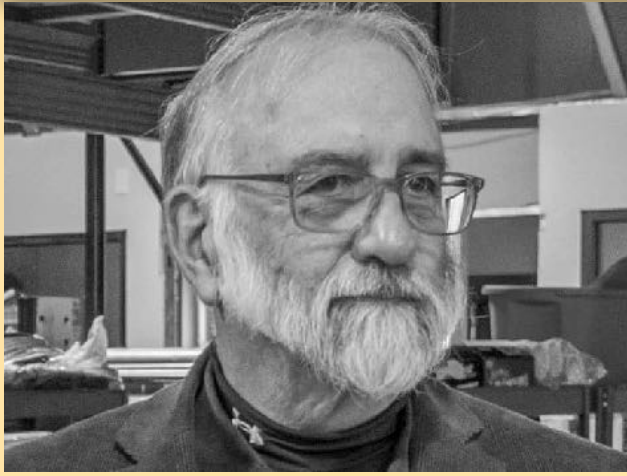




# PIT SIGNALS



LATE BRAKING VARAC NEWS MAR, 2025 - JEREMY SALE



## *J.R. Mitchell 1949-2025*

From JR's son Josh Mitchell:  
"We always loved going up to Mosport for the VARAC race, as it's probably his favourite track!"  
We note JR's passing inside this edition of Pit Signals.

Also inside, Ice Racing is done for this year! Plus! A Model Lotus Seven, Winter Workshops, Greatest F1 Driver, A Jensen Revival, A Very Quick Mini, the Teubler Special, Annual VMC meeting, VVGP and more!





# Late Braking News

John Hawkes

BEMC is now MAY 10/11 Yes, the first VARAC event of the season is not that far away! Who's ready to roll? I am...sort of...nearly....! Other than that, here's a few things to think about!

VVGP We look like we will get a really great turn out for the VGP in June. Sports 2000 is the featured marque and we will have races for all of our classes plus our popular HPDE day on Thursday.

VARAC WEBSITE Work is underway to build a new website with better access and more current detail. We know the old one was in need of a major overhaul, not just a quick top end rebuild. You will be able to find eligibility data, event info, championship points and even sell or buy a race car in a new classifieds page. More on next page.

DATE	EVENT	TRACK	GRIDS & POINTS
May 10-11	BEMC Spring Trophy Races	CTMP	Grids & Points: VHC; CMC; FC
May 23-25	Spring Classic	Mt-Tremblant	Grids & Points: VHC
June 12-15	VARAC Vintage Grand Prix	CTMP	Grids & Points: VH; CL/MC; FC
July 12	VARAC Peter Jackson Races	Shannonville	Grids & Points: VH; CL/MC; FC Double last race
July 26-27	BARC Canadian Touring Trophy Races	CTMP	Grids & Points: CL/MC; FC; <b>Note-no VH grid</b>
July 25-27	Summer Classic	Mt-Tremblant	Grids & Points: VHC
Aug 22-24	Calabogie Cup Race Weekend	Calabogie	Grids : VHC; FC <b>VARAC Participation to be conf.</b>
Sept 20-21	BEMC Late Summer Trophy Races	CTMP	Grids & Points: VHC; CMC
Sept 26-28	Fall Classic	Mt-Tremblant	Grids & Points: VHC
Oct 4-5	Celebration of Motorsport	CTMP	Grids & Points: VHC; CMC



# Late Braking News

John Hawkes

## CALABOGIE

We are calling out to all VH drivers to come try the Calabogie event in July. It's set in a beautiful area, the track is quite the challenge and I am even told it is partly resurfaced, so less tire wear! It looks like we have 10 cars committed and I know people like to wait, but it would be great if we could get to at least 20 cars. I will put on a bbq for the Saturday night, so it will be a two day version of the Peter Jackson event. If you want to check out this great track go to this link: [Calabogie](#)

## KEEPING VARAC RELEVANT

Our ever vigilant secretary Simon Tomlinson is leading an initiative with a small group to strategize on what we need to do to stay relevant and attractive to existing and new drivers over the next 5 to 10 years. Simon is looking for your input so feel free to chirp in with your views to him at: [tomlinsonsimon@yahoo.com](mailto:tomlinsonsimon@yahoo.com)

## CALLING ALL OPEN WHEEL RACERS

Last but not least, our favourite coach and open wheel competitor Paul Subject is rooting out all the Club Fords and other open wheelers to see what we can do to get more of these cars out on their own grid. We know our neighbours at VRG and VSCDA have a large number of open wheel cars and Paul is looking at some co-branding or two way promotion to encourage those cars. Paul says there are over 70 "real race cars" in the Toronto vicinity, so just getting a quarter of them out would be wonderful.

Ice racing season is over and then its time to focus on getting that car ready for May! See you at the track. John.



V.M.C.

John Hawkes: "VMC, the Vintage Motorsports Council was formed in 1988. VARAC and about 30 other north American vintage and historic clubs are members. The council was initially formed to consolidate and improve insurance coverage for vintage motorsport clubs. It has extended its governance to include a common data base for infractions and "potentially bad apples" and also leads the way on safety issues covering cars, tracks and flagging systems.

It has value to VARAC as we can learn from other non-profit clubs (like VRG and VSCDA) and for profit (like SVRA and HSR). VMC issues vintage race licenses but they are questioning their value, as most clubs issue their own (unlike us, as VARAC is not a licensing body)

VMC has a virtual and an in-person meeting once each per year. Last week was the in-person meeting at Indianapolis and about 20 of the 32 clubs were physically present, including myself as VARAC president. There is a lot of effort being aimed at flag systems using in car lighting systems and track based light panels, HSR and SVRA require the car based Flagtronics system as of mid 2025 for most or all classes racing with them. It is a definite improvement over physical flags alone and it is even possible for race control to meatball a specific car. I might get the folks at Flagtronics to give us a presentation if that is of interest to the club.

BTW, Indianapolis is an amazing location for any race car buffs there is a race shop, restoration shop or museum on every corner. We spent time at the Chuck Parsons family restoration shop where two Indy cars were undergoing full restoration. We held the meeting in the Dallara conference room and then had a tour round their production shop for the Indy cars and the Cadillac IMSA Dpi. See next page and check the link!"



**dallara**  
indycar factory



Left: Dan Gurney family Indy car restorations. Check The Dallara Indy Car Factory. [Dallara](#)



# Ice Racing at Minden!

By Chris Rupnik



Fortuitous circumstances and excellent timing before Christmas allowed my son Simon and I to acquire a Lexus IS300 “LexusCup” race car for some ice racing this winter. Having bought the car sight unseen but from an experienced ice racer had the car prepped and ready at the track for the first weekend of the season. Even better circumstances was that I met up with Simon Tomlinson, Ted Michalos, Stewart Wigg and his son who were racing on the entire weekend but in the rubber street class. A wonderful dinner and sound sleep at the Dominion Inn prepped for a dreamy fresh Sunday morning after a nice snowfall.



CASC made it very easy to participate - and the staff was very considerate to make sure that everyone had a good time. Whats the racing like? Whereas when our road racing fellow competitors have

# Ice Racing at Minden!



issues and “go off” that means that they are no longer on the track. Different with Ice racing where the track is the only place the cars can be - so you have to make sure you have the ability to circumvent any stranded or spun around cars. Fortunately for me the Lexus was very easy to drive in the studded tire classes. I doubled up the classes which meant that i got out for 4 sessions on Sunday, with the ice significantly changing from morning to afternoon so it wasn't at all repetitive. I look forward to the next time I get there! *Chris Rupnik.*







**Simon Tomlinson:** “You really should try ice racing! How else can you get your fix of racing while living in our Arctic Tundra? ..and it’s great value too! \$200 entry, \$200 to hire a car for a day. There is some amazing skill on show from the seasoned racers and it’s as fun to watch as it is to compete. And the word of the week is ‘humbling’. Ice racing demands finesse, car control, patience and controlled aggression that will only serve to make you a better driver and leave you wanting more. I attended with several other first timers – Stewart Wigg, his son Jamie, my friend Jim McRea and son Elliot, we had enormous fun. We were lucky enough to run together in the Street Cup class which got the banter going while some great memories were made.

