WINGS of WORLD ENGLISH EDITION

World Directory of Light Aviation 2013-2014



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Includes Light Sport Aircraft

Homebuilts

World Directory of Light Aviation 2013-2014

Certified aircraft

92



Ultralight gliders Certified gliders



Gyrocopters & Helicopters



Trikes



Includes Light Sport Aircraft



CAMPAN SA















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EW MTOW WA

47 180

AEROS

AEF AIR LIFT SYSTEM

TC

15

The Monotrace is developing steadily. After trying various power units and wings, in 2011 the maker standardized on an Ellipse Titan wing and a Simonini Mini 3 engine, all in pursuit of a lightweight trike with good soaring ability. The machine boasts retractable rear wheels which tuck in behind the pilot, plus a an optional full enclosure, with the canopy tiltable up to 7 degrees to provide trim. A front strut is optional. Alternative power units remain available - Simonini Mini 2 Evo, Mini 2+ or Electravia - and you can opt for a Fuji wing instead of the Titan if you wish.

AEF AIR LIFT SYSTEM 30 rue Ledru-Rollin • 78800 Houilles • FRANCE • Phone : +33 (0)1 39 14 66 05, Fax +33 (0)1 39 14 21 95 www.aef-gliders.com aef-gliders.com

Ena

Simonini Mini3

St Vmax US-UL

FC



AEROS 2 912 PROFI TL

Aeros was one of the first companies to apply strutted wings to trikes and its Profi TL is a good example of the breed. We list it here attached to the firm's Aeros 2 trike unit, making for a modern high-performance package, which has been marketed in North America under the Velocity name. The same trike unit can bought with the company's more traditional wings: Stranger 2, Stream, Profi and Still.

AEROS 5 Post-Volynskaya Street • 03061 Kiev • UKRAINE • Phone : +380 (0)44 / 455 4120, Fax : +380 (0)44

FAI-ML

erosint@aerosint.kiev.ua • www.aeros.com.ua

EW	мтом	WA	WS	TC	Eng	HP	St	Vmax	Vc	Vs0	Vz	FC	Cert	Price Assembled
220	450	14.5	10	53	Rotax 912	80	2	145	90-120	62	5	12	-	€ 27 966

AEROS ANT

Aeros, which has produced a range of two-seat trikes for some years, has now entered the solo market with this light and compact design. The engines are from the world of the paramotor (Cors-Air or Bailey) and the whole ensemble folds easily to fit in a smart carrying case. The weight shown in our data includes a single-surface wing, but it is also possible to substitute the much sportier topless Combat wing.

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76 185

sint.kiev.ua • www.aeros.com.ua EW MTOW WA TC Eng St Vmax Vc Vs0 ٧z

Cors-Air M25Y

US-UL	

		AND DESIGNATION OF THE PARTY OF
FC	Cert	Price Assembled
35		€ 8 285

AEROS CROSS COUNTRY 912 STILL

Essentially a stripped-down version of the Aeros 2, the Cross Country does without the elegant fairings and adds a heavy duty undercarriage. It can carry the same range of Aeros wings - Stranger, Stream, Still (detailed) and Profi, the exposed-crosstube single-surface Still being the most docile option. Engine choices include the economical HKS (illustrated), Rotax 503, 582, 912 (detailed) and 912S. This is very much the archetypal modern basic trike: robust and affordable. With a Still wing, it's a good tool for schools or Sunday pilots.

AEROS 5 Post-Volynskaya Street • 03061 Kiev • UKRAINE • Phone : +380 (0)44 / 455 4120, Fax : +380 (0)44 erosint@aerosint.kiev.ua • www.aeros.com.ua

FAI-ML

EW MTOW WA WS TC Eng ΗР St Vmax Vc Vs0 FC Cert Price Assembled 220 472.5 17.4 10 53 Rotax 912 12

AEROS DEL SUR

St

The first Argentinian manufacturer in our directory, Aeros del Sur is, as the name suggests, Argentina's Aeros importer. This aircraft uses an Aeros Profi wing and mates it to a trike unit of local design, shown here in open form although a podded version is also available. A mix of aluminum and steel is used for the structure and there are a number of powerplant options: we detail here a Rotax 582, but Hirth, Simonini and HKS are also offered.

