# What class am I in?

A simplified briefing of the SCCA Solo (i.e. "Autocross") classing structure

Note: This document is not intended to replace, or overrule, the official SCCA Solo Rules (available at www.scca.com or in the official SCCA rule book). This document is intended to only provide a simplified understanding of the SCCA classing structure, allowing a vehicle owner to quickly class their vehicle with reasonable accuracy. A competitor should not rely solely upon this document when determining what modification are or are not legal for an intended class, but should also consult with the official SCCA rule book.

There are additional allowances and additional restrictions in the rule book not mentioned here for the sake of clarity

## Car number AND class must be displayed in large text on BOTH sides of the vehicle

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Last updated to 2010 rules

# Novice Class

A "novice" class is an optional class available for any competitor in his or her first 12 months of competition. A handicapping system (i.e. "PAX") is used within the novice class to allow vehicles of various classes to compete on a weighted scale. This should theoretically remove the car from the equation, allowing drivers to compete on a more level playing field.

To register for a novice class, simply add an "**N**" to the beginning of your normal class. For instance, a Corvette Z06 which would normally be in "**SS**" and has a novice driver, has the option or registering as "***N*SS**", and running in the novice class.

# Pro Class

A "Pro" class is available to any competitor who wishes to have more competition than they would otherwise have in their standard open class. Pro class competitors will be awarded championship points for the pro class at each event based upon their PAX times from the event.

To register for a pro class, simply add an "**X**" to the beginning of your normal class. For instance, a Corvette Z06 which would normally be in "**SS**", has the option or registering as "**XSS**", and running in the pro class.

# Stock Classes

Stock classes are considered by some to be the "purest" form of competition. With competitors having theoretically equivalent equipment, the only variable becomes the driver. For others, stock classes are a wonderful entry-level into the sport, requiring a minimal monetary investment. Many stock class cars server double-duty as weekday commuters, while remaining weekend racers.

## Equipment Allowances:

All vehicles must be in 100% stock condition, except where indicated below.

- **Engine**
  - ECU must remain unmodified (no "chips" or "tunes")
  - "Drop-in" air filters are allowed
  - "Cat-back" exhausts are allowed
- **Wheels / Tires:**
  - Wheels must be stock size (diameter and width), offset within 1/4" of stock
  - Any DOT-legal tire may be used
  - Bodywork cannot be modified to fit tires or wheels
- **Brakes**
  - Any brake pad may be used
  - Braided brake lines (1991 or older only)
- **Suspension**
  - Any shock absorber may be used (must keep stock springs)
  - Any **front** sway bar may be used
  - Any alignment, with factory hardware
- **Other:**
  - All seats must remain stock
  - Spare tire or anything not permanently attached by factory hardware may be removed
  - Non-performance or maintenance modifications may be performed such as:
    - A trailer hitch may be added
    - Safety equipment may be added
    - Aftermarket guages
    - Stereo equipment may be added or removed, provided no net weight savings

## Available Stock Classes:

| Class | PAX Index* | PAX / 60 Index** | 2009 Nat'l Champion | 2009 Nat'l Champion's Vehicle |
|---|---|---|---|---|
| SS | 0.860 | 69.767s | Tom Kotzian | 2009 Chevrolet Corvette Z06 |
| AS | 0.864 | 70.258s | Scott McHugh | 1989 Chevrolet Corvette (car in BS as of 2010) |
| BS | 0.847 | 70.838s | Bryan Heitkotter | 2005 Mazda RX-8 (car in CS as of 2010) |
| CS | 0.840 | 71.429s | Ryan Buetzer | 2007 Pontiac Solstice |
| DS | 0.825 | 72.727s | Alex Muresan | 1998 Acura Integra Type-R |
| ES | 0.829 | 72.376s | Jerry Jenkins | 1994 Mazda Miata |
| FS | 0.837 | 71.685s | Sam Strano | 2007 Ford Shelby Mustang |
| GS | 0.812 | 73.892s | Anthony Savini | 2005 Mini Cooper S (car in DS as of 2010) |
| HS | 0.803 | 74.720s | Jimmy Crawford | 2006 Mini Cooper |

* PAX is an index used to equalize the various classes for intra-class time comparisions

** PAX / 60 is the estimated time based upon a course which a top AM car completes in 60 seconds

# Street Touring Classes

The street touring classes are intended to allow common affordable modifications, while keeping the cars much more "streetable" than a flat-out "Street Prepared" car would be.

