CCSCC Autocross School

April 9 & 10, 2011

Rantoul Aviation Center

Classroom Instructors:
Pete Hetman
Greg Lukach
Barry Rowe

Course Instructors
Russ Bedford

Course Design:
Russ Bedford

School Arrangements:
Pete Hetman

Computer / Timing Crew:
Tom Ingles

Safety Instructors
Greg Lukach
Pete Hetman
Barry Rowe

Table of Contents

To hold autocrosses, lots has to be done. CCSCC has generated de-scriptions of what each job is, what the person doing it has to do and when he needs to do it. These descriptions prepare you as an entrant to do these jobs. Autocrosses cannot be held without these jobs being done.

CCSCC Autocross School Notes
Date: April 9, 2011

Introductions:

       Instructors: Pete Hetman, Dennis Miller, Barry Rowe

             Each Instructor will tell of their experience

       Participants:

             How long have you been autocrossing?

             Why are you here?

             What kind of car do you autocross?

General comments:

       CCSCC history

       CCSCC and SCCA

       How can we offer Autocrosses?

             Insurance

             "Nationally Recognized Classes"

             Car Classifications

                   Stock classes

                   Street Touring

                   Street Prepared

                   Prepared

                   Street Modified

                   Modified

                   Karts

                   Vintage Classes

                   Comparing across classes -- the Index.....

             Worker assignments -- We can't autocross without them. See handouts

                   Course worker

                         How to count a cone. (in or out of the box)

                         What is an off course? (OC --not DNF)

                         Can someone get back on course?

                         Where to look when car is on course.

                         Safety

                         Photographers and other annoyances we all love

                   Timing and scoring: AXWare -- class offered tomorrow 8:00-10:00

                         Multiple Cars

                         Using a computer

                         Posting results

                         Trophies, winners & reporting results

                   Starter (the gate keeper)

                   Safety steward (requires CCSCC license) Class tomorrow

                       10:00 - 12:00.

Anyone who wants to serve as a CCSCC Safety Steward this year must attend this class.

                   Registration http://www.ccsportscarclub.org/registration/

                       Pre-registration online: (paypal)

                       On site; (cash or check)

                   Tech inspections

                       Self-classification

                       Year long tech & waiver on file card

                   Fun Runs

CCSCC Autocross School Notes
Date: April 9, 2011

How to volunteer so it helps you run better
>> Today
>> Another event

What you need to bring to an event
> Helmets (Snell 95 or newer Rating -- M ok -- last year for M95)
> Air & Air Gauge -- CCSCC provids an air compressor
> Be prepared for the weather hot, wet or cold
> No Alcoholic beverages, illegal drugs, ever
> No firearms
> Note book to keep tire pressures and other helpful hints.

Scoring
> Times -- what they mean
>> Raw score -- Indexed score
> Cones -- See Appendix A for course diagrams
>> Pointers
>> Normal
>> Special (Start / finish, Defined as special)

Physics of autocrossing:

Linear motion:
> **f=ma** -- f=force, m=mass, a=acceleration

Acceleration: the more massive the car the more force you need

Deceleration (negative acceleration): Brakes! The more massive ...

Massive need more force to accelerate (horsepower)

Turning:
> $F_c = mv^2/r$ -- centripetal force (m =mass, v=speed, r=radius of turn)

Centripetal force turns you.

More mass -- needs more force

More velocity -- need more force^2 !

Smaller radius -- need more force

Radius of turn you can make is determined by v and m

Inertia --"stay in same state of motion"

Linear: mv
> Must overcome inertia to accelerate or decelerate
> More mass -- greater inertia

Rotational: related to where the mass is
> Mass towards center of car
>> It turns easily whether you want it to or not -- "twitchy"
> Mass at ends of car means it resists changing its turning state
>> More stable 'feel'
>> Once it starts turning, it continues turning
> Rotational Inertia is not "turning" It is "State of Turning"
>> If not turning -- it resists turning
>> If turning -- it resists going straight

Center of gravity: (Cg)

We turn around the center of gravity -- see figure 2

Tires have a slip angle -- See figure 1

Center of gravity ahead of the center of aerodynamic pressure (Ca)
> car "blows back into line" and resists spinning -- See figure 3

Center of gravity behind the center of aerodynamic pressure
> car is "blown off course" and spins more easily

Plane of tire

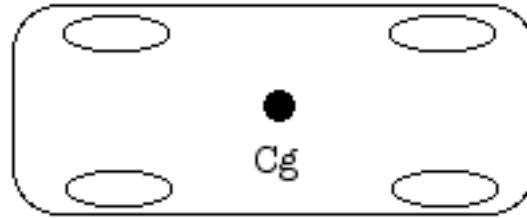Direction Car

Slip

Figure

Cg

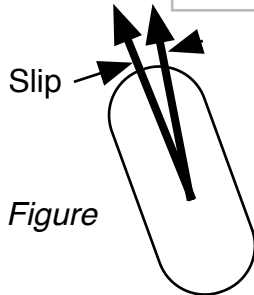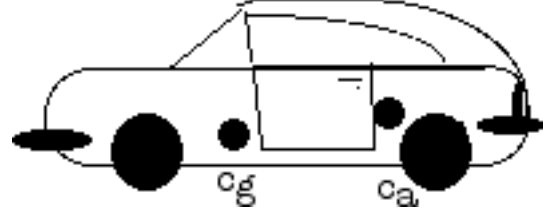*Figure 3*

cg   ca

Choosing a car to autocross:

