



The Aficionado

The Official Newsletter of the Winnipeg Sports Car Club

January 2021



**WANT TO GET ON THE ICE THIS YEAR?
WE'VE GOT EVERYTHING YOU NEED TO KNOW**

PLUS...

**DIRT X 2021
E-RACING UPDATE
BEHIND THE PITWALL**

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Welcome

This edition of The Aficionado contains articles from directors and members and collects together information from our club forums. Thank you to everyone that contributes to and maintains the forums. Check them regularly for the most up-to-date information on club activities: <http://forums.wscct.mb.ca>. Please distribute this newsletter to anyone that is interested in joining, competing, or volunteering with the Winnipeg Sports Car Club.

Club Information

The Winnipeg Sports Car Club is a non-profit corporation and, at 69 years old, is Canada's oldest continuously operating sports car club. Since 1952 the WSCC has organized motorsport events in and around Winnipeg and since the 1970's primarily at the Gimli Motorsports Park. WSCC membership in 2020 was 302.

These motorsports events are sanctioned by the Western Canada Motorsport Association and include road racing, time attack, autoslalom, rally, track days, high performance driving education (HPDE) race schools as well as ice racing in the winter.

Winnipeg Sports Car Club website: www.wscct.mb.ca

Winnipeg Sports Car Club forums: Forums.wscct.mb.ca

Mailing Address: WSCC Box 672, Winnipeg, MB, Canada R3C 2K3

Facebook: www.facebook.com/WinnipegSportsCarClub

Twitter: [@wscct_racing](http://twitter.com/wscct_racing)

Instagram: www.instagram.com/wscctracing/ #wscctracing

WSCC Autoslalom Results: www.wscctautoslalom.com



President's Message

Well 2020 is finally over and I'm sure most will agree not a moment too soon. 2021 is now officially underway, however with the promise of a new year it also brings some significant new challenges for our Club.

As most of you are aware, there is a concerted effort being made by a consortium of private investors to purchase GMP. Your Club Executive have been aware of these efforts for some time and is working tirelessly to ensure WSCC's continued presence the track the foreseeable future.

GMP is unique in Western Canada as the only remaining publicly owned facility that continues to host grassroots racing as we know it. The WSCC has a long and proud tradition with the track, having been instrumental in the development and construction of the original circuit in 1973 in partnership with the Provincial Government. The Club was also instrumental in the formation and operation of Circuit Management Inc., the non-profit company initially formed to oversee operations at the facility, until ownership transitioned to the Rural Municipality of Gimli a little over 20 years ago.

The WSCC is the longest and only continuous user group of the facility throughout its 47 year lifetime.

Throughout each and every one of those years the WSCC has remained committed to the vision of promoting and sharing opportunities to become involved in motorsport as broadly as possible, and ensuring the track remains a publicly accessible facility is central to that goal.

The Club Executive remains committed to that vision, and we will hopefully have more details to share with the membership soon.

In addition to the uncertainty surrounding the future of GMP, we are facing similar challenges to the continued use of the St. Andrews airport for our Autocross events.

As many of you know, Motion Performance Raceway recently entered into partnership with St. Andrews airport management to operate their dragway at the facility, which began operations earlier in 2020. The substantial noise pollution generated by the drag cars resulted in a significant public response, culminating the provision of a legal opinion indicating that motorsport activities at the site likely fell under municipal by-law authority and that the local RM had not been consulted in the development of the project. As a result, St. Andrews airport management have suspended motorsport activity until the matter can be resolved.

In the meantime, our Autocross events, which have never been a concern for local residents, are similarly suspended until further notice.

At the risk of sounding trite, 2021 is beginning to look like it may be a very significant year for our Club, with challenges to be overcome on multiple fronts.

But there is good news to share as well. Our 2021 Ice Racing season was recently announced, with events hopefully getting underway soon. The schedule has had to be adjusted for the ongoing restrictions imposed as a result of the COVID pandemic, including the cancellation of our winter HPDE, but we are very excited about the introduction of our new Ice Attack event debuting in February, where people can take to the track in a timed event and race against the clock in their daily driver! More details are available on the forums about this exciting new way to enter the sport of ice racing.

We are also in the early stages of planning our foray into DirtX this year, in an effort to expand the number and variety of motorsports disciplines we currently support and offer to our members and the public.

In closing, I just want to extend a note of gratitude for all the work and effort that our volunteers, organizers, sponsors and racers made over the year in incredibly challenging circumstances to ensure that 2020 was a success. I was fortunate to witness much of that first hand over the summer. Your passion for this sport and your unflagging support for our club have inspired all of us to work harder than ever to ensure the future of our Club and the preservation of grassroots motorsport in Manitoba.

I can't guarantee that we will be successful – only that we will do everything in our power to continue the proud traditions of this organization. As always, keep an eye on the forum - we will share more information about all these developing situations as they become available.

Thank you all for your continued support.

Jay Funke
WSSC President



2021 WSCC Executive and Board

We want to thank the outgoing 2020 WSCC Executive for all their hard work and welcome the 2021 WSCC Executive!

Position	Name
President	Jay Funke
Past President	Ken Hilash/Darin Wach
Vice-President	Jennifer Bell
Treasurer	Chris Boettcher
Secretary	Brian Wiebe (interim)
Road-Race Director	Mat Leveille
Road-Race Deputy Director	Scott McDonald
Track Day Director	Mat Leveille
Ice-Race Director	Mike Demchenko
Ice-Race Deputy Director	Stephen Leiding
Time Attack Director	Brooke Stecyk
Time Attack Deputy Director	Ian Stecyk
Autoslalom Director	Corey Dyck (interim)
Autoslalom Deputy Director	Tim Robinson (interim)
HPDE Director	Roland Hufgard
HPDE Chief Instructor	Darin Wach
Rally Director	Al Marcoux
Drift Director	Mat Leveille
Membership Director/Chief Registrar	Josh Peters
Steward	Vacant
WCMA Representative	Dino Calvert
Social Director	Shawn Wolk
Publicity Director	Mat Leveille
Aficionado Editor	Mia Schellekens
Aficionado Editor	Brad Epp
Volunteer Director	Dason Wowk
Quartermaster	Roland Hufgard
Webmaster	David Klassen
Webmaster	Jim Antosko
Sponsorship & Fundraising Director	Vacant



