



Orient
Express

Issue 76 May - July 1999



Front Cover:

Bottom: Welcome to the "Big Bad Brawny Jap Porsche Eaters"

Club Patron

We are honored that our Club Patron is: Steve Millen

Executive Committee

President:	Anthony Baker	(09) 410-2929
Vice President:	Brett Cambell	(09) 483-7881
Secretary	Julie Pepper	(09) 483-7477
Treasurer	Rob Chubb	(09) 443-0822
Club Captain	Hugh Pepper	(09) 483-7477
Social Co-Ordinator	Mark Thompson	(09) 634-3327
300ZX Owners Club Representative	Rowan Hick	(09) 521-3624

Technical Advisors

Auckland:	Greg Gillespie	(09) 410-9689
Wellington:	Don Mclean	(04) 479-6133

For 90+ 300ZX technical advise refer to the email list, website or phone Rowan to be pointed in the right direction.

Magazine Team

Editor	Rowan Hick
Assistant Editor	Paul Hansen

And many thanks to this issues Contributors:

Julie Pepper, Dave Kirkam, Mark Thompson, Mike Thompson, Tom Bell,
Article Reprint from Z Car Magazine Int'l
Fun Articles from <http://www.twinturbo.net>

Website

<http://www.zclub.org.nz> OR <http://300zx.nzpages.net.nz> (www.zclub.org.nz may not be active by printing date)

eMail

orientexpress@zclub.org.nz OR rowanh@ihug.co.nz

The views expressed in the "Orient Express" are those of the contributors, and do not necessarily reflect the views of the Datsun Z Club Inc., unless stated as a point of policy. The Datsun Z Club Inc. accepts no responsibility for the information or advice given in the "Orient Express" or by club officials or committee. Readers should exercise their own judgement when considering technical matters and modifications affecting their vehicles. It is recommended therefore that if in doubt on any technical matter, owners should consult the official workshop manual for their particular model of car.

In this issue...

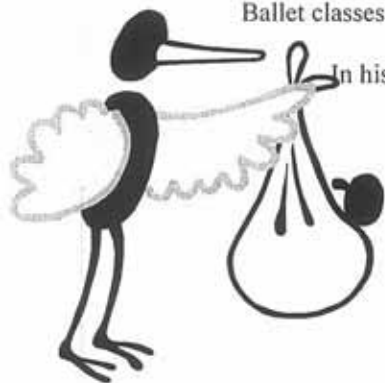
Redline!	1
Julie Speaks	2
Social Events Calander.....	4
Those Prancing Horses	5
The New Recruits.....	7
Corvettes for breakfast, Porsches for Lunch, and Ferrari's for dinner	8
AGM Notice	11
Domain HillClimb.....	13
Meremere Drag Day.....	14
Econorun	16
Z Challenge Results.....	18
300ZX Owners Club of NZ	19
Capri Sprint Day.....	23
Car Wars.....	25
A Few Good ZX's	26
Waitara	27
Dynos – The low down on low HP.....	29
Interview.....	34
Classifieds	36
Fine Print	37
Parting Shot.....	38

Congratulations!!

Greg & Brianna Gillespie on their arrival of Annalise, born on the 9th of June, a healthy 7lb 11oz.

Ballet classes twice a week and no karting for this one.

In his capacity of Technical Advisor Greg was sure to have given instructions to the mid wife on the finer technical points of delivery.



Welcome to the new monthly editorial Redline! Introductions are in order. Hi! By now some of you will have seen me at most of the fun events we've been having up here in Auckland. The names Rowan, and I'm the proud owner of bouncing baby '90 TwinTurbo Zed.

Well what's this you say? No Lisa Wilkies... Nope, it seems the time has come to change the editorship and I kinda stumbled into doing the Z Club magazine, not really meaning to but well I got it!. I only wanted to be the 300ZX Representative ☺

So how did I get here?

Over the past 6 months, some friends and I have been organising our own club for 90+ 300ZX's, as we couldn't find anything that really suited us. We were invited to the Meremere Drag meeting and eventually I got talking to the lovely Julie Pepper. Things grew from there and now my band of merry men and I are a Division of the Datsun Z Club. Jonathan Cameron and I have taken up committee positions and will hope to provide a bit of wind to the sails of the club, or should that be higher octane petrol to those tanks!

The Magazine Wants YOU!!!

Huh? What's this you say? Yes YOU, YOU reading this, we need YOU to do something. Get out your old Magazines on Z cars, or if you're feeling really ambitious pen and paper, or Microsoft Word and Keyboard. Start digging/writing! In order for the successive issues

to have some content and be a decent read we need YOU to provide US with articles.

It's not hard, will only take 1 - 2 hours out of a two months (that's 1/1460th of two months) and will help to make this THE best car club magazine in New Zealand.

Be Warned. Herr Rowan will be ringing you, at random, and **telling**—asking you to write something. Just 1 or 2 members a month, nothing to major. If you don't I might have to unleash Julie on you or something.... Oh did I mention there might be a prize for the best contribution for each issue?

The Eds \$0.02c worth!

Julie gave me heaps of old and new car club magazines to peruse for inspiration. I came upon Lisa's first article, well unfortunately (or fortunately for us guys) you're not going to get tales of leg waxing's for the first Ed Speak. Not even male bonding over magazines. Nope.

Actually what I am going to say is that it is a real joy to come to the club and meet all the wonderful, and interesting people this club has got. There must be something about us Japanese Ferrari owners, a certain quality. I look forward to meeting the rest of you in due course.

I hope you like what you find inside the magazine for Issue #76.

I thought I'd start off with a great story from a friend of mine, so here goes... Those Prancing Horses...

Rowan
Aka The Navigator from Hell (ask Jeremy!)
90 TT Manual "RKTSHP"



JULIE SPEAKS (STERNLY!)

On behalf of the Committee I find it appropriate to say a few words. I personally have been in the club now for about 5 years and have over the years thoroughly enjoyed watching and participating in many events. About 18 months ago when the committee was down on numbers and in need of help I thought it time I put something back into the Club by way of helping out on the Committee. I must say though that it has been a hard and mostly thankless task. Like any Committee the work is left for a few, we don't necessarily mind this, but what we do mind (and in fact find extremely demoralising) is the constant negative criticisms from a few.

We are all busy people who endeavour to do our best by you the members and the Club as a whole. The criticism seems to come in 2 forms (a) where's the magazine, why isn't more frequent etc and (b) there's never any events run. I would like to offer an answer (or more an observation) on these two.

Firstly the magazine does not write itself, Lisa has done a great job over the years of putting out what is in comparison to other car clubs a quality magazine despite little input by way of contributions. Many requests have been made to members to contribute to the magazine (it doesn't even have to be car stuff!). We now have a new editor (Rowan) keen to give it ago and perhaps give the magazine a new lease of life and from the sneak preview I've had I'm sure you'll enjoy this issue. But lets help him out and make it easier for him to keep up the quality and quantity of the magazine by providing material – letters to the editor, photo's, advertising, stories etc recipes if you like, we don't really care, someone may find it interesting. We now have a website to further improve communications to members with computers.

Secondly on the issue of events, I would like to outline some of the successes (and failures as the case may be) recently:

- November last year, Taupo Driver Training day with the exception of the committee only 2 entrants – a loss to the Club of \$1000
- The last Sunday Brunch cancelled due to NO bookings (although we here 2 members turned up anyway)
- Nosh Nog n natter discontinued for a period due to continual NO shows
- Relaunched Nosh Nog n natter number 2(9th June) cancelled due to NO bookings
- The last Sunday Drive only 2 members joined

On a positive note, recent successful events have included:

- Relaunch of Nosh Nog n natter number 1 on 12th May at Big Time Café in Birkenhead, menu and service were average, but turn out was great – 14 of us all had a good time. Thanks to those who made the effort to come and see you next time we hope to the rest of you.
- Zed Race Day in January, not only did 12 Zed's turn out to race, but the club also made a significant profit – enough to support many of our social events.
- Economy run a few weeks ago, a fantastic number of Zed's turned up, far out numbering

all the other clubs.

- Drags also a healthy number of members participated.

We go to a lot of effort to try and organise a variety of events to suit everyone in the Club. Diners, Brunches, and Driver Training Days were listed by members in the Survey as wanting more of them. Plenty of notice about Diners is given, they are held the 2nd Wednesday of every month unless we swap it for a Brunch (but again plenty of notice is given). If the Social Co-ordinator has not received any bookings by the day before the scheduled event we have to Cancel it (only fair on the Restaurant).

