

Orient Express



November 1999 - March 2000 Issue 78

Front Cover

Paul Hansen and Hugh Pepper at Puke,
Capri's once again getting a "trashing"



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For 90+ 300ZX advice, phone Rowan if you want to be pointed in the right direction.

Magazine Team:

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And many thanks to this issues contributors

Please send all magazine articles - adverts etc to Paul Hansen

Please ensure data is sent as email, on disk, actual magazine pages or at the least, typed.

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Club Events Calendar :

Thursday 13th April 2000 Auckland Raceway Indoor Go-Karting, 82 The Concourse, Henderson
GoKart day 7.30pm No more than \$45 (less if a good turnout)
Relay event: "Drivers are divided into teams (2-3 people each team) and take turns on driving in a 80-100 lap race", cars come into the pits for driver changes. Races last around 2 hours.
Enquiries to Jonathan Cameron (021) 734-860mob

Sunday 16th April 2000 Date to be confirmed
Drags Meremere 10.00am *Z Challenge 2000, Event 4

Friday 5th May 2000 Torque performance, 6 Fremlin Pl Avondale
Dyno Evening 7.00pm Costs \$50 (cash only?) and performance runs only
Enquiries to Jonathan Cameron (021) 734-860mob

Sunday 28th May 2000 Date to be confirmed
Economy Run Community Hall 9.00am *Z Challenge 2000, Event 5
Kepa Rd
Kohimarama

Sunday ???th mid June 2000 Where? Can't tell you that (assembly point TBA)
Mystery Drive & Lunch 7.00pm Costs - PETROL and LUNCH
Enquiries to Julie Pepper 09 483 7477

Sunday 23rd July 2000 Date to be confirmed
Trial TBA 9.00am *Z Challenge 2000, Event 6

No further reminders will be sent about the above functions so mark your calendar now. It would assist our Social Co-Ordinator with reservations if you indicated your attendance prior to the function.

Race Events Calendar :

9th April 2000
Clubmans Race Pukekohe Auckland Car Club

24th April 2000
ClubSport Sprint Pukekohe Capri Car Club & SCCNZ

29th April 2000
6hr Endurance Pukekohe Northern Sports Car Club

4th June 2000 Queens Birthday Wkd
ClubSport Sprint Taupo Capri Car Club & SCCNZ
This event is the Capri's AGM Weekend - PaintBall - GoKarts - Loads of fun over 3 days.

24th - 29th October 2000
Tarmac Rally North Island TARGA

Advertising :

Do you want to advertise your services or products in the Orient Express?

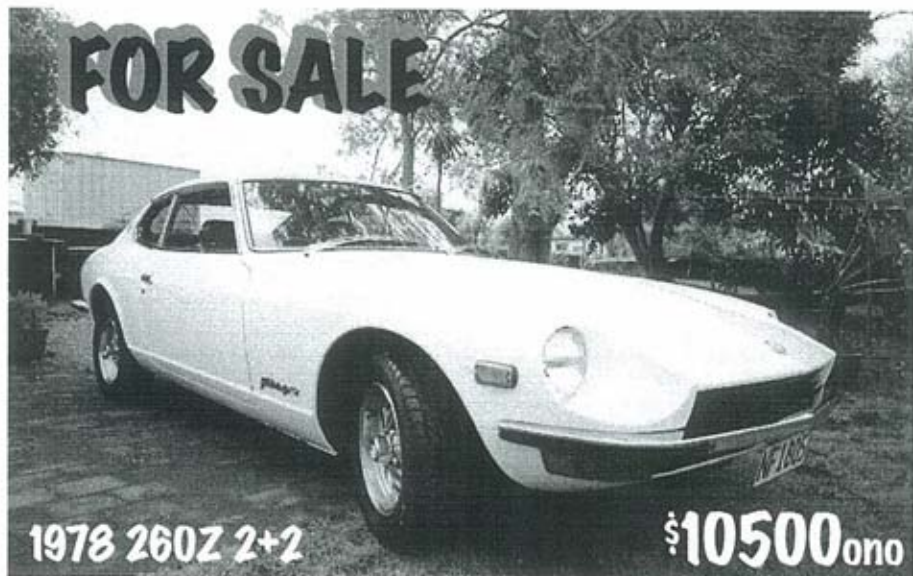
Reach your Target market! 250, that's right, 250 magazines are printed every issue. That means atleast 250 Z owners reading your advertisement.....

Costs

Full Page	\$50 per Issue
Half Page	\$25 per Issue
Quarter Page	\$15 per Issue

Note: This is Negotiable for 3 or more Issues.

Contact Paul Hansen



FOR SALE

1978 260Z 2+2

\$10500ono

- White, 2.0 5 speed Manual with original 90000km on the speedo.
- Restored professionally to original condition using genuine factory parts.
- Restored to concour's standard
- All receipts available.
- Bodywork stripped to bare metal and repainted in original colour.
- Repainted with baked on Glasurit paint.
- The car is highly detailed and must be the best 260Z around.
- Valued by Nissan at **¥12000.**

Telephone Richard: (09) 360 2530

Grass Gymkhana

March 2000

Well we finally got to have an organised event in quite a while. This year we combined our Grass Gymkhana with the BMW club. Thanks must go to club member Keith Smith for the use of his paddock and to Chris Couch (BMW) for making up all the courses.

The weather was fine and the paddock dusty. Bruce and Gillian Fensom could have cleaned up all the courses except for one small matter... No Beer!! You'll know better next time Bruce!

A good turn out of both Zed's and BMW's (about 15 of each) meant we ran three courses at once, did three timed runs and then moved on to the next course. I could have made a fortune selling both Zed and BMW air filters as it was really dusty.

Good to see it did not put anybody off competing.

Talking with people afterwards, everyone had a good fun day and I think having the BMW people there made it an even better day. Maybe next year we will see a bigger turnout of Zeds.

Now for the moment you have been waiting for (these are the fastest times for each course)....

Zed Driver	Slalom	Clover Leaf	Twin Garages
Julie Pepper	34.21	*33.81	49.17
Bob McCarthy	35.36	35.19	49.60
Jeremy Bardsley	*31.13	36.02	*38.21
Bruce Fensom	32.21	35.61	43.37
Jeremy (300 Zed)	33.70	33.89	48.10
Clint Greer	34.51	34.04	47.34
Michael Cadman	36.35	37.48	53.94
Mark Hunter	31.63	33.94	45.61
Jack Chapman	35.50	34.35	53.05

Julie was sure she was driving a truck (she just loves that 300 to pieces), Bob did the fastest times when he wasn't actually driving, Jeremy's battery thought it was a kangaroo and kept trying to "hop" out of the bonnet, Bruce proved you could do all the courses in first gear and still do good times!, Jeremy (300 Zed) proved you do not need heaps of horsepower - but hell it looks and sounds good, Clint had a sexual encounter of the "hand brake" kind, Michael made sure his lady videoed ALL of his mistakes and Jack just got talked to death by my youngest (bad move asking if he wanted to come for a ride). But lets leave the best to last...

Mark Hunter arrived and asked if Hugh and I if we had any ice. Hoping this was for the Gin and Tonic he was about to offer both of us we learnt that it was for his lady's finger that he had jammed in the car door - it looked pretty black too! - and he hadn't even started the gymkhana.

The week before Bob McCathy, Rod and Karen Brown and I had travelled to Taupo for the Capri Car Club sprints - I don't know why I keep telling you all this as no-one else seems to want to

come along, still we had a bloody good time - almost.

Bob was getting to grips with all of the track and surrounding farm land but the yellow banana come away unscathed. After scaring all the local wildlife Bob decided to pack it in and go and look for a trailer so that at future events he can throw caution to the wind and drive it harder. Good to see another keen new member and Zed owner - in fact he is so keen he has three Zeds...

1. 260Z 2+2 - the yellow banana
2. 240Z - for all you really old members, this is Cowboy's old car
3. 300Z 2+2 - 1st generation manual / turbo and soon to be the race car

Rod and Karen just kept going round and round and getting quicker and quicker. Their 240Z is very reliable and now well sorted. Rods fastest time was in the 49 second bracket, not bad for their first time there and running 2 up in the car. Good to see Rod and Karen all the way from New Plymouth

As for my day it was good and bad. Good from the fact I did my fastest time around Taupo with 2 in the car and bad from the fact that the pin finally fell out of the grenade. After nine years the bottom end finally let go, broken crank or conrod or conrod bolt or something. We will return...

Paul



Paul's secret is finally out - 'bowed legs' for "heal & toe'ng".



Is this Hugh (NECK BRACE) or Julie (the TENSIONER)? Either way - one of them looks to be having a BAD day

The "Retro-Look"
promised by Nissan
has been redefined
by the Americans

NEW!



Triple Turbo

NEW!

Now lookee here y'all, this is gunna sell like pork bellies. Triple Turbo, interheater in the dash, 4 wheels plus a spare. *Ford* badge to fool following drivers into thinking this dumb thing is a pig. Bonito LSD, 4 drum brakes (ceramic of course). Painted in the most reverent of colors - Kermit Green with orange bonnet plus pinstriped to give the effect of another set of doors

An anagram is a word or phrase made by rearranging the letters of another word or phrase. The following are exceptionally clever.

Someone out there either has way too much time to waste or is deadly at Scrabble.

Word:

Dormitory
Desperation
The Morse Code
Slot Machines
Animosity
Mother-in-law
Snooze Alarms
Alec Guinness
Semolina
The Public Art Galleries
I Bet A Decimal Point
The Earthquakes
Eleven plus two
Contradiction
Astronomer
Princess Diana

When you rearrange the letters:

Dirty Room
A Rope Ends It
Here come Dots
Cash Lost in 'em
Is No Amity
Woman Hitler
Alas! No More Z's
Genuine Class
Is No Meal
Large Picture Halls
I'm a Dot in Place
That Queer Shake
Twelve plus one
Accord not in it
Moon Starer
End Is A Car Spin

AND HERE IS THE MOST INTRIGUING PART

Year Two Thousand

A Year To Shut Down



**A Jolly Good
Read**



Official
Datsun Z Club
Clothing
FOR SALE

Style / Article	Sizes available	Colours	Price
Tee Shirts	M, L, XL, XXL	White, Blue, Red	\$18
Polo Shirts	M, L, XL, XXL	White, Blue, Red	\$25
Sweat Shirts	M, L, XL, XXL	White, Blue, Red	\$40
Jackets	M, L, XL, XXL	Black, Blue, Red	\$75
Badges		Traditional	\$10

These quality items have been embroidered with the clubs emblem and are great value. We've done a limited run so you'll have to be quick! Send a cheque (please add \$2.50 for postage). make cheque payable to Datsun Z Club Inc:

Datsun Z Club Inc, PO Box 24 176, Royal Oak, Auckland
OR buy these items at the next club event, ask for Julie Pepper

Performance Characteristics of Tyres at Varying Inflation Pressures

	@Higher lbs/in ²	@Lower lbs/in ²
Grip	Decreases	Increases
Contact Area	Decreases	Increases
Steering Response	Quicker	Slower
Lateral Stiffness	Harder	Softer
Traction, Braking	Decreases	Increases
Wet Performance**	Increases	Decreases

Adjusting the Inflation Pressure for Steering Behaviour

A: In the case of under-steering

Reduce front tyre pressure. The rear tyre pressure can be increased if necessary.

