



Peugeot Car Club (Auckland)

Peugeotex[©]



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Front cover – Remember 3 September 1967 in Sweden
Above – Peugeot unveils this giant Logo sculpture

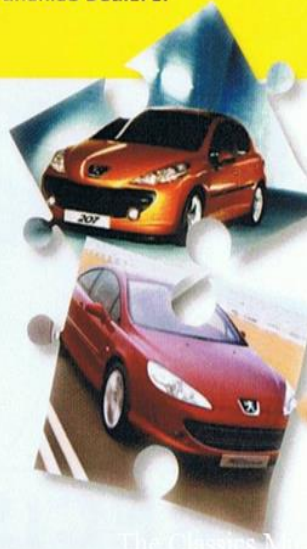
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COMING EVENTS

peugeotclub.org.nz

**For updates on events, keep
an eye on our website
peugeotclub.org.nz**

October 15-16 – Targa South Is

October 30 – Pride of Ownership

**~~November 11-14 – Far North
Weekend - Cancelled~~**

November 20 - Navigation Trial

THOUGHT FOR THE MONTH

Mark Twain said "If man had created man he would be
ashamed of his performance



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responsibility for any views expressed in it.

PRESIDENT'S RAMBLE

Things changed dramatically for the worse since last month's Ramble, you can find comments on those changes in my AGM report. The new committee hasn't yet met so not a lot to report, except that the new committee is the old committee plus Jayden Hardie. Thanks Jayden for joining us, still after more members/helpers – refer to my AGM report.

The only thing I can be definite about is our next Club Event, come along to the Pride of Ownership, Show and Shine, Peugeot Fashion Show or whatever moniker you wish to give it coming up on October 30. We will be using the car park at Smales Farm; assemble at the one closest to Northcote Road. Be there for a 1.45 start. I might (might) even clean my car first – time will tell.

A number of you regularly give me a thanks for the eating tips. We enjoy reading about where to go. Well on that subject I have a new favourite restaurant. For this one I have to thank my son Joshua who asked us to go there to celebrate his 20th birthday (celebrated 6 months late). He got us to go to one of his friends' parents' restaurants, and we were happy to do so. His friend, Nooth, is of Thai origins and his parents have the Primerose Thai in Birkenhead. It is not a large establishment. However a very cunningly placed full length mirror creates an illusion of it being roomy and more than twice the size it is – if you go you will know. The decor is lovely, the right mix between Thai styles, imitation brick wallpaper that actually looks like bricks, fish tank and water feature, cacti (including woollen ones that are so well made you don't realise they aren't till at least the third glance) and Primerose pictures and tones.

I have enjoyed Thai in recent years from some that have big name reputations including the now bought out Sawadee, which for many a year I thought must be the best Thai Restaurant in the Country, and from De Grand who expanded by buying out Sawadee to complement their restaurant in Epsom. But in my opinion, neither are/were as good as the Primrose, and my local Thai isn't even in the same category. It was so good that I have now been twice, never before have I returned to the same restaurant within a month, and am already to go back again for a third time, and all in agreement from my good wife Mandy. Granted they have some unconventional Thai dishes including a 'Mac'n'Cheese' Spring Roll, a dish made to keep their son happy. Personally, I enjoyed it, would have it again, but prefer the curry puffs and the by far the best "money bags" we have ever had. As for a main, one thing I suffer from is loving a good duck dish, so much so I find it difficult – read next to impossible – to order anything else. What I appreciated is that they have a good range of duck dishes as any good Thai restaurant should, and even then they made for me – no questions asked – a duck drunken spaghetti dish, even though they didn't have a duck variant on the menu. Now that is service! Twice at that, I didn't even consider another main on my second coming - it is that good. I can also report that I managed to snaffle a taster of the oyster sauce and rice off the side of Mandy's plate, again superb (but not duck).

Overall I would give them 10 out of 10 for taste, value and a 9 for ambience, looking forward to my next meal there, maybe I will hold off for 2 months, and savour the taste and thought of that duck. Mains are typically \$20 to \$25, \$10 to \$12 for starters and \$6 to \$8 for beer and wine, so very affordable in the scheme of restaurants. Give it a go, you know you want to!
Eat well, savour the experience,
Brent

COMING EVENTS

29-30 October	Targa's South Island event in Tasman/Nelson
October 30	Pride of Ownership; Smales Farm, Northcote from 1.45pm
November 11-14	Weekend up North; meet at the Northern Wairoa Hotel in Dargaville on Friday afternoon; a flyer has been emailed. CANCELLED
November 20	Navigation Trial; details to follow



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JEANETTE'S JOTTINGS

London's oldest building, standing at 41/42 Cloth Fair, was built between 1597 and 1614. Still occupied, it is the only house in the City of London to have survived the Great Fire of London in 1666.

