

⚡ 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 practices'.

It is recommended that this handbook should be read in conjunction with the MSA booklet:-
'Administration, Application & Operational Guide for FM Frequency' - *The Guide* .

Acknowledgments:-

This handbook has been compiled with the assistance of:-

BRMC

SMMC

Attendees of the BRMC Training days – Radio Training

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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.

The Purpose of the MSA Safety & Medical Communications frequencies (81.575 & 81.5375 Fm) is:-

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

Use of the Frequency

The above is the licensed purpose of the frequency 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 frequency.

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

The frequency can only be used as follows:-

1. On events which hold an MSA Permit
2. For the genuine checking of the equipment itself
3. For training purposes which have been approved by your MSA Radio Co-ordinator

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

Regional Administration and Management

The Safety & Medical frequency is licensed exclusively to the Motor Sports Association by Ofcom and is administered and managed, on a regional level, by a system of **MSA Radio Co-ordinators** who are regionally appointed and licensed by the MSA.

These individuals will provide guidance, support and training to event organisers, motor clubs, radio marshals and anyone else who requests it.

To assist each MSA Radio Co-ordinator in this task the MSA publish a document titled:-

Radios on Motor Sporting Events - ADMINISTRATION, APPLICATION & OPERATIONAL GUIDE FOR FM FREQUENCY

(Details of each of the MSA Radio Co-ordinators and the area they are responsible for is contained within the MSA Competitors and Officials Yearbook (the Blue Book) and also on the MSA's website.)

Motor Club Administration and Management

The use of the frequencies is further governed as follows. Each club or group nominates an individual who applies to the MSA for a sub licence to use the frequencies under a Callsign which is unique to that group or club. This person is responsible for ensuring that all that groups or clubs radios are maintained and operated as per the terms of the licence. This includes ensuring that each radio is annually checked by a qualified radio engineer and that each member of that group or club uses the radio equipment correctly.

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 MSA Radio Co-ordinator or the Radio Controller for that event to assist them with this task.

The task, put simply, is to ensure that on all the stages used, the radio locations are pre-determined and that these 'mandatory' radio locations are incorporated into the Event Safety Manual and the Competitors Roadbook. The task is completed by ensuring that all these 'mandatory' locations will be manned on the day of the event in order to provide the optimum safety radio cover. In addition during this planning process a radio control location will be identified in such a place so that it will be able to communicate with radios used on the event.

The stage radios are only a part of the overall radio scheme/network. The other components of a radio network are:-

Event Officials

- Non Travelling
 - Rally Headquarters. Clerk of the Course – MSA Steward
- Travelling
 - MSA Safety Delegate – Event Safety Officer – Chief Medical Officer – Event Stewards – Equipment Crews

Safety Cars

- Treble Zero – Double Zero – Zero – Intermediate Car - Course Closer

Stage Officials

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

The Blue Book regulation regarding the use of radio communications on rallies is in section R24.3.3 (b) This regulation states that, amongst other requirements, each rally event which utilises radio communications for safety purposes and has an MSA permit should incorporate all of the basic users detailed above but **MUST** use an MSA licensed **Radio Controller**.

The function of the Radio Controller is to ensure that there is a free flow of information exchange between the various users of the event radio network. As the Safety & Medical frequency operates on a simplex system, i.e. if two radios transmit at the same time they will interfere with each other and no message will be heard, it is essential that transmissions are controlled in order to prevent this interference from happening.

Typically Radio Controllers are experienced radio operators with a good knowledge of rallying and who have successfully completed the MSA's Radio Controller's licensing program.

This manual attempts 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 and theory should be supplemented by hands on experience which is a very good way to gain knowledge.

Radio Marshals new to rallying are encouraged to attend an event in the company of an experienced radio marshal in order to gain valuable knowledge of how the Safety & Medical Communications system operates before attending an event on their own.

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

Once a Radio Marshal becomes an accomplished and experienced a Radio Marshal they can then apply to the MSA to train to become a licensed Radio Controller. To become a Radio Controller details are available in the MSA Blue Book – Section G27.2

You must be aware that there could be a number of other radio networks in use on an event which may include:-

- Event Management - Competitors to service crews – Results - Private Mobile Radios (PMR) - Forest Enterprise
- St. John's Ambulance - Positive tracking – Media - Mobile phones - National emergency services
- Car park security

These additional frequencies could have an influence on the event Safety & Medical radio network.

