

Radio Marshals' Handbook



Foreword

This handbook is intended to provide a 'helping hand' to Radio Marshals; it is not designed to be a rule book.

It is a working document and is open to revision in line with current practices.

It is acknowledged that different rallying areas operate in slightly different ways and this handbook in no way wishes to alter that fact, but it is written to promote 'best practice' to maintain a common basic level of operation.

It is strongly recommended that this handbook should be read in conjunction with **Motorsport UK** publications: -

'Administration, Application & Operational Guide for FM Frequencies' - *The Guide*, as issued to the license holder of your callsign.

'Stage Rally Safety Requirements'.

(Please consult the above document in tandem with this Handbook)

(This can be found on the [Motorsport UK](#) website under the Rally Future banner or follow the link below: - [Motorsport UK - Rally Future](#))

Acknowledgments: -

This handbook has been compiled with the assistance of: -

BRMC

SMMC

Attendees of the BRMC Training days – Radio Training

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Motorsport UK Rally Future – Stage Rally Safety Requirements – Edition 7 February 2025

Useful Contacts:-

Please refer to the latest edition of the **National Competition Rules (NCR)** and the **Motorsports UK website**.

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Overview of the Safety & Medical Communications System.

Before reading the contents of this handbook it would be useful to understand how the system is licensed, administered, and operated.

Ofcom have granted radio communication licenses to the **Motorsport UK** for the following sole purpose: -

'To monitor and report on the safe passage, or otherwise, of competitors through the special stages on events'

Motorsport UK frequencies for the purpose of safety.

The frequencies referred to above are low band, operating at 81.575MHz (**Motorsport UK 1 & 2**) and 81.5375MHz (**Motorsport UK 3 & 4**) in the frequency modulation spectrum – FM and are available to events with a **Motorsport UK** permit, for safety purposes, throughout Great Britain. (The Irish Republic has its own separate system).

As a compliment to the **Motorsport UK** safety frequencies above, the Scottish Motorsport Marshals Club (SMMC) have, independently, licensed a radio frequency (69.5500MHz FM) for the purpose as described in the overview above. The use of the SMMC frequency is restricted, by license, to Scotland and the following OS Grid areas NT, NU, NY and the northern half of SD. Its use is NOT permitted outside these areas.

Radio marshals who regularly attend events in the above areas and would like to use this additional frequency should contact the SMMC for details.

Please note that your existing '81' aerial will not be compatible with the '69' frequency. A new aerial trimmed to the correct wavelength will be required.

You should be aware that the SMMC frequency is licensed for 25 Watts Effective Radiated Power (ERP) whereas the **Motorsport UK** frequencies are licensed to a maximum of 10 Watts. Using 25 Watts ERP in conjunction with the **Motorsport UK** frequencies will contravene the **Motorsport UK** license and should not be attempted.

Likewise, if the radio set you use for either of the above frequencies also contains a licensed UK General frequency, you should be aware that UK General frequencies are limited to 5 Watts ERP.

Many radio sets have only two power band settings therefore in your own interests please ensure that you are always operating within the terms of the lower power licenses.

The parameters and guidelines for the use of the above frequencies by, Radio Marshals, can be found in this handbook. The parameters and guidelines should be adhered to when using any radio frequency for safety purposes on any event that has a **Motorsport UK** permit.

Use of the Frequencies

The above is the licensed purpose of the frequencies, but it is also used for general administration purposes and the monitoring of the Officials and Marshals on an event as well as the spectators, however this additional use MUST NOT compromise the licensed purpose of the frequencies.

The essence of good communication is - **CLARITY, BREVITY AND ORDER.**

The frequencies can only be used as follows: -

1. For safety purposes on events which hold a **Motorsport UK** Permit
2. For the genuine checking of the equipment itself

3. For training purposes which have been approved by your Regional Radio Co-ordinator

Sub licenses to use the **Motorsport UK** Safety & Medical frequencies are issued by **Motorsport UK**. The process commences with an application to **Motorsport UK** by a motor club. The motor club will approach a radio equipment supplier and pass the suppliers contact details to **Motorsport UK**. **Motorsport UK** will then provide the supplier with a specification to which the radio equipment is to be supplied to and request that once the radios have been built to the specification, the radio supplier provides **Motorsport UK** with a Certificate of Conformity. Once this has happened **Motorsport UK** will issue the motor club with a sub license to operate the frequencies and advise the appropriate Regional Radio Co-ordinator.

Regional Administration and Management

The Safety & Medical frequencies are licensed exclusively to Motorsport UK by Ofcom and are administered and managed, on a regional level, by a system of **Regional Radio Co-ordinators** and **Advisors** who are appointed and licensed by **Motorsport UK**. These individuals will provide guidance, support and training to event organisers, motor clubs, radio marshals and anyone else who requests it.

Motor Club Administration and Management

The use of the frequencies is further governed as follows.

Each Motor Club nominates an individual who applies to **Motorsport UK** for a sub licence to use the frequencies under a Callsign which is unique to that Motor Club. This person is responsible for ensuring that all their Motor Clubs radios are maintained and operated as per the terms of the licence. This includes ensuring that each radio is checked, by a qualified radio engineer who is aware of the unique specification the radio has been built to, on a regular basis, say, at least once every five years and that each member of that Motor Club uses the radio equipment correctly and within **Motorsport UK** Guidelines.

Event Administration and Management

The responsibility for organising the safety radio scheme for an event is delegated by the Clerk of the Course to the Event Safety Officer who, in turn, may call upon the local Regional Radio Co-ordinator and/or the Radio Controller for that event to assist them with this task.

The task, put simply, is to ensure that on all the competitive sections or stages used, the safety radio locations are pre-determined being approximately 3 miles apart. These pre-determined radio locations, after agreement with the relevant Stage Commanders, are now deemed as 'mandatory' radio locations and are incorporated into the Event Safety Manual and the Competitors Roadbook. The task is completed by ensuring that all these 'mandatory' locations **MUST** be manned on the day of the event to provide the optimum safety radio cover. Further radio locations will be identified as supplementary to the mandatory locations and do not need to be shown in the Event Road Book(s) but should appear in the Event Safety Plan.

During this planning process the feasibility of operating radio control from rally HQ will be explored, using the appropriate technology where necessary. If this is not possible a remote radio location will be used with good communication links back to rally HQ. If a remote-control location is used, it is ideal for the Clerk of the Course or their Deputy to be present. (Refer to Stage Rally Safety Requirements -SRSR's – Section 2.5 The Clerk of the Course – 2.5.3)

The stage radios are only a part of the overall radio scheme/network. Other components of an event radio network will include the following, but may include others: -

Event Officials

- Non-Travelling
 - Rally Headquarters – Clerk of the Course – **Motorsport UK** appointed Steward
- Travelling

- **Motorsport UK** Safety Delegate - Event Safety Officer – Chief Medical Officer – Club Stewards – Equipment Crews

Course/Safety Cars (* Closed Road Events)

- Treble Zero – Double Zero – Zero – Intermediate Car(s) – *Road Closed Car – *Road Open Car - Sweeper Car

Stage Officials

- Stage Commander – Deputy Stage Commander – Stage Safety Officer – Doctor/Paramedic
- Rescue Unit – Recovery Unit – Sector Marshal – Radio Marshal

The regulations regarding the use of radio communications on rallies are within the National Competition Rules (NCR).

You should be aware that there could be several other radio networks in use on an event which may include: - Event Management - Competitors to service crews – Results - Private Mobile Radios (PMR) – Forestry Commission/NRW St. John’s Ambulance - Positive tracking – Media - Mobile phones - National emergency services - Car park security – local radio – local TV etc.

These additional frequencies could have a detrimental influence on the event **Motorsport UK** Safety & Medical radio network and where possible safety radios should be positioned away from users of these other frequencies.

Radio Control.

The function of the event Radio Control is to ensure that the radio network operates within the **Motorsport UK** guidelines and that there is a free flow exchange of information between the various users within each event radio network.

The regulations state that, amongst other requirements, each rally event which utilises radio communications for safety purposes and has a **Motorsport UK** permit, should incorporate all the basic users detailed above but **MUST** be controlled by a **Motorsport UK licensed Radio Controller**.

As the Safety & Medical frequencies operate on a simplex system, (*i.e. only one radio can use the frequency at any given time, if two radios transmit simultaneously, they will interfere with each other and only interference noise will be received*), it is essential that transmissions are controlled to prevent this interference from happening.

Radio Controllers are experienced radio operators with a good knowledge of rallying and who have successfully completed the **Motorsport UK**’s Radio Controller’s licensing program.

Where an event uses multiple **Motorsport UK** radio frequencies, each frequency must have a separate control with its own licensed controller and scribe.

Where multiple **Motorsport UK** Safety frequencies are in use on the same event there should be a system of exchanging information between each of the controlling teams plus the event decision makers in Rally Headquarters (RHQ).

Where a separate frequency is used for the administration and management of the event, consideration should be given to providing an interface between this system and the **Motorsport UK** Safety radio network(s) in use.

An overall consideration should be given, in accordance with the **Motorsport UK** Stage Rally Safety Requirements (SRSR’s), to combine the safety communications control function within RHQ. (Regional Radio Co-ordinators can advise about how this can be achieved).

Where positive tracking networks are in use there should be an interface between this system and the **Motorsport UK** safety radio network(s) in use.

Training

This handbook will try to clarify the role of a **Radio Marshal** by providing information regarding the operation of the radio system used to monitor and report on the safety aspects of each rally event.

The role of the Radio Marshal is an important one. Theory should be supplemented by hands on experience to gain the correct knowledge.

Marshals new to rally radio are encouraged to attend an event in the company of an experienced radio marshal (on event training) to gain an understanding of how the Safety & Medical Communications system operates, before attending an event unsupervised.

