



GAM

Guildford Advanced Motorists



Newsletter

Autumn 2021



Autumn 2021 Issue

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Editorial Matters

Welcome to the Autumn 2021 edition of the GAM Newsletter. In this issue we look at catalytic converter theft and have some pictures of the Alvis from the Summer issue.

This interesting photo is real and is in Woking, 'How not to sign a road'. Fortunately, the 'do not turn left' has now been removed and the tree has been trimmed.



Remember that **we want to hear from you** ... letters, comments and articles should be sent to editor@guildford-iam.org.uk

Should you know of anyone you feel might be interested in an Advanced Driving Course, please put them in contact with us: membership@guildford-iam.org.uk

Editor's small print

Please note that the views and comments herein are published without prejudice, being those of the writers and not necessarily those of the Guildford and District Group of Advanced Motorists or IAM RoadSmart.

Disclaimer: Driving is never a black and white activity, but full of grey areas, therefore neither GAM nor IAM RoadSmart are liable for any consequences you may experience because of reading our advice. You are the driver. You should always be in control of your vehicle at all times.

UK GDPR. Members and Associates are reminded that names, addresses, telephone numbers and membership details are stored to manage the group and the distribution of Guildford Group correspondence. We do not pass your details on to anyone else.

Letters to the Editor

We want to hear your views! editor@guildford-iam.org.uk

Chairman's Message

I was delighted to report to our AGM the other day that GAM was back to advanced driving coaching, not only our appointed observer runs (AORs) but also back at the Guildford depot. It was great to see a good number of observers and associates meeting together and getting out for runs like the good old days. It seems pretty certain that we will continue with a mixed diet of what we now call appointed observer runs (AORs) and our Group Sunday RunDay on the 3rd Sunday of each month.

We were also pleased to report that our financial position has remained strong in spite of COVID, we look forward to getting back to normal progressively of the next few months. There are some challenges ahead. Sadly, we have lost some observers who have retired, triggered by COVID or through ill health. I want to thank all the observers, and particularly those who have retired for their unstinting support of our advanced driving objectives. Along with needing to strengthen our Observer corps, we also need to refresh the committee. Neil Fuller who looks after membership and managing our Sunday RunDay has moved away from the area and intends to retire from the committee. We have decided to split membership secretary and operations and therefore look to fill these vacancies along with attracting new committee members to shadow important roles such as secretary with a view to the future. If we can spread the tasks around a larger number of volunteers, then we can ensure that volunteering for GAM remains a satisfying and enjoyable experience.

We have an Associate backlog of around 50 to catch-up with, including several who signed up during COVID lockdown. We have had to ask our associates to be patient with us as we try to catch up our coaching backlog and also recognise that there is a limited examiner resource leading to some delay between achieving the standard and going for test. Rest

assured we will do our best to prepare our associates for test and support them while they wait for the test run.

On a personal front I managed to complete my Masters mentoring and pass the test after a prolonged programme that was rudely interrupted twice by COVID. My thanks to mentors Graham Ranshaw (past GAM Chairman), John Holcroft (GAM NO) and Ryan Francis (one of our very supportive examiners). This was a very interesting and challenging experience. I tossed up whether to do it in an ICE or EV, choosing the EV finally. See some more about that in the speedometer article in this addition. Of interest I have been discussing with Tony Greenidge (IAM RS CEO) the shortage of EV Advanced Driving guidance from HQ. I hope GAM can contribute its experience in due course.

We have continued to use Zoom for virtual coaching and committee meetings up until mid-September. At last, we have got back to the depot as I mentioned and our first face to face observers meeting will be in Albury on the 7th of October, where we hope to discuss matters arising from recent coaching and tests as well as more general observer experience getting back in the passenger seat.

There has been no significant news or changes from IAM RoadSmart, and it seems that HQ is also slowly moving back to business as usual. Various information comes out through their electronic newsletter which hopefully most of you see. One interesting Twitter feed I picked up on related to learner drivers now tending towards going for an automatic transmission only test. The suggestion in the feed was that this was because they preferred an automatic vehicle rather than specifically that driving or the test was easier. At GAM we certainly see an increase in the number of associates with automatic transmission vehicles. It seems to be around 60% currently, and along with the arrival of a myriad of hybrid and electric vehicles, places an increasing challenge to our observers to ensure we are up to speed with the best practises that are appropriate for different engine and transmission options. We will try to ensure that we bring the best training and information to both observers and associates to position us in the best possible way for the test.

Finally, I want to begin by thanking our Committee and Observers once again for their unstinting support upfront and behind the scenes. In particular, the whole GAM family should be most grateful for Paul Whitehead's huge effort sorting out membership allocation, COVID membership extension issues and the return to runs in conjunction with Clive Heavens' (appointed observer runs (AORs)) and Tim Lyon (Chief Observer).

Drive well and say safe.

Gordon

Gordon Farquharson
GAM Chairman

Chief Observer's Message

Normal Service has been Resumed

Now I don't normally comment on anything particularly political, but... I do have good trick to tell when a politician is lying – their lips move.

Now before you start typing away as 'Angry of Guildford' let me explain further. I heard the above phrase a few days ago and it made me smile and then I started thinking!

Over the last few months there seems to have been a drive to convince the public that 'normal service has been resumed'. Try these two – You don't have to wear a face covering (except when you do). And, you can travel freely (in some fantasy world, but not this one), and yes I do work for an airline.

I will admit that we may be seeing the start of a return to something approaching 'normal', but are a long way from 'normal' itself. However, in one respect we are already back to 'nearly normal' – traffic!

My assessment is that for the last month or so, the levels of traffic I am encountering are at pre-pandemic levels. But it is different in one respect – speed. Going to work, before the pandemic (and especially during) I would get onto the M3 (northbound), turn cruise control on and 'relax'. There would be a few vehicles in lane 1, most in lane 2, a proportion in lane 3 – prepared for the M3/M25 junction in seven miles! Finally, there would be a smattering of cars in lane 4. So apart from a few lorries to overtake, I could sit in lane 1 and watch the world go by, because ninety per-cent of the cars on the motorway were going faster than I was.

However, now it feels different – people seem to be driving slower! This, you might think, is a good thing and I suppose you are correct. Being selfish, for me it's not a good thing – the speeds are lower, but the distribution of the traffic, across the lanes has not changed.

Is that a puzzled look?

It is all to do with maths – differentials, time, rates of change, distance, that sort of thing. What it boils down to is that the traffic in lane 2 is passing me at a slower pace than before. This means that 'usable' gaps for overtaking vehicles in lane 1 are turning up less frequently, so I have to start planning earlier. The closer to my speed the traffic in lane 2 is, the earlier I need to start planning. In fact, sometimes the cruise control does not even get turned on! It does seem counter-intuitive that the less dynamic the situation is the more planning you have to do – to take advantage of those opportunities that do occur.

