



Jack & Jenny

All photographs by Don Klein

After nearly 70 years on the ground and 21 years of restoration effort, airline pilot Jack Johnson's pristine Curtiss Jenny returned to the air in July this year. ANNE STEWART reports from Alberta, Canada



Like most 16-year-olds, Jack Johnson wanted a car, but in 1952 the only car he could afford was a 1927 Model T Ford. He called her *Hilda*, brush-painted her a bright robin's-egg blue, and restored her to her former glory. Thus began a lifetime love affair with historic machinery. A visit to Jack's acreage a few miles north of Edmonton, Alberta, in Canada, bears witness to his passion. It currently houses a number of "antique" and vintage vehicles, including a 1947 Harley Davidson motorcycle, a 1926 Chevrolet, a 1917 Overland once owned by "Wop" May, a 1953 Case tractor, and several other smaller pieces ranging from First

Left, Jack and his Jenny pose for Don Klein's camera during engine run-up.

Left, Jack Johnson flying his Curtiss JN-4D Jenny 3793/C-GDCX near his home base north of Edmonton, Alberta, in July.

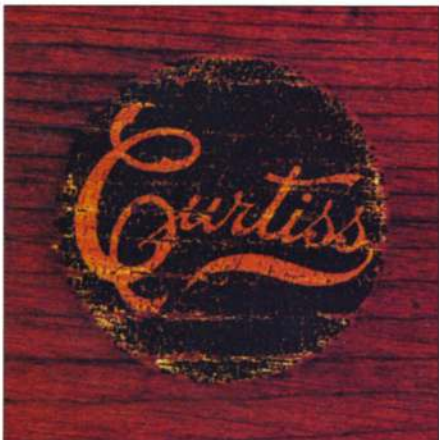
Right, the Jenny looks as graceful on the ground as in the air as Jack taxis the aircraft across his Alberta acreage.

World War German Army helmets to a 1930s gramophone. The mere fact that these things are old and have their own history makes them precious to Jack, but by far the most precious is his 1918 Curtiss Jenny.

To look at the old biplane is to be reminded of an era when both life and aeroplanes seemed slower and simpler. Images float through the mind: daredevil wingwalkers; astounding aerobatics; bug-eyed onlookers beguiled by the magic of the flying circus. The Jenny brought aviation to the American public.

Before the First World War the Curtiss Aeroplane & Motor Corporation of Hammondsport, New York, USA, built mostly pusher biplanes for the Army and Navy. However, pushers had a poor safety record. In 1914 Glenn Curtiss hired B. Douglas Thomas, a former designer with Avro and Sopwith in England, and together they designed a tractor type. By June 1917 the design had evolved into the JN-4D, combining the best design elements of the series. The name "Jenny" was derived from the letters "JN", combined with the inclination to endow aircraft with the feminine gender. When the USA entered the war the US Army's Signal Corps placed large orders for JN-4s, which were used as the principal trainer for new pilots in the USA and Canada, and also in Britain and France. Production was halted after the Armistice in 1918, and they were

Below, crackled with age, a Curtiss transfer survives on an interplane strut.



declared surplus. Many pilots, returning home from the war, indulged their new-found love of flying and picked up these Jennies at bargain prices.

Jack Johnson's Jenny was one of these. It was built by Curtiss in Buffalo, New York, in May 1918, and spent the remainder of the war training pilots at Rich Field in Waco, Texas. In 1919 it was sold to an individual in Buenos Aires, and from there it was sold in 1922 to a Hungarian pilot who had flown for Germany during the war and now lived in Montevideo. He flew the aeroplane until about 1930, when changes to Uruguay's air regulations banned "aliens" from flying. He dismantled the Jenny and stored it in his shop, where it remained until 1970, when an American bought it and shipped it back to Auburn, Washington, in a crate. By 1977 he realised he was unlikely to have the time to rebuild it, so he sold it to Jack.