A novice radio marshal will usually be utilised as a mid-point (in stage) radio gradually gaining experience to progress to the more involving locations at stage starts and stage finishes.

It is advisable for radio marshals to attend at least one Radio Training Day per year.

Training is available on a national level, details of which can be found on the **Motorsport UK**'s website, but training sessions can be organised through your own club with the assistance of a **Motorsport UK** Licensed Trainer or your Regional Radio Co-ordinator.

Once a Radio Marshal becomes an accomplished and experienced Radio Marshal, they can then apply to **Motorsport UK** to train to become a licensed Radio Controller.

The **Motorsport UK**'s enhanced safety initiative, Stage Rally Safety Requirements, requires that radio teams should consist of two **people** and that one member of each radio team must have completed the **Motorsport UK** Marshal Accreditation.

Stage Radio Requirements.

The inception of the Stage Rally Safety Requirements (SRSR's) has defined the above in greater detail can be found in that document within Section 4. Stage Radio Requirements & Communications Plan.

For clarity, in this document, the definition of the following three categories has been reproduced below.

Mandatory Radio Points.

4.10 Mandatory Radio Points should ideally be staffed by two or more people and are defined as follows:

- 4.10.1 Radios at the Start and Finish of each stage. These must be shown in the safety plan and road book but do not require radio boards to be displayed. They do not require RED flags.
- 4.10.2 The Start and Stop radio positions should be located in a safe position and able to provide direct communications Rally Control. Priority should be given to the safe running of the event and consideration should be given to siting of these locations and this may necessitate the shortening of the stage route.
- 4.10.3 Radios located at intermediate safety points and at a shortcut re-join junction that safety vehicles may use. These locations must be shown in the safety plan and road book as well as having radio boards in place on the stage route. These locations must have a RED flag available to be displayed, when required, by a marshal wearing an appropriate tabard at that location.
- 4.10.4 Radios needed to comply with the **Motorsport UK** requirement for approximately 3 miles between radio points. These locations must be shown in the safety plan and road book as well as having radio boards in place on the stage route. All these locations must have a RED flag noting NCR Ch. 13 App. 2 Art. 4.17
- 4.10.5 RED flags must be displayed and withdrawn only on the instruction of either the Stage Commander or the Clerk of the Course.

(These Mandatory Radio Points MUST be manned on the day of the event for the stage to run)

Main spectator area Radios.

4.11 These radio marshals do **NOT** need to see the competitor numbers and should be located to keep their eye on the spectator area. These locations must be shown in the Safety Plan but are not required to be shown in the road book or have radio boards. They do **NOT** require red flags unless they coincide with locations in 4.10.3 or 4.10.4 above.

Supplementary Radio points.

4.12 Supplementary Radio Points (not mandatory) should ideally consist of two or more marshals.

- 4.12.1 These points are located throughout the stage as required by the event, **signage is not required** and they do **NOT** need to appear in the road book.
- 4.12.2 Their location and details should however be listed within the safety plan. They do not require RED flags. As these locations are NOT included in the road book, they do not all have to be staffed in order for the stage to run.

- 4.12.3 *The primary role of the Supplementary Radio is to ensure that the event is running smoothly and that any incidents or missing vehicles at/or near their location can easily be found and/or reported on. They are also often responsible for reporting spectator issues or with supporting marshals if needed.*
- 4.12.4 *Supplementary Radios may also keep a log of the competitors that pass their location in order that they can ascertain whether specific cars have or have not passed their location. Their role is therefore vital to manage incidents and to the safe running of the event.*

Please refer to section 4 of the current edition of the Stage Rally Safety Requirements (available on the Motorsports UK website) for the complete set of information regarding radio marshalling.

Manpower.

The salient points below, in relation to radio car crews, have been extracted from the current edition of the SRSR's:-

*'A radio car crew must consist of two marshals comprising a Radio Operator and a Radio Marshal'.
'At least one member of the radio car crew must have completed the Motorsport UK Marshal Accreditation'.
'All Radio Marshals may be required to assist with event management issues such as vehicle incidents and spectator management as needed so they should be prepared for outdoor work as well as in car duties.'*

Further clarification is detailed regarding the Marshal duties of the radio car crew: -

Mandatory – The Radio Operator is NOT included in the 'Predicted Marshal' numbers whereas the Radio Marshal is. The Radio Operator must always remain with the radio whilst the stage is live.

Supplementary – Both occupants of the radio car at a supplementary radio location are classed as marshals and included in the 'Predicted Marshal' numbers.

Tracking – Occupants of these vehicles are NOT included in the 'Predicted Marshal' numbers.

Single staffed radio cars.

Although the SRSR's state that, ideally, radio cars should consist of a crew of two people, there is no 'ban' on single staffed radio cars.

It is recommended that to satisfy the SRSR's, radio operators who are attending an event on their own should advise the event organisers of that fact. This will allow the organisers to arrange for a 'Buddy' to accompany them or allocate marshals to the post/junction which has been allocated to the single staffed radio.

EMF Radiation.

We should also respect the 'safety' of persons who may be close to the radio and aerial when the frequencies are in use.

Ofcom have introduced a condition to the Motorsport UK Licence of the Safety and Medical Frequencies in relation to the exposure to EMF Radiation when radios are transmitting. Motorsport UK has updated the SRSR's to include the following.

4.9.1 To manage radiation from radio transmissions, all Motorsport UK licensed radios have been issued with warning notices to be displayed prominently on the vehicle carrying the radio. This is particularly important in busy areas such as Stage Starts, Service and Spectator areas. If using a hand-held radio, keep messages as brief as necessary.





Travelling Officials

Event Organising Team



Safety Cars

Road Closed Car (Closed Road Events)

000

00

Motorsport UK Safety Delegate

0

Sweeper (formerly Course Closer)

Road Open Car (Closed Road Events)



Stage Start

Stage Commander

Stage Spectator Safety Officer

Stage Doctor/Paramedic

Stage Rescue Unit

Stage Recovery Unit

Start Radio Marshal



Stage Finish

Deputy Stage Commander

Finish Radio Marshal

Radio Marshal

81.5375FM Chnl 1

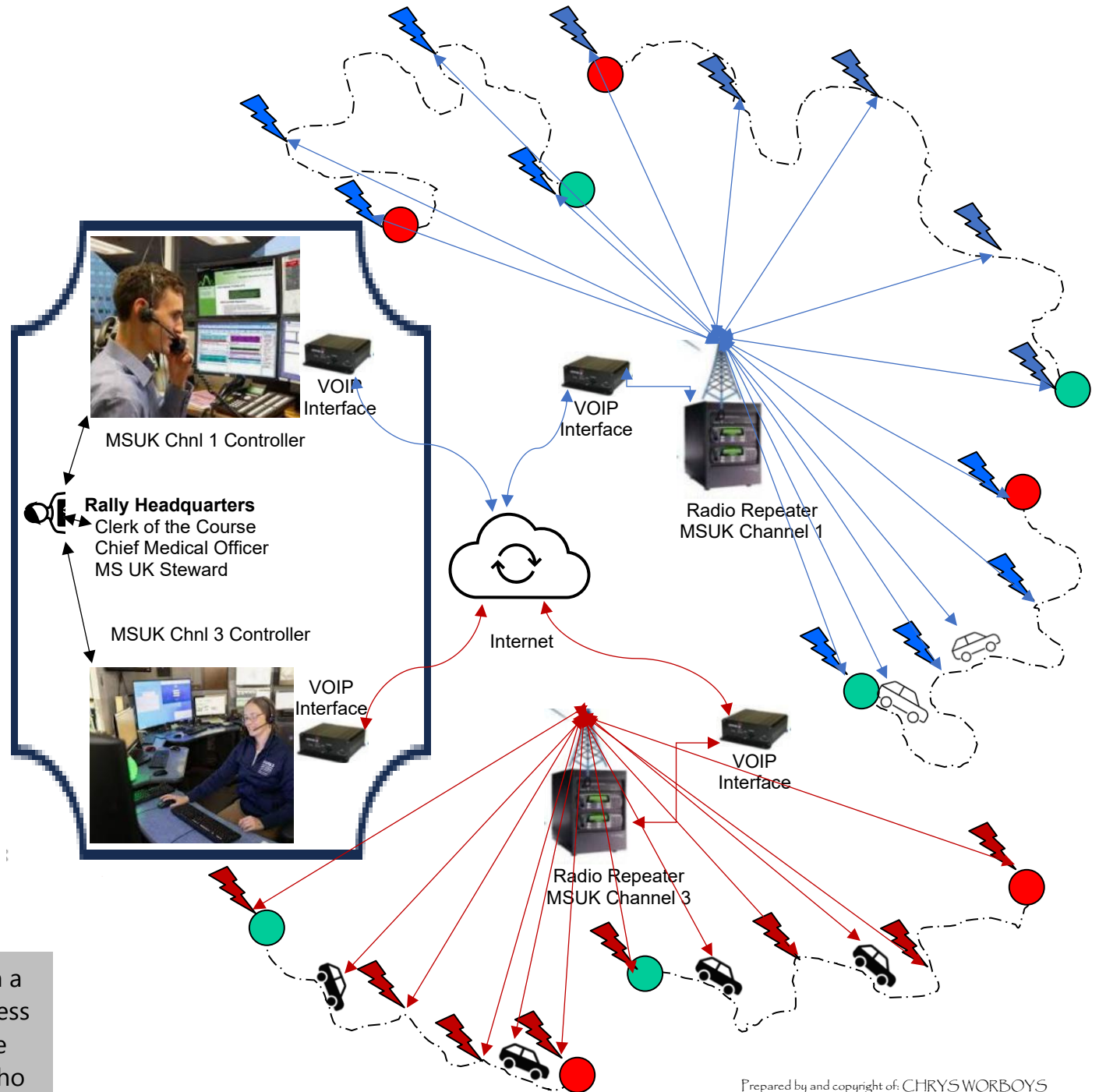


Chnl 3



Radio Communications / Organisation Interface

NOTE: The above graphic results in a minimum of 70+ people able to press the microphone button at the same time, hence the need to 'control' who talks and when.