We can't send out endless reminders about Diners etc – stick the calendar out of this magazine on your fridge and remember to BOOK and then turn up and have some FUN.

What I'm saying is before you next criticise the Committee consider your part in the equation:-

Have you turned up to an event lately?,

Have you offered to help organise an event? (you don't have to be on committee to do so),

Have you contributed to the Magazine recently or at all?,

Have you put forward an idea to the committee for an event for them to run?

Have you offered to be on the Committee?

I/we will gratefully receive any ideas or input on events, these can be sent addressed to the Secretary or Events Co-ordinators to Datsun Z Club, PO Box 24-176, Royal Oak, Auckland.

The Club has seen a "changing of the guard" over the past 12 – 18 months and it is fair to say that this has impacted on things. But I feel confident we are through this temporary glitch and the future looks positive, we have some "fresh" keen new members who I would not like to see discouraged in the way I have been.

Thanks Mark for the positive feedback (see Drag story, this issue), it keeps us going!
If nothing else this may instigate a rush of "letters to the editor" and that will be good.

Hoping to see you all over the next few months at our coming events or AGM and if you reside out of the Upper North Island drop us a letter.

Julie

Secretary/Events Co-Ordinator

SOCIAL EVENTS CALENDER

Wednesday 14th July **Nosh Nog n Natter** **Poppadom (Indian)**
7.30pm 471 Khyber Pass Road
Newmarket

BYOW Moderately priced
Phone Julie on 483-7477 to book

Saturday 17th July **300ZX Owners Club Breakfast** **Café Riva**
From 9:30am Mission Bay

Rowans show and tell from the states, don't miss out!

Sunday 1st August **Brunch** **Bird Cage Tavern**
From 8.30am *followed by... (see below)* (next to Victoria Park Market)
Phone Julie on 483-7477 to book

Sunday 1st August **Z Challenge Season Finale** **Starts at Bird Cage**
10.15am Trial Finishes at another venue
North of Auckland for a late lunch (1.00ish)

Wednesday 11th August **Nosh Nog n Natter** **Garibaldi's**
7.30pm 328-330 Broadway
Newmarket

Licensed & BYOW
Phone Jonathan on 025 734 860 to book

Saturday 28th August **AGM & Prizegiving** **Bronze Goat Restaurant**
6.00pm sharp Ponsonby Road
Auckland
BYOW & Licensed

Tickets available from Julie Ph 483-7477 or Jonathan Ph 025 734 860 \$37.50pp

The Z Club dinners – Nosh Nog n Natter are generally held on the second Wednesday of every month. Please mark your calendar now as no further reminder will be sent, please ensure you book with our Social Co-Ordinator because if we do not receive bookings by the Tuesday night prior to the dinner we will CANCEL the booking!

THOSE PRANCING HORSES..

By Tom Bell, from Indiana America.

My most memorable time with cars comes from another lifetime, though.

When I was young, I lived in Greenwich, Connecticut, outside of New York City about 30 miles. A nice suburb, and full of people who commuted to New York to work every day: so did my dad. Also home to a small slightly yellow brick building alongside the main road, backed up close to the railroad tracks if I remember correctly. The owner, Luigi, sold cars. The son of the owner, Coco, and I became friends, and did some of that 'friend' stuff for a couple of years.

In 1967, when I graduated from college, I came back to the area basically to collect my things and start my life somewhere else. I ran into Coco in a place where we had spent time together in those days. We caught up on old times, and had a good chat. I mentioned that, now married, I was going to buy a car, and Coco said that his dad had some used cars down at the store that I might be interested in: would I like to come down and take a look? I said yes and we made an appointment for two days hence. On the appointed day, I arrived, and my friend, Coco, met me and took me through the showroom, full of brand new cars, to the garage in back. He showed me a small red coupe, a 1962 model, short wheelbase, with a white circle on the doors, and the letters N.A.R.T. on the front edge of the hood. It had been cleaned up, and, as Coco explained, the mechanics had gone through the car and fixed it up, including the

notorious electrical system. The wire wheels looked great, and the interior was done in camel coloured leather. Mileage was unimportant.... The car was being used primarily to go to and from the races that the dealership sponsored, having been traded in a year earlier on a new model....

So, I asked Coco if we could start it up and see how it drove. He said that he would get the keys, and when he came back, his dad, Luigi, came with him. We started the car, and it settled into a nice burbly idle. We talked for a while about cars, and Luigi told me about his days in Italy, back in the '50's, when he drove cars in the Mille Miglia and other events. His eyes lit up, and he got very animated about those days, his passion for cars was evident in every word. After a while, he asked me if I wanted to buy this car, and I, no fool, said yes. So, he offered to sell it to me for \$3,000. Now at the time, this was the price for a brand new Ford or GM full size car. This one was a two seater, and not very big at that! However, I begged, pleaded and otherwise crawled on my proverbial knees to anyone who would listen and loan me money. Unfortunately, I struck out: who was going to loan a brand new college graduate the equivalent of half a years' pay? So, I had to call Luigi and say I couldn't do it. He understood, and we remained in contact off and on for about 20 years. I heard that he sold the car about two weeks later for \$3,500. I never got to drive it, though.

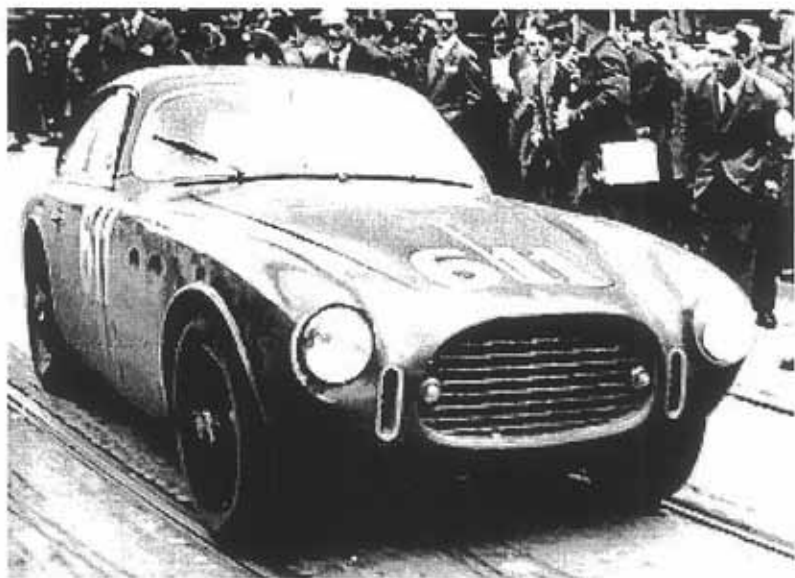
The car dealership was the only legitimate

Ferrari dealer in the USA at that time. The owner was Luigi Chinetti, Enzo's dear friend, and the man who launched Ferrari in the US. His son, Coco and I still send cards to each other occasionally, the last time was when Luigi died. The car was a 1962 Ferrari 250 short wheelbase coupe, now worth in excess of 2 million if you believe the used Ferrari pricing these days.

Sigh! But what I remember the most was the passion for cars and driving that Luigi had back then. I can shut my eyes and hear his words, and see him talking with his hands..... A great man. And yes, I AM disappointed that I couldn't buy the car back then. However...

Tom

Ferrari 250 S taken from <http://www.ferrari.it/>



The New Ones

Jonathan Cameron: Jonathan is the owner of a Red 1989 300ZX TwinTurbo Coupe, he works as a Systems Analyst/Programmer in Auckland. Notable things about Jonathan and his Z – One day a bird did what birds usually do to cars – not to worry, he pulled into a service station and asked a Service Station attendant to wipe it off!!

1989 300ZX TwinTurbo Coupe, "TTZ" – Which is *supposed* to mean TwinTurboZ . But if said many times over will reveal another meaning.

Jeremy Guy: Jeremy is the owner of the rather nice Silver 1989 300ZX TwinTurbo Coupe, featured on the front of Performance Car NZ. Jeremy tends to have a habit of spinning tyres and deafening passengers... Jeremy's car is number 220 from Japan, and is an original demonstrator car, even down to the painted underbody.

