Neutral Citation Number: [2024] EWHC 2966 (KB)

Case No: QB-2021-001300

IN THE HIGH COURT OF JUSTICE
KING'S BENCH DIVISION

Royal Courts of Justice
Strand, London, WC2A 2LL

Date: 29/11/2024

Before :

HIS HONOUR JUDGE BLAIR KC
SITTING AS A DEPUTY JUDGE OF THE HIGH COURT

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Between :

SHANE BYRNE — **Claimant**

- and –

(1) MOTORSPORT VISION RACING LIMITED — **Defendants**
(2) MOTORSPORT VISION LIMITED
(4) THE MOTORCYCLE CIRCUIT RACING CONTROL BOARD LIMITED

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Kiril Waite (instructed by **PM Law Solicitors**) for the **Claimant**
Malcolm Duthie (instructed by **DWF Law LLP**) for the **Defendants**

Hearing dates: 7-10, 13-17 and 22 May 2024

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Approved Judgment

This judgment was handed down remotely at 10am on Friday 29 November 2024 by circulation to the parties or their representatives by e-mail and by release to the National Archives.

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His Honour Judge Blair KC sitting as a Deputy Judge of the High Court:

The claimant and his claim

1. On 17 May 2018 a test day was held for the British Super Bike Championship series at the Snetterton motor racing circuit in Norfolk ('the BSB Championship'). One of the racers testing his super bike that day was the claimant - a professional racer. He was riding a Ducati Panigale motorcycle with a 1299cc engine. Then aged 41, the claimant was at the pinnacle of his sport. He had won more BSB Championship titles than any other rider (six in total) including those for each of the preceding two years - 2016 and 2017. Moreover, of the previous ten BSB races held at the Snetterton race track he had won the overwhelming majority.

2. A test day gives an opportunity for riders and their teams to prepare for a forthcoming weekend of competitive racing at that circuit to optimise their motorcycles with a view to winning. They try out different combinations of tyres and settings in order to maximize their performance on that track. A rider is likely to push his bike to its limits so as to assess what he is capable of achieving in the upcoming races.

3. These motorcycles are not fitted with a speedometer because the riders have no need to know their actual speed whilst racing. Their objective is solely to win by overtaking any rivals in front of them. The motorcycles are, however, fitted with sensors which record many types of performance data so as to enable the racing teams to evaluate what works best and to inform decisions about what adjustments and improvements to make. The device on the claimant's motorcycle was provided by MoTec.

4. The claimant wore state-of-the-art protective clothing including a safety helmet and an Alpinestars body vest which inflates to protect the torso if triggered by a sudden dramatic event. His body vest contained accelerometers from which data may be downloaded and interpreted.

5. As described in greater detail below, as he came down the straight which led to the third turn of his second test lap of the day (a corner called Palmer's) he and his motorbike did not follow the corner round to the left but instead came off the edge of the asphalt on the outside of the bend, crossed a small verge and continued across a grassed run-off area. The claimant's evidence is that he encountered an emergency situation near the end of the straight for which he had had to suddenly respond – his back wheel moved laterally to the right under him and he endeavoured to steer, reduce his speed and stay on. In the short moment that followed he concluded he was not going to be able to retrieve the situation by slowing sufficiently so as to steer the bike and avoid a collision with the safety barrier which was coming-up fast in front of him. Therefore he deliberately jumped from his motorcycle, landing on the ground with one leg out in front of him and the other trailing behind, before his body then began to tumble and roll. Both he and his machine hit the barrier a few meters apart from each other. His helmeted head struck the barrier first and forced his head towards his chest as his body followed towards it, he was then deflected back from the barrier and tumbled a few meters onto the grass. Meanwhile his motorcycle was propelled upwards into the air when it struck the barrier and then fell back onto the grass. The claimant sustained serious personal injuries.

