

# BRISBANE VALLEY FLYER

NOVEMBER - 2016



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



Gyrocopter line-up at Oz Kosh These nine arrived together.

(Photo by Mike Smith)

Wayne Petty (President) 0418-602-560  
Priscilla Smith (Treasurer) 07 3206 3548

Richard Faint (Secretary) 0412 317 754  
Rob Knight (Editor) 0400 89 3632

# - Brisbane Valley Flyer -

## **The Inaugural Oz Kosh - 2016**

By Mike Smith

Thursday 6<sup>th</sup> of October saw Priscilla and me heading south for the first ever OZ-KOSH fly in. At 6500 ft my usual lack of luck was evident in the 20-25kt headwind that was giving us a ground speed back in the mid nineties so a pit-stop at Narrabri to top up with fuel and a cuppa was prudent. Incidentally, Narrabri is a great place to have as a way point for anybody heading down that way. The refueller was so friendly they even brought the fuel truck to us. Great service and payment was with normal credit card. We left Narrabri for Dubbo where our overnight accommodation was waiting - Narromine was booked out.

On Friday morning we hired a car and drove the 40 k's to Narromine. This was better than flying in as we hadn't decided when we wanted to leave for the day and we thought that we might decided to stay until after last light. In the end it was a good choice because, by the afternoon, more than 200 planes had arrived and we would have been departing into much arriving traffic. Being ground-borne, there was plenty to see and we could make the best of it. Incidentally, these arrival numbers were only the beginning - by just 10 am on Saturday there had been 408 arrivals. I don't know the final attendance figure but my guess would be between 450 and 500 aircraft so, as a fly-in, it was very well attended. In addition to these, it is claimed that 2500 people came through the gate over the weekend.

Jim Peters from WSG was there in his twin Comanche. Scott and Chris Hendry had their beautiful Legend on display with another legend that the dealer from W.A. had flown over. These aircraft in particular were the target of intense interest over the weekend.

John and Linda Walmsley flew down in their C180. Bill Finlen flew down from Boonah in his beautifully restored 1930's Leopard Moth, and Kevin and Lyn Walters came down from Lynfield.

Quite a number of aircraft were on display. The line-up included a Sling, Bat Hawk, Bristol, Starfox, various Jabirus including the twin engined version, the Foxbat and Legend. Also a sizeable number of ubiquitous Trikes and Gyros were present.

By Saturday afternoon we were in a proverbial hive of people and planes. Activity was everywhere with new acquaintances forming, old friendships renewing, and the classic coldies in front of the aero club drawing everyone. There were also many trade stalls set up in two big marquees on the field giving people plenty to look at and talk about. Saturday evening was capped off with an awards presentation and B-B-Q, entertainment and oodles of camaraderie.

By Sunday lunch time the field looked comparably empty. The weather was looking great and we, also, decided it was time for us to depart. After the great service we had experienced at Narrabri on the way down, we could not pass up a return visit so we again dropped in for a refresh and refuel.

In all - I think that the weekend was very successful in its organisation, participation, and partnership with other flying groups. I can recommend Oz Kosh to everyone when it is next held.

I couldn't resist taking a pile of pictures over the weekend. A few are reproduced here, one on the cover and more over the page.

## - Brisbane Valley Flyer -



The line-growing on Saturday



Well - it says Jabiru on the engine



The Bat Hawk demonstrator on show



Coldies in the Aero Club forecourt



Scott Hendry's Legend



Me, talking with Tony King and Barry Wendle



Jim Peters PA30 Twin Comanche



Jim Peters, Bill Finlen, and me, with Bill's Leopard Moth

## - Brisbane Valley Flyer -



The always popular Underwing Hotel



Narromine again – heading home

### Low Level and Sloping Airstrip Operations

By Rob Knight

*Note that the following notes are just that – briefing notes passed on without further explanation or air exercises to provide a clearer picture of aeroplane low level and sloping strip operations. All values and percentage changes depicted in this article are rough figures only provided for the explanation of the concepts that I am describing. Because of the variations in pilot and in aeroplane performance, as well as atmospheric considerations, no values are absolute or guaranteed in any way whatsoever. All pilots operating at low level or off unofficial airstrips do so at their own risk. This is not a lesson on how it may be done; it's merely a treatise on the issues pilots training in these operations encounter.*

Part of my instructing career involved training budding agricultural pilots to operate at low level (below 500 feet AGL) and onto and from sloping airstrips. Some slopes were gentle about 3% (1.5 degrees), the worst to about 40% (22 degrees). Like most of life's endeavours, difficulty with this aspect of flying generally diminished in inverse proportion to training and experience, the degree dependent mostly on the individual's attitude.

