MARTLESHAM HEATH AIRFIELD WALK

The walk starts at the Control Tower

behind Parkers Place, off Eagle Way, IP5 3U

HISTORY

Martlesham Heath is Suffolk's second oldest **airfield**, the first being Orfordness. This Royal Flying Corps airfield was dedicated on the 16th January 1917.

In April 1918 the Royal Air Force was formed and Martlesham Heath became RAF Martlesham Heath.

In its early years it became a secret airfield and was given the title of the **'Aeroplane and Armament Experimental Establishment**' and a whole host of weird and wonderful aircraft flew from here. Civilian and military aircraft were brought to Martlesham for licensing – many were rejected.

In 1939 with the threat of war it was decided to move this important unit away from such a vulnerable spot and it moved to Boscombe Down in Wiltshire where it remains today, albeit under a private company called Kinetic. It is however overseen by the RAF.

Being only 8 miles from the coast, Martlesham Heath was seen to be perfectly situated as a fighter station. Bristol Blenheim aircraft were the first to arrive shortly followed by Hawker Hurricanes and Boulton & Paul Defiants.

RAF MH was part of 11 group as its northern most airfield protecting the London area and was involved in the Battle of Britain.

The first Americans arrived in the UK in April 1941 in the form of the RAF Eagle Squadrons. Although crewed by volunteer American pilots they were under the control of the RAF. All three squadrons came to Martlesham Heath albeit for a short time.

In October 1943, 3 squadrons of P-47 Thunderbolts from the 356th Fighter group arrived at RAF MH.

Prior to the 356th FG arriving the Control Tower was erected. A second runway East to West was added and both were laid to tarmac (*Note: The Tarmac may have come from coal tar from Ipswich Gasworks).* Interestingly, RAF Martlesham Heath remained a shared airfield throughout WW2.

The P-47's were later replaced with the faster P-51 Mustang fitted with the Rolls Royce Merlin engines. The 356th stayed until the end of the war and returned to the USA in November 1945 when the airfield reverted to a 'Research Station'.

RAF MH became home to the "Bomb Ballistic Unit" (BBU), and was involved with the development and testing of the "Atomic Bomb". The "Blind Landing Unit" and the "Rapid Landing unit" along with other specialist units moved in.

The jet engine era was born and the concrete ends of the runways were extended to avoid the tarmac melting. The airfield finally closed in April 1963.

Control Tower

The Control Tower was an American idea and was used to control movement of vehicles and aircraft around the airfield. The cupola (the box" on the roof) shows the number of the compass bearing of the runway being used. Quite a number of WW2 Control Towers were of a standard design. The Control Tower at Martlesham Heath is constructed of 9" brickwork with concrete render, apart from the south eastern wall which is 13.5" brickwork. The roof and balcony are constructed of re-enforced concrete. The ground floor comprised of a corridor with rooms on both sides and the staircase to the first floor. Downstairs there were the toilets, the metrological office and teleprinter room, switch room, Duty Pilot's rest room and office, and finally the watch office at the front of the building.

The first floor is made up of the Controller's rest room and signals office, whilst the main room at the front of the building was the control room. Normally two Flying Control Officers were on duty. One was responsible for aircraft on approach the other was responsible for aircraft in the circuit. The senior of the two was directly responsible to the Station Commander. The Senior Control Officer was also responsible for controlling the activities of contractors working on the airfield and for checking for any obstructions. All this information was kept up to date on a plan of the airfield kept in the watch office.

