BRISBANE VALLEY FLYER FEBRUARY 2012

BRISBANE VALLEY SPORT AVIATION CLUB

Watts Bridge Memorial Airfield, Silverleaves Road via Toogoolawah, Qld

www.wattsbridge.com.au
www.qua.org.au

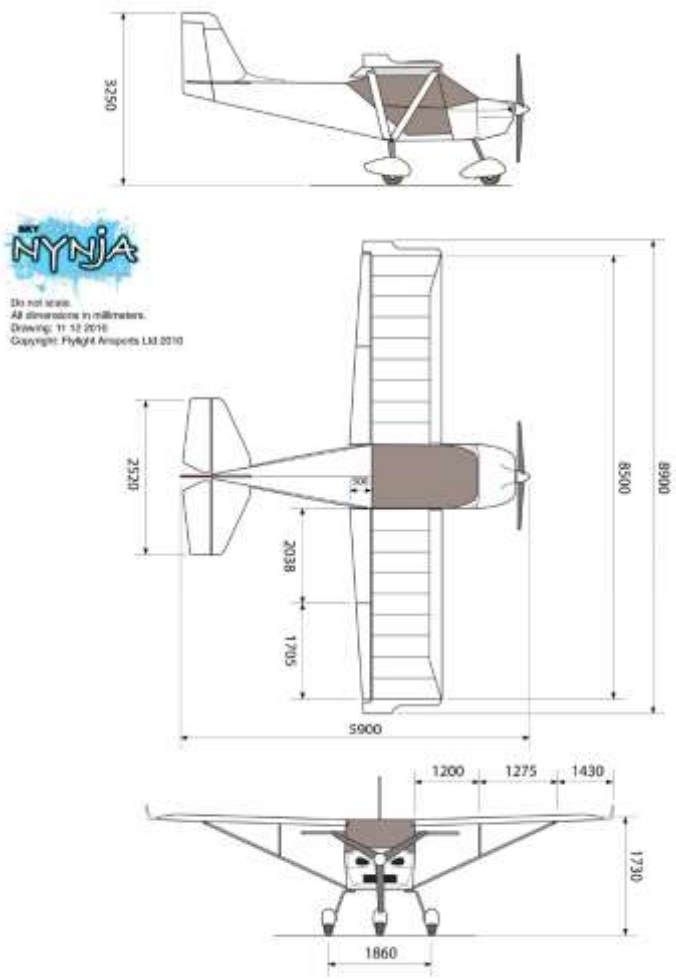
How Greg became a Ninja!

Photo by Rob Knight

Firstly, the story of the Nynja itself (adapted from Pacific Flyer)

After building the world's most awarded ultralight aircraft for fourteen years, "Best Off Aircraft" have announced the Nynja, a further logical development of the very successful Skyranger V Max and Swift. The Nynja uses the same patented tube and pin construction, consisting of straight Aircraft grade 2017/2024 aluminium alloy tubes bolted together with brackets. The genius of this unique construction method, developed for the Skyranger by designer Phillipe Prevot, has a number of advantages. Among them is its extremely high strength to weight ratio. The simplicity of this system gives unparalleled ease of assembly and ongoing maintenance. If you can use simple hand tools you can build a Nynja.

Whereas the Skyranger uses fabric to cover the fuselage structure, the Nynja uses composite panels . The result is cleaner, more aerodynamic lines. In short, the very best of both aluminium and composite technology, without the disadvantages of either. Another significant advancement is the wing tips, which have been carefully designed and wind tunnel tested to reduce parasitic drag. Engine cowls have also been redesigned for better airflow both inside and out. These obvious external improvements result in a significant increase in cruise speed, while not affecting the very low stall speed and excellent low-speed handling.



The redesign of the engine cowling was performed not only for aerodynamic airflow but also for simplicity. The engine choice for the Nynja is restricted to the ultra reliable Rotax 912 or 912 ULS (80 hp and 100 hp). These motors have made assembly even quicker and easier, as parts such as the firewall and cowls are more completely finished and require less work by the builder.

The Nynja sports a completely new cabin, with improved seating, dual control columns and central throttle lever. A new ergonomically designed, centrally mounted instrument panel is another feature which enhances the already spectacular visibility. On either side of the instrument pod are handy bins for maps, camera, etc. The cabin is entered via large tinted lexan covered doors on both sides, hinged at the top and counter balanced with high pressure gas struts. Entry and exit is a breeze, and visibility is excellent all round with the skylight extending behind the cabin to enhance visibility out the back.

The Nynja has undergone its British flight tests to be certified under Section S of the British Microlight Aircraft Association(BMAA), one of the toughest standards in the world. All Nynja aircraft imported into Australia will comply with this high standard. The Nynja is really a *completely* new aircraft, representing a leap forward in many areas, yet maintaining the ruggedness and legendary flying characteristics that have made the Skyranger a world-wide favourite with more than 1,200 flying around the globe.

Specifications

Empty weight	272kgs
Max TO weight (Aust)	540kgs
Useful load	268 kgs
Max baggage weight	20kgs
Standard fuel cap	60lts
Wing span	8.7m
Wing area	12.8 m2
Length	5.9m
No of seats	2
Cabin width at shoulders	1.1m

Performance

Vs1(no flap)	37kts
Vso (25deg flap)	34kts
Cruise speed 80%	100kts (100hp)*
Max climb rate 450 kgs 100hp)	1100 fpm (54 kts,
VNE (540 kgs)	120kts

* estimated performance with optional wheel spats.

