



A HISTORY OF BRITISH GLIDING PART 1 – THE BEGINNINGS TO THE END OF WORLD WAR 2

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INTRODUCTION

From the start of my writing gliding articles for the Gliding Heritage Centre website I've always intended to compose one on the "History of British Gliding". After a considerable amount of research I came to the conclusion that a single document would have to be a very large one indeed if justice was to be done to the subject. So in telling the story I've decided the sensible course is to write a "Part 1" so as to begin the task. The start of Part 1 is obvious – the "Beginnings"! I've taken the decision that the logical cut-off should be the end of World War 2. The reason for this is that all civilian gliding became illegal as of Easter 1940. Yes, some "naughty boys" disregarded this, and some became guests of His Majesty King George VI as a consequence! You could fly "privately", however, if you were an ATC instructor and flying from an ATC airfield, and many did. Note with a victorious end to WW2 in sight in 1945 the authorities took a much more relaxed view to "illegal gliding". Starting in 1946 the British gliding movement began the task of regenerating itself after 6 years of war, a very difficult task as it was a time of considerable austerity. So post WW2 will be "Part 2".

The human race has always had a fascination with flight. Looking upwards and seeing birds flying, and indeed soaring, has always been a thing occasioning great envy and desire, something man longed to be able to emulate. Greek mythology has the famous story of Icarus who tried to escape Crete using wings of wax and feathers designed by his father, Daedalus, but ignored the warnings and flew too close to the sun such that the wax melted and the wings failed, resulting in his falling into the sea and drowning. Then we have the great artist and scholar, Leonardo da Vinci, of the 15th/16th century who closely studied the flight of birds and around 1485 designed a man-powered ornithopter, though there is no evidence it was ever built.

Man's involvement with aviation likely began 2-3000 years ago with the Chinese flying tethered kites. With a strong enough wind the largest of these almost certainly could have successfully carried a man, though there's no record of this ever occurring, albeit a few legends. As we move into the 16th and early 17th centuries there's a number of recorded instances where people jumped off towers with bird-like "wings" strapped to their arms. Not surprisingly all of these ended in a calamitous and often fatal crash. Scientifically this is easily explained. Man's pectoral muscles are a far smaller percentage of his overall body weight than that of a bird. Per se flying purely through using physical strength is beyond that of a man.

A truly "scientific" approach to heavier-than-air flight (ie not balloons) is what was required and this is where we start the history of British gliding with Sir George Cayley.

As to the sources my main ones have been:

- A number of gliding books
- The gliding magazines made available by the Lakes Gliding Club via their website – <http://www.lakesgc.co.uk/> - <Archive><Old Gliding Mags>. *I think it's right that I*

should emphasise that without access to the Lakes GC archives writing this document would have been completely impossible! The same applies to 7 out of 8 of the other "Guides" I've written to-date. So a short word to advise readers how these archives came about is I think appropriate. Everything is owed to Wally Kahn of Lasham and the much missed Peter Redshaw of the Lakes GC. Wally allowed his complete book collection to be scanned plus those magazines which were missing from the set owned by the Lakes GC. Peter started scanning the magazines (all 724 of them!) in January 2005. The books were scanned commercially after £11,000 had been raised for the purpose. A truly amazing accomplishment, and one of incalculable value to all gliding historians.

- Many, many hours of trawling the internet

I have to say that writing on the history of an involved subject spanning many decades has a tendency to become a bottomless pit! How deep do you dig the well!? However, as always if you have new and interesting information and/or photos, else you believe there are mistakes, please contact the author at FGBradney@outlook.com, I'll be very happy to give appropriate attribution.

This second version has a few corrections plus additional information supplied by Ted Hull and Wally Kahn. Wally suggested amongst a number of additions that I should look to include a section on prominent early lady glider pilots, and this I have done.



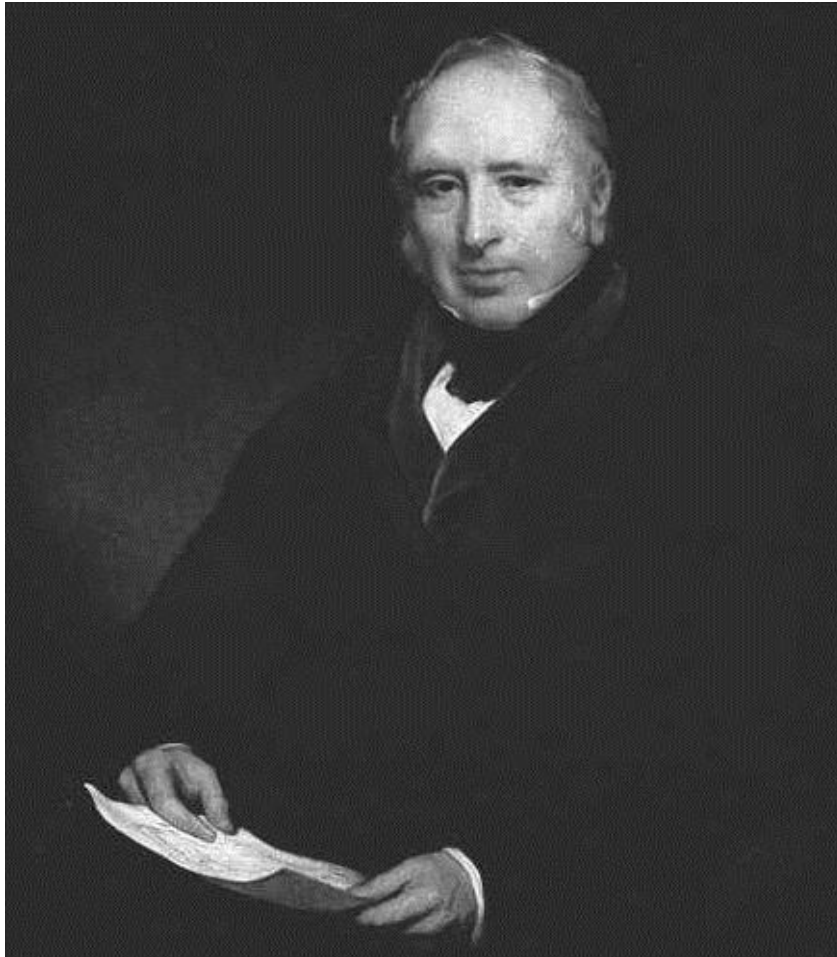
A very famous British aviator who did a great deal of gliding pre WW2 at Dunstable and the Long Mynd. Who is she? – see "Prominent early lady glider pilots" later in this document.

14th February 2015.

Glyn Bradney.

SIR GEORGE CAYLEY, 6th Baronet of Brompton

George Cayley was born on the 27th December 1773. He was an extremely innovative engineer though best remembered for his work on aeronautics – you will find references to him as the “Father of aerodynamics”.



(Sir George in 1840, picture is now in the National Portrait Gallery, London)

Cayley studied the flight of birds, especially crows and seagulls, and through his research worked out the four principal forces governing flight – weight, lift, drag, and thrust. He also realised that a cambered aerofoil was necessary to generate lift, and even came to appreciate that the position of the centre of gravity was extremely important. Altogether a quite remarkable man, who was also responsible for inventing the spoked wheel design that came to be used with bicycles, seat belts, automatic signals for railway crossings, self-righting lifeboats, and caterpillar tracks – to name but a few!

He was flying model gliders as early as 1804. It's also said that around 1849 he built a bi-plane glider in which an unknown 10 year old boy flew a few yards, though details are very sketchy which suggests the story should be treated with some caution. What we do know with certainty is that he subsequently built a larger glider which had a great sail as a wing that took on an aerofoil shape when it was towed by a couple of horses. Longitudinal stability was via an oar which had small sail surfaces at its rear extremity. This was used for the first

recorded flight by a man in a heavier-than-air machine in 1853, across Brompton Dale, Yorkshire, in front of Cayley's home at Wydale Hall, I've seen the 12th August cited as the actual date though so far I've been unable to get confirmation on this.



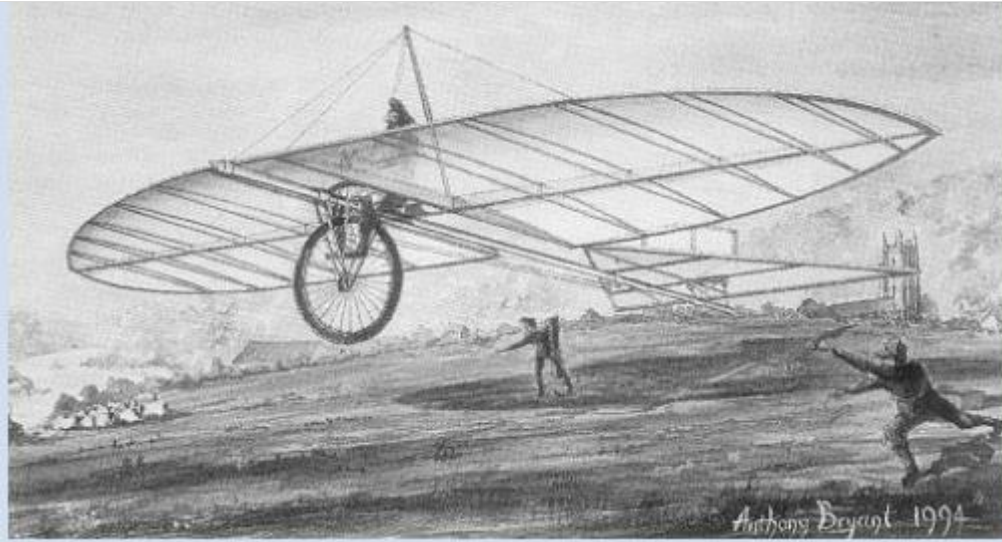
(Cayley replica, VGC News Winter 1999)

The glider flew quite a distance across the Dale before ending its historic flight in a crash. The popular story is that the occupant was Sir George's coachman who promptly resigned. However, this can't be confirmed, and it could have been any of several employees with his groom, John Appleby, being favourite, or even his nephew. I've been asked on occasions "Why didn't Sir George fly it". Well the simple answer is he was almost 80 years old at the time! – he died on the 15th December 1857 twelve days before his 84th birthday.

This first flight was re-enacted in a 1973 Anglia Television programme. John Sproule built the full sized replica which was successfully "hopped" at Brompton Dale by Derek Piggott. The glider is now an exhibit at the Yorkshire Air Museum, Elvington.

ALBERT LIWENTAAL

Wally Kahn bought Albert Liwentaal to my attention who I must confess I'd never previously heard of. Liwentaal was of Swiss origin and lived and worked near Dartmouth in Devon. In February of 1894 he made a short flight in a glider he'd built and designed launched from a hill above Dittisham Mill Creek. The flight which achieved several yards 6 or 7 feet above the ground ended in a minor crash, but in April when he tried again using the slopes at Bozamzeal he crashed so badly that he ended up in hospital. Liwentaal went on to design a number of other flying machines that never flew. Notable of these was his powered monoplane of 1911 where the proposed control system was purely air jets at the extremities of the machine operated by a system of valves and pendulums. This control by air jets was quite remarkably similar to that employed in the Harrier "Jump Jets" 50 years later! He went on to assist the famous Sir Hiram Maxim who besides machine guns had many other engineering/inventing interests including powered flight.



(Artist's depiction of the Liwentaal glider in 1894)

PERCY PILCHER

Percy Pilcher, born 16th January 1866, was a British engineer and inventor and in the final years of his short life a pioneer aviator.



(Wikipedia)

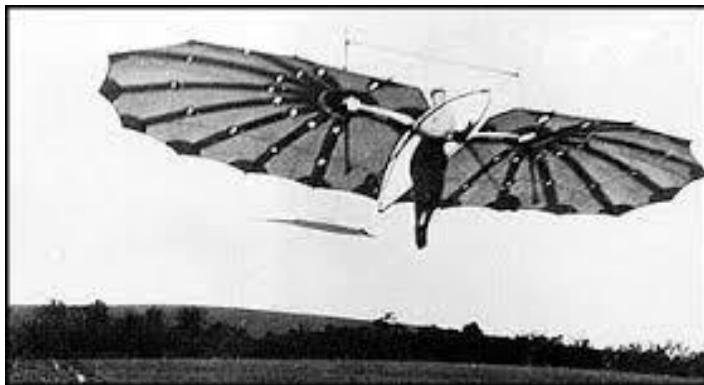
He spent 7 years in the Navy from 1880 and then turned to engineering in Glasgow, by 1891 he was a lecturer at Glasgow University which is where his interest in aviation began. His first glider, the Bat, first flew in 1895 and during that year he built a further 2 versions of the Bat, plus gliders named the Beetle and the Gull.

Later that year Pilcher corresponded with and then met the legendary German gliding pioneer, Otto Lilienthal, who had amassed the astonishing total of over 2000 glider flights starting in 1891, until he crashed and died from injuries sustained on his final flight on the 9th August 1896. The Beetle and Gull didn't meet expectations so Pilcher reverted to his original successful Bat design and modified it to create his famous Hawk.



(Pilcher Bat, 1895)

Note his ultimate aim was always powered flight, and experimenting with gliders was just a stepping stone towards his ultimate ambition, exactly the same path as the Wright brothers took in the United States.



(Wikipedia Public Domain – the Hawk in 1897, possibly Dorothy Pitcher, Pilcher's cousin)

By the Autumn of 1899 following his gliding success with the Hawk Pilcher had taken advice from his fellow pioneer Octave Chanute and progressed to building a tri-plane powered by a 4hp engine that drove both tractor and pusher propellers, the intention being to demonstrate this on the 30th September near his home at Stanford Hall, Leicestershire. If this flight had proceeded then it would have been Percy Picher who became world famous for the first powered flight rather than Orville (and Wilbur) Wright a little over 4 years later at Kitty Hawk, North Carolina! Sadly the crankshaft of the tri-plane engine had broken during ground running tests in the previous two days, and so as not to disappoint his guests Pilcher decided to fly his Hawk glider instead. Hitherto the Hawk had proved very reliable, however, on this occasion there was a failure of the tail unit on the third flight which resulted in a crash from about 30 ft. Percy Pilcher died from his injuries at Stanford Hall two days later on the 2nd October 1899.

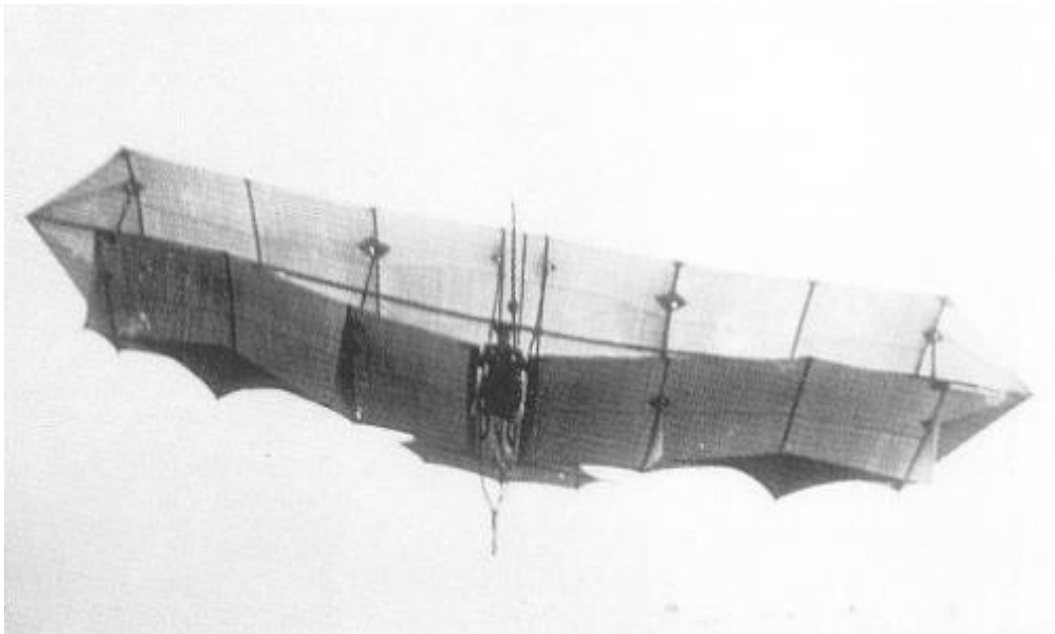
Incredibly sad and frustrating as a replica of the Pilcher tri-plane was built at Cranfield in 2003 (albeit with a 6 hp engine), and flew successfully for 1 min 26 secs. This replica is now on display at the Shuttleworth collection, Old Warden.



(Cranfield built replica Pilcher Tri-plane at Shuttleworth, Peter Clarke/www.ab.pic.co.uk)

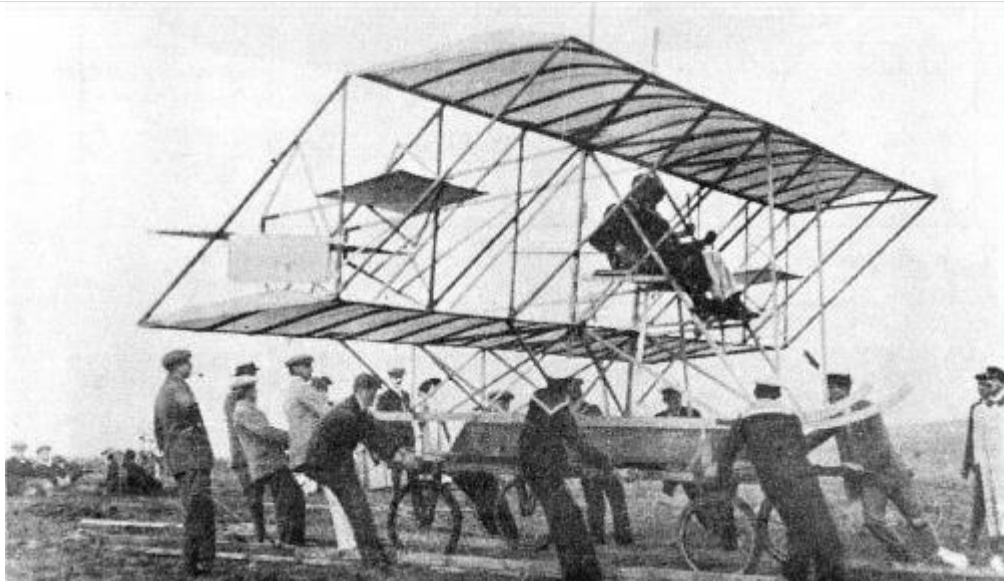
Not a great deal is recorded as we move into the early years of the 20th century. Worth commenting on though are:

- The bi-plane glider built by Samuel Cody in 1905 and flown successfully at Farnborough until it was crashed in September badly injuring his son, Vivian.



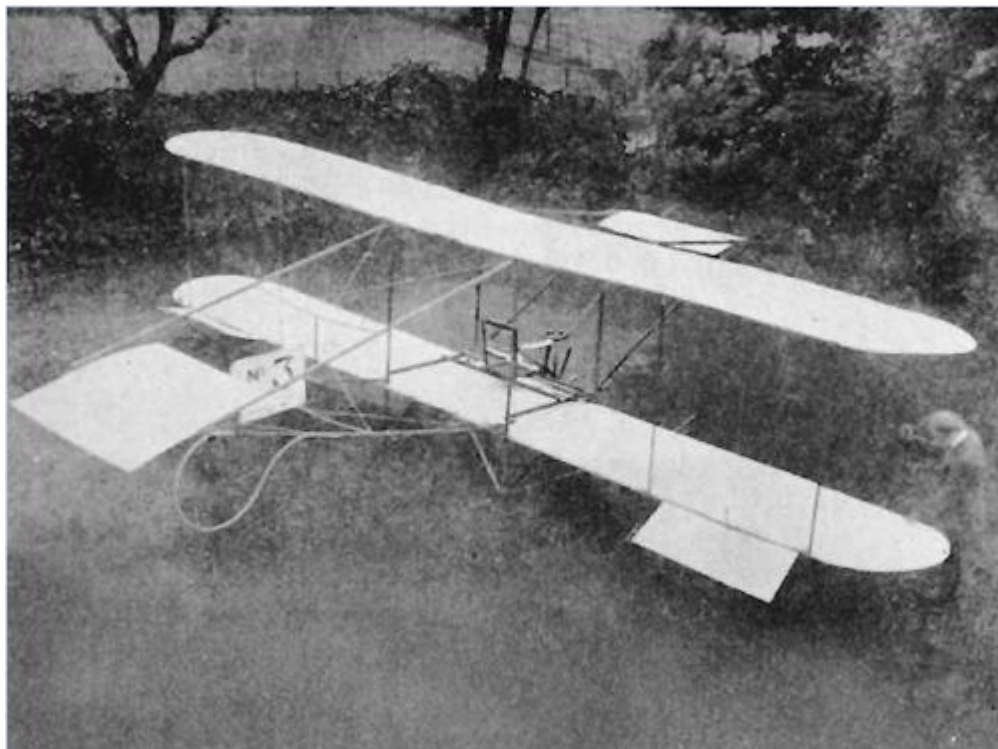
(Cody glider flying at Farnborough in 1905)

- The Porte and Pirie (2 naval lieutenants) two-seat side-by-side glider of 1908. The first (and likely only!) flight was off Portsdown Hill, Portsmouth, and resulted in the glider turning over before it became airborne.



(Porte/Pirie glider of 1908 almost certainly taken at Portsdown Hill, note the launching trolley!)

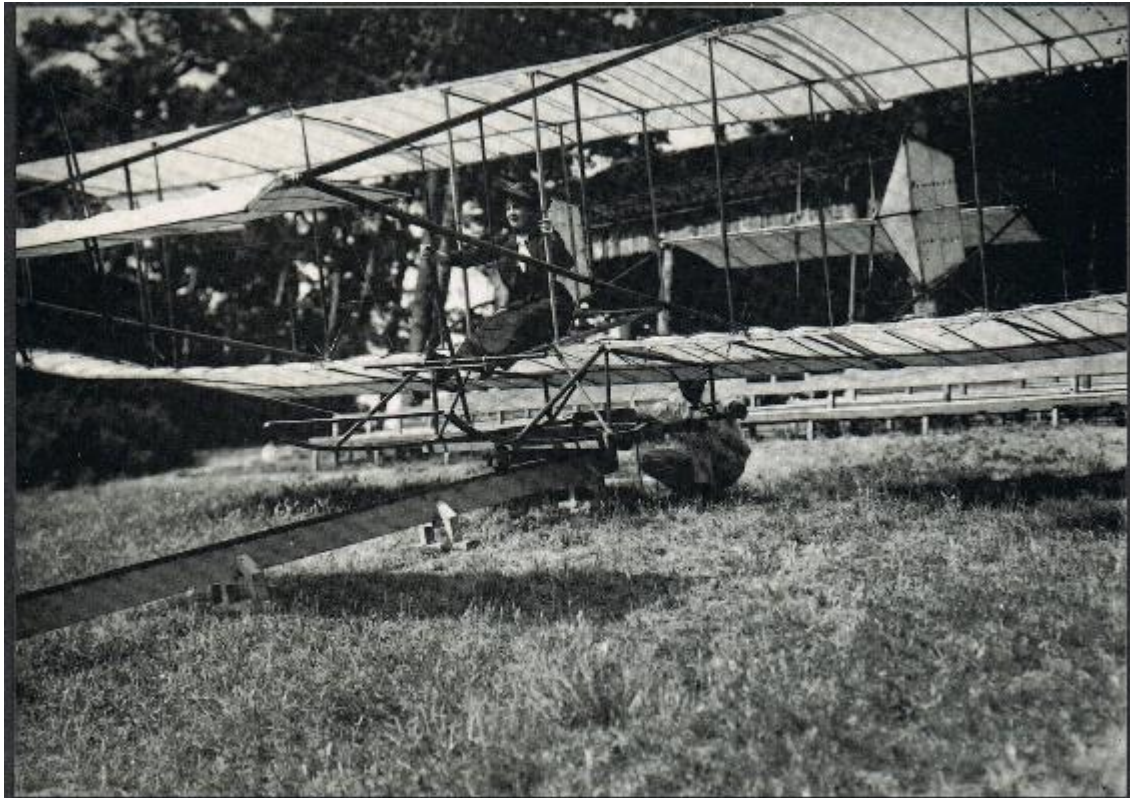
- The Bush bi-plane gliders 7 of which were built between 1909 and 1912 by the three Bush brothers, Eldon, Gilbert, and Jon. Short flights managed only, the 3rd built is notable for having ailerons hinged to the trailing edges of the bottom wings.



(The 3rd Bush bi-plane glider, note the ailerons)

- Note that Charles Lane started the "Lane Gliding School" at Brooklands, Weybridge,

in April 1910. I think we can safely say it was the very first gliding school in Great Britain. A biplane glider of the Farman type built by Lane was used, launching was from a laid-down starting rail on what is known as Members Hill. The enterprise didn't last very long but a Mrs Gavin is recorded as making a number of successful flights. Thanks to Ted Hull for bringing this to my attention.