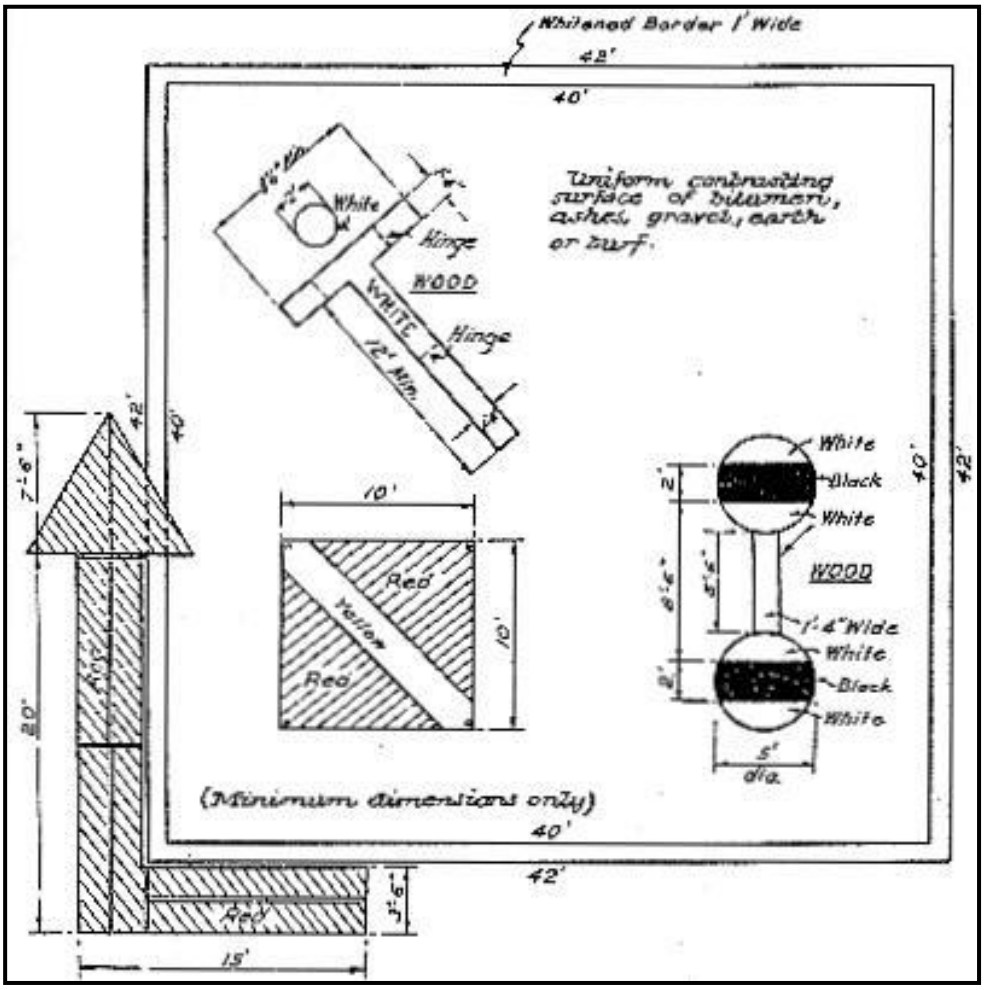
Gorseland Primary school

Gorseland Primary School is built on the site of one of 10 “USAAF Canteen Complex’s”. Kitchen, dining room, rest rooms and washing up facility, serving about 1000 meals a day each. Local residents were employed here.

Sixteen houses in Deben Avenue were requisitioned by the Air Ministry for use as accommodation for the Americans. Some houses still have “A” (for American) visible by the front door.

Signal Square:

Just 20yds South East from the Control Tower is the Signal Square. It contained ground symbols to indicate visually the conditions on the aerodrome to over flying aircraft.



Key: **The Red Signal Square** - A red square with no diagonals – aerodrome rules temporarily suspended and special arrangements in operation. If this square had one yellow diagonal cross bar, it indicated that the bad state of runway or temporary obstruction requiring caution when landing. If the Red Square had two yellow diagonal crossbars it meant total prohibiton of landing for prolonged period.

Dumb Bell Signals – A white dumb bell indicated takeoffs and landings were on the runways only and all taxying must be on paved surfaces only. A white dumb bell with black bars meant that grass areas could be used for taxiing.

Landing T - This was mounted on a pivot for ease of turning, It was lined up with wind direction. An aircraft landed along the direction of the shaft of the T towards the cross arm.

The **MH** indicates to the pilots that this is Martlesham Heath, Originally this would have been placed alongside the Signal Square,

Adjacent to the car park is one of the three remaining Revetments:

WW2 Revetments. There are only a handful of original revetments left in the country, Martlesham has 3. They were made by filling sacks with dry cement and sand. Aircraft were parked in-between the sandbags to give bomb blast and strafing protection. They also gave protection to station personnel from propeller wash.

Stop at Air Raid Shelter:

Just 70yds from the back of the Control Tower is an underground Air Raid Shelter. This was constructed to serve the personnel based in the Control Tower and other buildings close by.

An Anderson shelter has been erected nearby. Anderson shelters were provided free to many private dwellings. They were designed to be half submerged underground.

