

DECEMBER 2021

Flypaper



PETER PLANK
1943-2021

See page 6

HISTORY OF THE SRFC
BY DEREK WOODLEY
See page 14



srfc.bmfa.org

Contents

Contents and Contact	2
Treasurer & Membership reports, Tom Gaskin	3
Diary dates	4
Builders competition	4
Peter Plank Obituary, Paul Gladstone	6
Power Competitions report, John Ivory	8
Mobile phones rule amendment, George Evans	11
Gliding report, Robin Strange	12
History of the Sussex Radio Flying Club, Derek Woodley..	14
Hurricane – work in progress! John Ivory	21
Post-lockdown builds, Les Crane	24
Spotlight, Paul Gladstone	26
Target for Tonight! Lancaster build, John Wase	28
Hawker Typhoon Preservation Group, Les Crane.....	30
George Evans' Workshop Part 2.....	32
Aviation Quiz.....	36
Aviation Quiz, answers	38
Flyaways! George Evans	39
Flying with The Ghost Squadron, Robin Strange	40
My hangar, John Ivory.....	43
SRFC Committee	44

Cover: Peter Plank at Coombes, 27th August 2019, one of the last photos taken of Peter before falling ill. Peter passed away on 13th September 2021. Photo: Keith Miles

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Flypaper is published at the beginning of March, June, September and December.

Submissions for the March issue must be submitted by 15th February.

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.

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From the Treasury

Treasurer and Membership Secretary Tom Gaskin

A couple of Parish notices for you to start with:

For those of us who are BMFA examiners, as notified in a recent *BMFA News*, for 2022 you will be obliged to pass the Registration Competency Certificate, a link can be found on the BMFA website (bmfa.org). It would be a good idea for all members to take this test though, as it helps with the understanding of the legislation that we are all subject to nowadays.

I have decided that I have enjoyed myself enough on the Committee (four years this stint, with something like 21 years' service all told), so will not be standing for the two posts again. So, you budding bookkeepers you, get those quills sharpened ready for the AGM! You will need a computer and printer to be able to fulfil the position. Currently all the club data is Windows-based (Access & Excel) and printing is done on a colour inkjet.

On to general notes:

Another year gone by with me hardly flying this year, with opportunities limited by work commitments, lockdown and inclement weather (which always appeared worse at the weekends that I had free).

We are finishing the year with 132 members, which, if COVID-19 had not carved into our training capability, could easily have hit the 160 mark! I intend to recommend to the Committee that we do not increase the club fees for next year. The same as you did for this year, please use the BMFA portal and website to pay your BMFA and CAA fees.

A reminder of our fee structure, for seven-days-a-week flying opportunities:

Senior: £52. Juniors/Students: £12.

Payment to be made via bank transfer please, to the following account:

Bank: HSBC

Account No:

Account Name: Sussex Radio Flying Club

Sort Code:

While you can pay for 2021's BMFA and CAA fees shortly, please do not pay your SRFC fee until 1st January – that way I can keep the books straight. Remember, you are covered insurance-wise as soon as you make the payment using this method.

Attached in the same e-mail that contained this copy of *FlyPaper* is the membership form for 2022, simply enter your name in the top-left box and sign and date at the bottom. Post or e-mail it to me using the details in the top right of the form.

Acknowledging the harsh reality of the consequences of the virus and lockdown/furlough/redundancy, if you are experiencing difficulties in paying the whole club fee so soon after Christmas, please contact me in the strictest confidence to sort out a payment plan to keep you going. I know from personal experience how much better I feel after a session at the field!

I wish you and your loved ones a Merry Christmas and a better new year.

Diary dates

Make a note of these dates for meetings at Hill Barn Golf Club

December 3rd – Christmas party, 7.30-9.30pm

February 4th – To be decided

March 4th – AGM, 8.00-9.30pm

April 1st – Auction, 8.00-9.30pm

Builders competition

Robin Strange's Flamingo judged the winner by the committee.
(For fairness, Robin elected not to be part of the voting process)

Thank you to all who sent in photos of your builds. As per the e-mail sent to members on 13th October we asked for photos of models completed and successfully flown since 1st January 2021. Entries were received from **Pete Fullard, Dave Knott, John Wase, John Marchant, Les Crane, Paul Gladstone, Robin Strange and Mark Snow**. Sadly, some of these could not be judged as they had not flown but it was still great to see the photos. Here are some photos of Robin's Flamingo which I am sure you will agree is a superb model and a worthy winner.



Nearing the end of the build, just ailerons and canopy to go

*It was a stipulation of the competition that models must have successfully flown. Robin's Flamingo ticks that box!
Photo: Clive Upperton*



Action Man (1/6 scale) – complete with trademark battle scar on cheek! – fits Flamingo cockpit well. Tow release in nose



Accurate home-made decals on rudder and fin. Small text lists the Flamingo's designer, builder and critical flight details

Peter Plank R.I.P.

A Farewell Message from Paul Gladstone

I think we all heard the news about Peter Plank's passing on 13th September with terrific sadness. He had been unwell for quite some time enduring substantial ongoing treatments but despite all of that maintained his great sense of humour.

Peter's funeral service at Worthing Crematorium on 7th October was well supported by club members and the wake afterwards at Hill Barn Golf Club made a fitting tribute to Peter.

A lot of members will have known him as the welcoming face of SRFC as he was Membership Secretary for many years and an active club committee member.

Most of us will remember him as the cheerful, chatty guy at our Coombes flying site. Always willing to guide and help anybody, often pointing new members in the right direction and always with a smile.

Coombes flyers will remember Peter as one of our weekday flying regulars, often seen sitting and enjoying coffee and lunchtime chats reminiscing with stories of when he worked here and abroad.

My personal friendship with Peter began when he joined the club at about the same time as I did, the best part of 20 years ago. As we were both ex-RAF, we often bantered and chatted about our service experiences.

Peter will be greatly missed by us all.



IN LOVING MEMORY OF
PETER FREDERICK PLANK

29th January 1943 - 13th September 2021



*Left: Peter raises a glass to SRFC. Funeral Order of Service cover (supplied by John Wase)
Above: Spitfire floral tribute at Peter's funeral at Worthing Crematorium (photo by John Ivory)*



*Top: Peter with his well-known Majestic Major
Centre-left: Peter with Clive Upperton
Centre-right: 2018 Christmas party saw Peter presented with this salver to mark 15 years as Membership Secretary
Bottom: Peter enjoying himself at Coombes
Photos supplied by Keith Miles, Robin Strange and Derek Woodley*

Competitions at Coombes

Power Competition Secretary John Ivory reports on the final competition and gives overall results for 2021

Power Competition Report 17th September

Friday 10th September, the date scheduled for our September competition, was very windy with gusts of over 20mph so it was decided to delay this 4th round until the 17th. The competition would involve landing on a simulated aircraft carrier. This may sound quite easy but it turned out not to be the case...

Competitors were required to take off into wind from the carrier 'deck' (a 60x10 foot rectangle marked out with black and yellow tape), complete a circuit and land back onto the carrier's deck. Three rounds to be flown, each with a maximum time of 3 minutes. All models must have a wheeled undercarriage, tail wheels are not included.

The scoring is as follows:

A point is given for every foot from the start of the aircraft carriers deck to the point where the model stops with both wheels still on the carrier's deck up to 60 feet.

If the model stops with one wheel still on the carrier's deck it will score 75 points.
If the model stops with both wheels outside the carrier's deck it will score 100 points.

