



The "Kelling Flier" No.14



Hi all

Thank you again to those of you who have made submissions to this issue. I have included a copy of the "renewal Subs" form on page 2 together with instructions below on what you will need to do if renewing. Can I take this opportunity to wish you all a "Merry Christmas" and "Happy New Year", I think we have all earned it! With the current positive news, and advancements, it finally seems that we can look forward to a better 2021 and resuming a normal life. As you will have seen, we can resume flying again, albeit with care, but it's a start and more evidence of light at the end of the tunnel. Stay positive and I look forward to meeting/flying with you soon. Please continue to submit all items to me at awjenkins@sky.com.

Thanks, Andrew

RENEWAL OF CLUB SUBSCRIPTIONS

You have been emailed a copy of the Club Renewal form in both "Word" and "PDF" formats detailing the subscriptions for 2021. I have detailed below, the various ways of renewing your membership, BMFA and CAA subscriptions, should you wish to do so.

1. Print of the application form, complete it as usual and forward with your cheque made payable to "Kelling Model Flying Club (IN FULL) to **Nick Kirk, 3 Oliver Court, Cromwell Road, Cromer. Norfolk. NR27 0AU. BY 1st Jan 2021.**

2. If you cannot pay by cheque and need to pay by BACS, you need to send your payment by bank transfer to the account –

KMFC Subs, Sort Code 77-66-07, Account Number 26233768.

You will need to QUOTE YOUR SURNAME as the reference for accounting purposes. Please note, if paying by this method, you will still need to forward your renewal form to Nick and also write/type "PAID BY BACS" clearly across your form for accounting purposes. This needs to be emailed or posted to Nick at n.kirk15@btinternet.com/3 Oliver Court, Cromwell Road, Cromer. Norfolk. NR27 0AU. BY 1st Jan 2021

If any of you have any issues with the completion of your application or printing of the form, please don't hesitate to contact me by phone or email and I can post you an application or talk you through the process. My contact details are :-

Phone - 01692 400908 or 07900565026

Email - awjenkins@sky.com

Kind regards, Andrew

Model Flying Club Renewal Membership Application for 2021

Surname.....
 Forename.....
 Age.....Date of birth if under 18.....
 Address.....

 Postcode.....
 Telephone Inc STD code.....
 Mobile.....
 E-Mail.....
 Next of kin contact number (in the event of an
 Emergency).....

The annual fees for the KMFC are:-

Please circle the amounts in the grid below that you are applying for:-

	Club sub	BMFA	Total
Full	£50.00	£38.00+£9.00**	£97.00
Social	£12.00		£12.00
Junior	£15.00	£17.00+£9.00**	£43.00

- deduct the appropriate amount if current BMFA is already held.
- ** Remember. You must be registered with the CAA if you intend to fly your models with the club after 1st Jan 2021.

BMFA Number.....

If insuring through another club or privately Proof of insurance will be required.

Are you a member of another club.....if yes please state which club/s.....

Do you hold any BMFA proficiency certificates "A"- "B"- "C"- "Examiner"

Renewal amount cheque only please £..... Cheques payable to "Kelling model flying club" for total amount. Please do not write KMFC

I, the undersigned agree to abide by the rules of the Kelling model flying Club.

SIGNATURE.....

DATE.....

Please forward remittance and completed form to: - Nick Kirk. 3 Oliver court, Cromwell Road, Cromer. Norfolk. NR27 0AU. **BY 1st Jan 2021.**

Please send SAE if you wish to receive your new membership card by post.

"I confirm I have read and understood the CAA Privacy Notice relating to registration with the CAA and agree to the BMFA providing my Name, address, date of birth and email address (if applicable) to the CAA as part of the process."

STANS QUIZ CORNER



Here are the answers together with another group of aeroplanes for you to identify. Good luck!

Keep balsa bashing, Stan!

QUIZ - WHAT'S THE AEROPLANE ?

1. A long way home taking two decades.
2. Tommy's original new sheet.
3. The excellent soldier on board ship seems to be heating up the sea.
4. Fish eggs again! 'In the winter of our discontent made glorious

Answers to last Quiz - 1. Enrich Tauber (dove). 2. Martin Mars. 3. General Aviation Hotspur. 4. Consolidated Dominator. 5. Hawker Demon.

BUILDERS BOARD

John Wells "Curare" Pattern Ship Project....

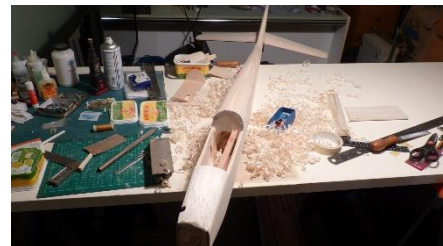
As some of you may know, many of my models are usually 'pre owned' and most are also 'pre-crashed'.

