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Notes and news

The University of Cambridge MacDonald Institute for Archaeological Research Historic Environment Research Conferences 2011–2012 covering: Anglo-Saxon Christianity (5 November 2011); Rural building traditions (25 February 2012); Death and memory (19 May 2012); Medieval and Tudor gardens (9 June 2012). Enquiries to Dr Susan Oosthuizen by email, smo23@cam.ac.uk, or post to HERC, c/o McDonald Institute for Archaeological Research, Department of Archaeology, University of Cambridge, Downing Street, Cambridge CB2 3ER. Phone (office hours) 0758 3151685.

The Wool trade in Bedfordshire. Maggie Stearn, a member of the Bedfordshire Guild of Weavers, Spinners and Dyers, has asked whether any member is able to help her with research into Bedfordshire's past involvement in the wool trade. She may be contacted at: www.mini-webs.co.uk/maggiestearn or www.maggiestearn.blogspot.com

Calendar of Events 2011–12. Please remember to send in your society's 2011–2012 programme to be included in our calendar of *all* affiliated societies' meetings and other local history events on our website. Programmes by e-mail to:

ed.martin39@btinternet.com or by post to the editor (see p. 4).

World War II and the LBC at Stewartby, Part 1

At the outset of the Second World War, London Brick Company (LBC) at Stewartby was the largest brick producing factory in the world. Its statistics were amazing. Its Stewartby 'knot hole' alone – 200 acres in size and operated day and night by mechanical diggers – was producing 40,000 tons of

clay weekly. Its kilns were producing 11.25 million bricks weekly (nearly one-third of the 36 million bricks produced weekly by the company from its 26 factories). LBC's 238 lorries as well as up to 400 private contractors' lorries were carting bricks from the works to sites around the country covering around one million miles of travel a year. Birmingham Corporation alone used 52 million of LBC's 'Phorpres' bricks on just one housing scheme in 1938. Nationally, every year, LBC spent over one million pounds with British industry and provided no less than 4¼ million tons of traffic, delivering approximately 8 million bricks a day by road, rail and boat and they employed 7,750 British workpeople.

Then war broke out in September 1939 and the company faced its greatest crisis ever. The year before, when the Munich crisis of 1938 brought the imminent threat of a European war, orders for bricks fell sharply, and this had a severe impact on the business. But this was nothing like the eventual effects on demand which were to dog the company throughout the rest of the war, and which, combined with wartime restrictions, were to seriously threaten the long-term survival of this major company.



Aerial view of London Brick Company brickfields, Stewartby, 1939.
(BLARS Z41/LB10/1/2/24)

The outbreak of the war quickly brought already diminished demand down to a very low level as investment in new building in the private sector and in local government was put on hold. The result was the closing of some LBC works and a general reduction to a single day shift became necessary before the end of 1939. Every department of the business was struggling. Because of reduced trading results, 250 million bricks had to be put into stock.

The only positive development came with Government orders for air-raid precautions and other defence building. These accelerated following the evacuation of the British Expeditionary Force from France, after the retreat to Dunkirk, and the consequent threat of invasion and the eventual enemy air raids, which began in the autumn of 1940. Substantial brick contracts for shelters, airfield buildings and other official buildings were awarded to LBC. The company then had the problem of actually delivering the bricks given the restrictions on rail and transport facilities in general because of wartime conditions and the needs of the armed forces. The company had to take out a full-page advertisement in *Architecture Illustrated* in August 1939: 'LBC Ltd tender their apologies for any delivery difficulties which have occurred. These have been due to the urgent necessity of giving priority to all Service and Civil Defence requirements.' It was eventually able to dispose of its vast accumulation of stocks but the cost of having to re-open the works it had closed earlier put considerable strain on the company.

Air raid shelters

As early as June 1939, LBC had given an undertaking to the Home Office that there would be no increase in the standard price of their 'Phorpres' bricks for air raid purposes and had published an illustrated brochure showing their range of 'Brick Air Raid Shelters', claiming that 'Reinforced brickwork designed for ARP work offers the most efficient protections against high explosive and incendiary bombs at minimum cost'. The increasing scarcity of steel and timber as the war progressed also led to new developments in the design of reinforced basements using brick columns, reinforced brickwork beams and floor slabs to enable existent floors to sustain a debris load of 400lbs/sq.ft

LBC, as was the case with all major manufacturers during the war, had to rethink the way it was to operate and what it was to produce. Firstly it vacated its head office from London to Stewartby, to join its already large work force based there. To allow for the maintenance of family life, the office work was compressed from six days a week to five days, thus enabling the London staff to travel home on Friday night and return to Stewartby on Monday morning.

