NAVIGATIONAL RALLY ORGANIZERS' MANUAL

Produced in July 2007 and updated with the latest RSO rules July 2009, this manual is the result of input from expert organizers in all RallySport Ontario member clubs. It covers all the important tasks which need to be done in order to create a navigational road rally complying with the rules and regulations of RallySport Ontario, and includes other helpful documents for additional information.

Inside you will find:

The author and RallySport Ontario wish to extend many thanks to all RSO clubs and members who offered information and advice; in particular, Mr. Craig Hamm of Motorsport Club of Ottawa; Mr. Alasdair Robertson of MLRC; Mr. Kurt Seelenmayer of the Toronto Autosport Club; Mr. Brooke Jacobs of TAC, and Mr. Peter Watt of Peterborough Motor Sports Club.

Rita Moore, VP Navigational;   vpnavigational@rallysport.on.ca

RALLY ORGANIZERS' CHECKLIST

1. Select start/finish location(s) and get permission from the owner/manager to hold your event there.
2. Look at map, drive roads, devise a route.
3. Select appropriate locations for checkpoints.
4. Work out speeds and timing to each checkpoint.
5. Break route into sections and devise appropriate instructions for each section for each class.
6. Have instruction packages sent to ORRC Guru for approval and advice.
7. Contact the RSO VP-Navigational to arrange a Green Crew.
8. Start advertising the event in newspapers, internet forums, etc.
9. Print corrected instruction packages, with Red Cross page attached to back.
10. Look at your timing and figure out how many checkpoint crews you will need, keeping in mind the CP opening and closing times and distances apart.
11. Start drafting volunteers to operate the checkpoints, and to do the jobs of: registration, course open (ensure all CP's are placed in time for their open times, and that there are no last-minute road problems), course close (watch for straggling competitors getting lost, off the road, or other problems; may also collect logs, clocks, and boards to return to the finish), scoring, and perhaps Quiet Zone Police.
12. Write a letter to all appropriate police departments covering the area of your rally, advising them of the date and route and explaining what a navigational rally is.
13. Obtain a copy of your club's event insurance.
14. Obtain insurance waiver forms (including underage waivers if needed) and maybe wristbands for registration.
15. Order trophies.
16. Print stickers for each checkpoint containing the following information: a)checkpoint number, b)section number, c)distance from start of section, d)ET from last checkpoint, e)car 0 time, and f)a space for CP crews to write in time-in and time-out, and TA request if any.
17. Print logsheets for each control so CP crews can record each car number, time-in, time-out, and TA's, with room for additional comments from the CP crew.

18. Print cards for the competitors to stick their control stickers on for scoring.
19. Print entry forms requiring at least: driver and navigator information, vehicle ownership, licence, insurance, waiver check, fee, and signature for permission to publish name with results.
20. Arrange for enough accurate clocks for each CP crew.
21. Arrange for enough checkpoint boards for each control, plus maybe one for the start/finish location, and "card exchange" board if necessary.
22. Make sure you know how to score the competitors *before* you get to that point!
23. Put together packages for each CP crew: a) control board, b)clock, c)map to the CP, d)description of CP location with diagrams/photos if available, e)open/close times, f)log sheets, g)stickers, h)copy of the police letter/ resident letters, and perhaps i)a copy of the competitor instructions for interest sake.
24. It would be nice to provide a small gift or token payment in cash or food for all your volunteers.
25. Bring a whiteboard or flipchart or similar object (with tape and markers, etc) to write and post the scores at the finish.
26. Bring a money float for making change at registration; also pens for registrants' use.
27. Bring a board or similar way to post these things at the start: a)copy of police letter (without the route!), b)copy of insurance coverage, c)any additional instructions.
28. Bring trophies, and clocks.
29. At the finish, also post a map of the route and checkpoint locations.
30. Post results as soon as possible on the Web.
31. Send results to RSO Scorer for series points tabulation.
32. Send report to RSO VP-Navigational including: a)final exact length of rally, b)number of competitors in each class, and c)Green Crew's names and address to ensure they get paid.
33. Write a thank you letter to start/finish locations. Also thank all marshals and the Green Crew.

How-To Information to Accomplish Tasks from the Checklist

1. *Select start/finish location(s) and get permission from the owner/manager to hold your event there.* Selection criteria include: location; space for the number of people expected (inside and in the parking area); availability of gas and food; washroom facilities; hours (cars' start/finish times, plus earlier for DNF-ing teams to call it a day and just go straight to the finish, and maybe you're going to station some volunteers there during the event for scoring etc).

2. *Look at map, drive roads, devise a route.*
Interesting roads may be found just from the map, but you have to drive them to make sure they are real roads which can be used by the proverbial first-time novice in the family car. You also may not know till you drive them that some areas have a lot of houses very close to the road, requiring a Quiet Zone or even a different choice of road altogether. A lot of roads can also be found and roughly measured from Internet map sites such as Google Maps, but again, in the end you have to drive the route and measure very accurately the distances to turns etc. Also remember to check the RSO rules to avoid "blacklisted" roads. See Regs 22.0-22.8.

3. *Select appropriate locations for checkpoints.*
Checkpoints are more fun if they are not visible to the competitors very far ahead; however they should be located in a place where it is safe for several cars to pull over off the road. CPs should not be too close to intersections or railway crossings, or residences whose owners will be irritated by the traffic. Refer to the Regulations, in particular 24.2.

4. *Work out speeds and timing to each checkpoint.*
Check the RSO rules regarding maximum allowable CAS's for each type of road you are using. (See Regs 23.9) Make sure that you slow the CAS down appropriately in quiet-zone type areas or anywhere else there will be local concerns. Pause at features like major intersections or railway crossings. Then, having all the accurate distances and speeds, calculate car zero times to each checkpoint location. Cars must be scheduled to arrive at "timed to the second" controls only at 1/10th of a minute times, ie 0, 6, 12, 18, 24, 30, 36, 42, 48, and 54 seconds past the minute. Cars must be scheduled to arrive at "timed to the minute" controls only at the exact top of the minute. You may have to alter the CAS's slightly or insert pauses to get the car zero times right.

5. *Break route into sections and devise appropriate instructions for each section for each class.*
(See Regs 23 for more information.) In general, Novice class instructions are to be suitable for those who have never entered a navigational rally before. Intermediate class should contain slightly more challenging instructions, and Expert class harder again. However it is not the idea to put everything you can into making the instructions difficult--competitors will not enjoy your event and will possibly avoid it in the future if they have to spend all their time wading through too many funny tricks. Keep in mind it is a successful rally, not a failure on your part, if NO team gets lost. TSD (Navigational) rallying is competitive on the entrant's timing ability as well as their interpretation of your routebook.

6. *Have instruction packages sent to ORRC Guru for approval and advice.*
The purpose of the RSO Guru/Technical Co-ordinator position (currently held by Mr. Robert Roaldi) is to review an event's routebooks to ensure that the difficulty level for each class is consistent with RSO guidelines. See Regulation 30.0 (k).

7. *Contact the RSO VP-Navigational to arrange a Green Crew.*
You may have a Green Crew in mind, which would be very desirable.   Or you may need help finding volunteers for this duty. VP Navigational needs to be notified in either case, to ensure that the GC is suitable, and that they get paid by RSO. Green Crewing must be done by a team other than the organizers to ensure that all your instructions send competitors on the intended route and are doable in every way. See attached Guideline for Green Crews.

8. *Start advertising the event in newspapers, internet forums, etc.*
Definitely make a flyer which can be printed and put up at the start/finish locations, on the club and RSO websites, sent out to rally newsgroups and other clubs. The RSO Public Relations and Communications Director can help you with this, or contact any other member of the RSO executive.

9. *Print corrected instruction packages, with Red Cross page attached to back.*
Incorporate all changes required by the Green Crew and then print enough of each routebook for your expected entry levels. Usually that means more Novice books than Expert, eg, but this may depend on the event. Make sure all packages include a legible recovery/EOS map which clearly shows the direction from which the competitors will arrive and depart. The Red Cross page is available at http://www.rallysport.on.ca/index.php?fuseaction=site.details&id=220 and should be attached to all routebooks unless there is some other provision for all crews to have a copy in their possession.

