



The Hen's Teeth in Junagarh Fort

BOB GARDNER describes how Sussex-based restorer Guy Black rescued two incredibly rare Airco D.H.9s from Rajasthan in India and brought the World War One bomber biplanes back to the UK for restoration



TOP LEFT & RIGHT Guy Black examines the dismantled D.H.9s in the gloom of Junagarh Fort's Royal Elephant Stables in 1999.

ABOVE The fort itself.

BELOW One of the D.H.9s had been restored locally for static display at the fort, but without the benefit of much reference material.



IN APRIL THE Aircraft Manufacturing Company (Airco) D.H.9 bomber restored by Guy Black was rolled out at the Imperial War Museum's (IWM) Duxford, Cambridge, site (see *News*, June *Aeroplane*). This event marked the culmination of a ten-year saga involving one of the greatest "barn finds" of recent years. The subsequent recovery of two-and-a-quarter D.H.9s from a desert fort to the UK, in part by camel, was an adventure in its own right. Once the remains were back in the UK, one was restored to taxiable condition for the IWM, while another is being restored to fly.

After the First World War the British Government had something like 30,000 surplus military aircraft on its hands. Many were brand new, and some had not even flown. Only a comparative handful were needed for the much-reduced RAF

envisaged after the "war to end all wars". After a year of inept Government attempts to sell them, Frederick Handley Page established the Aircraft Disposal Company (Airdisco) to sell off suitable aircraft to the civilian market, thus providing the famous skywriting Royal Aircraft Factory S.E.5as and most of the joyriding aircraft of the 1920s. What a pity that no-one thought to keep one of each aircraft type for posterity. The French did.

The Government also devised the Imperial Gift Scheme of 1920-21, whereby each of the countries of the British Empire was offered 100 aircraft of selected types (together with a complete spares backup), engineering workshops and even hangars to provide the nuclei of future air forces. (See *The Fairey IIIH "Threelantic"*, April 2007 *Aeroplane*).

India was a recipient, and three or four D.H.9s eventually found their way to Bikaner, the leading principality within the remote desert state of Rajasthan in north-west India. By 1980 their remains lay discarded within the immense Junagarh Fort. The then Prince, His Highness Maharajah Karni Singh ji, was starting to open up the area for tourism. He began to convert his ancient and magnificent fort into a museum, and within it the restoration began of one of the D.H.9s. The Maharajah died in 1988 and was succeeded by his son, Maharajah Sri Narendra Singh, 25th Maharajah of Bikaner.

There are five palaces within the fort, one of which is now an hotel. An adventurous English backpacker who was also an aviation enthusiast visited the newly-opened museum in the late 1990s and discovered the remains of two or three early biplanes, as well as the newly-restored example. It was not known then that all

were D.H.9s, but the roundels showed their British origin. He took photographs, and several months later showed them to Clive Denney of Historic Flying at Duxford, who was then working on Guy Black's Spitfire. The pictures showed sufficient detail to suggest a Geoffrey de Havilland design, and early D.H.4s and D.H.9s sprang to mind.

Guy wrote to Junagarh Fort, expressing an interest in buying one or more of the remains. Months later the Bikaner Royal Family replied. They were not averse to selling two of their three aircraft. One had already been restored for the museum. However, two possible obstacles existed; they might be registered as heritage items and they were not now owned by the family, but by a charitable trust set up by the late Maharajah. If they were registered heritage items, export from India would be fraught with difficulty and probably impossible. It was a relief to discover some months later that they were not registered, and that the trust was happy to sell them to free capital for the museum's development.

By now, word had spread in the aviation world,



and several other collectors had formed a queue to buy the aircraft. Guy Black met the daughter of the late Maharajah, Her Highness the Princess Rajyashree Kumari, in London in May 1999. She had played an important role in the establishment of the museum. It was agreed in principle that Guy would buy them, and he paid a substantial deposit. He and his wife, Janice, headed off to India as soon as they could.

The city of Bikaner was still then essentially mediæval and largely unchanged from the time of the Moghul princes of 500 years ago. It lies in the Thar Desert, a place of universal pale-yellow sand dunes with straggling scrub vegetation grazed by free-ranging camels. Travel both to and within the area was difficult, and the solution was to hire a taxi for a whole month. They covered several thousand miles, including some diversions for tourism. Each night the taxi-driver slept beneath his car, the coolest place to be found, although in India "cool" is a relative term. The cost of this mammoth taxi ride was about £100.

Guy and Janice stayed at the Lal Garh Palace,



TOP LEFT & RIGHT D.H.9 wings, and a fuselage with original World War One roundel still visible, share storage space with derelict howdahs on which members of the Bikaner Royal Family would have ridden elephants.

ABOVE The entrance to Lal Garh Palace, where Guy and his wife Janice stayed during their exploratory visit to Rajasthan to assess the D.H.9s.