(NB If the model travels outside the aircraft carriers deck at any time on take off or landing it will be deemed to have 'fallen over the side' and score 100 points.)

All three scores will be added together and the pilot with the least score will be the winner.

My thanks to all who took part and Paul Snellgrove for taking the excellent photos.

RESULTS

Name	Round 1 (secs)	Round 2 (secs)	Round 3 (secs)	Total
Clive Upperton	100	12	16	128
John Ivory	39	45	61	145
Pim Smith	18	100	39	157



Clive Upperton declared the winner of Event 4 and the overall winner and was presented with a prize of biscuits



OVERALL RESULTS FOR 2021

Name	Event 1	Event 2	Event 3	Event 4	Position
Clive Upperton	1st	5th	5th	1st	1st
Pim Smith	6th	3rd	1st	3rd	2nd
John Ivory	5th	6th	4th	2nd	3rd
Chris Foss	2nd	2nd	3rd	X	4th
Neil Harber	3rd	4th	2nd	X	5th
Keith Miles	7th	X	6th	X	6th
Alan Caldecourt	X	1st	X	X	7th
Robin Strange	4th	X	X	X	8th
George Evans	8th	X	X	X	9th

X = did not compete.

I would like to thank all who took part in this year's Power Competition and congratulate Clive Upperton as overall winner.

Mobile phones...

George Evans, SRFC Secretary, outlines an important rule amendment regarding the use of mobile phones on the flightline

Modern smart phones have become ubiquitous and when used correctly are a significant aid both to the enjoyment of our hobby, with respect to photographs and videos, and to our personal safety.

The technical issues relevant to earlier generations of mobile phones seem to have largely diminished. However, they can easily be a distraction – and distraction and flying safely don't mix. Can I remind you all that mobile phones should not be taken on to the flight line by *flyers*, unless flying alone (see BMFA guidance).

People using them to photograph or video *other people flying* should ensure that they are not a distraction to the person flying.

To help ensure this, 'Airplane' or 'Flight' mode should be activated on any mobile phones taken to the flight line for photographic/video purposes, thereby disabling the phone's ability to receive WiFi or Bluetooth signals which may cause interference to R/C equipment.

This change is effective immediately and the rule in the handbook will be updated in the next issue.

The existing prohibition on making or receiving calls and sending or receiving texts within 20 feet of the Pilot box remains.



Some great photos and videos can be taken at the flightline – just be sure you have notified pilots and none object, and if using a mobile phone ensure it is set to Airplane mode.

Photos by Dave Banting: Grahame Pearson's quarter-scale Pup plus a study in concentration: Pim and Grahame

Gliding 2021

Robin Strange, Gliding Competition Secretary, reports on an enjoyable year of gliding

Despite variable weather this year with more high winds, not a lot of rain but overcast days following one after another, we have managed to fly a higher percentage of the planned days than in recent years. In 2018 and 2019 (no competitions in 2020 due to COVID-19) we only managed around 50% of the planned competition days flying but this year we have achieved 80% with more people as well so it's been a win-win.

Flying at Ashurst hasn't been as prolific as in 2020 but we have had some good days flying there especially early in the year when we made a determined effort to use Ashurst for gliding so as to leave Coombes free for the power guys but as it turned out the numbers going to Coombes has been low. Monthly competitions didn't take place through a lack of attendance for a variety of reasons but we did spend some Sundays flying, which was thoroughly enjoyed by one and all. My plan is to cease the monthly competitions unless there is a sudden surge in interest but we will continue the monthly fly-ins. Anyone with a glider is welcome; a couple take a bungee as an option rather than the normal self-launching gliders and one or two fly DLG too. (For those who don't know, a DLG or Discus Launch Glider is launched using a 'discus launch' in which the glider is held by a wing tip and the pilot rotates rapidly before release.)

When flying at Coombes we continue to contact Shoreham ATC before flying above 400 feet with gliders weighing less than 2kg. Disappointingly some of the staff at Shoreham don't seem to know about the MOU and its detail. We only need to tell them we're flying above 400 feet; we don't need to advise them we've finished but some controllers ask us to phone back, which so far I do working on the principle it's not a big deal as it keeps them happy.



Robin launching John Ivory's Phase 6 at Itford



John 'Kamikaze' Ivory ready for combat with his Wildthing



Concentration! Combat at Devil's Dyke: Derek, Colin and Robin

This year for our club competition we reduced the time allowed for use of a motor from 30 seconds to 20 though the reduction hasn't stopped gliders getting very high. Twenty seconds to above 600 feet is easily achieved by a number of the gliders and a couple have to ease off on the climb otherwise in 20 seconds they would be out of sight – not a good idea, and probably above our 900 feet limit at Coombes.

The numbers attending varied a lot particularly in July and August but the competition was keen between those that regularly took part.

The final result was a win for Robin Strange with Clive Upperton in second place and John Ivory in third position.

The competition has always been aimed at encouraging participation and that is still the case. If you have glider with a wingspan of up to 2.5m you can take part. We don't use an height limiter to keep the cost down though it does mean that those who can get high have an advantage. If you have a glider and are free Thursday afternoons at 1pm come along and join in.

As 2021 has been windy we have had some good days on the hills across Sussex with a number of visits to Beeding Hill with a variety of Wildthings and other models and visits to Itford Hill, Firlie Beacon and Bopeep in East Sussex east of Lewes.

<=2.5m Class-1

Who	Total	May 13		May 27		June 10		June 24		July 8		July 22		Aug 5		Aug 19		Sept 2		Sept 16	
		R1	R2	R1	R2	R1	R2	R1	R2	R1	R2	R1	R2	R1	R2	R1	R2	R1	R2	R1	R2
Robin Strange	15813	1000	1000	1000	953	1000	1000	986	993	1000	970	984	942	T		1000	1000	T		988	997
Clive Upperton	13846	980	945	968	850	717	736	1000	1000	799	1000	920	781	O		635	992	O		1000	523
John Ivory	10702	702	915	915	745	1000	742	993	927	1000	396	690	1000	O		0	677	O		0	0
Jonathan Halford	10160	540	719	590	1000	714	693	1000	1000	930	1000			O				O		974	1000
Paul Gladstone	8998	651	204	868	350			962	928	978	934	1000	793							883	447
Keith Miles	8697	149	980	612	890	861	1000	995	670							353	481			754	952
Derek Woodley	3966			966	1000									W				W		1000	1000
Chris Foss	3882	1000	1000	1000	882																
Ivan Thomas	3667	213	552	809	0	839	0	890	364												
George Evans	1948	0	224					880	844												
Colin Lucas	1231							856	375												

History of the Sussex Radio Flying Club



Derek Woodley records the history of the SRFC in an article which will hopefully appeal to long-standing and new members alike

