

HALE HALL MODEL CLUB NEWSLETTER

NOVEMBER 2022



Club website link - <https://hhmac.bmfa.org/>

Hale Hall YouTube channel - [HH YouTube](#)

Welcome to the November newsletter. This month we have a report on a winter project and some hints and tips. Finally a few dates for your diary.

AGM

A last minute reminder that we will be holding our AGM on 6th December at the BAE Lighting club starting at 19:30. We are hoping for a good turn out this year, this is your chance to have your say!

Summer is over!

Bob Welton has said goodbye to the summer and is planning how to occupy himself during the winter months. Over to Bob to explain his latest project.

Winter Build Project – Edgley Optica by Bob Welton.

Early last summer I was browsing Sarik's website for my next winter project. My interest settled on their 81" span Edgley Optica designed around a 0.61 cu in two stroke glow motor. To say that the Optica is unusual is an understatement, however if you look beyond its strange appearance and the ducted fan propulsion, it's basically a big trainer with a simple constant chord wing. It sits on a fixed tricycle layout undercarriage and is known for its slow flying characteristics.

The full size Optica was launched at the 1980 Farnborough Airshow by Edgley Aircraft Limited, a company formed by John Edgley who, with a small team, designed and built the original prototype. In 1982, institutional investors bought into the project and set up a production line at Old Sarum Airfield in Wiltshire.

Over the next three years, the company was built up to full manufacturing capability, the aircraft received UK certification, and the first customer aircraft was delivered. Despite this success, the additional investment necessary for the final phase of full production was not forthcoming, the business went into receivership, and John Edgley was forced out.



With new owners, aircraft on the production line were completed, and the Optica entered service. A total of 22 Opticas were built, while construction of a 23rd began but was not completed. Ten aircraft were destroyed in an arson attack at the factory.

The Optica went through several changes of ownership, until FLS Aerospace took over the rights. The Optica then passed through other owners until, in 2007 the project was offered back to John Edgley who formed a new company, AeroElvira Limited, with three former employees of Edgley Aircraft. The new company successfully put G-BOPO back into service as a UK demonstrator, with a first return-to-service flight on 3 June 2008. In August 2016 Interflight Global announced plans to start a valuation of the dormant Optica programme with a view to relaunching production and currently remains active in the search for strategic partners to assist in the re launch the aircraft program.

Its unusual layout came about from the design brief to produce a viable competitor to small helicopters which are complex and expensive to purchase, operate and maintain. By comparison the Optica is relatively cheap to procure and simple to maintain and operate. It also has low noise and vibration levels and a claimed endurance of up to 13 hours. What's not to like!

Returning to the model, I sent off for a set of Sarik's plans to get a look at what I might be letting myself in for. I was not impressed! No information was shown regarding the engine installation other than "mount engine on this frame". Whilst the wings are of simple built up construction, the duct and the cabin pod are far from it. This would be a most challenging build with a high risk of ending up a disaster. With the short kit selling for over £400 I came to the conclusion that this had a high risk of being money down the drain, that is until our Honourable Secretary spotted a complete short kit for sale on the BMFA Classifieds including electric motor, speed controller and programming card – all brand new. Thanks for that Dave Ringland. The kit was bought by the seller during lockdown and never started. Too good to pass up a so after a few emails a deal was struck. The seller even paid for delivery!! Not wishing to electrocute my model I was also able to sell the electricery bits on eBay so all in all an absolute bargain at much less than half price.

Coincidentally the August issue of RCM&E featured an article about a Sarik Edgley Optica that has been build and successfully flown by the Chairman of the County MFC in the West Country, whom I have contacted and who has supplied me with a mountain of information and lessons learnt from his build.

So, as I'm sure you're suffering from Optica fatigue at this stage, I'll shut up for now and save some material for a future edition

Thanks Bob, makes a change from WW1! I look forward to the next instalment.

Did You Know?

A few more facts about the full size aircraft.

