The Official Magazine of the M.G. Car Club of Queensland Inc., Affiliated with the Confederation of Australian Motor Sport.

#### PUBLISHED 8 times a year

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THE OPINION of correspondents and advertisers expressed in the magazine are not necessarily those of the Management Committee nor the M.G. Car Club of Queensland Inc and as such the Club accepts no responsibility.

ALL ENQUIRIES TO THE EDITORS C/- Box 1847, G.P.O. Brisbane 4001.

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	¥35	MANAGEMEN	T COMMITTEE	Work Phone
PRESIDENT:	Terry Corbett	892	1151 (H)	37
VICE PRESIDENT	T: Reg Tomkinson	376	4304	279 1533
SECRETARY	Vicky Moore	359	3460	237 3480
ASST SECRETAR	Y David Robinson	a 848	0221	844 1037
EVENT SECRETAI	RY Joan Appleby	857	1561	
TREASURER	Ann Thomson	378	1368	s personal section of the section of
COMMITTEE	Steve Austin Linden Cooper Peter Tighe	341	2979 3942 2093	(075) 376116
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MEMBERSHIP SEC Phil Huto	CRETARY chison (H) 355 2	188) (w)	282 1377	e The state of
CLUB CAPTAIN Peter Ray	yment (H) 300 3	148 (w)	838 8932	

CAMS DELEGATE

Ann Thomson (H) 378 1368

POSTAL ADDRESS OF CLUB G.P.O. Box 1847, G.P.O. Brisbane (The committee meets every second Monday).

CLUB ROOMS CLUB ROOMS
18 Nash St., Rosalie
(Open most Friday nights.

AND THE RESERVE

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EDITORS OF OCTAGON John and Helen Kingcott. If you have any articles you may post them to the Club or to Box 162 P.O., Fery Hills 4055.

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CONSTITUTION A copy of the Club's Constitution is available for Club members' perusal at the Clubrooms. Copies are available from the Hon Secretary for a nominal fee.

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November 18th	CALENDER OF EVENTS  Day Run to Mt. Glorious vis new Road. Leave Gailes Shell Service Station at 9.15 a.m. Smoko Wivenhoe Dam at Wall picnic Area. Lunch at Mt.
	Glorious For more information please ring Peter or Delia Rayment on 300 3148.
18th	BMC Day - Austin Motor Vehicle/Wolseley Car Club Day at E.E McCaskie Oval at Kelvin Grove. 9.00 a m. to 3 00 p m All Welcome.
25th	M.G.C.C.Q.Inc Race Meeting at Lakeside This includes regularities. Please, if you are not running, come and help.
December 2nd	M.G.C.C.Q. Inc Hillclimb. Last for the year. come and enjoy yourselves. Ring Joan Appleby (857 1561) if you want regulations.
9th	Renault Car Club Sprints at Lakeside. M.G.C.C.Q. invited. Ring Joan Appleby regarding Regs.

### A couple of advance notices for next year -

5th

29th March- 2nd April National MG Meeting at Nowra. Contact a committee member if you wish to know more about this meeting.

Annual General Meeting 8 pm Club rooms

13th April 12th Armidale Classic Car Show (For further details see Club notice Board.

31st May - 1/2 June Australina Hill Climb Championships.
We need plenty of class sponsorship so see what you can do with your local firms.

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#### FOR SALE

Cylinder head to suit MGB in very good condition \$120 00 Contact Paul van Gool Rephone 452 195 (with 074 in front)

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MGB Frame and soft top "Lock in" type frame and black soft top Good condition \$200.00

Phone 888 3679 and ask for Deb

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MG ZB Magnette, stored on blocks for last 10 years.
Exterior sand blasted and primed, 26,000 miles running well, very original. \$2600 0N0

Phone 390 8324 and ask for Michael

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WANTED Two dining room chairs and one kitchen stool for the use of the timekeepers and announcer at the Hillclimb. Maybe some one has some furniture they are trying to dispose of and it may as well be down at the Hillclimb. Ring Joan Appleby if you can help.

#### PRESIDENT'S REPORT

Yet another A.G M. and Christmas are almost upon us as the calender rolls over another year.

