

# BRISBANE VALLEY FLYER

SEPTEMBER - 2013



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



Two Harvards display at Omarka in New Zealand earlier this year.  
(Image supplied – Thanks to Peter Freeman)

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### NOTICE TO MEMBERS

Please be advised that the next BVSAC meeting day is Saturday the 7th September which is also the date of the Federal Election.

To give members time to vote and then attend the meeting the meeting time has been moved to **12:00 pm**.

### The Sound of Silence

All pilots are tested. Not just during training to assess their level of competence, but also on every flight they ever do. Fortunately on most flights it's whether they make a good landing at the end but on every flight there's the chance, not a great one I'll admit, but still a chance they'll experience an engine failure.

There are two types of engine failure. One is a partial failure where engine power reduces and may fluctuate with or without alarming vibration and this is the greatest test because far more decisions must be made in this event to maximize the chance of achieving the best outcome – a success and safe landing in the best place considering the engine problems and the terrain available. The other is the total engine failure where blade fade stops the prop in front of the window, and an eerie silence settles across the aircraft. It is this type that is the topic of this treatise.

In my experience as a pilot, flight instructor, and flight examiner, several seconds will pass before it sinks in to any pilot that something is not right. The expected is always obvious but nothing is obvious to a pilot in the first few seconds after silence strikes unexpectedly. Most pilots spend time, perhaps up to 10 seconds, assessing the sudden change before they realize what is different and begin to respond to the new situation. The major difference is the experience level of the pilot – experienced commercial pilots on proficiency flight tests react and respond in much less time than most barely current private pilots when not expecting the engine to fail. If the pilot has been warned that he (or she) is about to get their forced landing the test becomes a mechanical exercise for the pilot to display to the instructor or examiner that they can follow a set of ritualized actions and judgements in a theoretical environment. It is more realistic to the examiner if the engine fails whilst the pilot's mind is on other things.

So what should a pilot do in the event of such a loud silence? Obviously the stage of flight where it occurs will have a profound effect on what is available. An engine failure at 5 feet above a runway on take-off leaves little option but to land straight ahead. In fact the wheels will probably be back on the ground before any pilot is fully cognizant of the total scope of the situation whereas when experiencing an engine failure at 8500 feet an hour after departure, there is (relatively speaking) time to spare.

Assuming time is available, then, what are the immediate actions for a pilot to undertake? This is simple. With no engine power, the aeroplane will immediately begin to slow down so lowering the **NOSE TO THE GLIDE ATTITUDE** is a first logical first action. OK, Then what?

If the aeroplane has a carburettor heat system then **IMMEDIATELY APPLY CARBURETTOR HEAT**. The engine is cooling rapidly and soon there will be no heat available if the system utilizes heat from around the thin-walled exhaust system. Note that the **THROTTLE** should be **LEFT ALONE** at its current position – do not close it! Closing the throttle will create a sudden and substantial drop in air pressure inside the carburettor throat and this can lead to ice forming where none previously existed or aggravating a build up already there. Also, with the throttle closed, very little air will pass through it so its throat will be exposed to very little heated air. Obviously applying the

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carburettor heat to a partly opened throttle will maximize the uptake of what heat is available as the heated air passes through the carburettor throat. If fitted, also check the mixture control is in the fully rich position.

Where fitted, the **FUEL PUMP** should now be turned **ON**. Don't start looking for fuel pressures or at fuel quantities – just get the pump turned on. It will support any engine driven pump and help drive fuel through then lines to the engine. If the aircraft has a single tank and a fuel cock, now check that the **FUEL COCK** is turned **ON**. If the aeroplane has multiple tanks then **CHANGE TANKS**; then, if fuel exhaustion is the underlying cause of the failure, fresh supplies are immediately available, and you have maybe two pumps restoring the petrol level in the carburettor to most quickly restore engine power. **TRIM FOR THE GLIDE ATTITUDE**.

