e-NEWSLETTER









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TAUNTON GROUP OF ADVANCED MOTORISTS

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DATA PROTECTION ACT

Members' details, i.e. names, addresses and telephone numbers, are kept on computer for convenience. This information will only be used to further the aims and objectives of the IAM and is only available to Committee Members BUT can be inspected at any suitable time provided just cause can be proven.

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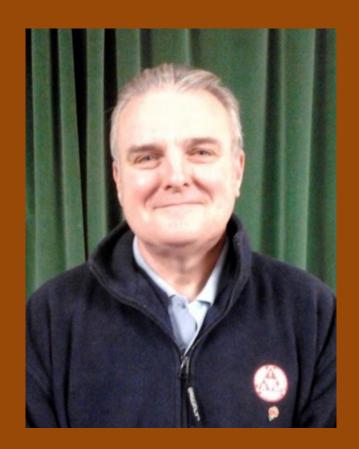
From the Chairman



By Andrew Griffiths

Welcome to this spring edition of our newsletter. With Christmas seemingly well and truly behind us, we're heading towards summer and if not already planned, we'll be arranging our holidays.

My plan for a holiday this year is to have several overnighters here in the West Country. There are many places Katie and I would like to visit but our main constraint is our family of Birman Ragdoll cats - we wouldn't contemplate putting them in a cattery so our excursions have to be planned around them.







Before Christmas, we had 4 cats but sadly, Minnie, a 4 year old Birman Maine Coon, was killed by a passing car outside our gate; the driver didn't bother to stop and my wife found Minnie a few minutes later. We live in a single track lane which has a national speed limit and the section of lane where we are allows drivers to see through the shallow bends so consequently some drivers - not all - give it their best shot to achieve 60mph despite there being clear evidence of houses in the vicinity (some with their front doors opening directly onto the lane!). As advanced motorists - and I promise that this is not a lecture - we know that every road has two speed limits; the "posted speed limit" and the "safe speed limit" and the two can be very different. There are however, drivers out there who see a speed limit as a target to be achieved rather than a maximum limit to drive within safely. We also know the golden rule of motoring... drive at a speed which allows us to stop safely in the distance we can see to be clear on our side of the road. Driving in a single track lane is challenging and the golden rule is that

we drive at a speed which allows us to stop safely in half the distance we can see to be clear, as oncoming traffic directly in our path will use the other half; so we approach "blind" bends with that rule in mind but we must be prepared for meeting a car/bike coming around the bend at speed. I tend to overcompensate by driving much more slowly towards and around blind bends and this paid off very recently when a car came around a blind bend too fast: had I been going any faster than a walking pace the other car would have collided headon and as it was he applied his brakes so hard that he only just managed to stop a foot away. A close call but I felt that I was as prepared as I could have been. I hear you ask. "Why don't you sound the horn to announce your presence?" Well this lane is frequented by horse riders who live in and around the lane (the evidence on the road is clear to see © and is of course an "observation link") so there is a risk that sounding a horn when approaching a blind bend may spook a horse on the other side. Have you similar experiences on single track lanes? Share them with us.





The aforementioned are covered by our team of Observers when preparing our Associate members for the IAM Advance Driving Test (Skill for Life) as part of raising road safety in Somerset. It is a fact that we won't be able to pass on knowledge to every driver in the County (but wouldn't it be nice?) but if we all do our bit in spreading the word it can only serve to help. Please be careful out there... it's a dangerous world!

And so back to holidays. Are you planning a trip abroad which may involve hiring a car locally? One of the most important things you can do when you take charge of the hire car is to carry out a cockpit drill. This not only helps familiarise you with the car and the location of essential switches and buttons but if done properly it can highlight defects before driving away. It gives you peace of mind. If you'd like to remind yourself what a cockpit drill involves, I have put it in a separate article in this edition.

It may look rather tedious and formidable and minds will be on other things such as getting to the hotel and jumping into the swimming pool or having cocktails on the balcony; actually it takes a minute or so to go through and between now and your holiday, you can practice it in your own car!

And on to IAM business. 2014 was a busy year and IAM introduced a number of changes to its management infrastructure; it promoted a professional approach to the way it operates; it set out a timed schedule for its 200 Groups to train their Observers for the IMI Qualification during 2015. Simon Best was the driving force behind many of these changes and regrettably, he resigned last year. His successor has recently been appointed and so Sarah Sillars becomes our new CEO. Sarah has a long and illustrious career within the automotive sector, having been CEO and Executive Chair of the Institute of the Motoring Industry (IMI). They made her an Honorary Fellow and Vice President on her departure in 2012. I'm sure we all wish her well in her new post.

I mentioned above that Groups had been given a schedule to train Observers for the IMI Qualification; there are two grades... National





Observer and Local Observer. TGAM now has 2 National Observers; David Perkins and me. We'll be involved in providing training at both National and Local Observer level. This is a priority for 2015 and it means that I'll be taking on fewer - if any - Associates of my own so that David and I can focus our efforts into preparing our Observers for the IMI qualification. I have to keep reminding myself that I'm an unpaid volunteer with interests additional to IAM!

So 2015 will be a challenging year. It will hopefully be a rewarding year too to see our Observers become "IMI accredited".

IAM Masters continues to draw interest across the UK; this is described as the ultimate challenge and it is a tough course followed by a tough test. As a Masters Mentor, one of my roles is training candidates up to the level required for the test. The time required to do this is tailored to the individual and can take upward of 6 training sessions, each of around 2½ hrs of which 2 hrs is driving (with a coffee break!).

The Masters test - conducted by Andy Poulton - lasts for around 2 hrs (driving and theory) and demands continuous and intense commentary which the candidate will have been coached to develop throughout the training. Masters requires dedication and commitment. It also requires a good memory as there is background reading to be done (and I give homework!) to develop depth of knowledge on Roadcraft (the Police Driver's Handbook) and on the Highway Code. It may sound torturous but everyone who goes through the Masters programme seems to enjoy the experience. One of our members, Peter Brocksom, recently passed Masters with a distinction... and Mr Poulton doesn't give many of those away! Congratulations to Peter for a sterling performance.

I hope to see you at our first social evening on Wednesday 18th February at Hatch Beauchamp. We'll be talking about motorway driving using one of the IAM training modules. Come and say "hello".

Andrew.

THE COMMITTEE



Committee meetings (for Committee Members ONLY) are held bimonthly at 7:30pm on the 2nd Thursday of the month at Hatch Beauchamp Village Hall. If, as a Group Member, you need to raise any issue at Committee level, then please feel free to contact any Committee Member to put your views to the next Committee Meeting.

