



VIEW GALLERY

# ABSOLUTE AVIATION'S African Pipistrel representation

BY ATHOL FRANZ

In its 30 years, Pipistrel has grown from an enthusiastic hobby hang-glider garage manufacturer into a world-renowned light aircraft producer, recognised by leading global aviation authorities. With its revolutionary ideas, Pipistrel introduced composites to light sport aircraft, achieved first ever electric flight of a two- and four-seater, won all three NASA challenges and won the hearts of passionate aviators on all continents. In April 2022, Pipistrel became part of Textron eAviation, a business segment of Textron Inc.

“

*Pipistrel by Textron eAviation is the global leader in electric aircraft and is focused on the future of sustainable flight. We are committed to bringing the next generation of sustainable aircraft to the market backed by Textron's 100 years of expertise and restless spirit of innovation.*

Gabriel Massey President and Managing Director.

”

## Velis Club

As a high-performance aircraft with a constant speed propeller and heavy-duty landing gear, the Velis Club provides an ideal platform for flight training, touring and glider towing. The Velis Club is part of the Velis family that includes the Velis Electro and Explorer complimenting them perfectly as part of the Velis training system providing aircraft that covers all areas of basic and advanced pilot training under VFR conditions. Its ability to absorb even the hardest of landings on tarmac or grass adds to its impressive list of attributes and it is well suited for intentional spins and UPRT training in addition to glider towing capability.





Velis Club

Combining proven airframe and engine designs with the simplicity and durability required of a club aircraft the Velis Club is not only capable but light on your wallet. The outstanding aerodynamic efficiencies and robust lightweight structure provides superior performance with low fuel consumption and low environmental impact. The Velis Club suits a wide range of uses from basic flight instruction to glider towing and long-range cross-country flying with unbeatable performance.

The exceptional outside visibility, together with the simple and reliable avionics suite, is ideal for pilots learning the fundamentals of VFR flying. Its heavy-duty landing gear is able to absorb even the hardest of the landings and permits routine operations from grass runways. The constant-speed variable-pitch propeller brings faster cruise speeds and better fuel economy. Flying at up to 132 knots and offering more than 1000 km of range,

this fast high-performance cruiser is a fantastic aircraft for cross-country flying. The Velis Club, as an EASA type-certified aircraft, has demonstrated safety levels required by the CS-LSA regulation by successfully passing all the qualification tests. The Rotax 912 S3 engine, also EASA certified, is a proven powerplant with a vast operational history. Based on the excellent safety characteristics of Pipistrel's certified predecessors Virus SW 121 and Velis Electro, the Velis Club incorporates additional features that enhance safety beyond what certification requires, such as the multi-sensory-path stall warning system, intentional spin approval and the Ballistic Parachute Recovery System. The stall warning system is based on true angle of attack measurement and consists of haptic stick vibration to the pilot's stick, an audible alarm to the headset and a cockpit acoustic alert.

The Ballistic Parachute Rescue System by Galaxy GRS can be installed as optional equipment. The system is conceived as a second chance beyond what is required by the certification standard and should be used when all other solutions are ineffective. The Velis Club combines the proven airframe and engine of the Virus SW 121 with the simplicity and durability of a club aircraft, which can also be used for pilot training. Optional equipment like baggage compartment, ballistic rescue system, wheel fairings and more, let the customisable Velis Club adapt to your budget.



Explorer

### Explorer

The clean lines and efficient design from 3D printing provide superior performance with minimum power required and is the highest performing aircraft in the CS-LSA category. The Explorer's durability, speed and performance makes it an ideal aircraft for General Aviation and for operation from the remotest of locations, including hot,





Explorer

high altitude and extreme cold. Approved for day / night VFR operation and intentional spins matched with an IFR ready avionics package. IFR ready avionics, dual touch screen Garmin G3X, advanced autopilot, constant speed propeller and airbrakes come standard. The best equipped, affordable and comfortable two-seat EASA type certified aircraft in its category. Ideal for personal travel, club workhorse or as an advanced trainer.

### Velis Electro

Arriving from the future the Velis Electro is the greenest way of learning to fly. Pipistrel are pioneers in alternative propulsion and its electric journey started in 2007 with the world's first two seat electric aircraft the Taurus Electro. Today the Velis Electro is the first ever type certified electric powered aircraft, fully approved for pilot training in day VFR operations in more than 30 countries worldwide. Ease of operation with an intuitive powertrain and impressive ergonomics come as standard. Velis Electro is optimised for pilot training as part of the Velis family of aircraft with demonstrated levels of safety built on over 15 years of Pipistrel expertise in electric flight.

The Velis Electro produces zero emissions during operation and with noise levels of only 60dBa is ultra-quiet both on the inside and outside. A revolution in sustainable flight, a game changer for ease of operation is not easy. You no longer have to dream about the future of sustainable flight, it is here and the Velis Electro has set the standard for electric flight. The Velis Electro has been designed to be simple to operate and maintain with no compromising safety. Power comes from Pipistrel's own type certified electric engine the E-811 producing 57.6kW from a 345 VDC electric system and in house developed dual battery system. This revolutionary powertrain is entirely liquid cooled, can be charged through the on-board charging port with an external charger and has demonstrated levels of safety equivalent or higher than conventionally powered aircraft.