AEROS DEL SUR • ARGENTINA • Phone : +54 (0)261 / 4290 213

info@aerosdelsur.com.ar • www.aerosdelsur.com.ai





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WS

472.5 15.4 10 50

EW MTOW WA

TC



AIRBORNE AUSTRALIA

Although the open 503 Redback is the starting point of the range as regards price, the better equipped X-Series Classic is historically Airborne's most popular package. It includes a pod, fairings, an electric-start E-gearbox 582 engine, disk brakes and instrumentation, and keeps on selling year after year. Standard wing is the single-surface Wizard 3, but there's the option of a double-surface Streak 2B, as detailed here. If you choose the slower Wizard 3, you get to keep A\$1284 in your bank account. NB: these prices, like that in our data, are in Australian dollars; other currencies on application.

AIRBORNE AUSTRALIA PO Box 7042 • Redhead 2290 • New South Wales • AUSTRALIA • Phone : +61 (0)2 4944 / 9199, Fax : +61 (0)2 4944 / 9395 airborne.com.au • www.airborne.com.au

Ena

FAI-ML

FAI-ML

FC



X-SERIES CLASSIC

 EW
 MTOW
 WA
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 167
 401
 15.0
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 44 80-120 14 Rotax 582 140 55 3.5 X-SERIES RED BACK AIRBORNE AUSTRALIA

St Vmax Vc

Simplest aircraft in the Airborne range, and fitted with the slowest of the company's wings, the single-surface Wizard 3, the Red Back is powered by a Rotax 503 and comes complete with instruments, drum brake, parking brake, bungee suspension and saddlebags. It uses the X-Series trike unit, without folding pylon. A more upmarket derivative is the X-Series Outback, with 582 engine and the option (A\$1284 extra) of a quicker Streak 2B wing. Tundra suspension is an option: A\$543 on the Redback, A\$366 on the Outback, NB: these prices, like that in our data, are in Australian dollars; other currencies on application.

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TC

fly@	airborr	ie.con	n.au • w	ww.air	borne.com.au								THE REAL PROPERTY.	
EW	MTOW	WA	ws	TC	Eng	HP	St	Vmax	Vc	Vs0	Vz	FC	Cert	Price Assembled
165	401	17.6	10.0	44	Rotax 503	53	2	100	75-95	42	4.0	10	Aus	\$ 27 630

AIRBORNE AUSTRALIA

The XT-582 is Airborne's take on a sophisticated modern touring trike. Using the XT trike unit with folding pylon, it adds the Cruze wing and a Rotax 582 and can be had in three versions: the Tourer shown here, the Tundra with a heavier duty undercarriage (A\$1000 more) or the stripped down tough-guy Outback. The latter costs A\$2200 less and comes with the slower Merlin wing, which is excellent for towing and for STOL operation. The Outback can be bought in kit form, without engine and wing. Prices in Australian dollars; other currencies on application.

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FAI-MI



XT-582 TOURFR

XT-912 OUTBACK

EW MTOW WA WS TC Eng St Vmax Vc FC 14.5 10.0 Rotax 582 S-LSA, BCAR S

AIRBORNE AUSTRALIA

Here's the bushplane version of the XT. In 912 Outback form, the XT comes with big wheels, heavy-duty suspension, optional disc brakes and a four-stroke engine, creating an aircraft capable of operating out of the most awkward strips. Electronic instrumentation is standard. It is offered with a choice of three wings: the Cruze (detailed here), the super slow Merlin, or the quick Streak 3.