B: In the case of over-steering

Increase the front tyre pressure or decrease the rear tyre pressure

C: If the car is losing traction whilst cornering

Decrease tyre pressure.

D: If steering is unsteady in cornering

Increase the front tyre pressure or decrease the rear tyre pressure.



Kumho V700 Victoracer - The V700 is today's competition member of the Kumho ECSTA high performance tire family. It is a DOT legal race winning tire which, by capturing national championships at the Sports Car Club of America (SCCA) Tire Rack Solo II Nationals and the Valvoline Road Racing Runoffs in 1998, has again proven its capabilities in both autocross and road racing competition.

The Kumho V700 features an asymmetric tread design moulded at 5 to 6/32" of tread depth in its two major circumferential grooves. It can be run at full tread depth for autocross competition, or shaved to between 3 to 4/32" of tread depth for competitive road racing. Its tread design features extra wide tread blocks for its outer shoulder (which comprise about 1/3 of the tire's tread width) to maximize cornering grip while promoting tread life (when new, the shoulder blocks are interrupted only by shallow, 1/32" deep lateral grooves). The center and inner shoulder portions of the tread design are comprised of short, stable tread blocks to further enhance handling while providing some wet traction when new (or at near full tread depth).

The V700 features a tread compound specifically developed to provide maximum grip, handling and treadlife. Internally the V700 has two steel belts reinforced with two nylon cap plies to help stabilize the tread area and provide V-speed rated (for 13" & 14" rim diameter sizes) or Z-speed rated (for 15", 16" and 17" diameter sizes) capability. Additionally, 3 rayon carcass plies with sidewall stiffeners provide high temperature durability and quick steering response. Attractively priced, the Kumho V700 is designed to provide the best traction and treadlife for your racing dollar. The Kumho V700 has a UTQG rating of 50 A A and will initially be available in both full and shaved tread depths.

Kumho V700



TOYO TIRES

Toyo Proxes RA-1 - The first DOT-approved competition tire designed specifically for improved touring racing, features all the high-tech components to provide you with an uncommon competitive advantage. From its ultra-aggressive directional tread design to its steel wire-reinforced sidewalls, the purpose is clear-- to maintain your winning edge. At its full tread depth (8/32 inch) the

RA-1 provides exceptional wet weather traction, but shave it to 4/32 inch and hang on as your lap times drop! The Proxes RA-1 is the exclusive spec tire for the prestigious Professional Sports Car Endurance Championship. It's also a proven winner in a wide variety of improved touring, autocross, and car club events.

Aggressive Looks With The Performance To Match Two wide steel belts stabilize the tread for improved steering response and long mileage.

A unique combination of special cap and base tread compounds optimize

Proxes RA-1



surface adhesion, high-speed durability, and treadwear. Jointless edge and cap ply construction provide high speed, stability, and a comfortable ride. Reinforced nylon side ply construction improves traction, steering response, high-speed capability, and cornering. A special high bead filler significantly enhances steering response and high-speed capability without compromising ride quality. Unidirectional tread pattern provides excellent wet handling and resistance to hydroplaning. Computer-optimized tread block design reduces noise while enhancing traction in any weather.



Yokohama A032R tires are the DOT legal competition tires that are the most like real street tires. While most DOT legal competition tires are sold without a warranty, the A032R is backed by Yokohama's standard manufacturer's warranty. The A032R's internal construction is symmetric in design and it doesn't share the absolute stiffness built into the Comp T/A R1. The A032R's tread design is distinctly directional, with wide grooves dividing the large tread blocks to provide wet traction and hydroplaning capabilities not usually found in competition tires.

While the performance of the A032R wasn't as much of a surprise as the Comp T/A R1 tires, its dry track capabilities exceeded every real street tire we've tested. And while the A032R was not able to match the lap times of the Comp T/A R1 in our test, it showed it is up to the task for the driver who wants to use one set of tires for dry and intermediate conditions, as well as, drive to and from the track without always changing back to real street tires. **NOTE: Heat cycling is recommended for all competition tires to increase their life while providing more consistent performance.**



BFGoodrich Comp T/A R1 230-series tires are serious DOT legal competition tires. And compared to the others, you might suspect that the Comp T/A R1 tires used steroids and spent some time working out at the gym during their development. The immediate reaction to holding an unmounted Comp T/A R1 is the feel of the tire's stiffness and weight. This is primarily because the Comp T/A R1 tires feature a stiff asymmetric internal construction that allows the tire to excel when rim widths and/or camber adjustments are limited. The tire's inner sidewall has more stiffness than the outer sidewall to help plant the tread on the pavement. The Comp T/A R1 features an asymmetric tread pattern that virtually eliminates any design in the outer shoulder to put as much rubber as possible on the road. Comp T/A R1s start with just 6/32" of tread depth and are typically shaved to 4/32" for the serious competitors looking for the last tenths of a second per lap. In addition to reducing tread squirm, shaving of this magnitude will typically reduce the tire's weight by about two pounds (of unsprung rotating weight). The performance of the Comp T/A R1 was a surprise to everyone who hadn't competed on it previously. Instant response, steady cornering and high levels of grip were immediately apparent.



	Proxes RA-1	Kumho V700	BFG Comp T/A R1	Yokohama A032R
Treadwear	40	50	60	60
Traction	A	A	A	A
Temperature	A	A	A	A

Pace with Grace -

For Chris, Datsun Z Club Race Day was the first motorsport event of the summer season and, appropriately, his first for the new millenium

Timekeeping and Organisation for this meeting proved to be not without its problems, as a reluctant computer and an elusive password slowed proceedings for a while before Julie Pepper and her team of helpers got it back on track. I'm prepared to accept that it was a latent and tardy Y2K bug but, more realistically, it was fated to happen the moment Greg Gillespie said aloud "You'll get nine or so races each if you want and can keep on going until you cry 'enough!'"

Ironing out the off-season tweaks

Practice sessions gave a chance for drivers to set times on which grids would be initially based and everyone had time to do their best. One group had time to do even better when that pesky computer failed to deliver first time out. In the fastest group, one who seldom looked threatened was experienced Ferrari driver Stuart McCondach



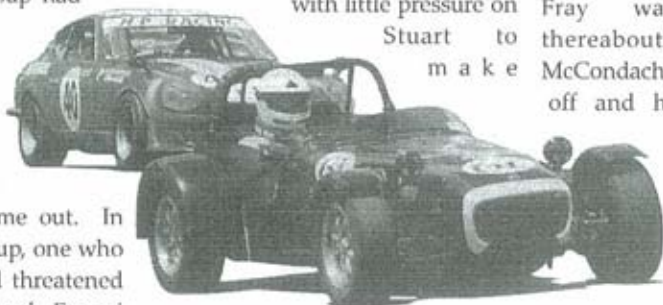
McGuire waits for the lights to drag Gillespie off the line



Daryn McDonald powers on

in his 308 GTB/R. It's super quick - reeling off eight laps of Pukekohe in a touch over 8.47 with little pressure on

Stuart to make



Fraser with Hugh Pepper up 'is date

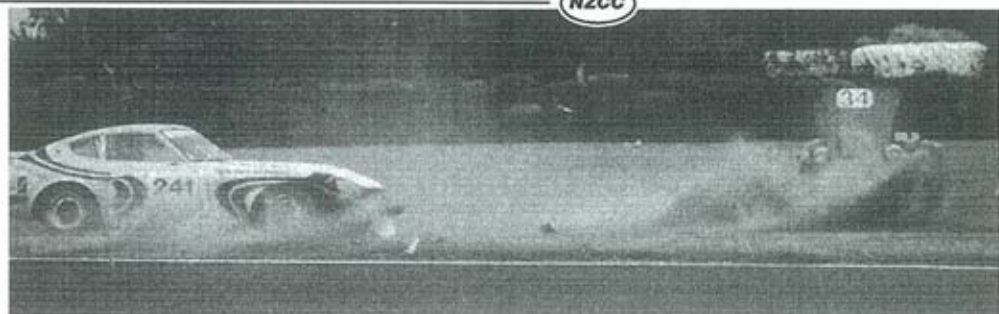
him really show his stuff.

A car which I'm afraid to me looks decidedly insect-like, something between a scorpion and a praying mantis, is the black Chevron Aprisa GT of Craig Fray. Belying its appearance, this car goes like a scalded cat with

impressive straight-line speed and a glued-to-the-track ability to corner. Certainly Fray was there, or thereabouts, to harry McCondach if he ever eased off and had only Murray Sinclair in his extremely sharp Lotus Elan to contend with for much of the fast group racing.

Datsun Z Club Race Day

NZCC



Murray Fish (240Z) slides through the hairpin as Grant Martin bounces off into the trap

Also closing on the front trio was Marty Davis who gains both confidence and experience at every opportunity in his Porsche 911 RS. Tucked in, not far behind and always able to show a what a Datsun 240 really can do, was Paul Hansen.

His 'green machine' often gives higher technology, later race-cars the hurlyburly, particularly as it scoots around them on corners and out-brakes them on the dive into the hairpin.

Possibly even closer together during their race were the second speed group which included, among others, Richard McCarthy Snr's Lotus Seven S4, Hugh Pepper's 240Z, Geoff Houghton's Fraser Seven, and Edgar Saltwegter's sprightly little ESC Clubman.

It looked as if it might be too much for even the wily McCarthy to handle as it scuttled by on the outside as

they ran through the sweeper with one to go.

John Sutherlands Mustang provided a size variant and some sheer grunt battling with the smaller Clubman cars.

Chris Packer's Mkl Jaguar showed a clean pair of heels to couple of Clubman cars in the third of the speed groups as it roared past them going down the back for the first time. Keith Mitchell (Fraser) and Ian Fair (Lotus 7) together with Steve Hutchison tightened up the battle with their similar power and handling capabilities.

More grunt and a bullocking charge through the field came from Mack Storey in the 327 Monaro GTS and Murray Fish (Datsun 240) who had started from the back of the grid. A whole host of Z's (there were 13 running on the day!) filled out this field. It's important to give the opportunity for occasional racer - for some this

is their annual race outing - and novices to get out and try their hand with the more experienced.

Drivers days do it

This points also to the value of the sort of day which the club had late last year - a 'Drivers Day' which gave a chance for club stalwarts, Greg Gillespie, Paul Hansen, Anthony Baker, Mike Dragecivich, Rob Chubb and others to share their enthusiasm for Zeds and some of their skill with a number of fellow clubbies. It also brought out a gathering of the 300ZX chapter of the club who impressed themselves (and their 240 purist instructors) with a burst or two from the Twin Turbo beasts. This is the lifeblood of classic racing. Do the basic things right by involving the enthusiastic amateurs and pretty soon you have recruited a number of individuals whose need for

speed sees them join the race fraternity. Far better that than have them go out and play games on the highway. A number of clubs use this system to good effect and involve their membership.