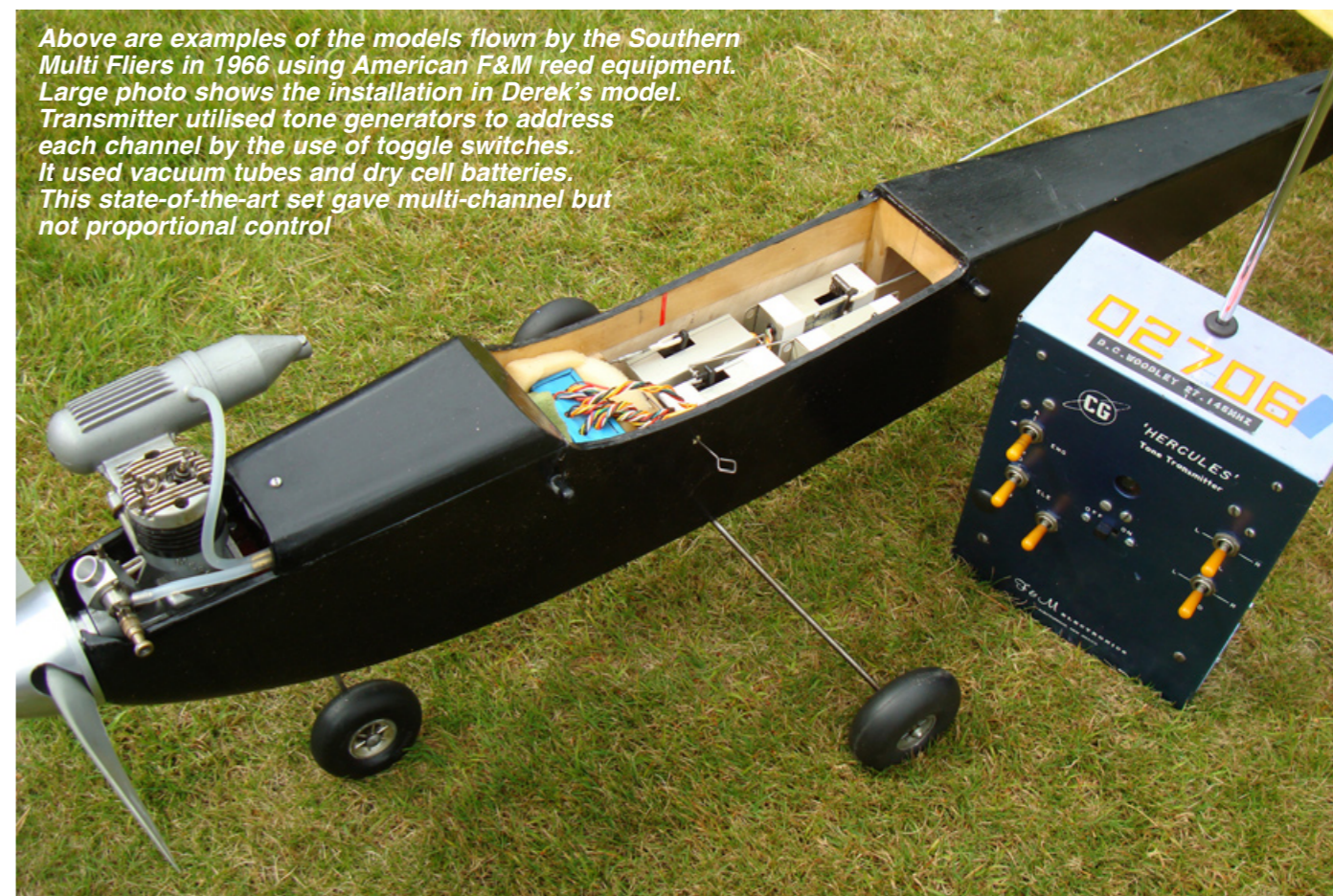
In this article I have attempted to record the history of our great Sussex Radio Flying Club; I hope the result is essentially accurate. I would like to thank those who have helped me with this project, in particular Chris Foss, Richard Cooper and Tom Gaskin.

The history of radio control model aircraft flying in the Brighton/Worthing area goes back to the early 1960s. Harry Brooks was a keen aeromodeller who lived in Portslade, and he placed equal first in the 1962 Radio Controlled Model Aircraft World Aerobatics Championship held at RAF Kenley.

He subsequently started a business – Southern Radio Control – to import and sell the American F&M reed equipment and the Bonner servos he used in his winning model. His business subsequently produced transistorised servo amplifier kits for the American Bonner servo mechanics. In the late 1960s, with business partner American Doug Spreng, he founded Sprengbrook Precision and began manufacturing radio gear in the UK.

During the early 1960s a group of Harry's customers gathered at weekends in a field in the valley to the east of Mill Hill to fly their models using the imported F&M multi-channel radio equipment. This small group of enthusiasts – about fifteen in number – called themselves the 'Southern Multi Fliers'.

In late 1966 the Southern Multi Fliers group became more organised and reformed as a club dedicated to radio-control model flying. They rented a flying field at Truleigh Sands, near Edburton, from the farmer Mr Windus, and affiliated to the Society of Model Aeronautical Engineers or SMAE (now the BMFA) and named the club the Sussex Radio Flying Club. The initials SRFC appealed to the group as many members were WW1 enthusiasts who made scale models of WW1 aeroplanes (RFC = Royal Flying Corps)!

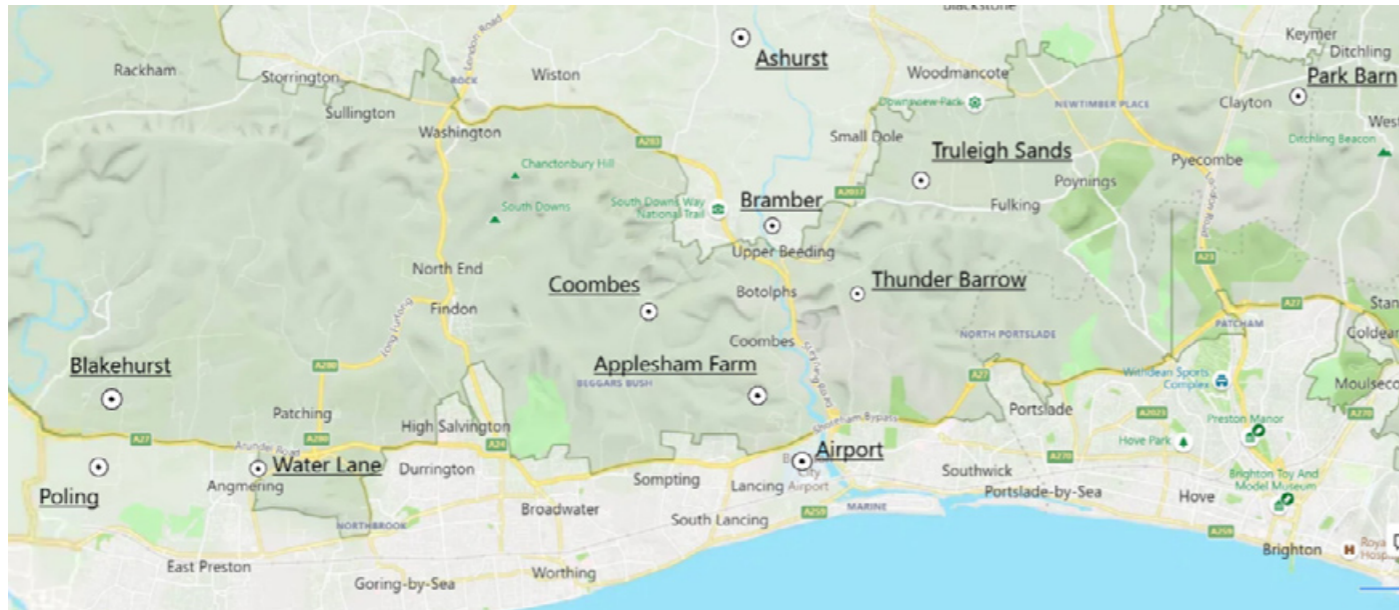


Above are examples of the models flown by the Southern Multi Fliers in 1966 using American F&M reed equipment. Large photo shows the installation in Derek's model. Transmitter utilised tone generators to address each channel by the use of toggle switches. It used vacuum tubes and dry cell batteries. This state-of-the-art set gave multi-channel but not proportional control

SRFC model flying at Truleigh Sands continued for a couple of years until Mr Windus decided to build a full-size airstrip on his farm in 1968.