10. *Look at your timing and figure out how many checkpoint crews you will need, keeping in mind the CP opening and closing times and distances apart.*
Checkpoints should open about 15 minutes before car zero time to that checkpoint, and close 30 minutes after the last car is due. You can use crews on more than one checkpoint as long as their second checkpoint opens enough time after their first closes that they can safely drive to the new location in time.

11. *Start drafting volunteers to operate the checkpoints, and to do the jobs of: registration, course open (ensure all CP's are placed in time for their open times, and that there are no last-minute road problems), course close (watch for straggling competitors getting lost, off the road, or other problems; may also collect logs, clocks, and boards to return to the finish), scoring, and perhaps Quiet Zone Police.*
As volunteers' names come in, put them down for specific jobs as soon as possible so that you know how many more are needed. Have contingency plans for the rally day in case you end up with not enough workers (some checkpoints may need to be dropped--know how this will affect your scoring/timing to the rest of the rally), or in case workers show up unexpectedly (you must have jobs for everyone to do; never turn volunteers away! Double up the workers at controls, or have extra controls or zones to assign them.)

12. *Write a letter to all appropriate police departments covering the area of your rally, advising them of the date and route and explaining what a navigational rally is.*
You can find out the geographical boundaries of police districts from the Internet, so that you know which departments to contact. Always give them your number and invite them to contact you with any concerns or questions, both prior to the event and the day of. Be sure to emphasize that navigational rallies are conducted within the Highway Traffic Act.

13. *Obtain a copy of your club's event insurance.*
The RSO rules require that this be posted in a prominent location at the start of the event.

14. *Obtain insurance waiver forms (including underage waivers if needed), and maybe wristbands for registration.*
It is vitally important that you have a system to ensure that all competitors sign and can prove that they have signed the waiver. The latest versions of the waiver form can be downloaded from the CARS website. Be sure that you know how to fill out these forms.

15. *Order trophies.*
Check with your club treasurer: they often have a preferred store and will do the ordering for you if you give them the information. Otherwise you will have to look after this yourself and do it well in advance to make sure that they are ready in time for the event.

16. *Print stickers for each checkpoint containing the following information: a)checkpoint number, b)section number, c)distance from start of section, d)ET from last checkpoint, e)car 0 time, and f)a space for CP crews to write in time-in, time-out, and TA request if any.*
Each checkpoint crew must get enough blank stickers for all expected competitors, plus a few extra for mistakes.

17. *Print logsheets for each control so CP crews can record each car number, time-in, time-out, and TA's, with room for additional comments from the CP crew.*
That way if there is a discrepancy between the competitor and the scorer, nobody has to rely on memory alone as to what the question was. Also, with a logsheet, scoring can begin long before the competitor returns to the finish with their scorecard. The comments section could also be necessary to record teams violating safe checkpoint procedure, for example.

18. *Print cards for the competitors to stick their control stickers on for scoring.*
Your club might have a supply of these for the asking, otherwise you need a minimum of some cardstock paper with boxes for each sticker and a place for the car number and names.

19. *Print entry forms requiring at least: driver and navigator information, vehicle ownership, license, insurance, waiver check, fee, and signature for permission to publish name with results..*
If a team does not have ownership and insurance for the vehicle in their possession, they cannot legally be driving on a public road. Therefore they cannot enter your event either. If you let them go out with an illegal car or without signing the event insurance waiver, your club and you yourself could be held liable.

20. *Arrange for enough accurate clocks for each CP crew.*
Many clubs have a set of self-setting 'atomic' clocks which will be synchronized automatically. No matter how it's done, it is very important to ensure that all control crews are operating on the same "official time" as the competitors, whether or not this time is "real". Don't forget to include a clock to provide official time at the start of your event.

21. *Arrange for enough checkpoint boards for each control, plus maybe one for the start/finish location, and "card exchange" board if necessary.*
Ask your club president, and make sure the boards are there to send out with the CP crews.

22. *Make sure you know how to score the competitors before you get to that point!*
There are several computer programs around, written in the past by various event organizers, which can be used; however many organizers still prefer to just score by hand-calculations on the cards as it is often faster than the data-entry needed for computers.

Either way the basics are:

At a "timed to the second" control:
        0.0 penalty for 0-5 seconds late
        0.1 penalty for every 1-6 seconds early or for every 6-11 seconds late.
At a "timed to the minute" control,
        0.0 penalty for 0-59 seconds late
        1.0 penalty for 1-60 seconds early.

Another helpful thing to do is create an "ET Table" which will show you a car's correct arrival time at a checkpoint assuming he has missed a previous checkpoint/checkpoints. An example is attached to this package. This allows you to quickly score cars with missing stickers.

23. *Put together packages for each CP crew: a)control board, b)clock, c)map to the CP, d)description of CP location, e)open/close times, f)log sheets, g)stickers, h)copy of the police letter/ resident letters, and perhaps i)a copy of the competitor instructions for interest sake.*
The description of their location needs to be very exact, because they have not been out on the roads before the way you have. Say something like, "the big stump with caution tape on it, next to the Private Property sign, on the east side of Main St. northbound, 0.7km north of John Street and 1.4km south of Jane Street." Diagrams or photos are a good idea. Make sure your volunteers know what they need to do with the stickers and logsheets, and how to handle possible inquiries from locals or police should that happen.

24. *It would be nice to provide a small gift or token payment in cash or food for all your volunteers.*
Sometimes your club will reimburse you for their dinner at the finish location, or maybe there are promotional items you can give out (cups, hats). Otherwise you can maybe purchase something on your own for them like car wash coupons or the like. Also be sure to thank all your volunteers at the finish of the rally and in your results.

25. *Bring a whiteboard or flipchart or similar object (with tape and markers, etc) to write and post the scores at the finish.*
(See RSO Regs 26) The sooner you can get scores up, the better, so that if there is a problem or questions it can be dealt with right away. If you are using a computer for scoring, you can maybe even get a projector to show the scores live, as you update them.

26. *Bring a money float for making change at registration; also pens for registrants' use.*
See attached "day-of" venue checklist for other items you must remember.

27. *Bring a board or similar way to post these things at the start: a)copy of police letter (without the route!), b)copy of insurance coverage, c)any additional instructions.*
Make sure there is an "official time" clock for competitors to synchronize to as well.

28. *Bring trophies, and clocks.*
Just the sort of thing you would hate to forget at home, or if someone else is bringing them for you, make sure you remind them to do so.

29. *At the finish, also post a map of the route and checkpoint locations.*
You can use the EOS map from the instructions and just draw in the route. Remember to have some routebooks from all classes available so that Novices can see what the Expert rally looked like, and vice versa. People always like that.

30. *Post results as soon as possible on the Web.*
Send them to your club's web site, or your event's own website if it has one, preferably by the next day. See RSO Regs 26.4. If you can include the site address in your routebooks or give it out before the competitors leave the finish location after the rally, people will love you even more.

31. *Send results to RSO Scorer for series points tabulation.*
Currently the ORRC Scoring is done by the VP-Navigational.

32. *Send report to RSO VP-Navigational including: a)final exact length of rally, b)number of competitors in each class, and c)Green Crew's name and address to ensure they get paid.*
Currently the VP-Navigational is Mrs. Rita Moore.

33. *Write a thank you letter to start/finish locations. Also thank all marshals and the Green Crew.*
No matter what you thought of the location, if they hadn't offered their facilities for you the rally would not have been possible. And no matter how many people you may have brought to their business, the rally still caused them some inconvenience in terms of staffing hours or disruption to their regular business; so you owe them a lot of gratitude and you hope you or other rally organizers will still be welcome there in the future. Similarly, you can't run a rally without volunteers, so make sure they are recognized for generously donating their time.

<u>Green Crew duties & suggested procedures</u>

Begin by "tabletopping" all instructions. Try to compare to the EOS map as you go. Go through each routebook to make sure that everyone's instructions are workable and can be solved using only materials which competitors will have available to them; and they just generally make sense. Plus, if you feel that some instructions are too difficult for the intended class, you'll have to let the organizer know.

Compare all 3 levels of the routebook step by step, to make sure that they all direct the competitors to the same turns and distances. There may be a typo which causes the Intermediates to work out to a L where everyone else has a R! You may also have to convert, for example, the Experts' non-accumulative distances to compare to the Novice's accumulative distances. Be careful not to assume some classes work based on your knowledge of others. It is easy to see a solution to a section if you already know what should happen, but your job is to make sure each set of instructions stands alone.