To while away the lockdown hours, I've been building a Curare pattern ship designed and flown by World Champion Hanno Pretzner in 1977. This is the first plane that I have built from a 'proper' plan, it seems like I chose the wrong time to do it, as there seems to be a shortage of good balsa available. The Chinese are buying all the stocks for wind turbine blade cores!



I had a bit of balsa etc in stock and acquired some more from the late Jim G's leftovers. Some of the stuff I got from Pegasus was heavy and twisted.

The plan and parts sheets were downloaded from the web and printed by www.model-plans.co.uk for just a tenner. I chose to make life more difficult for myself by incorporating a 'period' feature, the adjustable incidence, anhedral tailplane, supposed to make flight trimming easier. It will be



powered by the original power source, a Webra speed 61 glow engine with pipe. May have to look at converting a vintage Tx to go with it....

Great looking plane, keep us posted John!

A “budget friendly” jet from Peter Coldham.....



Here is a picture of an F22 Raptor made from 6 mil depron from Peter Coldham. As Peter says - “It is cheap fun and the plan can be downloaded from the website at www.parkjets.com for a small fee. It just needs 2 small servos, 1 - 3 cell lipo, 1300mah battery, speed controller, 6x4 propeller and a park fly receiver. It flies very slow and very fast, and climbs almost vertical. But it is real good fun to fly. *Could be your next winter project guys and it won't break the bank! What's not to like. Thanks for that Peter!*

(More building projects in the next instalment!)



“Your article” – Could be here in the next instalment! So get scribbling and emailing and share it with our fellow modellers

Andrew Taylor’s experiences with an Avro 504N.....



Two years ago, fellow club member Edward Allen generously presented me with the Veron kit of the Avro 504N which he had bought some 35 years before and which had remained un-started. This model would complement my existing Hawker Tomtit model from the same manufacture. The third model of the trio being the “Sopwith One and a half Strutter” of which I have the plan.

My Tomtit, converted from glow power to `40` electric, is a nice flyer on four channel and I expected the 504 to be similarly well mannered but this was not the case. The instructions described the model as being two-channel with throttle optional. I decided to complicate matters by decreasing the dihedral and adding ailerons to both wings, plus electrics as the Tomtit. Flight characteristics were most disappointing as the nose high attitude in turns was accompanied by a pronounced `yawing` despite using either or both rudder and aileron and with a significant application of power. Learned opinion suggested warps, not enough/too much side thrust, down thrust, rearward chg. despite the model weighing less

than the box `figure. At this point, mid -June, the Tx had to be returned to Ripmax for repair where it remains to this day under furlough.

Andrew continues....

Recently and using another Tx and having thought about what might be the trouble I carried out the following experiment `at the field` just as we might have done forty years ago. I wondered if the problem had to do with insufficient vertical area (fin/rudder). A cardboard cereal packet was to hand plus scissors and a couple of pins produced the "bodgeification" which seemingly has cured the problem. I now need to remake these vertical surfaces but with increased area of at least 20%. The model copied the full-size in having a `one-piece` fin but I may un-scale my replacement and have a fixed fin and hinged rudder. (Not as straight forward as it looks due to the `comma` shape at the leading edge.) I would be interested to learn if anyone had success with a two-channel version built as per the kit albeit with increased dihedral.! For me this model was a satisfying challenge and one unlikely to be experienced with a `box-fly` foamy.

(Thankfully I hear some say.) *Great article Andrew, thanks!*

Stan updates us with the latest on the Leprechaun Saga.....

The story goes on. I now know there are at least seven different sizes of this model drawn up and published.

When I decided to revive my Leprechaun as a shoulder wing powered glider, I hadn't realised how much work was entailed. The rebuilding of a light weight tailplane has proved to be extremely problematical and I won't be doing it again.

This model will be powered by a 700-watt outrunner. It seemed to be a straightforward job, i.e. make the motor mounting and screw on the motor. The problem was, I needed a hole in the second bulkhead to accommodate the battery. No problem to cut a hole, the difficulty lay in getting into the bulkhead. I decided to drill some holes in the ply bulkhead and then file these. This idea abandoned as too time consuming in favour of using a carpenter-type drill bit. As I was drilling, the 'bit' bit and stopped rotating, but the drill did not. The torque of the drill ripped the top one-third of the fuselage off. Bits and pieces flew through the air, followed by yours truly crawling around the floor picking up the pieces. As I now had the bulkhead in my hand, I could cut the required hole. Fortunately, the salvaged parts went back into position with the aid of super glue and a few well-chosen words.

