Brisbane Valley Flyer

July - 2014

www.wattsbridge.com.au
www.bvsac.org.au

Watts Bridge Memorial Airfield, Cressbrook-Caboonbah Road, Toogoolawah, Q'ld 4313.

The All-In Fly-In. A good line-up.(See page 5.)
Photo by Peter Davies

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Pilot Report on an X-Air 582

The 582 waiting to go

I spat bits of dry mown grass out of my mouth as I ran-up an X-air-582, a two-seat ultralight with side by side seating in an open, shallow depth cockpit. Around its wide windscreen was blowing a combination of slipstream, ambient crosswind and grass, as I checked the ignition. Owned by friend John Orr, a businessman from Mt Tamborine in Queensland, this model X-Air has no flaps, a basic instrument panel and a is powered by a Rotax 582 engine. With the engine popping, as Rotax 582's do at low RPM, I quickly ran through the limited checklist of pre-take-off items. When finished, a lookout showed no other traffic so I advised the CTAF that I was lining up and rolling on runway 04 at Boonah.

Alone, with half fuel and a 10 kt headwind, the acceleration was very rapid. In seconds I was lifting the nosewheel, and the aircraft flew off the grass at 35 knots after a ground roll of only about 40 metres. The V_Y in the book is 38 kts but I let the ASI settle at 45 to ease the load on the new rebuilt Rotax 582 engine which was running very smoothly. When established in the climb and trimmed, the VSI indicated a steady 820 fpm upwards.

The panel has only what is needed

Turning left to leave the circuit I found that I didn't need a ball to check the balance; the airflow, swirling around the windscreen and ruffling what hair I have left, provided sufficiently eloquent detail. Apart from the noise and the odd eddy of air as I played with the rudder in the climb, I saw few other signs that this was, in fact, an open cockpit aircraft as I climbed to 3000 feet and leveled off.

Flown carefully, one up and with 40 litres of fuel, the Xair-582 gave me a 53 KIAS cruise at 5000 RPM. However, this quickly dropped back to around 48 KIAS if I used the ailerons to keep the wings level without balancing the small amounts of the adverse yaw I incurred. The ailerons felt heavy; I was surprised at the energy necessary to use them. In contrast, the elevator was light, so much so that it would be easy to over-control in pitch. The rudder, also light, was not as powerful as the elevator. Considered together, the control harmony was only average at best.

For a high-winged ultralight the visibility in turns was normal. I lost a little speed in 45º turns, both left and right, when I tried them, and the rudder needed to maintain balance seemed about the same for each direction. Again, the light elevator forces made it easy to hold the attitude to maintain height but, being so light, the spectre of over control was ever-present.

Stalls were a non-event. With no flaps to play with I could only do basic and power on stalls. Basic stalls displayed little warning – just a nose sag with the ASI needle flickering at a little under 27 kts. With power on, the rate of airspeed decay was naturally slower and the nose higher at the break until, maintaining 4000 RPM, the aircraft just sat there nose high and sinking. The flickering ASI needle was impossible to read with accuracy. There was no tendency to fall off either way provided I prevented any yaw with the rudder. The effect was to be nose high and steadily heading ground-wards at about 240 fpm. I wondered how it might perform if a pilot didn't stop the yaw? However, I dropped the thought and left this aspect untested.

Turning towards the field I tried a 40KIAS glide. At this speed the VSI indicated 680 fpm down which is a little more than the book value for this configuration and, naturally, the controls were lighter. However, without the slipstream the rudder was markedly less effective and much more pedal was required to yaw the nose. To explore the level of inherent stability I stretched my left arm out into the airflow. Initially nothing changed but

then, slowly, slowly, the nose drifted left. Then the left wing sagged down and the nose fell gently away. I pulled my arm in but the nose strayed even further left as the roll slowly increased and the nose pitched gently down. We were spirally unstable. It was all perfectly normal.

Nothing but air rushing alongside.