1989 300ZX TwinTurbo Coupe, "

Mike Thompson: "Mad Mike" as most of us refer to him owns a red 1991 300ZX TwinTurbo Coupe (gee see a theme here or what!). Mad Mike is a Manager for a bank in Auckland, but despite his years, still behaves like a 16yr old!! He was last seen wearing a "Beanie" and "Sharkies" at the Cooper Car Club Trials.

1991 300ZX TwinTurbo Coupe, ""

Rowan Hick: Rowan is a Business Analyst for a Software company in Auckland, he owns a 1990 300ZX Twin Turbo Coupe. Rowans most notable thing is his love affair for his RocketShip as the car is affectionately known. Apparently after one long overseas trip, the first thing he did after getting home was not, go to the mens, was not go to bed, was not go get a drink... No.. it was to start the car "Just to see if she ran!"

1990 300ZX TwinTurbo Coupe, "RKTSHP"

Chris Hebditch Chris works for a property development company and owns a 300ZX 2+2 Twin Turbo, Red, naturally

1990 300ZX TwinTurbo 2+2, "ITSGR8"

CORVETTES FOR BREAKFAST, PORSCHES FOR LUNCH, AND FERRARIS FOR DINNER

Like something out of a dream, the Ferrari Testarossa appeared before me. "This can't be happening", I thought to myself. What are the odds of bumping into one of the ultimate super cars during my first test drive of my Jim Wolf Technology modified (JWT) 300ZX Twin Turbo? In all my years of driving sports cars, I had never even seen one of these on the road! But there it was, weaving its way through traffic like an assassin stalking his victim in a crowded room. My hand trembled with excitement as I punched the high button on my HKS variable boost controller and set my sights on the redhead dead ahead.

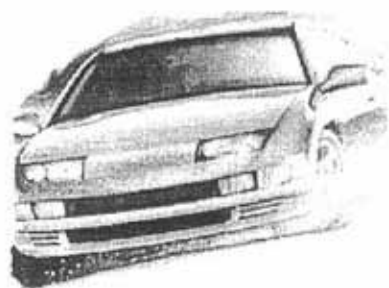
There could be no doubt as to my intentions in the mind of the Ferrari driver when I finally caught him, as I'd closed on him like an F-16 stalking a Cessna. But would he take the bait? Seconds later the rear of the Ferrari hunkered down, the tires searching for traction amidst the frantic wail of the big Italian twelve cylinder. My leg was shaking as I pushed the accelerator pedal to the floor. As the turbos spooled up I could feel the G Forces mashing me against the seat. Yes, this was going to be a good test drive.

Only six months earlier, my hands were trembling and my legs were shaking for different reasons. "You drove it through water didn't you?" were the first words out of Jim Wolf's mouth, I sat in stunned silence on the other end of the phone. How could he have known? All I'd said was "Jim, I blew up my motor". Indeed he was right, On a dark and rainy day in Dallas on February 20, 1997, I drove my pride and joy through about 10 inches of standing water, I'd just about made it through when the car

shuddered, and I heard a hammering sound from the engine compartment. One cracked block and a seized motor later, I turned to Jim Wolf Technology of El Cajon, CA to do some magic for my car!

During the first month after the incident, I plotted out my strategy for a new and improved engine. I finally decided that the aftermarket pieces would come from Jim Wolf, and Bankston Nissan of Irving TX, would handle the ordering of stock parts and assembly. Oh as for the aforementioned Ferrari? He and his gold chains took the next exit off, having been smoked by a bright red Nissan that cost one fourth the price of his ride!. That was one encounter he would not be bragging about to his buddies at the next polo match.

I should mention that my car was very quick before we started this project. With HKS intercoolers, an F-Con computer, variable boost controller, and modified exhaust, the car had been capable of 13.7 second passes at the Texas Motorplex quarter-mile strip. This, compared to the stock time of 14.4, placed my car in fast company. The only quicker cars recently tested by *Road & Track* magazine were



the Viper (13.1), Ferraris (ranging from 12.9-13.3), Lamborghini Diablo (13.2) and the Porsche 911 Turbo (12.9). Even the legendary Stillen GTZ only managed 14.0 second pass as tested by *Road & Track*. It was a nice feeling to know that there were only about 10 or so production cars in the world that were quicker, all of which were considerably more expensive than my Z.

People always say that you should make the best of any situation, so as I sat with a blown engine, I set out some goals for my "Project Z". I wanted 0-60 times to be in the low to mid four-second range quarter mile in the mid 12s, and 500-600 horsepower. Yet with all of this I wanted the car to be a comfortable daily driver, with a near stock feel until you plant the right foot. I also wanted the car to be quiet and capable of relaxed highway cruising. As the owner of a 1965 Mustang Fastback, I could always jump into that when I'm in the mood to shake, rattle, and roar!

Now that I'd established my benchmarks, the only question was "How do I get there?" After consulting with Jim Wolf several times we decided to modify the car in the following areas; turbochargers, injectors, cylinder heads, air intake, ECU, exhaust, and clutch. The only parts from my previous modifications I would keep were the HKS intercoolers and the variable boost controller. Obviously, before we could start this project, a decision had to be made about the block, as mine was cracked.

The stock block is virtually bulletproof,

even in high horsepower applications. The only failures Wolf has seen have been from abuse such as running excessive turbo boost with pump gas, and driving the car through deep water, which explains how he was able to guess how my failure had occurred! Since the stock block is so precisely assembled and each piston custom fitted to each cylinder at the factory, I felt that very little could be gained by balancing and blueprinting. The beauty of this is that I decided to buy a brand new, zero miles, shortblock with pistons, rods and crank for only \$2'500 fully assembled! If you choose to go the forged rods and pistons route, be prepared to shell out over \$4'000 for very little, if any, improvement in performance, and only an extra second or two of protection in the event of a major detonation problem. I knew I'd be running 103 octane racing fuel during high-boost situations, so I felt I could resist the urge to turn up the wick when running pump gas in the car.

The next big decision I agonized over was which turbochargers to use. Jim Wolf Technology can build one just about any way you want it, but the one he recommends for a combination of street and strip is a little hummer called the Sport 500 (the 500 denotes 500+ horsepower applications). Jim Wolf pointed out that the larger Sport 600 turbos have quite a bit more turbo lag and can't spool up as quickly as the Sport 500s (4200rpm vs 3800 for the 500s). Jim also said that the absolute maximum horsepower range you can achieve with 92 octane gas is about

JIM WOLF TECHNOLOGY INC.

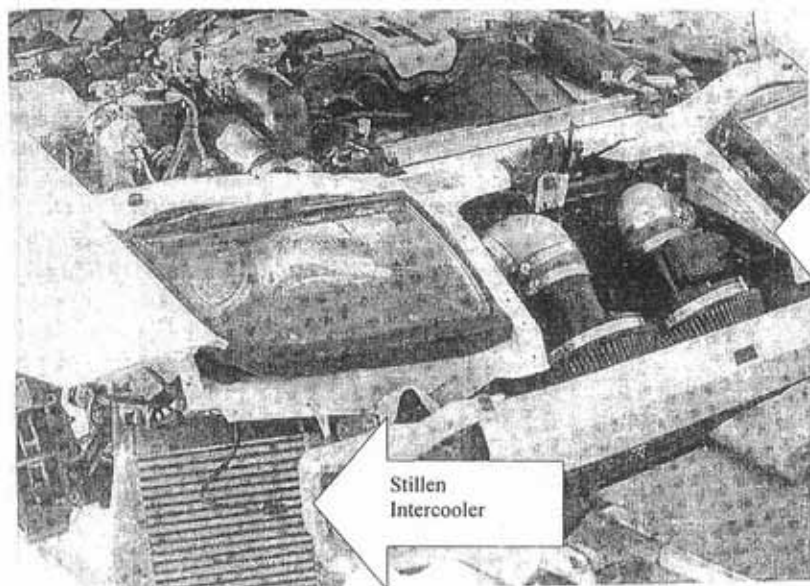
Over 25 years of Nissan Tuning Experience

475-500. The bigger turbos would only make more power with racing fuel, and even the only at high RPMs. A car with the Sport 500s will actually be more responsive and fun to drive than the Sport 600s with pump gas. The beauty of the Sport 400 is that it utilizes the stock housing, which will bolt directly to the stock exhaust manifolds without an adapter, saving you a cool \$700 to \$1000 over the cost of other packages. In addition, the 400 is machined for optimum air and exhaust flow, and has specially designed output turbine and compressor. This results in 25% more air flow than the stock factory turbos. JWT recommends running 16PSI boost with 92 octane gas, but you can run up to 21PSI with 105 Octane racing fuel.

