

Flypaper



Bucket List Spitfire

John Ivory takes a flight in a 1:1 scale Spitfire – see page 16

Senior Falcon

Derek Woodley remembers a classic – see page 32

Outing to Tangmere
11th October – full details, page 14



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Cover: *Les Crane* with his 1/6 scale 93" Fieseler Storch. Built from the Svenson kit, it's fitted with a Ripmax Quantum 2, 410kV motor, 100A ESC, 14x7 propeller and 6S 5000 mAh LiPo.
Photo: *Grahame Pearson*

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FlyPaper is published at the beginning of March, June, September 2023 and January 2024 (see above note).

Submissions for the January issue must be submitted by 15th December.

Text for articles should either be in a Word document attachment or simply as plain text within the email message. Photos should be high-resolution JPGs.

FlyPaper back-issues may be downloaded from the SRFC website: srfc.bmfa.org

If you would prefer your name not to be in the website version please notify the Editor when submitting your article.

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Note: from 2024 *FlyPaper* will be published at the beginning of January, April, July and October

Current Instructors & Examiners

Training Co-ordinator Mark Vale answers an often-asked question

At the present time, we have eight active instructors in the club who are currently training twelve members of various ages and abilities.

There are a further ten members waiting in the wings, some to have a check flight when they feel ready, some on hold for various reasons and a few who have taken a step back due medical problems that need to be rectified.

SRFC Instructors

Jerry Hansen
Ian Florio
Keith Miles
Mark Vale
John Ivory
Steve Coombes
Tom Gaskin
Robin Strange (gliders only)

As well as eight instructors, we also have four examiners listed on the club's books. However, due to circumstances there are currently only two active examiners.

SRFC Examiners

Dave Knott
Tom Gaskin

Therefore, if any members wish to have some flying instruction – whether fixed-wing or rotary-wing – or to take a BMFA examination please get in touch with me (e-mail address on back page).



From your Chairman

Derek Woodley reports on recent activity

Since the last *FlyPaper* members of the Sussex Radio Flying Club have enjoyed some excellent flying weather and also endured some absolutely atrocious conditions. Where is summer?

I have looked back at conditions reported by our Weather Station at Coombes and see that the last three weeks of June gave us a spell of really lovely weather with light winds, little rain and warm sunshine. Great for model plane flying.

Since then, rubbish! A very wet and windy July resulted in some of our planned glider events and power competitions being either cancelled or deferred.

It even became necessary to cancel our Fun-Fly Saturday in early August, thanks to those wretched low pressure systems that seemed to have plagued the UK on most weekends.

However, good fortune allowed each of the monthly Friday Club Nights at Coombes to go ahead.

Indeed, on the Club Night at Coombes on 4th August, bizarrely the day before the planned Fun-Fly event, we enjoyed excellent flying weather.

The highlight (for me anyway) of these summer Club Nights is the superb barbecue food that Mark Vale produces and he deserves a big thank you from us all for the effort and skill he devotes to these evenings. 40 burgers and 20 sausages were cooked during that evening!

On that particular Club Night it was heartening to witness a large turnout and the number of models flown. At one stage there were six models airborne simultaneously with each one representing a different discipline. We had a ducted fan jet mixing it with gliders, Robin's vintage Black Magic, a Wot4, my single-channel Pay Joey and a scale warbird! Quite a sight.

I have also to mention the control line demonstration by Colin Lucas flying the stunter he had purchased at Old Warden earlier in the year. For many of us that really took us back to the days of our youth when we were just starting on our aeromodelling journey. Well done Colin, I hope you're not feeling so giddy now, just keep taking the pills!

On the subject of our monthly Club Nights, with the outdoor summer Nights now finished we will be holding an Auction during October and have a First Aid lecture booked for November, two evenings not to be missed.

By the time you read this *FlyPaper* a number of us will have enjoyed a visit to the Glider Heritage Centre at Lasham organised by Robin Strange (*See report on page 30. Ed.*) and we are planning a visit to the Tangmere Military Aviation Museum on 11th October. (*See page 14. Ed.*)

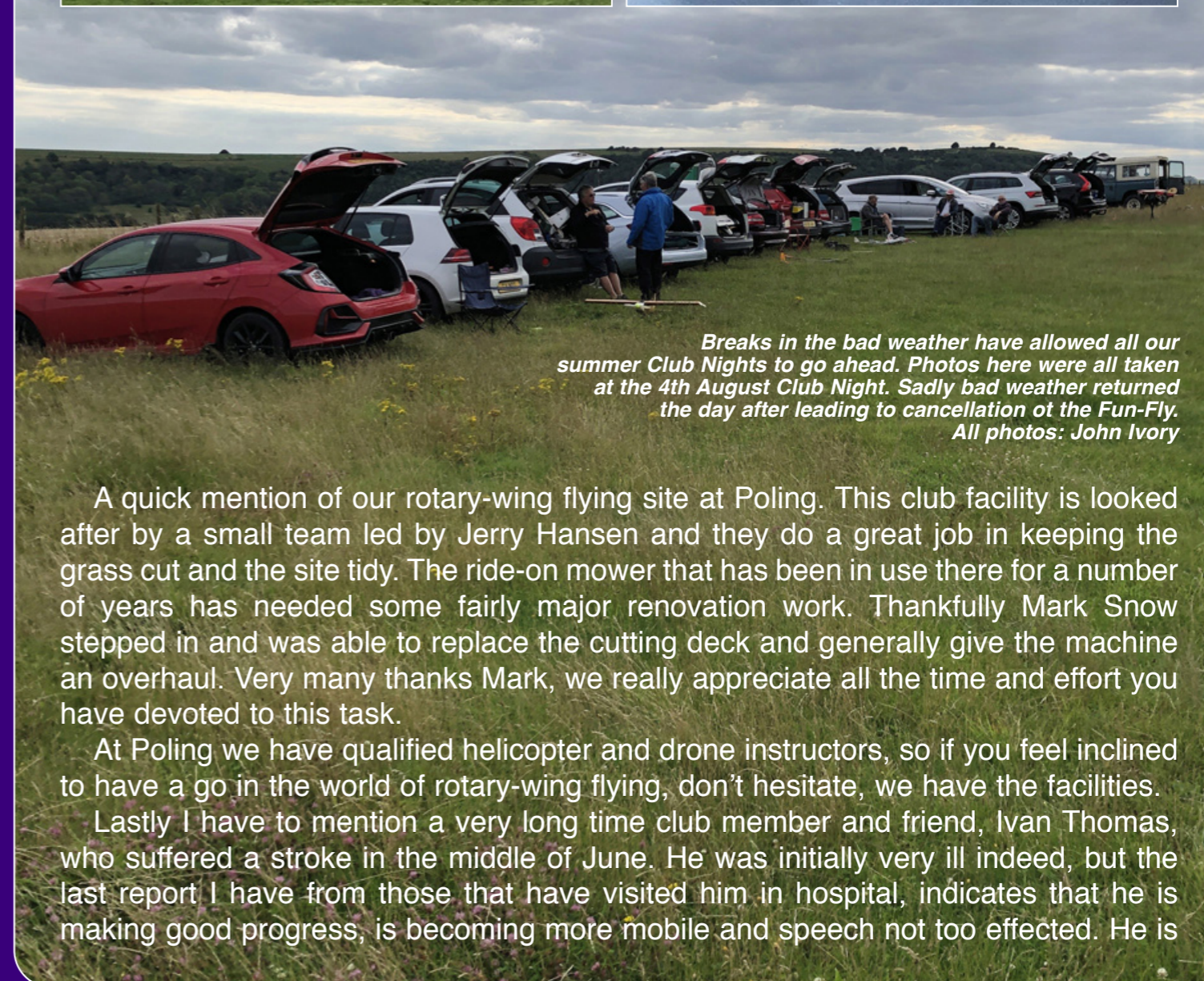
Our main fixed-wing flying site at Coombes remains in superb condition thanks to the regular mowing and maintenance team organised by John Ivory. It really is an excellent asset; the grass surface now rivals that of the best grass tennis courts!



Clive Upperton's Halifax as featured in FlyPaper, September 2021



Robin Strange's vintage Black Magic



Breaks in the bad weather have allowed all our summer Club Nights to go ahead. Photos here were all taken at the 4th August Club Night. Sadly bad weather returned the day after leading to cancellation of the Fun-Fly. All photos: John Ivory

A quick mention of our rotary-wing flying site at Poling. This club facility is looked after by a small team led by Jerry Hansen and they do a great job in keeping the grass cut and the site tidy. The ride-on mower that has been in use there for a number of years has needed some fairly major renovation work. Thankfully Mark Snow stepped in and was able to replace the cutting deck and generally give the machine an overhaul. Very many thanks Mark, we really appreciate all the time and effort you have devoted to this task.

At Poling we have qualified helicopter and drone instructors, so if you feel inclined to have a go in the world of rotary-wing flying, don't hesitate, we have the facilities.