Now I hear you say – if you slow down as well, and then the traffic in lane 2 will be passing in the same way as before. This sounds reasonable, but now my approach to the vehicle in lane 1 takes longer, my passing speed is lower and so it will take longer to overtake, holding up the traffic in lane 2.

So, what do we do? We treat the situation as we do any other – IPSGA. Think about a motorway overtake and take a moment to run through 'The System'. It was suggested to

me recently that overtaking and 'The System' were incompatible – why would you 'SGA' once on the other side of the road facing the oncoming traffic? Interesting point – you have the Information; you have Positioned to the offside and now think about SGA.

When we ask that you perform one of the slow speed manoeuvres, the starting point is usually stationary on the near side of the road. Once ready and it's safe, what do you do? IPSGA, make sure all phases can be accomplished in the distance and time available. If not, don't even start the manoeuvre.

Similar to overtaking? You have to be sure all stages of IPSGA can be accomplished before starting to move towards the centre of the road. If you are happy with this use of IPSGA, cross the centre line, but do not overtake – challenge your decision (your life may depend on it). Check your information is still good, check your positions are still valid (where you are now and where you want to end up). Ensure the speed is good – do not plan to break the limit. You should already be in the correct gear to give maximum flexibility – do not plan to change gear during the overtake. Finally, after all that you can decide to go (acceleration) or not (deceleration).

So, with the overtaking/IPSGA issue sorted, how does this help me overtake on the motorway? I treat a motorway overtake in exactly the same way as a 'normal' overtake. The main difference is that the approach speeds of the traffic while you are overtaking is much lower – usually on a motorway all the traffic is travelling in the same direction! Use IPSGA to get ready for the overtake, then when it's appropriate move out, challenge your initial decision and go – or not.

One other reason for all this talk of overtaking is that the local councils seem determined to leave no stretch of road without a reduced speed limit. Have you noticed that the faster cars can go the slower they must go? Just because you don't get chance to overtake, does not mean that you can forget how to overtake!

If 'Angry of Guildford' is still out there – write in and let us know. All feedback is welcome, of any type.

Finally, a quick word about something that has returned to normal – the Sunday Rundays on the third Sunday of each month (except it a week early in December). Our first official Sunday was the 19th of September and while the numbers were lower than expected – both Observers and Associates, it was good to see the whole person, rather than just a head and shoulders of a Zoom meeting! Thanks to all those that attended, and I look forward to seeing the numbers increase month on month back to the pre-covid values.

However, to ease the burden, we are always on the look out for new Observers. If you feel the need for something to do with all that post lockdown energy, send me an email. Or pop in on a Sunday to have a chat – please let me know first, or you may end up on the road with an observer sat next to you!

Tim Lyon

GAM Chief Observer

Become an IAM RoadSmart qualified Observer!

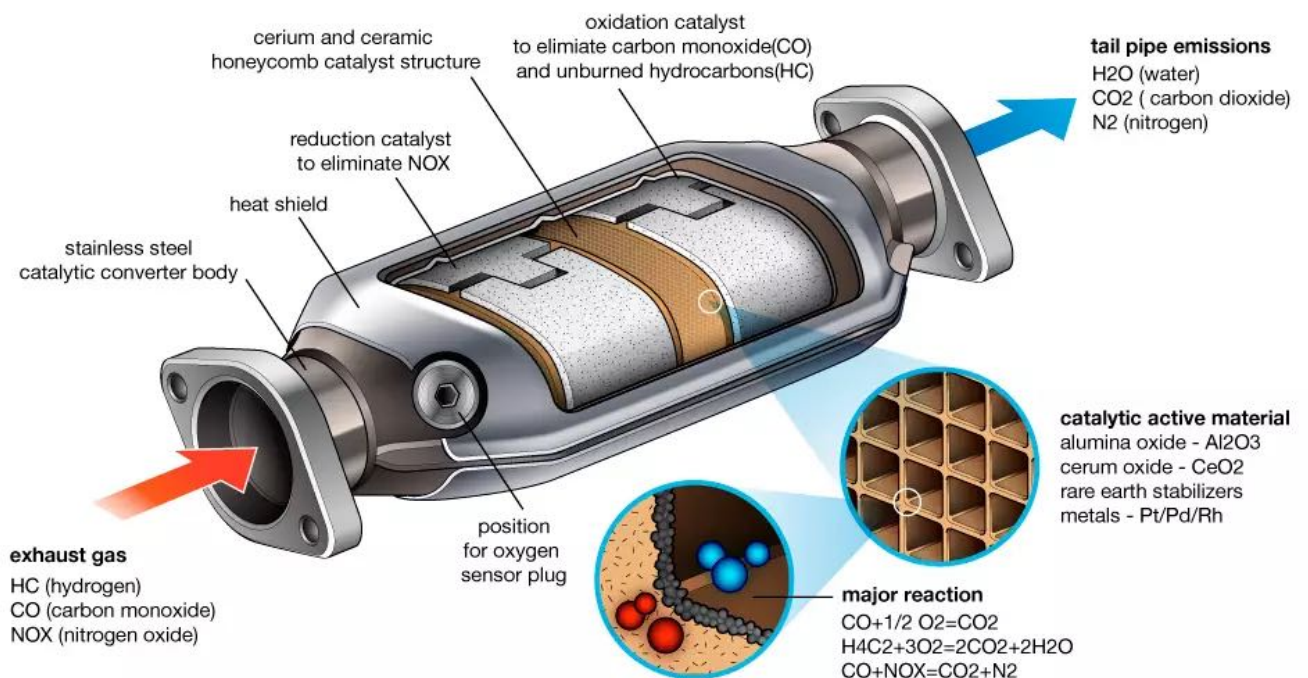
For more information, email training@guildford-iam.org.uk

Thefts of catalytic converters rise 100% in a year

Catalytic converter thefts rose by more than 100 per cent in a year, according to data from 25 police forces across England, Wales and Northern Ireland showing that there were 5,857 cases reported last year, an increase of 104 per cent on the previous year. Cars are being targeted because some of the rare precious metals such as rhodium, platinum and palladium are used in catalytic converters. The price of some of these metals has risen sharply in recent years and can be sold to traders.

Which? magazine carried out this research and found that the highest rise in cases was in north Wales, rising from 9 in 2019 to 46 in 2020. The West Midlands had the most cases last year, with 1,626, while there were none in the City of London.