The people are great at Minden, everyone seems to be out for fun – but come race time it’s intense! I’ve (so far) been to two weekends and driven a Lexus IS300 AWD, Subaru WRX 4WD, Lexus IS250 RWD, Mazda 3 FWD and Honda Fit FWD, and they all provided very different experiences. For anyone thinking of going I’d suggest hooking up with Steve Manol who looks after many cars for hire there for various folks – you too could try this array of drivetrains. I’d also like to extend thanks to Anne McCallum, Ted Michalos, Russ Bond and Chris Rupnik – as well as Steve Manol and his friend Mike for contributing to the facilitation and the fun.”

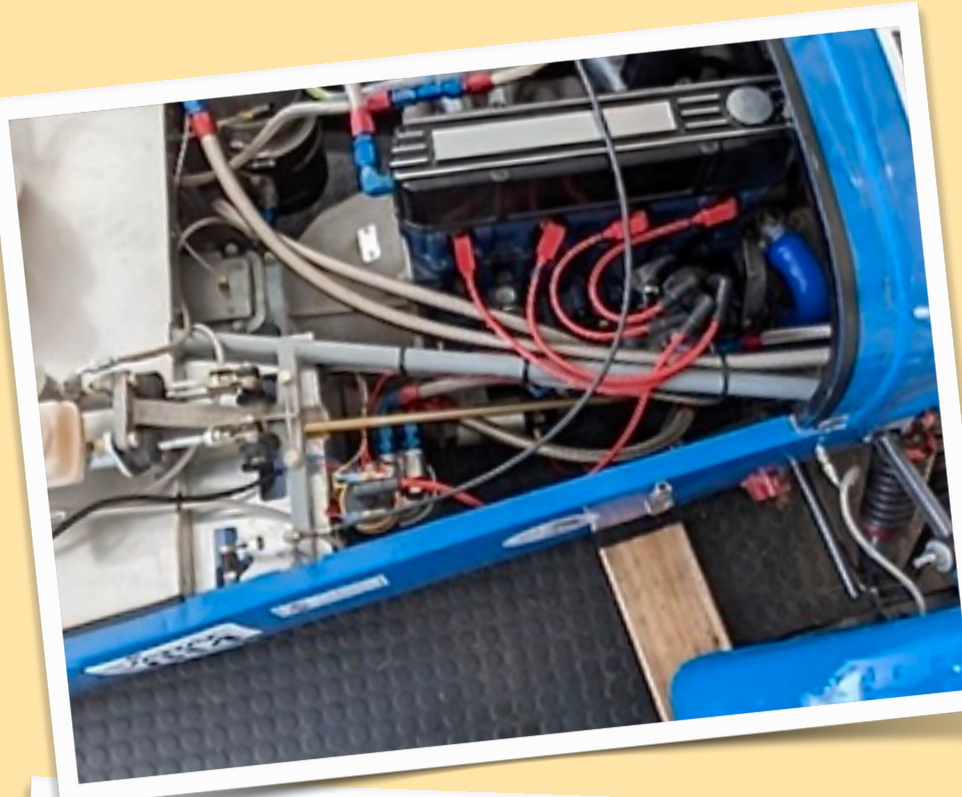
## Featured in “Kit Lotus” - the Brian Thomas Lotus 7!



Kit Lotus is, quote “The world’s only magazine dedicated to scale model Lotus” and the latest edition features “a very nice Lotus 7 on the front page, a 1:24 scale modified Tamiya Series 2 and based on a current car racing in Canada and modelled by Ed Luce.” Yes, it is of course based on the car raced by Brian Thomas. Ed says in the magazine article “A while ago I found a good deal on a 1/24th-scale Seven produced by Tamiya. A friend of mine races a Seven S2 here in Canada, and I thought it would be fun to build a replica of his car for him.” You can see on this page and the next the amazing degree of detail Ed Luce has put into the car.

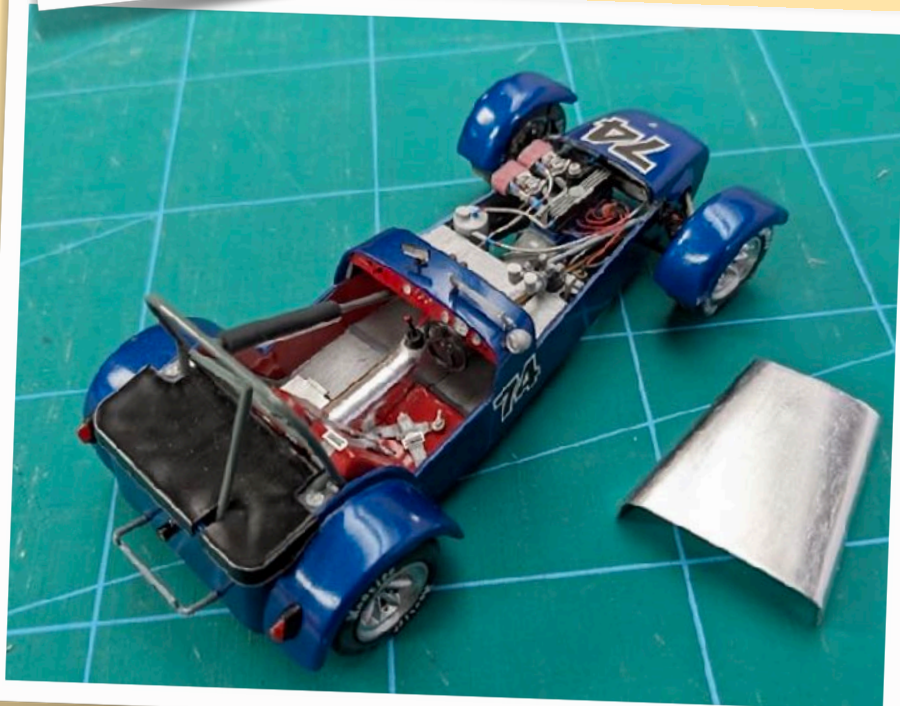


Brian Thomas: This summer Ed Luce built a scale model of my Lotus Seven S2. He presented it to me at the track and I was amazed. Such skill and hard work having only seen the car in pictures. He later submitted a piece to "Kit Lotus" magazine. We have some skilled and talented members in VARAC. Thank you very much, Ed!



Notes from Ed Luce: "The engine bay of the kit is quite sparse, though it includes the proper pre-crossflow engine and Weber carburetors, so a lot of 'dressing up' went on there. A few parts for the dry-sump system, etc. were made, and a lot of plumbing. The stock battery was removed from the shelf over the passenger's legs and a racing battery was placed in the passenger seat area.

The dashboard needed a bit of re-work, and the race car uses aftermarket black-on-white gauges which I printed in scale from images on the Internet. Steering wheel was made from scratch, but a few of the kit parts just needed to be shuffled around to their real-world locations on the race car."



[More here!](#)

# Greatest F1 driver ever? See the next two pages!

**MOST WINS  
BEFORE 2007**

**MOST WINS  
AFTER 2007**

<b>SCHUMACHER</b>	<b>91</b>
<b>PROST</b>	<b>51</b>
<b>SENNA</b>	<b>41</b>
<b>MANSELL</b>	<b>31</b>
<b>STEWART</b>	<b>27</b>
<b>CLARK</b>	<b>25</b>
<b>LAUDA</b>	<b>25</b>
<b>FANGIO</b>	<b>24</b>
<b>PIQUET</b>	<b>23</b>
<b>HILL</b>	<b>22</b>

<b>HAMILTON</b>	<b>105</b>
<b>SCHUMACHER</b>	<b>91</b>
<b>VERSTAPPEN</b>	<b>63</b>
<b>VETTEL</b>	<b>53</b>
<b>PROST</b>	<b>51</b>
<b>SENNA</b>	<b>41</b>
<b>ALONSO</b>	<b>32</b>
<b>MANSELL</b>	<b>31</b>
<b>STEWART</b>	<b>27</b>
<b>CLARK</b>	<b>25</b>

How can we compare a current-era driver to one from the '50s or '60s? Robert Searle says one measure of driver greatness is points earned as a percentage of points available, see next page...

