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G.T on Apprentice Navigation

A.G.M. Report

Xmas Party

Rally Directions

The official Organ of the Classic Rally
Club Inc. (Affiliated with CAMS)



January 2013

Classic Car of the Month

Alfa Romeo's 105/115 coupes were produced from 1963 to 1977. Virtually all the cars shared the basic bodywork and are referred to as 105s. A limited production convertible by Touring of Milan and an aerodynamic coupe by Zagato which had some aluminium panels were exceptions.

All models had the same mechanical configuration. This featured the venerable all alloy 4 cyl. motor with DOHC & two valves per cylinder and carburettors. Some U.S. models were fitted with fuel injection. Gearboxes were all 5 speed manuals. Brakes were discs all round with Independent front suspension & beam axle at the rear. Engine capacities varied from 1290cc through to 1962cc.

There were various model designations, GT & GTV with larger engines for enthusiast owners & GT Juniors for those happy with less performance. GTAs, A for 'Alleggerita' or 'lightened', were competition models.

Rob Panetta has owned his 1972 GT Veloce 2000 since 1982 and has been having fun, CRC style, in classic rallies since 1996. The car has a 'standard' Manning Motors engine & gearbox plus a standard L.S.D.

Coming Events



PRE-SEASON TRAINING RUN Saturday 2nd February

Designed as a warm up for for the 2013 CRC Championship Rallies this event will be directed mainly at new & regular APPRENTICE level competitors.

- CAMS licence not required
- No scrutineering
- No Entry Form
- **No Entry Fee!**

Starts at Castle Hill, covers 120kms, finishes with the First Saturday Free Fling at the usual Fling venue at Nth Parramatta.

Formalities from 2.00pm, Briefing 3.00pm 1st car away at 3.30pm. Plenty of assistance given to navigators at the start.

Full details inside or call Tony Norman on; 9804 1439 or 0402 759 811

Come along & have a go!

2013 CLARENCE CLASSIC SAT 9 & SUN 10 MARCH

Enjoy a weekend in the beautiful Clarence Valley area with friends from the CRC & others CAMS Clubs in the first event of the 2013 CRC Club Championship.

All the usual CRC Rally features;

- ◇ Masters, Apprentice & Tour Instructions.
- ◇ All Saturday meals & Sunday breakfast & lunch.
- ◇ Fun social atmosphere at Dinner on Saturday night.

Plus great new roads & fantastic North Coast scenery.

Full details inside or contact;

Ian Gibbs; 02 6642 7382

0410 507 674

itgibbs@bigpond.com

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DEADLINE FOR NEXT NEWSLETTER; 15th February '13



Classic Rally Club Meetings are held on the 4th Tuesday of each month, January to November from 7.30pm at Denistone Sports Club, 59 Chatham Road, West Ryde

The opinions and advice provided in this newsletter do not necessarily represent those of the Classic Rally Club Inc and its officers. No responsibility will be accepted for the opinions, advice and directions contained in this newsletter. Readers should rely on their own enquiries and make their own decisions.

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Ross's Rave.



How about that, it's 2013 already so obviously the world didn't end as predicted by the ancient Mayan calendar, which is just as well because that would have totally ruined our 2013 events calendar. I would like to thank Tony Norman for all his hard work in putting this calendar together. (it's up on the web site now and also in the back of this magazine)

I hope that everyone had a good Christmas – New Year break and that you are all well and rested ready for a great 2013 rally season. Have a great year everyone.

So, our first chance to get together this year will be our first Club meeting on 22nd of January, I hope to see many of you there as it will be a great opportunity to catch up and have a chat before we really get stuck into the coming year.

Next on our calendar will be an Apprentice training run which has been put together by Tony Norman and will be held on 2nd February. I would recommend that this would be a fantastic way for our Apprentice level crews to start the year. A sort of a practice run in preparation for the year ahead. I have reviewed the instructions (and got lost – in my own lounge room) which prompted Tony to make them yet easier again ... after which I would expect that they will provide an excellent learning experience.

In fact (irrespective of my earlier comment) Tony is focusing on helping crews to find the right roads on the route and in my opinion the navigation is reasonably simple. I strongly recommend that you take advantage of this valuable opportunity. And don't forget that the First Friday Free Fling (FFFF) is, for February only, the First Saturday Free Fling (FSFF). The FSFF is the finish and catch up after Tony's training run.

Our first competition event for the year will be the Clarence Classic which will run out of Grafton in northern NSW. I know, I can hear you saying "..... Grafton" but if you think about it, many of us used to travel down to Wangaratta for the old Forest Classics (which I personally miss very much) and that was a lot of fun. I know that Ian and Wendy have already received a number of entries and Ian has promised that this event has been deliberately set to be easier than his previous events and in particular he has said that the Apprentice level is intended to be really easy. The roads are what I'm looking forward to most, even the trip up should be a blast. If you're not in a hurry why not try the back way via Buckets Way - Gloucester, Thunderbolts Way – Walcha – Armidale and then the Waterfall Way via Nymboida through to South Grafton, you might even slip in the Putty Rd. (a great drive if you have the time!). Please think seriously about entering this event.