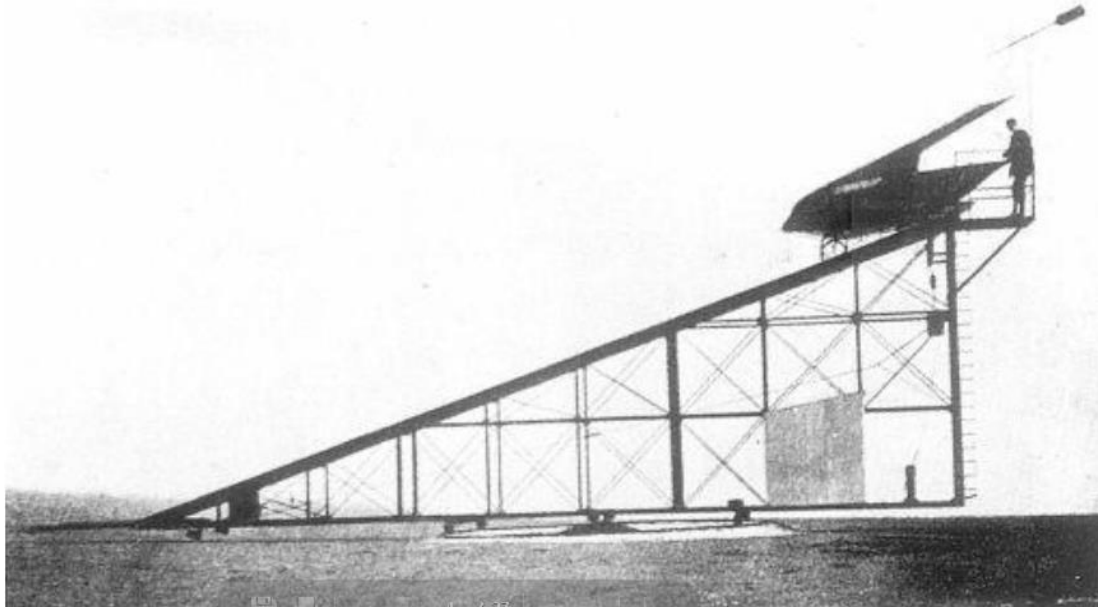
(Mrs Gavin and the "Lane Gliding School" glider. Courtesy of Brooklands Museum)

JOSE WEISS

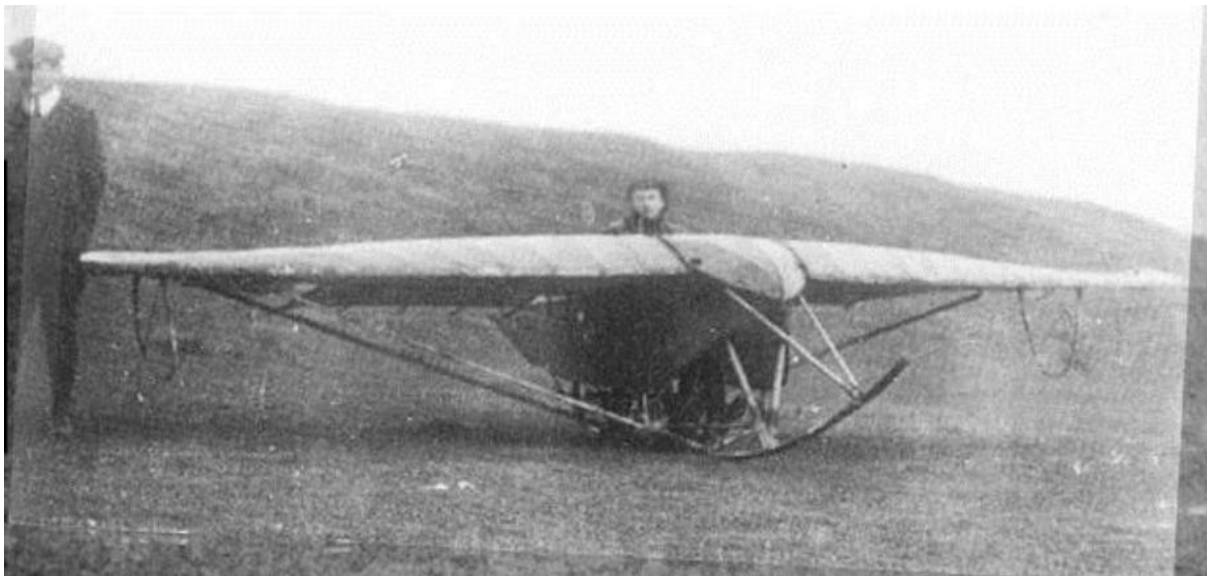
Jose Weiss was born in 1859 in Paris. In 1894 he married an Englishwoman and moved to live at Amberley in Sussex. He became a very successful landscape artist, especially of Arun beauty spots and scenes along the North and South Downs. Today his works are highly collectable.

His second great love was aeronautics and studying how birds managed to fly – and more importantly to him, soar. Weiss started his experiments by using small models but they became progressively bigger such that by 1908 they were very large indeed! Inevitably things moved on to a man carrying glider, and in 1909 Weiss built "Olive" which was named after one of his daughters. The wing span was 26 ft and whilst it had no rudder or tail it did have pilot operated foot pedals which controlled trailing edge flaps at the root of each wing.

The picture below shows one of these monsters atop a special launching ramp he built on Bury Hill near Amberley. Flights were achieving up to 2 miles in the right conditions.



Did Weiss himself fly “Olive”? Uncertain but the key name here is Eric Gordon England who at the time was 17 years old, and subsequently achieved fame in his own right as an early aviator and aeronautical engineer. On the 27th June 1909 Eric England was launched in “Olive” from Amberley Mount. The glider first descended but was then clearly seen to rise 30 – 40 ft as it flew into the hill lift. The flight was recorded as lasting 58 seconds with the glider landing safely in the valley below. This is widely recognised as the very first soaring flight on the planet by a man carrying glider.



(Eric England in “Olive”)

Jose Weiss died in December 1919 a rather saddened man – he was a convinced pacifist - in that during the last years of his life aviation had become a major weapon of war rather than a thing of beauty and adventure as it had first started out. For those interested you'll

find a detailed account of his life and aviation involvement in a really excellent article accessed from :- <http://www.littlehamptonfort.co.uk/wp-content/uploads/2014/03/Jose-Weiss.pdf>

Not surprisingly the outbreak of World War 1 in August 1914 put an effective stop to the development of gliding in Britain. The next major event to cover is the famous Itford Hill meeting in 1922.

ITFORD HILL 1922, THE FIRST BRITISH GLIDING MEETING

The Treaty of Versailles at the end of World War 1 forbade Germany from building powered aircraft. Consequently the frustration of this was very much a spur to the development of gliding in Germany. The key centre that rapidly emerged was at the Wasserkuppe in the Rhon mountains, a bit over 100 km to the NE of Frankfurt. Here starting in 1920 longer and longer distance glider flights were being made, and the word went around the aviation world.

Accordingly the air minded Daily Mail announced in August 1922 that a British gliding meeting would be organised for October with a prize of £1000 awarded for the longest flight, a considerable sum of money in those days. The dates were then set as 16th to the 21st October and the site at Itford Hill, near Lewes, in Sussex. The site was chosen as it had an excellent slope for an often seen SW wind with a good landing area at its foot. More importantly as it turned out it was reasonably close to the steeper slopes of Firle Beacon which were good in a Northerly or North Easterly, and it was at Firle where all the important flights took place, all of the gliders being launched by "bungee".

Three months was not a lot of time to prepare, not least because there were literally no gliders flying in Great Britain at that time. However, the Daily Mail received 36 entries, a few from obvious cranks, and of these 16 arrived at Itford of which 13 subsequently flew, 8 of which were British. Amongst the favourites were Eric England, he who had "soared" Jose Weiss's "Olive" 13 years before, and "Freddie" Raynham.



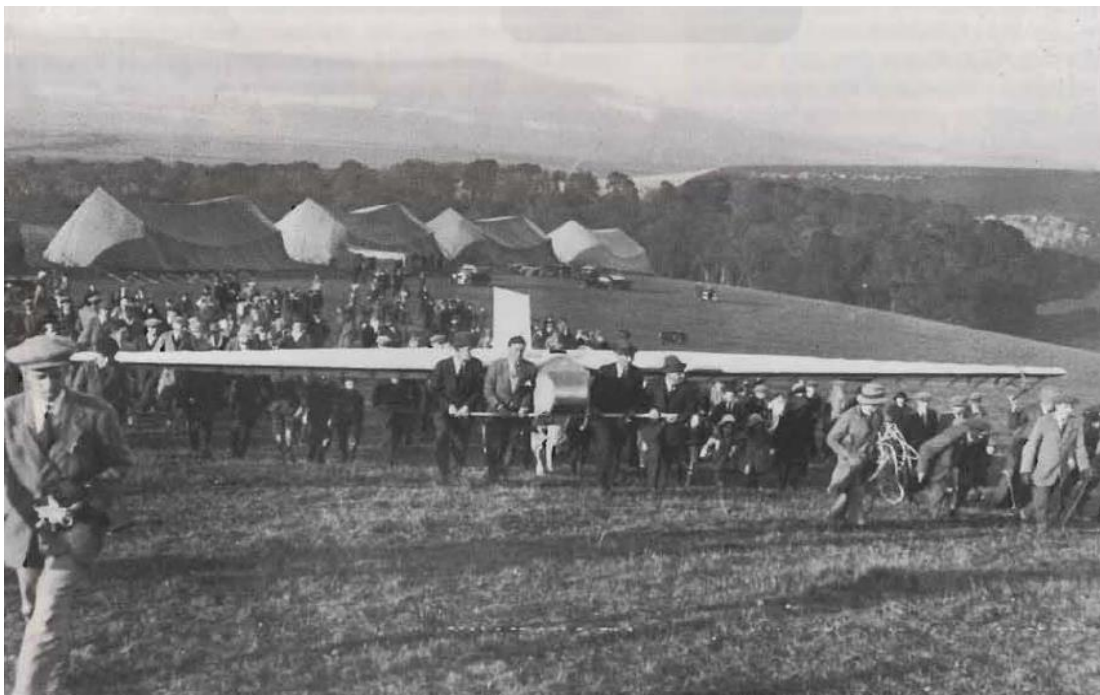
(England's glider and Raynham's "Handasyde" being carried at the Itford Hill meeting, VGC News, Spring 1993)

England brought a glider that he had both designed and built. Whilst his flights were OK they weren't particularly good, and on the final day, the 21st, he stalled and crashed breaking his ankle badly in the process.



(Sailplane and Glider October 1947)

Raynham flew a glider designed by G Handasyde and Sidney Camm (later to become famous as the designer of the Hawker Hurricane). On the Tuesday (17th) he bungied off from Firle in a steady NE wind and astounded everyone by staying up for 1 hour 53 minutes – the previous longest flight had been 37 minutes by Tony Fokker on the Monday, flying his bi-plane glider with a passenger – who was the Daily Mail photographer!



(Raynham's "Handasyde" glider, behind the Itford camp site, VGC News, Spring 1993)

No question that "Freddie" Raynham thought that the flight had won him the £1000 prize. However, he was too complacent. Saturday the 21st dawned with a much stronger wind, but Raynham delayed his flight allowing England an attempt which ended in a crash in less than a minute after launch.

A French entry, a Peyret tandem monoplane, had arrived late on the Wednesday, and apart from its design occasioning some derision, had not caused much interest. Mid-afternoon on the 21st its pilot, Alexis Maneyrol, took it to the Firle launch point for what would be its only flight of the meeting. The onlookers thought the flight would be very short indeed and almost certainly end in a crash – most others had at the Itford event! However, Maneyrol remained airborne without any problem, which made Raynham realise he was in danger of losing the £1000 prize to a most unlikely rival. So Raynham finally launched but chose to fly the wrong way along the ridge, which saw him landing in just under 12 minutes.



(Maneyrol launching from Firle in the Peyret at the start of his famous flight on 21st October 1922, VGC News, Summer 2003)

Dusk came and then darkness, and still Maneyrol continued to soar the slope. The reason was he was intent on beating the recently set world duration record, the German who had achieved it had been disparaging about French gliding at the time. Maneyrol managed to communicate with those on the ground underneath by shouting, and was informed by loud cheering when he beat the old record. He landed on ground lit by car headlamps after a flight of 3 hours and 21 minutes. The flight caused quite a stir in the newspapers and the Peyret was put on display at Selfridges, Oxford Street. On the return of Maneyrol and his glider to the Gare du Nord station, Paris, they were then both chaired through the streets by

wildly enthusiastic crowds amidst cries of “Vive L’Aviateur”!

One might have thought that such a successful and well publicised event would kick-start a gliding movement in Great Britain, as indeed was hoped for. It wasn’t to be I’m afraid, and we have to wait almost to the end of 1929 for the next major development. One instance of a successful glider in the 1920s is worth commenting on though, and that’s the “LPW” glider.

LPW GLIDER



(Courtesy of the Lancashire Aero Club, <http://www.lancsaeroclub.co.uk/lac/history.asp>)

The initials were those of its builders (John) Leeming, (Tom) Prince, and (Clement) Wood who began its construction in 1922. These three were part of the group who formed the Lancashire Aero Club (LAC), the oldest still existing flying club in the country. The glider first flew on the 24th May 1924 at Alexandra Park Aerodrome, and thereafter is reported flying frequently at Alexandra Park and then Woodford Aerodrome when the LAC moved there. Launching was by car. Note the aircraft had ailerons and a conventional tail with a decent sized rudder! – many early gliders had far too small a rudder.

MERRIAM GLIDER

Also worth mentioning is the Merriam glider that flew at the Itford meeting in 1922. This was a single seat parasol monoplane glider designed and built on the Isle of Wight by Frederick Merriam. He crashed it on its first flight at Itford, so badly it couldn’t be repaired in time to take any further part in the contest. After taking it back to the IoW Merriam converted it into a dual control two-seater and set up the Whiteley Bank School of Gliding which began operations in 1923. The glider is recorded as still in existence and at the Isle of White GC when it was set up in 1930, though whether the club ever used it for training or what its eventual fate was is not known.

THE COMEDY RESTAURANT LUNCH, DECEMBER 1929

Whilst almost nothing was happening in Great Britain re gliding post the Itford meeting huge development and progress was being made in Germany, not least at the Wasserkuppe. Robert Kronfeld and a few others had started to realise the existence of thermal generated lift and he used it to good effect during the 1929 Rhon meeting. Some of this news was filtering back and was written up in the Aeroplane magazine. This prompted Douglas Culver to organise a lunch for “Those interested in gliding” on the 4th December at the Comedy Restaurant, Panton Street, London. The expectation was that about 30 might attend, but in the event it was 56. It was agreed at this meeting to form a committee with the intention of creating a British gliding association (the “BGA”), and also to invite over a number of foreign (primarily German) recognised gliding experts to give flying demonstrations and hold lectures. The Comedy restaurant lunch effectively lit the blue touch paper! From the start of 1930 gliding clubs sprung up like mushrooms in a frenzy of enthusiasm. I’ve seen a figure of in excess of a hundred quoted though the great majority of these rapidly failed. Indeed many probably not even got to the stage of doing “hops” as firstly you needed a glider (which then would have been a “Primary”), and secondly someone with the right experience to superintend the training – and of course you needed a suitable launching site.

SOME OF THE VERY EARLY CLUBS

- The Kent GC founded on the 4th January by C.H. Lowe-Wylde. This is believed to be the very first British club, and also the first to actually fly on the 23rd February in a primary designed by Lowe-Wylde and built by the Kent GC members in just 5 weeks. They flew from a site near Lenham between Maidstone and Ashford.
- The London GC destined to become the most famous of all British clubs was formed on the 20th February, 37 out of the 56 attendees at the Comedy restaurant lunch subsequently agreeing to form a club for the London area. The very first flights took place at Stoke Park Farm near Guildford on Sunday 16th March, but by May they had started to use Ivinghoe Beacon.





(Kronfeld, far left, with the Prince of Wales at Ivinghoe. Sailplane & Glider, 12th Sept 1930)

This lasted until July when the police demanded they move! This was because of the great public interest and the crowds it produced, which culminated in a flying demonstration by Robert Kronfeld and his Wien glider that was graced by the visit of the then Prince of Wales. On that occasion all the local roads got blocked and the police said “That’s enough!” After a short use of another site they moved to their present site at Dunstable.

- The Scarborough GC formed in February, their first glider was a Primary ordered from the R.F.Dagnall company of Guildford (this glider type became known as a “Dagling”). This was the club that Fred Slingsby was very much involved in from the very beginning, and which had a major impact on leading him along the path to eventually become the country’s biggest glider manufacturer. The Scarborough club ran into difficulties as so many did, and it was their merger with the Bradford and District GC that led to the formation of the Yorkshire GC.
- Another ultimately very famous club, the Surrey GC, formed on the 20th March, they started flying on the May 24th using a “Dagling”, launching from a field at Chilworth near to Guildford.
- The Channel GC on 28th June. They flew from a number of sites near Folkestone, the gliders were stored at RAF Hawkinge. Bill Manuel was much involved with this club.
- Lancashire Aero Club at Woodford Aerodrome near Manchester. The LAC had been formed as a power club by a group of enthusiasts in 1922. As described above there was also a gliding element to this. A number of the early “A” certificates were achieved by LAC members – see table below.

GLIDING CERTIFICATES

Quite amazingly there’s very little change today as against the 1930s. For instance 3 satisfactory solo flights today and you get your “A and B” certificates. Back in 1930 the “A” and “B” were separate achievements:

The “A” certificate. A flight in a straight line of at least 30 seconds duration.

The “B” certificate. Two flights of at least 45 seconds duration. Also one flight of at least a minute in which a complete “S” turn was made. The purpose of this was to demonstrate that you could make turns successfully in both directions.

The “C” certificate. A flight of at least 5 minutes above the starting point. This effectively meant a hill site and using slope lift.

It should also be said that a qualifying flight had to end with a “normal” landing – and not a crash!

The issuing of certificates was administered by the Royal Aero Club on behalf of the FAI (Federation Aeronautique Internationale). The very first British “A” was achieved by C.H. Lowe-Wylde at the Kent GC on the 30th March 1930 – he got his “B” on the 8th June. Not

sure about the first “B”, certainly someone flying from the London GC at Dunstable. The first “C” by C.H. Latimer-Needham at Dunstable on 7th June 1930. The early dominance and importance of the London GC is well illustrated by the table below.

14 of the first 23 “A” certificates were all flown at Dunstable, 6 out of the first 7 “Bs” and all four of the first “Cs”. Besides Lowe-Wylde and Latimer-Needham there’s a number of other notable British gliding pioneers in the list – Geoffrey Mungo Buxton, Flying Officer Mole, and the Master of Sempill, to name three.

GLIDING CERTIFICATES.

The following Gliding Certificates of the *Fédération Aéronautique Internationale* have been issued by the Royal Aero Club:—

No.	Name.	Certificates.
1.	C. H. Lowe-Wylde (Kent Gliding Club).	A. and B.
2.	C. H. Latimer-Needham (London Gliding Club).	A., B. and C.
3.	Marcus D. Manton (London Gliding Club).	A., B. and C.
4.	M. L. McCulloch (London Gliding Club).	A. and B.
5.	Geoffrey M. Buxton (London Gliding Club).	A., B. and C.
6.	Flg. Of. E. Lucas Mole (London Gliding Club).	A.
7.	Colin Aubrey Price (Portsmouth and Southsea Gliding Club).	A.
8.	Denys Max Thomson Morland (London Gliding Club).	A.
9.	Col. The Master of Sempill (London Gliding Club).	A., B. and C.
10.	John R. Ashwell-Cooke (London Gliding Club).	A.
11.	Alan Goodfellow (Lancashire Aero Club).	A.
12.	Mrs. Joan Bradbrooke (London Gliding Club).	A.
13.	Thomas Graham Hunby (London Gliding Club).	A. and B.
14.	Leonard Charles Williams (London Gliding Club).	A.
15.	Harry Amein Abdallah (London Gliding Club).	A.
16.	Percy Michelson (Lancashire Aero Club).	A.
17.	Frederick B. Tomkins (Lancashire Aero Club).	A.
18.	Eric Christopher Stanley Megaw (London Gliding Club).	A.
19.	Basil Alfred G. Meads (Lancashire Aero Club).	A.
20.	Robert Gidner Spencer (Driffield and District Gliding Club).	A.
21.	John Cecil Wenale (Lancashire Aero Club).	A.
22.	Reginald G. Robertson (London Gliding Club).	A.
23.	Thomas Eaton Lander (London Gliding Club).	A.

(Sailplane & Glider, 12th Sept 1930)

The “Silver C”. A flight of at least 5 hours duration, a gain of height from the low point of 1000 metres (about 3,300 ft), a cross country of 50 kilometres (approx 31 miles).

There was quite a battle between 2 leading glider pilots of the day, Eric Collins and Philip Wills, to become the first British holder of a “Silver C”. Collins won by flying his newly acquired German Rhonadler on the 22nd April 1934 from Dunstable to Rayleigh, Essex, a distance of about 52 miles, and so achieved the needed 50 km cross country. As he also made the necessary 1000 metres gain of height on the same flight this completed his Silver C requirements, he’d flown the 5 hours on the 20th April. At the time Philip Wills still needed to make a 5 hours flight, though he did this on the 14th July, his other 2 Silver legs were

completed on the 18th March.

Collins Silver C was number 26 on the international list, Wills was 45 – out of interest No. 25 on the international list was Hanna Reitsch who was to become one of the most famous of all woman pilots.



(Philip Wills (left) and Eric Collins at Dunstable. Sailplane & Glider, April 1934)

The “Gold C”. A flight of at least 5 hours duration, a gain of height from the low point of 3000 metres (just under 10,000 ft), a cross country of 300 kilometres (approx. 186 miles). This international gliding award was first instigated in 1938.

The first British Gold C holder was Philip Wills. On the 30th April 1938 he achieved the distance requirement with a flight of 209 miles from Heston to St Austell, Cornwall, in a Minimoa, a British National record – this held good until 1947. On the 5th June 1938 in the same Minimoa he made a height gain of 10,180 feet over Dunstable in a thundercloud, again a British National record, and this completed his Gold C. It was the first on the British register, and only the third on the international, a quite remarkable achievement.

EARLY TRAINING

There weren't any 2-seaters to begin with, or at least of the very few that there were none were used for instructional purposes, so it was all done by the so called “solo” method. Launching was initially by bungee, an elasticised rope. This was arranged as a “vee” with 3 or 4 people on each side and the rope hooked onto the nose of the glider at the apex of the

“vee”. With the tail held back by another person those holding the rope would run forward until the rope was at maximum stretch. At this point the tail would be released resulting in the glider being catapulted into the air.



(A bungee launch at Dunstable. Glider is the unique Hjordis built by Slingsbys for Philip Wills. Wills almost certainly the pilot in this picture.)

The gliders first used for training were called “Primaries” and were very primitive indeed.

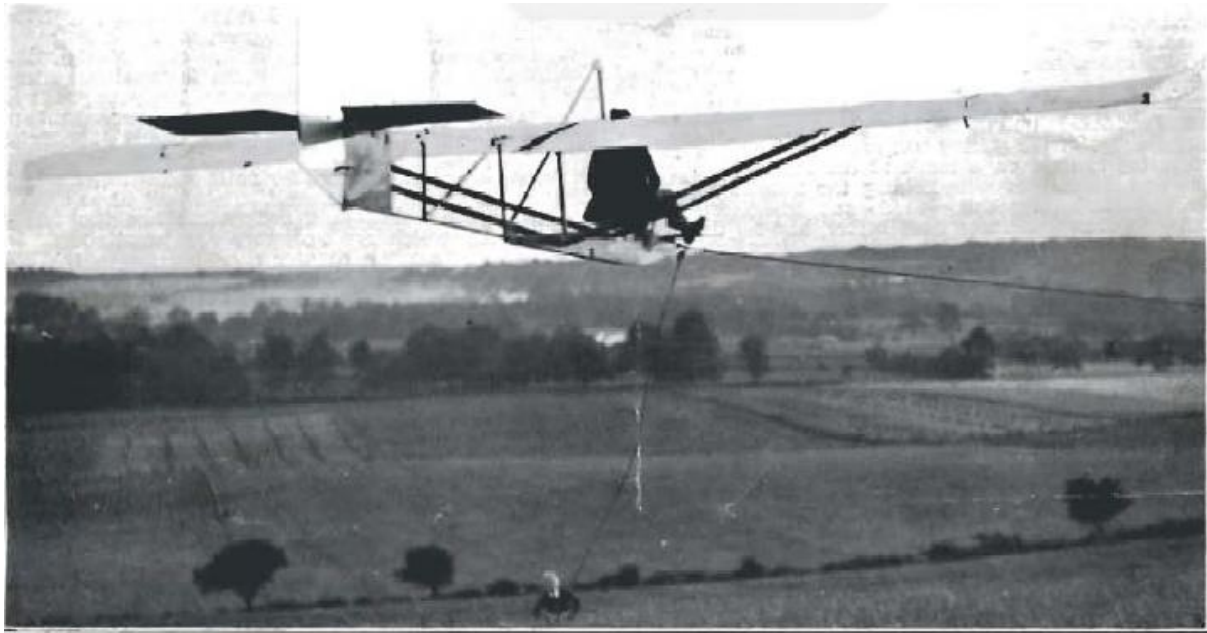


Mr. Read flying the Manuel VI which has been built by Corporal Manuel at Hawkinge.

(Sailplane & Glider, 17th October 1930)

Effectively a rickety frame as the fuselage, a pair of wings on top, the pilot sitting at the front on a simple bench type seat, and the whole lot held together by a forest of wires!