# Greatest F1 driver ever...

**Robert Searle:** “Who is the greatest F1 driver ever? We all have an opinion but there are so many variables to consider over 75 years of World Championships. Some eras were dominated by just a few drivers (Fangio won 47% of his races); at other times, many similarly-skilled drivers competed for the honours. The season has gone from 7 races in 1950 to 24 in '24. Available points per race have gone from 9 to 34. In the beginning, only the 5 top finishers earned points; that is now 10. Some years have been dominated by a single chassis while at other times the field was more level (e.g., if you could get a Cosworth DFV). Careers have lengthened considerably over time, due in part to safety improvements. How can we compare a current-era driver to one from the '50s or '60s?

Rank		BPs
1	Lewis Hamilton	1037
2	Michael Schumacher	805
3	Alain Prost	726
4	Sebastian Vettel	670
5	Fernando Alonso	668
6	Kimi Raikkonen	588
7	Juan Manuel Fangio	544
8	Max Verstappen	533
9	Ayrton Senna	532
10	Nelson Piquet	483
11	Jim Clark	463
12	Graham Hill	456
13	Jack Brabham	445
14	Jackie Stewart	435
15	Nigel Mansell	411

I think that one measure of driver greatness is points earned as a percentage of points available. A driver that earns 140 points in a year when 400 are available has a 35% success ratio so I award that driver 35 “basis points” (BPs) for that year. I’ve calculated these BPs for each season since 1950 and totalled them for each driver.

A long career helps so this metric is, in fact, a measure of greatness over an entire career. It is not a measure of pure speed. I think that most of us would agree that Hamilton and Schumacher are the two greatest of all time. What about the rest?

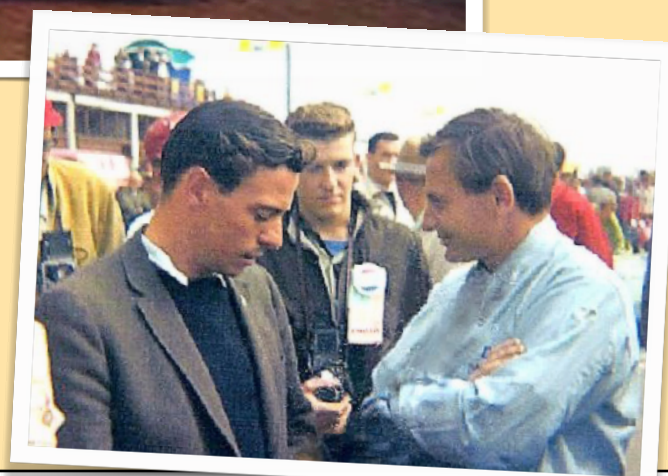
At left: My Top 15 list!

These drivers account for 51 of the 75 World Championships contested. It's clear that active drivers will move up the ranks, but how far? Alonso will almost certainly move into P4 next year. Max Verstappen might reach Hamilton but only by capturing 50% of all points available for the next 10 years; not impossible but a stretch. He has a good shot at reaching #2 but it will take him another 5 years of strong performances. How long before he retires. The other active drivers to watch are Leclerc (currently P37) and Norris (P56); neither is likely to reach the Top 15 in less than 5 years.

A few other thoughts: Stirling Moss just missed the list and is P16; he is the highest-ranked driver never to be World Champion. Max Verstappen was in the 35<sup>th</sup> position on this list after the 2020 season. Lewis Hamilton passed Michael Schumacher during the 2019 season and, in my opinion, is the Greatest F1 driver of all time.



Clockwise from above, Fangio, Clark and McLaren at Mosport, Stirling Moss.



# Jensen Healey Revival

*By Stewart Wigg.*

After an eventful and very enjoyable season of racing the Triumph GT6 in 2024, my New Year's resolution under the category "Self Improvement", was to add to my small car collection. Having been raised in Norwich in the UK, a stones throw from the Lotus factory, I had always hankered after something related to the iconic yellow and green brand. Yellow and Green are entirely coincidentally the colours of the soccer team I am obligated to follow - Norwich City - who, for historical not pigmentation reasons, have the sobriquet of "The Canaries". The Canaries regularly scrape promotion into the English Premiership, only to yo-yo back down to the 2<sup>nd</sup> tier Championship league the following season after their brief spell in the sun.

I had previously been impressed with Claude Gagne's eclectic collection of British motor cars and his necessary masochistic streak to keep all those gems of British engineering running. I was particularly interested in his lovely 1973 Jensen Healey (below) that I had drooled over in 2023 when searching for my first race car...



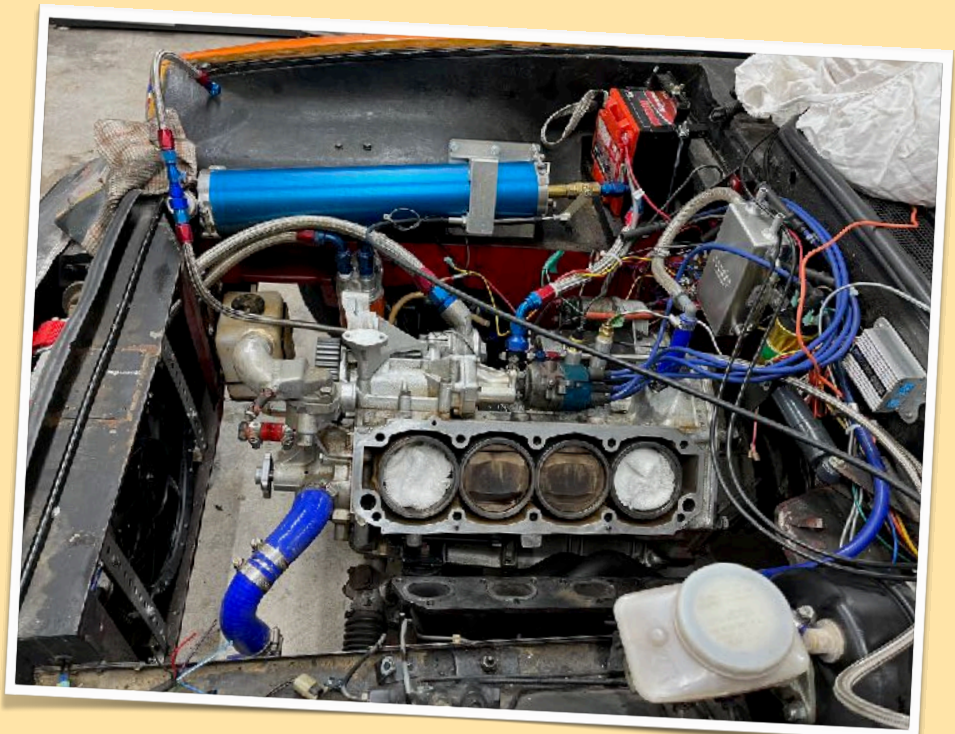
The original JH sported a ground-breaking 907 Lotus engine which, when introduced to Jensen as a potential power plant, was still very much in the beta stage of development at Lotus. Chapman did a sterling sales job on

## Jensen Healey Revival

Jensen and they chose the rather fragile 907 for their new model, leading to reliability issues which contributed to its and Jensen's early demise in the seventies. However, it had the distinction of being the first commercially available DOHC 4 valve-per-cylinder engine and later morphed into the more reliable Lotus 912. This was the impressive power plant for the Lotus Esprit, Excel, Éclat and the damnably cute Sunbeam Lotus. I happily discovered that the 907 in Claude's JH had been swapped for a more modern 912 built by a very reputable builder in the UK and I was hooked. Sadly the Jensen had suffered a blown head gasket on Claude's unfortunate first run out in 2024 at Mt-Tremblant but that only added to the appeal. Give me a fixer-upper over a pristine race machine any day. It's the same idiocy which keeps me following the Canaries, a fixer-up of a soccer team if ever there was.

Thus began what I suspect could be a lifetime of familiarizing myself with the foibles of the Lotus 9xx engines...

On dismantling the engine I found the head was a little distorted but sadly the block even more so. Various forums provided much insight into the many 'gotchas' of working with these engines (along with the usual generous smattering of off-topic gems of knowledge by those seeking to be recognized as oracles of the automobile). I quickly descended hopelessly into the world of "nips", degree wheels, composite v metal head gaskets and the dark arts of adjusting cam belt tension by pitch. I am now awaiting the results of some serious engine machining, whilst being surrounded by various engine parts and daunting "to-do" and "to buy" lists which I'm sure many owners of historical race cars are familiar with.







