

The Road Observer

The Newsletter of the North Down
Advanced Motorists Group



Summer 2021





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The Newsletter of the North Down Advanced Motorists Group (Group 8199)

Helping to Improve the Standard of Driving and Riding on the Roads in Northern Ireland and the advancement of road safety

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Test passes

With the ongoing restrictions due to Covid-19 we have no test passes to report.

May Cover Picture

The May cover picture was the Belfast Road, Newtownards at the bottom of Bradshaw's Brae looking towards Kiltonga. The hazard sign for wild animals might look a bit odd so close to the town but in recent years I saw 4 deer proceed across the road just where the road goes out of sight in the distance.

Congratulations to Ivan Greenfield for identifying this one.

This month's cover is also local. Do you know where it is? No prizes, just the satisfaction of good observation and, of course, a mention in the next Road Observer. Submit your answers to: secretaryndam@gmail.com

Covid-19 Update

At this point in time the requirements include the following:

Gatherings

Indoor gatherings (non-domestic) - a risk assessment is required if more than 15 are involved. The Group has a risk assessment for the use of the Boathouse if more than 15 are in attendance.

Outdoor gatherings - a risk assessment is required if more than 30 are involved. For the bike side here is a link to the requirements - scroll down to the section on Outdoor gatherings:

<https://www.nidirect.gov.uk/articles/coronavirus-covid-19-regulations-and-guidance-what-they-mean-you>

You should avoid places where large numbers of people and crowds will form.

Car sharing

If you travel with someone else who is outside your household the passenger should sit in the left-hand rear seat. It is this requirement that is an impediment to car observing as it is not possible to properly observe an Associate from this position.

The advice from HQ is that we must adhere to the guidance as our situation is different from that of learner drivers in that learners may find it necessary to pass the basic test for reasons of employment, caring for others etc.

Here are links to guidance on car sharing

<https://www.nidirect.gov.uk/articles/car-sharing>

and to an information flier

<https://www.publichealth.hscni.net/sites/default/files/2021-04/car%20share%20leaflet%200421.pdf>

The result is that on the car side we have had to cancel our planned enrolment night in the Groomsport Boathouse on Tuesday 10 August.

With Covid case numbers rising the situation remains fluid and it is difficult to anticipate when things will get back to normal (or at least the new normal).

Dates for your diary

In the hope that we will be up and running again in September:

7 September - STAC enrolment, Groomsport Boathouse 7.15pm

14 September - Group night, speaker TBA, Groomsport Boathouse 7.15pm

28 September - STAC session 1 Groomsport Boathouse 7.15pm

12 October - Group Night - AGM

9 November - Group Night TBA

14 December - Group Night - Christmas dinner - venue TBA

STAC dates for the remainder of the year will appear in the next issue, subject to the current restrictions being relaxed.

Car choices by David Harcourt

Most of you know me by sight, or by reputation (thanks Lisa). Even before lockdown and the various levels of COVID restrictions we've hurdled through, I have been a home worker for 12+ years, albeit one who travelled internationally up to twice a month. Since it costs more to drive and park at the airport for two days than the taxi fare there and back, I don't really use the car for work. Compared to the phase in my life when I drove to Antrim every day and had a young family, this has been very liberating, as I no longer need to make good decisions when choosing a car. That is, it doesn't have to be sensible, economical or practical, and doesn't need ISOfix fittings for a baby seat, although my wife does try to ensure I choose something which can make a run to IKEA.

I have owned, driven and tested a large number of vehicles in my driving career. I started out with a Fordson Dexta and a Fordson Major, agricultural tractors for you townies who don't recognise the marque. The interesting thing there was that one had the mirror image gearbox of the other, and neither had a visual indicator of the gate. I also drove a number of other vehicles around that time,



c. Martin Pettitt



c. Steve Glover

including my dad's Vauxhall Victor and Bedford TK and my cousin's MG Midget. With my school and student days out of the way, I began car ownership. I have been curtailed variously by budget, practicality, and my wife, but never by public opinion. Most of the cars I've owned have been sensibly practical family cars, and I've enjoyed them all to some extent, with the possible exception of the Fiat Oh-No, the Renault Scenic, and the murder car. The Fiat lived up to its acronym 'Fix It Again Tony', the Scenic stopped feeling like a new car approximately 25 minutes after delivery, assisted by the stupid, inconsiderate oaf who parked next to it in an otherwise empty car park and dented the door when it was literally fresh from the showroom. And for obvious reasons, the murder car, which had me at the High Court in Belfast to testify that I was not the driver of the suspect vehicle in a murder enquiry.