Matera, an Italian town built into the rocks in the remote southern region of Basilicata, is said to be the only place in the world where people are still living in the same houses of their ancestors of 9,000 years ago. Matera is a complex of cave dwellings carved into the ancient river canyon.

It has been estimated that a classic car owner may emit as much CO₂ in a year as manufacturing and charging 40 smartphones for 12 months.

Brooklands was the very first purpose-built motor racing circuit. It was also the venue for the very first British Grand Prix - on 7 August 1926 - and 95 years later to the very day a celebratory event occurred - called Brooklands Relived.

In the US there are around 21 million flexible-fuel vehicles running E85 gasoline which has an ethanol content of between 51% and 83%. Some 3500 stations serve it across 42 states.

Every eleven years, the sun's magnetic pole flips from north to south.

Electrostatic paint spraying has actually been around since the 1940s.

Studies in the US and Australia have found eggs from hens in urban backyards can contain up to 40 times more lead than eggs from commercially farmed hens.

The global spread of certain hazardous chemicals is so pervasive that unsafe levels of PFAS chemicals can be found in rainwater all over the world, including remote areas such as Antarctica and the Tibetan Plateau.

Following a similar decision in the European Union, the state of California has announced it is phasing out new sales of diesel and petrol cars by 2035, setting aggressive targets along the way. This move will have dramatic effects across the USA.

Seat belts and suitable vehicle seat standards did not become mandatory until the 1970s, and airbags did not become mandatory until the 1980s.

Poliomyelitis has returned to New York. An unvaccinated male living in Rockland County was hospitalized in June 2022. It had been 10 years since New York detected a polio infection. The polio virus was later found in sewage samples taken from Orange County and from New York City itself.

So far this year, 35 house fires in New Zealand have been caused by lithium battery malfunctions.

In California, there is a five year waiting list if you want to transform your classic car into an electric.

When we lose weight, fat cells turn into carbon dioxide and are then expelled through our lungs.

PRESIDENT'S REPORT 2022 AGM

I don't like doom and gloom, it's not me, nevertheless I feel I must report things as they are, which in my mind at least is not as good as they could be.

The committee has been underperforming, and John Cooney in particular I believe has taken on more than his share, the rest of us have underperformed for a number of different reasons. I myself am the busiest I have ever been with work, and getting that precious work life balance and in particular balancing family to club to work to friends and all those other things life gives and has makes it at times difficult to give to the club as much as it needs. From my personal point of view, I have noticed that my Rambles have generally been shorter than the past, and I think that is a reflection of having less time to give.

For a number of reasons, including the dreaded Covid, the committee has also had issues performing, getting enough turn up to the committee meetings, having problems organising events, finding time to live our lives and that of the club, yet despite this I believe we are all putting up our hands for re-election again. That is despite some of the committee being anything but spring chickens, I think currently there are only two of us under sixty and those two aren't too much under that!

Anyway I am sure that we need new committee members, not so much so those of us that are already on it can retire, but just to spread the load, cover those life events and ensure we have enough to turn up to have those meetings, run the club, get the magazine to you. On that subject I cannot say enough as to the value to the club that Jeanette is, she is priceless churning out the magazine month after

month, even if John and I as proof readers sometimes ask hard questions of her and occasionally veto some of the content, or at least attempt to if she doesn't out veto us back.

Now what I am about to report will be news to most of you assembled here including most of the committee members, I had intended to break it to them at the last meeting, however I was covided out. I have had a long discussion with Laurence – the Citroen Club president, and to put it succinctly they want out of the Tricolore Trophy. Their club feels that they have too many pressures and that in general their members are not enjoying and getting enough value out of the traditional navigation trial and gymkhana.

Frankly I don't know where this will or won't lead to, but they have definitely pulled out of the Navigation Trial this November and we cannot expect them to host a gymkhana next February. This may or may not be the end of the interclub competition. I have put it to them – and am yet to hear back- that maybe it is something that we could look to hold every 2nd year rather than annually and even then perhaps over only one event. I will encourage us to keep ties to each others clubs and perhaps have some combined events - to visit various car collections or whatever. Anyway to say the least, I am a little saddened by this turn of events but there is no point in flogging a dead horse; better to accept it and get on with life.

Another bit of disappointing news I just heard two days ago, is that Peter and Dave have pulled the Northland club event, they wanted at least 10 cars to have signed up and they have only six, as organisers they do not see the point in holding the event for such a small number. The timing is unfortunate in that I had just written in last month's magazine a little bit in my Ramble asking more to attend and to get hold of Peter, however his and Dave's minds are made up and that is that. Time to respect their opinion and get on with life.