However, new low level and strip pilots had a number of common issues to overcome and these would be at least as common today as they were then. The most common ones included neglecting to trim accurately, flying approaches both too high and too fast, losing the strip and not being able to find it again, getting so low in a valley they didn't have sufficient climb angle to get back up to the strip in the distance available. When down amongst the trees they flew slipping or skidding turns because they interpreted our aircraft drift incorrectly against the ground, they failed to recognise the increased turn radius required when turning downwind and more. In such an unforgiving environment, any one of these is potentially catastrophic and all stem from a lack of application of basic principles and knowledge that experienced strip pilots consider fundamental.

In no specific order, the first of these principles we'll deal with is that airspeed and turn radius are interrelated. Turn radius for a given bank angle is proportional to the square of the airspeed and so by decreasing the airspeed a pilot reduces the area needed to turn. Take a situation where, at 130 kts in a 30-degree bank, the turn radius is 2600 feet. The aeroplane will need a valley almost a mile wide to execute a 180-degree turn. It's simple maths - 2600 foot radius x 2 = 5200 feet and a nautical mile = 6080 feet. . If the valley being flown in is only ¾ mile wide (4053 feet), an early termination of the flight is inevitable. However, decreasing the airspeed to 70 knots will reduce the radius of turn to 755 feet, which means the pilot can turn through 180 degrees in about one quarter mile of lateral room, or in less than half the width of the same ¾ mile wide valley. Remember, these figures are

## - Brisbane Valley Flyer -

worked theoretical examples only - there is no provision in this simplistic description for air density issues or wind effects (up/down drafts, drift etc.) and I don't include issues such as pilot slip/skid control. To confirm my figures, check using [www.csgnetwork.com/aircraftturnfocalc.html](http://www.csgnetwork.com/aircraftturnfocalc.html). Of course, the added benefit of a lower airspeed is that there is more time to see obstacles and hazards, more time to assess their relevance, and more time to take reasoned, correct evasive action. It's not much help when dodging a tree to immediately fly into a power line that you hadn't had time to notice.

Next, for several very good reasons, it's not wise to exceed a medium angle of bank when flying in valleys, especially when down low in steep sided ones. When manoeuvring in a constricted valley much of the terrain is above and beside the aeroplane, and the pilot does not have the visual horizon reference to which they should be accustomed. For most beginners this is extremely disorienting and confusing, making it decidedly hazardous to "bank and yank" because they are eyeball to eyeball with spatial disorientation. Also, increasing the bank angle beyond 30° rapidly increases the load factor and thus the aeroplane's stall speed if height is to be maintained and there is none to lose.

It can now be more easily seen that slowing down is a key factor to flying in constricted areas, and using a lower bank angle to turn. The lower airspeed that allows the pilot to operate the aeroplane in markedly less geography also allows less bank angles necessary to manoeuvre. But, there's more, the lower bank angle has yet another advantage - in a high winged aeroplane the inside wing usually blocks all view in the direction of turn and shallow bank angles make it easier to diminish this concern.

Another necessary skill is to be able to set the aeroplane up to fly a power-on, steady, steep angled approach, to a precisely located flare point. I use 'steady' meaning an approach that has the aeroplane trimmed and in a position where minimum input of all controls (including power) will result in a safe landing. Unnecessary control input during the approach will indicate piloting judgement errors. A major part of this judgement lies in determining the necessary attitude and power to provide the desired approach airspeed, and approach angle for the aeroplane at its current weight and centre of gravity position. A steep approach angle provides obstacle clearance with less travel distance and keeps the runway in better view. An experienced and aware pilot sets the aeroplane up for the approach and then, whilst checking the ASI regularly for confirmation, listens and feels the aeroplane tell them of any changes to the airspeed status.

