LARGE PRINT GUIDE



Please return to the box for other visitors.

RAF Stories: The First 100 Years 1918 –2018







RAF Stories: The First 100 Years 1918—2018

The items in this case have been selected to offer a snapshot of life in the Royal Air Force over its first 100 years.

Here we describe some of the fascinating stories behind these objects on display here.

Case 1



RAF Roundel badge About 1990

For many, their first encounter with the RAF is at an air show or fair where a RAF recruiting van is present with its collection of recruiting brochures and, for younger visitors, free gifts like this RAF roundel badge.

X004-5252



RAF Standard Pensioner Recruiter Badge Around 1935

For those who choose the RAF as a career, their journey will start at a recruiting office. Here the experienced staff will conduct tests and interviews and discuss options with the prospective candidate.

1987/1214/U



Dining Knife and Spoon 1938

On joining the RAF you would be issued with a number of essential items. This would have included set of eating irons consisting of a knife, fork and spoon. These examples have been stamped with the identification number of the person they were issued to.

71/Z/258 and 71/Z/259



Dining Fork 1940s

The personal issue knife, fork and spoon set would not always be necessary. This fork would have been used in the Sergeant's Mess at RAF Henlow. It is the standard RAF Nickel pattern but has been stamped with the RAF badge and name of the station presumably in an attempt to prevent individuals claiming it as their personal item.

71/Z/257

Squadron Leader Beswick Combination Set Identity Tags Around 1940s



Every serving member of the armed forces is issued with a set of identity tags. Each tag records the person's name, service number, unit and religion. This example also records that this individual is an officer. If their owner died, the red disk was removed and used to report the fatality while the green disk remained with the body. This set belonged to Squadron Leader Ernest Norman Beswick, who enlisted in 1936 and became an officer in 1941.

X002-8234



Swagger stick 1920

Fashions change. During the 1920s and 1930s a cane swagger stick like this example formed part of an airman's kit. Walking sticks also formed part of an officer's kit with specific drill steps to master when carrying them.



Housewife 1918–2018 and beyond

A sewing kit, known as a housewife, has been a standard bit of military kit for centuries. The service number identifies the owner as having joined the RAF as an apprentice between the First and Second World Wars.

77/U/1242



Webbing Belt 1937

This canvas webbing belt has been Blancoed white. While white webbing was normally reserved for special occasions it also formed part of the standard uniform of the RAF Police.

1987/1957/U

Since the late 1930s the RAF has been affiliated to a number of youth organisations. Today the RAF supports the RAF sections of the Combined Cadet Corps, the Girl's Venture Corps and the Air Scouts.





Women's Junior Air Corps, Cadet Cap Badge Girls Venture Corps Badge 1942 and 1964

Until 1983 the Air Training Corps only accepted male cadets. From 1942 female cadets with an interest in aviation could join the Women's Junior Air Corps. In 1964 this joined with the Girls Cadet Corps to become the Girls Venture Corps.

X005-1227 and X005-1241



Air Defence Cadet Corps, Cap Badge About 1938

Formed in 1938 as the youth wing of the Air League of the British Empire, the Air Defence Cadet Corps was taken under RAF control in 1941, becoming the Air Training Corps.



Air Training Corps Brassard About 1970s

A brassard, worn on the right arm, displays the cadet's squadron number, rank classification and any additional achievements. This Leading Cadet has been awarded their ATC Marksman's Badge.

82/U/632



Webbing Paste 1918–1960s

In addition to the shining boots and brasses, webbing equipment had to be cleaned and protected with a covering of webbing paste. There were a number of manufacturers but it was universally known by the trade name Blanco.

RAF Loadmaster Flying Badge 1970



Aircrew who are not pilots wear a badge with a single wing. This is a badge for a Loadmaster who would be responsible for the loading of transport aircraft and helicopters. In the early 2000s Loadmasters were amalgamated into the wider aircrew role of Weapons System Operator.

1986/0777/U

Flying Suit Badge Around 1980s



After a course in elementary flying, pupils are sent to a Flying Training School to develop their basic skills. The pupils of this course appear to have an overly optimistic view of the capabilities of their Jet Provost trainers.

