

**IAM RoadSmart
Motorcycle Skills Day
Instructors Manual**



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1. Introduction

IAM RoadSmart Skills Days offer attendees an opportunity to practice road-based skills in a safe environment and to learn about their personal and machine performance in controlled conditions with qualified coaching. The machine and the circuit become the classroom with the objective of converting theory into riding skills. We should all feel very proud of what we offer, it is almost a unique product that is not dedicated to developing any racing skills but developing riding skills of real practical use on the roads.

2. A standard approach

The guiding reference document is Motorcycle Roadcraft 2020 The Police Riders Handbook. The Skills Day focusses on the core skills from this publication. The central theme of the day is developing the system of motorcycle control and reinforcing the mantra of our approach of the 'Three R's' – by using Road bikes, Road kit and Motorcycle Roadcraft. Customers use their own road legal motorcycle, wear approved road-based motorcycle clothing and a helmet, and we use Motorcycle Roadcraft and not racing techniques on the circuit. We do however use the correct lines on the circuit corners reinforced by reference cones.

3. Safety

The paramount consideration is always safety, at no time should the safety of the customers, instructors or any third party be compromised. Each rider is responsible for their actions and any consequences that those actions may have. Instructors may need to make positive interventions in order to bring a rider under control.

Before taking a group out onto the circuit please perform a short inspection of their motorcycle. If there is an issue that cannot be rectified quickly, please discuss your concerns with the safety officer.

Customers are given a comprehensive safety briefing during which they are told they must always conform to the instructions of our instructors and track officials.

Dangerous or inconsiderate riding is not tolerated. The Safety Officer has the right to prevent track access to anyone not adhering to our code of conduct.

Instructors must fully understand the circuit specific protocols and marshal flag information. These are contained in Appendix A – Circuit Specifics, and Appendix B – Flag Signals

4. Roles and responsibilities of instructors

As an IMI National Observer your role is to develop riding theory into riding skill. You do this with your own ability and knowledge of Motorcycle Roadcraft together with your coaching skills. Starting with a conversation you will check the customers current areas of knowledge and capability and investigate their own personal motivation objectives & goals for the Skills Day.

The IAM RoadSmart Code of Conduct applies to everyone involved in a Skills Day, we work together as a central team and are ambassadors for IAM RoadSmart.

Please ensure that the customers remain safe and fit to ride. Look out for fatigue, instructional overload and please ensure customers rehydrate regularly. Should there be any issues please report them to the IAM RoadSmart Safety Officer.

The IAM RoadSmart Safeguarding Statement appears at Appendix C.

5. Learning outcomes

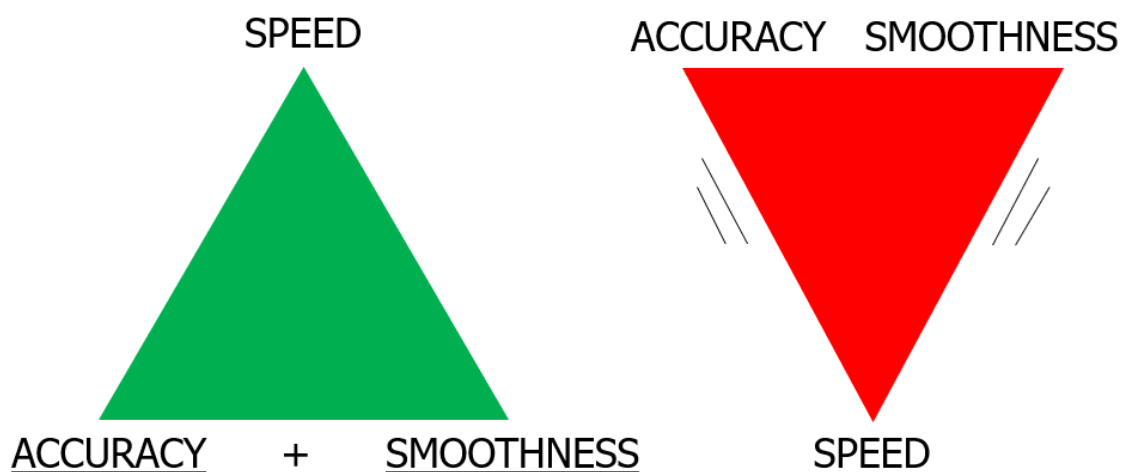
The Skills Day learning outcomes are based on the demonstration and application of the system of motorcycle control – Motorcycle Roadcraft Chapter 2 page 30-31. Developing a riding plan is no different even though we are on a circuit-based training day.