Chairman Andrew Griffiths chair@toam.org.uk

Secretary/Newsletter Editor David Walton secretary@toam.org.uk

Treasurer Geoffrey Stoate treasurer Glasm om uk

Associate Coordinator Tony Hucker coordinator Tony Hucker coordinator

Webmaster Paul Willitt <u>cmpw@tgam.org.uk</u>

Events Coordinator Ella Waude <u>events@toam.org.uk</u>

Committee Members Rachel Bettiss <u>cmrb@tgam.org.uk</u>

Brian Howe (President) president@toam.org.uk

Janet Loader <u>cmil@tgam.org.uk</u>
Faye Markham <u>cmim@tgam.org.uk</u>

GROUP OBSERVERS



Chief Observer and Masters Mentor	Andrew Griffiths
National Observer	David Perkins
Senior Observer	Michael Turner
Group Observer	Godfrey Davey
Group Observer	Brian Dodd
Group Observer	Tony Hucker
Group Observer	Isobel Jennings
Group Observer	Janet Loader
Group Observer	Hugh Todd
Group Observer	David Walton
Group Observer	Allan Wellwood
Group Observer	Russ Williams
Trainee Observer	Barry Keenan
Trainee Observer	Josephine Washington
Trainee Observer	Timothy Wheeler
Trainee Observer	Michael Wotton

Group Observers must be fully paid up Taunton Group Members AND National IAM members at ALL times to carry out your vital Observer roles: There are NO exceptions.

Always check that your Associate has an up to date membership card before departing on any observed drives. Please try to make and maintain contact with your new Associates and listen to any concerns or fears they may have. When Associates pass their Advanced Driving Test, PLEASE inform the Associate Coordinator as soon as possible as we have a duty to keep accurate and up to date records. All new Associate Members are normally teamed up with a conveniently placed Observer. If you have any problems please contact our Associate Coordinator, Tony Hucker.

The following IAM and TGAM members are Driving Standards Agency/Approved Driving Instructors:

 Nigel Steady
 01278 722944

 Nick Tapp
 07900 900678

Members and/or enquirers must establish their own facts and details when contacting a Driving Instructor. If any other IAM and TGAM Full Member Driving Instructors wish to be on the above list, contact the Group Secretary or the Newsletter Editor. (NB: You MUST remain full IAM and TGAM members at all times.)

PRESIDENT'S PONDERINGS



By Brian Howe Group President

I have recently been tracing my family history. I now have my father's Royal Navy records from 1941 to his medical discharge in 1949. I was already in possession of his WW2 campaign medals and his insignia of Signalman Trained Operator. I have also discovered that my grandfather Howe was a Royal Marine Infantryman who survived WW1 and was sent to China in 1927, followed by medical discharge in 1931. They were both born in the month of September, they both volunteered at the age of 17 years, they both survived a World Conflict, were both sent to the Far East and both medically discharged for the same illness which took both their lives at a very young age. Dad at 28 years, and granddad at 37 years.







I have traced the Howe family back to my 3 times great grandfather, born in 1803, then following his wife's family, I have managed to discover my 8 times great grandfather, Mr Keeley, born in 1641. I became so engrossed in this quest that I have been working on this laptop until nearly midnight for days. So I owe an apology to our e-Newsletter Editor, David Walton, for neglecting my duties and forgetting to supply an article for the spring edition. Sorry David.

Where does the time go? I have already forgotten what I did over Christmas, but I expect some of that is due to age. One thing I do remember with great joy and affection, was Christmas morning and Christmas lunch with my wife Alice, my daughter, her partner, 4 grandchildren, "ranging from 18 yrs to 26 yrs), and my great grandson, Caleb. It is definitely true that young children, (he will be 2 in March), much prefer the wrapping paper and cardboard boxes to the presents that are wrapped inside. I hope that you have all enjoyed your Christmas holidays, and that you have survived the worst of the winter so far, unscathed. Although I am writing this in the middle of the (cold) 3rd week of January.

Unfortunately, my Motorbility car, an 18 month old Vauxhall Meriva Turbo, did not survive unscathed. Alice was driving slowly into a parking bay, (I know! I know! Advanced motorists should always reverse into a parking bay), but I needed access to the luggage area for my rollator, (a 4 wheeled walking aid), without scratching other peoples cars.



As we entered the bay, the driver of the French MPV to our left, decided to open his driver's door without looking. This caused the leading edge of his door to scrape the front, left corner of the front bumper and front wing, causing scratches through to the plastic and bare metal





respectively. It also chipped small flakes of paint off the edge of our front left wing. The way Motorbility insurance works is that the vehicle goes straight in for repair without an estimate and the driver pays out the £75 insurance excess fee. Only after the vehicle is repaired do they investigate fault and whose insurance pays. Alice has been driving for 50 years without accident or blemish on her licence, so we are hoping that she will be found to be not at fault and that we will see the return of our £75 excess fee before spring. All this kerfuffle did mean that we only had a courtesy Vauxhall Corsa to use for our son's wedding on 21st December. Not guite as much room as our Meriva which was returned on the morning of Christmas Eve. Deep joy! As they say.

In other news, partly due to the wedding, Bobthe-Bike missed his twice annual service at Ralph Colman's of Taunton. I now have him booked in for the 28th January, meaning that I will, very soon, have to empty the shed he shares with 2 mobility scooters, a scooter trailer, and various sundry garden implements. The irony is that I will have to do my POWDER checks before I ride him the one mile plus down to Colman's. At least they will have to

check the brake balance, as there are two disc brakes operated from each brake lever, and check and lubricate the derailleur style gear system. If you have a bicycle that you haven't used all winter, please don't forget to check it out before you ride it. Or have it serviced at one of the many bicycle shops located in most Somerset towns.







would like to remind you all, especially if you have children who cycle on the roads, that IAM Chiswick no longer supplies any material or books regarding bicycling safety. They used to sell "How to be a better cyclist" for £9.99, but having searched the IAM website last night, (20th January 2015), I can see nothing whatsoever in regard to safer cycling. Once again the cyclist becomes the poorer relation of road safety. I did however, find 7 used "How to be a better cyclist" books on Amazon priced from £2.07 plus £2.80 UK postage. If you would like cycle training for your children or yourself, you could enquire about Bikeability, Cycling Proficiency for the 21st Century. Details are available from www.bikeability.dft.gov.uk or from Somerset Road Safety, Phone: 01823 340011, Email: roadsafety@somerset.gov.uk Web: www.roadsafetysomerset.gov.uk. You also enquire at your child's school to ask if they provide cycle training. It would be nice if Bikeability became an essential part of the national school curriculum.

Talking of training, do you drive a large van, minibus or other larger commercial vehicle? If you do, have you considered taking the IAM Commercial Advanced Driving Test? IAM

Chiswick now offers a new product designed especially for you at the modest cost of £99.

This covers a blue commercial IAM badge and the driving test. Unfortunately you cannot have it. It is for non-IAM members who think they do not require coaching or training to pass such a test. As an experienced Advanced Motorist, you have to pay the full £149 for the Commercial Skill for Life package which includes training for the test. Of course we all know that the training doesn't actually cost anything because all Observers are volunteers. The one saving grace is that your Local Group receives a small percentage of that fee. I think it is just plain daft! £149 is almost half of the weekly wage for a coach driver in the West Country. I know. I was a coach driver for 25 years.



I drove this one on school runs.





I must remind you of our upcoming social events at Hatch Beauchamp village hall. These are held on the 3rd Wednesday of every month except January and August. I would particularly like to plug our Classic Car Evening which will be on 15th July at 7:30pm. This event is entirely FREE, including food, to all who attend, whether members or not. If you own a classic car or interesting or rare vehicle, we would be very pleased to see it. Please contact Ella, our Events Coordinator at events Coordinator.



The car above was my last classic car, a 1970 Ford Zodiac Mk IV, 3 litre V6, Automatic.

