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February 2011

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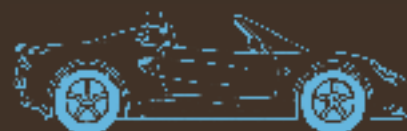
& Clubman Notes



The Official Magazine of
Lotus Club Victoria,
Lotus Club Queensland

Features:

CLUB Xmas parties
Electric Elise
LCV AGM
QLD Floods





LCO DECEMBER MEETING AND CHRISTMAS BBQ

by Daryl Wilson.



Greg Bray - Achievement Award Winner

Our December 2010 meeting was hosted again this year by Derek and Anita Dean and their hard working team at Motorman Imports Slacks Creek.

Unfortunately the numbers of members who attended were down on previous years mainly due to South East Queensland's on-going heavy rain. Many who did attend especially those with open cars chose to bring the family car and not risk getting a drenching. Yours truly did take the Caterham minus the roof after checking the weather bureau radar (BOM) and assuring she who must be obeyed that it would not rain!!!!

Needless to say we have no sooner left that it started to rain. So much for believing BOM! No problem we can just drive a bit faster and the rain will be blow over our heads. That worked fine until we got caught in the usual peak hour traffic jam on the M1 Motorway. Fortunately it was only a light short shower and we managed to get to Derek's none the worse for wear.

Derek as usual had cleared a large area in the workshop storage shed, so we could get all our cars under cover; which certainly helped as we had a very heavy rain storm about an hour after everyone arrived.

Master Chef Mal Kelson worked his magic on the BBQ ably assisted by Anita and Derek and soon everyone was happily munching away



and deep in conversation about upcoming Christmas, New Year and holiday plans. The guys were also busy wandering around the cars and checking out any new mods or new cars recently acquired.

As for the formal part of the night President Geoff, Secretary Shane and Treasurer Jason gave their updates then handed over to John Barram to announce the club annual awards.

The Competition Award went to Giles Cooper for winning the Queensland Marque Sports Car Hill Climb title and setting a new Marque Sports Car record at Mt Cotton. Also for Giles other successes at Mount Cotton and Noosa Hill climb and other Queensland events.

The Achievement Award went to Greg Bray for his beautiful work restoring his Lotus 61 Formula Ford.

Lastly the Clubman award went to yours truly, I swear no money changed hands!!!!



LCQ Members Christmas BBQ 2010.

All in all it was a great night and a good start to the festive season. I am also pleased to report that we got home without getting wet and the Caterham is safely tucked up in the garage and has not seen much action since due to the continual rain.

Many thanks once again to Derek, Anita and the Motorman team for their hard work to make the night such a great success. Also master Chef Mal Kelson for another great job on the BBQ.

Note: Special thanks to Garry Saunderson and Giles Cooper who contributed 12 articles and 9 articles respectively to the magazine during 2010. It certainly helps to make my job easier and hopefully provides good reading for all LCV and LCQ members. Thanks Gary and Giles.

On that note if you would like to contribute to the magazine all articles would be gratefully accepted ie: your recent road trip, the car you are restoring, the project that has stalled, any technical Lotus related information that would be of interest to other members, etc, etc, etc, please help.

Please send any articles to the LCQ Magazine Coordinator at wilmac@bigpond.com



Giles & Trooper accept trophy





RACING PORSCHE REINCARNATED IN WOODEND



Order yours now! This 1970 Porsche 917LH belongs to the Simeone Foundation, Philadelphia, PA - It is one of five Long Tail Porsches built in 1969 and 1970. It placed second in the 1970 24 Hours of Le Mans and did not finish at the 1971 running of the 24 Hours. It is painted in its original 1970 'hippie' or psychedelic color scheme.

If you're a talented artist and a gifted musician what would you chose to do for a living? Well, Andrew Keiller faced that question and decided that he would like to build replica Porsche 917s and 906s... Obvious really.

