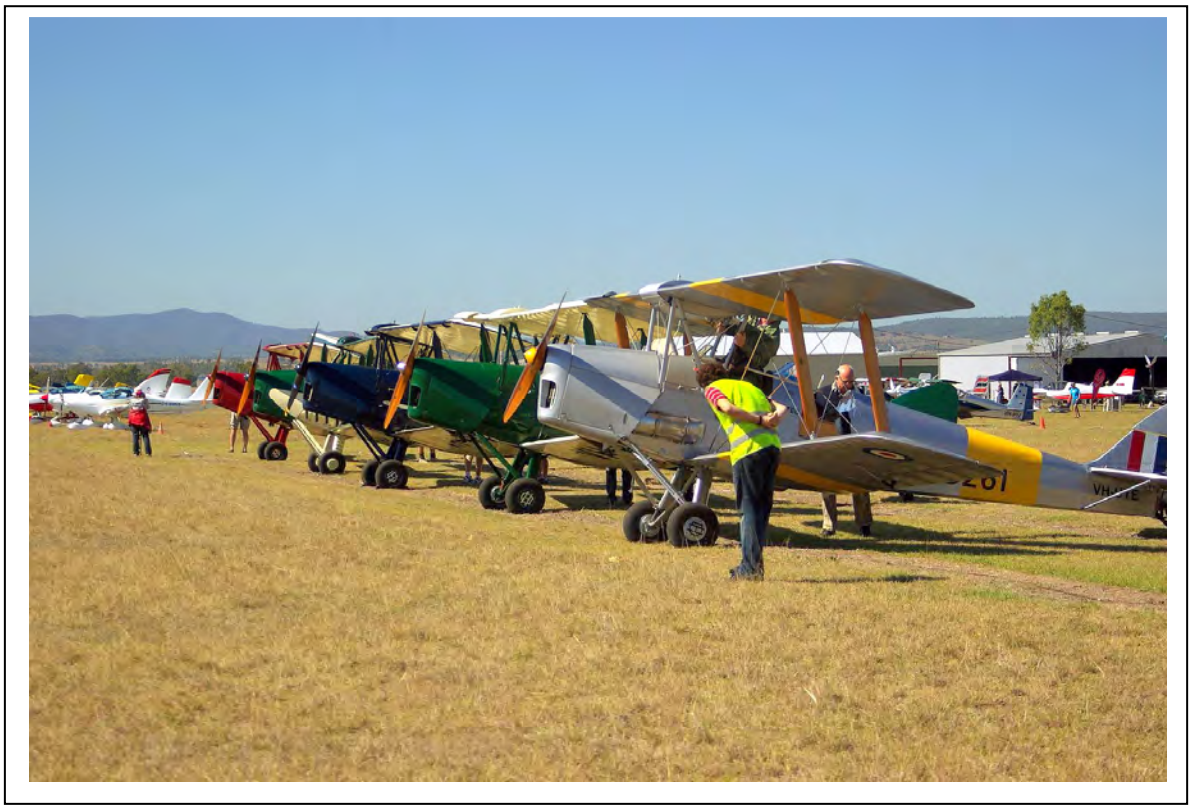
BRISBANE VALLEY FLYER

NOVEMBER - 2014

BRISBANE VALLEY SPORT AVIATION CLUB INC

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

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



Watts Bridge, Gathering of Eagles 2014. Which one's not a DH82a?

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De Havilland DH 80 Puss Moth(Pilot report)

Puss Moth panel.

The de Havilland DH 80 Puss Moth was designed in the 1920s to provide the flourishing private pilot movement with a comfortable enclosed-cabin-class aircraft for touring. It was inspired by an arduous flight to Morocco in a Gipsy Moth by Geoffrey de Havilland and his wife, Louise.