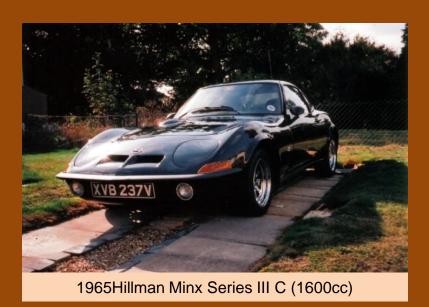




1965Hillman Minx Series III C (1600cc)







This Opel has belonged to my son since 1994. I ran it for a couple of years. It gives a beautiful ride due to it being so well balanced. The engine is so far back that the gearbox is directly between the seats. The headlights rotate out of the bonnet by the operation of a manual lever which is located on the transmission tunnel beside the handbrake lever. It is currently undergoing a full restoration in Fuerteventura where my son has lived for 8 years.

Well I think that's it from me on my soap box. I wish you all a rather late Happy and prosperous New Year. Enjoy your cycling, driving, motorcycling, horse-riding and yes, walking as well. Above all STAY SAFE, and help other road users to do so. Don't be afraid to talk to family, friends and work colleagues about what you have achieved. Don't forget that you can add your Advanced Driving Test Pass to your employment CV. It is a skill which you worked hard for. Bye for now.

Brian L. Howe. Coach Driver/Chauffeur Retired. Cyclist, Pedestrian and Mobility Scooterist. IAM PC/CV. TGAM Hon. President.

CALENDAR



COMMITTEE MEETINGS

9th April

11th June

13th August

			FEBRUARY
18	W	7:30 pm	Member's Evening – Motorway Driving - This module talks about motorway signs, rules & regulations, dealing with roadworks, breakdown or incident procedures and vehicle checks
			MARCH
18	W	7:30 pm	Member's Evening - Classic Cars - An illustrated talk by Tony Vaughan-Reed, a classic car enthusiast and collector.
			APRIL
15	W	7:30 pm	Member's Evening – We aim to organise an Interactive "Skills Challenge"
			MAY
12	Tu	am or pm	IAM Skills Day – circuit based driver training at Croft (N. Yorks)
			JUNE
17	W	7:30 pm	Member's Evening - Roger Jewell "as yet untitled"
			JULY
2	Th	am or pm	IAM Skills Day – circuit based driver training at Thruxton

MEMBERS' PAGE

Firstly, a big thank you to Serena for supplying me with the 'member's pages' copy for the last 2½ years (and John Gilbert, the previous editor, for many years before that). Now, with my membership secretary's hat on, I must try to follow her.

TGAM currently has 111 fully paid up members, of whom 11 are associates and 16 are observers. In the last 12 months the group's members have achieved 17 test passes, three of them at First level, and no failures. This 100% pass rate compares to 84% nationally, so congratulations to both the members and their observers who helped them achieve such fantastic results.

Masters

Congratulations to Peter Brocksom, who passed his Masters with a Distinction at the end of December. His mentor was Andrew Griffiths.

Advanced Driving Test Passes

Congratulations to six members who have recently passed their Advanced Driving Test.

OBSERVED BY

Neil Hammond David Walton
Gerry King Michael Wotton
Grant Lewis Tony Hucker/Hugh Todd
Andrew Ross (F1rst) Isobel Jennings
Dale Stote Hugh Todd
David Porteus Russ Williams

The Membership Register

This quarter we have five new group members, (two from Camelot, marked C). We hope you enjoy your association with the Taunton Group and we look forward to welcoming you to our meetings, events and activities.

	<u> IOVVN</u>	<u>LEVEL</u>	
Joe Caruso	Glastonbury	Full	С
Mark Drew	Wellington	Associate	
David Porteus	Bridgwater	Associate	
Hazel Snell	Taunton	Associate	
Richard Stephens	Yeovil	Full	C

David Walton, Membership Secretary



March Members' Evening

'Classic Cars'



An illustrated talk by Tony Vaughan-Reed, a classic car enthusiast and collector

Wednesday 18th March 7:30pm Hatch Beauchamp Village Hall

April Members' Evening

Skills Challenge

A practical evening of activities to suit every member

Among the planned activities are:

A night/dusk drive with an Observer, to include a reversing manoeuvre.

A motorway drive

Parking exercises

POWDEREY check exercise, members' own car

Cockpit drill exercise

A commentary drive

Wednesday 15th April 7:30pm Hatch Beauchamp Village Hall



The Cockpit Drill for Cars

By Andrew Griffiths

"Cockpit Drill" is the term used by advanced motorists to define a set of preliminary checks which will ensure that the primary vehicle controls and ancillaries are functioning correctly. The drill takes a while to become familiar but once inculcated it can be completed in a matter of seconds.

Really skilful drivers will run through this comprehensive safety check each time they enter their vehicle as a precaution against component or instrument failure en-route. They will do this even if they are returning to their vehicle after just a few minutes parking and have already carried out the drill earlier in the day although in this instance drill numbers 4, 5 and all except 'damage' in the P O W D E R check may be omitted.

Cockpit Drill (or Pre Drive Check) in practice

This drill should be implemented each time you enter the vehicle but before you start the engine.

- 1. First check that the handbrake is on. Then, whilst pressing the footbrake pedal release and re-apply the handbrake. Keep pressure on the footbrake for a few seconds. If you feel it sinking to the floor pan there is a serious hydraulic fluid leak. Do not drive the vehicle.
- 2. Do a P.O.W.D.E.R.E.Y check. (Petrol Oil Water Damage Electrics Rubber -

Environment -You). See below.

- 3. Check that the gearbox is in neutral by selecting 1st gear and then 2nd gear (or 3rd and then 4th) and then return to the neutral position. This system will guard against false neutrals which ageing gearboxes often present when 'wobbling' the gear lever sideways in the 1st or 2nd gate. For an automatic, check it is "park".
- 4. Tell passengers how to open doors and windows in an emergency.





- Adjust the seating and steering wheel position so that;
 - i. When your arms are outstretched the steering wheel bisects an area between your wrist and palm.
 - ii. Your legs can push the clutch and brake pedals to the floor and still have some bend at the knee.
 - iii. The top of the head restraint is at least level with your eyes and if possible level with top of the head.
- 6. Check mirrors.
 - i. Adjust rear view mirror for maximum rear window view.
 - ii. Adjust side mirrors to include approximately 10% to 12% of the car.
- 7. Looking in the side mirrors; check that all doors are closed.
- 8. Check that you know where all the ancillaries are, that they work and are all in the off position, e.g. lights, indicators, windscreen wash/wipe, demister.
- 9. Put on seatbelts (include passengers) and test that the seatbelt inertia systems are working by pulling them sharply away from the side pillar. Also check that the seatbelt

- releases you don't want to find out that there's a fault when there is a need to vacate the vehicle quickly! Important: When putting on a seat belt the lower loop should be well down over the thighs and NOT over the stomach.
- 10. Do not start the engine yet but with the clutch only momentarily depressed (in case of a false start) turn the ignition key to the first position and;
 - i. Check that all the warning lamps are working. A number of systems self-check and their lamps will go out.
 - ii. Check that there is sufficient fuel for the journey.
 - iii. Apply the footbrake again (to secure the vehicle) then check that the warning lamp goes out when releasing and re-applying the handbrake.
- 11. Pump the footbrake pedal a few times in order to negate the vacuum in the brake servo unit and then maintain footbrake pressure (see 12 i) whilst you;
- 12. Depress the clutch pedal (to disengage the gear-train and clutch weight from the starter motor and also to avoid excess



drain on the battery - see vehicle handbook.) then with one hand tensioning the steering wheel start the engine and;

- Check that the footbrake pedal drops slightly - indicating that the brake vacuum servo system is functioning correctly.
- ii. Feel the steering wheel move indicating the power steering is functioning correctly.
- iii. Check that all normal warning lamps go out. Note that primary lamps are red; secondary lamps are amber; information lamps are green/blue. (P.S.I.)
- 13. Release the clutch pedal if you are intending to wait or select the gear and (after effective all round observations) move off.