Finally a quick word of encouragement to our Apprentice navigators. I know it can be discouraging at times if you miss something and perhaps if you get a little lost (believe me I have had more experience at this than I would like) however don't let this spoil your fun. In my opinion the best way to approach this discouragement is to remember that every time you make a mistake you are likely to learn a lesson that you won't forget. This is how we all learn and it's what will make you more competitive. The most important thing is to have a talk with the Rally Director or a friendly Masters Competitor (aren't they all) to have them explain where you went wrong and learn, learn, learn.

See you out there (if I can find the right roads!)

Enough raving Ross.

Report of C.R.C. Annual General Meeting,
held 27/11/2012 at the Denistone Sports Club

The meeting was opened at 8.02pm by the President, Ross Warner.

A summary of the 2012 activities was provided by the President: About 70 days of activities/events in total was available to members.

Adoption of the 2011 AGM minutes: It was moved by Garth Taylor, seconded by John Henderson that the 2011 AGM minutes be adopted without change, this motion was carried.

2012 review: Financial performance for 2012 was satisfactory, despite membership numbers showing a small decline to 410, as advised by M'ship Sec, Ian Packard. A printed financial report had been previously provided in Rally Directions. Adding to this report, the Treasurer Tim McGrath, indicated that the operating surplus for the year was only of the order of \$1300, largely due to lower than expected participation numbers in many of the CRC Series events. This was described as a more significant factor on financial performance than the small membership numbers decline. With \$5600 held as cash in the club's normal account, it was discussed that the club should transfer some funds from the high interest deposit to meet working expenses and contingencies until the 2013 program produces revenue. (Magazine production, affiliation fees with CAMS and the CMC are some of these known costs).

It was also noted that the club magazine, Rally Directions continued to be a high quality element of the club's activities and aided the promotion of the club's activities strongly, but some increasing costs had been borne with the magazine production and distribution. The editor and the production team were congratulated on another fine year of work with the magazine. The opportunity for members to opt to receive the magazine electronically will be examined for 2013, and this may reduce production and distribution costs usefully, though due to volume printing rates, perhaps not by an obvious or especially significant amount.

The Secretary, Tony Kanak had provided a written report for 2012 in the October Rally Directions, which was summarised in a verbal report at the meeting.

Ron Cooper provided a short report concerning the HCRS, with 92 vehicles on the scheme at present, and the scheme had been generally trouble-free during 2012.

Identified changes for 2013: Tim McGrath commented that the level of difficulty at apprentice level needs to be moderated in the future to encourage more people to move up from tour level to improve participation, at all levels in 2013 events. The meeting endorsed this initiative.

Election of Office Bearers for 2013: Member Tony Wise took the chair to conduct the election. In the absence of any other nominations, the 2012 Committee was returned en bloc, for 2013. The meeting congratulated the Committee on their re-election, and thanked Tony for his assistance with the election process.

Fees for 2013: in light of the discussion of the club finances, already described, the meeting resolved to increase annual membership fees by \$5, applicable to both single and family membership types. This was passed almost unanimously, with some speakers having proposed greater or lesser fee adjustment alternatives.

No further business, the meeting closed at 9.10 pm.

Anthony Kanak

Secretary

OFFICIALS: Ever thought about being an official at some of our events and didn't know how to go about it ?

Scrutineering - Administration - Rallying - Event organisation - whatever ?

Ask any of the senior people in the club how you can get involved or as the committee member looking after officials have a chat with me about it and I will try to find the best way forward. It's not difficult and you can start out as a General Official any time you like and take it from there.

Dave Johnson 0428 299 443

How a great year's rallying ended for Steve and Grace Brumby.

Some of you will have already seen the photo of Grace navigating on the Pas de Deux with her eyes closed. And as some of you will already know it is not easy rallying with a teenager, particularly when "normal" sleep patterns are disrupted by rallies that commence before midday, a time of day that should ordinarily be used for sleeping in. So it was with some gentle slapping that we pushed through the "I should still be in bed" issue.

Early on the 11th of November we made our customary pre-rally bribery stop at Macca's for breaky on our way over to John Cooper's for the start of the Pas de Deux '12.



As a departure from the norm we took along our '74 Gold XB Falcon Hardtop with the "Continental" vinyl roof. The Alfa GTV was in need of a little TLC, that had yet to commence, but will be undertaken over the Summer break. The Alfa was looking a little forlorn in the big V8's wake.