AIRBORNE AUSTRALIA PO Box 7042 • Redhead 2290 • New South Wales • AUSTRALIA • Phone : +61 (0)2 4944 / 9199, Fax : +61 (0)2 4944 / 9395 fly@airborne.com.au • www.airborne.com.au

FAI-ML

FAI-ML



 EW
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 14.4
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 70
 Eng ΗP St Vmax Vc Vs0 ٧z FC Cert Price Assembled 90-120 4.2 9

AIRBORNE AUSTRALIA

Just as the 582-engined XT can be had in Tourer, Tundra and Outback guises, so can the 912. In Tundra 912 form with Streak 3 wing, as detailed here, it is one of Airborne's biggest sellers, combining a sporty wing with four-stroke power, gas strut suspension and a folding pylon. It carries UK and S-LSA certification. Alternative wings include the slightly gentler Cruze and the STOL Merlin. NB: prices in our data are in Australian dollars; other currencies on application. Airborne is working on kit versions of some models, but there are no details yet.

AIRBORNE AUSTRALIA PO Box 7042 • Redhead 2290 • New South Wales • AUSTRALIA • Phone : +61

(0)2 4944 / 9199, Fax : +61 (0)2 4944 / 9395 fly@airborne.com.au • www.airborne.com

EW	MTOW	WA	ws	TC	Eng	HP	St	Vmax	Vc	Vs0	Vz	FC	Cert	Price Assembled
221	445	13.5	10.0	72	Rotax 912	80	2	157	90-120	65	4.2	9	S-LSA, BCAR S	\$ 58 000

XT-912 TUNDRA



AIRTRIKE EAGLE 5

Now well established on the market, Air Trike's Eagle 5 uses its own derivative of the BMW motorcycle engine, in itself a well proven aircraft powerplant, allied to wings from either Hazard (strutted 12S detailed here) or Aeros. Interesting options include a seat heater and an in-flight adjustable trim. You can also order nosewheel suspension, a pod, and dual throttles. Alternatives to the BMW include a Rotax 912 and Airtrike's own 850ti turbocharged twin.

AIR TRIKE GMBH Am Stichkanal 45 • 14167 Berlin • GERMANY • Phone : +49 (0)30 / 8472 8722, Fax : +49

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EW	MTOW	WA	WS	TC	Eng	HP	St	Vmax	Vc	Vs0	Vz	FC	Cert	Price Assembled
215	450	12	9.8	65	BMW	90	2	150	120	55	4.6	7	DULV	

FAI-ML

FAI-MI

FAI-MI

FAI-ML

A-10 SOLO **ANTARES USA**

Antares trikes are sourced in Eastern Europe and use Aeros wings. The A-10 Solo uses an aluminum structure, with a one-piece composite mainwheel spring and titanium front forks - a rugged combination, hence the MTOW of 450kg, unusually high for a single-seater. The model priced here has a Rotax 503 and either a Stranger 2 or a Still 17 wing, but you can upgrade to a Stranger 2M, Stream 16 or Profi, or downspec to 447 power. The aircraft is approved as an FAA experimental homebuilt.

ANTARES USA 20748 Birchwood Spur Road, Birchwood Airport, NE Apron, Hangar B • Chugiak AK 99567 • USA • Phone: $+1\,907/227\,9881$, Fax: $+1\,907/248\,5919$ antares-us@ak net • v e-iie com

 EW
 MTOW
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 170
 450
 14
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 19
 Eng HP St Vmax Vc Ven Vz FC Rotax 503 52 1 140 83 43 8

FAI-ML Price Assembled

MA-33M R582 ANTARES USA

Big brother of the A-10, the MA-33M uses basically the same structure. There's a choice of Rotax 582 (detailed here) or 912, or you can choose the closely related MA-32 (Rotax 503) or MA-34 models. The latter comes in two guises: MA-34 Ranger (912, heavy duty undercarriage, 57 litre tank), and MA-34M Beaver (912S, even stronger undercarriage, 57 litre tank). There are lots of options, including alternative wings, floats, skis and crop-dusting equipment (illustrated). Also available is the Open Country, developed from the MA-34M Beaver but using an Aeros Stratos 15.5 wing and an enormous 150 litre tank.