Our relationship with the Wellington Peugeot Club has also been a bit rocky or perhaps I should say lacking, we were looking to hold a long overdue interclub meeting with them this year, however our planning was first hit by the uncertainties of the Covid situation, followed by the issues we have had of actually getting the committee to assemble let alone achieve anything meaningful, hopefully this will be rectified this coming year! I am more than ready to mingle with them again.

Anyway whether you are here listening to this as I read it or whether you pick it up later and read it in the magazine we would like more help in the committee. We need more numbers, whether you are formally voted in at this AGM or whether you simply become an acting committee member by volunteering after reading this (we will get you formally voted in at a the 2023 AGM instead) I simply want your help, even it is just to reliably turn up to the meetings, maybe express some ideas and to help fold the magazines into envelopes for posting.

I don't want to end with negatives so I will not, I am going to end with a thank you to our advertisers and sponsors, I, we the committee and the Club appreciate what you do for us. It is in part because of you that the club is in a healthy but not exorbitant financial position, that and our printer – Copies Plus – giving a good price for the magazine for many years, having only in the last couple of months put the price up despite rising costs to themselves, plus shall we say, generally frugal expenditure by the committee.

I think we are likely to run at a small loss this next year if we keep the membership prices the same, and I think that is a good thing. let us use up some of those cash reserves and support the current members in these financially trying times.

Brent

2022 AGM

PRESENT; Andrew Corbett, John Cooney, Ray & Anne Cotterill, Brent Druskovich, John & Jeanette Grant, Peter Hagglund, Jayden Hardie, David Holmes, Don & Wynne Howarth, Dennis & Roslyn Lowe, Graham Pooley, Mary Pullman, Ian Robinson, Buster West-Hill, Soo Land Wong.

The full minutes of this 43rd AGM have been emailed to all members but here are the key points

- We would like to thank Lukas for giving us a very interesting talk about the current state of Peugeot sales in NZ.
- The club's two Insurance Policies are the minimum available on any Policy in New Zealand, \$1 million. The Public Liability covers the Club for "material damages" at events or occasions held by the Club and its Members. The Statutory Liability covers Officers of the Club and Members for fines and penalties that are not "material damage". The number of members of the Club is not the constraining factor, it is the million dollars that is the factor.
- The Citroen Car Club has indicated that they no longer wish to compete with us for the Tricolore Trophy.
- Our existing committee was re-elected with the addition of Jayden Hardie.
- The **subs are to stay at \$50** – to be paid into the club's ASB account – **12 3069 0209308 00** asap.

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3 SEPTEMBER 1967
SWEDEN CHANGED TO
DRIVING ON THE RIGHT!

What great historical event lies just about halfway between the October Revolution and the present day?

Högertrafikomläggningen,

That's the day, September 3, 1967, that Swedes switched from driving on the left side of the road to driving on the right side. Most cars in Sweden already had their steering wheels on the left side, anyway, so the change made turning and passing much safer for everyone.

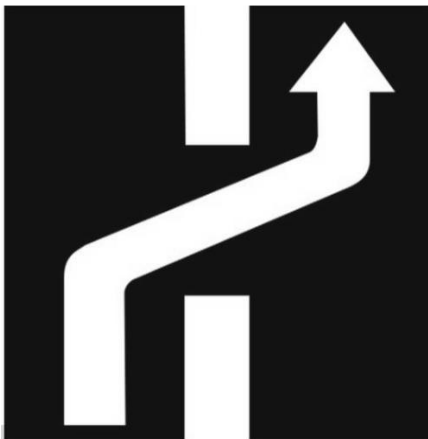
The logistics involved with making H-Day ("Högertrafikomläggningen" translates to "the right-hand traffic diversion") happen were terrifyingly complex, involving changing and/or moving nearly every street sign in the country, swapping out or modifying buses, and endless little details.

Just about anywhere else in the world, such a radical change would have triggered an apocalyptic tarmac slaughter for half the population during the first few hours, but Swedes tend to be good at avoiding chaos and lunacy and nobody died.



An important factor in H-Day's success might have been the catchy government-commissioned tune by The Telstars that instructed drivers to "Håll dig till höger, Svensson" ("Keep on the Right, Svensson").





As well as hoping to boost the country's international reputation, the Swedish government had grown increasingly concerned about safety, with the number of registered vehicles on the roads shooting up from 862,992 a decade earlier to a figure of 1,976,248 recorded by Statistics Sweden at the time of H-Day. Sweden's population was around 7.8 million.

Despite driving on the left, many Swedes already owned cars with the steering wheel on the left-hand side of the vehicle, since many bought from abroad and major Swedish car manufacturers such as Volvo had chosen to follow the trend. However, there were concerns that this was a factor in rising numbers of fatal road traffic accidents, up from 595 in 1950 to 1,313 in 1966, alongside an increased frequency of collisions around Sweden's borders with Denmark, Norway and Finland.

