



An incorporated club

A0035462V

**A friendly family social motoring club**

Edition 121

August 2008

## THE UNCOVERED MECHANICALS



**RACV GREAT AUSTRALIAN RALLY – 2008**

Richard Homersham's smart black Jowett Javelin on display at Mornington. At this time the motor car was showing off its unique mechanical arrangement, having its radiator behind the engine and astride the gearbox. No excuse for this one, except to give a formal welcome to this new addition to the ABCCC fleet.

Alongside is a BMC Mini that greatly impressed your Editor. It was very nicely presented.

*Please send in photographs of your British Classic so that it can be featured here – otherwise, definitely more Jowett pictures!*

### MEMBERSHIP SUBSCRIPTIONS

The annual membership subscription for the ABCCC Inc. is \$35.00. There is a once only joining fee of \$30.00. Please send membership subscriptions to:

Val Jefferyes

PO Box 8092

Burnt Bridge Shopping Centre

Croydon VIC 3136

**Please Note: Membership subscriptions should be paid prior to the end of December.**

**THE ALL BRITISH CLASSICS CAR CLUB (VICTORIA) INC., FOUNDED - SEPTEMBER 23<sup>rd</sup> 1997**  
**THE ABCCC IS AN ACTIVE MEMBER CLUB OF THE ASSOCIATION OF MOTORING CLUBS INC.**  
**Club Founder – The Late Frank E Douglas**

**"Owning And/Or Appreciating The Spirit Of Fine British Classics"**

## ALL BRITISH CLASSICS CAR CLUB (VIC.) INC. – YOUR COMMITTEE

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THE ALL BRITISH CLASSICS CAR CLUB WEBSITE IS <http://www.abccc.com.au>

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## IMPORTANT CLUB INFORMATION

### Introduction

The All British Classics Car Club of Victoria Incorporated, hereafter called the ABCCC, is a fully incorporated club in accordance with the Associations Incorporation Act. Accordingly, any publication or document officially issued by the ABCCC, must carry the ABCCC's Association Incorporation Registered Number: A0035462V.

### The ABCCC Magazine (Including Disclaimer)

The publication, *Your ABCCC News*, is the official magazine of the All British Classics Car Club Inc. It is published once a month, with the exception of December. The magazine's issue date is during the week of the 25<sup>th</sup> of each month. To make the editor's task a little easier, it is requested that articles, events information and photographs are with the Magazine Editor prior to the 14<sup>th</sup> of each month. Articles published in *Your ABCCC News* may be used without permission. However, the ABCCC does ask that appropriate acknowledgment be given.

This publication contains general information that should not be relied upon without specific advice from a suitably qualified professional. The authors and the All British Classics Car Club Incorporated expressly disclaim liability for anything done or omitted to be done by any person in consequence with the contents of this publication.

Those products and/or services mentioned in this publication are not necessarily endorsed by the ABCCC Inc. Articles and photographs published in *Your ABCCC News* do not necessarily reflect the views of the Committee, the Club's Membership or the ABCCC Inc. Events, other than those conducted by the ABCCC, are included for interest purposes only, and they are reproduced in good faith. The ABCCC Inc. cannot be held responsible for any inaccuracies relating to other clubs' listed events.

For those members who receive their issue of *Your ABCCC News* via E-mail, the magazine will be available to download from the ABCCC website <http://www.abccc.com.au> at the same time that the printed copy of the magazine is mailed to those club members who do not have access to the Internet.

Address all correspondence to: The Magazine Editor, 59 Rowson Street, Boronia, Victoria, 3155. Other editorial contact information is listed above.

### The Victorian Club Permit Scheme

The ABCCC Inc. is a club that is authorized by VicRoads to operate vehicles under the Victorian Club Permit Scheme. On the Committee there are two Victorian Club Permit Scheme Officers, and their contact details are listed in the Committee Directory.

Club members will be kept up to date with respect to changes and improvements to the Victorian Club Permit Scheme. However, it cannot be stressed enough, that a vehicle operated on the Scheme, must carry the VicRoads Permit (current), the AOMC Victorian Club Permit Scheme Handbook and a copy of *Your ABCCC News* that contains details of the event the permitted vehicle is participating in.

All enquiries should be directed to the ABCCC Victorian Club Permit Scheme Officers.

## THE VICTORIAN CLUB PERMIT SCHEME

For your Victorian Club Permit Scheme (VCPS) renewal, please forward your completed renewal form to Colin Brown at PO Box 40, Coldstream, Victoria, 3770. Please enclose a stamped envelope, addressed to VicRoads along with a cheque/money order for your VCPS Fee, and I will sign on behalf of the club and forward it on to Vic Roads for you.

Please note that the Customer Copy and VicRoads Copy must be intact It is your responsibility to maintain the motor car in a safe operating condition.

*Colin Brown.*

## NEW VCPS APPLICATIONS

For members wanting to place a car on the VCPS, under the auspices of our club, please contact: Nello Mafodda on (03) 9719 7949, who is the ABCCC VCPS Officer in Charge. Nello will be pleased to provide all the information required to place a motor car on the VCPS.

Nello's position is entirely voluntary, so due consideration should be given when contacting him.

## ABCCC EVENTS DIRECTORY

**Note: All events listed in this directory are placed in good faith. Events for inclusion must be with the Magazine Editor prior to the 14<sup>th</sup> of each month. Events organized by other clubs or associations have a contact telephone number, that should be contacted prior to the event, if giving consideration to take part in it, to confirm date and venue.**

### August 2008

- 10 Cream Sponge Run – [An ABCCC Event](#) Judy Birkett (03) 9755 1772  
Venue – Sassafras/Ferny Creek Fire Station Clarkmont Road, Sassafras, Victoria.
- 30 – 31 The Wonderful ABCCC Indulgence Weekend – [An ABCCC Event](#) Peter McKiernan (03) 9528 4644  
Meet Up Point – TBA

### September 2008

- 14 Hanging Rock Environs and Lunch – [An ABCCC Event](#) Marjorie Pepper (03) 9439 7875  
Please note the changed lunch venue – see inside.  
Venue – Hanging Rock Environs, Meet at Woodend..
- 24 Mid-week Run – [An ABCCC Event](#) Maxine Pettigrew (03) 9739 1146  
Meet Up Point – Lilydale International Club, Nelson Road, Lilydale, Victoria.
- 28 Bay To Birdwood Run – A Vintage Event (ABCCC Invited) Graham Tonkin (08) 8258 6547  
Finish Point – Birdwood Mill Museum, Birdwood, South Australia.