So, moving past a portfolio of practical, but dull, family cars, I became a homemaker with no need for a sensible, practical vehicle. I bought a manual Jaguar S-Type, then upgraded to automatic transmission and progressively larger engines, Mercedes AMG, Jaguar again, Lexus, Honda, and another Jaguar. My car dealer informs me when he has something of interest, so I drive a lot of his cars, and I'm not afraid to tell him when something fails to deliver.

In my most recent customer research, I tried a BMW 530M. It's a nice, well specified luxury car. The first thing I noticed was that despite the multiple seat adjustments, I just could not get a good driving position. Thinking I might dial it in later, I went for a drive. Seating aside, the ride was comfortable and smooth, but dull. It has so many gears, which it changes smoothly, that even in Sports mode it stayed in a very narrow rev band and did not deliver a rewarding response or tone.



c. M93

Next up, an Alfa Guilietta Cloverleaf. Absolutely stunning car, and for a moment I was in love. It had a nice, comfortable sports seat, fantastic road holding, and a joyful engine. However, it also had an armrest on the driver's seat which blocked access to the handbrake. The dealer suggested flipping the armrest up, which only succeeded in preventing me selecting gears 2, 4 & 6 as I hit my elbow when drawing the gearlever back.



After that I tried a VW Golf GTDT. VW have achieved the near-impossible and made an extremely practical and reliable car just a bit insane, and correspondingly fun. It's comfortable, easy to park, practical, fun, and good for the school run, and that last point was a let down for me. If I had to have a sensible, practical car, it would be a Golf. But I don't, so the test drives continued.

I tried a Jaguar XK, and then a second XK in a different colour. One was a 4.2 litre turbo model, the other a 5 litre supercharged. Both were spectacular, and for the record I preferred the 5 litre for both the response and the soundtrack, but I had to admit that even for me they're a bit impractical. They are so low, I clipped the side of my head on the edge of the roof every single time I got in. Obviously Mrs H didn't approve because it is entirely unsuitable for IKEA, but the deal breaker was the other Mrs H, my mother. She never saw either car nor passed judgement on them, but I know if, post-lockdown, I were to take her out for lunch some Saturday, it would require a Fire and Rescue crew with some specialised equipment to get her out of that bucket seat.

Next on the list was a Honda Accord. It had a lot of potential, was well equipped, capable of an IKEA run, probably indestructible, and black (I'm playing the long game with my eye on a black Bentley, and Mrs H doesn't usually notice a car change if I stick to the same colour). Now, I have driven cars which live up to the Honda acronym 'Hold On, Not Done Accelerating'. This was not one of them. The throttle pedal delivered enthusiastic tone and volume, but no discernible acceleration.

Which brings me to the ugly duckling of the pack. I don't like to judge on appearance, but the Peugeot iOn probably doesn't get asked out much. However, within its limitations, it is a fine vehicle. The seating position is upright though maybe just a little bit too close to the passenger, but there's room for two full size adults in the rear. It's disconcerting to turn the key and hear absolutely nothing. You get a small Ready light on the dash when you select drive, but it's completely silent. The iOn is rear wheel drive, stable and responsive, at least up to 45mph. If you are a town driver, this is a viable everyday vehicle. There's not a lot of equipment on board, hence not a lot to go wrong. The supermodels of the electric fleet, the various Teslas, are loaded with toys and are a curious compromise of technology and weight saving, most notably in my experience that the seats are hard plastic with the thinnest film of foam and vinyl, reminiscent of a 1970's Ulsterbus. The iOn at least has proper car seats. The Nissan Leaf and Renault Zoe are prettier. If it really comes down to it, even the Renault Twizy is prettier, and it's never won a beauty pageant. However the manufacturer's quoted range is only 93 miles, and that probably translates to a real world 60 miles. That is fine for



multiple short local journeys, but for anything longer it's equivalent to starting your journey with the fuel warning light on.

And finally, the winner. This car is so distant from anything mentioned so far, it's not fair to have them on the same list. Yet here it is, mostly because life's not fair. I replaced my Jaguar with a Mercedes CLS, confident that I've sampled alternatives. It's got a tremendously powerful 5 litre V8, and yet the



not so pretty Peugeot was just as smooth and a lot quieter. It's got obscene fuel consumption, making the range (on a large tank, I should add) comparable to a Tesla, though notably better than the iOn. It's difficult to park, and it can achieve a completely inappropriate speed unnecessarily quickly. It failed the IKEA test, but two of my neighbours offered their cars (and their sympathy should the day ever come) for IKEA and encouraged me to go for it.