Cars that are most often targeted are hybrid vehicles, as these vehicles have two power sources, so the catalytic converter is used less frequently. The metals are less likely to corrode, meaning they are worth more and therefore more attractive to thieves. Catalytic converter thefts can leave victims with heavy repair bills, rising insurance premiums or even complete write-offs, so it is concerning to see such a huge spike in these crimes across the country. *Which?* said that older hybrids, such as the previous generation of the Toyota Prius and Auris, and the Honda Jazz, were particularly at risk. Toyota said: "Catalytic converter theft is a serious problem in the UK and its effect on victims is emotional as well as financial. Honda said: "Honda UK recommends owners of these cars follow the advice given by police." Vans and SUVs are particularly at risk, as the ride height makes access to the exhaust system beneath them easier.



Catalytic converter theft prevention advice from West Yorkshire Police

To reduce the risk of having your catalytic converter stolen, you should:

- Park your car in a locked garage where possible, but if this isn't an option, then park it in a well-lit and well-populated area
- Park close to fences, walls or a kerb with the exhaust being closest to the fence, wall or kerb to make the theft more difficult
- Avoid parking your vehicle half on the pavement and half on the road, as this may make it easier for thieves to access the catalytic converter
- If there is a fleet of vehicles, park the low clearance vehicles to block the high clearance vehicles. This will obstruct access underneath
- If parking in a public car park, consider parking alongside other cars and facing your bonnet towards the wall if possible. With the catalytic converter positioned at the front of your vehicle, this will make it harder for thieves to get close enough to steal it
- For thefts occurring on driveways, consider the use of a Secured by Design (SBD) approved driveway alarm and sensor. This may assist in alerting you of a potential intruder entering your driveway or garden
- If your catalytic converter is bolted on, you can ask for your local garage to weld the bolts to make it more difficult to remove.
- Alternatively, you can mark your catalytic converter. Please ensure any property marking is Secured by Design (SBD) approved
- You can even purchase a 'cage clamp' which is a cage device that locks in around the converter to make it more difficult to remove. Toyota are offering a 'Catloc' for the Prius (3rd generation, 2009-2011 models) and Auris (2nd generation, 2012-2018 models). Please contact your Toyota dealership for more information
- Speak to your dealership about the possibility of installing a Thatcham approved alarm and tilt sensor that will activate the alarm should any thief try to jack the vehicle up to steal the converter
- If you see someone acting suspiciously under a vehicle, report it to the Police. Obtain as much information as possible, including any vehicle registrations

Black boxes lead to drop in car insurance.

Car insurance premiums have dropped by 8 per cent as older drivers sign up for GPS 'black boxes' that reward good driving.

Premiums are on a downward trend generally across all age groups, data consultancy Consumer Intelligence said, with the average policy now costing £779. Motorists aged 25 to 49 have seen a 2.1 per cent fall in premiums over the past three months, while over-50s and under-25s have seen decreases of 1.5 and 1.1 per cent respectively.

The average cost of car insurance for under-25s is now £1,735. For 25 to 49-year-olds it is £586, and for over-50s an annual policy typically costs £345.

Consumer Intelligence said one reason could be the rise in telematics quotes. Telematics policies use GPS technology "black boxes" to measure how a vehicle is being driven. Insurers

then make decisions about risk based on driving performance. While they are often used by younger drivers, use among older age groups has increased, according to the research.

The report added that lockdowns resulted in fewer cars on the roads, meaning fewer claims, so insurers could pass savings on to customers.

Editors' note:

As we (slowly) transition to EVs and more connected/autonomous vehicles, how long will it be before such things as GPS, eCall and Speed limiter systems become linked and are then actually required for road pricing in lieu of any fuel duty. The 'black box' part would then be already there, ready to charge on this 'per mile' basis and extra for speeding etc. (eCall is now required by law and speed limiter systems become so in 2022).

Green Cards & GB Stickers update

Green Cards: The European Commission has agreed to eliminate the need for British motorists to prove they have third party insurance when driving in EU countries.

Not only will this help drivers in Northern Ireland when travelling across the border into the Republic of Ireland, but for those crossing the channel to Europe, it is one less thing for British drivers to have to worry about.

Previously, if Brits did not have a green card, they could have been fined, prosecuted or had their vehicle impounded. From 2 August 2021, these measures have been withdrawn.

GB number plate sticker changes to UK: British motorists driving outside the UK must now remove old-style GB stickers or cover them up. Instead, they should display a UK sticker or have the UK identifier on their number plate from 28th September 2021.

"It might only be a matter of replacing two letters, but this is a significant change for drivers who in normal times take their cars outside the UK," said RAC spokesman Rod Dennis.



The new rules state that any driver with a GB sticker on their car now needs to replace it with a new UK one if they are taking their vehicle abroad.

"Drivers also need to remember that number plates featuring the blue band and letters 'GB' next to the European golden stars are also no longer valid," Mr Dennis warned.

Penalties for not complying with the new rules are likely to vary.

Your options are therefore a new number plate with the UK identification, an adhesive sticker over your old EU GB plate identification, or blank the old EU GB plate identification and use a separate UK plate.



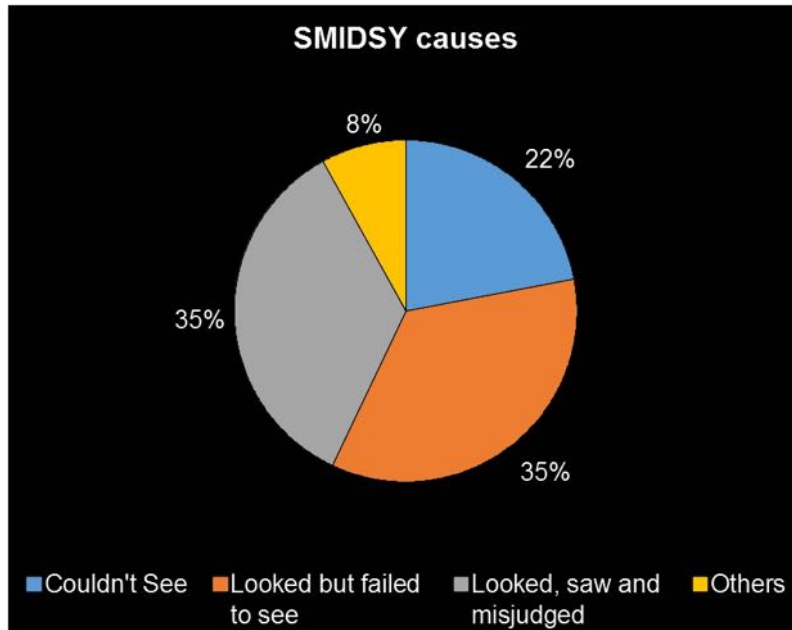
Science of being seen

Whilst courses like this are run primarily for the motorbike rider, there is quite a lot a car driver can be aware of to ensure those riding motorbikes, mopeds and push bikes can be seen by a car driver. Here are some examples and tips.

