

Meet Jenny

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Budd Davisson explains why a brief affair with “Jenny” is great for the soul.

I’m not one to tell locker-room tales about my latest conquest, but I did get the opportunity to have a go at Jenny. I can’t say it was truly an affair, because that would connote a longer-term relationship. Ours was more of a brief encounter, a time in which we happened to be passing through the same space at the same time.

We met at the invitation of my good friend Dan. When Dan met Jenny, she was bleached and near-derelect. Her dress was torn, her colour worn, but her basic health was good. She came to live with my mate and has stayed with him ever since.

Dan got around to putting Jenny into the clinic, working to heal her ills and encouraging her back into the element she had known so well. Today, they think nothing of heading into the wild blue yonder for a weekend with the old gang. No matter where they go, they run into friends who have known Jenny far more intimately than even Dan. They knew her when the snow was blowing and the light was failing. They knew better, but they’d be damned if this load of mail would ride home in a baggage car. They knew her at her best ... and her worst.

When Dan introduced me to Jenny, the spring grass was still short and the winter sun had yet to grow truly warm. She was in one of Dan’s hangars, spending some time with a few of her pals which have come under his protective wing. He cares for eight or nine aeroplanes and at one time, Jenny and the gang had gotten together as a sort of a museum. But it’s not easy trying to put on a show for folks when you’re so far off the beaten path. Nowadays, they clown around to entertain themselves, Dan, and any others who still remember the players in the aerial vaudeville shows of a much younger time. Dan introduced me to her, doing his best to point out her finest points, ignoring her marks of age. He showed me the tailskid that actually steered, a little, anyway, with the rudder pedals. He pointed out the new exhaust valve assembly which he hoped would add 20 or 30 hours to the life span on the OX-5. He also pointed out that over 95 per cent of Jenny

was original, and some of the fittings still showed pitting from years left alone in the sun and rain of a dozen country airports. I quickly noticed the wooden landing gear, the shock-absorbing bungee cords wound around the lower end like garters. The fabric-covered spoked wheels were a curiosity; but of more immediate importance was that the wheels mounted no brakes, so you had to depend upon Jenny's good and gentle nature to stop you in good time. The tailskid tearing its way through the grass would help as well.



As I climbed into the cockpit, I was quick to notice that Jenny still enjoyed wearing the jewels and fashions she was born into. A horizontal nautical compass floated under the panel. A tiny crank on the right wall, it was explained to me, operated a booster spark coil, and you cranked it just after a helper gave Jenny's prop a swing, thereby shooting an extra bit of juice to the plugs. The system must work, because Jenny began to talk to us after only two tugs at her propeller. Her voice, coming as it did from the cylinders and stacks of a V-8, was husky but smooth, like one of those femme fatale French cabaret singers she had heard about back in 1918. Even when goaded with the throttle, and she had every right to sound angry and raise her voice, only the rhythm and tenor changed; she still sang the same mellow, somehow sad, song.

I had to remember that Jenny was far past retirement age; an age where many others would have preferred a somnambulant retirement to an old folks museum somewhere. As I tried to coax her in given directions, it was easy to see she wasn't going to let me force her into doing something brash on the way out to the runway. A blast of power would ruffle her feathers, forcing the tail to get just light enough that full rudder would coerce a bend in the

straight line we were traveling. Eventually, we found the field of grass before us, the wind hitting us in the face. We both stood there, savoring the moment for entirely different reasons. For me, it would be the first time. For her, it could be one of her last. We were both anxious. Dan, being the gentleman that he is, didn't want Jenny to be crudely touched by a stranger's hands, so he made the aerial introductions for both of us, bringing the power up and floating us into the sky together. Even as we floated out over the trees, my eyes moved around the machine, my thoughts and feelings reaching out to connect with those of Jenny. I knew that after a few quick turns, it would be my turn, and I wanted to know as much about her as possible.

Suddenly, we were down and lined up again. This time, I reached over and took Jenny's throttle in one hand, and gently caressed the stick with my other. I asked her to sing to me. Even as the OX-5 sang its best song, I moved the stick to lift the tail just a little. Not much. Just enough to get a tailskid out of the grass, but not enough to chew the ground with the prop.

It was not so much a matter of rushing forward to gain speed as it was a leisurely walk into the air. Since Jenny had long since severed relations with her airspeed indicator, it was up to me to keep her nose at an angle which would keep her climbing and still give a good margin over the stall.