Even the race day is a low key

day with a family picnic atmosphere where you can run against cars of similar performance. Drivers from a number of marques had the benefit of trying their hand. David Heron in His 944 Porsche one such guest.

There were a number from TACCOC, the Auckland Car Club, Capri Club, MG and Porsche among others. Brett Campbell (260), Mark McGuire (240) and Kevin Harrison (260) had a one, two, three finish in one event before lunch though the straight 'Z' race was run in the afternoon for the nine remaining cars.

Attrition

Being early in the season it's hard to know whether the damage and failure factor is a blessing or a nuisance.

If there's going to be a good time to find problems and be able to address them before some of the bigger meetings like Whangarei and Whenuapai, this is good testing time.

However that's probably not much consolation to the



Datsun, Ferrari, fraser, Mustang....sweating the start on the dummy grid

legions who had failures at the 'Z' day. Greg Gillespie had rear spring trouble early in the day so changed them.

On starting on the second row against some of the other 240s he scorched off the line and looked set to blow them away first time down the back only to hook second gear heading through the sweeper and shear the drive shaft at the front universal.

As the 'cross' gave way the shaft lashed around driven from the differential end beating the hell out of the tunnel before Greg got the car on the grass where it went into polevault mode as the drive shaft buried itself in the softer going - with no major damage to Greg or car, at least on the surface.

Rob Chubb of the Z club also missed much of the day with problems though the biggie of the day was reserved for Murray Fish - late in the afternoon Murray, having sorted earlier problems, found himself in a tight and interesting battle for the lead

with John Sutherland in his Mustang. Lap after lap, the Mustang ripped down the back straight and grabbed the lead with Murray catching and passing him under brakes each time.

With a lap to go, the 'Z' once more shot down the open inside and had the corner only to find that one or two Clubman cars complicated things.

Grant Martin (Lotus Super 7) following the Z down the inside, appeared to move off his line when faced by the other Clubman crowding him and on hitting the grass found no braking to pull him up. He punched on through the corner impacting the 'Z' in the right front guard and carrying them through in a cloud of dust and debris.

Martin ended up buried deep in the 'kitty-litter' trap and Fish stranded on the grass; a nasty incident which could have been much worse. Somehow following cars managed to avoid the melee. Another who had a

'moment' was Luke Parker in his RS2000 who may have misjudged the line which Porsche 911 driver Glyn Taylor had as he swung into the sleeper.

A bit sudden and heavy on the brakes, Parker momentarily locked up before releasing to

retrim the car through the very fast right-hander.

Eric Stansfield and Luke Ogier in their Frasers had several good duels; the similarities of the Clubman cars once again demonstrating what fun and close racing they provide.

A couple of BMW 2002s came to race and added interest to fields where only the lone MGB GT of Neville Thompson appeared. Bill Hewson was along with his Alfasud, a great little car which used to provide whole grids a few years ago. From the same marque the 'boxy' Giulia of William Oxley proved to be no slug.

Faye Grant won the honour of the drives for the day from husband Dennis and had the big Mustang Cobra humming on the heels of several of the lighter, faster cars.

Daryn McDonald of Club Lotus kept up their representation in his

Escort, though I'm sure we'll see hordes of them in later events.

Blair

Burton's Skyline filled out several decades of successful Japanese performance cars which of course started with the 240 Z; still arguably one of the big

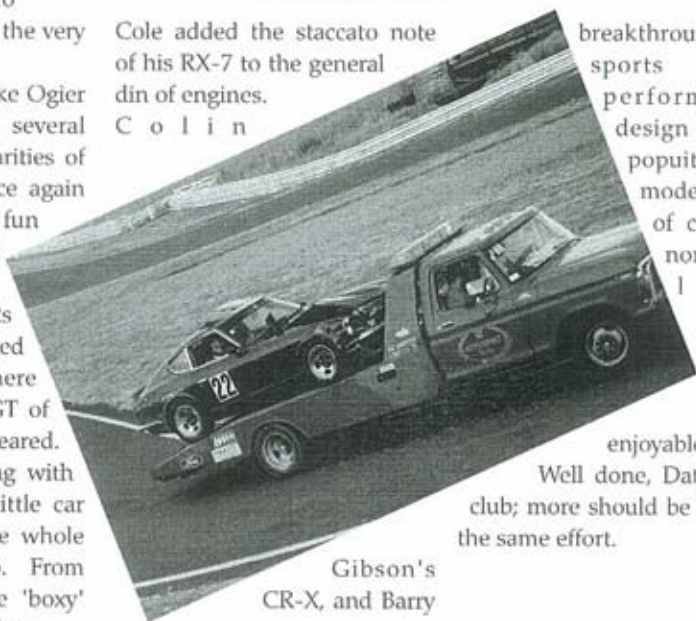


The smartly prepared and lightning fast Ferrari 308 GTB/R of Stuart McCandach

Cole added the staccato note of his RX-7 to the general din of engines.

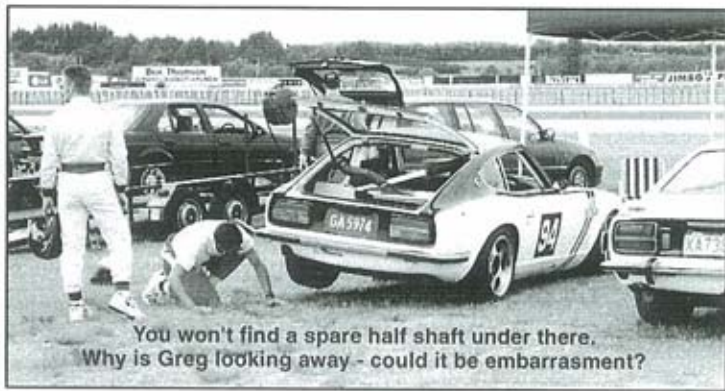
Colin

breakthroughs in sports car performance, design and popuity. A modest field of cars but none the less



Gibson's CR-X, and Barry

enjoyable. Well done, Datsun 'Z' club; more should be making the same effort.



You won't find a spare half shaft under there. Why is Greg looking away - could it be embarrassment?

Driver Training Day

December 1999

Well yesterday (19th Dec) was bloody awesome, the most fun I've ever had with my car and surprisingly quite a good workout (can see why race drivers are fit buggers now).

The day had a marvellous turnout with 300's as far as the eye could see - they just kept on coming, plus the everpresent black WRX wagon, a couple of skylines, quite a few Classic Z's and a number of Race Z's. It was excellent to see everybody out there and willing to have a go, which is the whole point of the day.

First session involved a lot of cones on the track simulating driving obstacles, zig zags, gates, slaloms etc... which was fun, low speed, low risk. Paul Hansen took me out for the first couple of laps, we were the first ones round the cones - we had to end up spacing a few of them out as Hugh had put them in for 240 turning radius, not 300.. we did a couple of laps and called it quits. Everybody got a turn round the cones, a few were knocked over, the brake test I think was the most popular (or at least the most talked about) where you had to go between two cones, hit the brakes, to try and stop for the second cones... Paul was most impressed with the 300's brakes/ABS system (pity it didn't brake like that after a couple of laps..)

We had a break for the BBQ (thanks to Charles for getting the meat sorted out for this, Mikey and Steve for cooking), a few yarns were told and Greg Gillespie went and showed off in his Z racecar (*ing quick)

The second session was slow (under 100) race lines, where cones were put on the entrance, apex, and exits of each corner. The idea was to practice your lines, using the track, learning how to drive smoothly. This session was good but a bit more difficult than I thought it would be as you weren't allowed to bring it up in speed, which made the quicker corners a bit interesting. It was good for trying to get a smooth line on the hairpin and castrol. Plus as the laps wore on you could have a bit of fun at the hairpin, ya know.. go in in 2nd gear, get all the weight onto outside tyres, halfway through lift off the throttle putting more weight onto the front wheels - unsettling the rear, then come back on the throttle - result = oversteer... woohoo :-) (not the fastest way round the corner, but hey - you know there ain't going to be a cop on the otherside)

The third session - now this was good - open track, no speed limit. The more braver souls got to wind their cars up, just don't pass on the corners was the rule (and if anyone was seen to be overdoing it they would've been brought in). I collared Anthony (Z club racer) and headed out for a bit of fun, after the first warm up lap, then the second you've got it all wrong lap, I started to get into it, aim for the lines, getting smoother, faster, more power, more drifts, brakes started to go though.. after 4 or 5 laps I was absolutely stuffed.. Anthony was constantly pushing me to get the car to go faster, experiencing all kinds of understeer, oversteer and big drifts.

Good fun.. it was a real confidence builder having him in the car, the corner that scared me the most (Mobil Hill) ended up becoming one of the easier corners, managed to keep it in 4th and gradually power out. Nissan Corner at the end of the start/finish straight is hairy but awesome - going through the corner throttle steering and correcting more on instinct than consciously thinking about... woohooo. The esses were kinda easy, but the castrol corner coming onto the front straight was quite difficult - natural instinct is to get past the apex and hit the throttle - which generally ends up in a big taily mess. No, the trick was to, just as you turned in for the corner start squeezing on the throttle in 3rd, putting more power in, you can feel the front

wheels understeering and grinding against the road, wind off a bit of lock putting some more power on eventually - once you get it right - results in a beautiful 4 wheel drift across the track landing you on the ripple strip setting you up for takeoff down the back straight :-)... After doing that 3 times in a row I was ready to come in for a break...

Car - Screwed the brake pads, they were excellent for the first couple of laps, then started glazing over and by the end of the day they were history. Top notch pads for fast road use and sprinting but sustained trackwork I don't think so...now they just aren't stopping the car so I have to pull them out and get the glaze off them. The guys with ultimates didn't seem to have any problems but I still don't think they stop that well compared to the Metal Matrix pads. Overall the rest of the car fared pretty well, took a bit of life off the tyres, never once got the engine to move over it's normal operating temperature, so I was pretty impressed, admittedly I wasn't going "that" hard down the back straight, as there wasn't much point, but everywhere else was full throttle when and where applicable. Think I have to change the gearbox fluid as 3rd->4th had a nasty graunch. Next time I'll have a cage, race seat and harness in it - standard seats and belts just don't cut it for reckless drivers such as myself.

One casualty - not really related to race day I don't think, but unfortunately Cynthia's car was having overheating problems so it's off to Harvey's to get some good TLC.

Gotta get me one of those - then after all the fun in our own cars the realllly brave souls entrusted their lives to the classic Z racers. All I can say is I want one, they don't have torque, but they can corner, and brake, and corner and brake, time after time after time ... they are phenomenol...

For those that went out to the track - Thanks for coming, I hope you all enjoyed yourselves, from the various tell tale smiles I think you did :-). This event was a success as far as everyone was concerned I think.

For those that didn't come out to the track - We are thinking about doing this again, again as a Fun-Training day, so leave your excuse book at home, and get your butt out there ! This event was not aimed at racing, but more as car control and getting you to become a better driver, and gain more of an appreciation of what you and your car are capable (or not) of. Regardless of whether you have a bog standard family car (of which there were a couple) or highly modified TT Z you will come away having learnt something.. So next time we hope to see you out !!



