College Mill, Winchester

Martin Gregory

The path of the river Itchen through Winchester was reorganised by the Romans to provide sites for grist mills. Thus mediaeval Winchester had many small mills using the river Itchen as their power supply. They were grouped on several branches of the river, one of which served Abbey Mill and then Floodstock Mill which was on College Street. Floodstock Mill is described as 'entirely ruinous' in 1419 and never again produces any revenue [1]. However, its tailrace ran through the Warden's garden in Winchester College. Embanking this tailrace created a fall further down the river, which was used to drive College Mill a century later.

Winchester College was founded by William of Wykeham, then Bishop of Winchester, in 1382 to educate 70 scholars. He endowed it with various lands and property to carry out its mission. This endowment included several corn or grist mills including, for instance, the tide mill at Eling, Hants. In 1534, King Henry VIII broke with the Pope in Rome and deprived the Roman church of its annates (annual taxes). Winchester College was included in the list of church benefices which Henry appropriated. However, in 1535, an Act specifically excluded the Colleges of Winchester and Eton and the Universities of Oxford and Cambridge, from payment of these taxes.

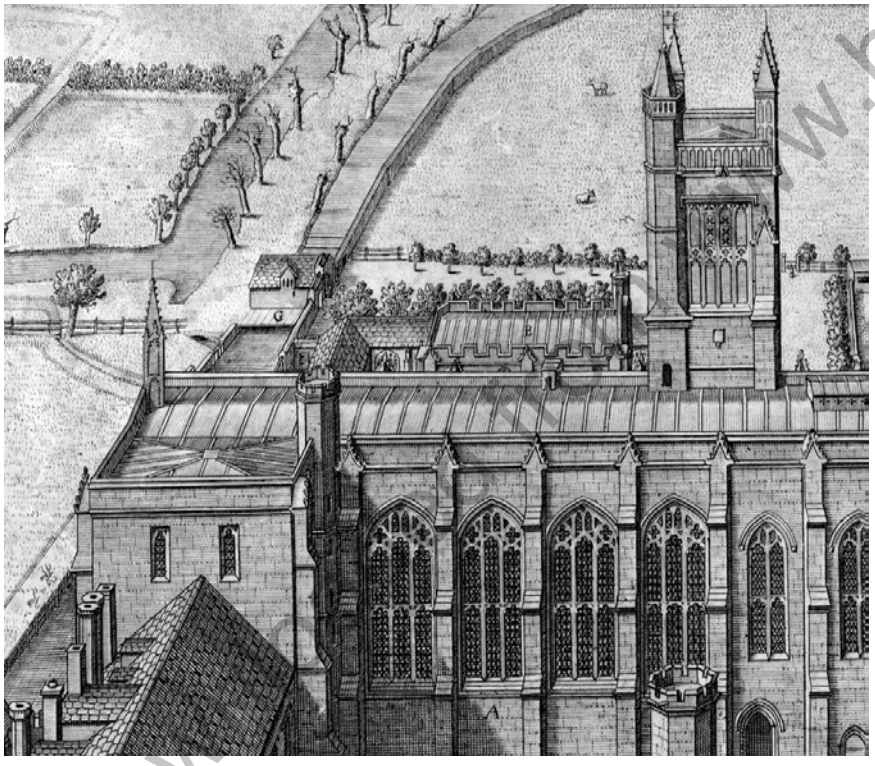


Figure 19. David Loggan produced an engraving of the College buildings in 1675. This detail from it shows the mill, labelled G, above the old cloisters [WCA].

Having survived, the College obtained a licence, dated April 14th 1539, from Bishop Gardiner (of Winchester) to Warden More (of the College) 'to build and maintain a mill for grinding their corn at a suitable spot … on the stream that runs from St. Swithun's Priory ….' [803]¶ It is not clear when a start was made on construction but the Bursar's Account Book for 1564-5 details milling machinery being brought from the Isle of Wight to Redbridge and thence to the College. The mill was completed in that year by one Robert Long. The Bishop's lease of the site of the mill and garden was acquired in 1571 [819-20]. Although owned by the College, the mill was let to a succession of millers. One of the conditions of the lease was to grind wheat for the College *gratis.*

The 'Colledge mill' (sic) appears on the Winchester street plan inset in John Speed's map of Hampshire (1611); it is the only Winchester mill depicted. The first illustrations of the mill showing its relation to the College buildings are also in the seventeenth century; in David Loggan's engraving of 1675 (Figure 19) and in an oil painting by William Barfoot of 1692 (Figure 20). By the beginning of the eighteenth century the mill seems to have fallen into disrepair. In 1734, the Warden and Fellows circulated a memorandum on what they should do. This, complete with insertions and deletions, survives [24193].

"That in ye Year 1734 The College Mill being greatly out of Repair, it was proposed by John Marshall jnr the Miller, to undertake the Repairs thereof at his own charge, if the College wou'd grant him a Lease of it.

Downloaded from www.hias.org.uk

But this not being tho't advisable for ye College to do upon many considerations; he was nevertheless encouraged & allowed by ye College to Repair ye Mill, & likewise to add 2 new pair of Stones at his own expense upon ye following conditions,

1st That he sho'd continue to Grind all the College Corn Gratis, as had been usual, & to serve them faithfully.

2dly That he sho'd pay to ye College ye accustom'd Rent of £5 pr an. & keep ye Mill in Repair from time to time at his own charge.

3dly That he sho'd give in to ye College a True bill & account of ye charges he has been at in repairing the Mill & setting up ye New Stones.



Figure 20. William Barfoot's oil painting of 1692 showing the same view of the College as Loggan. The mill is above the old cloisters [WCA].

4thly That at his Death, or other time of his leaving or being turn'd out of ye Mill it shall be entirely submitted to ye Judgement, Will and Discretion of ye Wn (*Warden*) & Fells (*Fellows*) of ye sd (*said*) College for the time being, to make such allowance to him or his execrs (*executors*), as to them at that time shall appear just & reasonable: the Condition wch (*wbich*) ye Mill shall be then left in, & the Time of his having enjoyed ye same being taken into Consideration.

And for ye better Direction of those that may come after, it is now by ye present Wn & Fs judged reasonable, that wreof (*whereof*) ye whole Bill of Charges is given in at £153, abt (*about*) £30 wreof is for ye 2 new pr of Stones; If ye sd 2 pair of stones be left to ye Mill & made ye College property, and the mill be confirmed in good repair: then ye College sho'd reimburse to ye Miller or his Family the remainder of ye sd sum of £153 which shall be left after a Deduction made of ten * pounds pr an. for as many years as He shall have enjoy'd ye Mill for ye first ten years (reckoning from Mich 1734) & of Five pds pr an. for ye next Ten years and that at ye end of Twenty years (if he sho'd enjoy it so long) the Whole Mill with all the apparatus of Stones &c, shall devolve to ye College