Both volunteering and increasing conscription of men into the armed forces inevitably drew experienced men from the brick industry. Those that remained, like most adults on the home front during the war, took on additional ARP work in the evening, on a rota basis, with such tasks as fire watching, Home Guard patrols and staffing first aid posts. Women were taken on to make up the labour shortfall and the management reported that 'they render good and cheerful service'.

Wartime welfare

Thanks to the benevolent and philanthropic Stewart family, the major directors of the company, welfare facilities at Stewartby (the village was named after the family in 1937) were well developed. Sir Percy Malcolm Stewart had built, from 1926 onwards over

two decades, an entirely new model village of superior housing for their workers, designed by the architect Sir Albert Richardson, adjacent to the factory. This welfare provision was opened up during the war to the many members of the armed forces located in the area, who were able to share the firm's well-equipped canteens, social and sports clubs, cricket and football fields, outdoor swimming pool and village hall.

By 1941 the firm's house magazine, *Phorpres News*, was boasting of the fact that it provided its women workers with a boiler-suit free of cost. A day nursery was set up with a Matron and trained child care nurses to enable young mums to work part-time at times to suit them and with transport to and from work and their homes in local villages. Hot meals were provided in the factory canteens.

Women workers

The work which the women found themselves doing, previously done only by men, was very hard and the conditions were harsh. The sheds in which they worked were covered but open to the elements at the sides. They wore trousers and headscarves to keep the clay out of their hair. Workers had to handle cold sticky clay – they tried using gloves but it did not work – lifting the 'green' [unfired] bricks out of the press on to trolleys before taking them to the kilns to be fired. Some of the women drove the trams which transported the bricks about the site. There were a minimum of experienced men to supervise and to control the firing of the kilns.

One such woman worker started on the conveyor belts at the Stewartby works with her twin sister when they were 14 years old in August 1943. Father already worked in the factory, as a 'drawer' taking the burnt bricks from the kiln and loading them on to the trucks. She describes what it was like: 'Very hard. Very tiring. 7.30am to 5.30pm. We had a break every two or three hours. You used to stand on concrete and your feet as well as your hands were so cold. We used to go behind the warm presses when we could but were so busy mostly.'



Women at work on brick production, Stewartby, 1940s. (BLARS Z50/113/1)

Another woman remembers her first day at the works: 'Frightening. We'd never seen anything like it

before, bricks and presses. The foreman showed you what to do. Hard work. Stretching a lot. Bending. We used to get a lot of backache and headaches. I've got big knuckles now from holding them bricks. If you wanted to go to the toilet, you had to have someone take over from you and if there was no one then you couldn't go. They were very strict. But they did have to let you have a rest – "relieving" it was called – because of the hard work.' (To be continued.)

STUART ANTROBUS

Augustus Henry Orlebar and the Schneider Trophy, Part 1

Augustus Henry Orlebar was the Flight Commander of the Schneider Trophy team from 1929 to 1931, when Great Britain won the trophy outright.

He was born on 17 February 1896 in the Red Room at Hinwick House, and was known in the family as 'Harry'. His father was Augustus Scobell Orlebar, and his mother's maiden name was Hester Mary Knowle. Harry's father had rented Hinwick House from his cousin Richard Orlebar, and ran a preparatory school there, which used the Orlebar coat of arms (argent, two bars gules with three roses argent) as the school crest. The school later moved to Hertfordshire, where it was known as Gaybridge Park School; it continued to use the Orlebar crest, and periodically paid the family a royalty for so doing.

Harry Orlebar was educated at Rugby School, where he excelled at games. The First World War broke out during his last term at Rugby, and in December 1914 he went straight from school into the 1st/5th Bedfordshire Territorial Regiment. He was commissioned in January 1915, and in September of the same year joined a battalion of the regiment that was already on active service overseas, being drafted to Gallipoli shortly after the landing at Suvla Bay. Less than two months later he was wounded by a sniper and sent home to England.