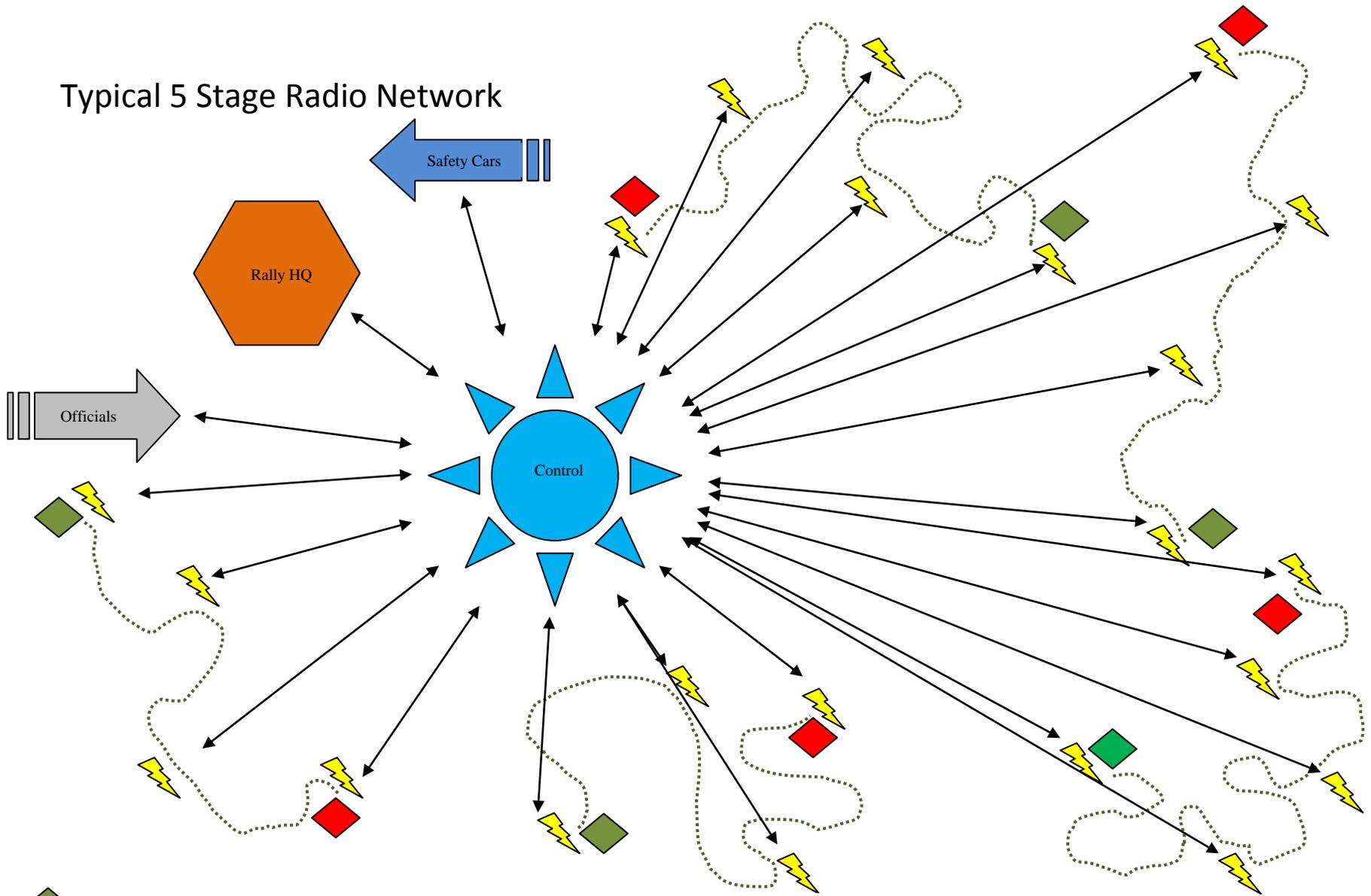
Training

It is advisable 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 MSA's website, but training sessions can be organised through your own club or can be provided by your MSA Radio Co-ordinator.

Alternatively 'on event' training is acceptable providing that the trainee is under the guidance of an experienced radio operator.

Typical 5 Stage Radio Network



-  Stage Start (Stage Commander – Stage Safety Officer – Doctor/Paramedic – Recovery Unit – Radio Marshal)
-  Stage Mid Point (Radio Marshal)
-  Stage Finish (Deputy Stage Commander – Radio Marshal)

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.)