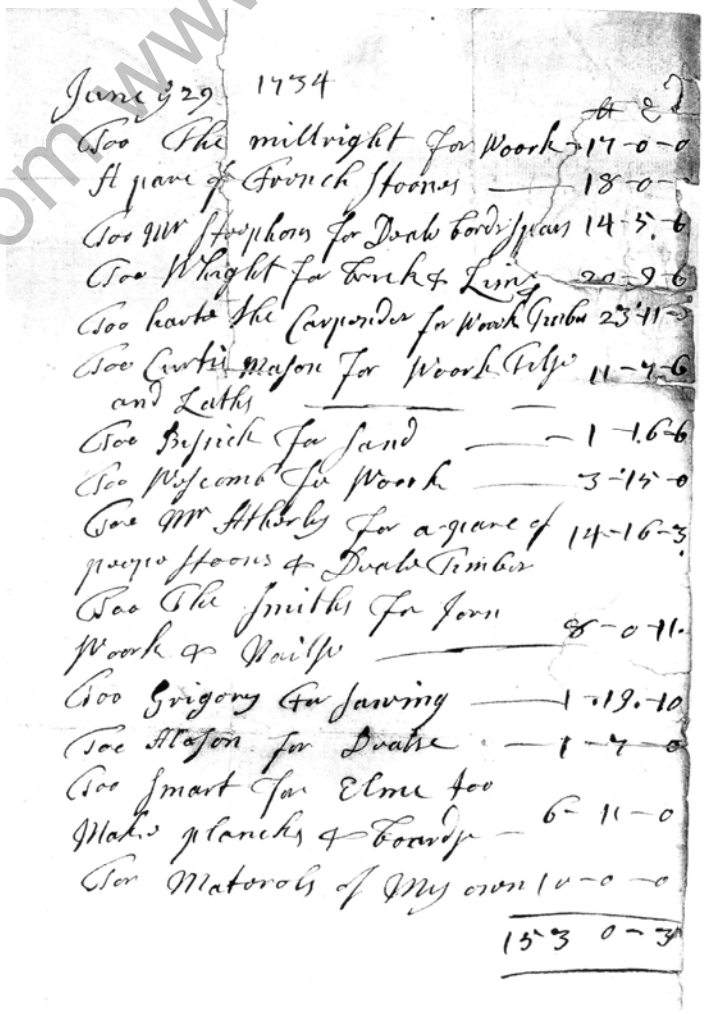

June 29 1734
Goo The millwright for Woork 17-0-0
A paire of French Stoones 18-0-
Goo Mr Stephens for Deals bords &c 14-5-6
Goo Wright for Work & Lime 20-9-6
Goo Mr the Carpenter for Work done 23-11-3
Goo Curtis Mason for Woork & Lyme and Laths 11-7-6
Goo Bricks for Sand 1-16-6
Goo Wiscomb for Woork 3-15-0
Goo Mr Atherley for a paire of Mayno Stoones & Deale Timber 14-16-3
Goo The Smiths for Iorn Woork & Nailes 8-0-11.
Goo Grigory for Sawing 1-19-10
Goo Mason for Deales 1-7-0
Goo Smart for Elme &c Makg Planchs & Boards 6-11-0
For Materials of My own 10-0-0
153 0-3

Figure 21. Materials and costs of the repairs of 1734 [24192]

Downloaded from www.nias.org.uk

without any consideration or allowance whatsoever.

*: if £5 a year be not a sufficient deduction so that ye whole sum shall be abated in 31 yrs."

The miller's account for the repairs is shown in Figure 21 which prices 'A pare of French Stones' at £18 and totals £153 for the repairs. Having paid this sum, Thomas Marshall ('John' has been struck out on the document and replaced with 'Thomas') was granted a lease during his own life [24194].

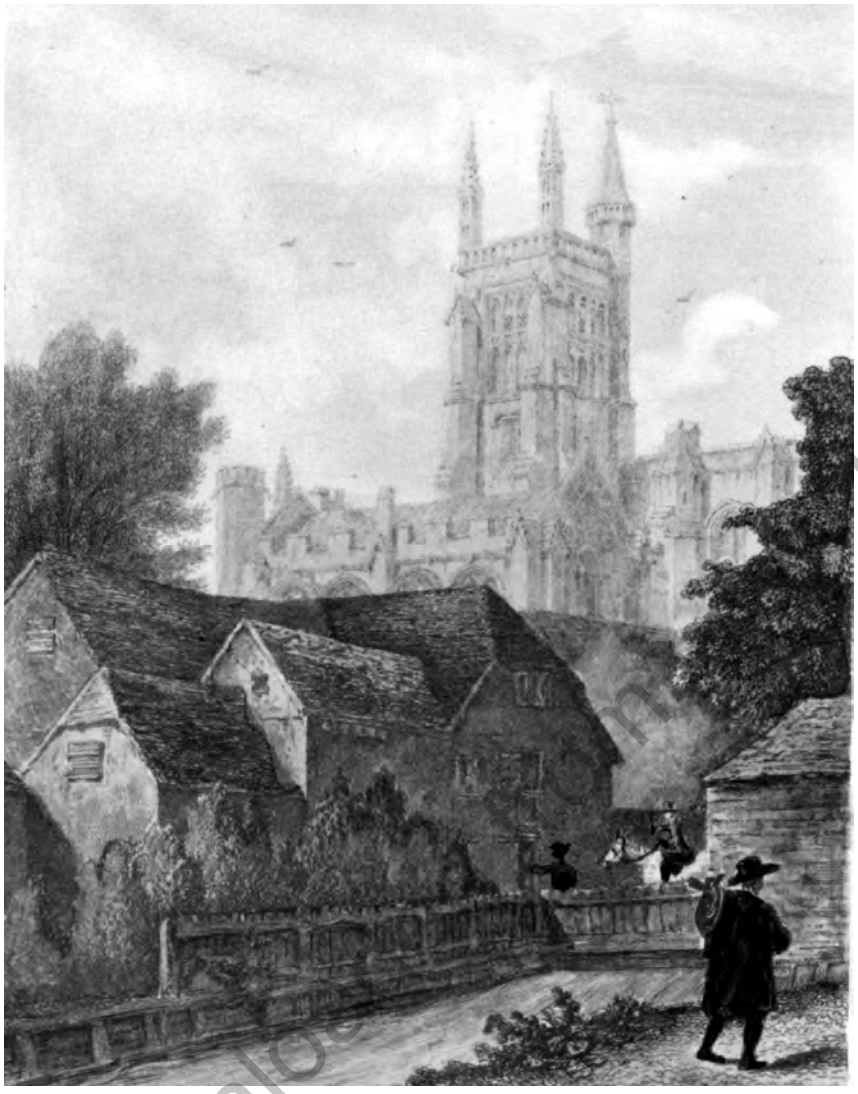


Figure 22. 'College Tower, Library & Mill' by Owen Browne Carter, from *Picturesque Memorials of Winchester.* (1830)

Wooden milling machinery required a lot of maintenance and so there is a steady stream of documents detailing materials for repairs throughout the eighteenth century. A bill for repairs in 1749 refers to a 'Boulting mill' and a 'Kyln for Drying of Corn' [24195]. At this time, bricks were quoted at 19d per thousand, sand at 7d per load of 40 bushells and lime at 3d per quarter. In 1757, Robert Willis put in his 'millright's bill for work' including 'for making and putting in a new water wheel and shaft, 7 guineas' [33671]. Peter Barratt's bill for 'work done at Collodge Water House' included 1/6d for 6 pounds of tallow for the Gudgeons' in 1764 [33676]. Throughout the century there are regular payments of 2 guineas for 'looking after the College Water Wheel one year due May the first last'.