In May 1916 he was attached to the Royal Flying Corps, the forerunner of the RAF. He trained initially at Reading and later at the Central Flying School at Upavon, Wilts, where he graduated as a pilot. He was then sent to France, where he joined No 19 squadron. He served on the Somme, at Arras and Messines, flying BE2s and later Spads, until July 1917. During this time he shot down two enemy Albatros scout aircraft over Douai and Zonneberg. He was next sent back to England to join the effort to stem German air raids. To this end he served with No 40 Air Defence Squadron, and was one of the first pilots ever to fly a single-seat fighter at night on interception missions.

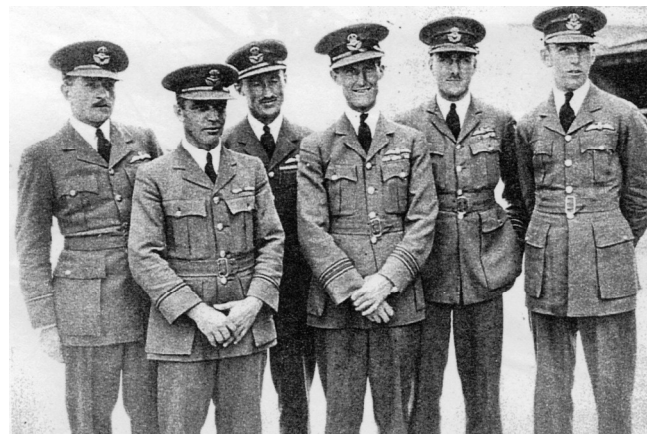
December 1917 saw his appointment as temporary Flight Commander, with the rank of Captain. In January 1918 he returned to France with No 73 squadron, flying Sopwith Camels. He then added a further four enemy aircraft to his previous tally, including a Fokker Triplane whose pilot was badly injured when his aircraft crashed. This proved to be Lothar von Richthofen, a brother of the famous Red

Baron. Harry Orlebar was wounded again at St Quentin in March 1918, and was again sent home to recuperate, returning to spend the final three months of the War with No 43 squadron, flying Sopwith Snipes. He shot down his final victim on 29 September 1918, bringing his overall score of enemy aircraft to 7. After the War ended he served with the Army of Occupation in Cologne.

In 1919 A H Orlebar was granted a permanent commission in what had now become the Royal Air Force, as a Flight Lieutenant. He was awarded the Air Force Cross in 1921 'for valuable flying service'. He subsequently served as a test-pilot at the Aeroplane and Armament Experimental Establishment at Martlesham Heath, and later in various staff posts both in Great Britain and in Iraq.

In 1923 he married Blanche Alice Victoria ('Tattie') Cooper, and in the same year he was promoted to Flight Commander in No 22 squadron at Martlesham Heath. Five years later he was promoted to Squadron Leader. It was shortly after this that he was offered, and accepted with great enthusiasm, the chance to command the High Speed Flight whose objective, was to win the Schneider Trophy.

The Schneider Trophy was awarded to the winners of a series of races for seaplanes. The competition was instituted in 1911 by Jacques Schneider, a French financier, balloonist and aviation enthusiast, who envisaged seaplanes as being a promising mode of transport for the future, and hoped that his races would stimulate their rapid development. The trophy is a sculpture in silver and bronze on a marble base, depicting the spirit of the air (a winged female figure) diving to kiss the spirit of the water at the top of a cresting wave.



Pilots of the Schneider Trophy team — the two world air speed record holders are Harry Orlebar and George Stainforth, respectively 4th and 5th from the left.

The rules of the competition were simple. The race was flown round a closed course over the sea. The distance flown in the early races was 280 km; later it was increased to 350 km. Any country, through its national aero club, could enter a maximum of three aircraft, and the race was to be held annually. Each time the race was flown, the winner would receive a cash prize of about £1,000, and his country would hold the Trophy until the next race. If a country won the Trophy three times in five

successive races, that country would retain it permanently, and the winning pilot would be awarded 75,000 French francs.

These races were very popular, and sometimes attracted crowds of over 200,000 spectators. Each race was hosted by the country which had won it previously, and the races were jointly organised by the Fédération Aéronautique Internationale (FAI) and that country's aero club – for Great Britain, the Royal Aero Club.