X004-6281

Gosport Tubes 1910s—1940s



The Gosport System of flying instruction, developed by Robert Smith-Barry during the First World War, revolutionised flying training and became the basic model used throughout the world. Clear communication between instructor and pupil was key to this system and, before the advent of radios with amplifiers, speaking tubes – Gosport Tubes – and head phones were used.

66/R/828

Pilot's Wings 1920



This badge is one of the most coveted in the world. The granting of pilot's wings signifies you have become a pilot in the RAF. The RAF badge closely follows the pattern of the Royal Flying Corps badge first approved by King George V in 1913. In early examples of the RAF badge the word Royal was emphasised by placing the enlarged letter R in the centre but these 'ARF' badges were not officially adopted. The design featuring the outstretched wings of the swift has been widely copied and has become the symbol for both mililtary and civilian pilots throughout the world.

RAF Police Shoulder Tab 1980s



In their role of protecting personnel and ensuring the rule of military law is upheld within the station, the RAF police find themselves with a task that is not always fully appreciated by other members of the Air Force.

X004-0287 & 0288

Unit Badge 1980s



One view of an Armourer or plumber, as they are known, is that they are multi-skilled individuals ready to turn their hand to whatever task they are confronted with. The creators of this patch appear to have a slightly different view of their skills.

X004-8522

Unit Badge 1980s



The Aircraft Salvage and Transportation Flight, better known as Crash and Smash, are responsible for the movement of airframes by land. Many of the airframes in this Museum will have been moved here on the Flight's vehicles.

X004-8562

Unit Badge 1980s



The Groundcrew for No. 20 Squadron have taken the elements of an eagle and rising sun from the squadron's crest to create their own badge. Instead of a carrying a sword this eagle carries a screwdriver and stands on top of a Jaguar, the type of aircraft the squadron was operating at the time.

X004-6286

NAAFI Token 1940s—1950s



This plastic token was used in place of money by occupying troops in Germany and Austria. With this a serviceman could buy goods or pay for services from the Navy, Army and Air Force Institutes, known as the NAAFI.

74/Z/1068



Railway Ticket, RAF Henlow 1930s

Many RAF stations had, and still do have, attendant railway stations offering a connection to the wider world. The holder of this ticket has been granted leave from RAF Henlow but a long journey with multiple changes lies ahead before reaching the final destination in Oxford.

84/C/723

Letter Head Printing Die 1960s



For many people today, work is centred around a constant avalanche of emails. In the past communication took the form of letters and memos. This die was used to print the address on the countless number of letters generated from the Lincolnshire base of RAF Coningsby.

74/T/1275



Hand Stamp 1960s

Like any organisation the RAF has to deal with a lot of administration. This hand stamp was used in the Air Ministry to mark the approval of a specific department.

71/T/420



Christmas Card 1980s

Members of 228 Operational Conversion Unit at RAF Coningsby have shown off their metal working and artistic skills by constructing this card depicting one of the unit's Phantom aircraft adorned with suitably festive headgear.

X003-4239



Aircraft Marshal's Wand 1970s

Ensuring the safe movement of aircraft, a marshal uses a series of hand signals to guide crews in restricted areas. In poor light conditions Illuminated batons are used.

82/1/329

Case 2



Officer's Gloves 2000s

With the adoption of the blue grey uniform in 1919 the colour of the Service Dress gloves remained brown as a reminder of the RAF's origins with the Royal Flying Corps.

X004/3578 and X004/3579



numin .

RAF Trade Physical Training Instructor Badge and Gymnastic Club 1923—1949

The badge of the Physical Training Instructor depicts three arms wielding Indian Clubs. These clubs were a popular tool for aerobic exercise during the first half of the 20th century.

Badge X005-4509, Club 71/2/272

Brass Button Stick 1918–1960s



Until the introduction of Staybrite buttons, the polishing of brass buttons, buckles and badges was a daily task. The button stick protected the fabric from being stained by metal polish.

78/U/413

RAF Pattern Buttons 1918, 1919 and 1954



The buttons of the original 1918 pattern RAF Officer's uniform retained the roped border found on the buttons of the Royal Naval Air Service uniform. When the blue grey colour of dress was introduced in 1919 the buttons were simplified, losing the rope motif. The St Edward's Crown replaced the Tudor after the accession of Queen Elizabeth II and at a later date the material changed from brass to Stybrite.