Back in the circuit the downwind checks were simple, there was no park brake, just one fuel tank and it didn't even have a fuel on/off valve. My harness was still tight and the aeroplane had no hatches. I closed the throttle when my flare point was just aft of the rear strut and stated a left turn. There was no radio traffic and I suspected that I was still alone in the circuit, a thought my lookout confirmed. Keeping the flare point at an angle of no less than 45° below the horizon, I turned final with 45 KIAS best glide nailed and the approach looked fine. The descent was rapid. This aeroplane really likes to come down and could, on a good day, easily race a crowbar to the ground. I continued with the glide approach and flared, allowing for the steep approach. There was little float, the drag saw to that, and the aeroplane settled softly onto the grass without even a bump. The coil-sprung undercarriage sure works well. As the airspeed fell, the nose-wheel settled and nosewheel steering was available. It was surprisingly heavy considering the speed and required substantial rudder pressure to yaw the nose. I opened the throttle and carried out a simulated overshoot. We were airborne in about 10 (ten) metres and I had to pull the nose up quite quickly to maintain my 45 kt climb speed.

John Orr enjoying the wind through his hair.

Even without flap the Xair lands pretty short so I decided to check out a precision approach and put it on a spot. Then I could see exactly how much room I needed to land. So I turned final, with 40 KIAS this time, all trimmed with just enough power to pull me over the fence onto a brown spot on the grass. As I flared I pulled the power and with little float we settled, nosewheel high, onto the grass. Holding full back stick I added brakes to pull the nose down and stop as quickly as possible. At a walking pace I turned off the runway and looked over my shoulder. From the flare point to where I turned off the distance was only around 40 metres. This is short by any fixed-wing standards.

I found the aeroplane noisy, even wearing a headset but that is to be expected in an open cockpit. Performance was good and handling was fair. Its descent was high, even without sideslip, but I did enjoy the wind blowing through the open cockpit.

The X-air-582 is a development of the Weedhopper designed in the 1970s by John Choita. It was further refined in France and is currently built in India by Raj Hamsa in Bangalore. Sold as a kit aeroplane by Xair Australia, the books say that the airframe is stressed to +6 and -4g and that the undercarriage is stressed to +9g. Its Maximum take-off weight is listed as 544 kg.

For further details Air Australia has a website at www.xair.com.au.

Vulcanair Introduces Budget Four-Seater

By Stephen Pope / Published: Apr 15, 2014

The Vulcanair VC1

Vulcanair of Italy has revealed plans for a four-place light single dubbed the V1.0 that the uninitiated will probably mistake for a wildly modified Cessna Skyhawk.

The high-wing design will feature a 180 horsepower Lycoming IO-360 engine and Garmin glass avionics — both hallmarks of the Cessna single. But unlike the Skyhawk, Vulcanair plans to take advantage the latest technology — such as the less costly IFR-capable Garmin G500 avionics system — to bring the price down. Way down.

The result will be an airplane Vulcanair hopes to sell for around $250,000, versus about $400,000 for a brand new Cessna 172. The company, best known for its P68 twin, showed off the V1.0 at Aero Friedrichshafen in Germany last week, where it announced its intention to start selling the airplane in the U.S. as early as next year.

The V1.0 is already certified by EASA in Europe, and Vulcanair plans to seek a bilateral agreement with the FAA to sell the airplane here.

Another unique feature of the Vulcanair design is the inclusion of three doors — two for the front-seat occupants and one for accessing the rear seats. According to Vulcanair, the V1.0 has a max takeoff weight of 2,546 pounds, an empty weight of 1,627 pounds and a useful load of 912 pounds. Max cruise speed is listed as 139 ktas and range with 50 gallon tanks as 600 nm.

The All-In Fly-In

Another great day for Watts Bridge Memorial Airfield. It was a great turnout and a good selection of aircraft turned up and even the showers almost stayed away.

Glenda Faint in the Instructor's seat and about to give John Gross a check-ride.

Nik Potter's Murphy Rebel. It's for sale folks!
See advertisement further on.

