

SCCON Spotlight

The Newsletter of the Sporting Car Club of Norfolk

June 2015



***Scottow Enterprise Park
AutoSOLO & Autotest***

Sunday 28th June 2015

Round 2 of the 2015 AMSC AutoSOLO Challenge

Round 2 of the Clubmans Championship

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Downloads available:
(via website or contact David Bell for a paper copy)

[Midsummer Classic
Regs & Entry Form](#)

[Scottow Enterprise Park
AutoSOLO & Autotest
Regs & Entry Form](#)

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Cromer Carnival Soapbox Derby

Sunday 12th July 2015

The Latest ...

Social Events

Howard – Social Secretary:

Phone Howard on 07917 060052 if you have any ideas or venues for social events

Club Nights

Do not forget that current club nights (unless stated in these newsletters) are at the **White Horse**

Please join us at the White Horse on **Thursday 18th June** for the next Natter & Noggin

Diary Dates

Wednesday 3rd June
Management Meeting

Thursday 18th June
Club night at the White Horse, Trowse

Sunday 7th June
Debden Targa
West Suffolk Motor Club
2015 AMSC Targa
Challenge Round 1

Saturday 20th June
East Anglian Classic
Chelmsford Motor Club

Sunday 21st June
Midsummer Vintage
& Classic Car Run
Watton

Sunday 21st June
Watton Classic Car Event
Watton

Sunday 28th June
Scottow AutoSOLO
2015 AMSC AutoSOLO
Challenge Round 2
Clubmans Round 2

Sunday 12th July
Cromer Carnival
Cromer

Marshalling

Marshal Points:

Have you been out marshalling on any club or invited events?? Then you need to claim your Championship points by contacting Maggy Bateman.

Sunday 7th June
Debden Targa
Carver Barracks
West Suffolk Motor Club

Saturday 20th June
East Anglian Classic
Elsenham
Chelmsford Motor Club

Sunday 21st June
Midsummer Vintage
& Classic Car Run
Watton

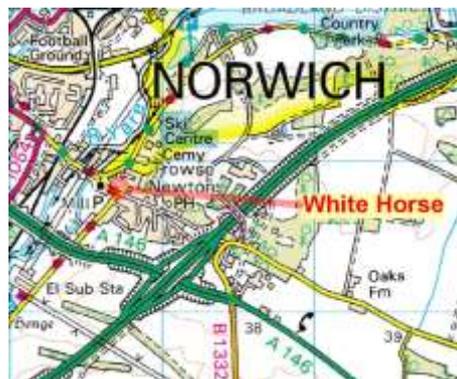
Sunday 21st June
Watton Classic Car Event
Watton

Sunday 28th June
Scottow AutoSOLO
Scottow Enterprise Park

Sunday 12th July
Cromer Carnival
Cromer



[White Horse, Trowse NR14 8ST](#)



2015 Dates	Event	Champ.	Contact(s)
Thursday 1 st January	New Year Treasure Hunt	Clubmans	Julian & Sara Riley
Thursday 15 ^h January	Club night		
Friday 30 th January	12 Car	12 Car	Jonathan Stimpson
Thursday 19 th February	Club night		
Friday 27 th February	12 Car	12 Car	Mark & Lorraine Annison
Friday 13 th March	March Hare		David Bell
Thursday 19 th March	Club night		
Friday 27 th March	12 Car	12 Car	David Bell
Thursday 16 th April	Club night		
Thursday 14 th May	AGM		David Leckie
Saturday 16 th May	Dinner Dance		Lorraine Annison
Saturday 30 th May	Norwich Forum		David Leckie
Thursday 18 th June	Club night		
Sunday 21 st June	Midsummer Vintage & Classic Car Run		Martin & Christine Newson
Sunday 28 th June	AutoSOLO	Clubmans	David Leckie
Thursday 16 th July	Club night		
Thursday 20 th August	Club night		
Sunday 6 th September	AutoSOLO	Clubmans	Martin Newson
Thursday 17 th September	Club night		
Friday 25 th September	12 Car	12 Car	
Thursday 15 th October	Club night		
Friday 23 rd October	12 Car	12 Car	
Sunday 15 th November	Car Trial	Clubmans	David Leckie
Thursday 19 th November	Club night		
Friday 27 th November	12 Car	12 Car	
Thursday 17 th December	Club night		

Chairman's Report June 2015

Here we are at the start of a very busy month, with two big events your very own car club are running with a little help from you! First of all I will tell you what we have been up to again, as normal we have not really been home much at the weekends

Sunday 10th May

Green Belt Motor Club / Wickford Auto Club MiddleWick Stages 2015 Woodbridge.

An early start again. We had quite an area to look after which covered the split and merge area for all 8 stages. There were only 35 entries and just 21 finishers for this rally so it did not take to long to run each stage.



*"When
Reliability
Matters"*

Norfolk Classic and Sportscars was born from a lifelong passion for motorsports and classic cars, and was established with the aim of providing a reliable and complete service for classic and sports cars, including on event servicing for motorsport events, as well as general servicing, repairs and rally preparation work.

The founder of the company, Robert Kitchen, has been providing on event support for the Endurance/Classic Rally Association since 2000, and has worked on most of their long distance endurance events over the last 11 years. Therefore Norfolk Classic and Sportscars is ideally placed to prepare vehicles for this type of event, as Robert has travelled many of the routes and experienced first-hand the kind of problems encountered by classic vehicles on these types of event.

