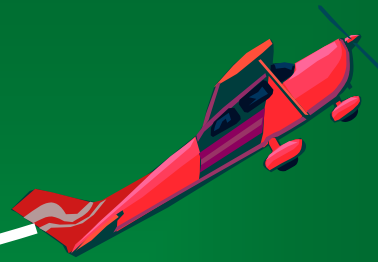


# Aerobat



Issue Number 5

October 2010

ALL ARTICLES/QUESTIONS/  
COMMENTS, SEND AN EMAIL  
TO:

[editor.aerobat@gmail.com](mailto:editor.aerobat@gmail.com)



# AEROBAT

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OCTOBER 2010

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## From the editor's desk...

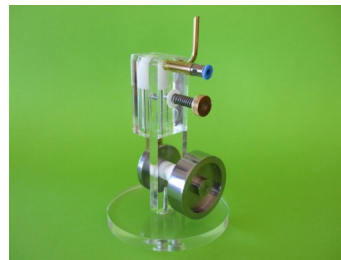
Well, spring is upon us now, so we are all waiting eagerly for the sun and the blue skies to return - itching to get flying again.!

In the meantime I have been ferreting away in the workshop late at night, during all the sleet, hail, and almost snow!

The project this time is my school tech project, which is a small steam engine - made mostly of clear Perspex - so you can see the innards at work.

There was an article in 'The Shed' magazine,

about a student at a college who had fantastic welding talents, but hardly allowed to touch so much as a hammer. This came as no surprise to me



*Finished tech project - a steam engine from plastic.*

however - as I started my tech project at the start of the year, and after fighting through a mirage

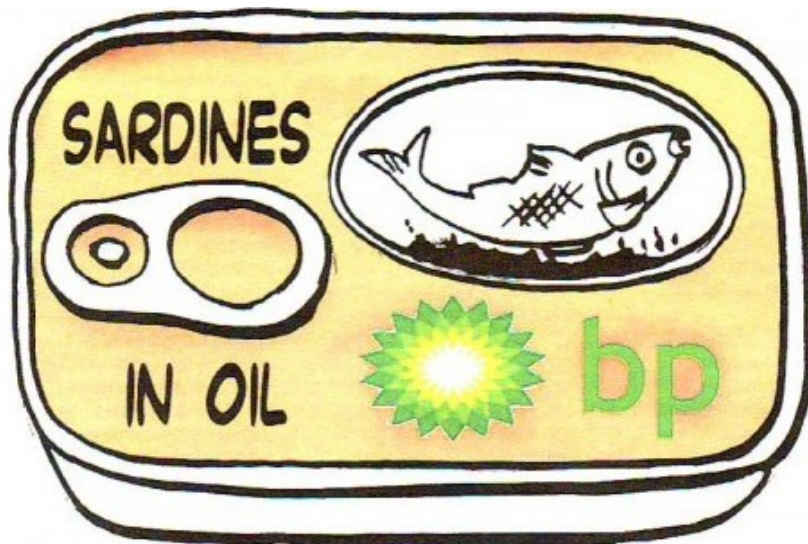
of paperwork; production has only just begun!

This seems to only teach us how to write an essay about what we could/should/would do— instead of actually doing it.

This month we have a selection of articles from club members, I have decided to start a competition, the usual funnies, and of course the usual club calendar and dates at the back.

*Hayden Purdy*

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# Club Meeting

For those members who do not attend club meetings you are missing something special. Apart from the companionship there is an opportunity to see and learn from others, last meeting was very interesting.

Charles Surgeson, brought along a Gyrocopter he designed and built some 20 years ago. Kerry gave a very informative description of the design and building and flying of these unusual models. Additionally he had his new Pitts Special biplane on display, really impressive, beautifully built, and almost big enough to get in. Kerry is gearing up to fly with the Big Boys, go for it we know you will do well.

Dave Kilsby, showed a small rubber powered Taylorcraft Fuselage which he is converting to electric. Most interesting was the history of the Taylor Aircraft Co. and its relationship with the Piper Aircraft Co.

Ray Wood showed a 7th Scale D82A Tiger Moth. Construction spread over 15yrs with assistance given by Bruce Malyon when enthusiasm waned.

A short summary as to the reason Ray chose to build this model probably rekindled childhood memories-nice model-lovely yellow colour pity he is not going to fly it says too much work building and not enough ability to fly it.

*Ray Wood*

# President's Report

Hi to all!

Hope you have all come out the other side of all the wind and rain O.K.

There has been little happening on the field as of late, due to the weather.

What's on the next couple of months? Well, there is the rain date for the Twilight flight on the 6<sup>th</sup> of October, and the Springhill Visit on the 7<sup>th</sup> of November - so mark your calendar (see back page).