FAR LEFT D.H.9 wings galore. Sadly they did not remain this intact, as is revealed in the text.

LEFT Ready for the move: crates stand outside the museum building at Junagarh Fort, awaiting their rare cargo.

RIGHT On the basis that the Englishman (Andy Saunders, who led the recovery expedition) could not possibly want the tatty original fabric still attached to the D.H.9 wings, helpful locals removed it and made it into a tent for the site's nightwatchman. Such are the dangers to historic aeronautical gems in developing countries — and sometimes in developed ones as well.

FAR RIGHT Andy with a virtually intact D.H.9 rudder.



“It was very exciting. Ala’ed-Din (Aladdin) in his treasure cave of the Arabian Nights could not have felt more ecstatic”



data plates on the two fuselages. There were no engines. Were they stored elsewhere?

After several hours of exploration in a temperature of around 120°F in dusty cramped conditions by the light of a smoky paraffin lamp, Guy concluded that they were D.H.9 bombers of 1918. There might have been four aircraft originally, one of which was now restored and in the Fort museum, but possibly there had always been just three aircraft plus spares. The answer is still unknown. Their Siddeley Puma engines had been removed years ago, probably to provide power for an irrigation scheme of the late Maharajah's. A later and somewhat arduous tour of every ditch in the area by the faithful hired taxi revealed no trace. While the wooden airframes were almost complete, they had fed generations of termites and their brothers, cousins and friends.

The next stage was to recover the aircraft to their country of origin for restoration, and Guy returned to the UK to arrange this. Well-known aviation archaeologist Andy Saunders was recruited to head a small team, and flew out in September 1999. The mediæval nature of this remote area presented problems. Most freight was moved in carts pulled by dromedary camels.

Packing materials of any sort were unknown, and suitable crates to hold the dismantled aircraft did not exist. They had to be made by local craftsmen. First one had to find a tree, and then a plank-maker. A nail-maker was located at his pitch on the pavement, and made nails for them by hand from a coil of wire, hammering each head to shape. Soon, a depot of small trucks was found. Camel-towed carts took the pieces of aircraft there. A gang of enthusiastic and helpful labourers was recruited. These charming and friendly people were enthused by the sense of occasion and used their initiative whenever possible. Clearly the Englishman would not want

still the home of the Bikaner Royal Family. It is comparatively recent by Indian standards, having been built just before the First World War. While taking tea with Her Highness the Maharani, the widow of the late Maharajah, she confided that the remains that Guy had bought were going to be burnt until word of them had spread in the aviation community.

He was led by a court servant to see the aircraft. Firstly, the restored aircraft in the Fort was revealed. The museum staff stood proudly by, awaiting the judgment of a fellow restorer. Guy was astonished. It had been rebuilt with flair and imagination, but there was no data in this remote region to show what the original aircraft had looked like. In consequence it bore only a little resemblance to a de Havilland design. Sadly, no trace of its original identity remained.

There was no sign of the other aircraft, although the backpacker had reported that they were here in the museum. Had Guy misunderstood the Maharani? For a fleeting moment he wondered if they had been burnt after all. In fact they had been removed to storage in the Royal Elephant Stable, a splendid but long disused building. There was no electricity. It was dusty, extremely hot and very dark, but the servant was well equipped and produced a small paraffin storm lantern and a box of matches. The individual elephant stables looked very like a row of dog kennels except that they were of huge proportions. The aircraft's remains were found heaped into corners and between pillars, alongside wonderful but derelict regal howdahs made of silk, gold leaf and ivory. It was very exciting. *Ala’ ed-Din (Aladdin) in his treasure cave of the Arabian Nights could not have felt more ecstatic.*

After initial exploration Guy deduced that there were at least ten wing panels. Could there be three aircraft here? There were two fuselages and tails. The numbers on the fins matched the