Focus Points

1. **I**NFORMATION – vision and lines, head up - eyes on main beam, scan
2. **P**OSITION & **S**TEERING - how your position/steering affects your motorcycle control
3. **S**PEED - brake smoothly and progressively
4. **G**EAR – be in a responsive gear for the circumstances
5. **A**CCELERATION – throttle control, plan to be on a positive throttle in bends

The Precision Triangle

A good graphic that explains the learning outcomes we are trying to achieve is 'The Precision Triangle.' A triangle is most stable when it is on its base. If we focus on developing riding accuracy and smoothness, then the speed and confidence will follow. This is represented by the green triangle. If you try to balance a triangle on its point it is unstable, if that represents speed as a primary focus for the rider then it follows that the rider's accuracy and smoothness will be poor. We aim to develop accuracy and smoothness in our riding plan.

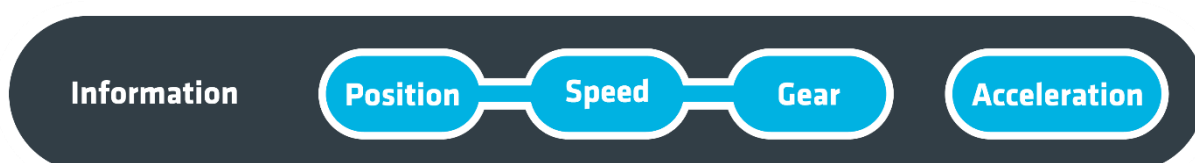


6. Core skills development

Underpinning reference document – Motorcycle Roadcraft 2020 The Police Rider's Manual.

Knowledge is power so you need to ensure you have a copy of Motorcycle Roadcraft and understand the key parts to develop the customer.

Effective development and application of the system of motorcycle control is very much dependent on the understanding and development of the core skills of advanced riding. It is vital that the rider understands how, the information process influences and affects the entire ride. Please remember that not all customers are advanced riders so system knowledge may be non-existent therefore some explanation of the basic system phases may be required.



Improving Your Observations –

Consider focussing your discussions on not only visual skills but also mental skills such as information processing and concentration and how these skills are linked.

The circuit environment gives excellent opportunities to emphasise the importance of scanning the environment and how riders often look at a particular hazard but miss other important information.

Whilst sight is the main sense for observation, hearing, smell and also the feel of the machine are all important elements of this key skill.

Motorcycle Roadcraft Chapter 3 pages 59–66

The 5 key stages of planning –

Observe – if you fail to observe then the remainder of the key stages become insignificant!

Anticipate

Prioritise

Decide what to do

Act

Motorcycle Roadcraft Chapter 3 pages 54-55

These key stages should be discussed with **Decide what to do** – what I can see, what I cannot see, what I can reasonably expect to develop etc.

Motorcycle Roadcraft Chapter 3 page 58

The purpose of the riding plan (known as the 4 C's) is to put the rider:

- in the **C**orrect position
- at the **C**orrect speed
- with the **C**orrect gear engaged
- at the **C**orrect time

to negotiate the hazards safely and efficiently.

Motorcycle Roadcraft Chapter 3 page 54

Weather conditions and road surfaces

Many riders fail to appreciate the links between observations, poor weather (reduced visibility for example) and road surface changes, and for the latter the effect on machine stability.

Consider asking the question "have you ever failed to spot a problem on the road surface that affected your tyre grip or machine handling?"

Motorcycle Roadcraft Chapter 4 pages 84 – 91

Acceleration, using gears, braking and cornering – are all linked and can have a significant effect on the stability of the machine.

Riders are often unaware of the comparatively small amount of tyre that is in contact with the road surface at any one time. On an average machine this is about the same size as a hand.

One of the most significant area for development for many riders is "**tyre grip trade off**".