## Jensen Healey Revival

....I am very fond of my first race car, but if you see me at the BEMC Spring Trophy in the GT6, you'll know things didn't go well with the Jensen. Although it's more likely I'll have the Jensen up and running than The Canaries gaining promotion to the English Premiership in 2025. Stewart Wigg.



To all of VARAC, we wish to extend you personal invitation to the

# Waterford Hills Vintage Weekend

## July 25-27 2025.

As many of you are aware, Varac has a strong history of support for our event, and we hope to see it stimulated with new faces and the return of old friends. Last year, we moved the date to Labor Day weekend, which at the time I felt was a good move. It turned out I was wrong, and I take all responsibility for the decision and the ensuing cancellation of the event! That said, we are moving forward, and with our club board finding the ability to return us to our original weekend, we want to extend this warm invitation.



Off track we think you will find it a “comfy in your skin” kind of event. Our race weekend volunteers are among the best there is, and work to be efficient and friendly rather than being officious. As for on track, Friday practice is included in the entry. Saturday is 2 sets of races, with a longer single race on Sunday. In all, expect around 5 to 6 sessions on track over the weekend.

Off track we only schedule the Saturday night dinner (normally a steak fry) with awards (and hopefully a laugh or two). We leave the rest of quiet time for you to relax, visit with old friends or make new ones. For those who have not been here in a while, you will find the new track surface holding up nicely, with upgrades to our paddock pavement and access roads...

# Waterford Hills Vintage Weekend

Now, for the special announcement: To honour the late John Greenwood, We are naming his race group for the

"John Greenwood Trophy"!

As you may know John was a strong advocate of our event and was always a fixture willing to offer help, advice, and of course the gift of his character. Mike Deeward has graciously offered to head the task of an actual trophy and its parameters of award-ship.



Waterford is easy to get to, easy on the wallet, (and pay when you get there). With emphasis on fun on and off track. The way race weekends used to be, and we hope you find with us, are still!

More news to follow. Any questions please feel free to email.

Cheers, Joel Hershoren: [whrrivintage@gmail.com](mailto:whrrivintage@gmail.com)

Like us on Facebook for the latest event news!

<https://www.facebook.com/WaterfordHillsVintage/>

"Everyone praises the social aspect and the clubhouse food.....I'll go for the Hilltop corner and the Swamp corner. The former a blind on the crest negative camber 2nd gear affair.... the latter an opening radius, flat out 3rd gear catapulting you on the finish line!"

*Stefan Wiesen.*



# White Mountain Vintage Grand Prix

Friday & Saturday, July 11-12, 2025  
Club Motorsports, Tamworth, NH

Event Chair: Marc Cendron (617) 771-0231

- Save \$50 by entering before June 26th!
- This is a muffled event – 90 dB limit.
- VSCCA Membership not required.
- VSCCA Members and VMC-licensed drivers welcome.
- Open to VSCCA, VMC, SCCA and similar logbook cars through the early 70's and Event Chair's allowances.

## Event Information & Registration

The event that gives you more track time than any other – over three hours on the fantastic 2.5 mile Club Motorsports circuit!



Eligibility is open to VSCCA cars, guests with VSCCA-type cars as well as small bore front-engine cars with largely stock bodies through the early '70s running on treaded tires. (A '73 Alfa GTV is acceptable, for example.)

# Winter workshop stuff...

We hear that Del Bruce has been preparing a Datsun 240 Zee race car to run in V/H....The car has been previously raced with CASC so may be familiar to some of us. Blaise Csida is doing the prepping so we can expect good things on the track!



Meanwhile Steve Hummel tell us “We are rebuilding our Panoz GTS. Our goal is to reduce the weight of the car. OEM Panoz chassis has an all steel interior. With the help of Blaise at BC Race Cars we are replacing the steel with aluminum & making other safety/reliability improvements. We found over 150 simple weight reduction opportunities without compromising safety/reliability so we are working our way through the list.”



# Winter workshop stuff...

Steve Hummel: "Additionally, we have just finished the restoration of our vintage road race 1966 fastback Mustang. It will join its sister car, our 1965 notchback Mustang in vintage racing this year.

Both cars are period legal, the fastback having a Holman-Moody single 4bbl intake system while the notchback has the H-M dual 4bbl intake.

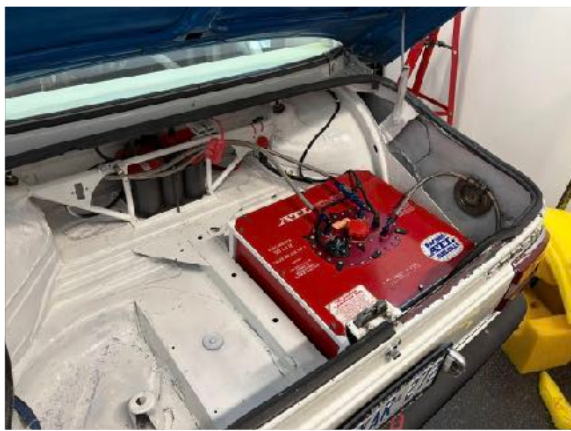
While the suspension is similar on both cars the notchback has the Shelby configuration while the fastback has the Ford racing configuration. The Shelby setup has much faster camber gain with very stiff springs while the Ford setup has quick camber gain & a more compliant suspension.



Both cars were dipped & rebuilt with chromoly roll cages on chassis jigs. The brakes are all disc, cast iron period Lincoln calipers on the front & cast iron period Mustang calipers on the rear. The bodies are all steel except for the hoods. The 289cid engines are iron blocks & heads. To keep operating costs reasonable the engines in both cars use Shell 91 pump gas & have hydraulic roller camshafts."

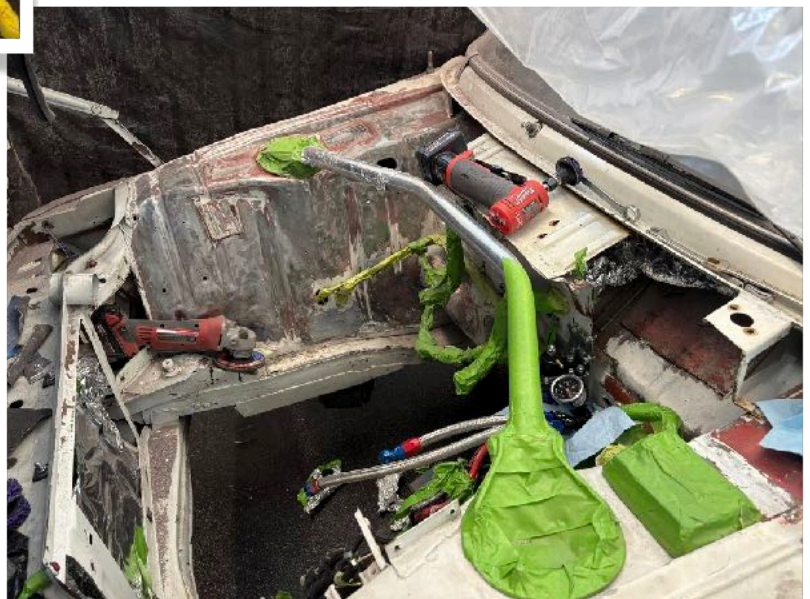
# Winter workshop stuff...

Simon Tomlinson:  
“It’s the hobby that keeps giving, isn’t it? Race it, break, it fix it repeat. My ‘off seasons’ have – so far – have always involved an engine swap. We won’t go into that here! – but while I wait for the engine rebuild, I always get a case of ‘well I might as well’....