De Havilland decided that a faster, more luxurious aircraft should be the next step in the growing market – and the idea for the Puss Moth was born. The majority of production Puss Moths were two-seaters in tandem configuration, but a few were configured with an extra rear seat for this role. The type was initially powered by the then new Gipsy III engine which was inverted to give the pilot better visibility over the nose, but later models were fitted with the ubiquitous Gipsy Major engine of 130hp, giving improved performance. Notable design features included folding wings similar in area to the Gipsy Moth's, allowing operation from short airstrips andstorage in small spaces, and swiveling main landing gear shock-absorber fairings which could be turned through 90º to act as airbrakes.

Sitting with its wings folded, the DH 80 really does look like a moth poised forflight. Wing folding is a one-man job, taking just three or four minutes. First, a small spring-loaded pin is pulled to release the trailing edge from the fuselage and then the wing can be swung forward. After a visual check, a safety catch is turned and the wing is secure. The jury strut that supports the wing when folded is then unhitched, pivoted back and stowed in a clip on the fuselage side. It then just remains to fold down the trailing edge and lock it in place with two spring bolts. Although there is a fuel tank in each wing, there is no need to couple/uncouple the lines as they run very close to the hinge point. As the wings click into place, the fuel cocks in the wing roots feed neatly through apertures in the cabin wall, putting them readily to hand. The fuel gauges are float type with calibrated sight glasses under each wing which are easily seen from the cockpit. Likewise the aileron cables and pitot/static tube stay connected throughout.

The undercarriage sports long-stroke, rubber-sprung shock absorbers, making for a smooth ride over uneven surfaces. Add to that the differential brakes and thecastoring tail wheel, and the aircraft is very manoeuvrable on the ground. Other notable features are the airbrakes, a tailplane with adjustable incidence for pitch trim (a-la Piper cubs, Tri-Pacers etc), and a long exhaust that runs well back behind the cabin, reducing noise.

As with most aircraft of its era, climbing aboard the Puss Moth is a bit of an art. Stepping on the beautifully-polished exhaust on the starboard side does help, although access can be gained from either side through the doors. Chrome grab-handles on the door frame/windscreen struts are strategically placed.

Once seated,the view over the nose is excellent for a taildragger. The cabin is beautifully appointed. The single front seat is a low-back, bucket with a webbing lap-strap. In keeping with its period, there is no shoulder harness. Behind the front seat is a similar passenger seat, which,in some models, can be slid diagonally to allow, in theory, a second passenger to occupy a rather minuscule bench seat.

The genuine wood-grained panel isfilled by a lovely array of period instruments and below them are the VHF radio,transponder, and circuit-breakers. A large, chromed cheese-cutter type elevator trim is mounted on the left cabin wall, forward of the door. On the right cabin wall is another cheese-cutter control, which operates the rotating-strut airbrakes. The hand-operated brake lever is mounted on the port door, below the armrest. Throttle/mixture levers and friction nut are mounted on the frame ledge, forward of the door hinge line and neatly lined up with that very convenient armrest. Unlike more modern aircraft, the mixture works in reverse – it is full rich in the aft position and fully lean when pushed forward.

After a suitable cockpit briefing we were ready to fire up. This DH80 has a starter but no generator so, to conserve the battery for the essential radio work, the electric starter was not used. We primed the engine and hand-swung the prop. After a few blades, the Gipsy burst into life and I warmed it up. With clearance to taxi to the holding point for a departure from Bournemouth's Runway 08, the fun began. Keeping a taildragger on a tarmac taxiway with weak brakes, a castering tailwheel and a ten-knot crosswind was certainly a challenge, and twice my check pilot had to hop out and swing us around to point the nose in the right direction. It was like trying to taxi a demented supermarket trolley! Although it was rather embarrassing, at least we didn't join the scenery. With clearance to take off, and a 90º ten-knot crosswind, I lined up on the downwind side of the runway to allow for any initial swing into wind, and we rolled. Opening the throttle progressively and smoothly, the centreline was achieved and after a short, uneventful roll of a hundred metres or so, the Moth simply levitated into flight at about 50mph (43 kts), the Gipsy rumbling away.

