



WINGSPOON

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The Aussie Corvair-powered

VP-2

Volsplane

By **Darren Barnfield**, engineeredextremes@bigpond.com

and **Pat Panzera**

I grew up with a father who had flown and served in the Royal Australian Air Force as a flight engineer on PBV Catalinas. I have early memories of my Dad spending many nights out in the shed, building a Thorp T-18. Fast-forward 20 years and I found myself in the military as a helicopter mechanic. After serving my country, I left the military and had no further interest in aircraft or aviation. I restarted civilian life as an engineer, and all was good. A short time later, I met the girl who would become my wife, and before long (a four-year courtship), we were at the altar in a garden ceremony saying I do. It was a great day, but what stands out for me was just before I said I do, there was a deafening silence that was only broken by the sound of a homebuilt Corby Starlet passing overhead, catching my attention. Anyway, the wedding went on, we had a great day, had our honeymoon, and life was as good as it can get.

A few months after that fateful encounter with the distracting aircraft sound, I was surfing the net when I came across some information on experimental aircraft. I was familiar with the process from my dad, so I investigated further. When I spoke with dad, he offered me his T-18 project that hadn't been completed. I was already familiar with the all-aluminum-build process and wanted something a little different, something with different

build techniques. There were so many aircraft out there to choose from, so I attended the Sport Aircraft Association of Australia's annual convention to see what I might find. Most of the aircraft were small and the stories of available orphaned projects were everywhere. I thought, it's not that hard—I can easily complete someone's project in a year. With more research I found what I thought I could build in about 12 months that would suit my 6-foot, 220-pound frame. It wasn't a sleek or fast aircraft but rather the elegantly simple Evans VP-2 that could get me in the air cheaply and quickly.

After I searched the internet, read as much as I could about the single-seat VP-1 and the two-place VP-2, I purchased a set of VP-1 plans from Volsplane designer W.S. Evans and found a local builder who gave me a set of unused plans for the VP-2. Evans stopped selling VP-2 plans some years ago due to legal problems, but since I was going to use it as a single seat I didn't see an issue. On July 1, 2000, I started building my single-seat VP-2 Volsplane.

The learning curve was steep when it came to working with plywoods and solid stock, specifically spruce and its costs. I

found a local species, hoop pine, that was used to build the de Havilland Mosquito during World War II, which I could use as a substitute. I had very basic tools, so over the years for birthdays, Christmases, and other occasions, the family helped me



Darren's find, attached to a set of jigs that allow rotating the fuselage for access to all sides. The same jigs saw service again when the wings needed covering.

build up a very healthy and respectable workshop.

The first year went so fast, and I didn't have anything to show. This made me wonder if I would ever finish. The next year, I had a motor, and I was lucky enough to find a fuselage that was never completed.

This moved me along, but it was still a slow process. We had purchased our first home, and with work and wife



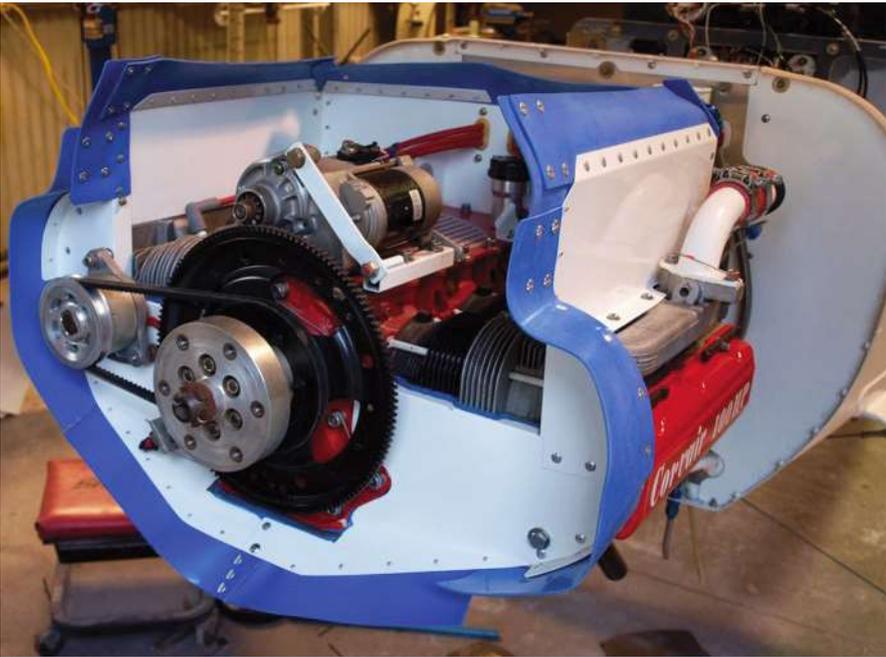
Darren (right) with mentor and test pilot, Nick Caudwell

commitments first, there wasn't much time for building. I did, however, get to spend most nights surfing the internet for any info on the Volksplane. What attracted me to it was that without too many structural concerns you could modify the look of it. There were some real nice looking Volksplanes getting around and I had a few ideas for my aircraft.