Training was supposed to start with low “hops” which went higher if the pupil showed his/her ability to control the glider. In the early days this was very much of a lottery: a.) How good the instructor on the ground was at explaining things b.) Whether the pupil listened / understood! – there was always a strong temptation to go higher than the previous pupil by pulling back on the stick. This succeeded, but very often at the expense of a stall which almost always ended in a crash and the end of gliding for the day. c.) Most sites launched down a slope, so the gradient of the slope and also the strength and direction of the wind at the time were very important factors not always properly understood.



The new Lowe Wyld training machine which is strut-braced for ease of erection. The cabane is to save the pilot's head if the machine turns over in a crash.

(BAC1 being bungee launched. The “A” frame / Kingpost “cabane” was a key structural part of the glider rather than being specifically designed to protect the pilot's head!)

The amount of “crashery” in the early days was prodigious! Mitigating factors were firstly, that the gliders being of simple construction were on most occasions not too difficult to repair, and secondly, a crash normally occurred from a low altitude so the pilot usually escaped with a few bruises, or if they were lucky just with injured pride. However, there were instances of serious injury and even fatalities, almost always at hill sites where the unfortunate pilots found themselves outside their envelope of competence/experience.

Fred Slingsby ruefully commented that as appointed ground engineer of the Scarborough GC almost every Monday their Primary ended up in the furniture company's workshop of which he was a partner, and that usually meant not too much furniture got built as the glider was repaired ready for the next weekend!

The Ilkley Club.

The Ilkley Club had a spot of bother on Sept. 7 when a Club member stalled their primary training machine. The machine was damaged and the pilot broke his leg. This question of personal injury is becoming serious. We think that the British Gliding Association should investigate the accidents which have so far happened and issue recommendations. Such a course would be to everybody's benefit.

(A plaintive little note from the Ilkley GC which appeared in the 12th September 1930 edition of Sailplane & Glider)

THE MEETING AT LENHAM.

On Sept. 21 the Kent and Channel Gliding Clubs agreed to have a battle. The London Club were there in snappy "fieger" coatings of bright blue and rather diminished strength, but they had to remain neutral. As 75 per cent. of the competing machines were smashed this was probably as well or the damage might have gone up to the hundred mark.

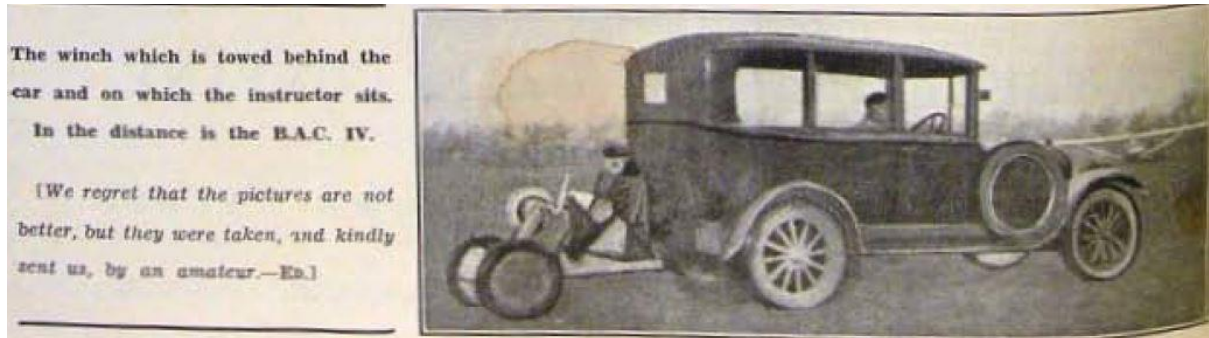
Competition I'm afraid encourages risks! - as evidenced by the above snippet from Sailplane & Glider, 26th September 1930. Note the competition was decided by adding up the combined flight times for each club's gliders. The Channel club won with a total of 74 seconds whilst Kent could only manage 57 ½ seconds. The longest flight was 29 seconds by a Channel club glider, so not even enough for an "A" certificate!

January 1931 saw the public introduction of auto-towing as a launching method. This was devised by C.H. Lowe-Wylde the founder of the BAC glider manufacturing company. No question that Lowe-Wylde was a visionary, far ahead of his time.



(Auto-launch of a Primary at the Oxford GC).

Very shortly afterwards Lowe-Wylde introduced a further innovation by fitting a winch on the back of the launching car that would pay out the cable as the glider climbed.



(Sailplane & Glider, 16th January 1931)

There was quite a lot of initial hostility to auto-car/winch launching by “bungee” purists who considered it dangerous. However, if it was well superintended, and Lowe-Wylde ran courses on how to do it, it proved safe enough. Whilst being used at both hill and flat sites it had the great advantage for flat sites of allowing pupils to gain their “A and B” certificates which, certainly for the “B”, hadn’t been possible before.

Another instance of pioneering by Lowe-Wylde and BAC was the production of the first British designed and built 2 seater – the BAC VII.



(BAC VII, Sailplane & Glider, 17th April 1931)

Lowe Wylde passionately believed that a 2 seater glider carrying pupil and instructor was the right way to train, and the best way to launch was by auto-car or winch. Sounds like “today” doesn’t it! Sadly Lowe-Wylde was to be killed on the 13th May 1933 flying a Planette, a

powered version of the BAC VII. It has to be said though that by that time there were strong indications that he'd fallen out of love with pure gliders and switched his allegiance to powered aircraft.

So training continued to be via the "solo" method of ground slides, low "hops", and then ever higher "hops" as the pupil's proficiency (hopefully!) increased. This even continued during WW2 where the Air Training Corp trained thousands of cadets to an "A and B" certificate standard. It wasn't until the end of WW2 that common sense finally proved victorious and training switched to using 2 seaters with an instructor.

THE MAJOR BRITISH GLIDER MANUFACTURERS IN THE 1930s

When gliding began with a bang in Britain in the early months of 1930 there was a great rush for the newly formed clubs to acquire a glider, which for a start-up operation invariably meant a Primary. Some were built from plans by the clubs members, or just simply "designed" and constructed. Many though were built by glider manufacturing businesses that suddenly sprung up.

The RFD company

A small factory In Guildford (RFD are the initials of the proprietor Reginald Foster Dagnell) that in 1930 and 1931 constructed and sold a number of Primaries based on the German Zogling design (Zogling translates as "Pupil"). These became known as "Daglings" and the 1970 Merseyside directory has 27 of them registered with BGA numbers. In fact it was 27 of the first 37 BGA registrations, so RFD certainly gave a kick start to the newly born British gliding movement. For a majority of clubs a "Dagling" was their first glider. The prototype first flew on the 16th March 1930 near Guildford.



(Sailplane & Glider, 24th Oct 1930)

The above photograph was taken at the first Inter-Club competition that the BGA organised on the 18th and 19th October 1930 at Ditchling Beacon. A considerable number of launches were made and what was remarkable was there were no crashes!

The Dagnall company were nothing if not entrepreneurial in their efforts to sell their Primary glider – see the below advert.

ANNOUNCEMENT

£10

will be paid to the Club
which obtains the greatest
number of "A" tickets, on
R.F.D. training gliders, from
15th August last to 31st
December, 1930.

Further particulars from:

THE R.F.D. COMPANY,
17, STOKE ROAD,
GUILDFORD, SURREY.

(Sailplane & Glider, 19th Sept 1930)

The involvement of the Dagnall factory with gliding didn't last too long. At the start of 1932 they made an announcement advising they were ceasing manufacturing gliders due to government contract work having to take precedence, and the glider business was handed over to the British Aircraft Company.

The British Aircraft Company (BAC)

Nothing at all to do with the modern day BAC! It was formed by C.H. Lowe-Wylde in the summer of 1930 and became a limited company in March 1931, their premises was a disused brewery in Maidstone. Lowe-Wylde was a remarkable man, he features as one of the early gliding eminences in my "Major Personalities" section a little later in this article. BAC overall produced nine different types of glider, BAC 1 to BAC 9. 41 of these are known to have been built, possibly 43, the great majority at the factory, but some from supplied kits and also via sold plans. So that puts them as number 3 in the all-time British list for building/designing gliders – behind Slingsbys and Elliotts of Newbury (who were post WW2).

Lowe-Wylde and BAC weren't slow in advertising their products and achievements!

3 "B's" in 30 MINUTES

Read what happened at Hanworth last Sunday, and realise how YOUR training can be speeded up by Auto-towing with a B.A.C. machine. *Ab initio* pupils can all be brought along together; no crashes to impede progress, the pupil's flight is under control all the time. When you have enough candidates ready, Auto-towing will enable you to collect a bunch of Certificates in one afternoon.

INTERCHANGEABILITY of **B.A.C.** types means the minimum of trouble and expense in converting your existing B.A.C. machine for towing or soaring.

If YOU can get to LEEDS, come to SHERBURN during the WEEK-END and see a demonstration of Auto-towing at the N.F.S. Aerodrome.

THE BRITISH AIRCRAFT COMPANY, MAIDSTONE
Mr. C. H. LOWE-WYLDE, General Manager.

(Sailplane & Glider, 20th February 1931)

The most remarkable glider they produced (only one made) was the BAC 8, known as the "Bat-Boat" which was successfully launched and landed on water.

ANOTHER ACHIEVEMENT!

The First Motorless Flying Boat



The B.A.C. VIII Bat—Boat.

This is another development of an Aircraft Company whose executive are fully alive to the progress required to keep abreast of the times.

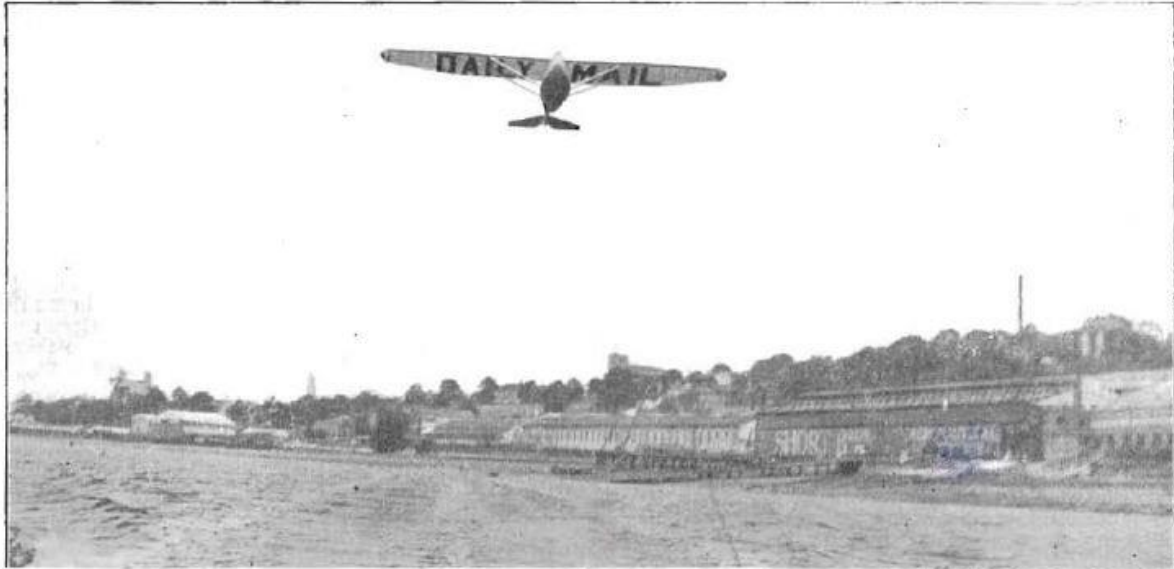
B.A.C. Ltd., Lower Stone Street, MAIDSTONE, Kent
General Manager : MR. C. H. LOWE-WYLDE, 'Phone : MAIDSTONE 4111

(Sailplane & Glider 31st July 1931)

The first flight was behind a speedboat on the Medway in August 1931. Subsequently it

made a number of flights from the Welsh Harp reservoir at Hendon.

THE BAT-BOAT



The latest B.A.C. which is a two-seat waterplane using standard wings and tail-unit flying behind a speed-boat on the Medway at Rochester.

(Sailplane & Glider, 14th August 1931)

As we mentioned earlier in the article Lowe-Wylde was sadly killed in May 1933 flying a "Planette", a powered version of the BAC 7. Glider manufacture had already ceased at this time, the business being taken over by Robert Kronfeld.

A detailed article I've written on BAC and its gliders can be accessed from the following link:

<http://www.glidingheritage.org.uk/documents/articles/BACGlidersV1.pdf>

The Bill Manuel gliders

Bill Manuel's involvement in designing and building gliders spanned an astonishing 58 years. He was a corporal in the RAF based at Hawkinge when he built and flew his first glider, a Primary bi-plane, in 1929. His final glider was the replica Crested Wren he finished shortly before his death in 1987.

He is best remembered for the "Wren" series of sailplanes he built during the 1930s. The first was the Crested Wren which was finished in 1931 and proved to be a very successful glider indeed, doing a great deal of its flying at Dunstable. This was followed by the two Willow Wrens, Yellow and Blue, which also proved excellent gliders. A further 4, possibly 5, Willow Wrens were built from plans – the cost of the drawings was 5 guineas.

Manuel left the RAF in 1933 and it was then he built the Blue Wren in a small workshop at Dunstable. In 1934 he joined forces with C.H. Latimer-Needham in forming the Dunstable Sailplane Company. They produced a new version of the Wren which was called the "Kestrel", it effectively was the same as the Blue Wren with a small number of modifications.



(Sailplane & Glider, February 1935)

Only one Kestrel was built by the factory but they did sell plans at 6 guineas (as per the advert above), and 5 were definitely built and flown from these – including 3 in Australia.

Manuel's involvement in the design and building of gliders ceased in 1936. However, in the later years of his life the passion returned and he was responsible for 4 gliders – the Hawk, the Condor, the Gnat, and finally the recreation of his 1931 triumph, the replica Crested Wren.

So overall Bill Manuel was responsible for the design of at least 19 gliders of which 9 he built solely himself, plus the Kestrel at the Dunstable Sailplane Company. That puts him number 5 in the list of British glider manufacturers.

A detailed article I've written on the Bill Manuel gliders can be accessed from the following link:

http://www.glidingheritage.org.uk/documents/articles/Bill_Manuelv5.pdf

Three of his gliders still exist today, all of them are on display at the Gliding Heritage Centre at Lasham though none are flyable. These are the Manuel Hawk, the replica Crested Wren,

and pride of place the 1932 “Yellow” Willow Wren, BGA 162, which is the oldest original glider in the country.



(Willow Wren at Brooklands 29th Sept 2012 at their “Aviation Day” event. Photo, the author)

Slingsbys of Kirkbymoorside

By a very considerable margin Slingsbys became the largest glider manufacturer in Great Britain. Totalling up the wooden gliders they actually built plus the kits and plans they sold, you get to about 1950, which is a bit over 80% of all the wooden gliders ever built in Britain - excluding military gliders such as the Hotspur, Horsa, etc. Note the second largest manufacturer was Elliotts of Newbury who account for about 350 gliders, though they didn't start production until after the end of WW2.

Fred Slingsby was a founder member of the Scarborough GC which was formed in February 1930. Due to his being a skilled carpenter he was appointed ground engineer and as I mentioned earlier his skills and those of his workforce were much needed in repairing the frequently crashed RFD “Dagling” Primary which was the Scarborough club's first glider.

Fred Slingsby himself wanted to fly a much better glider than a Primary. In the winter of 1930 he met a visiting German pilot, Gunther Groenhoff, who advised him a German Falke would in his opinion be very suitable. Slingsby bought the plans from the German Aero Club and built what became known as the “British Falcon” in the furniture workshops where he was a partner in Queen St., Scarborough. This turned out to be an excellent glider, and one he took to and successfully flew at nearly all the 1931 and 1932 gliding meetings. It was through these meetings that he met Espin Hardwick, the founder of the Midland GC, who persuaded

GLIDING HERITAGE CENTRE



him to build a second Falcon. This effectively marks the start of Fred Slingsby's career in building and selling gliders. The first Slingsby advert appeared in the November 1933 edition of Sailplane and Glider.



(The Primary referred to is the Slingsby Type 3 which was a slightly modified RFD “Dagling”)

Work at Queen St was now being dominated by building and repairing gliders to the extent that larger premises were required. As a temporary measure in the Summer of 1934 the old Scarborough tram sheds were used.



(Courtesy of Martin Simon's “Slingsby Sailplanes”. A T.3 Primary under construction in the tram works - a modern day “Health and Safety” manager would have apoplexy!)

In September 1934 a move was made to Kirkbymoorside where Slingsby joined an agricultural engineering company owned by a local land owner, Major J.E.D. Shaw, the new company being called Slingsby, Russell, and Brown Ltd. The success of the glider business saw a completely new factory being built next to Major Shaw's Welburn airfield near to Kirkbymoorside. This was completed in July 1939 and a new company, Slingsby Sailplanes Ltd, was formed with Major Shaw as chairman and Fred Slingsby as managing director.



Glider types made by Slingsby up to just after the start of WW2 (only those types which were completed and actually flown) :

- T.1, the original “British Falcon” was later given the “Type 1” name. At least a further 8 were built, perhaps a few more – Slingsby himself cited 12 though there’s some doubt about this.
- T.2, the slightly modified Falcon 1 bought by Espin Hardwick.
- T.3, the Primary which was based on the RFD Dagling. 67 are said to have been built, so what with the frequent repair business that followed the T.3 proved a profitable venture for Slingsbys!
- T.4, a 2-seater version of the Falcon designed by Fred Slingsby, the prototype being ordered by Espin Hardwick. Known as the “Falcon 3” it first flew in April 1935, a further 8 were built + 1 from a kit at the Cape GC, South Africa.
- T.5, this was the Grunau Baby built under licence from the Schneider factory in Germany. Slingsbys built 15 but it’s likely others were built from kits/sold plans.
- T.6, the “Kite”. A much cleaned up Grunau Baby with a gull wing, the prototype flying in August 1935. This turned out to be a very successful glider, Slingsbys making 25 of them. Because of the numbers available they were used as the main training glider at RAF Haddenham with No. 1 Glider Training Squadron when training began in January 1941.
- T.7, the “Kadet”. Designed by John Sproule as a cheap and easy to repair secondary glider, the prototype flying in January 1936. Due to its extensive use by the ATC in WW2 far more Kadets (known as the Cadet Mk1 in the ATC) were built than any other Slingsby glider. The estimate is 430-435 with Martin Simons citing 254 as being built by the Slingsby factory – many were built under licence, especially at Ottley Motors during the war.
- T.8, the “Tutor”. An improved Kadet, same fuselage as the Kadet but with revised tapered wings, first flown July 1937. Exact numbers built are not known, but certainly in excess of a 100. Many Kadets came to be converted to Tutors by fitting the revised wings.
- T.9, the “King Kite”. A very high performance sailplane designed by Mungo Buxton with assistance from Fred Slingsby and John Sproule. 3 were built and were flown by the British team at the first International championships held at the Wasserkuppe in 1937. Unfortunately the wings were wrongly jigged whilst being built at the factory with the result the glider spun readily.
- T.12, the “Gull 1”. A strutted gull winged sailplane, the prototype first flying in March 1938. Slingsbys built 9, the most famous of which is the “Blue Gull” which Geoffrey Stephenson soared across the English Channel on the 22nd April 1939 starting from a winch launch at Dunstable.
- T.13, the “Petrel”. This was based on the German Rhonadler but with gull wings. It was specifically ordered by Frank Charles who was well known as a motor cyclist, the prototype first flew in December 1938. 3 were built, sadly Frank Collins was killed in the prototype, July 1939, flying at the National championships at Camphill.
- T.14, the “Gull 2”. A side-by-side high performance 2-seater with a cantilever gull wing. Only one built which first flew in April 1940 – an official permit to fly had to be obtained as from Easter 1940 all civilian gliding was banned.
- T.15, the “Gull 3”. Unquestionably the highest performance glider that Slingsbys had built up to that point, arguably the most beautiful as well! It wasn’t quite completed when WW2 broke out in September 1939. The sailplane had a cantilever (no struts) gull wing of just over 50 feet span. It was first flown sometime in 1940, we don’t know

exactly when, likely a permit to fly from the Ministry was required. This is the glider bought and flown by the famous Prince Bira of Thailand in 1944 – he was allowed to fly it as he was an ATC instructor. Today it is on display at the Gliding Heritage Centre, Lasham, having been kindly loaned by the Brooklands Museum.



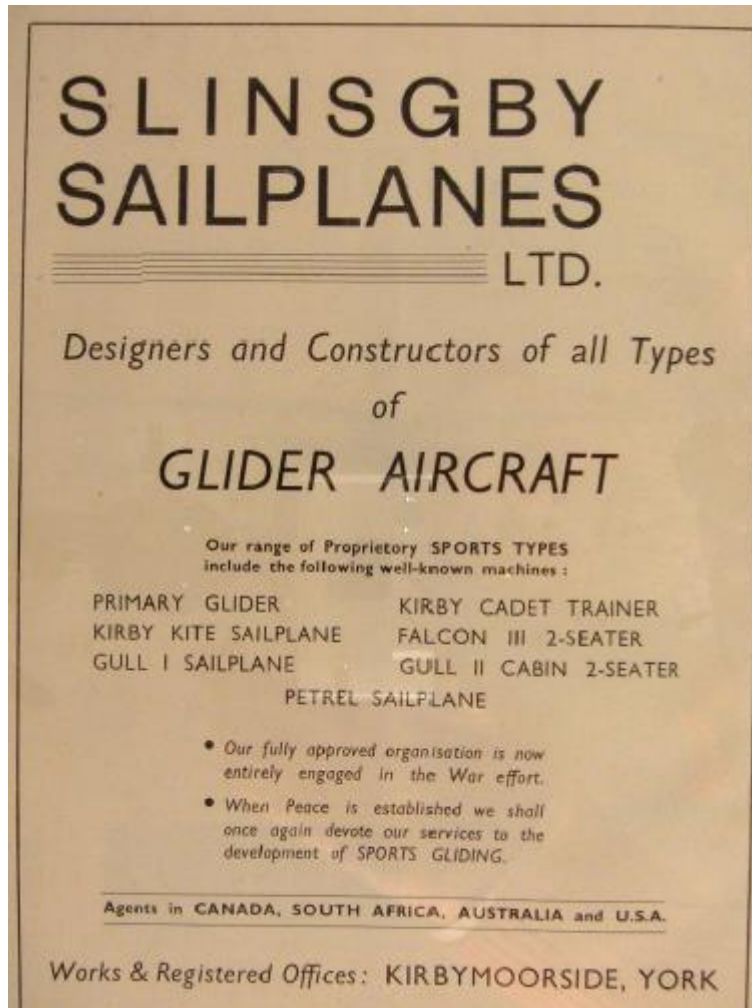
Gull 3 at Brooklands (Paul Haliday)

With the outbreak of WW2 Slingsbys ceased building gliders with the exception of the very many Cadet Mk1s they built for the ATC. They also stopped design work though of course they did design and build the Type 18 Hengist military glider. Initially things looked very bleak for the factory but a contract for Anson rudders kept them going. Eventually with the Hengist and Cadet they were kept very busy – especially with the repair work for the crashed Cadets.



(The Hengist Type 18. Wikipedia – public domain)

It's interesting to note that the Sailplane & Glider magazine ceased production with Volume 11 Number 6 Nov-Dec 1940 and resumed with Volume 12 1st February 1944.



(The Slingsby advert, Sailplane & Glider 1st Feb 1944)

Apart from possibly some Kirby Cadets no more examples of the above listed gliders were ever made by Slingsbys. They started post WW2 with an entirely new set of designs – T21, Gull 4, Kite 2, to name 3. However, these sit with Part 2 of “A History of British Gliding” and not with this Part 1 document!

A detailed article I've written on Slingsby gliders can be accessed from the following link:

http://www.glidingheritage.org.uk/documents/articles/slingsby_guide_v3.pdf

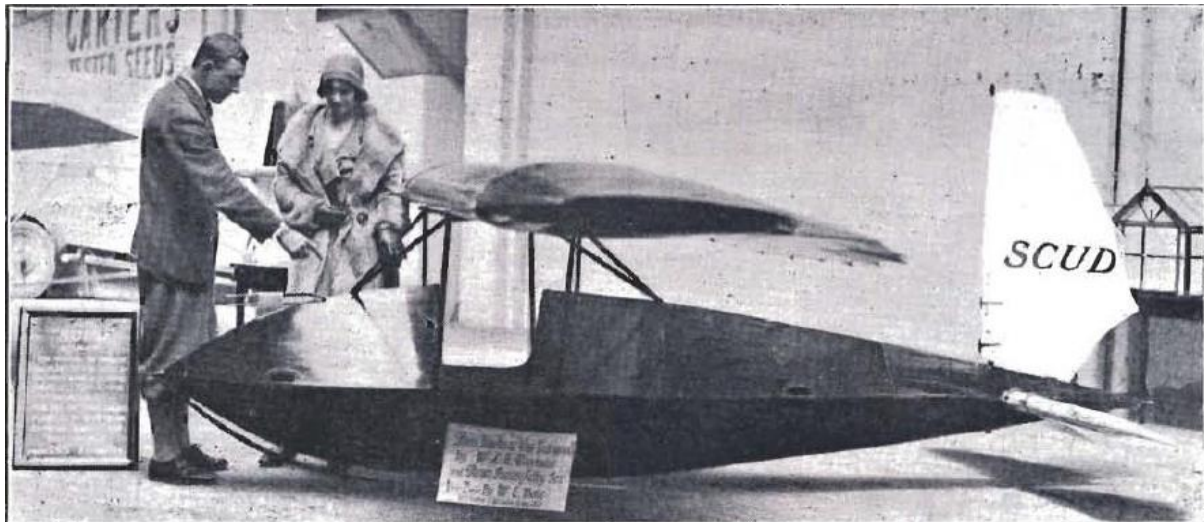
Abbott-Baynes Sailplanes Ltd – the Scuds

The company was formed in 1931 by E.D. Abbott and L.E. Baynes as a subsidiary of E.D. Abbott who were a coach building company with their works at Wrecclesham near Farnham.