1.1 Pre Event.

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

All this should be done at least two weeks 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.

Always remember to take what you need with you. It is a very 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) Personal Equipment & Documentation

81 Radio and aerial, 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, OS Map or road atlas. (*These items for the basic 'Rally Box' contents*).

iii) Event Documentation

Acquired at signing on:-

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 checksheets*)

iv) Travelling

Make sure you know where you are going and when you should be there. Remember to allow sufficient time to arrive at the stage start in good time.

REMEMBER to switch your set on before you leave home in order to monitor transmissions, to appraise yourself of what is happening on the event.

******DO NOT USE THE MSA SAFETY & MEDICAL FREQUENCY AS A CHAT CHANNEL******

2. On Event

2.1 General

Once you arrive at your stage start

ALWAYS REMEMBER TO SIGN ON

before you commence your event duties.

IF YOU DO NOT SIGN ON YOU ARE NOT COVERED BY MSA 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 to, sign on, collect any additional information, marshals incentives and then to travel to your stage location.

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

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

Man made obstacles can be overcome by relocating your position, if possible. 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.

The draw-back is that if you have a long message to pass, you must put a 'Break' into it. To remind you, your radio will bleep to indicate that the thirty second threshold is approaching.

The specification for MSA licensed radio equipment allows each set to be configured with four useable channels – MSA 1 (10 Watt), MSA 2 (10 Watt), MSA 3 (10 Watt), MSA 4 (10 Watt). The channels use two frequencies AND are separated by the use of unique tones per channel. These tones are configured to allow MSA 1 to be separate from MSA 2, AND MSA 3 FROM MSA 4.

To understand this, consider the tones as being two unique keys. The key for MSA 1 will only unlock the sets working on MSA 1 and no other. Similarly the key for MSA 2 will only unlock sets working on MSA 2.

i) Radio Operation contd.....

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

Press the PTT – PAUSE..... then speak.

Following this procedure will ensure that your entire message is passed and control will not have to ask you to repeat the first part of your message.

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 what additional radios may be present on a stage. The radio check also verifies that control has contact with the stage Rescue & Recovery crews in addition to the Doctor/Paramedic and Stage Safety Officer.

The radio check should also establish which radios are single manned and how many marshals are at each location on the stage. Status of spectators may also be requested.

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

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

Control this is (your callsign) at (your junction/location) receiving you strength (1 to 5). This radio is (double/single) manned and I have (number) marshals at this location, (and if required) and (number) spectators.

The definitions of the signal strength are as follows:-

1. Unworkable – no voice
2. Marginal - poor voice reception
3. Workable - but with 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 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 are usually low powered and are less efficient in Forests. *(The short range operation of these units make them ideal as a link between radio marshals who may be required to be separated due to vehicle proximity issues (i.e. 30M rule on stages) or when asked to investigate a potential incident.*

v) Start Radio Marshal

Signing On

If you are advised that you are to be the start radio, please try to arrive at the stage start early. Seek out the Stage Commander and offer to sign on 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 take on this role 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.

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 safety

Remember to park safely and if you have to move around the start area be aware of where you are in relation to the competitors. **Your vehicle *MUST* be parked at a minimum of 30metres from the stage route. If this is not practical please use common sense. Remember your own safety is essential to the operation of the Safety & Medical Communications system.**

MSA Regulation R24.4.12 states: "All non-competing vehicles must be parked in an appropriate place at least 30m from a road used as a Special Stage, between a point before the Start control and a point 100m beyond the Finish stop control."

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.

Operation

Radio check

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

When requested by your radio controller or if not requested, volunteer to pass the details you have recorded regarding which radio callsign is where on your stage. Include ALL radio callsigns on stage including the mandatory radios, Doctor(s)/Paramedic(s), Rescue Unit(s), Recovery Unit(s) and any additional radio callsigns you may have.

Safety Cars – including the MSA Safety Delegate

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 the Safety 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.

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.

Closing

When the Closing 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 Closing Car, to your radio controller.

Before the Closing Car enters your stage update the occupants with any information you have regarding your stage especially information concerning any known retirements.

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.