Down the centuries there are quarrels over water rights. Durngate Mill, City Mill and Segrim's Well Mill (now Wharf Mill) were on one branch of the river in parallel with Abbey Mill, College Mill and Barton Mill (Hammond's Mill) on another. In 1763, a dispute arose 'concerning the right of water running from a certain place called the Arrow hole…..and from thence to St Mary's College Mill …..' On the side of the document is written 'This agreement was only proposed by Mr. Goldon, the Steward of the College, but was never executed, the matter being adjusted for the present' [24201].

At the start of the nineteenth century H. E. S. Simmons' notebooks [2] state that there were three pairs of stones. The costs of maintaining the mill continued. In 1809 Wm Freemantle put in a bill for a total of £23 - 14s including '12 iron bucketts at 6/6d each (*for the wheel*), 12 days work for my man at £3 and 4 days work for myself at £1 - 4s' [33701]. Eight years later, Thos. Shearman rendered his account for work 'at Colledge Water Wheel' including '2 day fastn'ng jron hanging bucketts on wheel, - 4/6d, for beer, - 6d' [33706]. Two views of the mill survive from the early nineteenth century: it is shown in one of the plates of Rudolph Ackerman's history of 1816, and in an engraving by Owen Browne Carter of 1830. Both show the building very much as it is today.

Downloaded from www.mas.org.uk

The accounts for College Mill as a corn mill cease in the 1870s when Mr. J. B. Dance was the tenant [24208]. The water wheel remained in use, however, to drive a pump which provided an auxiliary water supply to College Conduit. The bin floor was removed and the stone floor cleared for use as a workshop. In his report to the Warden in January 1892 [3], the Headmaster (W. A. Fearon) states:

> 'The College Mill has been fitted up as a carpenter's shop for the use of the school; and it serves the purpose admirably; the water power is being adapted during these holidays for the turning of the lathes.'



Figure 23. The upper floor of the mill as a workshop in 1922. The man on the right is J. D. Le Couteur, an expert on stained glass; the photographer was Walter Abley, the physics technician at the College. [WCA]

Thus the building started a new career as the College workshop. It was used for the restoration of College glass and woodwork. Men in the School (pupils) were taught woodworking skills in their spare time and, in Edwardian days, carpentry even appeared on the timetable. New workshop buildings (now the College's Technology Centre and still called 'Mill') were opened in Kingsgate Park in 1935, since when College Mill has been used primarily for storage.

The use of College Mill as part of the College water supply goes back centuries. Segrim's Well Mill was so called because there was a spring nearby. The water from this spring was granted to the College by Bishop Wayneflete in 1482. Dug out as an open well it formed the College water supply. Later, it was covered in and pumps were installed in College Mill to pump the water [4].

Harry Best [5], in a survey of the College water supply in 1909, gives the consumption of water as 4000 to 5000 gallons per week, most of which came from the Winchester Water & Gas Company at 10d per 1000 gallons. This supply was supplemented by water from a shallow well in a field by the mill (Segrim's well). Best gives the dimensions of the pumping plant as an undershot water wheel 14 ft diameter by 27 in wide geared to a three throw pump with 2½ in diameter plungers of 6 in stroke. (I think Best has made a mistake over the dimensions of the waterwheel. Looking at the mill race today, the brickwork suggests a wheel about 8 ft diameter by 4 ft wide.) The pump was



Figure 24. Another of Abley's photographs of the interior of the mill in 1922 [WCA]

Downloaded from www.hias.org.uk



Figure 25. College Mill photographed from Chapel tower in 1933. This mimics the view drawn by Loggan 250 years before. [Country life]

fitted with an air vessel and safety valve and ran at 20-24 rpm feeding water to a lead-lined cistern of 515 gallons capacity in the roof of Chamber Court in the old College buildings. Best suggests the pump had been there for many years and originally pumped the shallow open well. After outbreaks of illness, the well was capped and replaced by a borehole nearby. He instituted regular laboratory tests on the water which showed it to be of acceptable quality. The water supply from College Mill was continued until 1928 when it was replaced by a supply from a new borehole sunk in the Warden's garden and fitted with an electric pump.

However, projects to reuse the building have occurred at regular intervals. In the 1950s, the College fishing club used the ground floor of the mill as a fish hatchery. Water was pumped straight out of the mill stream (Logie) into wooden troughs and chambers in which salmon and trout fry were reared for release into the river Itchen. From 1960-64, about 25 000 salmon fry were reared each year for the river Itchen. The arrangements were dismantled around 1965 after which stock for the river was bought in [6].

John Reynolds, a noted mill historian, and an assistant, Mr Muckart, visited the mill in 1967. Figure 26 shows their sketch of a conjectural layout for the mill with three pairs of stones.

One modern proposal for the reuse of the building came in the late 1980s. With increasing numbers of visitors to Winchester it was proposed to convert College Mill into a visitor centre and shop where parties of visitors could be greeted and shown introductory displays and videos without disrupting the pattern of life in College, particularly in term time. It came to nothing and the College has yet to solve this particular problem.

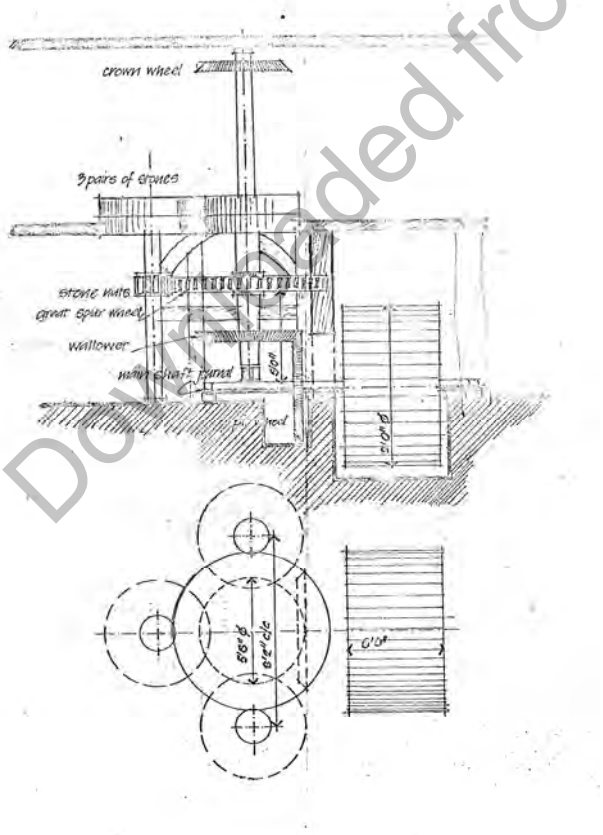


Figure 26. alongside Conjectural sketch of the machinery by J. D. Reynolds and G. W. Muckart (1967) [WCA]

Downloaded from www.hias.org.uk

Acknowledgements:

¶ Most of the material for this article comes from the Winchester College Archives [WCA]. The numbers in square brackets are the document numbers in the College Archives. My thanks are due to the Archivist, Suzanne Foster, for help in locating the material and to the Warden and Scholars of Winchester College for permission to reproduce it.

Notes:

All costs are left in Pounds (£), shillings (s) and pence (d); all distances in feet (ft) and inches (in)

1. J. S. Furley, *Mills and Waterways of old Winchester*, 1930
2. H. E. S. Simmons researched the history of English mills from the 1930s up to his death in 1973. His notebooks are now in the Science Museum Library.
3. Headmaster's report for 1891
4. J. S. Furley, op.cit.
5. Harry Best was a water engineer from Oxford who advised the College for many years [m6/42].
6. W. M. M. Baron, *private communication*



Figure 27. College Mill in 2011: from the north-west, showing the external stair to the stone floor. The gate alongside is called 'non-licet gate'.