Now, BVSAC member, Greg Robertson (Australian Best Off Aircraft agent) tells us how he became a Nynja

In 2005, having flown trikes for a couple of years, I decided it was time to go back to 3 axis. It is not that trikes weren't fun; they were (and still are), but they are so limiting. I was getting bored with going everywhere at 55 knots. I wanted to do some serious travelling. I wanted a 3 axis aircraft with side by side seating and a good payload. I wanted a plane that would cruise at close to the magic 100 knots, and, if I was going to build it myself, I wanted one that was both easy and quick to construct. Most of all, I wanted an aircraft that would fit within my limited budget.

There were a lot of kits on the market (as indeed there are now) and I looked seriously at a number of them. However, for me the Skyranger was a standout. It ticked almost all the boxes. There were hundreds of them flying in Europe, many in flying schools, and they had won more design and performance awards than just about anything else flying. The design was not as fast as I would have liked, but Jean-Claude Smitka (the agent at the time) informed me that there was a new short wing model that had just been released, and also a new hi tech fabric had become available. He thought that a 90-95 knot cruise was achievable. So I ordered a short wing Skyranger with X-Lam fabric (a design that later came to christened the Swift).

The kit arrived towards the end of January 2006. Assembling the Skyranger was just so much fun, and almost too soon it was finished. I had decided that I wanted as few restrictions to my flying as was possible so I fitted a mode C transponder, built the plane under SAAA experimental category rules, and placed it on the civil register as VH-ELS. ELS are the initials of my children's first names. I thought it very appropriate to name the new plane after them because I was financing the whole project on the SKI plan (i.e., spending the kid's inheritance). They deserved at least some recognition for their sacrifice.

ELS flew for the first time in May 2006 just 14 weeks after the kit was delivered. So began a love affair that lasted 5 years, and, by the time I reluctantly sold my Skyranger in 2011, it had done nearly 500 hours and had flown in every Australian mainland state without ever having missed a beat.

Late in 2009, the Skyranger agent at the time, Tony Holtham, called me to say that he was going to persue other aviation interests and relinquish the agency. Was I interested in taking it on? Tony and I were friends, and I had helped him out with trade displays at various fly-ins. He knew how much I loved my Skyranger.

As a business opportunity, it was never going to be a pot of gold. I knew that at best I would make a small profit; at worst, break even. It seemed like a great excuse to head off to fly-ins and talk aeroplanes. I knew the product well, and, even if I never made any money, it would be a lot of fun. So I took it on. Best Off Aircraft Australia P/L was registered in February 2011 and the agency transferred.

The Nynja, the latest aircraft from Best Off France (manufacturers of the Skyranger), had been announced late in 2009. It offered some significant improvements on the Skyranger. Most noticeably, the fabric fuselage was replaced with non structural fibre glass panels. It was a smoother, sleeker aircraft with a genuine 100 knot cruise speed, but one that retained the beautiful flying characteristics of the Skyranger. It also retained the simple structure that had served the Skyranger so well. I had to have one. How could I sell them if I couldn't show a client what he or she gets for their money?

How Greg became a Nynja (continued)

My new Nynja kit was delivered in early January 2011. I was not disappointed. Like the Skyranger, it is a quick build kit. It only took me 10 weeks and the Nynja made its first public appearance at Natfly in Temora that April. Registered VH-ELJ, the Nynja had passed its final inspection and had flown off the 25 hours test flying. ELJ lived up to expectations and continues to impress.

Over the past year, five new aircraft kits have been delivered to Australian customers; three Skyrangers and two Nynjas. My own Nynja and a Skyranger built by Chris Jeffs in Victoria are now flying, whilst three more are under construction. Mal McKenzie in Brisbane is building a Skyranger Swift, as is Mike Slade in Melbourne. Scott Hendry is well advanced with his Nynja project. All three should fly early in 2012.

Depending on the type of motor (and whether it is new or pre-loved), a basic Skyranger can be built for as little as $40,000. This represents incredible value for money. Our high dollar (against the Euro) means it will never be cheaper than now to order. A Skyranger kit landed in Australia is about $21,000, leaving $19,000 for engine, prop, instruments, radio, etc. While a new Rotax 912 would certainly put the end price up, a Jabiru, Subaru, HKS, Rotax 582 or Aerovee would keep costs close to that mark. It should be noted also, that engine mounts for all these engines are available as a no-cost option with the Skyranger. A rebuilt 912 ULS could even be sourced for about $11,000. A fully optioned Nynja, whilst being a little dearer, can be built for half the price of factory-built aircraft of similar performance. The real beauty of the Skyranger and Nynja is that they do not require any special skills to build. Anyone who can use basic hand tools can build a Skyranger.

Let's conclude Greg's account of how he became a Nynja with this photo of ELJ's cockpit (taken by Rob Knight)

And while on the topic of Skyrangers, Mal's got his cowl on and Scott's had is panel lit up in time for Xmas.

And the latest is that Mal has taken his plane to Watts Bridge for the finishing touches! **[Now see page 19!!]**

Kevin Osborne's CX4

In 2006, Kevin Osborne retired from his profession as an electrical technician specialising in industrial controls. Kevin lives here in sunny Brisbane after emigrating from Ireland in 1985. Although he has only recently joined the Brisbane Valley Sport Aviation Club, Kevin has been into aviation for a long time. He actually started building his first aircraft, a VW powered Corby Starlet, from plans, in 1987. This project took him ten long years and the aircraft was first flown by Barry Hempel out of Archerfield in June 1997. Kevin owned and flew this sporty little taildragger to places such as Narromine , Gladstone ,Old Station, Bundeberg and most airfields in the South east Qld area, before finally selling it in 2006. Kevin then got the boating urge and built a 16ft Hartley cabin cruiser. As a Hartley man myself, I can confirm that Kevin did a truly magnificent job on this boat. I have never seen such a well finished Hartley (see page 12).