It has certainly been quite an eventful and active year for the Club seeing the culmination of two major projects - namely the finalisation of our major Art Union (for the fully restored MGB - First Prize) and successful hosting of the 1990 National MG Meeting over Easter. It is hard to believe that it was only six months ago, it certainly seems much longer.

In the past months, Stage 1 of works were started at the Mt. Cotton Hillclimb with the establishment of a Motorkhana/Driver Training Area. Significant earthworks were carried out to open up the Pit area to about the size of a football field to provide a suitable area on which to conduct these activities when complete whilst in the interim providing better pit facilities for the hillclimb. Over coming weeks a cyclone fence and gates will be installed along the front boundary on Gramzow Road to help secure the property.

Some minor drainage works are required to complete the proper drainage of the pad area and this should complete Stage 1 of the works.

It is the committee's long term aim to have the Hillclimb being used much more frequently by our own club members as well as hiring the facility to other motorsporting clubs to enable us to improve the area for the benefit of all.

When the track was initially built back in the sixties, the thought of cars doing times in the 30 second bracket would have been thought improbable. These times are now a reality with an increasing number of competitors getting into the very low 40's. With this in mind, our track safety is an ongoing consideration and a programme of improvements is to be implemented over the coming years for the safety of all users.

The hillclimb is there for the benefit of each and every club member and is our Club's only major asset. If you have been enjoying the events that your club has and continues to put on for you and you haven't been able to contribute much either physically or financially to it's ongoing viability, then how about making a NEW YEAR'S RESOLUTION - TO GET INVOLVED IN 1991 because YOUR CLUB NEEDS YOUR HELP.

"Yes, but what can I do?" you say.

#### TAKE YOUR PICK:

CLUB MAGAZINE:

Our thanks to John and Helen Kingcott who have offered to take over as editors for the Octagon. However they still require written or typed (preferably) articles, photographs, stories, adverts, and general help on the issue dates with collating, printing etc. (Contact John on 351 6541).

NIGHT RUNS:

Setting of night runs - Set a night navigation run one night or weekend (approx time 1.5 hours) (About 8 required per year plus the IRONMAN). Setting the runs is as much fun as being in them (Contact David Robinson 848 0221)

CATERING:

The ladies and gentlemen on the canteen do a fantastic job raising funds and providing good food and cold drinks for everybody at ALL of our events Your offer of help will not be refused especially for the A.H.C. on 1/2 June 1991. (Contact Jan Tomkinson 376 4304).

CARPET LAYING/ TILING We still require some good second hand floor coverings or tiles for the club rooms.

FABRICATION:

Round pipe or square hollow section posts with drilled cap plates required for mounting seats/barriers for round the hill. (About 30 required initially).

CHAINSAWING:

Log splitting needs to be done to make seats and barriers for around the hillclimb.

PLUMBING:

We need some plumbing work carried out at the hill to connect up clean water to the wash basins in the toilets. We have the materials, we just need a tradesman.

NUT SHELLS:

If you know somebody with a macadamia nut farm who can provide nut shells at a reasonable price (we will pick them up) them please let us know.

Contact Terry Corbett for any of the above (892 1151)

GATE KEEPERS:

Required for race meetings and the Australian Hillclimb Championship in June.

RACE MEETINTS:

Pit marshalls, etc required for our Race Meetings at Lakeside, the A.H.C. and the Historic Meeting. Contact Joan Appleby (857 1561).

HILLCLIMBS:

A delay at nearly every hillclimb seems to occur because we don't have enough people to go on the flag points. Put your name down and see the hill from a different angle. If you are a competitor and you are not running for some reason, come out and do your bit anyway.

FUND RAISING:

Anyone can sell raffle tickets. A good way of meeting lots of people and raising some money at the same time.

MARKETING:

Have experience and expertise in marketing/advertising/promotion? Step forward now and lend a hand for the Australian Hillclimb Championship.

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MEDIA CORRESPONDENT: Someone to liase with the media and provide lead up articles for the Race Meetings we run and for the Australian Hillclimb Championship and to follow up with covering stories to the same media.

MOTORKHANAS:

Volunteer to be of assistance with the running of the Ironman Motorkhana and any other motorkhanas we may be able to hold

CONCOURS:

If you are a regular at the concours during the year, how about putting something into your particular area of interest within the club by organising a concours event next year. In this way we could have more than one concours to decide the concours trophy. Let's fact it, you have to go there anyway except you just have to leave a bit earlier to set it up.