SoloSnapshots

2021 WSCC Meetings

Until further notice all meetings will be held remotely. The conference call information will be posted prior to each meeting. The 2021 WSCC meeting schedule is as follows:

- January 21 – 7:00 pm
- February 18 – 7:00 pm
- March 18 – 7:00 pm
- April 15 – 7:00 pm
- May 20 – 7:00 pm
- June 17 – 7:00 pm
- July and August – no regular Club meeting scheduled
- September 16 – 7:00 pm
- October 21 – 7:00 pm
- November 25 – Annual General Meeting – 7:00pm
- December – no regular Club meeting
- December 16 – Joint Board Meeting – 7:00 pm
- (incoming and outgoing Directors and Officers)



Winnipeg Sports Car Club Ice Racing

What is it?

by Mike Demchenko

Photos by Steve Carmichael

This action packed winter motorsport has 2 key components – the Fire on Ice Racing series and the new Ice Attack drift action -whether you are looking for adrenaline packed door-to-door racing competition or the excitement of full-on winter drifting in a streetcar with others on a frozen track, WSCC Ice Racing has it. If you want to get involved and still have questions, don't hesitate to reach out to our club members on the WSCC forums or by emailing ice@wscc.mb.ca



How do I start?

Got an old car sitting in the backyard that can still spin the tires on ice? Maybe a winter beater that is just meant to slide sideways or an Autopac write-off that's not worth putting back on the road? Pretty much any streetcar works well for the ice assuming the steering, brakes and suspension are safe. Follow the info below to pre-register online for an event and show up with your car to start drifting on ice!

How much does it cost?

To start sliding sideways all you need is a club membership fee, entry fee for the event, a car, and a helmet. Ice Racing is one of the cheapest forms of motorsports.

A typical race event for Ice Attack is a \$60 entry fee for the day (\$100 for a double header weekend) and either a \$60 annual club membership or a \$10 temporary daily membership gets you on the track. The Fire on Ice Series costs only \$160 a day (\$220 for a double header) for high-speed studded tire race with door-to-door action.

Sanctioned regulations dictate all track participants utilize a minimum Snell SA2010 rated helmet (average cost \$300-500) however the WSCC club provides helmet rentals for \$25 a day (when restrictions permit).

We also recommend the ice racing school that occurs on the Saturday of the first race weekend. For \$150 you get some online pre-tutorials and a full day of on-track practicing, learning and coaching of various ice racing and drifting techniques. Entry in the school also includes all the Ice Attack track time for free on the following Sunday Race event.

Is it hard on my car?

Because you are mostly just tire spinning and sliding on frozen ice the wear on an engine is very minimal compared to any form of pavement racing. Bouncing off the rev limiter is so much safer when there is little torque on the drivetrain! An added bonus with this is the fact that minimal horsepower cars are just as competitive than high horsepower cars when sliding sideways and spinning rubber tires.

It is worth noting the most typical “wear” on a car in Ice Attack is the front plastic spoiler will sometimes not like plowing into a snow-bank when you get it wrong trying to perfect that sweeping drift. No worries however as the complementary tow truck is there pull you out!



Do I need special tires?

Good standard winter tires are perfectly fine. You also have the option of running tractionized rubber tires or DOT street studded tires. If you're looking for more speed and g-force, an experienced Ice Attack driver can get approved to run aggressive studded tires like the Black Rocket race tires or similar bolted tires. The Fire on Ice Racing Series utilizes a "spec" studded tire that are hand-built by Club Members utilizing specific bolts installed into a shaved tire for crazy studded grip on ice.

How do I step it up a notch?

Joining the door-to-door studded tire action requires a bit more commitment, but is also fairly easy to jump into. The cars require additional key safety equipment like a rollcage and seatbelt harness and drivers require a racing license. You can review the vehicle and driver requirements along with the licensing information in the WSCC Ice Racing Supplemental Regulations document located here: <http://forums.wsc.mb.ca/index.php?/topic/12005-2021-supplemental-regulations/>

Almost anyone can build an ice racer if they know how to do it properly, however it is definitely easier and almost always cheaper just buying a used ice racer. There is often a few for sale within our club on the forum or sometimes other race clubs in Ontario (CASC) or Alberta (NASSC) have used racecars for sale. If you are thinking of building an ice racer, contact our club at ice@wsc.mb.ca to discuss and review it and we will assist in any way we can.

What's a typical race day look like?

If you are showing up with a car to either race or drift, pull in and find a place to park in the pit parking lot and then check-in with the Race Registrar.

The race day event usually starts at 9:00am with the drivers meeting followed by a review/introduction meeting for any rookies or new comers. Ice Attack cars will be grouped into specific run groups based on their lap speeds and experience. The number of sessions is based on the number of entries/groups and racers can expect a lot of track time. The various cageless car groups will alternate with the caged racecars in the Fire On Ice series with each track session lasting approximately 10-15 minute sessions. You can expect 6-8 sessions per group depending on the car counts.

Please see the WSCC forums for the specific daily schedule details/times as an event approaches.



How do I sign up?

Online registration will be with our online partners MotorsportsReg.com (a.k.a MSR). Simply go to wsc.motorsportreg.com to get the full list of WSCC events, click the link to the event you are interested in and follow the instructions from there. Events will be posted at least 14 days before the event date and the posting will contain the details such as pricing, event schedule and membership requirements. You can find the calendar to all WSCC events posted on MSR [here](#).

If you decide you want to show up at an event first and learn what it is all about before you register, please feel free to walk the pit area and talk to other drivers (just make sure you sign the mandatory waiver located with the Race Registrar). Most drivers will be glad to answer your questions and fill you in on what you are missing and some may even offer to take you as a passenger for some hot laps.

If after reading all this, you still have questions, don't hesitate to email ice@wsc.mb.ca and we will try and respond to you as soon as possible. Stay safe and hopefully see you on the ice!