This winter has led to the desire to tidy the engine bay, the cockpit as it’s always been a birds nest of wiring that has bugged me, and driven by the dreaded vapour lock issues (and a leaking ATL bladder)

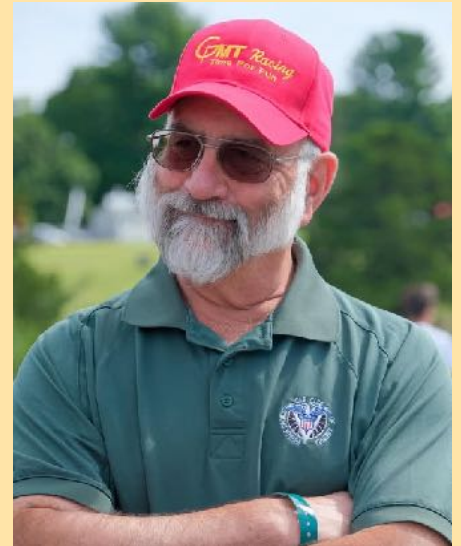
I’ve reworked the whole fueling system, with an ATL black box in the cell, a Malpassi pressure regulator with return and all new lines. What have you been up to? Write in let’s see those projects!”



# Passing of J.R.Mitchell

“He leaves some absolutely giant shoes to fill.”

From son Josh Mitchell: ” We always loved going up to Mosport for the VARAC race, as it's probably his favorite track! Especially when he would have some good runs with Phil Lamont! We haven't made it back up there in a few years because they keep adding races to that weekend for other organizations that our customers want to go to, so it precludes us from going there.



Honestly, he's been into cars forever. His dad worked at Armstrong tire, in the competition department, so they would get tickets to races and PR stuff from them. I believe his first motorsport job was scraping the rocks off dragster tires in California when he lived out there. When he moved back out east, he worked at a Branfon Porsche, then for Bob Sharp, then Mecca

Development, and finally, Bob Akin Motorsports. He then opened GMT Racing in January of 1995. The GMT stand for "Guided Mitchell Team", which was the name of he and his brother's slot car team.



He started with a couple Lotus 7's, a couple Lotus 18's, a couple Lotus 22's, and a Turner. We still

have a few of those, but have added a plethora of other cars, Formula B cars, S2000's, Atlantics, Indy Lites, LMP-1 cars, and various small bore sedans. As far as his own driving, he most definitely loved the Lotus 18 FJ the most. He and Mike Taradash have traded it back and





# J.R. Mitchell.



“ He would have some good runs with Phil Lamont!”

stopped because he loved the car so much. As for the future of GMT, he leaves some absolutely giant shoes to fill. I honestly don't know if I could ever get close to filling them, but we'll give it a go and hope I don't trip over my own feet doing it.” *Josh Mitchell*

“JR Mitchell was a longtime colleague of daughter Diana’s husband Glenn Taylor. They both worked at Bob Sharp Racing, building and preparing, among others, Paul Newman’s winning Datsun’s. And proud to say a longtime friend of mine. JR and wife Eileen (who is a better machinist than most according to JR) started GMT Racing and built the business through hardwork and developing a great team. I took special pleasure in racing with him when he built his own Lotus 18. Often when I was looking after my car with Diana’s help at some track far from home JR would help with parts and knowledge and then we’d go out and have a great time trying to best each other in pretty equal cars. His son Josh is also a fine mechanic and driver and will carry on the business with the team. A great loss to the sport and the business. And to VSCCA - he was president and contributed much to its continuing success. Godspeed JR - you’ll be missed by Formula Junior racers around the world. And by this friend.” Phil Lamont.



## The Teubler Special

*By Mike Nilson*

"In the mid 50's, Helmut Teubler was a mechanic for DKW in Germany. As German car sales grew in North /America, the need for experienced mechanics grew and Helmut took the opportunity to come to Toronto and work with W. Ornstein, the DKW importer at the time. In 1960, he teamed up with another DKW mechanic, Eddie Khol, and started St. Clair Motor Service. They took over a Supertest station at the corner of St. Clair and Keele, and became the local DKW dealership.

Helmut was keen on competition, having been a support mechanic for the DKW rally team in Germany. In 1959 he drove a DKW sedan in the races at Harewood Acres, doing quite well and in 1960 he decided to embrace Formula Junior and build his own car.

My car was entered in races as the DKW special. In 1961 Helmut raced the car 4 times, most notably at the official opening at Mosport and in the support race for the 1961 Canadian Grand Prix. By the end of the year he sold the car to another member of the Deutscher

Automobil Club (DAC), Gunther Decker, who raced it for the 1962 season, also in the Grand Prix support race. At the end of the year, the car was sold again to Rudolf (Robert?) Young, later to Murray Cornish. By 1970, the car was parked again. From what I have been able to find, the car did not compete more than 10-15 times.

In the mid 70s there was a resurgence in racing older cars and the creation of vintage racing clubs around the world. In 1976 the first president of the newly formed Vintage Automobile Racing Club of Canada, Louw Broadfield found the DKW special and planned on restoration for vintage racing. Health issues ended that ambition, and the car was up for sale again. This is when the car was renamed the "Teubler special".

So in 1978-79 the car was up for sale. I had become a VARAC member in 1977 and became its next owner. Over the next 15 years the car underwent several starts and stalls, other race cars came along and the Teubler ended up at the back of the shop. In 1994 another major move for me and the car was now in Ottawa, sharing garage space with four other Formula Vees. Then a good friend who raced a Mitter DKW Formula Junior contacted me, inquiring about the car and a deal was struck. The Teubler special went on its way to Pennsylvania with Frank Johanssen.

Long story short, in 2005 I bought the car back. The only question is where to start? I picked on something small and obtainable, the dash. But it's not that simple; the gauges didn't work and needed repair. I found a repair place in Alabama and off they went. The rest of the dash was straight forward, but I made a key decision that has kept with me throughout the project. If this was 1960, what would I use for parts? The dash has switches and lights straight from a DKW of the period. I asked the gauge repair guy to repair but not clean and polish. Wiring for the car came from a DKW sedan as well. Clips were made to hold things down, no tie-wraps. Nuts and bolts in key areas were drilled and cotter pinned.

The brake master cylinders are DKW, which I sourced in Argentina, and the list goes on. The most daunting task was the bodywork. I had next to none. Zero from the roll bar back and the steering rack forward, I had to use period photos to estimate what I needed. I had the frame, so I knew the wheelbase, the wheels are 15 inch and with a period photo I estimated the rest.

Making the body was a long process. I started the buck in 2015, final paint in 2021. The story is straight forward from here. Cut, fit, assemble, disassemble, change the design, try again. I had to recreate the pedal and brake cylinder mounts. I had the pedals, push rods, just not the frame to mount them on. Same goes for the steering



rack. When I recreated them, I also made them adjustable, not original, but needed and kept it with the original look and feel.

Somewhere along the journey Helmut Teubler started to follow me on Facebook watching me rebuild his car. Eventually I brought the car to him in Mississauga. I don't know how to describe the joy I felt at this

moment, it was emotional for both of us. How often can one re-unite a one-off race car, built in the 1960's with its original builder and driver? Very few cars like this survive. Helmut being the oldest member of the Deutscher Automobile Club, joining in 1960 and me, the then president of the same club! A rare and special occasion.

I joined VARAC in 78/79 and purchased the car from our first president. Joined the Alfa Club and became their race director in 1983. Started scrutineering as a VARAC specific tech guy in 86, the year after Winkelhock died. I did get a few years in racing my Chinook and Altona formula vee. Then scrutineering up till now. I think I have volunteered enough. The plan is to be on track in 2025! In order to do that I must stop volunteering and start racing. Mike.

