

## PROP TORQUE

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EDITOR	George Carnie	6398	2141	
Committee	Andrew McEnty	re 63	84 104	8

L.M.A.C., PO Box 1204, Launceston Tas. 7250



Kevin Hays' beautifully finished Ultimate. His 3 children give you an idea of the size of the model. Any bigger and one of them could fly it! Model is powered by a Moki in line twin engine. It flies as good as it looks too.

#### Official Newsletter of the... LAUNCESTON MODEL AERO CLUB Inc. VOLUME 12



## Super Summer

#### NEW FROM ZN LINE - HYDEAWAY & ENIGMA

HELICOPTER KIT	S ENGINES		GLID	ERS	ELECTRIC FLIGH	π
JR HELI'S VENTURE 30 ARF \$ 5 VOYAGER 30 \$9 VOYAGER50 \$1 VIGOR60 \$1 RAPTOR 30 \$8	950 185 055 900 40		DAW DRAGNETTE HLI FVK GILLETTE	G \$122 \$350	WINGO	\$185
XCELL 60 \$1	600		SALSA HLG AILERUN	\$319	FIREBIRD XL	\$199
MUSUUITU \$7	STROKE	S 8	MULTIPLEX MILAN	\$799	MULTPLEX TWIN JET	\$260
WILLEWIDWIZ 32	46 SIZES	1 m	AMD SU35	\$291	KAVAN PROJET I	\$165
-T	MAGNUM 46	\$170	BROLGA 2	\$88	EPP	\$123
	SUPER TIGER	\$170	SIARLITE	\$1550	ALBATROSS	<i><b><i>w</i></b>iz<i>w</i></i>
	GMS 47	\$165	NYX	\$1899	2M ARF	\$210
	YS 45	\$345	MINI ECLIPSE	\$499	ELECTRON Q	
	OS LA46	\$125	DAVE'S AIRCRAFT W	VORKS	2M AILERONS	\$370
	05 40FX	\$209	ME109, P51 ETC	\$165		-
POWER KITS	OS 10LA	\$104	LOADCOLO	17410	NEW ARRIVALS	2
	OS 15LA	\$124	LUADS OF G	EAK	-	
	OS 25LA	\$135	SPEED CONTROLL	ERS		
P NS04C	OS 25FX	\$198	SHULTZE		0	
1-06	US 40FX OS 61FY	\$190	SLIM 20	\$72		
0	05 91FX	\$445	SLIM 40	\$102		
TRAINERS	OS 140RX	\$865	SLIM 55	\$145	HACKER ELEC MOTOR:	S.
HUSTLER 3 S	95 OS 160FX	\$605	HACKER CONTROLLER	15 M ¢120	AERONAUT	2
CLASSIC ARF \$	139 A STROKE		PROPS	VI \$130	FVK MODELS	
BOOMERANG 40 \$	150 MAGNUM 30	\$235	APC BOULY MASTER A	IRSCREW	MK ACCESSORIES	
CHALLENGER \$	160 MAGNUM 52	\$289	RAM TOP FLITE MENZ	GRAUPNER	BVM ACCESORIES	
CANARY \$	149 MAGNUM 54	\$335	INDEAC	2000 C C C C C C C C C C C C C C C C C C	WREN TURBINES	
CROPTE & COALE	YS 63	\$595	VIDEUS	000	R.F.M. PROPS	
SPURIS & SCALE	05 30	\$321		909	KAVAN KITS & ACCES	SORIES
AILANTIS S.	440 05 52	\$309	10.C 2002	\$65	SLIMLINE MUFFLERS	
CMPRO I ARK S	258 0S 70 SII	\$505	UIDID EDDE	400		_
VMAR ROLL ETTES RUNC	OS 90 SII pump	\$649	Inexpensive		-	
	595 YS 91	\$785	Froight	83	15.8 HOA	
SWALLOW 90 \$	430 OS 120SE	\$761	Freight	1	DELO COR	
SEAGULL STEARMAN \$	322 OS 120 SIII	\$790	Rates to	/4	131	-
MIDWEST G202 KIT \$	467 SATIO 72	5400	Tasmania.			
FORCEWOLF 190 \$	415 TURBINES	1000000	Call us for	31		
AIRSAIL CHIPMUNK \$	175 JET CAT 120	\$4900	dataila and	1.6		and the second second
DOLPHIN 40 \$	199 WREN MW 54	\$2950	details and	1.1		
FAIRCHILD PT19 ARF \$	215 HELI ENGINES		those hard	-		2
DESERT AIRCRAFT	0S32 SX	\$280	to find		OFRIC	
DA 100	2290 OS50 SX	\$321	itoms		ChER.	
DA 150 S.	2990 0S70 SZ H	\$499	items.	1		
	0591 SX	\$460		-		