During this period model flying also took place at Shoreham Airport during the light summer evenings after the airfield closed at 8pm thanks to a helpful and enthusiastic airport manager. Evening model flying at Shoreham continued for many, many years through until the early 2000s.

During the late 1960s the first proportional radio-control systems started to be come available. This step forward in technology made controlling model aircraft using radio much, much easier and encouraged more aeromodellers to try radio control for the first time. (For younger members who may not be au fait with the workings of older RC sets, in essence, 'proportional' meant that a small stick movement gave a small control surface movement; more stick movement gave more control surface movement, hence 'proportional'. Previously movement was all or nothing. Ed.)



This map shows flying sites occupied by the SRFC over the years

Slope soaring was by now gaining in popularity and gliders were flown from a number of locations in Sussex by SRFC members. Many folk learned the art of radio-controlled model flying using gliders before progressing to the more demanding requirements of powered models.

After leaving the 'Sandy Patch' at Edburton in 1968 SRFC members flew at Thunder Barrow near the top of Truleigh Hill for a short time before negotiating a more permanent arrangement for a flying field with Mr Passmore at Applesham Farm, just north of Lancing College later in that year.

Club gatherings continued to take place on a regular basis at Shoreham Airport on Friday evenings for model flying followed by socialising at the bar in the airport buildings or at the Mercury flying club.

In the early 1970s more modern and reliable radio-control equipment began to be manufactured in the UK by companies such as Skyleader and Sprengbrook Precision. With this equipment available and the cost becoming more affordable (though still expensive by today's standards), many aeromodellers who had previously flown control line or free flight models converted to R/C.

First picture is a Skymaster biplane, flown by the Skymasters aerobatic team in 1976. Second and fourth pictures below are of a Chris Foss Phase 2 glider, designed in 1970. Third picture is a typical towline glider of the period. We all recognise the fifth picture, hard to believe it's been around since 1977. Sixth picture is a Veron Impala

**Skymasters Formation
Aerobatic Team, 1976**
1 = Ken Binks, 3 = Chris Foss,
4 = Ricky Shaw, 5 = Phil
Ramsey. Model 2 had crashed!
Team Manager John Godfrey.
Photo supplied by Ken Binks



The popularity of the hobby of radio-controlled model flying increased hugely at this time and this resulted in a significant increase in SRFC club membership.

Mr Passmore of Applesham Farm eventually became concerned with the number of cars passing through his farm on their way to the club's flying site and decided to place a restriction on his land use.

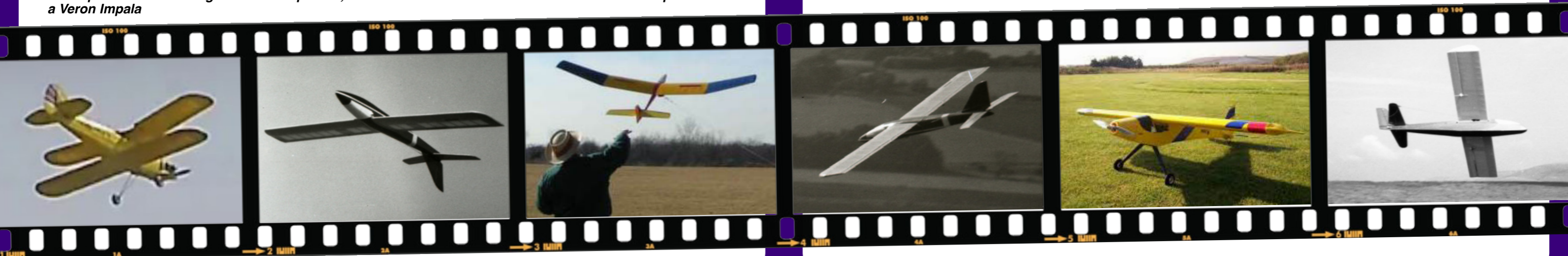
As a result of this, in 1972 the need for an alternative flying venue became apparent and SRFC found itself divided. The original and founder members of the club continued to use Applesham Farm while the newer members tried to source other sites for model flying.

This was not without difficulty, but flying fields at Bramber and at Park Barn, near Ditchling, were established while a lot of flying continued to take place at Shoreham Airport during the evenings.

SRFC Club nights were held each month on a Friday at Shoreham Airport throughout the 1970s.

During 1972 the club had negotiated the use of two adjacent fields at Bramber. One was used for power flying and the other exclusively for gliders. Unfortunately the Bramber sites were lost after a couple of years due to the noise from power models.

In those days, before electric power, gliders were launched by winch, towline or bungee. Glider flying did take place in other fields near Bramber at times during the rest of the 1970s and a field for 4-stroke-only powered flying was used in 1979 and 1980, 4-stroke engines being substantially quieter than 2-strokes.



A youthful Derek, glider-guider



In 1973 a new venue at Water Lane, Angmering became available next to the then embryonic banger racing circuit.

Sadly, in 1976 the Water Lane, Angmering site was lost as more land was needed for the banger racing, but model flying was able to continue at Shoreham Airport and at Park Barn.

Due to the difficulties in retaining flying sites, attempts to raise money to finance the purchase of land to permanently provide an SRFC model flying site were actively pursued.

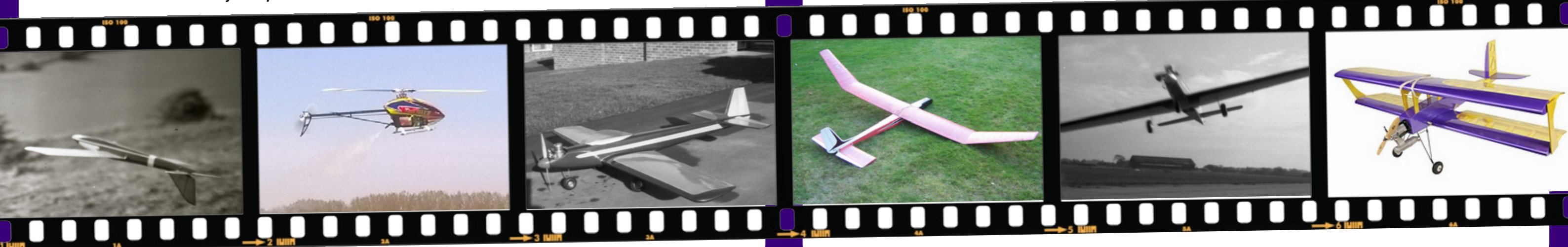
The SRFC organised one of the first Model Airshows in the UK at the Hickstead Show Ground on 22nd August 1976. This was a great success and raised a considerable sum of money for the club.

An example of the effort made to produce good displays of radio-control flying was the 'Skymasters' team.