    Uses:
        Family
        Fun
   Rallying also
        Only car
        Only an autocross car
        What do you want to run for?
            FTD
            Class win
            Against yourself
    Car set up
        Tire pressure
            Reading tires
            Polarized sunglasses
            White shoe polish or window chalk
            How pressure affects handling
                More traction -- more tire on ground
                Oversteer -- to fix: get more traction at the rear or less at the front
                Understeer -- to fix: get more traction at the front or less at the rear
                Balance is best so we want as much traction as we can
            How much pressure?
                Depends on tires, type of car, type of surface

overinflated

correct
inflation

underinflated
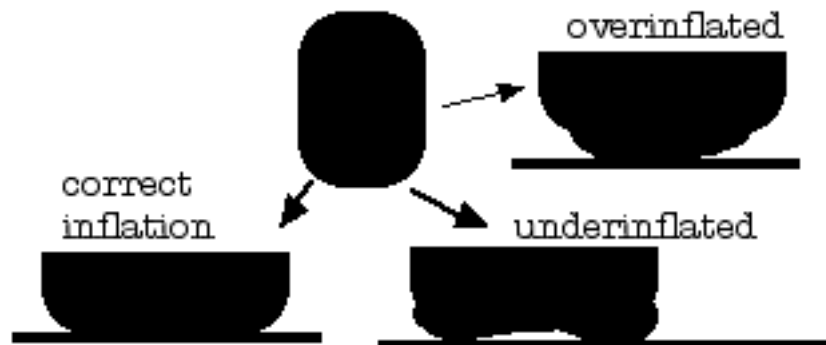
Modifications
What to take out before your run -- reduce weight
Tuning
The honor system -- and self-classification
Seat belts
Alignment
Numbers and class
  Readable
  Unique per car
  Both sides
  Year long numbers
How much gas?

Walking the course:
What should you be looking for (cones)?
What are the distances?
Who to walk with and who to listen to?
How many times?
Before you walk observe the course map (If posted) or make your own

Driving instruction
What and where you should be looking
Brake hard
Slow down to go fast (and other smart-ass comments)
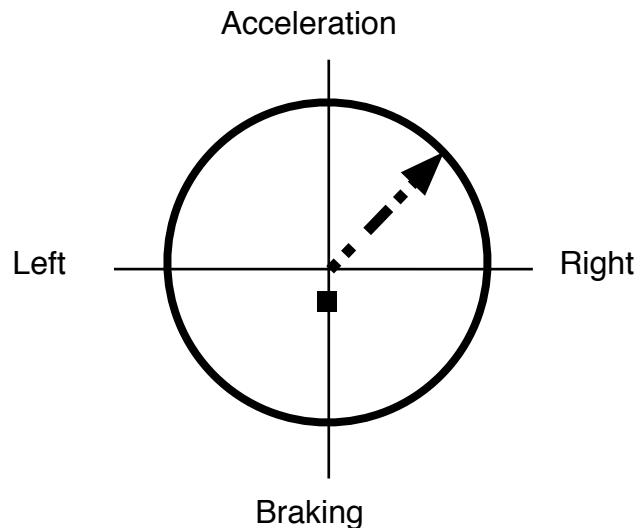 Don't look like a police car on TV
  Don't overdrive
  Shorten the course
Smooth
Traction How it works -- Circle of traction

The Circle of Traction.....

Acceleration

Left — Right

Braking

Driver location (hands & feet)
  Taking off from the starting line
    Go through the course in your mind while waiting
    Start in a reasonable time, but when you are ready
    Look ahead
    Virtually follow the cars before you through the course

CCSCC Autocross School Notes
Date: April 9, 2011

Shifting
- How, when, why
- Upshifting
- Downshifting
- Clutching
- Keep both hands on the wheel except to shift

Cones
- Pointers
- Slaloms (distances)
- Pacing off
- Imagine where you will be going
- Getting a "rhythm" going
- Which side?

Corners
- Hairpins
  - Slow Down
  - Tricks
    - Handbrakes
    - Trailing throttle oversteer
- Sweepers
  - Smooth
  - Apexes
    - Early
    - Late
    - Multiple
  - Smooth (in case we forgot to mention it)
- Where do you want to go? Look there
- Drive it or slide it? (smooth revisited)

Gates.
- Look ahead and set up for the next one
- What if you are going to miss it? (Accept this run will not be a winning run)
- Don't back up
- Get the pylon

Finish
- STOP
- Watch the pylons
- You don't win after the lights
- Cost of lights....