There is something developing at the Pas de Deux that I am enjoying. Like last year there was a great, convivial atmosphere. Perhaps because this is the last gasp for the year or perhaps because it is getting close to Christmas, but it was great wandering around before the start and taking in cars or whatever else was at hand.

As the driver I finish most rallies without much of a clue .where we just went, you know just enjoying the view and the drive; left here, right there but the Pas de Deux is a bit different. It runs through our backyard. Chasing Len's 928 up Greendale Rd was a morning highlight. Then we arrived at Cawdor Rd, already realising the road had been closed. What a great job Jeff and the organisers did to seamlessly rearrange the route on the fly and get us all back on track.

There were some great roads around Menangle that I hadn't been on prior to this event as well. Where do they find them?

When lunch was getting close there were a few in-car emergencies that started to mount up. Unlike the GTV that runs all day on the smell of a 98 octane soaked rag the rather thirsty Cleveland V8 is a different story . The fuel gauge started to point out that "You may make it to lunch but I wouldn't bet on the Finish". That and the navigator who normally seems to have a bladder the size of a hot air balloon started to make remonstrations (in between bouts of sleepiness). Bargo's Shell servo loomed on the horizon as the saviour of all issues and also provided an opportunity to stock up on lunch provisions. Then it was into lunch at Picton in the usual area which serves very well.



The exit from lunch onto Division 2 seemed to throw a few people but was well considered to deal with the weekend peak on Picton's main drag and we soon disappeared into the hills around Razorback somewhere. I have to admit that we knew the answer to one of the creek questions, the creek in question runs through my sister-in-law's property at Werombi. And so with the last trap under control (second driveway!) 2012 came to a close. And what a year it had been. A big well done to the Pas de Deux organisers and officials particularly Tim, Gary and Jeff for yet another great drive and to all the officials and organisers throughout the year.



2012 has been fantastic and a great opportunity for this Dad to spend all that time in the car with my wonderful girl Grace (most of it awake!)

I was so proud of her efforts when we realised she had won the Tour Navigators championship.

Steve Brumby

GT's thoughts on Apprentice level instructions and other navigational challenges.

Having done most of the 2012 season from the navigator's seat at Apprentice level, to try to get a better understanding of what the navigation challenge is all about, I have to say that I found most of the events very hard. Let's look at what I found difficult.

hard and this seems to be borne out when the results are viewed. The best placed Apprentice had the same point loss as the last placed Master, and the scores went steadily downhill from there to the respectable cricket score I amassed. (Admittedly some of my loss of points was from my own stupidity).



So let me put forward some recommendations to the 2013 and beyond Rally Directors to encourage our members to try the Apprentice Category.

1. Lots of help is needed for Apprentices to get the route onto the map in an acceptable time.
2. Consider giving say 10 to 15 minutes after the directions have been handed out before the start rather than the customary 5 minutes.
3. When it is necessary to change maps with a different scale please give grid references for the crossover roads.
4. Give the grid square for map location references, i.e. "...Mt Solitary (found in GS A1)"

The first part of a navigational event is getting the route onto the map. In many instances Apprentices need lots more help here. Some directors seem to be fearful that making it too easy to work out the route will spoil the 'challenge'. In my opinion this is just WRONG. For very new novices you could actually supply a fully marked map and the challenge of just knowing where you were on the map and keeping to the map would be enough.

At this point let me float another idea. Let's split the Apprentice category into two. The basic level would be renamed '**Novice**' and then for the more experienced, the '**Master's Apprentice**'.

Maybe that is making it a bit too simple but consider this as an example. It seems to be agreed amongst most of the Apprentice Navigators who competed in the Pas de Deux that it was much too

This second level would receive the Masters instructions plus a sealed envelope for each division with additional clues, like a copy of the '**Novice**' instructions. These get them through if they got stuck, with a penalty of say 20 points for every envelope opened. (This latter idea came from President Ross).

A question often asked this year has been why have entries been down when compared to previous years. We all suspect that there are several reasons such as the state of the economy but I have found that there is another reason. In an effort to avoid tied scores the rallies have been getting harder and harder and some past contestants have found the enjoyment of running in an event is replaced by total frustration from the increased event complexity. I suspect this is partly caused by a fixation to try to avoid tied scores. I see no need to have special driving tests, 'furthest cleanest' works, and if this is not enough, then add 'in the oldest car'. This could certainly work at Tour level. What do you think about this? I ask all rally directors to give consideration to 'dumbing down' future events for the Apprentice Category.

I'm coming back for another go as navigator for most of the 2013 events. My son Adrian wants to do a couple of the 2013 events so for these I will be doing the driving. Work roster commitments for my trusty 2012 driver Paul Morton means he won't be able to do as many events in 2013 so when this happens I will volunteer as an official and take along my camera to see if I can at least partially master action shots. Sorry, they won't be anywhere near the standard of the sorely missed Southy and Anne. I will also be using a modern car (the X-Type) from here on in as I have decided it is time to find a new caring owner for the Mk2, see details below.