2021 WSCC Ice Racing

by Mike Demchenko

Safe to say that planning a racing season during a pandemic can be challenging. With the expected cancellation of the Gimli and Winnipeg Beach Ice festivals it was decided to focus our series at our home location of Lake Shirley (Winnipeg Water Ski Pond) along with Beausejour's oval snowmobile track. Shortly after announcing our first proposed schedule, the province's health guidelines and restrictions required us to cancel and postpone the early January events. Following some additional changes to the calendar, to allow time for the Beausejour Snowmobile club to build their dedicated ice oval track, we anxiously await the lifting of restrictions and confirmation of our proposed racing schedule. Keep an eye on the WSCC forums for updates regarding the schedule as this evolves.

Despite all this, we are both optimistic and excited to hopefully still offer up an exhilarating ice racing calendar of events that will be unlike any other in the previous years. One of the key changes this year is the amalgamation of the RTI (rubber tire) class and Studded class into a single spec studded tire group. With this change we can anticipate a large grid of caged racecars all racing together in the same class on the same tires, which will make for some exciting door-to-door action for both competitors and spectators. The return of the RTI class will be reassessed next year, depending on the car count and interest. Another key aspect of this change, is the promotion and development of a new group of cars called the Ice Attack class. This class is an affordable entry level into ice racing, designed around un-caged cars with the focus on fun and driver development. Open to any and all cars meeting the basic safety requirements, we anticipate many daily driver vehicles and winter beaters out on the ice perfecting their ice drifting skills. It is worth noting that the Ice Attack group is not door-to-door racing and more akin to drifting and time attack lapping action. This group will be out on the track running sessions between the Fire on Ice studded races.

We are especially excited about a new special event planned for this year...Ice Attack GMP! We plan on plowing the entire Gimli Motorsport Park's 1.3 mile road course for a special weekend of lapping and racing. Open to all streetcars and racecars running rubber tires (no studded tires allowed) this will be a memorable event unlike any other. If you think running a racecourse in the rain is exciting, then be prepared for a whole new level of adrenalin and entertainment with lots of sideways drifting. This weekend will also include both timed lapping competition for streetcars and door-to-door racing for caged racecars on the frozen tarmac. Mark your calendar and come out and join us in February!

2021 SCHEDULE

MURDOCK ROAD WATER SKI POND - WINNIPEG

**SATURDAY, FEBRUARY 13TH, HOTLAPS / TEST & TUNE - 11AM
SUNDAY, FEBRUARY 14TH, RACING - 12PM - RACE #1**

GIMLI MOTORSPORT PARK - GIMLI

**SATURDAY, FEBRUARY 20TH, ICE ATTACK 2021 - 12PM
SUNDAY, FEBRUARY 21ST, ICE ATTACK 2021 - 12PM**

MURDOCK ROAD WATER SKI POND - WINNIPEG

SUNDAY, FEBRUARY 28TH RACING - 12PM - RACE #2

CPTC COMPLEX BEAUSEJOUR

**SATURDAY, MARCH 6TH
RACING - 12PM - RACE #3
SUNDAY, MARCH 7TH
RACING - 12PM - RACE #4**

MURDOCK ROAD WATER SKI POND - WINNIPEG

**SUNDAY, MARCH 14TH
RACING - 12PM - RACE #5**



CLD EXCAVATING

Photos by Steve Carmichael

Ice Racing Studded Tires

by Mike Demchenko

Photos by Mike Demchenko

There are very few specific ice racing tires on the general market, and most involve specially formed rubber tread blocks with various types of metal studs inserted into them. An example of these would be the Black Rocket tires that our studded class has been using the last few years. The key advantages are that they provide excellent grip and they come ready to mount on the wheel rim. The disadvantages are that they deteriorate fairly quickly as the studs get ripped out of the tire, are fairly expensive, and not easily available since they are specially imported from Finland. With feedback from our experienced ice racers along with some guidance from the Alberta Sports Car Club, who have also recently transitioned away from the Black Rockets for their ice racing series, it was decided that we would develop our own studded ice racing tires and establish an affordable and competitive spec studded tire series.

Building Ice Racing Tires

There are various ways to build studded tires, including inserting many studs into the tread blocks. However, for both longevity and consistency, it was decided that utilizing small bolts inserted through the tire would likely provide the most favorable outcome. The first key requirement, and challenge, for building a bolted ice racing tire is to start with a "shaved" tire. This is basically a tire with practically all the tread block removed in order to eliminate the flex and motion of the bolt, which is what causes premature failure of the inner lining. It is also worth noting that this can only be properly achieved on brand new tires, as used tires often have weaker linings and shaving them results in damage to the shaving machine. Ideally, the plan all along was to coordinate some tire-building work parties, as some of the ice racers expressed a desire to build their own or assist in the building process. I envisioned a garage full of WSCC friends sipping Christmas cocktails and working an assembly line, alas the Covid pandemic had alternative plans and this unfortunately was not possible this year.



Step 1 – Tire Shaving

The process of shaving off all the rubber was achieved by building a shaving machine from an old tire balancer, which was kindly donated by Al Marcoux. A heavy-duty router with a carbide cutter bit, was mounted to a custom-built adjustable mounting table. It was quickly found that the tire balancer motor had insufficient power and a more powerful motor was quickly donated by Steve Leiding. The process shaves off the rubber in small powdery pellets as the router moves back and forth across the tire's surface. It also became apparent that we had to change out the carbide bit frequently once they became dull, in order to eliminate the resulting noxious tire smoke smell. Very quickly, the process was perfected and consistent shaved tires were being manufactured.



Step 2 – Drilling the holes

Once the tires are shaved, they then need to be removed from the rim in order to be drilled and bolted. A key advantage with everyone using the same tire, was the fact we could build a single jig to fit the tires we bought. After some discussion and feedback from racers on the desired bolt pattern, a template was made from a narrow strip of steel, some scrap pieces, and a brake rotor for a stand. Using an 1/8" drill bit, 50 holes are strategically made at a tire.