Helpful Hints:
- Watch those in cars like you
- Get where you can see others run (other heat, your heat)
- Don't take the event nor yourself too seriously
- Get to know an experienced driver who can mentor you
- Read your tires after your first run
- Adjust tire pressure until the car feels right
- Once your run feels good, concentrate on your driving -- forget the pressures.
- Go over your run in your head as soon as you finish. Focus on where you can improve.
- Ask your mentor to watch your run BEFORE the run
- Ask where you went off course, but don't ask the workers
- Have fun and expect to get beat sometimes.
- Be a good loser

CCSCC Autocross School Notes
Date: April 9, 2011

Be a good winner
Remember -- you are running mostly against yourself.
Are you happy with your run?

Web Resources:

    CCSCC Web Page: http://www.ccsportscarclub.org

    SCCA Indianapolis Region: http://www.indyscca.org/

    Midwest Council of Sports Car Clubs (Chicago Area) Autocrossing Web Site;
        http://www.autox.chicago.il.us/autox/

    Solo II Novice Handbook: http://www.tirerack.com/features/solo2/handbook.htm

    Permitted SCCA Modifications: http://www.sff.net/people/dburkhead/prepcompare.htm

CCSCC Resources Online:

CCSCC Web page: http://ccsportscarclub.org

CCSCC 2011 Autocross Schedule: http://ccsportscarclub.org/soloii.php

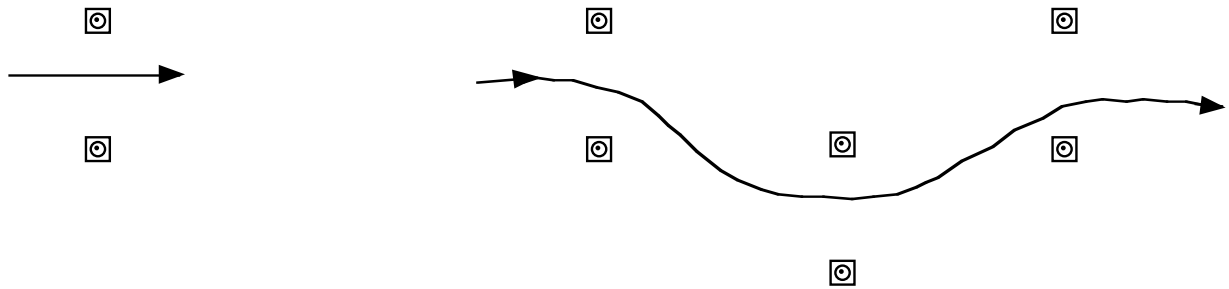CCSCC Online Pre-Registration: http://www.ccsportscarclub.org/registration/

To Pay for a CCSCC event with PayPal, send the money to "paypal@ccsportscarclub.org"

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Date: April 9, 2011
Appendix A: Course Diagrams

All diagrams show the path from left to right. None of these are drawn to scale!

Gate: You must go between the cones.   **Offset Gate**: You must go through all three gates
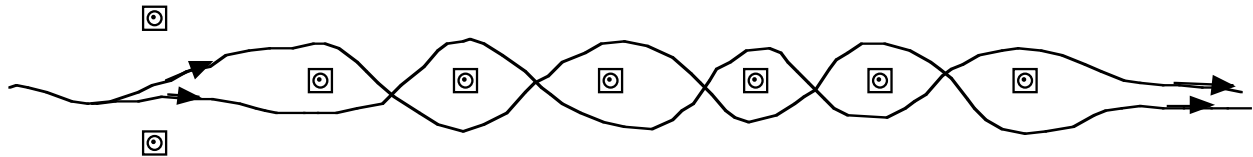
Slalom: The driver can enter the slalom on either side of the first cone and then alternates cones

Slalom with marker cone: The driver must enter the slalom on the side pointed to by the marker cone and then alternate cones.

Chicago Box: It is really a short slalom. Think of it as such.

CCSCC Autocross Chair Duties

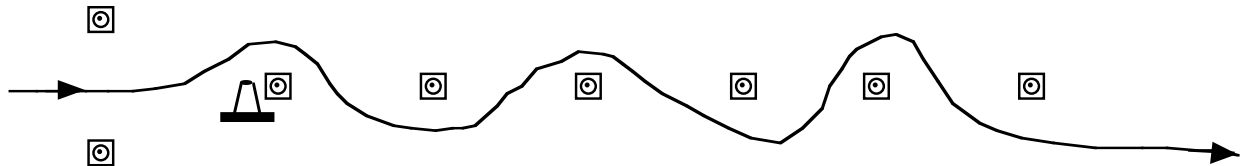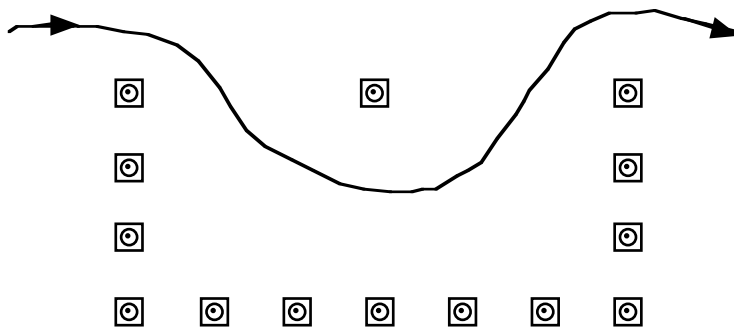The Autocross Chair is one of the CCSCC board members who serves as an auto-cross board member. The autocross chair will make arrangements for site use for the events early in the year. He will revise the instructional handouts and generate a packet for distribution to the event chairs and SSs. These forms will be filled out by the autocross chair prior to giving them to the event chair. The event chair and SS are assigned ahead of time. The autocross chair performs the following duties:

Before the event:

• Give the event chair the event chair packet. (at least a month before the event)

• Contact the event chair two weeks before the event to offer help and make sure the event chair has

    • Designed the course

    • Arranged for the trailer to be at the site

    • Arranged for a timing car

    • Ordered the trophies (usually T-shirts)

• The autocross chair should contact the SS and give him his assignment sheet.