NB. This is a general guide to cockpit drill which will satisfy the requirements of the vast majority of modern vehicles. However, for the very small minority the order of the drill may need some minor adjustment to suit your vehicle's specification. If you are unsure of anything in this guide you should seek the advice of an Observer.

POWDEREY Check

This acronym refers to a regular check of the 'driver friendly' components and accessories which are fitted to the outside of the vehicle. Note that some are found under the bonnet and sometimes in the boot.

- 1. PETROL. (OR DIESEL)
 - a. Ensure that you have sufficient fuel (petrol or diesel) for your intended journey.
- 2. OIL. There are various oil reservoirs and (if applicable) they all need checking regularly. Note that not all vehicles have all the following. Check yours and if you are not sure about which is fitted to your vehicle you should consult the handbook. For instance; do you know if you have a cable controlled clutch or is it hydraulic? This is important!
 - a. Brakes
 - b. Engine
 - c. Clutch
 - d. Gearbox
 - e. Power steering
- 3. WATER. There are various water reservoirs and (if applicable) they all need checking regularly. If you are not sure about which is





fitted you should consult the vehicle handbook.

- a. Engine coolant. Depending on the age of the vehicle this will be either the expansion tank or radiator.
- b. Screen washer.
- c. Battery (if applicable).
- 4. DAMAGE. If you have parked your vehicle in a road overnight or you have left it in a car park whilst shopping etc it might have suffered some damage from other vehicles or shopping trolleys without your knowledge. Therefore a quick visual check of the fundamentals is important.
 - a. Wheels for damage. If you are in the habit of parking with your wheels pointing outwards they are at risk of being hit by careless drivers. Straighten your wheels next time you park!
 - b. Tyres for slits and punctures.
 - c. Reflector covers for breakage.

5. ELECTRICS.

a. Exterior lamps (including rear number plate lamps)

6. RUBBER.

- a. Tyre pressures and tyre tread depth including the spare. Tyres must have a tread depth of at least 1.6mm across the central three-quarters of the breadth of the tread and around the entire circumference.
- b. Windscreen wiper blades both front and rear if applicable.

7. ENVIRONMENT

a. Be aware of weather conditions that may require extra vigilance; snow, ice, fog, mist, rain, wind/gales/gusts, low sun.

8. YOU

- a. How do YOU feel today?
- b. Are you on medication that could cause drowsiness?
- c. Did you drink alcohol last night? You might still be over the limit!
- d. Are you suffering from a heavy cold?
- e. Are you feeling stressed?



Petrol – everything you didn't realise you wanted to know about it

By David Walton, mostly gleaned from Wikipedia

History

The first Otto cycle combustion engines were developed in the late 19th century in Germany. The fuel use was obtained from coal gas. With a boiling point near 85 °C, it was well suited to early carburettors. The development of a "spray nozzle" carburettor enabled the use of less volatile fuels. Further improvements in engine efficiency using higher compression ratios, were blocked by knocking (premature ignition of fuel). In the 1920's, an anti-knock compound, tetraethyl lead (TEL), was introduced by Migley and Boyd.

In the 1950's oil refineries started to focus on high octane fuels and then detergents were added to petrol to clean the jets and carburettors. In the 1970's environmental issues led to the phasing out of TEL and its replacement by other antiknock compounds. Subsequently, low-sulphur petrol was introduced, in part to preserve the catalysts in modern exhaust systems.

Octane Rating

Spark ignition engines are designed to burn petrol in a controlled process deflagration. In some cases, however, the unburned mixture can auto ignite by detonating from pressure and heat alone, rather than ignite from the spark plug at exactly the right time, which causes rapid pressure rise which can damage the engine. This phenomenon is often referred to as engine knocking. One way to reduce knock in spark ignition engines is to increase the petrol's resistance to auto ignition, which is expressed by its octane rating. Of the various conventions for expressing octane ratings, the best known is the research octane number (RON).

In the UK, ordinary regular unleaded petrol is 95 RON (commonly available), premium unleaded petrol is always 97 RON, and super unleaded is usually 97-98 RON. However, both Shell and BP produce fuel at 102 RON for cars with high-performance engines, and the





supermarket chain Tesco began in 2006 to sell super unleaded petrol rated at 99 RON.

The octane rating became important as the military sought higher output for aircraft engines in the late 1930's and the 1940's. A higher octane rating allows a higher compression ratio or supercharger boost, and thus higher temperatures and pressures, which translate to higher power output. Some scientists even predicted that a nation with a good supply of high octane petrol would have the advantage in air power. In 1943, the Rolls-Royce Merlin aero engine produced 1320 horsepower (984 kW) using 100 RON fuel from a modest 27 litre displacement.

Additives

Anti-knock additives: Most countries have phased out automotive leaded fuel. Algeria will replace leaded with unleaded automotive fuel in 2015. Different additives have replaced the lead compounds. The most popular additives include aromatic hydrocarbons, ethers and alcohol (usually ethanol or methanol). For technical reasons the use of leaded additives is still permitted world-wide for the formulation of some grades of aviation petrol such as

100LL, because the required octane rating would be technically impractical to reach without the use of leaded additives.

Tetraethyl lead: Petrol, when used in high-compression internal combustion engines, tends to auto ignite (detonate) causing damaging "engine knocking" (pinking) noise. To address this problem, tetraethyl lead (TEL) was widely adopted as an additive for petrol in the 1920's. With the discovery of the extent of environmental and health damage caused by the lead, however, and the incompatibility of lead with catalytic converters, leaded petrol was phased out beginning in 1973. The use of TEL also necessitated other additives, such as dibromoethane. By the end of the 1990's leaded petrol was banned within the entire European Union.

Fuel stabilizers: Gummy, sticky resin deposits arise from the oxidation of alkenes and other minor components in petrol. Improvements in refinery techniques have generally reduced the susceptibility of petrol to these problems; catalytically or thermally cracked petrols are most susceptible to oxidation. The formation of these gums is accelerated by copper salts,





which can be neutralized by additives called metal deactivators, which are compounds that sequester (deactivate) metal salts that otherwise accelerate the formation of gummy residues. The metal impurities might arise from the engine itself or as contaminants in the fuel.

Detergents: Petrol, as delivered at the pump, also contains additives to reduce internal engine carbon build-ups, improve combustion, and to allow easier starting in cold climates. Typical detergents include alkylamines and alkyl phosphates at the level of 50-100 ppm.