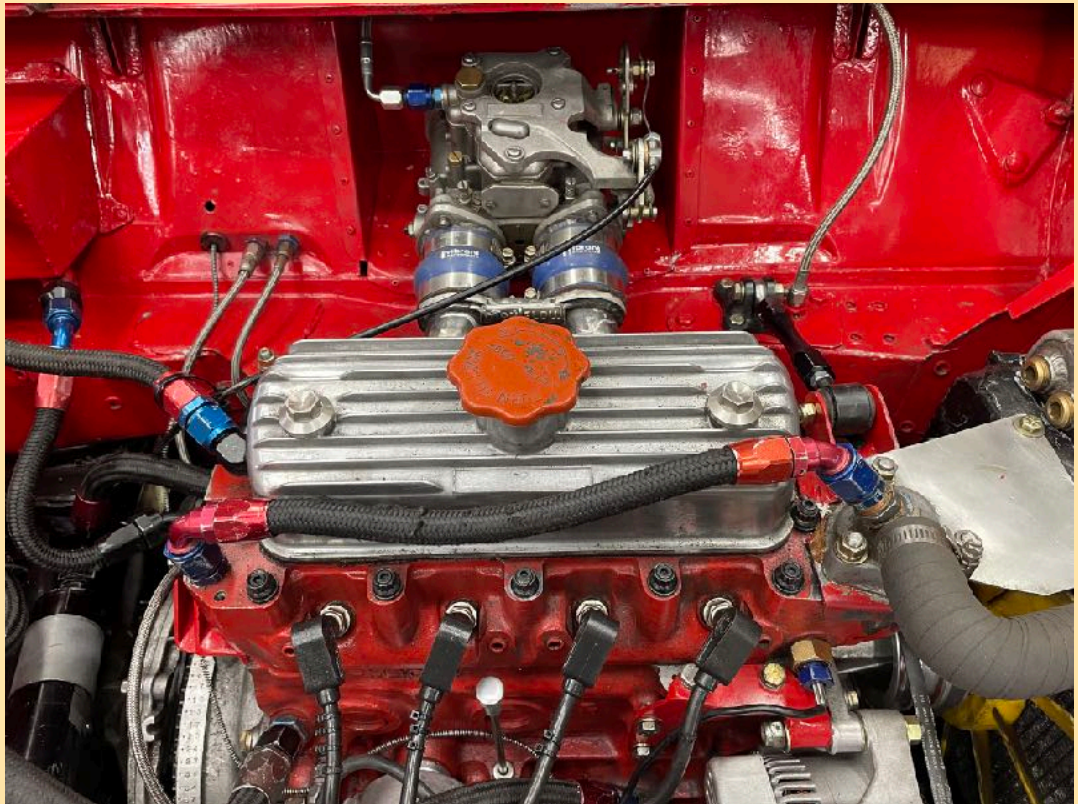
## Richard Paterson's "Helical" Crank A-Series engine



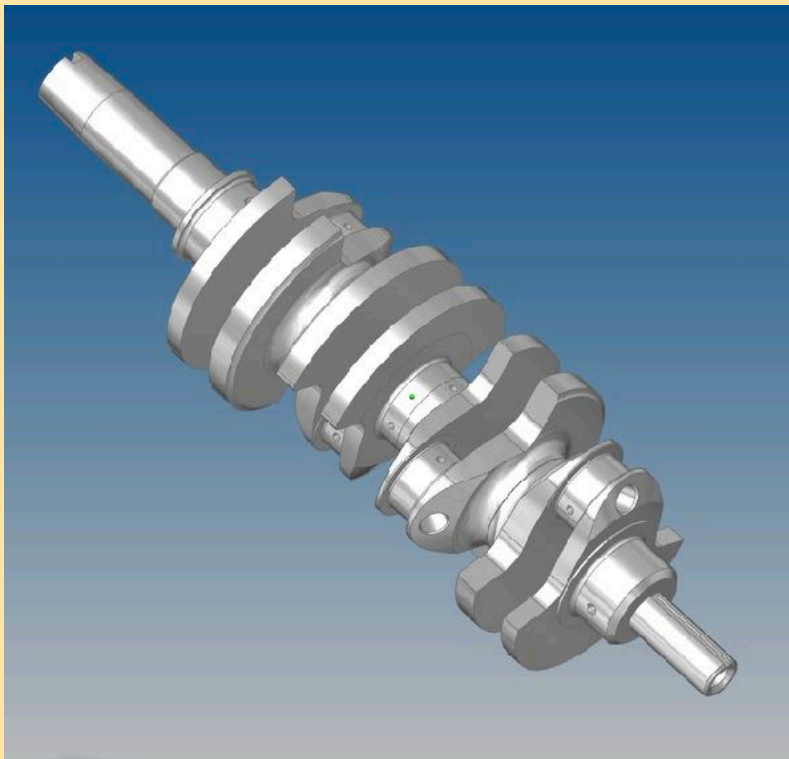
Richard Paterson's Mini is super quick and if you've heard it, even sounds a bit different. It has a special engine that has been extensively developed. Pit Signals has the story on what makes this car pop...

Richard Paterson: "The 1275 cc 4 cylinder British A Series engine has a 5 port ( 2 intake and 3 exhaust ports) cylinder head. No 1 and no 2 cylinders share an intake port and similarly no 3 and 4 cylinders. With the normal 1,3,4,2 firing order this means that no 1 cylinder begins to draw from the shared port while the intake valve for no 2 is still open. This reduces the filling and power output of both cylinders, especially when using long-duration race cams. Numbers 3 and 4 cylinders are affected in the same way. 8 port heads are available and are legal in most Vintage Race Clubs and can make more power than any 5 port A Series, but my passion is to see what can be done to make the Mini even more of a "giant killer" and beating cars that should be faster, while still keeping the venerable old 5 port head and legal bore, stroke, block, carburation, exhaust, etc.

After exhaustively studying the “problem” and using in-cylinder and in-port pressure measurement equipment to verify the assumptions, over the last several years, I built an A Series Mini engine with



two of the crank pins offset 90 degrees and with a 1,3,2,4 firing order.



A by-product of those changes is an uneven firing interval: 1 180 3 270 2 180 4 90 1, which is hard to tune for in terms of exhaust pulses, but the power output is still increased by around 2 HP per cylinder, at least compared to my “normal” race engine in which I have run several low 1:39’s at Mosport and a 1.38.78. - So a good, competitive engine as a comparison. This while retaining a normal A Series block and head with standard, vintage race legal, 3.2” stroke and .060” overbore.

With this crankshaft configuration one piston comes to the top of the bore every 90 crankshaft degrees. So number 1 comes to the top, followed by number 2, 90 degrees later, then 3, then 4 at the same intervals. This means that the crankshaft does not have to first accelerate four pistons then decelerate 4 pistons during each 180 rotation of the crankshaft. This constant acceleration/ deceleration of the crank on a normal inline four causes the crankshaft to change rotational speed a little twice per revolution. The inertia of the flywheel and crank pulley, however, causes them to try to maintain a constant speed, so making the crank want to shear at the nose or the rear main bearing, especially at high rpm.

Although it has other second-order balance considerations of it's own, this helical crank engine is ideal for building a very high rpm engine, but the basic breathing restrictions of the 5 port head still apply, so I mostly keep the rpm within the normal A Series range, i.e. up to around 8,300. However, with short gearing, I often see 9,000 at the top of the straight at CTMP." (I asked Richard what that 9,000 rpm represents and he said "Just touching 120 mph.")

Out of interest, there are only two other known four cylinder vertical cross plane engines in the world, the first being built by Helmut Fath in the late 60's and the other by Yamaha and currently used in their YZ R1 motorcycle. Helmut Faith, with considerable help from German Engineering Professor Dr. Peter Kuhn, put two vertical in-line 90 degree crankshaft twins together, with the power take-off in the middle, and beat BMW for the 1968 World Sidecar Championship by revving to 13,000 rpm while the BMWs were red-lined at 8,000.

My "helical" cross-plane engine is configured differently than either the Kuhn-Fath engine or the Yamaha engine, because the challenge was different. Copying the Yamaha crankshaft configuration, as discussed by Mini enthusiasts on the Turbo Mini Forum in 2009 and again in 2011, would be a complete disaster due to severe conflict in the shared centre exhaust port.

While the Yamaha R1 also fires 1,3,2,4 and has 270-180-90-180 firing intervals, the crank pins are arranged differently on my engine because Yamaha did not have to deal with Siamese intake and exhaust ports. It took a lot of study, and several Excel spreadsheets, to finally arrive at the “helical” crank pin arrangement of my engine. I designed and balanced the crankshaft, including the counterweights, on screen, using 3D CAD engineering design software.

The camshaft lobes for numbers 2 and 4 cylinders also had to be rotated and the distributor pick-ups altered to suit the changed firing order and firing intervals.

The sound of the engine, like the Yamaha one, is a product of the uneven firing intervals. The 270 degree interval between 3 and 2 firing being dominant, making either engine sound quite different compared to a normal inline four. The torque characteristics of either the Yamaha or my engine make for a very fun drive, without the “buzz” of a normal in-line four when run at high rpm.



“Grandpa’s car sure is quick!”  
“Yes, so is grandpa!”