• The autocross chair should see that the event chair has a key to the site gate and knows where the needed keys are located in the trailer.

The day of the event:

• Get to the event early and help set up the course or find a designee to do so.

• Help the event chair as needed.

• Make sure the event chair opens tech and registration on time.

During the event:

- Enjoy the event! Help as needed. The autocross chair does not need to work to get credit for points earned, but should help if needed. He can serve as any event official.

- Collect the event cards, waivers, money and the list of workers. Give the money to the CCSCC treasurer and give the membership applications to the registrar.

After the event:

- Check the results spreadsheet from the event to make sure the results are correct.

- Make sure the results are posted on the web.

- Save the waivers and list of workers.

CCSCC Autocross Event Chairman: _____

Event Chairman Information Date: _____ Location: _____

Safety Steward (Pre-assigned): _____

Pre-event Tasks CONTACT CCSCC AUTOCROSS CHAIR FOR HELP IF NEEDED:

☐ Order Trophies – Minimum 2 weeks before event from Sport Print (Chuck or Ara -- 217-352-3700).

☐ Acquire Gate Key from Autocross Chairman (Dennis Miller: 217- 367-0132)

☐ Arrange for Autocross Van to be at site (Emanuel Martin: 217.390.5248)

☐ Design Course (Rough design on attached map of Rantoul site or make your own for other sites) Use dots for cones and label "S" for start and "F" for finish.

Day of Event Tasks:

Design and lay out course with help from other workers and check it with the SS.

Make an accurate course map and post it.

With the Tech inspector, decide on classes and bumps and see that the heats are posted on the display board.

Hold the drivers' meeting and read "Things to say to all competitors and guests at all autocross events" at the meeting. Make sure all entrants take the mandatory course walkthrough before the drivers' meeting.

Announce winners and hand out trophies after the event using attached awards information

Post-event Tasks – (to be completed within 2 weeks)

☐ Make sure that the waivers, workers list and paper timing sheets are given to the CCSCCC autocross chairman.

☐ Write up a narrative paragraph or two about the event and email it to the webmaster..

CCSCC Autocross   SS: _____

Safety Steward (SS)   Date: _____ Location: _____

    Alternative SSs   _____

    Assistant SSs   _____

Your Responsibility as "SS of record":
•Verify the insurance certificate is posted
•Review the course for safety
•Advise the event chair in the running of the event
•Make sure the site boundaries and safe areas are marked, announced and watched
•Make final course inspection prior to the start of the event
•If Karts are running, arrange for a Kart Steward and discuss with him Kart safety
•Meet with course workers and explain their jobs, stressing safety
•Make sure the waiver station is set up and manned
•Wear something that identifies you as SS as provided by CCSCC
•During the time he is running, appoint either an alternative, licensed SS or an assistant SS (unlicensed) who will bring to the attention of the SS any safety questions
•Stay at the site during runs. Appoint an assistant if necessary to leave temporarily. If called away permanently, find a replacement.
•If there is a safety related problem:
    • Ask the event chair to halt the event until the problem is fixed. The event chair is required to halt the event when asked to by the SS. The event chair and SS should work together on solving any safety problems.
    •Announce to the entrants that the event is suspended temporarily.
    •If the SS's concern cannot be fixed or the event chair doesn't cooperate:
        1.Call a meeting of all CCSCC autocross committee members and CCSCC board members present to discuss the problem. At this point, the SS and CCSCC autocross committee members / board members can still restart the event if the concerns of the SS are remedied. The SS has final say. After this point, the event is no longer restartable.
        2.Announce the event is cancelled over the intercom and see that the course is torn down and the trailer packed up Write a report about the problem for CCSCC board action. All entry fees will be refunded.
    •At any time during this process, the autocross / board committee can replace the SS with another licensed SS. However, this should be done only when there is some problem that is not safety related and the event chair will be replaced at the same time.

Hints:

No CCSCC event has ever been cancelled due to a safety related problem that the event chair refused to remedy. The key to working with event chairs as SS is to confer with them in a pleasant yet forceful manner. Talk to them and work out problems, but don't let safety violations or concerns continue. You are responsible for the safety of all participants or spectators.

It is a good idea for the SS to make sure the workers know their duties. The starter should be observed and supervised at the beginning of each heat to help him know when to let cars start their run. The timing crew also should be talked to. The starter is under control of the timing crew and the SS. It is good to state in no uncertain words that the starter only listens to the timing crew and the SS. This is a safety issue.