## Equipment Allowances:

All of the rules and allowances of **stock** classes apply, with the following additions:

- **Engine**
  - All emissions equipment must be in place and working
  - Air intake can be modified up to the throttle body
  - Full exhaust system may be modified (except cat's)
  - Engine mounts may be replaced
  - Underdrive pulleys are allowed
  - ECU may be reprogrammed, with the exception of boost level
- **Wheels / Tires:**
  - **Minimum treadwear rating of 140**
  - ST / STS:
    - Maximum of 225mm wide tire; Maximum of 7.5" wide wheel
  - STX:
    - AWD: Maximum of 245mm wide tire; Maximum of 8" wide wheel
    - 2WD: Maximum of 265mm wide tire; Maximum of 9" wide wheel
  - STR:
    - AWD: Maximum of 225mm wide tire; Maximum of 7.5" wide wheel
    - 2WD: Maximum of 255mm wide tire; Maximum of 9" wide wheel
  - STU:
    - AWD: Maximum of 245mm wide tire; Unrestricted wheels
    - 2WD: Maximum of 285mm wide tire; Unrestricted wheels
  - Fenders may be rolled internally, but not cut or flared externally
- **Brakes**
  - Any pad or rotor may be used
  - Braided brake lines (any model year)
- **Suspension**
  - Any shock, spring or sway bar may be used
  - Any suspension bushing may be replaced
  - Strut bars may be added or modified, but may only connect in two points
  - Camber plates and camber bolts are allowed
- **Other:**
  - Bodykits are allowed, Rear wings or spoilers may be added
  - Any shift linkage may be used
  - Any seat may be replaced (min 25# replacement)

## Available Street Touring Classes:

| Class | PAX Index* | PAX / 60 Index** | 2009 Nat'l Champion | 2009 Nat'l Champion's Vehicle |
|---|---|---|---|---|
| ST | 0.824 | 72.816s | Bill Bounds | 1989 Honda Civic Si |
| STS | 0.826 | 71.259s | Matthew Glagola | 1989 Honda CRX Si |
| STX | 0.830 | 72.289s | Bryce Merideth | 1997 BMW 328is |
| STR | 0.842 | 71.259s | (new for 2010) | |
| STU | 0.844 | 71.090s | Thomas Kenna | 2004 Mitsubishi Evo |

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# Street Prepared Classes

The street prepared classes offer a few more modifications than the street touring classes, in particular slick tires are re-allowed

## Equipment Allowances:

All of the rules and allowances of **stock** and **street touring** classes apply, with the following additions:

- **Engine / Drivetrain**
  - Boost levels may be modified (stock turbo)
  - A/C Delete
  - Cat Delete
  - Differentials may be modified
- **Wheels / Tires:**
  - Any wheel or DOT-legal tire
  - Fenders may be cut or bent for tire clearance
- **Brakes**
  - Any brake caliper may be used
- **Other:**
  - Update/backdate parts from different years
  - Subframe bushings are allowed
  - All seats may be replaced with any seat
  - Aftermarket splitters and "spoilers" (no non-factory "wings")

## Available Street Prepared Classes:

| Class | PAX Index* | PAX / 60 Index** | 2009 Nat'l Champion | 2009 Nat'l Champion's Vehicle |
|---|---|---|---|---|
| ASP | 0.871 | 68.886s | Jason Collet | 2003 Chevrolet Corvette |
| BSP | 0.865 | 69.364s | Tom Berry | 2006 Mitsubishi Evo IX RS |
| CSP | 0.863 | 69.525s | Matt Mccabe | 1994 Mazda Miata |
| DSP | 0.849 | 70.671s | Ben Martinez | 1985 Merkur XR4 Ti |
| ESP | 0.852 | 70.423s | Mark Madarash | 1988 Pontiac Trans-Am WS6 |
| FSP | 0.838 | 71.599s | David Fauth | 1968 BMW 2002 |

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# Street Modified Classes

The street modified classes are intended to be the ultimate street-legal racing machines.

## Equipment Allowances:

All of the rules and allowances of **stock**, **street touring** and **street prepared** classes apply, with the following additions:

- **Engine**
  - Any engine is allowed, with any modifications
  - Make of engine block must match make of original engine or chassis
- **Minimum Weight**
  - SM:
    - FWD: Minimum 1550lbs + 125lbs/liter
    - RWD: Minimum 1800lbs + 200lbs/liter
    - AWD: Minimum 1800lbs + 300lbs/liter
    - +25lbs for mid or rear engine
    - "maximum minimum weight" of 3100lbs
  - SSM:
    - FWD: Minimum 1350lbs + 125lbs/liter
    - RWD: Minimum 1600lbs + 200lbs/liter
    - AWD: Minimum 1600lbs + 300lbs/liter
    - +25lbs for mid or rear engine
    - "maximum minimum weight" of 2900lbs
  - SMF:
    - Front-wheel drive only
    - 2 seats: Minimum 1650lbs + 125lbs/liter
    - 4 seats: Minimum 1550lbs + 125lbs/liter
- **Other:**
  - SM must have four or more seats, else SSM
  - Aftermarket hoods OR trunk lid
  - Wings may be added, removed or modified
  - Rear seats may be removed
  - Stereos may be removed

## Available Street Modified Classes:

| Class | PAX Index* | PAX / 60 Index** | 2009 Nat'l Champion | 2009 Nat'l Champion's Vehicle |
|---|---|---|---|---|
| SM | 0.877 | 68.415 | Mike Simanyi | 1995 BMW M3 |
| SSM | 0.883 | 67.950 | Dan Chadwick | 1993 Mazda RX7 |
| SMF | 0.870 | 68.966 | John Fessler | 1994 Honda Civic |

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# Prepared Classes

The prepared classes move beyond the relm of "street" cars, and into the relm of pure racing vehicles.