My first thought, when I saw how little progress we were making on getting over the trees ahead, was that Jenny had picked this particular time to end it all, with a lover at her side. I could see the individual leaves on the trees ahead as I moved my hand and asked Jenny to aim herself at the top of the trees, plus ten feet or so. She obliged, but seemed to do so a little begrudgingly.

The sky that day was full of bumps and jabs, like a bunch of poorly mannered kids making fun of an old lady on the way to the supermarket. Every gust, every poke, found Jenny asking me to respond with gross movements aimed at cancelling out the bullies. I didn't tell her so, but at the time I felt as if I was attacking a herd of weasels with a soda straw, her controls were so ill-suited to the purpose. Heavy of aileron, light of elevator and rigid of rudder; she would have had a difficult time making friends with a CASA certification team. No matter what charms she may lay claim to, her ability to dance is not one of them. Lovely to look at, but quite something else when in your arms.



As we moved about the place that was her element, it became clear that although Jenny had given birth to generation after generation of aeroplanes, we have learned a few things since then. Quite a few things. She is so encumbered with drag that no amount of power could make her young again, indeed, if she ever was. Those thousands of feet of movie film which show Jenny involved in all sorts of derring-do are monuments to the pilots of the day, who knew no better. Jenny may be a lady, but in those days she was the only damsel in town, and she looked terribly attractive to that first generation of airmen. In thinking back to films I had seen of two Jennys doing formation loops, each with two wing-riders on board, I was astounded. As I looked down at the runway, I was certain that those two Jennys were the first aircraft to break the sound barrier – in an effort to gain momentum to make it over the top of an egg-shaped loop. I was, at that point, as enamoured with the pilots of those early days, as of this fading lady.

As I turned toward the runway and brought the power back a little, Jenny put her head down at an angle which felt to me as if it would be just fine. However, Dan's instructive hands came up out of the forward cockpit, motioning down, so I obeyed. Even with her nose pointed down, it was obvious we weren't moving very fast. And, when we turned into the wind, I found myself reaching for more power to ensure myself and my date that we wouldn't wind up astraddle a fence at the end.

As we fluttered down, I eased the power back and asked Jenny to find the ground for me. It was a mistake. I'd forgotten how near-sighted she was, and she kissed the grass first with

her main gear, leaping back up into the air and shaking her head as if to scold me. With a little blast of power, we settled back down, this time her head held high, satisfied when all three touched at the same time. Then, as if tired from all the exertion, she slumped down into the grass barely able to move, her momentum and energy spent. She was not as young as she thought.

I guess about all I can say about Jenny is that I've been there. I've been where many of the greats have been, and I must say the effect is not what I had expected. She may be a lady, but she has a Victorian way about her that is sadly out of place today. It took a different type of man to handle her – one that understood the difference between being coy and cantankerous, precocious and bitchy. It is just possible that over the years her deeds have made us gloss over her shortcomings, viewing them as important parts of a matriarch character we know we must love. There's no doubt that Jenny is a character, but I'm not at all certain she's a lady.

It is interesting to think where the world would be without certain inventions that are as basic as dirt. Take wire for instance: it's one of those inventions without which we'd be lost. Without wire there would be no telephone, no way of keeping cattle on their property, no clothes hangers and, more importantly, no aeroplanes. Why no aeroplanes? Because without wire, the first generation of aeroplanes would have been placarded piles of disassociated pieces. It was wire that allowed those long-ago civil engineers cum aeroplane designers to build surprisingly light but huge structures that would allow man to fly on engines that had power-to-weight ratios worse than horses. The Curtiss Jenny was one of those structures. Without wire, the legend of Jenny could not have been, because Jenny, the Curtiss JN-4D, was a three-mile ball of wire with some floppy surfaces mixed in to give it form. The question has often been asked whether the wire was there to tie the pieces of the Jenny together, or were the pieces there to keep the wires apart?

Jenny and all her wire were the acorn of aviation. To be sure, there were other aeroplanes, extremely important ones, before Jenny. But she was the final combination of controls and configuration that decided the future shape of aeroplanes. The joy stick with aileron and elevator, the rudder bar and throttle were all arranged exactly as we know them today. What's more important, Jenny made her contribution as an aviation pioneer because she was mass-produced and enough of her sisters were available to affect a complete generation of pilots – the first generation of civilian, have-to-make-a-living, pilots.