For several years Kyran Meldrum has been saying: 'We must go and see Andrew Keiller in Woodend, he builds replica Porsches, it would be worth a visit. I'll give him a call.' Last November Kyran retired and sure enough a few weeks later, at the Lotus Christmas party, he asked: 'What are you doing next Friday? I'll call Andrew and we'll go up to Woodend.' I didn't need much persuading to rearrange my schedule and take the day off. At 9.30 on Friday morning there was the unmistakable sound of Kyran's Elan in my driveway and we were soon edging our way along the Monash Tollway.

Woodend is a quiet little town but it has a few good things to offer: a micro brewery and pub, an interesting second hand bookshop, good coffee shops, at least one decent restaurant, an historic B&B, and now a Porsche racing car factory. Ok, so that's a slight exaggeration. Kraftworkz is housed in a nondescript factory with no signage. But we found it without much trouble and Kyran rapped on the side door. Anthony, Andrew's son and fellow Porsche builder, let us in.

I'm not sure what happened to the next few hours, they were filled with questions, discussion, stories and photos, interrupted only by a very late morning coffee at the local bakery. The factory is not very big, so you step



carefully through the gaps between partly built cars, a 917, a 906, a 908, and a new chassis for a Speedster. There are body panels and moulds hanging from the walls or stored in the mezzanine 'loft'. There are spares stored anywhere that has a space. Magazines and Porsche reference books are piled on shelves and chassis drawings cover a draughtsman's board. Then there are the posters, model cars and the odd guitar. A man could spend a week having fun in this place.

If you are not familiar with the Porsche model numbers, let me jog your memory. The 917 was the sensational looking race car that first appeared in 1969; it was powered by a flat 12 engine. The early versions were somewhat unstable – prone to make like an aeroplane. Frank Gardner used to tell the story of receiving a call from Porsche offering him a drive in the 917. He was somewhat surprised by this, and when he asked about each of the regular drivers he discovered that they were either in hospital or had made themselves scarce. Of course once the stability was sorted out these





cars went on to win just about everything that they entered and finally destroyed CanAm racing by totally wiping out all opposition. You might have seen pictures of these cars in Martini colours (Andrew has a Martini liveried tail fin hanging from a wall). This was also the model that was painted in some wild psychedelic designs. Porsche designer Tony Lapine came up with the 'hippie' paint jobs and his son Anton comes into our story soon. If you still haven't got the idea, then find a copy of the Steve McQueen classic film 'Le Mans'.

Of course flat 12 engines are a bit hard to come by. I saw the one that Allan Hamilton used to have in his factory and rumour has it that its sale took care of his superannuation. Andrew sets up his replica 917s to take flat six cylinder engines. Normally Kraftworkz cars are shipped without an engine or gearbox. There are a number of advantages to this, most of the cars are exported (the USA and Germany being the common destinations) import duty is tiny if the unit is not a complete car. Owners can also chose a power plant and drive train to suit their needs and budget.

But the 906 is my favourite of the models. The 917 is a monster, whereas the 906 is a bit more Lotus like, smaller and more nimble than the 917. It also used a six cylinder 911 engine, so from one of Andrew's replicas you can create a car that is a little more authentic, and you can just about pick up 911 engines at Bunnings. (Just to keep us all confused, some 906's were fitted with a 2.2 litre flat 8 cylinder engine).

The 906 had a good racing history. Porsche raced this model in 1966 and '67. Drivers included Vic Elford, Rolf Stommelen and Jo Siffert. Siffert managed to finish fourth at Le Mans behind three of the Ford GT40s (or more accurately Ford Mk 2s). That was the year of the controversial staged 'dead heat'. McLaren and Amon were finally declared the winners, they were judged to have covered more distance as they started further down the grid than Denny Hulme and Ken Miles. The Porsche 906s staged their own group finish for fourth to seventh places.

At one stage Andrew took me into a small office and showed me a set of works drawings for the 906. On one of his trips to the USA Andrew had visited



Bob West Porsche Repairs in the LA area. Bob does a lot of club racing preparation and he had some 906 moulds in storage that Andrew was keen to relieve him of. If I have got the story right, these moulds had belonged to Anton Lapin, son of Tony who had created the Porsche 917 'hippie' paint jobs. Andrew did manage to buy the moulds and when they turned up in Australia, much to his delight, he found a copy of the factory drawings inside the crate. Bob West used to work for Colin Chapman at Lotus before he went to work for Porsche in Germany; he claims that



Porsche studied a Lotus race car before coming up with the suspension for the 906.