Jack had made his career as a pilot for Canadian Airlines International, and

had thousands of hours on various types of aircraft, but his interest lay more in building aircraft than in flying them. Since restoring *Hilda*, he has built or restored at least 12 aircraft, and has assisted in the final assembly, rigging

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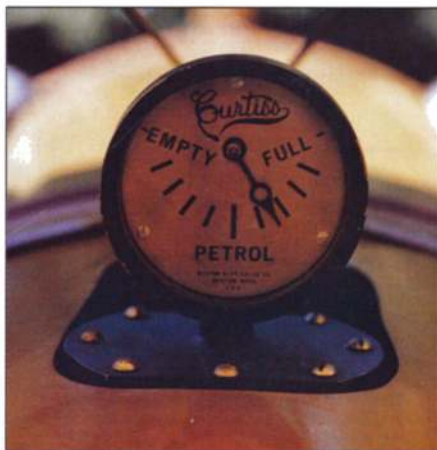
and test flying of scores of homebuilt and historic aeroplanes. These include de Havilland Tiger and Fox Moths, Stearman, Pietenpol, Mignet Flying Flea, Great Lakes, Isaacs Fury, Currie Wot, a Westland Lysander scale replica, and a 1933 Waco which he has since donated to the

Alberta Aviation Museum Association in Edmonton. Says Jack of his flying experiences; "Some of the aircraft were old and scary, but they're like old friends: they're all different and nobody's perfect."

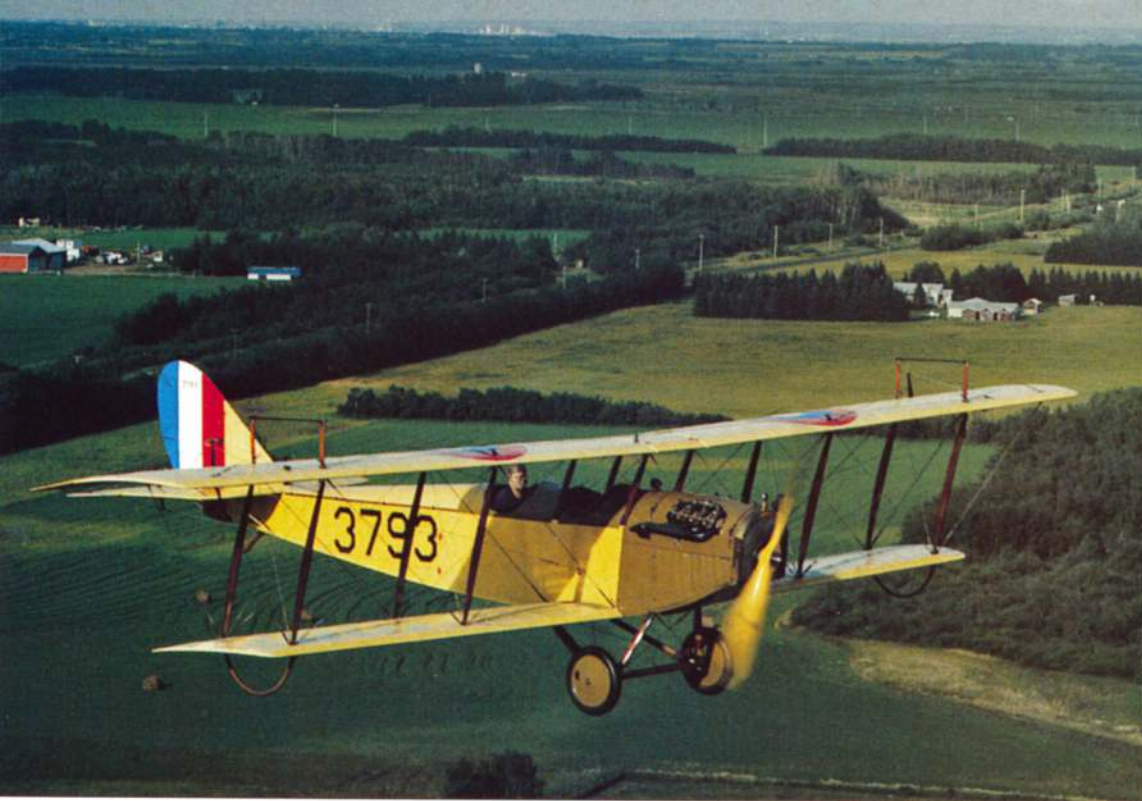
According to his friend Roy Olsen, who assisted with some of the work, the Jenny "... looked like a pile of junk. I'd have burned it!" Nonetheless, most of the parts were there and, unlike many old aircraft restoration projects, there was no crash damage to be rectified. The altimeter, oil pressure gauge and wheel covers were missing. Most of the aircraft needed to be rebuilt and re-covered, but much of the original cotton fabric, with the original roundels clearly visible, still hung on the frame.

