



***A Guide for Doctors and Paramedics
Working on the Billown Course***

Produced by
Manx Roadracing Medical Services LLC

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for



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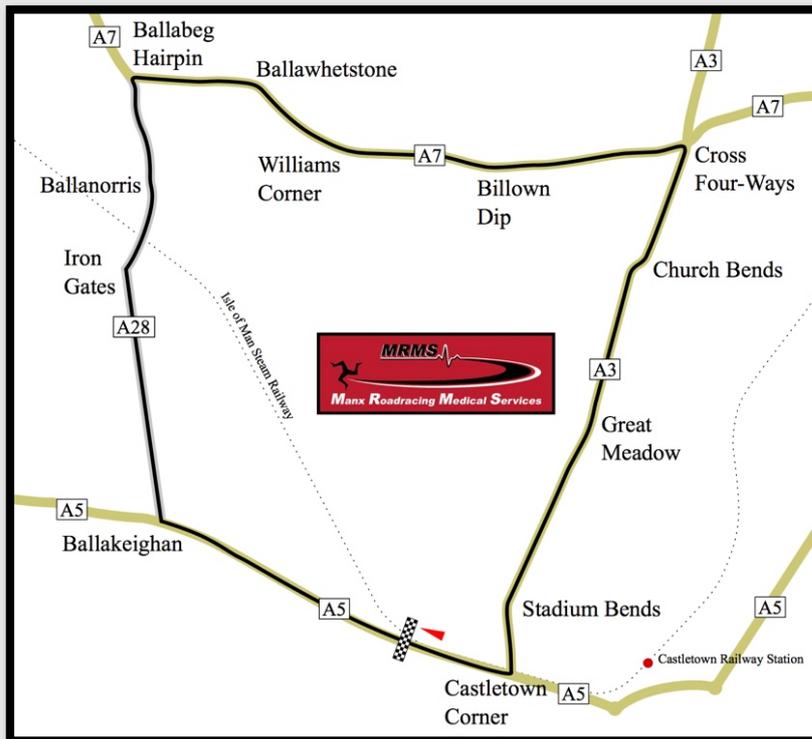
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APPENDICES

- 1. SOP – Medical Aircrew on Billown Course**

This guide and its appendices is intended for people directly involved in the operational delivery of the medical services for events run on the Billown Course, and should not be passed to third parties or placed in the public domain. – Manx Roadracing Medical Services LLC – February 2018

1. An Introduction to the Billown Course



The Billown Course is situated in the south of the island at the ancient capital, Castletown. The start line is located in Castletown and the course includes part of the A5 New Castletown Road, the A28 road from Castletown to Ballabeg, the A7 road from Ballasalla to Port Erin and the A3 road from Castletown to Ramsey. It is 4.25 miles in length.

Racing has been taking place on the course since 1955, and it has been a National Registered Circuit since

1957. In 1969 the Southern 100 Races were included in the British Championships. The Southern 100 is now one of the five FIM sanctioned *International* meetings held in the British Isles.

2. The events, how they are organised and run

Race meetings on the Billown Course are promoted, organised and run by the Southern 100 Club. They are run under a licence issued by the ACU. There are three events run on the course each year:

The Pre-TT Classic is run over 3 days at the start of the TT Festival

The Post-TT Races is a single day meeting at the end of the TT Festival

The International Southern 100 Races are run over 4 days during the second week of July each year.

More information about these events, including the dates, is available on the club's website www.southern100.com

In order for the races to be run, the roads have to be closed to the public, and this is done under the 2016 Road Races Act (Isle of Man).

3. The Medical Services on the Billown Course during events

The medical services for events run on the Billown Course comprise a number of doctors and paramedics located around the course (typically 10-12), along with 2 Fast Intervention Vehicles located at Balladoole and Cross Fourways, each with medical equipment and a doctor on board. In addition there is a helicopter, crewed a doctor and a paramedic (sometimes 2 paramedics), which is located at Iron Gate, and 5 crewed land ambulances located at the Start Line, Balladoole, Ballabeg, Cross

Fourways and Castletown Corner. Finally, there is a First Aid Post located in the grounds of the Southern 100 Clubhouse. During the events, the medical services are co-ordinated and run by the Chief Medical Officer, Dr Sally Simmons. During all race sessions the Chief Medical Officer is located in Race Control.

4. Requirements for medics working on the Course

As a doctor, paramedic or nurse, your Duty of Care requires you to be competent at dealing with the type of casualties you might expect to encounter when volunteering to work on the Billown Course. That means that you need to have knowledge of basic first aid and resuscitation/life support as a minimum. Although not essential, there are other skills that would be very valuable, and we would always recommend that you try to attend an appropriate course such as ATLS (Advanced Trauma Life Support), PHEC (Pre-hospital Emergency Care) or PHTLS (pre-hospital Trauma Life Support). More information about these can be found on our Educational Resources page.

Currently, it is not an absolute requirement that you have any of these qualifications, although it is your responsibility to make sure that you are working within your own level of competence.

We would also recommend that you read the BMA guidance for Doctors providing medical care at sporting events. If you would like us to email you a copy of this document, please contact us.

Having said all of that, it is important to remember that you will be supported by an experienced team of Marshals, as well as by the very experienced crews in the Air Ambulance and/or Medical cars in use around the Billown Course, so you will not be on your own!