Even though we could have stayed all day making a nuisance of ourselves, we were aware that we were taking up the guys' work time. Andrew and Anthony were very generous with their time, patiently answering questions and telling stories. But before we left I had to get one final photo - of a wonderful painting of Gilles Villeneuve that was hanging on the wall close to the door - I checked the artist's signature, Andrew had painted it.

For more information, visit: www.workzcars.com



ELECTRIC ELISE AT THE UNIVERSITY OF WESTERN AUSTRALIA'S RENEWABLE ENERGY VEHICLE PROJECT (REV)

by Thomas Bräunl

Professor in Electrical Engineering at UWA and Director, REV

Technical Director, WA Electric Vehicle Trial



"How can you destroy a perfectly good Lotus?" were the comments of my colleague from UWA's Mechanical Engineering Department when he learned that we were about to take this 2002 Lotus Elise S2 apart, remove its Rover engine together with fuel tank, exhaust, etc. and replace it by a battery-electric drive system. I begged to differ – "We are giving an older car a new life" (it did have almost 80,000km on the clock), "and we are doing it as an engineering project for our students".

I started the electric vehicle project REV in 2008 at UWA. That year, we converted a Hyundai Getz to battery electric drive, which received quite some media attention in Western Australia and has now driven over 10,000km with very few problems. Electric vehicles, although they have been around (on and off) for over 100 years, seemed to be a new and unusual concept. This has changed -- not a week goes by without reports of new EV prototypes and technologies in the paper or on TV. All major car companies have announced battery-electric cars for the year 2013 or earlier



and nobody in the automotive industry doubts that electric cars will gain a significant market share within the next two decades. Electric cars have the advantages of being emission free (if charged from renewable sources), being quieter (at low speeds) and cheaper to run (both in energy and service costs).

But, there is still the issue of limited range (mostly around 100km) combined with lengthy recharging times (typically 8 hours). So, the sensible electric car will be a small commuter car that can be the second car in a family, not driving longer distances.

