P&DARCS

Pakenham & District Aircraft Radio Control Society

THE NEWS MARCH 2014



NOTICE: If you see local Farmer's cows on either Wenn or Fowler roads, call Local Police

REMINDERS:

- # NAME BADGES MUST BE WORN AT ALL TIMES, NO BADGE, NO FLY. (TO STOP FREELOADERS USING YOUR FLYING FIELD)
- # VISITORS MUST BE SIGNED IN, AND WEAR A "STICK ON" NAME BADGE
- # WHEN STARTING AN I.C POWERED MODEL, OR ARMING AN ELECTRIC POWERED MODEL IN THE PITS, THE MODELS MUST BE RESTRAINED
- # ELECTRIC POWERED MODELS SHOULD BE ARMED AT THE FLYING STRIP AND DISARMED AFTER LANDING

Top Aerobatic Flyers to visit our field Sunday 2nd March, see page 6

Next Club Meeting, Sunday March 9th at the Burley Field, 1-00 pm start

BURLEY FIELD

Wenn Road Cardinia

www.pdarcs.com.au

P.O.Box 131, MDC Cranbourne 3977 Field Telephone Number: (03)-59 98 8431

President

William(Bill) Reynolds 9704 8393 president@pdarcs.com.au

Vice President / VMAA Rep'

Ivan Chiselett 9898 4379 vicepresident@pdarcs.com.au

Secretary

Don White 9560 2726 secretary@pdarcs.com.au

Treasurer

Peter Harris 0425 857 152 <u>treasurer@pdarcs.com.au</u>

Registrar

Paul Webber 0417 558 779 registrar@pdarcs.com.au

Contest Director

Vacant

Team Captain

Steve Malcman 9884 0614 teamcaptain@pdarcs.com.au

Facilities Manager

Paul Somerville 0417 539056

Buildings Manager

David Glossop 8588 1549

buildings@pdarcs.com.au

Field Manager

Norm Morrish 0418 586 406 fieldmanager@pdarcs.com.au

Editor

Frank McPherson 8787 7454 editor @pdarcs.com.au

Webmaster

Daniel Jenkins

webmaster@pdarcs.com.au

Social Director

Daniel Jenkins 5902 2987 social @pdarcs.com.au

Safety Officer

Alan Foley

safety @pdarcs.com.au

Catering Manager

Vacant

Editorial Submissions to:

editor@pdarcs.com.au

Editor's Bit

The Club Twi – Fly on Saturday, 22nd went well, we had Rick (rockets) Talman, doing his thing, Billy (Lazy Ace) Reynolds, Frank (Boomer 60) McPherson

Andrew (Quadcopter) Mysliborski, Daniel (foamy) Jenkins, Paul (strobe lights) Somerville, to name a few

Plus others too numerous to mention

It was a cool evening, with a light wind that dropped to zero around 8 pm,perfect for nite flying, we sat around the Somerville Burner keeping warm in between flights

Paul Somerville set up some red strobe lights to mark the runway thresholds that worked well

Lots of sausages were cooked on the griller in the kitchen, and we had a relaxed, fun evening

The last people went home around 10-30pm or so

Frank McPherson Editor



WHAT'S ON

At P&DARCS 2013 / 14

Look in the Club Calendar on page 9

NFG Annual Twins & More

From the VMAA Events Calendar 2014

2	Pre Masters Comp & Demo' Nepean	NMAA
8	VFSAA Scale/Sports Scale Ballarat	BRMFC
8 - 10	Australian Masters Albury	TCMAC
15 – 16	SAM 600 ½ Texaco, Duration, Ballarat Climb & Glide.	MFWAC
	GM at 10:00 am	
22-23	Monty Tyrell Scale Event and Giant Model Fly In Weekend.	
	All welcome	P&DARCS
23	Classic Pattern State Field	NFG
30	Annual Display Day Ballarat	BRMFC

NFG

In This issue:

March

30

What's on	2
Committee Reports	3
World class aerobatics at our field	6
Roy Robinson Trophy Event Report	7
Club Calendar for 2014	8
LiPO Basics (revisited)	9
Sponsor's advertising	12

PRESIDENT

The past month has opened up not one but two "cans of worms" which both required considerable thought from your erstwhile committee officers.