Span 39ft 4in

Length 26ft 9in

Wing area 170 sq ft

Empty weight 2090 lb

Max speed 132 mph

Range 656 miles

Endurance 8hr loiter



Optica

- Ducted fan propulsion
- 200 hp Lycoming piston engine
- Turbocharged option for hot and high conditions
- 3 abreast seating
- 650 miles range with reserves
- 9 hours endurance, rough field performance

- Exceptional quietness and lack of vibration
- Excellent low speed handling qualities

Uses:

- Pipeline and powerline patrol
- Police and coastguard duties
- Frontier patrol, search and rescue
- Aerial photography and television

fixed wing costs

helicopter visibility

Edgley Aircraft Limited

The Optica: orders are being taken for delivery in Autumn 1983.
Write, phone or telex for further information to:
Bill Fraser or Bill Purbrick

Old Sarum Airfield · Salisbury · Wiltshire · England · Telephone Salisbury (0722) 21812 · Telex 47158 EDGLEY G

An advert for the Optica aircraft

In the late 1980s, the Optica's unusual looks earned it a starring role in the 1989 film "*Slipstream*" with Mark Hamill (of Star Wars fame). I found a trailer for the film on YouTube, definitely a 'B' movie!!

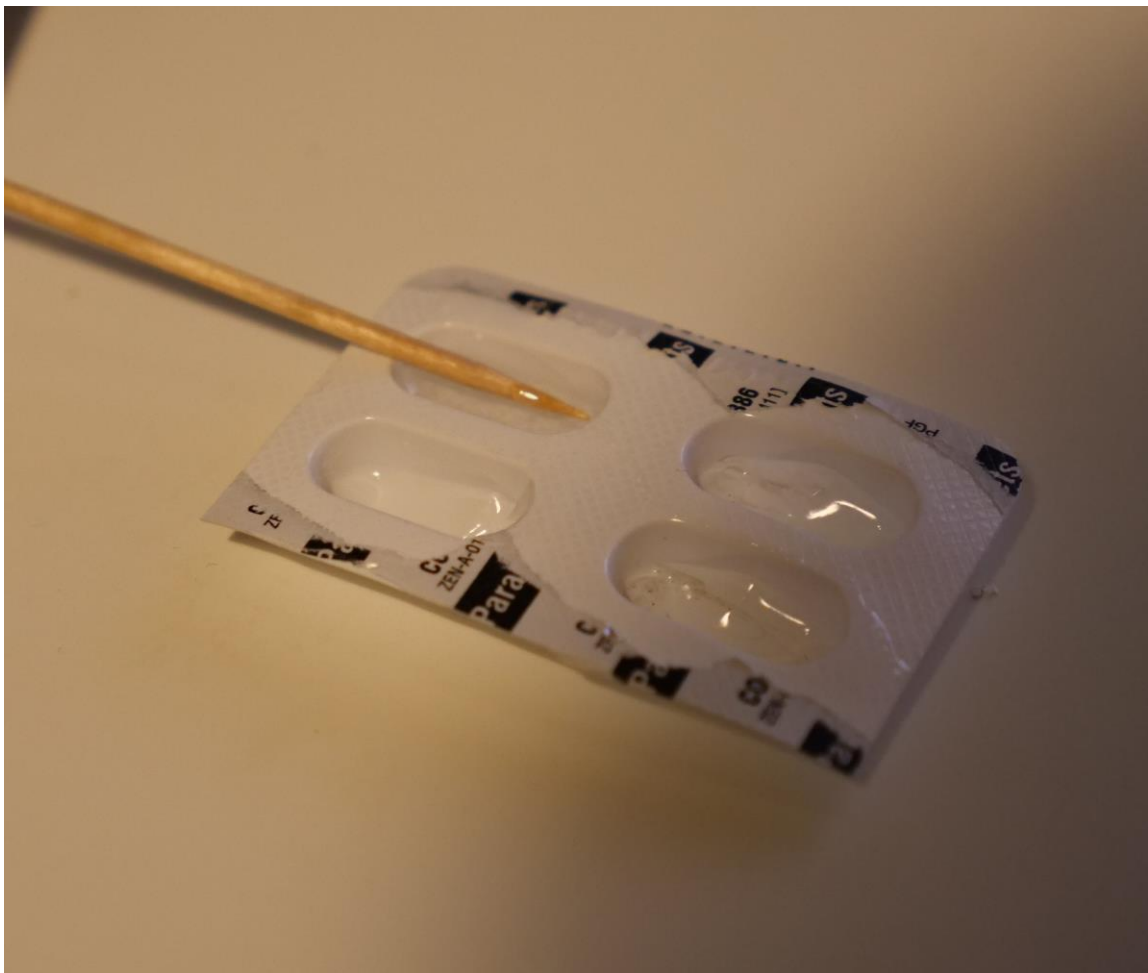
Production began in 1983 and the first aircraft was delivered in 1984. However in 1985, a crash (attributable to human factors, rather than any design flaw) killed two people and placed the project under a shadow.