"The market for cars in Sweden was not so big and so we tended to buy left-driven cars," explains Lars Magnusson, a professor in

economic history at Uppsala University. *"But that meant that you would be sitting on the opposite side to what made sense... and you were looking down into the ditch!"*

'Incredibly hard'

In the run-up to H-Day, each local municipality had to deal with issues ranging from repainting road markings to relocating bus stops and traffic lights, and redesigning intersections, bicycle lanes and one-way streets.



Several cities including Stockholm, Malmö and Helsingborg also used the change to implement more wide-ranging transport changes, such as closing tram lines to allow for more bus routes. Hundreds of new buses were purchased by municipalities around the country, and around 8,000 older buses were reconfigured to provide doors on both sides. The total cost of amending public

transportation came in at 301,457,972 Swedish kronor.

Some 360,000 street signs had to be switched nationwide, which largely took place on a single day before the move to right-hand driving, with council workers joined by the military and working late into the night to ensure the task got done before H-Day formally revved into gear on Sunday morning. All but essential traffic was banned from the roads.

"I worked incredibly hard on the night itself," remembers Ramqvist, who shared the responsibility for ensuring around 3,000 signs in Malmö were moved correctly.

"My boss was very proud because we were one of the first (municipalities) to ring Stockholm and tell the head of the commission that we were finished," he says, recalling a charged and celebratory atmosphere. *"We found ourselves eating cake and drinking coffee in the middle of the night!"*

Others remember the stress of the project more vividly.

"The most challenging thing was the shortage of time, no vacation at all, too many hours a day for months, I almost killed myself," says Arthur Olin, now 82, who was working as a traffic consultant in the city of Helsingborg and says he spent a full year knee-deep in logistical planning.

The stress caused him to "hit the wall" a year later. *"I had to go to Africa for two weeks just to cut all connections to the job – doctor's sharp instructions!"*

New era

But as Dagen H finally dawned, the hard work all appeared to pay off. Swedes began cautiously driving on

the right-hand side of roads around the country at precisely 5am on 3 September 1967, following a radio countdown.

Olof Palme, the Swedish Minister of Communication (who later became Prime Minister), went on air to say that the move represented *"a very large change in our daily existence, our everyday life"*.

"I dare say that never before has a country invested so much personal labour, and money, to achieve uniform international traffic rules," he announced.

In total, the project cost 628 million kronor, just 5% over the government's estimated budget two years earlier, and the equivalent of around 2.6 billion kronor (\$316m) today. But economic historian Lars Magnusson argues that this figure is actually relatively small, given the scale of the plan, which was the biggest infrastructure project Sweden had ever seen.

For more details, look at

<https://www.bbc.com/worklife/article/20180417-a-thrilling-mission-to-get-the-swedish-to-change-overnight>

<https://www.autoweek.com/car-life/a1829546/50-years-ago-today-sweden-switched-driving-right-driving-left/>

[John and I were there in July 1967; many of the new signs were up already - shrouded in black plastic. When we reached a border crossing into Norway on a back road, the only evidence we had left Sweden were signs on the road side for the next five miles or so, reminding us which side of the road to drive on. On a major road, they had traffic cops and moveable road barriers. Jeanette]

STELLANTIS' TEST CIRCUIT

The Feb 2022 Autocar had an article by Jesse Crosse headed "Under the skin." Here are the main points.

There has been much research over the past decade into the attractive concept of being able to charge a car, or any electric vehicle, while just driving along the road. Stellantis and its partners have now built a 1050m long test circuit near the A35 between Brescia and Milan in Italy. It is called the Arena del Futuro and aims to develop "dynamic wireless power transfer" or DWPT.

The ability to actually charge a vehicle while driving along a motorway would have a major impact on EV design for cars and haulage trucks as currently they need unrealistically large batteries to support the distances they need to cover. Local static charging would greatly reduce the size of batteries needed. Trials with a Fiat 500 and Iveco E-Way bus equipped with DWPT receivers actually started this year.

The principal is exactly the same as it is for wireless phone or toothbrush charging. 'Wireless power transfer' comes in various forms but is based on the phenomenon that if a wire is placed in a magnetic field, and then the magnetic field is removed, a voltage is induced (or generated) in the wire. Scaled up, with coiled wire and powerful electromagnetic fields, the electrical power so generated can be enough to charge an EV.

Their Israeli partner Electreon has developed the necessary charging technology which consists of multiple charging pads sunk beneath 11cm of asphalt along the length of the road and connected by a cable. As a vehicle passes over each charging pad, its receiver, which works at an induction frequency of 85kHz, generates enough electricity to charge the battery. This Electreon system

is unique because it provides both static charging when a vehicle is stationary and dynamic while driving.

It is the first time a dynamic charging system has been powered by DC current. This allows energy to be transferred to a vehicle at motorway speeds.