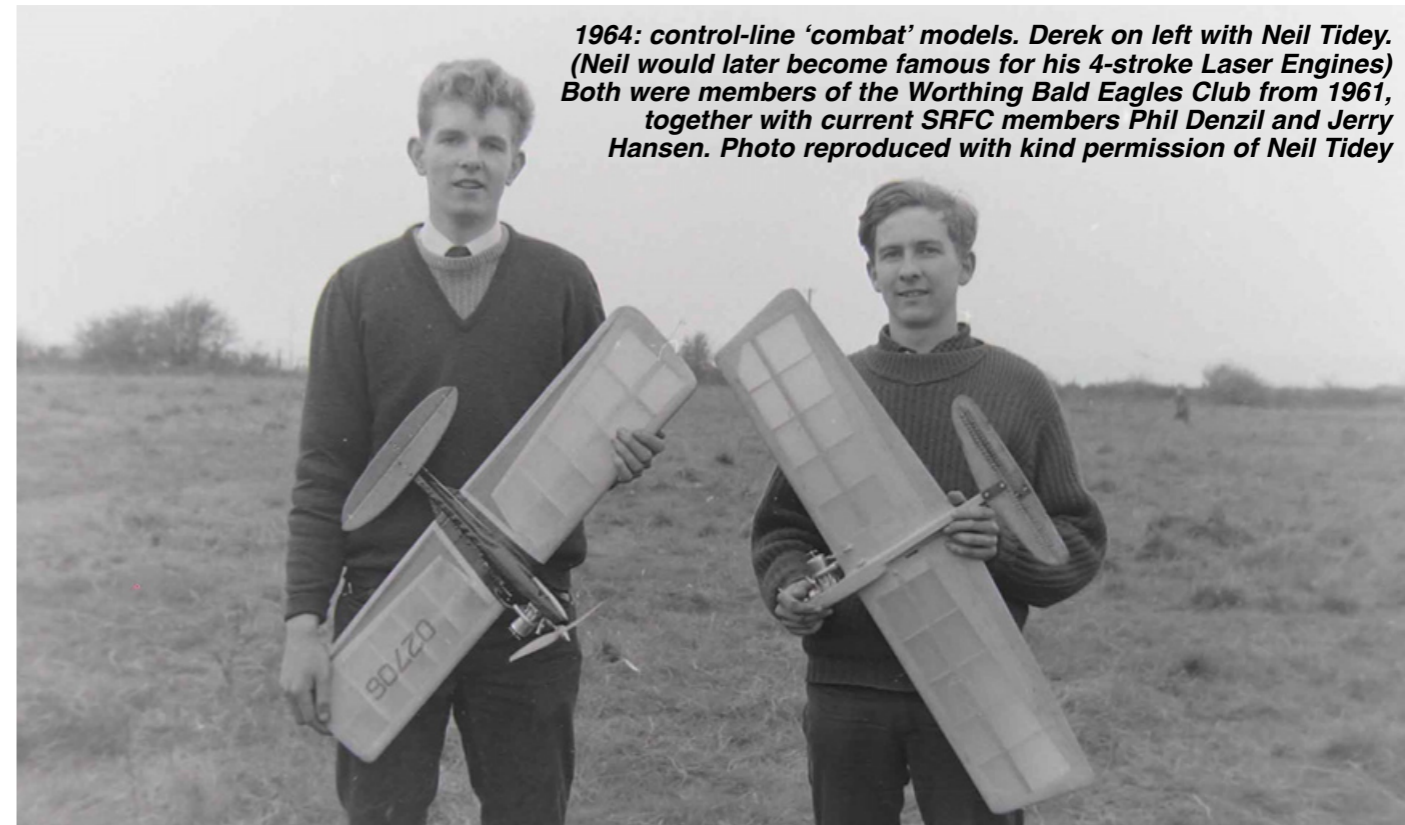
The following year the SRFC Model Airshow venue moved from Hickstead to Plumpton Race Course as Douglas Bunn, the owner of Hickstead, had demanded considerably more money for the use of his site.

SRFC continued to organise these airshows during 1977 and 1978 and raised a

Third and fifth pictures show a typical aerobatic power model of 1970 using proportional radio control, a 'Moon Glow' designed by Mike Birch who was the British Aerobatic Champion at the time. Scratch built from a plan, Derek's model is powered by a Merco 61 Mk2 twin-plug engine and fitted with Skyleader radio gear. Second picture is a helicopter being flown at Poling. Sixth picture shows an Avicraft 'Panic', a popular model flown in the 1980s in 'Fun Fly' competitions



1964: control-line 'combat' models. Derek on left with Neil Tidey. (Neil would later become famous for his 4-stroke Laser Engines) Both were members of the Worthing Bald Eagles Club from 1961, together with current SRFC members Phil Denzil and Jerry Hansen. Photo reproduced with kind permission of Neil Tidey



lot of money in the process, but the financial success was being noticed in the commercial model flying world and various organisations developed model airshows of their own.

In 1977 following the loss of the Park Barn site due to noise complaints, a flying site at Blakehurst Farm (North of the A27 near to Poling) became the main SRFC site and was used for both power flying and gliders, evening flying continuing at Shoreham Airport in the summer months.

The Blakehurst Farm flying site was eventually lost for power flying in 1988, again due to noise, but the glider flying was allowed to continue for a few more years.

Around late 1977 the use of our present flying site at Poling was secured.

General Club flying continued at Poling until 1989 when vociferous and determined noise complaints led to protracted negotiations with the District Council to obtain planning permission for the continued use of the site for flying model aircraft. Eventually, and after considerable expenditure by SRFC, permission was granted to



fly model helicopters only at Poling.

From the late 1970s a casual arrangement for glider flying has been in place at a farm near Ashurst. Thanks to the farmer, Chris Jesse, this venue remains available today, and has been used by SRFC for national and international glider competitions in years gone by.

Noise was always a problem at Poling, and from 1985 to 1988 some club members flew from a field at Thunder Barrow on the top of Truleigh Hill, but in 1986 the club was fortunate to also obtain a flying site on our current farm at Coombes, but in a field to the north-east of our present patch.

In 1988 we were moved to our current Coombes location because of concerns over noise effecting cottages in the nearby valley, but we have been very fortunate to continue to rent our present Coombes site for more than 30 years thanks to farmer Dick Passmore and, subsequently, his daughter Jenny Flake.

Club meetings during the winter months have used different venues over the years. Shoreham Airport Departure Lounge, various leisure centres, parish halls, pubs, and more recently Hill Barn Golf Club are among the venues used.

For more than 55 years our club has remained a successful organisation serving the needs of the radio-control model flying community in the area.

From the mid-1970s until about 2010 there was a waiting list for membership which was capped at 200 and we have consistently had a membership exceeding 160 since then.

You will note that during the last 30-plus years the Sussex Radio Flying Club has enjoyed the most stable period of its lifespan, and thanks to continuing good relations with the farmers at Coombes and Poling, has been able to establish and maintain the great club flying sites you benefit from today. A far cry from the uncertainties of earlier days. Maybe electric power development has played its part?

Long live the Sussex Radio Flying Club!

Hurricane – work in progress!

John Ivory's latest 22" wingspan beauty

Now, what do you get up to when the weather is wet and windy for days on end? Well, I came across an outline drawing of a rubber-powered 30" wingspan Hurricane. "That looks fun to pass the time," I thought. It was just what I fancied building.

I downloaded the outline drawing and after reducing it to a wingspan of 22" (1/24 scale), printed it all out on A4 paper. I hear you ask, "Why reduce it? Isn't 30" small enough?" It's because I had a small motor, 6 Amp ESC, receiver, four 4.1g servos and a 2S 350mAh battery already which experience with tiny models told me should be just right for a 22" model.