Velis Electro

The trend and foundation for future projects has clearly been set, to drive Pipistrel's ambitious goals and to continue its story of success, the joining of Textron and Pipistrel provides deep expertise and resources which would otherwise be inaccessible to Pipistrel alone. With Textron, pipistrel together geared to strive for future growth and look forward to announcing exciting new products and projects.

### Pipistrel Panthera

Backed by more than 30 years of aircraft innovation, Panthera is the culmination of Pipistrel's knowledge and expertise designing efficient aircraft. The Panthera offers the most exciting flying experience that a four-seat aircraft can offer. With a centrally





Pipistrel Panthera

positioned stick, the Panthera places control where it naturally should be for the ultimate hands-on flying experience. The Panthera's exceptional performance is matched by its safety features making it the ultimate four seat tourer.

One of the major design points of Panthera is the state-of-the-art ergonomic cabin. All features provide superior comfort and usability for people of all sizes. Access is easy via three large gull-wing style doors, two in the front for pilot and co-pilot and one for the back two seats which are very wide and convenient. Pilot and co-pilot seats are adjustable. It has a supersized, standard cabin luggage sized cargo door, but the cargo can also be accessed from the cockpit during the flight. The interior is furnished with the highest quality leather and LED lighting for exclusive feel and functionality. Climate is controlled thanks to the on-board air-conditioning with automatic ventilation (optional).

It will keep you cool during the summer and warm during the winter. Also special is the solar-powered ventilation which keeps the cabin cool when Panthera is parked outside in the sun.

Finished with high quality handcrafted leather, LED lighting throughout and virtually unobstructed views forward, above and to the side, Panthera is not just fast but comfortable. Panthera is designed with advanced fluid dynamics software and its sleek looks come from Pipistrel's design philosophy to reduce drag and lower fuel consumption. Thanks to advanced technology and design, Panthera is lightweight and powered by a Lycoming IO-540 piston engine.

Imagine an airplane, that can fully take advantage of small, short-runway airfields that bring you closer than ever to your destination or fly around the world and open a whole new world of opportunities. Panthera is an airplane that is carefully designed to keep you safe, comfortable, whilst at the same time quiet and friendly to the environment. From the start Panthera was designed to be powered with either electric engine, hybrid propulsion or petrol engine. Pipistrel decided for Mogas fuel due to lower price and better availability in several parts of the world comparing to Avgas.

Panthera's organic curves are a product of optimisation through advanced, in-house developed computer fluid dynamics, where each detail is designed to ensure minimum drag and maximum efficiency. It is specially optimised to ensure minimum noise and maximum performance, reducing the aircraft's environmental footprint and increasing cabin comfort. Panthera also features all-electric systems for component actuation. Its titanium trailing-link undercarriage, flaps and trim are all electrically operated, resulting in low weight and maximum reliability by removing the need for complex and heavy hydraulic systems.



Pipistrel Panthera



The maximal range is available with any payload, something which pilots of four-seat airplanes have been wishing for. The robust design of the undercarriage and low overall weight allows for operations from short grass strips, taking you as close as possible to your desired destination. The engine is ready for the future, able to accept unleaded fuels and meeting the future environmental requirements.

Realising Panthera's aerodynamic shape while still ensuring maximum safety and keeping the weight low would be impossible without the use of advanced next-gen materials. The majority of the structure of the aircraft is made from carbon-fibre composites, with antistatic materials and Kevlar used in areas where it matters. The retractable trailing-link undercarriage is built from titanium, giving it superior strength and energy absorption properties at minimum system weight. All actuation systems on the aircraft are fully electric, avoiding the need for complex and heavy hydraulics.

### Safety

As part of the rich serial equipment, Panthera features a full-airframe parachute rescue system, which was specially developed, so it can be deployed at both low- and high speeds as well as low altitudes. The cabin has been engineered as a safety cell / roll bar with built-in energy absorption zones, providing superior safety to the occupants in the event of an accident. The seats and safety belts are engineered to the latest +26G CS/FAR-23 certification standards. Immediately noticeable is the incredible view from the cockpit. By having just one central pillar, the pilot's view forward and sideward is virtually unobstructed, thus greatly improving the safety of flight. The ergonomic cockpit comes with special annunciation panels, improving situational awareness when it comes to different audio and visual alarms (terrain, stall, overspeed, engine issues, etc.).

Panthera's performance also contributes to safety. The lightweight structure, powered by powerful engines means that you will reach safe speeds and altitudes much quicker than usual, reducing time spent in the critical zones. Special attention has been paid to realise the aerodynamic shape, which gives Panthera excellent handling at low speeds and superior stall / post-stall characteristics. Also important are tailored solutions to simplify maintenance, thus reducing the probability of mistakes occurring during the check-ups. ✉

For further information please contact **Absolute Aviation** the African agents for Textron Pipistrel Aircraft  
Tel: +27 (0)11 548 3000 Website: [www.absoluteaviation.co.za](http://www.absoluteaviation.co.za)

PIPISTREL   
BY TEXTRON AVIATION



**ABSOLUTE AVIATION IS THE  
AUTHORISED SALES, SERVICE AND  
PARTS REPRESENTATIVE FOR PIPISTREL  
IN SOUTHERN AND CENTRAL AFRICA.**

**CLICK HERE TO VIEW FULL PORTFOLIO** 



**ABSOLUTE AVIATION**

AIRCRAFT SALES

FLIGHT SERVICES

AIRCRAFT PARTS

SERVICE CENTRE

+27 11 548 3000 | [absolute.co.za](http://absolute.co.za)