Step 3 – Installing the bolts

The bolts utilized are M6x1.0x25mm heavy-duty auto body bolts, along with 2 large washers and an M6x1.0 top lock nut. With our spec tire stipulation of 9 bolts per foot, the template created utilizes 50 bolts per tire. The process involves applying a dab of urethane windshield sealant onto a bolt and washer, and inserting it from the inside of the tire. On the outside, the other washer is placed and a dab of red locktite is applied to the threads, prior to the locknut. This is then tightened using an impact gun and, when fully torqued, the resulting bolt protrusion is approximately 12mm long (which is the defined spec stud length). This process is the most tedious, time consuming, and potentially messy (thanks to the black urethane). However, as the process was perfected, a fully bolted tire could be built in under an hour!

Step 4 – Remount the tire and race!

Remounting the tire is currently the easiest part. Hopefully, if the public health advisory restrictions are lifted (somewhat) in January, we will be racing as planned. Our fingers are crossed and we hope to be able to see everyone out on the ice. Stay healthy everyone!



E-Racing Winter Series by Ian Stecyk

E-racing is going absolutely great!

We are running 3 different series. The first series is the GT series. This series consists of high horsepower gt cars racing on some of the worlds most renowned and infamous circuits. The stakes are extremely high as these cars are stripped down full race versions of their production counterparts. One minor driver error can change the stake of the race completely. It's a high-adrenaline/ high-risk series that really showcases a driver's ability to handle crazy powerful cars.

The 2nd series is the Grassroots series. This series takes place with the AE-86 toyota corolla. The AE-86 is a lightweight, front engine, rear wheel drive production car with minor suspension and engine tuning to bump it up a notch. The races take place at smaller grassroot tracks that really provide an excellent layout for the car. With the low power and higher forgiveness of the car, this series really provides some great racing and lots of door-to-door action. The car is alright with the factory tuning, but drivers who put in the extra time tailoring it to the different tracks are rewarded hugely. At the very least, the car improves much better lowering the tire pressures by about 5 psi (hint-hint!). This is personally my favorite series as it is extremely forgiving for beginners learn and pick up on, but very difficult to master. The winner of this series will receive a free hot lapping day at GMP!



The 3rd series isn't necessarily a series but what we refer to as "fun races". These races range from everything to go-karts, production cars, rally races, to modern F1 cars and at all sorts of tracks imaginable. Its a great way to shake things up and really push yourself out of your comfort zone, and maybe even learn a couple of new techniques.

Our races take place every Saturday at 7:30 pm. We alternate series every week starting with the Grassroots series > GT series > Fun series. I highly encourage people who want to get involved to check out the E-Sports WSCC forums.

For those who want to follow the action, I try to post replays of the races the day after, with voice over commentary added in! These are posted to Facebook and the WSCC forums.

I'd like to thank Spencer and Peter for really putting in the work to get this going and keep it running. They are doing all the technical work making all of this happen. And, of course, A massive shout-out to Tracer JDM Imports for sponsoring the series and getting our dreams to become a reality. We really couldn't have done it without them.

E-Racing Standings Dec 28

Rank	Driver	Points
1	JS Stoezel	83
2	Scott Smitt	70
3	Spencer Green	63
4	Willard Popplestone	55
5	Ian Stecyk	45
6	Peter Muangxong	18
7	Darin Wach	14
8	George Abrahams	12
9	Ken MacBain	10



REGISTRATION IS NOW OPEN!

HPDE and Licensing School

The date has been set for the next HPDE and Licensing School. Please mark the weekend of May 1st and 2nd in your calendar. We are very hopeful that by that time there will be no more restrictions, and we are planning to hold our HPDE/Licensing School just in time before the new racing season will begin.

Sign-up begins January 1, 2021 through motorsportreg.com (look for WSCC, or search events near Winnipeg). This event is limited to 40 participants, therefore signing up early will help you getting one of those spots. As in the past, we will compile a waiting list if there are more than 40 interested persons; however, there is no guarantee that anybody from the waiting list will be able to take part in the event.

You can expect two long days at the Gimli Motorsport Park, filled with numerous practical lessons in vehicle set-up, proper driver inputs, collision avoidance and vehicle control, as well as instruction on how to attack the corners of GMP. Those practical lessons will be interspersed by short theory lessons and supplied trackside lunches.

Please note that participation in this licensing school is mandatory in order to obtain the required licenses for Road Race and Time Attack."

Go on motorsportreg.com after New Years, sign up early, and tell all your friends who might be interested!

Roland Hufgard, HPDE Director

**Over 50% Full!
Register Today!**



Behind the Pitwall - IndyCar By Kevin Mazur

As 2020 ends, it has become evident to me that almost everyone has had their established routines disrupted by COVID-19 to some extent. Like the rest of the world, the onset of COVID-19 was met with confusion and chaos in the IndyCar paddock. The series was in St. Petersburg, FL for the first race of the 2020 season in mid-March when the world came to a halt. We had just completed the setup of our paddock area and pit boxes, as rumours started to swirl that the event was going to be canceled. Ultimately, the rumours proved to be true and we returned to the track the next day to pack everything up and head back to our shop in Illinois.



After surviving the antics of the IndyCar iRacing series, we were finally able to return to the shop in early May. We separated the team into 2 crews, one for each car, and worked alternating 3-day sequences in the shop until our next event at Texas Motor Speedway at the start of June. This event was run in a single day, with paddock/pit assembly, practice, qualifying, and the race all taking place in a window of 12hrs. For reference, a typical race weekend would schedule paddock/pit assemble and those on-track sessions across 3 separate days. Paddock setup requires the leveling and assembling of the setup pad in addition to organizing of toolboxes and mounting of tires. Pit lane setup requires the assembly of our timing stand (where the engineers and team owner work from on pit lane) and fuel rig. The day was grueling and resulted in numerous crew members from teams across the paddock requiring medical assistance due to heat exhaustion. It was my first official race working in IndyCar and frankly I do not remember anything from it, aside from packing up the trailers in the dark after the race.

Thankfully, IndyCar series officials were open to hearing team input and modified the event schedules to ease strain on team members. Specific windows were provided to setup paddock and pitlane areas a day prior to any on-track sessions. The remaining race weekends were condensed to two on-track days, most often with the first day still having a morning practice session, mid-day qualifying, and afternoon race. The second day was typically a second qualifying followed by a second race. These doubleheader weekends created a new challenge for the teams, a single long practice session instead of a series of 3 or 4 shorter ones. Time management and efficient pitlane setup changes were key to maximizing on-track time.

