



# The HRCR Historic Stage Rally NOVICE'S GUIDE

Prepared for the HRCR  
Old Stager Historic Stage Rally Championship

[HRCR.co.uk](http://HRCR.co.uk)



The Home of Historic Rallying

## Foreword

This booklet has been produced as basic guide to Stage Rally Co-Driving. It is the combined efforts of a number of HRCR members Some of whom wrote the original version whilst others guided it through its various evolutions.

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Neither the author nor any other contributor has received any remuneration for their efforts, and all proceeds raised will go towards HRCR club funds.

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## Introduction

This booklet does not try to tell you everything there is to know about Stage Rally Co-driving, it only seeks to provide you with sufficient knowledge to get you started and to help you through some of the things that you will no doubt come across on your first event. Like all guides it makes assumptions as to the ability and intelligence levels of the reader. In some cases it may appear to be ‘telling granny to suck eggs’ but the writers do not know how much the reader knows about the subject, so apologies if it sometimes it appears to be “stating the obvious.”

Whilst we do not attempt to provide details of the car, its preparation, and safety features, we do refer to some aspects of it which you as a Co-Driver need to be aware of.

We have tried to make this a fairly light hearted read with a few anecdotes from people who thought they were the bee’s knees, but something came up and bit them on the bum.

We apologise for the gender references throughout, it would start to get on your ‘nerves’ if we keep referring to a person as he/she or him/her in the text., so we have decided to go with the male for the Driver (due to limited brain power) – and ‘you’ as the Co-Driver. We also refer many times to the ‘crew.’ This is the Driver, Co-Driver and the car. Told you we’d be stating the obvious!!

The one thing about Co-Drivers, however experienced or famous they are or think they are, they will nearly always help you if you have a problem. They leave the autograph signing and posing to the prima donnas of rallying – better known as the Drivers. Never be afraid to approach another Co-Driver and ask for their help – you might think your question is a bit silly – but you can bet your life they’ve probably all asked them in the past and it might help you avoid making a basic mistake.

Most of what we have written has been based on our experiences in Historic Stage Rallying but the information equally applies to Modern Stage rallying as well.

## **What is a Rally**

A Rally is not a Race – Crews set off at intervals, usually a minute apart, they follow a predefined route carrying out various tests of speed, skill, navigation and timing and get to the finish incurring the least possible penalties along the way.

There are basically two types of Rallies in the UK, a Road Rally and a Stage Rally. Although there are a few similarities, we have not attempted to cover Road Rallying in this booklet.

A Stage Rally is split into two sections, Competitive (the Stages) and Non-Competitive (the Road or Link sections.) The Stages usually take place on private land such as military roads, stately homes, airfields, testing facilities or more commonly in this country on Forestry Commission land. However in some places, such as Ireland, the Isle of Man, certain parts of Scotland, and on the continent the organisers can apply for a road closure order, which allows them to run the stages on the public highway. Unfortunately at the present time there are no events in England or Wales which have this facility.

The 'stages' are linked together by 'road' sections, which in the case of a Multi-venue event involves part of the event running on the public highway. We mentioned the word Multi-venue; - this refers to stages at different locations. There is another form called 'Multi-use' Stages which most of us still refer to as 'Single Venue' events. These usually take place on an old airfield or a test track and all the stages are run within the confines of the venue, and do not involve the crews going onto the public highway. Quite a lot of the information given can apply to both disciplines, but we have concentrated mainly on the Multi-venue type of event.

The actual 'Stage' is a section of road or track, which has a start and a finish point and the route between them is defined by a combination of arrows, the Road Book or maps supplied by the organisers. The stage can be any length usually between 1 mile and 20 miles. The object is to get from the Start to the Finish in the fastest possible time. Very accurate clocks at the start and finish enable the officials to record the time taken. (More of this under 'Timing section").

## **What is a Co-Driver**

The name indicates that a Co-Driver shares the driving. This is rarely the case except on very long events with long road sections where the Driver needs his beauty sleep so his tiny brain can be fresh to cope with all that fast driving. If you are driving, woe betide you if you get lost whilst he is getting some ZZZZZZZZs.

A frequently used name for a Co-Driver, especially by Drivers on stage events, is a 'sack o spuds,' indicating they think you are only there to make up the weight. Sure on a 1 mile stage with all the junctions taped and arrowed he might find his way from one end to the other on his own, and probably quite quickly, but get him to make sure he gets the right time on the right timecard or find his way through the next village on the road sections and he'll be completely scuppered. You'll soon discover that everything other than the actual driving is your problem and if anything goes wrong it will be your fault. Even if he puts it 'off' it will be your fault because of a late/early or missed call.

We like to think of Co-Drivers as the 'office manager' in the team, the thinker, the organiser, the diplomat, the encourager and the calming influence. As we progress you will see all the things you will be required to look after.

## Getting Started

Let's now make a few assumptions. You've decided you want to be a Co-Driver, you've found someone who is prepared to take a 'wet behind the ears' novice. Unless you already know the Driver, it's worth visiting your local motor club and talking to other people who know him to find out if he blows a gasket at the first thing that goes wrong and has no patience. If he gets through Co-Drivers more regularly than you change your socks, give him a wide berth unless you have a very thick skin. One of the first things to get sorted out is the finances – find out what he wants you to contribute – if it is more than you can afford and he won't compromise – find someone else. It's good if you can take something to the party, for example, can you afford to pay a bit/half/all of the entry fee and/or your own accommodation expenses. You will have other expenses like maps, route notes, and will need to get yourself kitted out with overalls and helmet, which are not going to be cheap. Work out a budget and try and stick to it. Initially it might be best if you can find someone who is just doing some local level events, or maybe an area championship. The ideal scenario is to find someone who is loaded or has a sponsor and will pay for everything, but as a novice it's unlikely you will find one of these. OK so what do you need to get started? The first thing you need is a Competition Licence. Events are graded and you will need different types of licences as you progress up the 'greasy pole'. Typically you will start with a National 'B' Non Race or a National A Navigators Licence both of which enable you to Co Drive. Which licence you choose will be influenced by what level you wish to compete at, plus any other motorsport you may wish to involve yourself with. You need to study the relevant sections of the Blue Book. (See the MSA web site for details)

All rallying in the UK is governed by the Motor Sports Association (MSA) and you will need a licence application form from them, you can obtain one on-line from [www.msauk.org](http://www.msauk.org). You fill it in and together with a passport photo and the correct money you send it off. It normally only takes only about 10-14 days to get it back but as all licences run from January to December if you are applying at the end or start of the Year allow plenty of time before the event you intend doing.

Nowadays the competition licence is in the form of a plastic card the size of a credit card and you will also receive a copy of the MSA Yearbook (Blue Book.) hardcopy & CD versions. This essential tome can also be viewed on the MSA web site, but we would not recommend trying to download and print the whole thing, but it is worth reading the appropriate sections. This contains all the 'Regulations' governing many forms of Motorsport in the UK. We will be referring to it throughout this booklet, but it's worth reading the various sections which cover most of what you are going to be doing, primarily the sections covering all competitions and rallying. You can skip the bits on other activities such as racing. The next thing you will need is a 'club' card. Technically you cannot apply for a Competition Licence without being a member of an MSA affiliated club. National B events require you to be either a member of the organising club or an 'invited' club. If you are doing any historic rallying it is best to join the Historic Rally Car Register (HRCR) as their card will cover virtually every historic event you are ever likely to do. You can join on line on [www.hrcr.co.uk](http://www.hrcr.co.uk).