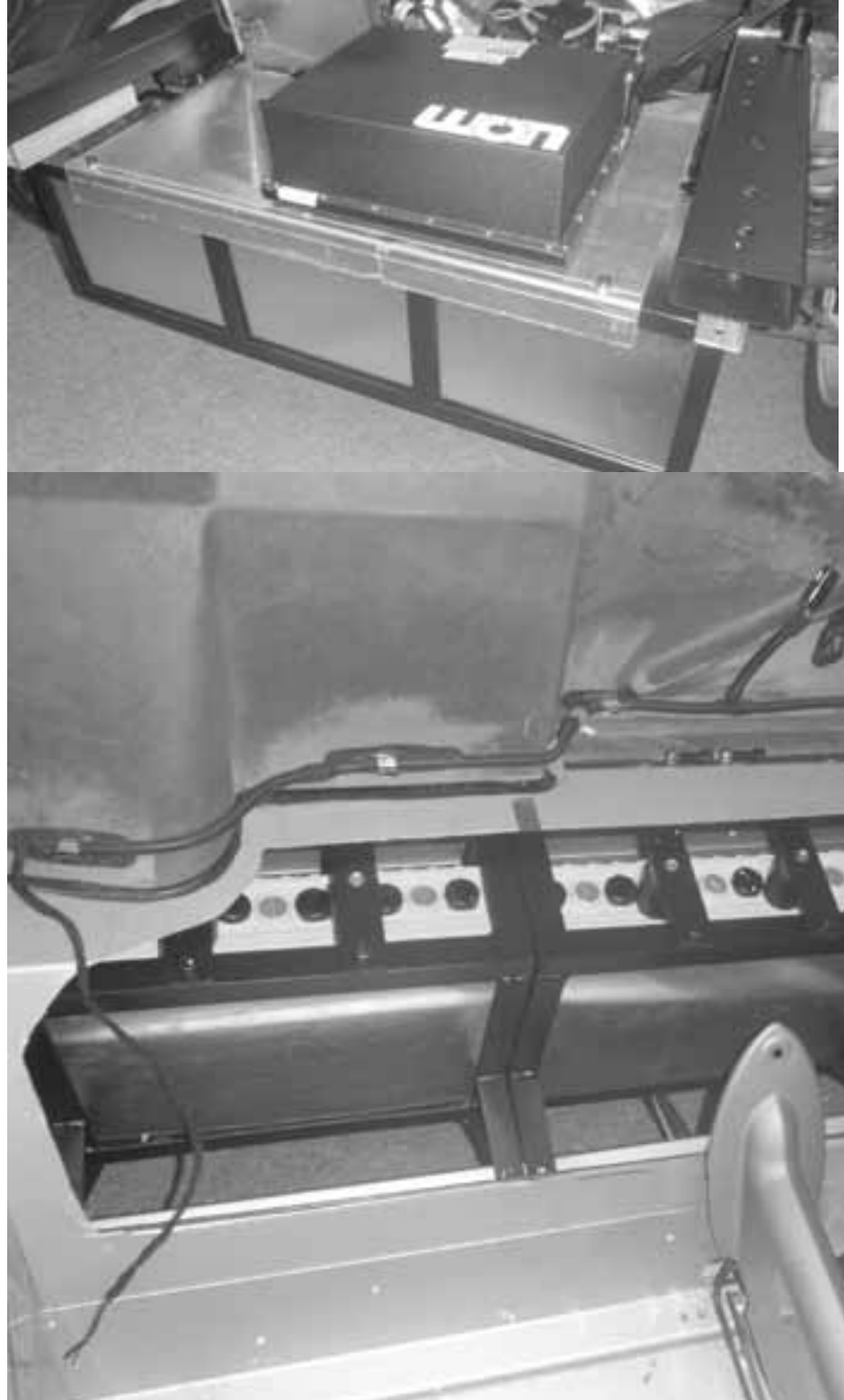
For the REV project's second car, my plan was always to convert a sport performance car. After several other choices fell through, I started looking on the Internet at cheap second-hand Elises from UK dealerships. Luckily, the father of a colleague lived near one, so we asked him to check some cars out, and in June



2008 we purchased a 2002 Lotus Elise S2 for GBP10,300 – a bargain compared to Australian prices -- but a long journey lay ahead. Customs informed me that only two companies would be licensed to import a Lotus into Australia, one in Brisbane and one in Sydney. I phoned IMG Motorsport in Sydney and they liked the idea of an electric Lotus so much that they offered their Australian compliance service free of charge. Shipping the car from Felixstowe to Sydney came relative cheap around \$2,000, but once in Australia, the cost for customs, GST and import services accumulated to over \$7,000. Then, all that was required for compliance was to exchange the instrument cluster to one with speedometer and odometer in kilometers instead of miles. This part was always “coming next week”, as Lotus Australia claimed, but after 4 months of waiting, I found a shop in the UK that had the required instrument cluster in stock and actually did deliver within a week. Getting the Lotus from Sydney to Perth took three days on rail and truck – and cost almost as much as shipping it from England to Australia – but then we finally had it.

Before we took the Lotus apart, we collected some data: we took it to Barbagallo Racetrack in WA and had a professional racing instructor give our students a safe racing experience, so we could compare before and after the electric conversion, and we used digital sound recording equipment to sample the motor sound. This would later enable us to play back synthesized engine noise (at a moderate volume) as a safety feature for the electric Lotus.

The conversion process involved over 30 Engineering students at UWA from Mechanical/ Mechatronics/ Electrical and Computer Engineering as well as several workshop staff and two academics. The conversion was planned to take one year, but we ended up needing almost twice as much. Although the Elise has no power-steering, no power-brakes, no air-conditioning and should therefore be a lot easier to convert than the Getz, it has very little available space for



batteries and controllers and we especially had some fun in the workshop building a motor mount. We ended up designing, building and enhancing 4 different designs, before we were happy with it.