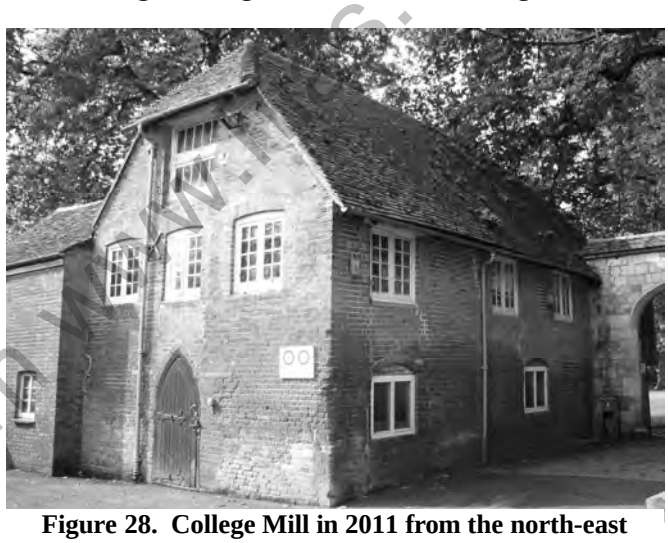


Figure 28. College Mill in 2011 from the north-east



Figure 29. The remains of the hurst framing in 2011



Figure 30. The roof structure in 2011

Downloaded from www.mills.org

Two Hampshire Airfields, Worthy Down and Chilbolton

Richard Hall

Worthy Down Airfield; History

I often wonder as I watch the myriad of dog walkers, joggers, ramblers and even the chap flying his model aircraft, whether they realise the tracks and paths upon which they walk or run were once home to the aircraft of the Royal Air Force and the Fleet Air Arm. Do the residents of the huge housing estate that is South Wonston ever look out from their windows across the former landing ground and visualise the test flying of Spitfires? Somehow I doubt it. I suspect that, like many others, they know not of the field's former history. There is very little at this 480 acre site to suggest that at one time the land was used for aviation. Even the one remaining Dutch-barn hangar looks like an ordinary agricultural building. However, look a little deeper and the signs are still there.

Not many people are aware that Winchester used to have its own horse racing course. This was located at a place called Worthy Down. Situated 2½ miles north of the Wessex Capital in the rolling Hampshire countryside, it was not an obvious place to build an airfield owing to the terrain. Worthy Down Airfield was a grass strip built on undulating ground 345 ft (105 m) above sea level. The slopes and type of ground at this field would have made landing and taking off "interesting".

The airfield had a long history and first came into existence in 1917. The former Winchester Racecourse was acquired for use by the Wireless & Observers' School (W&OS), which had to vacate Brooklands for the expansion of that airfield by aircraft manufacturers. The main technical buildings consisted of six large aeroplane sheds and an Aeroplane Repair and Salvage hangar, This was built close to the Didcot, Newbury & Southampton Railway which ran along the airfield's eastern boundary. The accommodation blocks and administration sections were largely complete by the time the airfield opened in 1918. By that time W&OS had moved to Hursley Park, which itself, in 1940, became the Control Centre for Spitfire production, following the heavy Luftwaffe raids on the Supermarine factory at Woolston, Southampton.

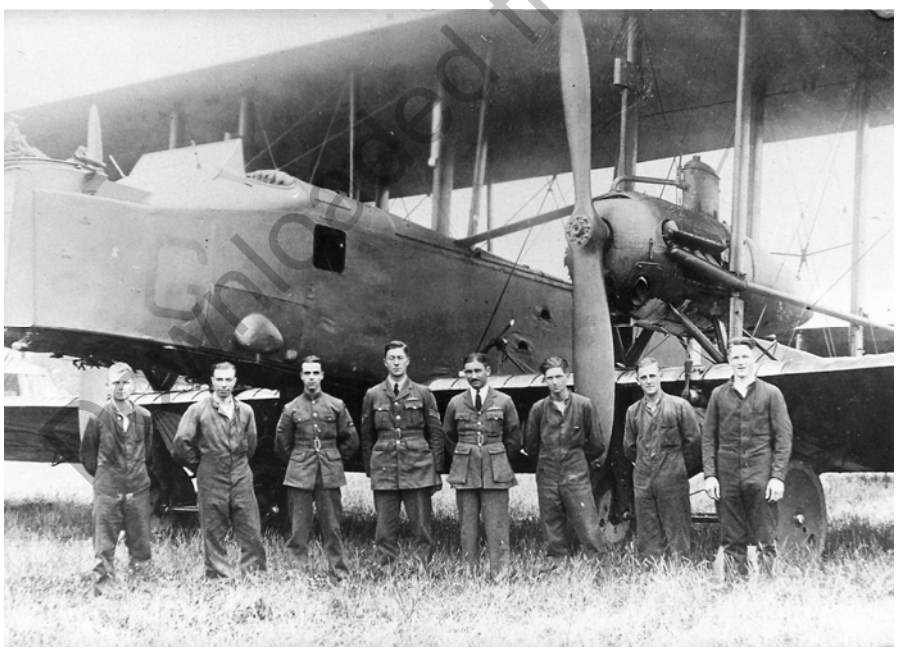


Figure 31. Vickers Virginia and crew.
I am indebted to Tony Dowland for allowing the use of this picture of a Virginia at Worthy Down. The photo was originally supplied to Tony by ACM Sir Walter Hugh Martin.

In August 1918 the RAF & Army Co-operation School arrived and acted as a finishing school for Corps recce pilots. Later the Artillery Co-operation School came into residence as a detached flight from Lydd. At the time aircraft located at the airfield consisted of 20 Armstrong Whitworth FK8s, 12 Bristol F2Bs and 50 RE8s. Personnel on the site amounted to some 1 450.

With the Armistice coming at this time, very little then happened at the airfield. There were plans to build an airfield at nearby Flowerdown for No. 1 (T) Wireless School but this did not come to fruition. Although no airfield was built at the site, RAF Flowerdown did come into existence in 1919. Any requirement for

Downloaded from www.hias.org.uk

flying at Flowerdown was handled by Worthy Down. Incidentally, Flowerdown was used throughout World War Two as a listening station which fed information to Bletchley Park and also, after the war, to GCHQ's Composite Signals Organisation as a large HF listening station, finally closing in the late 1970s.

Awakening from its period of relative quiet, in 1924, No. 58 Squadron was formed at Worthy Down on April 1st. The initial aircraft were Vickers Vimy which were converted to Vickers Virginia night bombers by the end of the year.

In April 1927, No. 7 Squadron arrived from Bircham Newton, again with Virginias. Up until 1935, either one of the two squadrons held the Lawrence Minot Memorial Bombing Trophy which I suspect led to a fair amount of rivalry between the two units. It is interesting to note that No. 7 was commanded by Wing Commander C.F.A Portal who rose to the post of Chief of Air Staff 1940-1945. No. 58 was commanded by Wing Commander Arthur T. Harris who went on to become Worthy Down Station Commander and ultimately Commander in Chief, RAF Bomber Command, 1942-1945. Harris recognised very early on that the bombers of that time were woefully ill equipped to fly over enemy territory in daylight and would have been easy prey to fighters. To this end Harris spent many nights at Worthy Down with 58 honing their night flying skills. In his words "I reckon we did more night than all the rest of the air forces in the world put together" I have recently obtained a diary entry from someone who lived near the airfield at this time. In the entry the writer states that he/she was being kept awake by the night flying Worthy Down based bombers. It's nice when this type of eye witness account is unearthed so many years later.