Radio Marshals' Handbook

1. Radio Marshal Memory Jogger

The notes below are set out in the order they would chronologically happen and are intended to be a memory jogger rather than a definitive list.

(If you plan to attend events regularly it would be useful to assemble a 'Rally Box' which should contain all your event essential items.)

The **Motorsport UK's** enhanced safety initiative, Rally Future/Stage Rally Safety Requirements, requires that you should be prepared to assist with event management issues which may involve on stage activities outside your vehicle therefore you should be prepared for this. The notes below will help you prepare for your on-event duties.

1.1 Pre-Event.

It is recommended that you regularly check your radio equipment. This check should include checking the power cables, leads and connections to speaker (if you are using a separate speaker), aerial, microphone. Also check the microphone PTT operation and finally check that your radio set is operating as it should by arranging a local radio test.

All this should be done at least one month prior to the event you intend to assist on. This will allow for the rectification of any problems discovered before you leave for the event.

Close to the date of the event, access the events website to check the latest information available including an entry list.

Make sure before you leave home for the event you:

Let you nearest and dearest know when you expect to be back home.

Know which of the two Motorsport UK Safety & Medical Frequencies you will be using. (If you are operating on more than one stage, ensure that you know which frequency each stage is using.)

Always remember to take what you need with you. It is a particularly good idea to 'over cater' as you may be away from home for longer than you think. Listed below is a suggested, but not exhaustive list: -

i) Personal items

Warm clothes (*Jumper, thick socks, gloves, scarf, woolly hat etc.*), tabard or reflective clothing waterproof coat and leggings. strong boots, change of clothes, personal medication, glasses/contact lenses, food & drink. *(As a rule, take enough provisions for one meal more than you would normally allow for)*

ii) Equipment & Documentation

81 Radio(s) and aerial(s), EMF warning notice, mobile phone, PMR radios, whistle, torch & spare batteries (Head torch preferred), watch or clock, pens and pencils, plain paper or notebook, competitor check sheets, incident report forms, Sat Nav, OS Map or road atlas. *(These items form the basic 'Rally Box' contents).*

iii) Event Documentation

Acquired pre-event or at signing on: -

Completed signing on form (supplied pre-event by email), Stage Safety Plan, entry list *(may be available on the event website prior to the event)*, time schedule, competitor check sheets *(do not rely on being provided with event specific check sheets)*

iv) Vehicle & Travelling

Check that your vehicle is up to the task.

Make sure you know where you are going and what time you are required to be there. Under the requirements of the **Motorsport UK** Guidelines, it is essential that you arrive at your signing on point in sufficient time to sign on or hand in your pre-signed form, receive your briefing, if not already received and get up to date information plus any 'goodies' and be at your designated stage location well before the predetermined time of the stage Radio Check. REMEMBER to switch your set on to the channel you will be using before you leave home to monitor transmissions, appraising yourself of what is happening on the event.

DO NOT USE EITHER OF THE **Motorsport UK** SAFETY & MEDICAL FREQUENCIES AS A CHAT CHANNEL.

2. On Event

2.1 General

Once you arrive at your stage start ALWAYS REMEMBER TO SIGN ON OR HAND IN YOUR PRE-SIGNED FORM, IF YOU HAVE NOT ALREADY, ENSURE THAT YOU RECEIVE A BRIEFING FROM THE STAGE COMMANDER AND GET UP TO THE MINUTE INFORMATION before you commence your event duties.

IF YOU DO NOT SIGN ON YOU ARE NOT COVERED BY THE EVENT INSURANCE.

It could be useful to synchronise your watch/clock with the event start clock so that you have 'Rally Time' available. Remember, arrive at the stage start in good time as outlined in **1.1 iv) Vehicle & Travelling** previously.

*(There is a stage travelling time schedule, **Appendix iv** at the back of this booklet to assist in calculating how much time to allow.)*

IMPORTANT: Unless directed otherwise by the Stage Commander you are required to park at least 30M from the stage route.

i) Radio Operation

You should be aware that there are various physical factors that will influence the efficiency of your radio reception and transmission. These factors may include: -

- | | |
|--------------------|--|
| Man-made; | High tension cables – electricity generators – computer centres – hospitals – radio transmitters - Other 'on event' radio networks |
| Natural phenomena; | Weather – cliffs – steep banks – trees – iron ore deposits – water |

Manmade obstacles can be overcome by relocating your position, if possible. If the interference is coming from another radio, ask them, in the interests of the event safety, to relocate. Natural phenomena can sometimes be negated by moving, but usually it is a case of working with what you have.

You should also be aware of the operating specification of your radio in relation to the length of message transmissions. The specification of your radio includes a thirty second time out function. This means that 30 seconds after the PTT button is triggered and the set begins to broadcast, it will 'time out' and the transmission will cease. This system is a fail-safe, which allows the radio network to be useable again 30 seconds after a PTT is triggered accidentally.

During normal operation it is very unlikely that your message will be longer than 30 seconds. This time period is usually more than sufficient time to pass your message. To assist in getting your message through, write it down before you transmit it. This will help if you need to repeat all or part of your message.

If you have an exceptionally long message to pass, keep transmitting until you hear the first 'Beep' then say 'Break', release the PTT, pause, then continue your message.

DO NOT BE TEMPTED TO PUT A 'BREAK' INTO YOUR MESSAGE IN ANTICIPATION OF THE TIME OUT – this wastes time.

The specification for **Motorsport UK** licensed radio equipment allows each set to be configured with channels as follows: –

- a) **Motorsport UK 1** (10 Watts ERP) – 81.575FM
- b) **Motorsport UK 2** (10 Watts ERP) – 81.575FM
- c) **Motorsport UK 3** (10 Watts ERP) – 81.5375FM
- d) **Motorsport UK 4** (10 Watts ERP) – 81.5375FM

Motorsport UK 1 & UK 2 use as the same frequency as each other as does, UK 3 & UK4 but are separated using unique tones per channel. These tones are configured to allow Motorsport UK 1 to be separate from Motorsport UK 2 and Motorsport UK 3 to be separate from Motorsport UK 4

To understand the above, consider the tones as being two unique keys. The key for **Motorsport UK 1** will only unlock the sets on **Motorsport UK 1**. Likewise, for **Motorsport UK 2**, **Motorsport UK 3** and **Motorsport UK 4**.

i) Radio Operation cont'd.....

The broadcast of these tones occurs as soon as you press the PTT button. This tone burst lasts for only a few milliseconds but during the burst nothing else will be transmitted, therefore it is **IMPORTANT** to observe the following operating procedure: -

Press the PTT – PAUSE...(2 seconds)... then speak.

(If the radio network is using a repeater, pause for 4 seconds)

This procedure will negate the need for control to ask you to repeat the first part of your message.

REMEMBER TO LISTEN TO YOUR RADIO AT ALL TIMES. DO NOT BE TEMPTED TO LISTEN TO ANY FREQUENCY OTHER THAN THE ONE YOU ARE SCHEDULED TO USE ON THE EVENT.

ii) The Radio Check

Purpose – To ensure that there is a radio marshal at each mandatory radio location on stage and that they have contact with the radio controller, either directly or through a nominated link or relay. Also, to establish contact with any supplementary radio marshals, Rescue & Recovery crews, Doctor/Paramedic, Stage Commander and Stage Safety Officer.

The radio check should also establish which radios are single manned, who requires a Red Flag and how many marshals are at each location on the stage and where spectators are.

To be effective a radio check should take place no later than 60 minutes prior to the first competitor starting the stage and preferably prior to the first Safety Car into the stage.

The correct response to a radio check initiated by Control is as follows: -

Control this is (your callsign) at (your junction/location)

Receiving you at strength (1 to 5).

This radio is (double/single) manned and I have (number) marshals at this location, (and if required) and (number) of spectators.

I have a Red Flag (if this is applicable)

The definitions of the received signal strength are as follows: -

- | | | |
|----|------------|---|
| 1. | Unworkable | - no voice |
| 2. | Marginal | - poor voice reception |
| 3. | Workable | - voice heard but with background interference. |
| 4. | Workable | - good reception with little interference |
| 5. | Workable | - good loud and clear reception |

If your contact with control is between signal strength 1 to 3 then try moving your position slightly within your location and call control again. Repeat this action until you have improved your signal, or you have exhausted all your alternatives. If there is still a problem with contacting control, check all your radio equipment connections, if this does not improve matters call a radio marshal you can hear and ask them to act as a relay for you.

Once your stage radio check is underway, note down where each Callsign is located on your stage and transfer this to your stage plan. Doing this will provide you with a clear picture of who is where on your stage.

iii) Faults

Make sure that you are familiar with the operation of your radio equipment. If you suspect your radio is not operating correctly, inspect **ALL** connections – power, fuses, microphones, aerials, speaker leads, set controls etc. If your set has power but you have heard nothing, do not assume that the transmit function is not operational. In an emergency transmit your message three times – it may well be heard; at worst your ANI code will be received so control will know you are calling and suspect that you may be experiencing difficulties.

iv) Handheld Radios

Handheld units are more commonly used in flat, clear areas such as Camps, Airfields, etc. These units can be low powered and are less efficient in Forests. *(The short-range operation of these units makes them ideal as a link between radio marshals who may be required to be separated i.e., to act as a remote stage observer or when asked to investigate a potential incident. PMR radios are especially useful for this)*

v) Start Radio Marshal

Signing On

If you are advised that you are to be the start radio, try to arrive at the stage early. Seek out the Stage Commander and offer to register the attendance of the radio marshals for his/her stage. This should speed up the signing on process and will provide you with the exact details of which radio is where on your stage. If you do this, ensure you have all the latest information and documentation from the Stage Commander and you have the required number of marshal's incentives to hand out. Once radio marshals have signed on or handed their completed signing on form to you and received their information and 'goodies,' ask them to move to their stage location.