The drive system is a three-phase brushless DC high-performance motor from UQM at continuous 75kW. Both motor and controller require water-cooling. The motor controller does support re-generative braking, so especially during stop-and-go city driving, some of the energy can be reclaimed, which leads to a lower overall energy consumption and therefore a longer driving range. The motor shaft is directly linked to the existing gearbox without a clutch. This allows driving the car similar to an automatic, but does require some practice for gear shifting. Luckily this is only required when changing from city driving to freeway and back.

We were able to fit 83 Lithium-Ion-Phosphate batteries in three areas: fuel tank, above the motor and gearbox, and under/in the previous storage area. This gives the car a total energy capacity of 16kWh,



which is good for driving around 100km. The original plan was to fit 100 batteries, so we are looking to fit the remaining 17 cells in the front as a future project. Due to the battery cells, the total car mass has increased by 150kg, which has been compensated for by a reinforced rear body structure and stronger shock absorbers.

Each battery cell is protected from overcharging and low discharging by an individual battery management module (BMS), developed in WA. All battery data is collected by an embedded controller that links into the mains charger and also feeds data to the touch screen driver-information-system, based on

re-licensing documents (and do not have a suitable track to determine top speed). Hopefully, by the time of print, licensing has been completed and you can look up details on our web site:

<http://theREVproject.com>

In the mean time, we are very proud that UWA's two road-registered REV cars have triggered the first Australian EV trial in WA, based on locally converted Ford Focus, as well as the first Australian fast recharging network for EVs. Electric cars may very well be commonplace



an automotive PC running Windows XP. With student-developed software, the driver can see all relevant system information, including voltage, current, energy level, remaining driving distance, charge status of every single battery cell, as well as a full GPS navigation system. All of our REV cars are equipped with 3G telemetry, which means that all this data, including the car's current location and charge status, can be monitored over the Internet from any PC or smart phone.

We had the finished electric Lotus out several times on the RAC DTEC Driving Centre near Perth Airport and it featured in the Australian Festival of Speed in November 2010. We do not have reliable data yet on performance, such as range, acceleration and top speed, as we are still waiting for the

in 5-10 years from now, but it has been a thrill for all of us to be part of the forefront of this latest wave of electric cars.

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The last GEAR day for 2010 at Lakeside saw two Historic race cars emerge. Alan Telfer took his latest Seven for its first drive in 37 years. This car, SB1349, was delivered by Geoghegan's to Sam Miller and thereafter went to Jim Quinn, followed by John Wood (Jaywood Motors), Maurice Quincy, Ray Parker (who fitted a Lotus Twin Cam and huge brakes) and Graeme Hurst. It finally came to rest with Dave Abreu in his shed in 1973, after being converted to a 1300 Clubman Formula by stuffing in a Corolla engine and gear box, which is the format it now runs. Alan rescued it from a "chook shed" during 2010.



CHEETAH AND SEVEN DEBUT LAKESIDE

December 2010

by John Barram.