If you are unable to assist in any of the above ways due to business commitments etc., then may be you can assist financially by advertising or sponsoring an event or class.

QUOTE OF THE YEAR: "THESE THINGS JUST RUN THEMSELVES DON'T THEY?
The simple answer is no they do not, they require the support, work
and input of you the member because it is your club.







Positive - that's how Jim Peters lived his life.

The Eldest son of George and Mavis. Jim's life was plagued with sickness from a very early age. However his inner strength, his battling spirit and his will to beat the odds saw him through.

Positive and productive. Never one to sit around and contemplate his lot, he filled his life with activities that would leave lesser mortals breathless - a condition he knew well but rarely let interrupt his active life. There was always something that needed his attention. As well as productivity at work his expertise in model construction was first class. From its very early days the Queensland Model Boat Club and later the Triple S Club benefited greatly from his dedication.

Like the rest of the family, Jim was interested and active in motor sport. Trevor's early experience with cars and their modification, Ken and Ian's race driving and lately, nephew Brett's career all were instrumental in developing and maintaining that interest. Jim was on the timekeeping team at the first Lakeside meeting and was very soon Queensland's Chief Timekeeper. His unswerving dedication to fairness, accuracy and meticulous record keeping saw the development of a system unmatched at any other racing circuit in Australia. And it was with Q.M.S.C., Q.M.R.O.A., M.G. Car Club, S.P.A.R.C. and the promoters of Surfers Paradise and Lakeside that he developed a loyal team and many lasting friendships. These tireless efforts were recognised by the Confderation of Australian Motor Sport who awarded Jim the "C.A.M.S. Service Award" for valued service to Motor Sport. His own driving reflected his attitude to public responsibility with his annual awards from the Road Safety Council for accident free motoring spanning almost 15 years.

Jim's working life saw only two employers. Firstly "Robinson the Umbrella Man". A company which he later bought and ran successfully until the influx of imported goods and "Payne Byrne & Blackford". During his teens all wondered whether he would live to his 21st birthday let alone lead a productive working life, and he too would have had doubts at times. But he showed dedication and a will to live and work unmatched by many healthier souls, and this earned him the utmost respect and admiration of his employers and fellow employees.

Jim was indeed a memorable person, a very private person but at the same time, approachable, easy going, scrupulously honest and a friend to everyone who had contact with him.

James Taylor Peters will be missed.



# ALUMINUM IN OPEN WHEEL CARS: How heating or bending aluminum cuts the strength dramatically.

#### by French Grimes

If WE HAD STARTED out with aluminum as our most commonly used metal, the introduction of steel would have been hailed as a tremendous leap forward. The new wonder metal, steel, would be said to afford great improvements over aluminum in the areas of weldability, forming, fatigue strength, crack resistance and stiffness.

Please don't misunderstand. Aluminum is a wonderful material that has made possible many of the wonders of the 1940s-1980s. Without aluminum we would still be stuck in the iron age. Aluminum has been the bridge between the iron age and the emerging age of composite plastics.

Yet every material has its tradeoffs, and in the case of aluminum, light weight and strength are available only if the choice of a given alloy is made after researching its characteristics and suitability for a specific application. The aerospace industry would never think of using a material in any application unless all the requisites of application were followed. The race car industry is always borrowing aerospace technology, sometimes without using the critical application information.

Aluminum is not steel. Therefore, it's best to forget the rules of steel and learn a few basic rules that may save your life if you use aluminum in highly loaded areas of a race car.

Rule #1: Know what alloy and temper designation you are working with.

Rule #2: Heat is death to aluminum unless it is applied very specifically.

Rule #3: Do not weld unless absolutely necessary and then only on the alloys that will accept welding.

Rule #4: Bend only by the guidelines for the alloy that you are working with.

Rule #5: Do not heat to bend except in specific and tested instances.

Rule #6: The process of heating, bending, or welding unknown aluminum alloys is known as 'You Bet Your Life.'

Let us look at some of the aluminums used in race cars.

3003 has a wide range of use and is great stuff for body panels, seats, and oil tanks. It cannot be heat treated and does not have a very high tensile strength (22,000 psi) in the H-14 temper, but it forms well and is easily welded.