With the turbos out of the way, the next big decision proved to be an easy, albeit expensive one. Since the larger turbos are flowing more air, there must be an increase in the quantity of fuel to

maintain a proper air/fuel ratio. The stock 300ZXTT injectors are rated at 370cc and are adequate up to about 400 horsepower. The next size range from 444-485cc will take you up to about 450 horsepower. The really hot setup is 550cc injectors which gives up to about the 600 horsepower range. Considering my goals I chose the 550cc injectors. But be prepared to open your wallet., as a set of these was about \$1'400. Keep in mind that there won't be much demand for a used set of 444cc injectors, so if there is even the remotest possibility that your engine upgrades will ultimately push you over 450 horsepower, pay the additional \$300-\$400 for the 550cc's.

The next step was to increase the intake air flow. I had been using a JWT single element high-flow filter before, which is fine for engines up to about 450hp. The filter setup was also good for above 18hp over the stock arrangement. However, engines in the 450+ hp range will see a



Stilgen Intercooler

Dual air intake (Dual Pop)

significant gain of 20 additional hp with the JWT dual-element intake system. This system also results in quicker turbo spool up by eliminating the flow disturbance caused by the stock rubber T-Hose. The filter venturis are made from cast aluminium and are machined for a perfect fit. The reusable gauze air filters will outperform the stock units and are probably the most cost-effective upgrade you can make!

The next area to consider was the engine control unit (ECU). This is the system that ties the whole package together and affects the performance and driveability of the car. We have all seen ads from various companies offering chip upgrades that deliver more power than anyone else's. Jim Wolf's approach to ECU tuning is that "performance is not just a single horsepower number at WOT. Throttle response, driveability and efficiency are also among the true qualities that define performance. The 300ZX is limited by compromises made in these areas by the factory, in the elusive attempt to satisfy all of the people all of the time."

Obviously, those tuners who can successfully unlock the horsepower potential of the 300ZX ECU are not about to give their proprietary secrets away, but Jim Wolf does offer us some keen insight into this area. "POP is the technology we use to unlock the compromises the factory builds into the ECU. Optimizing begins by addressing the fuel and ignition timing demands required for crisp response during throttle position changes. It requires that the actual memory maps be extended far enough to reach the high RPM and load limits of the higher capability of the engine. Variable computer-controlled cam timing is an innovation used on the 300ZX. Optimizing these cam timing points for load and RPM is a must for

optimised performance. Once all of the detailed housekeeping work is finished such as raising the RPM limiters and removing the speed limiters the maps can be tuned to perfection. Several days of dyno and road testing are required to achieve the maximum safe performance level from the vehicle. Air/fuel ratios and ignition timing are constantly monitored throughout every load/RPM combination, and vew values are continually downloaded to the ECU."

With the major mods and ECU tuning completed, it is time to road test the car. Although I will address the final modifications, as well as driving impressions and track testing, in an upcoming issue. I can say that my preliminary assessment is that putting the power to the pavement has been a real problem. The car easily smokes the tires in first, second, and part of third gear! And keep in mind this is with only running 16 of the 21 pounds of boost I have available.

[Ed: This was taken from a US magazine, as such the dollar values are US (!!!) and their 92 octane gas relates to roughly our 96. If you feel the urge to modify your Z in the above manner we have a number of contacts here in New Zealand who will help with your wish. There are at least 3 300's that are modified to roughly the same level as the car in this article. I can tell you first hand that the acceleration and throttle response of these cars simply takes your breath away – and I drive a Twin Turbo everyday!. These are some of the highest powered road cars out there, only the Diablo SV, F50, and McLaren F1 in New Zealand would give you a run for your money. Now that puts it into perspective! And you can do it for a lot cheaper than you think...]

Notice of
Annual General Meeting
Of the
Datsun Z Club (inc)



Saturday 28th August 1999
6.00pm sharp



The Bronze Goat Restaurant & Bar
108 Ponsonby road, Ponsonby
(upstairs private function room)

The business to be conducted and the order of business is as detailed in the Constitution and Rules of the Club.

The following will give you some indication of the issues that will be raised or presented at the meeting:

Voting in of new Executive & Committee Members: (President, Vice President, Club Captain, Secretary, Treasurer, Patron plus 5 other Committee members)
Club's Financial Statements
General Business

Note:

Anyone wishing to:

- a) be on the Datsun Z Club Executive or Committee, or
- b) nominate someone to be on the Datsun Z Club Executive or Committee

Should:

Complete and submit a nomination form by mail to the Secretary, or contact one of the current Committee members prior to the AGM and advise of any nominations or expressions of interest. Nominations close 21st August 1999

AFTER THE MEETING All members and partners are welcome to attend the Clubs Annual Prizegiving dinner. Cost of tickets for this is \$37.50 per head (to be confirmed), this includes a 5 course meal and corkage. Restaurant is BYO or full licensed. Tickets are available from Hugh or Julie (ph 483-7477).

This is your chance to have input into your Club

Volunteers to help or be on Committee are needed and would be gratefully received!

DOMAIN HILLCLIMB MAY '99

Well here it was, that time of the year, to compete in the Gearbox Factory's "Domain Hillclimb". The event is a short sprint from Stanley St. to the "circle road" at the top. So what you do is take nearly a 100 competitors and send them up the hill one by one.

After a quick ring around I find that Hugh Pepper and myself are again the only members representing the Z club. The day dawned wet and overcast but that wasn't enough to dampen anyone's spirit. Tyre choice for Hugh was his 225/50-15 Kumho race tyres and for myself it was my 205/50-15 RA1 Toyo race tyres. The Toyo tyres had proved themselves, in a wet race at Pukekohe, to give excellent "feel" and predicability - and besides these are the only tyres I have! Hugh did change to his wet tyres after the first run but I don't think there was any major difference.

The hill was certainly a challenge this year as about 14 drivers found out. The surface never dries out and is covered in leaves and moss. Still the crowd turned out to watch a very interesting day. Both Zeds performed well in the conditions with Hugh having a slight moment (you have told Julie haven't you!) as he clipped a kerb on the exit of one of the corners. I had a good tussle with Ray Williams in the 930 Turbo Porshe and eventually pipped him at the post.

The first three places were filled by rally cars with yours truly taking 4th=. Hugh wasn't far behind showing that the old Zeds can still foot it with many modern cars. Maybe next time we may see some more Zed cars entered? Special thanks to Meryn for his enthusiasm during the day!

Paul Hansen.

MEREMERE DRAG DAY

Saturday started on a good looking note with the weather being fine and coolish, ideal dragging weather. I met up with some of the 300zx guys at McDonalds Greenlane and after a session of shit giving on the merits of older Zeds vs 300zx's, as is almost compulsory we were away.

At the strip I thought we must have the wrong day, there being only two cars there and they were both yank iron {396cu in Chevelle, & 400cu in Trans Am }. The organisers Hugh & Julie arrived shortly after along with lot's more Zed's and an assortment of others and after some documentation and a drivers briefing by Anthony we were underway.

I had a couple of good runs early in the day doing mid 16's, 16.6 & 16.8 to be specific. Don't forget, standard 280zx's don't seem to want to go much faster than this. I think my fastest time of the day was done when I lined up with Steve Chong in his 300zx. I got the jump on Steve on the line { auto gearbox loaded up at the line } and really gave it the gun, all this in vain as Steve just cruised past about 1/3 the way down the strip.

Long time Z-Club member Ricky Cooper was impressive in his non Zed Subaru Impreza WRX , Ricky tells me his technique includes 7000rpm and dropping the clutch. This is great to watch. The Subaru just lifted on its suspension, 4 wheels spinning and took off. By the way Ricky's best time was 14.09, not bad for 2.0 litres. My old dragging rival Clint Greer turned up in his blue { used to be white } Z-31 200zx. Clint was giving me the scoop on what had been done since we last met, but the most obvious was definitely the colour. Clint had

a trouble free day and was running around the 16sec mark. Some older members will remember Clints car disappearing in a cloud of tyre smoke in a back copy of the Orient Express.