Next, how was I going to convert a rubber-powered plane to an electric model? How was I going to mount the motor? Where and how many servos? And, most importantly, where and how would I locate the battery to obtain the correct CG?

After sketching the outline of the motor, battery and servo positions onto the drawings it was time to start work on the wings. The main wing was made in three sections using mostly 1/16" balsa with two very thin carbon-fibre spars. The tailplane and fin were made from 3/32" x 3/16" strip. Now for the more demanding fuselage build. The fuselage formers were made from laminating 1/32" balsa sheet together at 90 degrees to increase their strength when cutting them out. The motor bulkhead was made from 1/16" ply with 1/16" balsa backing. The use of two longitudinal stringers cut to the shape of the fuselage made the assembly much easier as it doesn't cause the formers to go out of line. Once all formers were glued in position additional 1/16" square stringers were added. The forward section from the trailing edge of the wing was planked with 1/32" sheet. After a light sanding of all surfaces and adding servo mounts in the wing and fuselage it was time to cover the model with tissue paper and two coats of dope thinned 50% to avoid warps.



The canopy was moulded in the usual way and a 1/24 scale pilot located and painted. Control rods were added as was the undercarriage.

Using an airbrush and matt paint I sprayed the underside in RAF Sky Type S then masked and sprayed the upper surfaces in dark earth. Dark green was added by brush in a camouflage pattern. Decals were based on those from a 1/48 scale Airfix kit, scanned at 200% to give 1/24, imported into my PC and printed to waterslide transfer film and applied to the plane.



With CG checked and control surfaces set up including rates it was time for a test flight.

On a calm sunny day Clive Upperton gave it the once over and off we went to the flightline. With a nod from me, Clive launched the little Hurricane.

Off it went straight into a climb, then dropped the port wing and went into a steep dive. I managed to cut the power and flare before it hit the ground though it was still quite a hard landing, damaging the left-hand wing.

The post-mortem concluded that there cause was a CG issue combined with lack of power.

It took about two days to repair the wing, the most time consuming part being re-covering, painting and adding a new decal. I also increased the power by changing from a 2S battery to a 3S and replacing the three-bladed prop to a two-blader. To move the CG forward two small lead discs were added to the prop mount. It was time to give it another test flight...

Again, on a very light wind day at Coombes and with a launch from Clive, off it went, not lacking any power this time but started to bank to the right. Full left aileron was applied, alas with little effect and again had a very hard landing this time breaking the right-hand wing.

Thanks to Clive for giving me a hand and Robin for taking the outdoor pictures.

Let's just say it's work in progress!



*Always take the 'builder with plane' photo BEFORE the maiden flight!
John with his superb 22" Hurricane.*

Below: Clive launches the tiny Hurricane



Post-lockdown builds

Prolific builder Les Crane brings us up to date

Since the last *FlyPaper*, I have finished one model, built another and started a third.

I made a concerted effort to complete the Boulton Paul Defiant. The whole model is sheeted in 1/16" balsa (metrication has not arrived in the Crane household), and covered in light glasscloth after several coats of sanding sealer, followed by Halfords rattle can grey primer and then rattle can satin black. The pilot and his identical twin brother turret gunner are standard WW2 busts from SMC. Graphics are from Callie Graphics in the USA (callie-graphics.com) and are those of a 151 Sqn night fighter based at Wittering in 1940/41, the aircraft being lost on 24/10/42 when it stalled and crashed in a hailstorm on a ferry flight, the pilot being killed, the turret being unoccupied. Power is from a 380kv Turnigy Propdrive motor, 80 Amp ESC with separate BEC and 6S 5000mAh battery. It is from a kit supplied by Sarik from a Chris Golds plan. It has yet to fly.

I am also a member of the Horsham Club and they had a 'mass build' (all 11 of us!) of a Dancing Wings 1500mm Sunbird motor glider. I built this over a five-week period at the same time as finishing the Defiant. The laser-cut parts fit together extremely well making the build quick. The kit is unusual in that DW provide virtually everything.



Defiant awaits its maiden flight



Pretty in pink: Sunbird motor glider

The motor, ESC, folding prop, control surface hinges and horns, nuts and bolts were all provided in the kit. A few years ago at a club auction I bought a bundle of heat shrink covering and there was enough of two colours to cover the model. At the time of writing it has yet to fly.

I mentioned in the last *FlyPaper* that I had totalled my Tony Nijhuis 62" Hurricane.

I bought a replacement kit and have made a start on the new one. I managed to salvage the motor, ESC and BEC plus the retracts from the wreckage but will fit new servos and an up-to-date Rx. The plan requires the wing to be removed to fit and replace the 5S battery which is inconvenient so I am working on designing and making a removeable cowling battery hatch, although room to achieve this is limited.



New Hurricane takes shape. Watch this space...

Spotlight

*Your chance to share photos of your models with other members.
This month a selection of Paul Gladstone's models*

FMS Futura

Seen here photographed on an early test flight.

Folland Gnat

This model is built from the Tony Nijhuis plan. I decided to use the 60s Flying Training Command colours rather than the perhaps more popular and ubiquitous red scheme associated with the Red Arrows before they changed to Hawks. The model flies very nicely and spiritedly on a 3S battery.



Hawk

This is the FMS model and by far my favourite foam jet.

Spitfire Tr.8

This is shown with my Gnat to mimic the pair as I remember them, parked at an air show in the 60s. It was the first Spitfire I ever saw and is the prototype trainer. Found in the 50s by the Hampshire Aeroplane Club and raced many times it went to the USA but is now back at Biggin Hill albeit in camouflage which it never wore as a two-seater.

Mine is converted from the Top Flite kit and has taken me a good couple of years to finish. I had been hoping to test fly it but poor weather has so far prevented this. Soon though! Power is Emax BL7030 on 6 cells.



My thanks to Paul Snellgrove who took the flying photos.



Target for Tonight!

Built during the last lockdown, John Wase's Avro Lancaster awaits its maiden flight!

Built from the Tony Nijhuis plan, my 72" wingspan Lancaster is almost finished with just the setting-up of control surfaces, final check of CG, etc to do.

After nine months of very enjoyable building I've learnt such a lot. Having gained confidence from building a twin-engined Britten-Norman Islander from scratch, which flies well, a four-engined WW2 bomber seemed the next logical progression!

To ensure a balanced powertrain 4 Max advised me to ensure all motors and ESCs were new and matching. I have extended the motor wires, again as advised, and fitted counter-rotating props, all turning in towards the fuselage. Hopefully this should stop the model pulling to one side on take off and is one up on the full-size Lanc's Merlins which all rotated the same way and must have been quite a handfull on take-off. Power is provided by a pair of ubiquitous 3S 2200mAh batteries, one to power the outer motors and one to power the inner motors; battery failure or imbalance will therefore not result in unequal left/right power.

I've installed a six-channel (genuine) Spektrum receiver with a separate four-cell NiMH battery to power it and another for the undercarriage. To facilitate this all four ESCs have had their red power feeds to the receiver removed. As can be seen, I am taking no risks with the batteries but I am sure the large model will have no problem with the extra weight.

All that remains is the test flight. I hope to engage a test pilot who will give it a fighting chance of flying, someone who knows what they are doing. I do have someone in mind with a nickname very short and reminiscent of a certain summer drink...