Hah, the TeKuiti termites have been at it again

Thanks to: Julie & Paul & the rest of the crew of the Datsun Z club for organising the day, and being instructors, Charles for getting the meat, even though a last minute change of plans meant he couldn't come, Mikey & Steve for doing the bbq, Chris Poland for the photo's

Be Safe on the roads

Rowan

Tires and Traction

The most important aspect of handling is improved traction for the vehicle as a whole. While improved traction is the key, the goal is to increase cornering speed, reduce braking distance and enhance acceleration. The tire is the link to the road and, by itself, is the most important factor in the handling equation. Additionally, everything else you change in the suspension system will ultimately have an effect at the tire contact patch. Thus, understanding the basics of the tire and how it develops traction is paramount to making handling improvements.

Start off by thinking as if you were a rubber molecule at the tire contact patch. The goal of this exercise allows you to understand an important point: what happens at the tire contact patch is all that counts.

When you attempt to increase traction, the only factor that matters is the increase in traction, not what was done to increase traction. The rubber molecules at the tire contact patch do not know how they were made to work harder (nor do they care). They only know that they are now working harder, helping your vehicle brake, accelerate and corner more quickly.

Increasing Tire Traction

There are three factors that increase tire traction:

- ~ Increasing the friction between the tire and the road.
- ~ Increasing the number of rubber molecules at the tire contact patch.
- ~ Increasing the vertical load on the tire.

These are rather general statements, requiring further explanation.

Increasing Friction Between Tire and Road

This can occur in two ways.

First, the coefficient of friction of the road surface can increase. The coefficient of friction is an arbitrary measurement of grip created by a surface. The higher the coefficient, the greater the grip. Roads of varying materials—such as asphalt, concrete, dirt and so on—and in different states of repair will have different coefficients of friction. This will let the tires grip the road more firmly. We have no control over this, short of choosing specific roads to drive on. Second, we can increase the coefficient of friction of the tire. This is done by choosing a softer rubber compound tire. The softer rubber molecules will grip the road more firmly, but will also wear more quickly.

Increasing Amount of Rubber at Contact Patch

This can be accomplished in three ways. First, and most obvious, is a wider tire. Second, we can choose a tire with fewer grooves in the tread, thus increasing the area of the tire contact patch. This has obvious flaws on wet, slippery surfaces.

Finally, and most importantly, the existing contact patch area can be more efficiently utilized by properly tuning the tires and suspension system so that the maximum number of rubber molecules available are actually working to their fullest potential.

Increasing Vertical Load on Tire

The traction a given tire can generate increases with vertical load on the tire. Vertical load is the combination of vehicle weight resting on the tire contact patch, plus any aerodynamic downforce that may be present. The rubber molecules at the tire contact patch are further pushed into the road surface as the vertical load increases. This allows the rubber molecules to do more work.

Contrary to popular belief, the increase in vertical load does not cause the tire contact patch to grow larger to any significant degree—at least for the modern, low-profile high-performance or

creasing tire. The traction increase is due to the pressure on the rubber molecules. Try pushing a rubber eraser across a smooth surface. It will slide easily with no downward pressure being applied (vertical load). Now push down on the eraser while sliding it. The effort needed to move the eraser increases. The harder you push down, the more traction the eraser is able to generate.

Vertical load can be increased by adding weight to the vehicle, so that the tire contact patch sees more vertical load. While this will increase traction, the work that each rubber molecule at the tire contact patch must do also increases. Cornering speed, braking distances and acceleration will not improve. In fact, performance in these categories will actually deteriorate.

Aerodynamic Downforce

Aerodynamic downforce also increases the vertical load on the tire contact patch. For cars on the street, this is not a factor worth serious consideration, but on any competition vehicle, aerodynamics must be considered. Aerodynamic downforce adds to the vertical load on the tire, but does not add to the weight of the vehicle. The tire contact patches are pushed harder into the road surface, thus creating more traction. Since the vehicle weighs the same as before, the tires have no increase in workload, but have a greater capacity to do work (more traction) so the vehicle can corner at a higher rate of speed. Traction for braking and acceleration also increases. This is the reason wings and ground effects bodywork have appeared on race cars over the last twenty-plus years. Aerodynamic forces increase with the square of speed. In other words, if the vehicle speed is doubled, then the aerodynamic forces are four times greater. This relates to downforce, lift and drag. Aerodynamics have a much greater effect at high speed than at low speed. For production-based race cars and, to a much lesser extent for the street, one of the keys to improved handling is improved aerodynamics. First, it is important to reduce or eliminate aerodynamic lift. Lift reduces the vertical load on the tires, and hence the amount of traction. This is best accomplished by reducing the airflow under the vehicle. Rear spoilers can also reduce lift or even create a small amount of aerodynamic downforce. Reducing aerodynamic drag is the second area for improved aerodynamics.

Vertical Load Effects on Tire Traction

Tire traction increases as vertical load increases. We have already explored how this works, but that is not the entire story. While traction does increase as vertical load increases, it is not a linear relationship. The vertical load increases more quickly than the traction. For example, if we increase the vertical load by 100 percent, traction may increase by only eighty percent. This principle is crucial to fully understand how tire traction works on a vehicle.

Keep this relationship in mind: an increase in vertical load will increase traction, but the traction increase is proportionally smaller than the increase in vertical load. If the load increase is due to aerodynamic downforce, the work that the rubber molecules at the tire contact patch must perform is reduced for a given cornering force (lateral acceleration). Since the capacity for work done by the rubber molecules is the same as before, the cornering force (lateral acceleration) can be increased. In the same way, increasing vertical load on a tire contact patch by adding weight to the vehicle will increase the traction available. But here is the big-time glitch. Remember, the traction increase is proportionally smaller than the weight increase. Since the work required of the tire contact patches is increasing at a rate proportional to the weight increase, but traction is increasing at a slower rate, the lateral acceleration or cornering speed of the now heavier vehicle is less. The extra weight also hurts acceleration and braking performance. This fact is why Trans-Am teams yell and scream over a 50 lb. weight increase. It might appear that 50 lb. in a

2,200 lb. car with 600 hp is insignificant, but it is incredibly important.

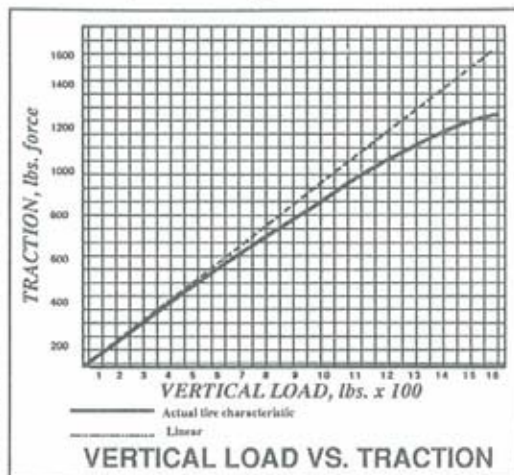
For any 2,200 lb. car capable of cornering at a lateral acceleration of 1.0 g, the addition of 50 lb. to the total weight of the vehicle would reduce the lateral acceleration (cornering force) to 0.984 g. On a 200 ft. diameter skid pad, the time needed to negotiate one lap at 1.0 g is 11.04 seconds. The time needed to negotiate one lap at 0.984 g is 11.16 seconds, a one-percent increase in lap times. Since about forty percent of a lap is spent cornering at the limit, for a lap time of 1 minute. 30 seconds for the example car at 1.0 g, 36 seconds is spent cornering at the limit. For the car with fifty extra pounds of weight added, the time spent cornering at the limit would increase to 36.36 seconds. This does not take into account the effect on braking performance and acceleration, which would be about the same loss in time. Top speed is the only factor not affected by the weight increase. So the 50 lb. costs about 0.75 second per lap in this example. In racing terms, that is an eternity.

One factor that helps to explain this phenomenon is the relationship between vertical load on the tire and the coefficient of friction of the tire. The coefficient of friction tells us the relative amount of grip that a tire (in our case) is capable of generating. As vertical load increases, the coefficient of friction decreases. This is a relatively minor loss in grip, more than offset by the increase in grip as load increases. It is, however, one factor that explains why the total traction increase with increasing load is not a linear relationship.

Tire Slip Angle

The pneumatic tire is a marvelous invention. Its characteristics have allowed phenomenal performance from the automobile. One of the characteristics of a tire is the twist in the carcass of the tire when it corners. A tire does not have to be rotated by the steering for this twist to occur.

The traction of a tire increases as the vertical load on the tire increases. In this graph, the dotted line shows a linear relationship between vertical load and traction. If this relationship was the actual relationship, then weight transfer during cornering, braking and acceleration would be of little consequence. However, the actual tire characteristics are represented by the solid line, and this graph shows that the relationship is not linear. Traction increases with load, but at a slower rate. This affects total vehicle traction during cornering, braking and acceleration, reducing the total amount of traction available. This tire characteristic is the most important to understand when tuning the suspension of a car.



When a vehicle is steered, all four tires experience this twist in the carcass. Slip angle is the technical name for this.

When a tire is rolling in a straight line, the rubber molecules at the tire contact patch trail one in front of the other as the tire rotates. In a left turn, for example, each molecule, as it reaches the

lead-ing edge of the tire contact patch and begins to touch the road surface, moves farther to the left than the previous molecule. As the molecule moves farther to the rear of the contact patch (as the tire rolls forward), it scribes an arc to the left. If you could trace the path of a single molecule as it moved across the road surface, it would make a smooth arc approximating the arc of the vehicle through the turn. It is like placing your right foot slightly ahead and to the left of your left foot as you walk; the feet point forward, but you "steer" to the left. At the tire contact patch, this movement to the left is caused by the twist in the tire between the tire contact patch and the tire sidewall.

The tire sidewall is then pointing in a different direction than the molecules at the tire contact patch. The top of the sidewall, where the wheel rim meets the tire bead, is one point of measurement. The other point of reference is the instantaneous path of the rubber molecule at the tire contact patch. The difference in direction between the reference points, measured in degrees, is the slip angle. The wheel always points farther into the turn than the tire contact patch. This is true at both ends of the car.

Tire Slip Angle and Cornering Force

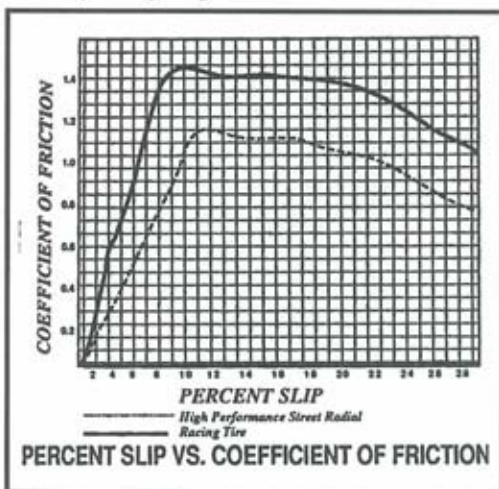
When a vehicle is steered into a turn by the driver, the wheel begins to turn first. The steering force is then transmitted to the tire sidewalls of the front tires. The force, which begins twisting the sidewall, moves to the tire contact patch and the vehicle begins to change direction. As soon as the steering force reaches the wheel, the twisting motion begins on the front tire sidewalls. The front of the vehicle begins to change direction. The vehicle then develops a yaw angle, which allows the rear tires to experience a load on the tire contact patch, with the same twisting force as at the front tires. The rear tires then develop a slip angle and follow the front tires through a turn. At low cornering forces, the slip angles are small. As cornering forces increase, so does the slip angle. Maximum cornering force—the limit of the tire—is reached at a given slip angle. If the slip angle is forced to increase beyond that point (more cornering speed or more steering lock applied by the driver), the cornering force reduces and the tire will begin to slide.

