

# SPORTPILOT

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## BLACKSHAPE SETTING THE BAR HIGHER **PRIME**

RRP \$8.80 inc GST



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RAAUS BECOMES A COMPANY ✕ NEW OPS AND TECH MANUALS RELEASED ✕ UNDERSTANDING CTA



# BLACKSHAPE PRIME TIME

BY BRIAN BIGG



YOU HAVE TO  
HAND IT TO  
THE ITALIANS.



**THEY never do anything mechanically half arsed. Think Ferrari, Lamborghini, Alfa Romeo. Outrageous, ostentatious, desirable, beautiful machines.**

I have owned two Alfas. The second one, a 156, is the only car I have ever truly loved. If I had to go across a 10m wide road to return a video, I'd drive there in the 156 rather than walk it. It's almost as if the Italians have a cultural imperative to only make sexy machines.

When RAAus National Tech Manager, Darren Barnfield, told me recently he'd approved the Italian Blackshape Prime for membership into the RAAus community, my first thought was of my beloved Alfa. It was almost as fast as the stodgy BMW3 (206kmph on the German Autobahn was flat out) and too expensive compared to other similar machines. But strap it into the hilly and winding roads around the highlands of Scotland (which I did several times) and my 156 came alive in my hands, like a thoroughbred horse. Ah, the joy.

Don't get me started on my beloved Alfa.

So while most aircraft manufacturers, from sensible logical countries like Germany and the Czech Republic, proudly declared their machines are perfect for beginners (schools are a big market after all), not the makers of the Prime.

I sat down with Blackshape Managing Director, Angelo Petrosillo, in Sydney recently and almost the first thing out his mouth was that the Prime was not for beginners.

It's a high performance two seater made of carbon fibre and aluminium. It only weighs a bit over 300kgs wringing wet, but it has a VNE of 165kts, retractable undercarriage and is stressed to +4/-2, so if RAAus aircraft were allowed to do aerobatics (which they are not), this would be a performer favourite at every fly-in.

It's a damned sexy looking aircraft. Everyone's first comment is that it looks just like a fighter. And just like a fighter (or a Lambo or Ferrari for that matter), the Prime is expensive enough to make your eyes water.



# AIRCRAFT



## BLACKSHAPE *prime*

### SPECIFICATIONS

<b>Engine: Rotax</b>	<b>Rotax 914 ULS3</b>
<b>Wing area</b>	<b>9.51sqm</b>
<b>Wing span</b>	<b>7.94mt</b>
<b>Height overall</b>	<b>2.41mt</b>
<b>Length overall</b>	<b>7.178</b>
<b>Fuel Tank Capacity</b>	<b>2 x 50 lt</b>
<b>MTOW</b>	<b>472.5 (up to 620)</b>
<b>Max baggage weight</b>	<b>20kgs</b>
<b>Cruising Speed VC</b>	<b>280km/h</b>
<b>Stall Speed @Flap LDG</b>	<b>65km/h</b>
<b>Range @75% MCP</b>	<b>1100km</b>
<b>Endurance @75% MCP</b>	<b>4.5h</b>
<b>Max rate of climb</b>	<b>1450ft/min</b>
<b>Max Load Factors</b>	<b>+ 4 / -2 g</b>

Did you ever think we'd see a time when an ultralight would cost the best part of a quarter of a million dollars? What is the world coming to? Our pioneers begrudged spending more than a \$1,000 on their flying machines. \$240,000 for a two seater? Really? As Angelo told me, it's not for beginners.

The Prime started life as the Millennium Master, a 2007 design, which itself was a development on an earlier wooden kit called Asso X. Blackshape bought the rights to the Master in 2011, got to work in southern Italy to develop the design further and make it comply with Fédération Aéronautique Internationale microlight rules. Eight months later, at Aero 2012 the company formally launched the Prime. It was an instant hit. They have been selling 11 or 12 a year since.

Angelo and his partner, aeronautical engineer, Luciano Belviso, have so far sold 50 aircraft, primarily in The Netherlands, South Africa and Canada.

Angelo says Australia is to be the fourth leg of

a worldwide co-ordinated structure of sales and support. Surprisingly, or perhaps not considering the sophistication of the aircraft, the main customers have been national air forces.

Did you ever think there'd be a day when an air force would fly patrols in an ultralight? I ask again, what is the world coming to?

Angelo quite proudly told me the Prime had the honour of being the first ultralight to ever take-off and land on an aircraft carrier. The Italian navy bought them for low cost patrolling and Angelo and the company's test pilot were asked to do a circuit to show the navy it was practical. Because of the 20kt headwind, they only used 30m of the carrier's 130m deck runway. Take that Boeing.

As well as looking drop dead sexy, the Prime has some serious cred under the skin.

Angelo likes to boast it uses the same high tech as the Boeing 787. Each Prime, he says, leaves the factory exceeding their expectations.

The aircraft uses quality prepreg fibre, steel



“You won’t want to venture into this machine until you have a few hours of fast and furious under your belt”

151kts cruise

# BLACKSHAPE PRIME TIME

4.5 hour endurance



# AIRCRAFT



rate of climb 1,150 fpm



Tricycle retractable landing gear electrically actuated

and aluminium. The low wing configuration and the low fuselage cross-section shouts high performance and agility.

It's available with either of two engines: the Rotax 912 or the Rotax 914. The performance of each is well known to most of us. A Dynon Skyview takes care of the avionics, also well known to most of us. The Skyview integrates a transponder module and is available with additional autopilot panels and backseat display.

High performance means the Prime has to take special care with safety.

Military certified wiring is standard, there is an advanced circuit breaker system, plus temperature and fuel capacity sensors. In addition, the aircraft comes with four point certified safety belts, ballistic parachute and anti-blast fuel tanks.

You and your best friend in the back will blast around the country at 148kts, burning 15-20 litres an hour. Angelo says the Prime has a range of 1,100kms.

According to reports from Europe, the trade-off for the streamlined shape is a sudden and strong stall.

Another reason why the Prime is not a good choice for a beginner. You won't want to venture into this machine until you have a few hours of fast and furious under your belt. An aerobatic endorsement wouldn't go astray either. Being able to recover from unusual attitudes is probably something you will need at some point.

Flying the Prime in Australia will have to

wait until Angelo chooses a local distributor, which is why he was here in July. There are several hopefuls with their hands up, but a final decision will be a difficult one.

Angelo quite correctly says the Prime is not positioned to be a market leader. It's actually the only aircraft in an entirely new niche.

He says his potential customers will come from one of four potential pools – high net worth individuals who already fly recreationally, GA pilots looking for a simpler life in

RAAus, schools which specialise in high performance training and the government.

It going to take a new and specific approach to its sales and marketing if it is going to achieve the potential it reached in other places. So choosing a distributor will be a complex decision.

The first Prime will land here in September. I've already begged Angelo for a flight when it arrives.

Just a month later the company will officially launch a bigger, meatier sibling for the Prime called the BK160. That will be a GA aircraft powered by a chunky 160hp Lycoming.

It will retail for a lazy Eur300,000 (AUD\$430,000). Another gorgeous model from a country which specialises in gorgeous models.

The Prime is going to cause fights in some households when it arrives. You know you will want one because you know that at the next fly-in, you will be swamped with pilots who want to be your new best friend. But, just like a Lambo or Ferrari, you will have to sell your children to afford one. Start packing kids. ☹

“Expensive enough to make your eyes water”