Call Brian Simpson on: (08) 9328 8986 Fax: (08) 9328 8932 Email: perthrc@perthrc.com.au Web: www.perthrc.com.au Perth RC Models and Hobbies 454 Newcastle Street, West Perth, WA 6005

#### CAPTAIN'S REPORT Peter Kidson (03) 6394 4380 p.kidson@microtech.com.au

#### Captain's Report.

Hello once again,

As you all know the club year is nearly over and the AGM is set for the 12th of May so please try and be there. It will be held at Gill Waddles house as last year and will start at 8 pm. I also mentioned in last month's newsletter, there will be places on the committee up for grabs so if you think you'd like to make a contribution then get a friend to nominate you.

A committee's role is basically to run the club on behalf of and for it's member's. That includes making or helping to make decisions that will help to push the club forward and not stagnate, (no, not you, the club). From an individual's position it is not a difficult task. A committee by it's very nature is not made up of just one person, therefore the decision making is shared by all. So come on, have a go, have a hand in running the club.

George and Kerry have at times asked for articles to help fill the club newsletter. Sometimes they have enough material for this months or next months issue, but they can never have too much so please keep jotting things down and send them in. They are very much appreciated.

Question, Are we a competition minded club or do we just run competition's?.

Your thought's on the subject please. Do we have too many comp's or not enough, or



just the right amount?. Also is the balance correct and not too many of one discipline.

Sylv and I along with Kev, Merv, Andrew and Greg attended the Tasmanian State Pattern Championship's on the 21/22 of March. There will be a full report in next month's issue of Prop Torque. A few mainland flier's also made the trip. The comp turned out to be the best I've been to in a long time so look out for the report.

A Philosophical Footnote.

As we go through life completing the tasks we call routine, sometimes it all goes wrong. Such is the case with one member of our club. Having been ill for the last 18 month's or so, he finally starts to get better and so decides to go flying. He stands behind the model to alter the mixture and touches the hot exhaust. Pulling his hand away quickly he jabs his digits straight into the rapidly spinning prop. All this happened before he had one flight. Now, having done forty laps round the pit area yelling, " blimey that smarts", (or something similar) he applies a bandage and has four flight's.

You may at this time be asking, "OK so what's the moral of this story". Well it is this, Try not to be put off by things in life, Try not to let things get you down and try not to poke your fingers where they don't belong. Props are tougher then your little pinkie's,

Be safe and see you at the field.. Pete...

> SECRETARY'S REPORT Gerry de Groot Ph: 0417 536 200 (BH) or 6369 5284 AH <u>degroot@tassie.net.au</u>

Hello All.

Not a lot to report this month!

Here are some brief points from the Committee meeting that was held on 17 March:

- Subscriptions: Renewals have started coming in although somewhat slowly. Please make your payment as soon as possible to avoid the last minute rush. Post your subscription to PO Box 1204 Launceston. together with the remittance portion of the form.
- Contest Calendar: At the next committee meeting, to be held on 14 April, the committee will be discussing the Contest Calendar for 2003/04. If you have any ideas about the number and type of contests that are run by LMAC, discuss it with a committee member, so your point of view can be represented.
- New members: We warmly welcome new members Robert



Garnett, Debbie Walters (Social) and Daniel Walters (Social).

- Annual General Meeting: A reminder about the AGM, which will be held on Monday 12 May at 8:00pm, directly after the May Committee meeting. Venue to be advised later.

You may be interested to know that with the two new Social members, the club now comprises 45 members, made up as follows:

- 24 Senior members
- 10 Pensioner members
- 2 Juniors
- 2 Associates
- 8 Social (non-flying) members

### From TMAA

#### <u>Report on MAAA Annual Conference</u> <u>etc.</u>

Among items discussed and concluded were the following:

**Rules Books.** – rules books are now featured on the web site and there is no restriction on downloading or copying.

Membership program – New membership program developed by Tony Frizell requires Access XP to run and a motion was passed as follows: the MAAA provide a subsidy of \$1000 to a state association that updates to the new MAAA membership system to allow for electronic membership updates. The payment of the subsidy to be paid after the first electronic update is received by the Registrar. (I have a copy of the new software but do not intend to load it at this time).