We had a few first timers on the day, they were mostly the 300zx guys, from the 300zx register {website: <http://300zx.nzpages.net.nz/>}



} they were Rowan Hick in his dark blue 300zx turbo who ran a 14.7 [Eds note: If only I could get traction off the line! my terminal was still a respectable 98mph) . Mike Thompson {no relation} in his red {aren't they all } 300zx turbo ran an impressive 13.36. Jonathan Cameron in his also red 300zx turbo ran a 15.56. Simon T in his Mitsubishi Lancer Evo111 ran an impressive 13.4 sec's. It's good to see new people in the club out there having a go. Rob Chubb's {of" trippery slack" fame} black 240Z seems to have found some much needed extra horsepower, at no small expense to the management, never the less the work done seems to have done the business.

Anthony Baker did the usual best burnout of the day, the best part about this Ant tells me is that it's a works drive for him {in Greg's car}. I seem to remember what happened to Ant's car when Greg had his works drive, there were the moon rock remains of a clutch on the strip to prove it. Luckily Ant only broke Greg's diff mount on the day. The fastest time of the day was the AC Cobra with 13.03sec's by the way. Up in the timing tower it's easy to see who's done this before, some of the reaction times were pretty slow and some were fast. Towards the end the same cars were coming through again and again, you could see clearly that practise makes perfect, as the reaction times just got quicker and quicker. Steve Chong had 12 runs and times improved considerably.

Howard Bath came up from TeKuiti for the day. Howard is one of the keenest Z-Club members I know, he drives all over the place to come to the club events, we need more people in the club like Howard. I don't know what times he's doing, but I knew he was starting to get serious when he put the good tyres back on the car for more traction. Speaking of traction, I've heard that the skid pad and strip will be resurfaced in the near

future. I don't know when exactly, but it can't come soon enough, you don't have to be a rocket scientist to work out the strip is in pretty poor condition. It's rough enough for club sport competitors to notice at fairly low overall speeds let alone in a funny car or rail doing 6-7 sec's. I'd like to thank Hugh & Julie Pepper for organizing a fun day for almost everyone, even though some of the new members don't hold clubsport licenses and had to run against the clock only, going on the feed back I have recieved they were more than happy to have a go. I'd recommend that these guys & girls get a clubsport license anyway for future events then you can physically compete against others, and this makes for much better competition. To apply for a clubsport license contact the club secretary Julie Pepper.

See Ya next time

Mark Thompson

COOPER CLUB ECONORUN – MAY '99

The idea is to complete a predetermined course starting above, out along the Northwestern motorway and then out through Helensville and back across to the number 1 highway and up to Waiwera. The course was almost exactly 100km – if you followed the correct course!

The trick however was that there would be a number of Cooper Car Club signs along the way on the left hand side of the road within about 5m of the road. The boards were about half a metre square and sometimes not completely visible. There were plenty of quick stops and the odd U-turn and reversing back.

Instructions stated there were no signs on the motorway. This was misheard by some as “no signs until the end of the motorway”, which meant we started off with a bit of a handicap.

There was also a brief detour to the weighbridge that was hard to spot if you hadn't been there before. We went cruising past about 5 km's before turning around. We were reassured by the fact that we weren't the only ones heading down that track. Another punter in the rear vision mirror gave a false sense of security.

This is the first run like this I have been on and it was heaps of fun. The guy who set the course and “hid” the signs was a master and stuck with his record of having no one get all the signs.

The finish was at a restaurant at Waiwera where everyone had a chance to sit down and share tales of the day, and previous experiences before the prize giving. There were several prizes for best fuel economy, best economy by weight and best navigator (most signs) and for the 300ZX guys – worst fuel economy! Overall the 300's did pretty well in the economy by weight and overall worst economy and I think we also did pretty well with the overall average speed although I don't think this was a category.

All the statistics were worked out based on the actual distance we were supposed to travel if we followed the route correctly which meant those of us who took a bit of a detour had our mpg and average speed figures distorted a bit – aye Jeremy?!

All in all a really fun day – will definitely be into the next one!

Mad Mike (Thompson – no relation to Mark!)

ECONORUN RESULTS

Driver	Navigator	Car	Fuel Consumption	Weight Adjusted Consumption	Navigator	Total Points	Overall Place
Ricky Cooper	Lesley Cooper	WRX	29.297	42.674	17	49	1
Bruce Fensom	Bruce Fensom	300ZX	30.145	47.469	7.5	42	2
Jonathan Cameron	Bevan Sutton	300ZX	25.85	47.83	10	39	3
Michael Gray	Michael Gray	240Z	33.166	37.865	7	35	4
Dave Long	Jan Long	300ZX	22.884	40.992	15	29	5
Kelvin Healy	Dawn Scott	240Z	28.995	37.668	13	27	6
Julie Pepper	Lesley Parkinson	260Z	21.259	29.292	16	25	7
Steve Chong	Steve Chong	300ZX	25.022	41.373	6	22	8=
Mark Thompson	Mark Thompson	280Z	27.306	38.699	3	22	8=
Ken Brough	Shona Brough	240Z	24.911	30.892	11	19	10
Mike Thompson	Dave Crompton	300ZX	20.44	35.405	12.5	17	11=
Jeremy Guy	Rowan Hick	300ZX	22.41	38.378	6.5	17	11=
Steve Newenham	Alex Newenham	260Z	18.876	24.151	13.5	17	11=
Matt Slater	Mike Smith	260Z	19.531	26.143	3	9	14=
Dave Kirkam	Garvin Couch	300ZX	16.583	29.052	5.5	9	14=

Z Challenge Results

The following is the results of the Z Challenge series to date. Note that previous issues have included non-entrants to the challenge series, this issue shows only those Competitors in the Challenge Series.

Driver	Car	Event 1			Event 2			Event 3			Event 4			Event 5			Total	
		MTRKHANA	Place	Points	CONCOURS	Place	Points	ECONORUN	Place	Points	MTRKHANA	Place	Points	MTRKHANA	Place	Points	Points	Place
Bruce Fensom	LD240Z	10	5	0	23	1	33									33		
Steve Newenham	?	8	7	0	6	9	14									14		
Jonathan Cameron	TTZ	6	9	0	18	2	24									24		
Kelvin Healy	?	23	1	0	13	3	36									36		
Hugh Pepper	Z240	13	3	0	0	0	19									19		
Mark Thompson	ZX	0	13	3	9	6	22									22		
Steve Chong	HER ZX	9	6	0	10	5	19									19		
Dave Kirkam	WD1806	0		11	4	5	16									16		
Julie Pepper	Z260	11	4	23	1	11	45									45		
Keb Brough	FV4253	18	2	18	2	8	44									44		
Ricky Cooper	?	7	8	0	3	7	10									10		
Jeremy Guy	?	0		0	7	8	7									7		

300ZX OWNERS CLUB

Who? What? Where?

We are a club born out of the desire to own, maintain and most importantly DRIVE one of the purest Highest Powered GT Sports car ever to be produced from Japan.

The club was unofficially formed on the 29th January 1999 after a group of people had been emailing each other throughout NZ, in particular a group of 5 guys in Auckland had been having regular breakfasts on Saturday or Sunday mornings in Mission Bay. Membership has been relatively exclusive in the initial stages of setting up the club, but is now pretty much open.

The focal point for the club is the 300ZX Owners Club webpage, this contains technical info, pictures of our rides, articles on 300's and links to interesting websites.

The club also gained sponsorship from these businesses:

NZ Pages

ELF Lubricants NZ

Team Evans Motorsport

TurboZ

MSE

The club has now 40+ Members, with only a certain number of those not owning 300's (but we let them in 'cause they are nice people anyway). The membership ranges from myself being the youngest to Tom Chong being probably the most notable in the club, 70+ years of age, a couple of heart operations later and *still driving* a shiny red 300ZX, granted "my reactions aren't as quick as they used to be so it's a Naturally Aspirated". If any of you get the chance to, have a talk to Tom, he's a likeable old chap! Professions vary, but most of us seem to be in the IT industry.

Nearly every other Saturday we have a club breakfast traditionally down in a Café in Mission Bay. We welcome anyone along to breakfast, although obviously conversation is slant towards 90+ 300's, given that theres usually at least 5 parked outside you have to expect these things ☺

We have organised events such as a Dyno Evening, a Tech Discussion and am looking to organise an InterMarque/InterClub track Fun Day in September with the Lotus Car Club.

As a club we strive to provide assistance to anyone who needs it as well as sourcing out cheap alternatives to the (damned expensive) factory Nissan items. If our Sponsors can't provide it, or we as a club can't find it, it can't be found (if it can we'd like to hear about it!).