Meet & greet

When you take up your start radio marshal duties, introduce yourself to the start marshals and arrange how the necessary information is to be passed between yourselves. Remember to keep the Stage Commander and Stage Safety Officer up to date with all the information regarding the running of their stage.

Personal and Third-Party safety

Remember to park safely and if you must move around the start area be aware of where you are in relation to the competitors.

REMEMBER to display your EMF warning sign.

Competitor checking

Check with the start marshals which previous competitor checking system is in use and agree a system between yourselves of how information on missing competitors advised by the finish radio will be handled.

Radio check

Respond to control as per the instruction under Section 2, (ii) The Radio Check.

Your radio controller may request details of the radio marshals as signed on, if this does not happen, volunteer to pass the details you have recorded regarding which radio callsign is where on your stage. Include ALL radio callsigns on stage including supplementary radios, Doctor(s)/Paramedic(s), Rescue Unit(s), Recovery Unit(s) and any additional radio callsigns you may have.

Safety Cars

When the Safety Cars begin to arrive at your stage start make a note of their designation and vehicle make, model and colour. Pass these details and the time that each Safety/Course Car enters the stage to your radio controller when appropriate.

Before the Safety Cars enter your stage update each one with any new information you have regarding your stage. For closed road events the Road Closed vehicle is classed as a Safety Car.

Competitors

When competitors begin to arrive record the number of the first competitor to enter stage and the time it entered the stage. Transmit this information to control when appropriate.

Record the entry of all subsequent competitors into stage on your competitor check sheet with times.

Closing

When the Sweeper Car arrives at your stage start, establish the following from your competitor check sheet: -

Total number of competitors to enter the stage.

Last three competitor numbers to enter.

Time of last competitor to enter (*from the start timekeepers*)

When appropriate transmit this information, along with the entry time of the Sweeper Car, to your radio controller.

Before the Sweeper Car enters your stage update the Sweeper Car Crew with any information regarding your stage especially information concerning any known retirements and their locations on stage. **(For closed road events there will be a Roads Open vehicle following the Sweeper to indicate that the public road is now 'open' for public use – you should not move until after this vehicle has passed you).**

Temporary stage stoppages

If your stage should be temporarily held/stopped then your controller will require the same competitor information as if the stage was closing. If the stage is restarted, then your controller will require the details of the first competitor to enter the stage after the temporary hold/stoppage.

vi) Mid-Point Radio Marshal

Meet & greet.

Introduce yourself to the marshals and/or spectators at your location. Keep them informed with the general information regarding the event being very careful not to divulge any information regarding incidents or any other information which is of a sensitive nature.

A good rapport with those around you will provide you with an additional resource of helpers which could be useful. If you are allocated a 'Mandatory' radio location, please check that the relevant yellow and blue radio boards are in place at your point and that you are in possession of a RED FLAG. If you do not have a RED FLAG, make sure you advise control.

Personal and Third-Party Safety

Remember that your own safety is paramount. Park where you and your property will not be at risk. For instance, avoid parking below the level of the stage, in head on positions, on the outside of bends or close to the apex of bends. REMEMBER THE 30M RULE.

If you consider it is too dangerous to remain at your allotted location, advise your radio controller stating the reasons why you consider it unsafe. If you are at a mandatory radio location and are given permission to re-locate, ask your controller if they require you to re-locate the junction radio boards.

If you are asked to investigate an on-stage incident, ALWAYS remember to do so taking your own safety into account.

Once parked safely, take time to survey your surroundings and then prepare your paperwork.

REMEMBER to display your EMF warning sign.

Radio check

When requested to do so respond to the radio check in the manner described in Section 2, (ii) The Radio Check.

If during the radio check you hear a radio responding that your controller does not, at the end of the radio check advise your radio controller accordingly and offer to act as a link for the radio control cannot hear.

Safety Cars

When the Safety Cars pass your location, note down their designation, vehicle make, model and colour and the time that they pass you. Maintain this information on your competitor check sheet BUT do not include the Safety Cars within the total number of cars past your location.

For closed road events the Road Closed vehicle is classed as a Safety Car.

Competitors

As with the Safety Cars note down each competitor number as it passes your location and if possible, note the time each one passes. If you are having trouble in reading the competitor numbers, arrange for someone to stand in a safe location closer to the stage in order to call out the numbers to you. If this is not possible, note on your check sheet that a vehicle has passed by putting a mark in the appropriate box on your check sheet thereby maintaining the total number sequence of competitors past your location. If possible, note down the make, model and colour of the numberless vehicle or any other unique marking.

Closing

When you hear that the Sweeper is about to or has entered your stage carefully audit your competitor check sheet to determine how many and which competitors have passed your location.

If you have any written reports to be transferred to the Clerk of the Course, make sure you advise your controller so that he/she can inform the Sweeper Car and ask them to stop at your location to collect same.

Hopefully you will have received information as to what to do when the Sweeper Car passes you. In all events you MUST remain on location until the Sweeper Car passes or until you receive an instruction from the Organisers of the event that there is no Sweeper Car and that you are free to stand down. **(For closed road events there will be a Roads Open vehicle following the Sweeper to indicate that the public road is now 'open' for public use – you should not move until after this vehicle has passed you).**

In most cases you will be asked to dismantle the stage furniture at your location and either pile it at the side of the stage or take it to the stage finish.

Temporary stage stoppages

If your stage is held/stopped, carry out the competitor check sheet audit and be ready to pass the information to your radio controller.

vii) Finish Radio Marshal

Stage travel

It is advisable that the finish radio marshal goes to the stage start to sign on/hand in their signing on form. It is not necessary to travel the entire stage length to the stage finish if there is an alternative route available.

Meet & greet.

Introduce yourself to the marshals at your location and agree how the information gathered at the finish will be transferred between yourselves. Keep them, and the finish location officials informed with the general information regarding the event including any 'on stage' incidents, remembering that discretion will be required.

Competitor checking

Check with the finish marshals which previous competitor checking system is in use and agree a system between yourselves of how the finish marshals will advise you of missing competitors.

Personal and Third-Party safety

Remember to park safely and if you must move around the finish area be aware of where you are in relation to the competitors.

Be aware that competitors will be arriving at the finish line with reduced stopping power, park accordingly.

Once you have parked safely take time to prepare your paperwork.

REMEMBER to display your EMF warning sign.

Radio check

When requested to do so respond to the radio check in the manner described in Section 2, (ii) The Radio Check.

If during the radio check you hear a radio responding that your controller does not, at the end of the radio check advise your radio controller accordingly and offer to act as a link for the radio control cannot hear.

Safety Cars

When the Safety Cars arrive at your location, note down their designation, vehicle make, model and colour and the time that they arrive at the stage finish. Maintain this information on your competitor check sheet.

Either through the finish marshals or through your own efforts ask each Safety Car crew for any comments regarding the stage and pass any relevant information to your controller.

Competitors

When competitors begin to arrive, record the number and time of the first competitor to complete the stage.

Transmit this information to control when appropriate.

Record the arrival of all subsequent competitors at the stage finish, with times, on your competitor check sheet.

If you hear that a competitor is missing on your stage, ask the finish marshals to question each competitor arriving at the stop line the location and competitor number of any competitors they have seen stopped in the stage.

Closing

When you hear that the Sweeper is about to or has entered your stage, establish the following from your competitor check sheet: -

Total number of competitors to exit the stage.

Last three competitor numbers to exit.

Time of last competitor to exit (*from the finish timekeepers*)

When appropriate transmit this information plus the competitor number(s) and location(s) of any known retirements, along with the arrival time of the Sweeper Car, to your radio controller. **(For closed road events there will be a Roads Open vehicle following the Sweeper to indicate that the public road is now 'open' for public use – you should not move until after this vehicle has passed you).**

Temporary stage stoppages

If your stage should be held/stopped then your controller will require the same competitor information as if the stage was closing. If the stage is restarted, then your controller will require the details of the first competitor to exit the stage after the hold.

viii) Main Spectator Area Radio Marshal

Meet & greet.

Introduce yourself to the marshals and/or spectators at your location. Keep them informed with the general information regarding the event being very careful not to divulge any information regarding incidents or any other information which is of a sensitive nature.

A good rapport with those around you will provide you with an additional resource of helpers which could be useful. It is especially important to arrive at your stage location early, before the spectators begin to arrive.

Personal and Third-Party Safety

Remember that your own safety is paramount. Park where you and your property will not be at risk. For instance, avoid parking below the level of the stage, in head on positions, on the outside of bends or close to the apex of bends. REMEMBER THE 30M RULE.

Once parked safely, take time to survey your surroundings and the designated spectator area.

REMEMBER to display your EMF warning sign if you are working from your vehicle.

Radio check

When requested to do so respond to the radio check in the manner described in Section 2, (ii) The Radio Check.

If your controller does not call you, once the radio check is completed, call control and advise them of your presence and duties.

Spectators

Your primary duty is to monitor and report on the status of the spectators.

If a situation arises which threatens to compromise the safety aspects of the stage, inform radio control prior to assisting your marshals.