Circuit based development is an ideal opportunity for riders to explore this in a safe environment and to develop further awareness of balance and tyre grip.

Motorcycle Roadcraft Chapter 5 page 104 – 107

Some customers may have a machine fitted with an **automatic or direct shift gearbox (DSG)** - these systems offer the ability to override the automatic function, as in a car, and manually select a gear using switches on the handlebars. When using the switches, they perform almost as a manual and allow a gear to be held or prioritised. If the customer is riding one of these machines, they should consult the handbook and follow the guidance on how to use the gearbox to best effect.

Motorcycle Roadcraft Chapter 5 page 118

The guidelines for **Braking** are a great talking point and practical opportunity. Few riders rarely realise the potential of their machines braking system. Explore **emergency braking**. It is always better to experiment and find out the machines braking capabilities before a time that it is needed. **ABS operation** can be introduced as a further learning point. Reinforcement of the **safe stopping distance rule** may be needed for some riders.

Motorcycle Roadcraft Chapter 5 pages 123 – 124

Cornering, balance and avoiding skids are critical areas for motorcyclists and are disciplines that can easily be incorporated into IAM RoadSmart Skills Days. Cornering on a motorcycle is very different from cornering in a car. If you get it wrong the outcomes for a rider can be more serious. Whilst the circuit environment is not ideal for limit point of view discussions it may be introduced within other cornering development.

Start the learning with some general principles and a simple explanation of the forces involved in cornering.

Introduce the **five key principles for safe cornering**, riders should:

- be correct position on the approach
- be travelling at the right speed for the corner or bend
- have the right gear for that speed
- be able to stop safely in the distance you can see to be clear on your own side of the road
- open the throttle enough to maintain a constant speed round the bend – maintain positive throttle

Motorcycle Roadcraft Chapter 7 page 141

Many riders do not consider their personal **riding position** and how they sit on the motorcycle – it may be worthwhile taking some time over this.

Motorcycle Roadcraft Chapter 7 pages 141 – 142

Machine roadworthiness has a significant effect on the ability to corner.

Motorcycle Roadcraft Chapter 7 page 142

Cornering forces – a motorcycle is most stable when travelling in a straight line on a level course and at a constant speed. Some riders mistakenly think that a moving motorcycle is unstable and that cornering is dangerous because a leaning bike is even more unstable.

Consider how by explanation of cornering forces, counter steering if necessary and the Full Control document you can dispel many of the fears that riders have.

The circuit gives you an ideal opportunity to explain (and allow the riders to demonstrate) how **Cornering forces** act on the machine and their effects.

Motorcycle Roadcraft Chapter 7 pages 143 – 145

Our customers at an IAM RoadSmart Skills Day arrive with a variety of machines – the **machine specification** has a significant effect on the handling characteristics and with that its stability.

A summary of the factors affecting cornering are:

- the speed of the machine
- the amount of lean applied
- the amount of acceleration or braking
- the slope across the road surface – camber and superelevation
- the road surface and how weather and other factors affect its grip
- the characteristics of the machine and its ground clearance
- the weight and distribution of any load being carried

Motorcycle Roadcraft Chapter 7 pages 148 – 149

Discuss how the **System is used in cornering** and in particular always position for

- safety
- stability
- view
- reducing the tightness of the bend

Always be prepared to sacrifice your road position for safety

Motorcycle Roadcraft Chapter 7 pages 159 – 160

Avoiding skids is a critical matter for motorcyclists. Riding safely within the limits of road conditions so that you are able to avoid a skid is much better than having to correct one.

As always **“A machine skids when one or both tyres lose normal grip on the road surface”**.

The best way to gain confidence in dealing with a skid is through formal loose surface riding instruction. No form of skid training will take place during IAM RoadSmart Skills Days.

The commonest cause of skidding is the riders input or external hazards.

Motorcycle Roadcraft Chapter 7 page 164 – 166

Machine design development is moving at a rapid pace with the introduction of ABS, linked braking systems, traction control and other associated programmes. The best advice is for a rider to consult the owner handbook to establish the systems fitted. Instructors should

remember that there are still many machines on the road which do not have ABS or any other developments.