1948 Grumman G-73 Mallard taxis in at YWSG

In, and looking out from, Mal McKenzie's Swift

There are now more Sopwith pups at YWSG than on the western front

Nigel Hammond's Glastar

The mighty little Teenie Two on taxi

The trike contingent had a good day

Moravia L200D, with its 210hp Avia M 337 engines

A rare Beechcraft T34 Mentor on display

Bert Percell's pristine Bantam

A PlatzerKiebitzhomebuilt with a VW engine

Part of one of the line-ups

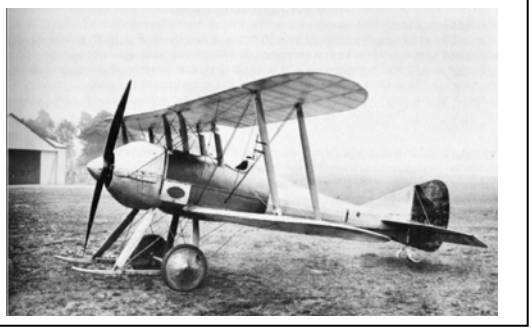
It was another memorable day. There was plenty of good food and drink and the attending public enjoyed walking around the aircraft on display.

FLY-INS Looming

Jul 5-6	Caloundra, QLD	Open Cockpit Weekend 2014 | google calendar
Jul 9-11	Birdsville, QLD	Big Red Music Festival 2014 |

Mystery Aircraft (July Issue)

What's this?



No winner this month but it sure did stir some interest.

Mystery Aircraft (JuneIssue)

- The **Royal Aircraft Factory S.E.2** (Scout Experimental) was an early British single-seat scout aircraft serving with the Royal Flying Corps over the Western Front in the early months of the First World War.

Jokes and Truisms for the Month

1. What's the difference between a co-pilot and a jet engine?
   Answer: A jet stops whining when you shut it down.
2. If you crash because of weather, your funeral will be held on a sunny day.
3. Never trade luck for skill.

Aircraft for Sale:

Micro Aviation Bantam B22M. $10,000
In good condition. Airframe 1900 hours, engine, Rotax 582 Blue Top, 350 hours. View by arrangement at Boonah. Comes complete with ICOM hand-held VHF radio.

Call Wayne on L/L: (07) 3804 0710 or mobile 0416 3670 16

Aircraft for Sale:

Murphy Rebel. $65,000
CoA 2014, TTIS 30, Lycoming O-320 150hp, TSN 4108, TSO 1956, STOH 30, Vetterman Cross-Over Exhaust, Culver 74x53 Propeller 44" Wide Cabin, Dual Controls, Icom IC-A210, Landing, Navigation + Cabin Lights, Whelan Strobes, AH, DG, Volt/Ammeter, Carburettor Temp, EGT x 4, CHT x 2, MGL FF-1 Fuel Computer, Hobbs Meter…
Useful Load 315 kg
Take-off/Landing Roll 100 m/130 m
1,600'/min Climb

Superb ground handling due to excellent forward visibility, differential hydraulic braking, a steer-able tailwheel, and the wide-stance gear. 7 hours endurance @ 92 kts @ 27 lt/hr, Room to sleep in the aft fuselage and wait, that's not all -you'll get a free set of steak knives!

Tel: 0458 736 440 Email: nikpotter@web.de Located: YWSG

True conversation heard at Hanover Airport..

The young woman in Tower has recently finished her training and is still not completely at ease. BA XXX is at holding position runway 09R. Another aircraft is doing approach procedures for a landing on the same runway. Tower wishes to expedite take-off for BA XXX:

Tower: BA XXX, are you ready for a quickie ?

BA XXX: Lady, I'm always ready for a quickie, but first I have to fly this plane to Helsinki.

Keeping up with the Play (Test yourself – how good are you, really?)

1. Compare an aeroplane climbing at its V_X into wind with the same aircraft climbing at its V_X downwind. Why is its angle of climb greater when climbing into wind?

    A. Because it has increased airflow when climbing with a headwind and the extra airflow provides extra lift.
    B. Because of wind shear.
    C. Because its groundspeed is less when climbing into wind.
    D. Because of wind gradient effect.

2. Under the principles of 2 stroke motor operation and ignoring any spark advance or retard factors, what is the total number of sparks that will occur in one crankshaft revolution of a two cylinder 2 stroke motor fitted with dual ignition?