GLIDING HERITAGE CENTRE



In 1930 Leslie Baynes had designed the Scud 1 glider, the prototype was built by Brant Aircraft Ltd, near Croydon, and had its maiden flight on the 11th January 1931. At this point the Brant company ran into funding difficulties and after some haggling the rights to the Scud 1 were acquired by the new Abbott-Baynes Sailplanes Ltd.



GOOD BUSINESS.—Mr. Baynes illustrating special features of the "Scud," four of which have now been sold at the Glider Exhibition by E. D. Abbott Ltd.

(Sailplane & Glider 15th May 1931)

The Scud 1 proved to be a very tricky glider to fly. There were a number of crashes and unfortunately a fatality at the London GC on the 8th March 1931. This caused Baynes to extensively modify the glider with a longer fuselage and completely redesigned wings, this became the Scud 2.

SCUD 11

HIGH EFFICIENCY
SAILPLANES

ANNOUNCEMENT

In anticipation of sufficient orders being received to enable a batch to be constructed concurrently, with the large reduction in production costs that results, the price of SCUD 11 Sailplanes is reduced on all orders received by July 31st, 1933, to:

£98 AT WORKS

COMPLETE WITH
C. OF A. & A.S.I.
N.B.—After July 31st the price for single orders will have to be substantially increased.

SCUD POINTS

Very robust construction with high load factors at all speeds.
Fly covered wing giving great structural stiffness.
All materials to Air Ministry Approved Specifications.
Every part subjected to a rigid inspection.
Rigging and truing up eliminated by rigid bracing system without wires.
Flying instruments mounted without need to 2 minutes.
Aileron controls automatically disengage at wing joints.
Elevators and rudder disengage without need to 1 minute.
Elevator and rudder controls remain undisturbed.
All control wires run direct to levers with out pulleys.
Small handling and launching party required owing to light weight.
Unique shock absorber design makes steering impossible with bad landings.
Rear portion of cockpit makes crashing less dangerous.
Great manoeuvrability due to small amount of inertia.
Differential gear and design of ailerons give unusually good lateral control.
Safety when stalled owing to lateral control being restricted with minimum yaw.
Special design of wing and ailerons giving non-spinning tendencies.
Factory construction and inspection guaranteed by designer and backed by 17 years aircraft experience.
Design and construction certified airworthy by British Gliding Association.
Airspeed indicator, safety belt and Certificate of Airworthiness included in price.
Fights for all official competition and records.
General Build up to highest standards achieved in sailplane construction.

TRAILER complete with water-proof cover and brakes **£27**

E. D. ABBOTT
LIMITED
FARNHAM, SURREY

(Sailplane & Glider 23rd June 1933)

As to how many Scud 1s and 2s were built is uncertain, a best estimate is 12 likely split half and half. One original Scud 2 remains today (BGA 231), it's part of the Shuttleworth collection at Old Warden.



(Scud 2, BGA 231, at Lasham. Courtesy of Scale Soaring UK)

The final glider type designed by Baynes at E.D. Abbott's was the Scud 3. Only 2 were produced but the glider was an incredible leap forward in design compared with the Scud 1 and 2 that preceded it. The photo below says it all.



(The second Scud 3 built that first flew in 1936)

The design looks far too modern for 1935 when the first Scud 3 flew. It had a wheel just aft of the skid which was revolutionary for its time. Also revolutionary was that it had self-connecting controls. Originally designed as a pure glider the prototype was in fact completed as a self-launching glider – another first!



Prototype Scud 3 in 1935. Jack Dewsbury, one of Britain's best glider pilots at that time can be seen. A hand throttle at its wing tip enabled the wing tip holder to taxi the glider to the take off point.

i

(VGC News, Summer 1993)

The engine was a 2 stroke Villiers motorcycle engine of 250cc – barely enough to get it airborne. However, rather than being fixed the engine retracted back into a compartment in the fuselage behind the wings! You look at today's glass gliders with sustaining turbos and they have exactly the same design, and you think "Wow!" Leslie Baynes devised this back in 1935!

Quite amazingly both of the Scud 3s still exist and are airworthy today, virtually 80 years after they first flew. The second Scud 3 (G-ALJR) is based at the Gliding Heritage Centre at Lasham having been very kindly donated by the late and much missed Laurie Woodage. Abbott- Baynes made no more gliders after the Scud 3s, though Baynes continued to have quite a career as an engineer/designer! – see Wikipedia link below:

[http://en.wikipedia.org/wiki/L. E. Baynes](http://en.wikipedia.org/wiki/L._E._Baynes)

A detailed article I've written on the Abbott-Baynes gliders can be accessed from the following link:

<http://www.glidingheritage.org.uk/documents/articles/AbbottBaynesv2.pdf>

That concludes what I might term the “volume” builders of gliders. There were of course a number of other companies who tried to make a success through manufacturing gliders. Not too surprising that several of these were based close to Dunstable, the home of the London GC, and in the 1930s far and away the most important of the British gliding clubs.

For myself the most interesting was Scott Light Aircraft Ltd who produced the “Viking” gliders, just 5 of them.

A detailed article I’ve written on the Scott “Viking” gliders can be accessed from the following link:

<http://www.glidingheritage.org.uk/documents/articles/ScottVikingGlidersV7.pdf>

MAJOR AND FAMOUS GLIDING SITES OF THE 1930s THAT STILL OPERATE TODAY

I will describe four of them, not surprisingly all have slopes that allow hill soaring if the wind direction and strength is appropriate.

The London Gliding Club at Dunstable

The London GC is the second oldest in the country and began flying at its present site at the foot of the Dunstable Downs a bit SW of Dunstable town in the late summer of 1930.



The site is at the foot of the Downs which themselves are only 250 feet high at their maximum point, but enough to give hill soaring opportunities in a westerly wind. Initial training was by “bungee” launching from the top of the Downs, gliders were pulled up the slope by an endless rope driven by a stationary engine mounted on a car chassis. The London GC were one of the first in the country to

use a winch for launching. To begin with this was only for experienced pilots with a "C" badge carrying out circuits on days where the hill wasn't useable, also for passenger carrying. Eventually it came to be realised that a winch launch gave a useful margin of height that was very useful in trying to hill soar in marginal conditions. Following on from this winch launches started to be used for normal training flights.



(The London GC from the top of the Dunstable Downs. Courtesy of www.petes-walks.co.uk)

There's an excellent article on the early years of the London GC by Ted Hull that can be accessed from the following link: http://virtual-library.culturalservices.net/webingres/bedfordshire/vlib/0.digitised_resources/dunstable_article_gldingclub.htm

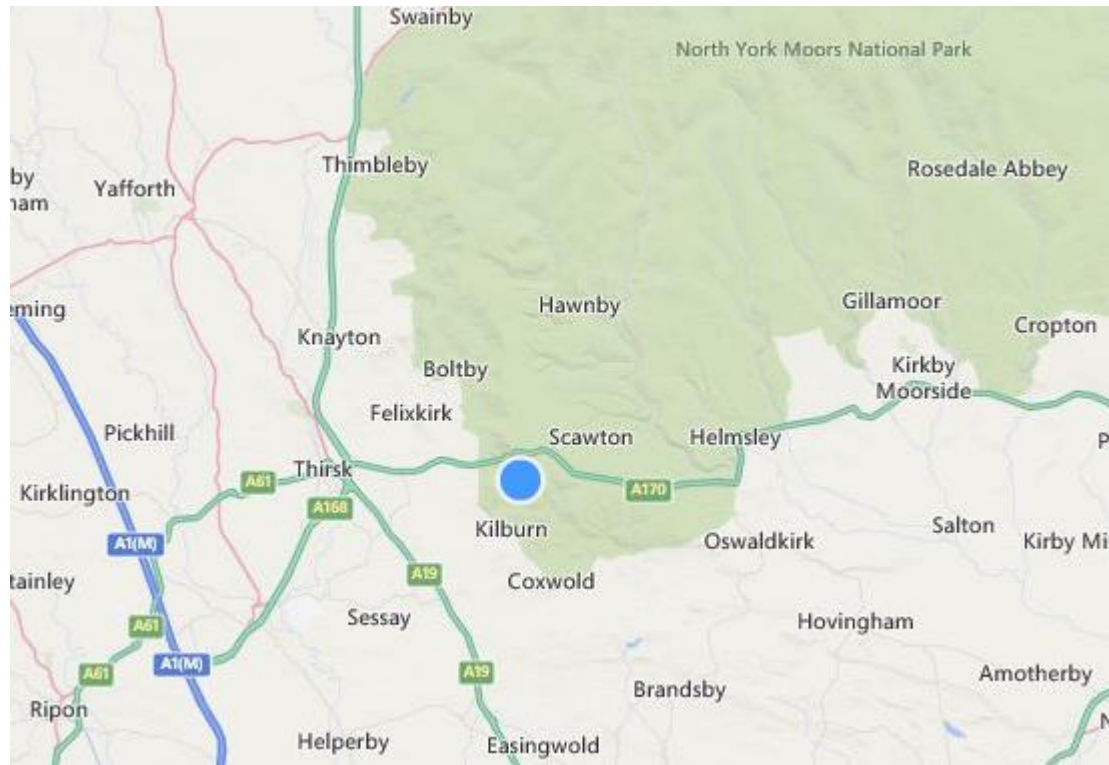
A further excellent article on the London GC in 1939 and 1940 written by another longstanding member, Geoff Moore, can be accessed from the archives of the Lakes Gliding Club :

<http://www.lakesgc.co.uk/>

Navigate via <Archive><Old Gliding Mags><Vintage Glider Club, VGC News><No 96 Spring 1999>

The Yorkshire Gliding Club at Sutton Bank

The site is approximately 6 miles east of the town of Thirsk at the top of an escarpment that forms the western edge of the North Yorkshire Moors National Park, the Hambleton Hills.



The Yorkshire GC was an amalgamation of the Ilkley and District GC and the Bradford and County GC formed under the chairmanship of Norman Sharpe in April 1934. The first time that the Sutton Bank was used as a launching site was on the 23rd July 1933. An expedition came up from Dunstable with the Crested Wren. Over the next few days several successful flights were made, the best of which was a very long flight indeed for the times of 2 hours 25 minutes by J.P.Dewsbury. Several good flights were also made from the nearby Ingleby Greenhow where Fred Slingsby had earlier gained his "C" certificate flying his Falcon 1. The success of the flying from Sutton Bank persuaded the BGA to arrange a competition there on October 7th and 8th. On Sunday 8th the meeting was blessed by good weather, a very good number of entrants, and a considerable number of good flights. It cemented in the name of "Sutton Bank" as an excellent site to fly from. It also got a considerable amount of publicity, the press estimate was that the Sunday attracted 10,000 spectators. On the following day, the 9th, J Laver set up a new British endurance record of 7 hours 22 minutes flying a "Dorsling" – a German secondary Prufing glider which was modified by the Dorset GC, hence the name.

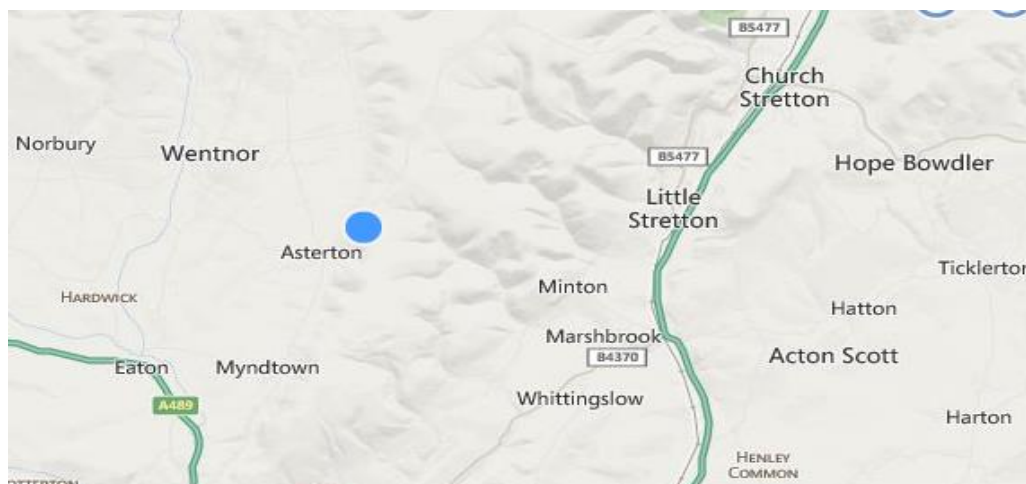
The January 1934 edition of Sailplane & Glider featured an article titled "The Sutton Bank Scheme" which sought support for forming a Yorkshire GC and using the Sutton Bank site as its base. Whilst enthusiastic support was received from the gliding fraternity there was initially a lot of local opposition – shooting rights, flying on Sundays and other holy days, too many public visitors watching the flying, to name three. However, negotiations continued with the Ecclesiastical Commissioners who owned the land, from the gliding side these were conducted by Norman Sharpe, Fred Slingsby, and Philip Wills. The outcome was that the negotiations were ultimately successful

which was reported in detail by Philip Wills in the May 1934 edition of *Sailplane & Gliding* – the Commissioners had finalised a lease with the British Gliding Association who saw Sutton Bank as very much complementary to the Dunstable site of the London GC in the development of British gliding.



(The Sutton Bank site of the Yorkshire GC showing the famous White Horse)

The Midland Gliding Club at the Long Mynd, Shropshire



The Long Mynd is a very beautiful range of hills and moorland just to the west of the small town of Church Stretton in Shropshire. “Mynd” in Welsh translates as “hill”, and on the western side of the range there is a long and steep escarpment running approximately north-south for several miles, so ideal for slope soaring in a westerly wind.

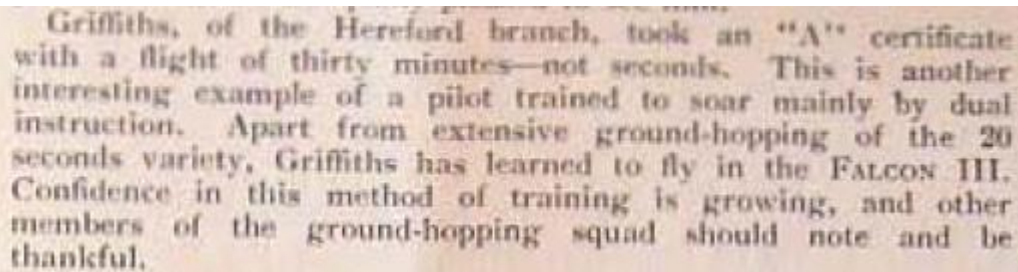
The first flights from the Mynd took place on Saturday the 11th August 1934 when a number of pilots, including Fred Slingsby, flew Espin Hardwick’s Falcon 2. Several soaring flights starting with a bungee launch were achieved, all successfully landing back on top near to the take-off point. The longest was 45 minutes by Slingsby and these flights underlined what a good site the Mynd potentially was. Espin Hardwick was a Birmingham stockbroker who’d learnt to glide at Dunstable but wanted to fly from a site nearer his home. He reached agreement with a tenant farmer to launch from the rented land at the top of the escarpment, but when the landowner found out about it he had it stopped – in case it disturbed the grouse, this subsequently became a celebrated law case! Not to be thwarted after losing the law suit Espin Hardwick bought 25 acres of land a little further along the hill above the small hamlet of Asterton, and the Midland GC is still there and flourishing 70 years later! The Midland GC was actually formed on the 17th October 1934 at a meeting convened by Espin Hardwick at the Mikado restaurant in Birmingham, Hardwick being elected as chairman.



(The Midland GC at the Long Mynd looking to the south west. Courtesy of Paul Haliday. The white flecks aren’t down to a bad photo, they’re sheep!)

Flying commenced at the new site on Sunday 20th October 1935 but to begin with only experienced pilots having their “A” and “B” and judged capable of soaring were allowed to launch from the Mynd itself. The club had another site, first used on Boxing Day 1934, at Handsworth, near Birmingham, which had a slight slope, and this is where the initial training was done using the “solo method” of

ground slides followed by higher and higher “hops”, the first club glider was a Slingsby T3 Primary. Later in the year Castle Bromwich airfield was also frequently used for the more experienced members employing auto-towing to launch. A very progressive club the Midland, in 1935 they also started training operations at Northfield aerodrome (which became known as the “Austin” section), Birmingham, and at Hereford. Members did their primary training at either Birmingham or Hereford and “graduated” to the Mynd, hopefully to achieve greater things especially gaining a “C” certificate, this was still the situation at the end of 1936. Note that Espin Hardwick ordered the first Slingsby Falcon 3 two-seater and this arrived at the Mynd in November 1935. In early 1936 via a typically generous gesture he agreed the Falcon 3 could be used for training purposes at the Mynd site. Use of the Falcon 3 for training and passenger flights became more and more regular, and the assumption is, from Sailplane and Glider reports, that by the spring (latest) of 1938 all of the Midland GC’s flying had switched to being solely at the Mynd.



Griffiths, of the Hereford branch, took an “A” certificate with a flight of thirty minutes—not seconds. This is another interesting example of a pilot trained to soar mainly by dual instruction. Apart from extensive ground-hopping of the 20 seconds variety, Griffiths has learned to fly in the FALCON III. Confidence in this method of training is growing, and other members of the ground-hopping squad should note and be thankful.

(Excerpt from the Midland GC report in the May 1937 edition of Sailplane & Glider)

The Derbyshire and Lancashire club, Camphill



The Derby and Lancs club is situated in the middle of the Derbyshire Peak District just north of the village of Great Hucklow. The site is almost always referred to as “Camphill” after the Iron Age

enclosure which was at the south side of the airfield. Before becoming a gliding site it was Camphill Farm and the original farmhouse, now a listed building, became the clubhouse. Camphill is a hill top site with easy access to good ridges of 3 miles for a westerly wind (Bradwell Edge) and 4 miles for a southerly (Eyam Edge). First use of the site is reported as the 25th November 1934 when R.G. Robertson launched from the top of Eyam Edge in the "Golden Wren" right outside the famous Barrel Inn which is there to this day.

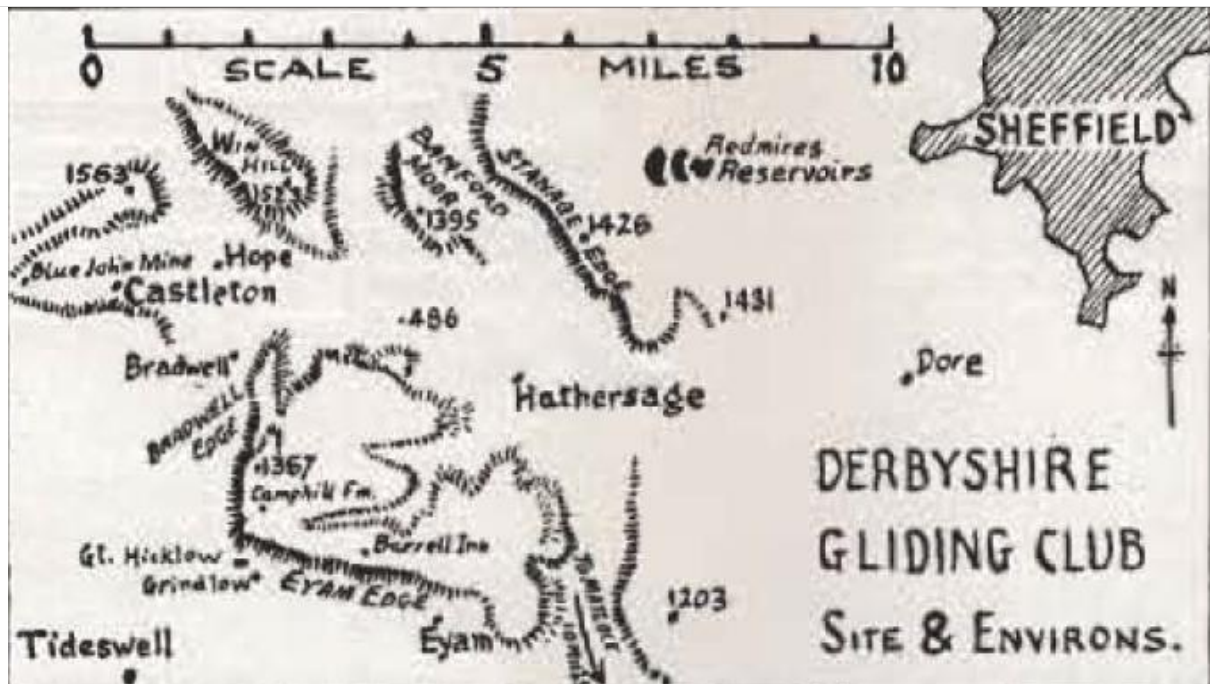


(Sailplane & Glider, May 1935)

More flying in February from Bradwell and Eyam Edges was reported in the April 1935 edition of *Sailplane and Glider* – the club is known as the Derbyshire GC at this point. Of most interest, however, was the news that negotiations were underway for the lease of a permanent club site on the top of Bradwell Edge. The May edition of *S&G* reported these negotiations as successfully concluded, and that work was well underway to prepare the site for club use. The May edition also reported that the first visiting pilots in Dewsbury and Nicholson of the London GC had arrived with their Rhonbussard, and over Easter had enjoyed some very good flights. Sunday 28th April was the first day the Camphill site was used for training with their RFD "Dagling" Primary. For the experienced pilots some launches were also made from Mam Tor, 5 miles to the NW of Camphill.

On the 11th June Robertson in the Golden Wren achieved the first really good cross country from Camphill when he flew 52 miles to land near York, this flight completed his Silver C which was the third on the British register and number 75 on the international list.

I haven't been able to find an exact date, but the Derbyshire GC became the "Derbyshire and Lancashire GC" sometime in the late winter of 1935 when the gliding section of the Lancashire Aeroclub at Manchester amalgamated with the Derbyshire GC.



(Schematic plan of the Camphill site in 1935)



(The Camphill site in winter looking from the north)

COMPETITION GLIDING

Where there's sport there's competition! The early competitions were between nearby clubs and

usually took the form of the winning club achieving the greatest overall airborne time by totting up the times of its individual gliders. In the very early days of 1930 and 1931 this normally didn't amount to more than a few minutes in total!

The first serious competition which attracted a good number of entrants, some of whom had to travel a good distance, was organised by the BGA at Sutton Bank over a weekend in October 1933. The Sunday produced good weather which resulted in several really good flights. The success of this event persuaded the BGA to go ahead and secure tenure of the site with a view to it becoming a site of national importance, like Dunstable, and where National competition events could be held on a yearly basis.

The 1934 National event at Sutton Bank

This was held over a whole week, 1st to the 9th September inclusive. There was flying on every day with 6 of them proving to be good to excellent for soaring. The two really notable days were Tuesday 4th and Saturday the 8th. On the 4th three pilots, Buxton, Collins, and Dewsbury became involved with a big thunderstorm that came through in the early evening. Mungo Buxton circled up into it and his Scud 2 glider was taken up (it was out of control most of the time!) to 8000 feet and achieved a new British height record – in reality he was rather lucky to survive.

Flights on Saturday, September 8th					
No.	Aircraft.	Pilot.	Start.	Landing.	
66.	Dorsling	... Laver	7.39 a.m.	8.0	p.m.
67.	Tern	... Little	10.44	12.5	..
68.	Rhönadler	... Collins	10.47	12.14	..
69.	Golden Wren	... Slater, A. L.	10.51	11.57	a.m.
70.	Grunau Baby	... Liddell	11.0	11.20	..
71.	London Scud	... Buxton	11.7	12.2	p.m.
72.	B.A.C. VII	... Falla	11.35	12.16	..
73.	Grunau Baby	... Wynne	11.49	12.42	..
74.	Falcon II	... Hardwick	12.0	1.2	..
75.	Golden Wren	... Smith, G. O.	12.15 p.m.	1.38	..
76.	London Scud	... Briscoe	12.30	3.7	..
77.	Tern	... McGlashan	12.34	12.52	..
78.	Blue Wren	... Petre	12.44	12.57	..
79.	Falcon II	... Slater, A. L.	1.27	1.51	..
80.	Blue Wren	... Dewsbury	1.32	3.34	..
81.	Crested Wren	... Humphries	1.56	2.19	..
82.	Golden Wren	... Robertson	2.0	4.10	..
83.	Falcon II	... Slingsby	2.20	2.42	..
84.	Rhönadler	... Collins	2.39	3.49	..
85.	Crested Wren	... Petre	2.45	3.15	..
86.	Tern	... Refell	2.56	3.48	..
87.	Falcon II	... Humphries	3.1	3.30	..
88.	London Scud	... Wills	3.27	5.5	..
89.	Falcon II	... Testar	3.47	4.20	..
90.	Stedman	... Stedman	4.15	5.25	..
91.	Falcon II	... Hardwick	4.25	5.8	..
92.	Golden Wren	... Humphries	4.28	5.43	..
93.	Tern	... Little	4.31	5.59	..
94.	Prüfling	... Meads	5.14	5.19	..
95.	Falcon	... Deane	5.32	5.37	..
96.	Crested Wren	... Petre	5.42	5.50	..
97.	Golden Wren	... Collins	6.3	6.16	..