Lastly I have to mention a very long time club member and friend, Ivan Thomas, who suffered a stroke in the middle of June. He was initially very ill indeed, but the last report I have from those that have visited him in hospital, indicates that he is making good progress, is becoming more mobile and speech not too effected. He is

expected to be discharged from hospital towards the end of August or early September. This is really great news, we are all thinking of you Ivan and wish you a speedy recovery.

Fair weather, light winds and happy flying!



George Evans flew his large (for him!) Flitfire as featured in FlyPaper, June 2021



Colin Lucas just has to be different! With assistance from Derek Woodley members were treated to a display of control line stunt flying



Diary dates

Outdoor barbie 'n' fly evening at Coombes

Final evening: **1st September**
6.30-10pm

Come along to the last meeting of the season and enjoy the company of club members and bring your models to show them off and fly. Enjoy a top quality burger or hot dog from the barbecue and a tea or coffee. Donations welcome! Weather dependent.

Indoor meetings at Worthing Leisure Centre BN12 4ET

- | | |
|---------------------|---|
| 6th October | Autumn Auction
7.30-9.30pm
Your chance to sell unwanted models and paraphernalia and to grab a bargain |
| 3rd November | First Aid talk
7.30-9.30pm
By Simon Aston |
| 1st December | Christmas Get-together and Party
7.30-9.30pm
Come along to our pre-Christmas get-together and party with buffet supper, raffle and prize-giving |
| 2nd February | TBC |
| 1st March | AGM
7.30-9.30pm
Your chance to become actively involved in the running of the club. More details nearer the time |
| 5th April | Spring Auction
7.30-9.30pm
Sell unwanted models or bits and bobs and stock up for summer flying |

Power Competition

Power Competition Secretary John Ivory invites members to have a go at the last power competition of the summer!

Final competition: **8th September**
1pm at Coombes

There will be a small prize awarded to the winner on the day. Weather dependent!

Glider Competition

Glider Competition Secretary Robin Strange invites members to have a go at the last glider competition of the summer!

Final competition: **14th September**
1pm-2pm at Coombes.

Peter Plank Memorial Day

9th September 16th September if weather poor on 9th.

Following the huge success of last year's event in celebration of long-standing SRFC member, the late Peter Plank, we are repeating the event. It may even become an annual event. Flying is primarily for ex-'Planky' models.

Outing to Tangmere Museum

11th October Email Derek Woodley: chairman.srfc@gmail.com
by 1st October. Admission £11 (Over 60s £9)
Full details see page 14



BMFA 'Around the World in 8 Hours' Challenge 2023

Derek Woodley recounts SRFC's contribution

The BMFA instigated the 'Round the World in 8 Hours' Challenge in the spring and encouraged all affiliated clubs to take part.

The aim of the event was for all participating clubs over a period of eight hours to fly an accumulated distance of 40,075km which is the circumference of the world.

Members of the SRFC rose to the occasion and two four-hour periods at Coombes on Thursday 6th and Friday 7th July were allocated to the event.

We had calculated that the distance covered in a normal circuit of our patch was 250m and we asked members taking part to fly as many circuits as they could during the periods and to count and record the number of laps completed.

Pleasingly 16 pilots took part and between them completed a staggering 1914 circuits. This was calculated to be a distance of 478,500m or 478km! (297 miles in English.) This distance achieved by the SRFC has been passed to the BMFA.

Clive Upperton flew the greatest distance over the two four-hour slots achieving 81.25km (over 50 miles).

I think all those present enjoyed taking part which gave our flying a sense of purpose. Most of the time there were five models circling the patch and having that



Photo: Paul Gladstone

many models in the same airspace doing the same thing was challenging in itself at times. However, no collisions or accidents occurred. Well done to all pilots.

I cannot finish this report without thanking Mark Vale for manning the barbecue and providing delicious food and refreshing drinks during the Friday session that coincided with our July Club Night.



Photos this page: Paul Shrubb

Power Competition, 21st July

Power Competition Secretary John Ivory reports on a less than summery competition at Coombes

Like last year, the weather has not been kind to us with the running of the power competitions, strong winds and rain leading to several cancelled competitions. Saying that, we were very lucky with the weather on the 21st of July.

The format was to land on a simulated aircraft carrier deck, 60 feet long and 12 feet wide. Now that sounds simple enough but it's harder than it looks, especially if there is wind and there were stiff penalties if you run off any part of the carrier deck at take-off or landing. On completing three rounds the competitor with the lowest combined distance from the start of the deck is the winner and rewarded with a pack of biscuits. Eight members took part, the results were as follows.

RESULTS FOR 21st JULY

1st Clive Upperton	5th Chris Foss
2nd John Ivory	6th Mark Vale
3rd Tom Gaskin	7th George Evens
4th Derek Woodley	8th Robin Strange



Carrier deck landing competition, 21st July.
Left to right: George Evens, Clive Upperton, John Ivory,
Robin Strange, Chris Foss, Tom Gaskin and Derek Woodley
Photo: Mark Vale



John about to award prize of biscuits to Clive Upperton (centre, with white hat), 21st July.
Photo: Mark Vale

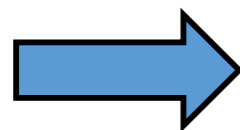
The next power competition was scheduled to be held on the 11th August with the format for the competition set to a Triple Thrash (three touch and goes, three loops and three rolls), winner is the shortest time from take off to landing with penalties for incomplete manoeuvres. With nine competitors champing at the bit ready to go low cloud and rain came in, the Weather App indicated it was going to pass quickly but an hour later it was still raining. The event was cancelled and rescheduled for the following Friday, the 11th but was again called off, as was the 18th!

The final competition is scheduled for 8th September and will be a 'double' to make up for lost competitions. Fingers crossed!



Would-be competitors, 11th August, before the competition was called off due to rain.
Left to right: Keith Miles, George Evens, Tom Gaskin, Clive Upperton, Derek Woodley, Chris Foss and Dave Knott.
Photo: John Ivory

Interested?



The Sussex Radio Flying Club is planning a visit the Tangmere Military Aviation Museum on Wednesday 11th October at 11am



Tangmere Military Aviation Museum, located in a corner of the former Tangmere airfield, was famed as an RAF fighter station from 1918 until Fighter Command left in 1958.

Tangmere Military Aviation Museum was opened by a group of aviation enthusiasts in 1982 to promote public awareness of the United Kingdom's military aviation heritage, to educate present and future generations in military aviation and to serve as a memorial to airmen and airwomen who gave their lives in the service of this country. Since that time it has been managed and run entirely by volunteers and in 2017 was awarded the Queen's Award for Voluntary Service.

Now one of the UK's leading aviation museums, it is home to an impressive display of historic aircraft and has a unique collection of aviation memorabilia stretching from the First World War through to the Cold War. Among the many attractions, there are numerous interactive displays and aircraft cockpits and simulators for visitors to experience. Light refreshments may be purchased in the Museum's Cockpit Café. A museum with something for all members of the family to enjoy.

There are a wide variety of military aircraft and artifacts to view. There will also be a special Exhibition, 'Hawker's Record Attempt', that refers to the attempt on the World Air Speed Record in 1953.

We hope to have the benefit of an introductory talk and a guided tour of exhibits.

A cafeteria will be available for drinks and snacks.

The cost of admission will be discounted and are expected to be around £9 for those of us over 60, £11 for younger adults.

You will need to make your own transport arrangements to Tangmere, car sharing would be a good idea to help parking.

WHAT TO SEE



The Museum Grounds



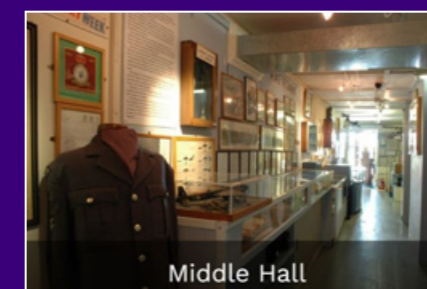
Meryl Hansed Memorial Hall



Merston Hall



Battle of Britain Hall



Middle Hall



Tangmere Hall

**More information is available at www.tangmere-museum.org.uk
If you are interested in joining this club outing please e-mail Derek Woodley at chairman.srfc@gmail.com by 1st October**

A day I will never forget

Biggin Hill, 28th June 2023 is a place and time which John Ivory will forever remember

Let me fill you in with some background first. It was at Eastbourne Air show with Heather, my partner, and family watching the various air displays until two biplanes with wing-walkers started their display. It was at this point I noticed my two daughters and partner starting to laugh and to whisper to each other. Now, over the years I have been given a number of Red Letter Days which included driving at Brands Hatch, flying in a two-seater plane, going up in a glider and tandem skydiving. (That's me in the photo, strapped to the instructor at 12,000 feet.)



All photos supplied by John Ivory

About a month later I noticed I was getting wing-walking adverts turning up on my Facebook page. I began getting very suspicious, "They are up to something," I thought, as I have big birthday at the end of the year.

The big day arrives and I have my family round to celebrate my 70th birthday, lots of cards, bottles of red wine, more bottles of red wine and then I was given a small box wrapped up. The room went very quiet while I ripped the wrapping paper off.

I was really taken back, it wasn't the expected wing-walking at all but something far, far better: a flight in a two-seater Spitfire! What a present, one of the things I have always wanted to do and tick off my bucket list. Photo shows the gift pack.