**Pilot Log Books.** – There was some controversy regarding charges being made for Pilot Log Books. These Log Books and Instructor Manuals will be available to State Associations free of charge.

Junior Membership. – There was some confusion regarding junior membership. The rule now is: the application form must bear the date of birth of a junior. (A member is considered to be a junior throughout the <u>membership</u> year <u>if they turn 18</u> years old on or after July 1 of the <u>membership year. The membership</u>

#### <u>year is July 1 to June 30.)</u>

*Election of officers.* – *Mike Close was re-elected as MAAA President for a further three years and Fred Adler was the only nominee for Technical Secretary.* 

27Mhz at MAAA Flying Fields. – A motion was passed as follows: A detailed policy to allow the operation of 27Mhz radio controlled electric powered model aircraft at MAAA fields be formulated by the Executive based on the original proposal that went out to the frequency subcommittee and incorporating a mass limitation of 500 grams and maximum voltage of 9 volts.

Radio Directive – 10kHz spacing. – The use of 10khz spacing was approved and it was noted that clubs have the choice to allow 10khz at their field or not. (In view of the testing requirements I would doubt that Tasmanian clubs would consider allowing 10 khz separation.

Synthesised Frequency Equipment. – A motion was passed as follows: MAAA ratify the Synthesised Frequency Equipment policy as tabled and it be included in the Manual of Procedures.

Finalisation of 2003/2004 Budget. – A motion was passed as follows: The junior MAAA fee be made up of half the senior member plus the field levy plus the insurance cost of a member. A further motion was passed as follows: (Continued on page 16)



e-mail: george\_carnie@bigpond.com 6398 2141 or 0418 134 672

Hello to all.

How the euphoria of aeromodelling can turn from elation to dismay in a short period of time. You know the feeling... "look at my new model... flies like a beauty!" Preflight checks are done "yep"; right model on the computer radio "sure is"; control surface movements in the right direction "yes".... "Let's go flying!"

A minute or so into the flight "hang on a minute, the model is not responding" Then that sinking (literally) feeling, as the model starts to descend in an ever tightening spiral, the questions "did I charge my receiver battery?" "I think so… maybe???" Then thump!!! Oh well, let's assess the damage. Surprisingly, despite the height the model fell from, nose first into a very unforgiving ground that more resembled a concrete pad that a dirt paddock, the only real structural damage to the glider was to the fuselage which sustained a fracture behind the wing mounting pad.

Unfortunately, the battery pack is a fairly lethal weight in electric models and the sleek design of the Organic does not permit any safe exit path in the event of a crash. Inevitably the rear of the Hacker B40-5L took the full brunt of the impact of the batteries—Result—a damaged rear motor housing and terminal damage to the batteries. What was that I said to



Kerry in last

month's article "no need to spend any more". I hope she didn't read the article.

A post mortem in the quiet of the workshop, revealed the tail antenna was well and truly jammed between the stabilizer and the v-tail elevator/rudder. Further inspection revealed it may have been a regular occurrence for this to happen. Only on this occasion it stayed there resulting in the elevator servo being stalled open. As I was using a 270 mAh battery, it did not take long to drain my Rx battery.

Unlike most 7 cell, I am using a Rx battery and no BEC (battery elimination circuit) due to high current draw and design of the ESC (electronic speed controller). A danger here is that there is a risk that old habits have you charging the motor battery and forgetting the Rx battery. Not any more for me!

Also I will redirect my antenna to ensure it remains clear of the elevator/rudder however due to the fuselage being carbon/kevlar, I cannot redirect through or alongside the fuselage.

Now to the rebuilding. A quick call to the Ukraine and a new fuselage was on it's way. Another call to Brian at Perth R/C Models and a new motor was in (Continued on page 7)

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transit. Next day the motor and battery arrived. 7 days later the parcel from the Ukraine arrived and I could hardly contain my enthusiasm to put things back together.

As I opened the parcel, I thought to myself how substantial the packaging was. Yet it was not substantial enough to withstand the handling of the postal departments! Kerry could hear the cries of anguish from afar. The fuselage was cracked. Inspection of the package revealed an area of external impact was the culprit. How do explain to your wife, you need 2 fuselages to replace the damaged one?