Follow the Peri Track towards the woods. Just after the turning to the right which leads back to the car park you can see a concrete foundation – where a tree has been planted in memory of Katie Webb,,

Over Blister Hangar

The concrete is the foundation of a building known as an over blister hangar. A blister hangar was a novel arched, portable aircraft hangar designed in 1939. Originally made of wooden ribs clad with profiled steel sheets, steel lattice ribs – later corrugated steel sheeting. An over blister hangar was used for the maintenance of aircraft. Canvas curtains at each end of the hangar were tied down into metal rungs sunk into the concrete foundation. Two more over blister hangars were located close by.

Carry on up the track just past where fencing for Police HQ starts on the left you can see another set of revetments through the shrubbery.

If you take the next left stone path (an aircraft way) you can see a metal bar set in the concrete across the path – this was the site of another blister hangar. Return to the peri track.

On the left behind the seat is a fern covered mound – a barrow.

Barrow

Going back 4000 years. "bowl" type barrow's or burial mound's, this is one of eight on Martlesham Heath. Probably, bronze age in date. A number of artefacts have also been found across the Heath - Neolithic hand axes, flint arrow heads, pot boilers and other prehistoric artefacts

Carry on up the track until you reach St Peter's Gate go through this into the fuel dump

Fuel tanks

Just 15yds from the peri track are 4 circular cast Iron structures sunk into the ground. Each is the top of a 12,000 gallon aviation fuel tank. For a bomber station around 120,000 gallons of fuel was used for every mission.

Take time to look at the information board

The Peri Track leads on to Portal Avenue.

Martlesham was well placed for an air sea rescue squadron and 'A' Flight of 277, (air, sea, rescue) was based here. The dispersal huts were where the Suffolk Constabulary HQ now stands,

Turn left into Portal Avenue ('B' Flight Road). You can cut the walk short here by turning right and following track to A12 underpass near Tesco

Officers Married Quarters

Portal Avenue or 'B' Flight Road as it was originally called was one of two public roads running through the station and remained open throughout the life of the station. The houses in front of you are the Officers married quarters and were in 'rank' order with the station commander at the top of the road. There is a pair of houses missing, the reason is that another burial mound can be seen in their place.

Marker post

On the corner of Portal Avenue and Main Road is a small concrete airfield marker post, one of many that marked the airfields perimeter.

Turn right and at the top of the road adjoining the A1214 (Main Road) and continue down through the underpass.

Black Tiles Public House

During WW2 this establishment was a high class tea room. Aircrew of both the RAF and the USAAF were made especially welcome and the place became something of an exclusive club.

There was an autograph book which is now in the RAF Museum at Hendon containing many pilots and aircrews signatures and their stories.

Walk straight ahead past Bloors Homes and turn right at the way marked sign for the Trim Trail and footpath.

Battle HQ

The "Battle Headquarters" was an underground bunker to be used for the coordination of the defence of the airfield if ever under attack. Connected to all the local services, i.e. Police, Local Authorities etc. to help co-ordinate a defense.

This was built following the German invasion of Crete in 1941.

The HQ was located a short distance from the airfield with a good overall 360 degree view.

It comprises of a 28 foot long by 9 foot wide underground box with an extra room to one side this room measuring 6 foot by 8 foot. The main walls are 13.5 inches thick and are made of brick with steel reinforcing and a concrete coating. The roof is an 18 inch thick concrete slab.

Rooms include, a messenger and runners room. A room equipped with telephone equipment and connected to a public exchange. A latrine containing a chemical toilet.. The station commander's office and the observation room with its thick concrete cupola on top.

The walls of this are thicker than the main bunker at 18 inches. Next to the observation room is the emergency exit with an iron ladder leading up to the surface, this would have had a steel cover which was able to be locked in the closed position.

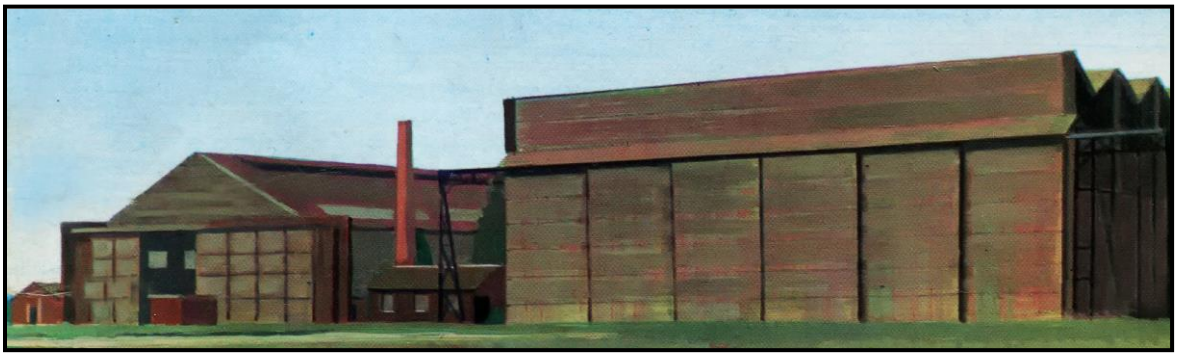
Follow path across the heath passing the Parish Council Offices and Community Hall to the Felixstowe Road.