To a spectator the engine sounds like it is running at about half of the actual rpm, rather like a V8. When you hear the car on track you are listening to the only “helical” crank A Series engine in the world. The car it is mounted in is rather special too. It has been an SCCA race car since 1968, and, being an early 1960 car, the body shell is a little bit lighter- A happy combination :)





# PIT SIGNALS CLASSIFIED



## For Sale or Rent 1997 Monte Carlo Stock Car

VARAC legal MC-A .GT2 Sprints. 2850 lbs full tube frame. 400 HP GM 604 crate motor. Dual ignition. Road course oil pan. T101 Dog box. New fuel cell. Containment seat. Penske Coilovers – just rebuilt, receipt available. Quick change with 3 link rear suspension. Watts Link. Rack and pinion.

# \$29,500

Available with matching 2018 24' trailer for \$39,000

Chris Lawson [Lawson3565@hotmail.com](mailto:Lawson3565@hotmail.com) for rental pricing.

905-510-6791

6 SEPT 2024





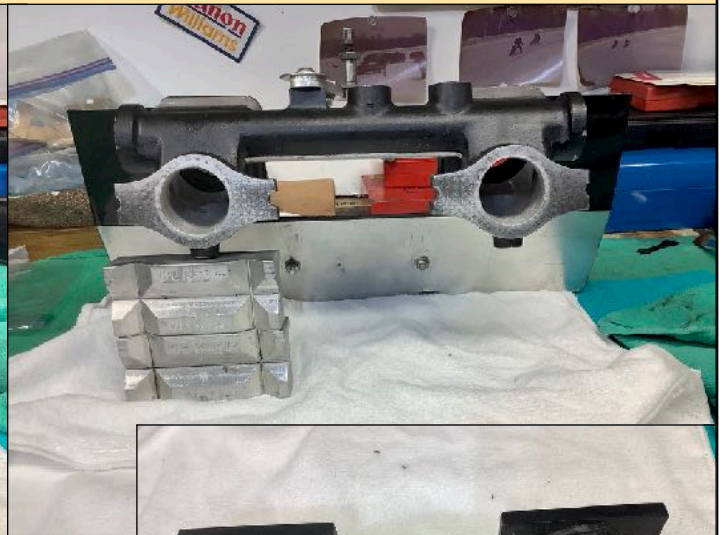
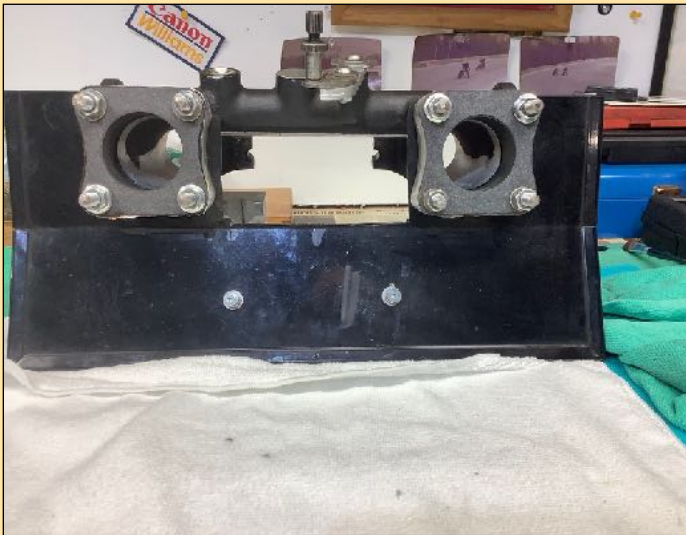
# PIT SIGNALS

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## Parts for MGB

HS-6 SU intake manifold. Ported and flowed by Classic Motor Works.  
Insulators and heat shield included, perfect condition \$350



Maniflow HS-6 steel manifold  
Like new \$150

2 X oil pump shaft with  
bronze gears, minimal  
wear.  
\$175 each

Contact Bob:  
613-829-3831  
[r.eagleson@rogers.com](mailto:r.eagleson@rogers.com)



# SCCA Formula Mazda \$27,000

For sale: Lew MacKenzie's SCCA Formula Mazda sports racer, purchased from Ted Michalos in 2017. On purchase engine upgrades by MazMark and no expense spared, resulting in impressive reliability. The sale is necessary as the wide side pods make it difficult for an 85 year old driver to step over one of them to reach the cockpit, although it does provide entertainment for the crew. As a result I will race the standard Formula Mazda in 2025.



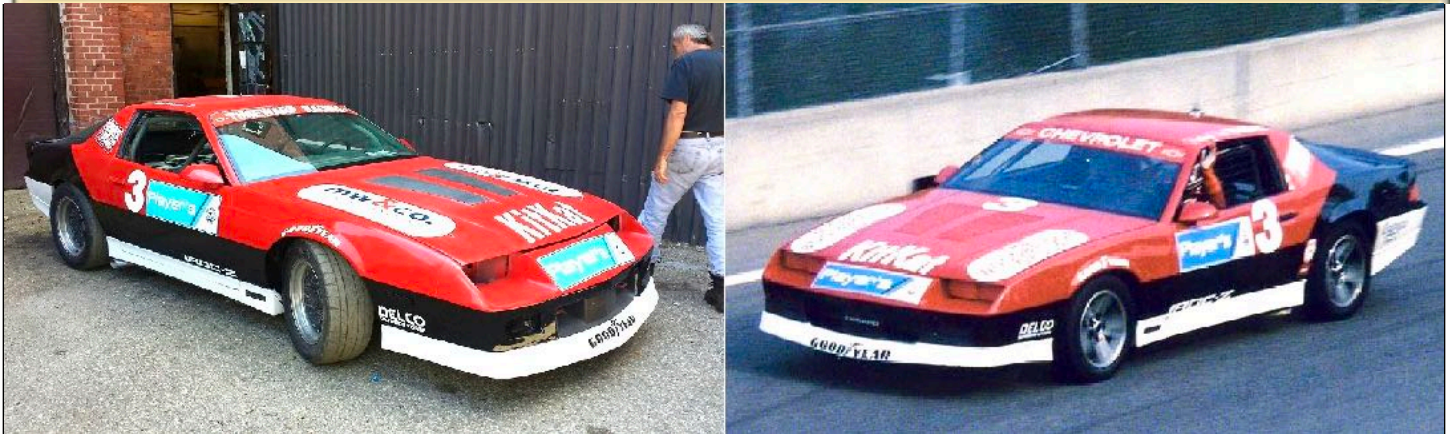
The car is based on the SCCA formula Mazda and as a result has upgraded wheels and the car comes with a spare set with wets mounted. The larger brakes are outstanding and the best I have experienced including the Wolf F1 car that I spent a weekend with at Mosport. The car is enjoyably quick but Paul Subject is quicker!

The car for the nostalgia folks provide a Walter Mitty experience as the view from the cockpit is very similar to the CANAM under two litre car. The car has benefited from tender care and maintenance at the AC/ heated Mortimer racing garages at Calabogie Motorsport Park. All yours for \$27 thousand. I'm in Mexico until 1 April, however I could arrange viewing earlier if necessary. Easy contact details:

416 200 4361, [lewmack031@gmail.com](mailto:lewmack031@gmail.com)



# PIT SIGNALS CLASSIFIED



**For Sale 1988 Camaro! Track Ready \$16,000.**

Doctor says I can't race any more so the Camaro is up for sale! It started out as a Players series car (Kit Kat Car) in 1988. It was campaigned by Kat Teasdale and I have some of her photos available. The car has run at CTMP under various owners and livery (Terry Fletcher, Steve Kent, Scott Zurer). The car was refurbished and repaired in 2022 by Kirk Spencer and I updated it with the old Players style Kit Kat Livery. The car has P255/50 16s rears, P255/50 16s fronts, extra set of Honeycomb rims 16s, Fire system, Accusump oil pressure system with remote filter, remote battery charging system. The 350 engine currently installed has an estimated 400 HP.