Once you have determined that all 3 routebooks refer to the exact same route, drive this route. You are checking that:
--the turns occur at the correct given distances and the odo calibration is consistent once the
        Odo Check is complete;
--there are no ambiguous intersections/instructions;
--all CAS's are safely do-able, are within posted limits, and there is sufficient time allowed for
        traffic signal pauses or crossing/turning at busy roads;
--the Odo Check is in a safe and appropriate location;
--any settlements which should be marked as Quiet Zones are included in the instructions.
--all roads are where they should be, open, unobstructed, and in rally condition.

The organizer will also have provided you with a list of checkpoint locations. As you drive the route, stop at these points and ensure that, in your opinion, they are in a safe location for cars arriving at CAS. Is there room to pull over enough and is the ditch safe? Is it too close to an intersection, RRX, or private homes? Any other concerns? (eg, generally checkpoints are not to be located on paved roads.)

If at any point along the route you find any other area which could constitute a safety concern, inform the organizer that a Caution may be appropriate.

The organizer should supply timing/scoring information for controls. The Green Crew should try to check these calculations to catch possible scoring mistakes.

Now that you've done all your tabletopping and are back from the drive, write a report to the organizer with everything you have found. Tell him about the instructions, the roads, the checkpoints, the cautions, everything! It may seem like a long list and you might feel that you will sound like a nit-picker, but a many-paged GC report is normal and important. The whole sport of navigational rallying depends on the rally instructions and route being correct, and organizers, being overworked humans, cannot possibly get it right first try without your help.

MCO RALLY VENUE CHECKLIST
(THINGS TO REMEMBER THE DAY OF THE RALLY)

- This piece of paper!
- Official Notice Board
- Supp Regs are posted on notice board
- RSO Rules and Regulations, MCO General Rules, and CARS rulebook on hand
- Official time is displayed (sync with NRC clock or GPS time or 'atomic' clock)
- Insurance permit is posted
- Cash box, with change float ($50 recommended in fives)
- Series Regulations are posted
- Series Standings are posted
- Letter to Police is posted
- Sample control boards displayed
- Special Notices or changes are posted
- Safe, 'secure' place and table for registrar and cashbox.
- Insurance Waivers, stack of
- Wristbands, plenty of
- Extra registration forms / 'Rally Passports'
- CP log sheets and CP stickers
- Awards are at venue (plaques, pins, etc.)
- Any rally instructional material to give away
- Any club promotional material to give away
- Membership forms

Workers Meeting

Do not let competitors hear worker instructions, locations etc.
Instructions, special notices, repeater frequencies, safety.
Worker package contents:
Maps, schedule, frequencies, letter to police, stickers, pen, log sheets, instructions.

Drivers Meeting
- Welcome participants
- If required, mention any points in list above
- Venues – please promote the venue, and thank the owner.
- Rest stops (if applicable)
- Talk to behaviour: do NOT hold up ANY car. Period.
- QUIET ZONES
- Specifically mention the letter to local POLICE.
- If any, promote/mention the sponsor(s)
- Contact phone numbers (Tow truck, Rallymaster, police, other?)
- Radio frequencies and repeaters used, if any
- Control boards – show each type
- Must declare if DIY controls are used
- Scoring, CP to minute and tenth.
- EXPLAIN TIME ALLOWANCES
- End of Rally procedure
- Ask that after the rally they wait patiently for the scores and to not harass the scorers.
- Car 0 times
- Note out marker for rally beginning (telephone pole etc.)
- Note triangle procedures are in effect
- Notify organizers/nearest-marshals if withdrawing from event.
- Wish them good luck!

ET TABLE EXAMPLE

This shows the ET from any CP to any other CP.

If the competitor hits CP 3 but misses 4 and 5, you need the ET from CP 3 to CP 6

Find the convergence of "3" on the left with "6" on the top to get 24.8

This is a real time saver when scoring.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	finish
et between CP's	27.4	10.6	3.7	3.8	4	17	7.7	16	19.2	17	14	37.5	2.7	1.9	7.2	31
accum. total time	27.4	38	41.7	45.5	49.5	66.5	74.2	90.2	109.4	126.4	140.4	177.9	180.6	182.5	189.7	220.7
ET from CP1		10.6	14.3	18.1	22.1	39.1	46.8	62.8	82	99	113	150.5	153.2	155.1	162.3	193.3
2			3.7	7.5	11.5	28.5	36.2	52.2	71.4	88.4	102.4	139.9	142.6	144.5	151.7	182.7
3				3.8	7.8	24.8	32.5	48.5	67.7	84.7	98.7	136.2	138.9	140.8	148	179
4					4	21	28.7	44.7	63.9	80.9	94.9	132.4	135.1	137	144.2	175.2
5						17	24.7	40.7	59.9	76.9	90.9	128.4	131.1	133	140.2	171.2
6							7.7	23.7	42.9	59.9	73.9	111.4	114.1	116	123.2	154.2
7								16	35.2	52.2	66.2	103.7	106.4	108.3	115.5	146.5
8									19.2	36.2	50.2	87.7	90.4	92.3	99.5	130.5
9										17	31	68.5	71.2	73.1	80.3	111.3
10											14	51.5	54.2	56.1	63.3	94.3
11												37.5	40.2	42.1	49.3	80.3
12													2.7	4.6	11.8	42.8
13														1.9	9.1	40.1
14															7.2	38.2
15																31
16																

<u>Before and After – Two Extra Points for Organizers to Remember</u>
Drivers' Meetings

All rallies should be preceded by a gathering often called a "Drivers' Meeting" but which should be attended by all competitors. This meeting should be brief and to the point. It must not provide any information which gives one or more teams a competitive advantage, but should include the following:

- A welcome to the competitors on behalf of the organizing club and any event sponsors.
- A statement that the event is sanctioned by Rally Sport Ontario and is conducted under RSO's rules and regulations.
- A statement that competitors are at all times subject to the Provincial Highway Traffic Act and all other regulations.
- An acknowledgement of the management of the start location for allowing the event to use their location.
- The displaying of the Checkpoint boards which will be used on the event.
- An explanation of Checkpoint procedure.
- A statement of which CPs will be timed to the minute and which to the second.
- A brief summary of any special cautions which may exist on the route. For example, if there are areas where slow moving farm equipment, construction, or horses being ridden on the road are likely, these should be noted as accurately as possible. This special information should also be posted on the event notice board.
- A specific explanation of the start line such as, "Zero your Odo at the orange line painted on the pavement next to that tree."
- A reminder to competitors to come to the finish or report to a CP crew if they are for any reason unable/unwilling to continue with the rally.

Trouble at the Finish?

From time to time organizers get to the end of a rally and find that not all competitors are equally delighted with the event. Usually this results in a difference of opinion about the scoring of the event. Often this is the result of competitors making errors which they don't yet understand. Sometimes it is the result of a trick built into the instructions, and sometimes it is a genuine error which has been missed by the Organizer and the Green Crew. There are some basic rules to bear in mind in settling these issues:

- Don't take it personally. Mistakes happen and if the mistake lies with the organizer's instructions or an error at a checkpoint, it should be fixed.
- Come to the event prepared with your route notes, the timing spreadsheet, the Green Crew's notes, and the means to rescore anything necessary.
- Hear from all the interested parties to be sure you understand all the arguments before you make any decisions.
- If you are not the scorer, take advantage of the expertise of the scorer and any other wise and neutral parties such as the Steward, or other experienced rallyists who are available.
- Make all corrections and adjustments based on the RSO rules and the principles of fair play.
- Only try to fix problems which actually affect the outcome. If the ET to CP2 was wrong for everyone, it is pointless to fix it.
- Never penalize a competitor for obeying the law. If you called for CAS 72, but it should have been 54, reward competitors who obeyed the speed limit.
- Resist the temptation to throw out CPs or treat them as route in/time out controls unless there is no alternative.
- If all the Intermediates got the section right, and the Experts blew it on the same set of instructions, are things as bad as the Expert teams are saying? Chances are they were so clever they outsmarted themselves.
- Be patient with Beginner and Intermediate teams who may not fully understand why they got into trouble. If possible, have an Expert navigator handy to explain slowly and gently why they went wrong. Similar patience should be attempted with Expert competitors as well.
- Don't spend the rest of your life trying to figure things out if things get messy. Thank the sponsors and the marshals, give out the prizes you can, and deal with the problems at the end.