Use the handout to meet with the corner workers so they know what to do

Make sure the event chair places experienced workers where they will do the important jobs. Corner workers, starter and timing crew need experience. Sending an experienced crew member to each corner is very important. Grid, helmet, waiver, spotter, crowd control and results board workers don't need as much experience.

All photographers must be accompanied by a spotter to pull them out of harms way.

CCSCC Autocross   Bumps and Classes using AXWare

CCSCC events are self-classing. The entrant should choose the class they are in. The registration workers, the tech inspection team and the event chair should help the entrant make this decision. The event chair has final say over classification if there is a disagreement. CCSCC uses "Nationally recognized classes".

After Tech Inspection closes:

The tech chair and the event chair need to determine classes and bumps. This must be done before the drivers' meeting. The basic rule is that there must, in most cases, be three cars in a class. More would be better. If a class has only one or two cars, it should be bumped to the next higher class by the following a consistent bumping order. This must be done very quickly -- meet with the event chair immediately after tech closes and the computer person has entered all the data.

The event chair has the option of bumping outside this bump order, but must announce at the drivers' meeting any change from this (SCCA order).

STOCK CATEGORY
HS ⇒ GS ⇒ DS ⇒ ES ⇒ CS ⇒ BS ⇒ AS ⇒ SS ⇒ To correct Street Prepared
     STS ⇑   FS ⇑   class for bumped car.

STREET TOURING CATEGORY
STS ⇒ STS2 ⇒ STX ⇒ STU ⇒ *To correct Street Prepared*
                              class for bumped car.

STREET PREPARED CATEGORY
ESP ⇒ BSP ⇒ ASP ⇒To correct Prepared class for each bumped car.
FSP ⇒ DSP ⇒ CSP ⇒ ASP To correct Prepared class for each bumped car.
    STX ⇑

PREPARED CATEGORY
CP ⇒ BP ⇒ ⇒ ⇓
DP ⇒ EP ⇒ ⇒ XP ⇒ To DM or EM, whichever is correct for bumped car.
⇑ GP   FP ⇑

MODIFIED CATEGORY
EM ⇒ DM ⇒ CM ⇒ BM ⇒ AM
             ⇑   ⇑
           FM   F125

STREET MODIFIED CATEGORY
SM ⇒ SM2 ⇒ XP

    Vintage Classes are bumped VSU --> VSO --> VMU --> VMO. They are not indexed but run "straight up" on times. If there are not 3 Vintage class cars, Vintage cars will run in their regular classes.

The bumping order should be followed because of points as well as fairness. Bumped classes are scored on the differential, which theoretically makes bumped classes fair.

However, if a class would be bumped a long way in the order it is appropriate to have a one car class. This decision is the event chair's to make.

Ladies class should be bumped together.

Novice classes should be bumped together to form classes by the same order, except bumped classes should be around 5 cars or more. We are limited by the number of trophies we order (about 18 1st place plus FTD, FTDi, and FTDis -- 21 classes).

The computer should be used for bumps. AXWare automatically scores bumped classes on the index, except for Vintage classes, where all cars should be listed as being in the final class in the computer. Bumping always starts from the lowest class in a "strand" such as 'Stock", "Street Prepared", etc. The event chair can bump classes across strands if needed, but shouldn't unless it is necessary

After Classes are determined

After the classes have been determined, the heats need to be determined. AXWare will choose the heats for you very quickly. You should run the AXWare process to determine heats and then check that the event chair is in the heat he wants and entrant requests are honored. You can manually change heats after AXWare has determined them. You should balance heats as much as possible.

At the drivers' meeting the event chair should announce the bumps and the heats. Heat workers should be reminded to immediately report to the timing vehicle for work assignments and those running the first heat should get their cars in line immediately. Heats and bumps should be posted on the van. AXWare will print the heat lists.

CCSCC Autocross   Event Workers

The Safety Steward (SS) assigns workers. They should be assigned according to need. Experienced course workers are needed at each corner station, as starter and in the timing vehicle.

Each course worker MUST sign the worker sign-in sheet or they will not get a trophy nor points for the CCSCC championship. Anyone who serves as SS MUST be listed in the worker sign-in sheet

The Event Chair and SS cannot perform any other duty. The Tech inspector, the Registrar and others who helped set up the course are excused from working if there are enough workers.

Assigned positions	Duties
Timing	Two experienced, trained workers are needed to run the timer, announce times, put them on the log sheet, and keep order in the timing vehicle. A third worker, if available can be a spotter for cones.
Starter	An experienced starter is needed to send off entrants at the correct time and hold entrants when needed. They also communicate information about each entrant to the timing car and results board.
Course Workers	Each work station needs two to 5 workers. At least one must be experienced. They replace cones, call entrants off course and red flag (halt) entrants. They need to be able to use the radio, run to replace cones and one must hold the unfurled red flag in readiness to be waved but not distracting entrants. No one wearing a red shirt can be assigned to a corner.
Waiver	This person is positioned with the waiver and has each person entering the event without wristbands to sign the waiver or leave
Grid	Two people needed to keep the cars in line and moving in the same order to the start. They should also check for seatbelt usage and helmet usage, inspect each vehicle for window stickers for registration and tech inspection, and that the correct, readable numbers and class information is on both side of the car.
Results	Two people are needed to write the results on the chalkboard
Helmets	If there are enough workers, this person should make sure the loaner helmets are returned to the front of the grid after each run
Crowd Control	If there are lots of guests this is needed to keep them in safe places
Spotter	If there are enough workers, one can be assigned to spot for a photographer. The photographer can go out on the course to take pictures. The spotter watches to see the photographer doesn't get in the way of the cars.