### October 2008

- 3 – 6 Swan Hill Wolseley Weekend – Pioneer Settlement Felicia Chalmers (03) 5036 2429  
Our club is invited to attend this event.  
Venue – Pioneer Settlement Museum, Monash Drive, Swan Hill, Victoria.
- 12 Rolling Hills Run – [An ABCCC Event](#) Rob Nolan (03) 5978 7798  
Venue – Gippsland, Victoria.
- 25 – 26 Como Gardens Open Weekend – [An ABCCC Assist Event](#) George Hetrel (03) 9761 1341  
Venue – Como Gardens, 79 The Basin – Olinda Road, The Basin, Victoria.
- 31 – 4 Nov. Touring The Limestone Coast – [An ABCCC Event](#) Bryan Tootell (03) 9891 6905  
Visiting South Australia.

**There are only two places left on the holiday and if readers want to come along, they had better get in quickly.**

### November 2008

- 15 – 16 Bendigo National Swap Meet – Federation Event
- 26 Archery Competition Round 2 & Lunch – [An ABCCC Event](#) Colin Brown 0408 343 176  
A Mid-week Event.  
Meet At – Lilydale International Club, Nelson Road, Lilydale, Victoria.
- 30 Mystery Bus Tour – [An ABCCC Event](#) Ray Higginson (03) 9336 7306  
Provided By The Higginson Charabanc Tour Company.  
Meet – Alexandra Avenue, Adjacent To Anderson Street Intersection, Melbourne, Victoria.

## December 2008

14 Christmas Luncheon Function – [An ABCCC Event](#) Tony Pettigrew (03) 9739 1146  
Venue – TBA

## January 2009

18 RACV Great Australian Rally – [An ABCCC Major Event](#) Colin Brown 0408 343 176  
Start Points – TBA

## March 2009

21 - 27 RACV Fly The Flag Tour – [An ABCCC Major Event](#) Tony Pettigrew (03) 9739 1146  
Touring – Yarrawonga, Beechworth, Kerang, Bendigo and Shepparton

**It should be noted that telephone numbers provided above are 'At Home' numbers.**

**Note: All ABCCC 'Noted Events' are Victorian Club Permit Scheme (VCPS) Authorized. To qualify for the VCPS, under the auspices of the ABCCC Inc., your VCPS permitted motor car must attend a minimum of three (3) club-run events per year, from the date of the vehicle's permit issue.**

***Note: The above listed events may require confirmation.***

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## EDITORIAL NOTES – ISSUE 121

This issue, being so early is a bit of a shock to most of you. Editorially, it wasn't because Mary Nolan had given good advance notice of the need for an early edition for this month. Mary and Rob are having a well earned break in Thailand, and we wish them a super holiday and a safe return.

This issue is a bit Jensen oriented, and why not? The Jensen 541-R is a splendid example of the marque. This was the model that made every schoolboy's pulse race a bit, when it was announced in the mid-1950s. It is a car that really looks as if it can really go – even when parked. I remember my headmaster, who ran a very nice Lanchester, saying that Jensen would never be able to get that curved rear window into production. They did, and we can still enjoy marvelling at it today. However, it was the more modern Jensen Interceptor FF that really took my fancy. Again, it was the rear window that was so eye-catching. In England, it soon attracted the 'Goldfish Bowl' nic-name, and having to replace one today must surely rate as being a difficult job.

Robin Jervis-Read has kindly given me a copy of his article that appeared in the British Jensen Owners Club magazine. It describes very well the RACV Fly The Flag Tour scenario to British readers and is excellent publicity for our tour. In addition to that, there is an interesting article on speedometer accuracy. Another good winter read for you!

Next month's edition of *Your ABCCC News* will be back on time, so your rhythm should not suffer too greatly.

*Mike Alfrey.*

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## PAST AND FUTURE EVENT REPORTS

### McCLELLAND GALLERY LUNCH – Wednesday 2<sup>nd</sup> July, 2008

#### Artistic Adventure

Twenty seven members braved the elements to participate in this Mornington Peninsula based mid-week run. The foul weather from the two previous days had started to abate as the intrepids arrived at the Manyung Gallery in Mt. Eliza. The inviting warmth of the open fires in the gallery and restaurant quickly encouraged people indoors to inspect the works on display as well as to avail themselves of the hot tea and coffee and the array of sweet temptations offered at the Boyz @Manyung café. It was great to be able to welcome some new club members from the area as well as the usual suspects. It was also good to see (Dr.) Harry Cooper back on the scene after his recent broken leg together with wife Jean and Harry's "new" British classic, a beautiful dark blue Rover 3 litre with a stunning bone interior. Other vehicles included the usual assortment of Jaguars, Minis, MGs, the Burkett's Landy and the quirky Citroën of Alan and Sandy Baker.

The tyranny of distance is no longer an excuse for members with the opening of EastLink. The Tootells claimed a Doncaster to Mt. Eliza time of ¾ of an hour whilst our erstwhile president claimed an ambit 25 minutes for the Coldstream to Frankston journey.

Whilst on East Link, members Ross Wolstenholme, Peter McKiernan, Ken McDonald and their respective spouses participated in the motor cavalcade from Frankston to Ringwood on the Sun 15<sup>th</sup> June. It was an interesting exercise which could have done with the organisational expertise of the ABCCC, a view reinforced in conversations with other participants on the day who have also been on Fly The Flag and The Great Australian Rally.

Our next stop was the studio of renowned maritime artist Richard Linton at the Morning Star Estate in Mt. Eliza. Richard gave us a short address on how he got into doing what he does and the techniques he uses. We were also treated to a display of his current "work in progress" which has a high country theme. This was begun 18 months ago and has a finish date that continues to blow out. Hopefully it will be completed later this year. I'm sure several

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members will make a point of another visit to see this work completed. Members were incredulous at the detail in Richard's work with a queue forming to use magnifying glasses to examine the intricacies of works on display, even down to the hairs in horses nostrils!

*Right: Richard Linton sharing his passion with Karen, Rosalie and Rob.*



In the meantime another member who has a great appreciation of Richard Linton's work spent considerable time contemplating the purchase of a work that he had admired on previous visits to the gallery. After much consideration and a satisfying lunch at the McClelland gallery his afternoon mission was to return and make his purchase.



*Left: Lunch with a view at McClelland Gallery.*

A short drive took us to the McClelland Gallery and Sculpture Park where we had a most enjoyable lunch in the light filled Gallery Café. The weather was favourable enough to enable the hardier souls to walk off their lunch by exploring some of the current and permanent sculpture exhibition in the 16 acre park whilst others involved themselves in much discussion as to the merits/demerits of the interior art and

photographic exhibition. Many thanks to the Manyung Gallery, Richard Linton and the McClelland Gallery Café for hosting us and to all club members who braved the inclement conditions to participate in a very enlightening and enjoyable artistic adventure.