It's late spring and I needed to book the day for the flight on a date my family was also free as I wanted them to enjoy the experience as well – I planned to arrange a chase plane for them. 28th June was good for everyone; the countdown began!

The day of the flight finally arrived. We have arranged to

meet up at café at Biggin Hill Airport early. The weather was not looking good with low cloud and the odd spots of rain. Would the flight go ahead?

I need not have worried... sitting outside looking at the runway we heard the unmistakable roar of a Rolls-Royce Merlin engine as a Spitfire took off. It was still on. Making a quick call to the Heritage hangar, I was informed that they were running a bit late as the chase plane had not arrived yet.

It was time to head over to the Heritage hangar, all booked in and safety video watched we were taken to the workshop where there were a number of Spitfires being serviced and one being built from scratch, as the photo shows.



The Heritage Hangar was a treat in itself



With flying suit donned came the realisation it was really happening!

After the tour and back upstairs where I was introduced to the pilot, Jerry, given a flying suit and gloves to put on. At this point I was getting a bit nervous and at the same time excited.

Off I went, led by ground crew to the Spitfire. I climbed aboard, strapped in with my parachute attached and put on my helmet with intercom.

While all this was all going on Heather and my family were being taken to the chase plane.



The chase plane would fly alongside the Spitfire for part of the flight

The boyhood dream was about to become reality!



With the cockpit closed and intercom checked I could hear the pilot talking to the control tower then saying to me that he is going through the pre-flight checks, then a warning from him, "It's going to be quite loud, John, when the engine starts." With a loud whistle from the starter gears the Merlin bursts into life and at the same time a whiff of aviation fuel and exhaust fumes waft into the cockpit. The whole plane is simply alive; I cannot put into words that feeling.

Jerry now pulls the control stick back to the point where it's now touching my stomach then increases the RPM and we head off down the taxi runway, weaving from side to side to enable my pilot to see what was in front of the long nose.

The chase plane is in front waiting for clearance then it was onto the runway and took off.

Now it's our turn. Final clearance given, we swing onto the runway, the throttle is opened and a fantastic roar comes from the engine as we accelerate down the runway. In no time we

are climbing away leaving the airport far below. The skies have thankfully cleared giving a clear view of the North Kent countryside. Soon we have caught up with and are alongside the chase plane.

I could hear Jerry talking to the chase plane's pilot saying he was going to change sides, then bank off to do a flypast. We changed sides and as we then banked off I heard the revs of the engine increase to the loudest roar yet as we shot past the chase plane.

We were now had the sky to ourselves. Across the intercom Jerry asked if I fancied a go? Well, what do you think? My hand was on the control stick as soon as he said, "It's all yours." I'm flying a Spitfire! I move the stick to the left, the plane immediately responds, banking left. Now to the right. I did this a number of times with a small correction required as I sometimes inadvertently allowed the nose to drop. Wow! How much fun can you have in a day! With control reluctantly handed back to the pilot we were soon on Finals at Biggin Hill, touching down and taxiing back to the hanger.



View from the chase plane window

Spitfire MkVIII, serial number MT818, is unique as it was the first Spitfire to be converted to accommodate a second pilot. It was built in 1944 and converted in 1946 by Vickers Armstrong and is well loved at Biggin Hill by all concerned.

I would like to thank my partner Heather and family for making this dream come true for me, it was a lovely present, and to the all the staff at the Heritage Hangar Biggin Hill for making the day so memorable.

If you would like to experience the Spitfire flight, it is available from Into The Blue Experiences, click this link: www.intotheblue.co.uk.



John with Spitfire pilot, Jerry

Chase plane provided superb photos of Spitfire MkVIII, MT818, which was the first to be converted to a two-seater back in 1946



Autumn Aviation Quiz

By two anonymous SRFC members

You can Google the answers but we urge you not to

Answers on page 24

1. Name Fighter Command's only VC in WW2.
2. Who was awarded the *Virtuti Militari* by the pilots of 303 Squadron?
3. Name the Coastal Command pilot awarded the VC for sinking a U-boat while seriously wounded.
4. Name the pilot awarded the VC for his attack on the *Scharnhorst/Gneisenau* in the famous 'channel dash'.
5. Name the pilot awarded the VC for his attack on the Maastrich bridges in a Fairey Battle.
6. What was the Queen Victoria Hospital in East Grinstead famous for in WW2?
7. Name the famous surgeon involved.
8. What nickname did the patients give themselves?
9. Name the manufacturer of these aircraft from WW2:
 - a Whirlwind.
 - b Fulmar.
 - c Martlet.
 - d F4U Corsair.
 - e P-61 Black Widow.
 - f Defiant.
 - g PB4Y Catalina.
 - h B-26 Marauder.



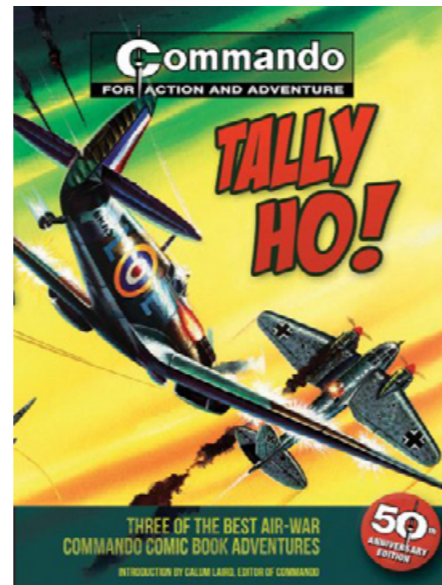
10. Three types of aircraft tested Barnes Wallace's bouncing bombs. One was the Lancaster, what were the other two?
11. Name the two earthquake bombs designed by Barnes Wallace and give their weights.
12. Dwight D Eisenhower was the Supreme Allied Commander in Europe, who was his deputy?
13. How many crewed the following WW2 aircraft?
 - a Fairey Swordfish.
 - b Avro Lancaster.
 - c Boeing B-17.
 - d de Havilland Mosquito.
 - e Heinkel He-111.
 - f Ilyushin Il-2 Stormovik.
 - g Mitsubishi Ki-46 'Dinah'.
 - h Fairey Battle.
13. What calibre were a Spitfire's machine guns?
14. Some Spitfires also had cannons fitted. What calibre were these?
15. How many marks of Spitfire were there (excluding sub-marks, e.g. IA, IB, etc)?
16. When did the RAF change from Roman to Arabic numerals for mark numbers?
17. What was the last mark of Spitfire to use Roman numerals?
18. The ribbon of the Distinguished Flying Cross (DFC) has diagonal alternating purple and white stripes at 45 degrees. The Air Force Cross (AFC) ribbon is a similar design but with the purple replaced by a different colour. What is it?
19. What is the name of the voice tube used by flight instructors in the early days of military aviation to give instructions and directions to their students?
20. What did a WW2 RAF pilot's cry of "Tally Ho!" mean?



Autumn Aviation Quiz – answers

Quiz is on page 22

1. Flt. Lt. James Brindley Eric Nicolson.
2. John Alexander Kent (then Sqdn. Leader). The *Virtuti Militari* is Poland's highest military decoration for heroism and courage in the face of the enemy at war.
3. Flt. Lt. John Alexander Cruikshank.
4. Lt. Cdr. Eugene Esmonde.
5. Flg. Off. Donald Edward Garland.
6. The treatment of burns sustained by aircrew.
7. Sir Archibald Hector McIndoe.
8. Guinea Pigs.
9. a Westland.
b Fairey.
c Grumman.
d Chance Vought.
e Northrop.
f Consolidated.
g Martin.
10. Wellington and Mosquito.
11. Tallboy, 12,000 lbs. Grand Slam, 22,000 lbs.
12. Marshall of the RAF, Arthur William Tedder, GCB.
13. a Three.
b Seven.
c Ten.
d Two.
e Five.
f Two.
g Two.
h Three.
13. 0.303".
14. 20mm.
15. 24.
16. The beginning of 1943.
17. XVI (16). Arabic numbers for marks 17-24 were used.
18. Red.
19. Gosport tube.
20. Enemy sighted, about to engage.



Beware of that prop!

Rob Vincent puts his remaining digits to keyboard to give fellow SRFC members a cautionary tale

For some time I have been starting my engine while sitting in a chair as I have back and knee problems. Until recently this technique has worked well. However, all this changed on Sunday 13th August...

I started the engine no problem then went to stand up from the chair. Unfortunately, I slightly stumbled and fell forward. My natural instinct was of course to put my hand out to break my fall. The rest is history. I've lost the top of my little finger and the one next to it has been reconstructed. Only time will tell if this surgery has been successful.

The plane was properly restrained and all I was doing was standing up. It just goes to show you can't be too careful. One thing is for sure: I will never sit in a chair ever again to start a plane.

On a different note it was nice to get to Coombes today and see the flyers there and fly again after the accident.

Some say that an I/C engine will stop when it hits a finger whereas an electric propeller will keep on turning. That may well be so but an I/C propeller will still do a lot of damage and carries a huge amount of energy. Any propeller's leading edge is in effect a knife. Both I/C and electric props need treating with the utmost respect. Ed.