The company also carries out restoration work, with workmanship undertaken to a meticulous standard. You can see examples of previous commissions in the Projects section. We are always happy to discuss your individual requirements, please do not hesitate to get in touch.

This is a small selection of the events that Robert has provided mechanical support on:



Saturday 16th May Afternoon Start

Race for Life. Charity event at the Show Ground just outside Norwich.

The SCCoN Team of ladies turned out with hundreds of other ladies to raise money for this cancer charity. Howard Joynt and I (Martin Newson) were there to support the girls. Everyone left the start at 2.00 to cover around 5 kilometres.

As this is an all-girl

event Howard I retire to the pub for some lunch and returned in time to see Christine, Suzanne and Maggy finish smiling as normal.

I am not too sure of the thinking behind this event as I would be very happy to help raise funds by doing the Race for Life, Christine does not really want me to dress up with a bra etc so I don't look out of place if walking with the rest of the women. I am sure they will be doing it again next year why not join them? We will let you know early next year as to where and when it will be happening. I am not sure how much Suzanne and Maggy raised but Christine raised £247.70 with your help, thank you for your help.

Saturday 16th May Evening Start

SCCoN Dinner and Awards Evening, The Old Rectory Crostwick.

There was a reasonable turnout for the evening, the food was good and the music was by our choice. We started the awards straight after the dinner at around 9.15, we have a good turnout of the award winners but there could have been more of you. We will be in touch with you soon if you did!

Could all of you that are interested in the things we do as a car club let me or Peter Riddle know if you would like us to continue having this type of event to celebrate your achievements in club events or do you have any better ideas?

Sunday 17th May

RAF Wethersfield. The first Autosolo of the series, a late start to the series do to venue problems. With only four and half hours in bed before our early start to they day, it was going to be a long one. Around 35 entries to this one on the runways of Wethersfield, our team was looking after a complete test, there were 3 tests laid out today. They were all quite long, and some had trouble keeping on the correct route. All the entries enjoyed the challenge of the fast flowing test layouts

The next round is ours at **Scottow Enterprise Park** formerly RAF Coltishall. We will need a small army of volunteers to run this, we will

provide some breakfast or lunch for everyone who does come forward to marshal for us, more details elsewhere in this newsletter.

Saturday 30th May

As you might have read over the last few months in these newsletters, we had a number of cars on display outside the Forum in Norwich. We had a good number of cars surrounding the front of the Forum. We had to be there quite early so there were no cars moving around when the general public started their



Automotive Performance Tuning

APT began in 2004, when Gary Hayward identified a demand for a knowledgeable specialist in the tuning and maintenance of Japanese performance vehicles in the Norfolk area.

Having completed training and with several years experience working with vehicles in a main-dealer environment and more recently managing the workshop for another local specialist tuning company, Gary decided to adopt a more dedicated approach. What followed was to become not only a success in the Norfolk area, but a Nationally recognised company with customers travelling often hundreds of miles, in fact our customer base now stretches into Europe too. Our existing customers seem to appreciate our honest and informative approach, along with our 'small company' attitude.

Our facility, based just outside Norwich is equipped with the latest equipment to allow us to carry out tuning of performance cars to a very high standard and taking into account the customers budget.

We have the ability to map most of the major aftermarket management systems, including MoTeC, Apexi, Autronic, HKS and are agents for the **EcuTeK** remapping system for Mitsubishi Evo vehicles.

Gary is proud to have been involved with various projects over the years, including customers such as RosSPORT and Mosler Europe, for whom we have mapped several of their road and race cars.

Additionally to this, we are also equipped to carry out tuning to modern Petrol and Diesel road-cars. Healthy power gains are available by optimising the vehicles operating parameters, but more significantly, fuel economy can be improved on Turbo-Diesel applications. Please click the Evolution Chips logo on the left for more information about this great service.

Our own Mitsubishi Evo 7 has continued to evolve and has become widely regarded as one of the leading Evo vehicles in the country. It provides a useful test-bed for new innovations and can be seen at various MLR events across the country. It features an APT-built 2.3 stroked engine, RosSPORT Garrett T04Z turbo, Drenth Sequential transmission and aggressive body-styling. It produces in excess of 700bhp and now also includes a NOS system. Look out for it at a trackday near you!!

shopping. Dave Leckie had got us all together for the day so he was in charge today and his parking skills are almost legendary. With a couple of fine adjustments we were ready to start talking to our public.

I am listing below the role call of people and cars on display, and I would like to thank everyone for all their efforts as it all went very well , very well received by the public.

Peter and Allison Cotes	Volvo
Andrew Lawson	Ford Escort Mexico
Dale Lawson	MG ZR Enduro rally car
Richard Ward	Ford Escort RS 2000
Andrew Ward	Mazda MX5
Mike Smith	Lancia Delta Intergrala Rally Car
Peter Riddle	Vauxhall Nova
Gordon Shipley	Peugeot 306
Martin Newson	MG ZR Rally Car
Long Stratton Motor Company	Lotus Elsie
Stuart Delf	Ford Fiesta Rally Car
Mark Annison	Ford Sierra Track Day Car and service area
Tony Hewitt	Kart Racing Team Manager
Chloe Hewitt	Kart Driver
Freddie Hewitt	Kart Driver

Plus thanks to	Christine Newson
	Lorraine Annison
	Seb Annison
	Howard Joynt
	Bryan Tooke
	Phil Newson
	George Shipley
	Mike Lambert

You never know how big an effect these events have with the public, we do need to make the public aware that motorsport is for everyone and you do not need to have millions to have an exciting and fun filled day. We did manage to sign up one new member so that is a start

Sunday June 21st

Watton High Street. SCCoN Classic Car Event.