A worthwhile exercise is before you go on your first event as a competitor, go to your local motor club and find out if they are marshalling on a similar event. Offer to go along and help and observe what is going on, even just running a check sheet, it will be surprising what tips you pick up.

## Equipment & Other Paperwork

Below is a list of all the items you should need, although not necessarily for every event. We have also included a few items which although they are usually the Drivers responsibility are worth checking with him before the event as in some cases you might not be able to start if he forgets them. We have also included a few items about the car and its layout, which can make your life easier if they are all provided for and things are accessible. Its worth making up your own check list to keep in your 'rally bag' so you can make sure you remember to take everything you need to each event.

### General Items

1	Fireproof Overalls (see the MSA Blue Book for the current standard).
2	Helmet. (Again see the MSA Blue Book.)the choice of Open or Full Face is a personal one.
3	Intercom set. Some helmets have them built in, alternatively use Velcro fixings. Check with Driver the type of intercom set fitted in the car. Sadly there is not a universal standard, but adaptors are available between the most common fittings.
4	Not mandatory but other clothing items such as fireproof boots, underwear and balaclava are all available. And make sense.
5	Competition Licence, Club Card and Championship Registration card if doing a particular Championship.

6	Rally Bag containing, pens, pencils, sharpener, rubber, highlighters, and possibly 'post-it' note pads. Some Co-Drivers also have a "mending and alterations kit which stays with the service crew and contains scissors, stapler, and blank paper and sticky tape.
7	Clipboard for timecards. A4 and A5 – timecards vary from event to event. A piece of card with a bulldog clip works just fine
8	Digital Watch with built in stopwatch. Large digits. Alternatively a separate stopwatch. Do not rely on there being one in the car. Complex Rally wristwatches which perform multiple functions are available, but are not to everybody's taste. <b>WHATEVER WATCH YOU USE READ THE INSTRUCTIONS AND PRACTISE BEFORE THE RALLY.</b>
9	Romer – used for plotting map references. Not always necessary but handy to have.
10	Magnifier (Potti) with built in light, for night stages or if using maps for stages. Spare bulbs.
11	Spare intercom battery – if the intercom does not run off the car's electrics. <b>IMPORTANT</b> if using a battery powered intercom always start the event with a fresh battery and do not buy cheap batteries.
12	Small torch – Maglite LED type are very good.
13	A pair of work gloves (mechanics gloves) Accessible for use during a wheel change – things get very hot.
14	Small see through bag of bits, string, paperclips, rubber bands, small screwdriver set, knife, sticky fixers, cable ties. Possibly in your rally bag

## Items for the event

1	The Event Regulations, and Final Instructions and any other paperwork sent out by organisers.
2	'Route Notes' if allowed on the event.
3	OS map(s) of the area. Or Organisers Map Book (if there is one)
4	Details of your hotel bookings/ferries.
5	Passport and E111 if required.
6	Road Atlas/ Maps of the country.
7	MSA Blue Book.
8	Pills, normal medication, sweets, Sunglasses. (Spare glasses.) Indigestion tablets are a good idea even if you never need them as drivers often suddenly demand relief.
9	Mobile phone – with credit on – charger – list of Drivers/ service crews' mobile numbers. <b>DO NOT LEAVE PHONES ON WHILST IN STAGE</b> , they often interfere with the intercom.

Items for which the Driver is responsible, but it is worth checking before the event with him.

## These should be kept in the car:

1	SOS/OK Board.
2	Warning Triangle.
3	First Aid Kit.

## The following should be in his rally bag or in your rally bag:

1	Stage Rally Log Book.
2	HVIF (Historic Vehicle Identity Form) if doing an historic event.
3	Insurance Details.
4	MOT & V5 document. (Car logbook).

5	Competition Licence, Club Card, Championship registration card
6	DVLA Driving licence (Co-Driver needs to take his on continental events)

**Items to be checked in the Rally Car** - preferably at some time well before the event.

1	Can you reach trip meter, door handle, window winder, cut off switch, horn, - all with your seat belts done up. TIGHT!
2	Pockets/places for Timecards, pens etc; Try not to put paperwork down the side of your seat nearest the door, you may have to get out in a hurry and that's when things get lost.
3	Adjustments for seat belts, check release mechanism.
4	Socket for Potti, if any night stages.
5	Check intercom.
6	Footrest in right place.
7	<u>Do you fit in the seat!</u>
8	Calibrate the trip meter, on the tyres to be used on the event. If necessary you may have to do a calibration for each type/size record all these somewhere permanent. (a sticker on the dashboard perhaps).

## Regulations

Every event that runs in the UK publishes a set of Supplementary Regulations, better known to us as 'The Regs.'. These supplement the regulations issued in the previously mentioned 'Blue Book'. Where do you get 'Regs' from? Nowadays most events publish them on the internet. If you have registered for a championship you might get a set in the post. 'Regs' can be in the form of a glossy brochure through to a set of stapled A4 printed sheets. A glossy set does not necessarily mean the event is good neither does a basic home produced set mean the event is 'crap.'

Even if you don't intend doing an event it is sometimes worth getting hold of a few sets, just to familiarise yourself with their layout and what they contain. They nearly all follow a similar format, so after a while you know where to look for the important information. You have obtained a set of Regs for an event you might be interested in doing. At this point it's worth meeting up with your Driver and go through them together as most of the decisions at this stage will have to be made jointly. What do you need to know about the event? When is it, where is it, how much is it, is it a round of the championship you want to do, can you afford it, how much time off work is required, will the car be ready? Drivers will say yes to this even if it's still in a million bits in the garage. They have no concept of time and will still be causing you to panic as they put the engine back together the night before the event. Finally agree who is paying for what!

Depending on the popularity of the event will depend on how quickly you need to get your entry in. A good organiser will get his Regs out well before the event (at least 2-3 months). Some events fill up very quickly, so you will need to get the entry form filled in straight away and into the post. You then have to wait for an acknowledgement of your entry. Some organisers don't acknowledge, but print an 'entries received' list on their website. Once you've agreed to do an event get the entry in as early as possible as this helps the organisers to give a firm commitment to run. Lack of entries has become the biggest reason for events being cancelled recently. Be aware that there are certain financial penalties if you have to pull your entry. The Regs will tell you how much. Be aware of the dates by which you can do this and the financial consequences!

You can now let the Driver go away and worry about the important things in his life – all things mechanical and telling people how quick he is.

You now start pouring through the Regs yourself for other important information. What maps will be required, are notes allowed, can you buy a set or do you have the opportunity to make your own during a reconnaissance (recce). (See later section on 'Pace Notes'.)