Princess Mary's RAF Nursing Service Shoulder Board 1927

There have been nurses serving with the RAF since June 1918 and between 1920 and 1939 it was the only role open to female applicants. This shoulder board was worn with Ward Dress and indicates the rank of Matron-in-Chief.

77/U/133



Aircrew II Badge 1946-1950

In 1946 the RAF's rank structure was reorganised with new ranks for non-commissioned aircrew. This proved unpopular and, by 1950, a structure based on the previous non-commissioned officer ranks was introduced. This badge represents the rank of Aircrew II which was the equivalent of a Sergeant.

1987/1535/U

Rank Chevron 1950s



Non-Commissioned Officers ranks in the RAF were inherited from the Royal Flying Corps and the use of chevrons to display NCO ranks continues to this day. The two chevrons shown here indicate the rank of Corporal.

X003-4426

Officer's Braid 1918



The method of displaying of Officer's rank in the RAF closely follows that of the Navy by using different sizes of lace on the cuffs. This quarter inch lace in olive and khaki was used on the original field uniform of 1918. Late in 1919 this was replaced to the dark and light blue lace which is still in use today.





Other Ranks uniforms of the RAF displayed rearward facing eagle badges on the shoulders similar in style to the eagles worn on the upper arms of the Royal Naval Air Service uniform. These remained a feature of Other Ranks dress until 1974 but were reintroduced for No. 1 Service Dress in 1996.

68/U/382 & 383



RAF Rank Slide Senior Aircraftman 1970s

From the 1970s it became standard practice to display rank on all but Service Dress uniforms through the use of rank slides worn on shoulder straps. This slide displays the three bladed propeller of a Senior Aircraftman and includes the unit identity which, in this case, is the Tactical Supply Wing.

X004-0094



Multi-Terrain Pattern RAF Rank Slide About 2011

From the 1990s rank on combat clothing was displayed on a slide attached to the centre of the chest. This slide displays the rank of Squadron Leader and is in Multi-Terrain Patterned camouflage, introduced during the conflict in Afghanistan.

X006-5974



RAF Piping Major Arm Badge 1940s—2018 and beyond

The RAF has employed a number of Voluntary Bands made up of serving personnel and civilian members. These include a number of RAF Pipe Bands some of whom wear the distinctive blue RAF tartan.

X004-0854

Aircraft Lapel Badge 1940s



Spitfire Funds were an initiative promoted by Lord Beaverbrook, raising money to buy aircraft by public donation. This small Spitfire badge was manufactured from a penny at 32 Maintenance Unit at RAF St Athan and sold as part of a local fundraising effort.

84/C/1030



Medical Services Collar Badge 1920–2018 and beyond

The winged staff and entwined serpents of the Caduceus of Mercury is worn by members of the Medical Branch and the Princes Mary's RAF Nursing Service.

Evening Bag About 1940s —1950s



Wives and sweethearts of serving personnel often wear an item of clothing or jewellery decorated with, or in the shape of, RAF wings to show they have someone dear to them in the service. This unusual evening bag has used a pair of pilot's wings sewn onto a suitable cloud-adorned fabric.

X005-5050

Teddy Cooper, Lucky Mascot Born 1925



Aircrew are understandably superstitious. Many carry charms or undertake rituals in the belief that these will help protect them. This bear was the companion of Flight Sergeant Frederick Cooper and when Frederick joined the RAF the teddy also received a hand-knitten uniform. Flight Sergeat Cooper carried him on every operational flight he undertook in the Far East during the Scrond Word War. The charm appears to have worked as both Frederick and Teddy survived the war.

X002-9989

The Gold Donkey Star 1985



There is a long tradition of mascots associated with RAF training establishments. The first official mascot was a goat by the name of Lewis who transferred from the army to join the permanent staff of RAF Halton in 1944. This medallion was awarded to No.1 Radio School's mascot, Sparky McDougall, who features in the RAF Family area of in this exhibition.

X001/3908

No. 601 Squadron Pennant 1954



This pennant was worn by an aircraft participating in an air show at RAF North Weald in 1954. It depicts the County Arms of London beside the Winged Sword of No. 601 (County of London) Squadron, Royal Auxiliary Air Force, whose Meteor fighters were resident at the base at the time.