As you should already know the next Classic Car Run is leaving Watton High Street on Sunday morning from 9.45 until 11.00 (then the static display moves into the empty high street). I hope you have volunteered to help this year. It is not a difficult job we have a number of team leaders on hand to help with any problems or enquires. As well as the high street, we have an Autosolo demonstration on the old RAF Watton site which as you approach Watton from Norwich is on the left. The Vintage Buses run from here, the remote parking into High Street

Please contact me, Martin Newson on 01502 716280 or email cjnewson32@yahoo.co.uk as soon as possible as it is going to be a busy day.

As I write this we have 100 entries for the run and we still have 21 days to go.

Sunday June 28th

The next round of the Autosolo series is OURS at Scottow Enterprise Park (formerly RAF Coltishall).

The 2015 AMSC (Anglia Motor Sport Club) AutoSOLO Challenge and a new venue Scottow Enterprise Park. The Challenge is open to members of the clubs that make up the Anglia Motor Sport Club with registration being automatic on entering the event. It is planned that the format for the day and tests will follow the general pattern of the events that have been popular in previous years. The plan is to offer 18 tests to competitors through the day, challenging enough to make you think but simple enough to be fun. An AutoSOLO consists of all forward, timed tests on a hard surface. Passengers are not allowed.

The event is not intended as a memory test as there will be numbered gates and markers defining the route to help you find your way around as well as a diagram of the test. You will have more than one run at each test and should you have a really 'bad' test for any reason the maximum is adjusted based on the fastest time achieved by others. This then allows for the little disasters by applying a time that doesn't rule out overall recovery by performances on the other tests. The cars entered into the Autosolo must be road worthy, they must be taxed, MOT'ed, insured and need to be driven to the event. For competitors who prefer to bring their cars to the event by trailer an Autotest event will be run at the same time as the AutoSOLO. The tests will be identical for both competitions.

We need our club members to help us make a successful event please come and either enter your car if not come and marshal. If you have any concerns about marshalling or having a go please contact me, Dave Bell or Dave Leckie we can help you with advice. We do need you there on the day.

**Martin Newson
Dave Bell
Dave Leckie**

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Well that's all folks for this month, please come out to play it is really good fun.

Drivers Licence News

THE INSTITUTE of Advanced Motorists (IAM) is warning people to be aware of the changes that will take effect in just over two weeks' time as the paper counterpart for the driving licence is scrapped.

As was the case with the abolition of the paper tax disc last October, the IAM fear many people are still confused or unaware of the implications of the scrapping of the paper counterpart on 8 June.

The counterpart was introduced alongside the photo card driving licence in 1998 to include details that could not be included on the card itself, such as any endorsements and which category of vehicles you are entitled to drive.

However this information will now be stored electronically and not be shown on any written documentation. These details can only be obtained via the DVLA driver record system, and be checked online or in writing by post.

As of 8 June the paper counterpart, or an old-style paper driving licence, cannot be relied upon to carry correct or-up-to-date information about endorsements or categories of vehicle someone can drive. The counterpart will carry no legal status, and the DVLA recommends it is destroyed after 8 June.

Also changing is the procedure to surrender your driving licence to a court in the event of an endorsement. The court will take your photocard and if you include the paper counterpart with your

submission, the photocard will be returned to you but the counterpart will not.

Another change is how to provide proof of your driving record to an employer or car hire firm, as your photocard or paper licence will not be enough in itself any more.

You will need to access the DVLA's Share Driving Licence service

www.viewdrivingrecord.service.gov.uk/driving-record/licence-number

which is now live.

Drivers will be expected to access the details themselves and print those off for submission to a car hire firm or employer. Alternatively you can call the DVLA and give a third party permission to check your driving record verbally.

If you are hiring a vehicle, other than using the DVLA's Share Driving Licence service, you can also obtain a special code from www.gov.uk which allows the hire firm access to your record for 72 hours to make the necessary checks. This applies to both holders of photocard and paper licences.

Commenting on the issue, Sarah Sillars, IAM chief executive officer, said: "People are not aware of how many of the current procedures are changing. Similar to the abolition of the tax disc, they assume much of what has happened before will continue.

"The onus is very much on the individual to obtain the information they need beforehand. So we very much hope people will not be caught unawares, especially if they don't want a nasty surprise when arriving to collect their car at the start of their holiday."

Dear Members,

For those of you with good eyesight!! you will have noticed that Hon Chairman, (Sir to his friends!!) in last month's Spotlight, announced to us all that, the national speed limits for HGVs have risen to 60 MPH on dual carriageways (50 MPH for single carriageways). The reason for this is the improvement in the braking systems (i.e. ABS) on modern HGVs which, includes an electric brake / type system in the transmission, this saving wear on the pads and of course keeping them cold for when one has to do some really serious stopping.

However, don't think that all HGVs will be zooming around the countryside at 60 MPH, 'cos they won't. All HGVs are fitted with a speed limiter, set at 55 MPH. so there.

Finally, dear members, a word to the wise, "lorry drivers hate everybody"!!!

My pet hate is company reps in BMWs and Audi cars.