Does the event need one or more night's stopover. You will probably be responsible for finding and booking accommodation/ferries. IT IS VITAL YOU BOOK ACCOMODATION EARLY. It is not appreciated by the driver and service crew if they end up in a dingy B&B miles from anywhere. Local tourist information centres are usually a good start. After doing a few events you start to build up a list of good B&Bs, caravan parks, camp sites or for the rich - 5 star hotels. If you can afford it, try and get a room on your own as you will want to probably spend some of the evening/night checking through the next day's information and you can't do that with the Driver snoring like a pig. You should already have decided with your Driver who pays for what beforehand. Will you have a service crew and will they need accommodation? Some Modern events allow 'chase' cars – (travelling service crews.) Historic events in championships do not allow them. Look at the 'programme' section in the Regs. This should give you all the main times of when and where things happen. What time does scrutineering open/close, what time does the event start/finish. If an overseas event will there be ferries which tie in with these times or will you need another night's accommodation. Does the event have night stages or are the later stages likely to be run in darkness – tell Driver so he can fit or take spot lights. Remember to allow for the event running late as well as you running late. Say the event is 50 minutes behind schedule and you have dropped 12 minutes. It will be just over an hour later than you original calculations.

Sometimes TBA (To be advised) will appear in the Regs. These details will be advised at a later date usually in a set of Final Instructions (finals). What sort of timing will be used? (See later section.) The Regs will also contain lots of information about how the event is run,

controls, penalties, information about servicing etc. If you are an optimist you can look at the awards list. During the intervening time before finals arrive, spend a quiet hour or so going through the Regs, highlighting anything you think important. After a while you will get to know what to look for in the Regs.

## **Final Instructions (Finals or FI's)**

These usually come out about a week before the event. They can go to either the Driver or the Co-Driver, rarely both. On the entry form they will probably have asked who to send finals to. It is best to get them sent to you. Whoever receives them must be responsible for advising the other members of the team of the relevant information, especially as it will probably be too late to post a set to the other guys. Finals will contain a seeded entry list, which will be based on the Driver's previous record and will not take into account that he will have a first time Co-Driver with him.

There will also be a time or window in which to report to noise test/scrutineering and maybe a 'provisional' start time. It will also contain any changes to the 'Regs' since they were first published such as details which were not finalised when the Regs were published or anything the organisers forgot to put in. There should also be sketch maps and/or map refs to help you find the various venues. Either the Regs or finals will tell you if you are responsible for competition numbers for the car. Sometimes the organisers will supply them, or will say they are on sale at the venue. If neither is mentioned, get the Driver to obtain them. Nothing looks worse, on a photo, on a well turned out car, to have numbers made up from bits of tape.

It's now time to plan your route to the venue. Are you travelling with the Driver/service crew or on your own? Is there room in the service vehicle without you being perched on top of a set of tyres for 200 miles? Make sure you all have each other's mobile numbers in case of

any last minute panics. Try not to get involved in all the Drivers' last minute problems, like what spares, fuel etc to take, but a quick phone call to make sure he has remembered to pack his competition licence, insurance, vehicle documents etc., may save a lot of grief. Some organisers send out Road Books, time schedules and details of the service schedules with the finals which means you can go through them in the comfort of your own home, (see section of paperwork checking) but don't forget to take them, as it is unlikely they will have any/many spares at signing on.

The night before the event, pack your rally bag using the checklist

## Event Schedule

By now you should have enough information to work out a simple schedule showing all the important times & locations.

Some Co-Drivers prefer to combine this with a fuel schedule.

## Fuel Schedule

Again you should have enough information to calculate how much fuel the car needs to be carrying at the start of every section of the event. Rally cars can use alarming amounts on stages. Mind you they still use a lot if you get lost or stuck in traffic so do not believe weight obsessed Drivers and build in a small safety margin.

The next page shows a combined Fuel & Time Schedule based upon the following data.

Tank capacity	60 Litres	Minimum fuel	10 Litres
Stage consumption	2 miles per Litre		
Road Consumption	3 miles per Litre		
Can capacity	19 Litres		



Bulldog 2010	Road Miles	Stage Miles	Fuel Road	Fuel Stage	Total Fuel	Car 1 Dur	Time allowed	Estimated Time	
<b>Fuel at Home</b>						<b>55.0 Litres</b>		Car 280	
<b>Max miles to accomodation</b>									
<b>Allow for scrut etc.</b>									
2									
<b>Fuel to Leave MC0</b>						<b>50.0 Litres</b>		01:21	
Start area in							08:10		09:31:00
Prestart							08:30		09:51:00
MC0							00:20:00		09:51:00
ATC5	33.08		11.0	0.0	11.0	09:37	01:07:00	10:58:00	
SS5	Big Ray	5.21	0.0	2.6	2.6	09:40	00:03:00	11:01:00	
ATC6	1.72		0.6	0.0	0.6	09:53	00:13:00	11:14:00	
SS6	Dyfi Main	8.57	0.0	4.3	4.3	09:56	00:03:00	11:17:00	
ATC7	5.35		1.8	0.0	1.8	10:25	00:29:00	11:46:00	
SS7	Pantperthog	6.99	0.0	3.5	3.5	10:28	00:03:00	11:49:00	
TC7	Regroup & Service In	12.64	4.2	0.0	4.2	11:01	00:33:00	12:22:00	
<b>Fuel to service</b>						<b>28.0</b>			
<b>Fuel theoretical required</b>						<b>38.0</b>		20	
<b>Totals</b>									
	52.79	20.77	17.60	10.39	27.98				

Service Min 20 minutes Max 30 mins

<b>Fuel to Leave MC7</b>						<b>35.0 Litres</b>		
MC7	Service Out					11:31	00:30:00	12:52:00
ATC8	14.34		4.8	0.0	4.8	12:01	00:30:00	13:22:00
SS8	Gartheiniog	14.23	0.0	7.1	7.1	12:04	00:03:00	13:25:00
TC8	Service In & Regroup	15.07	5.0	0.0	5.0	12:49	00:45:00	14:10:00
<b>Fuel to service</b>						<b>16.8</b>		
<b>Fuel theoretical required</b>						<b>26.9</b>		15
<b>Totals</b>								
	29.41	14.23	9.80	7.12	16.92			

Service Min 20 minutes Max 30 mins

<b>Fuel to Leave MC4</b>						<b>50.0 Litres</b>		
MC8	Service Out					13:19	00:30:00	14:40:00
ATC9	22.27		7.4	0.0	7.4	14:04	00:45:00	15:25:00
SS9	Penllyn	8.93	0.0	4.5	4.5	14:07	00:03:00	15:28:00
ATC10	14.12		4.7	0.0	4.7	14:50	00:43:00	16:11:00
SS10	Dyfnant	8.94	0.0	4.5	4.5	14:53	00:03:00	16:14:00
MC10	Finish Ramp	21.88	7.3	0.0	7.3	15:46	00:53:00	17:07:00
<b>Fuel to service</b>						<b>28.4</b>		
<b>Fuel theoretical required</b>						<b>38.4</b>		29
<b>Totals</b>								
	58.27	17.87	19.42	8.94	28.36			

Overall Total: 140.47 52.87 46.82 26.44 73.26  
 Plus minimum fuel 83.26  
 Less fuel in car at start 33.26  
 Number of cans 1.75

## **Amendments**

At any point during the event after the Final Instruction are distributed the organisers may issue amendments. These may be corrections to existing paperwork, but more crucially they may be significant changes to the route or time schedule. Amendments posted on the Official Notice Board are your responsibility to read. Amendments issued after this will require you to sign to say you have seen/read it. If the organisers are rescuing the event from a serious disruption it could be a scribbled note shoved through the window by a rain sodden marshal.