The rivalry between Harris and Portal continued during the war when the pair frequently locked horns over strategy and the bombing campaign. Other celebrities at Worthy Down included Ralph Richardson and Laurence Olivier. Their acting skills were allegedly better than their piloting ones and, between them, they wrote off or damaged several aircraft. Olivier successfully managed to taxi one Blackburn Shark into another on his first day. Olivier went onto to play Sir Hugh Dowding in the film *Battle of Britain*.

In April 1935, No. 7 Squadron began conversion onto Rolls Royce Kestrel powered Handley Page Heyford II aircraft. In August, No. 2 Squadron arrived with Hawker Audax aircraft to work on Army co-operation flights. Around this time Nos. 4 and 13 Squadrons, also with Audax, visited the airfield for a time. In October 1935, B Flight of No. 7 Squadron formed into 102 Squadron whilst A Flight of No. 58 became 215. The two squadrons initially flew Virginia X aircraft. Nos. 58 and 215 left for Upper Heyford in January 1936. In August 1936 Hawker Hinds of No. 49 Squadron arrived with 7 and 102 leaving for Finningley.

Nos. 35 & 207 Squadrons arrived in August 1936, their Fairey Gordon aircraft having been shipped back from the Sudan, rebuilt and test flown at Worthy Down. In August 1937, the Gordon units were re-equipped with Vickers Wellesley aircraft. This brought a more complex aircraft with retractable undercarriage, variable pitch propellers and an enormous wingspan, to the airfield.

In April 1938, Worthy Down was transferred from Bomber to Coastal Command. The first squadrons to arrive were Avro Ansons of Nos. 206 and 233 Squadrons. Further units also moved in, including 220 Squadron, again with Ansons, Hawker Nimrods, Fairey Swordfish and Hawker Ospreys from 800 Squadron, and some trial Gloster Gladiators.

Worthy Down was now to be a Fleet Air Arm Shore Base. In November 1938, 803 Squadron formed up with Blackburn Skua aircraft and, on 24th May 1939, Worthy Down was officially handed over to the Admiralty and officially named HMS Kestrel. The field became home to the Telegraphist Air Gunners' School (TAG). No. 1 Air Gunners School formed shortly afterwards with three flying units, Nos. 755, 756 & 757, equipped with Blackburn Shark and Osprey aircraft. The School was still resident when war broke out and they were joined by survivors from the sinking of HMS Courageous in the form of 811 and 822 Squadrons.

After the Dunkirk Evacuation, Blackburn Skua aircraft of 806 Squadron which had taken part in the action, made a brief visit to Worthy Down. 806 pilots collected the first Fairey Fulmar aircraft to enter service, from the field and then left for Eastleigh to undergo further training. Fulmars were present when the airfield received the unwanted attentions of the Luftwaffe during the Battle of Britain. On Thursday August 15th 1940, the airfield was attacked by Junkers Ju 88s. The raiders were part of LG1 escorted by Bf 110s of ZG2. Despite the constant attention of 43 Squadron's Hurricanes, 601 and 609 Spitfires, the raiders eventually got

Downloaded from www.rias.org.uk

through and bombed the airfield, though causing very little damage. The cost to the Luftwaffe, however, was high; II/LG1 losing 5 Ju 88s to 601 Squadron. In late 1940, Lord Haw Haw made one of his more notorious remarks when he informed the British public that HMS Kestrel had been bombed and sunk. No doubt this caused some amusement to the station personnel.

Not so lucky was the Supermarine factory at Woolston. On Tuesday 24th September 1940 the Luftwaffe attacked the factory killing many people but not destroying the complex. On Thursday 26th September 1940, the Luftwaffe again attacked and caused serious damage to Spitfire production at the factory. Following this, urgent dispersal of Spitfire production was arranged. Two Bellman hangars became available at Worthy Down and, in December 1940, Spitfire development flying was moved to the airfield with Jeffrey Quill in charge.

In early 1941, a large dispersed storage facility was created across the former A34 road to the west of the airfield. This was accessed by a taxiway and contained 48 Dutch-barn and 2 Bessoneaux storage buildings, and a Fromson Blister hangar. To protect the site a decoy airfield was laid out at Micheldever, three miles to the north east. Late in 1941, the first Rolls Royce Griffon powered Spitfire flew from Worthy Down. In addition, much of the early development work on the Seafire took place at the field.

The ground defences at Worthy Down were fairly substantial and consisted of a number of pillboxes surrounding the perimeter of the airfield. Today 25 pillboxes remain intact. There were three rare counter balance type Picket Hamilton pillboxes located on the landing ground. Two of these survive, one being listed by English Heritage, because of its rareness and type, but more on that subject later.

With the activity of Supermarine and the arrival of more Percival Proctors in 1942 for the TAG School the airfield became fairly crowded. Jeffery Quill had a coming together with a Proctor whilst testing a Spitfire. The accident occurred on the ground with the Proctor being written off and the Spitfire badly damaged.



Figure 32. The Brodie's gravestone in Itchen Abbas churchyeard.

When researching articles such as this, tales of human tragedy often surface. I recently discovered a grave in the churchyard in the Hampshire village of Itchen Abbas. The grave is the final resting place of Lieutenant Anthony Douglas Brodie R.N.V.R. Lieutenant Brodie took off from Worthy Down in a Percival Proctor BV591 on 7th July 1942. Near Abingdon the aircraft broke up after part of the wing failed. He, along with two others in the aircraft, including a WREN, was killed. It is somewhat poignant to note on the gravestone that Lieutenant Brodie's son, Peter, was also killed whilst flying from HMS Hermes in 1967.

Back to the history of the airfield: when the TAG School at Yarmouth in Nova Scotia, Canada was established, the units at Worthy Down were run down. 756 and 757 Squadrons disbanded, whilst 755 continued with the unpopular Curtiss Seamew which they used until April 1944.

Trials of the Mark XIV Spitfire started in November 1943; however, as the facilities at High Post improved, Supermarine development flying was transferred from Worthy Down in March 1944. The airfield now became home to some more unusual FAA units. 739 (Blind Approach Development Unit) moved in with Oxford aircraft during September 1943. They were joined by 734 Squadron which formed in February 1944,

www.hras.org.uk

equipped with Armstrong Whitworth Whitley GR VIII's. The Whitleys were used as flying classrooms to instruct TBR aircrew in the correct engine handling of those converting from bi-planes to Merlin powered Barracudas.

No 739 left for Donibristle in October 1944 and, following this, activity at the airfield slowly wound down. No 700 (Maintenance Test Pilots Training) Squadron reformed in June 1945 but left later in the year, Southampton UAS had two Tiger Moths until October 1946 before they too left and went to Eastleigh. An interesting item appeared on AiX recently regarding Worthy Down and its use as a ground target. This prompted further investigation and I am again indebted to Tony Dowland for providing further information. Circa 1952, Sea Furies from the RNVR carried out mock attacks on the airfield. On Sunday afternoons, the air and surrounding countryside were filled with the sound of Bristol Centaurus engines. This annoyed many a local but not Tony who enjoyed the sight and sound of this very iconic aircraft. I recently attended Kemble Airshow at which Sea Fury VX281 displayed. I imagined the aircraft carrying out mock attacks at Worthy Down during the Fury's display routine. It must have been quite a sight to see it for real at the time.