Doctors: In order to work on the Billown Course a doctor needs to hold FULL registration with the General Medical Council (GMC). This also applies to UK mainland motorsport events. In addition to full registration, a doctor needs to have a licence to practice issued by the GMC. In order to get and maintain a licence to practice, a doctor has to have a Designated Body and be subject to revalidation.

Doctors that work outside the UK (and therefore do not hold full GMC registration) but within the EU, should contact the GMC as there are certain circumstances where they can be permitted to work for short times within the UK.

Because FY1 doctors hold a provisional registration rather than a full registration, they are only permitted to work within approved Foundation Year 1 posts, and are therefore not permitted to work on the Billown Course.

The GMC regulations concerning FY2 doctors has changed, so that even though they are required to work within an Approved Practice Setting (APS), provided that their Educational Supervisor is happy, they are allowed to work outside their Designated Body. It is quite possible that your Educational Supervisor might want further information about the nature of the work and the level of supervision before allowing you to work on the Billown Course. We are happy to provide such

information for you to pass to your Educational Supervisor. You can read more about Approved Practice Settings at www.gmc-uk.org

Paramedics: In order to work as a Paramedic on the Billown Course you need to be a State Registered Paramedic with the Health & Care Professions Council (HCPC). In order to maintain your registration with them, you will need to satisfy their requirements. You can read more about this at www.hcpc-uk.org

5. Insurance

We are pleased to say that we have been able to organise Medical Malpractice cover for all of the Doctors and Paramedics that work for us on the Billown Course. In order to be covered medics need to be Statutorily Regulated. For doctors this means that they have to be registered with the GMC and have a licence to practice. For Paramedics this means that they have to be registered with the HCPC (Health and Care Professions Council) and hold a current licence.

Our Medical Malpractice Insurance will only provide cover whilst you are working for us during one of the events that we provide medical services for. Should you choose to carry out other work whilst on the Isle of Man, our Medical Malpractice Insurance will not provide cover for that work, and you should make sure that alternative malpractice cover is in place for those activities.

It is essential that all Doctors and Paramedics sign on as Officials of the event in order to obtain insurance cover. Please see section 7 for further information on signing on.

6. Registering with *Manx Roadracing Medical Services LLC*

Manx Roadracing Medical Services LLC is responsible for the recruitment of Doctors and Paramedics to provide medical cover for The Pre-TT Classic Races, The Post-TT Races, and the Southern 100 Races. This process is largely paperless, accomplished via the Registration section of our website WWW.MRMS.IM

Once you have filled in the Registration Form, we will contact you via email confirming that we have received your registration, and sending you links to the more detailed availability forms for the event(s) you are able to cover. If it is your first time working with us, we also ask that you submit a current CV with the Registration Form, and there is a facility on the form to allow you to do that. It is important that we have a CV for anyone working with us for the first time.

The registration process generally starts during November for the following year's events. We appreciate that you may not know your exact availability at that time, since this will often depend upon travel arrangements, work commitments etc. However, the sooner you are able to provide that information for us the better. In order to comply with the 2016 Road Races Act on the Isle of Man, from 2018 we will be issuing photo ID Cards to all of the Doctors and Paramedics that work with us. In order to produce the ID Cards, we require a recent passport style photo. The photo can be uploaded when you fill in the Registration form on the website or can

be emailed to us at gruff@mrms.im. It is a lot easier if we can produce these well in advance of the event, so again the sooner we can have a photo, the better.

Prior to each event we will contact all of the medics registered for that event, and circulate relevant information. This is done via email.

Once we have received availability details for everyone coming to a particular event, we will start to draw up the Duty Rota for that event. For events on the Billown Course, the rota will generally be provided when you sign on (see below).

7. Signing on for the event

It is essential that all Doctors and Paramedics working as a part of the medical team sign on using the ACU Officials signing on form before they undertake their first duty. Signing on takes place at the First Aid Post located at the Southern 100 Clubhouse on the main Start/Finish straight on the A5 New Castletown Road. You only need to sign on once for the event. Once you have signed on you will be covered by our Medical Malpractice Insurance, as well as by the Event Insurance organised through the ACU by the Southern 100 Club.

We would ask that before your first shift for any particular event, you allow time to visit the Southern 100 Clubhouse where you can sign on, and meet some of the other medics covering the event. You can also get a burger or a sandwich, and a drink, from the Clubhouse courtesy of **Manx Roadracing Medical Services**.

8. Road Closures

In order to allow racing to take place, the roads that form the circuit are closed to the public. This generally occurs approximately 15 minutes before the first scheduled practice or race for that session. The exact time of the road closures will be circulated to all medics providing cover for any particular event. Once the roads are closed you will not be able to go onto the course. Shortly after the roads close an inspection car will travel around the course to ensure that everything is suitable for racing.

Typically, after each practice session or race, the inspection car will make a lap of the course. It will be displaying plates that say **COURSE INSPECTION**. At the end of racing or practices, the roads will be opened by the Course Car travelling around the course displaying plates saying **ROADS OPEN**. Once the Roads Open car has passed your location, you are free to stand down.

There are some days where there is a break in the middle of the day in order to allow members of the public to move around, and to allow Marshals and Medics to have a lunch break. Again, in this instance, the Roads Open car will proceed around the course, and you are then free to leave your location. Usually the roads will open for approximately 1 hour, so make sure you know what time you have to be back at your location.