Safety Cars

Remember that in cases where you have a spectator issue prior to competitors entering the stage and you need assistance, you can request a Safety Car to stop at your location by contacting control or indicating your need to an approaching Safety Car by facing the car and crossing your arms above your head. (See graphic on page 22 Section 2.2 ii))

Competitors

As mentioned above, your primary duty is to the spectators.

There is no requirement for you to monitor the competitors, however, should a competitor have an incident at your location, you will need to report this to control.

Closing

Hopefully you will have received information regarding what to do when the Sweeper Car passes you.

In all events you **MUST** remain on location until the Sweeper Car passes or until you receive a different instruction from the stage commander or the event organisation. **(For closed road events there will be a Roads Open vehicle following the Sweeper to indicate that the public road is now 'open' for public use – you should not move until after this vehicle has passed you).**

Ensure that ALL spectators leave the area by the spectator routes and NOT via the stage.

In most cases you will be asked to dismantle the stage furniture at your location and either pile it at the side of the stage or take it to the stage finish.

Temporary stage stoppages

If your stage is held, advise the spectators that the stage is temporarily held, being careful not to impart any 'sensitive' information.

When you hear that the stage has re-started, inform the spectators. (Spectators are easier to 'manage' if they are kept up to date).

If you are advised that the stage has been stopped and will **definitely** not restart, advise the spectators and follow the 'Closing' procedure above.

ix) Competitor Checking Systems

There are several systems for checking the progress of competitors through a special stage but hereunder are the four most popular.

Previous Car Number

This is perhaps the most popular paperwork-based system.

As you are aware each competitor has a set of timecards for an event, part of which are specific cards for each special stage. Each set of cards will carry the individual competitor's number and, on each sheet, will be a blank box labelled 'Previous Car'. As each competitor enters a special stage, the competition number of the preceding competitor will be entered into the 'Previous Car' box on the competitors' timecard.

Upon a competitor's arrival at the stage finish the finish marshal will record the arrival of that competitor and check that the competition number of the car to arrive in front of this competitor matches the number as recorded in the 'Previous Car' box on the timecard. If there is a discrepancy, the finish marshals should advise the finish radio of the details.

There is a draw back with this system.

Competitors 1, 2, 3 & 4 enter the stage. The previous cars for competitor 1, would be the zero car, competitor 2 would be Comp. 1, for competitor 3, comp. 2 and for competitor 4 the previous comp. would be No.3. The zero car, comp 1 and comp 4 all arrive safely at the stage finish. We know from competitor 4 that the previous car was competitor 3 so we are automatically aware that No 3 is missing. However, as competitor 3 has not arrived the information that comp. No 2 was previous to him is lost and the finish are not aware that competitor No. 2 has started the stage and may be in difficulty.

RS29B:
SS30 : Falstone 2

CAR No.
26

Hr Min

TC29B

0 10

TC30

Provisional Start Time

Actual Start Time

SS30

Sec

PREVIOUS CAR No.
25

SF30

PC30

Carry forward to next page

This card collected at PC30

Page 4.51

Bingo or Cloakroom Ticket

This system employs the use of sequentially numbered tickets. They need not start at ticket number one but must be issued sequentially.

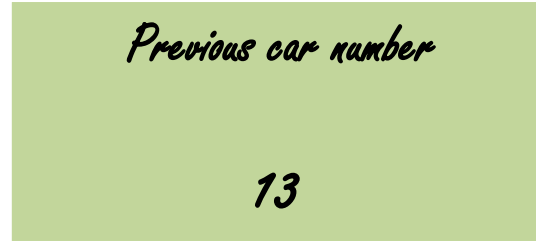
With this system each competitor, usually the navigator, is provided with a 'ticket', for example the first competitor to enter the stage receives ticket number 15. The second competitor to enter the stage will be issued with ticket number 16, the third number 17 etc.

Somewhere on this ticket, usually on the reverse, the start marshal will write the number of the previous car that has entered the stage.

Upon arrival at the stage finish the Navigator will hand the ticket to the finish marshal who will check that the number on the ticket is the number they were expecting and that the previous car number, on the reverse, matches the number of the previous competitor to complete the stage.

Because tickets are issued sequentially it quickly becomes apparent at the finish if more than one competitor is missing.

The only drawback with this system is that tickets can get misplaced by the competitors and the information is then lost.



Positive Reporting

This system relies on an additional radio system being used in parallel to the Safety & Medical frequencies. (Some events do try to run a positive reporting system on the **Motorsport UK** Safety & Medical frequencies, but the process becomes compromised when an Incident locks down the operation of the S & M frequencies).

Positive reporting radios are located at each stage start, finish and at roughly 5Km points along the stage route with a controller based, usually, somewhere within the stage or in such a location that they can communicate with all the positive tracking radios on the stage. These radios operate on separate frequencies per stage to avoid interference. The process commences with the start radio announcing the departure of the first competitor into stage. Further announcements are invited from the start by the stage controller usually comprising of competitor numbers in batches of three or five numbers. After the controller receives the information from the start positive reporting (PR) radio, they will ask the first mid-point PR radio which competitor numbers have passed that location. They will then ask the second mid-point PR radio for the same information and continue through the stage culminating with information gained from the finish PR radio. This process is repeated regularly until all the competitors have entered and hopefully, completed the stage. The information received during these 'sweeps' is recorded by each stage PR radio building up a picture of where each competitor is.

Competitors not arriving at mid-point PR locations are quickly highlighted and this information is passed to the **Motorsport UK** Safety & Medical system for further investigation.

SS	30
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Positive Tracking Check Sheet

	Start	Mid 1	Mid 2	Mid 3	Mid 4	Finish	STA TUS	STAGE NOTES	REP ORT	Start	Mid 1	Mid 2	Mid 3	Mid 4	Finish	
1	1	1	1	1	1	1										1
2	2	2	2	2	2	2										2
3	4	4	4	4	4											
4	5	5	5	5												
5	6	6	6	8												
6	8	8	8													
7	9	9														

Negative Reporting.

Negative Reporting differs to the above systems in that its application is via the MS UK Safety & Medical Frequencies.

In agreement with the MS UK licensed controller, each stage start radio will broadcast to control the competitor numbers who start their stage in the order they started. (These numbers are usually in batches of five for average to long stages and batches of three for shorter stages).

The radio controller will repeat the numbers back out to air so that the relevant stage radios can make a note of the competitor numbers in the order they started the stage.

This process advises every radio on the stage of the competitor starting order i.e.

Mercury Control this is Mercury One, Stage Start, Stage 5. Into the stage we have competitors 1, 2, 3, 5, 6. A total of 5 competitors.

Mercury Control to all radios in stage 5, Competitors into stage after Safety Car Zero are Numbers 1, 2, 3, 5 and 6. A total of 5 competitors.

Subsequent messages would be,

Mercury Control this is Mercury One, Stage Start, Stage 5, Numbers. After car 6 we have competitors 4, 7, 8, 9 and 10. A total of 10 competitors into stage.

Mercury Control to all radios in stage 5, After car 6 we have competitors 4, 7, 8, 9 and 10. A total of 10 competitors into stage.

Keeping a running total of the cars into the stage ensures that it will be quickly apparent if a listening radio has missed a batch of numbers.

Should competitors start arriving at the start intermittently, the start radio should make a judgement call regarding the batch size of the negative tracking messages.

Should an expected competitor not arrive at a stage mid-point, the radio marshal should advise radio control so that a search for the missing car can be initiated.

If the missing competitor is found, control should be advised immediately.

Should an expected competitor not arrive at the stage finish, the finish radio marshal should inform control and make sure that subsequent competitors arriving at the stage finish are asked for any information they may have regarding the missing competitor. Any information received should be passed to control as soon as possible and, if required, with the relevant prefix.

The finish radio marshal should remember that any discrepancies can be double checked against the previous car number system which should be in use at the stage finish.

All users of this system should be aware of the obvious drawback with using the Safety & Medical Frequency for Negative Tracking.

For example, stages one, two and three may be operating on the same frequency.

Stage one then has an 'Urgent' incident requiring a frequency wide message restriction - urgent or above messages only.

This restriction prevents the passing of negative tracking messages on the stages for the duration of its implementation and therefore compromises the system.

Once the restriction is lifted, it can be possible to revive the system on the stages.

For example, stage one start advises control that their next car into stage will be, let's say, car No. 12 which is the eleventh competitor total into stage. Control re-broadcasts this information across the stage. Every radio marshal will be able to check when car 12 arrives that is it indeed the eleventh competitor through the stage. If it is not, then control conducts a stage audit to establish how many cars are missing and their locations.

Competitor Tracking Systems

Advancements in technology have allowed for the development of independent Internet/GPS based Tracking Systems such as those used by commercial transport companies in order to keep track of when and where each vehicle in their fleet is.

Motorsport UK have adopted and modified this facility into a stage rally safety specification, details of which can be found in the Rally Future – Stage Rally Safety Requirement document.

It has a list of approved suppliers who can supply a Tracking System to the pre-determined specification.

Essentially, any system supplied as above should have the capability to monitor competitors and safety vehicles through special stages and provide a visual representation of same which is to be made available to event officials within Rally HQ.

It should also indicate the status of competitors who have stopped on stage i.e. 'OK' or 'SOS'.

A desired part of this system is that direct speech contact can be attained with the any competitor should the need arrive.

As stated above, these systems rely upon available internet bandwidth and GPS coverage, both of which can be variable.

Tracking Systems of this nature are under constant refinement and GPS coverage continues to improve, however, the tried and tested paper systems running alongside Tracking Systems can only augment the overall 'on event' competitor safety and provide a 'safety net' should technology fail.

Tracking Systems do not replace the reliance on the Radio Marshals and the Motorsport UK Safety and Medical Frequencies as the primary source of information from the stages. Tracking Systems are there to compliment the essential work of the Radio operators.