Motorcycle Roadcraft Chapter 7 page 170 – 172

One of the most frightening experiences a rider can have is **aquaplaning**. Weather conditions at an IAM RoadSmart Skills Days will dictate the time spent on this subject.

Motorcycle Roadcraft Chapter 7 page 173

Positioning - Whilst it is not possible to explore this subject in respect of road hazards and junctions on circuit-based development there are points that can be practiced and considered. It is a crucial element in the system of motorcycle control.

The five advantages of the following position and the two second rule – this can be developed and easily discussed and demonstrated.

Motorcycle Roadcraft Chapter 9 page 194 – 195

Positioning on bends – When approaching a bend, position to get the best possible view of the road ahead. Take information on the approach to the bend to help decide on the best position.

Motorcycle Roadcraft Chapter 9 page 195

The circuit environment may provide opportunities to develop overtaking skills more easily than during practical on road development sessions. The **single stage, or three stage overtake** are still relevant and the circuit allows discussions and development without the conflict of oncoming vehicles to take into consideration.

Motorcycle Roadcraft Chapter 10 pages 211 – 218

Please review the graphic below. The key point of overtaking is OAP. Anticipation of an overtaking opportunity occurs in the white sector, upon entering the bend, and planning to execute the overtake as you exit the bend. Overtaking takes place in the green acceleration sector and must be fully completed by the end of the green sector. We do not attempt to overtake into a bend i.e. the red danger sector.

Remember – **always be patient and leave a margin of safety to allow for errors.**

Circuit Overtaking

7. Rider management

Riders must ride within their own capabilities and exercise judgement when determining the safety of their actions. To encourage learning you may suggest trying different techniques. We must never encourage or tolerate poor riding, it is a road skills day and therefore the speed limit is set at 90mph. The instructor must control the session and give clear instructions.

At all times during an IAM RoadSmart Skills Day, all safety systems fitted to the customers machine must remain active. For machines fitted with selectable riding modes consider the most appropriate mode for the prevailing conditions and rider skill level.

If a rider is unwilling to respond to your guidance on a clear safety related issue, then return to the pit lane for a discussion. If you are unable to resolve the issue, please bring it to the attention of the IAM RoadSmart Safety Officer immediately.

Please remember to give feedback after each session, be positive and encouraging as they develop their riding skillset.

8. Appendix A - Expenses

Expenses payable for instructors.

	Car	Bike
Mileage – HMRC rates to venue & return	45ppm	24ppm
Breakfast if necessary	Provided or receipt to value of £7.50	Provided or receipt to value of £7.50
Evening meal if necessary	Provided or receipt to value of £20	Provided or receipt to value of £20
Accommodation if required (Depending on distance from venue)	Booked by IAM DB&B rate	Booked by IAM DB&B rate
Track mileage HMRC rates - Thruxton	42 miles = £18.90	120 miles = £28.80
Track mileage HMRC rates - Croft	35 miles = £15.75	110 miles = £26.40
Track mileage HMRC rates - Mallory Park	N/A	100 miles = £24.00
Track mileage HMRC rates - Blyton Park	35 miles = £15.75	100 miles = £24.00

9. Appendix B – Flag Signals

Flag signals used at circuits:



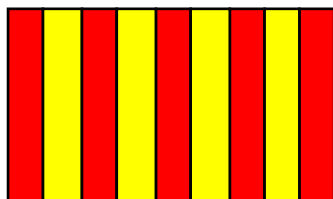
YELLOW FLAG – Danger hazard on track. If waved, significantly reduce speed. No overtaking is allowed. If held stationary at every marshal post a Virtual Safety Car situation exists, continue at reduced speed, no overtaking permitted.



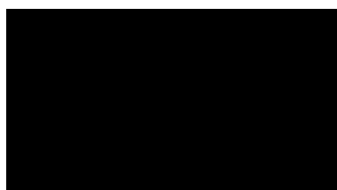
RED FLAG – Session stopped, significantly reduce speed and return to pits. Remember emergency vehicles will take the shortest route to the scene of an incident.