76/Y/1825

YII.

Siskin Aircraft Fabric 1920s

Squadron emblems frequently refer back to a period in their history. The Cross of Lorraine adopted by No. 41 Squadron was taken from the arms of the French town of St Omer where the squadron was based during the First World War.

79/Y/936



RAF 50th Anniversary Air Show 1968

The RAF does like to mark an anniversary. One of the main events to mark the 50th anniversary of the RAF in 1968 was the Jubilee Air Show at RAF Abingdon. It included many of the airframes now in the collection of the RAF Museum's collection.

1991/0539/C

Mess Dress Bow Tie 2000s



Squadrons can add their own flair to the standard RAF Mess Dress uniform through bow ties and cummerbunds in squadron colours. This colourful example belongs to No. 13 Squadron.

X003-1935

Aircraft Fabric Fragment, Fokker Dr1 425/17 1918



Manfred von Richthofen (the Red Baron) was the most successful Ace of the First World War with 80 aerial victories. On 21 April 1918, he was engaged in combat against Sopwith Camels of No. 209 Squadron when he was shot and killed by ground fire. Such was his fame that, when his aircraft came down in Allied lines, it was plundered for souvenirs which included this small fragment of fabric.

85/A/1294

Case 3



Anti Glare Mk 8 Flying Spectacles 1950s

As well as making you look stylish, sunglasses serve a useful role in aviation by lessening the sometimes substantial glare of the sun as it is reflected off the top of cloud cover.

84/U/383



Dark Adaptation Goggles 1940s

It can take over 20 minutes for the human eye to adapt to the dark. Night fighter crews would wear these goggles before missions to help acclimatise their vision.

1990/0704/U

Night Simulation Goggles 1950s



It is much safer to practice night flying during the day than in the dark. Wearing these heavily tinted goggles, a pupil can experience the low light levels of night flying while the instructor keeps a good look out.

1995/0536/U

Paraffin Flare Wick 1918–1950s



Before the advent of permanent runways with electric lights, airfields would be lit with flares to indicate landing paths in the dark. These flares consisted of a fuel-filled metal container, similar to a watering can, with a wick protruding from the spout.

X006-4858

Aerial Gunner Badge 1923



During the 1920s ground tradesmen could volunteer to serve as air gunners. This was an extra duty over and above their usual job. Along with extra flying pay these skilled tradesmen were entitled to wear a winged bullet badge on their right sleeve.

77/U/434

Air Gunner RAF Flying Badge 1939



During the late 1930s an aircrew brevet for Air Gunners was introduced resembling the Observer's badge worn by other non-pilot aircrew. The first design had thirteen feathers but this was reduced to twelve in an effort not to court bad luck.

Radio Observer's RAF Flying Badge 1941



As the Second World War progressed the Observer's badge was slowly phased out, replaced by an Aircrew Brevet, first introduced for Air Gunners. Each speciality was represented by the letters of their trade. This Brevet is for a Radio Observer and was worn by operators of the new radar devices being fitted to aircraft of the time.

83/U/140

Wireless Operator's Pattern Badge 1937



In 1918, Wireless Operators became the first trade in the RAF to receive a specialist badge. Today it is known as the Telecommunications badge and is worn on the Service Dress uniform of Other Ranks employed in the Radio Engineering Trade.

X003-4433

Bomb Disposal Armband 1941



In 1940 the RAF established Bomb Disposal teams to make safe and remove ordnance dropped on RAF Stations. Explosive Ordnance Disposal squadrons continue to undertake their vital and dangerous task on a diverse range of threats from improvised explosive devices to bombs left over from the Second World War.

1993/0677/U

Shirt Collar Around 1943



The commanding officer of No. 617
Squadron and leader of the Dam
Busters raid, Wing Commander
Guy Gibson, signed this collar and
presented it to the designer of the
bouncing bomb, Barnes Wallis. Sadly
the occasion and reason for this gift
remain a mystery.

1987/2039/C

Window Bundle 1942–1945



Window is the code name for a radio countermeasure made from strips of aluminium foil. The bundle was ripped open using the string attached and thrown out of the aircraft. The cloud of foil created a false return on enemy radar screens. The modern day equivalent is known by the American code name Chaff.