Prior to the start of each weekend, the assistant and race engineers would create pit lane change sheets. These "cheat sheets" tabulated the shift in mechanical balance for a given change and what phase of the corner that balance change would happen in. The pit lane change sheets expedited the time taken to decide what changes to make based on driver feedback after each on-track outing. The change sheets also eliminated longer changes such as roll center changes. The theoretical shifts in mechanical balance were determined from previous historical data as well as information from our simulator test days.



Honda Performance Development (HPD) operates a Driver in the Loop (DIL) simulator in Brownsburg, IN that is accessible to all Honda-powered teams. The simulator is a video game on steroids where teams can test setup changes and familiarize drivers with tracks they have not seen before. The simulator can incorporate different weather conditions, wind directions and most importantly, complex damping curves. We are unable to create accurate tire models due to restrictions imposed by Firestone, who is the sole tire supplier for the NTT IndyCar series. Without an accurate tire model, exact setup sheets cannot be determined from simulator sessions but vehicle behavior trends in reaction to setup changes can.

To maximize trailer loading efficiency, each car crew has its own dedicated transport trailer. One of the transport trailers houses a shock dyno and driver lounge while the other has gearbox components and a management office. Both trailers have numerous additional storage lockers for crew and various spare parts on their lower level. The toolboxes used in the shop all have casters and fit into designated locations in the trailers, so the location of tools always remains the same. We are fortunate enough to have a third trailer that acts as our engineering trailer which is where the engineering staff and team owner work out of for the race weekends. A spare chassis is brought to every race weekend. It serves as a backup in the event a crash damages a chassis during a race weekend prior to the race itself. This spare chassis is completely assembled with full suspension, wiring harnesses, and electrical boxes, to minimize the amount of work required to convert it into a full car. We also always bring at least one spare gearbox that is fully prepared with complete suspension assemblies. The fully assembled vehicles, spare chassis, spare gearbox, and all larger spare parts are transported on the upper level of each trailer.

One element that I was surprised by the most this past season, was the frequency and competitiveness of pit stop training at our shop. During the height of the season, mechanics were practicing anywhere from 3-4 hours a week, constantly looking to improve technique, consistency, and efficiency. Tire changes were practiced the most, but every few weeks we would also practice wing changes. There is a free video player for sport analysis called Kinovea that we use to create pit stop videos with overlaid live timers for race pit stops. We currently have a basic recording system of a GoPro camera mounted on a boom above our pit box to obtain the video footage. At the completion of each race weekend, we create these videos with timers in addition to visual graphs displaying everyone's performances within the team. IndyCar also provides us access to timing data where we can back out our pit lane performance compared to other teams. In addition to tire change time, a big opportunity to minimize time loss on pit lane is how quickly the driver decelerates into pit lane and their physical pit box. Completing a tire change 2 seconds quicker is very difficult compared to a driver shaving 2 seconds off of their pit in to pit out time by coming into their pit box quicker.

A responsibility I earned this past season was calling fuel. This means I was responsible for determining how far we could extend fuel loads in practice sessions and during races. On the surface this sounds rather simple, but there are numerous moving variables that can cause you to run out of fuel before reaching the checkered flag. Given the design of the collector in the fuel cell, we can only see the last 3.5 L of fuel. During practice sessions, IndyCar only permits cars on pit lane to be fueled using approved practice hoses and dry-break fittings. These practice hoses are connected to the team's fuel rig in pit lane which the series fills with their own supply of fuel. The practice hose has a fuel meter on it so we can keep track of how much fuel was put in the car during each session. This number is compared to the fuel burned number according to the ECU. These two numbers rarely match but their agreement is not important to us. We are most concerned about a repeatable difference between the two, which is what we call "fuel error." With a repeatable fuel error, we can accurately predict fuel usage while running on track by multiplying the reported fuel burned value from the ECU by our fuel error multiplier. During the race I have a spreadsheet open where I manually type in the fuel consumption for each lap. The spreadsheet also allows me to predict which lap we can extend our stint to based on a given fuel economy. In addition to employing the typical fuel saving strategy of lift and coast, the drivers also have 8 different ECU modes to select from. These modes are tuned each weekend by our assigned HPD engineer and vary fueling and/or timing to achieve different power modes and fuel economy.



Behind the Pitwall - IndyCar continued

During the race, we also monitor how much fuel was transferred to the car during pit stops by means of a sight tube and ruler mounted to the fuel rig. Prior to the start of each season, calibration of the fuel rig is double checked. In the rush of pit lane set up and tear down, the fuel rig can be struck and dented which can significantly alter our calibration.

There is no “off-season” in the IndyCar series, only a break from official race weekends. As soon as cars return from their last event of the season, they are stripped to their bare tubs. The paint on the chassis is sanded off and their floors are inspected for flatness. All wiring harnesses are cleaned, inspected, and tested before being placed in useable inventory. Suspension parts are inspected for straightness or roundness prior to being crack-checked. The crack check inspections are not reserved for end of season though and do occur between events as well. As soon as all components have been inspected, it is time to start reassembling cars for the first track tests of the new year which typically happen in the middle of January.

As I have mentioned previously, IndyCar teams take the attention to detail to another level. A great example of that was when we conducted a multi-day test to optimize our brake bias variation with system pressure and pedal travel. A rig was constructed to pressurize master cylinders using a pneumatic cylinder. The entirety of the braking system hardware such as the rotors, calipers and lines were laid out to replicate their actual positioning on the car. After 3 days of testing line lengths, sizes, master cylinders, seals, and assembly processes, we were able to confidently find a solution we were happy with.