These two items although entirely unrelated to each other, strangely enough were both concerned with aspects of our "open day" style activities.

The first of these was an approach from Hobby King regarding their holding an open day similar to that which they conducted in NSW last year. It appears they also approached other clubs around Melbourne, with what result I don't know. However we, in an attempt to do the right thing, contacted them asking what they expected from us, and what would we might expect from them. That was 4 weeks ago and there has been no reply.

The second item concerns the running of Model Engines Day but could be relative to any open function run by the Club. I cant expand on this one at the moment, but will do so when things are more clearly defined.

Bill' Revnolds, Pres'

SECRETARY

General meeting held Saturday 1st. February 2014 at the Burley field.

Meeting opened at 1300hrs.

Members 22

<u>Apologies.</u>. P Webber, F Dibble, F Connelly, A Coleman, N Morrish.

Minutes of the previous meeting be accepted.

Moved B Law Seconded A Foley. Carried

Business arising from previous minutes.

Next General Meeting to be 9/3/14.

Secretary.

The Roy Rob event had a good day. Next year the field will not be closed, the Roy Rob pilots will have the choice of the runway for the event, that will leave the remaining runways for general flying but pilots are not to fly over the runway used by Old Timers pilots.

Treasurer.

No change in finances from last month. Moved P Harris that the financial report be accepted. Seconded B Law, Carried.

Registrar.

5 new members since December.

Field

The exchanged Fergie will be an asset as it is in better condition with a few extras.

<u>Building.</u> Few small chores to be done. Gate sign needs to be upgraded and cleaned.

(Refer to committee)

Machinery

Spent ½ day cleaning out sumps and spoon drains. Spoon drain from sump to Wenn road needs to be cleared and graded to allow water to run in the right direction

Editor.

Any interesting items to be submitted to the Editor

Social.

Saturday 22nd February is the Twi-fly. 2nd March world champion pattern pilots are coming to our field for practice and will give a demonstration of flying during the day.

We now have staff to cater for the Monty Tyrrell (Weekend March 22nd-23rd) and the Model Engines day (April 6th) thanks to Daniel Jenkins.

Meeting closed at 1350hrs.

Next General meeting.

Sunday 2nd March at 1300hrs.

Don White, Secretary

TEAM CAPTAIN

The VMAA is almost upon us (April 12th and 13th), leaving very little time between now and the event. Last year we managed to secure an overall third place, flying against six other model clubs which is a very good effort and that was flying in all but two of the events. We could certainly do allot better if we have entries in each event.

I will be placing our order for our team member t-shirts shortly so it is important that we have our team finalized before I do this.

I still require entries for the below events;

- □Thermal Soaring
- □Electric Glider
- □Limbo Event
- Musical Landings
- □Club Racing
- □Combat

Please refer to the link on the VMAA website regarding the events. http://www.vmaa.com.au/vmaa-trophy-weekend.html

If you are interested in flying in any of the above events then please get in contact with me ASAP.

Steve Malcman P&DARCS Team Captain

REGISTRAR

Membership Renewals

Last month an un-financial Associate member re joined as a Full member. Great to see the Club is still getting new members, and past members re joining.

I would also like to remind the membership that generally I do not get your forms or payment directly, these are processed by the Treasurer first, then given to me to process.

Inductions / Orientation

Please give me a call or email to arrange a time. I now have Frank to give me a hand if you wish to make a time during the week

Please note that I will not chase you to make an appointment.

Changes to your contact information

Let me know of any changes of your details by email registrar@pdarcs.com.au (preferred) snail mail (Club mail address) or least preferred by phone (my mobile).