Ethanol: In the EU, 5% ethanol can be added within the common petrol spec (EN 228). Discussions are ongoing to allow 10% blending of ethanol (available in Finnish, French and German petrol stations). In Finland most petrol stations sell 95E10, which is 10% of ethanol; and 98E5, which is 5% ethanol. Most petrol sold in Sweden has 5-15% ethanol added.

Stability

Petrol should be stable for six months if stored properly but petrol will break down slowly over time due to the separation of the components. Petrol stored for a year will most likely be able to be burned in an internal combustion engine without too much trouble but the effects of long term storage will become more noticeable with each passing month until a time comes when the petrol should be diluted with ever increasing amounts of freshly made fuel so that the older petrol may be used up. If left undiluted, improper operation will occur and this may include engine damage from misfiring and/or the lack of proper action of the fuel within a fuel injection system and from an onboard computer attempting to compensate (if applicable to the vehicle).

Storage should be in an airtight container to prevent oxidation or water vapour mixing in with the petrol; it must be able to withstand the vapour pressure of the petrol without venting to prevent the loss of the more volatile fractions. It must be stored at a stable cool temperature to reduce the excess pressure from liquid expansion, and to reduce the rate of any decomposition reactions. When petrol is not stored correctly, gums and solids may be created. which corrode can system components and accumulate wetted on surfaces, resulting in a condition called "stale fuel". Petrol containing ethanol is especially





subject to absorbing atmospheric moisture, then forming gums, solids, or two phases (a hydrocarbon phase floating on top of a wateralcohol phase).

The presence of these degradation products in the fuel tank, fuel lines plus a carburettor or fuel injection components makes it harder to start the engine or causes reduced engine performance. On resumption of regular engine use, the build-up may or may not eventually be cleaned out by the flow of fresh petrol. The addition of a fuel stabilizer to petrol can extend the life of fuel that is not or cannot be stored properly though removal of all fuel from a fuel system is the only real solution to the problem of long term storage of an engine or a machine or vehicle. Fuel stabilizer is commonly used for small engines, such as lawnmower and tractor engines, especially when their use is seasonal.

Users are advised to keep petrol containers more than half full and properly capped to reduce air exposure, to avoid storage at high temperatures, to run an engine for ten minutes to circulate the stabilizer through all parts prior to storage, and to run the engine at intervals to purge stale fuel from the carburettor.

Enhance your skills with the IAM

New to the IAM events calendar in 2015 are their new **Skills Enhancement Days**. These are not circuit based but they offer the opportunity to take part in a number of activities during the day, some on-road and some theory and quizzes. Open for car and motorcycle members and non-members alike.

They offer the opportunity for drivers and riders to pick from a selection of 45 minute modules and compile your own day of activities. Typically 150 to 200 IAM members attend the days and choose from modules that include slow speed skills, parking and manoeuvring and an introduction to our Masters standard. The calendar reads as follows: Gaydon Motor Museum, Warwickshire on 9th May (limited places remaining) www.iam.org.uk/gaydon2015;

Yorkshire Air Museum, Elvington, North Yorkshire: 18th July www.iam.org.uk/elvington2015; Ingliston Showground, Edinburgh: 15th August.

These are all a bit far for TGAM members but may be followed by events closer to home.



INTER GROUP QUIZ

For many years there has been an annual inter-group quiz, to which the Taunton group has sent a team most years, with mixed success. Each year the quiz is hosted by the previous year's winners; this year Bristol group will be hosting. Their Secretary, Martin Evans writes:

"Dear local IAM groups...

It has come to the Bristol group to organise the next Inter-Group Quiz – despite our best efforts to 'not win' in recent years!

This year it will be on Tuesday 25th August @ BAWA, Southmead, Bristol.

We will be meeting at 7:30pm for an 8pm start - tea/coffee will be available.

Teams to consist of three people and the questions will be an entertaining and taxing mixture of highway code, road craft and general knowledge.

You can enter more than one team if you wish.

Once you've spread the word amongst your group members, perhaps you can confirm how many teams you will be entering (no need for names of team members) please?"

So come on all you keen quizzers; I am taking names for the TGAM teams and will contact Martin to let him know how many teams we can muster; just let me know you are interested!

David ed@tgam.org.uk



BELIZE DRIVING PERMIT TEST - REAL OR A JEST?

In order to qualify for a Driving Permit yon are required to successfully pass a written and a practical test:

WRITTEN DRIVING PERMIT TEST

Please read carefully each of the following and answer by putting an (X) in the correct Box on the right: for each number, only one (X) must be placed.

- 1. I should normally drive:
 - a. On the left hand side of the road
 - b. On the right hand side of the road
 - c. In the middle of the road
 - d. On the footpath
- 2. To. overtake another vehicle I shall pass:
 - a. To the right side of this vehicle
 - b. To the left side of this vehicle
- 3. At the junction of two equal roads I shall:
 - a. Pass first
 - b. Give right of way to vehicle on right
 - c. Keep to the left
 - d. Give right of way to vehicle on left
- 4. When crossing a major road I should:
 - a. Stop and look on both sides
 - b. Proceed without caution
 - c. Drive through slowly
- 5. When I stop my car on a road during the

night I shall:

- a. Put on the parking lights:
- b. Lock the doors
- c. Stay on the left side of the road
- d. Put on the bright lights
- 6. Speed limit in Belize City is:
 - a. 50 miles an hour
 - b. 25miles an hour
 - c. 10 miles an hour
- 7. To overtake another vehicle I shall wait:
 - a. A rounding curve
 - b. For an intersection
 - c. For a humped back bridge
 - d. To see far ahead
- 8. If involved in an accident where people was injured I must:
 - a. Go away
 - b. Stay in a car
 - c. Stop to give help





- 9. In a silent Zone I should avoid:
 - a. Speaking
 - b. Stopping
 - c. Blowing horn
 - d. Putting on my lights
- 10. When driving during the night I shall:
 - a. Have my lights on all times
 - b. Turn off my rear lights
 - c. Put on the ceiling lamp
- 11. When meeting or approaching another vehicle on the road at night I must:
 - a. Put the high beams on
 - b. Blow my horn
 - c. Take off all lights.
 - d. Use low beams only
- 12. Before moving a vehicle from a standing position I must:
 - a. Check all lights
 - b. Look on both sides
 - c. Check the trunk of the car
- 13. The traffic Sign "Silent Zone" is located near a:
 - a. Supermarket
 - b. Bank
 - c. Hospital
 - d. Prison

- 14. A Pedestrian Crossing is:
 - a. A Special road
 - b. A footwalk or causeway by the roadside
 - c. A space on the side of the road
 - d. A special marked footpath across the road
- 15. To indicate my intentions to change directions I must:
 - a. Use the brakes
 - b. Put my lights on
 - c. Shout or blow my horn
 - d. Use the mechanical indicators
- 16. Before reversing a Vehicle I must:
 - a. Look behind me
 - b. Open a door
 - c. Check the tires
- 17. The rearview mirror in a car is for:
 - a. Women purposes
 - b. Checking passengers
 - c. Have a clear view of the road behind
- 18. When another vehicle wants to overtake I must:
 - a. Accelerate
 - b. Stay in the middle of the road
 - c. Drive as close as possible to the right side of the road



- 19. Which one of these parts is the most important on car:
 - a. Spring
 - b. Horn
 - c. Bumper
 - d. Brakes
- 20. The purpose of a radiator in a car is to:
 - a. Have more power
 - b. Cool the engine
 - c. Wash the windshield
- 21. If I am the owner of a car:
 - a. I can drive without a Driving Permit
 - b. I must be the holder of a Valid Driving permit
 - c. I can drive on somebody else's Permit
- 22. When I see a round blue Traffic Sign with a red diagonal cross it means:
 - a. Park here
 - b. Don't park anytime
 - c. One hour parking permitted
 - d. No Entry

23.



means:

- a. You can overtake
- b. You cannot pass
- c. You can go through
- d. No "U"turn

24. A



This sign means that there is ahead:

- a. A Hospital
- b. A playground
- c. A pedestrian crossing
- d. A School

25.