On the last Saturday of the month, Ray would like to trial a 'Glider Day'. Please see Ray for details.

There is a Christmas Lunch at the Wood Bar and Grill on Saturday the 20<sup>th</sup> of November. The cost will be under \$20 a head.

Thanks:

*Roy Monk*

*President*

# New Gliding Competition...

There is a new glider competition to be held the last Saturday of the month, at 1pm. Please note this is not a N.D.C. Competition.

There has recently been some discussion as to the merits N.D.C. , mainly because of the high tech models flown by some competitors. We don't have any of these models, as most of ours are pretty simple R-E models.

How about something different? Where everyone has an equal chance of winning - think handicap - think tennis ladder where the best is listed at the top and the others ranked accordingly.

It was suggested that the top flyer receives no bonus points, and the others receive points relative to their ability.

We wish to encourage learners in a safe and friendly environment, To minimise damage trying to land on the spot, we will use a line extending 30m to windward. You can choose where to land along this line, and provided any part of the model comes to rest with 1m of the line, landing points are earned - miss and no points earned.

## **CONTEST**

- 4x3 minute flights each second earn 1 point.
- Maximum points 180 .
- Every second over the time deduct 2 points.
- Verbal assistance is free; make the most of this - you can ask anyone.

## **PENALTIES**

If the transmitter is passed along and assistance given, points will be deducted.

- Launching: minus 10 points
- Flight: minus 20 points
- Landing: minus 20 points

## **LAUNCHING**

- Your choice - winch or bungee.

**Most importantly - "Give it a go!"**

# Around the flying site August/September

Just some photos from the last few months of what happens when the weather is good for flying. There have been some days as can be seen from the photos.

Some of you will have seen Ross's little "pink it's pink people" Lazy Bee playing silly b\*ggers at very low level. Some say he can catch it as it flies past! This photo shows just what can happen if you fly too close to your wind indicator on your aerial. Lucky its not the 3 meter monster coming out of his junk room building shed soon. Hope that's not pink too!



Remember the 'Super Stick' that Simon had such a problem starting and keeping running? You know - his nemesis?! Well the good news is that he finally cured the problems and got it running fantastically. This could be that it had other problems, which until now were un-noticed. The even better news is that I hear he has sold it as is on trade me for a good price. Maybe a wise decision Simon.

Just another fantastic day. From left Ross, Noel, Kerry, Simon and Roy all looking at the interesting bits behind the spinning bit. You can see that gumboots are the order of the day but the sun is shining and there is no wind or ice on the ground.

*Ross McDonnell*



# A Small Competition...

I have decided to start a little competition of “Guess that plane” this month, and see how it goes.

The first three people to respond with the *correct answer* to my email ([editor.aerobat@gmail.com](mailto:editor.aerobat@gmail.com)) will get their name forever immortalised in print—as I have no actual prizes!

Just take a look at the picture below and send in your best guess.....

Ed'



# A South African Aerobatics Team....



Lefties have rights too

# Building the Sparey 0.8cc Diesel

Back in 2003 I purchased a kit for a Sparey Diesel Engine from Woking Precision in the UK. The kit consisted of a box full of round bar of various metals and a set of plans that were hand drawn and difficult to read.

I started construction on the crankcase casting which I soon discovered was under size before I started to clean it up! I did my best to machine it but it was gritty horrible aluminium alloy and I soon gave up in disgust and pushed the kit into the back of the cupboard and started some other project instead.

After my success at building a couple of Mills 1.3cc replicas I decided to have another go at the Sparey so I dragged the box of metal back out, and started from scratch machining the crankcase from stock Aluminium Bar.

I've worked on and off through this year on the engine building a few parts when the mood took me.

It is an interesting engine as it is actually 0.63cc not 0.8cc as it is known. It turns out that when it was designed more than 50 years ago someone made a mistake reading their slide rule (before calculators remember!) and calculated the engine capacity incorrectly.

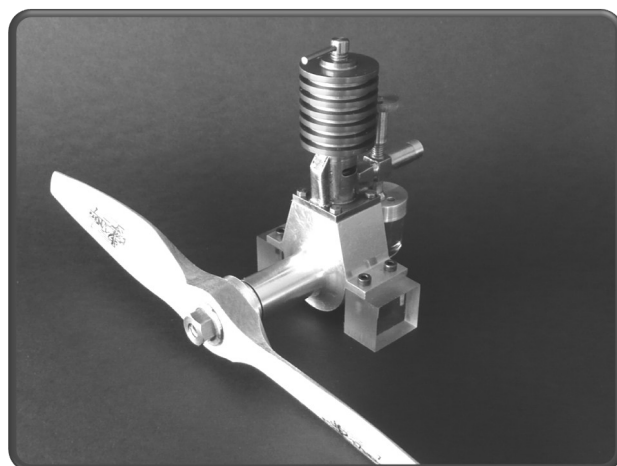
At 0.63cc it is pushing to boundaries of my skills as the tolerances are very small, it seemed exponentially more difficult than the 1.3cc engines. For example the little end gudgeon pin is only 1/16" (1.6mm) diameter silver steel rod.