Photo: John Ivory

Slingsby Kirby Kite 1 – Part Four

Robin Strange's new build – at last, commits to aviation!

At long last I finished the Slingsby Kirby Kite having had to recover the wings and tailplane with nylon due to a problem that occurred when I removed the masking tape.

Anyway, the model is finished with decals made using photos as references and printed on my laser printer.

On a calm evening at Coombes Mark Vale did the honours with his Ibis tow plane and gave the Kite an aero-tow into the evening sunshine. The wind was from the south so we were taking off and landing downhill but there were no dramas to report, a few tweaks of down trim on the tow to stop the Kite from getting too high relative to the tow plane and that was it. She flew beautifully once I released from the tow plane. It was immediately obvious that typical of a vintage glider a lot of rudder was needed to turn. I have 50% aileron differential set and in roll the



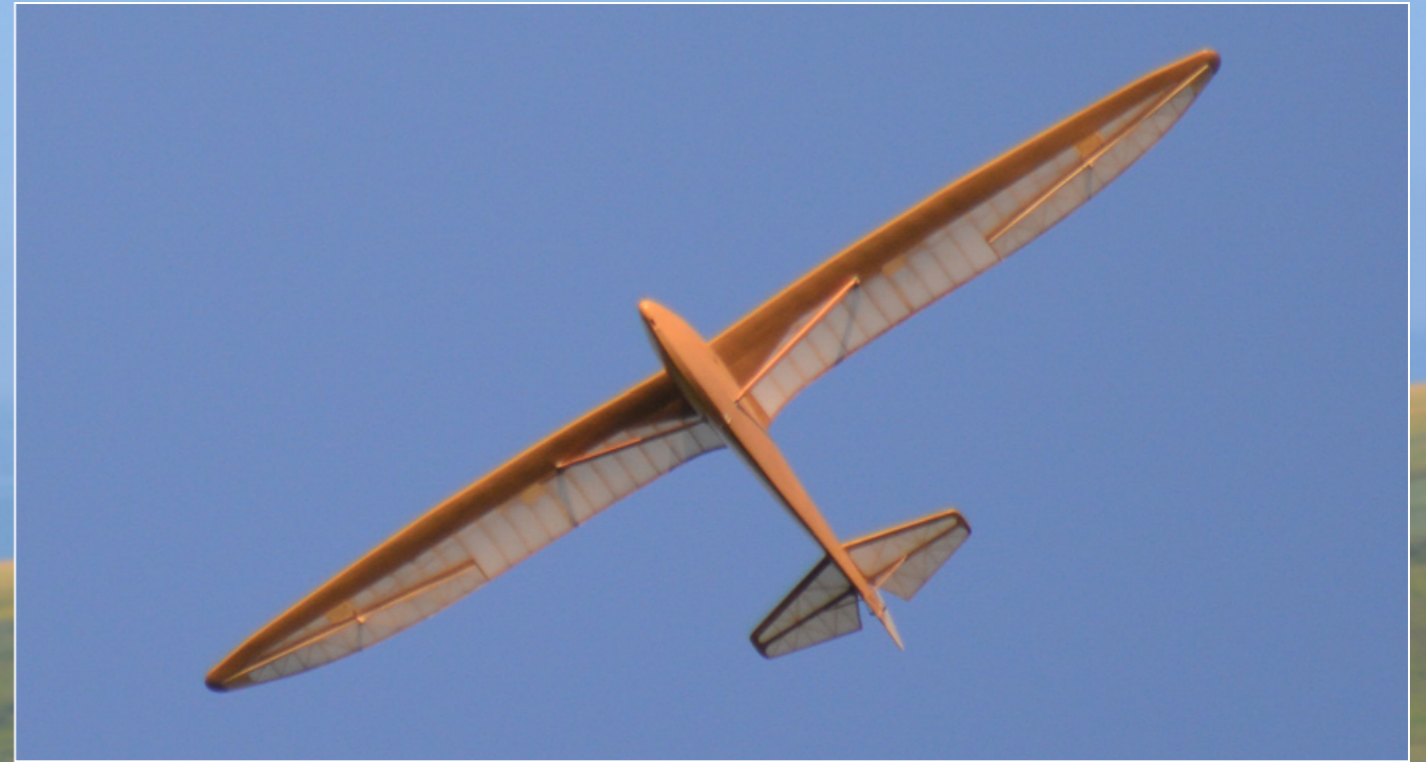
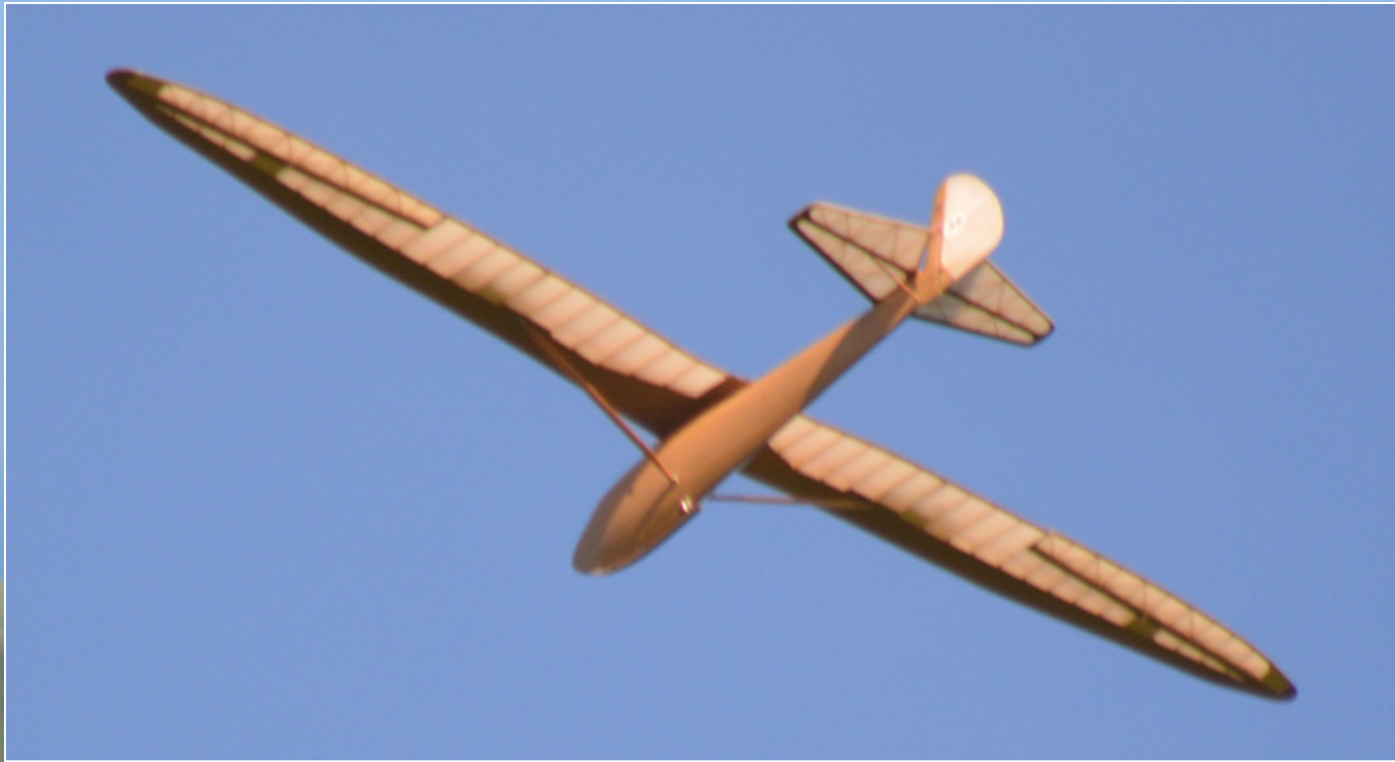
model is very responsive but with a vintage model coordinated turns are an absolute necessity. For the first landing I didn't use enough elevator to flare, which resulted in a very 'positive' landing but thankfully with no issues to report. Subsequent landings were a lot better as I got used to the amount of elevator required to flare out and some soft landings resulted. The spoilers are more than effective enough and even with the downhill landings I didn't need to use crow.

That's all to report so far. A video taken by Alex Blok is available on the SRFC YouTube channel (click this link: www.youtube.com/watch?v=PgxCILwdFNM) and more photos are on our website. A successful and satisfying end to 18 months of work.



*Looks as graceful as the full-size.
Below: stills from Alex Blok's video*





At quarter-scale the Kirby Kite is big – 140" big!

Outing to Glider Heritage Centre

Robin Strange organised a visit to the Glider Heritage Centre at Lasham Airfield, Hampshire



On a lovely sunny, yes sunny, day in August, the 16th to be specific, 14 members of SRFC visited the Glider Heritage Centre at Lasham airfield. It was a good day for gliding; there was a lot of activity on the airfield with gliders being launched by winch and by aero-tow. The sky was blue with cumulus cloud bobbing around providing lots of lift for the multitude of modern gliders in the air. However, our visit was for the purpose of visiting the Heritage Centre, home to 75 vintage gliders from the early days of flight.

