

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, or 3150 lbs in the new Street Safe class, 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 basic competition drivers license, a ride, and the safety gear. If you are planning to get your license and race you should sign up for the Ice Racing and Winter Driving School and seriously consider the financially advantageous rookie packages.

### **The License**

An ice racing license is earned at the Ice Racing and Winter Driving School offered by the NASCC in early January. There is an evening classroom session with some technical discussion on taking a corner at speed (turn-in, corner apex and corner exit, slip angle, friction circles and the like), 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. Use the NASCC.AB.CA website to link through event registration menubar in footer at the bottom of the web page to Motorsport Reg, and sign up on line. 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 to [nascc.events@gmail.com](mailto:nascc.events@gmail.com).

*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 instead bring 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 2015 or SA 2020 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 use a motorcycle helmet for the school.) Your car should be empty of material that may fly around. Ballast if used must be bolted securely (No tie down straps or sand bags allowed).

*Cost in 2024:* \$235 for School Registration for NASCC members, \$75 for NASCC membership, \$45 to the WCMA for the Ice Race license. See the Rookie package info below for another pricing option.

**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. In addition there are specific sub-regulations for spec car classes. For 2024 we have Chevette spec class, and an exciting new Street Safe Class that does not require a roll cage or extensive car preparation. The other classes utilize a stock car equipped with a roll cage and tires specific to each class. 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. You can also check club Facebook pages and forums such as Straightpipe, or even Kijiji and eBay Motors. 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 (Non-Stud, NS, and Street Safe, SS) are just that, conventional snow tires, while Limited Stud (LS), All wheel drive (AW) and Chevette (CH) classes use specific tire types with bolts mounted in them.

*The Chevette class (CH)* run a specially designated, durable bolted tire, ~100 bolts per 4 wheels. Chevette is a specified class with specific car preparation and tire regulations. The car must be stock with no performance modifications allowed. This is to ensure equal competition and low cost of entry. Availability of cars to build on the used market is limited. If you are interested in getting into this class it is best to network with NASCC members, as several may have race cars or stock cars for sale. Many parts are no longer available from standard auto parts stores but places like rockauto.com, rareparts.com, northerautoparts.com and ebay.com can provide parts. Yes, new cars have been built and several engines have been rebuilt within the past decade. **YOU MUST READ THE CHEVETTE REGULATIONS, THE NASCC SUPPLEMENTAL**

## REGULATIONS AND THE CURRENT WCMA TECHNICAL REGULATIONS TO UNDERSTAND WHAT IS ALLOWED IN PREPARING YOUR CAR.

*No-Stud class (NS)* Non-stud has very few restrictions on cars or tire choices, except that the tires must be DOT approved inexpensive snow tires of a specified set of brands, 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, SUV, Jeep, ATV 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. **YOU MUST READ THE NASCC SUPPLEMENTAL REGULATIONS AND THE CURRENT WCMA TECHNICAL REGULATIONS TO UNDERSTAND WHAT IS ALLOWED IN PREPARING YOUR CAR.**

Street Safe Class (SS) is new as of 2024. The SS (Street Safe) class is intended to provide safe, accessible, inclusive, cost effective, racing to competitors in near-stock or completely stock vehicles. No roll cage is required, although there are other safety requirements that must be met. SS cars shall run a commercially available DOT “Winter rated” (Snowflake logo) studless radial street tire, and shall not exceed \$160 per tire. Tracks shall be designed as a full track or sub-track within a longer track with all-reasonable effort to limit maximum Street Safe class speeds to 80 Km/h. Eligible vehicles shall be compact sedans, coupes, hatchbacks or station wagons, FWD, RWD, or AWD - none shall exceed 3,150 lbs in race-weight excluding driver & passenger. FWD & RWD will be classed separately from AWD cars. **YOU MUST READ THE NASCC SUPPLEMENTAL REGULATIONS AND THE NASCC STREET SAFE SUPPLEMENTAL REGULATIONS TO UNDERSTAND WHAT IS ALLOWED IN PREPARING YOUR CAR.**

*Limited Stud (LS)* must follow the car preparation rules in the Ice Racing Supplemental Regulations. Bolted tire requirements are given in the Ice Racing Supplemental Regulations, and the specified bolt, nut and washer set must be purchased from the NASCC. If you need a full set of tires plan ahead and inform the NASCC you will need a certain number of bolts (typically 200-300 per tire set). **YOU MUST READ THE NASCC SUPPLEMENTAL REGULATIONS AND THE CURRENT WCMA TECHNICAL REGULATIONS TO UNDERSTAND WHAT IS ALLOWED IN PREPARING YOUR CAR.** (Links are on the NASCC site.)

*All Wheel Drive (AW)* is an open class to run any four wheel drive car using the same tire build regulations as Limited Stud. The vehicle can not be a tube frame vehicle, a truck, SUV, Jeep, ATV or other non-street-car-like vehicle.

## 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* in CH, NS, LS, & AWD include, but are not limited to a roll cage, a 5 or 6 point approved race harness, large mud flaps, easily accessible tow points with chains attached, high-mounted brake light indicators and a rear pointed fog lamp, competition numbers and class designations, mud flaps and other items.

Requirements for SS class differ, in that a roll cage is not required and stock safety belts are to be used if there is no roll cage. Tow points, high-mounted brake light indicators and a rear pointed amber fog lamp, competition numbers and class designations are required, while mud flaps are recommended not required.

*The Driver requires* a fire retardant suit made of Nomex, Proban or similar material, such as an SFI approved race suit, or fire retardant coveralls. 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. Snell Foundation approved 2015 and 2020 SA helmets are accepted, while 2010 SA helmets are expired as of the end of 2023.

*Safety gear* such as coveralls are available at any work clothing shop. Racing Safety gear such as suits, gloves, helmets, shoes, etc is available locally, including at JB Automotive, Mopac, and Motorsport Supplies. Generally speaking, Motorsport Supplies 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 to ice and studded practices on the track, followed by a drivers meeting and lunch. Around 11:30 or 12:30 a cycle of race events starts, each having a 10 to 15 minute 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 any of the classes. 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 Chevettes can run in both CH and CHSS classes, and NS & LS cars can run in either class so long as on the appropriate tires. CH, NS, LS and AWD cars are eligible to run in SS, subject to Technical Inspectors approval. SS cars that have a full roll cage and mud flaps meet requirements for NS and LS on appropriate tires. 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.

**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 get a discount 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. Savings are \$250 or more, depending on the package. (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 if a larger number of race days are missed, at season's end.