*Karen and Ken McDonald.*

## **THE CREAM SPONGE RUN – Sunday 10<sup>th</sup> August, 2008**



We will be meeting again, at 10:00 am, for a cream sponge morning tea at the Sassafras/Ferny Creek Fire Station, Clarkmont Road, Sassafras (Melways Map 75 D1). Home baked cream sponge and tea or coffee provided for a gold coin donation to the Brigade. Your generosity raised over \$100 last year, and was gratefully received. Let's see if it can be more this year!

After morning tea, you will be supplied with tour notes, and there will be questions for you to answer on the way to our lunch venue.

A prize will be awaiting the crew with the most points scored.

Our lunch venue is Sam Knott's Hotel, 2882 Warburton Highway, Wesburn, 3799 (Telephone (03) 5967 1200). Melways 289 B7. Lunch will be \$22.00 per head, roast dinner or fish served

alternately plus dessert, including tea or coffee. Drinks at bar prices.

Please let us know by July 31<sup>st</sup> if you are going to attend, to help us with the catering.

Judy & Geoff Birkett, (03) 9755 1772.

P.S. Bring a clipboard and a pen, and a sense of humour.

*Judy Birkett.*

## **THE WONDERFUL ABCCC INDULGENCE WEEKEND – 29<sup>th</sup> to 1<sup>st</sup> August, 2008**

It's on again – the justly famous "All British Indulgent Weekend", This year we are heading east, meeting at Berwick on Friday 29<sup>th</sup> and departing in an easterly direction

Accommodation is at a famous 4½ star location with indulgent meals and surprise entertainment to keep you occupied all the weekend, returning home on Sunday afternoon.

All this for just \$585.00 per couple (excluding morning tea and pre-dinner nibbles). Spaces are limited. To ensure your place contact Rosalie or Peter McKiernan on (03) 9787 6003, or on mobile 0407 876 023.

See you in August.

*Peter McKiernan.*

## **HANGING ROCK ENVIRONS AND LUNCH – Sunday 14<sup>th</sup> September, 2008**

We have a slight change of plan as the Hanging Rock Winery do not do a Sunday lunch.

Meet at 10.00 am at Bourkies Bakehouse Shop1/115 High Street Woodend for an indulgent morning tea and sample their famous vanilla slices, (Australia's champion 2003 and 2004), and assorted pastries. You may wish to visit "The Rock" or stroll around some local shops of interest, such as Kerri's Bundle of Bears and Gifts, before heading off on the C317 towards Tylden. At Tylden turn left on to the C318 and proceed through Trentham to Blackwood, where you may visit the old sandstone cottage and garden of St Erth, circa 1860, two kilometres down the Sim-

monds Reef Road, Blackwood. Entry is \$8 per head and hopefully the Spring garden of rare and heirloom daffodils and other spring flowers will be in full bloom.

This site was once a bustling mining town of 13,000 people before the gold ran out and most of the wooden buildings were moved to Trentham. St Erth is a fully organic and self sufficient garden and offers advice on sustainable gardening in all forms. There is also opportunity to purchase plants and bulbs at St Erth, and no entry cost if you are a member of the Digger's Club. We will then meet for lunch at 12:30 pm at the Blackwood Hotel in Martin Street, which boasts a reputation as a very busy and popular country pub. We hope to see you there, bookings required by 30<sup>th</sup> August. Marj and Brian Pepper on (03) 9439-7875 / Mobile – 0419-509-920.

*Marjorie Pepper.*

## **CLUB HOLIDAY TO THE LIMESTONE COAST – 31<sup>st</sup> October to 4<sup>th</sup> November, 2008**

Due to restricted motel accommodation at this period, the group will be limited to 12 couples (or 12 rooms), so first in best dressed and be prepared to be placed on an emergency list.

- Day 1. Travel via Ballarat to Casterton.
- Day 2, To Penola, with wine tastings in the Coonawarra region.
- Day 3. To Robe, to sample the best crayfish on the Mainland.
- Day 4. To Mt Gambier to visit the "Blue Lakes".
- Day 5. To Hamilton, via Limestone Caves and Nelson.
- Day 6. To Melbourne, with lunch at Inverleigh before making our way back to the big smoke.

If you may be interested in participating please contact - Bryan Tootell on mobile 0412 549 906.

*Bryan Tootell.*

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## **VICTORIAN 541-R**

### **Robin Jervis-Read reports on a vibrant historic vehicle rally scene in Australia**

I have owned our 1959 Jensen 541-R since 1968 and shipped it to Australia when I travelled there in 1971. I drove the vehicle up to 1975 and then it remained on chocks until 1987 when I commenced a chassis up rebuild which was completed in 1992. This culminated in a repaint and the vehicle is now glorious metallic smoky silver.



*Arriving for a Pie Lunch at the Lucknow Football Oval, RACV Fly The Flag Tour, 2007.*

The purpose, other than the pleasure of creating a vehicle that is now much improved on that which I originally purchased, was to have a classic vehicle that was much loved that would take my wife (Anne) on rallies and outings with other like-minded souls, around our marvellous State of Victoria here in Australia — and occasionally further a-field as the occasion demanded.

It was not until 1997 that we ventured into the world of non-competitive touring/rallying and have enjoyed participating ever since

We missed a few years but have completed to date six in total. The last two have been with the Royal Automobile Club of Victoria (RACV), in liaison with the All British Classics Car Club (ABCCC), RACV Fly The Flag 'Rivers and Ocean' Tour in 2006 and Fly the Flag 'Rivers and Alpine' Tour in 2007. Both these tours are held at the beginning of April which is our end of summer, beginning autumn season over here – so, usually with glorious warm sunny days and sometimes rain, although very little at the moment.

All cars on these events must be in excess of twenty-five years old. There are usually a maximum of two-hundred vehicles participating, and about four-hundred people. The event runs 470 miles (1,177 km), over six nights and seven days and is always fully booked — it achieves this status almost as soon as the following year's route is announced and the event declared open for booking.

Participants must make care of their own accommodation for overnight stops — but breakfasts and dinners are included in the tour expense of approximately \$700.00 total per vehicle. The organisers pre-arrange with various



clubs / organisations in the towns at which we stop to provide these meals for the four-hundred participants — in a location that can accommodate us all. So we all eat together morning and night.