CCSCC Autocross Workers

Everyone who works an autocross must sign in. Entrants whose names are not on this sheet may not receive trophies nor points for this autocross. The SS should fill in all lines below:

Date: _____ Heat: ____ Event Chair: _____ SS: _____

Job	
Additional SSs	
Course Layout	
Registration	
Tech Inspection	
Starter	
Timing	
Grid	
Ride along	
Helmet	
Corner 1	
Corner 2	
Corner 3	
Corner 4	
Waivers	

CCSCC Autocross   Registration Information

Register no one who doesn't have a wristband showing! They should sign the waiver at the gate to the event first.

There are two lines at registration -- pre-registration and on-site registration

Pre-Registration:

Since the entrant has already pre-registered, the entrant needs to:
Check in
Show a valid Drivers' license
Get a registration window sticker
If they have year long tech get a tech window sticker, otherwise report to tech to get it

On-Site Registration

Have the entrants do the following in this order:

Show a valid Driver's license. If they do not have one, have them see the event chair.

Fill out the entry card COMPLETELY (including address unless they are regulars) and LEGIBLY. If they don't check the CCSCC member box or list SCCA or Heart of Illinois as clubs they belong to, they must pay the full price to compete unless they are a student. They can pay the student entry fee by showing a student ID. Without the CCSCC box checked they will not get points for this event in the club autocross championship

Let AXWare ssign them a number if they don't have a year-long number. ALL NUMBERS MUST BE UNIQUE!!! This is very important.

If all 4 of the entrant's tires have a wear rating of 140 or above they may compete for FTDis -- that is the fastest indexed time with street tires. Ask them if they qualify. If they don't know, have them ask the tech inspector.

Pay the proper fee

Get their information input into the computer

Go to Tech Inspection unless they have a year-long tech inspection card.

You should:

Collect all cards

Smile and be friendly. Welcome everyone!

Mark entrants' cards paid when you have received the funds.

Keep track of the money (do not leave it unattended)

When registration closes

Give the money, computer and cards to the event chair or his designee **IMMEDI-ATELY**!!!.

Minor information:

If a minor wants to run in the event:

We must have a minor waiver (in the waiver box) signed by a parent.

You can give a waiver to the minor entrant to have it signed by a parent before the next event if they wish. It must be witnessed by an adult known to CCSCC or checked upon by the adult. The minor may not run in the event during this day.

Give a copy of the approved waiver to the minor and they can show it at future events and be allowed to run.

File all waivers in the waiver box with the other minor waivers. You and future registration chairs can check the waivers in the box for entrants who don't have a card.

Please be understanding about a minor running. Stress we want them to be able to run, but our insurance requires us to take these precautions.

If a minor wants to spectate:

If a minor is present to watch without parents, point out safe places where they can observe the event that are not on the site. They need a minor waiver to spectate inside the site.

Joining CCSCC

If someone wishes to join the Champaign County Sports Car Club, have them fill out the CCSCC membership application card (in the registration materials) completely and take their money. Fill out and give them a signed membership card (they are in the money pouch), Give the membership application cards to the event chairman to be forwarded on to the registrar or if the registrar is there, give them to him. The money should be kept separate and given to the treasurer.

Point out that every time they run an autocross they MUST check the CCSCC membership box to pay the reduced entrance fee and to get points for the championship.

CCSCC Autocross   **Timing and Scoring Information**

Location: _____ Date: _____

Crews: Heat 1: _____

              Heat 2: _____

Before the Heat:

      Turn on the timing displays

      Check to see the radios are working

      Get a list of bumps/heats from the event chair

In the Timing Vehicle:

      Check to see that the timer is working correctly

      There are two jobs:

            announce/record times on paper (Paper Trail)

            Check the time input into the computer by the timer

      Listen to the radio communications:

            From the starter get:

                  car number

                  class

                  name

            From the course workers get:

                  cones

                  Off course calls

Signal the starter when to start or hold entrants

Make sure the next car to be timed in the computer is the car at the start line ready to run.

Record cones hit by the entrants as "+X" on the run log and enter them into the computer

Record times on the run log and check to make sure the times recorded by the computer are correct. Correct them if they are not.

Announce times to the entrants and spectators

If an entrant goes off course, announce where (Corner 1, etc) as soon as they are called off course. Also announce where they went off course with the raw time and record where and the raw time on the run log

Record where the cones were hit by corner on the run log

There are no "DNF" calls. They are either "OC" (off course) or "DNR" (did not run)

In case of problems, hold the start and page the event chair or SS (safety issues)

If you need another person to help communications, ask the event chair to find one to help.