Hawker Typhoon Preservation Group



Les Crane's Tony Nijhuis Typhoon displayed at HTPG Open Day

Some readers will know that I am a member of the Uckfield-based Hawker Typhoon Preservation Group, a registered charity set up to ensure the rebuild to airworthy status of a Hawker Typhoon 1b, based on the substantial rear fuselage section retrieved from Holland of RB396, XP-W, of 174 Sqn, 2nd Tactical Air Force.

The rebuild will be in the personalised markings of the pilot who flew most of RB396's 35 combat missions, Pilot Officer Frank Johnson with the name 'Sheila' on the cowling. P/O Johnson was not flying 396 when it was shot down on 1st April 1945 as he himself was shot down the previous day flying another aircraft, becoming a POW. Thus, on 1st April, 396 was being flown by Flight Lieutenant Chris House (photo, right) when it was hit by flak and he crash landed it near Denekamp in Holland, F/L House evading capture and returning to his Squadron four days later.

Readers may remember that I built a Tony Nijhuis 62" wingspan Typhoon 1b and finished it in the markings of RB396 'Sheila'. In late October, the HTPG held its annual members open day and asked me to have my Typhoon on display (along with my 1500mm Hawker Tempest V – parts of a Tempest V are being used in the Typhoon's rebuild as much of the fuselages are



Les' Tempest (left) and Typhoon, the latter in the markings of RB396 'Sheila'

identical). One of the reasons was that one of the special guests on the day was Shirley, the daughter of the late Chris House, the pilot on the day it crashed and they wanted a photo of her with the model. The photo below shows Shirley and myself beside the model.

HTPG has raised over £1m towards the rebuild which has ensured that the rear fuselage between the cockpit and the empennage will be rebuilt (to airworthy standard) by early 2022 and work on the early stages of the cockpit has commenced. If you are feeling generous, HTPG only needs another £4m or so...

For more info visit www.hawkertyphoon.com



Rear fuselage of RB396



Workshop – the saga continues

Following on from the article in September's FlyPaper, Part Two sees George Evans' new workshop erected

I have to be honest here... when I made the decision to get a new workshop, I knew the problem was going to be sorting out the contents of the of the current one, and I wasn't wrong.

I spent two full weeks boxing and sorting stuff (aka valuable items I will definitely need at some indeterminate time in the future) which involved a number of painful trips to the tip. I then went on holiday for ten days. On my return came the realisation that I had to get all said stuff, now in boxes where possible, out before a company I'd booked earlier came to demolish the old structure; time was going to be tight. Oh yes, my daughter's delayed house move happened in the middle of it.

I soon discovered that some of the boxes were overloaded – they either fell apart when lifted or were too heavy for me to be able to carry them, so some repacking was required and stronger boxes ordered. (Isn't next day delivery wonderful!)

Nevertheless, progress was being made – the pile in the garage became smaller and the 'neat' stack in the greenhouse became larger (Photo 1). I was left with the stuff that was too big or heavy to box including the bench, lathe, marble head, 1m yachts, motorbike, etc. And some planes! My lathe and drill press were palmed off on my son-in-law to put in his new garage while other large items were put under a tarpaulin tent on the patio (Photo 2). The planes went in the spare bedroom – a different slant on stacking (Photo 3)?





All was finally cleared the day before demolition was due (Photo 4).
Demolition Day! The money paid was worth every penny (well, pounds really).
Gone in six hours (Photo 5).

A landmark moment was the arrival of the new workshop (Photo 6) – over a ton of finest eastern European pine all wrapped up in plastic.

And so, the build begins. First the supporting wall was built, then it was on with the ‘Lego’. This is the second log structure of this design I’ve built (you will recall the log cabin in the first installment) and I am impressed with how well they have gone together. Follow some simple rules: have a level base, follow the instructions and measure regularly, oh, and have a big hammer nearby at all times (Photos 7 & 8).

So, at the time of writing the new workshop is erected, painted and power is in (Photo 9). The racking and benchtop are ordered but you will have to wait until the next installment to see what I do with the inside (Photo 10).



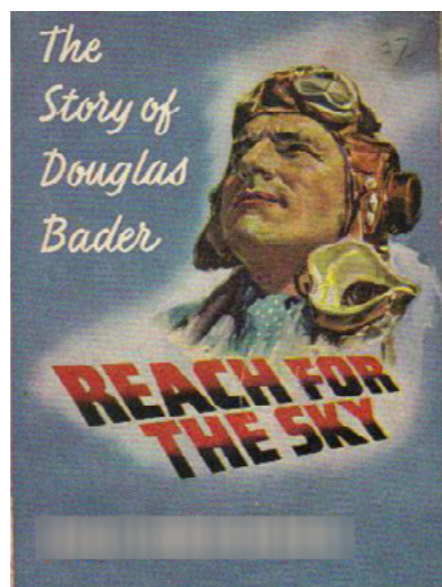
Aviation Quiz

By two anonymous SRFC members

You can Google the answers but we urge you not to

Answers on page 38

1. What was the name of the manoeuvre designed to combat the Zero in the Pacific, named after the pilot who thought it up?
2. Name the manufacturer of the engine fitted to the Focke Wulf Fw190.
3. Which company made the Boomerang and Wirraway aircraft?
4. What does 'Bf' stand for (as in Messerschmitt Bf109)?
5. What are the alternative names for the following?
Boston
Wildcat
RAF Middleton St George
6. Who wrote the 1954 biography of Douglas Bader, *Reach for the Sky*?
7. Who was the British film star shot down and killed on a civilian BOAC flight in 1943?
8. Who composed *Spitfire Prelude & Fugue*, used in the 1942 film *First of the Few*?
9. Name the Russian airfield used by 617 Squadron on one occasion when it attacked the Tirpitz.

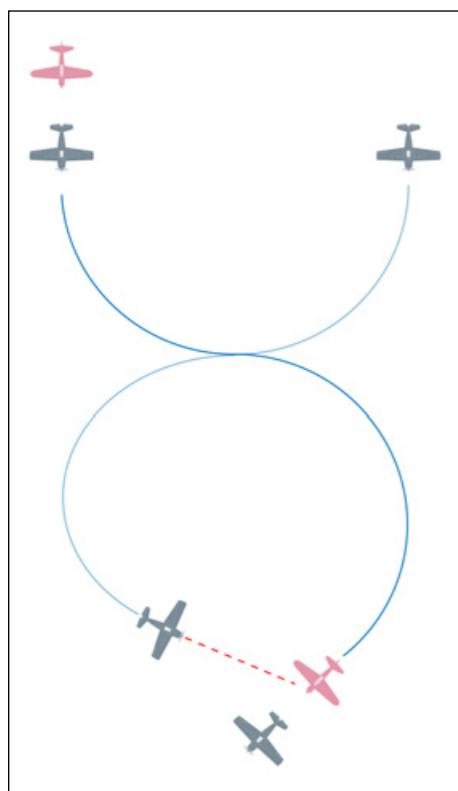


10. What year was the Air Training Corps founded?
11. Name the airfield from which the Spitfire made its maiden flight.
12. How many aircraft make up a Luftwaffe *Schwarm* formation?
13. Name the airfield where Andrew Mynarski (the only Canadian VC) was based when he won the medal.
14. British WW1 aircraft upper surfaces were usually painted a dark greenish brown called PC10. What did PC stand for?
15. What type of plane was Admiral Yamamoto flying in when he was shot down and killed?
16. What type of aircraft shot him down?
17. What are the gold oak leaves on the peak of a high ranking (Group Captain and above) RAF officer's cap colloquially known as?
18. What nationality were the following aircraft designers/scientists?
Anton Fokker
Kurt Tank
Clarence (Kelly) Johnson
Sydney Camm
Robert Oppenheimer
Verner von Braun
19. In WW2 what did leaving the top button of an RAF tunic undone unofficially denote?
20. What colour was the first aircraft to break the sound barrier painted?