We are all encouraged to Reduce, Reuse and Recycle to save the planet. I have reused someone else's Mercedes which is not yet due to be recycled. I am a fan of electric vehicles but their green credentials are not as clear cut as you might think. We don't have the infrastructure to support them yet. A large proportion of the environmental impact of a product comes from its manufacture, not its working life. In 2021 there just aren't enough of the right materials available for an electric vehicle for everyone, and getting the minerals out of the ground requires a lot of fossil fuel and generates a lot of waste. Nickel mining is arguably one of the most polluting processes on the planet, and it is alleged there isn't a blade of grass within 60 miles of the largest nickel mine in the world. The Phillipines, not known for tough environmental laws, has closed dozens of nickel mines in recent years. Sure, once the electric fleet is built, there will be a healthy recycling economy as the spent batteries are much more accessible than extraction from ore, but for the next couple of decades there's going to be a lot of environmentally unfriendly mining going on if we're ever to go electric.

Additionally, I read an article recently about the environmental impact of pet ownership. It estimated that a large dog has the environmental footprint of two Toyota Landcruisers, a cat is equivalent to a VW Golf, and a hamster is comparable to a 55 inch plasma tv. So, on that scale, I reckon I've just replaced the big cat with a large dog. The neighbours are covering the IKEA gap, and Mrs H is happy. The only downside is, it isn't black.

<https://www.theguardian.com/sustainable-business/2017/aug/24/nickel-mining-hidden-environmental-cost-electric-cars-batteries>

<https://www.ovoenergy.com/blog/lifestyle/carbon-pawprints-the-environmental-impact-of-pets.html>

ALL THINGS MECHANICAL in the MOTOR VEHICLE Ivan Greenfield

It was in the very early 1800's that what could be considered the first "horseless carriage" appeared. In 1803 Richard Trevithick used what is said to be the first horseless carriage which was powered by steam. It was to be another 20 years before Goldsworthy Gurney built steam-powered road vehicles of which there is an example in Glasgow Museum of Transport.

A Belgian engineer Jean-Joseph-Etienne Lenoir may be credited with the first "horseless carriage" in 1863 as it was powered by what was to be the first commercially successful internal combustion engine. However, in 1769 the Frenchman, Nicolas-Joseph Cugnot may be considered the inventor with his steam powered vehicle. He is also understood to be the first to have a car accident when he crashed into a wall at 3mph so a suitable means of stopping (brakes) was not to be ignored.

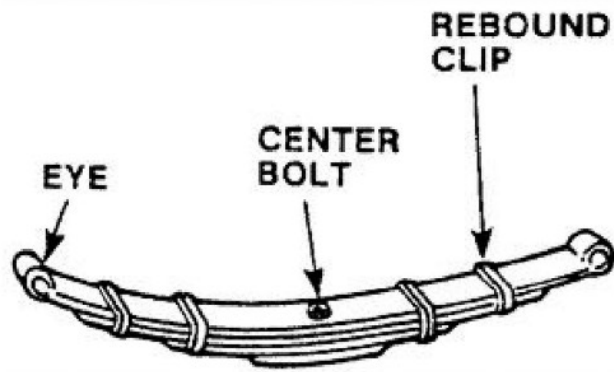


Considered as a step forward in technology there were always some detractors, people who thought that the smell, noise, even the speed (around 3mph) were unacceptable. The modern tyre, a pneumatic item was patented in 1845. by Robert Thomson 43 years before our own Mr Dunlop, developed it 1888.

So was born the seed that would sprout into the modern car. A form of transport for the modern family. A form of transport for public use. A form of sport for the modern millionaire. A form of pollution for the modern world. A form of debate for the modern designers, engineers and tree huggers.

