

Club racing on ice is grassroots stuff, open to anyone, and almost any kind of car, from Toyotas to Porsches, so long as the final racing weight is under 2750 pounds, not including driver. Ice racing is sanctioned by the Western Canadian Motorsports Association (WCMA), and our local Edmonton club, the Northern Alberta Sports Car Club (NASCC), sponsors and organizes Ice Racing around Edmonton's vicinity. You just have to get your competition drivers license, a ride, and the safety gear. If you are planning to get your license and race you should complete both the Winter Driving and Ice Race School form and the Ice Race Registration form.

### **The License**

An ice racing license is earned at the Winter Driving and Ice Race School offered by the NASCC in early January. There is an evening classroom session at the NASCC clubhouse (11512 - 168 Street) with some technical discussion on taking a corner at speed (turn-in, corner apex and corner exit, slip angle, friction circles and the like), some emphasis on aspects of competition (safety, flags, the rolling start), and a little information about car preparation. This session is followed by an on-track session on the Saturday, at a lake that is usually identified 48-72 hours in advance. It consists of a few exercises. 1: Braking, accelerating, turning - pylon type course, 2: low speed ice driving - short twisting course, 3. full track - regular highway speed driving with instructor in the car. (These vary depending on ice conditions) You will be in your car most of the day.

*Registration:* You contact the NASCC to sign up for the School. Download and send in the Winter Driving/Ice Race School form to the mail or email address on the form. Find the form from links in the News section, or the Racing Rules submenu. If you have questions contact one of the names on the website, identified either in the News or Contacts submenus; click on a name and send an email, or make a phone call.

*Vehicle:* Bringing your new race car to the on-track session is a good idea, but bringing any car will do. Installing a seat for your instructor is important though, if the car is race prepared, and if you can't install a seat you should think about bringing a car your instructor can sit in.

*Requirements on-track:* You require a vehicle, **meals**, warm clothes - you will be standing outside on occasion and should dress in layers, so you can adapt to conditions.

You will need a helmet – motorcycle in a pinch, but to race you need a Snell SA 2005 or 2010 approved helmet, not a motorcycle helmet, so you might as well just get one in advance if you are planning to race. (If you will not be racing you can get away with a motorcycle helmet.) Your car should be empty of material that may fly around.

*Cost in 2010:* \$80 for School Registration for NASCC members, \$70 for NASCC membership, ~\$45 to the WCMA for the Ice Race license. See the Rookie package info below for another pricing option.

Non-racing school attendees who do not wish a race license do not need to pay for one, and can opt for the \$120 non-member fee for the driving school.

**The Ride:**

Getting a ride is a big step, and there are a lot of choices to make. STEP 1 is READ THE SUPPLEMENTARY ICE RACING REGULATIONS, (found on the NASCC Website, Racing Rules Submenu) in which the class specifications, tire specifications, and car regulations are provided.

You can convert a car by stripping out the interior, adding a roll cage and whatever modifications the racing class you join will allow. Or, to start out, you can buy an already prepared race car. Prepared race cars can be found on the WCMA, NASCC, Calgary Sports Car Club, Winnipeg Sports Car Club and the BC sports car club sites and forums. There is a link to the Chevette class website on the NASCC site, and Chevette race cars are often listed for sale there. Neon cars are built and sold by MMM racing, or TDC Performance. Try one of these contacts: [marcel@TDCperformance.ca](mailto:marcel@TDCperformance.ca) or [Spec\\_Neon@TDCperformance.ca](mailto:Spec_Neon@TDCperformance.ca). Race cars even show up on eBay Motors (other/race car), Kijiji and Craigslist. One thing to keep in mind is that race cars do not sell fast, and so whatever you choose, you will want to be happy with it, or be able to modify it until you are happy.