9. Marshalling on the Billown Course during events

Providing and organising the marshals on the Billown Course for all events is the responsibility of the Southern 100 Marshals association. Their website is <http://www.southern100.com/index.php/marshals/marshals-info> . Without the Marshals there would be no racing and the Southern 100 Club do a great job in



recruiting volunteers for each event. In overall charge of the Marshals is the Chief Marshal, Peter Chadwick, but the Marshals at each location work in teams, with each of them having allocated roles during the running of the races and the management of incidents. In charge of the Marshals at each location is the Deputy Sector Marshal. The DSM is responsible for all activities at his/her particular location as well as for the safety of the marshals/medics and the spectators there. If he/she gives you instructions in this regard you should follow them.

Travelling Marshals: Road racing in the Isle of Man is unique insofar as it makes use of Travelling Marshals. For racing on the Billown Circuit there are 3 Travelling Marshals. These are generally experienced ex racers who also have experience of managing incidents on the course. During practicing and racing they are located at the Start Line, Ballabeg and Cross Fourways, and they are the 'eyes' of the Clerk of the Course. They are in radio contact with Race Control, and in the event of an



incident, the Travelling Marshal at the point immediately before the incident will be dispatched to attend. When he arrives at an incident he will assume overall control. He is also responsible for making sure that the road surface and the incident scene is suitable to allow racing to continue. They carry some First Aid equipment with them, and have had some additional training with regard to things such as airway management.

10. Safety on the Course – Flags

As mentioned above, the DSM at your location will be responsible for ensuring the safety of marshals at his/her location, but it is up to all the people at a location to make sure that everything they do is done in a safe manner. With that in mind there are a few things that you should do

- Make sure that you always wear a yellow hi-viz tabard indicating your role as doctor or paramedic. If you have not already got one, these are available from The First Aid Post when you sign on.
- Use your common sense to make sure that you do not stand in any obviously dangerous positions
- Always move if asked to do so by the DSM
- If you have to go onto the course to attend to a casualty, make sure that the appropriate flags are being displayed before you move.
- The instinct to rush to help someone is very strong but always 'Look before you leap'

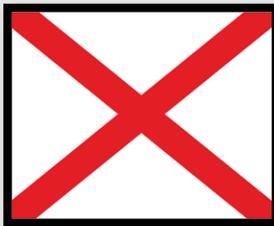
- When you are on the course, keep your wits about you. The bikes travel very fast. Even when the riders have slowed down for a yellow flag they may well still be doing over 100mph!
- If you feel that the position that you and a casualty are in is at all unsafe, let the DSM know and make arrangements to move the casualty to a safe place to assess and treat them.

Flags: There are various flags that you may see displayed at different times. Some of these flags are intended to provide information for riders, whilst others are intended to give them an instruction.

Information flags:



Lack of Adhesion flag
Used when grip on the road surface is reduced (usually oil)



Rain flag.
Used when rain is wetting the road surface

Instruction flags:



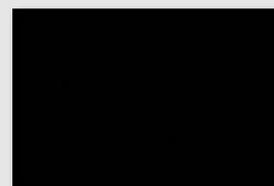
Yellow flag.
Stationary - Danger, slow down, no overtaking.
Waved - Imminent danger, be prepared to stop



Green flag.
Normal racing can resume.
Used after a yellow flag, once riders are past an incident.



Red flag.
All riders must stop at that location when they see a red flag.



Black flag.
Used in conjunction with a number to tell a specific rider to stop.

Flag procedures:

The most commonly used flag is a Yellow Flag. When shown stationary it warns riders of a potential danger ahead, such as a bike that has pulled in ahead. Riders must slow down and cannot overtake. A stationary yellow is also used immediately before a Waved Yellow Flag being shown at an incident.

A waved Yellow Flag is shown at an incident, and riders must slow down and be prepared to stop. Generally, riders will sit up on their machines and raise one hand to acknowledge the flag. **Do not go onto the course to attend an incident until there are Waved Yellow Flags being shown.** A waved Yellow Flag will also be shown if a Marshal is on the course (or making his/her way up the pavement). Riders, judged by the marshals, that ignore yellow flags, and do not slow down are reported to the Clerk of the Course, who can then take any action necessary.

A Green Flag is displayed immediately after an incident that is being managed under Waved Yellow flags to allow the riders to resume normal racing speeds, and to start overtaking again.

When the course is blocked by debris following an incident, or when there is oil on the track making it unsuitable for racing, the Marshals may ask Race Control for a Red Flag, which stops racing. In that event a Red Flag is displayed at the Start line and at all the Red Flag points around the course. Riders must stop at the first Red Flag they see. When they have stopped, they may be given further instructions by a Marshal to proceed to a holding area, signified by a further Red Flag. Once the Red Flag incident has been dealt with, all the riders who have been stopped on the course (i.e. the riders that were on the part of the course before the incident when it occurred) need to be brought back to the Start/Finish. Usually they will be escorted back by a Travelling Marshal.

A red flag will also be displayed when there has been an incident and it is determined by the Marshals/Medic on the scene that more medical help is required. This message will be passed to Race Control and Red Flags will be displayed all around the course before dispatching one (or both) of the Medical Cars, which are located at Balladoole and Cross Fourways. At the same time an ambulance will be dispatched to the incident. Depending upon the nature of the incident, the Helicopter may also be tasked to attend from its location at Iron Gate. This is somewhat different to racing on the TT Course, when all but the most serious of incidents is managed under waved yellow flags, and the primary response to most incidents is the helicopter.