78/R/302

Fuze No. 42 Mk 4 1940s



This fuze is fitted with a time delay capsule and was primarily used on illuminating flares and cluster munitions. A slightly modified version was used on the Upkeep Mine, better known as the bouncing bombs used by No. 617 Squadron during their famously daring dambusting raid. If the main hydrostatic fuze failed to detonate, the time delayed No. 42 fuze would set off the main charge.

72/0/74



Elsanol Chemical Toilet Fluid 1940s

Most multi-crewed aircraft of the 1940s were equipped with an Elsan toilet which required a healthy dose of Elsanol toilet fluid to sanitise the contents.

78/Z/1255





Belgian Congo Coffee Beans and Cigarettes 1940s

In an effort to raise morale,
RAF aircraft would occasionally
drop items that had become
unobtainable in occupied countries.
The coffee beans reminded Belgians
that one of their colonies was
still under allied control and the
cigarettes helped the Dutch citizens
celebrate the birthday of Queen
Wilhelmina of the Netherlands.

80/Z/1199 and 80/C/1124

Powdered Egg 1940s



Two thirds of the food consumed in the UK during the Second World War had to be imported by sea. Safeguarding this maritime lifeline became a vital task for the Royal Navy and the Royal Air Force. As ordinary as this tin may appear, people were prepared to die or kill so that its underappreciated contents could reach these shores.

1993/0631/G

Scourge, Belsen Concentration Camp 1945

On 15 August 1945, Allied troops liberated the Concentration Camp at Bergen-Belsen in Northern Germany. The liberators were confronted with the horrific sight of around 13,000 unburied bodies and 60,000 starving and diseased inmates. Large numbers of RAF personnel were called upon to care for the survivors and it was one of them who preserved this symbol of cruelty which was used by one of the prison guards.

81/C/169

Nylon Halex toothbrush 1940s

This may look like a normal toothbrush but a magnetised compass swinger is concealed within the handle. This is an example of the work of Section 9 of the Directorate of Military Intelligence (MI9). One of MI9's specialities was smuggling escape aids into prisoner of war camps in otherwise unremarkable looking objects.

72/S/1426

Nagoya Prisoner of War Camp Fan 1945

This fan shows the names of some of the inmates of the Nagoya Prisoner of War camp. Like many camps in Japan the prisoners were treated as slave labour and, in the case of the inmates of camp No. 9, they were forced to work for the Nippon Express Company. The fan was given as a mark of gratitude to the RAF detachment who liberated them.

X003-4209





Sand from Stalag Luft III Parade Ground, The Great Escape 1944

On the night of 24 March 1944, 76 Allied prisoners, the majority of them RAF aircrew escaped from the German prisoner of war camp, Stalag Luft III. They escaped through one of the three tunnels they had dug under the camp. The mass exit became known as The Great Escape. Only three of the escapees managed to evade capture with 50 of the recaptured prisoners later being executed on the orders of Adolf Hitler as a deterrent to other escape attempts. This Petri dish contains sand from the camp's parade ground.

X004-1399

Pulley block from 'The Pitch and Toss' 1944



After being captured in Libya during 1941, Flight Lieutenant George Carmichael of No. 451 Squadron became something of an escape artist, twice he managed to evade his captor. The second time saw him spending six months with Partisans in Yugoslavia and Italy before reaching Allied lines after sailing a small boat named 'The Pitch and Toss' down the Adriatic with eight other Allied escapees.

72/C/1353

Liberty Pennant 1946



Many nations have gone out of their way to show their gratitude towards RAF personnel who fought to liberate them. This pennant was given to Pilot Officer Eric Parkin, one of a number of Battle of Britain veterans who, in 1946, were invited as guests of the Belgian Government to take part in a series of events to honour their contribution.

X005-5722

Case 4



55 Company RASC Commemorative Plaque 1940s

The Royal Army Service Corps is the logistical transport arm of the British Army. Since 1944 its members have served in RAF transport aircraft as Air Dispatchers delivering airdropped supplies to British troops.

74/Y/470



Mikoyan Mig 17 Recognition Model Cards: 1940s; Recognition Model: 1950s

Recognition of potential enemy aircraft – as well as your own – is a vital skill learned by RAF personnel. Scale models were useful tools as they could be studied from every conceivable angle.