However, as well as the cabling and submerged pads, the system needs management units that can handle the transfer of energy from the grid to the road and can also communicate with approaching vehicles.

Receivers on the vehicles generate electricity as they pass over the electromagnetic field created by each pad and a central control unit communicates with all management units and registered vehicles

ALSO

Continental is developing a charging system called **Volterio** to be used in private homes, garages etc based on a similar pad. The system does not require precise parking and can be easily integrated/retrofitted to almost every electric vehicle architecture because of the small packaging size as well as the low complexity of the onboard unit. The system comprises an onboard socket and an offboard unit:

Due to the revolutionary self-centring, high power 360° connector design, the angular orientation of the parking electric vehicle does not matter. Unlike inductive charging where the vehicle must be positioned very precisely, this charging robot can handle large parking misalignments 0.4 x .4 m. Charging was never that simple - park and go away.

- Vehicle Unit - Onboard socket in the car's underbody.
- Ground Unit – the compact charging pad. measures only 800 mm in length, 420 mm in width and 68 mm in height.

Volume production is planned for 2024 and the charger can work with either a 7.4kW domestic feed or 22kW three phase.

SELF-HEALING COATING REPAIRS CAR SCRATCHES.

By Michael Irving

Finding a scratch on your car is a special kind of heartbreak, but in the future they might be gone before you even notice. Scientists in Korea have developed a coating that self-heals scratches in as little as 30 minutes when exposed to sunlight.

The new coating contains a polymer network based on acryl polyol, with what's called a hindered urea structure. Essentially, the polymers have dynamic chemical bonds that can break apart in response to a stimulus and then reform in their original arrangement, effectively repairing minor damage like scratches. In this case the trigger is heat, which is provided by an organic photothermal dye that captures infrared light, also embedded in the coating.

In tests on a model car, the team showed that the coating healed scratches in 30 minutes of midday sunlight. In theory, that means someone could key your car door and the scratch could be gone before you come back.

If half an hour is too long, the team also demonstrated that the process can be drastically sped up under concentrated light. Using a magnifying glass to focus sunlight onto the mark patched it up in under 30 seconds.

The team says the new coating has a few advantages over existing self-healing coatings. Using organic photothermal dyes means it needs far

less energy to work than regular inorganic versions, which usually require heat guns or concentrated UV lights. Others, like Nissan's Scratch Shield, work under gentler conditions but can take up to a week. The new coating can also repair a scratch in the same location multiple times, unlike self-healing materials that work using bursting capsules of resin.

Importantly, the new coating is transparent, so it won't mess with the colour of the paint job, and can be applied using existing spray-coating methods. While cars are the primary use case, the team says it could also be applied to other often-scratched devices like phones or building materials.

The research was published in the journal ACS Applied Polymer Materials.

LITHIUM EXTRACTION

U.S.-based Lilac Solutions has developed an extraction method that bypasses the need for evaporation pools, pulling lithium directly from brine in the Earth's crust with the company's patented ion-exchange process. The new approach not only reduces greenhouse gas production by 80% but also harvests 70-90% of the available lithium (depending on the brine sample). Traditional lithium extraction operations typically require a decade to reach commercial production. Lilac Solution's ion-exchange process reduces that time to two years.

This method proved itself during the first field trials and the team will now adapt the process for medium-term industrialization.

Mi16 DISASTER

I have had a bit of misfortune with my Mi16. I've been busy building and haven't had the time for quite a bit of work needed for its WoF. I had given it a good wash and was going to take it up to storage behind Hahei. I had been to the shops for a pie and was down the bottom getting its covers and hosing out the dinghy when I heard some loud noises and looked up.

The car had self-ignited. There were big brown and red flames from the middle of the car.

I raced up. The car was well alight. I dodged under the deck and turned on the tap round the back. Put out the burning scaff. Played water on the Mitzi 4wd about 3m away, which sizzled with the heat on it. I'd raced up without the key or my phone. The household fire extinguisher proved a waste of time.

What caused it? The car had had a water leak. I had got the water out of the front foot-wells and put 4x2 offcuts under the carpet to help them dry out, about an hour before but the 4x2 on the passenger's side must have crunched some wiring which shorted, setting fire to the synthetic carpet.

People turned up to help, then the Cooks Fire Brigade. The Hahei Fire Brigade truck got stuck in the drain and the Cooks Fire Brigade water truck couldn't get up the r.o.w, so we had to quickly pump water from our tank.

Very very close. Very very lucky that I had got home and very lucky John the pilot wasn't home for coffee.

The Hahei Brigade had seen the smoke as they came up the hill behind Hahei.

Now I've jacked it up and am putting 2nd hand tires on to make it moveable. Then I may sell it as is or dismantle it, especially for the Quaife LSD and wheels.

I'm sorry, I hardly ever go to Auckland and don't get to see my friends.

