



Welcome to Summer 2006 edition of the MBA Newsletter.

Editorial.

(Brian Lloyd)

We thank all members who kindly provide us with cover during our opening hours. New faces are very welcome so if you can spare a few hours of your time during the year please contact our good friend and organiser, John Bold on 0118 969 4582.

Later in this edition you will find an article written by Mr. Ken Wells. We thank Ken for this informative item. Many readers will be familiar with some of the achievements of F.G. Miles. Ken worked for Miles at Shoreham for many years. This article clearly illustrates the diversity and ingenuity of the Miles organisation which will remain for ever as an important part of aviation history.

Chairman's Report

(Ken Fostekew)

We are pleased to announce that Mr. John Fairey has accepted our invitation to be a Patron of the Museum. This we very much appreciate and look forward to his wise counsel from time to time.

Publicity Report

(Brian Lloyd)

Recently things have been fairly quiet on the publicity and press front. Information about the Museum has been published in some publications where they make no charge. Whenever an occasion arises members are asked to publicise the Museum, as we very much rely upon word of mouth. Should any member have any publicity ideas or a publicity opportunity please contact Brian Lloyd so that the idea can be developed

There is a slight change to our web address which is published on the back page. Exchange of links with other "like"

sites continue to grow thanks to web master Trevor.

Engineering Report

(Geoff Etridge)

We have been kept busy during the last six months getting on with our existing projects also some other things that we have had to cope with.

Firstly the miles martinet: we have now covered the wing leading edges, also the chaps have finished applying the wing re-skinning, we have now moved on to the trailing edge flap reconstruction. This is very complex because they have got some very weird curves, so it is proving quite hard to do them again. The next thing is the aileron drive system, of which there is nothing left, so we are having to remake the whole of it from scratch. The engine bulkhead and bearer frame is now complete. The aeroplane is now painted silver as it was during its time in Icelandic service.

The Fairey Gannet wing tips are now removed to allow us to eventually move it for the fencing to be started, ready for the start of the hangar extension to get under way. We intend to re-fold the wings after refitting the wingtips.

The Miles Student is still ticking along nicely; the lads managed to produce an English Wheel to roll the new curved skinning for the nose section.

The mini-link trainer is now operating O.K and we will put it to good use at the Woodley carnival.

Thanks to everybody for their efforts during the winter months.

The Shop

(Margaret Etridge)

Hopefully we will be able to make a good day of sales at the Woodley carnival; there are some bargains to be had as we are reducing the prices on some of the stock

The Miles Engine

(Peter Amos)

In 1942, Miles proposed that the design of the engines for the Miles M.26 X.9 Transport be laid down in conjunction with the design of the aircraft. A great deal of attention had been paid to the aerodynamic efficiency in the layout of the aircraft, which envisaged the engines buried in the wing. However, as there was

no existing engine of the necessary specification to fulfil this requirement, it was decided that Phillips and Powis Aircraft Ltd would build special engines 'to suit the job.' The use of such engines would not, of course, be confined to the X.9, but would also fulfil a long felt need. They were planned to be of approximately the same power and weight as the 1,740 hp Rolls-Royce Griffon II, but they were to have the cylinders arranged in two banks, horizontally opposed, with direct injection and compression ignition. The propellers were to have been driven through extension shafts.

So, in early 1942, George Miles, who had always been interested in aero-engines, together with a small team, set out to design a six cylinder horizontally opposed engine. The design was undertaken in the dispersed drawing office at Binfield Manor and I recently had the good fortune to be introduced to Michael S. Wooding, one of the design team engaged on the project.