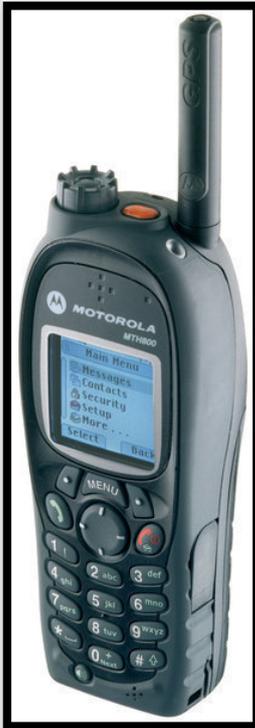
A Black Flag is used in conjunction with a race number when the marshals judge that there may be a mechanical problem with a particular machine. The Black Flag points are also the points where the Travelling Marshals are stationed. A bike that has been stopped by a Black Flag will be examined by the Travelling Marshal at that location and a decision will then be taken whether to allow the rider to resume.

11. Communications during the event

As mentioned above, before the event starts we will generally communicate with you via email. Once an event has started, but outside of actual racing, we will normally

contact members of the medical team by text message. We will send information out regarding delays to road closures, cancelled sessions etc. via our Group Text system. Please make sure that we have the correct phone number for you when you sign on. See Appendix 4 for Useful numbers during the events.

During the actual racing sessions, there are 3 separate radio networks in use. The first of these is for Marshals out on the course to communicate with Race Control. At each marshaling location, there is a dedicated radio operator who is in contact with a radio operator in Race Control. They will normally be the first to alert Race Control to an incident and they will pass any messages from that location to Race Control.



The second network covers the Course Cars, the Travelling Marshals, the Start Line, the Pit Lane and the Paddock. This network is used to control the cars, the TM's and to start and finish Practices or Races. It is controlled by the Clerk of the Course in Race Control.

The third network is the medical channel. This is run on tetra radios, and the talkgroup in use is **Ambmotorsports**. It is controlled by the Chief Medical Officer in Race Control and covers the 5 land ambulances, the Medical Car located at Cross Fourways and the Helicopter. There are sometimes other medics out on the course who also have tetra handsets, however we do not have enough handsets to provide radios for all of the medics out on the course. If you are out on the course and need to contact Race Control, you can either pass a message via the Radio Operator at that location, or you can use a mobile phone to phone the CMO. In the event of an incident requiring help from the medical car(s) or helicopter, medical information can be passed to Race Control over this network.

12. Medical equipment on the Course

The medical equipment that is around the course is provided by The Rob Vine Fund, www.robvinefund.im Equipment is placed at all the marshaling locations around the course, and when you are on duty this equipment will always be available to you.

Immediate Care Case: Usually referred to as the 'Orange Box' the Immediate Care Cases provide equipment required to manage minor injuries and also to manage the first 5 minutes or so of a more major incident, before a helicopter or response car gets to your location. The boxes are sealed but we would encourage people to open them to check the contents, and to familiarise themselves with the layout. They can be re-sealed with one of the spare yellow seals in the box.



The top layer contains dressings and bandages, eye care products, Paracetamol and an Antihistamine. The middle layer contains a selection of IV Cannulae (including paediatric sizes), IV giving set and fluid,

fixings for an IV cannula and also a large burns dressing. The lower compartment contains a bag, valve and mask, a hand operated suction unit, a selection of NP and OP airways (including paediatric OP airways), sharps container, a SAM splint, straps for securing the casualty onto the scoop stretcher, and patient report cards & pen.



Pictures: Top left – The top tray of the Orange Box. Top right – The middle drawer of the Orange Box
Bottom left – The lower compartment in the Orange Box. Bottom right – Head block for use with scoop.

Scoop stretcher: Along with the Immediate Care Case, at each location there is a scoop stretcher, and a red head block. The purpose of the head block is to keep the cervical spine in a neutral position, given that the vast majority of riders wear leathers with an aerodynamic 'hump'. Without the use of the head block this would put the cervical spine into hyperextension. If you are dealing with a rider with a suspected Cervical Spine injury and leathers without a 'hump', the head block should not be used. It can be used in any rider not suspected of having a Cervical Spine injury, for comfort.



At the time of writing (Feb 2018) we are looking at ways of providing Doctors and Paramedics with some extra equipment, probably in the form of a Medic's 'Bum Bag' to allow to undertake enhanced airway management with the use of a supraglottic airway (LMA or iGEL), enhanced management of major haemorrhage with appropriate haemostatic dressings, and possibly some extra analgesic options. More information will be provided on this when we have it.

13. Before you set off to your location

There are a few things to bear in mind before you set off to your location on the Billown Course. Make sure you know the time that the roads close. If there is any alteration to this, we will alert you via our Group Text system. The information is also given out on Manx Radio.

You will want to make sure that you have a number of things with you when you go on duty:

- Hi-viz tabard (available when you sign on)
- Photo ID Card (issued when you sign on)
- Medical Pass (issued when you sign on)
- Mobile Phone (charged!)
- Any medical equipment you want to take (see section 12 above)
- Clothing for all weathers (it is the Isle of Man after all!)
- Appropriate footwear (the ground can be quite rough underfoot)
- Enough food and drink (you will most likely be stuck at your location until the roads open again)
- Insect repellent, sun block etc.