Australian Puss Moth VH-ABU (ex VH-UPA imported for QANTAS).

It was very gentlemanly – there really is no other way of describing it. Initially the roll rate felt a little slow, but I soon got the feel of it as we climbed away at 60mph (53 kts), giving us about 550fpm. This, with two up and almost full fuel, is quite a respectable rate.

Setting the power at 1,900rpm gave us an IAS of 107mph (93 kts), which the graph said would cost us a fuel burn of 7 gph (26.5 litres/hr).As a result of the type's early history of shedding wings, an overly-cautious Vne of 120mph (104 kts) was set. Herein lies a caution – with a window of just 13 mph (11 kts) between cruise speed and Vne, the airspeed needs to be monitored with great care - especially in turbulent conditions.

I conducted the HASELL checks and prepared the Moth for a stall. As the speed fell the control forces became lighter in roll and yaw but the elevator became quite heavy, a strong rearward pull being required to continue maintaining height. The stall itself was completely innocuous and occurred at about 40mph, (35 kts). It was heralded by a little buffet and, at the stall break, a slight nose dip.

There was no tendency to drop a wing. Recovery was standardand recovery was quick with little height loss. It was very benign.

I advised Compton Radio and we joined for a left-hand circuit on 08. On the downwind leg I slowed down to 70mph (60 kts) and deployed the airbrakes. With a warning on the radio of wind-shear due to the crosswind over the trees, I added 10mph to the normal approach speed of 60 (53 kts) to allow for any possible loss of speed. Typically, no such thing happened, and the net result was a prolonged float followed by a nice landing halfway down the strip with no tendency to swing. All very satisfying, and resulting in the inevitable silly grin.

Another Australian Puss Moth – VH UPN

The Puss Moth is a lovely, lovely aeroplane, and it was a great pleasure to fly such a special part of aviation heritage. I could happily fly one until I hang up my helmet. As befits her looks, she deserves to be treated like a lady – for a beautiful lady she certainly is.

Where the term "Aviators" came from.

Extracted from a recently found diary of Genghis…

It has long been believed that Aviators come from a secret society formed around a thousand years ago. The members of this society were warriors and were undaunted in the face of any obstacle. At last the proof is presented…

A little known fact of history is the origin of the word "aviator."

PhuKhen (pronounced Foo Ken), is considered by some to be the most under-recognized military officer in history. Many have never heard of his contributions to modern military warfare. The mission of this secret society is to bring honor to the name of PhuKhen.A 'Khen' was a subordinate to a Khan in the military structure of the Mongol hordes. Khan is Turkish for leader. Most know of the great Genghis Khan, but little has been written of his chain of command.

Khen is also of Turkish origin, although there is not a word in English that adequately conveys the meaning. Roughly translated, it means "*One who will do the impossible while appearing unprepared and complaining constantly*." PhuKhen was one of ten Khens that headed the divisions(as the groups of hordes were known) of the Mongol Army serving under Genghis Khan. His abilities came to light during the Mongols' raids on the Turkistan city of Bohicaroo.

Bohicans were fierce warriors and the city was well fortified. The entire city was protected by huge walls and the hordes were at a standoff with the Bohicans. Bohicaroo was well stocked and it would have been difficult to wait them out. Genghis Khan assembled his Khens and ordered each of them to develop a plan for penetrating the defenses of Bohicaroo.

Operation Achieve Victory(AV) was born. All 10 divisions of Khens submitted their plans. After reviewing AV plans 1 through 7 and finding them unworkable or ridiculous, Genghis Khan was understandably upset.