Hoping to see you out there enjoying your car in 2013.

Garth Taylor

FOR SALE: 1961 Jaguar Mk2 3.8 Auto



After 22 years of very happy ownership the time has come to find a new, caring owner for this lovely car.

If you want a Concours vehicle with matching numbers, STOP READING. However if you are looking for a very useable car that has been progressively upgraded over the years, this is the car for you.

Fitted with; 420 front end, including the variomatic power steering and larger front brakes. 4.2 fully balanced motor from the 420, (same gross HP as the 3.8 but with a lot more torque) including a 60 amp alternator, reduction starter motor, new alloy radiator and Lumination electronic ignition.

Inside there is integrated air-conditioning, reclining series 3 front seats, retractable rear seat belts, a child seat mounting bracket and Nardi steering wheel.

At the rear there are air lift shocks and alloy centre lock wheels which use the original Jaguar splines and spinners. Plus too many improvements to list here.

This car ran in the first Jaguar Mountain Rally and has been a contestant runner in these types of public road rallies (the CRC Series) ever since. It is a great way to see the countryside and enjoy your classic car.

The Mk2 is set up with a Terratrip rally meter and navigation map light which can go with the car at a small additional cost.

Currently registered on NSW Historic Car registration (37081H), the car can easily be fully road registered again if desired.



Priced to sell at \$21,900. For more information call Garth Taylor on 02 4784 3301.

CRC Christmas Party



Drinking and driving; Some of us have probably had brushes with the authorities on our way home from an occasional social occasion over the years. A couple of nights ago, I was out for an evening, with friends, and I had a couple of cocktails and some rather nice red wine.

Knowing full well I may have been slightly over the limit, I did something I've never done, I took a cab home. Sure enough, I passed police carrying out Random Breath Testing but since I was in a cab, they waved it past.

I arrived home safely without incident, which was a real surprise as I have never driven a cab before . Anon.

The Grafton “Fun Car Rally “

I thought you may be interested in an event report for something that was not a Classic Rally Club event, but was a bit of fun...

After hearing about my involvement with the CRC, the Grafton Rotary Club asked me to organise a “Car Rally” for them. So, after warning them that their understanding of the term “rally” might be somewhat different from mine, I set out to plan the easiest of events. It was only a half day run, finishing at our place for lunch. I decided to introduce the club members to a little of what we do in our events, so the event was done in two sections. CRC style M and P boards were used, and results compiled based on visiting manned controls, and recording answers to questions, and recording VRCs. As the cars arrived at the start, someone was heard to comment that the Rotary club does not seem to have very many Wankel powered cars. All were very impressed with Benny’s 1926 Chrysler though. The first section was basically ‘tour’ format. Fully route charted with accurate incremental and overall distances for every instruction. Within a kilometre of the start the route passed the finish point, which was noted in the instructions, and also had a VRC board out the front. A couple of entrants took the opportunity to drop off picnic baskets and put beers in the fridge. After waiting a respectable amount of time after the last car departed, I returned home and swapped the P board for an M board in readiness for the finish a couple of hours later. Then after sorting out a few bits and pieces, I was about to head off to the end of section major control, when I was greeted by TWO entrants, facing in opposite directions, discussing whether they needed to stop here because there was an M board. OMG... how are they going to handle the navigation in section two? VIA points... map traces... tulips... roads different from the map... What have I done?!! Too late to change it now!

The crews all found the control at the end of section one (tour), but were already spread out over more than an hour and a half. I was getting worried about lunch becoming dinner. But I clearly did something right. Nearly all the crews found the manned passage control in the middle of the section, quite a few of them twice. None visited it three times as they were supposed to, and none of the crews went around the block at the very end of the event to avoid driving that section of the road in the opposite direction to their earlier visit. But amazingly, they all arrived for lunch within an hour of the first car. The winners scored over 85% correct, and were closely followed by Benny, who proved that you don’t need a modern car to do well. One of the last cars to get to the half way point stopped to make a cuppa at the control and still made it to the finish, and the podium. Everyone thoroughly enjoyed a great “drive in the country”, and all the couples who entered are still married!

All this bodes well for the Clarence Classic. Much of the route from this event will be re-used, and instructions have been well tested, so I will probably keep them basically the same and use them for the Apprentices. See you in March... it’s going to be fun.

Cheers, Ian Gibbs.



Navigator wanted for Clarence Classic: Heather Dux has a friend who hopes to run in the Clarence Classic in March. He has quite a bit of experience running in European events, similar to those run by the CRC, and is keen to experience one of our rallies. However he needs a navigator. If you can help out please contact Heather Dux at goti2306@bigpond.com.

SPARK PLUGS- **PART TWO OF “EVERYTHING YOU WANTED TO KNOW ABOUT SPARK PLUGS”** (or perhaps not)?