If engine power has not been restored the problem is probably not a simple one. Now is the time to **PLAN** for the worst. **FIND THE WIND VELOCITY** at ground level. Away from an airfield, this is best done by for looking for smoke or wind waves across long grass or farmers' crops. Dams will have the least ripples on the upwind edges. If there are neither, cloud shadows or recalling past wind drift affecting the aeroplane might help.

Now, where to land? Obviously the chances of 2000 feet of black bitumen with a couple of windsocks is unlikely so pilots must just settle for the best of what's left.

Where to look for a field is a good question. A quick scan of the area around the aeroplane is a good place to start and, for most light aircraft, any area below 45° to the horizon will be within easy gliding distance. Above 45° and it may be necessary to consider the wind direction before deciding whether it is within gliding range and the aircraft can be maneuvered to land in it. Remember – gliding range increases when flying downwind.

Which field? Herein lies a mighty big question. In essence, there are but three types of fields seen from the cockpit – green ones, light creamy-brown ones, and dark brown ones. These can immediately be reduced to two types – all dark brown fields which should be discarded because they are usually ploughed or prepared for seeding and are either too rutted or too soft to land on.

Green fields maybe a little better. If they have a short crop or a grass surface they can be excellent but the green might be from a crop of corn or sugar cane and these can cause a nose-over after landing. To gather an impression of the actual surface, look along the edges and corners of the field and check the apparent texture. Tall standing crops will usually give an impression of their height and the character of their surface.

This leaves **LIGHT BROWN FIELDS** and, while **GENERALLY THE BEST**, one should be aware that light brown fields can be dark brown fields that have dried out and may still retain their unfavourable attributes. Otherwise they are usually OK. With a solid supportive surface and easily seen obstacles such as hay bales, plan to pass diagonally through the pattern and check where you believe that you will flare and where you will eventually stop.

Now that the **APPROACH AND LANDING** has been **PLANNED**, the pilot should **SELECT** the **1500 FT AGL GEOGRAPHICAL AREA** on the downwind leg side of selected field, at the upwind end of the runway and head towards it in such a manner that the aircraft will be at 1500 feet AGL in that area.

Now there is time to do carry out a more in-depth check of the engine. **CHECK FUEL PRESSURE** and **FUEL QUANTITIES**. If these are normal the problem doesn't lie with fuel. **CHECK THE MAGNETOS/CDIS** by switching between them. Ensure the **FULLEST TANK** is selected. **CHECK FOR PARTIAL POWER THEN IF NO PARTIAL POWER**, close the throttle.

Transmit **MAYDAY** and **BRIEF PASSENGER(S)** and ensure **HARNESSES** are **TIGHT**.

Turn **MAGS/CDIS OFF**, **FUEL PUMP OFF** **FUEL SELECTOR OFF**. Turn **MASTER(s) OFF** if electrical system not further required. **UNLATCH HATCHES** as appropriate.

The pilot should now check again the **PROGRESS TOWARDS** the **1500 FT AREA** and **SELECT 1000 FT AGL AREA** abeam the finals end of the selected runway and at the end of what would be a close downwind leg. Continuing to **FLY**

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TO the **1500 FT AREA** and then to the **1000 FT AREA**. Carry out the **DOWNWIND CHECKS** to ensure the brakes are not parked and the harnesses are tight.

At the **1000 FT AREA**, turn and **MAKE A BASE LEG**. If the pilot is sure of getting into the field **APPLY FLAP**, as much as the pilot feels comfortable with. With the selected field now in the 10-o'clock position, the aircraft heading can be adjusting to make the appropriate distance to fly to the threshold, aiming to **LAND A QUARTER WAY INTO THE FIELD WITH FULL FLAP** (or use sideslip to steepen the final approach when established) make you way into the field and land.

Emergency over. Listen, the silence has gone. The birds are singing.