2.2 Incidents

Incidents can be defined as any occurrence which are outside the normal running of the event, such as a report of a competitor contravening the event regulations, spectator problems, livestock on stage, a situation which may result in an injury or injuries.

It is important to remember to start an incident report form as soon as you are advised or become aware of a potential incident as at this point you may not be aware of how serious the situation may develop into and not recording information at this time may result in the loss of significant details.

It is essential that every action noted on the report form is accompanied by the time that action was taken and who undertook the action and its outcome.

(A specimen Incident Report form can be found in Appendix ii at the end of this manual for reference)

Upon completion, the incident report form should be signed and dated and handed to a senior official of the event, usually the Sweeper Car, for forwarding to the Clerk of the Course.

There is no standard design for a report form. Some events provide event specific forms others rely on you being self-sufficient.

i) Information required

If you have witnessed an incident, you will have a photographic image, in your mind, of what you have seen. It is important to realise that you now have the responsibility of re-creating that picture in your controller's mind who in turn has the responsibility of doing the same in other event officials minds, especially the Stage Commanders. You should try and 'paint' your picture, in words, as faithful as you can to your photo image. DO NOT embellish, re-colour or sensationalise your personal image.

If the incident is in stage, the following information will be required: -

- Competitor(s) number
- Location of incident
- Condition of occupants or/and others
- Condition of the vehicle
- Status of the stage
- Contact details for the person making the initial report.

(A quick reference handout can be found in Appendix vi) at the end of this manual)

ii) Action to be taken

If you are the first to arrive at the scene of an incident, your priority is your own safety.

Remember that you are on a 'live' stage and competitors may still be travelling towards you.

Always be aware that you may be approaching an 'electrified vehicle'. (please see Appendix vi - Refer to Annex O – First Competitor on Scene in the Rally Future – Stage Rally Safety Requirements document).

If possible, put a lookout in place.

You should then assess the scene and take note of the information required, as above and either make a report in person to your nearest radio marshal or arrange for someone else to make that report whilst you, or someone you designate, protects the incident site.

REMEMBER, competitors could be arriving at the incident site shortly who you can stop to assist you, if required.

The Stage Rally Safety Requirements (SRSR's) provides further information, but specifically how to advise Safety Cars and competitors of your situation by the way of hand signals as illustrated below: -



All OK



Stop I need support

Protection of the incident site means ensuring that it remains in the exact same state as when you arrived, on scene. At this point you may not be aware of the potentially serious nature of the incident therefore it is important to maintain the integrity of the incident site.

When assessing an incident which involves a competitor, ALWAYS, if possible, approach the competitor's vehicle from the front. Approaching from any other angle may cause the occupants to move their heads which may aggravate any spine or necks injuries that have resulted from the accident. Also check that the SOS/OK board has been deployed as appropriate.

iii) Records to be maintained

Each person involved with processing an incident should complete their own incident report form. The details to be recorded are set out above and on the specimen incident report form at the end of this manual.

It can be especially useful for those not directly involved in the incident to maintain an incident report form which could be used by the event officials to corroborate the facts recorded on the other incident reports submitted. It is also good practice.

It is important to record the contact details of any person(s) who reports an incident to you. Should the situation become serious, this person(s) may need to be contacted by external personnel – probably the Police.

If you have a report of an incident to be handed to an event official **BEFORE** handing it over ***make sure you have signed it, dated it and that it contains your full name and contact details.***

iv) Assisting Cars / Rebuilding Chicanes or other stage furniture

When an incident as above happens, a marshal's primary responsibility is to act as look out to allow another marshal/event official to assess the needs of the competitor or the damage to the stage.

One marshal should be designated as a lookout to alert those marshals assisting the competitor or rebuilding the stage that a car is approaching and to move to a safe location. Some form of warning signal should be agreed beforehand, Ideally, a warning blast on a whistle.

Remember that on closed road events it is illegal for members of the public to be on the 'stage' once the road is closed. This includes assisting competitors and rebuilding the stage. Do not ask spectators to assist.

v) Ambulance Meeting / Rendezvous Points (AMP/RVP)

An Ambulance Meeting Point or Rendezvous Point is a pre-agreed location where the handover of an injured party can be made between the Rescue Unit and the County Ambulance service.

The use of this system allows for a quick response to an incident and the rapid treatment of confirmed injuries by the event Rescue units whilst the County Ambulance is responding to the 999 call.

The location of these points is dictated by the stages in use and is pre-determined by the Event Safety Officer.

vi) SUPeR System

To process an incident more efficiently there is a **key** word system in place.

The application of this system is explained below and is in use on a national basis.

Should you be advised of, or witness an incident you may include one of the following prefix words in your initial call to your radio controller: -

(a) SAFETY

For messages concerning stage safety, e.g. car overdue, first competitor into stage, stage furniture problems, spectator marshalling – problems where a slight delay can be tolerated.

(b) URGENT

For situations requiring immediate action, e.g. car known to be in difficulty, suspected injured persons – problems which may necessitate the cessation of the stage.

(c) PRIORITY

For situations where there is a **CONFIRMED** injury(s) – situations where immediate Medical/Rescue intervention is required.

(d) RELEVANT

For messages which have a bearing on the incident – submission of relevant information

Use common sense – DO NOT overrate the urgency of your message unnecessarily.

This is how a SUPeR message should be initiated: -

‘Mercury Control from Mercury Three, (SAFETY/URGENT/PRIORITY), Over’

‘Mercury Three this is Mercury Control – go ahead with your, (SAFETY/URGENT/PRIORITY), Over’.

‘Mercury Control from Mercury Three on stage (no.) at post/junction (no.) I have.....’

Mercury Three will then transmit the details of the (SAFETY/URGENT/PRIORITY) and Control will deal appropriately with it in conjunction with the correct on stage and/or off-stage personnel.

To ensure that the (SAFETY/URGENT/PRIORITY) is dealt with correctly Mercury Control will announce: -

‘Mercury Control is accepting (SAFETY/URGENT/PRIORITY) and above messages only’.

This means that any non-key worded messages or key worded messages below the level maintained must wait to be transmitted.

If the incident which generated the SAFETY call escalates to an URGENT or an URGENT situation arises then the control would increase the restriction imposed on the radio network to URGENT and above only, therefore any SAFETY messages must wait to be transmitted.

Similarly, if the PRIORITY restriction is imposed only PRIORITY messages will be allowed across the radio network.

If, however, you have information which is relevant to the incident but is not a result of the incident you can use the RELEVANT key word to access the restricted radio network. The RELEVANT key word works on all levels of restriction.

As soon as the incident is resolved control will begin to reduce the level of restriction downgrading from PRIORITY to URGENT. It will then deal with all the URGENT calls before downgrading to SAFETY. Once all SAFETY calls have been processed control will announce ‘Mercury Control to standby’ at which point normal working is resumed.

It is important that all radio marshals not directly involved with the ongoing incident remain silent and monitor the radio network.

If a serious incident occurs, it is VERY important to remain patient as it is likely it will take a long time to resolve. Should this situation occur, in addition to the above your purpose is also to ensure the stage remains closed to spectators and vehicles, unless authorised by rally control.

It is also important not to share any speculation or information in connection with the incident.

3. Typical Missing Competitor Scenario

In the event of an incident of a competitor reported as missing in stage

Start Radio Marshals

1. Upon receipt of the missing competitor's number, check your check sheet to verify that it did or did not start the stage. Double check this with the Start Marshals records.
2. If the competitor did start, inform the Stage Commander and Stage Safety Officer of the situation.
3. Ask the start marshals to ask subsequent competitors into stage to look for the missing vehicle and report any findings to the stop line marshals.
4. Pass the competitor number(s) of the competitors that have been asked to investigate, as per 3. above, to your stage finish radio marshal via control

Finish Radio Marshals

1. Upon receipt of the missing competitors number check your check sheet to verify that it has not exited the stage.
2. If you believe a competitor is missing check with the stop line marshals to confirm or otherwise
3. Ask the stop line marshals to question each competitor arriving at the stage finish to ascertain if they have seen the missing competitor and if they have, where on stage and what was their status.
4. Update your start radio marshal, via your radio controller, with any information received.

Mid-Point Radio Marshals

1. Upon hearing that a competitor is missing, check your check sheet to establish if the competitor in question has passed your location or not. Be ready to answer your controller, with this information, when called.
2. If you are asked to carry out a foot search, ensure you have the manpower to do so. If you are carrying out the foot search. ALWAYS REMEMBER THAT YOUR PERSONAL SAFETY IS PARAMOUNT. If you Co-opt marshals to carry out the search, tell them the information you require and stress that it is vital, once they have located the missing vehicle and collected the required information that they must report back to you as quickly as possible. Also advise them that their own safety is paramount. *(A quick reference handout can be found in Appendix vi) at the end of this manual which is designed to be handed to whoever you despatch to the scene of an incident)*

REMEMBER THAT THE STAGE IS STILL LIVE WITH COMPETING TRAFFIC.

4. Typical Incident Scenario

You are informed by a spectator/marshal/competitor that he is sure that a car has 'gone off' on the stage.

Your actions should include: -

1. Inform your radio controller with the information as given to you.
2. Validate the information given – send a runner to investigate with instructions to report back in person or, if you have them, by PMR radio or handheld 81 radio. The information you require is;
 - a. The condition of the occupants (*if there are injuries, the number of people injured, the injuries incurred by each person, the age and gender of each injured party, the location of each injured party*)
 - b. Is anyone else involved, marshals, spectators, general public.
 - c. Is the stage clear
 - d. The exact location of the incident
 - e. The competitor number involved.
 - f. The condition of the vehicle
 - g. Has the O.K./SOS board been deployed.
 - h. Has the warning triangle been displayed?
(A quick reference handout can be found in Appendix vi) at the end of this manual which is designed to be handed to whoever you despatch to the scene of an incident)
3. Take the name of and contact details for the person who made the initial report.
4. Start your incident report form with notes and times.