However, by 2008, Kevin had lived through the boating stage in his life and returned to his main passion, constructing and flying aeroplanes. This time he chose to build a Thatcher CX4, one of the most exciting single seat designs to hit the market in recent years. Kevin chose the CX4 because it has a similar configuration to the Corby but with longer dimensions, particular in regard to the yaw moment, which should make it a very controllable, stable aircraft, both on the ground and in flight.

Although powered by a 1915cc, 65hp VW motor, exactly the same type of motor that Kevin had in his Starlet, this plane is expected to cruise at over 100kts. The 1000 hours TBO engine is fully modified for aviation use with dual ignition (magneto and CDI), and sits in front of a 50 litre fuel tank which, at 15 litres per hour, should give the plane over two and a half hours endurance with normal reserves. The motor will be driving a 56" x 42" Sweetapple propeller. Kevin chose Richard Sweetapple to make his propeller, not just because they are good friends, but because Richard's laminated mountain ash wooden propellers are aerodynamically efficient, lightweight, fatigue stress free and totally reliable.

When I walked into Kevin's home work shop and first laid eyes on the CX4, I thought I was looking at some kind of scaled down World War Two fighter plane. It has those kinds of lines. It is one of the most aesthetically pleasing little aircraft I have ever seen and Kevin has done a meticulous job of putting it together. This plane has been built entirely from plans but with the same care and precision as Kenny Edwards' Courier, an aircraft that featured in our newsletter some time ago. It is in the same class as Steve Donald's Aeropup. How else can I describe it? It is a totally first rate job, absolutely outstanding, and the most amazing thing is that Kevin has relatively few standing machine tools in his workshop; just a band saw, a cut off wheel and a vertical drill press. Every other tool is hand held and operated.

Kevin Osborne's CX4 (continued)

Fitted inside the CX4's streamlined wheel fairings are toe operated hydraulic disc brakes. Both the main and tail undercarriage assemblies are impressively substantial without appearing out of proportion to the airframe. The wings have full span ailerons and there are no flaps (the aircraft's stalling speed is expected to be just under 40 knots). There are two separate luggage lockers behind the pilot's seat, an upper one for smaller items and a very capacious lower one in which a complete camping set would fit. Kevin has yet to do a full weight and balance on the plane, so he is not yet quite sure of how much weight he will be able to carry in these compartments.

The CX4 is stylishly finished in polished metal and canary yellow two pack aviation paint. In the next few weeks, Kevin will be taking his new bird out to Watts Bridge Memorial Airfield on the back of a friend's trailer. Once there it will be hangared, fully assembled and weighed. Then Kevin's L2, Kevin Haase, will conduct a final inspection before flight testing begins early in the new year.

Kevin chose Watts for safety reasons. It has a cross strip and there are plenty of nearby emergency landing areas. He has not yet decided to do the test flying himself, as he has been out of the cockpit for about 4 years and will need to get currency in another aeroplane first. Whoever is at the controls that day, I hope to be at Watts to watch this splendid little aircraft take to the skies for the first time, and will be reporting those events in a following article. Well done, Kevin Osborne!

Thatcher CX4 Expecting a Big Brother

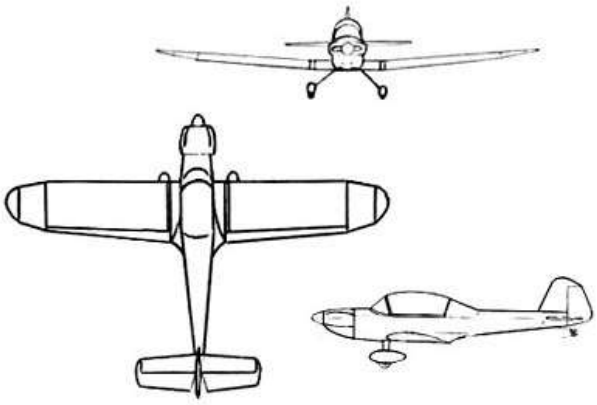
New two-place Thatcher, CX5 announced
By Peter Beck, EAA 19566, ptrbec@aol.com

As a result of the single-place Thatcher CX4's success and due to overwhelming builder demand, Dave Thatcher and his Thatcher Aircraft Company will offer a two-place version of the CX4 later this year. As is his normal style, Dave has been quietly working away, building the new prototype, drawing the plans for the past year, and keeping things under wraps.

Called the CX5, the plane is a two-place design with tandem seating. It will carry a big, American-style, fast-food-fed pilot up front and a big rear-seat passenger, who will have his own set of controls. So the cockpit room will be even more generous than the CX4, with a shoulder width of 28.5 inches at the longerons, 30" to the exterior skin. The CX5 will be sport pilot eligible and powered by the 85-hp Revmaster R-2300. Of course the plane is larger and more sophisticated than the CX4 having fuel tanks located in the wings and utilizing an engine-driven fuel pump. The general appearance of the CX5 will preserve the CX4's curves as well as its all-around good looks, and it should be an excellent trainer for the single-seat CX4.