Authenticity has been the primary directive in the restoration. It has taken Jack 21 years of dedicated effort, research and rebuilding to complete the project. He has contacted various museums, notably the Smithsonian National Air & Space Museum and the Canadian National Aviation Museum, and has corresponded with four or five other restorers and owners of Jennies.

Everything on Jack's Jenny is original, or identical to the original. The missing instruments were replaced with originals obtained through bartering



Above, the petrol gauge, set into the top cowling in front of the forward cockpit.



Left, another fine air-to-air view of the Jenny over the countryside of Western Canada. The aircraft was built on the other side of the North American continent, at Buffalo, New York, in 1918; the Curtiss JN-4 was the principal *ab initio* trainer for pilots in the USA and Canada during World War One.

with other restorers. The spark plugs, purchased from a collector, are brand new First World War Army surplus, and were still in their original boxes. Ninety-nine per cent of the wood, including the spars, is original. The high-pressure clincher tyres are new production from a company in the USA which occasionally manufactures tyres for historic vehicles. Much of the construction involved labour-intensive hand work. The flying and landing wire ends are wrapped with galvanised wire and soldered with 50/50 solder. The fabric covering is Grade A aircraft linen, hand-stitched, taped with hand-frayed tapes, and rib-stitched every four inches, as it was originally done. Jack then brushed the Jenny with four coats of nitrate dope and two coats of spar varnish. All turnbuckles are locked with copper wire, and genuine brass cotter pins are used throughout, as are thousands of brass screws. The original Curtiss OX-5 engine was rebuilt using the best parts from three engines. There are some areas where Jack did not perform the work alone, and trusted the assistance and expertise of others. He is indebted to Gerry Connor of G&M Aircraft who rebuilt the engine, and to Gerry's partner, Mel Smith, who was extremely helpful with engine overhaul and in various other areas. He also called upon Gerry Ward for precision machining, and Gaerhart Novotny contributed in many areas, particularly in the machining of bronze bushings for the undercarriage. Clark Watson of Watson Aviation was invaluable in the final assembly and inspection of the aircraft.

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The Jenny has a wingspan of 43ft 7½in

upper and 33ft 11¼in lower, is 27ft 4in long and stands 9ft 10½in high. It has an empty weight of approximately 1,450lb, a gross weight of 2,130lb, and the fuel tank holds sufficient for approximately two hours' flight, plus reserve. To move the completed aircraft on the ground, Jack constructed a wheeled dolly for the tailskid and, with the help of three other men, rolled it from the hangar, through the landscape of trees and hedges, to the grass taxiway. On July 16 this year his Jenny flew for the first time in nearly 70 years.

How does it fly? “Like a typical old biplane,” says Jack. “At first, when she got off the ground so easily, I thought she'd be a real performer, but then I realised that we were probably going about as fast as we were ever going to go!” He adds that the Jenny takes off fairly rapidly on an unprepared surface, cruises at 59 m.p.h., and has a maximum speed of about 75 m.p.h. The ailerons are not too effective, and a large

amount of rudder is needed for turns. But, in Jack's opinion, “The flying and landing is the easy part. It's taxiing that's difficult” — a reference to the lack of brakes and tailwheel.

Between 1915 and 1918 more than 7,000 Jennies of various designations were built. Today fewer than 50 survive, and only a handful are flying. Jack Johnson's Curtiss JN-4D is the oldest

airworthy aeroplane in Canada. What is it worth? Jack believes that it is impossible to put a monetary value on a piece of history: “They don't build them any more. She's priceless.”



Above right, the Jenny's original Curtiss patent plate and manufacturer's plate, stamped with the model designation JN-4D and the serial 3793.

Right, original detail: a World War One-vintage cardboard box for a Rajah “Pasha” spark plug rests on an engine hose-joint next to the plug itself and its cable.