X004-6150

TACEVAL Assessor Arm Band 1980s

Tactical Evaluation exercises test the readiness of RAF units and are usually called without prior warning. Assessors simulate a number of scenarios and assess a unit's ability to perform tasks under wartime conditions. TACEVALs were a common feature of RAF life during the Cold War.

X007-3965

Operation GRAPPLE H-Bomb Test Pennant 1956—1957

Operation GRAPPLE was a series of nuclear weapons tests carried out on the Malden and Christmas Islands during 1957 and 1958. During the 1957 tests four bombs were dropped, the last of which was Britain's first successful Hydrogen Bomb.

X003-1405







Beer Mat, RAF Gan 1976

All RAF messes have a bar which serves as a centre of social life especially in far-flung outposts of the world. One of the remotest of these was RAF Gan, an airfield clinging to an atoll of the Maldives in the Indian Ocean.

X002-3492



Maple Flag 13 Badge 1980s

Maple Flag is a Canadian run air combat exercise hosted at Cold Lake Air Force Base in Alberta. Since 1978 it has tested the skills of many NATO air forces including the RAF. It has also drawn participants from as far away as Australia, Singapore and Israel.

X004-8521





GRANBY was the operational name given to the response by UK forces to Saddam Hussein's invasion of Kuwait in 1990 and the subsequent Gulf War of 1991. This unofficial badge is typical of those worn by ground crews on their working coveralls.

X004-5352





303 Signals Unit operate a site on the summit of Mount Kent on the Falkland Islands and provide radar cover for the airfield at RAF Mount Pleasant. It is one of the remotest postings in the RAF and is frequently covered in cloud, snow and can be subjected to 100mph winds.

X004/1261





After the 2003 invasion of Iraq UK forces, including RAF personnel, found themselves having to deal with growing civil unrest. This side-handled baton was one of the policing items issued.

X005-6267





During the 1990s the RAF would undertake both offensive and peacekeeping role in the Balkans. The Implementation Force (IFOR) was a NATO-led peace-keeping force which operated in the former Yugoslavian provinces of Bosnia and Herzegovina. The RAF contributed transport aircraft as well as Chinook and Puma detachments to support the large British military contingent sent into the country.

X004-6223

NAPS Tablets and EpiPen 1990–1991

The threat of chemical or biological attack during the 1991 Gulf War was taken very seriously. Nuclear, chemical and biological warfare suits, along with respirators, were constant companions. Nerve agent pre-treatment sets (NAPS) were issued. If contamination occurred a nerve agent antidote could be administered by the use of an auto injector usually referred to by the trade name EpiPen.

1990/0981/S and 1990/0985/S





Nimrod Sidewinder Sticker 1982



X003-6681



SARBE 3 Rescue Beacon 1960s



This Search And Rescue Beacon was fitted to an aircrew lifejacket. When activated it would send out radio pulses on the international distress frequency alerting the rescue services and allowing them to home in on the signal.

X002/8246

Marine Craft Signalling Flag 1970s



RAF Marine Craft had to be able to communicate with other shipping so a full range of signal flags were carried. Each flag represents a letter or number but can also be used singly to convey a specific message. This flag represents the letter Z but used singly it requests the use of a tug boat.

X005-6370

Heated Goggles 1933



After funding the RAFs successful entry in the 1931 Schneider Trophy race, Lady Houston used her substantial wealth to fund another aviation adventure with the Houston-Mount Everest Flight Expedition. On the 3 April 1933 the chief pilot of the flight, Lord Clydesdale, the Duke of Hamilton, wore these goggles during the first successful flight over the world's highest peak.

70/U/665

ROC Officer's Cap Badge 1954-1996



The volunteers of the Observer Corps were a vital link in Britain's aerial defences. They reported the strength, height and direction of incoming raids. In 1941 the ROC was awarded the Royal title in recognition of the contribution it made during the Battle of Britain. This post-war badge marks a change of role for the Corps when their primary wartime task changed from reporting aircraft movements to preparing to report the location and intensity of nuclear strikes.

1990/1275/U

Operations Plotting Stand 1940s—1950s



Plotting rooms were vital to the defence of the UK. Information gathered from radar and the Observer Corps was collected together so defensive measures could be co-ordinated. This plotting stand was used to display the position, height and number of aircraft on a large table top map. You can try your hand at being a plotter on the air interactive table in the Defence area of this exhibition.