In an earlier edition, we covered a brief description of the features of the production, history, marketing and usage of spark plugs. Like many products that tend to be taken for granted, and all seem to perform much the same, the marketing experts have tried many things over the years to make their spark plug products seem superior to the competition. This technique to gain an edge often involves the development and promotion of features that are exclusive to a particular brand. Sometimes these features are actually useful. Sometimes the advantages are more dubious. For example today we can buy razors for shaving with 5 blade inserts in the replaceable cartridge. Twin, triple and quadruple razor blade systems have all been superseded. Such innovations have greatly increased the amount spent by the mostly male shaving community on shaving. It has been much the same story with toothbrushes and related science and features, and indeed with spark plugs. Some of the pictures in this article show some of these “features” developed in the past, and the ones you probably need to consider the most are discussed further below. Now read on.

PROJECTED TIP DESIGNS:

In the 1930s most plugs were much the same in terms of the electrode design. An example is in pic 1. During the 1950s the Champion company, er, championed the development of what is known as the projected tip spark plug. An example of this design is also shown in pic 1. This design change puts the firing point of the plug further into the combustion chamber. This change has a couple of useful effects- the plug is better cooled by the incoming fuel/air charge, and the combustion process tends to gain a little in terms of the rate of the flame front development, because it is not right at the periphery of the combustible gas mixture. The projected tip plug tends to be more tolerant of a wider range of operating conditions too, because at low speed the exposure to a bit of extra gas turbulence tends to keep the plug clean from combustion chamber deposits, and at higher engine speeds the plug tip gets cooled by closer proximity to the incoming fuel/air mixture.

For a while the companies who didn't have this projected tip feature offered the view to anyone who would listen, that these new fangled plugs would overheat and not last long. This turned out to be untrue, and they were rapidly adopted as normal by many car manufacturers. To finally dispatch these stories to the waste bin, around 1965 the Champion company in the USA famously put 50 Chevrolet sedans with V8 engines and automatic transmissions to back to back supervised acceleration tests, with a change between the original equipment AC brand “normal” plugs and projected tip Champions. 47 of the 50 cars accelerated measurably faster with the Champion plugs. Very soon AC offered projected tip styles of spark plug too.

Now this overseas evidence was good enough for most people and projected tip plugs became the standard fitment in many new Australian cars, locally at Holden, Ford, Chrysler and BMC. Locally the 1960s Chrysler vehicles included the Simca and the UK Rootes Group vehicles too. An examination of this range and era of cars shows a trend in the more modern cars to use projected tip spark plugs. Older recommendations for pre 1960 vehicles are where the traditional non-projected tip designs are still listed.



Sometimes this is because older engines used what were rare (even then), and strange thread lengths like the 7/16 inch reach Champion H series. Hillmans, as another example, mostly used projected tip plugs post 1963, so the concept and their durability is well proven across many millions of engines.

Some older engines never had the original plug recommendations updated to projected tip designs. Sometimes this was because of physical clearance problems, such as in the side valve six cylinder engines in Chrysler Royal vehicles in Australia. In this engine, the valve in block nature of the side valve design meant that the valves would strike the longer plug tip and thereby close up the gap on a projected tip plug! Other engines which kept the original plug recommendations into full obsolescence were 1950s era UK designs like the Austin Healey big four cylinder engines, and early BMC A and B series engines. Later versions of the A and B series did have projected tip plugs as original equipment, so there would seem to be no reason not to try projected tip plugs in your Austin Freeway?

COPPER CORE?

At some time during the 1980s the feature of a copper core became part of the marketing message. Presumably the earlier plugs had the same piece of simple steel from the base of the terminal where the plug cable connects to the firing end. Now with copper core plugs this part of the plug contained a copper core for better thermal conductivity. Hmm..... its a little hard to technically evaluate this benefit. The amount of copper involved can't be too large, and it is not visible in a broken plug. The pre C plugs and the post C plugs seem to work similarly well in my experience.

Champion added a "C" suffix to all of its copper core plugs, and renumbered much of its range. In many cases though the wider heat range claimed for the copper cored plugs must have been earnestly believed because the number of plug part numbers in some physical sizes was cut considerably, such as from 5 grades to 3 to cover the same heat ranges. So this production and marketing change would help with inventory management, and this contraction was justified because the copper core "widened" the heat range.

Other makers like KLG and Motorcraft followed Champion along the copper core route, and the idea of a more thermally and electrically conductive core went further with exotic alloys containing additives such as Yttrium, from makers like Bosch.

Overall, the copper or more advanced metallurgy core are now normal in even the simple and inexpensive spark plugs we can source for our classic vehicle engines. So we can welcome this feature. Or at least not be concerned about it.

IF A LITTLE EXTRA WAS GOOD, LET'S TRY MORE!