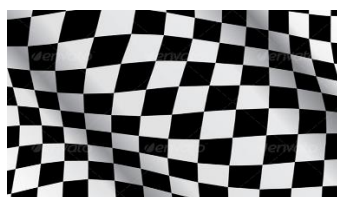
GREEN FLAG – The course is clear (post incident) Also used on the first 2 laps of Skills Day sessions to indicate to drivers where the marshal posts are located.



CAUTION FLAG – Slippery surface, oil, or other debris on the track. Exercise caution.



BLACK FLAG – A problem with your vehicle or driving. Return to the pits immediately and report to the Safety Officer for a discussion.



CHEQUERED FLAG – Session over, slow down and return to the pits.

10. Appendix C

IAM RoadSmart Safeguarding Statement

Purpose

The purpose of this statement is to protect people, particularly vulnerable adults, or young people, from any harm that may be caused due to their contact with IAM RoadSmart employees and associated personnel (as defined below):

A young person is, as defined by The Children Act 1989:

'a person under the age of 18 years'

A vulnerable adult is:

'a person who needs community care services by reasons of mental health or other disability, age or illness' and 'is or may be unable to take care of him/herself against significant harm or exploitation'.

IAM RoadSmart is committed to protecting the safety and wellbeing of young people and vulnerable adults and this statement outlines the commitments made by IAM RoadSmart and informs employees and associated personnel of their responsibilities in relation to safeguarding.

This policy does not cover:

- Sexual harassment in the workplace – this is dealt with under IAM RoadSmart's Anti Bullying and Harassment Policy
- Safeguarding concerns in the wider community not perpetrated by IAM RoadSmart or associated personnel

What is Safeguarding?

In the UK, safeguarding means protecting individual's health, wellbeing and human rights, and enabling them to live free from harm, abuse and neglect.

Scope

All employees contracted by IAM RoadSmart

Associated personnel whilst engaged with work or visits related to IAM RoadSmart, including but not limited to the following: consultants; volunteers; contractors; trainers and programme visitors including journalists, celebrities and politicians.

Context

IAM RoadSmart believes that everyone we encounter, regardless of age, gender identity, disability, sexual orientation or ethnic origin has the right to be protected from all forms of harm, abuse, neglect and exploitation. IAM RoadSmart will not tolerate abuse and exploitation by staff or associated personnel.

Best Practice

Always:

- Work in an open environment, avoid private or unobserved situations and encourage open communication with 'no secrets'
- Treat all vulnerable adults and young people equally, with dignity and respect

- Put the welfare of vulnerable adults and young people first
- Build relationships based on mutual trust and empowering vulnerable adults and young people to share in the decision-making process
- Be an excellent role model including not smoking or drinking in the company of vulnerable adults and young people
- Request written carer consent before you transport vulnerable adults and young people in your car
- Avoid private or unprofessional communication with vulnerable adults or young people by phone, text, letter, social media or email and do not grant vulnerable adults or young people access to your personal social media profiles

Never:

- Engage in rough, physical or sexually provocative games
- Allow or engage in any form of inappropriate touching
- Make sexually suggestive comments to a vulnerable adult or young person, even in fun
- Allow allegations made by a vulnerable adult or young person to go unrecorded or acted upon
- Take a vulnerable adult or young person to your home where they will be alone with you

Reporting

IAM RoadSmart will ensure that safe, appropriate, accessible means of reporting safeguarding concerns are made available to employees and associated personnel.

Anyone reporting concerns or complaints through formal whistleblowing channels will be protected by IAM RoadSmart's Whistleblowing Policy.

IAM RoadSmart will also accept complaints from external sources such as members of the public, partners and official bodies.

How to report a Safeguarding Concern

Employees who have a complaint or concern relating to safeguarding should report it immediately to a member of the Senior Management Team or their line manager. If the employee does not feel comfortable reporting to a member of the Senior Management Team, or line manager (for example if they feel that the report will not be taken seriously, or if that person is implicated in the concern) they may report to any other appropriate person such as Head of HR.