Tri-Gear Option
The CX5 will be offered with both tri-gear and conventional (tailwheel) configurations. Requests from many interested builders have been heard! The last large-volume tailwheel aircraft model of any kind ceased to be manufactured half a century ago, and whether or not tailwheels are more difficult to handle than tri-gears, the time, effort, expense, and limited availability of tailwheel endorsements are certainly challenges for many. Although a smart thing to have, a tailwheel endorsement isn't required for experimental aircraft unless passengers are to be carried (FAR 61.31).

Design
The plane is designed to have approximately the same wing loading (10 pounds per square foot) and power loading (14 pounds per horsepower) as the CX4. Consequently, performance and handling qualities are expected to approximate those of the CX4 (120-mph cruise, 800 feet/minute rate of climb, etc.), although it will be a larger, heavier plane. An electrically powered split flap under the center section will assist in steeper, power-controlled approaches if desired. Design work on the CX5 is nearly complete, and construction of two prototypes is under way – one in Dave Thatcher's Thatcher Aircraft shop in Pensacola, Florida, and one in Peter Beck's CX4 Works shop in Louisville, Kentucky.



Plans, unique components and assemblies will be available to plans-builders. Plans will be released only after the airplane has been flown and completely flight-tested. Kits are also expected to be available at that same time. One of the prototypes is being used to define computer numeric control (CNC) milled and punched kit parts, and kit production will be supported by CX4 Works and its current machining and manufacturing partners.

Materials/parts lists and construction costs can be defined precisely only when prototypes have been completed. At present, however, it appears that "all up, ready to fly," plans-built costs will be well under $25,000, while kit-built all-up costs shouldn't exceed $30,000.

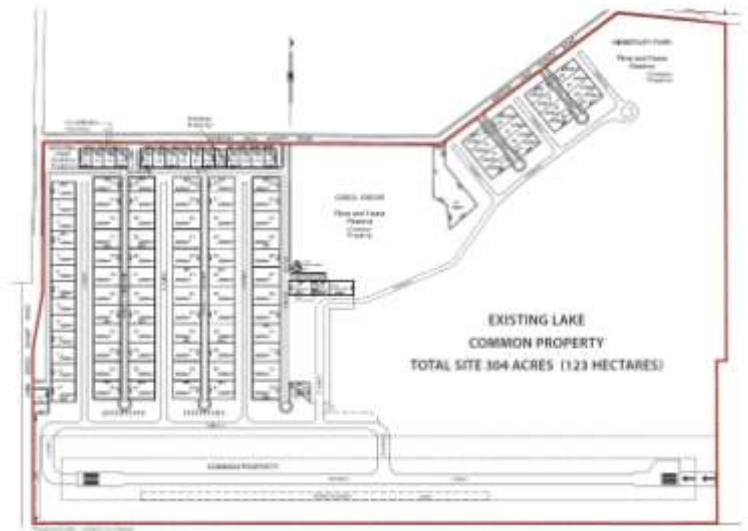
The CX5 can be expected to perpetuate the CX4's fine reputation for the best good looks and highest cost effectiveness in its class.

Lockyer Valley Regional Airport

The Brisbane Valley is getting a new regional airport. Strictly speaking this airport is in the Lockyer Valley – the name of the new airport is actually the Lockyer Valley Regional Airport – but let's not split hairs; all roads lead to Rome and (as we discovered last year) all creeks eventually lead to the River City. Situated half way between Ipswich and Toowoomba, six or seven minutes from Gatton, Laidley or Plainland, 123 hectares of prime land on the gently sloping shores of Lake Clarendon (see photo right), this magnificent new development boasts a 1250 metre long, 30 metre wide, tar-sealed runway pointing exactly east west, and as any Brisbane Valley aviator will tell you, 09/27 are the magic numbers in our area because when that South East Queensland sea breeze comes in, nothing else works.

The Lockyer Valley Regional Council is enthusiastically supporting the project, but they are not the developers. The new airport is the brainchild of Brisbane pilot/entrepreneur, Randal McFarlane, proprietor of VNE Systems (see photo left). Randal has been involved in aviation for many years. He started his professional life as an RAAF air traffic controller and has been intimately connected with aircraft and flying ever since. Randal is a director of the Australian Warbirds Association. He is a passionate supporter of anyone trying to turn their dreams into reality. Five years ago, he went to the US to buy a twin-engined Douglas A26 Invader and flew this WW2 vintage attack bomber back across the Pacific to its new home at Archerfield himself. Besides the A26, Randal owns a Cessna O1 Bird Dog forward air control aircraft and a Focke-Wulf FW 149D Luftwaffe (post war) training and communications plane. This immaculately maintained Focke-Wulf attended the inaugural Gathering of Eagles fly-in at Watts Bridge last September. It is a fully aerobatic, four seat, retractable nose-wheel undercarriage, low wing, all metal aircraft, powered by a Lycoming GO 480 motor developing 285hp. I remember being very impressed with this aircraft (see photo right).

Randal is so keenly involved with vintage aircraft that he intends opening an aviation museum at the new regional airport. There are also plans for the Lockyer Valley Flying Club, a group that was put out of business in 2008 when the University of Queensland closed their airfield at Gatton Campus, to re-establish itself at the airport. The business entity Randal has put in place to establish the airport is known as Lockyer Valley Regional Airport Pty Ltd. The project will be financed through the sale of 89 freehold hangar sites and 14 "non-air" sites for aviation businesses (see diagram left). All land title will be freehold and the hangar sites will include 15 metres of apron parking directly in front. There will be a building covenant which will ensure integrated and complementary building designs, sizes and colour schemes. The covenant will exclude residential accommodation and will also mandate all activities and storage to be directly related to aviation. That means no yachts, no junk, no domestic issues, etc.