ANTARES USA 20748 Birchwood Spur Road, Birchwood Airport, NE Apron, Hangar B • Chugiak AK 99567 • USA • Phone: +1 907 / 227 9881, Fax: +1 907 / 248 5919

EW	MTOW	WA	WS	TC	Eng	HP	St	Vmax	Vc	Vs0	Vz	FC	Cert	Price Assembled
242	500	17	10	40	Rotax 582	64	2	112	75	49	4.5	9	-	\$ 19 900

Now available as a ready-to-fly SLSA as well as an ELSA kit, this US-built Hungarian-sourced trike can be bought with any of four wings. The standard wing, detailed here, remains an Aeros Profi Classic, with the option of its strutted equivalent, the Profi TL, for \$800 extra. Alternatives are the strutted Reflex 11 and Reflex 13 designs, available for an extra \$2500, or \$3500 with electric in-flight trim. Powerplant options include Rotax 912 or 582 instead of the

912S specified here. Apollo Aircraft also imports Apollo Ultralight's simpler two-seater, the Jet Star - see separate

listina.

APOLLO AIRCRAFT

APOLLO NORTH AMERICA INC 39440 South Avenue • Zephyrhills FL 33542 • USA • Phone : +1 813 /

abid.faroogui@verizon.net • www.tampabayaerosport.com

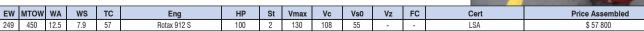
EW	MTOW	WA	WS	TC	Eng	HP	St	Vmax	Vc	Vs0	Vz	FC	Cert	Price Assembled
236	472.5	14.5	10.0	55	Rotax 912S	100	2	160	100-130	64	7	-	LSA	\$ 53 000

MONSOON AS-IV APOLLO AIRCRAFT

Now SLSA approved, the distinctively shaped Monsoon has been designed for the US market, with easy access and good wind protection. An underbody scoop aids engine cooling and all three wheels have suspension and hydraulic disk brakes; there's also a parking brake. Engine and wing options are as for the AS-III, though our data refers to the Manta Ray 12.5 fitted to early examples. The options list is comprehensive, including a BRS 1050 rescue system and an Enigma Color Glass EFIS/GPS. The Monsoon is also available as an ELSA kit.

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qui@verizon.net • www.tampabayaerosport.com









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KRUCKER MANUFACTURING

Although Krucker has built some landplanes, the company's first products were floats and at heart it is a seaplane specialist. The Cygnet won best trike award at the 2005 Sun 'n' Fun and has since evolved into the Cygnet 2. It is offered with a choice of 17m² or 19m² M Pulse wings from North Wing and either Rotax 582 or 912 engines. We detail it here in its simplest, lightest form, with 582 and 17m2 wing. Our photo shows an example with a 912, which sells for US\$49600. The company has an ELSA-compliant version under development and an ultralight-legal single-seater, the Explorer 103, is already available, for \$19900.

KRUCKER MANUFACTURING LTD 1400 Barrydowne Road / NORCAT Building • Sudbury P3A 3V8 • Ontario • CANADA • Phone : +1 705 / 521 8324, Fax : +1 705 / 521 1040 jp@4kru.com • www.flyamphib.com

FAI-ML



MTOW	WA	WS	TC	Eng	HP	St	Vmax	Vc	Vs0	Vz	FC	Cert	
450	17.6	10.3	38	Rotax 582	65	2	96	60	50	2.5	16	Canada	
LΑ	M	DUE	TTE	/ HELITE								SAMSON	l

To La Mouette goes the honour of making the first two-seat electric trike. With 19hp engine, the Samson can perform several flights on one charge, climbing two-up with a 150kg payload at up to 1m/s. The Samson can carry up to three 40Ah batteries, enough for a full-power two-seat flight of more than 30min. Performance one-up has not yet been measured but trials are promising. The chassis can be equipped with different engines: a 14hp unit for private purposes or a 19hp design for dual use. Note that the manufacturer is also working with trike maker CBB, and has supplied it with wings.