Cheers - Graeme Neal



402 DARL'MAT

It must have been heart-breaking for the American owner of possibly the world's most expensive Peugeot 402 Darl'mat Special Sports Roadster - when a bank seized his exceptionally restored car and then sold it at auction! This 1938 "Sochaux rocket" is similar to models that competed at Le Mans in 1937 and 1938 - and competition tuned, could cruise at 240km/h - an example of the heady days of the 1930s aerodynamic sports car era.

It was built on the preferred long-wheelbase 402 Legere chassis with streamlining from early wind tunnel research, all the hallmarks of the art deco design and a foldable wind-screen to really get the wind in the hair. It could be historic raced or not be out of place at top concours events. The cabriolet was offered without reserve online with a pre-sale estimate of US\$600,000 to US\$800,00.

With a day to go, there was some head shaking when bidding was hardly serious at a top offer of only US\$150,000.

Two days later, Henderson Motor Series indicated the heat had turned up somewhat, reporting the hammer fell at US\$610,000. Sadly, in an age when rare supercars have gained in value, this was less than the US\$777,000 paid for a top condition cabriolet at the Bonhams sale at Quail Lodge Resort in 2009. That had a US\$1 million top estimate.

Only 105 Darl'mat specials were built - 53 roadsters, 20 coupés and 32 cabriolets. At the time, the aluminium-bodied speedsters were unlike anything on the road. Twenty of all three models have survived. The 1938 models were fitted with an improved competition-tuned four-cylinder engine with a new high compression head and twin carburettors coupled to a modified four-speed, pre-selector electro-mechanical Cotal gearbox that could cruise at 240km/h. It features the tricolour 402 at the bottom of the grille where the O is a hole to insert a crank handle. It has an alligator interior, custom gauges set in a turned metal dash, an outside filler cap and bonnet clips instead of the straps seen on other models. The sale was at the Barber Motorsports Museum, home to the world's most extensive motorcycle collection, in Birmingham, Alabama.

When I reported the sale to Alastair Inglis of Peugeot Club UK, he responded: *"Blimey! I do wonder why such cars, which are so over restored that they are unusable, command such high prices. No good for Outback events."*

by Peter Wilson in PUGILIST

Heartbreak sale of Peugeot supercar



9X8 LE MANS HYPERCAR

One of the new prototypes retired early from the race and the other finished 25 laps in arrears of the winning Alpine, but Peugeot was encouraged by the lap times from Loic Duval in the surviving #94 car at the end. Oliver Janssonie, who leads the LMH programme at Peugeot Sport, said: *"If you look at our last stint, it appears that we are competitive. The most important thing is that we have shown the performance is there. When the car is running without any trouble, I think we can compete."*

Janssonie pointed out that the homologation rules for LMH restrict performance developments to just five so-called 'evo jokers' over the life cycle of the car.

"With these homologation rules, if you start with a car that is not competitive, it is very difficult to come back," he explained *"so this is a big relief for us."*

Duval, who shared the #94 Peugeot with Gustavo Menezes and James Rossiter, set the fastest lap of the race for one of the 9X8s. During his final run, the Frenchman's average lap time was within half a second of the other cars in the hypercar class on track at that point of the six hours. The #94 Peugeot made the finish in 33rd place after two stops of approximately 20 minutes each to overcome overheating issues.

Janssonie explained that the overheating of the powertrain was caused by debris collecting in the cooling ducts. *"We are learning about racing in traffic with debris flying around; it is a new experience for us and this is exactly why we are coming to learn,"* he said. Watch all WEC races live on [motorsport.tv](https://www.motorsport.tv) (geo-restrictions may apply).

Peugeot has completed more than 15,000km with its development chassis since January, but all the testing was undertaken with the car running on its own. The car had to come into the pits, said Janssonie, *"for cleaning and cooling every-thing down"*. Janssonie was unwilling to elaborate on the problem that put out the sister car shared by Paul di Resta, Jean-Eric Vergne and Mikkel Jensen. What he described as an "overall car systems" issue was linked to the problem that prevented Jensen from setting a representative lap time in qualifying, he revealed. *"We had had some issues in qualifying already, which we thought we had cured, but in the end we had only partially cured,"* he explained. *"It is probably several issues at the same time and we don't have the full picture of what happened yet."* He confirmed that there was a turbo boost problem, adding *"we don't know if that is the issue or a consequence of another issue"*. Di Resta subsequently completed more than 30 laps before a second long stop, after which Vergne did one lap before the car was retired.

Janssonie said that the most important thing at Monza was for the in-house Peugeot Sport team to gain experience as it builds up towards a full WEC campaign in 2023.