It was with much perspiration that PhuKhen submitted his idea, which came to be known as AV 8. Upon seeing AV 8, Genghis was immediately convinced that this was the perfect proposaland gave his immediate approval. The plan was beautifully simple.PhuKhen would arm his hordes to the teeth, load them into catapults, and hurl them over the wall. The losses were expected to be high, but hey, hordes were cheap. Those that survived the flight would engage the enemy in combat. Those that did not - well surely their flailing bodies would cause some damage.

The plan worked and the Bohicans were defeated. Only one of the Bohicans was left standing. He would become known as "The Last of The Bohicans." From that day on, whenever the Mongol Army encountered an insurmountable enemy, Genghis Khan would give the order "Send some of the PhuKhen AV 8ers."This is believed, though not by anyone outside our secret society, to be the true origin of the word Aviator.

PhuKhen's AV8ers were understandably an unruly mob, not likely to be sociably acceptable. Many were heavy drinkers and insomniacs.However, when nothing else would do, you could always count on an AV8er.The PhuKhen Aviator,denied, perhaps rightfully so, his place in history, has been, nonetheless, immortalized in prose.

You hear mystical references, often hushed whispers, of "those PhuKhenAviators". Do not let these things bother you. As with any secret society, we go largely misunderstood, prohibited by our apathy from explaining ourselves.

You are expected to always live down to the reputation of the PhuKhen Aviator, a reputation cultivated for centuries, undaunted by scorn or ridicule, unhindered by progress. So drink up, be crude, sleep late, tell rude jokes in mixed company, and get the job done.

When others are offended, you can revel in the knowledge that YOU are a PHU KHEN AVIATOR.

(History Lesson #13)

Distracted by Cellphone, Airbus Captain Forgets Landing Gear

An Airbus A320 captain is in hot water after investigators found he was forced to abort a landing below 500 feet after preoccupation with his cell phone caused him to forget to deploy the landing gear.

According to the Australian newspaper the Age, the Jetstar captain was sidetracked by incoming text messages as he and the co-pilot began their approach to Singapore's Changi International Airport.

The report maintains that the copilot looked over to find the captain distracted by his cell phone after repeatedly failing to respond the co-pilot's request to set the missed approach altitude.

As the A320 descended through 1,000 feet, the copilot did a scan of the instruments with the feeling

that "something was not quite right," although neither crewmember realized the gear was not down until an automated warning sounded at 720 feet.

The captain then moved to lower the gear, but aborted the landing at around 400 feet after another warning indicated the low altitude. According to the report, both pilots were disoriented and unaware of their altitude, believing the aircraft to be around 800 feet at that moment.

The report said the captain didn't send or read any texts during the approach, and that his preoccupation with his cell phone was just one of a number of factors that played a role in the 2010 incident. Others included the late realization of an autopilot warning light and a cockpit conversation about the Singapore skyline, among other factors.

New President for BVSAC

The BVSAC has a new president.

At the BVSAC AGM, held on 11 October 2014 at the BVSAC Clubrooms at Watts Bridge Memorial Airfield. Wayne Petty was elected the 2014-2015 club President.

Wayne began flying a little later than some – when he was 64. He did his training at the Coominya Flight Training school with John Walmsley and after he was certified (as a pilot), he purchased a Savannah.

Wayne and his plane a Savannah registered 19-5325.

Wayne is a retired builder and lives adjacent to the Watts Bridge Memorial Airfield field (how convenient). He says that he is still getting over the fact that he is now the President. When I asked him what he saw as his priorities over the next 12 months, he quickly replied that his primary task was to continue to build the Club infrastructure and finances to ensure the BVSAC is strong for the future.