Stay safe,
Paul

Paul Doodson

Wonderful Watton**Sunday 21st June 2015****The Sporting Car Club of Norfolk
Midsummer Vintage & Classic Car Run**

Starting in **Watton High Street** with a Le Mans style start (without the running!)

Finishing in the grounds of **Holkham Hall** (one of England's finest examples of Palladian revival style of architecture constructed for Thomas Coke by the architect William Kent aided by the architect and aristocrat Lord Burlington)

The route will be between 70 and 80 miles of free flowing roads to suit older vehicles while still avoiding A-roads whenever possible

It is not a speed event; it is designed to be a leisurely drive through the countryside

You do not need to be a member of the Sporting Car Club of Norfolk to enter this event

At the start you will be supplied with a rally plate for your car and a route book (and a map) in our popular easy-to-follow format

A memento will be given to every car that completes the run

There should be sufficient time to enjoy the various sites of interest along the way.

At the start you will be given vouchers which can be spent in the local cafes and restaurants.

Why not make a Watton Weekend of the Midsummer Classic Run and stay for the night, at one of our wonderful Local Inns or Bed and Breakfast establishments

The closing date for entries is 15th June 2015

Marshals required

Contact Christine Newson for more information
☎ 01502 716280 (after 6pm)

Wonderful Watton**Sunday 21st June 2015****The Watton Town Team
Watton Classic Car Event**

The start of the SCCoN Midsummer Veteran & Classic Car Run
with cars arriving from 8.30 am and departing by 10.30 am

The third running of the Peoples Choice Car show will begin at 10.30 am
when the cavalcade of cars arrive on the High Street for you to judge them

Display of competition motorcycles which will be also include examples from
The Vintage Motorcycle Club who will be arriving in the High Street at around 12.00
at the end of their Summer Run and they will stay for the rest of the day

Ex Jim Clarke Lotus F1 Car from Classic Team Lotus

Bennett Homes Wheel Changing Competition on the Chapel Car Park
teams of two, fastest time of the day wins the
Bennett Homes Wheel Changing Trophy

Cycle riding display from the spectacular **3SIXTY Bicycle Stunt Team**

Dedicated Motorcycling area in the car park of the Wayland Partnership
supported by **Lings Triumph** who will have their showrooms open all day

Parking for spectator traffic will be signposted from all directions into the Town,
please follow the directions and then park where instructed. A "Park and Ride"
bus route is in place for those directed to park at the Watton Airfield car park.
When at the Airfield car park you will also be able to see a competitive Autotest
being run, a most spectacular form of Motorsport. Spectators wishing to see this
who are not parked on the Airfield can jump on one of the Classic Coaches
to make the trip.

**All of the town's Shops, Cafes and Bars will be open
it is Father's Day and also Mid-Summer Day
so what better place to be than Watton for**

The Watton Classic Car Event!!!!**Marshals and entries required**

Contact Howard Joynt for more information
☎ 07917 060052 (after 6pm)

**Scottow Enterprise Park
AutoSOLO & Autotest****Sunday 28th June 2015****2015 AMSC AutoSOLO Challenge Round 2****2015 Clubmans Round 2**

An opportunity to have a look at a brand new venue with a load of history

Formerly RAF Coltishall and home to No. 6 Squadron RAF

The last Jaguar squadron left the base on 1st April 2006

The site was handed over to Defence Estates (MoD agency responsible for UK Military Sites) on 30th November 2006 and became MoD Coltishall

The gate guardian (picture on the front page) Jaguar XW563 ***Spirit of Coltishall*** was moved to the grounds of Norfolk County Hall on 27th February 2007

The site was sold to Norfolk County Council on 16th March 2014 and has now become Scottow Enterprise Park

The club is running a dual Clubmans permit AutoSOLO & Autotest

What is the difference?

AutoSOLO vehicles must be taxed, tested and driven to the venue
Autotest vehicles can be trailered to the venue

Both events use the same course, basically drive round a load of numbered cones in the right order and as quick as you can

Cheap and non-damaging motorsport
although enthusiastic drivers should expect a bit of tyre wear

NO SPECTATORS THE ONLY WAY TO GET IN IS TO ENTER OR MARSHAL

For regulations, on line entry form and payment see the [website](#)

Marshals and entries required

Contact David Leckie for more information
☎ 07875 885576



Sunday 12th July 2015

For the first time in 2015, we are so pleased to announce, the Cromer Soapbox Derby!

Scrutineering from 12.00pm

Racing from 1.00pm

Course A149 (Runton Road) - Beach Road to Morrisons Petrol Station

Junior course

Adult course with chicane and jump

Classes:

Junior:

10 to 12 years

13 to 15 years

16 to 17 years

Adult:

18 years plus

Fancy Dress:

Youth Group - Fancy dress cart and driver

Pubs and Hotels - Fancy dress cart and driver

Shops and Businesses - Fancy dress cart and driver

Village - Fancy dress cart and driver

*** Full details, including Race Rules and Application Form, can be downloaded from the Entry Forms page of our website or collected from The Cottage Freehouse, Loudon Road, Cromer. ***

COMPLETED APPLICATION FORMS MUST BE RETURNED BY MONDAY 6TH JULY 2015.
NO CRASH HELMET, NO RACE!

www.cromercarnival.co.uk

Marshals required

or would you like to enter?