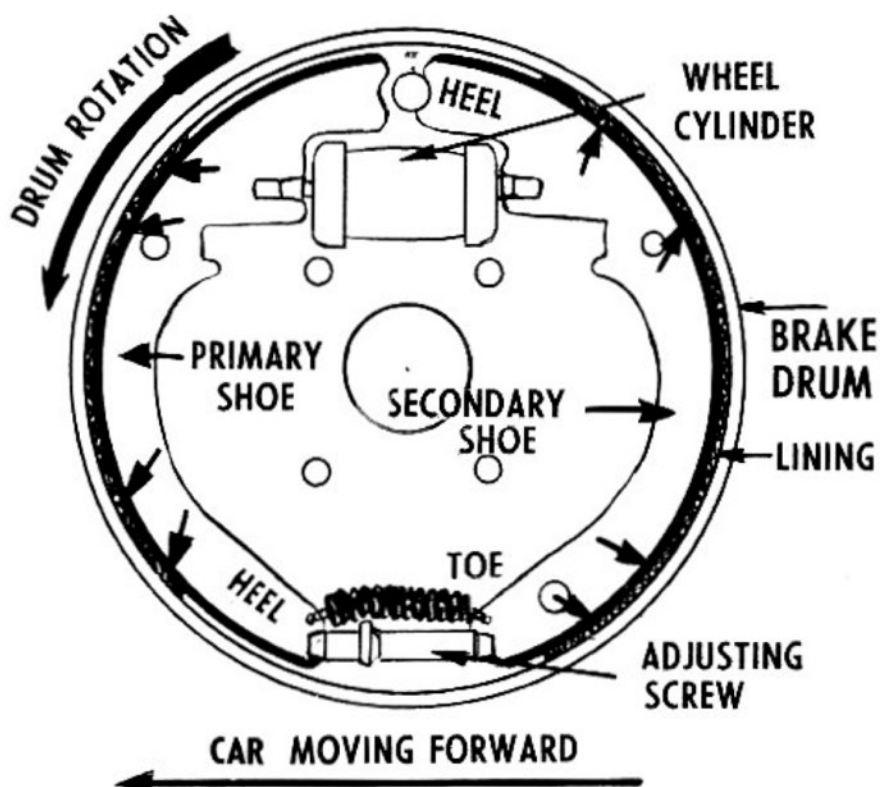
The following years would see the design and development of suspension, suspension damping, brakes, transmissions, tyres, aerodynamics, lighting, power units, fuels, the list goes on. Our world revolves around the motor vehicle, almost a necessity for modern living.

Suspension was invariably by elliptical and semi-elliptical springs. I wonder how many broke on the uneven roads of the day; as many as break today on our questionably expensive to maintain highways? The pace of development towards the modern car was fast outstripping the pace of suspension design and while an early, and crude by standards of today, fluid damper was introduced around 1902 the variation in design and any benefits were being negated by the onward progress of both vehicle weight and speed. Early units were single acting, only damping on the rebound and it was into the 1920's before a double acting unit was to become common place. Even then there were



lessons to be learned as the double acting, lever arm units were again overtaken by the demands of the suspension requirements. It would be approximately another 10 years to see the introduction of a telescopic unit that could be considered the father of our modern items, incredibly complex and no doubt still on the continual slope of development. The use of the spring to aid the location of the driven axle was eventually to be superseded by a 4 link system and the use of coil springs. The 4 links were located on the structure of the car and angled to locate the axle both laterally and longitudinally yet allowing the vertical movement required for the suspension to operate. This overcame the tendency of the leaf spring to let the axle “wind up” under load, especially with the introduction of more powerful engines.

As mentioned above Monsieur Nicolas-Joseph Cugnot was to determine, brakes were not to be forgotten and it was not long before the need was paramount. A crash at 3mph was a shock, no mistake, at 33mph it may be the one and only crash. In 1902 a British engineer, Frederick Lanchester was granted a patent for a “Disc Brake” no question a step forward but it was to take many decades before these became an option never mind a standard fit. It was to be 1920 before the first 4 wheel braking system was fitted to a car and these were of a drum and brake shoe design. A pair of “shoes” closely following the internal diameter of a drum were used to expand and cause sufficient friction to stop the vehicle. A single leading shoe design was common but a twin leading shoe arrangement was vastly superior.



A twin Leading shoe design would have 2 hydraulic slave cylinders, each with only one piston, the second being in place of the screw adjuster. Or in a mechanical linkage one lever operating a cam for a single leading shoe system or a second lever and cam to operate each shoe as pictured below as used on early motorcycles. While still in use today, mostly for parking brakes, even on some of the more salubrious vehicles, disc brakes were to replace the drum brake for the main brakes as applied using the foot brake. Simple transfer of energy being the main reason. Converting the energy due to the vehicles inertia (kinetic energy) to heat and dissipating this to the air. A drum brake contains this heat and a disc brake is 75% or more open to the air and dissipates it more rapidly.



And finally.....

How difficult can it be to park one of these between the lines?



The views expressed in the “Road Observer” are not necessarily those of the Editor, the North Down Advanced Motorists Group or the Institute of Advanced Motorists