New Member Applications

David Horskins has rejoined as a Full Member

Membership to date, refer to the spreadsheet below

Paul Webber, Registrar

Phone 0417 558 779

Email: Registrar@pdarcs.com.au

WEBMASTER & SOCIAL DIRECTOR

No report for this month

Daniel Jenkins, Social Director & Webmaster

Membership to date

Passed Away

		оприни 1	
Associate	4	5	0
Full	94	12	1
Junior	0	0	0
Life	3		
Non-flying Full	0	0	0
Pensioner	33	2	0
Probationary	15	4	7
Student	2	0	0
Spouse	1	0	0
		<u></u>	
Probationary - Associate	1		
Probationary - Full	1		
Assocate - Full	1		
Re Joined - Full	1		
Re Joined - Probationary	1		
Total Re Joined	2		

Resigned	6
Lapsed	17

Sub Total **152** 23 8

1

Paid 2013-14

Unpaid

New 13-14

BUILDINGS OFFICER

No report for this month

David Glossop, Buildings Officer

FIELD MANAGER

Hi guys, hope you have your models ready to do some serious flying now that the better weather is approaching. Certainly been an ordinary summer with the strong wind and total fire ban days. The piles of dirt on east side of east runway and west end of main runway are now removed free of charge, thanks to our Fowler Rd neighbor. The bales of hay near our runways should be removed by the time you receive this newsletter. I have asked the contractor to remove these bales first in future. Bales left in other paddocks will not affect us.

It appears that the extra couch and extra night of sprinklers is helping to reduce our east and main runways from bad cracks. Only time will tell if we are on the correct approach to reducing our peat clay base from bad cracks. I am confident with our approach and thank the mower men sincerely for leaving the cut grass on the runways to help spread the couch seeds and provide nutrition. I plan to buy a truck load of fine crushed rock to repair potholes and this should be done prior to you receiving this newsletter. Please reduce your speed on our driveway. We do not have road making equipment and the repairs are done manually.

The grev Fergie has gone. It only had 3 gears and you could not set the 3 point lifter to a set height. It is replaced by a 135 red Fergie which runs far better than the grey ever did. We will leave the trailing deck slasher connected to it most of the time which is perfect for cutting along Fowler Rd, cutting the extensions at each end of the main strip and for giving the grass pit barrier a haircut.

This will make our job much easier to keep the site looking neat. Cost was only \$1700 change over. The bonnet was rusty but this is now rust converted and painted.

We will continue to paint mudguards, wheels etc at a gradual pace, making the tractor looking more presentable

Norm Morrish Field Manager

SAFETY OFFICER

No Report for this month

Alan Foley Safety Officer

FACILITIES MANAGER

No report for this month

Paul Somerville Facilities Manager

THE FERRET REPORT



Diggin' Up Dirt

At the Twi – Fly on the 22^{nd,} Frank McPherson did a demo' flight with his lit - up Boomerang 60, come time to land it, he brought it in over the runway threshold, and cut the power expecting it to glide in for a gentle touchdown

The model had other ideas, it did a steep descent into terra firma, ripping out the front bulkhead, splaying the undercarriage, and dumping the batteries onto the strip

Frank, the Twi – Fly Boomer is heavy, keep some power on to land it, plus don't get stuck into the beer before flying!



Our Ferguson 135 will look similar to this when work is completed

Top Aerobatic Flyers to visit our field Sunday 2nd March.

By Norm Morrish

Mr Chad Northeast from Canada, will be at our field competing in a special shootout against some of our top F3A aerobatic flyers on Sunday 2nd March.

VPA (Victorian Pattern Assoc.) are organizing the event and are planning to put on a special 90 minute showcase at lunch time. The showcase will be based on Seba's favorite disciplines of large turbine jets, and freestyle aerobatics, powered by 200cc motors.

Chad came 16th in last year's world F3A Championships in South Africa.

APA (Australian Pattern Assoc.) have bought them out to Australia to compete at the Australian Masters in Albury over the Labour day weekend.

Every few years they bring top flyers to Australia. This year we are lucky to have them at our field.