Understeer and Oversteer

If the tires begin to slide at one end of the car before the other, the handling balance is out of whack. The front and rear slip angles are different, and want to follow different paths along the road. When the front slip angles are larger, the vehicle will push or understeer.

When the rear slip angles are larger, the vehicle is loose or oversteers. If both front and rear slip angles are equal, the car handling is neutral, and perfect balance has been achieved. When a car understeers, the path of the rubber molecules at the front is a larger radius than the path of the rubber molecules at the rear; the opposite is true for oversteer.

When a vehicle oversteers, the rear of the car will slide out when the limit of adhesion is reached (maximum cornering force). The car will try to continue in a straight (or straighter) line if understeer is encountered.



Shock

Wedg



This Nissan's nose is the perfect home for



for three litres of Commodore EFI Turbo six

Street Machine

EVER met one of those blokes who can't, or won't, take no for an answer? When it comes to modifying cars, Queenslander Peter Campbell's not keen on polluting the bloodlines. Like, if it's a Ford, it has to have a Ford engine. If it's a Chev, it has to have a Chev engine and so on. So, you might ask, how can Pete tolerate his turbocharged Datsun 240Z street stalker coupe being powered by an engine out of a Holden Commodore?

"It's out of a VL Commodore Turbo but I don't have a problem with that," he explains. "These engines may have had Holden badges on them when fitted to Commodores, but they were designed and built by Nissan.

"That's typical of the build plan for the whole car really, to make it reliable and easy to service," he adds. "We've engineered it so that virtually every part can be bought new over the counter at a Nissan or Holden dealer. There's so much commonality of parts between Nissans that it's easier to do it that way. It's too hard using one-off stuff." Smart philosophy for a bloke who doesn't have much time to get his hands dirty these



days. Working as a national sales/marketing manager leaves bugger-all time to pull on the overalls, so Peter works closely with Alan Stean, at Brisbane's Z-Car Workshop, to continue development of the car.

The original retro-fit of the blown RB30ET six was the work of NSW-based panel beater Nick Galaxidis. Nick also put his skills to good use getting the bodywork into perfect shape, including bonded flared guards and detail touches like the headlight bowls that have been welded and smoothed into the front guards. Tony Sultan laid on the bright 'n' breezy Dulux Mariner Blue which is from Mazda's MX5 colour chart.

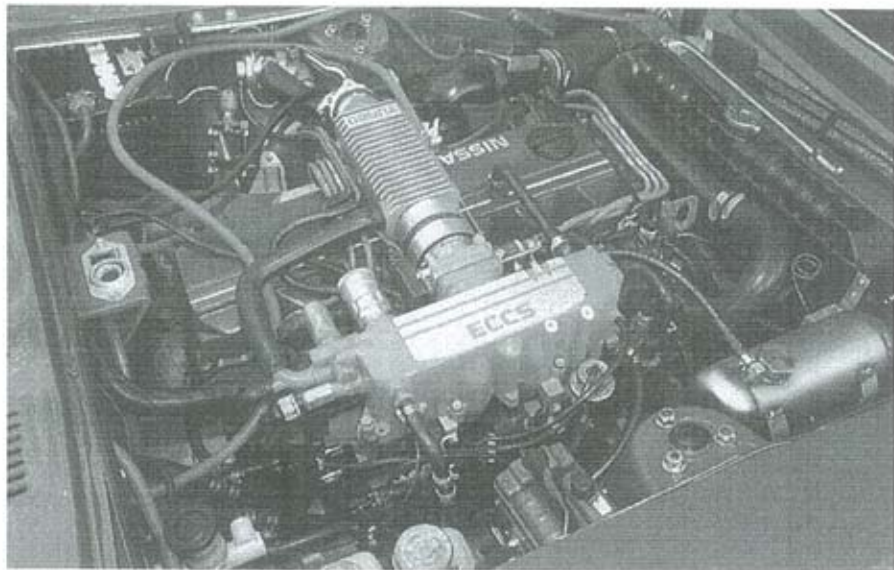
The mechanical spec is rich with the kind of no-nonsense engineering that makes this two-door flyer such a satisfying street ride. The factory turbocharged RB30ET three-litre straight six was a reliable 150kW balltearer straight off the production

line, so there's been very little internal tampering.

A big AVO intercooler keeps inlet temperatures down, while a threecore radiator with twin thermo fans keep the temps down. Dumping the exhaust gas is a beefy three-inch exhaust system including, of course, a catalytic converter and monster muffler.

The heavy-duty clutch and rugged Nissan-built MX7 five-speed box - also lifted from a VL Commodore Turbo make a neat fit, feeding power down a modified tailshaft to the 240Z's independent semi-trailing arm rear suspension.





Holden VL Commodore Turbo engine was supplied to Holden by Nissan. Si it sorta makes more sense here than in a Holden.

Peter and Alan beefed up the diff with a R200 unit from a Jap-spec 1990 Nissan Skyline.

"It's amazing how much of this stuff virtually bolts straight in, considering the age gap of the models," Peter says.

The suspension features plenty of nice engineering, it's fully adjustable, with competition-grade rose joints on most connections. Peter's Datto development is definitely heading down a road-

registered racer path, with events like Targa Tasmania, lap sprints and hill climbs in mind. It really hugs the road thanks to a low static ride height but still allows plenty of wheel travel over the bumps. The low narrow-coil King springs (6001b front/5001b rear) sit on adjustable platforms, with Bilstein gas shocks and polyurethane bushes. Big 330mm Willwood disc rotors and four-pot callipers with Pagid competition pads can take serious abuse, with Nissan factory hipo alloy finned drums up the back. Bitumen stomp is courtesy of 225/50Z RI 6 fronts and 245/45ZR16 rears, on polished New Zealand-made Motoform 81/2x16 alloys.

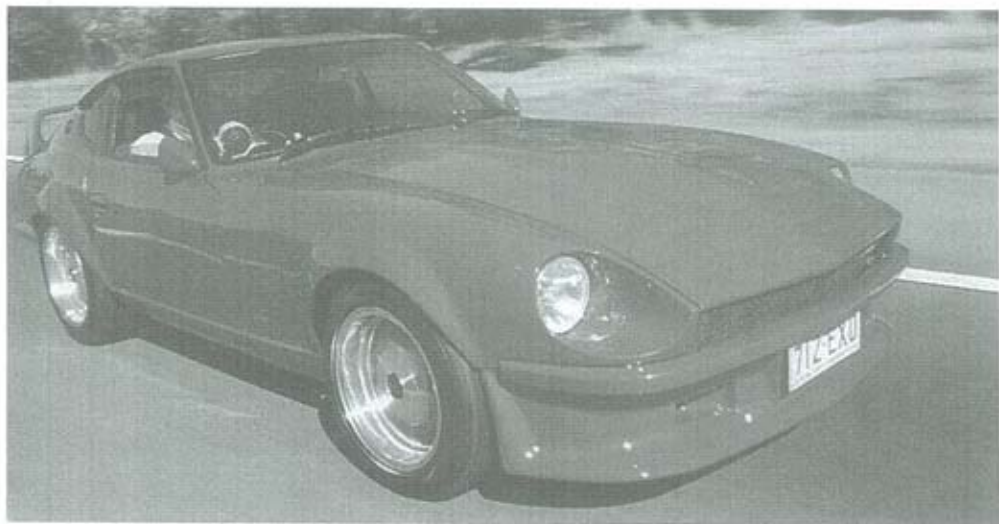
"It's a good thing to drive," Peter smiles. "It has plenty of grunt and a nice chassis that

can keep up with it. And it pulls plenty of looks on the street, too."

Inside is a nice place to be, thanks to a neat re-stitch by Rob Wilson Auto Trimmers. Recaro buckets and harnesses keep two butts nailed to the floor, with a Momo wheel and Auto Meter gauges adding to the flavour.

Don't go looking for a giant sound system inside. Peter doesn't like the idea of additional kilos being added which can tarnish performance. Apart from the basic creature comforts of good seating and neat trim, this Zed has been built to hit hard and hang on like a race car. It achieves those goals very effectively, but Pete has more ideas. "I'm thinking about slotting in a 4.5-litre quadcam V8," Peter reveals, is that the same super smooth,





high horsepower engine found in Nissan's luxury Infiniti flagship? Yeah, that's the one," he says, with a gleam in his eye. See what we mean about not polluting the bloodlines? it's obvious Peter wouldn't have it any other way.

**Peter Campbell's
1971 Nissan 240Z coupe**

Colour: Mariner Blue

MAKIN'IT MOVE.

Type: VL Commodore RB30ET

SENDIN'IT SOUTH:

Gearbox: VL Commodore

MX7 five-speed manual

Diff: IRS Nissan R200 3.9:1

**IN THE COMFORT
ZONE.**

Wheel: Autotechnica

Seats: Recaro

HOLDING IT UP:

Rims: 16x8 Motoform

Rubber: 22515OZR16



Mr Gillespie at the drags

MORSELS

This is a story in a local South Island community paper.

Recently a routine police patrol parked outside a local neighbourhood tavern. Late in the evening the officer noticed a man leaving the bar so intoxicated that he could barely walk. The man stumbled around the car park for a few minutes, with the officer quietly observing. After what seemed an eternity and trying his keys on five vehicles, the man managed to find his car which he fell into. He sat there for a few minutes as a number of other patrons left the bar and drove off. Finally he started the car,

switched the wipers on and off (it was a fine dry night) flicked the indicators on, then off, tooted the horn and then switched on the lights. He moved the vehicle forward a few inches, reversed a little and then remained stationary for a few more minutes as some more vehicles left. At last he pulled out of the car park and started to drive slowly down the road. The police officer, having patiently waited all this time, now started up the patrol car, put on the flashing lights, promptly pulled the man over and carried out a breathalyser test. To his amazement the breathalyser indicated no evidence of the man having consumed alcohol at all!

Dumbfounded, the officer said "I'll have to ask you to accompany me to the police station this breathalyser equipment must be broken." "I doubt it", said the man, "tonight I'm the designated decoy."

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An Interesting Letter from a Glenfield College student

To Roger Bailey - MotorSport NZ

Dear Roger

I am writing to express my appreciation for both your skills and your patience! I attended your ProDrive course last month and I was really impressed with the logical and safety-orientated approach you used. So much of what you taught in your theory section is just 'common sense' and yet it is information that the average teenage driver does not know.