Between Heats:

Announce the break and how long it will be

Turn off the timing displays to preserve the battery life

Check to see that the following information is correct between the run log and the computer data: This is called a "Cone Audit"

times

cones

OCs

DNRs

Print a running order list of the heat results and post on the trailer.

After the last Heat:

Do the "Between Heats:" computer tasks

Print the results

Give all prints to the event chair.

Announce that for fun runs to begin you need __ (put in a number here -- usually a starter and 1 person for each corner station) volunteers

Announce that fun runs are $1 a run, for registered cars and registered drivers, and passengers may be carried as long as they have signed the waiver, are belted in and are wearing a correctly fitted helmet.

Another event official will help with fun runs.

During Fun Runs:

There are no people stationed in the timing vehicle and people taking fun runs should record their own times. They do not count for the event, but are just "for fun"

CCSCC Autocross   Scoring & Trophies By Computer

Scoring should be done by the event chair. Classes and bumps are already determined before the event and should not be changed. If a late entrant arrives (and is allowed to compete), there should be no changes in the classes and bumps even if classes and bumps would have been different if he had arrived on time.

To Score :

The computer should have all entrants with all their information input by the timing crew or at registration. They should print you a running order list (to be posted on the timing trailer) with both heats on it. They should give you a printout of the results by group, which is the order of finish in class (groups are classes, including bumped classes), a printout of fastest times (for FTD), a printout of indexed times (for FTDi).

> FTD is given to the driver, regardless of class, who has the fastest time of the day. The FTD award takes the place of the first place award in the class of the FTD winner. Therefore, announce that class last.

> FTDI is given to the driver who has the lowest indexed time. The FTDi award takes the place of the first place award in the class of the FTDi winner. Therefore, announce that class just before the FTD winner's class. If the same entrant wins both awards, give the FTDi trophy to the 2nd fastest FTDi entrant.

> FTDis is given to the driver on street tires (all his tires must have a tread wear rating of 140 or better) who has the fastest indexed time. He gets this award instead of his first in class trophy if he won that. Only 1 trophy to anyone!

Sort the trophies by class. A 1, 2 or 3 car class gets 1 trophy (to first only), a 6 car class gets 2 trophies (to first and second), and a 9 car class gets 3 trophies (first, second, third). If there are extra trophies, the event chair, at his discretion, may award them as he sees fit.

If someone hasn't worked the event, they get no trophy.   Mark "NO TROPHY" on the printout. If someone is absent at the trophy presentation they don't get a trophy -- it should be given to the next person in line unless arrangements have been made for someone to pick it up for the winner.

Shutdown the computer and give it to the Registrar or see that it gets to the registrar quickly.

CCSCC Autocross   Technical and Safety Inspection

DRIVER & COMPARTMENT
Check for driver's wristband
Helmet (SNELL 95 or newer or current CCSCC or SCCA sticker)
Apply CCSCC sticker to left side of helmet if not already present
Brake Pedal 3 strokes (**must not go to the floor**)
Steering wheel (**loose or play in the wheel?**)
Seat belt attachment
Check for loose items in the interior (must be removed)
Make sure drivers' floor mat is removed if it is not fastened down

ALL WHEELS
Check tires (no cords showing)
Wheel (all lug nuts & studs present)
Steering (grab front wheel at front/back & wiggle   **-- should be little or no play)**
Suspension (grab wheel at top & wiggle **-- should be little or no play**)
Check tread wear rating on all wheels and if all 4 are 140 or larger, inform the entrant he is eligible to compete for FTDis.

ENGINE COMPARTMENT
Battery (strongly held down or unable to move)
Positive terminal covered
Master brake cylinder (check fluid visually from outside -- if not visible, have owner open it and show you the level)
Throttle return spring (does throttle return easily and completely?)
Check for leaks (look under car)
Hood latch (emergency latch operative?)

TRUNK
Spare tire (safely tied down or removed)
No loose items
Nitrous oxide is not allowed. If a nitrous bottle is present, it must be disconnected and secured within the car. The owner cannot run another event if the bottle is still in the car at that event It must be removed, but he can run today. He cannot remove it today, however.

Classification
Driver self-classifies car -- If you think he is in the wrong class, show him the SCCA rule book. If there is conflict on class placement, ask the entrant to talk to the event chair. Act as a resource to the entrant for classification. Ask questions to see what modifications have been made. Use classification sheet if needed. Use classification information in the notebook

After tech closes, meet with the event chair to help figure out bumps and heats. Use attached class / bump information

Make sure each car has visible numbers and class letters on both sides of car.

Things to Say to all Autocrossers and Guests

Has everyone signed the waiver? If not do it now. If you see anyone without an armband, point them towards the waiver station.

Restrooms are in Grissom Hall. Park in the lot across the street from the Rantoul Players' Theater and enter the Theater entrance. Turn right. Nearest food is in Rantoul on US 45 Spectator locations are on grass at least 65 feet from the course.

If you notice what you think might be an unsafe condition, report it to the safety stewards who are   _____, and _____.

No drugs, alcohol or firearms allowed

Parents are responsible for their children's safety. Children under 12 and pets are not allowed in the grid, start-finish area or course areas except when supervised by their parents.   Pets must be on a leash.