A desperate email to the Ukraine hoping they would take sympathy on a grown man crying. It was not their fault but the response was all that I could have hoped for -

"Dear George ! We regret about this unfortunate accident. Vladimir will send you another fuselage on Monday."

I would imagine that there would not be many companies who would replace the model in these circumstances. I am very grateful to them.

As mentioned in the President's and the Secretary's columns, the AGM is set for May 12. One of the positions available is mine. We have being editors of the magazine now for 2 years and now is the opportunity for someone to put their hand up if they are willing to give it a go. So if you have a computer and are prepared to spend bit of time each month putting the magazine together. It does require regular commitment. I believe it is the most time demanding but rewarding position on the committee. Any interested parties can give us a call if they want to know more before the AGM.

Until next month.. Put a spark in your life—Fly Electric— George & Kerry



Electric Fly-In this year will be held at PFL on SATURDAY 26th APRIL, starting at 10.00 am.

As with our Scale Day there will be a raffle with a ticket for each electric flight, refreshments and lunches, maybe a modest contest, and a chance to see what other clubs' members are doing in this most exciting and fastest developing area of our sport.

For more information contact -

Mike Adams 6328 1384

## Helpful Hints

#### **Carburettor Leaks**

If you can't get fuel to the carb by choking the engine, suspect an air leak in the carb if your fuel line is in good shape. Smaller air leaks show up when your engine tends to lean out badly going uphill in the air. The O ring between the carb and the body - remove the carb, and replace with a piece of paper between the O ring and the carb. The paper should be hard to remove, or even tear; if not, there just isn't enough pressure on it.

Other leaks - remove the carb, put some spare fuel tubing on the inlet nipple. Holding your thumb and fingers over the top and bottom air holes, insert the carb into water and blow, turning the carb over so various areas are on top (see figure). Wherever air comes OUT, air can get IN! This little exercise may amaze you - and with an older unit, blow your mind! In general, the larger the bubbles, the worse the leak. **Be sure to oil the carb afterwards to prevent rust.** 



#### **REMOVABLE TAILWHEEL ASSEMBLY**

A lot of the kits out these days either have you mount the tailwheel right on the rudder (ugh!) or have the tiller sunk into the rudder.

There are some problems here - if the tailwheel is mounted on the rudder, all the shocks from that wheel are taken up by the rudder hinges! Not recommended for long life. The better system is to use a tailwheel bracket to take all the loads - but if the tiller is embedded in the rudder, there are still potential problems. 1) There is little turning shock absorption; most of those shocks will be transmitted back to your servo. 2) After a bunch of landings, the tiller tends to turn the inside of the rudder to mush. 3) If the tiller breaks through the rudder, or if the wire strut breaks, there is no way to remove and replace it without ripping up half the rudder.

A removable assembly, as shown in the diagram, circumvents those problems. Use a wheel collar on the bottom to transmit the loads to the bracket. On the tiller, put on a piece of inner nyrod, then some fuel tube - this will help dampen turning shock loads, easing the loads on the rudder servo. The yoke that goes around the tiller and is bolted to the rudder can easily be bent from clevis rod wire. And the bracket does NOT have to be lined up with the rudder hinge line.



#### THROTTLE SET UP

by Clay Ramskill One of the more vexing problems novices (and all the rest of us, too!) face is setting up the throttle to work properly.

What we want to achieve is to have full power without the servo straining, and with the throttle control on the transmitter all the way back, have a good range of idle adjustments with the trim lever, and still be able to shut down the engine with the trim also.

Now, those of you with fancy computer radios have it made -- you need to read your "computer manual" rather than this article! But for the rest of us, we'll have to explore "mechanical" ways to adjust throws until we get it right.

First, make sure that the linkage used between the servo and the carburetor is reasonably solid. For the usual nyrod or cable installations, this means "tying down" the outer sheathing so that it can't flop around, buckle, or stretch out. The problem with the throttle is that we have a fixed throw (travel) from the servo, and a fixed throw on the engine's throttle lever, or control horn. So by changing the linkage geometry, we need to match these fixed amounts of rotation. From full throttle to idle, your throttle servo will rotate about 90 degrees. This is fixed. And the needed rotation for the throttle is also around 90 degrees. Gee -- it sounds simple! And, if the lever arms (the distance from the rotation axis to the output connection) are both exactly the same, you're going to be close. But that would be too easy.