FLY-INS Looming

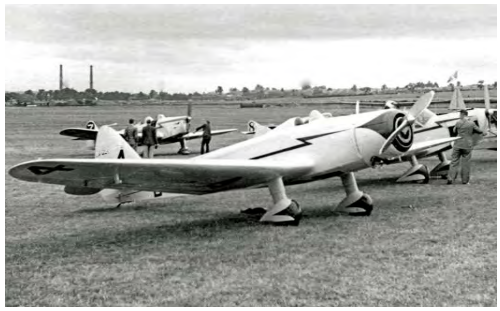
Nov 02	Gympie Aero Club	Gympie Monthly Brekky Fly-in| google calendar
	Caboolture	Wings and Wheels
Nov 08	Murgon (Angelfield)	Angelfield Brekkie Fly-in Murgon

Q: Why do 747s have humps?
A: So the pilot can sit on his wallet.

Student pilot (who forgot to ask for surface wind) "Please pass wind"

Mystery Aircraft (November Issue)

What's this?



Mystery Aircraft (October)

The mystery aircraft in the October 2014 Issue isan Italian Ansaldo S. V. A. 9 BUILT IN 1917.

CONGRATULATIONS

Mal McKenzie

You were the only one to get it. Well done

Jokes for the Month

Flying Dictionary:

Engine Failure: A condition which occurs when all fuel tanks mysteriously become filled with air.

Glide Distance: Half the distance from the airplane to the nearest emergency landing field.

Lean Mixture: Non-alcoholic beer

Parasitic Drag: A pilot who bums a ride and complains about the service.

Range: Usually about 1 mile beyond the point where all fuel tanks fill with air.

Rich Mixture: What you order at the other guy's promotion party.

Service Ceiling: Altitude at which airline cabin crews can serve drinks.

Spoiler: CASA/RA-AUS.

Stall: Technique used to explain to the bank why you car payment is late.

BRISBANE VALLEY SPORT AVIATION CLUB

Christmas Party

29th November 2014

All club members, their families and friends are invited to the Brisbane Valley Sport Aviation Club's end of year holiday celebration - the BVSAC CHRISTMAS PARTY which is being held in the Clubrooms at Watts Bridge Memorial Airfield.

Festivities start at 10am with nibbles and drinks after which a generous two course lunch is served at 12 Noon.

The cost is $25 per person paid on the day. RSVP is essential.

BOOKINGS ARE ESSENTIAL FOR CATERING PURPOSES !!

RSVP by email by 21st November 2014

Wayne & Lyn president@bvsac.org.au

Colibri II (Russian single-seat homebuilt)

Type	single-seat mini biplane
Engine	30 hp
Propeller	4-blade metal 2,43 ft dia
Landing gear	Tri-gear
Length	11 ft
Wing Span	18 ft
Wing Area	65 sq.ft
Wing Aspect Ratio	n.a.
Airfoil	GA(W)-1
Vertical Tail Area	7,66 sq.ft
Rudder Area	2,55 sq.ft
Horizontal Tail Area	7,55 sq.ft
Elevator Area	5,33 sq.ft
Empty Weight	369 lb
Gross Weight	555 lb
Wing Loading	8,53 lb / sq.ft
Power Loading	18,5 lb / hp
Fuel Capacity	4,6 gal
Top Speed	78 mph
Stall Speed	47 mph
Takeoff Roll	733 ft
Rate of Climb	200 fpm
Bldg. Materials	**Wing:** wood, metal **Tail:** wood, metal **Fuselage:** wood, metal

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

1. From the following select the most correct statement.
   A. The Angle of Incidence is the angle between the aerofoil chord line and the longitudinal axis of the aeroplane.
   B. The slower an aeroplane flies the higher is its stall speed.
   C. In a steadyturn with no slip or skid, there is no aerodynamic tendency for the aeroplane to overbank.
   D. In a steady climb lift is greater than weight.

2. In a steady turn with no slip or skid, what is the reaction to the horizontal component of lift?
   A. The tendency to overbank.
   B. Centripetal force.
   C. Centrifugal force.
   D. "G" loading on the pilot.

3. Which of the following most correctly identifies all the drag on an aeroplane not due to the development of lift?
   A. Form drag.
   B. Induced drag.
   C. Interference drag.
   D. Parasite drag.