One of the major benefits that flow on from the Rally is the economic value that on-flows to the local economies of the country towns that we visit — four-hundred people spending on food, petrol, clothes and general shopping. And one of the joys for participants is taking the time in each location, whether that be a small or large country town — to stroll around, take a morning or afternoon tea/coffee break and generally poke around the local retail scene — including antique and bric-a-brac shops etc.. There is always a scramble by participants to make accommodation bookings as available beds in good motels and pubs disappear quickly. Obviously the organisers hold onto the route information detail until they have booked their own space and they are constantly pestered by us mere mortals as we want to get into it ASAP, to secure comfortable and reasonably priced lodgings. Last year I suspect I was a little late starting, but I see from my records that this was about July 06, for the April 07 event. As luck would have it we managed to *get* all six nights booked up and usually paid for at least on a 50% basis well in advance. Having done that there is the usual excitement of receiving advance communications confirming rally start details, running sheets for the total six day event etc. and of course, the super pleasure of preparing the Jensen for the event.

In all the previous rallies we had experienced a yawing effect when going over pronounced humps. The rear would get pushed up, and this would force the front down with left to right bias. The rear springs had been replaced with new at rebuild in 1990. The rear shockers were adjustable but seemed okay at rebuild. The front shockers were re-conditioned at rebuild.



*Left: Robin and Anne's Jensen in the high country.*

I visited a suspension specialist with a sound reputation with classic cars (Pedders in Glenferrie Road, Hawthorn, for Aussie readers). The people at Pedders were very helpful. I had already received from Paul Boulton a pair of the correct rear shockers for the 541-R which I had already fitted. So we were pretty sure that the rear of the vehicle was OK. The problem was probably going to be the front shockers. Following suspension comput-

erised testing — they recommended that the front shockers be removed and reworked, Pedders wanted a *week* to do this and promised the Jensen would be available in enough time for me to undertake preparation for the rally. As it turned out they needed two weeks, as the shockers had to be sent away for the necessary work. However I collected the car with about a week to spare.

Pedders advised that when the front shockers had been disassembled it was found that one had the internals for an Austin Healey and the other for the 541-R. They had been able to replace the Healey shocker with the correct new item and reworked the 541-R internals to new. This was encouraging news and gave promise of a good outcome.

*Right: Keeping good company, RACV Fly The Flag Tour, 2007. Taking in the view near Mount Hotham.*



Driving home from the workshop, I was encouraged by what seemed an improved ride. The suspension seemed fine, but it was difficult to tell if the problem had been resolved. So, with a week to go, I changed the oil (Penrite HPR-30 30W60), topped up the brake and clutch fluids, sewing machine oil into the SU carburettor dashpots, checked the Hankook tyres — 28 psi seems good for touring, replaced the coolant with the highest boiling point available on a 50 per cent mix basis — as we had heard that the weather might continue with some very hot days in excess of 30 degrees Celsius.

Then filled up with petrol, purchased bulk bottle of lead substitute with easy measuring and pour facility, and prepared a tool kit. Brakes had already been bled as one of the front brake tubes had been replaced when front shockers had been done.

Last year I had changed the back axle and gearbox oils, checked brake pads all round and checked handbrake tension, checked and cleaned the plugs, and fitted new Jensen hub caps provided some time ago by Paul Boulton — and they look great!

We are due to set off at 9:00 am, Saturday 24<sup>th</sup> March from Government House, which is the home of the Victorian State Governor. This is a beautiful old mansion set in the heart of the Royal Botanic Gardens here in Melbourne. We plan to leave home, which is in the Eastern suburbs of Melbourne at 7:15 am, planning to arrive at Government House about half an hour later. Having risen an hour earlier and packed up the Jensen for a week away we depart with great excitement to join the other one-hundred and ninety-nine classic, vintage and newer classics as they entered the beautiful gardens surrounding the mansion to our marshalling area which is the enormous car park at the front. Breakfast is being prepared on extensive lawns next to the car park — these run down a slight incline into trees and a view to the city beyond. There is already a queue for the fried egg in toast and bacon, coffee and tea that will be our sustenance until we get to the first stop for morning tea.

Eventually the Governor appears and the oldest vehicles are lined up ready for his flag-off as they drive under the enormous arch that is the front entrance to the mansion. There is a small contingent of Scottish pipes who play some lively bits and pieces before the first vintage car – a 1924 Vauxhall moves through the arch under the Governor's flag and leads another ten or so oldies – off to the first stop for morning tea.



*Left: That distinctive rear view of the Jensen 541-R.*

The balance of the field of two-hundred cars then depart over the next half hour and move through the City to the freeway that will take us out of Melbourne and on to our first night stop one-hundred and eighty kilometres away. Each day follows much the same pattern all of which is very much to the liking of the participants which is why they come year after year to join these amazing and thoroughly enjoyable RACV Fly The Flag Tours.

Arrival at the night's destination is usually mid to late afternoon following stops along the way to sample the sights and visit the recommended motor museums and retail offerings all of which are highlighted in the running sheets for each day. The field is split up into the available motels and there is time to settle in and go for a walk around the town and do some shopping if there is time before moving off to the location where dinner is to be held. There was entertainment on at least three of the nights with good music and dancing. One night is fancy dress for the whole evening with prizes for the best offerings. Alcohol is to the account of the user, but everything else is included in the Rally fare. Announcements are made concerning the following day's activities and any amusements from the day are highlighted. The following morning we all meet back at the same place for breakfast and planning the route for the day and the stops for morning coffee, lunch and afternoon tea.

We travelled in a group of three other cars – a beautiful 1968 Alvis, and two Morgans – one red the other yellow. Sometimes we travelled together in convoy about two-hundred to five-hundred metres apart other times we simply arranged to meet up for the morning coffee and lunch stops. It was really enjoyable strolling around small country towns with our pals from these other vehicles – seeing the sights and generally being together talking all manner of stuff including of course – our cars.

Each morning the cars are all lined up and the local people can stroll around and have a look and talk to the drivers/owners. We are encouraged to have the vehicles looking their best and when we are flagged off each morning following breakfast – if there is a local school we will drive past and wave and hoot, as we will all the way out of the town. The local people love it!

The rally comes to an end with lunch at a large racecourse in an eastern suburb of Melbourne. There are speeches and prizes over a whole lot of categories. This is followed by farewell to friends and then into the car for the run home.

An excellent week and the Jensen went like a dream!

