



March 2005

# SKYWRITINGS

Newsletter of the *Mid Kent Strut* of the



## Contents:

Aero Vintage	1
Sonerai II	3
Vagabond Goes	4
Last Meeting	4
Contacts	4
Diary Dates	4

## Mike's Mutterings

Mike Negus -  
Editor



# Strut Visit to Aero Vintage

**March Meeting –  
Come and  
Enjoy**

**Quiz Night.  
--  
Easy  
Questions?**

### *Exciting things to read this month*

- Sonerai II
- Pictures of Strut Aircraft particularly needed
- Please let Editor Mike have your articles for inclusion in the Newsletter

A number of strut Members gathered for a most interesting trip to the premises of Aero Vintage Ltd at Seddlescombe in East Sussex. This company is a sister company to The Historic Aircraft Collection based at Duxford and was formed by Guy Black and Angus Spencer to restore and operate piston engined military aircraft. The Historic Aircraft Collection is the "sharp end" and currently operates Spitfire Vb (G-MKVB) and Hurricane Mk X11 (G-HURI) amongst others with Bristol Fighter D7889 an original 1918 machine awaiting



*Strut Members with Aero Vintage Chief Engineer, John Smith*

its engine of which more anon. The chance of a visit came up and the choice of the facility at Duxford or the restoration workshops was offered and the latter was deemed favourite so it came to pass that on the 19<sup>th</sup> March those interested members assembled outside the workshops of Aero Vintage Ltd.

We were welcomed by their chief engineer John Smith whose roots we were later to discover lay

in motorcycle engineering but has been with the company since its inception. There is currently a staff of 18 including admin in a well organized set of workshops and offices including an engine room, woodwork and assembly shop.

The first thing that greeted us was a Rolls Royce Eagle engine of 1918 vintage in an unrestored condition mounted on an engine frame and later we were to see an engine from the same period

**Don't forget the March Meeting is our ever popular Quiz Evening.  
Come along and join a team.**



*Rolls Royce Eagle Engine*



*"Aero Vintage has quite a bit of information on the aircraft and engine albeit in Russian!"*



*Hawker Nimrod Instrument Panel*



almost ready for ground running trials. Facing us was the fuselage of a Hawker Fury biplane fighter the remains of which had been located in South Africa and from the useable parts the restoration to fly was well underway. The airframe remains also contained its power plant which was a Rolls Royce Kestrel which produced 525 hp powering a 2 blade wooden propeller giving a top speed of 207 mph and a rate of climb of some 2380 ft/min. For an aircraft whose period of service spanned from 1931 to the latter part of that decade it was a pretty hot ship and delighted crowds at the Hendon air displays with formation aerobatics. Aero Vintage have a number of Kestrels either restored or awaiting their turn and these form the power plants to most of the other aircraft of the same period. Most of the engine rebuilds are carried out in house as is most of the airframe work but inevitably some has to be bought in but even this is a two way trade. Examples given were of requirements for the particular solid rivet which have been specially manufactured for the company and which they supply on occasions to other restorers and spar sections for Hawker aircraft the fabrication of which made the whole project feasible.

To avoid welding the Hawker biplanes of the '30s being of tubular steel construction used squared ends so that a joint with stainless steel plates could be made using close fitting ferrules held together between flared mild steel tubular rivets which are no longer available resulting in a major development programmed by aero vintage to recreate these and other materials. This has resulted in the construction of a tube squaring machine which is a story in itself from the chance discovery of a set of rolls in South Africa and the fabrication from a photograph of the original. This allows the roll forming of the spars for both the main wing and the tailplane. As the Fury was the forerunner of the monoplane Hurricane as far as technology was concerned some areas such as the tailplane spars are common and given the number of Hurricane restorations currently underway these spars can be manufactured to these customers' requirements. The Fury fuselage is well on and is for sale as a project or may be completed in house to fly, it would be sad if it was to end up in a museum.

Sitting next to the Fury is a Hawker Audax which was specified as an Army co-operation aircraft and whilst also powered by a Kestrel this is normally aspirated and not supercharged as its fighter brother. The Audax is a two-seater complete with a rear gunner / observer/ bomb aimer who has for defence a scarff mounted Lewis gun which

was still the main defence not having changed for 20 years since the 14-18 war.