    A. One (1).
    B. Two (2).
    C. Three (3).
    D. Four (4)

3. As the angle of attack on an aerofoil increases, what happens to the separation point?

    A. It moves forward.
    B. It remains stationary on the chord line.
    C. It moves aft.
    D. It disappears completely with the change in relative airflow.

4. Select the most correct statement relating to aviation navigation charts from the options below.

    A. On a Mercator chart scale expands towards the poles.
    B. On a Lamberts Conic Conformal chart scale is accurate only along the standard parallel.
    C. On a Mercator chart, for accuracy, distance must be measured across the latitude at mid track.
    D. On a Lamberts Conic Conformal chart scale expands either side of the standard parallel.
    E. Only options A, B, and D are correct.
    F. All options are correct.

5. Considering an aeroplane in a steady climb, why is the total lift less that the weight of the total aeroplane?

    A. The statement above is false – in a climb lift must be greater than weight.
    B. Because the lift is not supporting the total weight of the aeroplane.
    C. In a steady climb the aeroplane will be in equilibrium and the lift must be equal to the weight for equilibrium to exist.
    D. If the aeroplane is trimmed correctly any difference between the values of lift and weight will be nullified.

ANSWERS: 1. C 2. D, 3. A, 4. F, 5. B.

If you have any problems with these questions, call me (in the evenings) and let's discuss it! Ed.

BRISBANE VALLEY SPORT AVIATION CLUB Inc

MINUTES OF THE 14.06.2014 GENERAL MEETING

MEETING LOCATION:	Watts Bridge Memorial Airfield – BVSAC Clubrooms
MEETING DATE:	14th June 2014
MEETING OPENED:	10:21 AM
MEMBERS PRESENT:	17
APOLOGIES:	John Innes, Ian Ratcliffe, Mal McKenzie
VISITORS:	Nil
NEW MEMBERS:	Nil

MINUTES:

May 2014 meeting of the BVSAC Inc.
Wayne Petty moved an amendment to the minutes which stated that he had sprayed around the building when in fact he had not done so. With that amendment the minutes were accepted as being true and correct.
Proposed: Wayne Petty Seconded: Peter Ratcliffe.
Acceptance motion carried.

PRESIDENT'S REPORT:

Neil encouraged all to support the Poker Run & Christmas in July by partaking and attending.

SECRETARY'S REPORT:

-Richard commented on the incoming and outgoing BVSAC correspondence including:
-Allan Yeoman's membership,
-Aviation events notification,
-Poker Run permissions from Gatton, McCarron's, Kilcoy and Watts Bridge,
-Danny Fowler regarding repairing the hot water system,
-Poker Run and Christmas in July promotions,
-Distributing the newsletter to members,
-Caboolture Gliding Club's use of the BVSAC bathroom.

TREASURER'S REPORT:

Priscilla provided a financial statement advising that the BVSAC account balance is $528.89 and that the NAB account balance is $1092.17

WBMA REPORT:

-WBMA Secretary Liz Cook reported that the All-In Fly-In for 2014 was a great success and thanked Richard Faint for his efforts at organizing the event and keeping the website updated.
-Liz advised that The Gathering of Eagles – Australia is to be held on the 30th August 2014.
-Maintenance is ongoing with Wayne Petty, Peter Freeman and Nick Potter contributing in a large way.

BUSINESS ARISING:

Nil

GENERAL BUSINESS:

-The meeting thanked Wayne Petty for the clubroom improvements and those who repaired the hot water system.
-A quotation for the clubroom bench tops was discussed.
Catering arrangements for the Poker Run were discussed and tasks allocated.
-Sealing of the concrete hangar floor was discussed resulting in a plan of action.
-Mike Smith gave a report on the highly successful Thangool Fly-in and the pending appointment of a new manager for the RA-Aus.
-Rob Knight's newsletter quiz topics were worked through with the correct answer for each being found.

NEXT MEETING:

There will be no monthly meeting in July due to the Poker Run and Christmas in July.
The next meeting will be 02.08.2014 in the BVSAC Clubrooms Watts Bridge at 10:00 AM
A BBQ lunch will follow the meeting.

MEETING CLOSED:

There being no further business, the meeting was declared closed at 10:52 AM
A BBQ lunch was held after the meeting.

--ooOOoo--