## Autocross Glossary

Acceleration	The addition of speed, normally caused by an engine either pulling or pushing a car.
Aerodynamics	The science dealing with a car passing through air.
Apex	The center point of a turn with respect to entering and exiting
Brake Modulation	Easing off of the brakes slightly when you feel the wheels locking and then reapplying the brakes. ABS does the automatically.
Camber	The tilt of a wheel from the vertical, viewed head on (see figure 1). Positive camber means the top of the wheel leans away from the vehicle centerline. Negative camber has the wheel leaning toward the centerline. Any wheel camber has two effects: A wheel tends to run in a circular path toward the direction in which it leans, and at any time a wheel is not running at a right angle with the road surface, the flat tread is not fully in contact with the road. Since a vehicle tends to lean away from a turn due to centrifugal force and the wheels tend to lean with it, negative camber is sometimes used so that the tread is flat on the road surface when it is on the outside of a corner. This is when you most need traction if you are in a hurry.
Caster	The more-or-less vertical axis about which a wheel rotates during steering (see figure 2). When the top of this axis leans toward the rear, like the front fork of a cycle, it is positive caster. The primary effect of positive caster is that the tire contact patch on the pavement trails behind the point at which this axis contacts the pavement. This causes

	the wheel to tend to follow the caster axis and run straight ahead after a turn.
Center of Gravity	The center point at which the vehicle will balance
Centrifugal Force	The force towards the outside of the circle
Centripetal Force	The force towards the center of a circle
Chicago Box	A short slalom disguised as a box.
Clean Run	Indicated that a run through the course was without hitting cones
Cornering	Driving in an arc predetermined by either a limiting barrier such as a pylon, or by mental design on part of the driver.
Course Marshal	The person in charge of the event. Normally will be at or near the starting line supervising all aspects of the course.
Course Worker	Someone whose work assignment is on the course. Course workers reset cones, call in cone penalties on the radio, and display red flags as needed. Autocross cannot run without Course Workers!
Deceleration	The slowing of a vehicle, normally done by applying braking pressure

Decreasing Radius Turn	A turn that gets tighter as you go through it.
Dirty Run	A run where a cone or multiple cones were hit
Dive	A word sometimes used to describe the pitch motion in a car under braking
DNF	Did Not Finish. A run is scored as a DNF when a portion of the course was not completed or when a car fails on course. DNF runs do not post a time.
DNS	Did Not Start. A run is scored with a DNS if the driver is unable to or elected not to start the run.
DSQ	A run or driver is disqualified.
Early Apex	Turn line intersects the inside of the curve before the geometric apex. Note that the sharpest part of this turn happens at the end. If the driver hasn't slowed sufficiently, the car will drift right off the track beyond this point.
Entry Angle	The position of a car relative to an approaching corner
Esses	A series of turns in the shape of an S
Exit Angle	The position of a car relative to leaving a corner and approaching a straightaway
Finish Chute	The end of the course; requires a full stop or slowing to walking speed prior to exit

FTD	Fastest Time of the Day
Gate	Two cones, arranged for you to drive through them. A Gate may or may not have a Pointer Cone
Geometric Apex	Note that the turn line intersects the geometric apex of the corner. This curve represents the highest constant speed around the corner, since any high speed results in drift.
Heel-and-Toe	A driving method whereby the right foot is used to control both the accelerator and the brake. Can be used on 3 pedal (clutch) cars
Increasing Radius Turn	A turn that opens up as you drive through it
Late	While driving, getting behind in the course flow. A driver who is late is not on the proper driving line before they arrive at the next element
Late Apex	Turn line intersects the inside of the curve after the geometric apex. In this diagram, note that sharpest, and therefore slowest part of the turn is at initial turn-in. After that, the curve becomes less sharp, thus the driver can accelerate out of the turn.
Left-Foot Braking	Using the left foot to operate the brakes in an autocross car, normally used to help maintain chassis balance.