*Robin Jervis-Read.*

*From Reasons To Be Cheerful, the Jensen Owners Club (UK) Magazine – With Thanks.*

## **THE JENSEN 541-R**

### **A Sporting Car Powered By A Combine Harvester Engine**

The sub-heading may sound a little strange to most of you, but, like those tractor engined sports cars – Triumph, Swallow Doretti, Morgan, come readily to mind, the 541-R engine definitely had rural applications. Fair enough, the Triumph, *et al*, did have an engine that was originally designed for the popular and innovative TEA-20 Ferguson tractor. With the Jensen 541 it was a case of the venerable Austin six-cylinder engine, from trucks and Princess motor cars and, eventually I believe, becoming very much accepted in the later Austin-Healey sports cars. With all of that preamble, it is timely to mention that a company called Newage Engineering, based, I think in the West Midlands, used to produce marine and agricultural engine conversions based on the Austin 'B' and 'C' Series four and six-cylinder engines. The agricultural versions were set up to run on tractor vaporising oil (TVO, Kerosene) or lamp oil (for Spanish and Portuguese markets). My association with these very reliable engines was in their use in the Massey-Harris 726 combine harvester, which employed the six-cylinder version, and the little Massey-Harris 735 combine harvester which used the four. I am fairly certain that the six-cylinder was also used in the Massey-Harris 780 combine, but in my experience, most of those were diesel powered.

The Newage converted TVO engines had two interesting reputations – they caught fire easily, and the other trait was their ability to run completely *sans* ignition system! It is well known that TVO engines run hotter than their petrol fuelled brethren, due to the relatively low octane rating of the paraffin-based fuel and the need to vaporise it properly. In the case of the Newage conversion, the compression ratio was reduced greatly. That was quite alright, but, for some reason, the sharp point of the combustion chamber swirl-inducing shape was retained. When the engine was hot, that point would glow and completely take the place of the sparking plug! For us, overall, the Austin six-cylinder Newage engine was a very reliable and capable power unit. In England's heavy cereal crops, frequently, a considerable amount of 'grunt' was required to cope with huge amounts of wet straw passing through the harvester.



The Austin-Healeys became known for having good 'grunt' characteristics – and I'm sure that such was inherited by the Jensen 541 Series. However, it is very hard to visualise that splendid six with three huge SU carburettors sitting between the wheels of a large combine harvester!

### A Smattering of Jensen History

Body stylists Richard and Alan Jensen's first car was a 3.6-litre Ford V8-powered model fitted with a two-speed Columbia rear axle. Other engine options were available, including the 2.2-litre Ford V8 and straight-eight Nash units. Although a Meadows-engined 3.8-litre straight eight was planned for post-war production, it failed to materialize and a 4-litre Austin six was substituted. This engine was used to power the Interceptor of 1950 and also for the glass-fibre 541 saloon of 1964. The company reverted to American engines for the 1963 CV8 in this instance a 5.9-litre Chrysler V8, while 1967 saw the announcement of the FF. The engine was now 6.3 litres, but the really sensational aspect of the car was the Ferguson four-wheel drive layout used in conjunction with the Dunlop Maxaret anti-lock braking system. In 1968 Jensen was taken over by merchant bankers William Brandt from the Norcross Group, who had acquired the company in 1959. An outcome of this move was that Kjell Qvale became President and Donald Healey chairman of the reconstructed company. Consequently, when Jensen announced their new sports car in 1972, it was under the name of Jensen-Healey. The engine was a Lotus-built 2-litre twin-cam, 16-valve, four-cylinder based on the Vauxhall single cam block. Regrettably, the model failed to live up to expectations and, although a GT was announced in 1975, the company ceased production the following year.

### Comment On The Jensen 541-R

Jensen's 541 was a revelation at its launch in 1953, with its evocative streamlined styling (by Eric Neale) and panoramic windscreen. However, it would be another two years before the car was to go into production, by which time the company had chosen glass fibre instead of steel for the construction of the body.



Underneath was a new type of chassis featuring longeron tubing braced by box sections and flat floor platforms, along with Austin-type wishbone front suspension. Austin also provided much of the drive-train with its 4-litre (244 cu in) engine and gearbox. A moving flap where the grille would normally control air intake to the radiator and could be shut off completely in cold weather.

From 1956, there was an updated 112 kW (150 bhp) version of the 541 which had wire wheels, and it was one of the first British production cars to feature all-round disc brakes.

In 1957, the Jensen 541-R appeared with the same 112 kW (150 bhp) engine, along with rack and-pinion steering and an opening boot lid. The 541-S of 1960 was made slightly wider and longer, and it had a limited slip differential fitted as standard. The 541's streamlined body was designed by Jensen's own stylist Eric Neale, and the car has a drag coefficient of just 0.39 cd, about the same as a DS Model Citroën. The Jensen 541-R from 1958 was one of the fastest cars of its time.

### Technical Data

Engine:	3,993 cc (244 cu in), 6-cylinder
Power:	97 kW (130 bhp) – 112 kW (150 bhp 541-R)
0-96 km/h (60 mph)	12.4 secs
Top speed	174 km/h (109 mph)
Production total:	546 (of which 193 were of the 541-R)

*Editorial Note: These notes have been gleaned from the Encyclopaedia of Automobiles by David Burgess-Wise, and that excellent Encyclopaedia of Classic Cars by David Lilywhite. Our thanks for this interesting information.*

*Mike Alfrey.*

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## AUNTIE PAT'S SCOTTISH TEATIME TREATS

Pat Douglas has lent the Editorial Office a delightful little booklet that features teatime treats of a Scottish type. These are little fill-in pieces that can make an interesting change to that British institution 'teatime'. Here is the first:

### Treacle Scones - Ingredients

8 oz. Self Raising Flour; 2 oz. Butter; 1oz. Caster Sugar; ½ Teaspoon Ground Cinnamon; 2 Tablespoons Black Treacle (or Golden Syrup); Pinch of Salt; Milk to Mix (Approx. ¼ pint).

### Method

Set oven to 425 °F (Gas Mark 7). Grease a baking sheet. Sift the flour and salt into a bowl and rub in the butter. Mix in the sugar and cinnamon. Add the treacle and sufficient milk to make a soft dough. Turn onto a floured surface and knead gently. The dough should be fairly moist and elastic. Roll out to about ½ inch thick, cut into rounds with a 2½ inch pastry cutter. Place on the baking sheet, brush with a little milk and bake for 10 to 15 minutes until golden in colour. Cool on a wire rack. Serve split in half and buttered.

*From Scottish Teatime Recipes – With Thanks.*

## SPEED MEASUREMENT

*This interesting article is taken from the Australian Metrologist (March 2005), the journal of the Metrology Society of Australia. The author is Leslie C Felix, and is an article presented to MSA 2004 Conference in Melbourne.*

***It should be carefully noted that this article has been computer scanned into editable text. This appears to have been carried out twice. Therefore there could be some anomalies in the text.***

### VEHICLE SPEED MEASUREMENT II

#### Abstract

This paper discusses uncertainties and errors in vehicle speed measurement and the legal implications of these. It provides a proven method of measuring vehicle speed over its working range, without the use of extrapolation, which is conducted in a controlled environment rather than on public roads.