Lockyer Valley Regional Airport (continued)

Basically, with the establishment of this airport, Randal is hoping to eliminate everything that pilots and operators do not like about current GA/RAAus airports. A professionally run body corporate will be set up to administer all operations, and all of the airports freeholders will be democratically included in the decision making process.

The business is hoping to raise about $30 million through the sale of airport sites, meaning that each allotment will sell for $300,000. Given the perennial dissatisfaction of Archerfield owners and tenants, the threatened closure of Heck Field, and growing interest in recreational aviation in the area generally, there should be no shortage of interested buyers. Already there are plans afoot to base a rescue chopper at the airport, a facility that was sorely lacking in January last year when the Lockyer Valley flooded with such tragic consequences. On the matter of the floods, however, it should be noted that the airport land was high and dry during that terrible event, so future inundation is not seen as a problem for hangars, taxiways or the runway.

The airport will of course have its own refuelling service. It will cater for both Recreational and GA aircraft up to normal charter category. Scheduled services are not planned for, however, mainly because of the security headache they would bring. That means that ASIC cards will not be required (how wonderful)! Probably, though, all aircraft will be required to be radio equipped. Already the decision has been made to exclude parachuting and gliding operations, but with skydiving at nearby Ripcord and gliding at Boonah, this is not seen as too great a disadvantage. Landing fees will apply for non-owners but these are expected to be reasonable. A rigid fly-neighbourly policy will prevail. Good relationships with the local community are a number one priority. The airport will also be children friendly with a playground already planned. As well, the airport will boast one of the most environmentally-aware operations policies ever devised. Randal describes the development as Australia's first truly green airport with solar lighting, solar power and tank water systems required for every building. The sewerage system will employ bio-cycle technology and be completely independent of council infrastructure. There only outside service connections will be for three phase power and NBN communications.

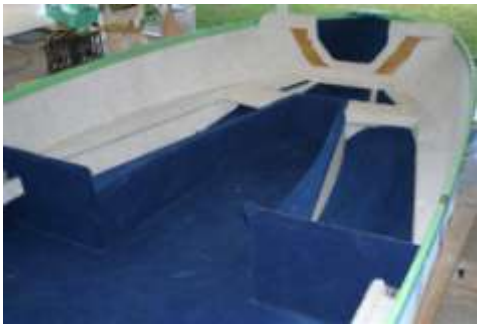
The airport (runway centre) is located 27° 30' 51.52" S, 152° 22' 01.86" E. To get there, just drive up the Warrego Highway from Brisbane and, just after Plainland, turn right at the Big Orange onto Lake Clarendon Way, then right again onto main Green Swamp Road. The airport will be on your right (see map above). For more information, go to the airport website at www.lockyervalleyairport.com.au for the Q & A page. Allotment sales do not start until the end of January, but there is currently a 5% discount deal for early bird expressions of interest. Well done, Randal McFarlane, and good luck with this wonderful project!

Natfly 2012

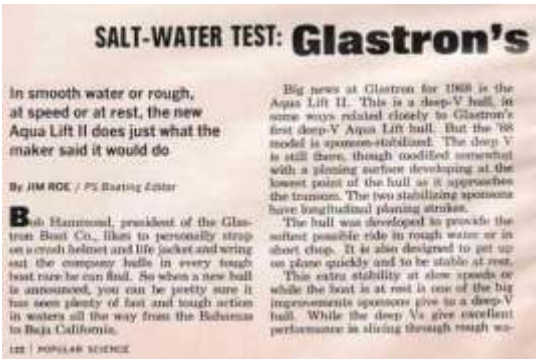
The newsletter editor is interested in talking to anyone thinking of heading south at Easter. Of course, it goes without saying that the weather, the wife (the husband?), the mother-in-law and other difficulties can come between you and a good weekend, however I would appreciate your contacting me if you are contemplating the journey. We may be able to assist each other with planning, etc. And if anyone is thinking of driving down, a small tent or two carried in the boot of the car could be of great assistance to people flying there in smaller aircraft.

Let's talk boats (BVSAC members' boats, of course)

The same blokes (and the same sheilas for that matter) who like planes also often like boats. Let's now look at three boats built by club members over the past few years. Firstly, the club's hard-working webmaster, **Will Miller**, the guy we mostly know for his insane interest in defunct early ultralights (see page 16). Young Will and his father have just finished a complete rebuild of a 1967 model Glastron Aqualift II half cabin. They also totally restored (to the last nut, bolt and piston ring) a 1980 Evinrude 100hp outboard to power it. This superb vessel made its maiden voyage on 27th December 2011, crossing Moreton Bay to Moreton Island in a choppy sea, which it handled well. Here are some photos of the project.



Popular Science article (1968)



SALT-WATER TEST: Glastron's

In smooth water or rough, at speed or at rest, the new Aqua Lift II does just what the maker said it would do

By JIM ROE / PS Boating Editor

Bob Hammond, president of the Glastron Boat Co., likes to personally strap on a crash helmet and life jacket and wring out the company hulls in every tough boat race he can find. So when a new hull is announced, you can be pretty sure it has seen plenty of fast and tough action in waters all the way from the Bahamas to Baja California.

Big news at Glastron for 1968 is the Aqua Lift II. This is a deep-V hull, in some ways related closely to Glastron's first deep-V Aqua Lift hull. But the '68 model is sponson-stabilized. The deep V is still there, though modified somewhat with a planing surface developing at the lowest point of the hull as it approaches the transom. The two stabilizing sponsons have longitudinal planing strakes.