Looking, but failing to see

SMIDSY- Sorry mate I didn't see you

The Pie chart below shows the causes of SMIDSY accidents:



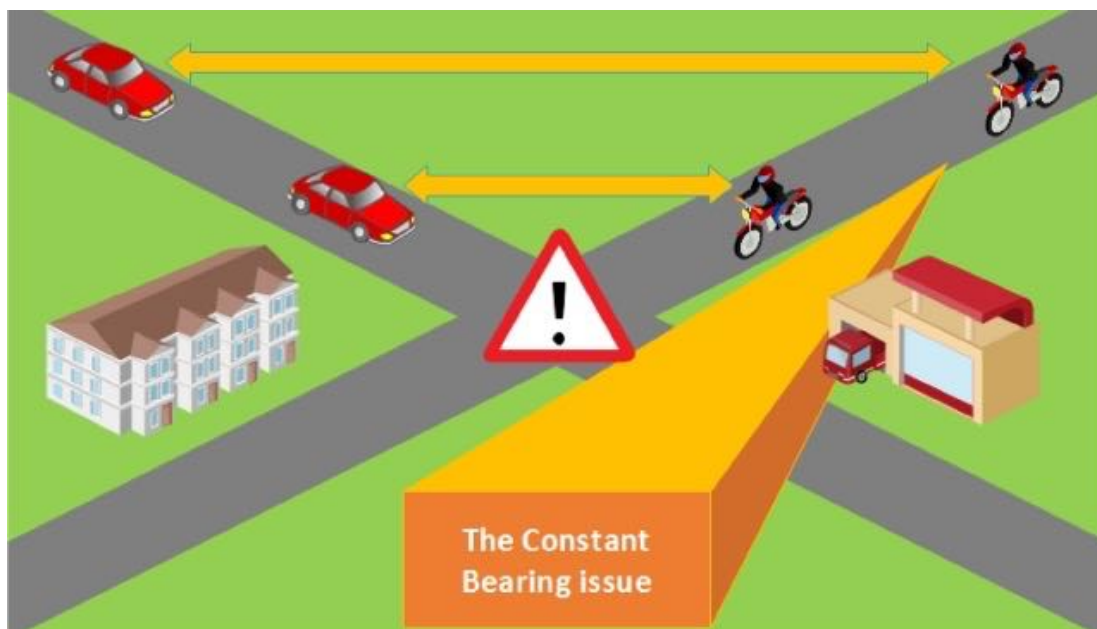
To prevent some of the above:

Couldn't see:

Move your head at junctions, look around objects, scan back towards the you (the car you are driving). *Search, evaluate, execute.*

Looked, but failed to see:

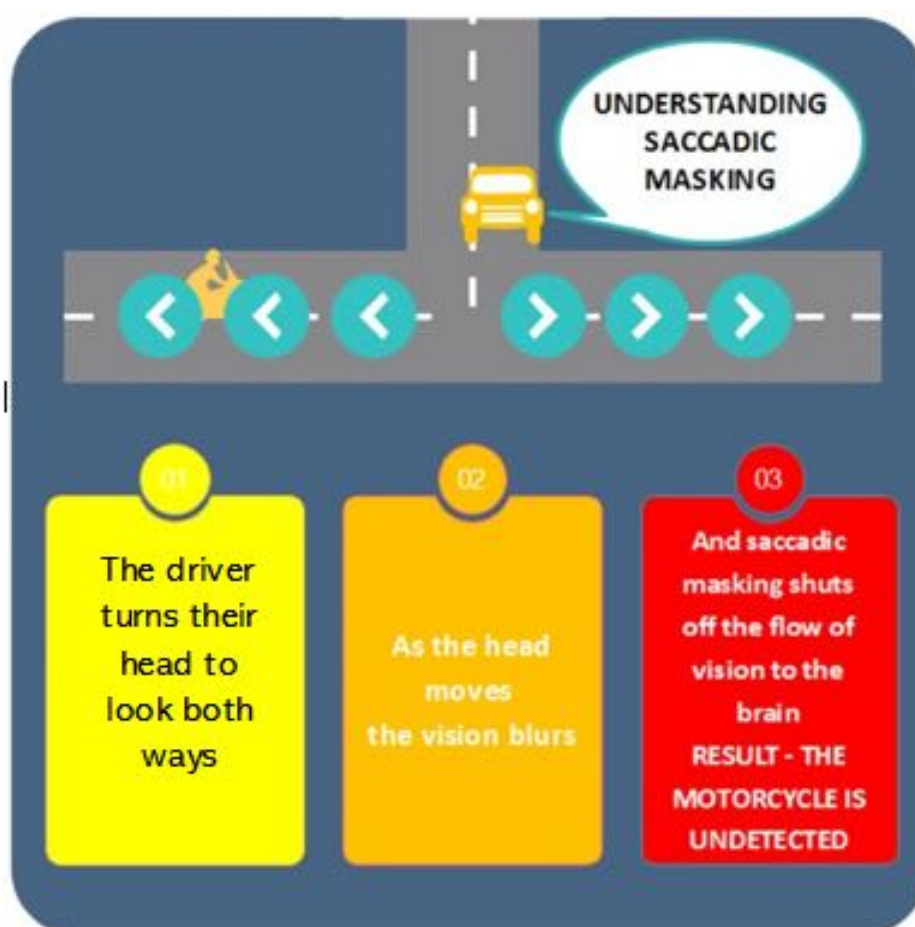
The 'constant bearing' problem is well-known in nautical and aviation circles, and it is also well-known that if another boat or a plane are on a collision course and hidden by some part of the structure, then the other craft will remain hidden almost to the moment of collision. The same applies on the road. If the approaching vehicle is hidden behind the A pillar when the driver starts to look to scan the road to check whether it is safe to emerge, and the two vehicles stay on a constant bearing, then the vehicle will remain hidden until it is close enough to 'expand' around the pillar. Although it is most likely to be a problem when the car is stationary and waiting, and the motorcycle is approaching on a near-collision course, the constant bearing issue can arise when both vehicles are moving towards a junction and due to arrive at the same time.



Camouflage

1. Motion camouflage

Saccadic masking, as you turn your head fast, vision blurs and shuts out sections of view. (The arrows in the diagram below). Your brain fills in the gaps.



To prevent this occurring: Turn head more slowly and stop, if only briefly, to focus on at least three points, at least twice. The brain has too much information to retain.