The general adjusting procedure:

1) Set throttle trim to center.

2) Connect linkage on servo and throttle arms, adjust clevises so that full throttle on the transmitter just gives full wide open at the carb.

3) On the transmitter, bring the throttle stick back towards idle.

(a) If the carb closes completely before you reach idle, you'll need less throw; (b) if the carb is still open more than 1/32nd of an inch, you'll probably need more throw;

(c) if the carb is open about 1/32" and you're able to completely close it with the trim, you should be pretty close.4) If (a) or (b) is the case, make a throw change as appropriate. Then start all over at #1!

5) Run the engine, make further adjustments if necessary.

Assuming adjustment for total travel is necessary (it usually is!), the first thing to try is going to a different hole on the servo arm. If travel is too great, go in closer to the servo for less throw; if travel isn't enough, shift out a hole on the servo arm.

Remember, adjusting clevises only varies the distance between servo and throttle arms -- it does not adjust throw, the amount of travel. That is, if you adjust a clevis to open the throttle more at full throttle, you also get a higher idle speed.

But throw adjustment is a different matter. If you've adjusted for full carb opening at high throttle, but cannot get a low idle or shut-off, you'll need more throw. If you have an OK full throttle, but the engine shuts down every time you bring the stick back, you need less throw.

OK, so you haven't found a combination of holes on servo and throttle arms that gives the correct throw? Here are several other ways to change the throw (see diagram):

1) Use a servo saver. Setting up for a bit too much throw, the excess is

absorbed by the servo saver spring at full throttle.

2) Shift the servo arm off center slightly

-- this will lower the throw.

3) A metal throttle arm can be bent slightly to accommodate too much or too little throw.

4) Some servos, Hi-Tech for one, offer a servo arm which has finely adjustable length, and thus adjustable throw. You may have guessed by now that there is no one set answer for exactly how to set up your throttle linkage and how to adjust it - each situation always has its own unique set of problems. Hopefully, the above will at least give you a clue as how you might proceed toward solving the problem in your case.



#### Contest Directors Report Geoff Hays 6344 1920 / 0408 559 806



The Tasmanian 7 Cell Electric Championship was held on the weekend of 15th and 16th February 2003.

But really one could be forgiven for thinking it was just a normal 7 Cell event in the L.M.A.C contest calendar. 6 Contestants entered, 5 were from L.M.A.C and one from

P.F.L. Although we did run the event with only 5 starters as one contestant had an urgent phone call to return home and was not able to start.

I dare say there would have been a number of valid reasons for the low numbers seeing that 10 or 12 like the last State event attracted, would have been expected to start this year. The weather on Saturday was good but the Sunday forecast was not all that promising. So we all came to the same conclusion that we should run 6 rounds on Saturday and leave it at that, as no others were expected on Sunday that were not there on Saturday, and this proved to be correct.

The F5F high performance electric's that was proposed to run in the afternoon was canned as the 4 or 5 contestants that were anticipated to start this event was reduced to one only contestant so it was decided not to hold this and run only with the normal 7 Cell Championship which we did.

There is very little to report on the running of this event as all ran very smoothly with some very close scoring being attained by the 5 contestants in nearly every round. Scores are as follows :-

Contest Scores 2002-2003							
7 Cell Electric Contest 15 February 2003							
	Name Pts Club Pts Div.						
1st	Greg Robertson	1569.00	110.00	А			
2nd	George Carnie	1558.00	110.00	В			
3rd	Kerry Gray	1450.00	103.06	В			
4th	Mike Adams	1370.00		PFL			
5th	Dave Jacobs	1357.00	87.09	В			

(Continued on page 13)

Launceston Model Aero Club Inc.

#### (Continued from page 12)

The next event on our field will be the Open Glider Champs on 15th and 16th of March, details next month. Then the last event on our current contest calendar will be on Saturday 19th April and this will be a Novelty Flyin.

I have not decided on what we will do for this, so I invite those interested to tell me what type of event they would like to see us do on this occasion.

We normally have 4 or 5 different events for the Novelty days. If I do not receive any suggestions then I will decide on what we will have and put a note to this effect on the Clubhouse notice board the week before the event.