Eventually someone somewhere got permission to attempt to extend the firing tip of the plug still further into the combustion chamber. These designs became common in the 1980s, but only in certain engines. At the same time spark plug gaps increased and higher energy ignition systems were used to fire these wider plugs where the spark gap was now in a still more



prominent position in the combustion chamber. Why not try these super extended plugs in your classic vehicle? Well with enough confidence that the end of these longer plugs won't get struck by a piston or a valve, you could.

With some difficulty the gap can be closed back to what a classic vehicles ignition system can work with, which is about half the gap on these new plugs, as they are supplied, or about .8mm compared to 1.5 mm or more.

Will you get any gain in performance or economy? Hmm..... well maybe, but this takes one characteristic of the original projected tip design further, and maybe too far. This effect is the change to the way the gas pressure builds in the combustion chamber after ignition.

Because the projected tip speeds up the initial spread of the flame front, compared to a non projected tip plug in most cases, the effect on engine performance is akin to advancing the ignition point, respective to the piston position, by a small amount. Depending on the size of the cylinder and the combustion chamber details this effect can be in the range of negligible to perhaps two degrees of additional ignition timing (aka advance or lead).

If peak cylinder pressure occurs too soon after the plug fires, then excess pressure is wasted in trying to stop the piston on its upward stroke in the cylinder. Pinging (aka detonation) can be the result, which is potentially hugely damaging. Higher octane fuel may help, or you can back off the ignition timing by a few degrees, and perhaps do a dynamometer evaluation.

Bear in mind though that in the engines designed for these ultra extended tip spark plugs the ignition timing is usually managed by a well informed computer, not an old mechanical distributor.

Yes, to delay ignition timing to the latest practical point and then to initiate the flame front with a high energy state of the art electric flame thrower is a great idea. When all parts of this plan work together, then less cylinder pressure is wasted before the piston reaches the top of its travel, and then the flame front spreads rapidly to push down hard on the piston before the exhaust valve opens. This feature of modern engines, which are designed to run smoothly and with high torque at very low RPM is great for fuel economy and efficiency- but obtaining the same benefits from a classic vehicle era engine and ignition system will take some work.

So will finding the right heat range plug, as such

plugs are not a backwards compatible recommendation from the plug makers. Also these types of modern design plugs merge with other modern high tech features such as multiple ground electrodes, and the inclusion of platinum and other exotic spark pads, fine wire centre electrodes etc. Most of these plugs will cost a lot more per piece than the inexpensive conventional projected tip plugs which are much more certain of success in a classic vehicle application.

Remember too that the 100,000 kilometre expected life for these modern plugs when used as intended, is only true in a fuel injected computer controlled engine, with a compatible ignition system. Compared to modern electronic fuel injection how does the classic engine measure up for consistent quality of fuel atomisation and cylinder filling turbulence- when assessed against a current engine design?

Many of these fancy spark plugs also incorporate electrical resistance within the plug itself, which is necessary for the modern ignition system to work properly. While resistor plugs have been around since the 1960s, these new designs are not the same, and you will likely need spiral monel wire plug cables as a minimal upgrade to use modern resistor plugs of any style. Maybe your classic still has real wire plug cables, you can use these with new resistor plugs - in the sense the engine should operate OK. The usually maligned "carbon string" plug cables won't work well with modern resistance plug designs and old style ignition systems. Too much total resistance is likely, and too much voltage leakage or loss will make it hard to get the engine to the redline in 3rd gear, even after you've installed the modern high technology wizard plugs - if the rest of the system isn't compatible.

If you have an electronic module in lieu of distributor contact points, and perhaps a high output coil and a capacitor discharge type box then you can practically experiment with these more recent design exotic spark plugs of the platinum/iridium etc types if you wish, but keep the plug gap to about 1mm or so, at least for initial trials.

SO - TIME FOR AN AFFORDABLE CONCLUSION:

If you want the best starting and performance from your classic vehicle, keep the tune up in good shape which includes all parts of the fuel and ignition system. Choose heat range projected tip style plugs (if suitable for your engine) and keep them correctly gapped with parallel gaps. Some air-cooled engines can only use projected tip plugs with care, and engines with domed pistons that intrude into the combustion chamber may not suit projected tip plugs either. Ask what others are running in their comparable set ups. Maybe try a swap to other brands of spark plugs, if you think that the heat range is a little too hot or cold to suit your particular engine or style of driving. Used spark plugs do indeed tell a story, learn to read this story.

If you do this you can be confident that fancier plugs at any price will be unlikely to offer gains in excess of about 1%, under any conditions, in your classic vehicle. This is because it has been the focus of innovations with spark plugs over the last twenty years or so to provide longer plug life, at higher cost - from designs tailored to modern engine management systems. However, real gains in the performance of a classic vehicle engine are hard to find, from fitting high tech plugs alone. If you already have clean suitable spark plugs and correctly functioning ignition in your vehicle then you are in good shape. Lots of info on plugs is available from the manufacturers in their catalogues, either on line or hard copy. Maybe there is a spark plug selection phone app coming too?