Contact Lorraine Annison for more information

☎ 01263 513052 (after 6pm)

Marshals Post

Upcoming club events – Midsummer Vintage & Classic Car Run, Watton Classic Car Event, Scottow Enterprise Park AutoSOLO & Autotest, Cromer Carnival Soapbox Derby

Other clubs:

Debden Targa on Sunday 7th June based at Carver Barracks (nr Saffron Walden) organised by West Suffolk Motor Club

East Anglian Classic on Saturday 20th June based at Elsenhall Golf Club (nr Bishop's Stortford) organised by Chelmsford Motor Club

Further information (if any) available from Maggy Bateman on 01379 783142 – there are also links on the Marshalling page on the club website (www.scon.co.uk/html/marshalling/marshal.html) for any readers that are interested and have internet access

There are also links to event sites that may be of interest to club members on the Other Club Dates page on the club website (www.scon.co.uk/index.html)

			
	Title	Pub Date	Edition
131	Boston & Spalding	22/02/12	D2
132	North West Norfolk, King's Lynn & Fakenham	30/03/11	<u>D1</u>
133	North East Norfolk, Cromer & Wroxham	29/01/14	D3
134	Norwich & The Broads, Great Yarmouth	28/11/12	D3
143	Ely & Wisbech, Downham Market	25/07/14	D2
144	Thetford & Diss, Breckland & Wymondham	07/11/12	<u>B3</u>
154	Cambridge & Newmarket, Saffron Walden	13/08/12	<u>D2</u>
155	Bury St Edmunds, Sudbury & Stowmarket	11/11/13	D3
156	Saxmundham, Aldeburgh & Southwold	28/05/13	B3

Anglia Motor Sport Club



2015 AMSC AutoSOLO Challenge



Round	Date	Venue	Organising Club
1	17 th May	Wethersfield	WSMC
2	28 th June	Scottow	SCCoN
3	19 th July	Debden	ECMC
4	6 th September	Scottow	SCCoN
5	20 th September	Wethersfield	CCC
6	8 th November	Debden	WSMC

2015 AMSC Targa Challenge



Round	Date	Venue	Organising Club
1	8th March	Sculthorpe	KLDMC
2	19 th April	Wethersfield	CMC
3	7 th June	Debden	WSMC
4	5 th July	Wethersfield	CMC
5	5 th September	Debden	WAC
6	15 th November	Woodbridge	CMC

2015 / 2016 AMSC Trials Challenge



Round	Date	Venue	Organising Club
1	18 th October	Kensworth	FMC
2	1 st November	Ivinghoe Aston	FMC
3	15 th November	Lyng	SCCoN
4	13 th December	Wattisfield	WSMC
5	1 st January	Seckford	ECMC
6	tbc	Harlton	CCC
7	tbc	Holbecks	WSMC
8	tbc	Wattisfield	WSMC
9	tbc	Ivinghoe Aston	FMC

CCC Cambridge Car Club **CMC** (Chelmsford Motor Club) **ECMC** Eastern Counties Motor Club
KLDMC (King's Lynn & District Motor Club)
SCCoN Sporting Car Club of Norfolk **WAC** (Wickford Auto Club) **WSMC** (West Suffolk Motor Club)

Formula One Powertrains in 2014/15 - they ain't simple any more

With the Grand Prix circus about to return to Europe, it seems appropriate to recall a very interesting talk that I attended earlier this year at Ford's Dunton Engineering Centre (where I used to work back in the 1990's). It was arranged by the Institution of Mechanical Engineers and was given by Jonathan (Jon) Willey, who is Senior Systems Engineer at Mercedes-AMG High Performance Powertrains based at Brixworth.

In 2013, the F1 rules stipulated 2.4 litre naturally aspirated 32-valve V8 engines with an 18,000 rpm rev limit. A KERS system (Kinetic Energy Recovery System) was optional and was permitted to store up to 400 kilojoules of electrical energy per lap. The power delivery from the KERS system was limited to 60 kilowatts. KERS gave about 80bhp of extra electric power for 6.7 seconds per lap under the control of the driver.

For 2014 major changes were introduced. The engines became single-turbo 1.6 litre V6's with a 15,000rpm rev limit. An Energy Recovery System (ERS) became compulsory and was permitted to store up to 2MJ (megajoules) of electrical energy per lap, or five times as much as in 2013. A 2014/15 F1 car needs to brake for about 16 seconds to provide a full re-charge of the energy-recovery battery. The ERS battery pack must not exceed 25kg in weight and it provides motive power to drive the car via a "Motor Generator Unit - Kinetic" or MGU-K. The MGU-K, mounted in series with the engine crankshaft, is permitted to provide electric power up to 120kW which is approximately 160bhp, or double what was allowed in 2013. The MGU-K can provide a maximum of 4MJ per lap, with battery power now available for 33 seconds per lap. Another motor generator, the MGU-H (or Motor Generator Unit - Heat) is connected to the turbocharger and can draw energy from the turbo when the exhaust gases are driving the turbo, or it can power the turbine shaft to keep it spinning when the throttle is closed. The battery is a DC device (charged and discharged by direct current) while the MGU's operate on alternating current.

In addition to these major changes to the engine, there are fuel restrictions too:

Each car is permitted to use no more than 100kg of fuel per race, 35% less than 2013.

There is a limit to the instantaneous fuel flow to the engine that must not exceed 100 kg/h.

The fuel must have 5.75% alcohol content and this alcohol must be biologically-sourced.

