

# WORLD AIR NEWS

for continental Africa

2017

March

AFRICA'S LEADING AVIATION JOURNAL

Volume 45 No 1 | Issue 529

LATEST NEWS FROM THE WORLD OF AVIATION



Corporate jets today

Show accidents defined

Race of the SSBJs

Flying the Vampire

The Aquila is coming

South Africa: R30.00 (incl VAT)





# THE AQUILA

By: Tom Chalmers

**C**URRENTLY TAKING Germany's and a large part of Europe's general aviation sector by storm is the latest in contemporary Very Light Aircraft (VLA) fixed undercarriage design, the 750 kg maximum takeoff weight, glass- and carbon fibre-built, single-engine, three-to-four-seat Aquila.

Tipping the scales with an empty weight of only 500 kg, this aircraft, which could be seen in South African skies in the near future, has a useful load of 165,7 kg with full fuel plus a maximum baggage weight of 40 kg for a design useful load of 250 kg.

Perhaps its greatest visual attraction apart from its clean lines and top-drawer finish both inside and out, are its wings with their curved leading edge which goes a long way to emanating those of an eagle. They span 10,20 metres and have an area of 10,5 square metres. The Aquila's length is 7,4 metres and it stands 2,4 metres tall.

The cockpit is equipped with all "mod-cons" with adjustable front seats and a forward-opening fully-glazed panoramic canopy and a rear-view window providing some of the best visibility in the GA business and making it ideal for its design operational uses as a hi-tec trainer and cross-country tourer. It boasts one of the biggest cockpits in its class with generous room for legs and elbows – no "up-close and uncomfortable" for the Aquila.

It has an inner cabin width of 1,15 metres, a cabin height of 1,2 metres and a seat-to-canopy clearance of one metre. The cabin length is 2,1 metres which includes the baggage



compartment behind the rear seats. This compartment has a capacity of 500 litres or 17,7 cubic feet.

Certified for both day and night VFR flying, the Aquila comes in three models – they only vary in flight instrumentation fittings. The first, the Aquila A211, is equipped with analogue flight instruments or the Aspen panel;

the Aquila A211G sports a Garmin G500 "glass" cockpit and analogue engine instrumentation and finally, the Aquila A211GX which is equipped with the Garmin 500-glass cockpit with an engine monitoring system (EMS).

Certainly no slouch when it comes to performance, the Aquila has a cruising speed of 135 knots with a Vne of 165 knots and a manoeuvring speed

of 90 knots. Its stalling speed "clean" with flaps retracted, is 52 knots; fully-extended flaps dropping this figure to a slow 43 knots.

Powered by a Bombardier Rotax four-cylinder 73,5 kW engine with a TBO of 2 000 hours driving a two-bladed hydraulically-controlled constant speed propeller and using Avgas 100 LL (28,9 US gallons useable),



# IS COMING



one of its main attributes is its low fuel consumption which gives it a maximum range at 55% power at 5 000 feet of 620 nautical miles.

It does not require a lot of geography to get airborne. With a full load at sea level under standard conditions, the Aquila gets airborne after a ground roll of 250 metres or requires 430 metres to clear a 50-foot

obstacle after take-off. Landing, from touch-down to full stop, requires only 210 metres without excessive use of its powerful braking system. The landing distance after clearing a 50-foot obstacle on approach requires only 430 metres.

Nose-wheel steering is via the rudder pedals with single hydraulic brakes on the main wheels. It is also equipped with a

parking brake. The tricycle fixed gear undercarriage is equipped with streamlined "spats" on all wheels.

More than 200 of these aircraft have already been sold in 11 countries mainly in Europe. A pointer to its attraction for private individuals, clubs and training establishments is its high demand and customer satisfaction resulting in very few,

if any, available on the used aircraft market. Small wonder then that the Aquila has earned itself an excellent reputation by experts and professional pilots – test pilots and instructors alike.

Its manufacturer has some ideas for improvements in the future, including fitting the aircraft with a parachute, a more powerful engine and de-icing equipment. →