This leads to what is arguably the most important ability of all. This ability is paramount in all flights but is EXTRA important in operations at low level and when in unfamiliar situations. This is the knack of being able to make the appropriate inputs to control roll, pitch and yaw without devoting brain time to it. Pilots that still can't keep straight with rudder without having to think about it are a danger because there is no room available for sloppy flying. There are plenty of these pilots, wobbling woefully around at altitude where it clearly doesn't matter, but if they are ever forced to fly low their lack of this intrinsic skill becomes a very real liability. See my piece, "Yaw is no Yawning Matter", in the BVSAC Flyer Issue 29, published for September 2015. This issue is available on the BVSAC website if you want to refresh your memory.

With that pre-amble completed, now we can look at strips themselves. In teaching low level operation and strip flying, much emphasis is put on operating the aeroplane at reduced airspeeds as stated previously. For practicality I used a speed range not exceeding  $V_x$  (best rate of climb speed) and not less than  $V_y$  (best angle of climb speed). The skills that I wanted to see were the pilot's quick attainment and maintenance of the desired airspeed (aircraft trimmed) and of the correct attitude, power, and airspeed to use for an appropriate approach into a strip. Many airstrips are one way so

## - Brisbane Valley Flyer -

once the aeroplane is committed, there are no go-around options; the pilot MUST know how to set up and execute the required approach.

Inexperienced left-seat pilots usually fly up the middle of a valley. While this may appear safer, it isn't because there's no room to manoeuvre (there is only half the potential room to turn) and often considerable turbulence. Flying up the windward side of the valley in the wind shadow area is preferable to avoid the inevitable downdraft caused by the wind descending into the valley on the lee side. If a ridge must be crossed, the pilot needs to know to fly across it at an angle of less than 90° to the ridge. This makes a turn away quicker if an excessive downdraft is encountered or the pilot changes their mind for any other reason. Another consideration is, if possible, to avoid flying away from the airstrip and/or having to turn around a vision-blocking bluff to make an approach. Such locations where these dangers are prevalent are not suitable for training or use OR by other than already experienced strip/low level pilots who can fly the aeroplane without having to think about their actions in doing so.

NEVER fly onto an airstrip without doing a fly-over, your life may depend on it. If the strip slopes, do the fly-over down the slope using at least the  $V_x$  for the aircraft but no more than the  $V_y$ . Experienced pilots often do more than just a single run; they do several runs to make sure their data is good. After all, why waste time – you're a long time dead?

When doing a fly-over, to guesstimate the runway length in metres, I used 60 knots airspeed noted the number of seconds it took to complete the fly-over and multiplied that number of seconds by 30. Thus, if 300 metres was the minimum required, the time to fly the length of the strip had better take me at least 10 seconds.

Note the altimeter reading when crossing the top of the strip and the bottom. Check the surface wind direction if any clues are available (wind shadow areas on dams/lakes are on the upwind side of the water, cloud shadows etc). Remember that the wind velocity may differ between the top of a sloping airstrip and the bottom where the flare will take place. Check for surface mobile obstacles such as cattle/sheep/deer: being non-affixed, these move so are harder to dodge. Check the runway surface for slope changes, drains, wash-outs, fences etc, as well as boulders or wet patches. Take special note of the terrain relevant to the approach line and the overshoot line (if an overshoot is possible.) Plan the approach path and, where available, the overshoot path. Also consider a go-around point. An overshoot might be possible if action is initiated early enough in the approach, so select a geographic overshoot point where one is possible. Be mindful that sometimes airstrips are a commitment as soon as the approach is initiated. If the terrain will stop you getting out – this is REAL commitment so misjudgements are not forgivable. This is not a video game – there are no spare 'lives' if you stuff-up.

A constant feature of inexperienced pilots flying onto sloping strips is setting up approaches that are too high. This is a judgement call and only practice helps. If the altitude of the flare point has been estimated during the fly-over, a level, or near level, approach may be available to ease, somewhat, any judgement crisis.

Wherever possible, keep the strip in sight. If the aircraft is properly configured and established for a steady approach, flying a normal circuit pattern is straightforward but the proximity of rising terrain adjacent to many strips precludes this. This terrain issue causes serious stress as most pilots are hesitant to "get down" into a valley. To operate in such areas it must be accepted that the aeroplane will be flying much closer to the terrain than untrained pilots are accustomed. It must be accepted that the high terrain renders all attitude indicators completely irrelevant. The horizon is now above the top of the windscreen in level flight in many cases.