The event at our field is to give them practice flying in an F3A event in Australian conditions, competing against some of Australia's top flyers. F3A aerobatics will be flown in the morning prior to the showcase, and again in the afternoon

VPA are organizing local flyers who fly these models to attend and put on a showcase at lunch time.

We are very lucky to have a top flyer of large scale freestyle living in Victoria, Mr Ido Segev. He has flown foamies at our field.

I watched his Freestyle display in Katherine, Northern territory, last year and it is unbelievable. He is one of the Worlds best and demonstrates throughout the world.

Ido is pictured below, standing between Seba, (white cap) from Sebart Models, and Ivo Krill, the man behind Krill Models at an event in South Korea

Do yourself a big favour and come down to see these guys fly.

An event not to be missed, be there



Great Day for the 2014 Roy Robinson TrophySunday 26th January

Report by Brian Laughton SAM 600

Here we go again, another contest year started at the beautiful P & DARCS flying field in Pakenham.

Sunday dawned magnificent with very light wind and a mild to warm day ahead of us, when I arrived at least half of the contestants were there early, ready for combat.

We got started just after 10AM with Texaco, not a good event for human injures, Graeme Gulbin from Ballarat accidentally put his hand in the prop preparing for his first flight and cut it badly needing to go to hospital and have 7 stitches, not a good start to his day, about the same time I was removing the ignition leads from my model and managed to chop up a fair bit of my forearm with the prop, not as deep as Graemes but messy just the same, lucky for me the medics at the field managed to stop the bleeding and bandage it up allowing me to continue flying in Texaco and to go on and win this event with my Bomber with Rob Taylor flying his Cumulus into 2nd place and Kevin Fryer also flying a Cumulus into 3rd place.

P & DARCS put on their normal lunch for us, it's a toss up between Cohuna, Ballarat and P&DARCS as to who makes the best hamburgers, they were terrific!!

After lunch we would all have liked to have a sleep, but we couldn't, we had a duration contest to fly and this looked like being very competitive with all the Grande Prix fliers lining up to start.

Away they went and the sky was full of very fast climbing models, unfortunately there was 2 types of air up there some got it others missed out and fell like stones but there was still 6 in the fly off with Rob Taylor coming in 1st with his ever reliable Cumulus, Lyn Clifford came in a close 2nd with his Lanzo Racer and Brian Stebbing all the way from Adelaide came in 3rd with his Stardust.

The overall Roy Robinson trophy winner was the ever reliable Rob Taylor taking out his 4th Roy Rob, congratulations Robert.

All in all it was a magnificent day with no major model casualties, I think we all went home very tired but very pleased with a good days flying behind us.

Again our thanks go to P&DARCS club for their ongoing support of our branch of the hobby we all love











