 'Pay As You Go' amount of £20. Its got the latest Android software, you can download the 'Trek buddy' gps mapping App direct to your phone for free. All you need then are some digital maps of our flying sites and we have full retrieval device including smart phone for less than the price of a gps unit on its own. When I get back to UK I'll look at using Mapc2Mapc software to convert my airfields maps into Trek buddy map tiles so they are ready to use with these new smart phones.

2011 Wherefore Art Thou Flashback?

Do we need all this new technology?

In 2011 most of us will still be watching the model down and then trudging along the flight line with our Morgan/Ruyter receiver in hand; remember how quickly we adopted the 'tracker' technology. For most of us this combined with compass binoculars and a gps will probably be enough for the current decade.

But if you are regularly flying off-paddock/field for distant retrievals then the CYM chips could be a good investment for reliable long distance retrieval. Smart phones are the way ahead combining telephony with gps functions and digital mapping but might be thought costly if you are replacing your present system; though that Orange San Francisco at £99 is just the first of the new powerful smart phones coming on the market at budget prices.

Certainly for fliers looking at their first retrieval technology you now have a wide choice of options. If this technology looks expensive then set it against the cost of your models, either in purchase cost or in your time to build, then you should see that investing a few hundred £s/\$s in the new technology could save its cost in just one off-paddock retrieve.

Happy teching.

David Brawn
Biggles FFT and Brisbane FFS