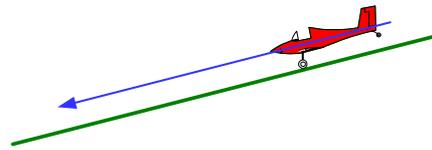
## - Brisbane Valley Flyer -

The bottom line is to know your aeroplane, know yourself, and to have acquired the knowledge and experience to help maximize precision, control, performance and safety when operating aeroplanes in terrain restricted or obstacle restricted areas.

This is an immensely broad subject and impossible to adequately cover in a few pages of text. All I can hope to do is give you, the reader, a taste of the issues that confront a pilot at low level and when flying onto and off short and sloping strips. The number of potential questions it raises vastly outnumbers the number of available answers but the following may answer some of the FAQs. Note that the following are a conceptual guide ONLY and too many other unmentioned factors are present for them to be conclusive. Always be guided by caution – except in an emergency, to not go into an airstrip will always be successful.

### **Sloping Runway Take-Offs – calculating effective runway length adjusted for down hill slope**

Rule of Thumb (DOWN HILL ONLY): when considering the effect of runway gradient, every 1.0% grade equals approximately 10% change in effective runway length. Therefore we can use the following quick calc to ascertain the effective runway length available:



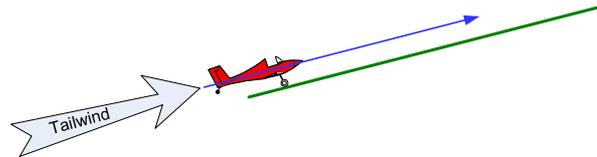
A 3% gradient.= 30% increase in effective runway length =  $500' + (.3 \times 500)$ . This will equate to an effective length of 650'.

A 5% gradient.= 50% increase in effective runway length =  $500' + (.5 \times 500)$ . This will equate to an effective length of 750'.

A 10% gradient.= 100% increase in effective runway length =  $500' + (1 \times 500)$ . This will equate to an effective length of 1000'.

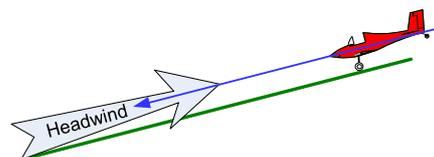
### **Landing uphill with a tailwind:**

Planning to land with a tailwind should be done with great care. Because a 10% increase in groundspeed results in a 20% increase in landing distance, even light tailwinds will greatly increase the resulting landing ground roll. If the runway ends in a drop-off, such as on top of a plateau or along a riverbank, and a tailwind landing is made, the pilot should anticipate an updraft over the drop-off on short final. This updraft can cause the aeroplane to balloon or float further down the runway before making its touchdown, and could be problematic depending on runway length and gradient. Additionally, when landing with a tailwind the pilot will have to fly a steeper approach to compensate for increased groundspeed, which can cause visual illusions that hinder judgment of height and distance relative to a sloping runway. Remember those illusions that I brought to your attention in Issue 41. At low level is where a knowledge and understanding of them really counts.



### **Landing downhill with a headwind:**

A strong headwind is required to overcome the increase in landing roll that a downhill landing creates; if the wind is strong enough to cancel the effects of a large downhill slope, expect serious turbulence on the approach,

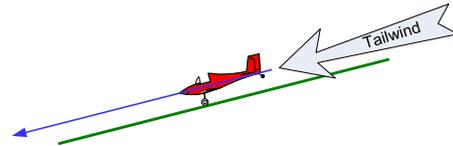


## - Brisbane Valley Flyer -

particularly if there are obstacles such as trees or buildings. If a faster airspeed is used for the approach to compensate for gusts and turbulence, the increase in groundspeed will further lengthen the landing roll. Also, when landing downhill the plane will float, and float, and float. Pilots may find it hard to touch down because the ground keeps dropping out from under the aeroplane. Once on the ground the pilot must count on brakes to stop because they are going downhill. Heavier aeroplanes have more inertia and can be very hard to stop indeed. In AG training I NEVER even demonstrated downhill landings let alone got a low-time left-seater to try one.