Michael told me that the team was led by Arthur Ham, who had previously been an expert on the design of ticket machines. Four draughtsmen were involved in the project, including Sid Porter, who had been an illustrator for 'Autocar' and whose artist's impressions of Miles aircraft appeared in many works publications. Michael was responsible for the camshaft, tappets and valve gear and each of the team had a portion of the engine to produce. Michael also recalled that he was responsible for installing the completed engine for test on a dynamometer, in what was laughingly called a test house, which was, in reality a small shed on the side of the airfield adjacent to the gravel pits! He also confirmed that the date of the first engine runs was May 1942, as he remembers having a grandstand view of George Miles trying to fly the M.35 Libellula at the time.

A Ministry, Confidential 'Miles Aircraft Ltd - Second Report - Aircraft -ii', dated 30th May 1945 (Ref: BT28/1195, reproduced at Appendix No.4), stated under Appendix 5 - 'Unofficial development work, initiated by the firm without any known official recognition' (!), dated 30th May 1945, stated in Appendix 5 (3) (m) 'Engine Development' that: 'Reports have come to hand that this firm is developing a 6 cylinder aero engine, as a private venture'. This is the first (and

only?) recorded reference to a six cylinder aero engine being under development at Miles Aircraft.

The development of such an engine would have given the firm independence from the only two main engine suppliers, one of whom, de Havilland Aircraft, were also producing their own light transport - the D.H.104 Dove - powered by their Gipsy Queen engine, the only other suitable aircraft engine available at the time. Not unnaturally, any priority for the supply of this engine would have been given to the Dove.

Nothing further is known about the Miles engine or even what became of it.

However, it is of interest to note that two Phillips and Powis/Miles Aircraft Ltd photographs (unfortunately, untitled and undated) show an eight-cylinder horizontally-opposed, water-cooled engine and its component parts. Nothing is known about this engine but the photographs were sent to George Miles by Julian Temple in 1985 in the hope that he might have been able to recall whether this was a Miles engine development or not. George returned the photograph with the comment: 'I have not, so far, been able to identify the water-cooled 8 cylinder engine although a friend who is the British representative of a major American engine company thinks that the cylinder blocks may have come from (Jowett) Javelin car engines', so the origins of this engine and the reason for it being photographed by Phillips and Powis/Miles Aircraft must, for the present at least, remain unknown.

The Miles Aeroplane which nearly got to Germany during the War.

*Here is an article from the monthly magazine, **Best of British**. We thank the magazine for giving us permission to reproduce this item. The Magazine would be pleased to hear from any member who would like a complimentary copy of the current edition. Please write to 27a, Market Place, Market Deeping, Lincs, PE6 8EA or 01778 342814, stating that you are a Member of the Museum of Berkshire Aviation and quoting Mrs. Linne Matthews.*

The magazine's web site is www.bestof-britishmag.co.uk

Not so great escape

We all know the one about 'the one that got away' - Franz von Werra who escaped from England to Germany in WWII. The book and film about the escape are well known.

How many know about the two German pilots that tried to escape in 1941 back to Germany from RAF Kingstown, Carlisle, in a stolen aircraft? The story was related to me by John Gibson, ex-RAF Lanarkshire. As a flying instructor at RAF Kingstown, one lunchtime he had parked his dual control Miles Magister training aircraft on the taxi track for refuelling. When he returned from a bite to eat at the NAAFI, his aircraft was missing. He asked around and ascertained that it had not been put into a hangar. Further enquiries revealed that a mechanic had started it up for two pupils who then taxied out and took off.

John Gibson said there were Polish pupils on the flying course, which could explain why they were allowed to do this, even though two escaped Luftwaffe officers had walked straight in through the main gate.

At about 4pm, John said he was somewhat mystified to receive a phone call from Great Yarmouth asking if a Magister, which had landed there, belonged to RAF Kingstown. He said yes, and was amazed to be told that two German officers had landed at Great Yarmouth to refuel and had been arrested before carrying out their intention to fly on to Germany.

Frank Stanford, Sevenoaks, Kent.

F G Miles Ltd – A Personal Recollection (Ken Wells)

My Interview at F G Miles was with Chief Draughtsman (Philip Jeffries). My only previous aircraft experience was National Service, and hobby interest, but was offered the job.