**Keywords:** speed, speedometers

#### Introduction

Both Federal and State legislation set standards for the accuracy of speedometers installed in motor vehicles. Unless these legislative provisions are compatible, and prosecution policies recognise the accuracy achievable by speedometers installed in vehicles, there is danger that motorists could offend unwittingly. This paper will discuss the interaction of the Federal design standard, individual state prosecution policies and the performance of speedometers and associated testing equipment.

The Australian Motor Vehicle Standards Act, (known as the Australian Design Rules, or ADR [1]) sets requirements for speedometers installed in vehicles to be used on the road throughout Australia as:

"indicate the actual speed, for all speeds above 40 km/h, to an accuracy of plus or minus 10 percent."

State Legislatures have also set their own minimum requirement. For example New South Wales Traffic Law [2] requires that speedometers:

"indicate when the vehicle is travelling at a speed in excess of 50 km/h, a speed that is not more than 10% less than actual speed".

The individual State requirements are all worded differently and may impose different constraints on the performance of speedometers. However none change the "10% less" requirement, which is a main contributing factor to the system failure. This accuracy guide method has severe limitations and is only used by persons with a lack of understanding of measurement.

Uncertainties are an integral part of regulations administered by the National Standards Commission, such as those concerning the weighing of products in commerce. Since there is a trend to base the level of fines on exactly how much the speed limit is exceeded, the policy should recognise the effect of uncertainty of measurement and fall into line with other measurements with financial implications. The ADR [1] should take account of the requirements of the ISO Guide to the Expression of Uncertainty in Measurement [3]. This reference to uncertainty is an integral part of weight measurement and is found in Australia's adoption of "Organisation Internationale de Metrologie Legale Recommendation RUI" [4].

There is a system that would enable drivers to reliably determine if they are travelling within the posted speeds limits. This paper will endeavour to prove the accuracy and safety aspects of a test system that once used, will enable the public to travel within the posted speed and furthermore be **expected** to do so.

#### Monash University Research Notes

The Monash University Accident Research Centre published research notes with the heading "Accuracy of vehicle speedometer readings with respect to speed enforcement tolerances" [5]. Table 1 gives a compilation of statistics summarised in the notes.

The University used some collated results from other sources and whilst the test methodology was not described these results indicate either a failure by manufacturers to meet the minimum requirement of the relevant ADR [1], or that other mechanical factors are affecting the results.

Actual Speed Relationship To Indicated Speed In km/h					
Actual	40	60	80	100	120
Max indicated	43	64	83	108	130
Min indicated	27	48	71	84	105

*Table 1: Summary of results of speedometer tests carried out by Monash University Accident Research Centre and others between 1982 and 2001*

#### Speed Indication Errors And Variations

Speedometers in vehicles respond to the rotational velocity of the wheels. Errors and variations in vehicle speed indication will then be due to either the relationship between a rotation of the wheels and the actual distance travelled, or to the errors in measuring rotational velocity. The nature of the tyres contribute the first type, and instrument errors the second.

## Rolling Road Testing

The speed indication in a vehicle is tested by either measuring the time to travel a known distance (measured by numerous methods), or on an apparatus consisting of rollers with known circumference and measurable rotational velocity (a "rolling road"). Some instrument repair companies merely "check" the odometer over a distance and conclude the speedometer accuracy from this data. Some have recently used GPS units. The latter options require conducting tests on public roads.

Testing of speedometers should ideally be conducted throughout the usable range as this eliminates the need for extrapolation. There are obvious safety implications if speedometers installed in vehicles are tested throughout their range on public roads. However using a rolling road for such measurements reduces the safety issues and the latest computerised rolling road machines provide a printout of the parameters tested.

Another machine that utilises rollers is the dynamometer and these can be used to test speedometers. Most rolling road testers are primarily a dynamometer. Its main function is to introduce resistance to wheel rotation by absorbing test vehicle energy into a load, and measuring the force developed by the drive wheels. Care should be taken when using a dynamometer that slippage is not induced by the machine's resistance. Some operators use the loading to minimise hunting (the failure to maintain a constant speed due to engine behaviour). Load generation should be minimised as should tie down pressures. It is normal practice to chain or strap the vehicle under heavy loading conditions for measuring engine torque to avoid the vehicle climbing up and out of the roller valley. In these tests lateral restraining of the vehicle was used, instead of tie down, since vertical restraining caused tyre distortion, which can lead to an error in the region of 2 km/h. It would be difficult to balance normal tyre load distortion, aerodynamic and centrifugal force to a corresponding offset for the rollers, because the forces are not linear and combined to create a complex response curve. At best only a "best fit" correction can be given.

Except where indicated otherwise, the tests described in this paper were carried out on a free-running rolling road, that is, without applying a load to the wheel rotation. This machine held a current NAT A accredited certificate of accuracy. The measurements described in this paper are traceable to an Australian National Standard and have adhered to the requirements of ISO 17025 [7].

### Tyre Contributions

Errors due to tyres may be long-term (e.g. tyre type and size), medium-term (e.g. tread wear), or short-term (e.g. pressure and loading). The author undertook measurements of both true and indicated vehicle speed with varying tyre brands, wear and tyre fill pressures.

**Inflation Pressure:** Increase in pressure will occur as the tyre increases with heating due to use. This pressure increase is as much as 28 kPa (4 psi). An increase in tyre temperature will increase pressure and cause the indicated speed to be lower. The tyre inflation pressures referred to in the following tests were hot pressures and should not be confused with cold pressure settings recommended by manufacturers. Tyre pressures were adjusted after the tyre had reached operating temperature.

To examine how pressure affects the tyres, they were initially inflated to 160 kPa. The first run at this pressure was followed by tests in increments of 30 kPa to a maximum tyre pressure of 280 kPa. One of the tests was conducted with a standard tyre pressure of 190 kPa and the equivalent weight of four adult males in the car, all the other tests in this series were with one adult male only. The deviations from true speed occurring at indicated speeds of 30, 60, 80 and 120 km/h were recorded. Three readings were made at each speed and pressure, and mean of the readings were calculated. Results of these tests are given in Table 2.

Speedometer Error Versus Tyre Pressure						
Speed	280	250	220	190	160	190 + Load
	kPa					
30	1.5	1.4	1.4	2.3	2.6	1.8
60	1.9	1.6	1.8	2.3	3.6	3.8
80	1.8	1.6	2.3	2.6	3.3	3.7
120	3.4	3.6	3.4	4.1	4.8	5.1

Table 2: Speedometer error variation with tyre pressure.