14. Getting to your location

Once you have signed on at the Southern 100 Clubhouse, you will need to make your way out to your location before the roads close. You can travel in either direction around the course, depending on where you are located. Some locations are accessible after the roads close, but many are not. See below for information about specific locations.



Balladoole located on the A5, New Castletown Road, just past the Southern 100 Clubhouse, by the Pit Lane Exit. During racing, the 2 Course Cars (Delta 1 and Delta2) are located here along with the Recovery vehicles and an ambulance. Parking is available in the private drive. You can also get here on foot from the Clubhouse.



Ballakheigan is a sharp right hander at the end of the Start/Finish straight. It is accessible from the Port St Mary direction when roads are closed, and on foot from Balladoole by walking through the fields on the outside of the course. The stretch between Balladoole and here is referred to as **Hedges**. Parking is on the Port St Mary road.



Iron Gate. A long straight after Ballakheigan leads to the fast right hander, Iron Gate. Not accessible once the road is closed. Parking in the field on the left. The helicopter is stationed here in the field on the right.



Ballanorris, also known as **Joey's Gate**, after Joey Dunlop went straight on through the gate into the field during the 1979 meeting. It is a left and then right hander. Parking available in the field. The gate is kept open during racing. It is inaccessible by vehicle once the road has closed.



Ballabeg. Turning off the A28 onto the A7 is the deceptively sharp and bumpy corner, Ballabeg Hairpin. During racing there is an ambulance and a Travelling Marshal located here. It is accessible form the Port Erin direction when roads are closed. Parking is available on the Port Erin road.



Ballawhetstone. After leaving Ballabeg, Ballawhetstone is a fast right hander. Inaccessible once the road has closed. Parking is available in the farmyard on the right.



Billown Dip. After Ballawhetsone there is a fast left hander called **Willams Corner**, leading to Billown Dip. Sometimes it is referred to as **The Bomb Hole**. It is not accessible after the roads close. Parking is in the farmyard on the right.



Cross Fourways. After leaving Billown Dip you go past **Maggies**, and turn onto the A3 at the sharp right hander at Cross Fourways. This is a popular spectating point with refreshments and a toilet available. It is accessible after the road closes from both the Ballasalla direction and the A3 from Foxdale. There is a response car and an ambulance here during racing. Parking available on the Ballasalla road. There is a radio commentary point here.



Church Bends. Another popular viewing point. Right hander on the entry and a left hander on the exit. Parking available on the right in the field. There is a footpath from the back of the church that leads across to Williams Corner. Church Bends is inaccessible by vehicle once the roads have closed.



Great Meadow. The section from Church Bends to Stadium Bend is very fast and passes through Great Meadow. It is a very slight right hand bend. It is inaccessible by vehicle when the road is closed



Stadium. After Great Meadow is the left hand bend at Stadium. So called because it is the home of Castletown Football Club. Plenty of parking available in the football club grounds. Toilets and refreshments are available.



Castletown Corner. Over the bridge, and turning off the A3, back onto the A5 New Castletown Road, Castletown Corner is a sharp right hander and the last corner on the course. During racing there is an ambulance located here. It is accessible from Castletown when the road is closed.



Southern 100 Clubhouse. On the A5 New Castletown Road (referred to as The Bypass), past the Sothern 100 Race control on the right, the clubhouse is on the left just after the start line. Parking is available but does get very busy. Refreshments and toilets are available. During racing an ambulance is located at the Start Line. Accessible from Castletown when the road is closed.

Please be aware that in the time leading up to the roads closing there can be a lot of traffic, and it can take longer than you think to get to the course and around the course.

15. When you arrive at your location

You should introduce yourself to the DSM and the other marshals, and in particular you will want to introduce yourself to the marshal responsible for looking after a casualty. It is a good idea to find out from them what they are comfortable doing.

The DSM at the location should be able to give you a good idea what the 'typical' incident at that location might be like and where the rider is likely to end up. You can then start to think about safe areas to treat a casualty, and discuss with the marshals

the best way of moving a casualty, and the medical equipment to those areas. It might be helpful to run through a few simple scenarios with the marshals.

We would recommend that you check through the Immediate Care Case ('Orange Box') in order to familiarise yourself with it, and to check that the Marshals are also familiar with the contents. The boxes are sealed, but there are spare yellow seals in the box to re-seal it. Check the contents and if you do discover any problems with any of the equipment, let us know in Race Control. You can do this by phone, or by text (07702 415670), but we are also working on an electronic solution for passing that information by using your smart phone, which will hopefully be in place by 2018.

16. Managing a racing incident

When an incident does occur, there is a natural reaction to want to get there as quickly as you can, but always be sure to **LOOK BEFORE YOU LEAP!** Make sure that waved yellow flags are out before you go onto the course. In many instances, a rider will regain his/her feet straight away. In that situation you can get the rider to a safe location and take your time to assess them for any injuries. Bear in mind that in the immediate aftermath of an incident, due to high levels of Adrenaline, injuries are not always immediately apparent. Be sure to keep a close eye on any such riders for 10-15 minutes.