P&DARCS CALENDAR FOR 2014

Date	Day	Confirmed	Location	Details Comments
January	,	?		
26 th <i>Februar</i>	Sun y	Yes	Burley Field	Roy Rob Event
1 st	Sat	Yes	Burley Field	Club Meeting
20 th	Thu	Yes	Burley Field	Committee Meeting
22 nd	Sat	Yes	Burley Field	Bi-Monthly Twi-Fly
March				
2 nd	Sun	Yes	Burley Field	VPA Aerobatic Display Day
9 th	Sun	Yes	Burley Field	Club Meeting
20 th	Thu	Yes	Burley Field	Committee Meeting
22-23 rd	Sat-	Yes	Burley Field	Monty Tyrell Giant Model & Scale Weekend
April	Sun			vveekend
5 th	Sat	Yes	Burley Field	Club Meeting
ວ 6 th	Sun	Yes	Burley Field	Club Meeting Model Engines Day
12-13 th	Sat-	Yes	State Field	VMAA Trophy
12 10	Sun	100	Clate Field	VIVII V C LIOPINY
17 th	Thu	Yes	Burley Field	Committee Meeting
26 th	Sat	Yes	Burley Field	Bi-Monthly Twi-Fly
May				
4 th	Sun	Yes	Burley Field	Club Meeting
22 nd	Thu	Yes	Dingley	Committee Meeting (Winter)
June				
7 th	Sat	Yes	Burley Field	Club Meeting
19 th	Thu	Yes	Dingley	Committee Meeting
28 th	Sat	Yes	Burley Field	Bi-Monthly Twi-Fly
July				
5 th	Sat	Yes	Dingley	Annual Club Auction
24 th	Thu	Yes	Dingley	Committee Meeting
August				
2 nd	Sat	Yes	Burley Field	Club Meeting & AGM
21 st	Thu	Yes	Dingley	Committee Meeting
30 th	Sat	Yes	Burley Field	Bi-Monthly Twi-Fly
Septem				
7 th	Sun	Yes	Burley Field	Club Meeting
18 th	Thu	Yes	Dingley	Committee Meeting
October 4 th	Sat	Yes	Burley Field	Club Meeting & Co-Op AGM
23 rd	Thu	Yes	Dingley	Committee Meeting
23-26 th	Thu-	Yes	Burley Field	Western Port Drifters
	Sun		,	
25 th	Sat	Yes	Burley Field	Bi-Monthly Twi-Fly
Novemb	oer .			
2 nd	Sun	Yes	Burley Field	Club Meeting
20 th	Thu	Yes	Burley Field	Committee Meeting (Summer)
Decemb	er			
6 th	Sat	Yes	Burley Field	Club Meeting
7 th	Sun	Yes	Burley Field	APA Pattern
10 th	Wed	Yes	Burley Field	Annual Dinner & Twi-Fly

LITHIUM POLYMER BATTERIES SOME BASICS REVISITED, (from August 2013)





A typical LiPO battery

Why LiPOs Are Used

LiPo batteries are a type of rechargeable battery that has taken the electric RC world by storm, especially for planes and helicopters.

They are the main reason electric flight is now a very viable option over fuel powered models.

RC LiPo batteries have three main things going for them that make them the perfect battery choice for RC planes and even more so for RC helicopters over conventional rechargeable battery types such as NiCad, or NiMH.

- 1. RC LiPo batteries are light weight and can be made in almost any shape and size.
- 2. RC LiPo batteries have large capacities, meaning they hold lots of power in a small package.
- 3. RC LiPo batteries have high discharge rates to power the most demanding electric motors.

These benefits are important in any RC model, but for airplanes and helicopters they are the reason electric flight has become so popular. Face it, electric cars and boats have been around for decades, it wasn't until LiPo battery technology arrived on the scene that electric planes and helicopters started showing up and are now surpassing nitro power and even turbines in terms of power to weight ratios.

Basic Construction

Almost every RC LiPo battery cell is packaged in an aluminium foil pouch, coincidentally called a pouch cell. The picture below shows a typical 2 cell LiPo RC battery pack.

Pouch cells are the perfect solution for building multi celled battery packs since the flat pouch cell can be stacked with no wasted air spaces like found within round celled battery packs. Of course since LiPo's use this light weight pouch instead of a metal can, less weight is the result making LiPo's the best choice over Li-lon in a weight conscious application such as RC aircraft.





A typical LiPo RC (pouch) battery pack, 5000mAHR, beside a golf ball to judge size The small tabs on each end are the + and - electrical connections

Handling Precautions

- 1. Be very careful to never let the main + and leads touch or inadvertently plug them together, fire and brimstone will be the result
- 2. Be careful to not drop the battery on a hard surface, the cells can be damaged

Using your LiPO's, (discharging)





A 40 size electric powered Biplane

A LiPO will heat up if it discharged under load to around 3.0 volts per cell - it will become very warm/hot and will shorten its life substantially.

A very good rule to follow here is the "80% rule".

This simply means that you should never discharge a LiPo pack down past 80% of it's capacity to be safe. For example, if you have a 2000 mAh LiPo pack, you should never draw more than 1600 mAh out of the pack (80% x 2000). This is assuming a healthy pack as well that has the full 2000 mAh capacity (as packs age, their capacity drops).