The points totals to date after 13 contests for the top 3 places in each division are as follows :-

Contest Scores 2002-2003 POINTS TOTALS After 13 Contests					
Division A Division B					
Contestant	Contests Entered	Points	Contestant	Contests Entered	Points
G. Robertson	7	770.00	A. McEntyre	7	685.44
P. Kidson	6	604.22	D. Jacobs	6	503.82
K. Hay	6	593.67	G. Carnie	5	491.67

The Tas Flyin 2003 took place at N.W.A field at Highclere on Saturday 8th March. This event turned out to be a very good day of flying and fellowship with the N.W. Club.

N.West had a reasonable representation of members having a go but alas the only visitors on the day were Dean Williams from Phantom, Greg Robertson, Clarrie Murray and myself from L.M.A.C.

It was a fun day with 3 events and as many flights as you can get in during the day. Each flight gave the pilot another raffle ticket so the more you fly the more chances you had to win the box of chockies.

Scott Kay I believe was the winner with ticket No 77, I had ticket 78. The rain was threatening but held off, the wind not too bad but a bit gusty at times.

The 3 events were climb and glide, speed differential and a spot landing. Cedric Eaves (Continued on page 14)

was the CD and kept the day rolling but laid back. Scores on the day were -

1st	Steve Ralph	100pts	N.W.A.
2nd	Gary Anderson	90 pts	N.W.A.
3rd	Dean Williams	85 pts	Phantom
4th	Scott Kay	70 pts	N.W.A.

The combined scores for the 3 top scoring contestants from N.W.A. = 260 points

Greg Robertson	= 35 pts
Geoff Hays	= 25 pts
Clarrie Murray	= 20  pts

The combined scores for the 3 contestants from L.M.A.C. = 80 points.

So N.W.A. hold the shield for the next 12 months until we have the chance to get it back again next year, or maybe another club will send enough pilots to get bigger scores and take the shield, whatever! Anyhow it was a great day and those who did not go missed out.

Well that's it from me for now. So as always,

Happy Landings All.

Geoff C.D.



Don't Forget—Badges are available for sale. Price \$10.00 (incl. 2 stickers). Contact Kerry, George or any Committee member if you require some.

Show your support and buy one.

#### You Might Be An RC Modeller If.. (Part 2)

- ....Your wife is looking for the kitchen scales and you have them in the garage checking your model weights.
- ...You complain about the cost of school supplies for your kids but can walk out of the hobby shop with \$127.83 worth of miscellaneous parts and supplies.
- ...You have balsa dust on top of your living room furniture.
- ...You keep feeling for the trim tabs on your TV remote control.
- ...You have at least three planes in various stages of completion.
- ...The neighborhood kids come to you to help them with their summer school projects.
- ...You can't understand how some men can get so involved with a silly thing like golf.
- ...You wife wonders why the brushcutter was no good yet the motor works perfectly well in your new model.
- ...You realize the best thing about it is that you can finally play with airplanes without having to make those funny sounds with your mouth.
- ...You have a layby account at the local hobby shop but can't understand why your wife buys so many clothes.
- ...You can land your plane even after you discover you are standing on a bull ant nest.
- ....You spend more money for a pair of sunglasses than for a lawn mower.
- ...You use your field box to crank your lawn tractor.
- ...Your kids borrow rubber bands from you.
- ...You think R/C flying should be an Olympic event.
- ...You read the AMA Journal of Medicine but can't find first aid treatment for prop cuts or monocote iron burns.
- ...Your wife frowns at you at the family cookout when you carve the Christmas turkey with an Exacto knife.
- ...You buy a 4-wheel drive vehicle so you can go get to those hard to get .slope soaring sites.
- ...Your wife spray paints her wrought-iron patio furniture with your fuelproof paint.

Bill Atkins, Dixie Aeromasters, Byron, Ga. (BAtkins@aol.com))

#### GLOW PLUGS- Why do they Fail??

The "ignition system" in our engines is in the main, the glow plug. The other vital ingredient, compression, actually determines the ignition timing, so it can't be totally ignored. But usually its the plug that gives us the problems.

Why DO glow plugs fail? There are four likely probabilities, five if you count old age. Yes, old age! The plugs operate by using a catalytic (chemical) reaction with the alcohol in our fuel to maintain their heat; as the plug gets "old", it gets more and more covered up with combustion byproducts (carbon, etc.) which hinders the whole process. Of the other four, LEAN RUNS is probably the most prevalent - not so much that the engine was running lean, as it was HOT. Too much heat, and the element fries and shatters, or even melts.