6. He now seeks compensation for those injuries and the consequential economic losses which have flowed from them. This judgment solely addresses the issues of liability. The assessment of the quantum of his claim is to be dealt with separately if he is successful in establishing liability against one or more of the defendants.

The defendants and their place in the organisation of competitive motorcycle racing

7. The world governing body of motorcycle racing is the Fédération Internationale de Motorcyclisme ('FIM'). In terms of running competitions, they retain control of International Motorcycling Grand Prix (Moto GP) racing. Snetterton is not licensed for international motorcycling events and so the FIM had no direct involvement with the circuit.

8. The controlling body for competitive motorcycle racing in the British Isles (excluding Ireland) is the Auto Cycle Union Limited ('ACU'). The ACU is affiliated to the FIM and recognised by the FIM as a national governing body. However, the ACU granted the fourth defendant - the Motorcycle Circuit Racing Control Board Limited ('MCRCB'), the right to be the controlling body of national level motorcycle circuit road racing on permanent race circuits owned or controlled by members of the Association of Motor Racing Circuit Owners ('AMRCO'). This included British Superbike Championship races. The ACU had originally been joined as the third defendant to this legal claim but the case was later discontinued as against them.

9. The fourth defendant (MCRCB) published a Yearbook. The 2018 edition extended to 236 pages and began with a 'Sporting Code' which expressly stated that "Every Competition or Official Test Day shall be held under this Code". It set out detailed regulations as to how they must be organised, the personnel required, the technical specifications for competing motorcycles, etc.

10. One of the owners of permanent road racing circuits in England is the second defendant - MotorSport Vision Limited ('MSV'). MSV owns, amongst others, the Snetterton racing circuit.

11. A subsidiary company of the second defendant (MSV) is MotorSport Vision Racing Limited ('MSVR') - the first defendant. The MCRCB, having acquired the rights and responsibilities to govern and control the BSB Championship from the ACU, then appointed the first defendant (MSVR) on its behalf to promote and organise the BSB Championship. MSVR became the commercial, media and organisation right holders for the series. MSVR organises the BSB Championship mainly at the well-known motorsports racing circuits in England, including those owned by its parent company: MSV.

12. MSV employed a Mr Stuart Higgs but appointed him to act on behalf of MSVR as their Motorsport Series Director for the BSB Championship. As part of its Sporting Code, the MCRCB required a person to be appointed as the 'Race Director' and the 'Clerk of the Course' for a BSB Championship competition or official test day. Such a person was required by the MCRCB to hold an FIM International Clerk of the Course Licence. Mr Higgs was that person and he was one of the witnesses from whom I heard evidence.

13. The MCRCB retained a range of responsibilities for the BSB Championship. The way in which Mr Higgs described the MCRCB was that they were the 'regulatory body, the judiciary and circuit inspectorate'. The MCRCB employed Mr Norman Williamson to undertake regular inspections of the racing circuits where MSVR wanted to hold BSB Championship meetings; he carried out safety risk assessments; issued permits and licences for races and test days; acted as MCRCB's 'Safety Delegate' for all BSB race days; and participated in Event Management Meetings at the end of each day's racing to review how it had all gone. Norman Williamson was thus employed (in a part-time role) by the fourth defendant as its track inspector, risk assessor and Safety Delegate. His name was printed at the bottom of all the required licences granted by the MCRCB for test days and race days for the BSB Championship series. He gave evidence before me.

14. Outlining the responsibilities and interrelationships of the various named bodies and defendants above has not been an entirely straightforward process. Given how the various companies have sought to structure their sporting and business activities it has been contentious as to exactly where legal liability vests for different aspects of alleged negligence and breaches of the common duty of care under the Occupiers' Liability Act 1957 (OLA). Nevertheless, all three defendants have been represented by the same firm of solicitors and counsel, thus implicitly acknowledging that there are no significant conflicts of interest between them in resisting this claim.