We gathered in the café at around 10.30 a.m. to gain some energy for the day ahead, coffee for some and rather more for others. Tony Fendall, our host, met us in the café. Chris Foss and George Evans flew from Shoreham to Lasham in Chris' RV8. Landing at around 12.30 p.m. they quickly got themselves a coffee each and everyone headed off to the Heritage Centre hangars on the other side of the airfield.

We started off with a presentation on the history of gliding in the UK with some great videos of historic interest, which just went to show how gliding has progressed over the decades. We then had a tour, led by Tony, of the two hangars that are home to the 75 glider collection. And what a collection it is, from contraptions only a very brave or foolish person would step into to gliders with a very good performance looking surprisingly modern.

Gliders designed and built by Slingsby, Abbott Baynes, Bill Manuel, Schweizer, Laister-Kaufmann, Scott Light Aviation, Jose Weiss, Jacobs Schweyer, Zlin, J Lemp, Hersteller Flugzeugbau, Elliotts of Newbury and more.

If you are interested in aviation I would recommend a visit to the Glider Heritage Centre; they are open at weekends and mid-week. Tours such as we had are available by prior arrangement. Click this link for full details: www.glidingheritage.org.uk.



Photo supplied by Derek Woodley



Photo: Derek Woodley.
Small photos: Robin Strange

Senior Falcon Project 2014

Derek Woodley built the classic Carl Goldberg kit. Twice!



When I started radio-control flying in the 1960s it was normal practise to start flying single-channel models then, having gained some experience and saved up lots of money, to progress to more complicated multi-channel aircraft.

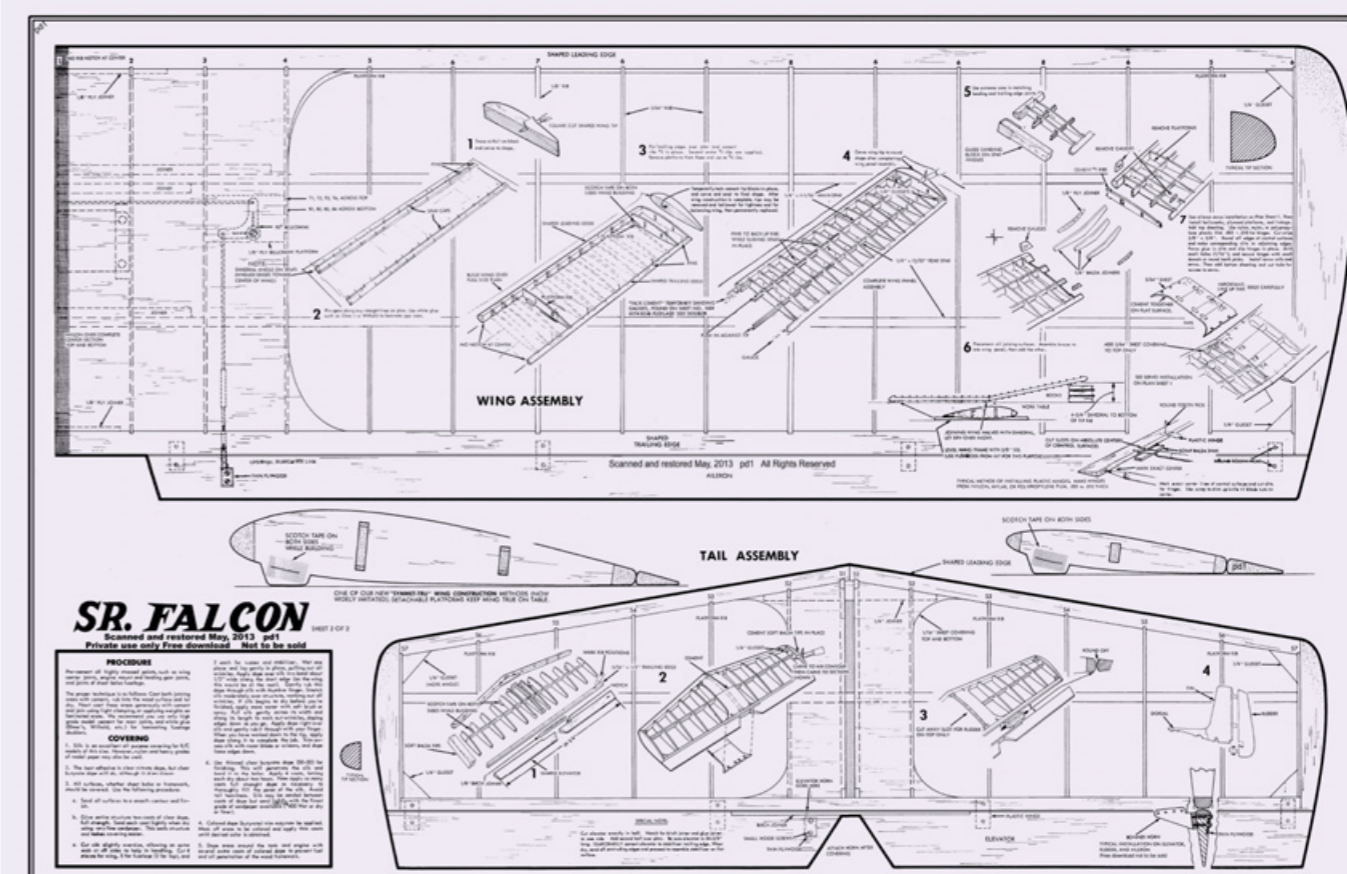
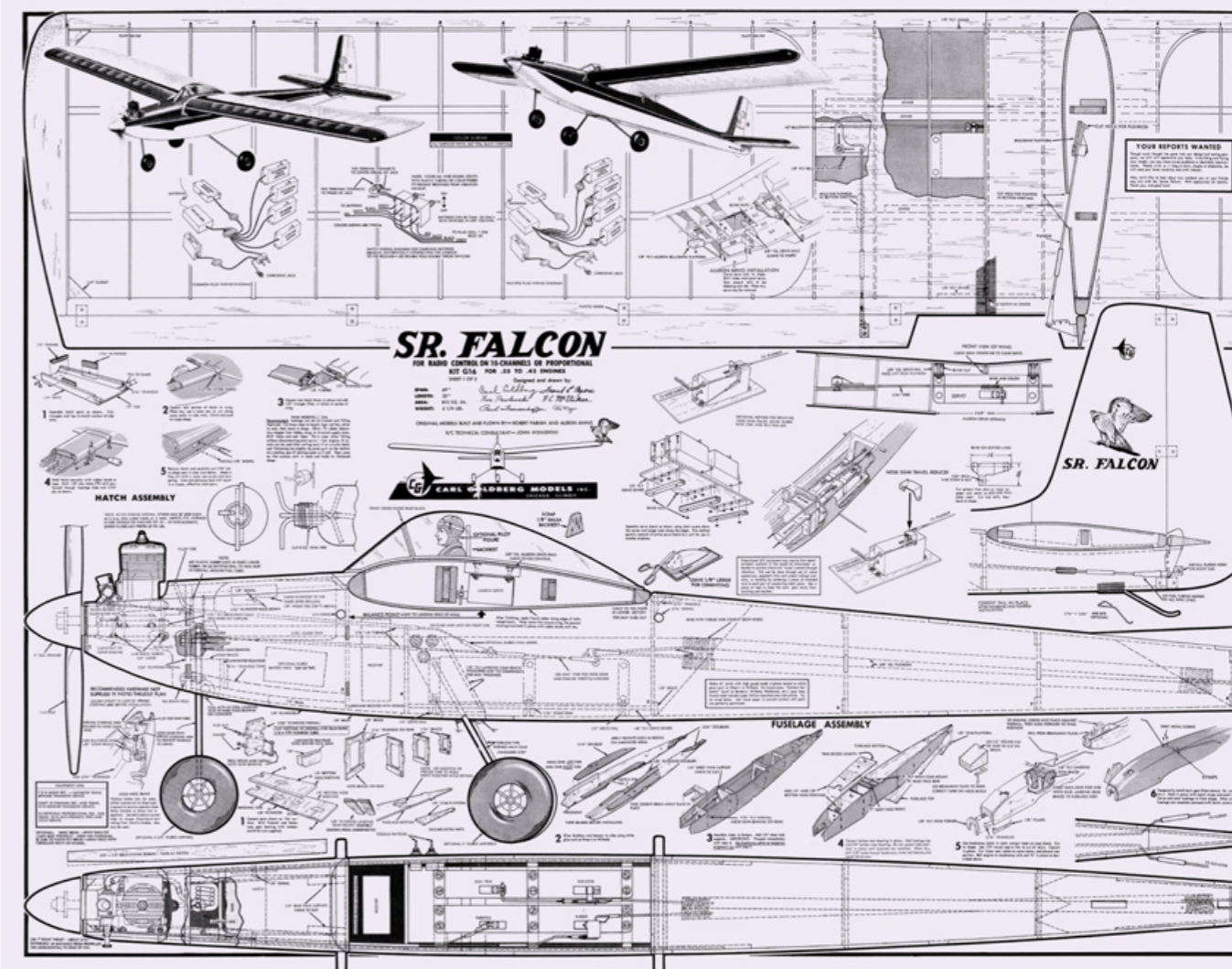
In the last edition of *FlyPaper* I described the radio equipment that was used in those far away days and I thought more information on the Senior Falcon model I flew would be of interest.