## **Arriving at the Event**

We will now assume that everything has gone according to plan, you, the Driver, the car and the service crew have all arrived for the start of the proceedings in plenty of time. Encourage the others to get there early as you will have a lot of checking to do. (See paperwork checking section.) Have a walk around and familiarise yourself where everything happens, routes in/out of noise/scrutineering, where signing on is, where the actual start control is if these are located nearby. Don't assume it's the same place as it was last year! Leave the others to unload the car off the trailer. Transfer your helmet and overalls into the rally car and make sure the Driver has all the vehicle paperwork with him in the car. Make sure the OK/SOS board, warning triangle and first aid kit are all in the car for scrutineering. It may be a long way to scrutineering and sure as eggs if the Driver has forgotten something he'll expect you to go back and get it. Check the adjustment of your seat belt because you can bet the Driver has been giving a ride to a twiglett or a baby whale.

## **Noise Test**

Most events start with a Noise test. You pull up alongside the noise official, the Driver revs the car to a required level, the marshal will take a reading and hopefully he will say OK. If you pass the test you will be issued with a 'process card.' This card will need various other signatures before you are allowed to start.

## **Scrutineering**

Most events require you to have Door Numbers and event decals in place before you pass through scrutineering, so make sure you have collected these. Now you can get in the queue for Scrutineering. Sometimes you have a time window to report here, other times it's a case of pull up behind the next car and wait. This can sometimes be a very long wait, other times you will drive straight in. When you are called into the bay, get both sets of overalls and helmets out. Some people put them onto the roof of the car, take care with this in case the driver has polished the car. A helmet that falls from the roof to the ground is scrap. Leave the Driver to sort out any problems with the car. Hopefully it will pass first time or maybe you might have to go back to the service area and do something to enable it to pass. If the official has a problem with the car, try and keep your Driver calm – if he starts getting stroppy and argumentative with the scrutineers you won't be going anywhere. If all is well, the scrutineer will then sign the appropriate box on the 'process card'

## Documentation

Next is Documentation or “signing on” as it is usually called. Occasionally it’s at the same place as scrutineering or more likely it’s in another building which can be local or some distance away. Before you go there make sure that you and your Driver have all the necessary Competition Licences, Club Cards, Championship Cards, insurance details, and any other forms (already filled in) which the organisers may have supplied, including the “Process Card”. In the signing on room there is usually a row of tables with officials sat behind them and you start at one end and work your way down signing the various forms and having your documents checked. During this you will exchange your process card for your “Rally Pack”. Some events have different tables for different blocks of competitors. So read any signs. In your Rally Pack will be items such as Road Book, maps, service schedules (if not sent out with the finals) timecards, amendments Stickers. Some events issue the time cards at a later time or at a different location. So if they are not in the Rally Pack make sure you know when and where they are issued. Good organisers will supply a list of the contents of this pack and it is your responsibility to check that all is present. It is important that you check that all the pages in the Road Book and Timecards are present. Despite checking very carefully organisers have been known to miss a page. 20 miles down the road on the way to Stage two is not the time to find out. Check the Official Notice board and write down any amendments. The finalised list of start times will be here (although some events now use SMS text messages to tell you your start time). If the event has more than one leg, or runs over night then you need to check your restart time for each leg, as the organisers may well re-seed after each leg. It is worth making a note of the cars a few places in front and behind so you can slot into the right place in the queue. Even at the

start competitors may not be running in numerical order, especially if the organisers have re-seeded a late entry from a local hero. If you have registered for a championship there is likely to be a separate table for championship signing on. Failure to visit this could cost you championship points. It is at the Championship desk that you can collect any decals that are required. Again failing to put these in the correct place on the car will cost you championship points.

## **Measured Mile**

Most events will have a marked measured mile; it is wise to use this to check the calibration of the Trip Meter, just in case anybody has been fiddling with the settings, or the organisers' calibration is different to yours.

## **Paperwork Checking**

You can now let the Driver and the service crews go and put the stickers and numbers on the rally car and generally 'faff' about, whilst you go and find somewhere quiet to go and check out all your paperwork in detail. Make sure that the Driver knows the start time and where the start actually is and arrange to meet him at a specific time and place. Drivers tend to wander off and give you last minute panics when you are due to be somewhere and they are off talking to the other drivers. You will need to keep a lead on him all day. Remember you will get the blame if you are late at a control. Also check the distance before first service so the service crews can put plenty of fuel in the car (see notes on Fuel Schedule). You'll also get the blame if you run out.

If you find somewhere quiet to sit and sort out your paperwork, invariably other Co-Drivers will also be there. As you get to know

others it is sometime best if two of you get your heads together and check the paperwork and the routes. It's surprising what one might spot and the other will miss. Don't be afraid to ask someone if you don't understand something. Work out the distance between services so you can ensure you have sufficient fuel – you might have to get fuel on a road section so highlight any service stations in the Road Book. Unless you are ultra competitive and are trying to save fractions of seconds, never run light on fuel.

*A very famous world rally crew took a wrong turning on the road section and because they were running very light, they actually ran out of fuel on the road section and were out of the event. The Co-Driver was to blame!*

Look to see if there are any amendments to the Road Book, or timecards in your pack. Things may have changed since the documents went to press. You may also be issued with further 'amendments' during the event, these are usually to cover some late problems that have arisen. These usually come in the form of a printed sheet passed to you at a control. You will be asked to sign for these. Make sure you transfer the relevant information as soon as possible.

At this point it's worth looking at the 'Road Book' in more detail.

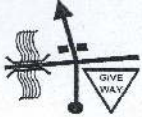





## **Road Book**

The Road Book is the main document which will enable you to get from the start to the finish and technically you should not need anything else – providing you don't make a mistake. So don't lose it!! The Road Book will usually contain a time schedule, lengths of the stages and road sections, explanatory notes about the diagrams, stage maps (although these may be in a separate document). Plans of service areas and where the 'in and out' controls are should also be included. If you haven't already done so, check the page numbers are consecutive. Usually the road sections and stage details are on

different coloured sheets. Road Books are based on the 'tulip' form of diagrams which represent diagrams of the junctions. There is a ball and arrow on each diagram - you approach from the ball and leave on the arrow. (See a typical page from a Road Book below). One column of figures is the intermediate distances between two consecutive 'tulips.' The other is the total distance from the start of the section.' The next column is the tulip diagram and to the right is information about the junction, if there is a signpost, speed restriction, fuel stations, etc. There is usually then a final column which gives you the distance 'to go' to the next control. You read from the top of the page downwards. When you come to the bottom of the page turn over quickly as the next junction/direction may be very close.