This sign:



- a. Is not compulsory
- b. Means go ahead
- c. Means turn back
- d. Means Full Stop



Recent Releases from the IAM Press Office

Have you mist any of our winter hints? What a mist-ake

Given the onset of cold weather more and more of us are experiencing misty car windows. The IAM's chief examiner, Peter Rodger recommends drivers better prepare their cars before they travel.

Your windows will steam up when the air inside your car is warmer and is carrying more humidity. This air inside is cooled near the glass allowing the humidity to condense and form mist. Here are Peter's top tips for coping better with misty windows:

- 1. Mist will often form quicker on dirty windows so it's important you keep your windows clean throughout the winter. Both the outside and inside of your windows should be kept equally clean free from dust, tar, tree sap and grime.
- 2. Newspaper can be used to polish glass once you've cleaned it. Wash the windows with some washing up liquid and water, then dry with a cloth ensuring you lift the

- windscreen wipers and clean the section of your windscreen beneath them. If you prefer the traditional method of using crumpled up newspaper, this works well too.
- 3. Don't leave any damp clothing in your car overnight as this can also cause the windows to steam up.
- 4. Use the air conditioner to help lift any condensation from the inside of your car windows. You can adjust it accordingly to lower the setting once the moisture clears. And if your car has a button that sets the demister at the optimum for clearing the screen then use that.

Rodger said: "Your windows are your eyes when you get behind the wheel. It is foolhardy and downright dangerous to drive one inch if you can't see clearly from your windows. Be five minutes late rather than venture down the road in this way".





The Worst Speeders in England And Wales

The Institute of Advanced Motorists (IAM) has lifted the lid on the worst examples of excessive speeding caught on safety cameras across England and Wales in 2014.

Britain's two worst speeders were caught at 146mph, both by Kent Police on the M25. One was travelling anti-clockwise at Junction 5 at Clacket Lane Services, the other going clockwise at Swanley.

There were three other instances of speeds of 140mph or more being recorded; 145mph on the M6 toll road (70mph limit), 141mph on the A1 Great Ponton Northbound road (70mph limit) and 140mph on the A5 Crick road (60mph limit). But perhaps the most astounding figure was 128mph recorded on London Road, East Grinstead – a 30mph road, exceeding the limit by 98mph.

The statistics come from a Freedom of Information request made by the leading road safety charity to police forces in England and Wales. The IAM asked each police force for the highest recorded incidences of speed caught on safety cameras in 2014, including locations, speed limits and top speed in each case.

Of the 41 police force areas the IAM requested the information from, 36 responded. All forces recorded at least one top speed over 110mph with the exception of City of London, Cleveland, Greater Manchester, Northumbria, West Midlands and South Yorkshire.

Wales' top speeder was an individual who recorded 136mph on the A5 Ty Nant to Dinmael road in Conway, which has a 60mph limit.

London's worst speeder was recorded at 123mph on a 30mph road by the Metropolitan Police. The location has not been revealed as it is exempt under Section 31 of the Freedom of Information Act.

The highest figure recorded in a 50mph zone was 120mph, by Nottinghamshire Police on the A631 Beckingham road.

And the worst speed caught on a 40mph road was 115mph on A10 Great Cambridge Road in Cheshunt, Hertfordshire.

The IAM's fundamental belief as is that an improvement in driving skills and attitude is the key to reducing the numbers of people killed and injured on UK roads.





It has long advocated advanced driving and riding tuition and continuous development in skills to help achieve this.

Sarah Sillars, IAM chief executive officer, said: "It is disheartening to say the least that some road users are showing such disregard for the safety of all other road users – pedestrians, cyclists, motorcyclists and other drivers.

"At speeds of 140mph an individual is travelling at nearly two-and-a-half miles a minute. At that speed it is simply impossible to react to anything that might happen in front of you.

"It is also impossible to handle corners, gradients, street furniture and junctions with any effectiveness. In short, all these individuals are playing with their own lives and others – they are all accidents waiting to happen and it requires a major shift in the attitudes of these people to think about safety."

The IAM supports the use of safety camera systems at collision hot spots, on roads with a speed related crash record and at areas of proven risk, such as motorway road works (2). A summary of the highest speed recorded in each police area follows (3).

Location	Speed	Limit
Avon and Somerset Police M4 J20 – 19 Eastbound	138	70
Bedfordshire Police M1 J 13 & 12 Southbound	116	60
Cambridgeshire Constabulary A14 Eastbound	128	70
Cheshire Constabulary A556 Chester Road	128	70
City of London Upper Thames Street Stew Lane	86	30
Cumbria Constabulary M6 Todhills	136	70
Cleveland Police A171	99	50
Derbyshire Constabulary M1 Northbound, Tibshelf	110	50
Dorset Police A35 Tolpuddle Bypass eastbound	d 110	70
Durham Police A66 Galley Bank, Barnard Castle		70
Essex Police A127 Arterial Road Rayleigh	111	50
Gloucestershire Constabulary		
A417 Dartley Bottom	121	70

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MOTORISTS

Location	Speed	Limit	Location	Speed	Limit
Greater Manchester Police			Northumbria Police		
A5103 Princess Rd, Manchester	104	40	A1 Western Bypass	103	50
Hampshire Constabulary			North Wales Police		
A31	123	70	A5 Ty Nant to Dinmael, Conwy	136	60
Hertfordshire Constabulary			Nottinghamshire Police		
A10 Cheshunt, Herts	115	40	A631 Beckingham	120	50
Humberside Police			South Wales Police		
A180 Great Coates	125	70	M4 between J35 Pencoed		
Kent Police			and J34 Miskin	125	70
M25 Clacket Lane Services Jn 5		70	South Yorkshire Police	400	=-
M25 clockwise Swanley	146	70	M1 S bound, Woodhall Services	100	50
Lancashire Constabulary	445	00	Suffolk Constabulary	440	=0
A683, Heysham	115	60	A140 Coddenham	119	50
Leicestershire Police	440	=0	Surrey Police	407	70
M1 Southbound, Swinford	119	50	A3 Burntcommon	127	70
Lincolnshire Police	4.44	70	Sussex Police	400	00
A1 Great Ponton Northbound	141	70	London Road, East Grinstead	128	30
Merseyside Police	440	5 0	Thames Valley Police	404	70
M62	112	50	A4146	121	70
Metropolitan Police	400	20	Warwickshire Police	4.45	70
Not revealed	123	30	M6 Toll Gantry 1165b	145	70
Norfolk Constabulary	400	70	West Mercia Police	- 440	00
A11 Ketteringham	120	70	A41 Tern Hill towards Whitchurch	n 118	60
Northamptonshire Police	140	00	West Midlands Police	100	50
A5 Crick Eastern Verge	140	60	M6 J5 to J8	106	50



IAM expresses 'disappointment' at rise in road casualty figures.