**TOO MUCH BATTERY** power is another failure mode - very related to the above paragraph. Your battery should heat the plug to a nice bright orange or red orange color; if the plug glows white hot, it just isn't going to last. It's bad enough that we subject a tiny little element glowing hot, to the pressures of combustion. But if we add more **VIBRATION** to the situation, we get trouble. Unbalanced props, loose engine mounts, etc. may all add up to plug failure, especially in combination with too much heat.

Another plug failure mode is from **FOULING**. The element is very small, and located down in a well. It doesn't take much trash flying around in your

combustion chamber to foul (and ruin) the plug! Aside from the obvious dirt coming through the intake or with the fuel, the fouling can come from metallic sources, usually a result of bearings coming unglued, or from excess carbon deposits in the engine. If the combustion chamber is full of caked-on carbon, pieces of that can, and do, come adrift and end up fouling the plug!

A quality plug run in a sport engine should last for dozens of flights. If they don't, its probably not the fault of the plugs - its time to look elsewhere for the source of the REAL problem!

(Continued from page 5) The MAAA Inc. fees, excluding insurance costs, for the year 2003/2004 are; Senior \$25.00 + GST Junior \$13.50 + GST Pensioner \$25.00 + GST It will not be possible to give a firm cost of insurance cover until mid- June and this will make it very difficult for clubs and TMAA to calculate membership fees for the coming year. Perhaps clubs may have to consider changing their membership year.

I would also advise that HMAC have made application to hold the 2004 Electric Fly-in and the 2004 State Flyin.

Yours sincerely,

<u>Garth Wilmot.</u> (Hon. Secretary.)

### **New Year Bargains**

\*Slowpoke R/C Sports Model Was \$203.42 **Now \$129.95** 

\*Spirit Elite R/C Sailplane Was \$191.91 Now \$119.95

\*Super Sportster 40 R/C Plane Was \$256.64 **Now \$169.95** 

\*Precedent Electra Fly Was \$209.61 Now \$129.95

\*World Models Happy Fly R/C Plane Was \$185.95 Now \$129.95 Happy new year to you all from the team at Birchalls.



Contact D'Wayne Leonard 118 –120 Brisbane St The Mall Launceston PH: 1800 806 867 Fax: 03)6331 7165 Email: dleonard@birchalls.com.au

#### CLASSIFIEDS Free to Members!

#### For Sale:

OS 46LA Motor with muffler extension. BRAND NEW!

A steal at \$100.

Call Brian Booker 6331 5272

#### For Sale:

Old Timer "Miss America" in as new condition. Greg Robertson built. Comes complete with Enya 41 four stroke motor. Only needs a receiver and she's ready to fly!

A bargain at \$390.

Call John de Groot 6396 1183

#### For Sale:

"Cyclone" 2m Pattern Ship. Nomex fuselage. Includes Hyde engine mount and fuel tank. A great start for the

competitive Pattern pilot at \$650.

Call Scott Kay 0409 528 210

Sell / Trade or Swap:

"Step-Up" Glider

- 3 metre wingspan
- Fibreglass fuselage
- Hi-tech electrics
- Ready to launch!!

#### Wanted:

• 4 stroke motor

Contact Nigel 6344 6079



Apr 19	Novelty Fly-In (4)	LMAC	9:30 am
Apr 26	Electric Fly-In	PFL (Panshanger)	10:00 am
May 12	Annual General Meeting	Gill Waddles	8:00 pm

"BOLD" text denotes LMAC events

Contests to be on the day specified. If weather is not suitable, then the next day, Sunday. If that too is not suitable then the event is cancelled and we move to the next contest scheduled.

"Club Day" is the first Saturday in each month. "Cafe Symmons" will operate each Contest Day and Club Day. (Please come along to both these events. These are important fund raising events for your club . Ed.)

# Candid Camera





Dave Jacobs with his ever faithful Spirit Elite. Uses an Astroleisure 6003C motor and a 3:1 gearbox

Clarrie Murray's nicely finished Bellanca Decathalon. Span is about 65" and uses an OS FS60 for power.





Andrew McEntyre at the recent LMAC Pattern competition.