The Occupiers' Liability Act 1957

15. The duties owed to the claimant under the 1957 Act by the defendants fall to be considered first. Section 1(2) states that those who are occupiers and visitors are to be decided by the rules of the common law. The claimant was very obviously a visitor at the course, he was there at the invitation of the organisers of the BSB Championship (the first defendant). But who was an 'occupier'?

16. The first and second defendants admit that they were occupiers (paragraphs 6(i), 7(ii), 8(a) and 9(iii) of the Amended Defence). The first defendant was an occupier because it had the necessary element of control of the premises on the test day and the claimant was there at its invitation. It was the organiser of the BSB Championship. Mr Higgs was appointed to act for the first defendant as the 'Clerk of the Course' for official test days under the obligations imposed by the fourth defendant's Sporting Code. The second defendant was also very obviously an occupier, being the owner of the course. It was responsible for having designed and created it in the first place. The second defendant still had control of its premises and occupied it, even if its subsidiary (the first defendant) was running the test day. As for the fourth defendant - it was not an occupier. Although it formally licensed the official test day of the BSB Championship in question it was not an occupier of the course. Its appointee - Mr Williamson, was not even present at the test day.

17. The nature of the OLA duty of care imposed upon the first and second defendants was to take such care as in all the circumstances of the case was reasonable to see that the claimant would be reasonably safe in using the track for the purposes he was invited or permitted to be there (section 2(2) OLA).

18. The way in which the duty of care has been pleaded for the claimant in the Particulars of Claim, both in respect of the Occupiers' Liability Act and the common law as against all three defendants, is as follows:

> "6. …the inevitability is recognised that riders will from time to time fall…[T]rack occupiers and organisers owe a duty…to take such steps as are reasonably required to ensure that those participating…are protected from and do not suffer avoidable injuries when such accidents and/or falls occur."

It continues:

> "7. …however: (a) the claimant expected to ride on circuits which were reasonably safe to use; and (b) where foreseeable risk of serious injury had been mitigated…by the provision of appropriate safety precautions which included:… (ii) a Type A additional protective device in front of the safety barrier in the event that the rider collided with the same…"

This formulation of the duty of care is denied by the defendants in the Amended Defence.

19. In assessing what level of care was reasonable in the circumstances for the first and second defendants to provide Mr Byrne so as to see that he was reasonably safe in using the Circuit, I have to consider under the OLA whether, in the circumstances of this case, the first and second defendants could ordinarily have expected a greater degree of care to have been shown by him to guard against any special risks ordinarily incident to the exercise of his profession as a BSB Championship motorcyclist (section 2(3)(b) OLA). The first and second defendants did not identify to me any special risks which they could have expected the claimant to have guarded against. He was pursuing a near identical test lap to his unexceptional and successful previous one when, as Mr Byrne says, all of a sudden something physically interfered with the motion of his rear wheel. I do not conclude that he was approaching Turn 3 at too great a speed. The claimant was not taking any special risks which he may have been expected to guard against and, therefore, section 2(3)(b) OLA does not impact upon the occupiers' common duty of care. I will consider separately, when I come to consider causation and contributory negligence, the criticisms which have been made of the claimant's riding and his response to, and handling of, the situation if he did encounter the erratic movement of his back wheel as he claims.

Willing acceptance of risk / *volenti non fit iniuria*

20. I have to consider whether the first and second defendants do not in fact have the common duty of care imposed upon them at all in this case because the claimant "willingly accepted" the risks which have resulted in the injuries he sustained – section 2(5) OLA. In dangerous sports there is inevitably a level of risk which participants willingly accept. The question therefore becomes one of adjudicating upon what level of risk was willingly accepted. There will be some risks which are willingly accepted by a BSB Championship rider as part and parcel of their sport and others which are not. The common law had developed this principle long before the OLA, adopting the Latin phrase for the principle: *volenti non fit iniuria*. That principle also has to be considered

insofar as I find any common law duty of care was owed by the fourth defendant to the claimant.