Personal Safety

Remember that your own safety is paramount. Park where you and your property will not be at risk. **Your vehicle MUST be parked at a minimum of 30metres from the stage route. If this is not practical please use common sense. Remember your own safety is essential to the operation of the Safety & Medical Communications system.**

MSA Regulation R24.4.12 states: "All non-competing vehicles must be parked in an appropriate place at least 30m from a road used as a Special Stage, between a point before the Start control and a point 100m beyond the Finish stop control."

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.

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 and your intentions. 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 at all times.

Once parked safely, take time now to prepare your paperwork.

Operation

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 – including the MSA Safety Delegate

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.

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 experiencing difficulty 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 checksheet 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 Closer is about to or has entered your stage carefully audit your competitor checksheet to determine how many and which competitors have passed your location.

Hopefully you will have received information as to what to do when the Closing Car passes you. ***In all events you MUST remain on location until the Closing Car passes or until you receive an instruction from the Organisers in the event that there is no Closing Car.*** 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 checksheet audit and be ready to pass the information to your radio controller.

vii) Finish Radio Marshal

Stage travel

It is not necessary for the finish radio marshal to travel the entire stage length to the stage finish if there is an alternative route available, BUT you must ensure that you sign on if you are travelling directly to the stage finish.

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 when requested to do so by an event official.

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 safety

Remember to park safely and if you have to 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 less stopping power than they had at the stage start.

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

Operation

Radio check

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

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 on your competitor check sheet.

Closing

When you hear that the Closer 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 Closing Car, to your radio controller.

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

2.2 Incidents

Incidents can be defined as any occurrence which is outside the normal running of the event, such as a report of a competitor contravening the event regulations or 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.

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 report form is appended 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 Closing 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

(A quick reference handout is appended at the end of this manual which is designed to be handed to whoever you despatch to the scene of an incident)

ii) Action to be taken

If you are the first to arrive at the scene of an incident, your first priority is your own safety. 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, there may be other competitors arriving at the incident site shortly.*

Protection of the incident site means ensuring that it remains in the exact same state as when you arrived as at this point you may not be aware of the potentially serious nature of the incident. It will also aid the access of the Doctor and Rescue Crew once they arrive at the scene.

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.

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 very 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.

iv) 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.

v) SUPeR System

In order 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 **CONFIRMED** situations which involve injury(s) – problems 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, 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 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 in order to access the restricted radio network. The RELEVANT key word works on all levels of restriction.

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

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.

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 competitor number, check your checksheet to verify that it did or did not start the stage
2. If it 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 to your stage finish radio marshal via control

Finish Radio Marshals

1. Upon receipt of the competitor number check your checksheet to verify that it has not exited the stage.
2. Inform the stop line marshals of the situation
3. Ask the stop line marshals to question each competitor arriving at the stage finish to ascertain if they have seen the missing competitor
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 checksheet 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. Co-opt marshals and if the stages are stopped, and after the stage is stopped with Controls consent, spectators if necessary. 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 is appended 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
 - 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 is appended 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 in order 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 progressing the incident maintain radio silence unless you have any relevant information and update your incident report form with details of how the incident is being handled.

5. Post Event

When your duties on an event come to a conclusion 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 the 81 Safety & Medical frequencies whilst travelling away from the event unless it is for a genuine Safety situation.

iii) Speed

Remember the Forest Enterprise speed limit for the forest you are operating in and observe it. Travel safely home.

iv) Incident Reports

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

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.

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 sevenne 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 frequency:

'Acknowledged'	: I have received and understood the instruction(s) given
'Break'	: Announcing an intentional pause in a long message
'Affirmative'	: Yes
'Go ahead'	: Instruction to proceed with your message
'Negative'	: No
'Out'	: When you have finished transmitting and are closing down
'Out to you'	: I have concluded my conversation with one radio and I am about to call another (usually used by control)
'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 (can be used with suffix 'All before' or 'All after')
'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:	MSA approved personnel
Auto 'RACK' 5 – 21	Approved MSA 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 MSA 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 MSA 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 MSA 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 MSA 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
- 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 ‘Break’ into long messages
- 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**  
~~~~~

Stage:

No:

Date:

Radio Operator Callsign:

Name:

COMPETITOR														
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		:

Course Cars				Competitors									
In	Out	Past @	First Competitor	Last Five Competitors			Totals						
				No.	In	Out	Past @	In	Out				
01	:	:	:	No.	In	Out	Past @						
02	:	:	:		:	:	:						
03	:	:	:										
04	:	:	:	Last Competitor									
05	:	:	:	No.	In	Out	Past @						
06	:	:	:		:	:	:						
Retirements													
Loc'n	J	J	J	J	J	J	J	J	J	J	J	J	J
Comp.													
Cleared													
													Total Retired

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 Closing Car.

Event: _____ **Date:** _____

Stage Name: _____ **No:** _____

Operator Name: _____ **Tel:** _____

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

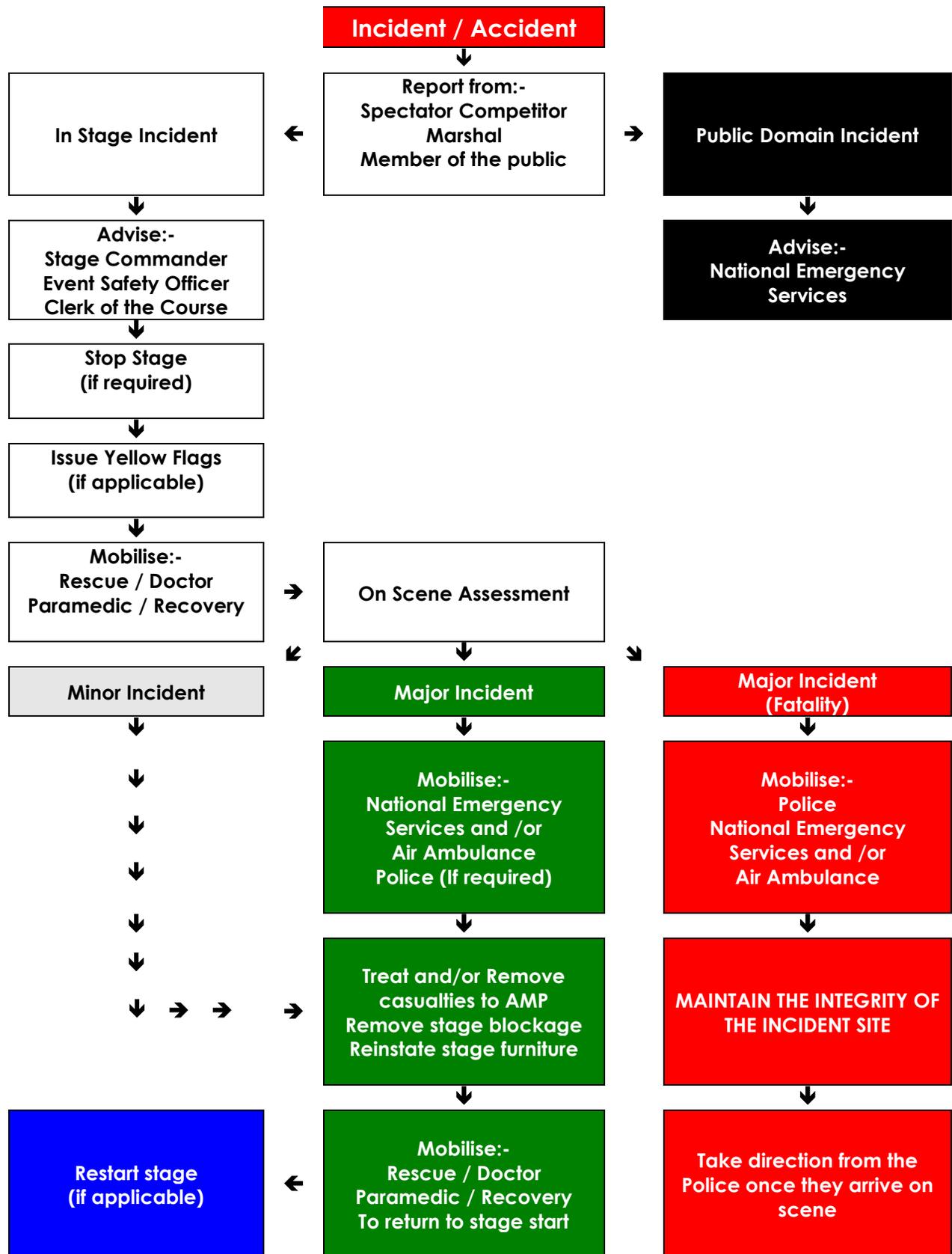
Nature of incident:

Action taken:	Time:

Witness details (Names, Addresses etc)

Singed

Date



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 Forest Enterprise.

It is in the interest of your safety that you plan accordingly and observe this speed limit. This document may help

This matrix is designed to be an 'aide memoir' to assist with the movement of resources through a stage prior to it's operational due 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 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 being ready on location	
	Signing on	Travelling to Location	Parking off stage	Checking & preparing Paperwork	HRS	MINS
1	15	3	15	15	0	48
2	15	5	15	15	0	50
3	15	7	15	15	0	52
4	15	10	15	15	0	55
5	15	12	15	15	0	57
6	15	14	15	15	0	59
7	15	17	15	15	1	02
8	15	19	15	15	1	04
9	15	22	15	15	1	07
10	15	24	15	15	1	09
11	15	26	15	15	1	11
12	15	29	15	15	1	14
13	15	31	15	15	1	16
14	15	34	15	15	1	19
15	15	36	15	15	1	21
16	15	38	15	15	1	23
17	15	41	15	15	1	26
18	15	43	15	15	1	28
19	15	46	15	15	1	31
20	15	48	15	15	1	33
21	15	50	15	15	1	35
22	15	53	15	15	1	38
23	15	55	15	15	1	40