4. In a climb, what opposes thrust?
   A. Drag.
   B. Weight.
   C. Drag and part of the weight.
   D. Gravity
   E. The rearward acting portion of the total weight force?

5. The parasite drag on an aeroplane at 100 knots is 160 kg. What would the parasite drag be on the same aeroplane at 160 knots?
   A. 320 kg.
   B. 420 kg.
   C. 510 kg.
   D. 640 kg

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

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 06 09 2014 GENERAL MEETING

MEETING LOCATION:	Watts Bridge Memorial Airfield – BVSAC Clubrooms
MEETING DATE:	11th October 2014
MEETING OPENED:	10:40AM
MEMBERS PRESENT:	14
APOLOGIES:	Peter Ratcliffe, David Ratcliffe, Sandy Walker, Scott Meredith, Max Bain, Danny Fowler, Mary Clarke
VISITORS:	2
NEW MEMBERS:	Nil
MINUTES:	September 2014 meeting of the BVSAC Inc. Proposed: Richard Faint Seconded: Neil Bowden Acceptance motion carried.
PRESIDENT'S REPORT:	Newly elected President Wayne Petty introduced himself to the meeting, provided the members with a little of his aviation background and outlined his vision for BVSAC.
SECRETARY'S REPORT:	Richard summarized the incoming and outgoing mail received during the past month. This included insurance matters with Gordon Wilson Insurance, sharing the clubrooms shower facilities with SEQAS, promoting the QVAG Early Aviation Seminar, Aeroclub events, G20 Seminar information, the BVSAC Newsletter & distributing the WBMA BoM meeting minutes.
TREASURER'S REPORT:	Priscilla provided a financial statement summary and advised that the BVSAC ING account balance is $536.45 and that the BVSAC NAB account balance is $414.74 Priscilla tabled financial documents for those members requiring additional details.
WBMA REPORT:	WBMA President Bruce Clarke welcomed Wayne as the new president. BVSAC was thanked for the contribution made to planting the vetiver grass in the treatment area. Bruce updated the meeting on the planning for the Gathering of Eagles 2015 and highlighted the promotional and financial opportunities this would provide for groups such as BVSAC. Bruce spoke about the CASA Aging Aircraft program and how it is making it increasingly difficult to maintain the airworthiness of vintage aircraft resulting in the building of new aircraft which evoke a bygone era. QVAG is holding an Early Aviation Seminar on the 18th October and anyone interested was encouraged to attend. Lastly: Bruce commented most favourably on the continuing co-operation between the groups on the airfield.
BUSINESS ARISING:	Nil
GENERAL BUSINESS:	Glenda Faint asked about a tap and hose so that the trees around the clubrooms could be watered. It was agreed that a suitable hose and reel could be purchased. Moved Richard Faint, Seconded Wayne Petty, carried. Faint's to action. John Innes brought to the meeting's attention problems he has been having with exploding Lithium dry cells and strongly recommended that they not be used in aeronautical devices. Mike Smith brought to the meeting's attention other problems that have been encountered with LiPo (Lithium Polymer) batteries including

explosions and spontaneous fires and strongly recommended that they have NO place in aircraft.

Mike advised of a service bulletin for Rotax 912 engines – SB912-065. The SB deals with sinking carburetor floats and the fire risks associated with this.

Richard Faint advised that the BVSAC meeting dates for 2015 are now on the Watts Website.

Wayne actioned a cleanup around and in the clubrooms and the hangar area.

Floor covering for the clubrooms was briefly discussed with, tiles, vinyl, paint and carpet mentioned.

NEXT MEETING: The next Monthly Meeting will be held on the 1st November 2014 in the BVSAC Clubrooms Watts Bridge at10:00AM
A BBQ lunch will follow the meetings.

MEETING CLOSED: There being no further business, the meeting was declared closed at 11:13AM

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Speed is life, altitude is life insurance.