The hull was developed to provide the softest possible ride in rough water or in short chop. It is also designed to get up on plane quickly and to be stable at rest.

This extra stability at slow speeds or while the boat is at rest is one of the big improvements sponsons give to a deep-V hull. While the deep Vs give excellent performance in slicing through rough wa-

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Well done, Will Miller!

Our Second Boat: "Ossie Maid" (Kevin Osborne's Hartley)

Kevin built this Hartley 16ft cabin launch from plans. It is a very well finished example of a famous design. Kevin's boat is a particularly sturdy vessel. The hull, for instance, is made from 10.5mm marine ply soaked in epoxy resin, strongly ribbed and able to stand up to a rough chop with ease. Kevin has also put a lot of thought into the interior. There is a surprising amount of room for a 16 footer, with plenty of head height in the main compartment. There is also heaps of storage and a comfortable meals area at the back. The 75hp four-stroke Honda provides smooth, quiet, planing power, and should return about 2.7 km per litre at 4200 rpm cruise (see fuel specs for Honda BF75 on page 15). Well done (again), Kevin!

Now, wouldn't you like to own this beautifully crafted Hartley cabin boat? Well, the good news is that Kevin is thinking of putting it up for sale! How much? Good question. He has invested about $24,000 in its construction. Time to negotiate?

Our Third Boat: “Platypus” (my Hartley)

Yes, I’m into boats too. I bought this one as a weather-rotted hulk from a neighbour, and while building my house over the last 12 years, I took time out to rebuild it (a seven year project in all). Originally an 18ft trailer sailer (14ft design, extended to 18ft), I sold the sails and the running gear, took out all the fittings, ripped out the keel box, put in a new floor, made a motor pod for the stern, and basically rebuilt the boat into a launch. Unlike Will’s and Kevin’s boats, this is slow boat. The 9.8hp motor with 7” pitch power prop produces 9 knots (hull speed), but an 8.5” pitch cruise prop returns better than 5km/litre at 7 knots with much less noise. The boat is a comfortable overnight boat for two people.

Honda BF75 fuel flow (as on Kevin Osborne's Hartley)

If you are interested in buying Kevin's boat, here are the fuel performance figures for the Honda BF75 motor on a similar type and weight of boat (actually, this boat is probably a little heavier, so Kevin's boat may do marginally better). As can be seen, 4000 rpm at 30 kph returns a figure of 2.7 kpl. For a boat with this kind of performance, that's quite economical.

HONDA MARINE

Honda BF75D Fuel Performance Data

Engine Specifications

Model:	BF75
Horsepower:	75 @ 5500 rpm
Displacement:	1496 cc
Weight:	163 Kgs (Dry)
Gear Ratio:	2.33:1
Mounting Height:	lowest hole
Prop Material (Blades):	Aluminium 3 Blade
Prop Manufacturer:	Solas
Prop (Diameter / Pitch):	13.5 x 15

Amara Kimberly 5.0

Boat Specifications

Length:	4.90 metres
Beam:	2.20 metres
Height:	2.50 metres
Max HP:	90 Hp
Fuel Capacity:	100 Litres
Max. Transom Weight:	203 Kgs
Total Weight (as tested*):	1350 Kgs

*Total weight of boat / engine set up was estimated with all persons, required safety gear and boating equipment included.

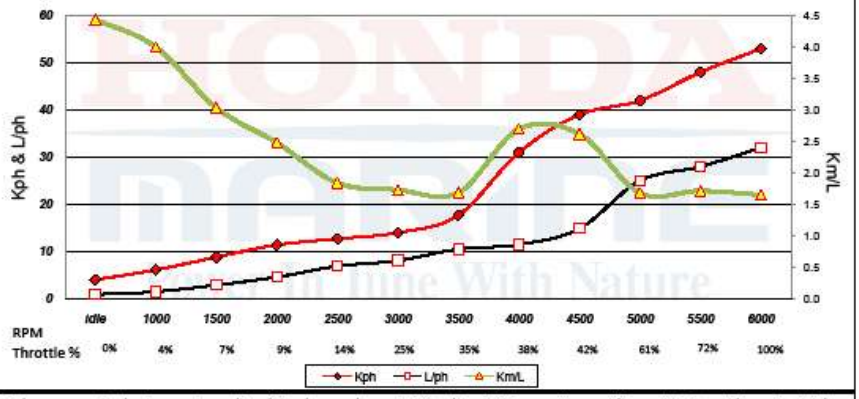
Test Conditions

No. of People:	3
Air Temperature:	25 C
Water Temperature:	19 C
Wind Velocity:	21 Kph
Conditions:	Steady
Wind Direction:	ENE

Test Performance

Test Date:	November 26th, 2009
Maximum Speed:	53 Kph
Best Ave. Acceleration 0-30 Km/h:	8.1 Seconds
Fuel Type:	91 Octane Unleaded
Best Kms/Litre:	4.4 Km/L @ 1000 RPM @ Trolling 2.7 Km/L @ 4000 RPM @ Cruising

Amara Kimberly 5.0 & BF75D Average Speed & Fuel Consumption



Data may vary due to changes in weather, tides, temperature, wind direction, hull & propeller condition and load conditions. Fuel data gathered with a calibrated Honda digital fuel gauge. Throttle position percentage was obtained utilising Honda's "Dr H" diagnostic software. Speed data gathered by GPS receiver. Honda Australia accepts no responsibility for the accuracy of these readings. All data is recorded with the engine trim positioned for best performance. Propeller selected is for general hire use

Next meeting: Saturday 4rd February at 10am in the BVSAC Clubhouse Watts Bridge (BBQ to follow).