Other the past 3 months we the club have been discussing with the Z Car Club about becoming closer together, so as we don't reinvent the wheel but we still wanted to maintain an identity (our 300's are after all, Nissans, not Datsuns ☺). We have come to an agreement that suits both parties, in that we become a *Division of the Datsun Z Car Club*.

In doing such we have agreed to build up the web page so all Datsun Z Club Members can utilise it (have their own Rides page, and have member's access) – if you want access please email myself rowanh@ihug.co.nz . And that any of our events are open to all members of the Datsun Z Club. In return Events we run are done so under the umbrella of the Z Club to abide by MANZ rules, our members become full financial members of the Z Club, and we keep our name.. The 300ZX Owners Club of New Zealand

In partnership with the Z Club and the likes of Pukekohe Driver Training Days and Sunday drives no doubt the future looks to be very positive and we hope that maybe we can entice a few more people to join the club and enjoy these wonderful machines.

Rowan Hick
Club Founder



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 at least 250 Z owners reading your advertisement..

Costs

Full Page \$50 Per Issue

½ Page \$25 Per Issue

¼ Page \$15 Per Issue

Note this is Negotiable for 3 or more Issues.

Contact Editor – Rowan

OFFICIAL
DATSUN Z CLUB CLOTHING
FOR SALE

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

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
P.O. Box 24-176
Royal Oak
Auckland

OR buy these items at the next club event, ask for Julie Pepper

CAPRI SPRINT DAY '99

No sooner had the Hillclimb at the Domain finished, we were off to another sprint day at Pukekohe hosted by the Capri Club. This time it was Julie Peppers turn to take over the reins of the HP Automotive racing 240 Zed. Sneaking in and parking well away from the rest of us was Rob Chubb. Rob had come armed with some new racing rubber, RA1's from Mr. Toyo, and it was soon evident in his lap times that Rob had been sand bagging for many months. Rob had put the stick in the ground by telling Ron Frew (organiser) to clear a space in "A" class for him.

From 1.19.00 second laps straight down to 1.14.00 second laps, it had to be either the Viagra pills or the new tyres - lets hope it was the tyres! Rob came in with a big smile on his face (that was the Viagra!). Glee was soon to turn to gloom for Rob as all this new grip had possibly caused the engine to starve for oil around one of the corners. The car was retired to the trailer, piston broke and a leg out of bed. Still there was Julie and I to fly the flag...

Julie was busy taking some of the 300 Zed crew for a quick run around the track in the 240. I think she managed to suitable impress them. Good to see some of the 300 crew out there...maybe a 300 Zed team for the next sprint session?? This event was held under the new 5 lap sprint formula and was excellent - well done Ron Frew and his team for actually looking at the regulations. The test session was now over and we were off again...

The day stayed fine and the track was good. Julie was turning in some fast times until the diff finally gave up on the start line. At least it wasn't the gearbox this time. And then there was one...

My 240 performed faultlessly all day and finally allowed me to go under the 1.10.00 second mark. Running low 1.09.00's all day I was rewarded with 2 laps in the 1.08.00's.

As normal we finished off with a prize giving at the end of another excellent day (I'm always saying this - why don't you believe me!!). The next meeting is at Manfield (Levin) on Saturday 3rd of July. It would be great to see some of the central or southern North Island Zed club members either competing or coming to support. How about it?? Until then.....

Paul Hansen.



Our very own Girl-Racer Julie savouring the moment after terrifying yet another passenger!

Space for rent – space for rent – space for cent.

Contact Editor

"CAR WARS"

Luke: "You were on the NASCAR Circuit??"

Ben: "I was once a performance-enthusiast Jedi, like your father..."

Luke: "My father didn't race cars. He was a tool -- he drove Mini-Vans and Toyota's for years."

Ben: "That's what your mother told you. She didn't hold with your father's ideals. She thought he should stay home and not modify in search of additional torque and horsepower."

Luke: " I wish I had known him, when he could really drive."

Ben: "He was a cunning Jedi, and the best racer on the circuit. And he was a cool. I understand you've become quite a speed-racer yourself. For years he went to the track, shredding up tires and running record quarter mile times. Well, before the dark times. Before,...his skirt."

Luke: "How did my father become such a lame ass?"

Ben: " A young chick, namely your mother, who was pretty cool herself until she turned to evil. Helped by other women, She hunted down and destroyed the coolness in men. She domesticated and murdered the Dude who was once your father. Your mother was pissed off by the dark side of Twin Turbos."

Luke: "Twin Turbos?"

Ben: [smiles] "Why yes. Twin Turbos are what gives a Jedi his power. It's a combination of Intake, Exhaust system, ECU upgrades and mods like that. It plays with us like a drug...it gives superiority on the roads...and lets us yell stuff like 'Z-YA LATER' in public everywhere. Which reminds me. Your father wanted you to have these when you were old enough, but you Mother wouldn't allow it. She thought you'd disappear off on some damned 5 day road-tripping crusade."

Luke: "What are they?"

Ben: [smiles] "It's the keys to your father's 300ZX. The weapon of a Jedi. Not as random or clumsy as a Camaro, Mustang, or Supra. But, an elegant weapon from a less civilized age."

"A FEW GOOD ZX'S"

scene: (fade routine, roadside traffic stop. Rain is pounding the windows and thunder crashes sporadically outside...)

Officer: "You own this Nissan, sir?"

Driver: "I think I'm entitled to one."

Officer: "Did you know what the posted speed limit is here?"

Driver: "My answer is I don't have the slightest clue. Okay. Maybe I'm NOT an early riser."

Officer: "Is this car stock?...License and registration sir?!"

Driver: "You want answers?!?!?!?"

Officer: "I want your Twin Turbo 300ZX !!!!!!!!"

Driver: " YOU CAN'T HANDLE A 300ZX!!!! (dramatic pause) Sir, we live in a world that has passing lanes, and these lanes have to be used by cars will balls. Who's gonna do it? You? YOU Officer....Johnson? I have a greater responsibility than you can possibly fathom. You drive your mini-vans and you curse our lifestyles. You have that luxury; you have the luxury of not knowing what I know: that my high-speed lane changing, while grotesque and incomprehensible to you, SAVES LIVES. Deep down, the two things you don't admit at your lame-ass cocktail parties are that you WANT me on those roads, you NEED me on those roads. (said with pride) We use words like "Boost," "HICAS," and "Torque." We use these words as the backbone of hours spent upgrading. You use them as a punchline. I have neither the time, nor the inclination to explain myself to a man who rises and sleeps underneath the blanket of the very horsepower that I provide. I'd rather you just said thank you and went on your way! Otherwise, I suggest you get in, sit down, shut-up and hold on! Either way, I don't give a DAMN what you THINK your ENTITLED TO!!!

Officer: "Did you make these aftermarket modifications?!!?"

Driver: "I did my job. I'd do it again!"

Officer: "DID YOU DO 160 IN A 65mph ZONE!?!?"

Driver: "YOU'RE GOD DAMN RIGHT I DID!!!!!!!!!!!!!!!!!!!!!!!!!!!!!"

WAITARA CLASSIC CAR STREET SPRINT

April 1999

After reading of this proposed street sprint in the Classic Car magazine I decided to give Ross Galgher a call in Waitara. The field was to be a hand picked group of about 30 classic cars. After a bit of pleading Ross allowed me to run the 240Z in a field that was to have no Japanese cars. The 240Z was the only Jap car that was allowed to run and in the end my 240Z was the only 240Z there. After alot of hassles from council and locals the street sprint was a goer!

If you can remember the really bad weather on Friday 16th and Saturday 17th of April, well Sunday 18th was race day. My son and I set off about 9am on the Saturday and headed for Waitara (about 15 kms north of New Plymouth). The weather on the way down was nothing short of lousy and windy. The wind really blew the trailer around and half way down I really started to wonder if it was all worth while.

We arrived in one piece and headed straight to scrutineering. They looked and looked and finally gave the 240Z a clean bill of health. After the unfortunate incident at Queenstown they are pretty thorough when it comes to checking the cars. The public are going to be close to the circuit and they did not want any problems due to mechanical failure.

The car was soon back on the trailer and we were off to Rod & Karen Browns home in Bell Block. I think one of the big pluses of being involved in a car club is getting to know other club members I other parts of the country. Z club members, in my experience, are only too happy to put fellow members up at their homes - thanks again Rod & Karen.