In a situation where a rider doesn't regain his/her feet, the first thing to assess is whether the situation is a safe one. You want to be assessing and treating any riders in a safe place off the course. If there is any doubt, get the marshals to help you move the rider. This may involve quickly log rolling the rider onto the scoop stretcher and carrying them off the course, with the help of the marshals, or in certain circumstances it may involve simply dragging them off the racing line to a safe location under vigorously waved yellow flags! Typically, for racing on the Billown Course, this situation will have resulted in the Clerk of the Course displaying Red Flags around the course, and further medical help will be on the way in the form of a Response Car and Ambulance, or the helicopter (or all of these). Once Red Flags are being displayed, many of the risks involved in managing the situation will have been mitigated.

Once in a safe location you can assess the rider. The first task is to safely remove the rider's helmet. Many of the Marshals will have been trained in this and will be comfortable performing this operation under your supervision. You can then assess Airway, Breathing and Circulation as well as any major haemorrhage, and take any appropriate actions. In this situation, a helicopter will be heading towards you. If there are no immediate ABC concerns, you can consider starting to package the rider ready for transfer. However, depending upon the situation, that may not be appropriate if there are significant injuries that need to be dealt with. Having carried out your Primary Survey, and taken any steps necessary, if there are significant injuries the next things to consider are analgesia and IV access. In general, given the short response times of the helicopter/response cars, it is quite likely that help will be with you before you get to this stage. We are gradually introducing Methoxyflurane (Penthrox™) as an inhaled analgesic as it can be used quickly and effectively before IV access has been established. There are some training issues surrounding

it's use which we are able to address. Remember that during this time, if you have not been able to exclude a Cervical Sine injury, one of the marshals will need to be instructed to maintain manual in line stabilisation.

Once the helicopter/response car arrives, you should give a hand over to them, describing the mechanism of injury and your medical report. There are yellow report cards in the Orange Box (see section 19 for information on record keeping).

Medical Incident Officer: In the event of a serious incident (as determined by the Chief Medical Officer), a Medical Incident Officer (MIO) will attend, and will be in one of the response cars. He/She will then take over the responsibility for managing the medical aspects of the incident, and will also pass information back to the Chief Medical Officer in Race Control.

The Medical Incident Officer, in consultation with the Chief Medical Officer, will decide on the most appropriate method of transferring any casualties to Nobles Hospital. Many times this will be by land ambulance, but if the situation demands, the casualty will be transferred by helicopter.

17. Helicopter procedures

For all racing sessions on the Billown Course, there is a medical helicopter stationed at Iron Gate. It is crewed by members who are experienced at dealing with racing incidents. The crew will generally comprise a Doctor and Paramedic, although there are occasions when the crew will be two Paramedics. The Chief Medical Officer has the responsibility to task the helicopter. (Please See Appendix 1 – SOP for Operational Routines for Medical Helicopter on the Billown Course)

It is the responsibility of the Travelling Marshal to identify and secure the landing site and to make it clear to the helicopter where that site is. In practice, that responsibility is frequently delegated to one of the marshals on scene.



When the crew disembark from the aircraft, one of them will be carrying the Response Bag, and the other will bring a scoop stretcher and head block to replace the ones at your location.

Historically, casualties were generally loaded in to the helicopter with the rotors running, in order to save time. Due to the changing nature of Pre-Hospital Care, and with an eye on safety, it is as likely now that the helicopter will shut down when on scene to allow for loading to take place without the rotors running. There are times when the Captain of the aircraft will not want to shut down for operational reasons (difficult terrain etc).

When transporting a casualty to the helicopter, you should stop just outside the rotor disc to await instructions. At this point, one of the helicopter crew will be responsible for the casualty, and the second crew member will be 'eyes up' with responsibility for the overall loading procedure. He or she will wait for an all clear from the pilot and will then instruct the marshals and medics to approach the aircraft. This will nearly always be done from the front of the aircraft between '10 o'clock and 2 o'clock'.

Safety is paramount at this point, and it is important to proceed slowly and safely. Make sure any caps or loose items of clothing are removed, and take care with your footing. **NEVER** approach the rear of the aircraft when the engines are running.

Before the helicopter leaves, the crew will replace any equipment that has been used in managing the incident. Sometimes this might only be a couple of straps which they will give you if you ask, other times it might mean replacing a whole Orange Box, which they will also do. It is easy in the heat of the moment to overlook this, so if you realise after they have left that you are short of a piece of equipment, contact Race Control and we will make arrangements to replace it at the end of the session.

We would advise that you watch the TTMA instructional video which can be found at www.youtube.com/watch?v=diecYaiZfQc

18. What to do after an incident

Once the dust has settled after an incident, you need to check the equipment that you have available to make sure nothing needs replacing. If you are short of anything let Race Control know.

It is good practice to have a short debrief with the Marshals after any but the most minor incidents. Discuss things that went well, as well as anything that you feel could have been better. If you have any specific concerns about a particular incident, please let us know. You can phone Sally on 07702 415670 or email sally@mrms.im We carry out regular case reviews during the events to see what we can learn to improve the service for next time.

Some incidents can be very harrowing, and if you or any of the marshals at your location are suffering as a result of the experience, please let us know because we can arrange any support that is required.