Jon described these F1 powertrain rules which are freely available to view on the FIA website.

Unlike in 2013, when the use of KERS power was under the control of the driver, there is now computer-controlled re-distribution of electrical power, at all times during a race, between the battery pack, the MGU-K connected to the crankshaft and the MGU-H connected to the turbo. The strategy for this distribution of power is quite complex in order to:

1/ comply with the restrictions in the rules and

2/ get the maximum performance from the permitted fuel

At all times when the driver gives a throttle demand, the standard FIA Engine Control Unit (supplied by TAG McLaren) determines how much of the power will be from the engine and how much will be electric. This ECU control unit continually receives 100 input signals and generates 80 command and recording outputs!

By choosing how to combine the V6 engine's turbo power with added ERS electric power, the power curve of a 2014/15 F1 engine can be almost flat, versus the very peaky power curves of 2013. This enables the latest eight-speed gearboxes to keep the same ratios for every race, for a modest (in F1 terms) cost saving.

Jon said that the overall efficiency of the Mercedes F1 powertrain in 2014 was "about 40%" - it was probably higher than that because he said he wouldn't tell us the exact figure. The efficiency of 2013 F1 engines was roughly 30%. Efficiency is the work achieved (\approx torque x time) from a quantity of fuel versus the maximum energy that could be achieved by a totally efficient burning of the same amount of fuel. Jon said that he thought the 2014 Mercedes powertrain had been more fuel efficient than both Renault and Ferrari's 2014 powertrains and this was a major reason for Mercedes superiority last year.

Although the latest F1 engines are permitted to rev to 15,000rpm, they typically use only 10,500rpm because higher revs would create more friction which would reduce efficiency. The use of much lower revs and the effect of the turbo in extracting energy from the exhaust gases explain why the current F1 cars are so much quieter than they were in 2013.

Jon stated that turbo lag in F1 is now "nil" – the turbo is always spun up to the required speed before the driver applies throttle. He thought that this feature will be the first thing from the current F1 rules to bear fruit on future road cars.

One difficult question they always had to consider was how hot to run the engine. Jon explained that running an engine cooler gives more power, but running hotter allows the radiators to be smaller. Smaller radiators cause less drag so the car can then go faster on less power.

To achieve the required efficiency and to stay within the 100kg fuel limit per race, it is sometimes necessary to run the latest F1 powertrains in a fuel saving mode in which the power reduces before the end of a straight. When this mode is in operation, the red light on the rear of the car flashes; thus providing a warning to a closely following driver that the car in front may slow down sooner than he might expect.

Intriguingly, because the powertrain strategy has been designed for optimum efficiency at the maximum speed of the car, the nearer a driver can get to this optimum (by driving faster), the nearer he gets to the optimum efficiency designed into the Mercedes powertrain. "So, counter-intuitively, going faster can use less fuel than going slightly less fast!"

Mercedes-AMG have made a test facility for their powertrain control software that incorporates a computerised simulation of how a Mercedes F1 powertrain would behave. This enables them to introduce and test some of their software revisions in less than an hour, though of course they have not yet been tested on a real powertrain.

They had a massive task to get ready for the first race of 2014 and there were a lot of situations (like safety car scenarios) that they hadn't had time to consider so they were added 'on the fly' between races during the 2014 season. All F1 powertrain software has to be submitted to the FIA by the Monday before each race, and Mercedes have a policy of never implementing untested software changes at a race. When there are races on consecutive weekends they only have from the end of the race on Sunday until the FIA's Monday deadline (allowing for time changes around the world) to complete a software change. This creates huge time pressure for some members of their team.

Traction control is banned but there are alternative throttle maps that make the pedal action more sensitive over different parts of the rev range and for different levels of power output. The driver is allowed to change between the different throttle maps up to four times per lap. In some situations, if the engine power deviates from certain 'power limitation criteria' (designed to prevent any means of traction control) there can be an FIA-imposed delay of 0.5s before additional power is available. I struggled to understand exactly how this works, but there is a continual two-way data interchange via telemetry between every F1 car and the FIA during a race.

Formula One teams are restricted as to how many times they can change a driver's powertrain and its components during a season. Mercedes constantly measure the vibration levels of certain

critical components so they can estimate the cumulative 'life' used to date. If an engine is nearing the end of its life, they can elect to run it at reduce revs to make it last longer and (hopefully) avoid exceeding the permitted number of component changes and the consequent grid place penalties. They will get better at this as they learn how much vibration the various bits can withstand before they are prone to failure.

Jon said that the other teams using Mercedes powertrains have "exactly the same engine hardware and the same level of software development", but I guess there can be big differences in the calibration settings.

Jon invited questions and one person asked how they tested for EMC (electro-magnetic compatibility to ensure no interference from external sources). He answered that "We have such high electro-magnetic fluxes from all our own high voltage stuff within the car that we just have to make sure the car works.

Then we have no worries at all about any external sources!"

Jon had worked at Dunton before joining Mercedes-AMG and his former boss at Ford thanked him for his talk, describing him as "a man of genius". At the end Jon did a bit of a cheeky recruitment pitch to any of the young Ford engineers who might be interested in joining the Mercedes F1 team!

As I came away from Jon's talk, I was thinking how difficult it must be for any other F1 engine supplier to catch up with Mercedes, clearly a VERY capable and well funded team. The performance of those teams running other manufacturers' powertrains in the first races of 2015 provides some demonstration of this.