*Getting to the track.* If your car is still roadworthy you can license and insure it and drive it to the race track. If it does not survive the weekend you can get help getting home from the other competitors. You can also flat tow the car, with all four wheels on the ground, using one of those A-frame tow bars available from places like ABC Muffler and Hitch or Princess Auto, but you have to know if the differential will handle being spun by the tow. However, if all four wheels are on the ground the car must be licensed for the road, even though you are towing it. You can use a tow dolly, which puts two wheels on the dolly, in which case the car does not need to be licensed, although the dolly renter may still require it to be licensed. You can also use a car hauling trailer, either open or enclosed. A tow dolly can be rented from U-Haul or Budget, and trailers are rented by trailer companies listed in the yellow pages. Used trailers are often a good bargain, but you have to store it somewhere. Tow dollies are more easily stored, but are not that great a bargain compared to the price of a trailer.

**Race Classes**

Choosing a racing class is important. In ice racing the classes are largely defined by the tires: Rubber to ice classes are just that, conventional snow tires, while street and race stud use tires you generally build yourself, made by screwing around 50 or more 1/4 inch bolts through a tire and grinding them to 12 mm in length.

*The Chevette class (CH) and the Non-Stud (NS) classes* run rubber to ice. Top speeds are around 100 km/hour. Chevette is a specified class with specific car preparation and tire regulations (Blizzaks). Non-stud has very few restrictions on cars or tire choices, except that the tires must be DOT approved and the cars must have had a racing weight of 2750 pounds or less, a wheelbase of 110 inches or less, and can not be a tube frame vehicle, a truck, or other non-street-car-like vehicle. There are specifications about the roll cages provided in the WCMA regulations, and the Ice Racing Supplemental Regulations define where and how much re-inforcing, alteration of the cars frame, Safety Equipment and

other modifications are allowed or required. The drive train is essentially free in NS and must be completely stock in CH. Blizzacks are the most popular tire choice in NS, and are required in CH. **YOU MUST READ THE SUPPLEMENTAL REGULATIONS AND THE CURRENT WCMA TECHNICAL REGULATIONS TO UNDERSTAND WHAT IS ALLOWED IN PREPARING YOUR CAR.** (Links are on the NASCC site.)

*There are three classes of studded tire racing.* Studded tire build regulations are exacting, and are given in the Ice Racing Supplemental Regulations. There are two types of tires, Limited stud, with 9 bolts per foot, and unlimited (race) stud, with no limitation on the number of bolts. Bolts must be 1/4 inch and no more than 12 mm above the tire surface. Tire must be shaved to remove the tread. Top speeds are around 160 km/hour.

*Neon Class racing (NE)* uses limited stud tires, and a stock SOHC 1995-99 Neon. Specifics for the class are given in the Spec Neon Rules, found on the NASCC website, Racing Rules submenu. Spec class racing in a Neon is intended to provide as level a playing field as possible between the cars, making it a drivers series. Very limited car modifications are allowed, and the manufacturer or after market performance parts available for Neons are not allowed. (Eg ACR models and their parts are not allowed). **YOU MUST READ THE SPEC NEON RULES, THE SUPPLEMENTAL REGULATIONS AND THE CURRENT WCMA TECHNICAL REGULATIONS TO UNDERSTAND WHAT IS ALLOWED IN PREPARING YOUR CAR.**

*Limited Stud (LS) and Unlimited or Race Stud (RS) classes* must follow the car preparation rules in the Ice Racing Supplemental Regulations. These are the same as those given above for the NS class. Class choice is then determined by the type of tire you are running. **YOU MUST READ THE SUPPLEMENTAL REGULATIONS AND THE CURRENT WCMA TECHNICAL REGULATIONS TO UNDERSTAND WHAT IS ALLOWED IN PREPARING YOUR CAR.** (Links are on the NASCC site.)

### **Safety Equipment**

A variety of Safety items are required on the race car, and these are outlined in the ICE RACING SUPPLEMENTAL REGULATIONS, AND THE WCMA TECHNICAL REGULATIONS. The information below is a guideline only and is not comprehensive, you need to READ the Supp Regs to have accurate information.

*The vehicle items* include, but are not limited to a roll cage, a 5 or 6 point approved race harness, a fire extinguisher, large mud flaps, easily accessible tow points with chains attached, high-mounted brake light indicators and a rear pointed amber fog lamp, competition numbers and class designations, and other items. A GRS or FRS radio is required for communication from race control.