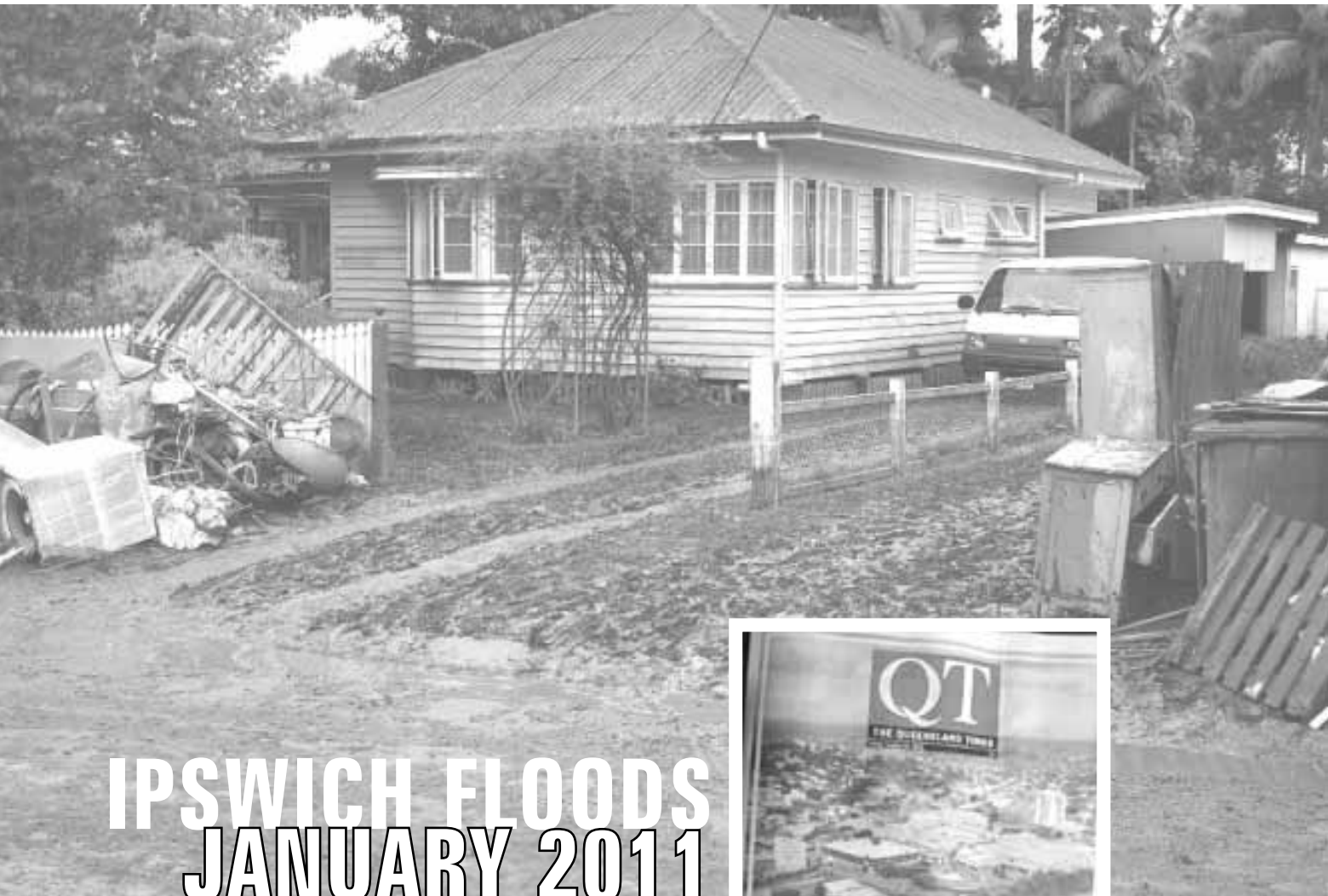


The other car is my Cheetah Mk 5 Formula 3 car. This car was built for Peter Roach in Victoria in 1975 before Gary Scott brought the car to Queensland later that year. Subsequent owners in Queensland were Ian Bland and Derek Pingel before Brian Sampson took it back to Victoria in 1991. Blair Salter brought it back to Queensland in 1995 and then Russ McBurnie raced it. I managed to buy it during 2010 after it had sat unloved in its trailer for seven years.

The Mk 5 was the first mono Cheetah and this is reputed to be the last one in existence as most were converted into Mk 6 models. The car still runs a 3K Corolla motor and Peter Holinger modified VW transmission as these cars did in the mid 70's when they were the car to beat in Australian Formula 3.