In 2014 I built a Senior Falcon to replicate the model I had been flying in the 1960s when I was a member of the immediate predecessor of the Sussex Radio Flying Club.

The original 69" wingspan model was built from a Carl Goldberg kit, a product had long been discontinued. Carl Goldberg was to Americans something like Keil Kraft was to us Brits, a real blast from the past.



Derek's 2014 build uses '60s adhesives – no CA here!
All photos supplied by Derek Woodley



Plan: outerzone.co.uk

So, in 2014 I contacted the AMA, the American equivalent of the BMFA, who I knew held a large library of model plans, to see if they had plans for the CG Senior Falcon. I received an e-mail by return saying that if I paid them \$25 they would send me a set!

A beautiful set of full-size plans duly arrived through the post, so no excuses, I had to buy the balsa and get cracking!

I decided to build the model using all the glues and methods employed back in the '60s. The construction was completely traditional with all parts such as wing ribs, bulkheads, etc, cut from sheet balsa planks. Materials such as balsa cement, Araldite for the hardwood parts, dope and nylon covering, cellulose paint, etc, were used and, I have to say, I really enjoyed the build.

As the last *FlyPaper* described, I still had the original F&M reed radio equipment, but I no longer had a '60s Merco 61 Mk2 twin-plug two-stroke I/C motor to provide the power. Fortunately eBay threw up the odd example of this engine from time to time, and a club member (I'm sorry I can't remember who) gave me a very gummed-up example, so from a number of motors I was able to assemble an all original Merco 61 twin-plug that ran very well. I even found a brand new con-rod in a box of engine spares I had. Who says hoarding doesn't pay off at times! (Note: the motor shown in the pictures is a Mk4 version of the Merco 61 and was used initially before the genuine Mk2 became available.)

The model was finally completed, the motor given lots of running in the garden to ensure it was reliable and I was ready to fly it.

However, I didn't fly using the reed gear initially, but installed modern proportional



Derek attaches the 69" wing with traditional rubber bands



Model flew perfectly, albeit with modern radio initially



Reed gear maiden took place at Coombes and was 100% successful

equipment in the model so that I could get the hang of flying and trimming the model.

I decided to test the reed radio gear separately so installed it all in a very stable slope soarer and used that to prove that all was still working as it should, and more to the point, to give me a chance to relearn the techniques of using reed gear switch controls.

Eventually the day came when I had to fly the Senior Falcon with its Merco 61 motor and with the reed gear now installed. It was with much trepidation that I taxied the model out (it had a steerable nose leg) to the beginning of the strip at Coombes, gunned it and was airborne! Surprisingly the flight went well, my thumbs had got used to pulsing the switches of the transmitter thanks to the slope soarer and I managed a reasonable flight and was able to land again on the strip. Phew!

I flew the Senior Falcon with the old gear for a few weeks, but having achieved my goal, and remembering it was on 27mHz and there were so many electrical contacts just waiting to fail in the radio system, I thought I'd play safe and put the modern radio gear back into the model. Big mistake...

Sadly, after just a few flights I had an aileron servo fail and the model crashed big time. Because it was so lightly built it was really smashed and beyond repair, so that was the end of my Senior Falcon project.

I quite often find myself thinking I should have another go with a Senior Falcon. I still have the plan, the motor and the reed gear, so maybe one day...

The plan is available as a free download via the excellent Outerzone website, outerzone.co.uk, together with comprehensive build and flying notes and photos. Click this link: https://outerzone.co.uk/plan_details.asp?ID=6137 . Ed.



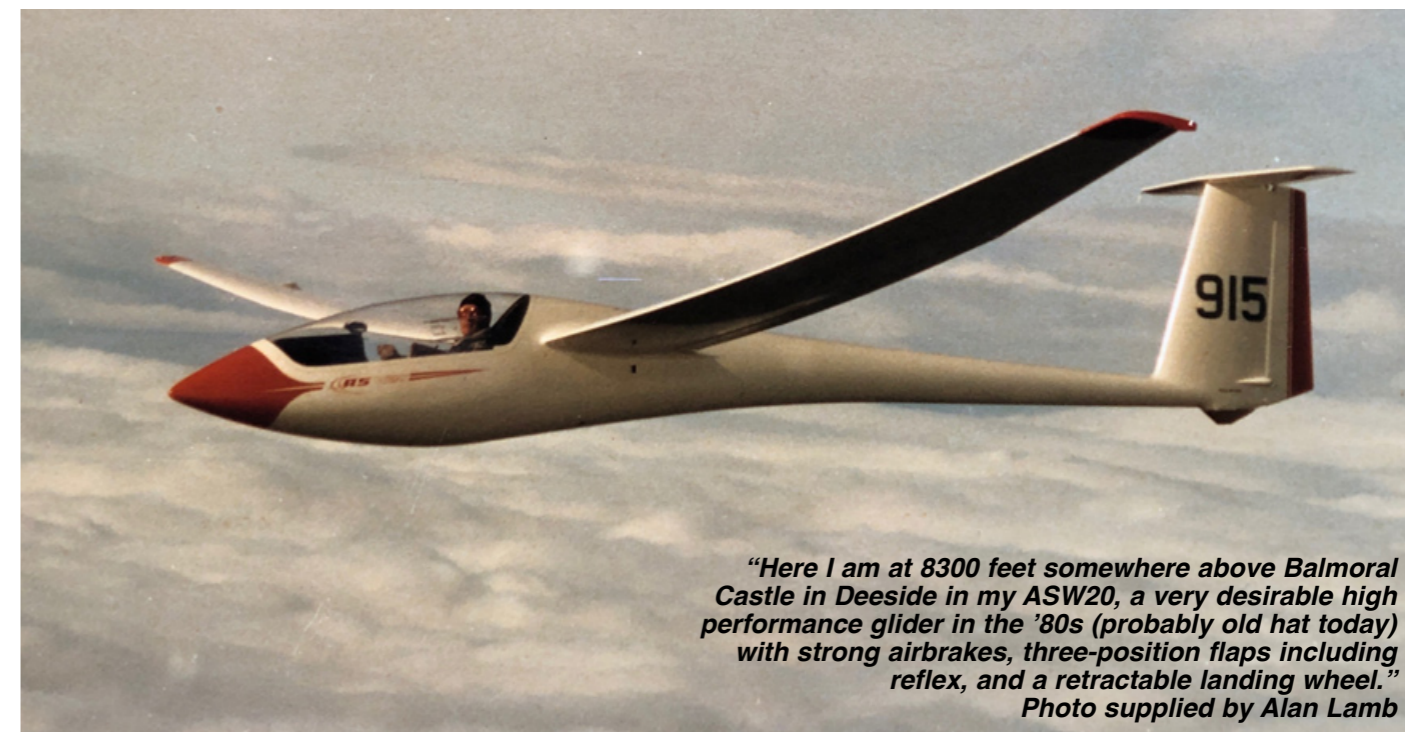
Never mind skill

***Skills, yes... but actually it's all about the weather.
More gliding reminiscences from Alan Lamb***

As an 'ab initio' I used to watch the gliders landing at Lasham while excitedly awaiting my turn. I thought the pilots emerging from these sleek glass ships were gods, gifted with flying skills I could only long for and dream about on the cold wet Saturdays when I found myself pushing wet gliders across wet fields to the launch point at 6 a.m. I soon discovered that even a novice could feel like a god if the weather was right, as on those rarified days when catching usable lift seems unavoidable. For the rest of the time (i.e. most of the time) you get used to flying in bad weather because otherwise you would never fly at all. Although you don't necessarily realise it at the time, this is when you build up the vital skills to make use of the weather on a really good day. On these glorious days you are literally 'riding' the weather itself and stealing its energy.

To the gliding novice, the idea of gaining a 'Silver C' is just unimaginably difficult. The three task elements (usually claimed separately) include a height gain of 1500m, a flight duration of five hours, and a cross-country distance of 50km minimum. On any normal UK day, none of this is possible. Indeed, to complete the height and duration tasks it is arguable that you need a particular topography as well as particular weather conditions. And then... all in due course, you find yourself in the perfect situation, on the perfect day, and suddenly you have completed your first Silver leg.