OTHER USEFUL ORGANIZER RESOURCES

RallySport Ontario (rules, contacts)   http://www.rallysport.on.ca
ASN (insurance forms)   http://www.asncanada.com/
Canadian Association of Rally Sport (waivers)   http://www.carsrally.ca

MCO --organizers handbook
        http://www.mco.org/files/rally/RallyOrganizersHandbook.pdf
MCO -- checkpoint timing
        http://www.mco.org/files/rally/CheckPointTiming.pdf
MCO -- navigational rally manual
        http:///www.mco.org/cms/index.php?name=Downloads&d_op=getit&lid=196
Sports Car Club of America rules for organizers
        http://www.scca.com/_FileLibrary/File/rr-rfo.pdf
Checkpoint crew instructions
        http://members.tripod.com/~PeterWatt/RSOdocs/Starting/controlman.htm
Road rally marshal procedures
        http://www.mco.org/cms/index.php?name=Downloads&d_op=getit&lid=127

REGULATIONS FOR ROAD RALLIES

These Regulations shall apply to all road rallies organized by RallySport Ontario clubs.

21.0 ELIGIBILITY OF VEHICLES, CREW AND EQUIPMENT

21.1 CREW

a)   a rally crew shall consist of two persons. Any additional persons shall be considered as passengers.

b)   passengers will not be allowed on rallies except with the permission of the organizers.

21.2 CHANGE OF CREW

No change of crew and/or vehicle will be permitted during a rally.

21.3 FINISHER

To be classified as a "finisher" the crew shall pass the control marker for the Main Time Control of each leg of the rally in the vehicle entered, under its normal power and within their maximum lateness/earliness. They shall also satisfy any additional conditions of finishing as may be published in any other regulations for the event.

21.4 DOCUMENTATION

1)   The following documents, valid on the date of the event, should be shown to rally officials at registration (failure to do so is grounds for exclusion):
a) driver's licence for any crew member listed as "Driver";
b) vehicle registration;
c) third party liability insurance;
d) written permission from a parent or guardian for participation in the rally for persons under the legal age of majority for the Province of Ontario.

2)   All entrants in any rally organized by a RallySport Ontario club must sign appropriate insurance waivers.

21.5 VEHICLE

All competing vehicles must be in legal roadworthy condition. Loose fuel containers should not be carried in any competing vehicle under any circumstance.

21.6 SAFETY EQUIPMENT

a)   vehicles must be equipped with safety belts for each occupant.

 b)   the following equipment is highly recommended for all vehicles and should be carried in the passenger compartment of vehicles scoring in an ORRC Championship:

i) a first aid kit which should include: antiseptic (ointment or liquid), gauze pads and rolls, adhesive tape, arm sling, safety pins, and scissors
ii) a minimum of one self supporting reflective warning triangle.

c) the following equipment carried in the passenger compartment of competing vehicles is strongly recommended for all rallies:
i) a fire extinguisher with a minimum Underwriters Laboratories rating of 5BC, securely attached to the vehicle by a quick-release bracket
ii) two reflective emergency (space) blankets.
iii) a RSO Red Cross card.

21.7 LOOSE ARTICLES

All articles which could be dangerous if left loose should be securely restrained.

21.8 LIGHTS

a) It should be possible to turn OFF all high beam headlights and auxiliary units with a single switch, which leave the low beam headlights functioning.

b) All reversing lights may only be switched on by engaging reverse gear.

21.9 DISCIPLINE

a) The organizing club has the right to refuse any entry. If possible the organizer should notify the competitor before the competitor travels to the start of the rally.

b) Any entry failing to comply with Regulations 21.1 to 21.9 or with any other event regulations before the close of registration may be excluded by the organizer.

c) Stewards, or in the absence of a steward the organizer, shall have the power in accordance with these rules to:

i) penalize a competitor as described under the CARS - National Rally GCRs, Penalties, for being charged with an infraction of local, provincial or state traffic regulations and/or the Criminal Code of Canada occurring during an event, or for conduct which is unsportsmanlike or detrimental to the sport;

ii) decide what penalty (according to Cars - National Rally GCRs, Penalties) to impose for breach of rules as listed in the CARS National Rally GCRs. The decision to impose a penalty must be posted before the results are final;

iii) authorize the modification of any special event regulations in exceptional circumstances;

iv) authorize the amendment of the results of a rally before the results become final;

v) prohibit from competing or continuing to compete any driver who or any automobile which is considered to be

dangerous or is reported as such by the organizer;
vi) postpone or abandon a portion of the rally under exceptional circumstances after consultation with the organizer
The decisions in the above cases are final and are not subject to appeal

21.10   ADVERTISING

All advertising or promotional material used in connection with competition should state that the event is sanctioned by RallySport Ontario. Advertising material should be in good taste and must not be misleading or untruthful. The words National, International, etc. when used to describe an event or used in the title of an event must be approved by CARS.

22.0 CHOICE OF ROUTE

The route should be carefully chosen to ensure that competitors are not kept circulating in one locality for a long period of time.

22.1 BUILT-UP AREAS

To promote the public image of rallying, the use of "Quiet Zones" is recommended where normal rally traffic may generate adverse public opinion, especially in "built up" areas or on main roads. When specified, the "Quiet Zone" shall be conspicuously identified in the instructions with clear indicators for the start and finish. A competitor violates the "Quiet Zone" by doing any of the following during the "Quiet Zone"
i)   using auxiliary lights
ii)   excessive noise or speed

22.2 NUISANCE

Anything which creates nuisance or inconvenience to anyone not connected with the rally should be avoided. Cemeteries are to be avoided.

22.3 PRIVATE ROADS

If "Private Roads" are used, permission for their use must be obtained in writing and a copy should be displayed at the start of the rally.

22.4 TWISTING ROADS

Twisting or narrow roads should not be used for rally traffic that is traveling in both directions at the same time.

22.5 NOTIFICATION

Organizers should notify police officials of the general rally route and the approximate times that competitors will be on

this route. A copy of the correspondence should be displayed at the start of the rally.

22.6 REFUELING

a) Re-fuelling stops of at least 15 minutes must be located not more than 250 kilometres apart. If circumstances require a distance in excess of 250 kilometres then this must be stated in the General Instructions, posted at the start of the rally and noted in the Drivers Meeting.

b) Events over 400 kilometres in length should have minimum one-hour stops no more than 400 kilometres apart. Rest stops should be chosen to ensure reasonable facilities are available for male and female crewmembers.

22.7 BLACKLISTED AREAS

a)   A list of roads where rallies may not be run is kept by the RallySport Ontario Director and is published to clubs from time to time. If an incident occurs which a club or club member feels should cause a road to be added to the list notification should be given to the Director.

b)   The following areas and roads are not to be used by any RallySport Ontario club without prior written permission of the Rally committee. The committee will decide if the requesting club can approach the necessary municipal authorities in order to obtain such permissions as are necessary to use these areas and roads. Any permissions granted must then be posted at the start of the rally. Additions and/or deletions will be made as required. This list supersedes all previously issued ones.

i)   Restricted Townships

a)   MonoTownship - County of Dufferin. Township By-law allows 2 motorsport events per year; events must apply ahead of time for approval.