Pillbox

A pillbox is a type of blockhouse or concrete dug-in guard post, normally equipped with loopholes through which to fire weapons.

Continue to the junction with Gloucester Rd and cross at the crossing.

Stand and look back towards Wicks and Tesco. On this site were 2 hangars with ancillary buildings. The goliath hangar, a large experimental hangar built in the 1920s was to become the standard RAF Hangar and housed all the experimental bombers, known then as "B" Flight Hanger. The second hangar housed all the experimental fighter planes. Sadly both were knocked down when Tesco's was constructed.



Cross Gloucester Rd

Now entering the Technical site

On the left you can see remnants of a Blast wall protecting the airfields fuel store and oil store. Other building in this area now gone included lubricant and gas respirator store, salvage compound. Just in front of Lings garden shop was where the ops office of Don Straits 361st was situated. On the right would have been a hangar built in WW1 by German prisoners of war for aeroplane maintenance.

If you cross the road Just before the next junction you can see the header for the fuel tank, used by the Maintenance Unit for vehicles; lorries; fuel tanks; fire fighting vehicles etc.

Type A hangar

The large hangar on your right with the 7 pitched roofs is a Type A hangar, designed in 1924. This hangar is the first of the permanent end opening hangars and measures 122ft wide and 249ft long. The hangar is constructed off steel stanchions spaced at 38ft apart supporting steel frame girders with cantilever gable trusses and steel doors. The wall infill is constructed off reinforced concrete 14 inches thick at the base and 9 inches thick at the top. Single storey brick annexes were used as workshops can be seen along the eastern side of the hangar. This hangar became "B" Flight hangar and contained scales to weigh aeroplanes.

At the far end of the building you can see the metal tracks where the large doors would have slid open. Metal rods to which the handles would have been fitted to wind the doors open. At the rear

of the building – far end you can see bullet and shell holes in the wall. The original RAF Martlesham Watch Office was nearby and was destroyed by a Luftwaffe attack on the 15th August 1944.

Guard room

In front of the hangar is a brick building used as the guard room for the airfield. The guard room was constructed in 1929. Rooms inside include toilets, store warden office, fire party office, a barrack room and the guard room with detention cells. Other duties included the issuing of keys, investigations of crimes, controlling transport leaving the airfield, providing escorts, lost property and dealing with dress and discipline of the airmen.

The small windows above the new left hand door were the cells.

Opposite the Guard Room

Main stores

On the left is a brick building with five pitched roofs, this is the main stores building for the airfield. Stores of clothing and technical equipment but also aircraft components were kept here; all were brought in at the rear of the building, stored, logged and ready to be issued. Just beyond this is a two storey brick building used as airfield offices.

Power house and Booster house

Just after the Main stores building, on the left, is a brick building with three pitched roofs. The left hand and central building of the three are the original power house and booster house. To supply incoming electricity around the site and for emergency electrical generation.

Cross at crossing

The brick building in front of you was used as offices and workshops.

Stop at Station HQ

The two storey brick building on the left with pillars was the Station Headquarters. This was built close to the southern entrance of the airfield and was where access to the airfield was granted. It was used as offices for clerks, officers, the squadron commander and metrological office.

Note the white number 1 towards the top of the building.

Buildings that have now been demolished in this area include the blacksmiths and welding shop, engine repair building, machine and painters workshops, test house and air screw testing, decontamination centre and gas defence centre.

Runway

Immediately past the BT roundabout on the right hand side is a length of runway that extends back to the Control Tower.

Carry on past BT and stop at Barrack Square

Beyond the Barrack Square was South Camp

An area used to house other personnel.

The Barrack Square

The Barrack Square surrounded by barracks which housed RAF personnel. More blocks, but not as sophisticated were located further down the track.