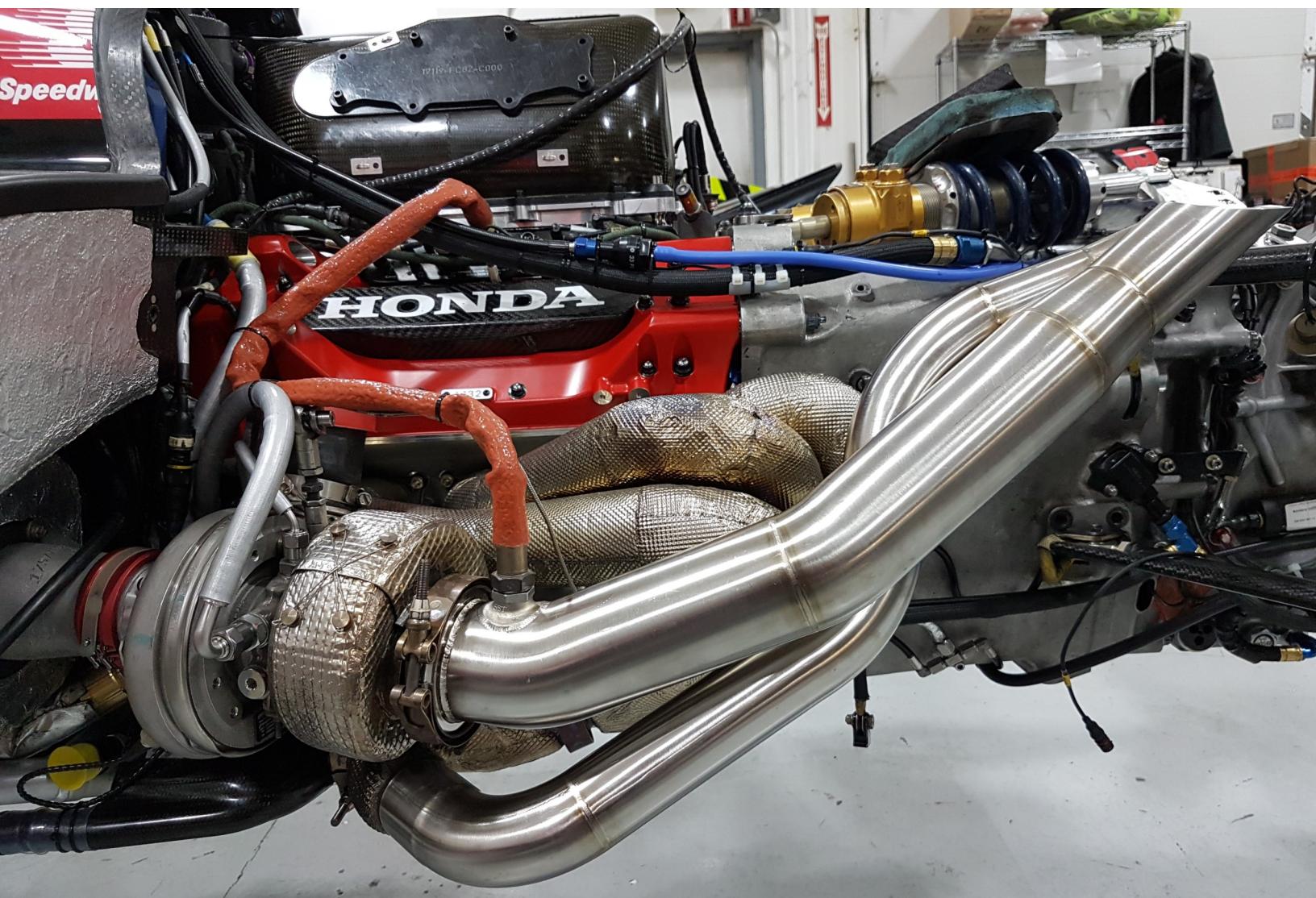
Admittedly we did not mind running races without fans. The general sentiment among crew members was that we preferred it because there were no crowds to navigate through when going back and forth from our pit box to paddock area. Our last race of the season was back in St. Petersburg, FL where fans were present but were not allowed in the paddock. It was refreshing having people there who were so interested and supportive of the IndyCar series. After experiencing a race again where fans were present, I am certainly looking forward to the day when they are allowed back in our paddocks.



I hope this edition of “Behind the Pit Wall” has provided a small peak behind the curtain, sharing some of the finer details that are not broadcasted on television. I will admit that working on the team has become habitual at this point. It has become easy to overlook the rarity and excitement of my opportunity to be surrounded by the motorsports world on a daily basis. My favorite part of race weekends, is going out to pit lane first thing in the morning as the sun rises to do an operations check on the timing stand. It is at these times when I most appreciate this unique job I have, while enjoying the silence of the day prior to the percussive racket of racecars filling the air.



Check out updates and insights from Kevin on the WSCC forum: forums.wscc.mb.ca/index.php?/topic/11441-imsa-behind-the-pit-wall/



DirtX by Mat Leveille , Al Marcoux

The WSCC is excited to announce a new activity for 2021. DirtX will debut as a demonstrative discipline. The intention is to garner some interest while keeping the requirements and costs for participation to a minimum. We plan on holding one or two events between May and September.