Road safety experts the Institute of Advanced Motorists (IAM) have expressed disappointment at the rise in numbers of killed and seriously injured on UK roads, as revealed this morning by the Department of Transport.

The charity blames many years of Government cutbacks and the resulting drop in visible policing for the increase in figures.

Neil Greig, IAM director of policy and research, said: "It is disappointing that after many years of solid falls in the numbers of people killed and injured on our roads, the Government has taken its eye off the ball.

"These figures reflect our view that cuts in visible policing and road safety spending has had an impact, with a third successive quarter of increases. We have had pretty much two decades of falls in the KSI (killed/seriously injured) figures, and while these new figures can in no way be regarded as a trend, they are a big concern."

Neil added that the Government has been 'riding its luck' to an extent, and that the recession has played its part in artificially making the figures seem better than they really are.

He said: "Recent transport ministers have been

lucky. The recession had slowed traffic growth, new car technology has delivered safer roads year on year and most accident black spots have now been engineered out of existence.

There was 1,711 deaths, a 1% increase, 24,360 killed or seriously injured (KSI) casualties in the year ending September 2014, a 4% increase compared with the previous year. Child KSI casualties rose by 3% over this period. For the year ending September 2014, there were 192,910 reported road casualties of all severities, 5% higher than the 184,087 for the year ending September 2013.

Neil added that this is the perfect opportunity to stress that a change in driver attitude must happen before we see any major falls in numbers killed and injured on our roads.

He said: "This is an opportunity for us to prove the key underlying part that driver skills and behaviour play in road safety.

"Most crashes are caused by human error, and technology can only deliver so much. If we don't change policy we will still be killing 1,000 people a year in 2030 – that is unacceptable. Driver behaviour, skills and training will be the key focus for our future research and policy work."





IAM brings you the 'key' to motoring happiness

The battery in your car key will not last forever. When the battery fails there is always the option of unlocking your car manually, but with some simple maintenance you can avoid getting locked out this winter. The IAM's head of technical policy, Tim Shallcross, shares his top six tips as part of our #wheelsinwinter campaign:

- Make sure you replace the key battery every two years, including the battery in the spare key if you have one.
- 2. If you don't already have a spare key, make sure you get one and keep it safe a failed or lost key will cost much more in vehicle recovery. A replacement key typically costs between £20 and £50 for a blank electronic remote with a blank transponder, and a blank key blade from online suppliers. Allow around £15 £20 to programme it and cut the blade. The cost is likely to be higher from a main dealer, typically £70 £150.
- 3. Each autumn on a dry day before the first frost use some lubricating spray on the keyhole, such as a 3-in-1 oil or GT85 Teflon spray. This will help keep the small parts in the lock dry

- and help those parts to move freely.
- 4. The lock can freeze in winter if there is water or condensation in it. Place a hot water bottle over the lock for a few minutes and then use WD40 or GT85 to disperse the water and reduce the risk of it freezing up again.
- 5. A frozen lock may also mean that the rubber seal is frozen on the doorframe and if you pull too hard at it you may risk pulling the rubber apart. To prevent this apply some chalk dust on to the rubber. This is an important step to carry out during the same time you are oiling the locks each autumn.
- 6. Looking after your car keys and locks may seem trivial, but a 'lockout' is a severe irritation and you will have no other choice but to call for professional help.

Tim said: "Key issues can easily happen without proper thought and maintenance, and the costs of replacement can be shockingly high. These easy steps will not only save you money, but also eliminate the annoyance factor should this ever happen to you."



The IAM says 'who cares wins!'

The IAM's chief examiner, Peter Rodger is asking motorists to drive with extra caution where mobility scooter and electric wheelchair users are also using the road. It is extremely important drivers show vulnerable road users due consideration. Here are Peter's top tips for driving with their safety in mind.

- 1. Some larger mobility scooter and electric wheelchairs can be used on the road and travel at a maximum speed of 8mph so you may need more time to react. You should avoid tailgating or overtaking them suddenly, especially on a busy road. Only overtake them when you are sure it is safe, giving them plenty of room.
- 2. When you are making a turn or going round a roundabout, don't forget to check your blind spot and look in your mirrors vulnerable road users are not always spotted easily.
- 3. Never wave vulnerable road users across the road as there may be traffic overtaking from behind or coming in the opposite direction that may not be aware of your signal. Smaller mobility scooters are restricted to using footpaths and pavements, and use

- dropped kerbs when they cross a road. Show consideration and avoid parking adjacent to dropped kerbs and make sure that you give yourself enough time to slow down and anticipate their manoeuvring to cross the road.
- 4. Be careful when travelling in the dark when vulnerable road users are harder to spot. Mobility scooters and electric wheelchairs are designed for use on the road and have lights, but they may not be switched on so you must take extra caution and fully concentrate so you can spot them easily.
- 5. They may often ride away from potholes and drain holes to avoid any sudden dips. Make sure you leave enough space between your vehicle and their vehicle to avoid road collisions. It's better to be safe than sorry!

Peter said: "People need to be more aware that roads are used by more than just motorists. While it can be frustrating to be delayed, please bear in mind that a driver has a lot more protection than the user of a mobility scooter. Act as you would around a pedestrian or cyclist, and give that person extra time, space and attention. It makes perfect sense."





MP and road safety charity express anger over motorway service charges.

Tired drivers should not have to pay to take a vital is clearly contrary to the main reason for their

Tired drivers should not have to pay to take a vital and life-saving rest at motorway service stations, an MP and a road safety charity have said.

David Davies and the Institute of Advanced Motorists (IAM) have hit out at charges imposed by private firms on motorists who stop for more than two hours to avoid falling asleep at the wheel. Mr Davies has teamed up with the IAM to call on the government to change its policy on the two-hour free parking limit, which service station operators have to comply with.

The Monmouth MP, who previously worked in the haulage industry as a continental lorry driver, wants longer hours set before parking charges apply. He argues that drivers should be allowed to rest properly instead of opting to go back on the road to avoid having to pay hefty fees.

"Charging large amounts of money to park could be increasing the risk of accidents caused by driver fatigue," said Mr Davies.

"This is profiteering plain and simple. There is no justification whatsoever for making a charge. It is bad enough that motorists pay over the odds to buy a coffee or snack at a service station without the worry of paying vast charges for taking forty winks.

"Limiting parking time at motorway service stations

is clearly contrary to the main reason for their existence – to provide rest stops."

Mr Davies' campaign has been backed by the IAM. While the government encourages drivers to take regular breaks as part of its key objectives on motorway service areas, the IAM would like the campaign to receive financial backing. The issue forms a key part of the charity's manifesto.

Through its THINK! campaign the Department of Transport suggests that almost 20% of accidents on major roads are sleep-related; sleep-related accidents are more likely than others to result in a fatality or serious injury; and men under 30 have the highest risk of falling asleep at the wheel.