2. Contrast camouflage

Hi-vis jackets are meant to be seen right? Well, they usually are most of the time by most people, but it is not always the case in Autumn with a yellow or orange jacket, that can blend into the background of autumnal colours. Pink is best overall; however, 'Ghost jackets' are good for both day and night time and overcome the issues of blending into the background during the pre-winter months.



3. Disruptive Camouflage

The traditional Battenburg pattern used on police and emergency services vehicles is an example of disruptive camouflage, it breaks up the shape of the car, vehicle or bike 'forcing' the brain to reassemble it, and therefore be conspicuous, however it is not good at being seen in dappled light.

Looked, saw, and misjudged: Size-arrival effect

The size-arrival effect *results in an illusion that smaller objects are less likely to collide with the viewer.* For example, drivers may underestimate the likelihood of collision when turning when a smaller oncoming vehicle is approaching because it is perceived as being farther away. This is especially prevalent at night when it is difficult to spot how fast a motorbike (often with the one headlight) is travelling.

To overcome this somewhat two additional lights can be fitted to form a 'Triangle of lights' with the existing headlight, so as they get closer, the triangle gets larger and larger.



The Anti-SMIDSY manoeuvre

Potentially used by some motor bikers and can even be used by cyclists if they feel a car that looks to be pulling out on them (or across them) due to motion blindness or the lack of focus that is inherent in the human eye in the peripheral vision.

This generates some lateral movement to help overcome this issue with the rider moving from the typical 'command' position (close to the centre line, about the same 'track' as a car's offside wheel) to the nearside and back again in an effort to be seen. This is known as the Palmers Z-line. This technique can be used whether there is a car (or cars) in front of them or not but the sight line from the car driver waiting to emerge to the nearside when there are vehicles in front of the bike may be the only one there is.

Further reading at:

<https://www.devittinsurance.com/guides/motorcycle-features/the-science-of-being-seen>

Speedo Accuracy

The accuracy of passenger vehicle speed indicating devices is often the source of some discussion. On the one hand, we all need to know the speed at which we are travelling at any given moment, and we also expect the equipment used to monitor that speed by enforcement authorities is also accurate. But what does 'accurate' mean?

The regulations that I believe to be current are in fact very broad. According to thecarexpert.co.uk (and other sources), UK law is based on an EU standard, with some minor changes. A speedo must never show less than the actual speed and must never show more than 110% of actual speed + 6.25mph (a close approximation to 10km/h).

So if your true speed is 40mph, your speedo could legally be reading up to 50mph but never less than 40mph. Or to put it another way, if your speedo is reading 50mph, you won't be doing more than 50mph but it's possible you might actually only be travelling at 40mph.

To ensure that they comply with the law and make sure that their speedometers are never showing less than true speed under any reasonably foreseeable circumstances, car manufacturers will normally deliberately calibrate their speedos to read 'high' by a certain amount.

So, the "+10% + 6.25mph" results in a huge band of possible readings. The IVA manual from DVSA for kit cars and other modified vehicles says:

A speedometer must be capable of indicating the vehicle speed in miles per hour (mph) at uniform intervals not exceeding 20mph for all speeds up to the maximum design speed of the vehicle.

The speedometer must not indicate a speed less than the true speed.

The speedometer must not indicate a speed that is in excess of the true speed plus the permitted tolerance in the chart below.

Indicated Speed (mph)	Minimum True Speed (mph)
35	26
40	30
45	35
50	39
55	44
60	48
65	53
70	57

It is rare, I would suggest, to find such a large discrepancy, but the potential is there. The main factor that could affect the readings is of course tyre wear, and possibly tyre size. The allowance included by manufacturers for tread wear of up to around 6mm on the tyre radius over the life of the tyre is relatively small but is taken into account. Fitting non-standard wheels and non-standard tyres will certainly make a difference in some circumstances, as will significantly over- or under-inflating the tyres.

There is an alternative of course, since many Sat Nav and GPS systems include the possibility for instantaneous speed measurement, but these are not approved devices for the purposes of determining vehicle speed. So, you may find that your Satnav or GPS says you are travelling at 60mph and the car speedo says 55mph for example – the uncalibrated and unapproved device may be more accurate, but the law says you must use the installed instrument.

That makes life difficult for the Advanced Motorist. IAM advice is very clear – Richard Gladman, Head of Driving Standards, reminds us that 'All of our driving and riding plans will be made within the speed limits and with due regard for our fellow road users.'

That gives us a problem, because we don't want to upset an IAM Examiner by consistently showing an excessive and therefore potentially illegal speed being achieved, but because of the discrepancy allowed for the instrument we use, we may still be within the law. We have heard suggestions from IAM sources that any speed limit infringement will be penalised on the advanced test, but equally that a couple of mph over would not be an issue. But which is right?



Drivers of cars with traditional dials and needles for the instruments will have a slight advantage because the thickness of the needle and the angle at which it is being viewed by a passenger may well give a little bit of flexibility, but one Observer recently commented to me that digital speedos take no prisoners. They are too obvious, with digits that are very large, and are very easy to see.

And when a digital speedo says '30', is that actually 30 and possibly very nearly 31mph, or does the display change at 29.5, so your speed could only be up to 30.4?

Hunting and hysteresis in control loops are common problems for controls engineers, but for the ordinary driver, one probably has to assume that to stay visibly under 30mph your digital speedo must never show 30.

The remaining issue is the traditional response of 'I always seem to be holding up other traffic'. Well, that is probably true. All the cars around you will have speedos set to different settings with different variability, so your progress at an indicated 29mph may well be seen as too slow by someone who is prepared to travel at 33mph.

What would become of them if stopped? Auto Express published the results of a survey in 2019 where they asked all 45 Police Forces to state their speed tolerance figures. The majority of the forces that responded said their speed cameras would only activate when drivers exceed the speed limit by 10 per cent plus 2mph, in line with prosecution guidelines from the Association of Chief Police Officers.

This means cameras will not issue tickets until someone is driving at 35mph or more in a 30mph limit, or 79mph or more on the motorway, for example.

The Metropolitan Police, which uses a less strict 10 per cent plus 3mph threshold, say this is "a proportional response to the high volumes of traffic" in the capital. Lancashire Police also sets its cameras so that they activate at 10 per cent plus 3mph, and says that this has been done "to ensure greater tolerance or discretion".

So the gap widens. In the extreme you could have a speedo that legally tells you that it thinks you are driving at 60mph when it is actually 48mph over the ground, and the Police will not generally prosecute you if your actual speed is more than 68mph as recorded on their calibrated devices. In these circumstances I believe you are more at risk from a warning for driving too slowly and therefore inconsiderately, but you are relying, quite understandably, on the information provided to you by the device in your car. Is there a solution?

Paul Whitehead , GAM – September 2021

Speedometer displays- Analogue or digital LCD?