Aviation Quiz – answers Quiz is on page 36

1. The Thach Weave
2. BMW (Bayerische Motoren Werke)
3. Commonwealth Aircraft Corporation
4. Bayerische Flugzeugwerke
5. Havoc
Martlet
Goosepool
6. Paul Brickhill
7. Leslie Howard
8. Sir William Walton
9. Yagodnik
10. 1941
11. Eastleigh
12. Four (consisting of two pairs of aircraft)
13. Middleton St George
14. Protective Covering
15. Mitsubishi G4M 'Betty'
16. Lockheed P38 Lightning
17. Scrambled egg
18. Dutch
German
American
English
American
Polish
19. That the wearer was a fighter pilot
20. Orange. (Bell X-1, flown by Chuck Yeager, 14th October 1947)



Flyaways!

George Evans, SRFC Secretary, on the legal aspect of flyaway models and what we need to do

We all hate to see our model become a distant spec in the sky, whether this be through forgetting to switch on the receiver before launching a glider heavenwards (don't laugh – it happens more often than you'd think) or through simple disorientation or flying in front of the sun, with my official Secretary's hat on I thought it worth commenting on the mandatory reporting protocol we should all be following specifically in respect to flyaways.

As has been discussed before, our Coombes flying site is bounded on two sides of the triangle by public rights of way (footpath and road) and any uncontrolled incursion into those spaces should result in, at the very least, the completion of the BMFA online tool: rcc.bmfa.uk/art16-occurrence-reporting

Where a SUA (small unmanned aircraft) is lost then there is the risk that those areas where the public have access could have been affected. Additionally, there is an impact on our MOU (memorandum of understanding) with Shoreham ATC (Air Traffic Control) which requires us to comply with the mandatory reporting framework as, though small, there is a risk to manned aircraft from a flyaway.

While it remains an individual's responsibility to comply with the legislation, I would like to remind you that in the event of a flyaway the least you should do is complete the BMFA tool and then comply with the guidance it offers.

In these days of seemingly ever-increasing bureaucracy and legislation we must all do whatever it takes to remain legal. Not to do so could increase the risk of us losing our most valuable resource: our flying site.



If we're honest, we've all experienced that feeling when we suddenly realise we are staring at an empty sky!

Flying with The Ghost Squadron

On the first weekend in September Robin Strange went to Buckminster to try aero-towing with The Ghost Squadron

My Flamingo is designed with a towing attachment, which I had included in the build and having never tried aero-towing the meeting at Buckminster seemed an ideal opportunity to try it.

I arrived on the Friday afternoon and Manny (the site manager) suggested I put my glider together and park it in the hangar for the weekend, which I duly did.

Pre-visit

I had shared a number of e-mails with John Greenfield who runs The Ghost Squadron and at his suggestion I had tested the tow release at twice the model's weight, it apparently being the biggest issue with those of us new to the launch method. My use of a standard Ripmax servo meant it passed the test with flying colours with a pull of 7.5kg.

Unfortunately John hadn't mentioned the need for a link to connect my model to the tow-line; I assumed the tow line itself would fit my model so I spent two days borrowing the said item. Now to make some.

Briefing

Saturday morning started with a pilot briefing followed by the flying. During the briefing the no-fly zones, etc were run through and the aero-tow route was pointed out and finally it was emphasised that on the launch it was good practice to keep one's finger on the tow release just in case an emergency occurred, such as a wing tip digging in on the ground or something going wrong in the climb.

We had a predefined place to line up in a queue to await a turn to launch, which in the event was often very short so one could land, pick one's model up and rejoin the queue ready to go again; consequently I was able to fly as much as I wanted to.

Flying

The glider guider has two things to do: a) be prepared to activate the tow release and b) concentrate on keeping the wings level on take-off and aligned with the tug. There is no need to worry about the rudder or elevator on a well trimmed glider as the glider just follows the tug.

On take-off the glider lifted off without my input and stayed above the tug. On my first launch I over controlled in the roll axis because the ailerons are far more effective due to the glider being pulled at a speed it doesn't normally achieve unless it's heading earthwards at a very steep angle. In fact the tugs could have pulled my little 3.5m Flamingo up vertically had they wanted to. On subsequent launches I asked the tug pilot to slow down and it made the whole experience much more enjoyable and my roll control was much better. On my early flights I was releasing the tow at

between 800 and 900 feet and as the weekend progressed I went higher till I released at 1400 feet and got caught in a strong thermal from which I spent most of the flight trying to get down as at 1500 feet a 3.5m wingspan glider was getting rather small.

The Ghost Squadron team members were very helpful, full of advice and encouragement with the aim of ensuring everyone enjoyed the experience. I was the only aero-towing virgin on the Saturday and there was one more on the Sunday.

Models varied from three small ones – two 3.5m Flamingos and a 3.5m Minimoa – and the largest was an 11m fibreglass ship. Other than that, John Greenfield had his half-scale Tiger Moth and a half-scale Wien glider – big stuff!



Left: the field, runway and route taken by the tug on launch



Attaching the tow line to Robin's Flamingo



SDD Greenley tug



Half-scale Wien

The tugs

The tugs in use were SDD Greenleys, the largest of the Greenley family of tug and sport models. (The original is the SD – or Super Super – Greenley, the SDD is the Super Duper Duper!) The SDD Greenley was developed as a purpose designed tow plane and has proved very popular not only in the UK but worldwide. The SDD Greenleys are powered by DLE 111 motors turning Biela 28x10 props.

The models weigh around 9.5kg and carry 1.5 litres of fuel to enable them to tow for around 45 minutes depending on the weight of gliders being towed. They are happy towing any size of glider up to around 60kg. The towline in use was an orange builder's line 40m long.



Flamingo on one of many flights over the weekend

My hangar

First in a hopefully regular dip into members' hangars, FlyPaper takes a look at John Ivory's clinically clean shed cum hangar – well, you wouldn't expect anything less, would you!



Left-hand side bench from front to back
 Viper ducted fan
 28" wingspan Jet Provost
 F16 ducted fan
 F18 ducted fan

Left-hand side floor from front to back
 Hawk 1500mm glider
 Balsa Wot 4
 Mig-28
 Gamer foamy
 Hawk 2000 glider (it's not easy to see)



Right-hand side bench from front to back
 De Havilland 103 Hornet
 F82 Mustang
 Hurricane
 Meteor
 Hawker Fury
 Micro Wot 4
 Acro Wot Micro

Right-hand side floor from front to back
 Arco Wot foamy
 Moronic
 33" wingspan Mustang
 33" wingspan Fw 109 D-9

Back wall
 Phase 6 glider
 Wildthing
 Blob

Why not send in some photos of your workshop or shed? Just e-mail pics and a few words to grahame.pearson.srfc@gmail.com

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George



Tom



Robin



John



Grahame

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Rep & Field Maintenance)**

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Safety Adviser

Dave Knott

Safety Marshall 1

Paul Gladstone

Safety Marshall 2

John Wase

Safety Marshall 3

VACANT*

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