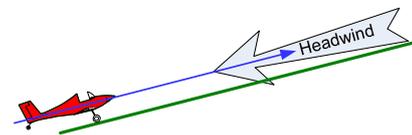
### Downhill Take-off with a tailwind:

Considering that a 10% increase in groundspeed increases the takeoff roll by 20%, and every 1.0% of runway down-slope equals approximately 10% more effective runway, it takes about 1.0% down-slope to counter every 2 to 3 knots of tailwind for most GA aeroplanes and the same should be considered likely in RA Ultralights. Thus, a 6-10 knot tailwind would require at least a 3.0% down-slope to neutralize the effects of wind. If the down-sloping runway ends in a drop-off, the plane may become airborne or fly in ground effect, but will encounter a downdraft over the drop-off once it leaves the runway. Turbulence will often accompany this downdraft, and water below will amplify it. This can be a sticky situation, especially when flying around rugged terrain whether at the same level or in beside a river bed. If no turns can be made and the departure must be flown with a tailwind due to terrain, downdrafts and turbulence may continue along the departure path. The only option a pilot has is to lower the nose and maintain airspeed and try to remain clear of the terrain.



### Uphill Take-off with a headwind:

Based on the relationships of groundspeed and gradient, an aeroplane will generally require a significant headwind to counteract more than a slight uphill slope. If the runway is short, choose a takeoff abort point; if the aeroplane is not in ground effect and accelerating by that point it may not out climb the gradient. Aborting a takeoff uphill provides more rapid deceleration and less distance than a runway without slope. Anticipate wind shear/gradient and turbulence over trees or obstacles after departure. Also, when taking off uphill, chances are the terrain beyond the departure end of the airstrip rises, and may exceed the climb capability of the aircraft. Not a good choice if any other option exists.



I always used great caution when mixing wind and runway gradient. Many runways with gradients have surrounding obstacles and terrain that can exacerbate the effects of downdrafts, wind shear, and turbulence on approach and departure. On short runways, especially with obstacles in the approach or departure path, landing and taking off with more than a light wind is seldom a good idea and only likely to be appreciated by the aeroplane repair shop guys.

Happy flying

----- ooOOoo -----

*Remember: you don't HAVE to take-off, but, if you do THEN YOU WILL HAVE TO LAND. So think carefully before you execute the former to avoid a compulsory latter.*

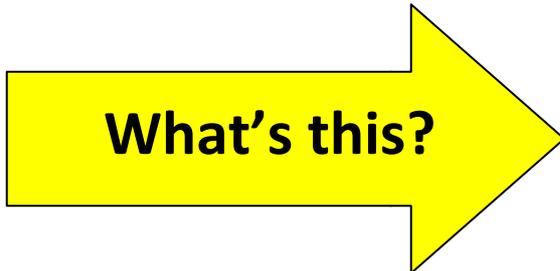
# - Brisbane Valley Flyer -

## FLY-INS Looming

<b>Nov 5</b>	Childers YCDS	Childers Quarterly Fly-In Breakfast (See Note 1)
<b>Nov 6</b>	Sunshine Coast, YBSU	Sunshine Session -
<b>Nov 19</b>	North Stradbroke Island	Dunwich/Straddie Fly-In Breakfast
<b>Nov 27</b>	Watts Bridge, YWSG	Watts For Breakfast <sup>†</sup>

**Note 1:** Contact the Club for catering – PH. 0428 714 690 or EMAIL: [isis.flying.club@gmail.com](mailto:isis.flying.club@gmail.com)

## Mystery Aircraft (November Issue)



## Mystery Aircraft (Last Issue)



This mystery aircraft from last month is a Taylorcraft BC-12-d from 1946. These are the grandmother to the Piper series of aircraft after Bill Piper purchased the Taylor Craft company.

The first correct identifier was Mal McKenzie. Well done Mal.

¼ Share for sale - \$4500

A share in a WB Drifter 582 is being offered. The aircraft is based at Lynfield west of Brisbane.