Happy motoring!
Tony Kanak

A few other great Engineering achievements. Some car related, some not!



Just in case you needed inspiration to get your Classic out of the shed & have a run.
A few great photos from last year's CRC events.





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PRE-SEASON TRAINING RUN

SATURDAY 2nd FEBRUARY

This Event will be run under a CAMS Social Permit and will be non-competitive. **NO** CAMS Licences. **NO** scrutineering. **NO** Entry Form and **NO ENTRY FEE.** Just contact the Event Secretary by telephone at least 4 days prior to the Event, to allow time to organise sufficient, but not too many, copies of the map and Route Instructions to be photo-copied.

The Event is designed as a warm-up for the 2013 CRC Competition Rallies and will be directed primarily at new and regular APPRENTICE level members. It is hoped that, being of limited duration, regular TOUR entrants may be encouraged to 'give it a try.'

MASTERS Instructions can be supplied on request but NO TOUR Route Chart. Note that it will not be conducted as a 'Navigation School' type event but assistance will be available at the Start, to assist Navigators as necessary.

Instructions will be issued approx. 30 mins prior to departure of the first car and written in typical APPRENTICE format i.e. written as for MASTERS but with many additional Instructions - I promise!

There will be a mapped herringbone and mapped tulips. If un-familiar with these you should seek advice from an experienced Navigator prior to the Event.

EVENT DETAILS AS FOLLOWS:

START: Mt Wilberforce Lookout Reserve, Castle Hill Road.

TIME: Registration from 2.00pm. Briefing at 3.00 pm. 1st car away at 3.30pm.

DISTANCE: 120Kms - 74.5 Mls. No dirt but some narrow winding roads.

FINISH: Carpark at Harrys Cafe de Wheels, off FENNEL ST, PARRAMATTA.

Cars are expected to arrive from about 6.00pm - just in time for a pie!

For further information contact the Event Secretary as follows:

TONY NORMAN mob. 0402 759 811 or home. 9804 1439.



First Saturday Free Fling (Pie Night)

Saturday 2nd February from 6.00pm.

Harry's Café de Wheels

431 Church St. (cnr. Fennell St.)

North Parramatta

NOTE CHANGE OF DAY AND TIME

FOR THIS EVENT IN FEBRUARY ONLY

**The Pie Shop in Nth Parramatta is the finish
location for the 'Training Run'.**



2013 CLARENCE CLASSIC SAT 9 & SUN 10 MARCH

Get that classic out of the shed...



Join some old and new friends.



for a drive in the country...



and some navigation fun.



Join the Classic Rally Club and friends from other CAMS Clubs for a weekend in the beautiful Clarence Valley area. The Event will be based around Grafton and will start and finish in or near Grafton on both Saturday and Sunday.

Enjoy approximately 600 kms of great classic car roads for an untimed Touring Assembly with 3 levels of participation:-

- Tour - a fun run that is route charted to enable all entrants to successfully complete the event;
- Masters - to challenge the experienced navigator; and
- Apprentice – simpler navigation instructions focussed on keeping you on the right road.

For the entry fee of \$429 per crew of 2 you get:-

Rally pack and maps – breakfast, lunch, dinner and accommodation on Saturday plus breakfast and lunch on Sunday with a chance to enjoy great new roads and varied scenery.

Options available for additional nights accommodation or extra crew.

Entries now open. Get in early for the best accommodation options.

Entry forms along with Supplementary Regulations can be downloaded from www.classicrallyclub.com.au

For more details contact: Ian Gibbs
w: (02)6644 0907 h: (02)6642 7382

itgibbs@bigpond.com
m: 0410 507 674

Excellent roads...



choice of clear instructions or challenging navigation...



and if this happens...



just go to the pub!



BP RALLY 2013: The BP is one of the oldest rallies still being run in Australia and is run by the HRA based in Victoria. It is a navigation event in the Victorian style, run as a Touring Road Event with only one category, ie there is NO Tour with lots of dirt and gravel roads of all standards. This years event is on 9th to 12th May and starts on a Thursday evening & finishes on a Sunday. Basically Melbourne to Melbourne.