Line	The physical line of travel that a car takes through a turn from turn-in- point to apex, to the track-out-point. The correct line will make you fast and smooth.
Negative Camber	A situation where the wheel leans away from the car at the road level. The top of the tire is leaning inward from vertical
Neutral Handling	The car feels balanced and responsive; the driver feels more comfortable and in control.
Off Camber	When the ground surface tilts down away from the inside of the turn. This causes reduced grip and makes the cornering speeds lower
Offsets	A series of gates or stand-alone cones that must be driven in left and right turning somewhat similar to a slalom but wider
On Camber	When the surface tilts down toward the inside of the turn. This increases grip and makes cornering speeds higher.
Oversteer	The car wants to over-respond to your steering inputs. The rear end of the car feels light, and the car acts as if it wants to spin to the inside of the corner.
Paddock	The area where cars, trucks, trailers, and any spare equipment is kept during the event
РАХ	Stands for Professional Autocross. The PAX system is a handicapping method of scoring cars in a wide variety of classes by applying a multiplier to their times.
PAX Adjusted Time	This is your Raw Time adjusted for the PAX.
Pin Turn/Cone	Term for a tight, normally 180-degree turn, where a single cone, known as a pin cone, marks the apex
Plus 1 (+1)	Term to indicate that a cone was hit on a run. It stems from the Corner Worker or the scoring table stating your car number, and then adding "plus 1." Two (2) seconds are added to your Raw Time

Pointer Cone	Pointer cones indicate which side of a stand up cone the course is routed on. These cones lie on their sides, and serve as arrows pointing to the opposite side of the cone. Pointer cones are not scored, should one be hit during a run.
Pylon	Those critters we try not to hit when autocrossing, usually a fluorescent-orange rubber or plastic traffic cone.
Pyrometer	A technical instrument used to accurately gauge the temperature of the rubber compound on a tire.
Raw Time	The unadjusted course time for a driver. Raw time does not take into account penalties or indexing. This is shown on the remote display
Red Flag	STOP! Every corner station on an autocross course has a red flag. If you see one on a run, simply bring your car to a stop. Generally red flags are displayed when a car ahead of you has spun or stopped on course. Proceed as directed by the Corner Station.
Re-Run	When a driver is shown a red flag or there is an issue with the timing or scoring of a run, a re-run may be granted. Re-runs may also be granted if a driver stops for a downed or out-of-place cone.
Roll Bar	More correctly call an anti-roll bar, this device reduces body roll and is normally mounted laterally at the front and rear of the car. Also called a sway-bar or anti-sway-bar
Safety Steward	A club volunteer who oversees the safety of the event. Approach either the Safety Steward or the Course Marshal with any noted safety concerns.
Shock Absorber	A dampening device used in conjunction with springs to reduce bounce, and stabilize the ride of a vehicle
Slalom	A common course element, taken from downhill skiing. A slalom is a line, generally straight, of cones that must be weaved through. A Pointer Cone may designate the entry side

Spin	Loss of tire grip resulting in an undesired rotation of the car past 180 degrees. "When you spin, both feet in" $-3$ pedal cars, depress clutch and brake until stopped. Automatic cars, full brake until stopped.
Springs	Devices of various shapes that support the weight of a vehicle in a resilient fashion
Staging Grid	The staging area for cars in the active run group. There may be an active grid for cars currently running and a pregrid for cars nearer the staging line, or a single grid in a line that everyone inches along from.
Staging	The line where the Starter indicates to stop prior to the Green Flag to START
Sweeper	A long continuous-radius turn
Threshold Braking	Maximum braking with the wheels on the verge of locking
Тое	The alignment of the wheels as viewed from above (see figure 3). "Toe-out" means each wheel points away from the centerline. "Toe-in" means each wheel points in, toward the vehicle centerline. The primary purpose for the seeming misalignment of toe-in is to preload the steering and suspension linkage and take out all the linkage slack or springiness. It does this because the centerline of the tire usually lies outboard of the caster axis, and forward motion tends to push the wheel and tire rearwards in an arc so that the wheels tend to toe-out. The amount of static toe-in is such that the wheels are pointing at or near straight ahead after the car is in motion and all the slack is taken out of the system.

	Toe-Out Toe-In
Torsion Bars	A supporting device much like a spring, only instead of moving up and down, they torque or twist.
Track-out Point	The point on the course at which the car should be when you have completed the turn.
Trailing Accelerator	A condition whereby the driver maintains a lag in acceleration while beginning to apply the brakes.
Trail Braking	Continually applying pressure on the brakes keeping the weight of the car off the rear tires which can induce oversteer, intentionally or otherwise
Trailing Throttle Oversteer	Oversteer caused by lifting off the gas or braking while in a corner. Rear engine cars are noted for doing this.
Understeer	Commonly called "push" or "plow", the car feels like it is unresponsive to your steering inputs, will continue straight ahead, and feels like the wheels are not turned enough. Generally caused by entering a corner with more speed that the front tires can handle or by applying too much throttle when exiting a corner than the front tires can handle. The initial response the wrong response is to turn the wheels more.