In the summer of 2011 I paid a visit to Tangmere Aviation Museum and got talking to one of the volunteers. He told me that he was stationed at Worthy Down and was responsible for the bombing range there in the 1950s. He recounted to me that on one day a Westland Wyvern was undertaking attacks on the range. Whilst diving into attack the canopy of the aircraft suddenly became detached and fluttered down to earth luckily without causing damage to any of the nearby houses. I would imagine that this led a rather cold and unpleasant flight home for the Wyvern's pilot.

HMS Kestrel paid off in July 1952 but reopened shortly after as HMS Aerial II. This was to house the Air Electrical School (AES): no flying took place. However, flying did not entirely cease. In November 1959, 848 NAS was re-equipped with Westland Whirlwind HAS.7 helicopters. 848 left the airfield in March 1960 to join HMS Bulwark. In November 1960 AES moved to Lee on the Solent and again Worthy Down was paid off.

After this the Royal Army Pay Corps took over the site. In 1992, the Pay Corps amalgamated with the Adjutants General Corps and remains at Worthy Down to this day.



Figure 33. The remaining complete Dutch-barn hangar at Worthy Down.

Surviving remains

Some of the buildings from the former airfield remain in use today by the resident army unit. I have not personally visited the live site. Outside the live base there are many remains from the former airfield. The landing ground is now turned over to agriculture. The perimeter tracks are used as a recreational facility by residents of nearby South Wonston, where a large housing estate has sprung up over the years.



Figure 34. Vestigial remains of a second Dutch-barn hangar

Downloaded from www.hias.org.uk

One of the first items to be noted when visiting the site is this Dutch-barn hangar (Figure 33) which has somehow survived for many years. The Dutch-barn was very narrow as it would only take naval aircraft with folding wings. This is not the sole surviving hangar though. Hidden away from the public gaze is another rather derelict Dutch-barn (Figure 34).



Figure 35. The fuzing shed, showing its double wall.



Figure 36. A surviving section of the perimeter track



Figure 37. The remaining Pickett Hamilton Pillbox at Worthy Down

Located near the landing ground is this curious twin walled fuzing shed (Figure 35). The inner structure was built in 1929. At some point after this a further wall was built around the shed to offer additional blast protection. Near here, until recent times, was a Torpedo Shed. This was demolished a few years ago on Health & Safety grounds. Some years ago, I photographed the shed using a 35mm film camera. Alas so far, to my annoyance, I have not been able to find the shots.

Much of the perimeter track remains in place (Figure 36).

Located out on the landing ground is this rare counterbalance type Pickett Hamilton Pillbox (Figure 37). The box is pretty much complete. I have ventured inside but it is rather wet underfoot. A further PH Pillbox survives but is not internally accessible at present. If you intend to visit this area of the airfield at anytime it is best to wait until after harvest, lest the farmer gets upset.

During the build up to D-Day the railway that ran near the camp was upgraded to enable the passage of troops and war materials from the industrial North. A new platform was constructed and upon it was placed this building which was known as the Admiralty Store (Figure 38). It would appear that the railway was used to transport aero engines, as a purpose built crane was constructed next to the line to aid lifting and loading. During the war a leave train ran most nights at the request of the Royal Navy. It became well known due to the antics of drunken sailors returning from a ‘beer up’ in Winchester. In the end the RN had to put Officers on board the train to keep order. If the sailors left a mess in the train then they had to clear it up. This often meant them returning to Winchester as the train returned as empty stock. A four mile walk then ensued back to Worthy Down which must have acted as a deterrent to future trouble.

Downloaded from www.hias.org.uk

Over the other side of the former A34 road a large aircraft storage area was created. Guard posts were put in place in the form of Quetta Huts. Two of these still survive in situ (Figure 39).

Like many airfields the site had its own sewage treatment works. This still exists to the east of the field with the round sewage beds still visible. As yet I have not photographed this as it is on private land.



Figure 38. The wartime (1943) platform and store at Worthy Down station on the railway line from Newbury to Winchester.

So that concludes our look at the history and the present day remains at Worthy Down. As can be seen there is much that has happened at the airfield which today has quietly gone back to an agricultural existence. I often visit the field and try and visualise the aircraft on approach. I think of Harris who flew from the field and then went on to become a controversial figure in the RAF for his strategy of area bombing. I always wish I could hear a Merlin on full song as the engine struggles uphill to lift the Spitfire into her natural element, the air, at Worthy Down. I almost got my wish in 2010. With the celebrations surrounding the 70th anniversary of the Battle of Britain a flypast was arranged for the BBMF Lancaster to fly over former airfields used in the battle. The day was set, time was taken off from work. I took my powerful 500 mm lens and camera to stand in the middle of the former landing ground. A large crowd of people gathered to witness the event. However, as always the English weather intervened and kept the Lancaster firmly on the ground at Bournemouth. So I never did get to hear the Merlin over Worthy Down and I never got that shot that was likely, for me, to be a once in a lifetime event. Oh well, sometimes such things are best left to the imagination.

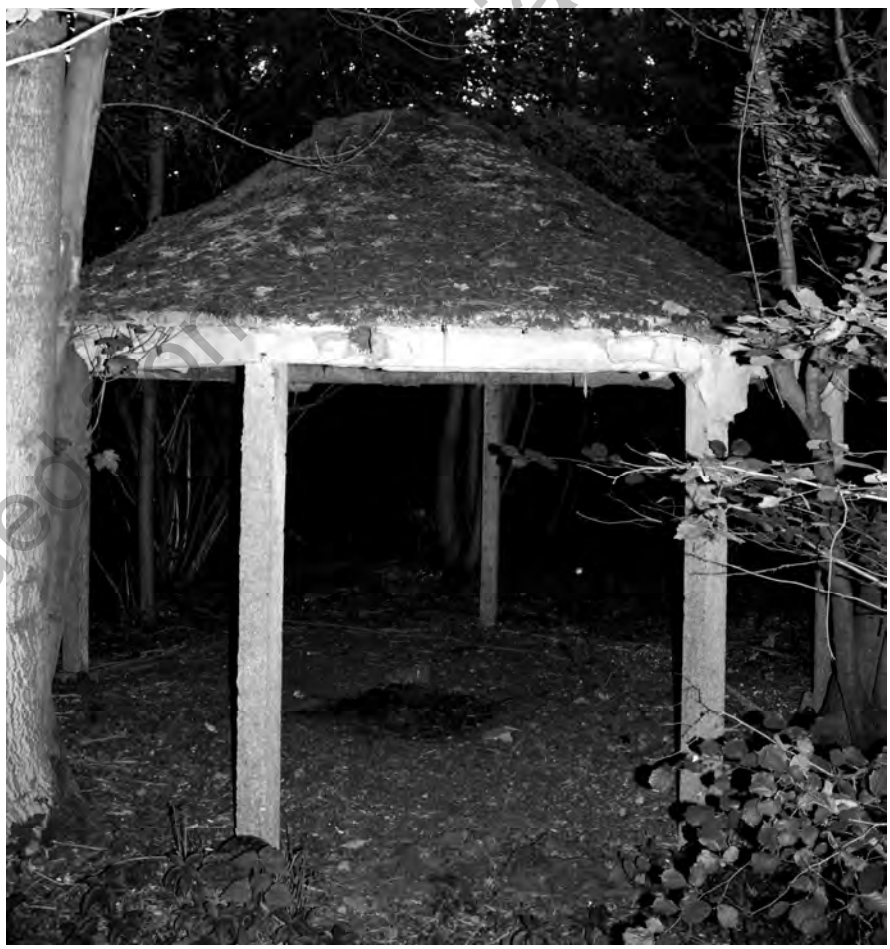


Figure 39. The remains of the guard posts for the storage area on the west side of the A34 road.