In my case it was an effortless height gain of more than 5000ft, which happened to me almost by accident during my first wave season at Aboyne. One idyllic day I was stooging around in strong wave, going up, and up some more until I could see



*"Here I am at 8300 feet somewhere above Balmoral Castle in Deeside in my ASW20, a very desirable high performance glider in the '80s (probably old hat today) with strong airbrakes, three-position flaps including reflex, and a retractable landing wheel."
Photo supplied by Alan Lamb*

the coast some 30 miles away. My logbook reads, *'Silver height – and so much more! Most amazing flight in the most amazing conditions so far. Joined by EQR at 8500ft for a few photos. Lift to spare, very smooth indeed, cloud base at 4500ft with about 5/8 cover, beautiful day, perfect end to a very exciting week.'* As if to make my point for me, my old logbook notes are all about the weather, not the flying. Suddenly, without really trying too hard, one major flying achievement was behind me, in an ASW20. The satisfaction was simply immense and this got me thinking. Maybe I can get a Silver C. My contention is that we are not half as skillful as we like to think, and probably a bit luckier than we realise when it comes to getting the most out of the weather. Understanding it is everything.

In fact, it was only through getting into the habit of always carrying a freshly smoked barograph whenever I was wave soaring (just in case!) that I was able to claim the second leg of my Silver – once again, while not really trying. I honestly had not set out to stay up for five hours that day but actually found it difficult to get out of the lift in order to land for a comfort break. Of course, after a few hours when you start to realise it could be on, then it does become a bit of a pole-squat. I was just short of six hours as I landed after soaring and sightseeing all day in complete relaxation over the hills and lochs of Deeside. My logbook says it all, *'Silver duration. Beautiful day'*. Nothing more. How else to explain six hours aloft?

Which brings me to the last leg, my first cross-country. This is a bit like a sailor losing sight of land for the first time, and then really *having* to navigate properly. More of a psychological barrier than a real one, but it does make you nervous. I was at home one day in mid-summer when my ASW20 syndicate partner phoned. There was no preamble, no how's your father, just a simple directive, "Get yer **** up here, mate, you're doing your Silver distance t'day!" I knew him well enough to know that the absolute certainty in his (Australian) voice meant that I simply had to jump in the car and drive, to complete my Silver.

An hour and a half later I was climbing into the cockpit and strapping in. 'You'll only need two thermals t'day mate, the first one you'll find over Leighton Buzzard, the second over Milton Keynes and from there you will make it to Hus Bos (Husbands Bosworth), no probs.' With such a helpful and supportive partner (also an instructor) I knew it was all down to me now. Activity at the launch point was frantic, with a fast-moving queue behind the aerotow and ground crew running with wing-tips. The excitement was palpable.

With the aircraft fully prepared and without too much time to think about it (probably a good thing) I took off, released overhead the field, and the rest of the story unfolded almost exactly as I had been briefed. The conditions were just awesome. My logbook reads, *'Silver distance – 1st cross country, 72km, a most incredible day for gliding! Blue day, as far as Northampton, then lots of cumulus, excellent viz, especially at height. Launched straight into a thermal at 2000ft, at 3500ft headed straight for LB, didn't hang around, no strong lift, spotted two gliders thermalling on outskirts of Milton Keynes, went straight for them, joining a really strong thermal, vario off the clock! Up to 4500ft in no time, saw another glider near Northampton and set off after him, cruising fast, joined another cracker at Northampton, went to 5500ft, arrived Hus Bos exactly one hour after take off – at 4000ft! Had to land to claim Silver (no camera!)*

but could have done 150km.'

If the camera had been in place I could have taken the shot by standing the glider on its wingtip for a moment, and then heading back to base (Dunstable) where I could have claimed a 'Double Silver' for an out-and-return of 72km each way. Sadly, it was not to be. Hey ho. My partner was still grinning as he arrived with the trailer to take me home. "Aw, mate!" he beamed. He seemed almost as chuffed as me. It was one of those blissful summer days when you could not fail to find lift everywhere you looked. With a bit more confidence (and experience) I could have dolphin'd all the way there and back, easily!

With hindsight, I could have re-launched and flown back to base, laughing all the way. It really is all about the weather. OK, some skill was involved, but on such God-given days you could strap the ballast in on its own and it would probably make it home again in one piece. All the same, I really take my hat off to those glider pilots who fly 300km and even 500km triangles, as a matter of course, on any given summer day when the conditions are right. And, as if that wasn't exciting enough, they satisfy their competitive urges by doing all that against the clock, racing to see who can complete the task, get the photos and get back home in the shortest time. Not much 'stooging around' on those days. To all those full-size glide pilots reading this, "Happy hunting".



*"To fly anywhere except local to the field you will need a trailer and somebody standing by all day waiting for your call to say where you have landed out so they can drive to retrieve you – all part of the fun!"
Photo supplied by Alan Lamb*

Vintage planes, vintage flyers!

Les Crane and friends enjoyed a balmy – or barmy? – late summer evening's flying

Wednesday 16th August, an unusual day as calm winds throughout, so Editor Grahame, John Wase and I decided it would be a perfect opportunity to fight our way to the back of our hangars and dig out our 'Old Timers' for an evening of vintage flying.

Grahame brought his 96" Double Diamond, John his 84" Flying Quaker and I took my Junior 60, the baby of the bunch at 60" (obviously). Purely by chance and unbeknown to us beforehand 'Electric' Bob also turned up with his Junior 60 which had a few issues to resolve before flying. After a little tinkering all was well and we assembled our models on the strip ready to take off. There were more large elastic bands on show than in SMC!

So, three vintage flyers plus one (i.e. Grahame who is approaching vintage), lined up the models and off they went. Formations were immaculate! Not more than 200 yards apart and occasionally two planes on the same side of square at the same time! Marco, the press-ganged cameraman, had great difficulty getting two planes in the viewfinder at the same time but did distinguish himself by occasionally getting



Prior to take-off. John Wase's Flying Quaker in foreground with Les Crane's Junior 60 and Grahame Pearson's Double Diamond behind. Photo: Grahame Pearson. All other photos are stills from video by Marco Cucinotta

For one brief moment all four models were in frame at once!





John's Flying Quaker with Lancing College behind

three and for one brief moment, all four.

Grahame's Double Diamond was so slow that it was lapped time and again by my Junior 60 which could not maintain height at such a slow pace whereas Bob's 60 was still having problems and gained height even on tickover – rumour has it that at 5000 feet he was ordered down by Shoreham ATC which he managed only through full down elevator. John's Quaker flew sedately at a pace between mine and Grahame's.

We had two good flights in superb calm conditions as the photos show. Videos of both flights are now on the SRFC YouTube channel.

Vintage planes flown by vintage flyers or old timers flown by old timers, take your



pick or mix and match to suit. Suffice to say all who were there thoroughly enjoyed it.

While sitting enjoying a post-flight cuppa, a couple came along with two disadvantaged children (possibly teenagers) in wheelchairs and we made them most welcome. They looked at the models by the cars and chatted for a while with those not flying and seemed to have enjoyed themselves.

If anyone is interested in flying an old timer in company and (very) loose formation let any of us know and we will include you next time we take ours up. Robin has already expressed an interest in joining us with his newly completed Black Magic. (See page 48. Ed.)



Grahame's Double Diamond flying at barely walking pace



Les's Junior 60



Grahame's Double Diamond lines up for a gentle touch-down

Guest Flyers at Coombes

Two helicopter flyers from 'oop north', enjoyed some southern hospitality on 7th August, as Mark Vale recounts

On the afternoon of the 7th August SRFC hosted two visitors. Wayne Hedges is the Secretary of the Martini RC Flyers in East Yorkshire and Chris Smith is the Chairman of the North Notts Model Flying Club.

They had travelled down on Monday 7th, taking the opportunity to fly their electric helicopters at Coombes in the afternoon. The following day they paid a visit to Sussex Model Centre before heading home.

John Ivory volunteered to meet our guests and showed Wayne and Chris around. John was amazed at their flying skills. They also met with Chris Foss and Jim Leach during their visit.



Chris (left) and Wayne with their helicopters at Coombes. Photo: John Ivory

Build, build and more build...

... but very little flying! Les Crane's latest build report

Since my last report there has been ample time to fly but, inconveniently, not for me! I managed a little but, sadly, missed lots of opportunities.

I have given up trying to fly the Zero in which, although ready to fly again, I have little confidence of success.

I have, however, managed to maiden the Storch – three times! (See cover. Ed.) Although I bought it 70% complete I did finish the building, correcting several major mistakes and, having balanced it at the plan position, I had every confidence it would fly OK.

After a range check I opened the throttle and it quickly lifted off but immediately went into a sharp left bank only a couple of feet high so I put it down straight away, buckling the flimsy tube U/C and breaking the wooden prop. I straightened the U/C and fitted an identical (or so I thought) prop.

Maiden 2... I opened the throttle and the model remained immobile. A quick check revealed that it was an opposite hand prop – when I ordered them I must have been inadvertently given two different handed props and I hadn't noticed. Reversing two motor leads and I tried again. The Storch ran the length of the strip and ran off into the long grass, again bending the U/C and breaking the prop.

Repaired, wires reversed again and with a correctly-handed plastic prop, I tried maiden 3! At the end of another long take-off run I gave full up elevator and managed to gain about 5ft of height but the nose dropped sharply when I started to relax the elevator. I managed to keep it airborne at about 5ft with full/almost full up for about three-quarters of a circuit of the strip but it wouldn't do any more and came down in the long grass, again damaging the U/C and the nose.