It was apparent that a large team of engineers is needed to manage and run a 2015 F1 powertrain. It looks as if it may be impossible for enthusiasts in the future to run these cars privately as Historic Racing Cars unless they too have a big team of very clever folk.

Peter Riddle April 2015





The Sporting Car Club of Norfolk

Established in 1951



1951 Friendly Low Cost Good Fun Motor Sport 2015

The Sporting Car Club of Norfolk brings car enthusiasts together for friendly low cost motor sport. We're family-oriented, with several junior members (who can enter some events from the age of fourteen). Don't be confused by the name: you don't need a sports car; we have fun competing at surprisingly low cost, driving everyday cars with no special modifications.



SCCON in 1951

Founder members Bobby Pattenden & Stan Boshier in their Connaughts waiting to race at Fersfield



SCCON sixty years later

Current members Peter Riddle and Dave Bell tackling a ford during a night event in Derbyshire.

In the club's early days, motor sport was only for the wealthy; one member was the 4th Earl of Kimberley (known as Johnny Kimberley). In his autobiography he said that he removed the silencers from his Jaguar to make it faster, but confessed that during one rally, house-holders along the route were annoyed by a very noisy car. "I wonder who they could possibly have meant?" was his not altogether innocent comment. SCCON's 60th anniversary celebrations were held in 2011 at Kimberley Hall near Wymondham, Johnny's home in the 1950's.

Today, some members still compete in high-profile events, such as Rob Henchoz of Amazon Cars, at Brundish, who entered the 2012 London-to-Cape-Town Rally in his self-built Volvo 144. He nicknamed it "the Camel" due to its beige colour and in the hope that it would perform well over the desert sections. Indeed it did, and "the Camel" achieved an excellent top ten finish as the highest-placed two-wheel-drive car that had required no outside assistance to get through the Egyptian desert. Since then, Allison and Peter Cotes have driven the SAME CAR to finish in the top 20 percent of competitors on the 7,600 mile long Peking to Paris Historic Motor Challenge. And Ian Rix who runs Rix Engineering in Harleston drove his 1972 Ford Escort RS1600 to 2nd in class and 20th overall on last year's National Rally GB in North Wales, beating over eighty more modern cars. In 2013 and again in 2014, Mark Banham and Jonathan Stimpson finished 2nd overall on the Preston Charity Challenge, a very tough all-night event that supports the East Anglian Air Ambulance. "I must try to do better this year" says Mark.

But most Sporting Car Club members compete in more modest events with entry fees of only £10 to £50, and where a neat and tidy driving style is often more effective than a flamboyant one. If you enjoy driving or are just interested in cars, you'll meet like-minded people in SCCON. To learn more contact Peter Riddle on 01953-601174

Peter Riddle

A long way from Norwich to Watton



Souvenirs from previous Norwich Union Classic Car runs include programmes, a road book and finishers' medals.



Sporting Car Club members, Peter Morris and Max Floyd take a break during a SCCON Classic Run in Max's Ford Mustang.

The Story of the Sporting Car Club of Norfolk's Midsummer Classic Car Run

Today's car run has its roots back in 1986 when the Royal Automobile Club organised a non-competitive event on a Sunday to give owners of classic cars the chance to drive some scenic and enjoyable routes in the company of fellow enthusiasts. The RAC teamed up with Norfolk's biggest insurance company to launch the first Norwich Union RAC Classic Car Run, which had start venues in Bath, Epsom and Nottingham and finished at Silverstone race circuit. Attracting 437 cars, the event was a great success, so further starting points were added for 1987 including one at Norwich Union's Surrey Street HQ. The company was keen to emphasise its strong links with the city, and sought ways to make Norwich the premier starting point for the run. Those who elected to start from Norwich were offered benefits that weren't available elsewhere: owners could put their cars on show in Chapelfield Gardens and were invited to a complimentary evening buffet in the Marble Hall of NU's headquarters building. The icing on the cake for the keenest drivers was an extra route around Norfolk to be driven the day before the main Norwich Union Run. This became known as "The Saturday Run".

Malcolm Watson (1943-2005) was both a committee member of the Sporting Car Club of Norfolk and a Norwich Union employee, so he arranged for SCCON to organise the Saturday Runs on behalf of the RAC, and for SCCON to marshal the start proceedings of the Sunday Runs. Malcolm teamed up with Mike Dixon, Andy Kingdon and Peter Morris (seen in the photo above) to plan the Saturday route and to produce a detailed 'road book' to guide participants around it.

The Norwich Union run gained several innovations over the years; those drivers who reached the finish were allowed to drive a few laps of the Grand Prix circuit; fortunately there were no mishaps despite some high-speed slip-streaming. In 1989 the finish was moved to Donington Circuit near Derby and in 1992 a shorter 'Edwardian route' was added to suit older cars. By 1996 the finish was back at Silverstone and there were now ten starting points including Dublin and Paris; the entry list reached a massive 1780 cars.

But 1997 was the last year of Norwich Union's sponsorship, and though the RAC ran a similar event for a further three years, with sponsorship from other insurers, it failed to retain the pre-eminence of NU years, and never again would Norwich be a starting point.

The move away from Norwich prompted SCCON's committee members, led by Malcolm Watson, to organise their own 'Saturday Run', now supported by the EDP. But SCCON's run was to be held on a Sunday, so it would need a new name: hence the Sporting Car Club of Norfolk's "Midsummer Classic Car Run" was born on 21st June 1998 attracting 77 entries.