For more information, history and pictures contact:

Dino Micacchi 519-788-2227 [Dino@Mlctrading.ca](mailto:Dino@Mlctrading.ca)



# PIT SIGNALS CLASSIFIED



## For Sale 1968 Corvette \$16,000

Doctor says I can't race any more so the Vette is up for sale! It started out as a David Brackstone Car (Special Lite Car) in 1975. I have a note from his wife detailing the history and I also have some of her photos available. The car was rebuilt in 2006 and has run at CTMP as well as the 2009 Toronto Indy in the TWR Vintage Support Race. The car has: Unique Dick Gulstrand (Mr. Corvette) Rear Suspension., 27 x 11 15s rears, 25 x 11 15s fronts, Extra set of rims 15s. Fire system, Accusump Oil pressure system with remote filter, Remote battery charging system.

A 305 engine is currently installed with headers and lakeside pipes.

ALSO AVAILABLE: All new parts: New Water pump, MSD Ignition, New alternator, New Edelbrock Performer intake, Used Edelbrock Victor Jr intake, New fuel pump, New oil pump (2) New Pulleys, New 1.5 Roller rockers, New starter motor, Aluminum Headcovers, New Iron heads with 1 ½ "intake and 2" exhaust, Edelbrock 1905 AVS2 650 CFM 4 Barrel Carburetor, 350 4 Bolt main Block, Additional body quarter panels.  
\$3,500

For more information and pictures contact:

Dino Micacchi 519-788-2227 [Dino@Mlctrading.ca](mailto:Dino@Mlctrading.ca)



# PIT SIGNALS

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## Panoz GTS Chassis #50 VARAC CL-A

2021 CL-A champion, CL-A class winner in 2024 VARAC GP, many race wins under current ownership (3<sup>rd</sup> owner, owned since 2016). Small block Ford powerplant (Ford aluminum block/heads, 10 hours from new) that runs on Shell 91 pump gas with a Tremec TKX 5-speed transmission. Chassis has all Panoz updates plus much more. The vehicle comes with a massive spares inventory, most of which are new parts/components. Spares include 4 sets of wheels (1 set never used, still in boxes), 1 set new dry tires, 1 set used dry tires (6 heat cycles), 1 set wet tires (1 heat cycle), full new body (less roof), new spindles/control arms, new front crash box with radiator & undertray. The car has been professionally updated, maintained & optimized.

Fuel cell bladder & fire bottle replaced in 2024. Car is being freshened right now with lighter replacement components (aluminum ATL fuel cell can, Coleman aluminum driveshaft, NASCAR lightened 9" rear gears, etc.) as well as new suspension rod ends, etc. All improvements & races are fully documented (10+ binders + over 538GB+ of data (records, video, etc.).

Car is on a hoist during this 2025 season preparation, so it is easily viewable from all angles. Price is on request, please contact Steve Hummel, 519-572-7654 or [stevejhummel@gmail.com](mailto:stevejhummel@gmail.com)



# PIT SIGNALS CLASSIFIED



“I am retiring from racing after 50 years!”



**Ice Racer for sale.** 1984 Pontiac (Chevette). Built in the screw stud era but only ever raced in Street Stud. 3.8 Buick engine, 350 automatic with full manual valve body, full cage from fire wall back fuel cell and plenty of ballast. Rough looking but handles well and has lots of power. Race winner, class winner and series winner. 13 and 14 inch rims and some spares. Asking \$ 1,000.00.



**F4 for sale.** 1971 Gord Green built P & G Mk.6. Water cooled, 3 cylinder, Suzuki 2 stroke engine with close ratio gears. Weighs 550 lbs dry. Ontario CASC champ in 1982. Fastest lap at Mosport 1:30.6. Includes paddock needs and enclosed trailer. 6 consecutive log books. Asking \$4,000 but open to offers.

Richard Walker 9richardf4@gmail.com Phone / text 905 435 6290.



# PIT SIGNALS CLASSIFIED



Dellorto 48DHLA complete with a cookie tin of jets etc.  
Price:\$700.00



Engine stand for Rover V8,  
well built. \$100.00



Spanish Weber  
48DCO ran on  
dyno and three  
laps, like new,  
comes with a  
very nice  
crossflow  
manifold  
Price: \$1700.00



Spanish Weber 40 DCOE with  
fuel unions and K & N air  
cleaners suitable for road /  
race Kent or Lotus  
Price: \$950.00

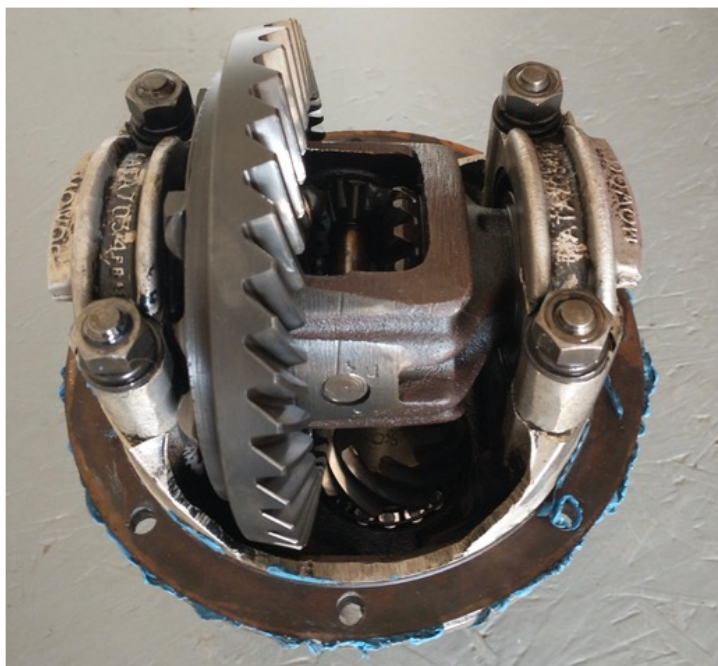


Hardly used race boots Size 10 purchased  
from CSC. Price:\$75.00  
Brian [deltapipe@aol.com](mailto:deltapipe@aol.com)





Large range of Ford Cortina and Kent motor parts:  
Two Weber 28/36 DCD with manifold  
Three starter motors  
Cortina GT instrument binnacle and two sets of Smiths Speedo/Tach  
DM me for prices and other stuff  
416 890 3992  
[Johnhawkes57@gmail.com](mailto:Johnhawkes57@gmail.com)



Three Spridget 3.9 diffs.  
Two professionally welded in excellent condition and unused since the weld. \$400 each. The third is open and has not been used for racing. \$275.  
Contact Nick at [gidget89nick@gmail.com](mailto:gidget89nick@gmail.com) or call 705-768-0253.



1985 new bare shell build, no undercoating, no sunroof, CASC log book 95-027, 1.75" full cage, fuel cell, fire system, air jacks, 2" flared fenders steel, fibreglass hood, nose and front bumper/chin splitter. Lexan side and rear hatch. GT3 rear wing, fresh engine as of June run-in 265 hp RW, cf dash, Recardo Pro Hans seat, Schroth 2024 belts, cool shirt set-up, tons of time in the UOIT Wind tunnel, over 4 years developing the program there. Racing drive axles and race cv joints, transmission relocated to improve drive shaft axle angles, close ratio gear box, with Guard LSD, spare tall close-ratio gear box with LSD. MO 30 front brakes, turbo rears.

Custom triple adjustable Koni shocks plus spares, new rain Hoosiers on 16" wheels, 1 set new dry R7 tires, 1 set used dry R7 tires on Forgelines, 1 set used Continentals dry on Forgelines. dry break fuelling/jug included, red transponder, AGM battery.

## Asking \$30,000

Also for Sale, 2014 F350, 32" goose neck, Gold Rush Trailer, all Aluminum, with winch, canopy, solar panel, hydraulic lift. Bench cabinets, lighting, tire racks. nose of trailer full of spare parts for 944.

Ernie Jakubowski ernie9146@gmail.com 905-483-5154

# 1984 Porsche 944

1984 944. Would make a good Race Car. Solid Solid Body. Came from the USA.  
Faded Paint.  
Ratty Interior.

**\$2900**

Or Best Offer.

May consider trades.

Frank

647-967-4999



## Spare BMW S50B30US engine for sale!

Suggest a refresh with new piston rings and cylinder valve grind.

**\$1500**

Alan Morris:

[morisalypal@gmail.com](mailto:morrisalypal@gmail.com)

(905) 330 2457