X005-5739

Amy Johnson Fabric Doll Around 1934



Amy Johnson achieved international celebrity when she became the first female pilot to fly solo from England to Australia in 1930. She went on to attempt and set a number of other record-breaking flights, some of which are recorded on the doll's sashes. In 1940 she joined the Air Transport Auxiliary and it was in their service that she lost her life when she disappeared over the Thames Estuary on 5 January 1941.

X006-8956

Case 5



Parachute Rip Cord Handle 1930s—2018

Pulling this handle could save your life. Attached to the handle is a length of wire connected to two pins. These pins secure the cover of the parachute. Once removed, a spring-loaded drogue chute bursts the cover open and pulls out the main parachute leaving you floating gently towards the ground.

1994/0346/S



Flying Belt Release Buckle 1920s—1940s

A Sutton harness, or Harness Type A as it was officially known by the RAF, was the standard way of securing a pilot to their seat up until the 1950s. It consisted of four canvas straps with large metal eyelets through which this buckle was passed. Flimsy as it may appear, the wire locking handle was all that kept them attached to the aircraft.

1993/0249/A

MKVA Pressure Head 1920s—1950s



It is fundamentally important to know an aircraft's speed through the air. This can be achieved by the use of a Pressure Head. The difference between the static pressure of the upper vent and the dynamic pressure of the airflow entering the lower tube is transmitted and displayed on the scale of an Air Speed Indicator.

X004/1282

Ki-gas Engine Priming Pump 1930s—1950s



Prior to starting piston engines require fuel to be fed to the cylinders. This can be done by hand-turning the propeller or by the use of a priming pump. The pump bypasses the carburettor and sprays fuel directly into the induction pipe. They were a common feature in cockpits from the 1930s onwards.

X005-2723



Today the power to operate systems in aircraft, like fuel or electricity, comes from the engine. When the RAF was formed it was more common for these systems to be powered by windmills turned by the movement of air as the aircraft moved forward. This windmill drove the pump that supplied the DH9As Liberty engine with fuel. A DH9A is on display in the Attack area of this exhibition.

X005-7429

Flying Wire Acorn 1920s—1930s

Flying wires, which can be seen connecting a biplane's wings, serve two purposes. They support the weight of the wings when on the ground and hold the wings in place when flying. Where the wires cross, acorns are used to keep them separate.

83/A/811



Cockpit Lamp 1940s—1950s



This adjustable lamp would provide a source of light to crew positions on aircraft. The amount of light could be controlled by the movable cover and a red filter could be swivelled over the bulb in an effort to preserve night vision.

X005-8466

Wing Spar 1930s



When metal overtook wood as the aircraft building material of choice, manufacturers had to find new ways of building familiar parts. This wing spar has been made by rolling two metal octagonal tubes and riveting them to a web. This method of construction was used in a number Hawker designs during the 1930s.

1995/0504/A



Control Column Grip 1930s

Spade shaped control column tops were a common feature of British aircraft designs from the 1920s right through to the 1950s. The two levers in the centre of this example were used to fire the aircraft's machine guns.

1987/1430/A





Douglas Protractor 1914–2018

This square protractor has its origins in marine navigation but has proved equally useful for use with aeronautical charts as nautical ones. The grid of the protractor corresponds to the grid of the chart enabling measurements of headings and distance to be taken with ease.

70/1/458

Disposable Cup Holder 1960s



A new role of Air Steward was introduced in the 1960s when catering on aircraft became widespread. This was the first aircrew position open to members of the Women's Royal Air Force although WRAF and Princess Mary's RAF Nursing Service members had been serving as Flight Nurses since the 1940s.

71/Z/523

Slide Rule 1950s



When loading aircraft it is important to ensure that the balance is maintained. This is the task of an Air Quartermaster and the job of loading the freight into a Hastings aircraft was made easier by the use of a slide rule specific to the aircraft type.

85/1/287



Course and Speed Calculator Mk IIA 1920s—1940s

This analogue calculator enabled courses to be worked out quickly taking into account the effect of the wind. Manual computers and calculators continue to be useful navigational tools to this day.

65/I/124