Since then SCCON has promoted our own run every year without fail; last year's attracted a record 120 starters and we hope for even more in 2015. Final mention must go to Ernest Stebbings of Larling. He is the only driver to have entered every one of SCCON's eighteen Midsummer Classics in his 1955 Sunbeam Alpine roadster. See if you can spot Ernest's car in Watton High Street.

Peter Riddle

Website

I assume that most readers are aware that the club has a website and hopefully one or two have had a peep. However, based on one or two weird queries that have come my way, perhaps the 'peepers' have not enjoyed the full experience on offer!

While the website is not particularly leading edge, more trailing, it does hold a font of information and is regularly updated. Technically it has been developed with Dreamweaver and is navigated using Menus, Sub Menus and Tabs.

Accessing the website via www.scon.co.uk should land you on the Home page.

Down the left hand side are the Menu buttons Home, Classic, Clubmans, Marshalling, March Hare, AMSC, Useful Links, Club Stuff.

Selecting a Menu button (left click) may open up a Sub Menu eg Clubmans will open up the Clubmans page with Sub Menu buttons 2015, 2014.

Selecting the 2015 Sub Menu button (another left click) will open up the 2015 Clubmans Championship page with a series of Tab buttons across the page Clubmans, ACC15, ETC15.1, ETC15.2, TRC15, Rnd 1, Rnd 2, Rnd 3

Selecting the Rnd 2 Tab (yet another left click) will open up the 2015 Clubmans Championship Round 2 page. Almost the end of the trail, but not quite – one or two links to pdf files as well as the on line entry system and entry list (both open up new windows) and last but not least any images embedded in a page will usually take you somewhere else when clicked (left click of course) – the image on this page will take you to a new window and the 2015 AMSC AutoSOLO Challenge website (www.amsc.org.uk/aac15) in particular the Round 2 page.

Back to the Home page, 3 images taking you directly to the relevant page, also a series of Tab buttons Home, Club Dates, Other Club Dates, Club Calendar which when opened have direct links to relevant pages.

Navigation through the menu system is usually documented with a > representing a left click giving the route to the 2015 Clubmans Championship Round 2 page from the Home page shown as: **Home>Clubmans>2015>Rnd2**

Most of the pages are fairly static but the Sub Menus under the Club Stuff Menu aren't:

Home>Club Stuff>Spotlight will open up a page with links to Spotlight

Home>Club Stuff>Watton will open up a page promoting the Watton Classic Car event and is worth a mention for two reasons 1) an image that goes nowhere when clicked 2) a scrollbar on the right hand side of the page meaning that there is hidden extra information lurking to be viewed by the adventurous

Most websites are a voyage of discovery. Hope you enjoy the trip!

Peter Riddle



This is rather an old one that has been around for a few years, but is one of my personal favourite jokes.

Tech: "Ridge Hall computer assistant; may I help you?"

Customer: "Yes, well, I'm having trouble with WordPerfect."

Tech: "What sort of trouble?"

Customer: "Well, I was just typing along, and all of a sudden the words went away."

Tech: "Went away?"

Customer: "They disappeared."

Tech: "Hmm. So what does your screen look like now?"

Customer: "Nothing."

Tech: "Nothing?"

Customer: "It's blank; it won't accept anything when I type."

Tech: "Are you still in WordPerfect, or did you get out?"

Customer: "How do I tell?"

Tech: "Can you see the "C" prompt on the screen?"

Customer: "What's a sea-prompt?"

Tech: "Never mind. Can you move the cursor around on the screen?"

Customer: "There isn't any cursor: I told you, it won't accept anything I type."

Tech: "Does your monitor have a power indicator?"

Customer: "What's a monitor?"

Tech: "It's the thing with the screen on it that looks like a TV. Does it have a little light that tells you when it's on?"

Customer: "I don't know."

Tech: "Well, then look on the back of the monitor and find where the power cord goes into it. Can you see that?"

Customer: "...Yes, I think so."

Tech: "Great! Follow the cord to the plug, and tell me if it's plugged into the wall."

Customer: "...Yes, it is."

Tech: "When you were behind the monitor, did you notice that there were two cables plugged into the back of it, not just one?"

Customer: "No."

Tech: "Well, there are. I need you to look back there again and find the other cable."

Customer: "...Okay, here it is."

Tech: "Follow it for me, and tell me if it's plugged securely into the back of your computer."

Customer: "I can't reach."

Tech: "Uh huh. Well, can you see if it is?"

Customer: "No."

Tech: "Even if you maybe put your knee on something and lean way over?"

Customer: "Oh, it's not because I don't have the right angle-it's because it's dark."

Tech: "Dark?"

Customer: "Yes-the office light is off, and the only light I have is coming in from the window."

Tech: "Well, turn on the office light then."

Customer: "I can't."

Tech: "No? Why not?"

Customer: "Because there's a power outage."

Tech: "A power... a power outage? Aha! Okay, we've got it licked now. Do you still have the boxes and manuals and packing stuff your computer came in?"

Customer: "Well, yes, I keep them in the closet."

Tech: "Good! Go get them, and unplug your system and pack it up just like it was when you got it. Then take it back to the store you bought it from."

Customer: "Really? Is it that bad?"

Tech: "Yes, I'm afraid it is."

Customer: "Well, all right then, I suppose. What do I tell them?"

Tech: "Tell them you're too stupid to own a computer."