Despite being a shared airfield the USAAF 356th FG never shared these facilities except for medal award ceremonies.

There cannot be any other "**Barrack Square**" that has three memorials, or more accurately two memorials and one commemorative pillar.

The 356th Memorial was erected by Captain Harvey and dedicated in June 1946. Captain Harvey was a WW1 retired Captain and lived with his wife, a WW1 nurse at The Grove in Little Bealings. The money to build the memorial came from a collection that he instigated in the local parishes.

Captain Harvey also created the "356th Roll of Honour". This book is leather bound with gold leaf wording and has 72 pages, one page for each USAAF pilot killed while flying from RAF Martlesham Heath. The book resides in the church of St. Michael & all Angels on Martlesham Heath.

The RAF Memorial was commissioned in 1991. The money for this came from the business on the heath. Our President Richard Barker was chair of the organising committee. The memorial is also dedicated to the Commonwealth and Dominion Air Forces who fought alongside the British and US forces.

The small centre commemorative pillar was commissioned in 2009 by the Martlesham Heath Aviation Society. This pillar reminds us of all the units that were stationed on RAF Martlesham Heath and who took aviation to new heights.

Barrack Block Buildings

These buildings were constructed in 1926 and were the main barrack blocks that served the airfield. Inside each building was the main entrance hall, staircase to the first floor and the non-commissioned officer's bedroom. A total of forty-eight bed rooms were located on the ground and first floors, each room would sleep 12 men. Buildings that have been demolished in this area include the dining rooms, rations stores, toilets, bath house, the station church, American Red Cross Club, tennis and squash courts, the mortuary, sick quarters and a hospital. Just to the west of the barrack buildings would have been the hockey, rugby and football pitches

Retrace route back past BT – Cross at traffic lights, then turn left past Ten Pin and Martlesham Leisure and proceed over the foot bridge to Eagle Way. Cross and follow path to 'The Square'

Piece of Runway

In front of the Douglas Bader public house another remaining stretch of E-W orientated main runway.

Douglas Bader Pub

Captain, Sir Douglas Robert Stuart Bader was a Royal Air Force (RAF) fighter ace during the Second World War and was based for a short time at Martlesham Heath airfield. He was credited with 20 aerial victories, four shared victories, six probable, one shared probable and 11 enemy aircraft damaged.

In 1931 he lost both his legs whilst doing aerobatics. At the outbreak of the war he was allowed to fly again and flew in the Battle of France and the Battle of Britain, where he earned his fighter ace title. In 1941 his plane was damaged and he baled out over France and was captured. After trying to escape a few times from hospital he was sent to a POW camp where he stayed until 1945 when the Americans liberated the camp.

The church of St Michael's and All Angels.

The church contains stained glass windows donated by Martlesham Heath Aviation Society. They were designed by a member of MHAS and were installed and dedicated in September 2000 on the same day that the Control Tower Museum was opened.

Below the stained glass window in a cabinet is the 356th Roll of Honour. Created by Captain Harvey it is a leather bound book with gold wording and gold leaf edged pages. It has 72 pages, one page for each of those 356th pilots killed in action.

The stained glass windows feature left to right the emblem of the Royal Flying Corps, the Royal Air force Crest, the 356th Fighter Group USAAF crest and the RAF Martlesham Heath crest.

From the Square turn left into Valiant Road. At the end of Valiant Road turn right into Eagle Way. Cross the road and walk along Eagle Way to the bus stop. Turn left and head back to the Control Tower

If you would like to leave any feedback on this walk please email mhasmuseum@mhas.org.uk

For more information and details of opening times for the Control Tower Musuem please see our web site www.mhas.org.uk

Group visits – Interest Groups – Schools and Youth Groups are welcomed throughout the year by appointment. Please contact Museum Manager 07707711104 or email mhasmuseum@mhas.org.uk

Martlesham Heath Aviation Society welcomes new members. For a modest annual subscription members benefit from reduced entry to our monthly talks at the Martlesham Community Hall and receive a copy of our publication, "Runway 22" every 4 months.

There are a number of publications available from the museum shop:

Martlesham Heath from Flying Corps to Jet Age

RAF Martlesham Heath Short History

Kesgrave Hall at War

Special Dinner at Martlesham Heath

Blind Landing Experimental Unit

Gliding at Martlesham Heath

Researching Your Great War and World War 2 Military Ancestors

QR Code for MHAS

Overlay of Runways on Martlesham Heath Housing Estate