At the top of the page are various boxes which tell you which road section or stage you are on, the total section distance, the target time, and the average speed. Both the sheets for the road sections and the stages follow a similar format. The important thing to remember about the diagrams of the stages is that only the actual junctions are shown and arrowed. Bends in the road are not! There may be caution boards or other information such as fresh air drops on a bend or cautions on a 'Yump,' if the organisers deem it necessary in amongst the tulip diagrams. Again the columns with the various distances are shown.

Very few Co-Drivers rely on the Road Book to get through the stages. They either use larger scale OS maps sometimes provided by the organisers or nowadays more commonly most use 'Route Notes.' There are still a few Co-Drivers who prefer to rely on maps even if notes are available.

RS	0	WELSHPOOL	MC0	MC0 TIME		PAGE	6
via	-	TO		TARGET	67 MINS	DISTANCE	33.08 MILES
PC	-	BIG RAY	ATC5	DUE		AVERAGE	29.62 MPH
DISTANCE		DIRECTION	INFORMATION	MILES to TC			
TOTAL	PARTIAL						
30.64	0.24		⇕	2.44			
	<span style="border: 1px solid black; padding: 2px;">12</span>						
31.18	0.54		Past spectator entrance.	1.90			
	<span style="border: 1px solid black; padding: 2px;">13</span>						
31.71	0.53		⇕	1.37			
	<span style="border: 1px solid black; padding: 2px;">14</span>						
33.02	1.31			0.06			
	<span style="border: 1px solid black; padding: 2px;">15</span>						
33.08	0.06		ATC5	0.00			
	<span style="border: 1px solid black; padding: 2px;">16</span>		GPS: 52° 40.707'N 03° 45.378'W				
33.15	0.07		SS5				
	<span style="border: 1px solid black; padding: 2px;">17</span>		GPS: 52° 40.672'N 03° 45.458'W				



# Timecards

Most events timecards follow a similar format. (See sample) They are made up of a series of boxes in which the marshals at the various controls fill in the times you arrive at their controls. There will also be spaces where you can record your times, on the sample shown, these are on the left of the dotted line (perforations). Take time to go through the times cards before the start. Check it against the Road Book and/or time schedule. Again it is highly unlikely that a card will be missing, but it's better to check and find out now than when you turn over a page and find one missing. Note the 'target time' for the sections between controls. Should you find a discrepancy between times given in the Road Book or a time schedule; the times on the Timecards always take precedence.

Unfortunately on some events, mainly on overseas, the Timecards are not issued in advance and are only given out at the first control of a leg or the day. Hopefully there will be none missing in these cases.

**Tour Of Epynt**  
22<sup>nd</sup> February 2009

Control	hr	Min
Actual Service B In		
Loc. Time Service B Out		
Actual Time Service B Out		
Time Allowed	00:04	
Pre Time SSA 4		
Actual SSA 4		
Pre Time SSS 4		
Actual SSS 4		
Pre Time SSF 4		
Actual SSF 4		
Time Allowed	00:35	
Due Time MC 2 In		

**TIME CARD 3**  
For Competitors Use

**Tour Of Epynt**  
22<sup>nd</sup> February 2009

**SERVICE B**

Control	Prev Car	Signature	hr	Min
Service B In				
Control	Prev Car	Signature	hr	Min
Service B Out				
Control	Prev Car	Signature	hr	Min
SSA 4				
Pre Time SSS 4				
Actual SSS 4				
Pre Time SSF 4				
Actual SSF 4				

**SS 4**  
Bogey Time 11 Mins 03 Secs  
Target Time 28 Mins

Car No. 70

Time Allowed from SSF 3 00:35

Due Time at Service B Out will be Allocated by the Marshall

Time Allowed from Service B Out 00:04

Transfer SSF 4 Time

**TIME CARD 3**  
Hand This Time Card In at MC 2

## Route Notes

These used to be called Pace Notes (and still are by a lot of people) Technically Route Notes are about telling the Driver the things he needs to drive safely whilst pace notes are about telling the Driver how to achieve maximum speed. In practice everybody ignores this fine distinction. Many events now allow note making organisations to recce the route and they produce sets of notes for sale. (Usually £40 to £45 for a single day event). They also now produce in car DVDs/video of the stages albeit at slow speed. (Alternatively on some events you are allowed to do a controlled recce and make your own notes or check the notes supplied). We hold the opinion that novices cannot write good (or safe) notes so wherever possible buy the best commercially available product. Writing your own notes is a separate skill and should be acquired later in your career. In the same vein try to prevent the Driver from doctoring the notes you have purchased. Drivers have been known to attempt to transpose the full set into a different shorthand. This is not a good idea.

A good tip if you are using notes, look through the Road Book at some of the trickier junction diagrams and draw the junction in the appropriate place in the notes. This is especially useful when chicanes are included as they probably won't have been in place when the recce was carried out.

As with all of the paperwork for the rally, check that you have all of the pages in any route notes supplied. A good tip is to turn over the corner of each page (say, the bottom right as a pianist would do with their sheet music). This will help to ensure that you do not turn over two pages at once by mistake in the middle of a stage, with potentially disastrous consequences.

If the organisers offer a Recce period make the maximum use of this. Make sure you do at least two passes of all roads used on the stages. Often the organisers set up convoys. If so get your driver to drive

steadily a little way back from the car in front, and you read the notes. Concentrate on getting the flow and timing right, so that the Driver is hearing what he needs at the time he hears it. Not all Drivers have the same memory span so you need to agree what he needs to hear and when. Finally accept the idea that you may have to get used to more than one "system" as it is the drivers choice as to the "system" used.

13 of 2.

S1/3 P. 13  
Narra

2L Lg      40      <sup>DC</sup> 2L   1R   +   <sup>Thru Dip</sup> 1R Lg

---

40      2R/C      40      3R Lg      60

18710.40

J17      <sup>DC</sup> TURN 6L      +      !! 2R      →      <sup>DC</sup> HpL Lg / Narr Br

80      !! 5R / Sm C > / Dip      60

19710.72

Sm C → <sup>DC</sup> 5R → Mid / Jnct      150

NEXT

2R 200 !! 2R

## Take Note (making and using notes)

Much mystique and discussion centres on the making and using of pace notes or route notes, but really they can be as simple or as complicated as you the competitor, wishes to make them. Notes, read by the Co-Driver, are designed to let the Driver know what is ahead. It is that simple.

The first recognised form of pace notes documented was when Stirling Moss took the works Mercedes SLR to victory on the Mille Miglia 1000 mile road race through Italy in 1955. Renowned English motoring journalist Denis Jenkinson was Co-Driving and he devised a plan to record land marks on a long long roll of paper in a toilet holder type of device. As the miles rolled by, Denis unrolled his long sheet and was able to shout approaching hazards to Stirling.

Then in the early Sixties, Drivers such as Hopkirk, Aaltonen and Timo Makinen were sent off for months to “recce” the Monte Carlo Rally. They honed the art of pace note making so that they recorded every bend, straight and jumps on what was then a huge route.

One extra dimension to making notes in advance for something like the Monte, is that although the road may stay the same, conditions, be it ice, snow, rain, fog, can change the whole demeanour of a road or forest track. This applies as much today as it did then of course and is well worth bearing in mind when making notes.