G H Miles, F G Miles's younger brother was chief designer. There was a Chief Technical officer Bill Niedermeyer, who was notable for riding an ancient bicycle to work. The work was described by F G Miles in an interview as "taking in aviation washing" contracts for which the large companies were not interested in tendering.

F G Miles was one of the last of the second generation of British aviation pioneers, having been responsible for many successful light aircraft in the 1930s, including several King's Cup race winners, and Miles Magister and Master trainers in WW2. He had tried to move into larger aircraft at the end of the war, and built one aircraft, the Miles Marathon to the specifications of the Brabazon committee. As with most of the Brabazon committee's requirements the aircraft was not competitive against American designs and the original Miles Aircraft based at Woodley near Reading failed in 1949.

The new company *F G Miles Ltd* was started at Shoreham using existing buildings and gradually expanded to fill most of the buildings on the site

F G Miles was also very good at finding markets for new products before the big companies had realised the markets existed, and at various times manufactured glass fibre transparent roof sheeting, glass fibre speed boats and yacht instruments, leaving the market when competition built up. The Drawing office was an old garage with transparent roof sheeting, but very few windows. Heated by paraffin stoves in the middle of the office. Fortunately my drawing board was close to one stove. Adjacent sheds held a two man stress office and an Aerodynamicist (Graham Gates). Technical publications department was at one end of the drawing office, they were known as the "potters" probably due to the shed looking like a potting shed.

My first work was on subcontract work for Rolls-Royce. This included installation of an RB108 lift engine in a Gloster Meteor. My work included detailing of engine fire walls, which gave me my first experience of aircraft stressing. Draughtsmen were expected to carry out calculations on designs, which were usually based on rough sketches, final drawings were then checked by the stress office. Stress calculations were made using slide rules, accurate geometric calculations by logarithmic tables, or using the one mechanical calculator owned by the stress office.

The Meteor with lift engine installed, after ground engine runs at Shoreham, was transferred by road to Rolls's own airfield at Hucknall for flight trials. Next was the world's first installation of a gas turbine reverse thrust system. This was installed

on a modified Avon engine in the first prototype Hawker Hunter. This aircraft was largely hand made, with many deviations from the drawings - this caused problems, as a new rear section of fuselage for the new engine was made to drawings. Engine runs carried out at Shoreham, full thrust with reversers engaged damaged the ailerons. The aircraft was transferred to Hucknall for flight trials.

While about two thirds of Design staff were working on sub contact work, F.G Miles was trying to get back into mainstream aircraft manufacture with two projects.

The Miles M100 Student was a Jet Trainer, contemporary with the Percival (later BAe) Jet Provost, but because of the limited development budget progress was slow, and the single prototype relied heavily on loaned components from component manufacturers. Because of the slow progress it was not really considered for the RAF order, but nearly obtained orders from Finland and Sweden. These orders however were not large enough to launch a production line and the project died. It was resurrected some years later, and the prototype shipped to South Africa, but again failed to achieve an order. The prototype gave a spirited display at the Farnborough show in 1957, flying a full acrobatic display when the cloud base was too low for most aircraft to give a display at all.

The second project was for a STOL light transport to fill a slot in the market later filled by the Britten Norman Islander (which was itself largely developed by F G Miles staff) The prototype was a modification of the largely wooden structured Miles Aero van of the late forties (which was just that, a flying van, with a pod and boom fuselage with rear cargo door that could carry a vehicle.

The aircraft was fitted with a very high aspect ratio wing licensed from Hurel Dubois in France. This prototype was used to prove the aerodynamics of the wing. The Production design would have had a newer design of fuselage. The take-off distance was very short.

This aircraft was also demonstrated at the 1957 Farnborough, where the gimmick was to take off again after a very short landing, fly directly to the dispersal point, and land across the parking runway.