Associated personnel should report it immediately as follows:

- Volunteers – report to the Chair of their Group (ASDMs will be available to offer advice to the Chair)
- Trainers – DDR to Driver Education and Development Manager
- Trainers and Examiners – to ASDMs (ASDM team will seek advice as required from Head of Field Service Delivery or Head of Driving and Riding Standards)

Responding to a Concern

If you are made aware of a concern, you should:

- Stay calm
- Contact emergency services if there is a need for any medical attention or protection – ensure they are aware this is a safeguarding issue
- Reassure the accuser they are not to blame, and they were right to tell you
- Listen to them and show that you are taking what is being said seriously
- Keep questions to a minimum, although you must have a clear and accurate understanding of what has been said. The law is strict, and an abuse case can be dismissed if it appears a vulnerable adult or young person has been led or words and/or ideas have been suggested
- Record what has happened
- Report what has happened as soon as possible

If you suspect that a vulnerable adult or young person may be the subject of abuse, it is not your responsibility to decide whether abuse has occurred/is occurring, but it is your duty to report your concern.

IAM RoadSmart Response

IAM RoadSmart will follow up safeguarding reports and concerns according to procedure, and legal and statutory obligations.

IAM RoadSmart will apply appropriate disciplinary measures to any employee or associated personnel found in breach of the statement.

IAM RoadSmart will offer support to victims of harm caused by an employee or associated personnel, regardless of whether a formal internal response is carried out (such as an internal investigation).

Confidentiality

It is essential that confidentiality is maintained at all stages of the process when dealing with safeguarding concerns. Information relating to the concern and subsequent case management should be shared on a need to know basis only and should always be kept secure.

Date: February 2021

11. Appendix D

IAM RoadSmart Zero Tolerance Statement – Abusive or Aggressive Behaviour

We are committed to providing a professional and fair service to everyone we work with and in return we ask that members respect our staff.

IAM RoadSmart will not tolerate threatening, abusive, or violent behaviour. Under these circumstances our staff and volunteers should not be required to or feel obliged to deal with any person either face to face, over the phone or in email or written correspondence.

About this position statement

This position statement enables us to deal with unacceptable behaviour, professionally, consistently, and fairly. It lets staff, volunteers and members know what we consider to be unacceptable and outlines the steps we will take to deal with such behaviour.

What behaviour is unacceptable?

For the purposes of this position statement, unacceptable behaviour is defined as:

Behaviour or language (written, verbal or online) that we consider may cause staff or volunteers to feel intimidated, afraid, offended, threatened, or abused.

Examples of this include (but are not exhaustive):

- **Communication** that we consider to be unreasonably demanding, or unreasonably persistent in its frequency, type, and nature. By this we mean face to face, telephone, email, online or through social media.
- **Inflammatory/derogatory statements**, remarks of a racial, xenophobia or discriminatory nature and unsubstantiated allegations.
- **Violent behaviour** - Physical contact made in an aggressive or threatening manner. This includes pushing; jostling; kicking; punching; physical restraint; sexual assault; spitting and use of weapons.
- **Threatening behaviour** - Words or actions that cause a person to be concerned for their safety, the safety of colleagues, or the safety of their property. This includes visual threats or gestures; aggressive stance; sexually explicit or threatening language or body language; abusive phone calls; on-line bullying, use of aggressive dogs and obstruction or aggressive use of vehicles.
- **Abusive behaviour** - Words or actions that cause a person to feel harassed, intimidated, or distressed. This includes offensive gestures; aggressive stance; abusive, provocative, or obscene language and inappropriate use of social media.
- **Wilful damage to property** - This can belong to IAM RoadSmart, its employees, contractors, or volunteers. And includes buildings; fixtures; fittings; equipment and vehicles.

What action will we take?

Anyone giving verbal abuse to members of staff or volunteers, either in person, over the telephone or by email, will be sent a letter advising that this behaviour will not be tolerated. Any future violation of this policy will result in termination of their membership. There will be no appeal process.

Date: June 2021

12. Appendix E

IAM RoadSmart Skills Day Instructor Selection Criteria

It is essential we select the right candidates to join the team. A mentor from the presenter team will be appointed and this will be the prospective instructors point of contact throughout this process. Becoming an instructor on a circuit-based skills day is not as simple as saying that someone is competent on the road so they must be okay on a circuit. As an instructor you will have a duty of care to our customers and so your skill level must be suitable to operate in a circuit-based environment.