PRESIDENT: Mike Smith 0418 735 785 TREASURER: Ian Ratcliffe 0418728238

SECRETARY: Richard Faint 0412317754 Email richard@auav.org

NEWSLETTER EDITOR: Arthur Marcel Email a.marcel@optusnet.com.au

From Ross Nolan (a guy who happened to read our newsletter on-line)

Greetings, Arthur. I just came across the story about the Veenstra two seater in your newsletter. You requested information from anyone who knew anything about Sander or that aircraft. I knew Sander between 1978 and 1985. I worked on and flew with him in several of his aircraft, including the first flight of the two seat "Tardis". I have also flown the open cockpit aircraft in your photos. *(Ross is here referring to Will Miller's latest acquisition)*. This was the preceding design to the Tardis, which had an enclosed cockpit and twin 250cc robins. If you would like any further information or recollections, etc, concerning Sander and this period of ultralight history, I would be willing to help in any way I can. Good to see that Sander's work has not been forgotten. I'll put down some recollections as time permits. Sander's widow (since remarried), Judy, has a lot of photos of the aircraft under construction, and very much more background on Sander (and also on Robby LaBahn, who worked with Sander and was a sort of protege', another significant figure in the early days of ultralights). Sadly, both Sander and Robby died in aircraft of their own design and for equally preventable, even stupid, reasons. They were a great loss to ultralight aviation. I have not had any contact with Judy for many years and would not know how to contact her now (with only one possible link that I can think of). I think she would like to see someone recognize Sander's work in a museum or some other type of display. Maybe I could make contact with her as well. I will be back in touch. Regards Ross.

Spitfire Mk26b. Photo taken at Boonah on 2nd January

4MBS Silver Memories Concert and Dance Success!

One hundred and sixty smiling faces came and went through the doors at South's Leagues Club on 18th December. The big band Sojourn, with singers Trina Tremble and Jacob Ballard entertained everyone with the music of the great era of swing, jazz and radial aircraft motors. Our esteemed secretary, Richard Faint, was in attendance with his far better half and they cut a fine figure on the dance floor (don't let young Glenda spin you any yarns about a bum leg in future). The next 4MBS Silver Memories Concert and Dance is on the 4th February in the ballroom at South's. Doors open at 5.30pm.

All-In Fly-In 2012
Airfield Open Day

All pilots and aviation enthusiasts are invited to the Watts Bridge Airfield Open Day, celebrating the diversity of recreational aviation.

The All-In Fly-In is an all day event with on-field catering and coffee available. Entry is free with no landing fees. Aviation fuel is available on the airfield.

19th May 2012
9:00am ~ 4:00pm

Catering by: Beyond Limits
Supporting youth for education.

Contact

Richard
0412-317-754

Liz
0419-369-963

Or visit the website for more information.

Recreational Aircraft
Vintage Aeroplanes
Aerobatic Aircraft
General Aviation
Gyroplanes
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War Birds

If it flies ~ It's welcome at Watts Bridge !!
www.wattsbridge.com.au

WATTS BRIDGE
MEMORIAL AIRFIELD INC.

Golfing with Rob Knight

Sitting invitingly on the green grass at Boonah airfield, the Tecnam P96 Golf, in its blue and white livery, beckoned. Its clean, low-winged design and big clear canopy promised a spectacular ride among the slowly drifting cumulus of South East Queensland's Scenic Rim. I installed my headset and did the customary walk around inspection. With 3 hours of fuel, good oil and coolant levels, and all aerodynamics intact, I ran out of excuses not to go, so I called Ian and we both climbed aboard.

Taxiing for 04 showed the Golf's nose-wheel steering to be light and positive and its handbrake system powerful. Beside me was Ian McGregor, the CFI/proprietor of Airsport and the owner of the P96 that was making all the noise. He watched quietly as I did the run-up. Then, when the pre-take-off checks were complete and a visual check showed no approach traffic, I advised Boonah CTAF and lined up on the centreline. With the rudder centralised, I opened the throttle.

For a standard takeoff with 15° of flap set, acceleration was normal. The rudder became effective at around 30kts and was soon needed to control the left yaw caused by "P" factor as we rotated at 45kts. Lift-off was clean, and I was still holding right rudder as we accelerated to our climb speed. At 300ft AGL, I raised the flap with the electric switch and turned the fuel boost pump off. I trimmed for no elevator pressure using the stick mounted electric trim switch and we settled into a steady climb at our V_Y of 60kts. I noticed, however, that I was still holding considerably more right rudder to keep straight than I had expected. A quick balance check showed the ball squarely in the middle, so I wondered if the extra rudder needed in the climb might be a characteristic of the aeroplane type. This I would need to check out later.

The world outside the cockpit, except that part of it below us and directly behind, was in glorious view. Inside, well lit by the sun through the big bubble canopy, the panel layout with its two electronic glass windows seemed a little different but easy to read nevertheless. Noise was comfortably low through the headphones and the air-vents built into the

instrument panel worked well at keeping cockpit temperatures pleasant. The VSI said we were climbing at 850fpm and I was still holding a boot full of right rudder as we headed into the training area. Ian was quiet, looking out his side of the cockpit, but I suspected that he was more alert than he appeared. A retired airline pilot, he still holds a position with Virgin as a Simulator Instructor, so it was unlikely anything would pass him unnoticed. The air was exceptionally clear and he pointed to skyscrapers in the Brisbane CBD, plainly visible to the north east.