Mike Batten and I will be having a run this year. I have all the maps and instructions from the last event also run by Ross Runnalls in 2010 and am happy to share the info obtained with any other NSW / ACT competitors who would care to join us. I am in dialogue with Ross to get back up to speed as the last time I ran in a BP was 1968. Let me know if you are interested. **Dave Johnson 0428 299 443**

2013 CRC Events Calendar

CRC meetings held at Deniston Sports Club, 59 Chatham Rd, West Ryde. First Friday Free Fling held at Harry's Café de Wheels, 431 Church St., Parramatta

Date	Event	Note	Contact
22-January-2013	CRC Meeting		
02-February-2013	Pre-season Training Run.	Apprentice level only. Total distance - 120km.	Tony Norman 0402 759 811, 02 9804 1439
02-February-2013	First Saturday Free Fling.	Change of day - Finish venue of Training Run	
26-February-2013	CRC Meeting		
01-March-2013	First Friday Free Fling		
9 - 10-March-2013	Clarence Classic - Grafton area. Entries due 10th Feb. C.C.	Set in Grafton area.	Ian Gibbs, 0410 507 674 igibbs@bigpond.com
26-March-2013	CRC Meeting		
05-April-2013	First Friday Free Fling		
07-April-2013	Le Rallye Des 100-Criques. C.C.	1 day rally, Central Coast.	Tony Norman 0402 759 811, 02 9804 1439
23-April-2013	CRC Meeting		
03-May-2013	First Friday Free Fling		
25- 26-May-2013	Barry Ferguson Classic C.C.	David Johnson - Trial Tim McGrath - Tour	David Johnson 02 4887 7803 longitude@internode.on.net Tim McGrath 0419 587 887
28-May-2013	CRC Meeting		
07-June-2013	First Friday Free Fling		
23-June-2013	Tour d' Corse -C.C.	TBC	Tony Wise lmwise@bigpond.net.au Carol Both 02 9878 2035
25-June-2013	CRC Meeting		
05-July-2013	First Friday Free Fling		
July	One day competition rally or Club Lunch Run. TBC	Date & format TBC	
23-July-2013	CRC Meeting		
02-August-2013	First Friday Free Fling		
05-August-2013	Driver Training day at Wakefield Park		Tony Norman 0402 759 811, 02 9804 1439
27-August-2013	CRC Meeting		
06-September-2013	First Friday Free Fling		
7 - 08-September-2013	MG Spring Classic C.C.	TBC	
24-September-2013	CRC Meeting		
04-October-2013	First Friday Free Fling		
19 - 20-October-2013	Alpine Classic C.C.		Wayne Gerlach
22-October-2013	CRC Meeting		
01-November-2013	First Friday Free Fling		
9 or 10-November-2013	Penrith Pas de Deux C.C.	Day TBC	Jeff West
26-November-2013	CRC Meeting - AGM		
06-December-2013	First Friday Free Fling		
15-December-2013	Club Christmas Party. TBC		

Information, entry forms and supplementary regulations for C.R.C. events can be downloaded from www.classicrallyclub.com.au

Club Regalia For Sale

CRC Embroidered Cloth Patch	\$5.00
CRC Windscreen Sticker (120mm x 65mm)	Free to members
CRC Windscreen Sticker (323mm x 174 mm)	Free to members
CRC Polo Shirts (with pocket & club logo)	\$25.00
CRC Nylon Jacket (with hood & club logo)	\$37.00
CRC Sloppy Joes (with club logo)	\$25.00
CRC Tee Shirt (with club logo)	\$18.00
CRC Cap	\$10.00
CRC Black Chambray Shirt (club logo & long sleeves)	\$33.00
CRC Drizabone Jacket (with club logo)	\$75.00

All club regalia available at Club Meetings through John Cooper

Or phone orders to 0414 246 157

Cheques made payable to Classic Rally Club

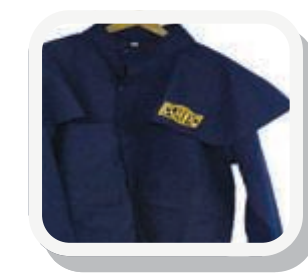
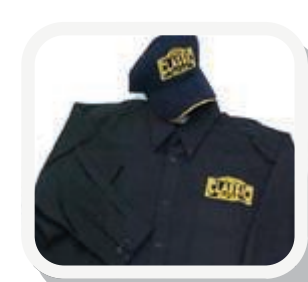
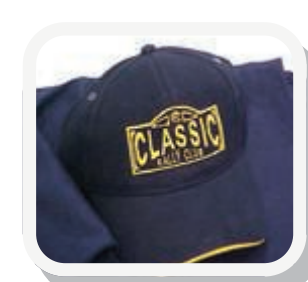
A full range of individual and personalised jackets & caps are available (with CRC logo) for your Classic Rally Team Members through;

Prestige Embroidery

4/29 Coombes Drive, North Penrith, NSW 2750

Phone: 0402 127 230

Fax: (02) 4727 0893



Contributors to this edition: Anne Bloomfield, Steve Brumby, Heather Dux, Wendy & Ian Gibbs, Tony Kanak, Tony Norman, Robbie Panetta, John Southgate, Alex Taylor, Garth Taylor, Ross Warner. Thank you all.



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