(Details of the flights on the 8th September 1934 at Sutton Bank)



A lot of flights over an hour on Saturday the 8th, the highlight being the flight of J.Laver of the Dorset club setting a new British endurance record of 12 hours 21 minutes flying a “Dorsling”. Laver had previously held the record, again with the Dorsling, achieved at Sutton Bank in October 1933 with 7 hours 22 minutes. That had subsequently been beaten by Flying Officer Mole in May 1934 at Dunstable with 8 hours 8 minutes, so a very substantial improvement. Today we look at endurance records, shake our heads, and say “Hey, this is akin to “Pole squatting”!” However, back in the 1930s “endurance” was seen as an important record.

Note for the 1934 Sutton Bank competition there wasn’t the concept of an outright “National Champion”. Firstly there was a Daily prize where the organisers decided on the day, dependent on the expected weather conditions, what form of task had to be performed – it could be highest height achieved above launch for instance, or the longest flight. Secondly at the end of the meeting awards were presented for the overall best flight during the whole meeting for a.) Distance, b.) Height gained c.) Duration d.) Out-and-return distance. Two sets of awards, one for gliders of unlimited span and one for those with a span of no more than 46 feet.

Finally 3 cups were awarded for distance, height, and duration. These were for the very best flights in the whole country achieved since the previous National meeting – which was the October 1933 event. Effectively this was a Yearly Award occasion, and underlines how importantly the BGA viewed the Sutton Bank National event.

- **Wakefield trophy** for the longest distance flight. Won by Eric Collins for a flight of 98 ½ miles on August 6th from Dunstable.
- **De Haviland Cup** for the greatest height gain above launch. Won by Mungo Buxton with 7,970 feet for his flight in the cumulo-nimbus at the 1934 meeting on the 4th September.
- **Volk Cup** for the greatest duration. Won by J.Laver for his flight of 12 hours 21 minutes on the 8th September.
- **Manio Cup** for the greatest pre-declared Out-and-return distance flown at the meeting itself. Won by Eric Collins for his flight on the 3rd September.

The competition was seen to be a considerable success. 15 competing gliders (several had more than one pilot flying them) achieved a total airborne time of over 106 hours. Yes, there were a number of crashes but thankfully none of the pilots were seriously injured. Several gliders came from Dunstable, the furthest distance travelled to get to Sutton Bank was by the “Dorsling” of the Dorset GC and the Scud 2 of the Ulster GC.

The 1935 National event at Sutton Bank

This took place from Saturday 24th August to Sunday 1st September. The format was the same as for 1934 with the exception that “duration” was no longer a Meeting prize category and was replaced with a new category of the “Longest flight to a pre-declared goal”. This emphasises the increasing importance that cross country flights were seen as having. One change with respect to launching in that for the 1934 event the great majority of launches had been by bungee, just a few by winch, and this was reversed in 1935 where the great majority were by winch.

The annual cups were awarded to whoever held the best flight in the category as long as it was achieved with a flight between the 10th September 1934 and the 1st September 1935.

20 gliders were entered (see list below) and their total recorded flight time was a little over 134 hours.

List of Machines			
Aircraft.	No.	Pilots.	Total Flying Time.
Hjordis ...	1	Wills ...	9 hrs. 50 mins.
Khönigswald ...	2	Nicholson, Cooper ...	20 .. 11 ..
Grunau Baby ...	3	Liddell ...	4 .. 34 ..
Grunau Baby ...	5	Filmer ...	3 .. 37½ ..
Falcon ...	6	Wynne, Metcalfe, Slingsby ...	16 .. 31 ..
Falcon ...	7	Laver, Slingsby ...	11 .. 24 ..
Falcon ...	8	Cooper, Hardwick, Hastwell, Nicholson, Rainey, Sharpe, Wills, Wordsworth ...	3 .. 40 ..
Scud II. ...	9	Briscoe, Bergel, Wills ...	6 .. 44½ ..
Scud II. ...	10	Harris ...	.. .. ..
Grunau Baby ...	11	Reffell, Bergel ...	3 .. 41 ..
Kirby Kite ...	12	Neilan, Slingsby, Bergel ...	9 .. 44 ..
Tern ...	13	Little ...	1 .. 48 ..
Falcon III. ...	15	Slingsby, Hiscox, Bergel ...	2 .. 37 ..
Scud II. ...	16	Barker, Bergel ...	5 .. 27 ..
Golden Wren ...	18	Smith, Slater, Robertson ...	15 .. 35 ..
Blue Wren ...	19	Bell ...	8 .. 45 ..
Pegasus ...	20	Penrose ...	6 .. 29 ..
Stedman ...	23	Stedman ...	2 .. 22½ ..
B.A.C. VII. ...	24	Falla ...	.. .. 4 ..
Prüfling ...	26	Hatcher, Jameson ...	1 .. 25 ..
Total flying time for the Meeting ...			134 hrs. 19½ mins.

And the major annual awards:

- **Wakefield Trophy** (furthest distance) J.C. Neilan for 54 miles in a Kirby Kite achieved at the meeting on the 27th August.
- **De Haviland Cup** (greatest height gain) Philip Wills with 5400 feet in the Hjordis
- **Manio Cup** (best out-and-return distance flown at the meeting) Philip Wills with 24 miles in the Hjordis on the 29th August.

So apart from the out-and-return distance no improvements over the 1934 event. Note Eric Collins had been sadly killed on the 30th July 1935 whilst performing aerobatics in a Grunau Baby at an Alan Cobham display at Upwood – he'd attempted an outside loop, known as a bunt, which the glider was just not stressed for.

The 1936 National event at Camphill

After 2 years of being held at Sutton Bank the BGA decided to switch their annual competition to Camphill, the home of the Derby and Lancashire GC, despite necessary work on the site being far from completed. Again of course a hill soaring site.

The event took place between Saturday August 29th and Sunday the 6th September. There was no change in the format, it was kept the same as at Sutton Bank the previous year.

Key List of Competing Machines.	
1. HJORDIS.	15. KIRBY KADET.
2. RHÖNSPERBER.	17. GOLDEN WREN.
3. RHÖNADLER.	18. WHITE WREN.
5. CAMBRIDGE I.	19. CRESTED WREN.
6. GRUNAU BABY.	20. GRUNAU BABY.
7. KIRBY KITE.	22. FALCON III.
9. KIRBY KITE.	23. WILLOW WREN.
12. GRUNAU BABY.	24. CAMBRIDGE II.
13. GRUNAU BABY.	26. NACELLE DAGLING.

[Note.—GRUNAU BABY machines were owned as follows: No. 6, S. Hobson and brothers; No. 12, F. C. Coleman; No. 13, W. E. Filmer; No. 20, G. B. Baker.]

So slightly less gliders than at Sutton Bank in 1935.

Not as good as the preceding year's competition primarily due it being plagued by low cloud bases and much rain, which meant whilst there was a lot of hill soaring carried out not much happened by way of cross countries. In fact there were only 3 genuine cross countries, the best of which was by Philip Wills, 45 miles, on Saturday 5th in the Hjordis – the glider was badly damaged in the field landing and couldn't take part on the final day. The best day Wednesday 2nd, when three 5 hour flights were successfully flown.

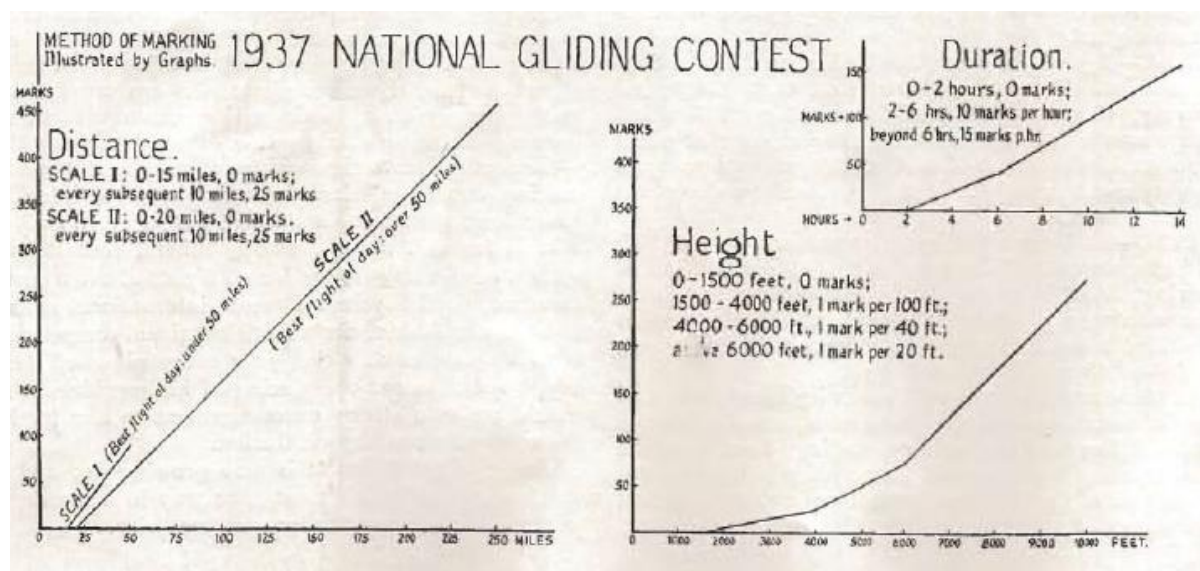
Wednesday, September 2nd.				
		Time.		
Machine No. and Pilot.	Club.	h.	m.	s.
18. Morland	London	5	46	15
(Won Daily Prize and completed first test for "Silver C" Licence.)				
1. Wills	London	2	0	0
5. Slazenger	Cambridge Univ.	5	7	25
(Completed first test for "Silver C" Licence.)				
17. Slater	Derby and Lanes.	5	3	35
(Completed final test for "Silver C" Licence.)				
20. G. B. Baker... ..	London	—	18	0
25. Turner	Cambridge Univ.	—	18	0
(Landed at the bottom.)				
7. Hiscox	London	4	25	49
(Landed at the bottom.)				
24. Furlong	London	4	29	25
3. Robertson	Derby and Lanes.	4	4	10
13. Filmer	Southdown	2	20	30
20. Baker	London	—	28	20
19. Thomas	Derby and Lanes.	2	57	28
2. Dewsbury	London	1	39	30
20. Smith	Derby and Lanes.	—	32	30
23. Lingford	Cambridge Univ.	1	11	30
9. Sproule	Yorkshire	—	26	20
1. Wills	London	1	0	3

And the annual awards (flights between 1st September 1935 and 6th September 1936) :

- **Wakefield Trophy** (furthest distance). Philip Wills, 104 miles in the Hjordis on the 6th July from Dunstable.
- **De Haviland Cup** (height gained). Philip Wills 5600 feet in the Hjordis, 26th July at Dunstable.
- **Manio Cup** (best out-and-return at the meeting). Not awarded due to no qualifying flight.

The 1937 Nationals at Camphill

8 days, Sunday 29th August to Sunday 5th September, rather than 9. There was one very important change to the format of the competition and that was the introduction of a scoring system which gave marks for all of distance achieved, height gained, and duration. This was calculated in such a way that the points were equivalent, and added together gave an overall score. For the first time this enabled a pilot to become the undisputed National Champion.



Before each flight the pilot had to declare whether he was attempting height/distance or duration. If the former then points could be scored for both height gained and distance flown. If the latter then points were only scored for the time airborne. Note there were minimum thresholds that had to be passed before any points could be scored.

24 competing gliders, 5 in the "A" class (span greater than 46 feet) and 19 in the "B" (max span 46 feet + all two seat gliders).

The 1937 Nationals turned out to be a truly great competition, far and away the best competition of the four that had been held. 7 flying days where the total flying time of the competing gliders was just over 279 hours, this from 231 launches, so the average flight time was 1 hour 12 minutes which was quite something.

3 really good cross country days on the Thursday, Friday, and Saturday, the longest distance of the competition 85 miles to Flamborough Head by J.P. Dewsbury in the Rhonsperber on the 2nd.

Placing of Machines

Order.	No.	Machine.	Points.
1st	1	HJORDIS	477
2nd	8	RHÖNSPERBER	408
3rd	6	K. Lingford's KIRBY KITE	278½
4th	2	RHÖNBUSSARD	239
5th	14	Cambridge KIRBY KITE	212½
6th	4	CAMBRIDGE II	204
7th	12	Newcastle KIRBY KITE	181
8th	16	C. Kaye's KIRBY KITE	158½
9th	18	P. Brown's FALCON I	158
10th	19	White GRUNAU BABY II	145
11th	5	SCUD II	102
12th	22	F. Slingsby's KIRBY KITE	93
13th	3	TERN	83
14th	10	CONDOR	78
15th	7	Derby and Lancs. GRUNAU BABY	37
16th	9	H.17	35½
17th	23	CRESTED WREN	19
18th	24	D. G. Hiscox's KIRBY KITE	10
19th	15	F. Coleman's GRUNAU BABY	5½

Awards and Prizes

Open Championship.—No. 1, HJORDIS; pilot: P. A. Wills. 477 points.

Individual Contest Prize.—No. 1, HJORDIS; pilot: P. A. Wills. 477 points.

Open Team Prize.—No. 6, KIRBY KITE; pilots: K. Lingford and J. E. Simpson. 278½ points.

Club Team Prize.—No. 8, RHÖNSPERBER; pilots: J. P. Dewsbery, C. Nicholson and R. P. Cooper. 408 points.

Aggregate Duration Prize.—No. 2, RHÖNBUSSARD; pilots: E. Swale, L. R. Robertson and G. Shepard. 20 hours 35 minutes.

Altitude Prize.—No. 5, SCUD II; pilot: P. B. N. Davis. 5,100 feet.

Distance Prize.—No. 2, RHÖNSPERBER; pilot: J. P. Dewsbery. 85 miles to Flamborough Head.

Manio Cup.—For best goal flight. No. 1, HJORDIS; pilot: P. A. Wills. Goal flight to North Coats Aerodrome. 75 miles.

Volk Cup.—For longest duration flight during past year. J. V. Rushton. Eight hours at Midland Gliding Club, July 24th.

Wakefield Cup.—For longest distance flight during past year. P. A. Wills. Dunstable to Dover, 95 miles, on August 15th.

De Havilland Cup.—For greatest height during past year. Not awarded. (Previous performance not beaten.)

List of Machines				
No.	Type.	Class.	Pilots.	Club.
1.	HJORDIS ...	A ...	P. A. Willis	London
2.	RHONUSSARD ...	A ...	H. Swale	Derby & Lanes.
			G. Shepard	"
			I. R. Robertson	"
3.	TERN ...	A ...	G. A. Little	Southdown
4.	CAMBRIDGE II ...	B ...	R. S. Rattray	London
			E. J. Furlong	"
5.	SCUD II ...	B ...	P. B. N. Davis	London
6.	KIRBY KITE ...	B ...	K. Lingford	Cambridge Univ.
			J. E. Simpson	"
7.	GRUNAU BABY II...	B ...	D. Upton	Derby & Lanes.
			G. M. Thompson	"
			H. Booth	"
			S. Dickson	"
8.	RHONSERBER ...	A ...	J. P. Dewsbery	London
			R. P. Cooper	"
			C. Nicholson	"
9.	H.17 ...	B ...	M. F. Barnes	Midland
			B. H. T. Oliver	"
			W. G. Edwards	"
10.	CONDOR ...	A ...	F. Thomas	Derby & Lanes.
			A. L. Slater	"
			G. O. Smith	"
			R. G. Robertson	"
11.	NACELLED DAGLING	B ...	S. Dickson	Derby & Lanes.
12.	KIRBY KITE ...	B ...	S. C. O'Grady	Newcastle
			R. M. Smart	"
			M. S. Roberts	"
14.	KIRBY KITE ...	B ...	K. W. Turner	Cambridge Univ.
			J. E. Simpson	"
15.	GRUNAU BABY II...	B ...	F. S. Coleman	Derby & Lanes.
16.	KIRBY KITE ...	B ...	C. A. Kaye	Derby & Lanes.
			A. L. Slater	"
			A. Davies	"
17.	GOLDEN WHEEN ...	B ...	G. O. Smith	Derby & Lanes.
			A. L. Slater	"
			R. G. Robertson	"
18.	FALCON I ...	B ...	P. Brown	Derby & Lanes.
			B. Thomas	"
19.	GRUNAU BABY II...	B ...	H. C. Wynne	Midland
			P. G. Everall	"
			J. V. Rushton	"
20.	GRUNAU BABY II...	B ...	A. H. Ruffell	Southdown
21.	KIRBY KADET II ...	B ...	A. & C. Verity	Derby & Lanes.
			A. Goodfellow	"
22.	KIRBY KITE ...	B ...	Mrs. Price	London
			R. F. Stedman	Yorkshire
			F. N. Slingsby	"
23.	CRESTED WHEEN ...	B ...	L. C. Withall	London
24.	KIRBY KITE ...	B ...	D. G. O. Hiscox	London

The 1938 Nationals at Dunstable

The competition ran from Sunday 10th to Sunday 17th July, which is getting on for 2 months earlier than the previous four Nationals held at Sutton Bank and Camphill. This decision to hold an earlier event was in the hope and expectation that they would get better thermal conditions at Dunstable in mid July as compared with the end of summer. Note the slope formed by the Dunstable Downs is only 250 feet above ground level at its highest, the ridges at Sutton Bank and Camphill far higher, and therefore much better for hill soaring.

In fact the weather turned out to be disappointing, there were only two really good days, the Wednesday and final Sunday, on which several cross countries were done. That said the longest distance of the whole contest, 106 miles, was flown by Kit Nicholson to Lowestoft on Monday 11th. Watt managed 87 miles on that day, the next best distance being 33 miles.

28 gliders took part and for the first time in a Nationals the entry list was restricted, Also for the first time aero towing was used as an available launching method. There wasn't an outright National Champion in 1938 as Nicholson and Dewsbury shared the flying in the winning Rhonsperber.

Open Contest: Final Position

No.	Sailplane	Pilots	Points
30	RHÖNSPERBER	C. Nicholson, J. P. Dewsbery...	464
23	KING KITE ...	P. M. Watt ...	459½
25	RHÖNADLER...	J. S. Fox, P. B. N. Davis ...	413
24	MINIMO...	P. A. Wills ...	332½
28	RHÖNBUSSARD	R. Pasold, I. Pasold ...	200½
26	RHÖNBUSSARD	R. P. Cooper, Mrs. J. Price ...	176
14	H-17 ...	F. T. Gardiner, J. T. M. Parker ...	153½
17	KIRBY KITE	D. F. Greig, J. C. Dent, G. H. Stephenson ...	151½
13	KIRBY KITE	J. W. S. Pringle, J. T. M. Parker, R. C. G. Slazenger...	141½
27	RHÖNBUSSARD	S. Humphries, L. C. Withall...	117
1	CAMBRIDGE I	G. W. Pirie, M. H. Maufe, C. J. Wingfield ...	92½
12	KIRBY KITE	J. V. Rushton, G. Edwards, R. F. James ...	81
2	CAMBRIDGE II	E. J. Furlong, O. H. Furlong ...	70½
22	KIRBY KITE	J. E. Simpson ...	68½
21	KIRBY KITE	S. C. O'Grady, R. M. Smart ...	63
18	KIRBY KITE	K. G. Wilkinson, A. B. Wilkinson, K. M. Chirgwin ...	55
4	GRUNAU BABY	E. Taylor, J. Parker, J. G. Shepard, G. M. Thompson ...	53
10	KIRBY GULL	A. Davies, L. R. Robertson, G. O. Smith ...	49
20	KIRBY KITE	F. J. Davies, R. F. James, B. T. Oliver ...	41½
15	KIRBY KITE	P. Brown, E. Swale ...	39
29	RHÖNBUSSARD	E. Swale, J. G. Shepard, L. R. Robertson ...	35½
19	KIRBY KITE	Miss A. Johnson ...	29
6	GRUNAU BABY	N. W. Burnett, H. C. Bergel, A. Ivanoff ...	18
8	GRUNAU BABY	G. M. Thompson, S. D. Dickson, R. F. James ...	8
9	GRUNAU BABY	K. W. Turner ...	2
3	CONDOR ...	E. Thomas ...	-
5	GRUNAU BABY	Miss A. C. Edmonds, R. H. Shaw, J. Saffery ...	-
31	TERN...	G. A. Little, A. H. Reffell ...	-

Awards and Prizes

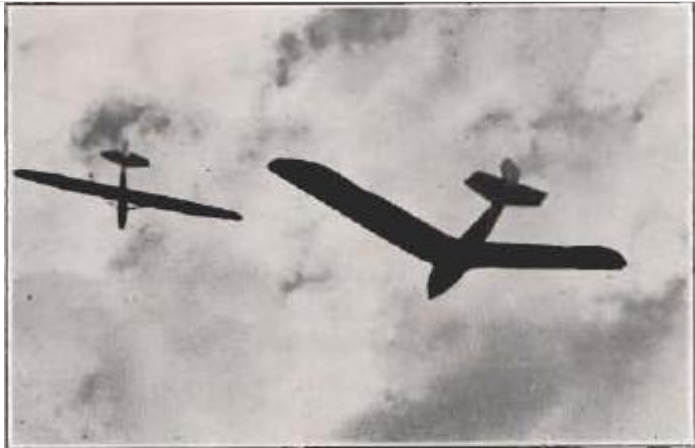
LORD WAKEFIELD TROPHY for best distance during the year: P. A. Wills, 206 miles.

DE HAVILLAND CUP for best height during the year: P. A. Wills, 10,080 feet.

VOLK TROPHY for best duration during the year: W. B. Murray and J. S. Sproule, 22 hours 13 minutes 35 seconds.

MANIO CUP for best goal flight during the contests: C. Nicholson for cross-wind goal flight from Dunstable to Lympe, 87 miles.

The Volk Trophy "best duration" award shown above deserves mention as it was actually achieved at Dunstable on the 9th and 10th of July in a Slingsby Falcon 3, though this was outside of the Nationals competition. At the time this set a new duration world record for a two-seater glider. An amusing photo in respect of this flight below.



While putting up the new international duration record for two-seaters, W. B. Murray and J. S. Sproule lost their last packet of sandwiches in the fuselage, and dropped an urgent message asking for more. Here is R. H. Shaw, in a "Grunau," trying to comply with their request, the packet can just be seen dangling below him, but whenever it came nearly within reach of the hungry ones, the drag wires on the "Falcon III's" nose swept it aside.

(Sailplane & Glider, August 1938 – 22 hours 13 minutes flown on the 9th/10th July)

The 1939 Nationals at Camphill

The last Nationals held until post WW2, Sunday 9th to Sunday 16th July. This was not a good competition! Firstly the weather was poor, which is reflected in the total points for 1939 being 2797 as against 3312 in 1938 and 2924 in 1937, this despite the overall standard of pilotage being significantly better. Secondly, and very sadly, there were two fatalities.

The first fatal accident occurred on Tuesday 11th when W.E. Godson got into a spin over the site from which he could not recover. He was flying a Manuel Kestrel which he'd built from plans, it's worth noting that all of the Manuel Wrens and Kestrels were prone to spinning if mishandled. The second accident was on Saturday 15th when Frank Charles flying the prototype Slingsby Petrel could not release the winch cable and dived into the ground from 200 feet.

Awards and Prizes

DE HAVILLAND CUP for best height during the past year: P. A. Wills, 14,170 ft.

VOLK TROPHY for best distance during the past year: C. Nicholson, 162 miles.

[Probably this should be the Wakefield Trophy, which is offered for distance; in which case the Volk Trophy, offered for duration, would go to Flying Officer A. N. Young, for his flight of 13 hrs. 27 mins. last August.—ED.]

Markings in Open Contest

	<i>Aircraft</i>	<i>Entrant</i>	<i>Points</i>
8.	RHÖNSPERBER	C. Nicholson ...	595
2.	MINIMOA ...	P. A. Wills ...	573.7
17.	KIRBY GULL	D. F. Greig ...	329
10.	KIRBY KITE	Cambridge Club ...	327.1
19.	PETREL ...	Slingsby Sailplanes ...	292
25.	RHÖNBUSSARD	London Club ...	129
12.	RHÖNBUSSARD	Mrs. M. J. Price...	117.5
6.	MINIMOA ...	P. Brown ...	110
16.	KIRBY GULL	Derby and Lanes. Club ...	62
13.	VIKING ...	E. J. Furlong ...	49
15.	GRUNAU BABY	Derby and Lanes. Club...	39.3
28.	KIRBY KITE	Norfolk and Norwich Club	35.1
4.	GRUNAU BABY	H. Booth ...	33.1
26.	KIRBY KITE	Imperial College Club ...	32.1
27.	GRUNAU BABY	Bristol Club ...	25.5
3.	VIKING ...	W. E. Filmer ...	18.3
5.	KIRBY KITE	Yorkshire Club ...	12.4
22.	KIRBY KITE	C. A. Kaye ...	11
1.	RHÖNBUSSARD	E. Swale ...	6



After the flood on Sunday, July 16th. Note the Bristol Club's tent in mid-stream.

(A suitably dismal ending to a dismal competition!)