Which is best; Easiest to control speed accurately; Best quality information; least distracting?

Why is this important? Some GAM associates have recently found controlling speed tricky, and my personal experience of mentored Masters' practice and eventually passing the Masters' test in a BMW i3 EV made me think about a number of issues. These were comparing mental capacity required *taking* and *using* speed information (TUG), speed visibility to an Observer or Examiner. But before I delve into the issues, it's also important to understand vehicle speedometer accuracy and interesting to learn about speeding thresholds applied by our police forces.

Let's clarify some important terminology in this article. In today's motor vehicles, speedometers display the output (speed) from electronic pulses usually derived from a suitable point in the drive train. This can be displayed on an analogue dial or numerical display. Many readers will recall the traditional mechanical speedometer where the

instrument dial was connected by a rotating cable in a static sheath. Often the reading was unsteady and became worse with age.



Enough of the measurement and display technology, in this article I want to focus on how the different displays of road speed influence or affect our ability to comply with the law and Advanced Driving Practice, i.e. to demonstrate we can drive safely at the appropriate speed for the prevailing conditions up to the prescribed speed limits. This continues the views expressed and reported by Paul Whitehead earlier in this Newsletter.

First, I wondered about **speedometer accuracy** in today's vehicles. I searched various on-line sources as part of my investigation and found a really helpful *Auto EXPRESS* magazine article. They investigated how accurate the speedometers fitted to 10 sample cars were. They did this by comparing the speed indicated by the speedometer in the car compared to a GPS *VBox* meter. Legally, vehicle speedometers are not allowed to 'under-read'. This of course means they can't indicate you're going more slowly than you really are. However, they are allowed to over-read by up to 10 per cent plus 6.25mph. I'm not sure where this allowance comes from, but in a worst case means a speedo could read 50.25 mph at a real 40 mph. In the actual research carried out by *Auto EXPRESS*, all the cars assessed were well within legal limits, some reading with near-perfect accuracy, while others over-read by only 3mph. This seemed reasonable to me. However, does it mean I can/should set my cruise-control or speed-limiter plus 3 mph? As users we don't know in detail how the speed signal is processed before display or use for automated speed control. The measurement uncertainty isn't published, and therefore it seems reasonable to assume the system is accurate.

Secondly, I wondered about **legal speed limits and police action levels**, particularly for instantaneous and average speed cameras. It seems that policy is somewhat variable around the UK. *Auto EXPRESS* magazine also sought information through a *freedom of information request* and found the following. Whilst the responses were variable, most of the forces that responded said their cameras would only activate when drivers exceed the speed limit by 10 per cent plus 2mph, in line with prosecution guidelines from the 'Association of Chief Police Officers'. This means 30, 40, 50 and 70 mph are triggered at 35, 46, 57, and 79 mph. This of course doesn't mean it is acceptable to drive at these detection limits, and certainly doing so during an advanced driving test would likely lead to a *FAIL*.

With this background clear, I want to move on to the impact of the speed display type on our ability to control speed accurately during and advanced drive. The two display options I want to consider are a numerical versus an analogue display. They are illustrated below, and from the research I have done have similar accuracy. Clearly, the numerical display means I can discriminate 26 mph much more easily than on the analogue dial display.

Comparing the experience of both displays, I have come to the conclusion that the **numerical display speedometer** is more efficient and less visually distracting for absolute reading tasks, whereas the **analogue display speedometer** is more effective for detecting relative speed to a reference or limit and for detecting dynamic speed change.



Then we need to consider how we use the information to control our speed without cruise-control or speed-limiter assistance. Most of the time, advanced drivers should be using *accelerator sense*. That is using variable accelerator pedal application to gently increase or decrease road speed to reach or maintain a target speed. If we think of it in terms of control loop theory, it is a closed-loop process control following Input, Brain, Foot, Eyes, Brain as illustrated below.

Now, let's make things a little more complex as I found when doing my Masters in an EV. In the specific car (BMW i3), the speedometer is numerical in clear view, regenerative braking is fixed and the car configured for city one-pedal driving, and as many EVs, the instantaneous torque from zero motor rpm makes the accelerator very sensitive. I found the mental control loop data processing very demanding, making attention to some other aspects of the advanced driving more challenging. During my mentored runs I also used and compared a conventional high-performance ICE 7-speed DCT auto car. This proved much easier (for me) to drive to the necessary standard, mainly due to the much less sensitive accelerator sense. Maybe the problem is with my age and size 14 feet! I persevered with the EV and passed, missing a distinction due to poor progress, due to accelerator pedal caution.



Finally, I want to look at the issue from an Observer/Examiner perspective. In particular, the visibility of the speedometer from the passenger seat. I have used some real examples to illustrate the challenge. The BMW ICE images below compare the driver's (LHS) and Observer's (RHS) view of the same speedometer. It's nearly impossible for an Observer to accurately see 20, 30, 40 and 50 mph, maybe giving the associate or mentee a bit more wiggle room. The numerical display leaves you no hiding place.



So, time for a conclusion. On balance I would have to say that an analogue speedometer is easier to drive accurately primarily because your brain can process the speed to target relativity more quickly. Also, most cars will give the driver a visibility advantage over the observer/examiner; not that this should be a basis of a technology choice of course, if you have one.

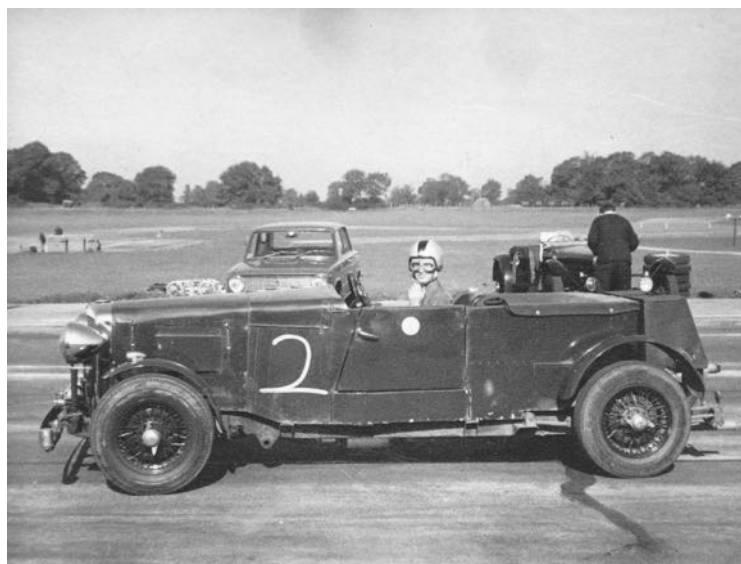
What's your experience & opinion? Do write and let us know.