Downloaded from www.ias.p

Chilbolton Airfield; History

RAF Chilbolton. Not a name that springs to mind for many people. Mention Middle Wallop, Boscombe Down or maybe even RAF Andover and you are more likely to get a flicker of recognition of the important role these airfields played in World War Two. But Chilbolton, situated 91 metres above sea level on a plateau in the heart of the Hampshire countryside is not an airfield many will have knowledge of. Many people will drive along the Roman road from Sutton Scotney to Stockbridge in Hampshire and will note the impressive radio telescope situated at Chilbolton. Again, I doubt that many will realise that the telescope is built next to part of the disused runway.

Chilbolton came from obscurity and has pretty much gone back the same way. I for one have lived in Hampshire all my life, passed Chilbolton on more occasions than I care to remember and always considered there was nothing left there of note. I was wrong. Chilbolton played an important role during the war and went on to be one of the airfields from which the genesis of jet aviation was born. The airfield ended its days as a site for test flying some well known post war designed jets. The purpose of this article is to give a brief history of the airfield's operational flying days and an idea of what can be seen in the present day.

Chilbolton began life as a small grass airstrip used by a Mr. Freddie Cameron to land his private aircraft whilst coming to visit his mother at Three Ways Cottage. Work began in 1938 on levelling 145 acres of land to allow construction of Chilbolton airfield. The airfield was intended to act as a dispersal site for the bomber base being built at Middle Wallop. By the time the work was finished, Middle Wallop was a Fighter Command Sector Station for No. 10 Group. In order to relieve the pressure on Middle Wallop during the Battle of Britain, Hurricanes of No. 238 Squadron were dispersed to Chilbolton. The Hurricanes flew from Middle Wallop to Chilbolton on 30th September 1940. A short flight, as Chilbolton is only 5 miles as the crow flies from Middle Wallop. I would imagine the skies in the area were rather busy, what with Chilbolton, Andover, Middle Wallop, Old Sarum, Boscombe Down, Worthy Down and Chattis Hill all being in close proximity flying wise. Much reliance on the Mark One eyeball, I suspect.

By noon on 30th September 1940, the Hurricanes were in action intercepting 40 Heinkel 111ss and their escort as they made to attack the Westland Works at Yeovil. The next day, 238 were again in action intercepting Luftwaffe raids on Portsmouth and Southampton. During these intercepts several Hurricanes were lost. A short respite for 238 and then again the squadron was in action on 5th October 1940, this time intercepting bomb-carrying Messerschmitt 109s. As winter approached, the Luftwaffe raids diminished and by the end of the Battle of Britain, 238 had lost 17 Hurricanes. 238 stood down in May 1941 in preparation for deployment in the Far East.

Upgrading of the airfield took place in 1941 with the construction of a tarmac perimeter track, a few hard standings and blister hangars. A technical site was built in the northwest corner, plus several dispersed living sites that could eventually accommodate 2 800 personnel. The field remained as a grass strip. At this time no permanent squadrons were based there, although various units and squadrons continued flying from Chilbolton until 1943, including 245, 308 (Krakow), 501 and 504.

The airfield transferred to No. 70 Group in April 1943. Further upgrading took place with the construction of concrete runways these being 12-30 of some 5 400 ft, 02-20 of 4 800 ft and 07-25 at 4 200 ft. Two hangars were constructed, the tarmac perimeter track was strengthened and 48 loop hard standings were built. A bomb dump and an ammunition store were constructed off the south side of the airfield. During this upgrading work Chilbolton was selected as home to an aircraft maintenance depot which was established on the northeast side of the airfield.

In December 1943, a new unit arrived in the form of 5th Tactical Air Depot which were joined later by 68th Fighter Group USAAF. Chilbolton was now in the hands of the Americans. The P-47s were involved in relentless softening up attacks in France prior to D-Day. In Mid June 1944 the P-47s left for new bases in France. This probably pleased the local residents of Chilbolton as this was a time of intense aerial activity. Less pleased would have been the Germans who would be on the receiving end of more locally based P-47s.

Following the departure of the P-47s to France, the locals had a short respite until Douglas C-47s arrived at the airfield bringing back wounded and undertaking supply flights. From September 1944, the 442nd Troop

Downloaded from www.ias.org.uk

Carrier Group moved in, Chilbolton being selected as an advance base for the group's participation in the airborne assault in Holland. C-47s and Hadrian gliders continued to fly from Chilbolton in support of the on-going invasion. Airborne troops involved in Operation Market Garden also flew out of Chilbolton. So it can be seen that this relatively unknown airfield played a major role in key World War Two operations.

Chilbolton was returned to the RAF on 1st March 1945 and 41 OTU arrived with various Hurricanes, Spitfires and Martinets on its strength. Around this time Mustangs, Typhoons & Tempests were also to be found at the airfield in an operational capacity. Chilbolton now became a forward airfield in the Middle Wallop sector of No. 11 Group. With the war in the East still underway plans were made for 183 & 247 Squadrons to join Tiger Force to deploy under the command of Wing Commander Roland Beamont, flying Centaurus powered Hawker Tempest IIs. However, the war ended so the Wing involved remained at Chilbolton, taking part in the Battle of Britain Flypast in September. 183 Squadron was renumbered to 54 Squadron, training and converting pilots destined for the Middle East.

The jet age came to Chilbolton on 11th September 1945 when a Gloster Meteor III visited to demonstrate to the Swedish Air Force Commander In Chief, who was interested in possible procurement of the aircraft. It would appear that the Meteor did not make much of an impression on the C in C. Sweden only purchased three T.7 Meteor variants for target towing duties with its airforce.

On 14th March 1946, No 247 Squadron received its first De Havilland Vampires. 54 Squadron left Chilbolton on 26th June 1946 with 247 following two days later. This left no flying units at the airfield. The airfield then started a slow rundown with the clearance of equipment. Chilbolton became a sub-site of No. 3 Maintenance Unit (MU) based at Didcot. Surplus RAF equipment was stored in the hangars and other buildings until it was disposed of around June 1948. Further stores were forthcoming in the form of ammunition. Responsibility was taken by No. 202 MU for this part of the operation from April 1950 until the RAF finally severed links with Chilbolton in June 1954.

Whilst the above was going on, Chilbolton moved on to the next stage of its life. This was the start of the early testing and development of the jet powered aircraft. During this time a number of well known test pilots came to the airfield; including John Derry, Mike Lithgow, Teddy Tennant, Dave Morgan and Jeffrey Quill. This was an age where great risks were taken by the test pilots of early jets in an area of aeronautics that was not fully understood at that stage of jet aviation development. February 1947 saw Vickers Armstrong (of which Supermarine were part) move in from High Post. The 1950s saw various Supermarine fighter prototypes appearing at Chilbolton. Construction of the aircraft had been undertaken at Hursley Park and included Types 508, 529, 525 & 535.