24	15	58	15	15	1	43
25	15	60	15	15	1	45

Incident Information Required

VEHICLE			
Car No		<input style="width: 100%;" type="text"/>	
		No.	Before
Location	Nearest Post		
Status	On stage – Passable	Yes	No
	On stage - Blocking	Yes	No
	Clear of stage	Yes	
Is the vehicle:- leaking fluids		Yes	No
In a dangerous position		Yes	No

PEOPLE			
Occupants	O.K.	Yes	No
Injury	Driver	Age	Sex
	Nav.	M / F	Condition
	Other	M / F	
	Other	M / F	

Other information					
Triangle deployed	Yes	No	O.K. Deployed	Yes	No
Stage Clear	Yes	No	SOS Deployed	Yes	No
You					
Name		Tel:			
Address					

NOTE: Cross out the answer that DOES NOT apply

Incident Information Required

VEHICLE			
Car No		<input style="width: 100%;" type="text"/>	
		No.	Before
Location	Nearest Post		
Status	On stage – Passable	Yes	No
	On stage – Blocking	Yes	No
	Clear of stage	Yes	
Is the vehicle:- leaking fluids		Yes	No
In a dangerous position		Yes	No

PEOPLE			
Occupants	O.K.	Yes	No
Injury	Driver	Age	Sex
	Nav.	M / F	Condition
	Other	M / F	
	Other	M / F	

Other information					
Triangle Deployed	Yes	No	O.K. Deployed	Yes	No
Stage Clear	Yes	No	SOS Deployed	Yes	No
You					
Name		Tel:			
Address					

NOTE: Cross out the answer that DOES NOT apply

SAFETY FIRST

REMEMBER – Your own safety is paramount

At the scene -

- ◆ Make an assessment of the incident area
- ◆ Approach the vehicle from the front (if possible)
- ◆ Make an assessment of any casualties
- ◆ Check for additional casualties e.g. spectators / marshals
- ◆ Secure the incident area and make it as safe as is possible
- ◆ Deploy the O.K./SOS Board as appropriate
- ◆ Deploy the warning triangle
- ◆ Record the information required (see other side of this sheet)
- ◆ Ensure this completed Incident Information Sheet or the information that is required on it is delivered without delay to your nearest radio marshal (Show the SOS board to a following competitor if possible and give the information to them to take)
- ◆ If possible take the contact details from any eyewitnesses to the incident
- ◆ Use other marshals/spectators, if required, to assist in the above
- ◆ If the competitors are uninjured, ensure they are comfortable before leaving the scene

In case of FIRE –

- ◆ Remove the occupants from the vehicle to a safe location
- ◆ Advise radio control immediately
- ◆ Follow the procedure above

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Name	Location	Phone	Email	Other
Andrea Richards	MSA Colnbrook, Slough	01753 765000	Andrea.Richards@msauk.org	www.msauk.org
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Brian Avery	Wakefield	01924 220345	Brianaveryeagle1@gmail.com	MSA Radio Co-ordinator
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Tower Comms		01353 749859	sales@towercomms.co.uk	www.towercomms.co.uk
Marlborough Radio Services		0113 243 1626	Sales@MarlboroughRadio.com	www.marlboroughradio.com
Strode Sound		08456 344242	ssound@globalnet.co.uk	www.strodesound.co.uk
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