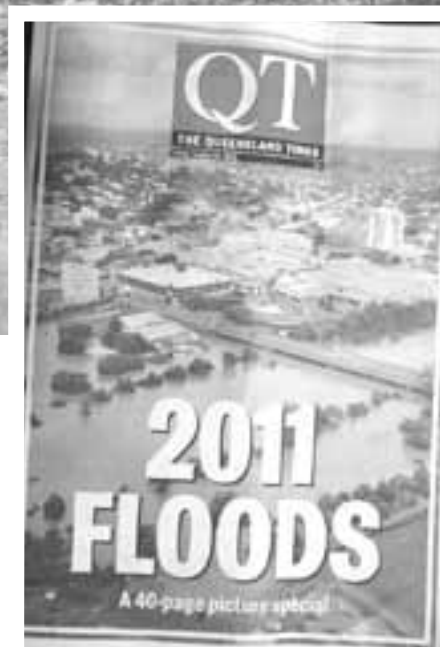
I have spent a few months giving it a good freshen-up after seven years of inactivity although the car was ready to race when it last ran. The GEAR day was a first tentative outing on old tyres to check that we have the fundamentals right and no major oil or water leaks. It felt fabulous.





IPSWICH FLOODS JANUARY 2011

by Garry Saunderson





IPSWICH CBD: The view from a tiny boat floating down Brisbane Street towards Queens Park at the height of the flooding on Wednesday, January 12.



IPSWICH CBD: Rubbish was picked up by flood waters and scattered around. IPS120111F0120



IPSWICH CBD: Visitors flocked to David Trumpy Bridge to view the floods. IPS120111F0120



IPSWICH CBD: Coles supermarket was submerged by rising floodwater on Wednesday, January 12. IPS120111F0120



IPSWICH CBD: A Mary Street resident sits on his driveway waiting for the peak. IPS120111F0120

Page 32, Queensland Times Flood 2011

What a week, rain, rain, and more rain. The flood waters have come and gone in Ipswich but what a mess it has left behind. There are so many flood affected people who are now finding out that they are not covered with insurance. I do not even know if we are covered with my policy with AAMI. Something to sort out in the near future.

We never went under. The flood waters peaked at 19.5 m and it would have had to go to 22.5m to get on to our land and 24.5 m to get to our high house. The 1974 flood peaked at 20.5m. None of our kids houses went under either and my daughter Michelle who is a copper worked 100 hours in 7 days on the flood disaster.

On Tuesday the 11th of January when our premier Anna Bligh forecast a 22.0m flood level in Ipswich I said to my wife Leila pack our bags we are not sleeping here tonight. My mate Trevor Norris offered a bed and we stayed over there. We filled all our cars with bits and pieces and then Trevor and I took 8 Cortinas 7's (GT500, Lotus Cortina, 1600E Cortina and 5 GTs) of them up the hill to my mate Wybe and Anglea Geertsma's place and my Lotus Escort out to Trevor's shed.

No time for the trailer, so we drove the 3 race cars up through town in the traffic. Wybe's mate and his wife had moved their 2 Vauxhalls and Alfa up there at







the same time as their house was flooded. I have included some pics of the cars at Wybe's place which looks like a used car yard. My son Allan had my Mk1 Cortina fastback at his place and he moved it to a friend's place on higher ground. After 2 days the water started to go down, my mate Peter Stevanovic and I moved the 8 cars back to our place.

The last 2 pics are of my neighbour behind us Adrian Hanson's house which backs on to the river and my wife Leila. They are both checking out the flood waters at the peak of 19.5m,

I would like to take this opportunity to thank all our friends and relations who phoned to offer help and support. If you could not get me on the phone it was because I was only answering about 1 in 5 calls otherwise I would not had time to move all our gear.

Till the next flood

Saundo



Lotus Club Queensland – New Website by Daryl Wilson.

I am pleased to advise that we have launched our new Lotus Club Queensland website.

While the old LCQ website has served us well for many years; it was felt it looked a bit dated and did not offer many functions of newer websites.

Many thanks to Gavin Goeldner who took care of all the difficult technical stuff including arranging a new hosting facility and migrating all the content from our old web site. Also for Gavin's patients in helping me come to grips with Joomla and designing the layout of the new web site.

Also thanks to David Conran who has continued to provide on-going technical support in the past from Sydney and various other overseas locations where he has been working.

The new website can be found at the same address www.lotus.org.au. Please have a look and I would appreciate any feedback and/or suggestions as to how we can improve the web site. Please send any comments or suggestions to me at wilmac@bigpond.com

New LCQ Website – HOME page.