**Brand And Model:** Examination of model and brands were undertaken using 17 and 18 inch rims with low profile tyres. Some 20 different tyre models were tested to consider variations between brands. It was found that a variation of speedometer reading of 1.5% resulted from the same vehicle and speedometer calibration settings over the twenty types.

**Wear:** The change in the tread depth of a Dunlop Monza 205/65 R-15 tyre, from new through to the 1 mm above wear indicator bars, was measured to change the diameter by 12 mm (although the diameter change can be 14 mm if worn completely). This is equivalent to a change in circumference during its life of 2.0%.



**Tyre Distortion:** On the face of it, the circumference of a tyre is constant whatever the tyre pressure. However, tyres compress as the tyre surface changes shape when it meets the road surface squeezing and then stretching each portion of tread during a cycle so that the distance travelled per revolution of the wheel changes. It was found that a worn tyre does not compress to the same amount as a tyre with new tread although smaller in circumference. During these experiments it was found that tyre growth, under the influence of centrifugal force, was only significant when the tyres were under-inflated, and at speeds of more than 120 km/h. A Dunlop 215/60 R-16 95V inflated to 240kPa was roller driven to 160 km/h and had expanded 3.5 mm on radius or approximately 1.1 % of indicated speed. This expansion increases with speed in an approximate logarithmic fashion.

Experiments showed that a Dunlop Monza 205/65 R-15 tyre fitted to a rim had an undistorted radius of 320 mm at a pressure of 220 kPa, a compressed radius of 295 mm and, a compressed radius of 290mm at a pressure of 190 kPa. The calculated circumferences for the three radii were 2,011 mm, 1,854 mm and 1,822 mm respectively. The distance travelled in one rotation, for the compressed tyres was measured to be 1,966.5 mm at 220 kPa and 1,908 mm at 190 kPa. The difference in the measured distances travelled was 0.7% yet the radii differed by 1.7%. Further clarification of this phenomenon would require tests throughout the pressure range for a number of combinations of vehicle and tyres. The actual results from direct comparison to laser and radar measurements at speeds from 30 to 160 km/h had indicated only a 0.7% difference at 100 km/h dropping to 0.4% at 160 km/h. This suppression may be a result of aerodynamic behaviour of the vehicle. The results are given in Table 3.

Indicated	30.0	60.0	80.0	100.0	120.0	160.0
Rollers	29.7	57.3	76.3	96.4	116.1	157.3
Laser	30.0	57.0	77.0	96.0	116.5	156.5
Radar	29.5	57.0	77.0	96.0	116.0	156.5

*Table 3. Comparisons of different methods of speed measurement.*

**Roller Effects:** When speed is measured using rollers the compressed diameter of the tyre varies from the compressed diameter of the same tyre on the road surface. This is due to the rollers creating two curved surfaces rather than one flat surface on the tyre (load surface area and shape, or tyre footprint).

The effective circumference of a tyre on the road can differ with brand ply rating, belt type (steel or nylon) and tread depth. This circumference variation can be minimised when the vehicle is on the rollers by increasing the tyre pressure. The required increase will depend on tyre type, but early test results indicate it is about 30 kPa.

Experiments on the tyre distortion with different diameter rollers was undertaken starting with 203 mm (8.0") to 266 mm (10.5") in 12.5 mm intervals. Some experiments are still being analysed that look at leading edge roller speed sensing verses trailing edge roller speed sensing. This plays a role in the effective diameter seen by the rolling road tester.

Tyre slippage for a sedan on the roller was measured at a range of speeds using a strobe light and was found to be minimal. Great care was given to minimise slippage during the tests, and the measured slippage was less than 100 mm over the test distance of three kilometres. The total effect of slippage on speed accuracy was not deemed as significant in free rolling testing.

### **Instrument Errors**

Systematic corrections that are not eliminated during calibration, or applied as a correction, will contribute with opposite sign to the results of speed measurement by a police pursuit vehicle. For example, consider a police car tested at 100 km/h with a reported error with new tyres of + 1.5 km/h (that is, the true speed is 1.5 km/h lower than the indicated speed) and which, eventually has tyres at half wear equating to 1 km/h. A motorist's vehicle is then perceived to be travelling 2.5 km/h faster than actual. If the motorist has a speedometer error of 1.5 km/h and is travelling at an indicated speed of 100 km/h we can see that it has been measured to exceed the speed by 4 km/h, enough to be considered a breach of traffic rules. These errors created by, (a) tyre wear, (b) not applying calibration corrections, and/or (c) the roller-to-road anomaly, are critical to the overall picture, since the accumulative affect can be as much as 4 km/h. These three items were intentionally not calculated in this first view of the uncertainty assessments (subject discussion to follow) since the corrections mayor may not be deemed as uncertainty components.

To calculate the uncertainty associated with a driver's knowledge of the true speed of his or her vehicle, a review of the components of uncertainty arising from interpretation of speedometer indication, vehicle load, engine power management and tyre behaviour was undertaken by the author.

The driver's ability to accurately determine the vehicle speed using an ordinary speedometer is affected by:

- The intrinsic accuracy of the instrument (the residual systematic error after calibration).
- Parallax error.
- Size of minor graduations (normally 5 or 10 km/h). \*Readability (usually one-fifth of one minor graduation).

Based on these factors uncertainty (expressed as 95% confidence intervals) for a speedometer read to 2 km/h was as follows:

60 km/h is plus or minus 8 km/h  
80 km/h is plus or minus 10 km/h  
110 km/h is plus or minus 13 km/h

A calibrated speedometer read to 2 km/h and tested with certified speedometer testing reaches a better accuracy than the ADR 18.5.1.2, that is the accumulated uncertainty described in this paper is less than the plus or minus 10% specified by ADR. The calculated uncertainty is plus or minus 4.9 km/h at 110 km/h without any account for tyre wear and roller to road anomaly. This assumes that the speedometer was either adjusted to read true or the calibration correction was applied. Failing this, the uncertainty must be calculated with uncertainty components added for the systematic errors.

The needle in an analogue speedometer will be about 2 mm from the gauge face. This results in a parallax error, which will depend on the position of the driver's dominant eye. The maximum error derived from experimentation was less than 2 km/h. With the advent of liquid crystal displays with either synthesized analogue or numerical read-out, parallax problems are not an issue. On the other hand rounding of the displayed speed may create errors but these would be less than 1 km/h.