This project failed to gain sufficient market interest, and the prototype was written off when the test pilot, Peter Hollick (known as "Alca") made a heavy landing and the tail boom collapsed. He walked into the drawing office shortly afterwards, and when asked what had happened, replied "I have shortened it a bit"

The design calculations and market research were later sold to Shorts at the start of the Short Skyvan project, which was eventually built with a conventional wing.

The company aircraft was a Miles Gemini, twin engined 4 seater light aircraft built in the late 1940s. After a major overhaul the Gemini was due to fly to a prospective customer. The pilot was Duncan McIntosh, test pilot for the Student, passengers were stress man Ron Dack, Aerodynamics expert Graham Gates, and draughtsman Dennis Berryman. Due to the very wet grass airfield the aircraft failed to get airborne, and crashed into a ditch on the airfield boundary.

The aircraft had upward opening "butterfly wing" doors, and to get to the rear seats you had to climb into the front seats, and then between them to the rear seats, hence the rear passengers were normally last out. After the aircraft came to rest the first person out was Ron Dack from the rear seat. The pilot said that he had footprints up his back. On seeing the accident the control tower called out the airport fire tender, and the Shoreham fire-brigade. The Shoreham brigade from two miles away arrived before the airport engine! Ron was noted for his presence of mind; he had a car accident when his Morris Minor collided with a lorry that came towards him on the wrong side of the road. At the time of the collision Ron had moved across to the passenger seat and was unhurt.

To be continued.....

Members in Action:

During the Anniversary week of the first flight of the Spitfire, Chairman Ken Fostekew gave a short interview on Radio Berkshire. He was interviewed by Henry Kelly and we thank Radio Berkshire for giving the Museum this publicity. Ken explained that major parts of Spitfires were manufactured in the Berkshire area and the Aircraft were fully assembled at Henley Airfield and then flown to Benson

where they were used for photo reconnaissance. The aircraft were unarmed. Ken was also asked "how long does it take to build a Spitfire" Answer "it depends!!"

Thank you Ken for doing this on our behalf.

Recently Jean Fostekew entertained a local Scout Group.

In May, Member John Kite, gave a talk entitled "The War and White Waltham" to the over fifties group at Woosehill Community Centre. He took along some aircraft models and described some of the projects carried out by ML.

Over the Whitsun Bank holiday weekend, members manned a stall at the Keevil Air Show in Wiltshire. Selling books, videos and other surplus items to benefit the Museum's funds. The Miles Aircraft Collection members were also in attendance, headed by Peter Amos.

A Museum stall was at the Woodley Carnival. A float was not entered, so that other exhibitors would stand a chance to win!! Thank you to the volunteers who helped throughout the day.

A New Book:



This 164 page publication by author Graham Carter, was launched in the Club House at White Waltham in May. The Press were present, Dick Jordan, Brian Lloyd and Richard Poad Chairman of the Maidenhead Heritage Centre. Later on during the day other persons attended and purchased signed copies from Graham.

A number of people assisted the author with this book, especially Museum member Dick Jordan. Here is a book review.

This is a story of how two men took over a near bankrupt company in 1940 and transformed it into one of the most successful aviation research establishments in the United Kingdom - ML Aviation Ltd. Marcel Lobelle was one - a designer of repute who, during his time as Chief Designer with Fairey Aviation, produced

a number of famous aircraft, including the Swordfish. The other was Eric Mobbs, whose family founded the Slough Industrial Estate.

The book lists the many 'SECRET' projects which were developed by the Company from the beginning of World War Two until 1997, when ML was taken over by the Cobham Group. It is an interesting collection of successes and failures - the latter being part of the lot of members of the aviation industry in those developing years where an autonomous firm, of which there were many, could 'have a go' - a feature sadly lost in these days of the conglomerate.