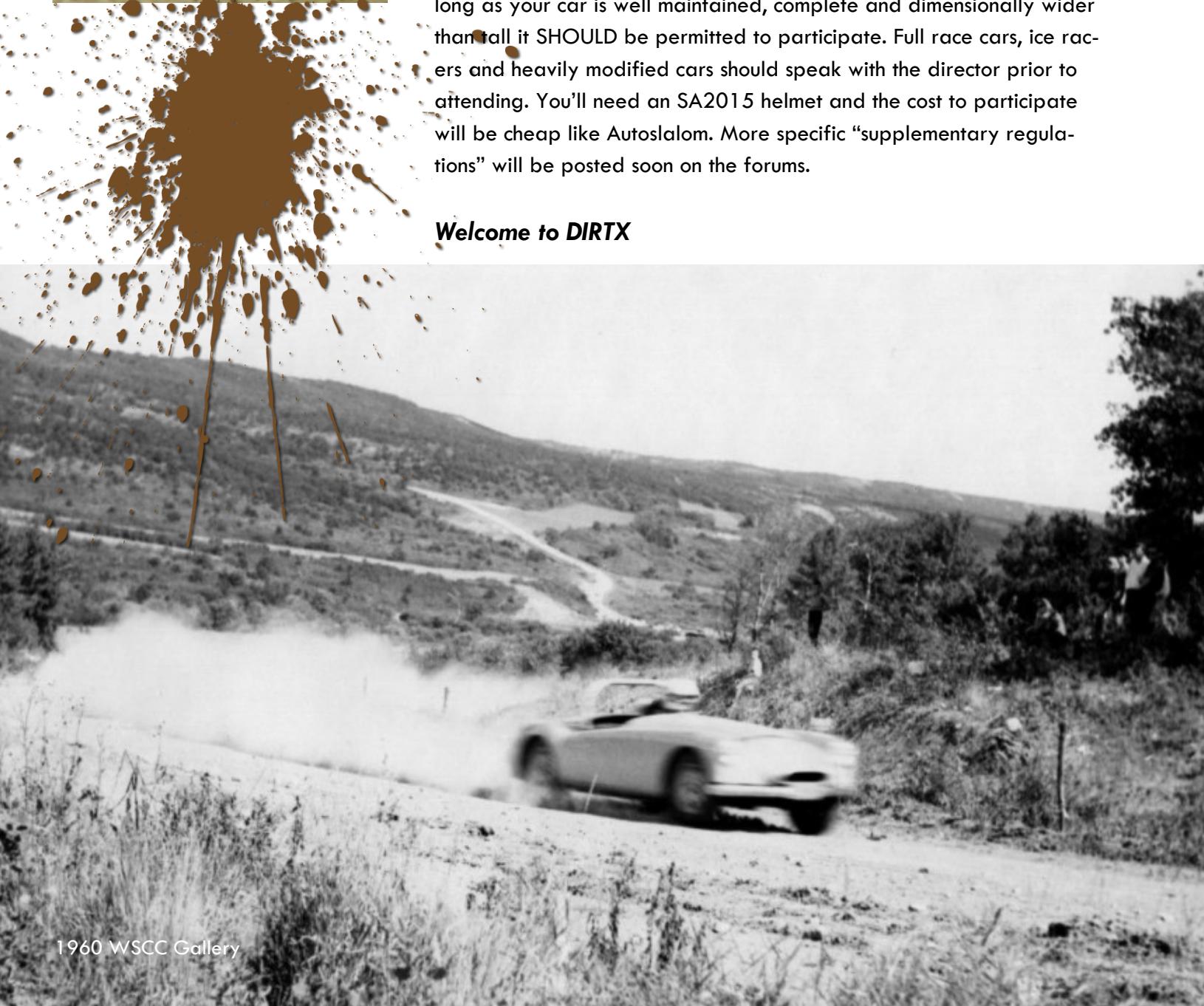
The DirtX concept is similar to Autoslalom. Envision 1km courses on various loose surfaces. This is a timed solo sport activity where drivers can expect to hit speeds of +/- 80 Kph. Each event will feature multiple runs on more than one configuration.

Cars will be classed only by AWD, FWD and RWD for this season. As long as your car is well maintained, complete and dimensionally wider than tall it SHOULD be permitted to participate. Full race cars, ice racers and heavily modified cars should speak with the director prior to attending. You'll need an SA2015 helmet and the cost to participate will be cheap like Autoslalom. More specific "supplementary regulations" will be posted soon on the forums.

Welcome to DIRTX



1993 WSCC Gallery



1960 WSCC Gallery



Photo by Mat Leveille

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Race Cars for Sale

An easy way to get into racing is to start with an existing race car.

Check the club forum for further information and contact info:

<http://forums.wscc.mb.ca/index.php?/forum/73-race-cars-currentcompleterunningincomplete/>

Formula Vee \$4500

With a heavy heart, I am selling my Formula Vee! This Vee was purchased as a fully disassembled car, everything is here. I have spent several thousand dollars on getting a brand new rebuilt engine and transmission for it - built by Vallis Motorsport in Ontario. This car has won championships in its previous life, and when assembled with the right driver, will do so again. While coming with the parts to complete the kit, included is a ton of other part which includes 6 rims, another complete engine that has been disassembled, extra brake parts, and the list goes on. The chassis is solid and requires no work to be race spec. This Vee is also fitted with a bladder style fuel tank which is an expensive upgrade. Only thing I can think of that you will need to get is a motorcycle battery to get the vehicle going.



I am taking a large loss on this project, so please only reasonable offers; looking to send this car to someone looking to get racing!

Call or text for more information! Vas - 204-230-0221

68 Chevelle drag car

513 Merlin - Just Rebuilt - Drag Mark Winnipeg. \$25,000 on the motor 860 HP just motor. Only one run on motor 9.69 - 1/4 mile Gimli AFR. Aluminum Heads Runs on C12 Fuel 400 Turbo. Trans w/ 4000 stall Torque Convertor Trans. Brake Line Lock Progressive Nitrous 456 Gears

Includes new Hoosier tires 33X22-5X15LT. New coil shocks. All setup for the 1/4 Mile. *Looking to trade for heavy equipment, skidsteer, semi tractor, etc of equal value, otherwise asking \$45,000 obo. Contact on WSCC forums.



Formula Vee For Sale

1975 Lynx B Caracal. Ex championship car from Gimli track. Originally from the US. Many spare parts and info to get started. May need trans work.

A bargain at \$4500.00 Call 204-291-4056

2011 Honda Civic Ice Racer

Multiple Championship winning Rubber to Ice car, including the last 3 seasons in a row. Low mileage JDM D16A6 engine, welded diff, caged with FIA bar. Ready to win another championship! Comes with a bunch of hand cut tires including last years set that will do another season competitively. Maintained and stored by Al Marcoux.

Asking \$2000, no seat.

Call Damon @

204-471-4495 or email

damon@nomaddigital.ca



Ford Focus for Sale

2001 Ford Focus 2.0 Zetec. Was raced at RRCS. Amazing build quality, ultra safe cage, all new parts, tons of spares. 2015 build. 2016 Championship car. Will discuss details with buyer. Turn key. Asking \$3000 to \$4000 depending on how you want it. Sean @ 1-204-461-3946



Honda CRX Road Race Car

Honda CRX road race car, fire system, 4 corner adjustable suspension, anti roll suspension, 1.5L with amazing power have dyno sheets, racing seat, adjustable rev limiter, super nice car for someone starting out and handles like a dream, way too many things to list.