19. Record keeping

IMMEDIATE CARE REPORT CARD

EVENT AND YEAR: _____

NAME: _____ NUMBER: _____

DATE: _____ PLATE COLOUR: _____

TIME SEEN: _____ SOLO/DRIVER: ()

INCIDENT SITE: _____ PASSENGER: ()

K'OD: () NOT K'OD: () VOMITED: () BLOOD LOSS: ()

PULSE RATE: () NONE - ()

RESP RATE: () SLIGHT - ()

MODERATE - ()

SEVERE - ()

AVPU: ALERT () VERBAL () PAIN () UNRESPONSIVE ()

EYES N=PEARL D=DILATED C=CONSTRICTED

RIGHT () LEFT ()

MEDICATION: _____

ALLERGIES: _____

DRUGS: _____

GIVEN AT: _____

ENTONOX ()

OXYGEN ()

Name of Doctor / Paramedic _____

Keeping good records of our activities has never been more important than it is in this day and age. Within the Orange Boxes there are some yellow Patient Report Cards. Typically, one of these would be filled out by the medic on scene, and either handed to the helicopter crew, in the event that the casualty is evacuated by air, or to the ambulance crew or Response Car crew in the event that the casualty is evacuated by land ambulance.

If the casualty does not require evacuation, we would still want you complete a Patient Report Card, and ask that you drop it in at Race Control when you get the chance. We are hoping to develop an electronic version of the Patient Report Card, which

will simplify the process. We will give further information about that when it is available.

The notes need not be exhaustive, but with the increased scrutiny that there is within all fields of healthcare these days, it is important that they reflect the care that has been given.

20. Payments to medics

We appreciate how expensive it is for people to travel over to the Isle of Man and to stay here during the events. We also understand how much of an investment of people's time it is, and we are hugely grateful for the support we get. Whilst we are not able to pay people the going rate for the job, we do try to do all we can to ensure that people are not out of pocket. To that end we are able to pay expenses to all of the Doctors and Paramedics that volunteer to work with us. We have a fixed pot of money to pay the expenses out of, so the exact amount that we are able to pay does depend upon a number of factors, including how many people volunteer, how many sessions there are in that particular event etc. As a rough guide, we would generally expect to pay in the region of £55-60 per session (a full day would comprise 2 sessions). We pay these after the event, by bank transfer, so please make sure that we have the correct bank details for you when you sign on.

Finally

If, having read this guide, you have any further questions, please email either Sally Simmons, sally@mrms.im or our Administrator, Stuart Greaves, stuart@mrms.im

If you want to register to be a part of the medical team for a unique event please do so on the registration page of our website <http://mrms.im/registration-form/>

Remember to upload your CV if it is your first time working here, and please also remember to upload a current passport style photo. This can be taken on your phone or with a web cam, and then uploaded via the Registration Form.

We look forward to seeing you on the Isle of Man.

Appendix 1:

**Operational Routine For Medical Crew Aimed
for Billown Course Events**

Distribution	Flight Doctors Flight Paramedics MRMS Directors Clerk Of the Course Rob Vine Fund TT Aviation Co-ordinator
Related Documents	Auto Cycle Union handbook. Published by the ACU MRMS Aimed Equipment SOP
Date of Review	January 2017

1. Aim

- 1.1. Define the role and responsibilities of the flight medical crew manning in Aimed.
- 1.2. Identify the necessary radio calls and checks with Billown Race Control (BRC)

2. Principles

2.1. Flight doctor and paramedic:

- 2.1.1. Are fully registered practitioners licensed to practice by the General Medical Council and Health Care Professions Council.
- 2.1.2. Have the necessary competencies for delivering pre-hospital emergency medical care.
- 2.1.3. Are familiar with S100 course incident management including serious and major incidents and the wider contents of the "Green Book".
- 2.1.4. Have current experience of providing medical care in the motorsport environment.

2.2. The aircraft will be equipped with the necessary medical equipment and drugs defined in Manx Roadracing Medical Services (MRMS) Equipment SOP.

2.3. The duty medical crew is responsible for ensuring all the medical equipment is present and in good working order and that drugs are in date at the beginning of each shift.

- 2.4. Duty medical crew will undertake a training moulage or talk through of an incident or review a piece of medical equipment on each shift.
- 2.5. Wear appropriate protective footwear.
- 2.6. All medical crew have undergone aircraft familiarity training with one of the captains and signed the appropriate paperwork. This should be done for each event.

3. Background

- 3.1. The hand held and aircraft tetra radios operate on Ambutilities on the Billown course. Also on this talkgroup are all other medical assets provided with radios eg: Hogg Ambulance, Hogg Rescue, Hogglet, Medical Incident Commander, and Medical Race Control (CMO). It should be noted that this is not a secure channel.
- 3.2. Traveling marshals that need to speak with the aircraft can do so by contacting Race Control (CotC).
- 3.3. Aircrew communication with RC will be via the CMO.
- 3.4. The armed helicopter is kept at Iron Gate during Southern 100 Course events, but during Pre TT and Post TT will fly from Nobles helipad.

4. Beginning of Shift (S100)

- 4.1. Medical crew should: Arrive at Iron Gate 30 minutes before road closure for practices and racing. On the first shift of each event, the medical crew will receive a briefing from the pilot on all safety issues and will be required to sign to say that they have received and understood the briefing.
- 4.2. Receive all armed medical bags, doctor's drugs bag and RSI drugs pouches from D1 car or Hogg Ambulance.
- 4.3. Conduct a check of equipment as per MRMS equipment SOP signing to confirm all the equipment is present and mission ready.
 - 4.4. Choose appropriately sized helmet & labeled flight suit.
 - 4.5. Undertake a radio check with CMO Billown using handheld tetra radios as per 3.1.
 - 4.6. Confirm with RC the crew of each aircraft and the standby point for each aircraft. Normally this will be Iron Gate.