*The Driver requires* a fire retardant suit made of Nomex, Proban or similar material, such as an SFI approved race suit, or work overalls. Gloves and boots or race shoes are required as well. No polyester, rayon or similar highly flammable synthetic should be worn as any part of your attire. A helmet specific for automotive Motorsports is required, a motorcycle helmet (an M class helmet) is not satisfactory and will not pass technical

inspection. Currently (Jan 2010) Snell Foundation approve 2000 SA, 2005 SA and 2010 SA helmets are accepted, but winter 2010 is the last season for 2000 SA helmets.

*Safety gear* such as coveralls is available at the Work Clothing shop at Argyll Road and 99<sup>th</sup> street and is the lowest cost way to go. Racing Safety gear such as suits, gloves, helmets, shoes, etc is available at several locations including JB Automotive, Mopac, and G&G Racing in Leduc. Generally speaking, G&G has higher quality, but more expensive safety equipment.

### **Racing**

*A TYPICAL RACE SCHEDULE* starts in the morning with registration and technical inspection of your car and your safety equipment. (If you fail tech and never enter the race track it is possible to get a refund on registration, once you enter the race track there is no refund for any reason.) There are then a series of rubber and studded practices on the track, followed by a drivers meeting and lunch. Around 12:30 a cycle of race events starts. The cycle is usually Limited Stud, Non-Stud, Race Stud and Neon, Chevette, each having a ~10 minute plus one lap sprint race. Then the cycle is repeated one or two more times, depending on weather, ice conditions and efficiency of running the classes through the cycles.

*GRIDS:* The very first race of the season cars are gridded on a first come first serve basis, the rest of the day gridding is done based on the order of finishing the previous heat. The beginning of each new Race Day gridding is done based on the points accumulated previously. The grid order may be inverted in Chevette, and Neon classes, and in the top 6 spots in Non-Stud. The Grid Marshal will tell drivers where to line up. Arguing with the Marshals about the grid position is highly frowned upon and can get you disqualified for the day if you are overly vigorous. Complaints about grid order must be brought to the Stewards, who administer the WCMA Sporting Regulations.

*RACE CLASSES* It is possible to race your car in more than one class, so long as you register for that activity and pay the fees. For example Chevetttes can run in both CH and NS classes, while Neons can easily run in both NE and LS classes without changing their tires. If you are willing to do tire swaps you can run a car in NS and LS and/or RS., or in LS and RS, as examples. Keep in mind the race cycle mentioned above, in selecting classes you would run in. If you are swapping tires you likely need a crew to do the tire swaps in order to make it back to the grid on time, though there is one notable exception to that rule in our current collection of racers.

*FIND OUT MORE:* If you are undecided about racing consider coming out to watch the races on a weekend, or better, to work as a corner marshal for a weekend. You get a great view of what wheel to wheel racing is all about. If you want advice about what you are getting into come out to some NASCC Club meetings. We meet on the first and third Wednesday of every month, and the club members are always welcoming to new attendees. At the meeting you can also hook up with an experienced racer to help you learn the ropes, and anticipate the challenges of going racing.

**The Rookie Package**

You can sign up and pay for the Rookie Package in order to save \$100 over the course of the season. There are two options, a single class option and a two class option. These options are shown on the School Registration page and on the Ice Racing Registration page. You will need to complete both pages if you are going ice racing.

The Rookie package fee covers the Ice Race school, club membership, and five race days, in either one class or two classes. (The WCMA license fee of \$45 is not covered.) Refunds will be provided if the club has to cancel races and is not able to set up alternate dates, so that fewer than 5 races are run. Refunds will be provided at drivers request for one race day, if at the end of the season the driver missed one of the race dates. Should a larger number of race days be missed, refunds will be provided only if requested and if advanced notice was provided to the organizers, specifically the Race Director (see NASCC website for identity and contact info), however these larger refunds are at the discretion of the organizers.