204-228-5115 \$10,000



1984 Reynard F 2000 Hayabusa swap

Still available...1984 chassis 1999 hayabusa engine all mounted aluminum box built off engine for chain drive.. drive set up built...just needs to be finished..Gord was my right hand man on this deal and I don't have it in me anymore to go through with it ... life changes... 1 306 561 8069 \$5k Kyle

Race Cars for Sale

Ice Racer—1991 Suzuki Swift GT— Parts or Fix

1991 Suzuki Swift 1.3L DOHC GT Engine - was torn down and rebuilt by Bill Langner a few years ago Bottom end is blown - I threw a rod and there's a hole in the block. Head is still in excellent shape, engine ran very well prior to blowing.



New spark plugs, new cap/rotor/plug wires. MAF cleaned, has cone filter adapter, brand new K&N cone filter GT 5-speed transmission - newly rebuilt by Asperline Transmission (over \$750 last fall) - new synchros, gears, etc. Only has 4 race days on it, and is in excellent shape. Tons of other new parts: New front CV axles. New front

and rear brakes (calipers, pads, lines, etc.) New e-brake cables. Newer battery. New Oxygen Sensor. New PCV Valve. New HPDE Shifter bushings - nice and tight! Has 5 tractionized winter tires on rims, plus 1 non-tractionized. Front and rear push bars, full lexan windows (windshield is OEM Glass), new blue paint job (has marks from a full season of door to door action). Rear fog light, all lighting, wiper, and fan circuits on individual toggle switches in the cockpit. Car has a good roll cage, built by Bill L. Very light car, and very competitive. Was a previous winner before I bought it just over a year ago, and I had many podium finishes in the car. Car will need an X-brace fabricated for the front end - common Swift problem. Comes with tons of spare parts - 2 transmissions, axle shafts, newer aluminum radiator. Can include a new Sparco 6-point Harness (2017 dated, FIA, good until 2022) for additional cost. No racing seat included.

Price: \$1500 | Contact: Jared Halpin @ (204) 294-0286

1994 Civic Road Racer

Car is ready to compete in ST5/6. Interior is stripped, giant tach strapped to the dash, legal cage, etc. Weight should be in the 2,300 range with your average driver. This car ran in ST6 last year and at the last event developed a slight off-throttle knock in the engine. Car runs and drives fine but



will require a new engine to race.

I have a B18 with Crower cams that is ready to be dropped in and this car will be good to go, making a touch more power than it does now. This should put the car into ST5. Other items include Acura Legend dual piston front calipers, adjustable front A Arms, KYB adjustable coilovers, rear brace, strut tower brace, aluminum half rad and a sickening wing that will make your pants tight.

Passed tech last year without issue and comes complete with all safety gear you'll need - valid camlock harness, window net, etc. The only safety item you'll require is a seat as I would like to keep the one currently in the car.

Asking \$2,000 obo. [Contact on WSCC forums](#)

License Applications

Go to www.motorsportreg.com to get your 2021 licenses and to register for WSCC events. Click to get your license:

[Amateur License](#)

[Basic Ice Race](#)

[Race Official License](#)

[Time Attack](#)

[Annual Waiver Hard Card](#)

[Car Number & Classification](#)

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WCMA 2021 Amateur License



Western Canada
Motorsport
Assoc



Tuesday, Dec 1, 2020 —
Friday, Dec 31, 2021
WCMA Licenses,
Edmonton, AB

Registration ends in a year on December 31, 2021 11:59 PM MST

Amateur - Race / Historic (Road Racing)



The Western Canada Motorsport Association is the authority for amateur motorsports in Alberta, Saskatchewan, Manitoba, the Northwest and Yukon territories.

Previous editions of the Aficionado can be found on the WSCC forum and website:

www.wsccmb.ca/wscct-afficionado/



FIRE ON ICE CHAMPIONSHIP

2021 SCHEDULE

MURDOCK ROAD WATER
SKI POND - WINNIPEG
SATURDAY, FEBRUARY 13TH,
HOTLAPS / TEST & TUNE - 11AM
SUNDAY, FEBRUARY 14TH,
RACING - 12PM - RACE #1

GIMLI MOTORSPORT
PARK - GIMLI
SATURDAY, FEBRUARY 20TH,
ICE ATTACK 2021 - 12PM
SUNDAY, FEBRUARY 21ST,
ICE ATTACK 2021 - 12PM

MURDOCK ROAD WATER
SKI POND - WINNIPEG
SUNDAY, FEBRUARY 28TH
RACING - 12PM - RACE #2

CPTC COMPLEX
BEAUSEJOUR
SATURDAY, MARCH 6TH
RACING - 12PM - RACE #3
SUNDAY, MARCH 7TH
RACING - 12PM - RACE #4

MURDOCK ROAD WATER
SKI POND - WINNIPEG
SUNDAY, MARCH 14TH
RACING - 12PM - RACE #5



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SEE RACING CARS BATTLE ON ICE AT OVER **120 KPH!!!**



LEE MCRAE
2020
RUBBER
CHAMPION



RACE YOUR DAILY DRIVER
AGAINST THE CLOCK IN
ICE ATTACK
FEB 20TH & 21ST



FOR RACE UPDATES, RULES & REGISTRATION VISIT : WSSC.MB.CA/ICE-RACING

[FACEBOOK.COM/WINNIEGSPORTSCARCLUB](https://www.facebook.com/winnipegsportscarclub)

[INSTAGRAM.COM/WSSC.RACING](https://www.instagram.com/wsscracing)

[TWITTER.COM/WSSC_RACING](https://www.twitter.com/wssc_racing)



WANT TO SPONSOR AN EVENT?
CONTACT : ICE@WSSC.MB.CA

CORNER MARSHALS NEEDED. CONTACT : DASON WOWK
JUSTAVIPERGUY@GMAIL.COM 204-291-7728

PHOTOS BY : STEVE CARMICHAEL
SOLOSNAPSHOTS.COM

EVENTS SUBJECT TO CHANGE

ALL EVENTS ARE SANCTIONED BY THE WCMA AND AFFILIATED WITH GDS CANADA