Perhaps, stemming from his early days with ML Aviation (Apprentice) and his subsequent ejection from a Meteor (RAF pilot), Author Graham Carter has attached particular significance to the 'failure' of a ML Aviation ejection seat that essentially put the Company out of the race with Martin-Baker. With access to documents at the National Archives and the East Sussex Coroner's Office, the Author reveals the real circumstances leading up to the death of the Hawker Chief Test Pilot (Squadron Leader 'Wimpey' Wade) when he ejected from the P1081 using a ML ejection seat in April 1951.

In this book, the dedicated research of the Author is evident, as is the interest of the 'survivors' of the Company. This is backed by the support of the Berkshire local community with a concern to preserve the past historical influence of the Company in the area. This has resulted in the reproduction, in this book, of photographs that have never been seen elsewhere.

It is a totally genuine presentation of a slice of aviation history which oozes the atmosphere of those aviation years now gone.

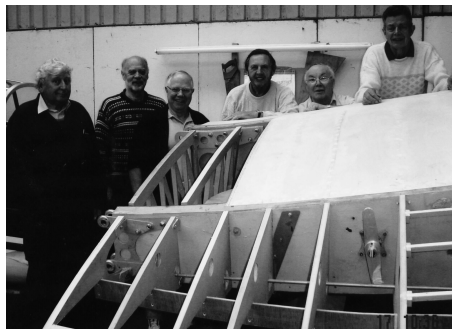
Copies can be purchased by contacting the Author on 01628 634347 or from the Maidenhead Heritage Centre at 3, Kingsway, Kings Street, Maidenhead, Berkshire, SL6 1 EE. Cost of the book is £15.00p plus P and P, £1.50p for UK purchases.

Visitor from Iceland.

The brother-in-law of member Brian Lloyd visited the Museum recently to have a look at the Martinet. The picture below shows him and some of the Martin-

et restoration team looking over the wing section.

Geiri hopes to see it finished on his next visit to UK!!



Left to Right: Ian Simmons, Neil Eyles, Geiri Jonsson, Ted Prestige, John Hanby, Dennis Harvey

Summary of Thirteenth Annual General Meeting

The AGM was Chaired by Ken Fostekeew on 21st March 2006 at the University of Reading with a Quorum present.

A vote of thanks was proposed to recognise the past work undertaken by Trevor and Robert Wood. Both had resigned from the Committee due to other commitments. Trevor continues to manage the Museum's web site and Robert continues for time being as Company Secretary.

It was unanimously agreed that Ken Fostekeew should become Chairman and Mr. Alan Foskett would take over as Treasurer, effective from the date of the AGM. Thanks were proposed to Jean Fostekeew for handling the financial affairs during the few months prior to the AGM.

Reports were presented to the meeting by The Curator, The Engineering Manager, The Publicity Officer and The Shop Manager.

During the Finance and Fund Raising discussion Gift Aid was mentioned. The balance on all accounts at 30th November 2005 was £19,000. The balance as at 13th March 2006 stood at £16,274.82p. It was reported with regret that the Museum was currently running at a loss.

Accounts for the period 01.12.04 to 30.11.05 were with the auditors.

Help from the Lottery fund was not available to MBA as the Museum did not meet the criteria.

The negotiations regarding the Museum extension were ongoing.

The officers and committee were unanimously re-elected.

Under any other business, Patrons were discussed, the Auditors remuneration, and their re-election or otherwise. Attendance at two air shows, the Avion Videos kindly being handled by Mr. A. Lott, and the interview of Mr. K. Fostekeew on Radio Berkshire.

The meeting closed at 21.05 and members were thanked for their support.

F.G. Miles Apprentices Reunion

For those persons not advised the 2006 Reunion is on 15th July 06. 01273 441061

Royal Berkshire Aviation Society

RBAS is only too pleased to see any Crew Members who wish to attend their monthly meetings (held on the first Tuesday of each month). The August meeting is a "social" at White Waltham, other meetings are held in the Harry Pitt Building at Reading University (where the MBA AGM was held this year).

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