There are many variations and types of notes, but there are two basic approaches. One is to make a pure description of the road, the other is to make speed notes. An example of the difference would be where a slow corner follows a slow corner. In speed notes the Driver may call the second corner fairly fast as he had to slow right down for the first one.

Making notes from scratch involves the Co-Driver equipping himself with a couple of pencils, a rubber, and an A5 or A4 notebook, preferably with spiral binding, for ease of turning the pages. Mostly

organisers forbid the making of the notes in a rally car, so some form of a small “recce” car is necessary.

It is a good idea to have a tripmeter in the recce car, and equip it with some underbody protection. Normally these days the recce period allowed by the organisers is a fairly small window, and if you end up at the side of the road with a broken sump on the recce car, you will not get many notes made.

It is important when making the notes to follow the organisers Road Book very carefully, as there is not much point in making notes on the wrong road or track. Similarly the start is very important, with the distance from a junction, plus any landmarks, carefully marked. There is nothing more off-putting than the first corner being wrong, because the stage start may have been moved slightly “on the day”.

Making the notes is simply a matter of driving slowly down the stage route, and the Driver calling the notes to the Co-Driver, who writes them down in good big bold writing. Before starting out the Driver and Co-Driver will need to have worked out what they are going to call everything, and the Co-Driver then needs to devise a simple shorthand description of these terms. In that respect, numbered notes are simpler than descriptive terminology. It's easier to write down “3R” than “Fast Medium Right”, which will be shortened to “FMR”.

There is a myriad of ways to describe corners and crests but the most important thing of all is that the notes are consistent. One note too fast can wreck a Driver's confidence let alone cause an accident. Also whatever terminology is settled on there must be no calls starting with the same letter. For example, it doesn't make sense to have a call for “flat” and a call for “fast” as in the heat of the moment in a rally car, on a stage, with all the noise and bumping, the Driver could mistake one for the other. Similarly when calling distances even numbers should be used for up to 100 yards or meters and uneven numbers above so that there can be no confusion. Great care should be taken when putting in landmarks – avoid possible ambiguity!

Many of the rallies in the UK are not allowed to have a reconnaissance period. Patterson Pacenotes supply standard notes in all sorts of formats for most of these rallies, and information about most formats can be found on their site [www.rallynews.net](http://www.rallynews.net) If you have not used notes before it might be beneficial to study the different systems. In addition they make a safety DVD which gives great insight into the notes in relation to the actual stages. Finally if you can get the the notes to work for you, they definitely make the stages faster and can give both Driver and Co-Driver a great deal of satisfaction when it all clicks.

## **The Start**

You have checked on all your paperwork, passed any information to the service crew, found your Driver. Get your overalls on and make sure both helmets are actually in the car, plus road book, watch, times cards and route notes.

*The weekend before this piece was originally written a crew arrived at the first stage on the second day of the event, to find they had not put their helmets back in the car. A very fast run back to meet their service crew only just kept them in the event. Thank god for mobile phones.*

Go and check your watch against the rally clock – there is usually one near documentation or definitely at the start. This is usually somewhere fairly close to rally HQ, however sometimes it may be in a Town Centre or maybe at some other remote location. If it is elsewhere make sure you leave yourselves plenty of time to get there allowing for town centre traffic etc. Open the Road Book to the correct page. The start is nearly always called a Main Time Control. (MTC) There may be a previous control called a holding control (MCO) which you have to be at by a certain time usually 10 minutes before your start time.

Pull up to the start marshal and hand over your Timecard and ask for the time you want. They will write it on your Timecard, hand it back,

check they have recorded it correctly. The marshal will then count you down to the time when you can go. Zero the distance trip as you leave the line or where the Road Book indicates.

You now start following the Road Book, putting a line through or a tick beside each junction/instruction as you pass through it. Concentrate, especially if you have to go through towns and villages and have to look for tricky turnings, some can be very close to a previous instruction. Good organisers will usually arrow tricky junctions. Road sections are timed at a relatively slow 'average' speed to allow for traffic, road works, narrow lanes, etc but try to maintain reasonable speeds where you can as you don't know what may lie up ahead. There should be no need to break any speed limits, try and keep your Driver in check as the last thing you want is a speeding ticket, which can also result in you being excluded from the event – and that, will be your fault as well!!

At this point it's worth dealing with the 'Controls & Timing issues' you are likely to encounter.

## **Controls & Timing (MSA).**

The start is always at a MAIN TIME CONTROL. (MTC) This can take the form of a ramp, an arch or just a Control Board, (always a Red Clock) on the side of the road. Prior to this there should be a board with a Yellow Clock. This is the start of the control area and you should not pass the yellow board until you are either in the preceding minute, or in the actual minute you are due. You will have already checked your start time and the number of the car immediately in front of you – if he hasn't shown, don't be tempted to go in early. You will likely incur a penalty – not a good way to start!! As a rule only hand over your time card in the appropriate time window, unless the marshal has confirmed the time he will give you.

On rallies governed by MSA rules you will have an amount of maximum 'penalty free' lateness between Main Time Controls, usually in the region of 15 minutes. This will usually be stated in the Regs. This means that you can be late at various controls throughout the rally without incurring 'road' penalties. However this lateness is cumulative and 5 minutes late at one control and a further 5 minutes at another will count towards your 15 minutes maximum allowance. If you go over the maximum lateness you are usually excluded. If you are late on one road section, you cannot make up the lateness on a subsequent section.

How do you know what time you need to be at the next control? In most cases you will be going from the start directly to the first stage. The Road Book and the Timecard will give you an allowed 'target' road section time. This will be given in minutes, or hours and minutes if a very long road section. You add this time to your start time. E.g. Your 'Start Time' was 10.20hrs, the road time allowance is 56 mins, so your due time at the next control is 11.16hrs. (Rallying uses the 24hr clock.) If the next control is at the stage start it will be called an ARRIVAL CONTROL (ATC or SSA) and is also denoted with Yellow & Red Clock boards. You observe the same control procedure as for the Start, i.e. do not pass the yellow clock until the preceding minute you are due. Both crew members should be helmeted and strapped in ready to start the stage as you enter the arrival control.

Sometimes you will get to the location and find there is a big queue of rally cars waiting at the control, so you are unable to drive into the control and get your time. You – the Co-Driver – must get out and walk into the control to obtain your required time – even if it is raining! Let us assume everything is running on time, and you have to wait a few minutes to 'go into the Arrival Control.' Whilst you are waiting open the 'notes' to the right page and turn the Road Book to the page for the start of the next road section unless you are using the Road Book to negotiate the stage. Get the helmets on, plug in and give the



intercom a final check and get belted up. Nowadays the Arrival Control marshal nearly always 'nominates' a provisional stage start time – which should be a minimum of 3 minutes after your arrival time. Don't worry if you are not able to start on that time due to a delay. The time between the arrival control and the start line control is called 'dead time' and is penalty free if the delay is not of your making.

A marshal will then call you to the start line; this is called the STAGE START (SSS). The marshal will then either confirm the 'nominated' time or enter a different time if it was not possible to start at the nominated time. Nearly all stages in forests start at 1 minute intervals, however sometimes if stages are run twice consecutively you may be required to start at 30 second intervals. The Road Book or other paperwork will have advised you of this.