6061 is generally used in the T-6 temper and is the most versatile of the heat treatable alloys. It is moderately strong (45,000 psi) and can be welded and formed. This alloy makes good pinch blocks, engine plates, floor pans and wheels. If you weld any component made of 6061T-6 it must be heat treated after welding or the tensile strength will drop to 8,000 psi. in the heat affected zone. This caution reminder definitely refers to welded W-links or Jacobs ladders which are soft unless re-heat treated. Wheels may be welded without a post weld heat reatment but they will be subject to easier deformation in a crash. This is not too big of a problem as a crash usually causes considerable deforma-

tion anyway.

2024 is damn strong and very spooky. The tensile in the T-361 temper is 72,000 psi. and it is used for torsion and steering arms, although, 7075 T-6 would be slightly strong at. White some of the lower strength aluminums can be slightly overheated and cooled without disaster this is not true of the super strength alloys 2024 and 7075. If these are overheated the result is a parthat is not only soft, but very brittle. 2024 is a very prone to stress cracking and all new decrease bends should be tested to failure to deten 2024. Welding should not be attempted on 2024.

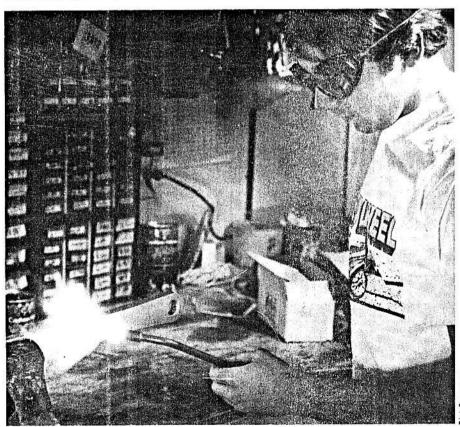
7075 is the strongest of all aluminums (83,000 psi.) in the T-6 temper. This high strength makes it ideal for torsion and steering arms, wheel hubs and spools. The same cautions apply to 7075 and 2024. Do not weld, and test to failure any new design bends. Stress cracking is as bad or worse than with 2024. The best way to use the super strength alloys is as they come from the mill. Do whatever is the appropriate machine work but do not weld, and try to avoid bends in the design of the part.

A-356 is considered to be the best compromise of strength and castability (33,000 psi.) in the T-6 temper of the castable aluminums. We find it used in cylinder heads, blocks, rear center sections, steering gear boxes and similar parts. It is very weldable but the heat input should be kept to a minimum to reduce the annealing effect of welding, if the full strength of the T-6 properties are required then the part must be re-heat treated.

The most important thing to remember about aluminum is that heat over 300°F, begins to permanently alter the strength of the part. Temperatures of 650°F, will anneal most but not all aluminums. Thus it is easy to see how welding will result in a joint that has the strength of the annealed base metal at best. As a general rule, the annealed form of a given aluminum alloy, has only one third the strength of the highest strength form of the same alloy. As an example: 6061-0 has a tensile of 18,000 psi, while 6061-T-6 tensiles out at 45,000 psi. This does not take into account the more drastic drop in the yield or bending point. For example, 6061-0 yields at 8,000 psi. while 6061-T-6 yields at a much higher 40,000 psi. If you want a part with one third the strength of your present part, then design it that way. Don't let yourself in for a surprise by welding or heating the part to the weaker state.

There are some very specific cases where the use of a 300°-400°F re-heat will help relax the elastic limit of the high strength alloys, and allow them to be bent at lower force levels when forming. I am not going to attempt to outline those procedures here because the potential for misuse is tremendous. Heat treating aluminum is a very complex exercise and should be regarded as practically impossible in the field.

Torsion and steering arms, bird cages, and suspension parts are all part of the drivers' life support system. Unheat treated, welded and heat straightened parts are dangerous and subject to failure.



70 OPEN WHEEL

AGENDA FOR GENERAL BUSINESS AT A.G.M. on 5th December

CHANGES TO CONSTITUTION OF M.G. CAR CLUB OF QUEENSLAND INC. Section 6 Paragraph 2 (original)

(2) All subscription shall be payable on application and subsequent subscriptions on 1st January each year, except that in the case of members elected on or after 1st October in any year, the subscription then payable shall cover the ensuing year, plus CAMS Capita+ion Fee for the ensuing year.