LA MOUETTE / HELITE 1 rue de la Petite Fin • 21121 Fontaine-les-Dijon • FRANCE • Phone : +33 (0)3 80 56 66 47, Fax : +33 (0)3 80 55 42 01

lamouette@lamouette.com • www.lamouette.com

EW MTOW WA WS TC

US-UL

89

														9
EW	MTOW	WA	WS	TC	Eng	HP	St	Vmax	Vc	Vs0	Vz	FC	Cert	Price Assembled
70	-	-	-	Batteries	Electric	14-19	2	-	-	-	-	-	-	-

AV8R 912 **MEDWAY**

Medway proprietor Chris Draper has been concentrating on fixed-wing aircraft of late and his flexwing range has been unchanged for several years, but it retains a loyal following and is excellent value. The top of the range is the Av8R 912, which uses a similar Raven wing to the less sophisticated EclipseR, but with more camber, more battens and a recut fin. The trike unit is also quite different from the EclipseR and features an 80 litre tank and a folding pylon. It is offered with a choice of two Rotax engines: 912 (as detailed here), or 912S (£28169).

MEDWAY MICROLIGHTS Burrows Lane, Middle Stoke, Rochester • Kent ME3 9RN • UNITED KINGDOM • Phone: +44 (0)1634 / 270780, Fax: +44 (0)1634 / 270648 chris@ravenmad.co.uk • www.ravenmad.co.uk

FAI-ML



EW	MTOW	WA	WS	TC	Eng	HP	St	Vmax	Vc	Vs0	Vz	FC	Cert	Price Assembled
-	415	15.0	11.0	80	Rotax 912	80	2	129	100	48	4.1	9	BCAR S	£ 26 444
_														

MEDWAY ECLIPSER 912 The EclipseR is Medway's offering for those who want four-stroke flying on a budget. Power plant is identical to the

more expensive Av8R, but the wing is an older design and trike unit is less sophisticated. Those whose wallets are even slimmer will find Medway's two-stroke model, the HybredR, excellent value at £16094 with Rotax 503 engine.

MEDWAY MICROLIGHTS Burrows Lane, Middle Stoke, Rochester • Kent ME3 9RN • UNITED KINGDOM • Phone: +44 (0)1634 / 270780, Fax: +44 (0)1634 / 270648 ad.co.uk • www.ravenmad.co.uk

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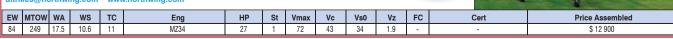


EW	MTOW	WA	WS	TC	Eng	HP	St	Vmax	Vc	Vs0	Vz	FC	Cert	Price Assembled
-	415	15.0	11.0	43	Rotax 912	80	2	129	100	48	4.1	9	BCAR S	£ 26 444

ATF STRATUS XP 17.5 **NORTH WING**

The ATF (it stands for 'Air Time Fix') is North Wing's soaring-oriented nano-trike and its wing, the Stratos, features a combination of a single bridle line and a washout strut to give good pitch stability and low drag. For 2010 this was improved to become the Stratos XP, thanks to a raft of changes including fiberglass tips and different sailcut. Glide is now 10.5/1 (up 5%) and sink 1.12m/s (down 10%). The XP comes in two sizes, 17.5m2 (detailed here with an MZ34 engine) and 16m². Note that our price refers to an ATF with the alternative Simonini Mini2 powerplant. Without wing, this version costs \$7900.