22.8 ROUGH ROADS

a)   The route for a road rally must be chosen so that extensive strengthening and/or under shielding of competing vehicles will not be necessary. The route chosen must be traversable by standard road vehicles

23.0 INSTRUCTIONS

23.1 GENERAL

a) All instructions given to competitors which define the route or timing must be in writing

b) A set of instructions:
  i) may only be given to competitors at the start or finish of a leg;
  ii) must contain complete instructions for one or more legs

c) Any other type of instruction than in 23.2, 23.3 and 23.7 must be self-explanatory or an explanation must be given

d) The instructions must be such that there is no reasonable doubt as to their meaning and such that competitors need not be familiar with local terms or conditions, or possess other than Official Maps in order to follow the route. Instructions which require a general knowledge rooted in a specific culture or education background are specifically banned unless the concise and pertinent information needed to interpret the instruction is included with the instructions.
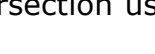
23.2 TERMS

The following terms nay be used in the instructions and must have the following meanings:

a) LEG is a major portion of the rally extending between rest, meal or fuel stops. When a leg ends with a Main Time Control, it is necessary to arrive within Maximum Lateness to be classified as a finisher (also 21.3).

b) SECTION is a subdivision of the instructions which is complete within itself. The timing instructions may be separate provided the timing information for each section is complete within itself.

c) INTERSECTION is any meeting or crossing of roads. This definition includes both Crossroad and Junctions as described below:
  i) CROSSROAD is an intersection in which two roads cross each other at the same level.
  ii) JUNCTION is an intersection in which two roads meet at the same level but do not cross
  iii) TEE JUNCTION is a junction having the general shape of the letter "T" as approached from the base. Where the change is not approximately 90 a qualifying term must be used- (e.g.- Tee Bear Right, Tee Acute Left)
  iv) JOG is a turn at a TEE JUNCTION followed by a turn back to the original direction of travel less than 0.10 kilometres later. A JOG may also be treated as two separate JUNCTIONS

d)   i) TURN is a change of direction of approximately 90 at an intersection;
BEAR is a change of direction of substantially less than 90 at an intersection;

ACUTE is a change of direction of substantially more than 90 at an intersection;
STRAIGHT AHEAD means the vehicle is to continue with the least possible deviation from its present heading. A distance or qualifying instruction should be given with this instruction

23.3 DIAGRAMS

The following may be used without giving an explanation:
a)   Road
b)   Divided Highway
c)   Trail
d)   Rail Road Crossing
e)   Bridge

f)   Tulip is a diagram of an intersection using the definitions above.
Usually a dot indicates the point of entry into the intersection and an arrowhead indicates the direction of travel.
If this is not the case an explanation must be given.

g)   —   Stop sign   —   When used with a tulip diagram
h)   ▽   Yield   EMBED PBrush
i)   Traffic Signal   •

23.4 ROUTE DEFINITION

a) Where no specific instruction is given a competitor shall continue on the road on which the competitor is traveling as long as that road is clearly and unambiguously identifiable. Where any doubt exists (i.e. where there is a conflict between the above conditions) and priorities are not defined in the General Instructions, a specific instruction should be given.
b) End of Section information and/or Start of Section information and section length must be provided, must be clear enough for competitors to begin the route from the information given and shall take precedence over all other stated rally instructions

23.5 SIGNS

a)   When entering or leaving limited access highways or making turns in built-up areas or from multi-lane road the instructions should indicate the road signs or street names to be followed.
b)   All landmarks or signs referred to in the instructions must he clearly visible and legible from the route under anticipated

rally conditions.

c)   Any road with a permanently erected sign stating "Private", "Dead End", "No Exit", "Road Closed", "Cul de Sac", etc. shall not be used or counted as a road unless specifically indicated as such in the instructions.

23.6 HAZARDS

a)   When the term "caution" is used a description of the hazard and a distance must be given.

23.7 ABBREVIATIONS

a)   The following set of abbreviations shall be considered standard

SA	Straight Ahead	L	Turn left
R	Turn right	Tee	Tee (not abbreviated)
Stop	Stop (not abbreviated)	Yield	Yield (not abbreviated)
A	Acute	RRX	Railway crossing
TS	Traffic signals	W	West
B	Bear	N	North
S	South	E	East
QZ	Quiet zone	BQZ	Begin quiet zone
EQZ	End quiet zone	CAS	Commence average speed
SOS	Start of section	EOS	End of section
ET	Elapsed time	hwy	Highway
h	Hour(s)	km(s)	Kilometre(s)
kph	kilometres per hour	min(s)	Minute(s)

(Note that Traffic Signals are Red-Amber-Green signals; no standard abbreviation is provided for a flashing yellow or red (or any other colour) light.)
Any conflicting or additional abbreviations used must be defined in the General Instructions.

23.8 ODOMETER CALIBRATION

a)   A specific and readily identifiable object of a permanent nature must be described in the instructions as an "Odometer Check". This check must be at a minimum distance of 10 kilometres. The route prior to the odometer check must be defined in the instructions so as not to rely on accurate Distances. No control may be located within the odometer calibration distance or within 5 kilometres thereafter. An odometer check must be provided in each leg in which a different vehicle and/or odometer calibration was used to establish the route instruction distances.

b)   Distances shall be statute to within plus or minus 2%

c)   An odometer check may be provided prior to the start of the event. In such cases, the first control may be located at any distance after the start. Competitors should be notified ahead of time that the odometer check must be run prior to car "0"

departure, and should be registered competitors prior to driving the odometer check.

23.9 AVERAGE SPEEDS

a)   The maximum average speed allowed on any unpaved roads used in a rally is 10% less than the legal maximum speed at that point and must be based on distances with plus or minus 2%.

b)   On Paved Roads, the maximum average may be 5% less than the legal maximum speed. Average Speed controls and Route controls should not be placed on portions of the route where the speed is greater than 10% below the legal maximum speed.

c)   Organizers should be aware of the existing conditions during a rally and should undertake to reduce "average speeds" should conditions warrant.

d)   Time Allowances shall be used, in accordance with Appendix B

23.10   ELAPSED TIMES

a)   An elapsed time, or time in addition to the average speed, should be given at any point where a delay may reasonably be expected (e.g.: a traffic signal, one-way bridge, lift bridge, traveling through a built-up area, etc.)   Such elapsed time ("ET") would be in the form of:
    i)   take 5 minutes to travel from 6.40 to 7.59;
    ii)   take 1 extra minute between 2.4 and 2.7;
    iii)   pause 26 seconds at Traffic signal

b)   generous elapsed times should be used for meal, fuel or rest stops. There should be no less than 5 minutes allowed whenever competitors are required to park and check in.

23.11   RECOVERY POINTS

a)   Recovery points must be indicated in the route instructions at the end of every section and at least every 75 kilometres except where it is impractical due to the length of a road being in excess of 75 kilometres. The locations of recovery points and the direction of approach and departure must be defined in such a manner that they can be,
    i) located on a map provided or on a map specified as the official map in the instructions;
    ii) related to the route instructions.

b)   The approximate time of arrival of car "0" at recovery points must be given in the route instructions. Since car "0" times include nominal dead minutes at controls, car "0" times at recovery points should be given within +/- 5 minutes (otherwise competitors could calculate the number of controls in a section).

23.12   ROUTE INSTRUCTIONS

    a)   All competitors within a class shall receive identical route instructions. Organizers should ensure that instructions are matched to the speed required at any point in the rally, to the difficulty of performing the instruction, and appropriate to the class.

23.13   DISTRIBUTION

    a)   Route instructions should not be issued so far in advance to permit any competitor to practice any part of route except the odometer check. All competitors shall be given their instructions an equal amount of time before they are due to start the portion of the rally to which the instructions apply.

23.14   HALTS

    a)   The location of rest, fuel and meal stops and the finish must be given in the route instructions.

24.0 CONTROLS

24.1 DEFINITIONS

    a)   An Elapsed Time Control is a control at the end of an elapsed time segment of the route. A time is recorded (see 25.3 (d));

    b)   An Average Speed Control is a control within or at the end of an average speed segment of the route. A time is recorded (see 25.3 (c));

    c)   A Route Control is a manned or unmanned control used ensure that the competitor is on the correct route. No time is recorded;

    d)   A Start control is the control at the Start of a leg. The competitor's starting time is a "Time Out".

    e)   A Main Time Control is an Elapsed Time Control or Average Speed Control where competitors must arrive within maximum lateness in order to be classified as a finisher (see 21.3). The final control on a rally is a Main Time Control; end-of-leg controls are often Main Time Controls.

24.2 LOCATION

    a)   controls should be situated at a point where several competitors can pull well off the road beyond the control.

    b)   no controls may be placed in the following locations: (except for meal, gas, rest stops)

        i)   on a main thoroughfare (that is intended to include most paved roads and most numbered highways);

ii)   within a built-up area;

iii)   within "Nuisance Range" of a habitation unless the occupant consents;

iv)   within sight after a traffic control device or railway crossing.

24.3 IDENTIFICATION

a)   All controls must be identified by a marker board at least 60 centimetres square. The background must be a colour contrasting with the surroundings and the identification mark

b)   The control marker shall be on the right-hand side of the road, securely erected, close to the shoulder, in close proximity to the control and clearly visible from the route. The marker shall be the Official Control Location.