Then one night I came across an engine called a Corvaire. I had an old Revmaster R-2200 that I was planning on using, but this website called FlyCorvaire.com had my attention. Surfing through I found a small picture of an aircraft, and it was titled the world's fastest VP-2. This Volksplane was the nicest I had ever seen; I spent many hours surfing the internet for any



Like so many other wood wings, it seems a pity to cover such artistic work.



Corvaire engine converted and installed. See the YouTube link at the bottom of this page to see and hear it run.

other info. I had emailed the man on the Corvaire site, a Mr William Wynne. I got a very brief e-mail from Mr Wynne saying the owner of the VP-2 was Dale Jorgensen. He had no e-mail but he passed along Dale's address. The next morning I sent Dale a letter and 20 dollars for some info and/or photos. Buy now we had purchased a new home and were renovating so the plane had to take a back seat. Then out of the blue I got a letter from Dale. It explained a lot and he had sent me the \$20 back plus a heap of photos. Dale also sent me his phone number and we soon struck up a great relationship.

When I got back to building, a few years had passed. I had the fuselage almost completed, the rudder and stabilator were done, and the Revmaster was on the



Custom bubble from Todd's Canopies.



The fuselage support jigs being used to support the wings.



It doesn't get any better than this!

firewall. My wife, Jakqui, has been wonderfully supportive—one day back in 2003 she surprised me with a gift of a lifetime. For my birthday, Jakqui had purchased a return airfare to EAA AirVenture Oshkosh 2003. We all know this is the Mecca for homebuilding. My first phone call was to Dale. I was hoping we could finally meet, but Dale went one better and offered to put me up for the time I was there. This was a dream come true. Dale lived about 100 miles from Oshkosh.

At Oshkosh 2003 I met a lot of other VP builders at a dinner, which we had arranged on the Volksplane discussion group prior to leaving. The last day of my trip to the United States, Dale took me into one of his barns and offered me a gift that would change my whole aircraft. He pulled back the cover to reveal a 1965 110-hp Corvair. This was a dream come true. I had searched Australia for one of these and now I finally have one—I thought I would never get my hands on one. At the time, the Australian exchange rate was about 48 cents to the U.S. dollar, so this was why I hadn't purchased one. The only thing I had to pay for was the freight home, which I could afford to do.

While at Oshkosh I also met William Wynne, the noted authority on



Cockpit and panel

converting Corvair engines for flight, and Pat Panzera, editor of Contact! Magazine and fellow Corvair engine builder. Could it get much better?

After returning to Australia, I was all fired up and making good progress. I had finished my fuselage, and it had the shape and look I was after. And now with the Corvair on the front instead of the Revmaster, it was looking great. I often get other builders making a dig at me for building the VP-2, but to date I have only spent my spare change on the project, made some lifelong friends, and got my restricted pilot's license as well.

("Restricted" is the equivalent of the recreational license in the United States.)

Fast-forward a few more years. We have travelled to England for a family wedding and I was able to meet some other VP builders and once getting home and picking up, the visual progress is there. I try to do a small bit each week. There's a lot you can do to the Volksplane to take away the box look. I had a custom canopy blown

for me at Todd's Canopies in Florida, which makes the aircraft really pop.

Since becoming friends with Dale, he has helped me so much with my project, even though he's on the other side of the world. I was able to pay him back in a small way three years ago. Dale had come to Australia to do an EAA Technical Counselors visit as well as have a holiday. The company I was working for as an aircraft mechanic at this stage had a fully operational Australian-built P-51 Mustang. So while Dale was down under, I got him a ride.

The Evans Volksplane is a good, stable, and reliable aircraft. I had started my build 10 years ago, and when I walk into my shed, I have a completed aircraft.

I think the reason why so many projects aren't completed is that people start too far behind the eight ball. Yes, the Volksplane isn't going to take first prize in the best-looking contest, but I have invested about \$18,000 AU over 10 years from spare cash—that's \$1,800 AU a year. (It also helped me to quit smoking.) Anyone can build an aircraft, but crawling before you walk is the best bit of advice I can offer. ➤ *Darren*