"It was a hard race for us; we came here to learn and I think we learnt a lot," he said.

by Gary Watkins in 'Motorsport.com'



THE 106 TODAY

According to the article written by John Evans in the 10 August issue of Autocar, the 106 GTi and Rallye models *“offer real world entertainment and exceptional driver appeal for very little outlay.”*

Apparently they can be bought in the UK for between £2000 for the GTi and up to £13,000 for the Rallye. Despite them both being 106s, they are totally different.

In fact, there were two versions of the Rallye. The first - the S1 launched in 1994 – was designed to qualify for sub-1400cc rallying and is powered by a fuel-injected 1.3 litre, eight -valve engine producing 99bhp. It only weighs 825kg and has a close-ratio five-speed gearbox, a chassis with stiffened anti-roll bars and non-assisted steering, a stripped-out cabin, cloth seats and and steel wheels.

Only 1000 were sold and very few have survived. Currently one with 150,000 miles is being auctioned and has so far reached £5000, still below the seller's reserve.

In 1998 the S2 was launched. It was based on the facelifted Phase 2 106 of 1996, and it too was a homologation special powered by a 1.6 litre version of the S1's 1.3 litre engine producing 103bhp. At 865kg it was only slightly heavier and shared the same suspension as the 106GTi.

Unlike the S1 which has drum brakes at the rear, the S2 had discs all round and feels quicker through the gears. The interior had a mix of Alcantara and leather. Both offer a level of driver involvement that few modern cars can emulate.

The 106GTi launched in 1996 had a 16 valve 1.6litre engine producing 117bhp. It weighs 950kg, heavier than the Rallye but the more powerful motor makes it faster. It also had power steering, smarter alloy wheels and a bodykit. It is just as much fun to drive as its Rallye siblings.

However, rust is the enemy of both the GTi and the Rallyes. In particular, check the front jacking points as owners often jack the car incorrectly and split the sill seams.

For parts try spoox.co.uk and 106parts.com



The 106GTi.co.uk website is full of valuable advice and tips on essential jobs ranging from fixing the alarm to changing the engine mounts which can become loose with age.

HYDRO-DIESEL WINS 100TH PIKES PEAK

From motor1.com

The Pikes Peak International Hill Climb is a risky place to test out a new technology, but that's exactly what Trillion did with its new fuel technology called HydroDiesel+. The company was the official fuel provider for the Boxeer Race Team and sponsored driver Grégoire Blachon in the 100th running of the hill climb that took place on June 26, 202.

This radical fuel that infuses water into diesel fuel droplets at the nano level performed remarkably, powering Blachon's Radical race car up the hill in just 12:33:647 (min/sec). That earned Blachon and the Boxeer Race Team the fastest time at this year's race among all diesel-powered competitors – a full one and half minutes faster than its closest competitor.

Trillion developed this water-in-diesel-fuel nanoemulsion technology that infuses a nanometer-sized water chemical solution inside diesel fuel droplets. The benefits range from lower costs to significant emissions reduction, increased engine output, higher fuel efficiency, and reduced health effects on humans and animals from air pollution. The process even

displaces a certain amount of diesel, so the amount of fuel required falls by 20 % but the total volume expands to 125 %.

The fact HydroDiesel+ not only survived but thrived during its torture test at the Pikes Peak International Hill Climb speaks to its potential as a new and better power source for diesel engines. The proof is in the performance: Blachon's Radical is powered by a 2.0-liter turbodiesel making an incredible 500 horsepower, or 250 horsepower per liter of displacement! For comparison's sake, a quad-turbo Bugatti Chiron makes just 187.5 hp per liter. In fact, the only car in the world we're aware of with a higher power-per-displacement metric is the gajillion-dollar Koenigsegg Jesko.

Using HydroDiesel+ doesn't require any modifications for current diesel engines, either. And Trillion already has the tech to convert current diesel fuel to HydroDiesel+ at any point in the refinement and distribution pipeline.



Converting the world's diesel to HydroDiesel+ seems like a no-brainer, particularly if you like climbing hills. If you're interested, Trillion is crowdfunding its growth on StarEngine, where you can invest in the company's right-now solution for meaningful climate change. In the meantime, the company is currently traversing the continental United States on a 7,500-mile roadtrip in a vehicle powered by HydroDiesel+.

The President's AWARD

That in 2022, **Peter Hagglund** Went the extra mile; well more like 9, taking himself and his hapless passenger Soo Land past Castor Bay to Browns Bay only to have to turn around again and return to Castor Bay to attend the committee meeting. Dedication in these times of increasing fuel costs!

IF MY BODY WAS A CAR

supplied by Roslyn Lowe.

If my body was a car, this is the time I would be thinking about trading it in for a newer model. I've got bumps and dents and scratches in my finish and my paint job is getting a little dull.

But that's not the worst of it.

My traction is not as graceful as it once was. I slip and slide and skid and bump into things even in the best of weather.

My whitewalls are stained with varicose veins.