21. The issue of willing acceptance of risk / *volenti* is also said by the defendants to be affected by their assertion that the claimant had agreed to be bound by the terms of a 'signing-on form'. The relevant words of the first defendant's standard 'signing-on' form pleaded in the Amended Defence reads as follows:

> "MOTOR SPORT CAN BE DANGEROUS AND INVOLVE INJURY OR DEATH. You must read and agreed the following Declaration and paragraphs below which are designed to create a legally binding relationship in return for your being allowed to enter and compete:
>
> 1) I accept the competition in motorsport may involve the risk of injury or death and I agreed to take part at my own risk
> 3) I confirm that I understand the nature of the competition I am entering and I am competent to take part
> 5) I will satisfy myself (by sighting lap or otherwise) before taking part that the venue and track are acceptable to me with regard their features and physical layout
> 6) I will NOT take part if I have any doubt about my ability or safety including in relation to the safety of the venue and/or weather conditions."

22. It is not the defendants' case that the claimant is excluded from bringing a claim for personal injury as a consequence of that 'signing-on' form (paragraph 17(d) of the Amended Defence). The defendants could not have achieved that, in any event, because of the effect of sections 1(3)(b) and 2 of the Unfair Contract Terms Act 1977 which render ineffective any purported exclusion of liability for personal injury caused by negligence. However, the defendants do assert that Mr Byrne signed a form whereby he confirmed his willing acceptance of the risks which give rise to this claim; that the principles of *volenti* absolve them of liability; that he had walked the track before riding around it before and chose to use it - thus accepting the track's features and physical layout; and, that he took part because he did not have any doubt about the safety of the venue.

23. The claimant's case (as finally pleaded after amendments) was not to admit that he did sign the standard 'signing-on' form in relation to the test day on 17 May 2018 (paragraph 11 of the Amended Reply to the Defence). His credibility was challenged as to this, since it was asserted that it was the first defendant's standard practice to ensure it was signed on every occasion by every rider. The defence was unable to produce in evidence a form signed by the claimant on the day in question. They complain that this only emerged as an issue at a late stage of proceedings, which may have prejudiced their ability to produce it many years later.

24. It was put to the claimant in cross-examination that he had walked the course before and so he must have been satisfied as to the safety of the barriers at Turn 3/'Palmer'. Moreover he had ridden the course many times since it was built and had never complained about the safety of the barriers.

25. My conclusions as to this are that the claimant is not an expert in track design and construction. As he explained in evidence, although he had walked around the course before, he was focused on the track surface itself. He did not know about the different types of barrier design and their appropriate application in different locations around a motorcycle racing course. He could not reasonably have been expected to step away from the track surface to go and measure the sufficiency of distances from its edges to the safety barriers beyond, or to examine the construction and materials of the barriers along its length. He did not walk the course on the test day itself, that would not be usual, and as far as he was aware none of the other riders inspected the circuit that day.

26. My findings as to 'willing acceptance' / *volenti* / signing a form accepting the risks are as follows. I reject the proposition that the claimant (or indeed any of his fellow competitors) willingly accepted the risk of colliding with the barrier as it was designed at Turn 3 in circumstances as occurred in this incident. I also reject the proposition that he willingly accepted that the barrier he collided with provided him with a sufficient level of protection from serious injury.

27. As for the alleged 'signing-on' form, the onus of proof lay with the defendants to satisfy me on a balance of probabilities that he had signed one that day. They have failed to satisfy me of that as a fact. Further, I have to bear in mind section 2(3) of the Unfair Contract Terms Act 1977, which reads:

> "Where a contract term or notice purports to…restrict liability for negligence a person's agreement to or awareness of it is not of itself to be taken as indicating his voluntary acceptance of any risk."

Even if the defendants had satisfied me that Mr Byrne had signed one of their notices that day, I would not have concluded that the claimant had indicated his voluntary acceptance of the risks which I have to assess in this case.