Gordon

GAM Chairman, NO

Alvis Photos

Unfortunately, we were unable to publish the photos for the Alvis article in the Summer, so here they are:





My Experience with IAM

New GAM Member, Monique Harrison has written about her training with GAM and recent test pass.

“Why being an Advanced driver with IAM has attracted me”

The 2 men in my family passed their test 2 and 3 years ago. I could NOT allow myself, the only woman at home, not to try. So, I received my Christmas present and started.

We had a new car by then: a Lexus Hybrid, and I did find the driving challenging in a different, more sensitive car. So, it was a perfect time to start with IAM.

I had a few sessions and was still nervous. So that made me more aware of the need for the IAM coaching.

Then unfortunately COVID appears, and everything stopped. But what a good idea to have had Zoom meetings organised! I started to focus on my car, read more about it. The presentations in the Zoom meetings were very good and I could feel how the team members were very committed and even passionate about it. I felt engaged in the IAM instructions and advice. All with very pleasant, and knowledgeable people.

A big thank you for that.

The lack of practice during the lockdown made me lose some of my confidence. But I always loved driving and was a bit upset not to have mastered this new car.

Then at last it all started again. I never felt pushed or pressured when my instructors gave me their time and support: I regained my confidence. The pleasure of driving came back as I knew my car much better.

Then it's time for the test! I was far too stressed about it, more than I expected; then I made a silly mistake especially with my lack of understanding about some warning, non-obligatory, signs (to be added to the teaching I believe).

But the good thing is that my examiner was very pleased with my driving and as he said: “you were so close to a First and you definitely have a Pass with top marks”. Which nobody said to my menfolk!

Hip Hip Hurrah! I got it.

Thank you SO MUCH to the GAM Observers for their patience, their desire for you to succeed and without negative criticism.

I would very strongly recommend anybody to go for the IAM course because it's important to feel happy and safe with your driving, and because it is so well organised.

Monique Harrison, GAM Member

Driving and riding safely for work

For most people, driving or riding will be the most dangerous work activity they do. Around one third of all road traffic collisions (RTCs) in Britain involve someone driving or riding as part of their job and countless other RTCs involve people travelling to or from their workplace.

Although the risks cannot be completely controlled, employers or companies who engage drivers and riders must take all reasonable steps to manage these risks and do everything reasonably practicable to protect people from harm in the same way as they would in a fixed workplace.

HSE and the Department for Transport have worked with stakeholders to create new 'Driving and riding safely for work' webpages.

There is clear, simple guidance:

- for employers and those who engage drivers and riders on how to make sure the journey, driver and vehicle are safe
- for workers and those who drive and ride for work on their responsibilities .

In recent years there have been significant developments in driving technologies, employment status and driving practices.

The new webpages explain the responsibilities of anyone who engages workers to drive and ride for work, whether in an HGV or on a two-wheeled vehicle.

The guidance covers health and wellbeing as well as safety.

<https://www.hse.gov.uk/roadsafety/employer/index.htm>

Competition

OK, so there are no prizes, but what has caused these skid marks? Let us know...



GAM AGM 2021

This was held Wednesday 23rd September 2021 – 20:00, the Chairman's and Secretary's reports are reprinted below.

CHAIRMAN'S REPORT

It's hard to believe that I started my tenure as GAM Chairman two years ago. That time has been impacted by COVID, but we have still managed to deliver on-line coaching and get back to the real face-to-face practical stuff. I will avoid duplicating our Secretary, Paul Whitehead's report and focus on some of the opportunities and challenges of the last year.

I want to begin by thanking our committee and Observers for their unstinting support upfront and behind the scenes. In particular, the whole GAM family should be most grateful for Paul Whitehead's huge effort sorting out geographic membership allocation and COVID Associate extension issues with IAM RS and managing the return to Observed runs in conjunction with Clive Heavens (focussing on appointed observer runs (AORs)) and Tim Lyon (Chief Observer); we are holding our own alongside other similar groups and have made good progress in recent weeks.

GAM is driven and enabled by our committee members and Observers. This volunteer force has most recently been concentrating on getting back to observed runs and addressing our Associate member backlog, including more recent new recruits. As COVID restrictions were lifted we couldn't operate our 'Sunday RunDay' from the GBC Depot and operated what we called our 'non-Sunday

Run' (NSR) model. As this model applied to so many Associates on any day of the week, we decided to rename it 'Appointed Observer Run' (AOR). Interestingly this approach seems to be used by many groups, and for some is their only approach. It certainly makes run management simpler. Looking to the near future, we will need develop an approach that best suits our Associates and Observers.

Thanks are due to Guildford Borough Council for the free use of their depot; the facility is greatly appreciated, and the caretaker clearly takes pride in assisting us to the best of his ability.

On a personal front I managed to complete my Masters mentoring and pass the test after a prolonged programme that was rudely interrupted twice by COVID. My thanks to mentors Graham Ranshaw (past GAM Chairman), John Holcroft (GAM NO) and Ryan Francis (one of our very supportive examiners). This was a very interesting and challenging experience. I tossed up whether to do it on an ICE or EV, choosing the EV finally. More about that in our next GAM Newsletter. Of interest I have been discussing with Tony Greenidge (IAM RS CEO) the shortage of EV Advanced Driving guidance from HQ. I hope GAM can contribute its experience, including that of a couple of current Associates with EVs.

The COVID impact has had some positive internal GAM and broader external outcomes I'm pleased to say. We have continued to improve our use of our Microsoft Teams and web systems, in particular reorganising our SharePoint libraries and Website and refreshing a myriad of GAM procedures, GAM Guidance Notes (GGNs) and key documents. Our thanks to Clive for his input to this important activity. Externally I have had the opportunity to join several sister group on-line meetings and events. This has helped in three ways. I have been able to benchmark our efforts (we seem to be very much up with the best), promote GAM, and see how we might better exploit a hybrid face-to-face and on-line meeting model better in the future. We have recently delivered all our new Associate inductions on-line. We still believe face-to-face contact as being important, but maybe with a stronger social dimension. We have plans for 2022!

Of course, we do have some serious challenges we need to identify and address. Paul will present a summary of roles and positions we need to reinforce, so I won't repeat. First, several senior Observers have seen COVID as a trigger to retire for a variety of reasons. We thank them for their support over so many years and recognise their great contribution to driving skills and road safety. We are therefore looking for new Observers. These are mostly drawn from our new members. As you approach your test, it's a great time to think if you would enjoy feeding back into our coaching team, talk to your Observer about it! The second is our need to reinforce and refresh our GAM committee. We enjoy the company of a great experienced team but need new blood with new ideas. It does require some commitment to a combination of Zoom, face-to-face meetings and some background input. We have effective systems in place, and will always support anyone taking on a formal role. As they say, many hands make light work.....GAM needs you! Give me or Secretary Paul Whitehead a call to discuss.