Rod & Karen's 240Z was damaged at the Datsun Z Club meeting in Jan '99. Now that Rod has finished painting the roof he is finally allowed to get the 240Z back together and get 'back out there'. There was a dinner organised that night for drivers and friends and most attended.

Next day dawned a little overcast and we were soon on our way to the circuit. I can see why they were a little nervous about the cars condition. The circuit ran along the front of many homes and shops. The public were only a couple of metres away. More cars arrived and so we had a full field of...

Porsches, Escorts, Mustangs, Capris, TR8s (including Ross Galghers TR8), Camaros, a Jag, a Ferrari, a Lotus, an Austin 7 Sports, a Falcon GT, a Leyland P76 (ex B&H car), Petra Bates in her Ford Thunderbird and my littl' ol' 240Z. Thirty two cars in all. All the cars lined up for a two lap look at the track and to let the public see us. The circuit was in the main area of Waitara and to slow the cars down they had placed four tyre barriers around

the track. These were at ninety degrees to the track and could only be taken at walking pace in first gear. This was going to be good!!

Practise was great with the 240Z setting the fastest time. After Chris at AJ Automotive had done a little head work during the week, the 240Z felt really strong. It had to as I was only using 1st and 2nd gear through the main part of the track and a brief trip into 3rd across the finish line. The engine was running to about 7500rpm, and as I was told, was sounding sweet.

Everyone had three runs. We ran only against the clock with one car on the track at a time.

The comments from the public, and the two MANZ stewards, were excellent. No one had any problems or accidents. There was about 5000 spectators present according to the reports.

Afterwards we had a short prize giving and a cup of tea. My son and I left Waitara about 5.30pm and we were home 4 hours later... with a little something for the mantle piece!!

Maybe they won't have any Jap cars next time...

Paul Hansen

DYNOS.. THE LOW DOWN ON LOW READINGS

Reprinted from Z CAR MAGAZINE. If you like this article then subscribe to the Magazine

Ask Mr Good-Tech
Dynamite

At a local custom car show yesterday, I got to do a run on a DYNOJET 248 chassis dynamometer. The numbers it spat out were 122HP @ 5'400RPM and 120-125 ft-lbs torque, flat from 3'000RPM all the way to 5'200RPM, I assume this to be net at the wheels. Do I add about 25% of this number to take into account the approximately 20% driveline losses? That would give me 152.5 HP. Is this what they call net HP (with perhiperals and a full exhaust)? Is gross HP measured on an engine dyno with no alternator or exhaust system? The reason I want to go all the way back to gross is that the 240Z's were rated at 150HP SAE gross @ 5'600RPM. I'd like to figure out what my triple Webers, headers, and a 2.5" exhaust are worth. The motor is otherwise stock except for an N47 head, not shaved, 170 compression across the board. To do this I need to know what a stock car puts to the rear wheels, or how to arrive at a gross horsepower number from a rear wheel horsepower number. There was a feneral consensus that the dyno was reading low. Of course this is what everyone wants! Heres an example, there was a 325i BMW with full Hartge 2.8 Litre engine built by a reputable speed speedshop that is supposed to be spec'ed at 250HP, It ran off a 168 at the wheels.

Answer

Oh boy this is a sensitive and big subject. I put off replying to this at first because it was such a big subject. But it is a common question, and one that hits on a topic that is so often talked about and so poorly understood that I decided to stick my neck out and address this. You have hit on one of the great smoke and mirror areas of high performance. You have to remember that engine dyno readings are adjusted to a baseline so that they can be used for comparisons. Even the smallest change in the environment will alter the readings of a dyno. I've seen cases where a door left open at the end of a very large building affected the dyno results by as much as 5HP when the dyno was all the way at the end of the other building, say 100+ yards away. Some folks realise that gross changes in air density, temp, humidity, etc must be corrected for when running an engine dyno, but few people including some dyno "operators" realise how sensitive the equipment really is. Also the correction factors are not always straightforward.

The bottom line is, you are not getting hard data from an engine dyno (as most people think) but rather extrapolated information. And the extrapolation procedures is subject to 'interpretation' and error. Add to this the fact that most dyno testers want to publish or brag about dyno results, have a vested interest in the results being as high as possible. For the most part I have found dyno claims to be more a representation of what the engine owner and/or builder wanted than what they really got. For example I have seen motors, with "dyno test results" showing 228HP, which, when tested by independent, expert dyno

operators, have shown only 165HP! This is on engine dynos, now, not chassis dynos, so there aren't any "losses" to blame this difference on.

You are talking about a chassis or rear wheel dyno, where other factors, frictional and environmental losses, have to be calculated and factored in. To be accurate, you would need to test your motor on an engine dyno, then on a chassis dyno, and then deduce the total losses for your particular car and setup. After establishing this factor, you wouldn't be able to change fluids, brake adjustment, temperature, tyres or anything relating to the drive train or the operating environment, or your loss factor would change.

The conventional wisdom regarding the difference between Flywheel HP read on an and engine dyno and rear-wheel HP read on a chassis dyno used to be that there was a 33% loss at the rear wheels. Now if you do the calculations, you'll see that this just can't be frictional losses alone. Not enough waste heat is generated by components for this to be the case. But often this number tends to predict fairly well the difference between flywheel and rear wheel HP numbers. Why is this so, and where is the power going?

You need to understand that engine dyno numbers are corrected to sea level and 68degF. However, once installed in a car, the engine is operating in an engine compartment that is much hotter than this. This means that there will be "losses" or differences in HP readings on the exact same engine simple because it is installed in a car and its operating environment is now hotter. Additionally few of us live at sea level, most of us live at 500ft or more above sea level. Typically there is about a 10% loss in engine HP just by installing in a car and running it at 500ft in altitude. Even greater losses can be experienced in some cases and once you start talking about high altitudes like Denver, CO, you really see some big losses [Rowans note:- At Pikes Peak the famous Hill Climb in the states, the Engine management systems adjust fuel maps real time as the cars scale the mountain so the engines don't go bang at the top. I think an 800HP car loses 100HP from start to finish]. So before we even get to any frictional losses, our rear wheel HP numbers will already be down from the flywheel numbers generated off an engine dyno (the most common type of HP number's bandied about in the performance industry). Remember it is the temperature in the engine compartment we are concerned with once the engine is installed in the car. Ambient air temp is a far less important factor at this point. Damn few engine compartments stabilize at 68degF! Especially when the car is sitting stationary on a chassis dyno.

Now you have to subtract the internal frictional losses, these losses due to friction in the transmission and differential. These are probably around 15-25HP. Plus, you must factor in the additional frictional losses, such as at the tires and the U-Joints which will affect readings on a chassis dyno. Yes, tires will lower the HP readings. In fact, tire brand, model and even pressure will affect HP readings. Tires can easily "net up" another 5-10HP or more! And with independent rear suspension of a Z, there are a lot of U-Joints to eat up HP. The CV joints halfshafts of the turbo model will consume less power than the U-Joint type half shafts of the non-turbo.

Add all this up and what do you have? Well let's start with a 150HP Z car, where the 150HP (gross) was measured on the flywheel with an engine dyno. First we take 10% or 15HP, for environmental changes, Our engine is reading 135HP, Next, you must subtract for internal frictional losses. Lets use 20hp as a nice, safe, middle of the road number. We

are down to 115HP. Now subtract the additional amount for external frictional losses. Again lets use a middle of the road figure here and use 6HP. This leaves us with a rear-wheel HP reading of "only" 109HP on a car that has an "honest" 150HP. That's almost a 30% loss! To offer a simple answer, made all the more useless by its simplicity, you probably should expect rear wheel HP numbers to be 25-35% below accurate flywheel HP numbers. Obviously each car tested on this dyno would vary in regard to losses, so using a blanket factor will mean the results are far less useful that they could be, but there is often really no other reasonable option.