After we levelled out at 3000ft, we waited for the speed to rise to 80kts before reducing power to 4800rpm. The ASI steadied at 95kts and a touch of nose-down trim again removed all residual stick pressures. This is a good speed for a 100hp machine. However, I still needed some right rudder to keep straight. I wondered if, maybe, the fixed rudder tab had been used as a handle.

A good lookout showed no traffic, so I tried a 45° steep turn each way. They were straightforward provided I maintained 4800rpm to minimise airspeed decay. The rather narrow nose profile on the Golf made attitude appreciation easy, but I still needed more right rudder than left to coordinate. Sixty degree banked turns needed full power to maintain height and in each direction the ASI settled to 80kts. The aeroplane was steady, predictable and easily controllable. The only noteworthy item was the continued need to favour the right rudder to keep the ball in the middle.

Remaining safely below the dazzling white cumuli that were popping up everywhere, I ran through the HASEL list. Everything checked out and, with Mt Moon over the nose, I reduced the power to idle. The quiet was deafening, and the blur of the slowing prop darkened the horizon ahead. The speed fell away as the nose rose with the back stick needed to maintain height. Then, after a light buffet, the nose sagged with a tiny amount of roll to the left. I checked the stick forward and we were flying again. I added full power and we climbed away. The total height loss was just 80 feet according to the altimeter!

Two more stalls followed, one with 3000rpm and 15° of flap, and the last with 4000rpm and full flap to simulate a stall on a short landing approach. In the second stall, despite the higher power setting, the airspeed decayed much faster and the buffet was markedly prolonged. Then, at 39kts IAS, the stall broke abruptly, the nose pitched down and the aircraft rolled slightly to the right. Again, recovery was very quick and still only 150 feet lost off the altimeter. However, in the latter stages of recovery back to level flight, I needed extra right rudder to counter the left yaw.

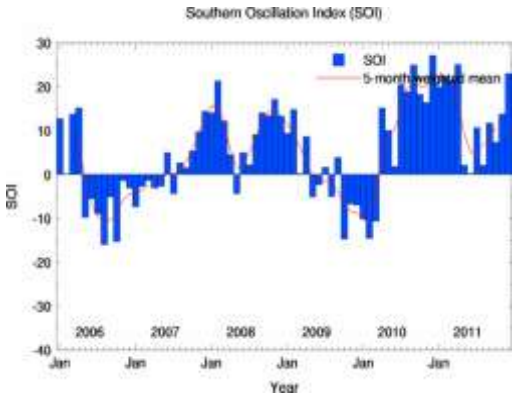
The glide was typical for a clean ultralight aeroplane. In the event of an engine failure, the 12:1 lift/drag ratio on the Golf would convert height to glide-range well. Also, the ancillary controls were well placed and there would be no undue difficulty in carrying out the emergency procedures. I was surprised to note, though, that V_{FE} is 60kts and that this is also the best glide speed. However, with a V_{NE} of 145kts, there was plenty room on the ASI dial for a descent without flap.

Back at the airfield, we did two circuits. The first was a glide approach and the plane's good glide characteristics were clearly apparent. I thought I had turned base a little too late to reach my chosen flare point without adding power, but instead we needed full flap to touch down halfway along the runway. The second approach was with power and full flap for a short landing, holding 55kts over the threshold. There was little float, just a gentle touch, and if it had been a "for-real" short landing, maximum braking would have pulled us up very quickly indeed.

In all stages of flight, the controls were light, powerful and well harmonised, making this aeroplane a pleasure to fly. Also impressive was the superb visibility through the bubble canopy – a major factor in a trainer. Apart from easily spotting other aircraft, the student can see the runway better during the approach and therefore judge their landings more precisely. This aeroplane performs well, appears to have few vices and is great fun to fly. If you want to try it (and fly it) – call Ian McGregor or Dave Briffa at Airsport on 07 5463 4028. Oh, and by the way, after the flight it was confirmed that someone had indeed been leaning on the fixed rudder trim tab and the dumbo had bent it.

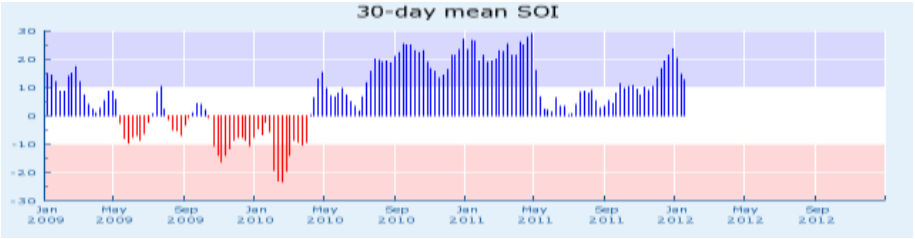
Book buy of the Month

A collection of over 200 black and white very clearly printed photographs from the archive of the London newspaper of the day, the Daily Mail, this book covers the period between July and October 1940. Apart from a few glaring exceptions, like a line up of obviously later mark Spitfires, the book is well edited and very interesting. Of course, the commentary tends to be a little Union Jack and doesn't concern itself with deeper issues to do with the war, but there is no need to read it at that level. I bought this book from the QBD bookshop in Mt Ommaney for only $12.99. It's hard to beat a bargain like that.



The Southern Oscillation Index

The SOI spiked past the +20 mark in December and this could be behind January's unsettled weather. The good news is that it is now falling rapidly.



STOP PRESS: The latest photos from the Freeman Hangar at Watts Bridge:

"Who is that masked man, Daddy?"

"That, Son, is the Lone Skyranger!"