You have your start time and there are 30 seconds to go, so CLOSE YOUR WINDOW. The marshal will begin a countdown at 15 seconds, 10, 5,4,3,2,1 GO. Many events these days operate a 'traffic light' system with a large clock where at 15 seconds a red light comes on, at 10 seconds an amber cluster of 5 lights comes on as well. At 5 seconds the red light goes off and the 5 amber lights go off one at a time, as the 5, 4,3,2,1 countdown. During the countdown, zero the trip and get your stop watch ready. At zero the last amber goes out and the green light comes on – and you are AWAY! Start your stopwatch. Try and watch the sequence as a previous car starts.

Between you and the Driver you attempt to get to the other end as quickly and as safely and with as few a mistakes as possible. Only by actually doing stages together will you find out what works for you both. It will take time to build up a relationship – things will go wrong – he'll lose his cool – you'll shout at him, but hopefully the adrenaline rush will get you though.

Stages have three 'times' allocated to them, the first is called the 'bogey time.' This is set at a high average speed - 75mph on tarmac and 65 on gravel.

Normally no one will beat the 'bogey', but if you did you would still only be allocated the 'bogey time' for the stage. The next one is called "stage maximum", this is set at a low average speed which allows crews to have relatively slow speed run if they have a problem. If you were to exceed this time you would still be allocated the stage maximum. Any times taken between the 'bogey' and 'maximum' are called 'stage actual' which is what you would normally get. Time taken over the "stage maximum" is added to your lateness.

You've negotiated the stage safely, and are coming towards the end. About a 100yds before the finish are a pair of YELLOW Chequered Flag boards either side of the track – this is a warning of the FLYING FINISH ahead, which is then denoted by a pair of RED Chequered Flag boards. As you pass through these at 'full' speed a marshal will press a button or the car will break a beam stopping a clock located at the STOP line. Stop your stop watch as you pass this board. There are then 3 motorway style 'countdown' boards which means you have to start slowing down until you come to a halt next to a RED STOP board. If the Driver overshoots the board NEVER REVERSE BACK. This is very dangerous and carries an instant penalty. **You have to get out and walk back!**

This is called SPECIAL STAGE FINISH (SSF.) You hand your Timecard to the marshal who records the time when the clock was stopped. Take the start time from the finish time and this will give you the time you took for the stage and should be very close to the time on your stop watch. If it's only the odd second or two adrift, you don't query it, but do check what the marshal has written. This applies at every control. Marshals are usually very reliable but are human and can make a mistake – just like you!! So if either you can't read what they have written or think it is way out, e.g. The clock stopped at say 11.23.26 and they have written 11.26.23, you should 'politely' query it. Something like this should be obvious and they will accept your query

with good grace. It is always the responsibility of the Co-Driver to ensure the correct time is entered at all controls.

You now set off on the next road section to the next stage or to service. If you suddenly realise that the marshal has given you the wrong time or made some other mistake, never allow your Driver to reverse back into the control. You must walk back to query it.

When do you need to arrive at the next control? Again the Timecard and the Road Book will give a 'target' time to cover the distance. You take the time recorded at the Flying Finish (SSF), ignoring the seconds as your start time for that road section and add the 'target' time. E.g. you crossed the Flying Finish line at 11.28.59sec, your start time will be 11.28hrs. You add this to the target time, as you did before and this will give you the time of day you need to be at the next control.

Other controls you will encounter are SERVICE IN and OUT CONTROLS, again denoted by yellow and red clocks. The same procedure applies as for ATCs. The Road Book and/or the timecard will normally give you the 'service time' which you should stick to, to remain penalty free. On single venue events, the Service 'In' marshal will usually enter a Service 'Out' time on your Timecards. Allow time for extracting the car and barging through the traffic to get to the out control on time.

A control you may also come across is a RE-GROUP CONTROL this is set up by the organisers to get the event back on schedule, by closing up the gaps in the field. You will book 'IN' to the area on your due time. The marshal at this control will then enter a 'Time Out' of the area. There will then be an 'OUT' control, which will be the start of your next road section.

Another control you will encounter is a 'PASSAGE CONTROL' denoted by a Red 'Stamp' Board. These are set up by the organisers for the purpose of collecting Timecards for the results crews. These usually appear just after the end of a stage or in a road section. These should have a yellow 'stamp' board warning you of the passage control. There are no times recorded here so you can go straight in. You hand over

your Timecards to the marshal, who will remove the appropriate pages of your Timecard(s) sign in a box and pass it back to you - you can then proceed but make sure that you and/or the marshal have carried over any time needed for the next section onto the next Timecard.

The end of the rally or a leg will have a Main Time Control – procedure here is the same as for other controls. Unless a marshal is obviously beckoning you to go into a control, before your due time which can sometime happen, wait outside for your due time. If the marshal definitely waves you into this final control early, still ask for your due time.

## **Controls & Timing FIA (INTERNATIONAL)**

There are quite a few events running in this country which run to (FIA) International Timing, for example some of the events in the British Rally Championship (BRC) use this format. As the British Historic Rally Championship includes several events which are also rounds of the BRC and one event on the Continent it is worth pointing out the main differences.

The main difference is that there is no ‘penalty free lateness’ on these events, so if you go from the Start (Main Time Control) to the first Arrival Time Control and you are late, you are penalised usually at a rate of 10 seconds per minute.

The other major difference is that the time you are given to actually ‘start’ a stage is also the start time for the next road section. For example say you had a start time for a stage of 10.28hrs and the Road Book says the ‘target’ time to the next control is 25 minutes, the latest time you are due at the next Time Control is 10h53m59s before incurring penalties. Say you take 11 minutes 30 seconds to complete the stage, the remaining 14mins and 29 seconds is the time in which you have to stop, get your finish time from the Stop Line Marshal, take your helmets off, and then drive the road section to the next Arrival

Control before incurring any penalties. This means that should you have a problem on the stage, (a stall, an off or a spin) all the time you are losing is eating into your road time. On these events the stage finish time you are given has no bearing on the road section time. This means that if you overtake a slower car on a stage, they will start the next stage back in front of you! It also means that the faster crews have always more time to do the road section than the slower ones. Unfair or what!! Usually the organisers set the overall times at reasonable levels, but sometimes it results in a bit of a road race to get to the next control without incurring any penalties. Some events will set a control not too far from the stage finish to avoid just this. All the 'boards' mentioned in the MSA section are the same configuration and colour and you will still encounter, Passage, Service In/Out and Regroup Controls which operate in a similar way. One thing to be very wary of is that whereas we previously stated you can go into a control during the minute before your due time and the marshal will usually give you the next minute, the Regs for some events might say the time you will be given is the time you actually hand over the Timecard. Even on MSA events it is always worth holding on to your Timecard until you are absolutely sure the marshal will give you the exact time you want.