## Equipment Allowances:

The prepared classes allow extensive vehicle modification. Many additional modifications are allowed which are not mentioned here. There also are additional restrictions on a per-class basis which are not outlined here.

- **Engine**
  - Extensive internal and external engine modifications allowed
- **Wheels / Tires:**
  - Maximum of 12" wide wheels
  - Any tire may be used
- **Brakes**
  - Unrestricted, but no inboard brakes unless originally equipped
- **Suspension**
  - Essentially any suspension modifications are legal
- **Other:**
  - All open-top cars MUST have a roll bar
  - Extensive weight reduction may be done (stripped interiors)
- **XP additions:**
  - Wings or spoilers may be added, modified or removed
  - Pedals, steering wheel and seat must be entirely left (or right) of vehicle center
  - Any engine may be used, provided it's basic orientation and position remain the same
  - Minimum weights apply

## Available Prepared Classes:

| Class | PAX Index* | PAX / 60 Index** | 2009 Nat'l Champion | 2009 Nat'l Champion's Vehicle |
|---|---|---|---|---|
| XP | 0.890 | 67.416 | Fred Zust | 2005 Lotus Elise |
| CP | 0.866 | 69.284 | Mike Maier | 1965 Ford Shelby GT 350 |
| DP | 0.874 | 68.650 | Lloyd Wilson | 2000 Toyota MR2 Spyder |
| EP | 0.873 | 68.729 | Christopher Raglin | 1986 Honda Civic |
| FP | 0.876 | 68.493 | John Thomas | 1971 Datsun 240Z |
| GP | 0.850 | 70.588 | Steve Bollinger | 1966 Austin Healey Sprite |

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# Modified Classes

The modified classes contain some of the fastest vehicles in the world. These are one-off custom built machines with the sole purpose in life of completing a solo course as quickly as possible.

## Equipment Allowances:

In modified, the rule set varies based upon the class. These descriptions are very over-simplified, see the full rule book for more details.

- AM:
  - Anything goes, 900lb minimum weight
- BM:
  - SCCA "wings and things" club racing cars
  - Sports Racers: CSR, DSR
  - Formula Cars: FA, FE, FS
- CM:
  - SCCA "non-winged" club racing cars
  - Sports Racers: SRF, S2000
  - Formula cars: FF, S2000
- DM / EM:
  - Based on a production vehicle (silhouette car)
  - 2.0L engine or smaller in DM
  - > 2.0L engine in EM
- FM:
  - SCCA "budget" club racing cars
  - Formula cars: F500, FV
- FSAE:
  - 600cc 4-stroke motorcycle engine, no minimum weight
- Kart classes (F125, FJA, FJB):
  - F125: Adults, 125cc 2-stroke racing engines, 385# minimum
  - FJA: 12-18yr olds, 100cc 4-stroke engines, 280# minimum
  - FJB: 8-11yr olds, 100cc 4-stroke engines, 250# minimum

## Available Street Touring Classes:

| Class | PAX Index* | PAX / 60 Index** | 2009 Nat'l Champion | 2009 Nat'l Champion's Vehicle |
|---|---|---|---|---|
| AM | 1.000 | 60.000s | Dan Wasdahl | 2008 BBR/Phantom DVS-1 |
| BM | 0.965 | 62.176s | Clemens Burger | 1976 LeGrand Mk18 |
| CM | 0.915 | 65.574s | Peter Calhoun | 1986 Swift DB-1 |
| DM | 0.913 | 65.717s | Jeff Cashmore | 2002 Lotus 7 Clone |
| EM | 0.907 | 66.152s | Jeff Kiesel | 2008 KFR Turbo Sprite |
| FM | 0.908 | 66.079s | Salvatore DiPompo | 1984 DareDevil F500 |
| FSAE | 0.960 | 62.500s | Erick Kohler | 2006 F06 UTA Formula SAE |
| F125 | 0.959 | 62.565s | Paul Russell | 2008 Tony Krypton/Honda |
| FJA | 0.869 | 69.045s | Joey Montelo | 2002 Biesse Exceedingly |
| FJB | 0.834 | 71.942s | Julian Garfield | 2007 CRG Cadet KT100 |

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