It takes me hours to reach my maximum speed. My fuel rate burns inefficiently.

But here's the worst of it.

Every time I sneeze, cough or sputter,
Either - my radiator leaks
or - my exhaust backfires.

PEBBLE BEACH CONCOURS D'ELEGANCE

Monterey Car Week is over, and it surprised us by offering some big debuts. But the classic cars that flock to the area are a huge draw, too, and the week is never complete without some awards.

Winning this year's Pebble Beach Concours d'Elegance's Best of Show was a stunning 1932 Duesenberg J Figoni Sports Torpedo. A 1956 Jaguar D-Type won the Quail's Best of Show award.

The Duesenberg, crowned yesterday, is the first American car to win the award since 2013 when a 1934 Packard Twelve took home the top honor. This is the seventh American car to win. The Duesenberg competed against 40 vehicles from 18 countries and 33 states. The Duesenberg competed against cars such as the 1951 Talbot-Lago T26 Grand Sport Stabilimenti Farina Cabriolet, the 1930 Duesenberg J Graber Cabriolet, and the 1937 Talbot-Lago T150C-SS Figoni & Falaschi Teardrop Coupe.

"We've been doing this for years, and we've come close in the past, but we never won actually," said Lee Anderson Sr., the Duesenberg's owner. The Pebble Beach Concours raised more than \$2.67 million for charity this year, benefiting more than 95 local charities in Monterey County, California.

Winning the Best of Show award at this year's The Quail, A Motorsports Gathering was a 1959 Jaguar D-Type. It was one of over 200 competing for the prize and was inducted into the Rolex Circle of Champions. It was picked for its "superb construction, design, attention to detail, workmanship, and extensive restoration process." Jaguar won Le Man three years in a row, from 1955 to 1957, with the D-Type racer.

BETTER BATTERY?

Engineers at MIT have developed a new battery design using common materials – aluminum, sulfur and salt. Not only is the battery low-cost, but it's resistant to fire and failures, and can be charged very fast, which could make it useful for powering a home or charging electric vehicles.

Lithium-ion batteries have dominated the field for the last few decades, thanks to their reliability and high energy density. However, lithium is becoming scarcer and more expensive, and the cells can be hazardous, exploding or bursting into flames if damaged or improperly used. Cheaper, safer alternatives are needed, especially as the world transitions towards renewable energy and electric vehicles.

So the MIT team set out to design a new type of battery out of readily available, inexpensive materials. After a search and some trial and error, they settled on aluminum for one electrode and sulfur for the other, topped off with an electrolyte of molten chloro-aluminate salt. Not only are all of these ingredients cheap and common, but they're not flammable, so there's no risk of fire or explosion.

In tests, the team demonstrated that the new battery cells can withstand hundreds of charge cycles, and charge very quickly – in some experiments, less than a minute. The cells would cost just one sixth of the price of a similar-sized lithium-ion cell.

They can not only operate at high temperatures of up to 200 °C (392 °F) but they actually work better when hotter – at 110 °C (230 °F), the batteries charged 25 times faster than they did at 25 °C (77 °F). Importantly, the researchers say the battery doesn't need any external energy to reach this elevated temperature – its usual cycle of charging and discharging is enough to keep it that warm.

Although the type of salt in the electrolyte was chosen because it has a low melting point, it coincidentally has another benefit – it naturally prevents the formation of dendrites. These metal tendrils, which gradually grow between the two electrodes until they cause a short circuit, are a major hurdle for batteries, particularly lithium-ion cells.

The team says that this battery design would be best suited to the scale of a few dozen kilowatt-hours, like powering an individual home from renewable sources. They could also be useful as charging stations for electric vehicles, thanks to their rapid charging. Other types of batteries, such as a recent design using molten salt electrolyte and aluminum and nickel electrodes, could work better at grid scale.

The patents for the aluminum-sulfur batteries have been licensed to a spinoff company called Avanti, co-founded by one of the authors of the study describing the design. The first order of business is to build it at scale, and run it through stress tests.

The research was published in the journal 'Nature'.

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FEMALE INVENTORS

Mária Telkes (1900–1995) was a Hungarian-American biophysicist, scientist and inventor who worked on solar energy technologies. In 1948 she built herself the first solar powered house. Telkes is considered one of the founders of solar thermal storage systems. During WW2 she developed a portable water desalination kit that would save pilots and sailors stranded in the Pacific Ocean from dying of dehydration. Her patented invention, a collapsible purifier made with a clear plastic film, eventually became part of standard-issue military emergency kits.

DEFINITION OF THE MONTH

“ATHEISM IS A NON-PROPHET ORGANISATION”



The 'Roller coaster' bridge linking the Japanese cities of Matsue and Sakaiminato was constructed like this in order to enable large ships to pass beneath on Lake Nakamui

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