Now lets that the example you recount of the BMW – it is supposed to hage 250HP (engine) and reas only 168 (wheels). Well lets start with the 250HP reading and subtract 10% losses due to change in temperature and altitude, our environmental losses. That drops our real readings down to 225HP. Next, let's subtract the inetrnal frictional losses – in this instance let's stick with the 20HP we used for the example above. This drops our real readings to 205. Then, subtract the external frictional losses – again let's use the 6 HP we used in the example above. This dops our real HP numbers at the rear wheels to around 199 or 51HP less than claimed by the engine builder. Offhand I would say this sounds about right,

Now hearken back to my comments about engine dyno HP numbers usually being a bit inflated (Remember my story about that 225HP Datsun motor?) I can easily see where the 250HP results could be off by as much as 10% if the testing was not handled quite right. I call that the "inflation factor" and it can often run much higher than 10%. If that were the case, then the rear wheel HP would expected to be more along the lines of 176 or so. As you can see we are now getting much closer to the 168HP that this chassis dyno read. A small change in altitude or temperature would easily explain the differences, as would slightly higher frictional losses. Remember, I was simply generalising about the frictional losses. In fact, if you assume the 10% "inflation" error in the flywheel numbers, and the 10% environmental losses your honest engine HP would be about 202. If you then use the high end of the frictional loss spectrum I talked about above (as opposed to the middle of the pack number I picked to use), you would come up with rear-wheel HP readings of about 168, which is just where this dyno came out.

I would say this dyno was probably closer to right than to being too low, as my experience has shown that most flywheel HP numbers are far too high. "Inflation" [ed...resist the viagra jokes...resist..] is hard [ed doh!] to beat [ed no I'll shut up now] and all of us seem to suffer from it in one way or another [ed...no] . This is one reason why I look at dyno numbers with a skeptical eye. I hope this helps, though I know it's not the definite answer and is not the unequivocal answer you were hoping for. I purposefully haven't gotten into a number of topics that would greatly affect the outcome of any chassis dyno test and alter how it's results would compare to flywheel HP numbers, such as ensuring the engine and drivetrain components had gotten upto operating temperatures and had stabilized, or what viscosisty oil was used in each kind of test etc.

As to your actual HP numbers. If we apply the same number crunching I have used above, to figure out what your flywheel HP might be based on your rear wheel HP reading of 122, we come up with 165 HP or so, add the "inflation factor" I talked about, and the flywheel HP numbers I would expect from a typical engine dyno test would be somewhere in the 180-185HP range. End.

INTERVIEW

BRUCE & GILLIAN FENSON

Tell us about your Zed

1971 240Z Red Left Hand drive Canadian import, hence the number plate LH240Z. Pretty close to original, I've made no changes to it since I've owned it (2 years), except clean up the body work.

Also have a Silver, 1992 300zx called Xistine

History of Car?

It came in to NZ November 1988, it's had 5 previous NZ owners and I paid the grand sum of \$3,725 for it.

When did you join the Z Club, how did you hear about us?

I joined about 3 years ago, heard about it from the owner of Le Ferarri Restaurant!

Is your car purpose built, street raced, daily transport, business vehicle?

Daily transport, used by Gillian every day – she loves it, not many cars leave the lights before Gillian does!!

Future Plans?

Hope to quietly upgrade the 240z to at least a 2.8 so it becomes competitive – the 300 will also get some small mods!

Worst moment in your Zed?

Probably this morning when I encountered the WOF inspector from hell! Thought he was going to right the car off!!

Best time you have had with your Zed/s?

Dragging off a Falcon down the Ruakaka straights on my way back from Kaitaia in the 300zx. Falcon ran out of pedal before us!

What sort of events have you been involved with in your Zed/s?

Both have been on the Taupo track for Driver training days, the 240z also been in a Motorkhana and the 300z recently did really well in the Club economy run.

What car would you buy if you won lotto?

Twin Turbo Zed, the latest with chip changes – nothing else competes! [Ed: Right on buddy!]

CLASSIFIEDS

To advertise in this section please contact Rowan, ph (09) 521-3624 or email rowanh@ihug.co.nz

Free for any text ads - \$10 for ad with photos

FOR SALE

1976 260Z 2+2

Forest Green, 2.8, 5spd - otherwise original and very tidy, won concours (260 Class) last 3 years in a row!

\$6,800 Phone Julie 483-7477 or 025 854-406

FOR SALE

1990 300Z 2+2

Grey, Twin Turbo, Fully Spec'd Automatic, Targa Top, Full Leather, all offers considered as **urgent sale needed** Phone (025) 740-855

FOR SALE

280Z RACE CAR

My 280Z coupe is up for sale. This car has been extensively modified over many years and has all the best parts. The car has some slight "race incident" damage (panel). Mechanically excellent and extremely quick. Set up for serious racing, hillclimbs, sprints etc. Comes with trailer and full list of spares including wheels and tyres. Would separate if I had to.

You need to ring me to get all the details (0.44.00's around Taupo and 1.11.00's around Pukekohe). The 3 litre engine has had a recent rebuild and the side exit exhaust is new.

Lets start to haggle at....\$8990.00 for the lot!!!

Phone Meryn at (09) 576-3701 or leave a message on the answerphone thingy if I'm not in.

FOR SALE

Datsun 280Z 2+2 parts. Excellent red velour interior. Mags wheels and tyres - 14". Have heaps of parts for 280Z model. Give me a call for anything you need. No reasonable offers refused on any parts.

Phone Keith at (09) 2928-007. Remember, I'm a farmer so don't ring too early!

FOR SALE

Datsun 240Z race/road car. Fresh 2960cc motor ready to run in. Four wheel disc brakes (four pot calipers on front), oil cooler, electric fans, roll bar, triple carbs, extractors, electric fuel pump, front and rear spoilers, 14 x 7 mags with Hankook Z2000 race/road tyres, race harness and seat. Has lowered and adjustable suspension. Car is red in colour. Is registered and warranted. Very quick, well sorted car with race history. Wife now wants boat! You could not build this car for the price I'm asking...**HEY, I'M OPEN TO OFFERS!!!!!!!!!!**

Phone Ron at (09) 262-1603 work or 021-920896 mobile.
Go on ... make my wife's day!!!

FOR SALE

Datsun Fairlady Z, 1978 model. 2.0 litre EFI, 5 speed manual with only 90,000 km's on the speedo. Restored to original condition using genuine factory parts to concourse standard (all receipts available). Body stripped to bare metal and repainted in original colour with baked on Glasurit paint. Engine bay highly detailed. **This car has to be seen to be appreciated.**

Phone Richard on (07) 866-2054 Sell price.... \$12,500.00

PARTS FOR SALE

King Springs, model KDFS-15, suitable for 280ZX front. Standard ride height, repainted black. Brand new \$200.

Contact : Mark Thompson, ph 6343327 or 025 2885235.

PARTS FOR SALE

4 15"x7" 4 Stud Mags suit 240/260/280 5 Spoke 'Trucker' design. Near New. Complete with 205/60/15 Dunlop W101 R Spec Tyres used for 1 meeting. \$950 ono [Eds note I couldn't read my own handwriting so you'll have to double check with Mr Hansen on that price!]

Ph Paul Hansen 298519 a/h

Letters to the Editor

This is YOUR magazine have YOUR say.

Either email them to me (rowanh@ihug.co.nz) or post your letters to the Z Club post box. I would love to see some comments on this issue seeing as I spent HOURS on it!!!!!!!!!!!!!!!!!!!!

THE FINE PRINT PAGE

Membership Discounts

Members of this club are able 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 M.A.N.Z. licenses (see below) qualify for a very extensive list of discount items.

Competition Licenses

You do not require a competition license for Motorkhanas, Trials, Hill-climbs, or sprints, provided these aren't interclub competitions.

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

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 \$33.75 to MANZ.

National B

This license is the minimum requirement for all "Regional" MANZ permitted competitions, as well as being required for all closed-club racing or rallying. This License is issued by MANZ. Application forms are available from Club Secretary.

National A

Those who wish to participate in RACING will need to obtain a National A license, study up on the rules, then sit the test. This involves calling on an examiner listed in the front of the MANZ 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 pocket 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 Marshals. Very few people would be aware of the fact that every motoracing employs as many helpers as there are drivers out enjoying. You could well be one of those helpers, and you may find it to be 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 its 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 its 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, postcode and phone number.

Parting Shot



Guess you never can tell when those powerpoles
will jump out at ya,

No, not even Ferrari owners can tell that!

Next Issue:

Brake Upgrades for 90+ 300ZX's the complete low down and skinny on what to buy why and who from.

Rowans Report Card from the Temple of Zoom (SGP Racing in Dallas)
Scintillating Race Stories from those hardy mid winter racer's

(yes I did amazingly have to hold over a couple of articles cause we ran out of room!!!!!!!)