Analogue instruments display information by indicating with a needle or a pointer. The graduations on the display face limit the precision of the instrument readability. With a minimum division of 5 km/h and a needle width of the equivalent of 1 km/h, resolution to a fifth of a division or 1 km/h can be expected. Examples of the application of this convention can be found in Australian Standard AS 1349 [6].

Since infringements can occur in just a few metres, we investigated other sources of speed control and measurement and found a significant problem with smaller vehicles. Measurements with an air-conditioned four-cylinder vehicle showed a 5 km/h variation in speed with the air-conditioning compressor cycling. This variation is created by the driver compensation for power fluctuations by his efforts to maintain constant speed. Policy makers may wish to include this in the big picture.

### **Calibration Of The Testing Machine**

The measurements of the roller diameters and rotational speed gives a standard uncertainty component of less than 0.1 to 0.3 km/h between the speeds of 30 and 180 km/h. The stability of performance of all the roller machines tested throughout most of Australia over the last six years has been in the region of plus or minus 0.2 km/h. Plotted roller wear on the Adelaide based unit was less than 0.01 % over six years.

### **Police Tolerances For Speed Infringements**

The inconsistency between Australian States in their tolerance of small infringement of speed limits means that there is no single system in use. The most widely used system is the decade method. The posted speed limit can be exceeded by 9 km/h e.g. 69 in a 60km/h zone (89 in 80 km/h zone etc) and incurs a fine if 70 km/h is detected. This method was introduced to compensate for the ADR 18.5.1.2 speedometer error of plus or minus 10%.

One State has recently introduced a 3 km/h tolerance, since their detecting equipment carried an uncertainty in the region of plus or minus 2 km/h. This system has the implicit assumption that the drivers must not exceed the speed limit regardless of measurement errors and the onus is upon the driver to ensure that they comply with the law irrespective of accuracy of their speedometer.

### **Discussion**

**Achievable Aims:** The statistics collated by the Monash University, the police departments, the Royal Automobile Association and myself, indicate that a high proportion of speedometers are set to read 3 km/h high to minimise liability and supposedly to compensate for possible drift. There has been no response from manufacturers confirming this practice. The application of this offset does not improve the accuracy of speedometers. The latest manufactured vehicles have an accuracy of 3% or better, of reading with one brand offering an adjustable version correct to within 2% of full scale. In the first instance, the use of "3%" is an archaic method of describing accuracy and creates a distorted view of the errors expected. Statistics have shown that ADR [1] should be amended to read:

*"an accuracy of  $\pm$  (0.65% of full scale + 1.75% of reading)", or " $\pm$  (1.5 km/h + 1.75% of reading)".*

This would ensure that the tolerance does not limit the lower values to impossible accuracies or the upper value becoming too large.

**Tyre Behaviour:** The tests conducted were not intended to measure individual effects of tyre behaviour on speed but was a measure of an overall effect. The "lumping" of the tyre effects was purely to extract expected overall variations in speed measurement.

Tyre wear and low fill pressure just resulted in a higher indicated speed, which may not be of concern in a motorist's vehicle, but in a police vehicle will result in a high reading of the speed of motorists. A worry for motorists is the fact that tyre pressure increases from cold to hot, lower indicated speed.

**Improved Method:** With the adoption of the suggested changes to the design rules, and with roller anomaly taken into account, we can then address the policy of dealing with the error caused by tyre wear, so that the uncertainty can be calculated considering all significant components. The author suggests taking measurements for the tyre wear at the half wear point since a tread depth at time of test can be obtained and results of the speedometer test mathematically corrected to the half wear point. The tyre wear can then be included in the uncertainty to reflect re-

sults by tyre and wear being other than half worn. The combined uncertainty components mentioned earlier and these latest additions were calculated to be  $\pm 6.7$  km/h for a Dunlop Monza 205 165 R-15 tyre at 110 km/h.

**No-Man's Land:** In some Australian States road works and children's crossing zones are automatically classed as 25 km/h zones. As the wording of the design rules (ADR 18.5.1.2) does not call for any accuracy for speeds below 40 km/h, the driver has no assurance of the vehicle's true speed in these zones.

#### **Driver's responsibility**

Other errors that have been attributed to outside interference (for example incorrect tyre size fitted, or differential ratio altered), or a deviation from manufacturers specifications are a separate issue. With vehicles made to the amended ADR as suggested above in paragraph "Achievable Aims", the un-calibrated speedometer would have a lower calculated uncertainty of speed measurement and can be expected to perform within a smaller infringement tolerance.

**Breach Of Natural Justice:** The calculation of uncertainty associated with speeds up to 120 km/h shows that the decade method used by police forces allows infringement notices to be issued to drivers travelling within the region of uncertainty. The issuing of infringement notices using the 3 km/h tolerance system can be even unfair to drivers who use a speed measuring instrument conforming to Australian design rules.

**A Temporary Measure:** A suggested policing policy is to allow 7 km/h at speeds of up to 50 km/h and an additional 1 km/h for every 10 km/h of speed up to 110 km/h speed. This policy will prevent infringement notices being issued for the region of uncertainty and therefore should not be legally challengeable. This policy of expanded tolerances would only be an interim measure to correct the present situation, prior to public testing facilities being introduced.

**The Solution:** I believe that this paper lays the groundwork to give the Federal Government, State Governments, State Police Forces and motorists the tools to operate motor vehicle speed control measures correctly and fairly. If all recommendations are accepted, a fixed tolerance of 7 km/h (or a sliding scale of tighter constraint but more cumbersome to apply) can be used without compromising the motorists and afford them their right to an accurate form of speed measurement. However this policy assumes the application of calibration offsets to correct the speed value. The process of testing and calibration of rolling road testers that is traceable to a national standard must be made publicly available. A series of approved testing stations should be available so that motorists can confirm their speedometer accuracy and drive accordingly.

Acknowledgements – I would like to thank the following people and companies for their assistance in producing this paper.

- Royal Automobile Association of South Australia for the use of testing equipment.
- R Laslett (retired) of S.A. Police Traffic Technical Support for Encouragement and guidance.
- J Lipman Traffic Technical Support NSW Police, for duplicate testing to expose systematic errors.
- Injection Perfection NSW, for duplicate testing to expose systematic errors.
- South Australia Police Force for road to roller comparisons.
- J Tapping for his editorial assistance.
- Abstec Calibrations Australia For my employer's continued support.

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*From the Light Shaft, Austin 7 Club Magazine – With Thanks.*

## REMINDER!

If you require accommodation on the 2009 RACV Fly The Flag Tour, please contact Tony Pettigrew on (03) 9739 1146 to secure your reservation.