The first race was in Monaco in April 1913. The aircraft had to fly 28 laps of a closed 10 km course. Only two countries entered, France and the USA; a French Deperdussin machine won, at an average speed of 45.3 mph. The actual speed was in fact rather better than this, nearer to 61 mph, but the judges decided that the pilot had crossed the finishing line in an unacceptable manner, and they made him take off and fly the final lap again!

The British won in 1914, with a Sopwith Tabloid, at 86.0 mph. After this race, because of the First World War, the competition did not resume until 1919, when the race was flown off Bournemouth in foggy conditions. The Italians won – but they were disqualified for missing a marker buoy, and the race was void. Nevertheless the 1920 race was held at Venice and the Italians won in that year and in 1921. In 1920 they won by default, since no other nation entered, and in 1921 the single non-Italian entry failed to start.

The 1922 race in Naples was won by the British entry, a Supermarine Sea Lion II, at a speed of 145.7 mph and in 1923 in Cowes in the Isle of Wight the winner was the Curtiss CR3 from the USA. There was no race in 1924: the Italians and the French entered but then withdrew, and two British entries crashed in pre-race trials. The 1925 race was held over Chesapeake Bay in the USA, and was won by the US Curtiss R3C-2 at 232.6 mph. The Italians took the prize back in 1926 with their Macchi M39, at 246.5 mph. The winning aircraft were all sleek, streamlined machines using liquid-cooled inline engines.

The next few races were very significant in British aviation history.

From 1927 onwards the competition was held biennially, to give more development time between races. Further, although it was not in the rules, since 1926 all competing countries had fielded pilots from their armed forces. Shortly before the 1926 race (in which Britain did not compete), the RAF formed the High Speed Flight, based at the Marine Experimental Establishment at Felixstowe, to train a dedicated team to compete in the 1927 race, to be held in Venice.

The Italians were confident that the Macchi M52, developed from their 1926 winner, the M39, would beat all-comers, especially on their own ground. Another potential protagonist was the USA, but its team received no backing from the US government for the 1927 race, and no private backers were found.

Britain was in a strong position. The High Speed Flight had carried out many training flights in high-speed aircraft, and had ordered examples of three new types to equip their 1927 team. These included two Supermarine S5 aircraft, designed by R J

Mitchell, and a Gloster IVB. In the event, all three Macchi machines and the Gloster aircraft had engine failures during the race, leaving the two S5s, flown by Flight Lieutenants S N Webster and O E Worsley, respectively, to finish first and second. The winning speed was 281.5 mph.

Webster inadvertently performed a lap of honour! To keep a check on how many laps he had performed, he punched a hole in a sheet of paper each time he crossed the finishing line. When he punched the seventh hole, which should have meant that he had finished, he noticed that the time was five minutes less than he had anticipated, so he flew an additional lap just to make sure!

The 1929 race was to be held at Cowes, but, after the 1927 victory, the High Speed Flight had been disbanded, and it seemed that there would not be any Treasury support for a British team in 1929. Surprisingly, funding was eventually made available, but the Air Ministry objected to the use of RAF pilots, despite having agreed to supply the aircraft. This was eventually overcome and the High Speed Flight was reconstituted in February 1928 and was fully operational early in 1929.

The Flight Commander chosen for the High Speed Flight was Squadron Leader Augustus Henry (“Harry”) Orlebar. The other pilots he chose for the team were Flying Officer R L R Atcherley and Flight Lieutenants J N Boothman, D Greig, G H Stainforth and H R D Waghorn.

The Supermarine S5 which won the 1927 race was powered by a Napier Lion engine. The S5's designer, R J Mitchell, felt that the engine had reached its design limit, and asked Rolls-Royce to develop a completely new one for 1929. The Air Ministry was not prepared to fund the development of this new engine, so Rolls-Royce privately financed the building of a ‘military engine with racing capabilities’, the ‘Type R and Mitchell began to design the Supermarine S6 for the British team, two of which had been ordered. The S6 was an improved S5 which had won the previous race. The Gloster Aircraft Company was also developing a new design for the 1929 race, the Gloster VI. As Mitchell had foreseen, this had many problems with its uprated Napier Lion engine, which was too unreliable to compete for the Trophy!

(To be continued.)

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