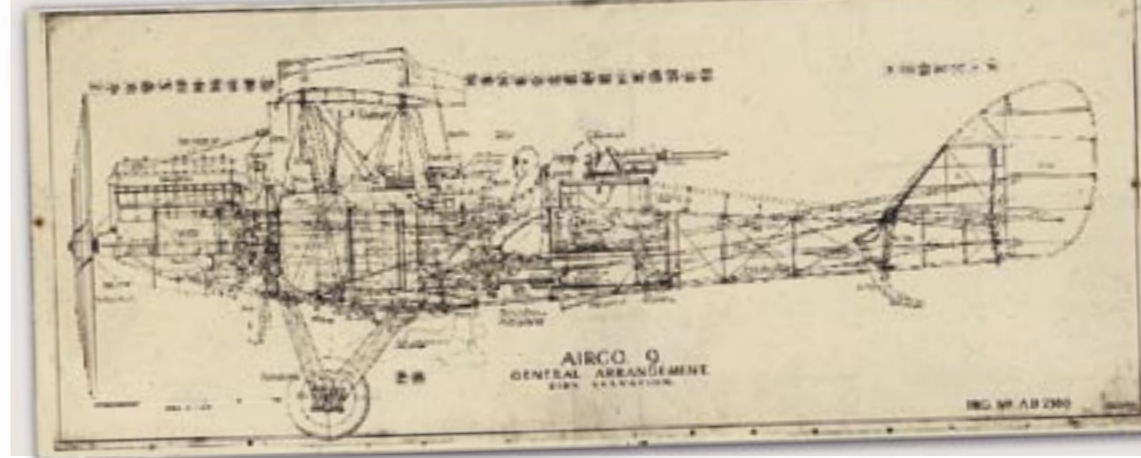
Solving the jigsaw puzzle

DESPITE extensive research, no original engineering drawings for the D.H.9 have been found. However, well-known aviation author (and *Aeroplane* contributor and editorial helper) Philip Jarrett provided a general-arrangement open side elevation which was exceptionally detailed and almost exactly to scale. This became the blueprint for the restoration. For example, both airframes had only a part of one engine bearer between them. The drawing enabled it to be identified and new ones made up.

Historian Jack Bruce provided several photographs of a dismantled D.H.9 that were equally valuable. In one, a trim wheel had been placed prominently at the front. The glossy look revealed that it was varnished rather than coated in shellac. The dark look confirmed that it was finished in a proprietary varnish called “Japlac”, which simulated a japanned finish.



ABOVE A photograph provided by the late J.M. “Jack” Bruce, one of the world's leading historians of World War One aviation, showing a D.H.9 rear fuselage with a “Japlac” trim wheel placed on it.



LEFT The detailed side-elevation drawing supplied by Philip Jarrett which revealed essential information for the restoration project.

Termite fodder



ABOVE Nothing much wrong with this timber... until you see the termite-gnawed other end, **BELOW.**



EXAMINATION of the airframes revealed the damage caused by the termites. They had ignored hardwoods like mahogany, which was used in only small amounts, but most of the softwoods, such as spruce, had been eaten to some extent by the burrowing insects. A glimmer of hope arose when the Retrotec team saw the mainspars. These had been coated with shellac, which must have deterred the termites. There was not a single hole in the shellac. But their delight was short-lived. The termites had eaten their way in from the unprotected ends, and the spars were almost empty shellac tubes!

the awful original fabric from the wings, so overnight, while Andy Saunders was away, they stripped it from the wings to make a tent for the nightwatchman. Later it became clear to them that the wings were causing the Englishman problems. They were unreasonably long; too long for the small trucks. They helped by breaking them into two pieces, shyly proud of their initiative. Fortunately this idea was discovered at an early stage and stopped.

After sea freight to the UK, the containers arrived at Retrotec Ltd, Guy Black's restoration company. The fragile components had suffered some further damage. Although the wings were complete and the fuselages relatively so, there was still something reminiscent of a 1,000-piece three-dimensional jigsaw.

Research into the two serial numbers revealed that the better of the two aircraft, D5649, was recorded as being ready at its maker on June 14, 1918. Made by the Alliance Aeroplane Company, into which furniture manufacturer Waring & Gillow Ltd had been incorporated in January 1918, it was earmarked for 110 Sqn at Kenley as a training machine. It probably never went there, because it was reallocated to storage on June 17 and then became part of the Imperial Gift of aircraft to India. As it was the better of the two aircraft, it was selected for the IWM.

The more fragile of the two, E8894, was one of a batch of 200 D.H.9s ordered on March 23, 1918, under contract No 351/418/C.296 (BR.394) from the Aircraft Manufacturing Co Ltd of Hendon. There is no record of military service before it was placed in storage and sent to India as part of the Imperial Gift scheme.

Guy Black felt strongly that so rare an aircraft as the D.H.9 should be represented in a national collection. Five are thought to survive elsewhere, but none in the UK.

Initially, sufficient funds could not be raised,

but the IWM was approached by Paul Allen, late of Microsoft and the backer of Burt Rutan's SpaceShipOne, which won the US\$10-million Ansari X-prize. Allen, who owns the Flying Heritage Collection of Second World War aircraft, wanted to buy the IWM's Messerschmitt Me 163 Komet rocket-powered interceptor. After discussion with its trustees and with the Department of Culture, Media and Sport, the IWM concluded that, unlike the D.H.9, the Komet was not unique in the UK and had little connection with the nation. They “de-accessioned” the Komet, to use Civil Service jargon, sold it and bought the D.H.9, commissioning Guy Black to restore it for them.

The aircraft is now housed in the new AirSpace building at Duxford. At the unveiling a *Daily Telegraph* reporter asked Guy how rare the D.H.9 was. “Like hens’ teeth”, he replied.

■ A later article will focus on the restoration of both of the recovered D.H.9s, and particularly the flyer

BELOW The start of the journey home: crates of D.H.9 parts are loaded aboard lorries at Junagarh Fort