PROMINENT EARLY GLIDING PERSONALITIES

C.H. LOWE-WYLDE

Charles Harold Lowe-Wylde, known as “Jimmy”, was born in Newcastle-on-Tyne on the 4th February 1901. He served an apprenticeship with the aviation department of Armstrong Whitworth and Co Ltd and then spent 2 years in the RAF as a technical instructor. From there he moved to become the works planning engineer with the Blackburn Aeroplane and Motor Co in Phaleron, Greece, and came back to the UK as experimental production engineer at Supermarine Aviation. He was one of those who attended the famous Comedy restaurant lunch on the 4th December 1929, and whilst his subsequent ideas on gliding met a good amount of resistance at the time, there’s no question that he was a uniquely visionary figure at the start of the gliding movement in Britain.

MR. C. H. LOWE-WYLDE.



(Sailplane & Glider 17th May 1932)

- He founded the Kent Gliding Club on the 4th January 1930, the first British club.
- He was the first holder of the British “A” gliding certificate which he achieved on the 12th September 1930.
- He founded the British Aircraft Corporation (BAC) in the summer of 1930. In the next 2 years this went on to build 9 different types of glider. Many of the types BAC built had interchangeable components with easy rigging a key feature.
- Lowe-Wylde pioneered auto-towing as a launching method. No question that at the time the purists who insisted on bungee launching were holding pilot training, and hence the whole gliding movement, back.
- BAC designed and built the first British two-seater, the BAC VII.
- As an interesting idiosyncrasy BAC also designed and built the so called “Bat Boat”, the BAC

VIII, a glider that launched from and landed on water.

- Lowe-Wylde was hugely pro-active in marketing and promoting his BAC gliders. In 1931 he toured the country with a BAC VII giving demonstrations and flying passengers.



Mr. Lowe Wylde in the Douglas-engined BAC VII.
[*"Aeroplane"* photograph

(Sailplane&Glider 25th November 1932)

There's good indications that because of the resistance he was meeting from the traditionalists Lowe-Wylde was losing interest in gliders from the commercial perspective as 1932 progressed. The BAC VII was modified by the factory to take a 600cc Douglas motor cycle engine, the maiden flight taking place sometime in the autumn of 1932. This became known as the "Planette" and was put into production by BAC, the building of gliders had seemingly ceased. Sadly the "Planette" became Lowe-Wylde's downfall. On the evening of the 13th May 1933 he was flying the 4th built Planette at Maidstone. The first flight went OK though Lowe-Wylde subsequently made a number of control adjustments. On the second flight the Planette fell from about 800 feet and crashed with its engine still under full power. Lowe-Wylde was killed instantly. The exact cause of the accident was never established. It's been suggested that he was very much stressed due to over work. However, rather more likely is that the adjustments he'd made prior to his final flight were a major factor in causing him to lose control.

FRED SLINGSBY

Frederick ("Fred") Nicholas was born on the 6th November 1894, "Slingsby" being a very long established Yorkshire family name. He served in the Royal Flying Corp (to become the RAF) from March 1914 to February 1920, during this time being awarded the Military Medal for bravery whilst flying as a gunner/observer on a photo reconnaissance mission, taking over the machine and successfully landing it after the pilot had been killed. After leaving the RAF he bought into a wood working / furniture manufacturing company in Scarborough as a partner in 1920.

He was a founder member of the Scarborough Gliding Club, one of the earliest of the British clubs, formed in February 1930. With his carpentry expertise and workshop facilities he was appointed ground engineer, which unexpectedly for him led to a complete change in his life that was to have a huge impact on the development of British gliding.



(Fred Slingsby about to bungee launch in his Falcon 1)

- After he'd completed building his Falcon 1 in the spring of 1931 Slingsby started to visit quite a few sites and gained a good reputation for himself and the Falcon. In the autumn of 1932 the BGA organised a competition at Ireth in Lancashire, the home of the Furness Gliding Club. Flying the Falcon he won a number of awards, also at this meeting Mungo Buxton of the London GC borrowed the glider and flew what was a then a record distance for a British cross country of 13 miles to Lake Coniston – this flight duly won the BGA's Wakefield Trophy for that year.
- It was at the Ireth meeting that Slingsby met Espin Hardwick, a Birmingham stockbroker. Hardwick was very impressed with the Falcon 1 and managed to persuade Slingsby to build him a slightly modified one. This was the Falcon 2 and effectively marks the start of Fred Slingsby's career as a professional glider manufacturer.
- Espin Hardwick was responsible for the founding of the Midland GC and also its famous Long Mynd site. The very first glider flights from the Mynd took place on the 11th August 1934.

Several soaring flights took place that day using the Falcon 2, the very first of these saw Fred Slingsby as the pilot.

- Slingsby was majorly involved in the creation of the Yorkshire GC and especially in the negotiations with the Ecclesiastical Commissioners that led to a lease being granted for the Sutton Bank site in the spring of 1934.
- In September 1934 Slingsby moved his glider business from the tramworks at Scarborough to Kirkbymoorside, a name forever associated with Slingsby gliders.



(Courtesy of Scale Soaring UK. Fred Slingsby kneeling down next to the cockpit of a Kite. The lady next to him is the famous Amy Johnson. I suspect the gentleman with the pipe is Major J.E.D. Shaw, who gave Slingsby so much assistance in setting up his factory and getting established at Kirkbymoorside)

Slingsbys were to be responsible for the design of over 1900 wooden gliders. Not all were constructed by the factory as quite a few were built under licence by companies such as Martin Hearne and Ottley Motors, plus a few built from sold plans.

Whilst it's outside of the time horizon of this particular "Part 1" document it should be noted that Philip Wills won the 1952 World Gliding Championships in Spain flying a Type 34 Sky. This really put Slingsby on the world map as a glider manufacturer, there were even congratulations in the House of Commons.

Glider production at Kirbymoorside finally ceased in 1982. However, Fred Slingsby's health had started to deteriorate well before this in 1962, and two years later he retired at the age of 70. He died in May 1973 at Ryedale, Yorkshire, and so passed a gliding legend.

ERIC COLLINS

Eric Collins career in gliding was sadly short but certainly meteoric. He started gliding at Dunstable in January 1932 and obtained his "C" certificate on the 1st May. For a "C" certificate you had to maintain above your launch height for 5 minutes, but in Collins case he stayed up for a full 30 minutes, which was an early indication of his ambition and what was to come.



Collins and the Rhönadler 32. Photo: Ted Hull.

- This might sound funny in this day and age, but he was probably the first British glider pilot to learn to turn full circles and do them accurately. Back in 1932/1933 if you soared it would be by using hill lift, and if you did a 360 degree turn you risked being drifted back beyond the hill into the turbulent air and downdrafts that were behind it – so pilots didn't! Collins began doing this at Dunstable in 1932 in a "Kassel 20" two-seater he'd bought a share in – almost certainly he was motivated by reports coming out of Germany of gliders utilising thermals to stay up.
- The Huish meeting near Pewsey, Wiltshire. This began on the 18th June 1933 although the weather to begin was poor, Collins had been hired to be the instructor for the meeting and also to do passenger flights using a BAC VII – which demonstrates how much he'd

progressed in such a short period of time. On the 1st July flying the BAC VII on a number of flights he remained airborne for far longer than expected, the weather was stable with little wind, hill soaring just wasn't possible. He repeated this again on the 2nd, his simple technique was to circle, and of course he was circling in the updraft of a thermal. So Eric Collins was the first British glider pilot to successfully use thermals.

- After learning from the experiences of the previous 2 days Collins did even better on the 3rd July when with his wife as passenger he achieved a cross country flight of 6 miles. This was the first cross country in Britain using thermals, he used 4 different thermals to climb during the flight.
- Eric Collins was learning fast and on the 23rd August in a Professor sailplane he flew 19 ½ miles from Dunstable and set up a new British distance record. Through all of these exploits being reported in the Press he was becoming very well known. Responding to this his father bought him a German Rhonadler sailplane, which at that time was the very best available, and this arrived at Dunstable in April 1934.
- Meanwhile on March 18th he'd flown the Kassel two-seater with a passenger 46 miles from Dunstable into Essex. This was just 2 miles short of the then world record for two-seaters. Mixed emotions for Collins, as on the same day his great rival Philip Wills flew 56 miles from Dunstable to take the British distance record from him.
- Collins found the Rhonadler much to his liking. On the 22nd he flew it 52 miles from Dunstable to Rayleigh, Essex, which completed his Silver C, the first on the British register. This beat Philip Wills, who whilst having 2 completed Silver legs, hadn't by then managed a 5 hour flight.
- On the 5th August Eric Collins made the best flight of his career. Again in the Rhonadler, he flew 98 1/2 miles from Dunstable to Holkham Bay on the Norfolk coast, this was a new British distance record. If it hadn't been for the sea it would have been significantly further, as when he reached the coast he still had 3000 feet in hand, he was airborne for 4 ½ hours.
- Flying in the Rhonadler at the 1934 Nationals meeting at Sutton Bank he won the Manio Cup for the longest pre-declared out-and-return flight on the 3rd September.
- 1935 is when things came to a tragic end for Eric Collins. He'd performed a very successful flying demonstration at the Royal Aeronautical Society's annual display. Typically Collins, the tow rope broke on the way to the event but not accepting defeat he then used thermals to get there about on time for his display. It was this, and by then his huge reputation, which gained him a lucrative opening flying aerobatics for Alan Cobham's display team which was at the time successfully touring Britain to foster "Air mindedness". The glider he used was a Grunau Baby 2 built under licence from the German Schneider factory by Slingsbys, in fact the first of the 15 Type 5s that Slingsbys built, and it was bought by Alan Cobham. On the 30th July 1935 Collins was performing at Upwood near Ramsey, Huntingdonshire. As one of

his manoeuvres he attempted something new, a “bunt” which translates as a forward loop. It was unwise in the extreme, as the glider simply was not stressed to withstand such an extreme aerobatic manoeuvre. Not too surprisingly one of the wings failed and the glider fell to earth killing Eric Collins instantly.



(The ill-fated original T5 Grunau Baby, courtesy of David Underwood)

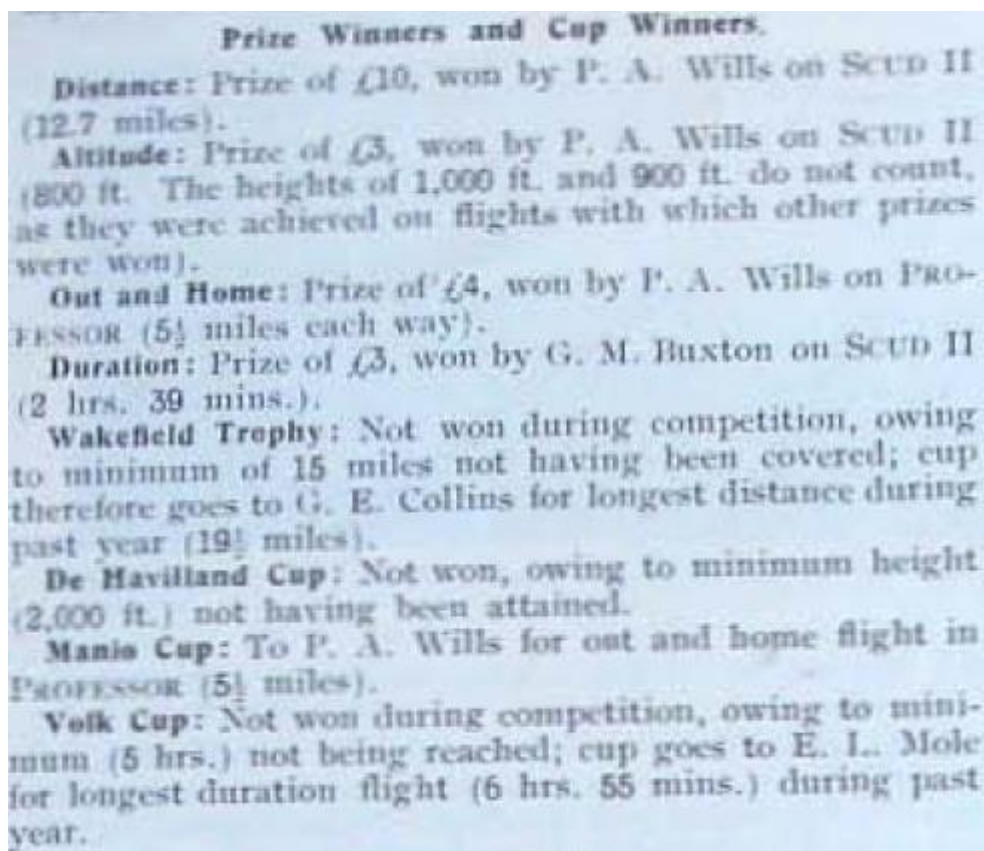
A very sad end to a short but very illustrious gliding career. One has to wonder what Eric Collins would have gone on to achieve if it hadn't been for that moment of madness at Upwood.

PHILIP WILLS

Born on the 26th May 1907 into a wealthy family he began power flying in his early 20s and became an experienced pilot, albeit badly injured and lucky to survive on the 20th January 1929 when the Moth he was flying in crashed at Duxford airfield.

- He started gliding at Dunstable in early 1933 and made very rapid progress indeed. “A and B” certificates achieved on the 9th April, “C” on the 17th June. Starting with the 11th August 1933 Sailplane & Glider edition we have Wills’s name first mentioned in the London GC News, he’d made an impressive flight in the club Professor to land on Ivinghoe Beacon.
- In the October 33 S&G his name now starts to be mentioned amongst the elite club pilots such as Collins and Dewsbury. He’d started flying a Scud II which he’d bought with his friend Mungo Buxton, and was putting in some good (and somewhat adventurous!) flights in it.
- He flew the Scud in the October 1933 meeting at Sutton Bank and beyond question he was the outstanding pilot. Quite remarkable for someone who’d only achieved his “A and B” 6 months before. The great rivalry between himself and his fellow London GC member, Eric

Collins, was now starting to emerge.



(Awards at the October 1933 Sutton Bank meeting, Sailplane&Glider November edition)

- In the first half of 1934 there was a great battle between Philip Wills and Eric Collins to become the first British holder of the much coveted Silver C certificate. Collins won as he flew all three required legs on the 20th and 22nd April. At that time Wills still needed the 5 hours duration flight which he finally achieved on the 14th July, to become number 2 on the British Silver C register and 45 on the international.
- 18 March 34 saw the first of his many British National records when he broke the previous distance record with a flight in the London GC Professor with 55.8 miles to 9 miles north of Southend. In the same flight he also broke the official height record with a gain of 3800 feet. It should be noted that height records were quite frequently being broken "unofficially", you needed an accepted barograph trace for it to become "official". 5th July 1936 regains the British distance record (previously held by Eric Collins) with a flight of 104 miles from Dunstable to Pakefield, near Lowestoft, flying the Hjordis. On the 17th April 1938 he beat his own distance record flying his new Minimoa with a flight of 110 miles. However, on the same day Kit Nicholson surpassed this by flying 119 miles. Nicholson's record only lasted a day, as on the 18th J.S. Fox flew the Rhoadler (previously owned by the now deceased Eric Collins) 144 miles. The 144 miles record itself didn't last very long as it was smashed on the

30th April 1938 when Philip Wills flew his Minimoa 209 miles from Heston to St Austell in Cornwall. 5th June he broke the National height record, which Mungo Buxton had held since his 8323 feet climb in September 1934, with a climb in a cumulo-nimbus of 10,080 feet from Dunstable in his Minimoa. 1st July 1939 regains his height record with a climb in again a thunderstorm of 14,170 feet in his Minimoa from Dunstable. Note N.Mclean had briefly held the record when on the 22nd June in a Grunau Baby (!) he used the "Helm Wind" wave (forms in Cumberland with a NE wind triggered by the east side of the Pennine chain of hills) to achieve an astonishing 10,350 gain of height.



P. A. Wills settles down in the cockpit of his "Minimoa" sailplane before putting on the transparent lid.

- Numerous National competition achievements. 1935 won distance prize in class 2. 1936 distance prize plus De Havilland Cup (altitude). 1937 1st in the first Nationals that had a full scoring system and produced a National Champion. Won Wakefield Trophy (distance) and Manio Cup (out-and-return). 1938 4th, won Wakefield Trophy and De Havilland Cup. 1939 2nd, won De Havilland Cup.
- Gliders flown in the competitions. 1934, Scud 2. 1935-37, Hjordis. The Hjordis was a "one-off" sailplane built by Slingsbys and specifically designed for Philip Wills by Mungo Buxton. 1938 -39, Minimoa. Wills bought the Goppingen 3 Minimoa new from Germany and first

flew it in April 1938.

- Most would agree that Eric Collins was a better pilot than Philip Wills. However, Wills had great determination, was highly motivated, and prepared for and planned his flights in great detail. He was a successful business man who was fortunate in having a good deal of time to indulge in his passion for gliding. He was doubly fortunate in having a wife, Kitty, who was an absolutely brilliant retrieve crew. In February of 1935 he became a board member of the British Gliding Association and held senior posts for the following 19 years. Not bad for someone who'd only been gliding for 2 years. A few words on the BGA as its early years were far from being trouble free. Its first chairman was Eric England and after serving his term of 3 years he was replaced by the Master of Sempill in February 1933. There were money problems and a great deal of politics which caused the London GC, by far the largest in the country, to disaffiliate itself from the BGA in the autumn of 1933. Many of the other gliding clubs were becoming increasingly upset at how the BGA was being run and the pot finally boiled over at the start of 1935. Philip Wills was one of the leaders of the revolt, which resulted in the overthrow of the old order in February 1935 and a completely new constitution that gave the affiliated clubs much more power and control, Wills becoming the new BGA chairman for a very short period and then chairman again from 1949 to 1968.
- Philip Wills was the senior British pilot at the 1937 Wasserkuppe competition often described as the first, though unofficial, world gliding championships, which took place from the 4th July to the 17th. Wills flew his Hjordis, a little surprising as the British team also took 3 King Kites that had only just been built by Slingsbys, and which on paper were a much better glider. Possibly considerable foresight on Wills part, as the King Kite immediately showed it had very bad spinning characteristics.



(Philip Wills with the Hjordis at the Wasserkuppe, July 1937. His brother Bill is to his right and

holding the wingtip is his wife, Kitty)

The British team had no pretensions about winning, they went to learn. This they certainly did as none had ever participated in a 2 week competition before, flying against the top European pilots to boot. Philip Wills came 14th out of 28 entrants with 270 ½ points. He was beaten by Willy Watt flying a King Kite with 440 ½ points. However, this needs to be seen in the context of the winner, Heini Dittmar, with 1662 ½ points flying the Sao Paulo (also known as the Fafnir 2).

- Philip Wills was the first British holder of the Gold C which he completed on the 10th June 1938 with a height gain of 10,180 at Dunstable in his Minimoa. He'd achieved the distance requirement with a flight of 209 miles, again in the Minimoa, on the 30th April. This was the number three Gold C on the international list so a remarkable achievement for a British pilot.
- When WWII broke out he became the second in command and director of operations of the Air Transport Auxiliary based at White Waltham airfield. Throughout the war the civilian pilots of the ATA delivered new and repaired aircraft to active service squadrons and also maintenance units. Wills was also very much involved in the very secret radar trials that took place at Worth Matravers, near Swanage, in the summer of 1940. However, I'll leave a description of that to the final section of this article.

A great deal more to write about Philip Wills, but as it concerns his post war flying that will be covered in my Part 2 History of British Gliding article, as he will certainly feature in the "Prominent Gliding Personalities" section. Suffice it to say post WWII he competed in 7 World Championships, with the pinnacle of his gliding career reached in 1952 when he won the World Championships in Spain flying a Slingsby T.34 Sky. He died on the 16th January 1978 aged 70.

GEOFFREY MUNGO BUXTON

Mungo Buxton was born in Norfolk in 1906. Both he and Philip Wills went to Harrow and became good friends. He was one of the very early pilots at the London GC, he's entered as No 5 in the Royal Aero Club list for having the "A and B" certificates. He was the fourth British pilot to gain the "C" certificate, this on the 25th July 1930. It was Mungo Buxton who introduced Philip Wills to gliding at Dunstable and the two of them bought a Scud 2 in 1933.

His most outstanding flight unquestionably was the height gain of 8323 feet made in the Scud II on the 4th September 1934 at the Sutton Bank National event. This was achieved through being sucked up by the updraft into a thunder storm, and he was more than a bit lucky to survive the experience! As he was carrying a barograph this was a new British height record which lasted to the 5th June 1938 when Philip Wills set a new record.

In 1934/35 he designed the revolutionary Hjordis sailplane for Philip Wills, which Wills subsequently flew with distinction for the next three years. You'll also find references to him being the designer of

the Slingsby Type 9 King Kite and the Hotspur military glider. In fact whilst he gave advice on the King Kite he wasn't the main designer, and it's certain he had nothing to do with the Hotspur which was designed by F.F. Crocombe.



L.E. Baynes the designer and builder of this Scud 2 with G. Mungo Buxton in the cockpit before the height record set at the 1934 National Contest at Sutton Bank on 29 September 1934

(VGC News, Summer 2000 – note the “29” date in the caption is wrong, it should be the 4th)

I can't establish exactly when he joined the RAF, quite possibly directly from school, but he's named as “Mr Geoffrey Mungo Buxton, RAF” when his wedding to Miss Horatia Mary Fisher, daughter of Vice Admiral Sir William Fisher was gazetted in December 1929. He spent some time serving in India before the RAF sent him to Cambridge University where he gained a 1st in aeronautical engineering.

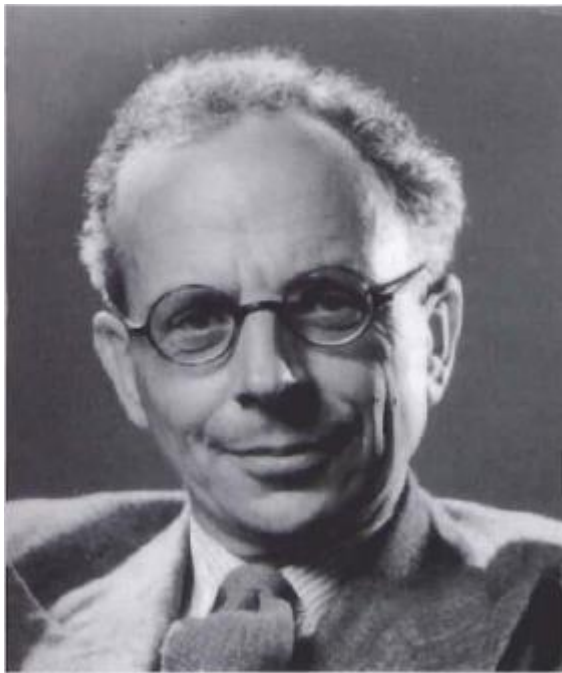


(Mungo Buxton)

By the start of WWII he was a Wing Commander and given his considerable gliding background it was not too surprising that he found himself posted to Ringway, Manchester, as one of the senior officers of the Central Landing Establishment where he was in charge of the technical and tactical development unit. However, just before this Buxton had commanded the radar trials (or RDF {Radio Direction Finding} as it was known then) which had taken place in June/July at Christchurch and Worth Matravers. I'll give much more detail on this in the final section. Mungo Buxton died on the 19th November 1979.

"KIT" NICHOLSON

Christopher ("Kit") David George Nicholson was born in 1904. He read architecture at St John's College, Cambridge, and went on to become a celebrated British architect and industrial designer. It was he who designed the London GC clubhouse which opened on the 11th January 1936, and is there to this day.

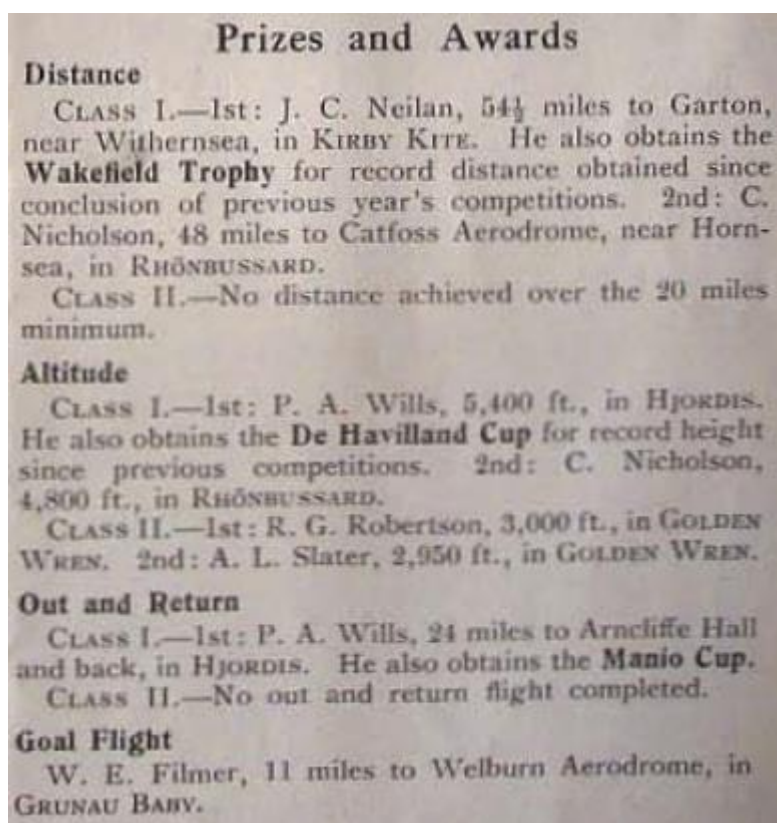


Kit Nicholson, photo via CW.