The four main things that shorten LiPo battery life are:

- 1. Heat
- 2. Over Discharging
- 3. Over Charging
- 4. Inadequate Balancing

Charging And Balancing LiPO batteries





Frank McPherson A typical computer controlled charger, and power supply, on a concrete surface

Charge LiPO batteries on a fireproof surface, OR in a fireproof bag, and at least 1M from any combustible material

A 3.7 volt RC LiPo battery cell is 100% charged when it reaches 4.2 volts. Charging it past that will ruin the battery cell and possibly cause it to catch fire..

It is critical that you use a charger specified for LiPo batteries and select the correct voltage or cell count when charging your RC LiPo batteries if you are using a computerized charger.

If you have a 2 cell (2S) pack you must select 7.4 volts or 2 cells on your charger. If you selected 11.1V (a 3S pack) by mistake and tried to charge your 2S pack, all the better computerized chargers out there these days will warn you if you selected the wrong cell count, and not start to charge

Balancing is required on any RC LiPo battery pack that has more than one cell since the charger can't identify from different cells and know if one might be overcharged even though the total voltage of the pack indicates otherwise. Balancing ensures all cells are always within about 0.01-0.03 volts per cell so over charging or discharging of one or more cells won't ruin your battery pack, or worse become a safety issue from overcharging a cell.

Note the small balancing lead plugged into the charger, behind the main leads, in the picture above

LiPO Damage

1. Swelling





A badly swollen 6s 5000 mA hr LiPO pack, very risky to continue using this one

LiPo cells can swell a little bit, especially if they are getting pretty warm during use.

It is actually somewhat normal (again based on how hard you run the packs, the quality of the packs, and how much they heat up) and as long as it is very-very minor swelling & goes away after the pack cools down you usually have nothing to worry about.

As packs age, the swelling can get a little worse

As a LiPo pack is nearing the end of it's useful life it can show some very minor swelling that won't go away, even after the pack cools. This pack may still have some nice non aggressive flights left in it however, so treat it kindly with gentler flying / driving in its early retirement before sending it to the LiPo grave yard

If the LiPO pack is swelled up to the point that is tight as a drum, (as shown in the picture above), and very hot to touch, and it does not return to normal size when it cools, do not use it, dispose of it

2. Crash Damage



Frank McPherson An impact damaged 6s 5000mAhr LiPO pack, (it did not burn !)

Dispose of crash damaged LiPO packs

Disposing Of LiPO Packs

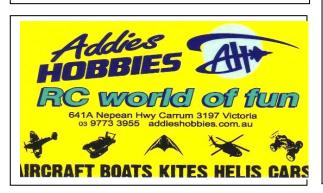
Unlike NiCd or NiMH batteries, LiPO batteries are environmentally friendly

- 1. If any LiPO cell is swollen or physically damaged do NOT discharge the battery, jump to step 5
- 2. Place the battery in a fireproof container or on a concrete surface at least 1M away from combustible material
- 3. Discharge the battery using a LiPO discharger, or use a lamp
- 4. Discharge the battery to 1.0 volts per cell or lower
- 5. Submerse the battery in a bucket of salt water, (½ cup of table salt per 4 liters of water) use a sharp object and puncture the LiPO cells when immersed, leave the battery in the salt water for an extended period, (two weeks)
- 6. Remove the battery from the salt water, wrap in newspaper or a paper towel, and place in normal trash



46 McCrae Street Dandenong 3175 Phone (03) 9794 5999 Fax (03) 9793 9108 sales@hobbyman.com.au

www.hobbyman.com.au







Stocking only quality products and accessories for the RC Modeler

20 Spring Square Hallam 3803

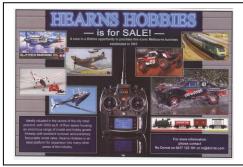
Phone FAX 03) 97031160 hallamhobbies@optusnet.com.au

www.hallamhobbies.com.au









Next Club Meeting, Sunday March 9th at the Burley Field, 1-00 pm start

P&DARCS Newsletter Pakenham & District Aircraft Radio Control Society

If undelivered return to P&DARCS.
Po Box 131
MDC Cranbourne 3977