End of problems? Getting the motor out of the packaging, I discovered the wires and shaft to be at the same end of the motor. Not what I wanted at all. So, I assembled the alternative drive and tried to tighten the screws. These screwed in but failed to tighten and just rotated and rotated. So, this drive was no use. The supplier, when the dilemma was explained, agreed the motor should be returned. I now await the return of said motor.



Two Leprechaun variants

The saga continues. Stan (*More Leprechaun tales to come!*)

Geoff Cleall updates us on his Taylorcraft and an insight into WW2 “Grasshoppers”

According to Jane’s Fighting Aircraft of World War II there seem to be four different makes of light liaison/observation aircraft used by the American Military. They were all adaptations of pre-war civilian trainers/glider tugs etc. They were all high wing and they look remarkably similar. One is the Stinson O-56 Sentinel. This was adapted from the Stinson Voyager and was also called the Stinson L-5. I believe that it was not called a grasshopper. The Piper Aircraft was developed from the Cub Trainer. It was called the Piper L-4 and it was soon called the Piper Grasshopper.



Piper L4 Grasshopper



Aeronca Grasshopper

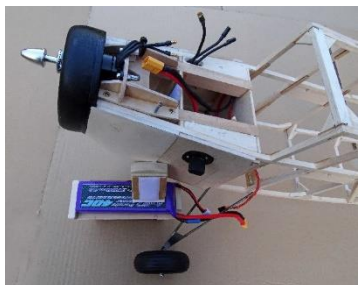
Aeronca also had a liaison/observation aircraft and it seems to have been made under licence from Fairchild and was called the Aeronca L-3 Grasshopper. And yes, you guessed it, Taylorcraft also made a liaison/observation aircraft. It was an adaptation of the Taylorcraft Model D two seat trainer. It was named O-57 and later called the L-2 Grasshopper. Taylorcraft began to make the aircraft in England called the Taylorcraft/Auster with many Austers used by the British Military worldwide. The Taylorcraft was chosen by the military because of its ability to take off upwind, downwind from small bumpy and sloping airfields. This I’m sure is equally true for the other makes. They could keep up with the advancing fronts and were really ‘Jeeps’ of the air.

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Taylorcraft L2

My Taylorcraft D Type (1.8m span) is progressing slowly. (see pic). Fitting the battery was a bit of a problem. The 3S 3700mAh battery is too long to fit vertically or across the nose so has to be slid in



Geoff's Taylorcraft

beneath the motor. I don’t want the battery coming out and being demolished by the prop so the bespoke locking battery tray is shown. I’ve also bought a 1.6m span Fieseler Fi 156 Storch from HobbyKing. It was heavily reduced in their sale and won’t be built for some time. It’s all balsa and mostly cut out. It has flaps and slats and needs 8 servos. I probably won’t use the slats so that it will need 6 servos with 1 for the gyro and hence OK for my transmitter. The Storch was Germany’s version of the liaison/observation aircraft. It was real STOL machine. One of its most famous tasks was snatching the captive Mussolini from the top of Mount Sasso in the Abruzzi Mountains in Italy

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Fiesler Storch

Interesting article Geoff, Keep us up to date with your Taylorcraft!

THE Hillier X-18.....

Whilst trawling the net I came across this article on Wikipedia charting the construction and demise of the X-18 VTOL aircraft which contributed (in part) to the development of the Osprey.

Design work started in 1955 by Stanley Hiller Jr and Hiller Aircraft Corporation received a manufacturing contract and funding from the U.S. Air Force to build the only X-18 ever produced, serialled 57-3078. To speed up construction and conserve money, the plane was constructed from scavenged parts including a Chase YC-122C Avitric fuselage, 49-2883,^[1] and turboprops from the Lockheed XFV-1 and Convair XFY-1 Pogo experimental fighter programs. The tri-bladed contra-rotating propellers were a giant 16 ft (4.8 m) across. The Westinghouse turbojet engine had its exhaust diverted upwards and downwards at the tail to give the plane pitch control at low speeds. Hiller nicknamed their X-18 the "Propelloplane" for public relations purposes.



The X-18 with partially rotated wings

Preliminary testing occurred at Moffett Field Naval Air Station, CA. The first flight (hop) was on 11/20/1959 followed by the first real flight on 11/24/1959 with Hiller test pilots George Bright and Bruce Jones. Further test flights were held at Edwards AFB, ultimately recording 20 flights. A number of problems plagued the X-18 including being susceptible to wind gusts when the wing rotated, acting like a sail. In addition, the turboprop engines were not cross-linked, so the failure of one engine meant the airplane would crash. Thrust control was through throttle changes, which were too slow for acceptable height and roll control.