I felt that the driving part of the course was a very efficient use of time and resources. I learned so much in such a short time. My instructor Julie was great in that her instructions were repetitive and designed to be remembered in crisis situations (more about that later) and her teaching was very patient and supportive. We learned so much about what to do when the unexpected happens - I cannot believe that this is not a compulsory course for people learning to drive.

On a personal note, I really appreciated your patience and persistence after the course. To spend an hour and a half breaking into a student's car was above and beyond the call of duty!! If you hadn't been there I would have either smashed a window or resigned myself to an AA bill in the near future. The enclosed is not exactly the promised Moteiths, but I am sure you can be supping a frothy brew in time for Christmas.

Should you wish to see the following for anecdotal fodder, please feel free - as long as you use a suitably fake name of course!

After my extended stay at the airfield I was naturally eager to return home. I drove down my street which is long and smooth with a nice curve in it..... I confess I was travelling too fast for the occasion (about 60kms/hr) and I met an approaching car. There were cars parked on both sides of the road, creating a one-car corridor. I entered the corridor first when to my horror I realised that the other car wasn't giving way! Naturally I SLAMMED on the brakes and skidded blithely along - I KNEW I would crash, when I remembered Julie's voice saying stab-stab-stab on the brake. Hastily I applied my new-found skills and to my relief, my car actually stopped - only a whisker from the other car. I sat there with my heart pounding in the middle of a cloud of burnt rubber and felt very grateful to you and your team.

Could you please convey my thanks to Julie - without you all I would have been a sadder, poorer and absolutely NONE the wiser. I only hope that the other driver can go through the same experience (the former one of course) with equally beneficial results

Many thanks
Stabber



The 17th Annual Whenuapai Historic & Classic Race Meeting Press Release February 2000

The Thoroughbred & Classic Car Owners Club (TACCOC) can at last release the date for the Year 2000 race meeting, to be held at the Whenuapai Air Force Base as in previous years. The Royal New Zealand Air Force's commitments this summer have forced the usual late February meeting – so popular with motorsport enthusiasts throughout New Zealand – to be rescheduled to the 15th & 16th of April this year.

Whilst this has caused TACCOC some concerns (rescheduling personnel and sponsors for an event with such a formidable financial and manpower requirement is always difficult), there are spectator and competitor benefits. The annual Pinepac Whenuapai Race Meeting is always an exceptionally popular event with the Historic & Classic sector of motorsport. This April's meeting will be even more important. The later timing of the event will bring the final round of the Formula Libre Championship. This spectacular class of single-seater and sports racing cars includes Formula 5000 cars and Indy cars, Formula 3000 cars and Formula Brabhams, plus the occasional CanAm car. Whenuapai will see their final run-off for this year's title.

The featured marque this year will be Lotus cars, which celebrated its fiftieth anniversary last year. A wide cross section of road and racing cars from this famous and revered marque is expected, and some "Lotus Only" events will be held on the track. All Lotus fans and owners should contact the nearest chapter of their club immediately for further information on how to participate in this exciting event.

Also revived for this meeting are the classic battles for the Lotus & Alfa Romeo Challenge Trophy. The whole weekend will certainly feature some torrid racing, but a balance is restored with the Regularity Trials. These favour the lovely old classics – the Jaguar XKs, Austin Healeys, Triumph TRs, Aston Martins, valuable old Porsches, Alfas, Lotuses and Morgans as they take to the track under controlled conditions, racing against the clock. This allows us all to enjoy the sights and sound of these famous and historically significant marques.

The usual entry of around two hundred and fifty competitors will guarantee an exciting weekend of classic motor racing.

Public entrance to the event is from Brigham's Creek Road. Tickets will be available at the gate. For further details contact the event coordinator, Robin Lock (09) 418 3386

Concours Winna's



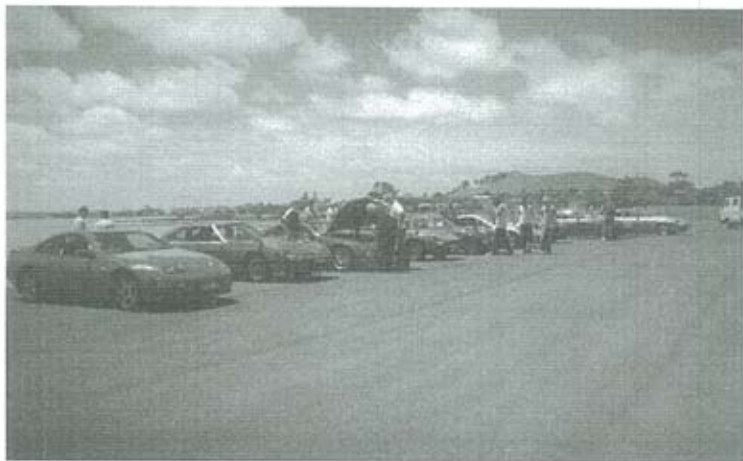
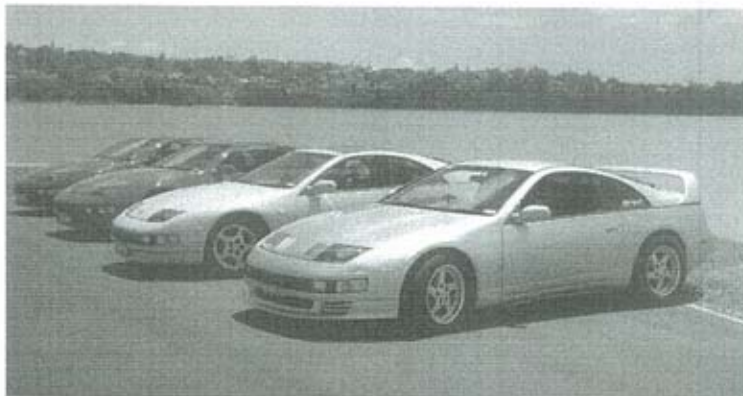
MORSELS

Ever wondered why it's a beautiful ute - Holden showed off a Commodore VS ute at the Detroit Motor Show. The Aussie icon was there to showcase the Aussie arm of General Motors. But why the ute, you ask, when Holden could have sent the Commodore SS, the prototype Commodore Coupe or an HSV Senator? The Americans wanted a pick-up or "truck." But they didn't tell show-goers that the VS ute has been around since 1995 and that it will soon be replaced by the VT.

Bentley's big bucks

Got a spare \$7000? No, not for a digital television set but a couple of sterling silver items from Bentley - a 375mm drinking flask in the shape of a Bentley radiator, and a pair of cufflinks, both carrying the winged B emblem. The lid on the flask is a scaled-down version of the quick-release radiator cap of the Le Mans Bentleys of the 1920s. If you really want to go the whole hog, platinum and diamond cufflinks gain adorned with the winged Bentley will set you back \$15,000.

An auto accessories company in Japan has developed a instrument which electronically tells drivers the direction in which the steering wheel is pointing the car, in case you are desperate to know. The info is displayed on a screen on the dashboard. We don't know if it works in reverse gear. We don't care.



MORSELS

Seat with a phew

Four-wheel-drive owners who have just returned from camping and coping with the basic toilet facilities at some of the countries more isolated beaches or lakes might like to mark down for future reference the latest American accessory. It's a toilet seat called Uncle Booger's Bumper Dumper that attaches to the vehicle's towbar. You um, can sit in comfort while trying to figure out why Uncle Booger invented it in the first place.

Prickly problems

It's not nice, the way the humble hedgehog often ends its days, sprawled gutted on the road. So try to avoid running it over next time because it may ultimately save your life. Scientists studying the makeup of the hedgehog's spines - its prickles - believe the honeycomb-like compound is one of nature's greatest cushions. A single hedgehog prickle can apparently absorb and disperse a huge amount of energy. The car industry is looking at how exactly it all works. Not that the family four-door will end up with a long, bonnet and shuffling along the road covered in prickles - just that carmakers may one day thank the hedgehog for improving safety.

Manfeild Run-around



Don McLean



Hmmm - lots of non-members here!!!



MORSELS

A thief had to jog to a police station in Hanover, Germany, handcuffed to the police car. Apparently, his body odour was so bad police insisted he remain downwind and outside the car.

Down the road in Stuttgart, identical twin sisters, aged 20, were caught speeding in a convertible car by a roadside camera. They escaped a fine because both denied driving and police couldn't prove which was at the wheel.

Drink-driver Rebecca Escobar was ordered by a judge in the United States to walk around her home town wearing a sign that reads: "I am a convicted drunk driver and as a result I took a life."

Actor Jean-Claude Van Damme gets himself out of all sorts of on-screen scrapes. But offscreen he's just another citizen. That's what Hollywood cops told him when they stopped his car on Sunset Boulevard and arrested him for drink-driving.

Luciano Pozzoli, aged 18, wanted a Mercedes-Benz for his birthday. But his mum and dad reckoned the Merc was a bit flash for a young man in Sora, Italy, so they bought him a Fiat. Luciano burned down the family home.

A German driver who grew tired of being tailgated to and from work fitted a James-Bond style device to his Opel manta which sprayed oil over the car behind. Ulf Schwarz, from Frankfurt, was caught after a victim wrote down his number plate.

Paul's Cookie Recipe

So, here it is !!!

A friend of mine paid \$US250 for this .. She doesn't want Neiman-Marcus to ever get another penny off of this recipe.. (Recipe may be Halved):

- 2 cups butter
- 4 cups flour
- 2 tsp. Soda
- 2 cups sugar
- 5 cups blended oatmeal
- 24 oz. chocolate chips
- 2 cups brown sugar
- 1 tsp. Salt
- 18 oz. Hershey Bar (grated)
- 4 eggs
- 2 tsp. baking powder
- 2 tsp. Vanilla
- 3 cups chopped nuts (your choice).

Measure oatmeal and blend in a blender to a fine powder.

Cream the butter and both sugars.

Add eggs and vanilla; mix together with flour, oatmeal, salt, baking powder, and soda.

Add chocolate chips, Hershey Bar and nuts.

Roll into balls and place two inches apart on a cookie sheet. Bake for 10 minutes at 375 degrees. Makes heaps of cookies.

Enjoy cooking the most expensive cookie in the world!!



BOC GASES AUSTRALIAN SUPER TOURING CHAMPIONSHIP



MORSELS

A circus dwarf, nicknamed Od, died recently in Northern Thailand when he bounced sideways from a trampoline and was swallowed by a yawning hippopotamus which was waiting to appear in the next act. Vets on the scene said Hilda the Hippo had a gag reflex which automatically caused her to swallow, the Paftaya Mail reports.

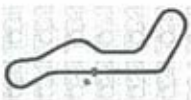
A Colorado man is recovering after being shot by his dog Samson. Authorities confirmed, the golden retriever did pull the trigger, but it apparently was an accident. Joseph Cameron Tiffany was hunting when he left his gun on the ground. Samson stepped on it, releasing the safety catch and pressing the trigger. Tiffany, hit in the foot, is likely to lose two toes and part of his foot.

A Russian army officer faces a long spell behind bars after police discovered he tried to sell a railway locomotive to boost his pay. The army shunting engine was found by chance at a power station after its disappearance during repair work. The officer had forged documents about the engine's origin and then drove himself to the plant while local authorities tried to raise the \$US122,000 asking price.