Glenn Curtiss laid down Jenny's basic air frame in 1916, with an eye toward capturing a training contract from the fledgling air arm of the Signal Corps. Since he couldn't run out to Pennsylvania and scoop up an engine for his new aeroplane (there were no regular manufacturers), he designed and built his own engine. His 90-hp water-cooled OX-5 V-8 weighed a whopping 420 pounds – hardly a light weight by today's standards, but it put out a fairly reliable 90 hp, and only quit occasionally. You had to take special care of the engine, like greasing the exposed rocker-arm assembly every few hours. But even with the best of care,

Jenny seldom went more than 50 hours before an exhaust valve would warp, and you had to tear the engine down. A single aeroplane could have worn out a carload of engines in its life. Probably the OX-5's biggest asset, at least as far as a penny-pinching generation of barnstorming pilots was concerned, was its availability. The military definitely believed there was safety in numbers, so they built dozens of engines for every airframe produced. Surplus engines were everywhere, but even if supply had been short, the OX was a tractor-simple machine that almost any farm boy could keep running, after a fashion.



"After a fashion..." is a hindsight judgment. In the early 1920s, the OX's reliability and the Jenny's flight characteristics were considered standard fare. Pilots had only the glamour machines of the Great War to compare to it. In those days, Jenny was it, she was all they had. She was cheap, she was easy, she was available. \$200 bought a good Jenny. A case of Scotch bought a better one.

After the war, it seemed as if Jenny were everywhere. There was nothing she couldn't and didn't do. Her most famous exploits were at the hands of barnstormer pilots who wanted to eat more than they wanted to live. They'd do anything for a crowd, and they asked Jenny to do things for which she was never designed. The old CAB probably didn't keep much data about barnstormers, except who was killed, where and how. One bit of statistical information that would have been interesting is how many hours Jenny flew with men or women standing on her wings or dangling from her landing gear.

The famous Black Cat squadron super pilots specialised in bending the physics of aerodynamics as far as they could be bent and bending the rules of luck even further. The

legacy of Jenny and the barnstormer generation, with which she shared many an open wheat field, is a thousand feet of film picturing some of the most hair-brained stunts ever pulled. Not satisfied with standing on the wing of a Jenny when she was doing her feeble imitation of a loop, the daredevils would walk nonchalantly about on top and between her wings. They would clamber down to the landing gear, hanging from their knees just behind that huge propeller. They'd work two Jennys close together and climb from one aeroplane to another, all the time knowing their only safety lay in the strength of their hands. Only a sissy used safety wires, and the parachutes of the day were much too bulky to allow them the freedom of movement they demanded. Many times the Jenny came down with fewer men on board than she took off with.

When it came time to put wings on Pony Express riders, it was Jenny they chose for a mount to carry the mail. Although she wasn't much faster than a train, she didn't have to follow the tracks and could go places a train never dreamed. At the same time, she had adventures that have kept writers busy for over fifty years. Weather hasn't changed all that much since Jenny carried the mail. In a spruce and canvas kite, with helmet and goggles for protection and a schedule that had to be kept, the early mail pilots and their Jennys were far more daredevils than any who flew under a bridge or looped-the-loop with a wing rider. The unmerciful pounding they took in an effort to prove an unproven concept will probably never be adequately portrayed in literature or film. Like war, it loses the steely edge of terror when it is simply retold. It has to be lived.

The Prohibition era, in which Jenny found herself wearing civvies, gave her plenty of work. It was quickly found that the front pit of a Jenny would hold two or three cases of bootlegged booze, and she could be modified to carry even more. So quiet, backwoods meadows would often awake to the harsh, but soft voice of a straining OX-5, as it did its very best to lift a man and some 100-proof over the trees and to a far-away consumer behind a locked door with a peek hole. Just say Jenny sent me.

Under her dress of cotton, Jenny had a skeleton of wood, a very dainty one. Her fuselage was framed of pieces of spruce and ash no more than an inch and a half square. It was a spidery combination of long, thin femurs of wood, joined together with incredibly complex fittings of wire and more wire. To keep it light, they kept all the structural members to an absolute minimum, depending upon the life-giving wire to brace the members and give them rigidity.

Even control surfaces, such as the ailerons and elevators, were externally braced by wires running up to a stand-off that was jutting up from the main spar of each surface. Huge suspension towers rode atop the outer panel of each wing, the wires running from many points on the wing to the terminus at the top of the towers. Wires on the Jenny fought lift, they fought drag, they argued with gravity, they stiffened surfaces, they told the landing gear what its place in life was supposed to be. Wires fought to hold Jenny together... but Jenny had to fight to move all that wire forward. With 90 hp and a light load, Jenny was hard-pressed to

maintain 70-75 mph in level flight. Today, a clean 65-hp Cub could run away and hide from it. But then, so could everything else. Of course, in 1917, they didn't HAVE anything else.