The duties of care which were owed to the claimant

28. Under the OLA, therefore, the first and second defendants had to take such care as in all the circumstances of the case was reasonable to see that the claimant would be reasonably safe in using the track for the purposes he was invited or permitted to be there. In addition, I have also concluded that they were under a common law duty of care to take such steps as were reasonable to ensure that BSB Championship competitors using the Snetterton 300 track on a test day would be reasonably safe from foreseeable risks of serious injury, by (among other things) providing appropriate safety precautions. The first defendant owed that duty to the claimant as the organiser of the test day and the second defendant as the owner/designer/creator of the circuit.

29. What of the fourth defendant? It was the governing body of this form of motorcycle racing. It controlled whether or not a test day could take place at a particular circuit on a particular day. It was the body which appointed a Safety Delegate to undertake track inspections and risk assessments. It decided if a license should be granted to a race track so as to permit its use. Its Safety Delegate could direct the first and second defendants to provide additional measures so as to protect the public, marshals, riders etc. before it was prepared to provide a licence to authorise a track for BSB

Championship use. These powers were ones which it retained for itself with the evident purpose of taking reasonable steps to keep limited classes of people (including competitors such as the claimant) reasonably safe from foreseeable risks of serious injury from a potentially dangerous sport. There was a relationship of close proximity between its activities and the foreseeable consequences of their decisions for BSB Championship riders which was in the nature of them being their 'neighbour'. It is fair, just and reasonable for the law to impose a duty of care in these circumstances. Furthermore, its Safety Delegate - Mr Williamson, acted in some ways as a consultant when the track was developed several years earlier and provided the other defendants with advice and opinions on aspects of its design and safety. I find that by acting in the above manner the fourth defendant did take on and did owe the claimant a duty of care in the same terms - to take such steps as were reasonable to ensure that BSB Championship competitors using the Snetterton 300 track on a test day would be reasonably safe from foreseeable risks of serious injury. One of its prime roles in this regard involved its stipulations about the use of appropriate safety precautions in its licensing capacity. This finding is, I note, consistent with a similar conclusion reached in respect of the MSA in Wattleworth v Goodwood Road Racing Co Ltd and others [2004] P.I.Q.R. 369.

The development of the Snetterton circuit in 2010/2011

30. Snetterton is used for racing by both motor cars and motorcycles. Motor car racing has a different international governing body – the Fédération Internationale de l'Automobile ('FIA'); a different national governing body – MotorSport UK ('MSUK'); and a different track licensing body - the Motor Sports Association ('MSA').

31. By 2010 a decision had been taken by MSV to develop Snetterton so as to make it more technically interesting and commercially viable. This included adding several more turns within its perimeter so as to create a circuit (the Snetterton 300) which was just short of 3 miles in length. 'Palmer' - Turn 3 - was one of those new turns. Motor car and motorcycle racing were both going to be important for MSV and MSVR's future plans. The evidence called before me was that they considered motor car and motorcycle racing to be of equal importance in their development plans. In designing the 'Snetterton 300' the second defendant had, therefore, to incorporate and provide for what was going to be required for both motor car and motorcycling racing at the highest intended level of competition.

32. There is no single comprehensive guide as to how a race track should be configured and designed. Mr Higgs, for the first defendant, explained how they wanted to 'future-proof' it as much as possible and minimize any differences regarding safety installations pertinent to motor car or motorcycle racing. He said that MSUK, the ACU and the MCRCB were consulted in the process. He explained that the combined experience and expertise of many people is used, together with the pool of knowledge gained from the design of other tracks.