In 1952 Chilbolton was used to film parts of David Lean's award winning movie "The Sound Barrier". Used for the filming at the airfield was Supermarine Type 535, "VV119". The aircraft was named Prometheus for the film, with air to air filming being undertaken using an Avro Lancaster from the Royal Aircraft Establishment. For anyone with an interest in what Chilbolton looked like in the early Jet Age, "The Sound Barrier" provides a good glimpse, as many of the aviation related sequences were filmed there. The Type 535 went on to become the Swift an example of which, FR.9 WK277 is on display at Newark Air Museum (Figure 40).



Figure 40. Vickers Supermarine "Swift" of the type used in the film "The Sound Barrier" and flown from Chilbolton.

Downloaded from www.nias.org.uk



Figure 41. Folland "Gnat" fighter on display in Solent Sky museum in Southampton.

In 1953 Folland Aircraft Ltd also moved in as they needed somewhere to test their Gnat fighter/trainer and Midge fighter. Figure 41 shows an example of a Gnat fighter. This one is a Gnat F.1 XK740 and is preserved at Solent Sky in Southampton.

Vickers Armstrong left in 1957 following the rundown of the Swift programme. Folland stayed on undertaking trials with the Gnat before moving to Dunsfold in 1961. Chilbolton again lay abandoned. In 1963 work commenced on building an observatory for the Radio Research Station, this opened in 1967 and is a very prominent landmark in the area being visible for many miles.

Surviving remains

Chilbolton these days is a very quiet peaceful place compared to when it resounded to the noise of piston and jet engines. This is so to such an extent that it is hard to believe that so many people lived, died and for a time called the airfield home. There again this is the same for many places that witnessed the frantic activity of aerial warfare and the perils of test flying. Today the farmland surrounding the site is owned by Leckford Estates which form part of the John Lewis Partnership.

A surprising amount of the old airfield remains. Parts of the runways and perimeter tracks are still visible along with many buildings dotted around the site. Stonefield Park now occupies part of the domestic site and has many Nissen huts and Stanton air-raid shelters still in existence. A few light aircraft and micro-lights fly from the area near Stonefield Park so the aviation link remains, which is nice to see from an airfield that played such an important role in World War Two.

The following photographs aim to show some of what can still be seen.



Figure 42. A view looking North along Runway 02-20 with the Radio Observatory which is a prominent landmark for many miles around.



Figure 43. The Operations Block is now used by a local fuel company.

Downloaded from www.hias.org.uk



Figure 44. The Braithwaite pattern water tower is still in use and is located near the Operations Block.

Figure 45. (below) Part of the perimeter track which remains in places on the airfield site.





Figure 46. These Romney huts remain from the site that housed the aircraft maintenance unit. It is likely they were used for post-war storage as well



Figure 47. This hangar remains as agricultural storage. It is one of two built on the airfield during the expansion period

Downloaded from www.[illegible].org.uk



Figure 48. Within Stonefield Park there are many Nissen huts that are being used by local businesses.



Figure 49. This Nissen hut had an ablutions block built on complete with its attendant water tank tower.







Figures 50-52. Several Stanton air-raid shelters exist within the domestic site.

← 50. the entrance to one of them

↓ 51. the interior

↙ 52. the escape hatch.

www.hias.org.uk



Figure 53. This memorial stands within the Domestic Site in tribute to members of the Airborne Services who served from Chilbolton.



Figure 54. A general view across the airfield on a bitterly cold November Sunday afternoon.

Downloaded from www.hias.org.uk

So that shows some of what is left at Chilbolton. As can be seen, quite a bit really, which is surprising as when you drive past the field not much is really evident. There are other buildings that still exist so a visit is worthwhile if you are in the area. If you do visit, take a moment to take in the atmosphere of the airfield and remember all those who flew and served from here and those who did not return.

For those who are interested in what the observatory gets up to the following site is worth a look - http://www.chilbolton.rl.ac.uk/default.htm

Sources –

Ashworth, Chris, *Action Stations 9*
Dowland, Tony
Karau, Paul, Parsons, Mike and Robertson, Kevin, *The Didcot, Nrebury and Southampton Railway*
Lockyer, Eleanor M., *Chilbolton Airfield Trilogy*
Phipps, Mike, *Wessex Aviation H*
Sacree, Richard
Seward, Dudley, *Bomber Harris*
Smith, Dave
Willis, Steve, and Holliss, Barry, *Military Airfields in the British Isles 1939-1945.*
daveg4otu.tripod.com
www.rapc.co.uk
www.airfieldinformationexchange.org
www.stringbag.flyer.co.uk

Publications

Published by Southampton University Industrial Archaeology Group

Adrian Rance (ed), *Seaplanes and Flying Boats of the Solent*
1981 **£6.00**

Monica Ellis, *Ice and Icehouses Through the Ages* (with Hampshire gazetteer)
1982 **£6.00**

Pam Moore (ed), *A Guide to the Industrial Archaeology of Hampshire and the Isle of Wight* 1984 (with supplement) **£3.00**

Edwin Course & Pam Moore, *The Changing Railway Scene in Hampshire*
1991 **£5.00**

Edwin Course, *Hampshire Farmsteads in the 1980s*
1999 **£5.00**

Edwin Course (editor), *Southampton Industrial Archaeology Group Journal*
No. 1 (1992); *No. 2* (1993); *No. 3* (1994); *No. 4* (1995); *No. 5* (1996); *No. 6* (1997); *No.7* (1998); *No. 8* (1999); *No. 9* (2000/2001)
£5.00 each to non-members

Published by Hampshire Industrial Archaeology Society

Edwin Course, *The Itchen Navigation*
New Edition, 2011 **£7.50**

Martin Gregory (editor), *Hampshire Industrial Archaeology Society Journal*
No.10 (2002); *No. 11* (2003); *No. 12* (2004); *No 13* (2005); *No 14* (2006); *No. 15* (2007*);* *No. 16* (2008); *No. 17* (2009); *No.18* (2010); *No 19* (2011)
£5.00 each to non-members

All the above are obtainable from Eleanor Yates, *Publications Officer, HIAS,*
Danesacre, Worthy Road, Winchester, Hampshire, SO23 7AD.
(All prices include postage and packing)

Downloaded from www.hias.org.uk

Hampshire Industrial Archaeology Society

Hampshire Industrial Archaeology Society was founded as the Southampton University Industrial Archaeology Group in the 1960s from members of the University Extra-Mural classes who wished to continue their studies in industrial archaeology. Recording has included surveys of mills, breweries, brickworks, roads and farm buildings. Restoration work is undertaken by associated groups such as the Tram 57 Project, the Hampshire Mills Group and the Twyford Waterworks Trust. In addition to the Journal, the Society publishes a newsletter (Focus) twice a year and lecture meetings are held every month throughout the year.

To join, contact the Membership Secretary:
Keith Andrews, 13 Ashley Close, Harestock, Winchester, Hampshire, SO22 6LR.



The Kings Cross Footbridge
A detail of the stairs leading up from platform 8, showing the exotic cast iron balusters and Handyside's plate.

(Andy Savage)





The trowel presented by Messrs. Joseph Bull & Sons to Viscount Eversley to lay the Foundation Stone of Winchester Guildhall, 22nd December, 1871

(Winchester City Council Museums)

Fairey Swordfish once stationed at Worthy Down airfield

(Richard Hall)



Downloaded from www.hants.gov.uk