The head is made from Aluminium Alloy and I home anodized it colouring it with Emerald Green Dylon Dye.

The trickiest part of building your own diesel engine is getting it to run when you have know idea that it will in fact run or where the compression or needle should be set. Patience and quite a bit of prop flicking is the only answer. Luckily the mixture isn't that critical so I started with the compression screw. If it is under compressed or you have a poor fitting piston it won't fire at all. If it is over compressed it will fire before it goes over TDC and the prop oscillates back and forth. A quarter turn more on the compress screw from where it starts to pop and fire seems like a good place to start the engine.

The good news is that mine is a runner so all the hard worked paid off.

So now it is onto the next project which looks like a scratch built 1.5cc glow engine, more on that in the future I hope!



*Ross Purdy*

# I Love Stories With a Moral...

One day a farmer's donkey fell into a well. The animal cried piteously for hours as the farmer tried to figure out what to do.

Finally, he decided the animal was old, and the well needed to be covered up anyway, it just wasn't worth it to retrieve the donkey.

He invited all his neighbours to come over and help him. They all grabbed a shovel and began to shovel dirt into the well. At first, the donkey realized what was happening and cried horribly. Then, to everyone's amazement he quieted down.

A few shovel loads later, the farmer finally looked down the well. He was astonished at what he saw. With each shovel of dirt that hit his back, the donkey was doing something amazing. He would shake it off and take a step up.



As the farmer's neighbours continued to shovel dirt on top of the animal, he would shake it off and take a step up.

Pretty soon, everyone was amazed as the donkey stepped up over the edge of the well and happily trotted off!

The donkey later came back, and bit the farmer who had tried to bury him. The gash from the bite got infected and the farmer eventually died in agony from septic shock.

## **MORAL FROM TODAY'S LESSON:**

When you do something wrong, and try to cover your ass, it always comes back to bite you.



# Senior's Aren't That Dumb...

A lawyer and a senior citizen are sitting next to each other on a long flight.

The lawyer is thinking that seniors are so dumb that he could get one over on them easy.

So the lawyer asks if the senior would like to play a fun game.

The senior is tired and just wants to take a nap, so he politely declines and tries to catch a few winks.

The lawyer persists saying that the game is a lot of fun. I ask you a question, and if you don't know the answer, you pay me only \$5. Then you ask me one, and if I don't know the answer, I will pay you \$500, he says.

This catches the senior's attention and to keep the lawyer quiet, he agrees to play the game.

The lawyer asks the first question. 'What's the distance from the Earth to the Moon?'

The senior doesn't say a word, but reaches into his pocket, pulls out a five-dollar bill, and hands it to the lawyer.

Now it's the senior's turn. He asks the lawyer, 'What goes up a hill with three legs, and comes down with four?'

The lawyer uses his laptop and searches all references he could find on the Net.

He sends e-mails to all the smart friends he knows; all to no avail. After an hour of searching, he finally gives up.

He wakes the senior and hands him \$500. The senior pockets the \$500 and goes right back to sleep.

The lawyer is going nuts not knowing the answer. He wakes the senior up and asks, 'Well, so what goes up a hill with three legs and comes down with four?'

The senior reaches into his pocket, hands the lawyer \$5 and goes back to sleep.



**I've never understood decimals. I can't see the point.**

# Club Calendar

## October

Mon	Tue	Wed	Thu	Fri	Sat	Sun
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

**Schedule of Events:**

**October 2010**

- 6th October - Twilight Rain Day
- 30th October - Gliders (from 1pm)

## November

Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

**Schedule of Events:**

**November 2010**

- 7th November - Springhill Visit
- 20th November - Christmas Lunch

<u>Date</u>	<u>Day</u>	<u>What</u>	<u>Where</u>	
06	October	Wednesday	Twilight1	Wainui
30	October	Saturday	Gliders (from 1pm)	Wainui
07	November	Sunday	Springhill Visit	Springhill
20	November	Saturday	Christmas Lunch	Wood Bar & Grill
26	January	Wednesday	Twilight 2	Wainui
02	February	Wednesday (Rain Date)	Twilight 2	Wainui
27	March	Sunday	Open day	Wainui
30	March	Wednesday	Twilight 3	Wainui
19	June	Sunday	Thermal Thaw	Wainui

A diamond is forever; the payments are longer.