Disabled driver Barry Austin broke down on an outback road in Australia. He survived on radiator water for five days until help arrived from Alice Springs.



Round 1
DATE May 28
TRACK Oran Park (South Circuit)
STATE New South Wales



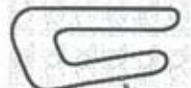
Round 2
DATE June 18
TRACK Lakeside
STATE Queensland



Round 3
DATE July 9
TRACK Oran Park (Grand Prix Circuit)
STATE New South Wales



Round 4
DATE August 13
TRACK Mallala
STATE South Australia



Round 5
DATE November 12
TRACK Queensland Raceway or Lakeside
STATE Queensland



Round 6
DATE December 10
TRACK Symmons Plains or Baskerville
STATE Tasmania



Round 7
DATE January 7, 2001
TRACK Sandown
STATE Victoria



Round 8
DATE February 11, 2001
TRACK Oran Park (South Circuit)
STATE New South Wales

SBK SUPERBIKE WORLD CHAMPIONSHIP



March 28th
Kyalami
South Africa

June 18th
Misano
San Marino



April 23rd
Phillip Island
Australia

July 9th
Laguna Seca
USA



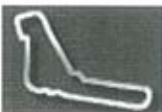
April 30th
Sugo
Japan

August 1st
Brands Hatch
Europe



May 14th
Donington
Great Britain

TBA
A1 Ring
Austria



May 21st
Monza
Italy

September 3rd
Assen
Netherlands



June 9th
Hockenheim
Germany

September 10th
Oschersleben
Germany



Mags 15x7 4 off

inc Wheel nuts and centres
\$400 ono
Ph 527-1929

October 15th
Imola
Italy



1978 280z 2+2 5sp

- **Black with Bronze Metallic**
 - **Excellent Body (full restoration 12 mths ago),**
 - **Runs really well, WOF & Rego, Reluctant Sale**
- Ph 025 820-942 (Jacqui)**

- * **Sepang, Malaysia - April 2**
- * **Suzuka, Japan - April 9**
- * **Jerez de la Frontera, Spain - April 30**
- * **Le Mans, France - May 14**
- * **Mugello, Italy - May 28**
- * **Catalunya, Spain - June 11**
- * **Assen, Holland - June 24**
- * **Donington Park, England - July 9**
- * **Sachsenring, Germany - July 23**
- * **Brno, Czech Rep. - August 20**
- * **Estoril, Portugal - September 3**
- * **Valencia, Comunitat - September 17**
- * **Jacarepagua, Rio - October 7**
- * **Motegi, Japan - October 15**
- * **Phillip Island, Australia - October 29**

1979 280 Coupe

2 Seater LHD extensively modified for racing.

- 1/2 Cage, Brake Bias
- new exhaust
- 300 4 Pot + 2 Pot Brakes
- 15x8 Mags
- Locked Diff, new motor
- Harness
- Race Seat etc etc.

**Panel damage from rollover
easy fixed, lots of spares**

Ph 527-1929 (Meryn)

**offers
\$5500 - \$6000**

MORSELS

TV3 has got the V8's
Prime TV does the
excellent Sports Mondial
on Thursdays
(actually a copy of
MotorSport Asia ex Sky
Rugby cricket golf
croquet league Sport.

Pedestrians account for
50% of road fatalities in
the Middle East,
compared with 40% in
Asia and about 20% in
Europe and the United
States. In New Zealand,
pedestrians accounted
for 10% of road deaths
in 1996 and 12% in
1997. What's the moral
behind these statistics?

1. We are careful
pedestrians - WRONG
 2. We are shocking
drivers - CORRECT!!
- Harking back to
comments made in the
past - the average Kiwi
driver is an absolute
bloody shocker - no road
sense - no training -
doesn't give a damn
about others on the
road, doesn't understand
the meaning of "stay on
the left"

The car has claimed 30+
million lives in the past
100 years.

By 1990, with atleast
500,000 people being
killed yearly, traffic
accidents were listed as
the world's 9th biggest
killer.

The first pedestrian
death was in 1896; the
first driver was killed in
1898.

Boris Kalush drowned
after trying to get a
drink from his beer
tanker. He was found
with his legs sticking out
of the inspection cover
on a road near Omsk,
Siberia.

MORSELS

A German who shot dead a traffic policeman after he was caught speeding said the killing was a bid to avoid penalty points on his licence, police said.

The 45-year-old unnamed man said he was worried that penalty points from previous speeding offences would mean he would be stripped altogether of his licence.

The attack happened in January on a motorway 100km northeast of Frankfurt after the policeman used a radar gun to record the speed of the attacker's vehicle. The driver stopped, approached the police car on foot and fired once, hitting the 41-year-old father-of-two in the chest and killing him instantly.

Police said the stretch of motorway where the incident happened was only being monitored for test purposes and no penalty would have resulted from the measurement. - Reuter

Police and customs officers at British ports are on the lookout for cars and vans which are sitting unusually low on the suspension. Odds-on they will be chock-a-block with booze from the Continent. Smuggling cheap beer, wine and spirits is the fastest-growing crime in Britain. Last year 1,000,000 vehicles were sprung.

Sighted in Parramatta Rd, a black Jeep bearing the number plate BA BAA. That's ba-baa black Jeep. I guess



2000 F1 Grand Prix Calendar

07 March	AUSTRALIA	(Melbourne)
26 March	BRAZIL	(Sao Paulo)
09 April	SAN MARINO**	(Imola)
23 April	GR. BRITAIN	(Silverstone)
07 May	SPAIN	(Catalunya)
21 May	EUROPE	(Nürburgring)
04 June	MONACO	(Monte Carlo)
18 June	CANADA	(Gilles Villeneuve)
02 July	FRANCE	(Magny-Cours)
16 July	AUSTRIA	(A1-Ring)
30 July	GERMANY	(Hockenheim)
13 August	HUNGARY	(Hungaroring)
27 August	BELGIUM	(Spa)
10 September	ITALY	(Monza)
24 September	USA	(Indianapolis)
08 October	JAPAN	(Suzuka)
17 October	MALAYSIA	(Sepang)

COMMITTEE VACANCIES:

Several positions are vacant or becoming vacant and need filling asap to spread the load with so few committee members remaining

If you have skills in any of the following and are willing to help out :-

Accounting, Event Organisation, Website maintenance or are just enthusiastic,

expressions of interest can be made to:

President

PO Box 24-176, Royal Oak

or Phone Julie (09) 483-7477 evenings

Auto Trader

1999 AUTO TRADER BRITISH TOURING CAR CHAMPIONSHIP



Brands Hatch
Rounds 1 & 2
Apr 8 & 9



Donington Park
Rounds 3 & 4
Apr 23 & 24



Thruxton
Rounds 5 & 6
April 30
May 1



Knockhill
Rounds 7 & 8
May 13 & 14



Oulton Park
Rounds 9 & 10
May 28 & 29



Silverstone
Rounds 11 & 12
Jun 10 & 11



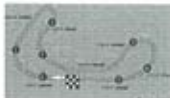
Croft
Rounds 13 & 14
Jun 13 & 14



Snetterton
Rounds 15 & 16
July 8



Donington Park
Rounds 17 & 18
Jul 29 & 30



Brands Hatch
Rounds 19 & 20
August 27 & 28



Oulton Park
Rounds 21 & 22
Sept 9 & 10



Silverstone
Rounds 23 & 24
Sept 16

MORSELS

USEFUL FORMULA'S

Power

1 bhp = 0.7457 kw

1 kw = 1.342 bhp

Torque

1 lb/ft = 1.356 nm

1 nm = 0.738 lb/ft

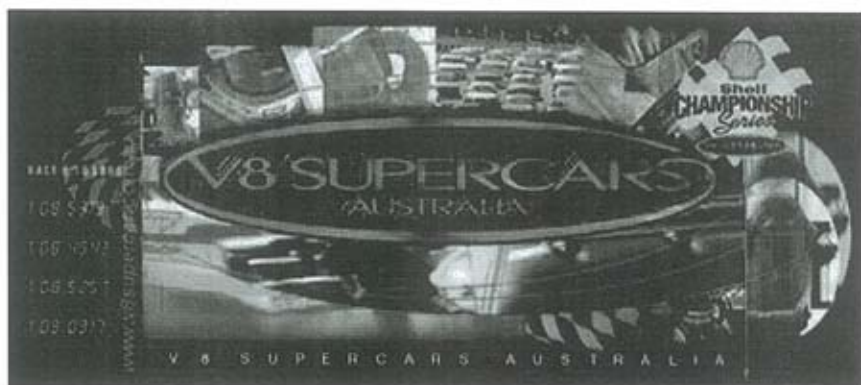
Farewell to Flicker

A motorsport fan phoned the other day to ask whether television would screen the latest category in Germany - Volkswagen New Beetle races. The class was introduced last year. We couldn't tell him. But we could let him know that the digital television set he was planning to buy should ideally be 100 hertz and not 50 hertz. We know this because a TV repairman said so. The average television image is broadcast at 50 frames a second. But the 100hz model copies each frame and broadcasts it again, which means the image hardly flickers. A 100hz set with a feature called "digital motion interpolation" cuts out flicker altogether. What the repairman didn't say was how much a 100hz set costs anywhere between \$3000 and \$20,000.

A jury in Los Angeles has ordered General Motors to pay \$US10 billion to six people who were burnt in an explosion after a crash ruptured their car's fuel tank. GM's appealing.

F1 on TV1 - cool

Sky's going to the pack but atleast they still have WSB Super bikes and the 500 GP's live.



May

Round 5 Hidden Valley - Darwin NT - 19-21 May

June

Round 6 Canberra Street Circuit - Canberra - 9-11 June

July

Round 7 Queensland Raceway - Ipswich Qld - 1-2 July
 Round 8 Winton Raceway - Benalla Vic - 16-16 July
 Round 9 Oran Park Raceway - Sydney NSW - 29-30 July

August

Round 10 Calder Park - Melbourne Vic -- 19-20 August

September

Round 11 Queensland Raceway - Ipswich Qld - 8-10 September

October

Round 12 Sandown International Motor Raceway -
 Melbourne Vic 7-8 October
 Special Event Indycar Australia - Gold Coast Qld - 12-15 October

November

Round 13 Mt Panorama - Bathurst NSW - 16-19 November
 FAI 1000 - Bathurst

TAUPO AGM TESTDAY & SPRINT CHAMPS June 4th SUNDAY 2000

- Documentation - 8.30 to 9.45am.
- Scrutineering - 8.30 to 9.45am
- Drivers briefing - 9.45am & 11.30am
(Please NB - All drivers must pick up their entry forms from the timing tower prior to being scrutineered)

TESTDAY commences at 10.00am and finishes at 11.30am. Passengers / tutors are allowed, you will also need to wear a crash helmet and overalls. This is an opportunity for testing, tuition and familiarisation of the track

- Timed Practice Sprints from 11.50am to 1.00pm followed by lunch.
- Lunch - 30 minutes.
- Sprints - Five lap runs + 2 x 8 lappers at the end of the day
- Timed Sprints from 1.40 to 3.40pm.
- TESTDAY resumes at 3.50pm and finishes at 4.30pm
- PRIZE GIVING WILL BE HELD AT 5.00pm at the Spa Meeting House.