SECRETARY'S REPORT

This has been a very disruptive year for so many individuals and organisations, and GAM is no different. This year's report is therefore very different to years gone by.

Group committee and Officers

Your Officers remained in post at the last AGM and under Gordon's leadership we have tried to make the best of a very difficult year. We managed to hold the requisite number of committee meetings using a variety of on line platforms and they were successful.

Our newly appointed Newsletter Editor, Val Pascual, announced she was engaged to be married shortly after the last AGM, so Val was able to produce just one more Newsletter for us before

departing for a new life in Devon. Fortunately, a capable and willing volunteer came to the rescue, and David Clifton was co-opted on to the committee in the Editor role. David has done well producing the recent publications, and the newsletter is one of our 2021 success stories. One member was kind enough to note that he felt it kept him in touch with the IAM and motoring in general in a way that many other publications did not.

Later in the year we heard that Neil Fuller, our Membership Secretary, had finally sold his house in Surrey and was off to the West Country, so we started a process of looking for a new Membership Secretary and an Operations Manager. Those roles are yet to be filled – the Membership Secretary work has fallen to me to manage temporarily, but a new Ops Manager for the Sunday Runs and other activities is urgently needed. Neil had taken on a lot of work for the Group over the last few years and was a very useful member of the team, especially for his IT knowledge, but a suitable replacement must be found. We wish Neil well in his new home (when he eventually finds one and moves from the rented cottage) and hope he manages to start the Bodmin Moor IAM Group.

Your committee is therefore running very 'lean' and some new members to help with some of the tasks would be really appreciated. New ideas are always welcome, nothing is cast in stone, and if anyone fancies being Group Secretary, please note I will not be at all offended by your kind offer! Full training provided.

Associates and tests.

A very disappointing year as we had nothing to offer the Associates in terms of 'on the road' training. Things are slowly returning to a new normal and we have just managed to get back to the GBC depot to start Sunday Runs again, but it is early days. Our first full Sunday Run for 18 months was just a few days ago on 19th September.

We had a small number of new Associates join us over the last year, and those 14 or so new starters have been advised that there is a waiting list for our services. A couple who did join have decided the wait is too long so sadly they will not be joining us, and some of the Associates we had in process before our enforced stoppage have also decided that they no longer wish to continue. Nevertheless, we are returning to driver training with well over 50 names on the list, and we will be working hard to get them all up to test standard as soon as possible. Communication is key, so we ask all Associates to keep us up to date with their intentions regarding their advanced driver training.

In the last 12 months – as at the start of September - we had just one test scheduled which resulted in a well-earned pass for Monique Harrison. A few more are in the pipeline and we wish these Associates good luck on the day. Examiners are suffering in the same way as everyone else with reduced numbers and increased workload for those remaining, so we have to be patient as we are all volunteers.

GAM's Advanced Driving test passes in 2021 (COVID-19 affected)

Monique Harrison
Andrew Sloane



FELLOW

GAM - IAM RoadSmart 'Fellows' Roll of Honour

Neil Fuller
Alan Powley

Paul Whitehead
Brian Mellor



FIRST



MASTERS

GAM - IAM RoadSmart 'Masters' Roll of Honour

Graham Ranshaw 2016 Distinction
Mike Hughes 2017 Distinction
John Panting 2018
Peter Laub 2019 Distinction

Victor Olisa 2019 Distinction
David Clifton 2019 Distinction
Gordon Farquharson 2021

GAM Management Team - Officers and Committee Members

Chairman	Gordon Farquharson	Chairman@guildford-iam.org.uk 07785 265 909
Secretary	Paul Whitehead	Secretary@guildford-iam.org.uk 07860 600477
Treasurer	Michael Tilney	Treasurer@guildford-iam.org.uk
Membership Secretary	Neil Fuller	Memsec@guildford-iam.org.uk
Chief Observer	Tim Lyon	Chief.observer@guildford-iam.org.uk
Newsletter Editor	David Clifton	Editor@guildford-iam.org.uk
Observer Training Officer	Paul Burn	Training@guildford-iam.org.uk
Non-Sunday Run Manager	Clive Heavens	NSRManager@guildford-iam.org.uk

GAM Diary Dates

Events 2021 – See the GAM Facebook page.

Observer Meetings 2021

Starting at 7:30, venues to be advised and to be confirmed nearer each event as details can change (and are subject to COVID-19 restrictions).

Dates:

- 7th October – Drummond Arms, Albury
- 2nd December - Location tba

These meetings will provide an important opportunity to get information and guidance, and importantly share experience and best practice with GAM peers. Please send apologies to Training Officer, Paul Burn.

Committee meetings for 2021 – Thursdays at 7:30pm – venue to be decided

- 4th November

Observed Runs: 'Sunday-Runday' & Non-Sunday Runs

Sunday runs are now back from September 2021 at the Woking Road Depot, and you should have been contacted about this. The usual date for this is the 3rd Sunday of the month, with exceptions published in advance.

We continue non-Sunday runs (or Allocated Observer Runs AORs) to those who prefer to have some consistency with the same observer and for those who find it difficult to meet on a Sunday.

Contacts

GAM Website: www.guildford-iam.org.uk



@IAMgroup



www.facebook.com/guildfordiam



GAM Online coaching channel

GAM YouTube Channel: *recordings of the GAM Virtual-Run training sessions.*
https://www.youtube.com/playlist?list=PLAEIIOdg_iR8PTrcQGJhXdB_RyZ3dXhKL

1.	GAM Vehicle Intro – POWDERY
2.	GAM EV Cockpit drill
3.	GAM Virtual-Run IPSGA and the ‘System’
4.	GAM Virtual-Run Bends
5.	GAM Virtual-Runs Junctions & Roundabout
6.	GAM Virtual-Runs Overtaking
7.	GAM Virtual-Runs Motorways/Dual Carriageways
8.	GAM Virtual-Runs Slow Manoeuvring
9.	GAM Virtual-Runs Automatic Transmission
10.	GAM Virtual-Runs Commentary
11.	GAM Quiz night
12.	GAM Virtual-Runs Vehicle technology
13.	GAM Virtual-Runs Night driving, weather, vulnerable road users.
14.	GAM Virtual-Runs The thinking driver, Human factors.
15.	GAM Virtual-Runs Signals
16.	GAM Virtual-Runs Q&A Forum

Location for our GAM Sunday runs:

Guildford Borough Council (Woking Road Depot)
Woking Road (A320)
Guildford
GU1 1QE