¼ share price of \$4500 (includes hangarage

Contact Kev Walters Tel 0488 488 104



## - Brisbane Valley Flyer -

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

- From the following select the most correct statement/s.
  - Induced drag is highest in level flight at the aeroplane's minimum level flight speed.
  - Induced drag rises as the angle of attack rises.
  - Induced drag is caused by span-wise airflow.
  - All options are correct.
- For safe flight, the centre of gravity should be?
  - Behind the Centre of Pressure.
  - Ahead of the Centre of Pressure
  - Aligned with the Centre of Pressure
  - In parallel with the Centre of pressure.
- Select the correct statement(s)
  - In level flight, lift = drag and thrust = weight.
  - In a climb, lift is greater than weight.
  - In a turn, lift is greater than weight.
  - In a glide, lift = the total reaction of drag and weight.
  - C and D are both correct
- By definition, drag acts:
  - Parallel to the chord line.
  - Perpendicular to the normal axis.
  - Opposite to the direction of motion.
  - Along the line of total reaction.
- A pilot on approach for runway 06 accepts that surface wind velocity is 030 Magnetic / 20 knots. He correctly estimates his crosswind component as being which of the following?
  - 5 knots.
  - 10 knots.
  - 12 knots.
  - 15 knots.

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

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

--ooOOoo--

## - Brisbane Valley Flyer -

### Aircraft for Sale

Skyranger Swift. First flown 5<sup>th</sup> Feb 2013  
TTIS:-205 hours, Engine: Rotax 912S  
Prop: Warp Drive, Instruments: MGL Extreme LCD  
Radio: MGL V6, GPS: Airbox Foresight 7 Inch LCD  
Cruise: 85 Knots IAS at 5,000 RPM  
Fuel flow: 15 litres per hour at 5,000 RPM  
Max fuel: 90 litres, Seats: Two  
Rego: Current to Jan 2017.  
**Price: \$ 39,000 Neg.**  
Hangared at Watts Bridge (YWSG)



Contact Mal on 0414723049 or  
Email: [mmc80789@live.com](mailto:mmc80789@live.com)

### Aircraft for Sale

Low time (362 hrs TT) Hughes 582 Rotax  
powered Lightwing. Reluctant sale (due to  
health reasons). Comes with Maintenance  
Release. \$27,000 (neg). - Contact Mal Joyner at  
Gatton Airpark 0417 077 055



# For Sale

Phone Richard/Glenda on 0412 317 754

Flown only by a  
sweet little lady  
on weekends



\$9999.00 (negotiable)

Hours engine & Airframe -0 320  
Cruise 70-75 knots @ 15 l/hr

Fan cooled Rotax 503 DCDI  
6 hours endurance

With brakes  
Registered

## - Brisbane Valley Flyer -

### House for Sale

Just 3 Minutes from Watts Bridge - 5 acres of land plus timber home with 3 bedrooms, 2 bathrooms, open plan kitchen, lounge and dining. 20,000 gals rainwater. Built 2009 and used as holiday home. As new. High aspect and good views. Contact: 0732897310 or email: thomasvall@dodo.com.au



Once upon a time ...

The king called on the royal weather forecaster and inquired as to the weather forecast for the next few hours. The royal weatherman assured him that there was no chance of rain for at least 4 days. So the king went fishing with his wife, the queen. On the way he met a farmer on his donkey. Upon seeing the king the farmer said, "Your Majesty, you should return to the palace! In just a short time I expect a huge amount of rain to fall in this area."

The king was polite and considerate, he replied: "Thanks for your concern, but don't worry. It's not going to rain today. I hold the palace meteorologist in high regard. He is an extensively educated and experienced professional. And besides, I pay him very high wages. He gave me a very different forecast. I trust him."

So the king continued on his way. However, a short time later a torrential rain fell from the sky. The King and Queen were totally soaked and their entourage chuckled behind their hands upon seeing them in such a bedraggled condition.

Furious, the king returned to the palace and gave the order to fire the professional. Then he summoned the farmer and offered him the prestigious and high paying role of royal forecaster.

The farmer said, "Your Majesty, I do not know anything about forecasting. I obtained the information about rain today from my donkey. If I see my donkey's ears drooping, it means with certainty that it will rain very soon." So the king hired the donkey instead.

And thus began the practice of hiring dumb asses to work in the government and occupy its highest and most influential positions.

The practice remains unbroken to this day...