The X-18 on its test stand



The Osprey as we know it today

On the 20th and final flight in July 1961, the X-18 had a propeller pitch control problem when attempting to convert to a hover at 10,000 ft and went into a spin. The crew regained control and landed, but the X-18 never flew again. However, ground testing of the tiltwing concepts continued. Eventually a VTOL Test Stand was built on which the X-18's vertical takeoff and landing and hover control was to be tested. One engine run was successfully conducted to the full 15-foot wheel height on the VTOL Test Stand. The program was cancelled on January 18, 1964 before further VTOL Test Stand testing could be conducted, and the X-18 was cut up for scrap.

Identify the item!

See if you can guess this one! This has been supplied by Peter Coldham and is an object that you would use on your model! Thinking caps on chaps, I look forward to hearing from you! Email me with your ideas (awjenkins@sky.com) and the first correct answer will get a mention in the next issue.



The item in the last Flier was correctly guessed by Peter Coldham as Wing-alignment bars. Nick, who supplied the object, goes on – “You place one on each wingtip and eyeball from one wingtip to the other and as long as the bars are level there should be no twist in the wings. Any twist should be lost in the centre”.

and finally A word from our Chairman

Hello All,

I hope you all got the e-mail from Andrew that we can fly at Muckleburgh again, weather permitting. I popped over there last Saturday morning and got in a few flights under a rainbow! Whilst there I spoke to Sir Michael; he is keeping well and asked me to pass on his best wishes to everyone.

We discussed the situation regarding Workshop Wednesdays in the museum and agreed that there was little point in trying to re-start them again until autumn next year. However, if the vaccination program has the desired effect, perhaps we can consider some Wednesday meetings outside in the summertime.....fingers crossed.

In the past few week's we have had the BMFA AGM and the BMFA East Anglia Area AGM, both conducted as Zoom meetings. I attended both on behalf of the club and gleaned a few interesting details from them that I am summarised below. In both cases the meetings were far better attended than any previous AGMs; there is no doubt that the use of Zoom was the main reason for this.

The first point, of interest to us all, is that there will be no change to the BMFA subs for the coming year, so it remains at: £38 seniors, £17 juniors, £25 family and £13 family junior. Our friends at the CAA are also keeping their registration fee at £9; as per last year this will be collected by the BMFA with membership renewals.

Some of you may be aware that the BMFA membership has been around 35,000 for quite a long time but has declined in the last few years, possibly because a significant number of people have been put off by the CAA/ESA registration scheme. In 2020 the membership topped out at 30,578, down by 1,324 on the previous year, and if the trend continues it may be only 30,000 next year. Another statistic that I'm sure will be of no surprise to you all is that there are 7 times more members over 75 than juniors.



On the positive side the BMFA had a surplus of £51,853 in 2020, so it would seem that the lack of activities (and associated costs) has put some money in the coffers. Also, the National Centre had a surplus of £5,397 which is encouraging news considering that many thought it would be drain on the finances.

Sorry to return to the subject of the CAA, but get ready to change the registration number stickers in your models soon. Why? Well, in their wisdom the CAA have decided that we should all have new numbers, apparently their computer system can't cope with retaining this year's numbers !!!!! And the CAA rules will give way to European rules early in the New Year, so watch out for a few more tweaks to the bureaucracy!

Notwithstanding our disgruntlement with the CAA you may be surprised to know that 170,000 people registered with them as an operator, of whom 30,000 are BMFA members, 1,500 LMA members, 2,000 Scottish Aeromodellers Association members and 2,000 FPVUK members. That's a lot of people flying drones! And it is reassuring that they are responsible enough to register, but the trouble is that from the CAA viewpoint aeromodellers are a minority and that's not such a good situation to be in. Finally, you may recall that the ESA/CAA wanted to introduce a requirement for all our models to carry an 'Electronic Conspicuity' device; that is a device which transmits a signal to tell the world it is there and identifies the operator. It has been pointed out to them that there are no such devices small enough and light enough to fit in our models. So now they are proposing that each of our flying sites will have to have a beacon to tell the world we are there! The modelling organisations are arguing against this and it's certainly not a definite dictate as yet.....but watch this space.

Apparently there were a lot of successful A and B tests taken in the East Anglia Area last year. Perhaps we as a club could make a concerted effort to bolster those numbers in the coming year? Let's see what we can do.

The BMFA's study on whether they should apply for charitable status will conclude next year – if this happens it may result in some parts of the organisation being run as a separate entity to be more tax efficient but I don't think it will affect us directly. I think that's about it as far as what is going on in the background.

To lighten things a little here is a picture of a resin figure that we found among Jim Giblen's aeromodelling things. We thought that it might make a suitable trophy for the club. So, please send in your suggestions for what it might be awarded for and what it should be called to Andrew. We will announce a decision on it in the next newsletter.



Meanwhile, I wish you all a very Merry Christmas and let's hope more normal times to return in the New Year.

Cheers, Steve