NORTH WING DESIGN 103 Gala Avenue • Chelan WA 98816 • USA • Phone : +1 509 / 682.4359, Fax : +1 509/682 0758



NORTH WING MAVERICK 2 PACER 13

North Wing's mainstream solo trike was updated in 2008 with a folding pylon and increased luggage space, and in 2009 to a higher maximum weight, up from 250kg to 295kg. Two versions are offered: the stripped down RT specified here and the better equipped Legend (\$1500 more). The standard wing has the same name as the trike -Maverick - but our price and data refer to the sportier option, the Pacer 13, which adds \$840 to the price. All wings from North Wing are available separately and can be found on a wide variety of US machinery, North Wing being the first port of call for any US triker in need of lift.

NORTH WING DESIGN 103 Gala Avenue • Chelan WA 98816 • USA • Phone : +1 509 / 682.4359, Fax : +1 ving.com • www.northwing.com

Ena

Rotax 447

US-UL



FC Price Assembled \$ 16 830 **SOLAIRUS**

19 **NORTH WING**

TC

9.4

This new model from Northwing is a modern single-seat machine which is easy to transport and rig. More sophisticated than the tubular-construction ATF (which remains available), the Solairus uses lightweight composite construction to give an aerodynamic shape that reduces drag and fuel consumption. The Solairus can be powered by the Thor Polini 100 or 200 engines, or the Bailey-200 V4.

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ing.com • www.northwing.com

US-UL



SPORT X2 APACHE MUSTANG 3

 EW
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 49
 115
 17
 10.57
 TC Eng HP St Vmax Vc Ven ٧z FC Bailey - Polini 22 - 29 40 - 50 33 \$ 15 900

Vc

90

Vs0

48

St Vmax

120

NORTH WING

204 481 15.0

EW MTOW WA 114 295 13.0

North Wing's two-seat SLSA range was boosted by the arrival of the topless Mustang 3 wing, replacing the M-Pulse 2. This is standard on the Sport, which can be bought in Apache trim (pictured and priced here) or in stripped-down Navajo spec (\$3000 less). The same two trim specs are available for its sister aircraft, the Scout (illustrated), which features a more upmarket trike unit, a Quest GT5 wing (also topless) and a Rotax 912 (\$46,000 Apache, \$43,000 Navajo). ELSA customers have further choices: for instance, they can swap the Sport's 582 for an HKS or specify one of several other wings.

NORTH WING DESIGN 103 Gala Avenue • Chelan WA 98816 • USA • Phone : +1 509 / 682.4359, Fax : +1 509/682 0758

Rotax 582

wing.com • www.northwing.com

EW MTOW WA WS Eng St Vc ٧z FC

US-LSA	

Cert	Price Assembled
S-LSA	\$ 33 000

EXPLORER P&M AVIATION

Following pilots feedback P&M Aviation has redesigned the undercarriage for the Explorer. It can now be fitted with 6 inch wheels and 15x6 tires to make smoother landings on rough ground. All wheels can now be ordered with brakes. Same holds true for the PulsR trikes. For 760 Euros all Explorers can optionally be delivered with all models of the Quik wing range.

P&M AVIATION LTD Unit B, Crawford Street • Rochdale, Lancashire OL16 5NU • UNITED KINGDOM • Phone : +44 (0)1706 / 655134, Fax : +44 (0)1706 / 631561







EW MTOW WA235 450 9,26 TC Eng ΗР St Vc Vs0 FC Cert Price Assembled Vmax Rotax 912 80-140 14

PULSR P&M AVIATION

Introduced at the Flying Show in Birmingham in December 2011, where it stole the show, the PulsR sports a new strutted GTR wing mated to a totally new semi-enclosed aerodynamic trike unit. Much faster than existing P&M models (an easy 160km/h cruise) and with greatly improved glide of up to 12/1, it is still in prototype form at the time of writing but is increasingly being seen out and about at flying shows in the hands of designer Bill Brooks, where it never fails to attract attention.