The first production Edgeley Optica G-KATY was bought by Air Foyle who subsequently leased it to the Hampshire Constabulary Air Support Unit. The aircraft was collected on 2nd May 1985 for evaluation at their Lee-on-Solent base. The aircraft was formally accepted on 14th May 1985. On the morning of 15th May 1985 it was flown (not by a professional pilot but by a serving police officer with a PPL and a CAA exemption) from its base at Lee-on-Solent Airfield to Ringwood, where it was authorised to take aerial photographs (the photographer/passenger also being a serving police officer rather than a professional photographer). About 20 minutes into the flight whilst performing a tight turn the bank angle increased to 90 deg, the aircraft crashed into trees sadly killing both occupants.

Hints and tips

Here are some hints and tips sent to me by some of our members.

1. Mixing epoxy can be a messy and wasteful business, especially when you only need a small amount. You can use the plastic trays that contain throat sweets, paracetamol or medication as small containers to mix the epoxy. Just be careful when removing the contents! I use the tops from coffee tubs for larger amounts. They are flexible so the left over epoxy can be easily removed when cured.





2. Wire for closed loop controls from a model shop is expensive. Visit your local fishing shop and get some wire trace used for pike fishing. You can get various strengths / diameters, it is much cheaper.
3. Many of the ARTF warbirds are well built but come finished with a non-scale shiny covering. An alternative to removing the covering and starting from scratch has been trialed by Andrew O'Neill. Andrew used a varnish recommended on an internet scale forum, Rust-oleum crystal clear. Apparently if allowed to dry for a few days the resulting finish is fuel and petrol proof.



Original finish.



Matt finish.

4. Fitting Mylar / flat hinges so that the control surface and flying surface line up accurately can be tricky. Try using a support roughly half the width of the control surface to guide your knife blade when cutting the slot. Then use the same support on the flying surface. Even if the hinge is not exactly central the control surface and flying surface will always line up.



5. Wing storage. Modified shoe racks make excellent wing storage when mounted on the wall. Use the self-assembly version available from Argos, just don't fit the legs on one side.





6. Disposal of used knife blades can be difficult to do safely. Try buying a "blade disposal case" that are intended for safety razor blades. They are great for scalpel blades. Once the bank is full in how ever many years it takes, chuck the whole thing in the recycling bin.



Thanks to Michael Powell, Steve Wheatland, Roger Milne and Andrew O'Neill for their contributions.

What's on

Hale Hall Events

The club have the following events planned this year, exact dates may be weather dependent!

AGM – 6th December 19:30 BAE Lightning club

Mince pie meet – Late December

Parting shot

So that is the end of another newsletter, I hope you found it interesting. For future newsletters I would like to include as many of your projects and especially first flights as possible. So please document the occasion with a few photos or contact me and I will try to come down with my camera. I do have some ideas for future articles, but the success of the newsletter will only continue if you, the members, provide me with some copy. Anything aircraft related will be more than welcome, days out, trips, build logs, full size or something for the Curiosity Corner.

Don't be shy; if you don't fancy writing a full article, just send me a few notes and I will do the rest.

If you have any suggestions on subjects to be included in the Newsletter, drop me a line.

In these days of data protection we need to ask members if they have any objection to be included, either by name or photograph, in the Newsletter. If you do not wish to be in the Newsletter please let me know.

Cheers,

Andy Holden.

You can contact me at andy.holden56@btinternet.com