Weather related precautions: drink plenty of water, use sunscreen, tie down your stuff if it is windy. We will suspend the event in case of lightning.

If you have to jack up your car use jack stands and do that only in the pits.

No warming up tires prior to the start line. The speed in the pits, grid, and anywhere on site (define site) other than the course is walking speed. Smoking is not allowed on the grid nor on the course.

If you hit the cones at the start or finish that run will not count. If you hit the timing lights and damage them you will have to pay for them, you will be disqualified for the day, and all previous runs will not count. You will not get a refund.

The cone penalty is 2 seconds if it is knocked out of the box or knocked over. (show demonstration)

Every one will get at least __ runs We will have __heats. When we change heats please do so as efficiently as we can. The sooner we change over the sooner we get done and then we may have more runs.

These people will be in the first heat (read names) and these are the class bumps___. They are posted on the truck.

Please line up in the same order for all your runs. This makes it easier on the people timing and makes the event go faster.

If you are red flagged, stop and then proceed at a reduced speed and safely exit the course through the finish lights. You will get a rerun if you are red flagged for someone else's error. If you are red flagged for something involving your car you will lose that run.

Things to Say to all Autocrossers and Guests

If while on the course someone runs in front of you, stop and you will get a rerun. Also if you see a cone down while on the course stop and point it out and you will get a rerun. If you don't stop you will not get a rerun.

If you spin out, put brake and clutch pedals to the floor and get your car gathered back up before you continue. The run is lost anyway. Use it to practice, but be safe. Wild, uncontrolled runs could cost us the use of the site and could cause you to be ejected from the event.

If you are using a club loaner helmet you MUST return it to the front of the grid area as soon as you park your car. If you get in line to run wearing an unapproved helmet or no helmet, you will be removed from the start line and you will lose that run.

Everyone is expected to work the event. You are to check in at the timing vehicle before your work heat starts. If you do not work you will not get a trophy if you have earned one.

A single passenger is allowed provided he/she: is at least twelve (12) years old; is wearing a properly fitted seat belt and a properly fitted helmet; he/she (or parent/guardian, as appropriate) has completed and signed the required participant waiver(s).

If we have time we will have fun runs. Fun runs are $1.00 each with a registered car and registered driver. You may carry as many passengers as there are seatbelts in your car during fun runs. All people in the car must be belted in and wear helmets.

If you leave early we will not save your trophy unless you make prior arrangements or have someone pick it up for you.

Please pick up all your garbage and put it into garbage bags we have provided. (tell them where garbage bags are located) we want to leave this site in as good a shape as we found it or better.

Last but not least, when leaving please drive sensibly as this reflects on the whole club and may affect if we get this site in the future. We have notified the police and they will be watching for exuberant driving and you will be ticketed.

Those who are in the second heat report now to the timing truck for work assignments.

Now good luck to everyone and lets have a safe fun day.

CCSCC Year Long Tech Inspection Directions

At an autocross tech inspection any car that passes is eligible for year long tech inspection. Please ask each entrant if he wants to participate in this program. If they do:

1. Fill out a "CCSCC Year Long Tech Inspection" card and give it to the entrant. Stamp it with the stamp pad and CCSCC logo stamp

2. Inform the entrant that they only have to show the card at registration and their registration card will be accepted without tech inspection. However, they must agree to a re-inspection if they make any change to inspected items during the year; and they can be inspected at any time if an autocross official deems it necessary.

3. Remind them that if they run tires that have a treadwear rating of 140 or greater they are eligible for the FTDis trophy at any autocross. Inspect the tires and note if they are eligible on their Year-Long Tech Inspection card and the year long tech form filled out by them.

4. Each card can hold up to two year long inspected cars..

Vintage Classes

For cars 25 years or older. Since there are no indices for these classes, none of these entrants are eligible for FTDi or FTDis. They are, however, eligible for FTD

VSU: "Vintage Stock, Under 3 liters

Any car that is DOT legal, has a displacement less than 3.0 litres, uses the stock intake and exhaust manifolds, has no added fender flares, and for whatever tire / wheel combination is used, the tread is not visible looking down from the top of the body above the axle center may run in this class. Brakes, safety equipment, transmission, differential and body (stock) panel material is free. The same basic engine as it was manufactured with must be used (of course numbers do not have to match). Tires must have a treadwear rating of 140 or higher. Turbochargers and Superchargers are allowed only on cars that had them offered as an option from the factory.

VSO: "Vintage Stock, Over 3 liters"

Same rules as VSU, except the displacment is 3.0 Litres or more.

VMU: "Vintage Modified, Under 3 liters"

Most stock restrictions, such as they are, are lifted. Tires (R compound DOT legal) and wheels are free, but no actual race tires. Fender flares and tread showing from above is OK. Lightening OK. You must run the same engine block, at least, that was offered in the car. Everything else can be changed. Superchargers and Turbochargers are allowed, but only on cars where they were offered as an option.

VMO: "Vintage Modified, Over 3 liters"

Same rules as VMU, but for cars with unlimited engine size.

Bumping:

VMO <---   VMU <---   VSO <---   VSU

 Since there are no indices for these classes, they run straight up times.