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FAI-ML



€ 45 260

EW MTOW WA St Rotax 912 / 912 S 80 - 100

P&M AVIATION QUIK 912 S

The rocket! When in 2003 designer Bill Brooks took a 20 year-old solo wing concept and applied it to modern twoseat flexwing practice, the result was a revolution, the first trike capable of a genuine 160km/h in level flight (the magic 100mph in old money). A huge success, both domestically and for export, it is still in production eight years later and started a worldwide trend to smaller wings. We detail it here in 912S guise, but a 912 is also available (£1250 less). A new option for 2012 is the Explorer heavy-duty undercarriage package, at £650.

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Ena

Rotax 912 S



FC

12



QUIK GT450 912 P&M AVIATION

168

Vc

132

Vc

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61

St Vmax

Now the best-seller in the Quik range, the GT450 was introduced in 2006. It uses the same trike unit as the standard Quik but substitutes a larger wing featuring distinctive winglets, which you can see in our photo. A little less fast than the original, it is nevertheless a serious long-distance machine and has proved a big hit with schools and with pilots wanting a gentle, easy-handling aircraft which retains most of the Quik's speed. We detail it here with a 912 engine; the 912S is a £1250 option, as is the Explorer undercarriage (£650). The GT450 is S-LSA approved in the US

ΗР

100

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Eng

FAI-ML

FC



 EW
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 65
 Rotax 912 80 128 61 61 **QUIKR 912S** P&M AVIATION

St Vmax

There are topless wings and there are small wings, but until designer Bill Brooks created it in 2008, no trike had combined the two. Gold at the World Championships in 2009, plus gold and silver at the 2008 World Air Games, bear witness to the rightness of the concept. Sized between the GT450 and the original Quik, but featuring winglets like the former, the QuikR boasts a unique set of performance figures: Vne 193km/h, genuine 150km/h cruise and minimum speed still 63km/h. A 912 engine is optional (£1250 less), as is the Explorer tough-guy undercarriage

HP

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FAI-ML



	EW	MTOW	WA	WS	TC	Eng	HP	St	Vmax	Vc	Vs0	Vz	FC	Cert	Price Assembled
	220	450	11.43	8.45	65	Rotax 912S	100	2	193	150	64	6.1	-		£ 29 000
P	ΑC	OT	ТО	- A	IR	BRAKO								BRAKO	503 / GRIF TRAINER

PAGOTTO - AIR BRAKO

EW MTOW WA WS TC

8.0

409 10.6

Recently, Enio Pagotto has concentrated on developing his distinctive welded stainless-steel spaceframe into the basis of a gyroplane, so he has left his trikes unchanged. The aircraft use cantilevered Ergal bars for suspension and are a pleasure to look at. He works closely with hang glider manufacturer Grif, whose two-seat power wings he uses exclusively. There is a range of four: the Trainer is the gentlest, the Spyder is mid-range and the Corsair, which comes in two sizes (12.8 and 13.7) is the sportiest. Data here refers to the Trainer wing and Rotax 503 (a reconditioned 912 is optional).

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FAI-ML



BRAKO 912 / GRIF SPYDER

EW	MTOW	WA	WS	TC	Eng	HP	St	Vmax	Vc	Vs0	Vz	FC	Cert	Price Assembled
158	450	16.0	10.35	42	Rotax 503	52	2	100	75	45	2.8	12	-	-

PAGOTTO - AIR BRAKO

One glance at the data table shows that the change to a Spyder wing and the addition of a 912 Rotax have a dramatic effect on the Brako's performance. As befits the much higher price, this is an altogether better equipped machine. The Corsair wing, not detailed here, is faster again. Either can be had with a Rotax 582 if required.

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EW	MTOW	WA	WS	TC	Eng	HP	St	Vmax	Vc	Vs0	Vz	FC	Cert	Price Assembled
201	450	14.0	10.35	42	Rotax 912	80	2	120	100	52	5.0	10		-

PARAZOOM TRIO-STAR DELTA

This clever design from German company ParaZoom is three aircraft in one. In standard form it is a wide-track paratrike with heavy-duty wheels (as detailed in our sister publication, World Directory of Free-Flight), but reducing the track and adding a bicycle conversion turns it into a combined road/air vehicle, in which form it is a rival for Fresh Breeze's Flyke. Alternatively, by leaving the chassis alone but substituting a Bautek Pico wing, it can be turned into the flexwing trike shown here. The data here refers to the standard trike, without wing; for the bicycle conversion, add 599 euros and 3kg.