- He started gliding at Dunstable in the spring of 1933, and in the early summer was one of the syndicate members that bought Manuel's new Willow Wren. He uniquely achieved his "B" certificate on the 1st July when soaring the Wren for 17 minutes. He was likely getting a bit ahead of himself, as on the 6th August he spun the Wren into a bush on Dunstable Downs, the damage to the glider being rather more than to himself – a few broken teeth!
- Nicholson was at the October 1933 inaugural Sutton Bank meeting and flew Fred Slingsby's Falcon 1. He was also at the 1934 September Sutton Bank National event sharing the Willow Wren with Cooper and MacClement. However, on the 2nd September MacClement flew the

Wren into a tree on the escarpment, Fred Slingsby taking away the bits to his new nearby Kirkbymoorside factory. Not to be deterred Cooper and Nicholson, MacClement was in hospital, immediately bought the Scud 2 which L.E. Baynes had bought up to Sutton Bank for exactly such an eventuality. The 2nd Sept wasn't at all a good day for Cooper/Nicholson as both of the launches in the Scud 2 failed, the second cartwheeling on landing – so the Scud went back with Baynes to Farnham! Nicholson and Cooper subsequently flew the London GC Professor which was also at the meeting, and on the final day he flew Espin Hardwick's Falcon 2.

- The 1935 Nationals event at Sutton Bank was altogether a better one for Kit Nicholson. In March of 1935 he, R.P. Cooper and J.P. Dewsbury had acquired the Rhonbussard that Joan Meakin (later Price) had flown in the Alan Cobham air displays and took this to Sutton Bank where he and Cooper shared the flying, Nicholson doing the great majority.

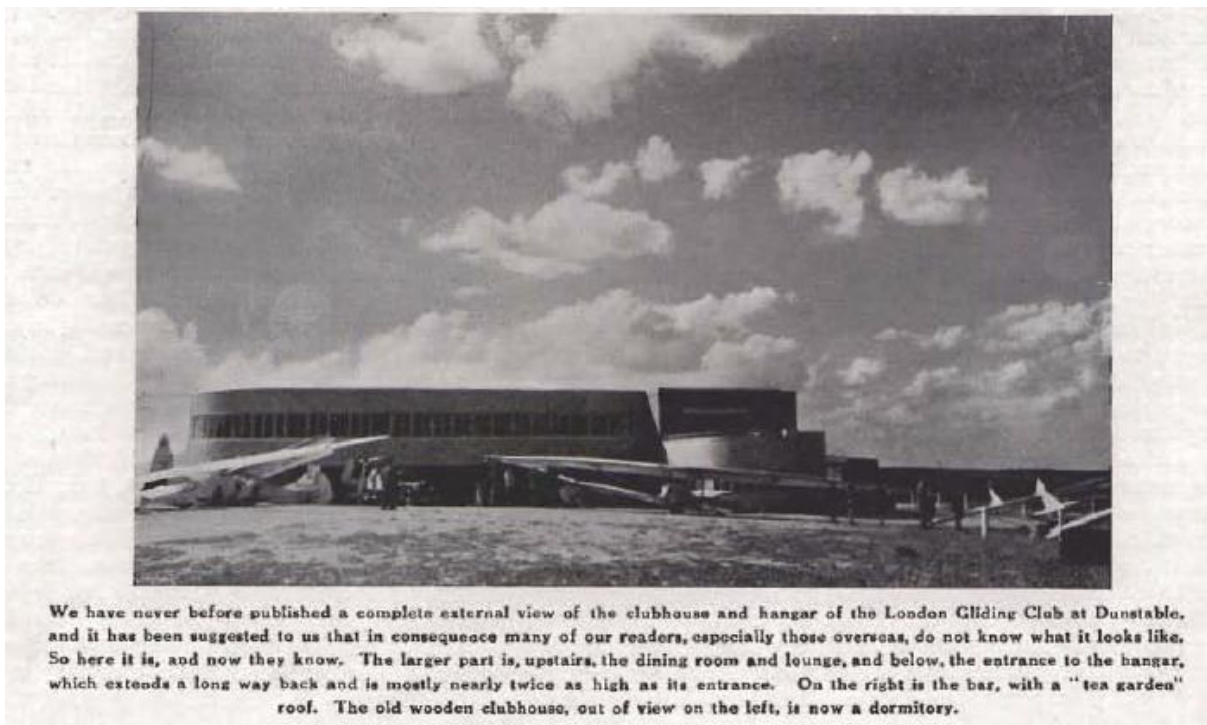


Two mentions in the major prize list and it was during this event he achieved all three of the needed Silver C legs, his was 6th on the British list, number 177 on the international.

- The start of 1936 saw his syndicate changing from the Rhonbussard to a Rhonsperber, most would agree the best sailplane available at that time. Dewsbury and Nicholson entered the Rhonsperber in the 1936 Nationals event, this being held at Camphill for the first time. However, weather-wise the comp was pretty awful, and neither pilot achieved anything of

particular note.

- Late August to early September of 1937 Camphill again held the Nationals, and for the first time an integrated scoring system was used which ranked all of the competing pilots and “He who was first”, if an individual, was crowned as the National Champion. Cooper, Dewsbury, and Nicholson entered the Rhonsperber and the weather was far better than in 1936. Whilst Philip Wills won the competition flying his Hjordis, the Rhonsperber trio came second with Dewsbury and Nicholson responsible for the great majority of the 408 points they scored, and they were awarded the team prize.
- The 17th April 1938 saw Kit Nicholson flying 120 miles in the Rhonsperber from Huish, Wiltshire, where the Cambridge GC meeting was being held, to Bigbury-on-Sea, Devon. This was a new British distance record but it only lasted for a day as on the 18th at the same meeting J.S. Fox flew 144 miles in the Rhonadler.
- The 1938 Nationals contest in July saw him flying at “home-base”, Dunstable. Nicholson and Dewsbury won what was an excellent competition flying the Rhonsperber. Kit Nicholson won the Manio Cup with a goal flight of 87 miles to Lympne and also the prize for the longest cross country flight of the meeting with 106 miles to Lowestoft.



(Dunstable clubhouse which Kit Nicholson designed, opened in January 1936)

- The final Nationals contest before WWII was held at Camphill in July and the weather was pretty dire. Kit Nicholson entered the Rhonsperber with himself as the sole pilot and won the competition with 595 points narrowly beating Philip Wills with 573.7 points in the

Minimoa. The longest cross county flight of the whole meeting was 162 miles by Nicholson to Southend, Essex, and this also won him the Wakefield Trophy.



Mr. Nicholson on his arrival at Southend Airport.

(Photo by S. H. Lowe.)

(At the end of his 162 mile flight from Camphill)

- Not too many details of Kit Nicholson during the war, though he certainly started off as a meteorological expert for the Navy based in Scotland and ended it as a Commander in charge of flying at the Fleet Air Arm station, Trincomalee, Ceylon.

I would normally continue with his gliding career post WW2 in Part 2 of my “History” document. However, there was to be a tragic end to it in the summer of 1948, so I’ll complete the story here.

Civil flying including gliding became officially allowed as of the 1st January 1946. Only one mention I can find of him in 1946 and that was at the Cambridge University camp at the Long Mynd in June flying a Weihe. Surprisingly he didn’t fly at the Easter Rearsby meeting which was the first official British gliding event after the war. No National contest in 1946 but this was revived in 1947 at the Royal Navy Air Command Station, Bramcote, near Nuneaton. The contest took place between the 22nd and 29th June and this was the first time a “flat” site had been used for a Nationals event.

Kit Nicholson flew as the lead pilot of a team entry with Lieut-Commander P.Blake flying a Kranich 2 entered by the Royal Navy Gliding and Soaring Association, Nicholson being listed as “Commander, RNVR”.

The pair came second in the overall placings behind Philip Wills. They won the Londonderry Cup and the L. du Garde Peach Trophy for being the best club entry, won 2 Daily Prizes, and set a new British distance for a two-seater with a flight of 104 miles to Langham.

Final Markings.					
Order	Contest No.	Entrants			Marks
1	27	P. A. Wills	..	..	610
2	7	R. N. Gliding and Soaring Association	..	..	481
3	14	Association of B.A.F.O. Gliding Clubs	..	..	418
4	12	Association of B.A.F.O. Gliding Clubs	..	..	351
5	21	D. F. Greig	..	..	334
6	17	H. C. G. Buckingham	..	..	307
7	9	R. N. Gliding and Soaring Association	..	..	293
8	10	Surrey Gliding Club	..	..	285
9	11	Surrey Gliding Club	..	..	282
10	2	Cambridge Gliding Club	..	..	273

(1st ten places at the 1947 National, Bramcote. Contest number "7" is the Kranich 2 flown by Kit Nicholson and P.Blake as one of the RNGSA entries)

The first official World Gliding Championships took place at Samedan, Switzerland, during July 1948. Samedan is sited in the high Swiss Alps not far from St Moritz.



Winning Swedish Weihe Flown by P.A Persson

(A view of the terrain at Samedan)

Kit Nicholson and Philip Wills were both flying the new Slingsby Gull 4, Donald Greig and Lorne Welch EoN Olympias. The British team was completed with Forbes and Mallett from the BAFO Germany both flying Weihe's, overall there were 37 entrants. One has to be surprised that Samedan was chosen as the venue for the competition. It was a true mountain soaring site and therefore potentially subject to extreme turbulence and downdrafts with in many places a very hostile landscape with few places to land safely, assuming a crash wasn't inevitable. It consequently demanded mountain flying experience and without such a background competing pilots were flying

outside of their envelope of competence and so risking serious consequences if not complete disaster, as sadly proved to be the case. The first contest day was the 20th July and to get the much needed practice the British team arrived on the 8th. However, the weather Gods were unkind and there were only 3 reasonable flying days in the run up to the 20th.

After 7 contest days, the majority of them rather poor, we arrive at the fateful Wednesday, 28th July. The race was a pilot declared goal, Nicholson declaring a goal in Italy. Early evening and news came through that he had crashed into a mountain. The crash was observed and eye witness reports say he was seen flying in thin cloud at the top of the mountain. A rescue party reached him and started to bring him slowly down. Initially he was conscious and speaking, but died in a priest's house on the descent. He was 43 years old at the time.



Nicholson just after landing, and Mrs Nicholson

(Kit Nicholson at Samedan, July 1948)

There was a double calamity on the 28th July as Donald Grieg also died when his Olympia hit a cable close to the mountainside that severed part of one wing, resulting in an uncontrollable spin and crash. Truly a black day for British gliding.

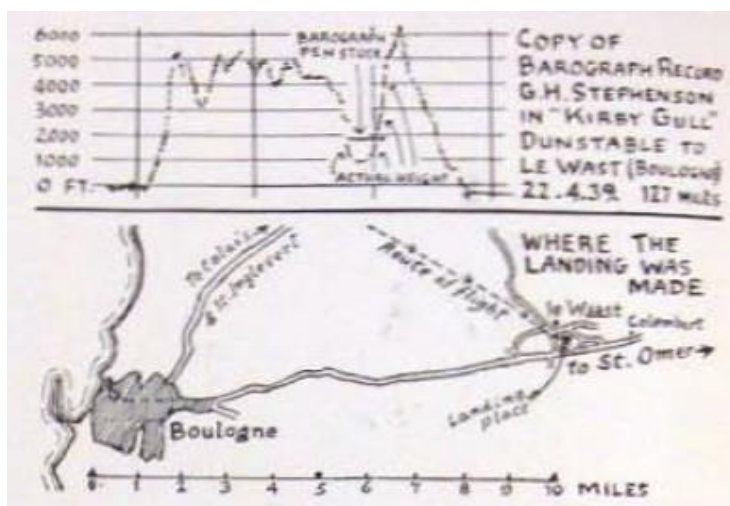
GEOFFREY STEPHENSON – THE CROSS CHANNEL FLIGHT

The great majority of Geoffrey Stephenson's gliding career, born on the 27th June 1911, belongs to the post WW2 era. However, he made the very first soaring flight across the English Channel to France on the 22nd April 1939 and I think this, as a very famous British gliding flight, deserves coverage in this Part 1 History. Stephenson joined the London GC sometime in 1935 with no previous flying experience, and went through the "Primary Training Mill". At about the same time Donald Grieg had started at Dunstable and they became friends. In April of 1937 the pair of them teamed up with John Dent and bought a Slingsby T.6 Kite, this was to become well known as the "Grey Kite". Flying the "Grey Kite" in the summer of 1937 Stephenson achieved his Silver C, number 15 on the British register. At some point in late 1938 Grieg and Stephenson exited the Kite syndicate

and bought a Slingsby T.12 Gull 1, then a very new design, and because it was painted blue it came to be famous as the “Blue Gull”.



On the 22nd April 1939 in the Gull Stephenson took a very low winch launch at Dunstable (about 300 feet) just before 15:00. He fortuitously found a strong thermal and climbed to 4000 feet before setting off SE. The original idea was to maybe land at Redhill airfield and attend Ann Edmunds' (later “Douglas” then “Welch”) engagement party. However, conditions continued to be good and an in-flight goal of reaching Canterbury airfield switched to RAF Hawkinge. Hawkinge was reached at 1000 feet where a very strong thermal was unexpectedly run into that took Stephenson via a cloud climb to 6000 feet. From here he took the decision to attempt the Channel crossing, and despite some worrying strong sink encountered along the way, the French coast was crossed close to Cape Gris-Nez at 2600 feet. The flight ended at the village of Le West 10 miles east of Boulogne, and 127 miles from the starting point of Dunstable. He'd tried to find an aero-towable field but without success. Hence it had to be a road retrieve organised by the redoubtable Ann Edmunds accompanied by Brian Powell which broke up the Redhill engagement party.



PRINCE BIRA

Prince Bira, or to give him his full title, Prince Birabongse Bhanudej Bhanubandh, was a very flamboyant character who lit up the British gliding scene in the years around the end of WW2 up to the very early 1950s. He was born on the 15th July 1914 at the Grand Palace, Bangkok, Siam (later to be Thailand) and was one of the grandsons of King Mongkut – played by Yul Brynner who starred with Deborah Kerr in the famous film “The King and I”. He was quite a sportsman, best known for being a racing driver, but also a yachtsman who competed in four Olympic games.



(Prince Bira after winning the Imperial Trophy Race at Crystal Palace in 1937)

However, it's his gliding exploits we're interested in and as well as being a very good pilot he was also very much an extrovert! I haven't been able to discover exactly when it was he first got involved in gliding, it's virtually certain he was a power pilot first. What we do know is that he was an instructor at an Air Training Corps school in Devon during the war. Being an instructor meant you could fly your own glider from the airfield you instructed at for the ATC, and thereby get round the ban on civilian gliding. So Prince Bira bought the Type 15 Gull 3 from Slingsbys in 1944, this hadn't quite been finished at the outbreak of WW2 and at that time was the highest performance glider that Slingsbys had produced. Amazingly the glider still exists today, it's on display in its “Bira Blue” colour scheme at the Gliding Heritage Centre, Lasham, <http://www.glidingheritage.org.uk/>, kindly loaned by the Brooklands Museum.

Bira flew the Gull at the ATC Schools gliding event at Rearsby on the 1st September 1945. After his display he spot landed right in front of the public enclosure when to the crowd's amazement not only did he emerge from the cockpit but also a small white dog! This was “Titch” a white West

Highland Terrier to which Bira was completely devoted. It accompanied him on the great majority of his gliding flights, sitting on his shoulders in the case of the Gull with a small window behind the canopy to look out of – which can be seen to this day!



Prince Bira with "Titch," beside the "Minimoa."

(Sailplane & Gliding August 1946)

Prince Bira achieved his Gold C height flying the Gull with Titch for company with a climb in a cumulo-nimbus to 12,000 feet. A number of people have suggested that it was cruel to take the dog flying. However, from literally all of the reports I've seen Titch just could not wait to get into the cockpit, and if it was open immediately took a flying leap into it! In early 1946 Bira bought Philip Will's famous Minimoa. The Cambridge University GC held a 2 week camp at the Long Mynd in June which he attended. He achieved 2 separate climbs in the Minimoa to over 13,000 feet and also a cross country of 96 miles. However, his best flight was earlier on the 18th June when he flew 184 miles to Aldeburgh on the Suffolk coast. This was only his second cross country, the first had been just 22 miles, and this completed his Silver C, very nearly his Gold C! In fact Chris Wills (youngest son of Philip) wrote an article much, much later saying that properly measured the flight was 186 miles and therefore a Gold C 300 km distance. However, I'm dubious about this, and Bira actually achieved his Gold C with a flight of 375 km on 22nd January 1949 in Argentina. More interesting in the same

article is that Chris Wills wrote that Titch accompanied Bira on the Aldeburgh flight as "Official Observer"! Did Titch do 5 hours at any point? It would seem likely as the flight that ended at Aldeburgh was 4 ½ hours duration. Perhaps Titch was the first and only "Gold C dog" in the world!!



*(Photo by A. E. Slatyer
Prince Bira in "Minimoa" accompanied by dog to
maintain correct position of centre of gravity.*

(Sailplane & Glider June 1946. The reference to the CofG clearly has to be a joke by the magazine!)

In March of 1947 he switched gliders again this time to a Weihe (BGA 489 – not Philip Wills Weihe), which was aero towed over from France. From this point we don't really find a lot about Prince Bira and gliding, his main interest of motor car racing was taking precedence. A very much versatile and cultured man, he was an accomplished painter and sculptor, he sadly died in poverty and obscurity. He collapsed and died on the platform of Barons Court tube station, London, 23rd December 1985, from a heart attack aged 71. Initially the authorities had no idea who he was. However, in one of his pockets there was a small piece of paper with a short hand written note in Thai, and this allowed them to trace him. A sad and poignant end to what had been at least in the prime years of his life an

action packed existence even adventure.

ROBERT KRONFELD

Robert Kronfeld is arguably the most famous of all the early glider pilots. He was born in Vienna on the 5th May 1904 but as he was a Jew fled to Britain in 1934 when the Nazi persecution of Jews began, becoming a naturalised British citizen in 1939.

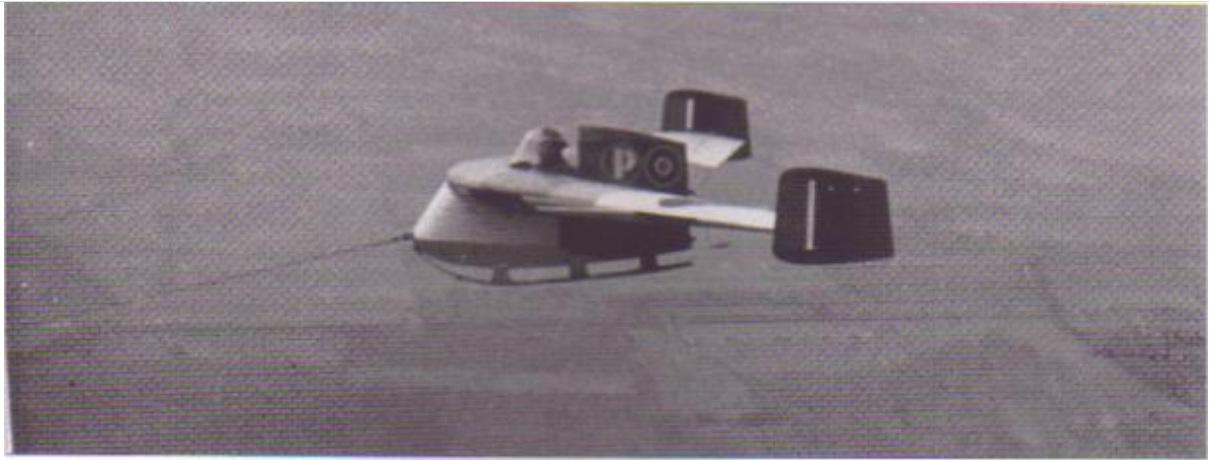
- In his youth he became a good mountaineer, an Austrian skiing champion, and then a really expert canoeist. In 1927 because of his sporting expertise he was one of three people selected by the Aero Club of Austria to attend the gliding site at Rossiten, East Prussia, on the south eastern coast of the Baltic, here they soared the sand dunes. At Rossiten he progressed to his “C” certificate with a soaring flight of an hour, and in the spring of 1928 started flying at the Wasserkuppe where he rapidly became a very popular instructor.
- It was in the Rhon competitions at the Wasserkuppe in the summer of 1928 that his true flying genius was revealed. He won a number of prizes helped by using the very first variometer designed by his friend the meteorologist Walter Georgii – I think we can say that Kronfeld was the very first glider pilot to understand thermals and exploit them to gain height, also the first to deliberately use cloud flying. In May 1929 he was the first pilot to exceed 100 km in a cross country flight. Later that year he won the Rhon competitions flying his Wien (“Vienna”) sailplane and in the course of the contest twice broke his own world distance record using cloud climbs. It was the exploits of Robert Kronfeld in 1929 that was a major factor in the Comedy Restaurant lunch being arranged in London on the 4th December which marked the start of the British gliding movement.
- Kronfeld was now famous in aviation circles and was invited over by the newly formed BGA in 1930 to give flying demonstrations so as to help popularise the new sport of gliding in Britain. This he did at a number of sites flying the Wien – Dorchester, Folkestone, Ilkley, Ivinghoe, Scarborough and Weymouth. On the 17th June he made a cross country flight of 112 km from Itford Hill to near Portsmouth, this was the first ever thermal assisted cross country flight in Britain. As we mentioned earlier in this document, in July he demonstrated to the Prince of Wales and enormous crowds at Ivinghoe. Returning to Germany he again won the Rhon competitions and again broke his world distance record this time with a flight of 162 km.
- On the 20th June 1931 flying his Wien once again he won the Daily Mail prize of £1000 for the first glider to cross the channel both ways in a single day. Today you think “Well that wasn’t such a great event” given it was via a 10,000 foot high aerotow from St Inglevert near the French coast before gliding across the channel to land at Dover, then repeating the flight back to St Inglevert. However, the flights received an enormous amount of publicity
- During the 1932 Rhon competitions flying his massive 30 metre span Austria sailplane the glider broke up in cloud. Kronfeld escaped by parachute and it’s believed this was the first

successful use of a parachute from a stricken glider. Despite this trauma 24 hours later he was off to Paris to give demonstrations with the Wien.



(Kronfeld with the Karakan sailplane in 1933)

- 1934 he moved to England to escape the Nazi persecution of Jews. In December of that year he took over BAC Ltd at Hanworth, Middlesex, which was to be renamed Kronfeld Ltd and began the production of the Drone light aeroplane – which had begun with Lowe-Wylde's "Planette" back in 1932 as a motorised BAC VII.
- On the outbreak of WW2 now a naturalised British subject he immediately joined the RAF, initially as a "link trainer" instructor – Kronfeld had actually invented the first "ground trainer" which was completed in November 1936. Not surprisingly given his amazing gliding expertise he moved to Ringway when the Central Landing School (CLS) opened, and became the chief test pilot of the Tactical Development Unit commanded by Mungo Buxton. Robert Kronfeld spent the war working for the CLS, which was renamed the Central Landing Establishment and then the Airborne Forces Experimental Establishment (AFEE), finishing as a squadron leader. The AFEE moved to Sherburn-in-Elmet, Yorkshire early 1943 and it was here through his work with Hengists, Horsas, Hamilcars, and also the incredible "Baynes Bat" that he was awarded the AFC (Air Force Cross) which made him very proud.



Robert Kronfeld flying the BAT Photo: The Army Flying Museum, Middle Wallop

- The Baynes BAT (which translates as “Baynes Aerial Tank”) was a third scale prototype of a 100 foot wingspan flying wing intended to transport a tank into a combat zone. A quite bizarre concept, and one that was rendered redundant by the GAL Hamilcar. However, the BAT as a tailless glider continued to be tested extensively by Kronfeld at the AFEE to discover the flying characteristics of tailless aircraft.
- With the war ended Robert Kronfeld joined GAL (General Aircraft Limited) as chief test pilot and continued his work on tailless aircraft / flying wings. Tragedy struck on the 12th February 1948 when he took off from Lasham airfield flying a GAL 56 glider towed behind a Halifax to 10,000 feet. There were three variants of the GAL 56 and Kronfeld first flew the original, GAL 56/01, at Farnborough on the 13th November 1944. It was 56/01 that he was flying on the 12 Feb 48 when the intention was to carry out stalling tests. The glider went out of control and in attempting to recover caused Kronfeld and his observer, Barry MacGowan, to “red” out due to the negative G. The observer came to just in time to successfully bail out, but not Robert Kronfeld who was killed instantly when the GAL 56 crashed at the small village of Lower Froyle close to Lasham. He was 42 years old at the time, and a gliding legend.



(The GAL 56/01)

PROMINENT EARLY LADY GLIDER PILOTS

AMY JOHNSON

The photograph on page 2 of this document is that of Amy Johnson who was born on the 1st July 1903. Whilst best known as a pioneering British aviator she also became a very keen glider pilot. Her interest in gliding was almost certainly started just after her historic flight in May 1930 from Croydon Airport, London, to Darwin, Northern Territory, Australia in a Gipsy Moth – 11,000 miles. On hearing of her arrival in Australia the Chairman of the then recently formed Scarborough Gliding Club cabled her asking if she would become the club's President, to which she replied "Honoured to accept". She subsequently made a number of other record flights up to 1936, you'll find these listed in the detailed Wikipedia article on her life which you can Google – not surprisingly there's a great deal of material to be found on the Internet on Amy Johnson. It was in the summer 1937 when she first started gliding at Dunstable.