Between this and the final Hawker machine in this workshop is the fuselage frame of a Russian Yak 1 and laying underneath was its main armament , a dirty great big 20mm ShVak cannon which fired through the propeller hub. The aeroplane is powered by an 1100 hp Klimov vee-12 liquid cooled engine giving 373mph top speed and 3940 ft/min climb. This was a very successful fighter designed by Alexander S. Yakovlev and went in to production in 1941 and served with distinction in the Great Patriotic War. A tubular steel fuselage was attached to a wooden wing to give a very rugged and easily maintained aircraft. Aero Vintage has quite a bit of information on the aircraft and engine albeit in Russian!



Last in line but certainly not least is the project closest to flight eagerly anticipated during 2005 which is a Hawker Nimrod Mk2 a ship board carrier fighter from the 30's and believed to have seen service on HMS Eagle. This is a beautiful example and the attention to detail superb even down to the starting handle stowed in the aft compartment. There is one concession to modernity which is the discrete Dittel type radio mounted in a spare instrument opening. The only project completed and flying and currently owned by the Fighter Collection at Duxford is the Nimrod Mk1 S1581 first flown in 2000. On average we were told a ground up restoration project takes 5/7 years and it is apparent that no effort is spared to achieve excellence but as John told us the more these engines and airframes are worked on the more belief that the engineers of yesterday were a clever lot.

On in to the engine workshop where the Yak power plant was in a disassembled state that which came with the airframe

probably not now airworthy but a suspected zero time replacement obtained from a French museum stored since the last war . Certainly the best was saved til last with the Rolls Royce Falcon engine destined for the Bristol Fighter in its fully restored condition. I am a technophobe of the first order as all who know me will testify but even I was swept away with the beauty of this old water cooled engine which oozed the result of a lot of dedicated work and when compared with the Eagle we saw at the start shows what lengths these people go to. Things as fundamental as spark plugs are well nigh impossible to find of that vintage so these have to be purpose made. The airframe the engine will be mated to currently resides at Old Warden where they have their own Brisfit of course and with the Fighter Collections own airworthy example it could be that one day the sight of three world war one genuine fighters could be in the air together, what a thought! What a sound!

Then to round off the tour yet another surprise sitting in a jig the mortal remains of a De Havilland 9 medium bomber again of WW1 vintage and was the successor to the first British aircraft designed as a day bomber the DH4. The DH9 was designed to be mass produced and at one time an example was coming off the production line every 40 mins, quite incredible. Powered by amongst other engines was the Rolls Royce Eagle the unrestored example mentioned before. Two or three separate aircraft were discovered in India and repatriated to the UK and the one we saw was obviously in a bit of a state having been attacked by termites which has done the woodwork no good at all but nice little touches such as the observer's wicker seat were still extant. This machine will be restored to static condition but it is hoped that from the other examples a flyer can be constructed. Now wouldn't I like to see that. With that John was subjected to a question and answer session on the back of the myriad previous queries which were answered with great patience. We were then allowed to wander freely around the projects, a great privilege, taking photographs some of which are reproduced in this article.

I hope I have conveyed something of what we saw and you find it interesting but if you wish to know more about their business it is well worth visiting the web site [www.historicaircraftcollection.ltd.uk/hawkerbiplanes](http://www.historicaircraftcollection.ltd.uk/hawkerbiplanes)

**Rand KR2 For Sale - 1834Acro fuel injected engine.Cheap to run at 2.5gph - Cruises at 100K - Fixed undercarriage - Sensible offers**  
Phone Stephen Solley on 07836653257 or 01304374337

I convey our thanks to John for taking time out and for a very informative visit and to Sarah Pepper from HAC for setting it up and not least to Mark Balding to organizing the trip from our end, all I hope is that maybe we could have a return trip somewhere down the line but in the meantime look forward to some of these projects getting airborne. It's nice to know there are still people willing to put their heart and money behind such a worthy cause. Long may it remain so.

### A Monnett Sonerai Project.

Brian Hope.

Mention was made in the last newsletter that I have bought a Sonerai IIS project so I thought I'd best say a few words about it.

I have long admired the Sonerai concept because of its good performance on a VW engine, and its nifty wing fold system. I believe it has the potential to be an excellent, and affordable aeroplane to own and operate, without having to suffer too many compromises.

The aircraft I bought was effectively complete but unflown. However, it has been 'over built' as a result of the builder trying to turn it into something it was never meant to be. How over built? Well let's just say that the prototype weighed in at 540lbs and this one at 668lbs, and no I wasn't sitting in it when it was weighed!