24.4 OPENING/CLOSING

a)   Controls should "Open" at least 15 minutes before the due time of arrival of the first car and should not "close" sooner than 15 minutes after the maximum lateness time of the last car in order to allow for time-outs.

b)   A control may close early if:

i)   all competing cars have checked in; or,

ii)   the course closing official assures that missing cars are no longer competing in the event

24.5 INFORMATION

a)   At all controls where time is recorded the official control number, section, distance, elapsed time and precise due time of car "0" must be available to competitors.

24.6 CONTROL PROCEDURE

a)   competitors arriving at a manned control must continue past the control and park in such a manner as to not impede the flow of traffic (or prevent another competitor from exiting the control zone without backing up). One crewmember must then proceed to the control to check in. A car may not reverse toward a control.

b)   if, in the marshal's judgment, any unsafe driving acts or incorrect control procedures are noted, a notation "ICP" must be made on the marshal's log sheet and should be made on the competitor's route card or sticker by the marshal at the control at the time the infraction occurs.

c)   after receiving the sticker, competitors should move forward a sufficient distance to allow following competitors room to stop

25.0 TIMING AND CONTROL RECORDS

25.1 ACCURACY
a)   An "official" time piece must be available at the beginning and the end of the event

25.2 TIMEPIECES TO BE USED BY RALLY OFFICIALS
a)   shall be accurate, legible and display hours, minutes and seconds;

b)   shall be set to correct official Time and checked by a person in the control opening/closing cars (when such a vehicle is used). The time of checking and any error shall be noted on the control log sheet.

c)   Whenever possible, automatically synchronizing clocks should be used.

25.3 PROCEDURE
a)   The following is the standard timing procedure to be used on all rallies organized by RallySport Ontario clubs)
i) For time to the minute controls the no-penalty period shall be from 00 to 59 seconds of the correct minute and the control shall be located at the 00 second of the minute;

b)   at all timed controls the marshal shall record on the log sheet the Hour, Minute, Second at which the competitor's vehicle passes the control marker

c)   i) at average speed controls the marshal shall record this on the competitor's route card or sticker under "Time In";
ii) if the competitor was observed stopped before passing the control marker (except in the interest of safety) the marshal should record as the "Time In" the time at which the competitor was first observed stopped;

d)   i) at elapsed time controls the marshal shall record the same H-M-S, or a later H-M-S if requested by the competitor, on the route card or sticker under "Time In". The marshal shall also record the Time In on the control log sheet (Note that the Time In may not be the same as the time of arrival);
ii) at indoor controls the Time In shall be the time requested by the competitor or the time at which the competitor presents them self, which ever is later;

e)   i) a competitor's Time out will be

    a)   for scored-to-the-minute controls, the Hour and Minutes portion of the Time In plus one minute

    b)   (for scored-to-the-tenth-of-a-minute, use "plus two minutes") unless a later Time Out is recorded on the route card or sticker by the marshal, in which case the marshal shall also record this Time Out on the control log sheet;

    c)   in cases where competitors arrive after 45

seconds, the checkpoint crew may use the "plus two minutes out" routine;

ii) Manned Route controls/Quiet Zone controls

  i) On road rallies, if a manned route control/quiet zone control is used a one minute time allowance must be given in calculating the elapsed time to the next control;

f) errors by the marshal in the recording of times will be corrected in scoring;

g) where controls are scored to the tenth of a minute the no-penalty period shall be from 0 to 5 seconds of the correct tenth of a minute and the control shall be located at the 0, 6, 12, 18, 24, 30, 36, 42, 48 or 54 seconds mark of the minute.

i) Such controls must be identified to the competitors before the start of the rally.

ii) If a timed-to-the-second control is not placed the following control should become a control scored to the tenth of a minute if possible. Failing this, a time allowance must be made which would include the minute on either side of the "correct" minute of the elapsed time. (e.g.; checkpoint 3 is timed to the second/scored to the tenth of a minute. The correct ET from CP 2 to CP 3 is 5.5 minutes and the correct ET from CP 3 to CP 4 is 10 minutes. However, CP 3 was not in place for the competitors and is not scored. Normally CP 4 should become a timed-to-the-second/scored-to-the-tenth-of-a-minute control with an ET of 15.5 minutes. If that is not possible then the correct ET would be any one of 14, 15 or 16 minutes.)

25.4 MAXIMUM TIMES

a) a "maximum lateness" and a "maximum earliness" for each leg of the rally should be stated in the Instructions or supplementary regulations of the rally. The standard maximum earliness shall be 15 minutes while the standard maximum lateness shall be 30 minutes at all controls except for the finish control which shall be 60 minutes unless specified otherwise as per these rules;

b) checking into a control is defined as arriving within the maximum earliness/lateness. So, if a competitor does not arrive within the maximum earliness/lateness the competitor is deemed not to have checked in at all;

c) a competitor's total lateness at a control shall be deemed as the sum of minutes late minus the minutes early at all timed controls since the beginning of the leg (including those which are to be scored as route controls due to grievances);

d) if a competitor's total lateness at a timed control exceeds the maximum lateness for the leg scoring shall be as for missing that control (even if it should be scored as route-in/Time Out control due to grievances). At an actual route control (i.e. one

at which the competitor's Time In is not recorded on the route card or sticker) maximum lateness does not apply;

e) maximum earliness shall be defined in the same way as maximum lateness substituting "early" for "late";

f) the maximum lateness for a leg may not be extended after the leg has started;

g) marshals shall not attempt to judge whether a competitor is within the maximum earliness or lateness. The marshal shall issue and record times for each competitor who checks in.

25.5 MISREAD WATCH

a) If a competitor believes that a marshal has misread the watch the competitor shall ask the marshal to recheck the time
i) if the marshal agrees that the watch was misread the marshal shall correct the time on the route card or shall issue a new sticker with the correct time in. The correct Time In shall be noted on the log sheet.
ii) if the marshal does not agree that the watch was misread the competitor shall base all calculations on the time recorded.

25.6 INACCURATE WATCH

a) if a competitor doubts the accuracy of a marshal's watch the competitor shall ask the marshal to record on the control record sheet the Time In requested by the competitor. The marshal shall do so, but shall not alter the route card or sticker. The competitor shall base all timing calculations on the Time In recorded on the route card or sticker.

b) if an inquiry is entered concerning the accuracy of a marshal's watch and an error is found, an allowance equal to the number of seconds of error shall be made to all competitors, reducing penalties only. An equal number of seconds of lateness shall be allowed at the next control if the marshal's watch was slow;

c) for controls timed to the minute, watch errors totalling plus or minus 10 seconds will not be corrected.

25.7 LOST TIME

a) Time shall be non-accumulative between controls (is. time lost or gained at one control cannot be 'made up" at any later control).

25.8 CONTROL MISSED

a) A competitor missing one or more consecutive controls shall be scored at the next control reached based on his elapsed time from the previous control reached and the sum of the correct elapsed times from the previous control.

26

25.9 REPEAT VISIT
a)   If a competitor checks in to the same control more than once the first Time In/Time Out shall be used to calculate the competitor's score

25.10   WRONG SEQUENCE
a)   In all road rallies competitors checking in to a subsequent control without previously having checked in to all preceding controls will be deemed to have missed any and all previous controls which have not been checked in to in the correct sequence

25.11   MIS-LOCATED CONTROLS
a)   if an average speed control is not located at the distance indicated at the control or on the control sticker competitors should be scored, if possible, according to its actual distance.
b)   if an elapsed time control is not located within plus or minus 0.15 km. of the end off an elapsed time it shall be scored as a route control and an allowance made at the following control.