## **Parc Fermé.**

If the event lasts more than one day or has several legs, you may have to put the car into a 'Parc Fermé.' This is a secure area set up by the organisers. The control 'in' to Parc Fermé operates the same as for a service 'in' or any other arrival control. You will park your car as directed by the marshals, take out all your paperwork, maybe your helmets, lock up the car and leave the area. Nowadays most organisers will give you a tally/card/wristband with your car number on. This ensures only you can get the car back out in the morning. Overnight

the organisers will issue a set of 'restart times' based on your performance that day – it is called re-seeding. As stated before it is your responsibility to find this out. Next morning you report to the entrance of the Parc Fermé, usually 10 minutes before your due restart time, hand over your tally/card and you can then get your car out and line up at the Main Time Control to start the next leg/day of the rally. Nobody can enter except the two crew members and no work can be carried out on the car whilst it is in 'Parc Fermé.'

If your car will not start when it is time to leave the Parc Fermé, you may be able to push the car out and then work on it. Make sure that you know exactly who can do what. (Check event and championship Regs).

Occasionally at the end of a rally you may be required to put your car into Parc Fermé. This is to ensure no work can be performed on the car until all results have been declared final. This is in case there is an appeal or query about the eligibility of the cars.

## **The Finish**

Congratulations, you have got to the end of the rally, signed the damage declaration form and booked in at the final main time control or maybe Parc Fermé as described above. That's it, you can pack up and go home or to the bar. **WRONG!** Firstly if you have done very well or have a new car, you may be required to go to 'post-event' scrutineering. Usually only 3 or 4 cars are selected. This is usually held at a nearby garage and allows the scrutineers to have a more in depth look at your car, to see it is running to the rules and eligibility regulations of the event or championship. Make sure the Driver takes all the vehicle documents with him. Whilst you have to accompany the Driver, you don't have to get involved too much in this and hopefully the scrutineer will pass the car as OK and you can then return to the finish venue.

## Results

Whilst the Driver and service crew can now load up the trailer and then swan off to the bar you still have a few more tasks to perform. Throughout the day hopefully you will have been keeping a record of your times for each of the stages, there's usually space on the competitors section of the Timecard or in the back of the Road Book to do this. You may have been handed interim results during the day. If you have time, maybe when in the service area, check these against your recorded times. If you spot a discrepancy, fill in a query form, usually there is one in the back of the Road Book, and try and find an official to hand it to. If at the finish you still haven't managed to find someone, now is the time to hand it in. Go and study the official notice board where a set of up to date results should be displayed fairly soon after the last car has finished. Hopefully you will have not incurred any road penalties; there will be a separate column for them. 'I.e. you booked in early at a control, booked out of service late, etc, hopefully there should be nothing in the road penalty column against your name. Check out all the stage times again. If something is still wrong or you have road penalties showing which you are not aware of, fill in a query form and hand it in immediately and await an answer from one of the officials. Don't put a query in against for the odd second unless it means the difference between an award or not. Hopefully the answer from the officials will clear up any outstanding queries. If upon receiving the answer you are not satisfied with the outcome, there is a 'Protest and Appeals' process you can go through (see the Blue Book.) Hopefully you will never have to go there – don't ever try to use this to try to cover up a cock-up you have made and don't want to admit to – you will always lose out and it will cost you money. This results checking should also be done every day if the

event lasts two or more days. If there is any discrepancy you might be wrongly seeded for the next day.

If you are running in a class and fairly competitive it is also worth checking if someone else in the class has appeared to have done unusually well on a particular stage. They may have had a 'minute flyer' which means you might have lost the class win/place if this time stands.

It's highly unlikely they will point it out to the organisers and whilst some may think it is not the done thing to query someone else's results, it is likely that if the positions were reversed someone would probably query one of your 'iffy' times.

When all 'queries' have been answered and there are no appeals or protests pending the results will be declared 'provisional' and will remain so for 30 minutes. This is the last time someone can query something about the results. At the end of the 30 minutes they are declared final and no further queries, protest etc can be considered. It might now be time to look at the awards list in the Regs, if you feel you've had a good result. Look at the class awards and see how many entries are needed for a particular class award – you may pick up one. Unless for some reason you have to get away quickly it is always good to attend the awards ceremony, if only to applaud the other guy's achievements. Just remember one day you might have the honour of going to collect an award and there is nothing worse than having an awards ceremony with only half a dozen present. It is also an excellent opportunity for a bit of "networking" and the place to pick up useful gossip!

## **Debrief**

A few days after the event sit down quietly and go through the event in your mind, and with the paperwork. Did you make a mistake, how can you prevent it again, can you do something better next time. Try



and sit down with the Driver and see if you can improve on how you called the notes. Spending a full day in a car with a possible stranger, things don't always go well – if either of you has a problem try and sort it as soon as you can. Just because you've finished your first rally without any cock-ups and maybe got a reasonable result, don't think you have arrived and you're the 'dog's whatsits'. Every event is different, next time something else will happen you hadn't thought of or have forgotten. It is your ability to think on your feet and deal with a problem quickly and calmly that will start to build your reputation as a half tidy Co-Driver. You never know, one day you might even get the call from a works team with an offer of a job.

WELL WE CAN ALL DREAM CAN'T WE!!!!

## What can go wrong!

The following are a few problems that the authors have experienced or seen others have when out marshalling or officiating. In the interest of the authors ever getting another ride, we have not listed which is which.

1	Problem: Left Roadbook in service vehicle before start of the event. Realised after Service Crew had left to go to Service Area. Solution: Talk nicely to officials and blag another.
2	Problem: Left timecards on the table at signing on. Solution: as #1 but luckily in this case another Co-Driver found them and passed them to the crew before they got to the start.
3	Problem: Turned over two pages in notes. (same has happened with Roadbook). Solution: As soon as you realise tell the driver “he is on his own and driving on sight” When you think you have caught up, give the driver a cautious confirmation and a couple of corners later when you are certain you are in the right place you can tell him.
4	Problem: Crew goes wrong at a split junction. (whatever you do never reverse back to the junction.) Solution: There isn't one, you can “own up” or swear blind the arrowing/diagram was wrong but your penalty still stands.
5	Problem: Had an off in stage, got out to push and lost the roadbook. Realised at the end of the stage. Solution: Wait for the next car to exit the stage and follow them to service or the next stage. As soon as you can scrounge a another set.
6	Problem: Time Card open at the wrong page so the marshal filled in the wrong box. Solution: speak nicely to the organisers and they will sort it out.

7	<p>Problem: Driver has ignored the Co-Driver and driven into a control early.</p> <p>Solution: Plead politely with the marshal or stage a major “domestic in the car” so that the marshal takes pity on the crew and issues the correct time. This only works if the crew are a couple.</p>
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## Stopping on Stage

Hopefully not on your first event but every crew will at some point come to a halt on a stage.

There are three reasons for stopping on a stage. Mechanical Failure, you crashed, or the road is blocked.

Here are some basic Do’s and Don’ts. Which apply in all circumstances.

1	Do not panic.
2	Firstly try to park off the road.
3	Protect the scene by getting someone back up the road with a warning triangle. Always ensure that YOU are in a safe place.
4	Display the OK/SOS board.
5	Stay off the phone, the event radio system is how incidents should be dealt with.
6	If you get going again, always put your helmet and seatbelts back on before you set off. Even if you are now in a slow convoy.

If you encounter a serious incident (possibly an SOS board displayed) the required procedure is the first competitor stops to protect the scene and the second proceeds to the next radio point.