Driver and Vehicle Standards Agency (DVSA) information suggests one-fifth of accidents on motorways and other monotonous types of roads may be caused by drivers falling asleep at the wheel.

Neil Greig, IAM director of policy and research, said: "Service areas are meant to be about safety and taking a break on a long boring journey. All too often these days they are more about selling things at inflated prices to a captive audience. The two hour parking rule leaves many drivers confused and worried that they may inadvertently go over the time limit if they stop for a break, which is not a good recipe for safer motoring," he added.



Twentysomethings still believe in drink-drive myths as statistics show they remain high-risk.

The Institute of Advanced Motorists (IAM) has warned that the drink-drive message is failing to get through to twentysomething drivers who remain the most likely to be caught drink-driving and be involved in accidents involving death and serious injury.

The charity also believes that young drivers are choosing to trust their friends and popular misconceptions about the effects of alcohol on their bodies, rather than take heed of official information.

The comments came as the Association of Chief Police Officers (ACPO) issued figures from their festive anti drink-drive campaign. They showed that the failure rate for those under 25 was nearly double that of those over 25.

While there was a reduction in the number of tests in December 2014 (down to 133,996) there was a higher failure rate by percentage; with 5,885, or 4.39%, failing breath tests.

Of those 28,228 under-25s were tested. This age group posted a 6.33% failure rate, compared to over-25s; where 4,042 or 3.94% failed.

The figures tie in with existing research that has

historically showed that the high numbers of drivers in their twenties on the roads, combined with their lack of awareness of the effects of alcohol, makes them the most at risk age group.

Road accidents remain the biggest killer of young people in the UK. In 2013 there were 191 people under 24 killed and 20,003 injured as drivers and riders of cars and motorbikes. In the past five years (2009-13) there were 1,037 people under 24 killed and 120,958 injured on UK roads as drivers and riders.

Kath Pavitt, driver education director for the IAM's Driver Rehabilitation Academy said: "The latest figures are disappointing but not at all surprising. Young drivers, aged 17-24 have the highest level of drink-drive crashes per distance travelled.

"Drink-driving is still one of the biggest killers on our roads amongst this age group. One-ineight UK road deaths result from crashes where the driver was over the drink-drive limit. Drivers with even a little alcohol in their systems are more likely to be involved in a crash causing death than a sober driver."





She said that often young people believe in third-hand stories from friends that eating a meal, drinking lots of water and 'sleeping it off' are effective ways of recovering from a heavy night's drinking and would bring them under the limit later – but these are all myths.

Kath added: "Alcohol affects judgement, hand to eye coordination, the ability to focus, the ability to see and think clearly, and the ability to recognise potentially dangerous or hazardous road conditions or situations.

"Young and novice drivers usually lack both driving and drinking experience. They tend to be risk takers and are less cautious than their older counterparts. So, even in the absence of alcohol, young drivers are at a greater relative risk of crash than older, more experienced drivers. When you add alcohol to the equation, the risks become significantly higher."

These deaths, and the many more serious injuries, can be stopped if all drivers pledge to not drink any alcohol before driving.

She added the IAM Driver Rehabilitation Academy supports the evidence from around the world that shows taking steps such as lowering drink-drive limits and stepping up police enforcement are highly effective in cutting drink-drive casualties.

The effects of a drink-drive conviction can last potentially a lifetime. A conviction for drink-driving will lead to a minimum of a year's driving ban, a fine of up to £5,000, an endorsement on your licence for 11 years as well as a criminal record.

A criminal record can affect an individual's career prospects, restrict overseas travel and lead to high car insurance premiums.

Kath added: "The valuable and hard-hitting drink-drive Government messages on the issue are failing to sink in to the minds of our young drivers.

"With the national publicity campaigns in the UK, it is worrying that young people, mainly in their twenties, still do not take heed of the consequences of drinking and driving."

The IAM's Driver Retraining Academy delivers the Drink Drive Rehabilitation Course (DDRC) for Drink Drivers referred by courts. The course gives those referred a better understanding of the dangers of alcohol; not only with respect to driving, but to an individual's health and life in general.





50 years on people continue to ignore seat belt laws at their peril, warns the IAM

The Institute of Advanced Motorists (IAM) is warning that despite 50 years of seat belt laws, far too many drivers and passengers are still putting themselves and others in great danger by not wearing seat belts.

The first seat belt law came into force in January 1965, which saw all new cars in the UK required to have seat belt anchorage points on the outer front seats – and paved the way for far-reaching compulsory seat belt wearing laws in the decades after.

Statistics from the Department of Transport show that of the 232 car occupants killed in 2013 (for which seatbelt data was recorded), 45 were not wearing a seat belt – a shocking 19%, or nearly one-fifth.

According to Safer Roads, 2,000 people a year are saved by wearing seat belts. They say in the event of an accident if unrestrained, you will hit the windscreen, or the front seat in the case of a rear seat passenger at a force of 30 to 60 times your own body weight.

The effectiveness of seat belts as a life saving device is without question. Research has found that for drivers seat belts are 50% effective at preventing fatal injuries, 45% effective at preventing serious injuries and 25% effective at preventing minor injuries.

It also found for front seat passengers, seat belts are 45% effective at preventing fatal or serious injuries, and 20% effective at preventing minor injuries.

Quite apart from safety factors, drivers caught without a seat belt face on-the-spot fines of £100 and three penalty points. If prosecuted, the maximum fine is £500.

Back in 1965 all new cars sold were required to have seat belt anchorage points for the front outer seats. In 1967 the law was changed so all new cars were required to have seat belts fitted. In 1968, seat belts were required to be retro-fitted to all cars sold from 1965.

The biggest development in seat belt development came in 1983 when it became





compulsory for front seat occupants to wear one. This Sunday (31 January) marks the 32nd anniversary of the passing of the front seat belt law in the UK.

In 1989 it became compulsory for all children under 14 to wear a seat belt in the rear, and finally in 1991 it was required that all rear seat occupants wear a seat belt.

After the 1983 law was passed, there was an immediate 25% reduction in driver fatalities and a 29% reduction in fatal injuries among front seat passengers.

Despite that, the 2013 statistics show there is still a section of the driving population that continues to ignore the law, despite it being in place for more than three decades.

Kevin Delaney, IAM head of road safety, said: "The biggest problem is complacency.

"Quite simply people feel it will never happen to them. They think if they are driving locally and at a low speed they will be OK. Statistics show that many accidents not only take place at low speeds but also within a few miles of home – so people are mistaken if they think that makes them safer."

Although putting on a seat belt is habitual to many car occupants today, evidence from the DfT's THINK! campaign has found that people are less likely to belt up on short or familiar journeys.

Kevin added: "The trouble is if people are not wearing a seat belt and find themselves heading towards an accident, it is far too late to do anything about it."

He called for continued campaigning by government, police and road safety bodies to ensure the issue of wearing seatbelts remains a priority message.

"We need to keep spreading the message particularly on rear seat belt use. And if people don't take heed of it, they will end up as a Department of Transport accident statistic."



Closing date for the Summer Edition of the TGAM e-Newsletter is 20th April.

All contributions would be very welcome.

All items should be sent to "The Editor" at ed@tgam.org.uk or by mail to David Walton at Little Paddocks, White Street, North Curry, Taunton TA3 6HL