25.12   ASSESSMENT OF PERFORMANCE
a)   The penalties in road rallies will be as follows:
i) 1. point per minute early or late at controls scored to the minute.
ii) 0.1 point as per the following schedule at controls scored to tenth of a minute (Timed to the second)

	Early		Late
1 - 6 sec	0.1	0 - 5 sec	0.0
7 - 12 sec.	0.2	6 - 11 sec.	0.1
13 - 18 sec.	0.3	12 - 17 sec	0.2
19 - 24 sec.	0.4	18 - 23 sec.	0.3
25 - 30 sec	0.5	24 - 29 sec.	0.4
31 - 36 sec.	0.6	30 - 35 sec.	0.5
37 - 42 sec	0.7	36 - 41 sec.	0.6
43 - 48 sec.	0.8	42 - 47 sec.	0.7
49 - 54 sec.	0.9	48 - 53 sec.	0.8
55 - 60 sec.	1.0	54 - 59 Sec.	0.9

iii)   20 points per missed control;
iv)   15 points maximum time penalty per control;
v)   10 points for the first violation of a Quiet Zone and Exclusion for the second violation

vi)   10 points for incorrect control procedure;
vii)   5 points for missing a route control.

ix)   No penalty for wrong direction. (Note: a competitor's Time In at a time control will be recorded when the competitor's vehicle passes the control board from the proper direction intended by the route instructions, or when the competitor stops within sight of the control, as described in 2.5.3 c) ii)

b)   the observer (or organizer) as per 21.9(c) has the right to assess a penalty of up to 30 minutes or to exclude either or both members of a crew for any action not specified above but covered by 21.9(c) (i), (ii).

c)   the tie-breaker for determining event awards only shall be as follows:
i)   most zero penalties at controls;
ii)   most consecutive zero penalties at controls;
iii) most 0.1 point penalties at controls;
iv)   most consecutive 0.1 point penalties at controls;
etc.
most consecutive one point penalties at controls; etc.
 fewest TA's used.

If a tie-breaker, other than the above, is to be used it must be so stated in the General Instructions or posted at the start of the rally.

26.0 RESULTS

26.1 POSTING   REQUIREMENTS
a)   Complete provisional scores (control by control) should be presented as soon as possible for each competitor upon completion of the event.

26.2 REVISIONS
a)   Corrections to scores as a result of grievances should be made as soon as possible and must be presented at the finish of the rally. The time of modification shall be noted

26.3 FINALIZING   RESULTS
a)   Results shall be "Final" 15 minutes after results are presented or after the last corrections are made, or earlier if all competitors and officials agree to finalize the results. Results may be finalized on a class-by-class basis

26.4 PUBLICATION OF RESULTS
a) Results should be tabulated and published with the following
   i) name of rally
   ii) name of organizing club
   iii) date of rally
   iv) status of rally
   v) finishing position
   vi) vehicle number
   vii) names and clubs of both crew members
   viii) points lost at each control
   ix) total points lost by each crew
   x) complete list of prize winners
   xi) acknowledgment of sponsors, stewards, organizers, workers, etc

b) ORRC Event results should be distributed within 14 days following the event, with a copy sent to RSO.
c) Results may be posted to the web as long as a link is provided to RSO (and the RSO web master is informed)

26.5 TIES
a) Competitors having equal numbers of penalty points shall be considered tied. Subsequent positions shall be enumerated on the basis of the number of vehicles ahead. Results must show ties. (Also see 25.12 (c).J

27.0 ADMINISTRATION OF A RALLY

27.1 ROUTE CHECK
a) Instructions, including timing calculations and control locations, should be checked by someone other than the route master so that ambiguous statements and errors may be found and corrected. Duplicate instructions must be carefully checked against the original copy by the organizers to ensure that typographical errors have not crept in. Rallies must be planned far enough in advance to permit the organizers and observers to check the final instructions. Whenever possible route checks should be done:
   i) by crews from other RallySport Ontario clubs in order to avoid "local knowledge, local type" of instructions;
   ii) by crews using instructions for all classes;
   iii) at a time and a condition (i.e. season) which approximates the time and condition that the rally will actually be run at.

27.2 STARTING ORDER

a) Competitors shall start each Leg of a rally at intervals of not less than one minute. Beginner crews should be started first and may be given slower speeds or different timing since the less experienced crews may be at risk of easily exceeding maximum times and thereby discouraging future entries.

27.3 ROUTE

a) a course-checking vehicle should cover the route not less than 6 hours nor more than 24 hours before the rally. If a portion of the route is not passable to the course-checking vehicle, alternate instructions must be prepared and posted.

b) if the route becomes blocked or impassable to all competitors after the course checking run, all controls between the impasse and the next recovery point should be deleted and the next time control made route in/time out

27.4 CONTROL VEHICLES

a) A control opening/closing vehicle should be used to ensure that controls are correctly located and that control timepieces are set correctly.

27.5 REGISTRATION

a) A Registration must he held at the start of the rally during which a registrar must check that all competitors and officials possess valid documents as listed and that all have signed the CARS, insurance and other appropriate waivers.

27.6 INTRODUCTION - Drivers Meeting

a) An introduction of officials should be held at least 15 minutes before the start of the rally. The organizers, observer and any other persons authorized to sign official documents should be introduced. No information should be given that has any pertinence to the running of the route without it also being posted at the start of the rally if not already included in the route book. Questions should be answered during the introduction.

27.7 OFFICIAL NOTICES

a) an Official Notice Board should be displayed at the start of the rally, ends of legs and at the finish of the rally and should contain only official notices, letters of notification to police and letters of permission to use private roads

b) all official notices must be signed by the organizer, the observer, or a person designated at the introduction of officials.

c) all types of marker boards to be used at control points must be displayed near the official Notice Board at the start;

d) any known corrections to the route instructions must be posted on the Official Notice Board before the start of the leg to which they apply;

e) any changes to the event regulations should be posted on the Official Notice Board before the start of the leg to which they apply and should be signed by the organizer or the observer;

f) a timing sheet stating the official distance of all controls and the correct elapsed times to all timed controls should be posted on the Official Notice Board at the finish of the rally before the time of arrival of the first car;

g) an official with the authority to sign official notices should be present at the end of each leg before the due time of arrival of the first Car and until the time of departure of the first car on the next leg.

27.8. EVENT CANCELLATION

(a) Should an organizer or organizing club decide to withdraw an event from the current calendar for any reason, the following procedure must be followed: i) the organizing club executive should attempt to find another organizer to take over the event and allow it to proceed. ii) If no alternate organizer can be found within the club, the club President or Rally Director must notify RSO VP Navigational that the club officially wishes to cancel the event. iii) RSO VP Navigational may then either attempt to find an alternate organizer from another club, or announce the event's cancellation. (b) (i) The procedures in 27.8 (a) must be performed in such a way that 27.8(a)(ii) occurs no later than 3 weeks before the event's scheduled date. (ii) No refund of the original listing fee shall be issued to a club for any event cancelled during the current calendar year. (iii) Should a club violate 27.8(b) (i), the club shall be required to post a bond to RSO of $75 for the following calendar year's events. This bond to be refunded at the end of that year if their subsequent events return to compliance with 27.8.

28.0 PENALTIES

a) penalties may be imposed by the appropriate RallySport Ontario official(s) upon any promoter, organizer, official, competitor, entrant, or other person committing a breach of the rules as defined in the RallySport Ontario Rally Regulations or the CARS National Rally GCRs.

29.0 INQUIRIES

a) When a competitor feels that an organizational error has been made that competitor may file, in writing, an inquiry to the organizer outlining this complaint and a suggested remedy. If such a remedy will have no affect on the positioning of competitors, and will not affect series scores, the inquiry will be withdrawn. If the inquiry is accepted by the organizer, then the remedy shall only apply to competitors who were using the instructions that created the problem.

30.0 RULES FOR THE ONTARIO ROAD RALLY CUP

a) The Ontario Road Rally Cup (ORRC) shall determine the best road rallyists in Ontario in six separately scored categories.
   These are:

1.	Expert Driver	2.	Expert Navigator
3	Intermediate Driver	4.	Intermediate Navigator
5	Novice Driver	6.	Novice Navigator

b) There shall be three classes in each event: Expert, Intermediate, and Novice.