**NO entries
on the day**

NB. closing date for entries is the **1st June 2000**.

Entry Fees are as follows (those entering the sprints do not have to pay for the FunDay)

- TestDay \$35
 - Sprints \$65
- (\$35 deposit with the balance payable at documentation on the day)

Send completed entry form to

Capri Car Club (NZ) Inc
PO Box 172, Ngaruawahia 2171
Attn: Ron Frew (Events Coordinator)
Any Enquiries
ph 07 824 7143 fax 07 824 5356
email: floodgte@wave.co.nz

For Capri Car Club, Sports Car Club NZ Inc. members and those invited, organised by both National Committee's.

PUKEKOHE TESTDAY & SPRINT CHAMPS April 24th MONDAY 2000

- Documentation - 8.00 to 9.30am.
- Scrutineering - 8.00 to 9.30am
- Drivers briefing - 9.50am & 10.55am
(Please NB - All drivers must pick up their entry forms from the timing tower prior to being scrutineered)

TESTDAY commences at 10.00am and finishes at 10.50am. Passengers / tutors are allowed, you will also need to wear a crash helmet and overalls. This is an opportunity for testing, tuition and familiarisation of the track

- Timed Practice Sprints from 11.00am to 12.30pm followed by lunch.
- Lunch - 30 minutes.
- Sprints - Five or more lap runs (plus warm up and cool down laps)
- Timed Sprints from 1.00 to 3.30pm.
- TESTDAY resumes at 3.40pm and finishes at 4.30pm
- PRIZE GIVING WILL BE HELD AT 5.00pm in the Grandstand Bar.

**NO entries
on the day**

NB. closing date for entries is the **19th April 2000**

Entry Fees are as follows (those entering the sprints do not pay for the FunDay)

- TestDay \$35
 - Sprints \$65
- (\$35 deposit with the balance payable at documentation on the day)

Send completed entry form to

Capri Car Club (NZ) Inc
PO Box 172, Ngaruawahia 2171
Attn: Ron Frew (Events Coordinator)
Any Enquiries
ph 07 824 7143 fax 07 824 5356
email: floodgte@wave.co.nz

For Capri Car Club, Sports Car Club NZ Inc. members and those invited, organised by both National Committee's.

Only a Photocopy of the Entry form will be accepted, do not send this original





Entry & Driver Declaration Form

Official Competition No

Event

Venue

Date

/ / 2000

Preferred No

Held under the National Sporting Code of MotorSport New Zealand Inc. and the Supplementary Regulations applicable to the event.

Driver / Entrant of Car:

Note: If Driver and Entrant are different, name, address and contact details are required for both.

Age:

Address:

Phone No:

Fax No:

Mobile No:

NOTE: If any of the below signatories are under the age of 18 years then they must have the following completed by an authorised person

I, Name of Address Date / 2000
being the parent / guardian of the under 18 signatory do hereby consent to his / her participation in the above event. signed



Is this your 1st event?

yes no

male

-18

18-25

26-35

35-60

+60

female

-18

18-25

26-35

35-60

+60

TestDay

\$35

prepaid

Sprint and TsetDay

\$35

prepaid

then

→ \$30

on the day

Indemnity

I / We have read the Supplementary Regulations issued for this meeting and agree to be bound by them and by the National Sporting Code of MotorSport NZ Inc.

In consideration of acceptance of this entry and of my being permitted to take part in the above event, I agree to save harmless and keep indemnified the Capri Car Club of NZ Inc and MotorSport NZ Inc. and their respective officials, fellow competitors, servants, representatives and agents from and against all losses, actions, claims, costs, expenses and demands in respect of death, injury, loss of, or damage to the person or property of myself, my drivers, passengers or mechanics or of any person whatsoever, howsoever caused arising out of or in connection with these entries of my taking part in this meeting not withstanding that such death, injury, loss, or damage may have been contributed to or caused by negligence of the above named club or the Association or any of its representatives / officials.

Declaration by Driver

I declare that should I at any time of this event be suffering from any disability of any kind whether permanent or temporary which is likely to detrimentally affect my control of my automobile or my fitness to drive in this event; I will not participate in the event.

I further declare that the vehicle detailed on this entry form shall be presented at all times in every respect complying with the Safety and Eligibility requirements detailed in the various National Sporting code Appendices and Schedules.

Consent

I consent to the collection of the details on this entry form by the Capri Car Club of NZ Inc. for the event registration and promotion purposes and for it to retain and disclose these to MotorSport NZ Inc.

I acknowledge my right to access and correct this information. This consent is given in accordance with the Privacy Act 1993.

Entrant / Driver Vehicle Compliance Declaration

I hereby state that:

- I have inspected the vehicle against the items ticked in the Inspection Items section of this form and confirm that the vehicle complies with the requirements of Schedule A or AA (as ticked below) of MotorSport Manual Edition 28 and its amendments.
- The vehicle will be made available for scrutineering audits as requested by the scrutineer.
- I am aware that where any breach of the Safety Schedules is found during a scrutineering audit I will be subject to the penalties under the National Sporting Code.

Signature of Entrant

Date

Vehicle Compliance with Schedule

A

Signature of Driver
Note: If Driver and Entrant are the same, only one signature is required.

What's your best lap time on this track?

Date of Birth (if under 18):

Financial Member of (Car Club):

Competition Licence Grade:

Competition Licence Number

Make of Car:

Model of Car:

Colour of Car:

Year Manufactured:

Capacity (cc):

Standard / Modified / Supermod:

Log Book Number:

No of meetings since last audit:

Date of last audit:

tick as appropriate

this car must be audited (by order of the secretary)

Vehicle Compliance Inspection Items Checklist Section

Category 1 - Critical Safety:

- | | | |
|--|--|---------------------------------------|
| <input type="checkbox"/> Helmet & Overalls | <input type="checkbox"/> Safety Harness | <input type="checkbox"/> Roll Cage |
| <input type="checkbox"/> Seat(s) & Mountings | <input type="checkbox"/> Fire Extinguisher | <input type="checkbox"/> Brake System |
| <input type="checkbox"/> Steering System | <input type="checkbox"/> Wheels & Tyres | |

Category 2 - Non Critical Safety:

- | | | |
|--|--|--|
| <input type="checkbox"/> Engine & Trans | <input type="checkbox"/> Reverse Gear | <input type="checkbox"/> Starter Motor |
| <input type="checkbox"/> Power Unit Mounts | <input type="checkbox"/> Oil Catch Tank | <input type="checkbox"/> Throttle Return |
| <input type="checkbox"/> Lubrication Systems | <input type="checkbox"/> Cooling Systems | <input type="checkbox"/> Fuel tank |
| <input type="checkbox"/> Wipers & Demisters | <input type="checkbox"/> Rain / Tail Lamps | <input type="checkbox"/> Front Doors |
| <input type="checkbox"/> Ignition Switch / Circuit breakers | | <input type="checkbox"/> Bulk Head |
| <input type="checkbox"/> In'tr Cockpit Fittings | <input type="checkbox"/> Rear Vision Mirrors | <input type="checkbox"/> Battery |
| <input type="checkbox"/> Body Condition & Suspension (not affecting Critical Safety Items) | | |

Category 3 - Non Safety:

- | | | |
|---|---|---|
| <input type="checkbox"/> Competition Number | <input type="checkbox"/> Sponsorship Decals | <input type="checkbox"/> Exhaust System |
| <input type="checkbox"/> Body Appearance & Aerodynamic Aids | | |

The Fine Print Page

Membership Discounts

Members of this club are to avail themselves of discounts on quite a number of products and services. The list is ever-changing and at times complex, making it difficult to publish here. The best way is to ask someone of the Committee before you buy

Holders of MSNZ licenses (see below) qualify for a very extensive list of discount items.

Competition Licenses

You do not require a competition license for Motorkhana's, Trials, Hill-Climbs or Sprints, providing these aren't interclub competitions.

Members interested in more serious competition will need to go through a few formalities in order to participate. Following is a brief explanation of what it all means.

ClubSport or Restricted ClubSport License

This is required for participation in club events such as dual drags and sprints. There is no formal testing to obtain this class of license. Simply get a form from the Secretary and send along with the required payment to MSNZ.

National Race

Those who wish to participate in RACING will need to obtain a National Race license. You must first pass a colour blindness test. Study up the rules, then sit the test. This involves calling an examiner listed in the front of the MSNZ book, passing a test on your knowledge of the racing flags and other rules, whereupon you will get your license, then you will be able to enter race events.

Pocket Patches

The Z-Club has embroidered patches available to members at \$10.00 (inc post and GST). Send payment to our postbox.

Flag Marshal's Club

Many of our members who are sports car enthusiasts, though not keen on racing their own cars, find much pleasure and enjoyment in getting involved in the sport as Flag Marshal's.

Very few people would be aware of the fact that every motor race employs as many helpers as there are drivers out there enjoying themselves. You could well be one of those helpers, and you may find it great fun. A stint on the flags is also highly recommended for those of you intending to take out Competition Licenses.

Talk to a Committee Member for more info.

International

Planning a trip overseas? This club keeps contact with dozens of Z Clubs throughout the world, therefore we are able to supply any member tripping off to anywhere (apart from Outer Mongolia!!) [ED..... does that mean there's one in Inner Mongolia??] with a list of contact names and addresses. Visiting these clubs often proves to be the very best way of seeing another country, as well as letting you see first hand how it's done (Z-wise) elsewhere.

Events

The Committee are charged with organising most of the events promoted by the club. This does not mean that you are precluded from setting something up for the rest to enjoy. If planning an event your way looks like a fun thing to do, start setting it up and talk to the events co-ordinator about it's feasibility and scheduling.

Address Change

Keeping up with the Gipsy characteristics of a couple-of-hundred Club-Members can be quite a battle. If you're planning to move caravan, why not let us know? it surely makes things a lot easier. Please check that we have your current address, post code and phone number.



FloodGate

FlexiO



NEW ZEALAND

Ron Frew

PO Box 172

Ngaruawahia 2171

ph 7 824 7143

fax 7 824 5356

mob 025 521 586

email floodgte@wave.co.nz

web

<http://axil.wave.co.nz/pages/floodgte>

internet web design

design web sites

single pages

multiple pages

frames

consultations

service provider info

from \$400 / 1st page

design web pages

sophisticated images

optimised formats

crisp photo images

visual enhancements

supply components

links

site management

upload sites

optimisation

links

maintenance

add url to search index's

web counters

laser printing

colour laser - printing

up to 1200 dpi

A4

ex computer file

ex colour hard copy

u supply components

from \$1.50 / page

gray/black laser - printing

up to 600 dpi

A4

ex computer file

ex colour hard copy

u supply components

from \$0.50 / page

scans

colour

grayscale

bitmap

all formats

u supply photo / pic

from \$5.00 / image

publications

brochures / cvs

business cards

club magazines

adverts

flyers/catalogue covers

yearbooks

greeting cards