(Amy Johnson in a Kirby Kite, thought to be taken at Dunstable)

She made rapid progress achieving her "A" certificate on the 12th September, "B" on the 13th, and "C" on the 15th.



Miss Amy Johnson after taking her "C" at Dunstable.

(Sailplane & Glider, October 1937, looks to be a Slingsby T.1 Falcon")

In March of 1938 Amy Johnson is recorded as flying a Hutter H17 where she was part of the owning syndicate at the London GC. We then find her in the entry list for the 1938 Nationals at Dunstable in August with a Slingsby Gull. However, in the competition she actually flew a Slingsby Kite which she'd bought - this was BGA 316 and the glider still exists, albeit not airworthy, owned by Dale Busque in the USA. Late 1938 she switched clubs to fly at the Midland GC, Long Mynd where she was often mentioned as flying in the Sailplane & Glider Midland GC club reports. The Yorkshire GC says in their "History" that she joined the club in 1937 "after gaining her Silver C at Dunstable". However, I haven't found her name mentioned in any of the club news reports, which is very surprising for someone of her fame, plus I don't believe from the research I've done that she ever did achieve the Silver C qualification.

When war broke out Amy Johnson joined the ATA (Air Transport Auxiliary) as a ferrying pilot. Sadly she was the ATA's first fatality when she was killed on the 5th January 1941. The full circumstances are still not known, being kept as secret under the "100 Year Rule". She was flying an Airspeed Oxford from Blackpool to supposedly RAF Kidlington near Oxford, it's thought with a passenger who's identity has not been revealed. Two versions of the story. Firstly adverse weather caused her to get lost such that she ran out of fuel and bailed out over the Thames Estuary. Secondly the Oxford was shot down by friendly Ack Ack fire after it twice failed to give the correct colours of the day. However, either way she drowned and her body never recovered. In fact she was so very nearly rescued as HMS Haslemere was very close when her parachute came down. The commander of the Haslemere, Lieutenant Commander Walter Fletcher, dived into the water to save her but he too was drowned. It's said there was a second parachute in the water and this remains an unresolved mystery, perhaps to be explained in 2041 when the 100 Year Secrecy Rule expires!

NAOMI HERON-MAXWELL

Helen Naomi Helen Maxwell, known as “Maxie” was born on the 25th June 1913 and was the first British woman to gain the Silver C certificate.



All 3 legs of her Silver C were achieved in Germany flying from Griesheim in the spring of 1936, she'd gained her “A”, “B”, and “C” in the preceding winter flying at the Hesselberg glider site. Prior to getting involved with gliding she'd done a great deal of parachuting and said “staying up” rather than descending was why she took up gliding. Her height gain in a Grunau Baby happened when she got sucked up into a thundercloud, just like Mungo Buxton a few years earlier, she was in truth a little lucky to survive. The encounter with the cumulo-nimbus, which she described as “like being in a washing machine” was on May 7th and with this flight she also gained the distance leg with 54.8 km. Her “5 hours” was achieved with 5 hrs 20 mins on the 15th May

This was Silver C number 208 on the international register.

During the war like so many lady aviators she was a ferry pilot for the Air Transport Auxiliary. After the war she emigrated to the USA where she did a good deal of gliding in California. She died in 1984 aged 71. Her son, Nick Thomas, has written a book on her life titled “Naomi the Aviatrix”, I believe it's still in print and available - (ISBN: 9781453883853).

No.	Name.	Awarded.
26.	G. E. Collins ...	17.5.34
45.	P. A. Wills ...	20.9.34
75.	R. G. Robertson ...	20.7.35
85.	S. Humphries ...	19.8.35
174.	J. C. Neilan ...	2.11.35
177.	C. Nicholson ...	17.11.35
208.	Miss N. Heron-Maxwell ...	17.5.36
241.	P. M. Watt ...	9.7.36
244.	H. C. Bergel ...	25.7.36
291.	A. L. Slater ...	18.9.36
298.	G. O. Smith ...	16.10.36
338.	J. S. Fox ...	1937
—	R. S. Rattray ...	—
—	P. B. N. Davies ...	—

(List of British Silver C's, Sailplane & Glider August 1937)



Naomi 1942

("Maxie" Heron-Maxwell in ATA uniform)

JOAN MEAKIN

Marjorie Joan Meakin was born on the 7th January 1910. Also very well known as Joan Price following her marriage in the summer of 1935 to Ronald Price who was assistant general manager of Sir Alan Cobham's Flying Circus.



(Joan Meakin {Price} in the Rhonbussard in which she gave many aerobatic displays for Sir Alan Cobham's Flying Circus)

Her involvement in gliding started in 1931 when she was touring Germany in an MG Midget along with an air-minded friend, Ruth Nicholson. They visited the annual gliding meeting at the Wasserkuppe and were so thrilled with what they saw they stayed on for a further 2 weeks as members of an advanced course, by the end of which Joan Meakin had achieved her "C" certificate. She turned up at the Basildean meeting in October 1931 where she flew Fred Slingsby's first built glider, the "British Falcon". Next heard of in 1934 when on the 3rd April she started a tow from Darmstadt, Germany, which after 4 intermediate stops en route finally arrived at Heston on the 5th April. This was in a Rhonbussard which she'd been contracted to fly for Alan Cobham's Flying Circus in which she performed aerobatics, the first woman ever to fly in his displays. The flight across the Channel on the 5th April was the first by a woman in a glider, and received a considerable amount of publicity.

Flying the Rhonbussard on the 14th July 1934 at a display at Bristol she found lift and then went on the first cross country glider flight flown by a woman in the UK – 40 miles to a bit west of Salisbury. This particular flight didn't qualify as her Silver C distance leg as the release height at Bristol was just a bit too high at 2500 feet. She continued flying displays for Alan Cobham in 1935, but in December of that year the famous English aviator Charles Scott bought the majority of Cobham's National Aviation Displays Ltd and formed C.W.A

Scott's Flying Display Ltd. Now married, Joan Meakin had switched to flying a Goppingen Wolf glider which was a much better aerobatic machine than the Rhonbussard.



C.W.A. Scott's Flying Display Aircraft. Photo-Flight, 1936-16-04. The caption reads: The Fleet : Miss Joan Meakin's Wolf glider, the Airspeed Ferry, and the B.A.C. Drone are in the foreground.

The company was scheduled to do displays at about 150 centres in 1936 but the weather was foul during most of the year, and consequently trading for Scott's company was poor and it went into voluntary liquidation in November. Flying in the Wolf she had a radio and her commentary on the aerobatics was transmitted via a radio van to the assembled crowd below.

THE team to represent this country at the International Competitions in July has now been chosen. This is the list, together with the machines they are to fly :—

J. C. Neilan and P. M. Watt	...	...	KING KITE
P. A. Wills and G. M. Buxton	...	...	KING KITE
D. G. Hiscox and Mrs. Price	...	...	KING KITE
R. G. Robertson and G. O. Smith	...	...	HJORDIS I.
W. B. Murray and J. P. Dewsbery	...	...	FALCON III.

It may be of interest to tabulate the number of hours' flying experience which each pilot has had, both in sailplanes and in aeroplanes :—

	Sailplanes	Aeroplanes
J. C. Neilan	85	600
P. M. Watt	20	2,600
P. A. Wills	110	510
G. M. Buxton	100	700
D. G. Hiscox	100	20
Mrs. Price	183	167
R. G. Robertson	114	90
G. O. Smith	95½	nil
W. B. Murray	50	700
J. P. Dewsbery	150	200
Total hours	907½	5,580

(Sailplane & Glider May 1937 – provisional British team for the Wasserkuppe competition)

The international competition held at the Wasserkuppe between 4th and 18th July 1937 is often described as the first world gliding championships (albeit unofficial). I find it a little surprising that Joan Price (as she was now called) was selected as she didn't have a Silver C at the time. One guesses that it was down to her reputation and overall flying experience.

The actual starting team was:

Great Britain.					
Hjordes	...	G-GAAA	...	Wills, P. A.	15
KING KITE	...	G-GAAB	...	Neilan	16
KING KITE	...	G-GAAC	...	Watt	17
KING KITE	...	G-GAAD	...	Smith	18
FALCON III	...	G-GAAE	...	Mrs. Price, J.	19
				Murray	
				Fox	

However, Willy Watt spun in from the launch on the first day, 4th July, writing off his King Kite, and the resulting re-organisation saw Joan Price paired with John Neilan. She only scored on one day, the 13th, with a 92km cross country.

She flew in the 1937 Nationals at Camphill, a team entry with Stedman and Slingsby of the Yorkshire GC, flying a Kite entered by Fred Slingsby. The entry came 12th out of 19th, with Joan Price flying all of the scoring flights in which she achieved the needed height gain and 5 hours duration legs and so completed her Silver C, the distance leg had previously been flown at the Wasserkuppe – No 621 on the international list, the second British woman to achieve a Silver C..

January of 1938 she was at Colley Hill near Reigate when the first exploratory flights were done which led to the founding of the Surrey Gliding Club (this was the second Surrey GC, the original had foundered in 1930), a vision inspired by Ann Edmunds – she became an instructor at the club. On the 5th June launching from Reigate she broke the British lady's distance record with 76 miles to Frinton-on-Sea.

In the 1938 Nationals at Dunstable partnering with R.P. Cooper flying a Rhonbussard they came 6th out of 28th. At the 1939 Nationals at Camphill she was 6th again (out of 24), flying the Rhonbussard as a joint entry with Cooper, but this time doing all of the flying. Interestingly in the initial entry list for the competition she was entered to fly a Viking 1.

With the outset of WW2 she was raising a family. Did she continue her gliding career post WW2? - as yet I haven't uncovered any evidence of that. She certainly visited gliding sites. Colin Simpson (son of John Simpson) remembers her having tea in their caravan at Lasham. She's also stated as being a guest at the inaugural Vintage Gliding Club meeting at Husbond Bosworth in 1973. She died on November 11th 1977.

BRITISH GLIDING AND WORLD WAR 2

The spirits of those competing/crewing at the end of the 1939 Camphill Nationals couldn't have been that good. Bad weather, two fatalities, and also the ominously gathering war clouds in Europe all must have combined together to make the atmosphere rather grim. Seven weeks after the

Camphill meeting war was declared by Great Britain and France against Germany on the 3rd September 1939.

Civil flying was banned in September shortly after the outbreak of war, but there was confusion (no doubt much of it deliberate!) amongst the gliding fraternity as to exactly what was defined as “civil flying”. This was cleared up on the 5th January 1940 when the British Gliding Association received a letter from the Air Ministry saying that all civilian gliding, including “ground hopping”, must cease immediately, and until further notice gliding clubs had to restrict themselves to purely “social activities” - this was reported in the January/February edition of *Sailplane&Gliding*.

Some limited gliding did continue though, which was allowed as it was in conjunction with a military gliding training camp. Thus at Easter, 22nd – 25th March, a training course was held at Dunstable for 22 pupils of the RAF Initial Training Wing. As Dunstable members helped out in the organisation and running of it they were allowed to fly with limits of 2 miles horizontally from the site and 2000 feet vertically, and a number of pilots took advantage of this. Some further gliding went ahead at Dunstable after this with “special permission” being granted by the Air Ministry, the last gliding until after the war taking place on the 5th May. There was quite a big meeting held at Wilmington near Dartford, Kent, in April organised by Ann Edmunds. Seemingly this must have been sanctioned as Colin Simpson (John Simpson’s son) has a flyer advertising the event.

The *Sailplane&Glider* magazine continued on a bi-monthly basis until the November/December 1940 edition – the next was February 1944. However, there was no British flying to write about and almost all of the Club News reports focussed on their members joining the armed forces, and sadly reporting some of them as being killed.

A considerable number of gliders, especially the newer ones, were taken over by the military – “impressed” was the term. A lot of these eventually ended up with what was to become the Air Training Corp (ATC), and as for many of these gliders the ATC didn’t have any obvious use for them they were just left to slowly deteriorate before being scrapped or burnt.

Of those gliders that were impressed the great majority that served a useful function were used for specific military purposes. “Gliding” was emphatically sucked into becoming a means of conducting modern warfare when on the 10th May 1940 the supposedly impregnable Fort Eben-Emael on the Dutch/Belgium border was stormed by the Germans through using troop carrying gliders to land on top of and inside the fort. This immediately led to the outflanking of the main French defensive position, the Maginot Line, and was a direct cause for the subsequent defeat of France. Once the details of what had happened at Eben-Emael filtered through to London Winston Churchill reacted in typically rapid fashion. On the 17th June he fired off a memorandum to the War Office ordering urgent investigation into forming a corps of 5000 parachute troops and also the possibility of using gliders to transport troops into battle. As a direct consequence a few days later the Central Landing Establishment was formed at Ringway, in later days to become Manchester airport.

So many of the first impressed gliders, mostly Slingsby Kites as they were the only glider type available in good numbers, found themselves at Ringway where it was soon found that parachuting and gliding didn’t mix very well! A search for a new site for gliding training led by Tim Hervey, who was previously the manager of the London gliding club, ended when it was decided to use the small airfield next to the village of Haddenham, Oxfordshire, and this became RAF Thame. As a starter five Kites were moved there on the 1st January 1941 and this became the Glider Training Squadron,

effectively the birth of the Glider Pilot Regiment, which from a very small beginning led on to truly amazing glider based assaults predominately in the European sphere of WW2, but also some operations in Asia.

I won't go into any further detail on the fascinating story of the early days of the Glider Pilot Regiment and RAF Thame. For those interested in reading a detailed account there is a really marvellous article by Peter Chamberlain that can be accessed from the following link:
<http://www.haddenhamairfieldhistory.co.uk/gliders.htm>

Also much recommended is Lawrence Wright's book "The Wooden Sword" - ISBN: 9780236177769

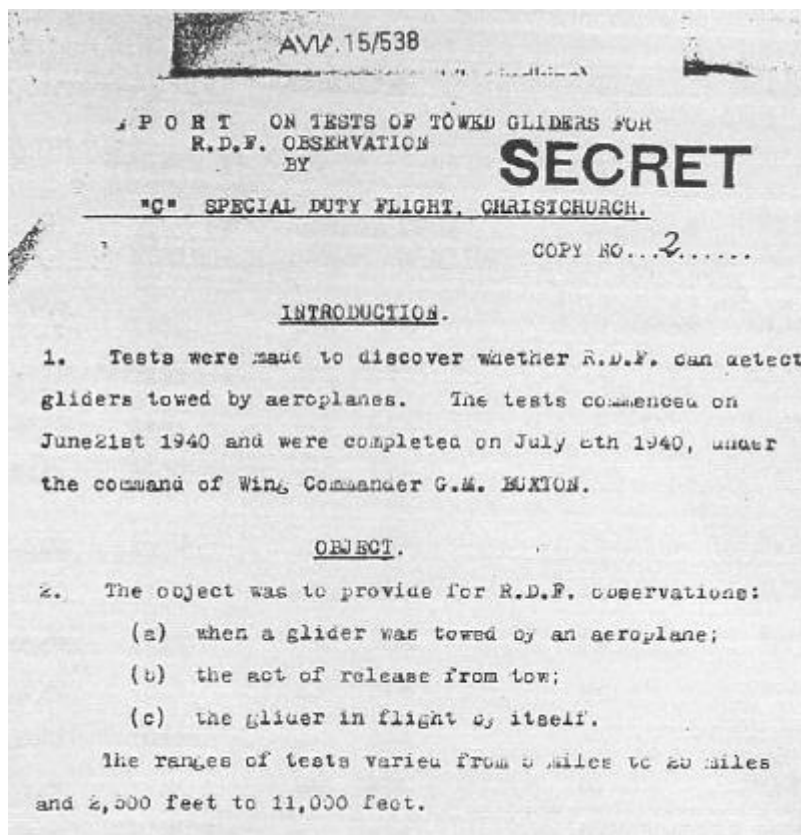
And for an account of the history of British Military Gliding see my article accessed from:
<http://www.glidingheritage.org.uk/documents/articles/BritishMilitaryGlidersv2.pdf>



(The King and Queen visit RAF Thame, 27th June 1941. Courtesy of Peter Chamberlain article)

However, Ringway was not the first place that previously civilian gliders were used by the military. The first occasion was the very secret radar trials that took place at Worth Matravers, near Swanage from 21st June to 8th July 1941. "C Special Duty Flight" was formed at RAF Christchurch on the 21st June 1940 led by Mungo Buxton, then a Wing Commander. The purpose was to determine whether the Worth Matravers radar station, which at that time was the key research and development establishment for RDF as radar was then known, could detect inbound gliders. This of course was spawned by acute invasion fears, and driven by what had been learnt about the events at Fort Eben Emael in May, it was top priority and top secret.

The gliders chosen were Philip Wills' Minimoa, 2 Viking 1s, the two-seater Viking 2, a Rhonbussard, and right at the end of the trials a Kite that had been specially made by Slingsbys. This Kite was interestingly referred to as the "Non Metallic Glider" in the then top secret correspondence concerning the RDF trials, and had wooden rods for the great majority of its control activating circuits rather than wire cables which was the norm. The great majority of the trials were carried out using the Viking 1s, and at the end the Kite, almost certain that the Rhonbussard was not used. The tow-planes were 2 impressed ancient Avro 504 Ns, which Buxton knew were stored at Heston, and a Tiger Moth. The pilots, who alternated between flying the tugs and the gliders, were W/Cmdr Buxton, P/O Davis, F/O Davie, A/C2 Pringle, and Philip Wills who was with the Air Transport Auxiliary and not the RAF.



(The start of Mungo Buxton's report on the RDF (radar) trials)

Whilst RAF Christchurch was the base it was immediately found to be unsuitable for the trials themselves. So the gliders were transported in their trailers to a small but just adequate field on the cliff tops right next to the Worth Matravers RDF establishment and rigged. The tugs flew in, towed them off for their assigned tasks, and everything returned to Christchurch in the evening.

Most of the initial flights went out to sea, a few were inland, up to 11,000 feet from the English coast with the enemy occupied French coast clearly visible on some occasions only 20 miles away. Once released from the tow-plane it must have been a very lonely and nerve wracking glide back to the initially invisible English coast. As the trials continued some of the release points were lower and nearer to the take-off field.

The flights were far from without danger. Firstly there was the possibility that they could be intercepted by enemy aircraft. Indeed on one occasion the Worth Matravers operators saw a plot of a German aircraft from France merge with that of the tow-plane and glider. Fortunately the German pilot did not see the combination, or if he did was so amazed at the sight of a truly ancient Avro 504 towing a glider he took no action. Secondly there was a definite chance with the flights launched out to sea that either through misjudgement or unexpected adverse weather conditions the glider wouldn't make it back to land. This actually happened to Philip Wills flying the Minimoa. He arrived at the cliff face about half way up but fortunately there was a breeze blowing onshore. He used this to soar the Minimoa up to a 1000 feet and looked down in amusement at many Worth Matravers staff who had rushed out to the cliff edge looking down to see if they could see where the Minimoa had crashed into the sea.

NARRATIVE

5. Summary of flights is given below:-

DATE	TIME OF START	COURSE FROM WORTH MATRAVERS	DISTANCE	HEIGHT OF RELEASE
1940 22/6	1700	220 SEA	10 miles	5,000 feet
23/6	1430	300 LAND	15 "	10,000 "
24/6	1430	300 LAND	20 "	10,000 "
24/6	1630	220 SEA	21½ "	10,000 "
25/6	1515	220 SEA	17 "	8,000 "
25/6	1750	235 SEA	15 "	5,000 "
26/6	1700	220 SEA	15 "	7,500 "
27/6	1215	220 SEA	20 "	11,000 "
27/6	1600	200 SEA	20 "	11,000 "
1/7	1630	230 SEA	20 "	10,000 "
2/7	1415	220 SEA	10 "	5,000 "
2/7	1515	220 SEA	15 "	7,500 "
2/7	1615	220 SEA	20 "	10,000 "
3/7	1415	Changing to instructions Sea & Land	5 "	2,500 "

(Further extract from Mungo Buxton's report)

The final flights were carried out using the "Non Metallic" Kite and proved successful, RDF really could identify incoming gliders even if they were almost solely constructed of wood.

THE AIR TRAINING CORPS (ATC)

The origin of the ATC lies in the formation of the Air Defence Cadet Corps (ADCC) in 1938. This was the brainchild of Air Commodore J.A. Chamier, who'd served in the RFC and RAF in WW1. In the late thirties he was determined to make everyone aware of the RAF and its vital role in any future war, and so looked to establish an air cadet corps to encourage young people to consider a career in aviation, especially the RAF. The ADCC proved a big success, very many squadrons were formed in towns around Britain which were run by local people. The value of the ADCC was recognised by the



government and towards the end of 1940 they took direct control. On the 5th February of 1941 it was reorganised and renamed the Air Training Corps, with King George VI as the Air Commodore-in-Chief. I should also mention the Officer Training Corps (OTC), which was formed in 1908 from the units operated by over a 100 schools, which itself had started way back in 1859. During WW2 the OTC Air sections were absorbed into the ATC and then in 1948 the OTC was renamed the Combined Cadet Force (CCF), and most of the original ATC Air sections switched to being CCF (RAF) units. By the end of the war in the 7 years since the formation of the ADCC close to 100,000 cadets joined the RAF. The ATC was the equivalent to the German NSFK (English translation of that is the "National Socialist Flyers Corp") which was founded in April 1937 as successor to the German Air Sports Association. The NSFK trained a huge number of 16-17 year olds to at least "B" standard, many of whom went on to join the Luftwaffe, in 1944 alone it's recorded NSFK members carried out 3 ½ million launches.

ATC training was by the "solo" method, ground slides, followed by low and then higher and (hopefully!) higher hops powered usually by a winch. The late Bill Tonkyn, long time member of Lasham, wrote a really excellent letter describing his ATC experiences, which began in April 1943, which you'll find in the winter 1993 edition of the VGC News – accessed via <http://www.lakesgc.co.uk/>, go to "Old Gliding Mags".

Apart from the very limited military use of civilian gliders I've already described, plus the huge ATC operation that developed over the war, no other civilian glider flights were permitted unless specifically authorised by the authorities. As I said in the opening paragraphs of this document there were some "naughty boys" who flew on their belief they wouldn't be caught. Some succeeded (and I know some names which I won't record here!), others failed some of whom became a "guest" of King George VI!

One celebrated instance of being caught was that of Ron Clear. He'd been renovating a previously crashed Scud 3 for 4 years and once the work had been completed was determined to fly it, this is believed to be some time in 1941. So with his crew he took it to Winchester Hill, rigged it, and then soared the slope for 45 minutes. He made two attempts to land on the top, but the glider, not at that time having spoilers, in the end had to land in a field at the bottom to be promptly surrounded by troops with fixed bayonets – who thought it was a German glider and he was a spy! He and his crew, which included his wife, spent the night in Winchester jail. The next day he appeared before the magistrate and was very lucky as the magistrate happened to be an ex RFC pilot from the first world war. The judgement was "Would a fine of £5 be acceptable?" - rather than a prison sentence!

The war time ban on gliding was lifted as of the 1st January 1946. The first official meeting was held at Rearsby, Leicestershire, over Easter 1946. That's where I'll pick up with Part 2 of this "History of British Gliding"!

Glyn Bradney

14th February 2015

APPENDIX – SOME FURTHER INTERESTING PICTURES



The London Gliding Club's first flying meeting, held at Stoke Park Farm, near Guildford, on March 16th, 1930. In front is the first DAGLING, or Dagnall-built ZöGLING, which Mr. R. F. Dagnall presented to the club but crashed at the end of the day. Behind is the ZöGLING obtained from Germany. Since that date the club has done, at a rough estimate, between 5,000 and 6,000 hours' flying.

(The London Gliding Club's very first flying day! – 16th March 1930 at Guildford. Sailplane & Glider May/June 1940)



The first British gliding certificate was gained by C. H. Lowe-Wylde at the London Club's ground near Tring on March 20th, 1930. He flew the Kent Club's COLUMBUS, the first British primary, here seen on the occasion of its first flight at the Kent Club's ground on February 23rd, 1930. It is still airworthy to-day.

(“Columbus”, the first British built Primary. Sailplane & Glider May/June 1940)

BRITISH GLIDING DISTANCE RECORDS

September 4th, 1932: G. M. Buxton in "Falcon": Askam-in-Furness to Coniston, 13 miles.
August 22nd, 1933: G. E. Collins in "Professor": Dunstable Downs to South Mimms, 19 miles.
March 18th, 1934: P. A. Wills in "Professor": Dunstable Downs to Latchingdon, Essex, 56 miles.
August 5th, 1934: G. E. Collins in "Rhönadler": Dunstable Downs to Holkham Bay, Norfolk, 95 miles.
July 5th, 1936: P. A. Wills in "Hjordis": Dunstable Downs to Pakefield, Suffolk, 104 miles.
April 17th, 1938: C. Nicholson in "Rhönsperber": Hulsh, Wilts., to Bigbury-on-Sea, Devon, 120½ miles.
April 18th, 1938: J. S. Fox in "Rhönadler": Hulsh, Wilts., to Povey, Cornwall, 145½ miles.
April 30th, 1938: P. A. Wills in "Minimoa": Heston Airport, London, to St. Austell, Cornwall, 209 miles.

(How British gliding distance records progressed through the 1930s. The Philip Wills flight of 209 miles held the record until 1947)

[18th February 2015]