The runner returns.

Your actions are: -

1. Ensure that you have all the information you have requested your runner to obtain.
2. Report the facts as given to you to your radio controller.
3. If you do not receive all the information requested, get your runner to return to the scene to acquire the missing details.
4. If there are confirmed injuries, after reporting the facts to your controller ask any personnel you have at your location to proceed to the incident to assist with protecting the site.
5. Update your incident report form with the information given and the time it was reported and what actions you have taken, with times.

Whilst the stage personnel and radio control are managing the incident maintain radio silence unless you have any relevant information. Update your incident report form with details of how the incident is being handled.

When it is appropriate, advise your radio controller that you have a written report which needs to go back to Rally Headquarters for the Clerk of the Course.

Your controller will try to get the Sweeper Car to stop at your location to collect your report but failing this you may have to take the report to RHQ yourself.

5. Post Event

When your duties on an event conclude you should follow the instructions previously advised by the event organisation or, on the event itself, as instructed by the Stage Commander and/or your Radio Controller.

i) Leaving your location

Before leaving remember to thank all the marshals who may be at your location on behalf of the organisers, then break down all the stage furniture at your location and pile it neatly at the side of the stage, providing it is not being used at that location again during the event.

Make sure you take all your litter with you upon leaving. (*Remember the black plastic bag in your Rally Box?*)

ALWAYS travel in the stage direction unless you have specific permission from the Stage Commander to leave the stage against traffic.

ii) Radio Usage

Do not use either of the 81 Safety & Medical frequencies whilst travelling away from the event unless it is for a genuine Safety situation.

iii) Speed

With regard to forest rallies, remember the Forestry Commission FE/FL&S/NRW speed limit for the forest you are operating in and observe it.

For closed road events, the relevant road speed limit applies BUT you must be aware that the road surface conditions will have changed so proceed with caution.

iv) Incident Reports

If you have any Incident / Judge of Fact reports make sure that you have handed them either to the Sweeper Car or the Stage Commander before you leave the stage. If that is not possible you MUST plan for these reports to get to Rally Headquarters prior to the culmination of the event even if it means taking them in person.

If you feel that you need to reach out following your involvement in an incident, Motorsport UK offer support and encourages you to contact their Safeguarding Team on 01753 765000 or email safeguarding@motorsportuk.org

v) At Home

When you arrive home, or soon thereafter, it is a good idea to replenish the items you have used out of your Rally Box and check that your radio is stored correctly so that you are part prepared for your next event.

Take time to analyse your performance on the event and if any improvements can be made.

6. Radio Abbreviations and Key words

Strict adherence to correct procedure is necessary to ensure accuracy and speed in passing messages and to eliminate mistakes and repetition.

i) NATO Phonetic Alphabet

Use the NATO phonetic alphabet and figures when it is necessary to spell out individual words and numbers as below; -

A – Alpha	B – Bravo	C – Charlie	D – Delta	E – Echo	F – Foxtrot
G – Golf	H – Hotel	I – India	J – Juliet	K – Kilo	L – Lima
M – Mike	N – November	O – Oscar	P – Papa	Q – Quebec	R – Romeo
S – Sierra	T – Tango	U – Uniform	V – Victor	W – Whiskey	X – X-Ray
Y – Yankee	Z – Zulu				

ii) Figure Pronunciation

0 – Zero	1 – Wun	2 – Two	3 – Three	4 – Foh Wer
5 – Fife	6 – Six	7 – Sevenne	8 – Ate	9 – Niner
10 – Wun Zero	11 – Wun Wun		Etc...	
20 – Two Zero	21 – Two Wun		Etc...	
100 – Wun Zero Zero	111 – Wun Wun Wun		Etc...	

iii) Twenty-Four Hour Clock

Always use the twenty-four-hour clock system as follows: -

7.00am = 0700hrs	vocalised as;	‘Zero seven zero zero hours’
11.30 pm = 2330hrs	vocalised as;	‘Two three three zero hours’

iv) Pro-Words

Listed below are a few key words which will assist you when using the radio frequencies:

‘Acknowledged’	: I have received and understood the instruction(s) given.
‘Break’	: Announcing an intentional pause in a long message (wait for the beeps)
‘Yes – Yes - Yes’	: Affirmative
‘Go ahead’	: Instruction to proceed with your message.
‘No-No-No’	: Negative
‘Out’	: When you have finished and are closing down
‘Over’	: Used at the end of a message.
‘Roger’	: I have received and understood your message.
‘Roger so far’	: Have you received and understood my message so far.
‘Say again’	: Repeat your message (<i>can be used with suffix ‘All before’ or ‘All after’</i>)
‘Standing by’ / ‘To standby’	: Used by Control to advise that it is now free and awaiting calls.
‘Wait out’	: Wait and I will call you back.
‘Wrong’	: What has been said is incorrect.

7. Restrictions on the use of Call Signs

The following call signs are allocated permanently and may not be used except by their authorised users.

Auto 'RACK' 1 – 4:	Motorsport UK approved personnel
Auto 'RACK' 5 – 21	Approved Regional Radio Co-ordinators* <i>*Co-ordinators are not permitted to use their call sign when they are running a control on an event.</i>

The following call signs are allocated to **Motorsport UK** licensed personnel and may **ONLY** be used in conjunction with their licensed duties.

Auto 'call sign Control'	Radio controllers	i.e. <i>Mercury Control</i>
Auto 'MOMO No'	Doctors/Paramedics	i.e. <i>MOMO Two</i>
Auto 'call sign Recovery'	Recovery Units	i.e. <i>Peak Recovery</i>
Auto 'call sign Rescue'	Rescue Units	i.e. <i>Stoke Rescue</i>

The following call signs are reserved by the **Motorsport UK** for use on an event-by-event basis. Their use should be approved by the Regional Radio Co-ordinator in whose area the event is to take place.

Auto 'ARC No/Name'	Area Co-ordinator(s)
Auto 'MEDIC No/Name'	Doctors/Paramedics appointed by the event organisers.
Auto 'PILOT No/Name'	Safety car(s)
Auto 'SECTOR N/Name'	Sector Marshal
Auto 'SPEC No/Name'	Spectator Safety car(s)

The following call sign may be allocated on an event by that event's **Motorsport UK** licensed controller as follows.

Auto 'XXX RELAY'	for a designated radio which is acting as a relay for two or more other radios on the event radio network.
------------------	--

The call sign BASE should not be used except where its location is permanent.

Primary call signs authorised to Motor Clubs or other organisations will be vetted for their suitability by the **Motorsport UK** but should NOT contain any of the protected words set out above.

REMEMBER

- ALWAYS** Use the callsign of the radio you are calling followed by your own when opening a transmission i.e. *(Mercury Four this is Mercury Control – Over)*
- ALWAYS** Say ‘Over’ at the end of each transmission
- ALWAYS** Take your finger off the PTT (Push To Talk) button when you have finished speaking
- ALWAYS** Be as brief as is possible.
- ALWAYS** Make sure you transmit your message completely and correctly. If necessary, write it down before speaking.
- ALWAYS** Remember, safety is paramount, especially your own.
- ALWAYS** Have your radio in sight in order to monitor its operation.
- ALWAYS** Know where your microphone is and make sure that the PTT button cannot be operated accidentally.
- ALWAYS** When transmitting a message, press the PTT, pause ----- then, talk, otherwise your first few words will be lost.
(This allows the tones transmitted at the front end of the message to ‘open’ other radios on the network)
- ALWAYS** Put a ‘Roger so far’ into long messages but remember that you have 30 seconds of message time.
- ALWAYS** If you feel unable to handle a situation, pass the microphone to someone who is, if possible
- ALWAYS** Keep calm.

- NEVER** Transmit when the frequency is in use – you will cause interference and disrupt the radio network.
- NEVER** Use bad language
- NEVER** Use the Safety & Medical frequencies as a ‘chat channel’
- NEVER** Add to, embellish and/or use unnecessary voice inflections to messages and information given which is to be passed over the radio network.

- NEVER** Divulge information passed over the radio network to third parties who are not part of the event organisation either verbally or by operating with your volume too loud or your speaker outside your vehicle.

- NEVER** Panic

~~~~~  
**THINK OFF AIR**  
~~~~~

Appendix i)

RADIO MARSHALS CHECKSHEET

EVENT:-

STAGE. Name:

No:

Date:

Radio Operator

Name:

Callsign:

COMPETITOR DETAILS

No.	Car No.	Time	No.	Car No.	Time	No.	Car No.	Time	No.	Car No.	Time	No.	Car No.	Time
1		:	31		:	61		:	91		:	121		:
2		:	32		:	62		:	92		:	122		:
3		:	33		:	63		:	93		:	123		:
4		:	34		:	64		:	94		:	124		:
5		:	35		:	65		:	95		:	125		:
6		:	36		:	66		:	96		:	126		:
7		:	37		:	67		:	97		:	127		:
8		:	38		:	68		:	98		:	128		:
9		:	39		:	69		:	99		:	129		:
10		:	40		:	70		:	100		:	130		:
11		:	41		:	71		:	101		:	131		:
12		:	42		:	72		:	102		:	132		:
13		:	43		:	73		:	103		:	133		:
14		:	44		:	74		:	104		:	134		:
15		:	45		:	75		:	105		:	135		:
16		:	46		:	76		:	106		:	136		:
17		:	47		:	77		:	107		:	137		:
18		:	48		:	78		:	108		:	138		:
19		:	49		:	79		:	109		:	139		:
20		:	50		:	80		:	110		:	140		:
21		:	51		:	81		:	111		:	141		:
22		:	52		:	82		:	112		:	142		:
23		:	53		:	83		:	113		:	143		:
24		:	54		:	84		:	114		:	144		:
25		:	55		:	85		:	115		:	145		:
26		:	56		:	86		:	116		:	146		:
27		:	57		:	87		:	117		:	147		:
28		:	58		:	88		:	118		:	148		:
29		:	59		:	89		:	119		:	149		:
30		:	60		:	90		:	120		:	150		:

SAFETY CARS				COMPETITORS										
Desig	In	Past	Out	First Competitor				Last Five Competitors				TOTALS		
	:	:	:	No.	In	Past	Out		In	Past	Out		In	Out
Spec	:	:	:		:	:	:		(Check)					
000	:	:	:	Last Competitor					In					
S/D	:	:	:	No.	In	Past	Out		Less Retired					
00	:	:	:		:	:	:		Equals Out					
0	:	:	:		:	:	:							
RETIREMENTS														
Loc'n	J	J	J	J	J	J	J	J	J	J	J	J	J	J
Comp														
Cleared														

Incident Report Form

PLEASE COMPLETE ONE OF THESE FORMS FOR EVERY NOTIFIABLE INCIDENT YOU HAVE INFORMED RADIO CONTROL OF. THIS FORM MUST BE USED WHERE MEDICAL ASSISTANCE WAS REQUIRED.