Proposed change -

(2) All subscriptions shall be payable on application and subsequent subscriptions on 1st January each year except that in the case of persons first elected on or after 1st October in any year, the subscription then payable shall cover the ensuing year.

Additional CAMS Capitation Fee for the ensuing year shall be paid.

#### CHANGE OF NAME

Original M.G. Car Club of Queensland Incorporated

Proposed Change M.G. Car Club of Queensland Inc.

Agenda

Life Membership fees to be discussed.

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## NOVEMBER - MONTH OF MOTORSPORT

Australian Grand Prix - Some highlights
Saturday MG's of the year parade.
Racing wise in the Touring Cars - Dick Johnson leads the Banana
Benders with Longhurst, Jones Wayne Park and Maurice Pickering
adding their efforts

Group E Car Section was won by tony Scott after a very exciting race Also racing were Ian Palmer, Bruce Lynton, Tod Wanless.

Sports Sedans were represented by Queenslanders Mark Trenoweth, Ken Nelson, Graham Neilsen and David Pullen.

Historically speaking, Don Thallon, John Girard and Bruce Lynton were running their cars.

Maybe, between Brad Stratton, Vicky Moore, Dean Tighe, Lyndal Parr and Peter Herlihen, we may be able to print a story from a Club members' view point in the Next Octagon. Surely one of you knows how to put pen to paper.

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DON'T FORGET THE ANNUAL GENERAL MEETING ON WEDNESDAY 5th DECEMBER 1990 at 8.00 p.m. AT THE CLUB ROOMS, 18 Nash St., Rosalie. A nice supper will be served to come and join the team.

If for some reason you cannot come please send your proxy in so the person you nominate may vote for you.

#### EDITORIAL

Well, how are you all? I am John Kingcott, your new editor. Some may know me. I am the fat fella who drives the red Escort No.141.

Enough of the intro duction, on the editorial. As a starter I'd like to encourage you to send big mobs of articles for the next magazine.

With a big year for MG coming up, it would be good to see the pits/ motorkhana area at Mt. Cotton finished in time for the Australian Hill Climb Championships.

I know what you are saying - another one of them wanting me to help them. What an interesting word "Them" is. "Them" the committee and hard working members of your club. Yes your Club so who really is "THEM"?

That's right, you and I are really "Them" so next month when youre voting for the 1991 committee spare a thought for who you want and make the effort to be at the A.G.M. on Wednesday 5th December at 8.00 p.m.

Forms for nomination of management committee are included in this magazine.

John Kingcott

#### OCTOBER IN REVIEW

V8's aren't dead - Grice and Percy proved that According Bathurst: to those on top of the mountain, even the Ford lovers were wrapt, can't beat the roar of a V8.

> Well done, Brian Bolwell with 23rd Outright and 3rd in Class B.

Dickie's DNF was unfortunate. If only the seat had moved the end would have been even more exciting.

The supporting events provided a couple of wins for local driver Tony Scott's Bridgestone Commodore. Brad Stratton attack on the Appendix J Races was all over before it started when the Mini's flywheel let go somewhere down Conrod during practice. Probably a good thing considering the carnage of the race.

Bob Holden's team received some help from locals too. Peter Herlihen and Dean Tighe changed the Corolla's Gear box in 20 minutes only to have a wheel fly off over the top and nearly wipe out the Channel 7 camera.

- Bailey Powerlines Novice Rally A number of our members competed.

  Dean Tighe and Lyndal Parr finished well up the field Top S placing. Pity he poked a light with a course marker John Kingcott navigating for Steve Bradford finished 15th while Paul van Wijk and navigator Peter Herlihen finished well up in the field.
- Rally Australia Rallying in the big time great coverage by Channel 9. Bib non-finish for Ross Dunkerton and a bare ended finish to the televised special stage by the Faster Pastor loosing his pans while pushing the dead VR4 to the end of the stage.
- Australian Motorkhana Championships Perth Western Australia saw our local hero Alan McConnell drive all the way to defend his title which he won last year. This year he beat the field by an even greater margin and we congratulate him on once again being the Australian. Motorkhana Champion. May be we'll have an article about this next Octagon.