5. Movement to Stand by Point

- 5.1. Before lifting the pilot will ask for confirmation that helmets, harnesses and doors are secure. Either of the medical crew can respond.

5.2. When airborne medical crew should undertake radio check on the aircraft tetra radio set and confirm intended destination.

5.3. When landing at stand-by point RC should be updated.

5.4. When on the ground and out of the aircraft undertake a radio check on the hand held radios.

6. Tasking To An Incident

6.1. It is the role of Chief Medical Officer in RC to decide when and where the aircraft are tasked.

6.2. If asked to “scramble” the crew should make their way to the aircraft. Either the paramedic or doctor should acknowledge receipt of the call confirming the location. Once in the aircraft they buckle in, secure helmets and equipment and prepare to lift to the incident. The pilot will start the engines.

6.3. The medical team should confirm the pilot is happy with the location of the incident.

6.4. Before lifting the pilot will ask for confirmation that helmets harnesses and doors are secure. Either of the medical crew can respond.

6.5. When airborne the team should confirm with RC the intended destination.

6.6. In some circumstances a crew may be asked to come to “Stand By”. As before the team should acknowledge receipt of the Stand By instruction and make their way to the aircraft, buckle in and secure helmets and equipment in readiness of going on a mission. The aircraft engines will not be started unless a second message requesting them to scramble is given by RC. The crew should acknowledge receipt of the scramble

7. Airborne On Route & Landing

7.1. Assist the pilot with navigation and identifying the incident.

7.2. Inflight and when landing look for obstacles or hazards, confirm with the pilot he is sighted to anything you are worried about.

7.3. Before landing confirm with RC that incident has been identified and confirm landing

8. Exiting the Aircraft On the Ground

8.1. The pilot will give the medical crew clearance to exit the aircraft. Leave the aircraft between 10:00 and 02:00 in line of sight of the pilot. Do not exit until this clearance is given.

- 8.2. If the aircraft has landed on uneven ground or a slope agree with the pilot exactly which part of the disc to exit under.
- 8.3. If marshals or members of the public are moving toward the aircraft give them a clear indication with your hand to stay where they are.
- 8.4. The aircraft will remain rotors running unless told to shut down by the flight paramedic or doctor, or if the pilot considers it necessary.

9. On Scene with Patient.

- 9.1. Ensure the necessary flags are out and that riders are slowing down.
- 9.2. If the patient is in the track or other unsafe position move the patient to a place of safety before further assessment or treatment.
- 9.3. After examining the patient give a medical report as per Appendix A

10. Packaging

- 10.1. After the necessary treatment ensure the patient is securely strapped to the scoop stretcher.
- 10.2. Patients with severe injuries should be placed on the upper stretcher in the aircraft.
- 10.3. The lower stretcher should be used for patients with less severe injuries.
- 10.4. If an orange box has been used this should be exchanged.
- 10.5. The security of all doors should be checked by either the flight doctor, flight paramedic or pilot before lifting. If any of the baggage doors have been accessed on scene then these should also be checked.
- 10.6. Intubated patients should always be put in the aircraft when it is shut down.

11. On Route To Hospital

- 11.1. Before lifting the pilot will ask for confirmation that helmets harnesses, doors and equipment are secure. Either of the medical crew can respond.
- 11.2. Confirm with RC when the aircraft is airborne and its intended location.

- 11.3. Pass any significant updates to RC on the condition of any casualties.
- 11.4. If the medical crew intend to stay with the patient let RC know.
- 11.5. If a trauma team response or blood is required on arrival at the ED ask RC to let the ED know.

12. Landing & Patient Transfer At Nobles Helipad

- 12.1. Inform RC via aircraft tetra radio that the aircraft is landing at Nobles.
- 12.2. Off loads will normally be rotors running unless the patient is intubated or unstable.
- 12.3. Ensure the clinical notes are passed to the Hogglet ambulance crew at the helipad. If there are any concerns about patient instability, airmed crew are to accompany patient to ED.
- 12.4. Exchange scoop stretcher, head rest and straps.
- 12.5. Place used orange box in trailer and restock aircraft with fresh box.
- 12.6. Inform RC that patient handed over and request next movement.

13. End Of Shift – Returning to Stand By Point

- 13.1. RC will let the medical crew know when they can make their way back to the Stand By point (normally Iron Gate) via radio.
- 13.2. On lifting confirm airborne with RC.
- 13.3. Confirm landing with RC.
- 13.4. RC will inform airmed crew when they can stand down. This is normally when the roads open car passes their location.
- 13.5. Review equipment checklist and sign that the aircraft is mission ready for the next day. If there are deficiencies that cannot be rectified from the white trailer these should be communicated to RC and a solution identified, this includes the replenishment of used drugs.

For each incident:

The number of casualties and any additional resources required. (Use **METHANE** if major incident appropriate).

For each patient: (loose ATMIST)

Patients name

Approximate age if known

Rider / Driver / Passenger / Member of the public/Marshall

Number and colour of plate

Mechanism

GCS

Movement of limbs

Injuries

Haemodynamic stability

Treatment given/Proposed interventions/ immediate needs