This form, once completed, **MUST** be returned to the Event Safety Officer at Rally Headquarters – directly or via the Sweeper Car.

Event: Weather: Clear Dry Wet Snow Ice
 Stage Number & Name: Visibility: Good Bad Poor
 Operator Name: Stage condition: Dry Wet Ice Snow
(Tick the boxes that apply)

	Time:		Time:
Incident occurred:		Incident reported:	
Stage held:		Stage restarted:	
Rescue Unit at Scene / leave scene:	/	Doctor/Paramedic at scene / leave scene:	/
County Ambulance at RV/AMP / leave RV/AMP:	/	Transfer of Casualties into Rescue unit / County Ambulance:	/

What happened:

Actions taken and/or observations made:	Time:

Witness details (Names, Addresses etc.)		Witness details (Names, Addresses etc.)	
Name:		Name:	
Address		Address	
Tel No.		Tel No.	

Print and sign you name.

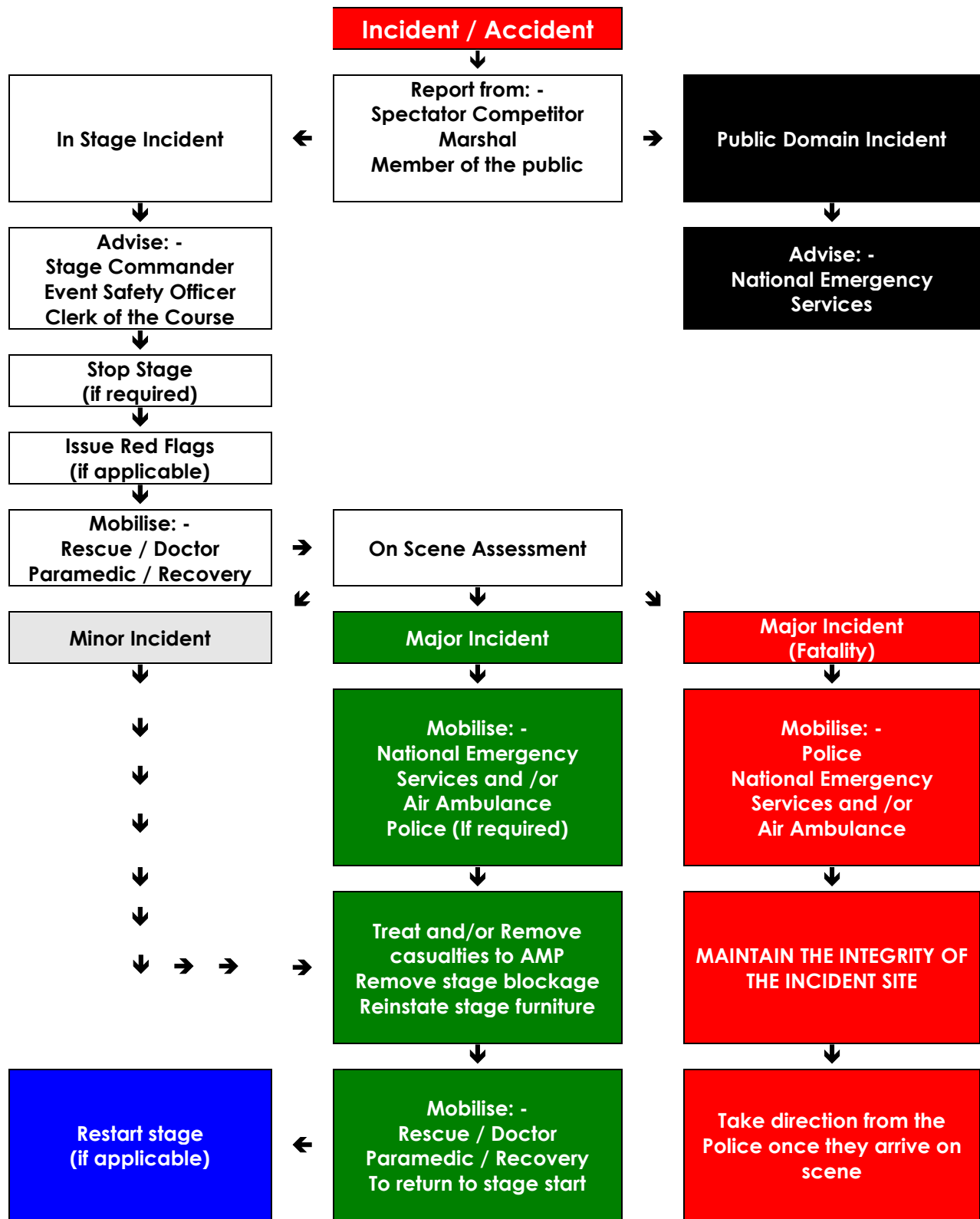
Print

Date

Singed

Time

Appendix iii)



Appendix iv)

Arrival and deployment of Radio Marshals

In most cases Stage personnel are 'on stage' well in advance of the stage operational time.

However, an area which is often overlooked is the actual through stage travelling time based on the 25mph speed restriction imposed by Forestry Commission/NRW. (This speed restriction may differ in different Forestry areas so please check before attending an event) It is in the interest of your safety that you plan accordingly and observe the speed limit in force. This document may help but remember that it is based on a limit of 25mph. *(For Closed Road events, please refer to the information provided by the event organisers)*

This matrix is designed to be an 'aide memoir' to assist with the movement of resources through a stage prior to its time.

If we put together the components involved in arriving at the stage until reaching your final stage location, we have the following: -

- i) Arriving, parking, signing on and receiving a briefing and updates
- ii) Travelling through stage
- iii) Parking in a safe position at your designated location and preparing paperwork etc.

If we apply minimum times to the above, then the following applies: -

Miles from stage start to stage location	TIME TAKEN FOR: -				Total time to be allowed from arriving at stage start to be being ready on location	
	Signing on and Briefing	Travelling to Location	Checking Location & Parking off stage	Checking & preparing Paperwork	HRS	MINS
1	25	3	15	5	0	48
2	25	5	15	5	0	50
3	25	7	15	5	0	52
4	25	10	15	5	0	55
5	25	12	15	5	0	57
6	25	14	15	5	0	59
7	25	17	15	5	1	02
8	25	19	15	5	1	04
9	25	22	15	5	1	07
10	25	24	15	5	1	09
11	25	26	15	5	1	11
12	25	29	15	5	1	14
13	25	31	15	5	1	16
14	25	34	15	5	1	19
15	25	36	15	5	1	21
16	25	38	15	5	1	23
17	25	41	15	5	1	26
18	25	43	15	5	1	28
19	25	46	15	5	1	31
20	25	48	15	5	1	33
21	25	50	15	5	1	35
22	25	53	15	5	1	38
23	25	55	15	5	1	40
24	25	58	15	5	1	43
25	25	60	15	5	1	45

INCIDENT INFORMATION REQUIRED					
Vehicle Information					
Car No:		Status	Yes	No	
		On stage			
Location		Blocking stage			
Post / Junc.		Off stage			
Before (Mtr.)		Dangerous loc.			
After (Mtr.)		Leaking Fluids			
		On fire			
Triangle out	Yes	No	OK or SOS	OK	SOS
People					
Crew & Other	Age	M/F	Condition		
Driver					
Navigator					
Other					
Other					
Information supplied by					
Name					
Address					
Tele: No.		Time:		:	

REMEMBER – Your own SAFETY is paramount.

At the scene –

- Assess the incident area
- Approach the vehicle from the front (if possible)
- Assess any casualties
- Check for additional casualties eg. Spectators / marshals
- Secure the incident area and make it as safe as possible
- Deploy the OK / SOS Board as appropriate
- Deploy the warning triangle
- Record the information required – as opposite
- Ensure the completed Incident Information Required form is completed as far as you can and is delivered without delay to the nearest radio marshal by whatever means is available to you.
- Remember that you can signal to competitors as follows



All OK



Stop I need support

- Collect contact details from eyewitnesses
- Get marshals/spectators to assist you, if required
- If the crew are uninjured, ensure they are comfortable before leaving the scene.

If you cannot attend the scene, hand this form to someone who can with instructions to, once at the scene, complete the form and get it to a radio marshal. Make sure they have a pen or pencil.

In case of FIRE –

- Remove the occupants from the vehicle to a safe location.
- Advise radio control immediately

Your Notes.