Unless the decalage is badly out, which I doubt as I seem to remember doing a check, I can only conclude the model is decidedly nose heavy so after another repair I have reduced the amount of lead in the nose. I have not been able to carry out maiden 4, you will have to wait for the next, thrilling, instalment!

So, on to the Miles Gemini which, not being finished, has yet to fail to fly!

I have now fitted the appalling mechanism for joining the wings/front fuselage to the rear fuselage, built the nacelles and fitted the U/C which I decided in the end would simply be bent piano wire and not sprung. The motors, ESCs, Rx and the relevant wiring have been fitted, all connected including the aileron and flap servos, and it all works fine. The large windscreen and fully planked front fuselage have been fitted to the wings which virtually completes the wing/front fuselage unit. I cannot find any indication on the plan of a battery position so I created one in the nose. I had built a skeleton framework for the rear fuselage but due to the laser-cut balsa sides being of differing hardness, it was decidedly not straight and this needed rectifying before further building. This was done by fitting it to a jig and sheeting the bottom, thus ensuring it remained straight on release – which it did and that is as far as I have got



with the build at the time of writing.

The Horsham Club, of which I am a member, are having a winter build of the Crescent Bullet so I purchased a kit and power train and started building. I have part built the fuselage and am at the stage of joining the veneered wings, having fitted the leading and trailing edges along with the wing tips, shaped them and added the ply U/C inserts. It is a quick build and should have flown by the next issue of *FlyPaper*.

I have also been following the activities of the Glider Group, specifically the slope soaring and, not having sloped for years, decided to check over my Wildthing and Cliffwhacker ready for a foray. Time had taken a small toll on the Wildthing, the tail having virtually separated from the fuselage due to the glue and tape losing their strength. It was removed and refitted and the control surfaces checked and is now ready to fly. The covering on the Cliffwhacker needed re-attaching in parts and the wrinkles treating with a hot iron. One of the snakes needed attention but complete replacement would have required butchery so a temporary solution was carried out and it is ready to fly again. Sorry, Glider Group but you may have an interloper at some stage.

A Little Nostalgia – Part Two

Robin Strange completes the build of his Black Magic!

You will recall from Part One (*FlyPaper*, June 2023) this is my second Black Magic, the first having been built in the late '60s. On a relatively calm day at Coombes I flew this second Black Magic for the first time. I knew I had put a motor in it that was going to be more than enough for the model so I wasn't surprised when it rose off the ground on full power after what seemed to be less than three or four paces and climbed away at 45 degrees despite copious amounts of down elevator being applied. Thankfully, throttling back to about one-third power saw it flying very well with no vices to write about. With a large amount of dihedral it turns extremely well on its rudder and the response to elevator is more than adequate.

After the maiden flight I added more throttle to elevator compensation and under power it was then absolutely fine even on full power, which is definitely not needed but is available. I played with limiting the amount of power available but eventually decided to remove the limit as it was more than controllable.

On later flights I found that the Black Magic will loop readily and will do a 'sort of' barrel roll using its rudder and elevator. Flying at very low level, well below ten feet, it will happily turn continuously through 360 degrees all day in a very relaxed manner and is most enjoyable to fly. On a 3S 2200 mAh battery it will fly for 18 minutes and still have 25% battery capacity left. Not everyone's cup-of-tea but I love it.



Easycover proved to possess Teflon-like qualities

The only downside has been the covering material I used (Easycover), which I can only describe as horrible. On the tailplane I had to use Balsaloc to persuade it to stay on but even wrapping both top and bottom coverings on the mainplane it would not tighten properly without pulling off the airframe and the slightest glimmer of sunshine resulted in the covering slackening and looking awful. As a consequence I decided to recover the model and a call to SMC to see what black covering they had in stock resulted in me buying black Solartex at what I can only describe as a good price for Solartex. The model is now looking spick and span in its new coat, the icing on the cake being some vinyl-cut white decals by Colin Lucas.

The model has subsequently flown with her new covering in the Round the World Challenge on 4th August without drama, see photo on page 10.



Resplendent in new Solartex covering and superb decals by Colin Lucas. All photos supplied by Robin Strange



SRFC videos online

We now have over 100 videos for you to watch!

If you have not yet discovered the club's YouTube channel you are in for treat. Just search YouTube for 'Sussex Radio Flying Club (SRFC)' or go to the club's website – srfc.bmfa.org – for a direct link to the channel or click **here**.

The videos will play on any device but the bigger the screen the better.

Tip: Consider 'subscribing' to the channel – once on the SRFC page hit the 'Subscribe' button. Subscribed channels are those you visit frequently and saves you from having to search each visit (a bit like Favourites or Bookmarks on your web browser). Additionally, if you click the 'bell' icon you will be notified via your smartphone whenever a new SRFC video is uploaded. A message will pop up on your phone's screen together with a 'ping' but you can easily turn off the 'ping' if you find it irritating or obtrusive and just retain the visual notification.



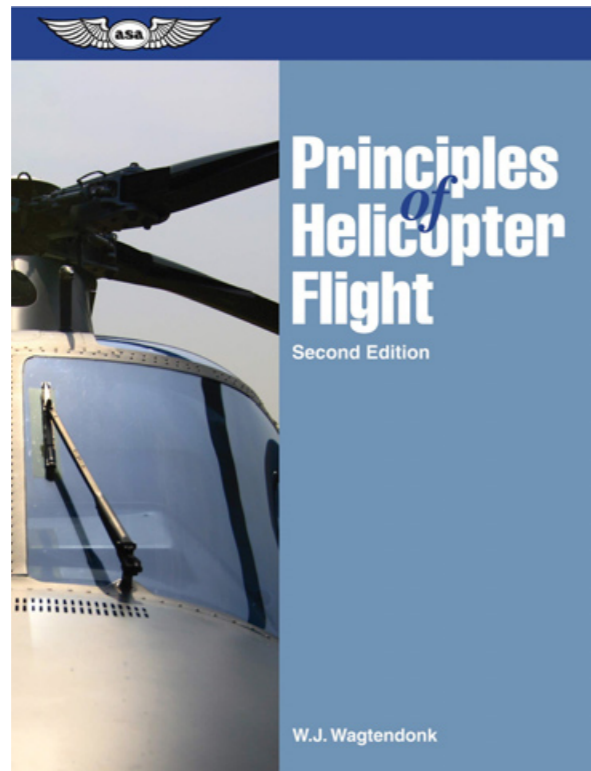
Helicopter stuff

Jerry Hansen reports from SRFC's helicopter site at Poling

More on setting-up your helicopter

You will probably have heard of lead and lag, flapping, gyroscopic progression, vortex ring state, ground resonance, and things like that. The good news is that you don't need to understand any of that, just go and fly your helicopter.

If you *do* want to know about the theory it's best to get a book on (full-size) Helicopter flight. *Principles of Helicopter Flight* by WJ Wagtendonk is worth a read (£19.55 from Amazon), as are others.



A couple of things that may help though...

C of G is important, balance at the main rotor shaft or a little in front of it.

Don't over tighten or over loosen the blade grips, that lets the blades 'lead and lag' the retreating blade leads and the blade moving forward lags and balances out. Larger blades need to be tighter than smaller blades.

You will find that hovering the helicopter requires more power than forward flight. When flying forward and particularly into wind you will need some down stick as the advancing blade is grabbing more air than the retreating blade, when turning down wind you will probably need more power and less or no down stick.

Heading hold is when the gyro is set to hold the helicopter in a set direction, so when you turn a corner you will need to use the rudder to coordinate the turn, a bit like fixed-wing flying when you need to counter adverse yaw in a turn.

Maintaining head speed is important using throttle curve and pitch curve to achieve that, best to ask on that one.

You can use a governor. It will give a constant head speed as it adjusts the engine for more or less power when needed. This keeps a constant engine and head speed but does not allow the engine to slow down and grab some cooler air now and then.

Fuel, I use 10 or 12% nitro and add another 5% of castor oil as that is more heat tolerant than synthetic oil.

A header tank will help to avoid the clunk in the main tank grabbing air and stopping the engine in a low fuel situation. It's always wise to set a timer to avoid low or out of fuel situations, and do a low fly-by to see the fuel in the tank now and then.

The best advice is to not fly too close, that's why we have safety lines and to fly within your limitations; rotor blades are not forgiving if you or anyone else gets hit!

Some have asked why the club's Solo is a lot harder than recommended by the BMFA. The reason is to prove that you can fly in all orientations and not be a particular danger to other field users. With that in mind the Part 1 Solo lets you practise on your own in a limited way, again to keep us all safe.

Above all, have fun and be safe.

Poling helicopter flying site

All is well at Poling although we could do with a little more help with mowing on a more regular basis. Just 20 minutes' mowing after flying will keep it nice and tidy.

We can give you an introduction to the mowers, we mow the strip short and the outer field longer.

The hedge could do with cutting back as it's intruding on our parking area and making mowing under it difficult.

We have signs of moles again; you may see the mole traps marked with a white disc and a stick. If you fancy helping with that we can give you info on what to do.



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**Poling Representative (Helicopter
Rep & Field Maintenance)**

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**If you feel you can fill a vacant position please contact the Secretary for details*