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## Message from Archer Falls Airfield – Aviator’s Paradise –

Please feel free to email us with any query, or log on to [www.archerfalls.com.au](http://www.archerfalls.com.au) relating to our impending Fly-In planned to be held on October 5/6 2013 We look forward to seeing you, and your members, friends and families, please feel free to pass out information on the event to your contacts, as we strive to exceed the \$10,000 funds raised for RFDS in 2012. Cheers for now, We hope you are considering flying into the 4th annual ARCHER FALLS AIRFIELD FLY IN DRIVE IN, an event in partnership with Wings of Life, Kilcoy Lions and local business and community raising funds for RFDS.

ARCHER FALLS AIRFIELD FLY IN DRIVE IN,  
Contact Edith 0497 180 343, ON BEHALF

Ron Field,  
Archer Falls Airfield - Aviators Paradise,  
1253 Neurum Road,  
Mount Archer, QLD 4514  
Email [archerfallsairfield@gmail.com](mailto:archerfallsairfield@gmail.com)



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**Archer Falls, QLD**

Warning: It is a requirement to check air strip condition and details with owner

Variation: 10.7° E

Turn left after T/O to avoid horse yards

On missed approach: immediate LEFT turn, climb to circuit height

Beware mechanical turbulence

Surrounded by paddocks and sparse housing

NORTH TO THE TOP - DRAWING NOT TO SCALE

<b>Elevation:</b>	350 Feet AMSL	<b>Time Zone:</b>	UTC + 10
<b>GPS Position:</b>	26° 58' 500" South 152° 40' 009" East	<b>Area Forecast:</b>	
<b>VAC Chart:</b>	Brisbane (3340)		
<b>Owner/Operator:</b>	Archer Falls (07) 54963507, <a href="mailto:president@wingsoflife.com.au">president@wingsoflife.com.au</a>		
<b>Strip Directions:</b>	18-36		
<b>Strip Lengths:</b>	700 M		
<b>Strip Surface:</b>	Unsealed - grass		
<b>Windsock:</b>	Yes		
<b>Strip Markers:</b>	Nil		
<b>Lighting:</b>	Nil		
<b>Fuel:</b>	Yes - contact Ron Field if fuel required 0408 195497 (mobile)		
<b>Special Procedures And Remarks:</b>	CTAF 126.7, Brisbane Centre 129.0 (on the ground). Beware power lines, trees, hangars, kangaroos, birds and model aircraft. Beware high terrain (1780 feet) from the west around to the south east and the associated mechanical turbulence. This airstrip can be demanding in stronger winds. All aircraft are required to conduct at least of 3 circuit legs (1000 FT AGL minimum) - all landings run way 18, all take offs run way 36. The airstrip slopes down to the north, pilots are required to commence take off roll down the mound at the southern extremity of the run way. Noise sensitive areas to north, east and west, avoid flying directly over houses. All operations at the risk of the pilot. Permission required prior to use. Website: <a href="http://archerfalls.com.au/">http://archerfalls.com.au/</a> .		

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**Archer Falls, QLD**

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## No Small Task

### There's no such thing as a minor detail in aircraft maintenance

The following article is provided to recognize all of the professionals in our industry who continue to realize how important all of our jobs are in this industry. I found the author and received permission to reprint this article. Every person in this industry should be able to relate to this article, no matter whether you are an aviation maintenance manager, a foreman, crew chief, technician, aircraft groomer, or aircraft fueller. Being a conscientious worker and taking pride in every job that you do is critical to ensuring the airworthiness of every aircraft every day. As you read the following story, think about what you would do if you were in Doug's shoes.

### The Spirit (Downloaded from the Internet)

It was Doug's first job. The pay was good, 20 cents per hour and it allowed him to work around airplanes. His job was to sweep the floor, save dropped rivets, nuts, and other undamaged hardware, and put the trash into an empty oil drum with one end cut out. Mahoney Aircraft Company was located on Dutch Flats, and was close enough to San Diego Bay for Doug to smell the ocean. A tall, lean pilot taxied a brand new airplane from its final test flight, parked it on the concrete apron, and shut down its engine. Then he climbed out and got into a black touring car and drove off with the Chief Engineer.