# - Brisbane Valley Flyer -

## **BRISBANE VALLEY SPORT AVIATION CLUB Inc.**

**Minutes of the BVSAC Annual General Meeting held on the 10<sup>th</sup> October 2015.**

**Location:** Watts Bridge Memorial Airfield – BVSAC Clubrooms.

**Meeting Opened:** 10:26AM

**Members Present:** 13

**Apologies:** Sandy Walker, Scott Meredith, Peter Ratcliffe, Ian Ratcliffe, Glenda Faint, Neil Bowden, John Innes, Rob Knight, Mike Smith, Liz Cooke.

**Visitors:** 3

**Minutes:** Minutes of the 2014 AGM were voted as a true and correct record.  
Moved Priscilla Smith, Seconded Max Bain. Carried.

**Business Arising:** Nil.

**President's Report:** Wayne Petty reported it had been a pleasure to be the BVSAC President for the last 12 months and that he had enjoyed the company of the members. He was pleased to report that the BVSAC clubrooms were at long last completed.

**Secretary's Report:** Richard Faint was pleased to report that BVSAC was in good shape, retaining the membership numbers from previous years. There are currently 64 members. He was of the opinion that this shows the club is relevant to the membership. The club again supported the Watts Bridge All-In Fly-In and the Gathering of Eagles, both of which had been highly successful. The BVSAC Fun Fly Poker Run was held in July with more than 30 participants.

Richard drew special attention to the impending purchase by the WBMA of the land upon which the airfield is located. BVSAC strongly supports this and is actively raising funds to assist with the airfield land purchase.

**Treasurer's Report:** Priscilla Smith tabled the audited financial statements and reported:

The club has had another good year, although net income was down this year, we still achieved a Surplus of \$3,816. This is a 42% reduction on last year's outstanding result, but is still up 35% on 2013.

Major capital outlays include the replacement inverter, materials to complete the clubhouse cupboards and the new clubhouse flooring. Thank you to all members who have contributed to the maintenance of the clubhouse and hangar, thereby keeping our costs down. A special thank you goes to Wayne for the many unpaid hours spent finishing the clubhouse cupboards and laying the new flooring, which has given us all such a great environment to gather in and spend time.

Hangar income was down 5.2% from last year due to a lower occupancy rate and memberships were down 20%. Also solar credits were down 71%, due to the converter being out of action for a period of time.

Net income from food and drink was up 25%, due the great results from selling drinks at airfield events during the year. Thanks to all who helped with drink sales.

## - Brisbane Valley Flyer -

As shown in the Auditor's report (which has been distributed around the room); starting from the top, you will see net income from:

➤ Memberships	\$2,600.00
➤ Hangar	\$2,331.20
➤ Food & Drinks	\$1,783.40
➤ Solar Credits	\$ 346.80
➤ Other fundraising	\$ 170.00
➤ Donations	\$ 70.00
➤ Interest	\$ 16.56

Giving a gross surplus of \$7,317.96

Operating expenses were made up of:

➤ Clubhouse expenses	\$3,213.10
➤ Bank fees	\$ 8.00
➤ Memberships paid	\$ 218.00
➤ Postage	\$ 14.00
➤ Fees & charges	\$ 48.25

Giving us a net surplus of \$3,816.61

At 30<sup>th</sup> June, Cash on hand was \$5,143.16 and the total of the association's assets had increased to \$112,509.59.

I congratulate everyone for contributing to the continued progress of our club and its facilities. In conclusion, I would like to thank Melissa Ratcliffe for auditing our financials promptly and free of charge.

### Election of Office Bearers

All executive positions were declared vacant.

Wayne Petty was re-elected unopposed to the position of President.

Nominated: Bruce Clarke                      Seconded: Vern Grayson

Richard Faint was re-elected unopposed to the position of Secretary.

Nominated: Vern Grayson                      Seconded: Max Bain

Priscilla Smith was re-elected unopposed to the position of Treasurer.

Nominated: Mary Clarke                      Seconded: Vern Grayson

Richard Faint was re-elected unopposed to the position of WBMA Delegate.

Nominated: Wayne Petty                      Seconded: Priscilla Smith

**Meeting Closed:**                      There being no further business, the BVSAC AGM for 2015 was declared closed at 10:40AM.

--ooOOoo--

Note that the BVSAC President Wayne Petty and the BVSAC Secretary Richard Faint are not standing for re-election to their BVSAC committee positions this year. As both offices are falling vacant please consider your nominations for these to positions