A prospective instructor:

- Must be a National Observer and Masters qualified rider. However, Police qualifications and/or Auto Cycle Union/Association of Racing Driver Schools qualifications are also considered to replace the Masters. An IMI Examiner qualification may replace the National Observer requirement.
- Must be an active IAM RoadSmart volunteer, committed to the values of the organisation, one who gets involved for the good of others.
- Must be a previous Skills Day customer to understand the unique delivery method of an IAM RoadSmart circuit-based Skills Day.

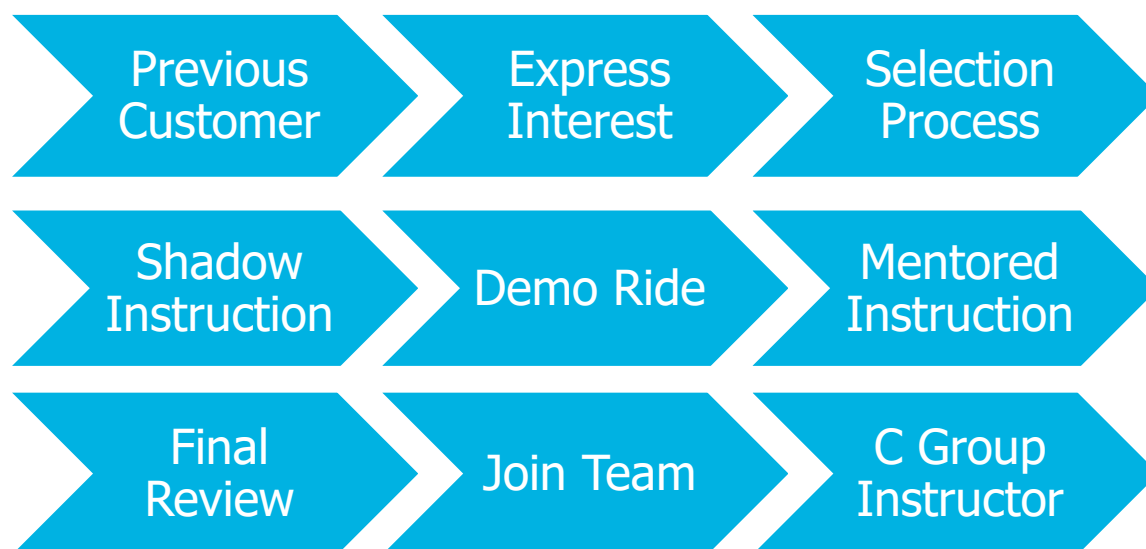
What is the process of selection?

- A prospective instructor will be invited to a Skills Day instructor training session which is held at the commencement of each Skills Days season. This session may be online.
- A prospective instructor will be invited to attend a Skills Day and shadow ride with a C or B Group instructor. *(Note – no Instructor expenses can be paid)*
- On this initial shadowing day, the prospective instructor will deliver a demonstration ride during the circuit riding sessions 5 or 6 in the A Group with an ASDM or a an A Group X-Bib.

This is intended to allow the prospective instructor to ride in a faster moving group but demonstrate a high level of personal control in their own riding.

- If successful, a prospective instructor will then be invited to instruct in the C Group, shadowed by a mentor instructor (*Note – no Instructor expenses can be paid*)
- If unsuccessful at any stage a personal development plan will be discussed with the prospective instructor and mentor. There is no guarantee of success.
- If successful at the final review stage, will be invited to join the Skills Day instructor team and instruct in the C Group whilst developing experience in the delivery of an IAM RoadSmart Skills Day. (*Note - Instructor expenses can now be paid*)
- It is important to note some feedback may well be given to help develop your skillset to operate in this unique environment. This feedback will form part of your personal development plan and be recorded in your instructor portfolio.
- It is recognised that not all instructors want to instruct in all groups. However, those who wish to instruct in the B or A group should in the first instance express an interest to the IAM RoadSmart Skills Day organiser. Each group requires a slightly different balance between coaching skills and riding ability. A development plan will be discussed with the instructor based on their personal aspirations.

The instructor selection process flow:



Richard Gladman – Chief Examiner IAM RoadSmart.



1, Albany Place
Hyde Way
Welwyn Garden City
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