The working crew closed their tool chests, picked up their lunch boxes and headed home – all but the shop foreman, the two linemen, the night watchman, and Doug. The foreman told the line crew exactly how much fuel to put into the main tank. Doug helped the roll out five drums of aviation gasoline from the fuel shack, climbed a stepladder holding a fuel funnel and a twelve inch long rubber hose extension. Doug held the funnel while the linemen poured in the fuel, five gallons at a time. He called out the number of gallons as each lineman carefully measured it into the tank. As he removed the funnel after the last gallon was poured, he accidentally dislodged the extension hose, and it fell into the tank. The Lineman hadn't noticed and Doug deliberated – the hose was too large to block a gas line and he might be fired for carelessness. Jobs were hard to come by so was disclosing the error worth the risk?

He tightened the fuel cap on the tank and climbed down the ladder. Still holding the funnel he helped them clear away the drums and the other equipment. When everything was safely locked away in the fuel shack they went home to the boarding house they shared.

Doug couldn't sleep. The lost hose was in the front of his mind and the recollection of its disappearing into the tank interior just wouldn't settle. He tried to rationalize the situation – what was the issue – the hose wouldn't be found for months – if ever, it could block anything, but the image just wouldn't let him rest. His mind wandered to how the engineers and mechanics had poured over this airplane – making everything perfect. Any part less than perfect was removed, discarded, and rebuilt until it was. Still he couldn't sleep. Was that fuel hose the only part of the airplane that wasn't perfect? The only answer was "Yes", and it was his fault!

The clock in the parlour chimed midnight. He rolled over. The house creaked and he rolled over again.

Shortly after he got up, quietly dressed, and walked the mile to the foreman's house. He had to knock loudly and call out several times before someone stirred and several minutes later the door opened. The foreman stood in front of him, sleepy and dressed in his pyjamas. "Yes", he inquired.

Doug stammered, very aware that in the next few minutes he might be out of work. "I work for you at the factory and something happened tonight that I feel I should let you know about.

The foreman, recognizing him, got friendlier. "Come on it, Doug. What the hell is it that it can't wait until the morning?"

Doug told him about the hose in the tank. "I don't see how it can hurt anything but I just had to let you know about it".

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The foreman was silent for a moment, lost in thought, then he jerked into life. "Get those linemen out of bed. Then the three of you meet me at the airplane – we'll be working all night."

Doug ran back to the boarding house at Ketner and Maple. He woke the linemen who were most unimpressed, yawning and complaining as they dressed. Doug cranked the Model - T and they departed for the factory. It was two am. The silver airplane stood silent and dignified in the moonlight, just where it had been left in the care of the night watchman.

"Get the hand pump and five empty drums," ordered the foreman. "Let's get the gas out of that tank."

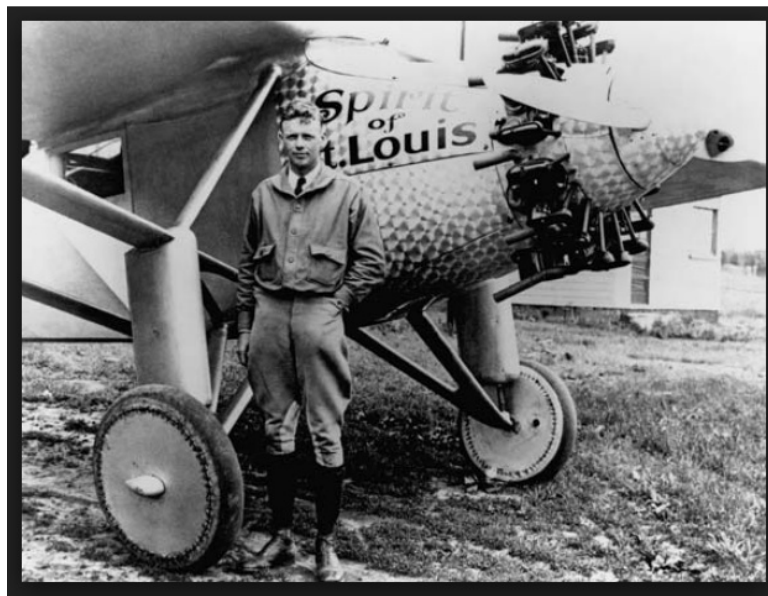
For the next three hours, taking turns, they cranked the pump handle until the fuel level in the tank had fallen enough for the foreman to see the hose with a flashlight. He fished it out with a coat-hanger then ordered the removed fuel be filtered and the tank be returned to its former fuel level.