Sonerai



Where is this Strip?



*Who stole my Struts!!!*



*"but ever the optimist, I can already see light at the end of the tunnel"*



## Committee Contacts

### Co-ordinator: Jaqui Clark



New Orchard Farm,  
Sittingbourne, ME9 0QL  
Tel & Fax: 01795 - 830378  
E-mail: [jaquiC@pfa.org.uk](mailto:jaquiC@pfa.org.uk)

### Treasurer:

John Dean 01892 822776  
[john\\_dean@tiscali.co.uk](mailto:john_dean@tiscali.co.uk)

### Membership Secretary:

Graham Hammond 01622 891466  
[g@twelveacrefarm.freeseve.co.uk](mailto:g@twelveacrefarm.freeseve.co.uk)

### Newsletter Editor:

Mike Negus 01634 364396  
57 Ploughmans Way  
Rainham, Kent, ME8 8LH  
[mike@negus8.fsnet.co.uk](mailto:mike@negus8.fsnet.co.uk)



### Committee Members:

Mark Balding 01959 523825  
Brian Hope 01795 662508  
Mike Tooze 01634 865516  
Derek Browning 01622 736626  
Bob Chequer 01634 668276  
Stephen Solley 01304 374337  
Norman Willoughby 01634 314739

### Dates for your Diary

Mar 31 Quiz Night  
Apr 28 Andrew Moore PFA Engineering  
May 15 Young Eagles  
May 26 Talk on "Events to Visit"  
June 26 Flv-In

The Sonerai was designed as a simple, basic sport aircraft. No electric starter, and minimal instruments and creature comforts. Built as designed it will cruise at 140mph on a 2180cc VW conversion and operate out of 450 or so yards. Built like it was, it would have been a bitter disappointment to the original builder.

Configured as a tricycle undercarriage, it had twin magnetos on a homemade engine accessory case, a battery big enough to start a bus, a prop extension, ring gear and electric starter, and thick aluminium cockpit flooring. The fabric had the paint trowelled on, and the small fibreglass wingtips had been replaced by larger, homemade and heavy ones. I have stripped the aircraft down to bare bones and will be rebuilding it as a single seater tail dragger version. Fortunately the basic structures are built as per the plans, so most of the excess weight can be dispensed with. I am hopeful that I can get its ready to fly weight down by a good 100lbs.

I am currently stripping the paint from the steel tube fuselage so that I can weld on the different main gear brackets required for a tail dragger, and make a few other minor alterations. I shall then shot blast it and repaint it prior to recover.

I'll write the odd update as the aircraft progresses. At the moment there's a long way to go but ever the optimist, I can already see some light at the end of the tunnel.

### February Meeting

Unusually I could not attend and so rely upon others to report but thanks to all who stepped in to support the evening to discuss their building projects and I gather it all got a bit lively later on in the session.

**For Sale - Sonerai 1**, total hours from new 65, 2 hours on new engine (VW 1834 Acro). Awaiting permit renewal £4500. Contact Tom Harrison 07768 660999  
[tfh@codsall-middle.staffs.sch.uk](mailto:tfh@codsall-middle.staffs.sch.uk)



[www.solleysicecreams.co.uk](http://www.solleysicecreams.co.uk)

Hosted by yours truly it will be as always an opportunity for a more informal evening with topical prizes for the winners and losers with a bit of time hopefully for a chat afterwards.

### April Meeting ( 28th )

Andrew Moore from PFA Engineering is paying us a visit and no doubt a number of you will have some interesting questions so put that one in the diary.

### Strut Web Site

I am reliably informed by John Dean that our site, to be found on [www.midkentstrut.freeseve.co.uk](http://www.midkentstrut.freeseve.co.uk) has been revamped by Dave Pauling so give it a hit and see what you think.

### Vagabond Departs

Our old chum Mike Holden is now the proud owner of the Piper Vagabond based at Farty Corner and formerly owned by Paul Newman and will make its way North to its new home as weather permits, nice to see Mandy and Jackie again.

### Strut Trips

Following the successful trip to Aero Vintage, your committee are looking for other venues to arrange a visit to and any thoughts or ideas on the subject would be very gratefully received.

**Age is a very high price to pay for maturity**

**For Sale - Luscombe 8A** ragwing 2857TT built 1946 owned for last 15 years c/w 760 com & gps. £11500  
[richard@thomasautos.co.uk](mailto:richard@thomasautos.co.uk)