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Ena

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FC

12.7 9.7 B&S Vanguard V-Twin 15 **POLARIS**

St

Vmax

If you love both air and water, you'll feel right at home chez Malingri. This nautical family may have come from the sea, but they made their name in the air, thanks to the FIB which we show below. Here we detail its amphibious brother, the AM-FIB, introduced five years ago in response to customer demand. You can take off from land and come down on water, as the wheels can be retracted in flight, thanks to a crank mechanism for the rear pair and a catch-and-rope arrangement for the front. It's simple but it works.

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TC

EW MTOW WA

Eng HP St Vmax Vc Ven Vz FC

 EW
 MTOW
 WA
 WS
 TC

 239
 406
 19.6
 11.15
 40
 Cert Price Assembled Rotax 582 DCDI 64 80 65-70 48 4.5 13

FIB 582 **POLARIS**

It's been in production for over 25 years, but the design of the FIB is not moribund, and to prove it Polaris introduced in 2011 some small but useful improvements to the famous Flying Inflatable Boat. The hull was reshaped and performance slightly improved. However, the word 'performance' is relative, as this is a low-speed device with a simple, single-surface wing, designed for slow flying. It will never win a speed record, but if there were an award for fun, it would be right up there at the top.

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EW MTOW WA WS TC Eng St Vmax Vc FC Cert Price Assembled 19.6 11.15 216 406 Rotax 582 DCDI

POLARIS SKIN 503 GRYPS 16

If water is not your thing, Polaris still has an aircraft for you, the Skin. The company's conventional trikes tend to be overshadowed by their famous stablemate but they are attractive and viable aircraft in their own right, with a pedigree that goes back even longer than the FIB, to the early '80s. The Skin is available either as a bare-bones trike or with pod and fairings as shown here, and is powered by a Rotax 503 (detailed here) or a 582 (illustrated). There's a choice of four wings: Gryps 14, 16 (detailed), 19 and Ares 21, plus lots of other options such as low-noise kits, various props, and analogue or digital instrumentation.

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FAI-ML

FAI-ML

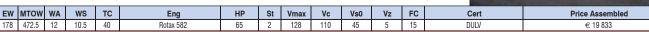
 EW
 MTOW
 WA
 WS

 155
 360
 15.8
 10.60
 TC Eng ΗР St Vmax Vs0 ٧z FC Cert Price Assembled Rotax 503 DCDI 3.5 13

POWERTRIKE EVOLUTION **POWERTRIKE**

The name Evolution doesn't really do justice to this aircraft, because in reality Power Trike's designers wiped the slate clean when they set to work to create it. Metal bi-pole construction was out, composite monopole was in, with composites also used to provide rear suspension. The resulting combination of good aerodynamics, high speed range and low fuel consumption has brought the company world and European championship honours, achievements which speak for themselves.

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Ulrich Hahn began to fly trikes in 1985 and subsequently devoted himself to aliders and motorgliders. Since 2001, he has run a flying school (www. cavok.de) and worked as a flight tester, assessing the technical requirements of aircraft. But he is never happier than when flying as far as possible, with just his wife, a tent and a sleeping bag.

Crual choice

Trike wings are manufactured in a wide range of different types with a multitude of different characteristics. For example: single surface, double surface, big, small, fast, slow, agile, stable, superior, or inexpensive. For any preference or budget you should be able to find a suitable wing producer. Nevertheless, one question still remains on the mind of pilots and manufacturers, a wing with kingpost or topless? Neither of these two alternatives can be achieved without disadvantages. Therefore the answer to this haunting question has to be found by the pilot. However, one thing is for sure: it has to be weightshift controlled and it has to be in

Ulrich Hahn

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