The foreman dropped the hose into a five gallon glass bottle and filled it with fuel. He capped it and set it in a back corner of the fuel shack. He turned to Doug.

"You're fired." But if you come back tomorrow I'll hire you at 25 cents an hour. Now all three of you go home and grab some. Be back at noon if you want to see this aircraft again."

The three skipped breakfast the following morning, returning to the factory long before the midday deadline. Doug was especially pleased that he hadn't really been fired, but had, instead, gay a pay raise. Standing on the apron they watched the tall, leant pilot, Charles Lindbergh, climb into the airplane, now with the title, "Spirit of St Louis" lettered painted onto its cowling. Then they watched as he took off from Dutch Flats and disappeared eastwards over San Diego. The date was May 10, 1927. The San Diego Sun carried the story. On May 2, the tall lean, quiet pilot took off from New York. Thirty three hours later he landed in Paris, France, on the other side of the Atlantic. Every newspaper in the world carried the story.

Later that foreman called Doug. "Get that glass bottle with the hose from the fuel shack and bring it to me." The rubber hose was gone, disintegrating into a sticky black gob of goo. It would, almost certainly, have caused an unexplained loss of a beautiful new airplane and a tall, lean pilot somewhere over the Atlantic.



Charles Lindbergh and his Spirit of St Louis before departing Roosevelt Field in New York for Le Bourget Field in Paris, France, on the first successful solo flight across the Atlantic Ocean.

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### FLY-INS Looming

September 6/7	Birdsville Races, Birdsville
September 7	Wings over Warwick
September 7/8	Goondiwindi Fly-in
September 9-11	Adels Grove, QLD – Cessna 182 Assn Fly-In
September 14	Murgon, Burnett Flyers Breakfast Fly-In
October 5/6	Archer Falls Airfield - Aviators Paradise – Fly-In – Drive-In at Archer Falls Airfield

### Photo Competition

This month's winner is.....

Nobody sent one in!

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## Mystery Aircraft (September Issue)

Clue: An American aircraft.

This is aeroplane designed for private and commuter use.

STOP – STOP – STOP – STOP - STOP  
There is a prize for the first person to email me this month's correct answer – After Dark Technology Pty Ltd has generously donated an 8GB USB memory stick for the September winner.



## Mystery Aircraft (August Issue)

This is a Bennet Airtruck, three of which were built in Te Kuiti in New Zealand. It was the forerunner of the Transavia Airtruck built here in Australia. Both were designed by Luigi Pellerini.

As there was no correct response received for this aircraft in August the After Dark Memory Stick will be added to the September prize and the September BVSAC winner will get TWO sticks.

C'mon – get cracking, then!

## Joke for the Month

Arguing with RA-Aus is like wrestling with a pig in the mud, after a while you begin to think the pig likes it.

More definitions:

De-Icer	De person wat puts da ice on da wings
Flight Instructor	An individual of dubious reputation, paid vast sums of money to impart knowledge of questionable value and cast serious doubt on the coordination, intelligence, and ancestry of student pilots.
Flight Plan:	A scheme to get away from home to go flying.
Glider	An aeroplane after running out of fuel.

Quotes (or, "There's wisdom in the air"):

I am not afraid of crashing, my secret is - just before we hit the ground, I jump as high as I can.