1.	Expert Driver	2.	Expert Navigator
3	Intermediate Driver	4.	Intermediate Navigator
5	Novice Driver	6.	Novice Navigator

c) An "Expert" is any competitor who:
   i) is currently defined as an Expert
   ii) has, in the opinion of the RallySport Ontario Committee, shown them self to be an expert level Competitor.

d) An "Intermediate" is any Competitor who:
   i) is currently defined as an "Intermediate".
   ii) has, in the opinion of the RallySport Ontario committee, shown them self to be an Intermediate level Competitor.

e) A "Novice" is any other competitor. However, if a vehicle is equipped with a computerized system capable of performing simultaneous, real-time odometer and timing calculations, the competitor may not enter as a Novice.

f) For the purposes of classification class is to be determined by the level of the navigator with the exception of the Novice Class, where the driver must not be an Expert.

g)   Scores will be determined by the competitor's performance in the events listed in the ORRC championship during that given year. The number of events scored will be 66% (rounded up) of the number of events listed in the championship, or as determined at the annual calendar-setting meeting. Therefore, if 10 events are listed, the best 7 will be scored. If 12 events are listed, the best 8 will be scored. Events that do not run for any reason will be considered dropped from the list. All championships shall have at least 4 events scored.

h)   Event points scored will be as follows:

1st	10 points	6th	5 points
2nd	9 points	7th	4 points
3rd	8 points	8th	3 points
4th	7 points	9th	2 points
5th	6 points	10th	1 point

i)   To be eligible to score series points in any event competitors must be a member of a RallySport Ontario club at the time of the event. Points will not be awarded retroactively. Those competitors who do not qualify for series points are eligible for event awards. In the case of the novice class, the RSO board may determine a grace period in which a competitor may join an RSO club. That grace period may not include more than three ORRC events.

   a)   All RSO members entered into ORRC events will automatically score ORRC championship points.

   b)   Notwithstanding 30.0(i) and 30.0(i)(a), an RSO member may opt out of scoring for the full season or for an individual event, provided it is done before the start of the event in question. A competitor who opts out of scoring may then enter the event in any class they wish, regardless of 30.0(c), 30.0(d), 30.0(e), or 30.0(f). A competitor who has opted out of scoring in order to change classes may not win an event award over any competitor who is scoring in that class. Organizers may offer a separate class outside of ORRC scoring for such competitors, eg "Touring Class", "Open Class", and award event prizes for that class as well as for the regular ORRC classes. Non-scoring competitors may then enter the non-ORRC class, or any ORRC class of their choice.

   c)   For the sake of scoring, non-scoring entrants do not exist, i.e. scoring bumps up.

   d)   It shall be the responsibility of the competitors' club to ensure that they are registered with RallySport Ontario.

Series standings may be readjusted throughout the year to reflect changes in a competitor's eligibility.

j)   Competitors in the Expert and Intermediate classes may receive credit for organizing and green-crewing listed events during the year. Competitors in the Novice class may receive credit for organizing listed events. The first instance would receive a credit equal to their highest series score in the year. The second instance would receive credit equal to their second highest score. There may only be two such credits in each year, of which only one may be for green crewing. Greencrews should be selected in consultation with the Vice President (Navigational Rally)

k)   In order to ensure that all rallies run to a consistent standard, but still allowing each organizer and club the opportunity to make their type of event, the RallySport Ontario ORRC Technical Co-ordinator should review the instructions at least two full weekends in advance of the event. This will allow time for questions, corrections and interpretations. This should be done before the green crew checks the route.

l)   In all cases not covered by these Regulations the decisions of the RallySport Ontario Committee shall be taken as final.

30.1 ENTRY LEVIES

a)   Each organizing club shall pay RallySport Ontario a levy for each event the club organizes in the ORRC. Further, each club shall collect an "entrants levy" (per vehicle) on behalf of RallySport Ontario for each vehicle starting in an ORRC Championship

b)   Levies should be remitted to the Treasurer within two weeks following the event.

30.2 FEES

The RallySport Ontario board will periodically issue a memorandum stipulating fees for clubs and regional event levies. These are shown in Appendix A.

APPENDIX B   Time Allowance Regulations

Background and Purpose
Time allowances (TAs) provide a mechanism to allow a competitor to adjust their timing when something "goes wrong" that would otherwise make them late at a checkpoint, thus discouraging any possible inclination to speed to make up lost time. Challenging winter driving conditions, getting lost, railroad crossings, or slow local traffic (e.g. a tractor on the road) are all unexpected events that can delay a competitor at a control. The main focuses of a navigational rally are route-following and precision timing. A competitor's score is determined entirely by his or her ability to arrive at a control at an ideal time; TAs reinforce this aspect of rallying by providing what is essentially an extra pause in the time calculated by an individual competitor, so there is no need to exceed posted speed limits.

<u>Regulations</u>

1. TA Budget: Teams start the rally with a Time Allowance (TA) budget of 19.5 minutes.
2. TA Requests: Time Allowances must be requested at the control before disclosure of timing information. A TA request slip may be provided for this purpose.
3. TA Values: TAs may be declared in one minute increments beginning with 0.5 minutes. Valid TAs are in the series 0.5, 1.5, 2.5, 3.5,...,18.5, 19.5.
4.   Improper TA: If an improper TA value (i.e. an even minute) is requested it will be rounded to the next higher valid TA. If a TA greater than 19.5 is requested, a TA of 19.5 will be used. If a TA request results in the sum of that TA and all previous TAs exceeding the TA budget, then the TA will be rounded down to the nearest valid TA (or 0) such that the sum does not exceed the TA budget.
5. Maximum Lateness: TAs do not affect maximum lateness. Maximum lateness for the rally is 30 minutes at each control and 60 minutes at the finish control.
6. Scoring: At all controls, a requested TA is subtracted from a team's actual Elapsed Time before determining the score for the control.
    (Team's time to control= actual ET-TA)
7. The first TA used by a team is free of any scoring penalty; subsequent TA requests are subject to a 30 second (0.5 minute) additional penalty regardless of time scores. This penalty is separate from any time penalty, and cannot be negated by the timing or the TA value Eg: team is 5.5 minutes late and requests a TA of 5.5 minutes. They have already used a TA at a previous checkpoint. Therefore although their time is zeroed by the TA, they still get a 0.5 penalty for this TA usage. (See further examples following).
8. Valid Controls: All controls are timed to the second. Some controls are scored to the tenth, and some are scored to the whole minute. TAs may be requested at any control.

Time Allowance Examples for Controls scored to the tenth:
(Add 0.5 to all examples if this is not your first TA request for the event.)

1. You were 1.7 minutes late and requested a TA of 1.5 minutes. Your score is 1.7 less 1.5 = 0.2 minutes late.   (You will score 0.7 if this is a second or more TA request in the event)
2. You were 1.7 minutes late and requested a TA of 2.5 minutes. Your score is 1.7 less 2.5 = 0.8 minutes early penalty.   (If this is a second or more TA request in the event, the TA scoring penalty of 0.5 is still *added* to your total, giving you a final score of 1.3 at this checkpoint)
3. You were 1.5 minutes late and requested a TA of 1.5 minutes. Your score is 1.5 less 1.5 = 0.0 minutes or no time penalty. (However, you still score 0.5 if this is a second or more TA request in the event)
4. You were 2 minutes late and requested a TA of 2.5 minutes. Your score is 2 - 2.5 = 0.5 early.   (score 1.0 if this is a second or more TA request in the event)

Time Allowance Examples for Controls scored to the minute:

1. You arrived 1:20 (1 minute 20 seconds) past the top of the minute and requested a TA of 1.5 minutes. Your score is 1:20 less 1:30 TA = 10 seconds before the top of the minute = 1 minute early penalty. (For timed to the minute controls, 0 penalty points are applied only from 00 seconds to 59 seconds of the target minute.) If this control is not your first TA request this event, it is also subject to the 30 second TA usage penalty and your final score here is 1.5.
2. You arrived 1:20 past the top of the minute and requested a TA of 0.5 minutes. Your score is calculated as 1:20 less 0:30 TA = 50 seconds past the top of the minute = 0 minutes late, so there is no time penalty. However if this control is not your first TA request this event, it is still subject to the 30 second TA usage penalty and your final score here is 0.5.
3. You arrived 1:40 past the top of the minute and requested a TA of 0.5 minutes. Your score is calculated as 1:40 less 0:30 TA = 1:10 past the top of the minute = 1 minute late penalty. If this control is not your first TA request this event, your final score here is 1.5.
4. You arrived 1:40 past the top of the minute and requested a TA of 1.5 minutes. Your score is calculated as 1:40 late less 1:30 TA = 10 seconds past the top of the minute = 0 minutes late, so there is no time penalty. However again, if this control is not your first TA request this event, your final score here is 0.5.