



## Electric aviation is off to a flying start in Australia.

*FlyOnE Sustainable aviation* is tackling the multifaceted challenge of decarbonising light aviation in Australia with the importation of current and future electric aircraft options, certification of new (local and foreign) airframe releases and designs, developing electric aviation charge nodes in key areas in Australia and working with governing bodies to build a framework of safety and training around electric aviation operations and pilot skills development.

After almost 12 months of active electric aircraft operations and training in Western Australia, we are extending our reach to the east coast and touring one of the aircraft, attending the Avalon Airshow and our own unique open day at Bankstown Airport.

The Bankstown Airport open day will be conducted on the **24th and 25th of February**, kindly hosted by **Sydney Flying Academy at 73, Tower Road, Bankstown Airport** from 8am to 4pm.

**Friday Feb. 24th** will be an open viewing day displaying the aircraft with engine covers off and full power run ups on the apron to demonstrate the reduced noise of electric aircraft.

Note: From 500 ft above the ground, the aircraft is inaudible to ground observers.

We hope to have time (and fair weather) to conduct a demonstration flight before sunset to get some on board camera footage of the very first electric flight over Sydney landmarks.

**Saturday Feb. 25th** will be an open viewing day displaying the aircraft with engine covers off and full power run ups on the apron to demonstrate the reduced noise of electric aircraft.

We will also have a FREE sausage sizzle and (non alcoholic) drinks from 11am.

## Australian Electric aviation overview to date

Electric aviation presents private operators, flight school operators and light commercial operators with an exciting decarbonised and cost reduced method of flying, as well as providing a very peaceful and serene flying experience.

*FlyOnE* have 2-seat electric aircraft currently operating in Western Australia as trainers and recreational aircraft, but these are just the tip of the iceberg for electric aviation. In addition to representing (and stocking) Pipistrel electric aircraft in Australia, *FlyOnE Sustainable Aviation* has committed to over 40 additional electric aircraft orders including eVTOL and 700km range commercial air transport capable aircraft to build the electric aviation ecosystem in Australia with these additional aircraft entering service from 2024.

To support and enable these aircraft for commercial, training and recreational operations, *FlyOnE* is also building the electric aviation charge network, with multiple sites already active in Western Australia for recreational aviators to access and recharge the aircraft for extended range and flight time.

The rollout of the charge network is critical for the uptake of electric aviation in Australia, *FlyOnE* is already working with airports Australia wide to integrate relevant charge capabilities and solar energy collection and storage systems for the next few decades to ensure proactive airports are ready for the new wave of aircraft entering our skies.

The 2 seat Pipistrel Alpha Electro is the first in a long line of emerging electric aircraft to start filtering into Australian aviation. Built primarily as a trainer, it was engineered for 60 minute missions to keep the MTOW under 600 kg and the price under \$250K AUD.

With a mission time of up to 60 minutes, The Pipistrel Alpha Electro is the perfect trainer, but also makes a fantastic recreational aircraft, flying 2 person missions of an hour for skills consolidation and recreational sorties in the sport category.

In addition to stocking new and used Pipistrel Alpha Electro for the Australian Sport and Recreation aviation market, *FlyOnE Sustainable aviation* is pursuing the GA certification of the Pipistrel Velis Electro, a 600 kg MTOW EASA type certified 2 seat trainer. Very similar to the Alpha, but eligible (certification acceptance with CASA pending, ETA Q1 2023) for GA registration so GA flight schools Australia wide have the same Electric aviation cost cutting advantages as Sport and Recreational RA-AUS flight schools.

The first generation Pipistrel Electro range are powerful and dynamic small aircraft with all carbon composite build, Ballistic parachutes for safety, up to 1200 fpm climb rate, +4G load rated (-2G), have a 15:1 glide ratio allowing notable thermal updraft altitude gain, have simple dismountable wings for road /trailer transport AND, use only around \$5 per hour of energy to fly. Yes that's right, \$5 per hour of energy.

But this isn't the biggest saving presented by electric aircraft. What will really advance and accelerate the uptake of electric aircraft in Australia is the lowered cost of service and maintenance.

After factoring all lifetime service items, including battery replacement/upgrade, operating an electric aircraft is less than HALF the cost of a comparable sized combustion aircraft.

This is the key factor that will make electric aircraft so attractive for flight training schools and private aviators. But don't just take our word for it, there are scores of flight schools in Europe, South Africa, the UK, Iceland and New Zealand that have already adopted electric aircraft for flight training and recreational operations.

And of course, Australia's first ever electrified flight training school, *Could Dancer Pilot Training* in Perth, Western Australia, who were the very first to integrate an electric aircraft into their operations as early as 2018.

With longevity advantages such as the first motor service at 2000 hours.. and the average 100 hourly inspection taking around 3 hours to complete (with no filters or fluids required), an electric aircraft operator spends more time flying and less time in the workshop.

2nd generation GA electric aircraft will enter service in 2024, with the likely first arrival being the Diamond eDA40. *FlyOnE* will operate a Diamond eDA40 as a trainer and commercial air taxi between Jandakot and Rottnest Island in Western Australia. With this route requiring a flight time of only 20 minutes, it's perfectly suited to electric aviation.

Another key area of focus for early commercial electric aviation operations will be the Whitsunday islands, as all the airstrips on the islands are within easy reach of electric aircraft range capabilities and with some basic Solar energy collection and storage infrastructure upgrades, can support a true zero emissions air transport service in the region.

3rd Generation electric aircraft entering service in late 2024 will break free of the need for airport operations with the introduction of the first certified eVTOL in the recreational category. While more work still needs to be done on the regulatory framework around airspace integration, ground operations and training, the governing bodies have welcomed the *FlyOnE* agenda with open arms and the progressive adoption of eTVOL air traffic is looking very positive in Australia, possibly even cementing Australia as a world leader in eVTOL uptake.

In fact, while other regions in the world held the Pipistrel Alpha Electro in the 'Experimental' category, CASA was the first regulatory authority in the world to approve an electric aircraft for flight training use, with the Pipistrel Alpha Electro achieving a certificate of airworthiness for 'Reward and Hire' in the Recreational/Sport category allowing the very first aircraft to enter service in Australian skies for pilot training in 2018.

The future of electric aviation in Australia has an exciting path ahead, with many more 5, 9 and 19 seat fixed wing electric aircraft entering service before the end of the decade.

While the range on these aircraft will be modest, there are a great many commercial routes, recreational and training operations that can be serviced by electric aircraft to assist with the decarbonisation of aviation in Australia, and to grow and develop an new sector of aviation with new generation aircraft that are, by nature and by design, safer, quieter, more economical and offer a more pleasant flying experience for pilots and passengers.

We are very excited to see where the future takes us and where we can take the future of aviation..

**Korum Ellis**

Founder

*FlyOnE Sustainable Aviation*