— Bill Cosby

## BirdsiPhotography

Want an air-to-air shot of you flying your dream machine? It's easy to arrange and will cost less than you might think. Grab the phone and contact Peter Davies or Rob Knight on 0400 89 3632, or email [kni.rob@bigpond.com](mailto:kni.rob@bigpond.com)





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

1. The POH for an aeroplane advises that it has a  $V_s$  of 37 knots. Under what circumstances will the aeroplane stall at that speed?
  - A. At all times and in any attitude.
  - B. In straight and level flight.
  - C. In a turn (or climb).
  - D. In a spiral dive.
  
2. Which of the following will cause the stall speed in an aeroplane to increase?
  - A. Level or climbing turns.
  - B. A steep climb
  - C. A spiral dive
  - D. Using excessive aileron at low speed.
  - E. A, C & D.
  
3. When the correct QNH value is set on an altimeter subscale it will:
  - A. Read 0 feet at sea level.
  - B. The altitude of the aircraft above aerodrome level.
  - C. Read aerodrome height above sea level when at that aerodrome height.
  - D. A & C are correct.
  
4. When established in a steady climb at a constant airspeed:
  - A. An aeroplane's lift is greater than its weight.
  - B. An aeroplane's total thrust equals its total drag.
  - C. An aeroplane's lift is less than its weight.
  - D. An aeroplane's lift equals its weight.
  
5. What causes compass deviation?
  - A. The angular difference between true north and magnetic north.
  - B. Turning and speed change errors.
  - C. The variation between isogonals on an aviation topographical chart
  - D. The aeroplane's unique magnetic signature.
  
6. Does an increase in aeroplane weight change an aeroplane's best lift/drag ratio in the glide?
  - A. Yes, but only in a turn.
  - B. No, it just needs to glide at a slightly faster IAS.
  - C. Yes, at all times within its performance envelope.
  - D. No, so long as the pilot adjusts the trim correctly.

ANSWERS: 1. B, 2. E, 3. D, 4. C, 5. D, 6. B.

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

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# BRISBANE VALLEY SPORT AVIATION CLUB Inc.

### MINUTES OF THE GENERAL MEETING HELD 3RD AUGUST 2013

**MEETING LOCATION:** Watts Bridge Memorial Airfield—BVSAC clubrooms

**APOLOGIES** Richard Faint, Glenda Faint, Malcolm McKenzie, Scott Meredith.

**VISITORS:** Nil.

**NEW MEMBERS:** Nil.

**MINUTES:** June meeting. Proposed: Mike Smith, Seconded Bruce Clarke. Accepted.

**Presidents Report:** Neil advised that he would be away for the next two meetings  
The poker run held in July was very successful, with possibly a record number of participants, and a perfect day weatherwise. The Christmas in July night at the Aerobatic club that evening was also a great night.

**Secretary's Report:** As Richard was absent there was no report.

**Treasurer's Report:** Priscilla advised that the BVSAC bank balance is \$17441.20 and provided a summary of income and expenses.

**WBMA REPORT:** Bruce advised those flying at Watts that there is a soft spot near the end of threshold of runway 30 and to take care in that area. Works are in progress near the front gate to reinstate the model aircraft area and it is hoped there will be some models flying soon.  
Gathering of Eagles will be held on the 31<sup>st</sup> August. The airfield is in great shape thanks to the work of the Volunteers.

**General Business:** Bruce advised that CASA had arrived at the field recently to conduct drug and alcohol testing, however there was no aircraft operating at the time. CASA advised that they would return in the future.  
A robust discussion was held regarding membership of WBMA. All people using the field regularly whether flying in or driving in are required to be members of WBMA. This is really a fairly low cost for the quality of the facilities provided. All BVSAC members are asked to please join up if you are not already a member, and help support the great airfield we have.

**Next Meeting:** The next meeting will be Saturday 7<sup>th</sup> September **at 12 noon** which is polling day, so you will have plenty of time to vote before coming to the meeting. A BBQ lunch will be held following the meeting.

**Meeting Closed:** The meeting was declared closed at 11.25 am.

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