

## PETERBOROUGH MOTOR CLUB Newsletter - November 2009

Last month, we had two meetings (in a way) a day apart. On the normal Club night we had a natter at the Farmers in Yaxley, where we all sat round and talked and then on the following night a large group of us (about 25) went to Peterborough Raceway (the Kart centre at Bretton – just follow the arrows to get there) and had a great evening. Twenty of us decided to race, although Tony and I pulled out about half way through mostly because I kept getting cramp in my feet and legs and so having to slow down. We both enjoyed what we did though. I am hoping to have a report sent to me about the Karting to put in the December magazine, to go with possibly some pictures. The results are as follows:

1. Richard and David Elms
2. Paul Apthorpe and Clive Fulcher
3. William Faux and Stephen Joyce
4. Harry Brierley and Sarah Evans

Well done everyone, and many thanks, Richard, for organising such a good evening.

This month we are having a talk given by Arthur Wolstenholme, who is now producing a battery-powered car. There is an abridged version of an article from Car magazine on the next page.

Next month is the annual Christmas buffet which is being held at the Farmers on 14<sup>th</sup> December from 20.00. The Committee meeting is on 30<sup>th</sup> November. Anyone intending to supply any copy/photos etc. for inclusion in the December 'full' magazine, please send it to me at [nagivatorjan@tiscali.co.uk](mailto:nagivatorjan@tiscali.co.uk) by 21<sup>st</sup> November so I can get it to the printers in time to send it out before the meeting.

I have also been told about a talk being given by one of our members, Jeff Ward, at the Peterborough Engineering Society's monthly meeting (held at The Forum at Perkins Engines at Eastfield – accessed via Gate 4 from Frank Perking Parkway) on 12<sup>th</sup> November at 19.00. The subject is '100 Years of Motor Racing'. All are welcome.

**Our next Sporting Trial is on 22<sup>nd</sup> November at Eaton. The map reference for it is SK 790292 and it is a short distance west of the village on the unclassified road leading to Stathern and Eastwell. Please contact either Lynn Jones or Brian Stapleton to offer your assistance. Lynn can be reached on 01733 252886. Please offer your assistance, it is a great day in the open air!**

### Calendar of Events

#### Social

Nov			
9	PMC Club Night	The Farmers, Yaxley	Talk by Arthur Wolstenholme
12	Peterborough Engineering Soc.	The Forum, Perkins Engines, Eastfield – via Gate 4	Talk by Jeff Ward on 100 years of Motor Racing
12	Bourne MRC		Talk – Stuart Turner
Dec			
10	Bourne MRC		Xmas Party
14	PMC Club Night	The Farmers, Yaxley	Xmas Buffet

## Sporting

Nov			
7	Flame and Thunder - RAFMSA	RAF Barkston Heath	Sprint
7/8	Matlock MC – AB Motorsport	Nottinghamshire, Derbyshire and South Yorkshire	RR
8	Kings Lynn & DMC – Lynn Charity Stages – contact Colin Shinkins 01945 772827	Sculthorpe	SV
15	Roger Albert Clark Rally contact Jon Binns 01257 241680 (home) 0780 171 6418 (mob)	Up North!	MV
21	Dukeries MC – Rallitrak Premier Rally – contact Andrew Smith 01623 480410	Sherwood Forest OS 120	MV
22	PMC – Johnson Trial	Eaton	Sporting Trial

Unfortunately there appear to be no events in December!

## Lightning gives battery new life - or How Arthur's cars are powered

Five years ago the prospect of battery-powered cars combining any sort of range with any sort of performance remained a fantasy.

But by spring next year The Lightning Car Company, based in Peterborough, will launch its first road-legal prototype of the all-aluminium, 700 bhp Lightning GT. Powered by lithium nano titanate batteries and electric wheel motors, the Lightning will hit 60 mph in 4.0 seconds, a maximum speed of over 130 mph and keep going for 188 miles. When the batteries do run out they can potentially be re-charged in ten minutes and should live for 15 to 20 years.

The Lightning's "NanoSafe" lithium batteries have been under development by US firm Altairnano Technologies for several years. The key difference between this and other types of lithium battery is that the electrodes are made of a lithium titanate material rather than graphite. The crystalline structure of the new material has a surface area up to 200 times greater so it's possible to inject lithium ions into it faster.

The Lightning uses a radical new design of lightweight wheel motor capable of producing 660 lb foot of torque each. Developed by another UK firm, PML Flightlink, the "Hi-Pa" electric motors were designed specifically for in-wheel use and are claimed to have 20 times the power density of other electric drive systems. Like all hybrid and electric cars, the Lightning will use regenerative braking to recover energy when slowing. Because NanoSafe batteries charge more quickly, they can recover more energy, contributing to the Lightning's impressive range

Lightning technical director Arthur Wolstenholme admits NanoSafe batteries are still much more expensive compared with alternatives, as are the wheel motors. But, for now, the most important thing is that they seem to work.