33. I heard evidence from Mr Giles Butterfield, the Group Operations and Engineering Manager for another subsidiary of MSV, whose job encompassed engineering aspects for all five of MSV's race tracks. He was involved early on in the reconfiguration at

Snetterton and relied on his experience when helping with initial designs and layouts for the second defendant. He had a competitive four-wheeled motor racing background driving karts, Formula 3 cars and sports cars. He explained that the core design team consisted of the following key people: Jonathan Palmer (the Chief Executive of MSV, a well-known former motor racing driver in Formula 1 and after whom Turn 3 was named); Jamie Hopper (the Circuit Manager for MSV at Snetterton, who he line-managed); Stuart Higgs; and himself. Giles Butterfield stated that they "worked together with Stuart Higgs and Norman Williamson, the Safety Delegate to the MCRCB, who both had a vast amount of experience in relation to two-wheeled racing". They also engaged an external firm of consulting engineers – Peter Brett Associates, who Mr Butterfield said were familiar with FIA guidance on track design.

34. Mr Butterfield said that FIM did not have a technical department to consider design for motorcycle tracks at the time. Snetterton was not intending to host international motorcycling events and was therefore not seeking to pursue the FIM authorisation procedure. Mr Butterfield said: "we still considered any FIM guidance such as there was at the time." (This was a significant comment because the claimant's expert Mr Barnard was later subjected in cross-examination to criticism for his references to aspects of the FIM guidance.) Mr Butterfield said that neither they, nor anyone else at the time, had simulation software for motorcycle racing, but the FIA did for motor cars and their guidance was regarded as reliable. It was Mr Butterfield's evidence that the correlation between the FIA standards and motorcycles is well established and was used at the time around the world and still is.

35. Particular elements which are to be included as part of a circuit's permanent infrastructure (or which are to be put into use when racing actually takes place) have to comply with designs which have been authorised by the relevant governing bodies. The word used in motorsport for such an authorisation is 'homologation'. The first and second defendants would therefore have to use homologated devices and systems for many aspects of their operations.

36. It is clearly necessary to have safety in the forefront of a designer's mind. This requires a detailed assessment of the speeds which are likely to be achieved from accelerating along the straights and the speeds which can be taken through the various turns by the different types of users of the circuit.

37. There are obvious important differences between the safety considerations for a sport where competitors have some physical protection as a result of being contained and restrained within the structure of a four-wheeled racing car as compared to those who sit astride a two-wheeled motorcycle with minimal physical protection.

38. It is part and parcel of competitive motorsport that cars and motorcycles will come off the asphalt track when trying to achieve the shortest lap times possible. Indeed, it is very much part of the spectacle of racing events. These often arise from such things as the interactions of competitors when attempting to overtake each other at high speeds; from a loss of grip caused by something on the track; from taking a corner so fast as to lose traction with the surface; from a momentary error of judgment; or from component failure. These are commonplace and predictable dangers.

39. To protect those attending a race track from injury caused by these sorts of events it is necessary to dissipate or absorb the energy of vehicles and their riders/drivers by enabling their deceleration to a reasonably safe speed.

40. By way of an example, the design of a track might incorporate a smooth stiff barrier alongside a straight so that if a competitor cannot regain control they will make contact at a shallow angle, slide along it and thereby be gradually brought to a halt from the operation of friction and braking forces. Another example, but at a corner, might involve incorporating into the design a sufficiently large run-off area outside the turn so that a vehicle and competitor which has lost control at the highest predictable speed on the preceding straight may come safely to a halt before reaching any obstacle, spectator or marshal.

41. In the latter example, however, if there are limitations in the available space outside a turn which provides insufficient distance to decelerate the vehicle and competitor to speeds where everyone can be kept reasonably safe, then other measures may be incorporated into the design of the corner to achieve that objective. One such measure is sometimes called a gravel bed, but which in fact consists of uniformly sized small pebbles to arrest the vehicle and competitor more quickly. For circuits where motorcycles are raced, it was accepted by the parties that gravel beds are not a preferred option because they can actually increase the dangers faced by riders.

42. Another measure that may be considered on the outside of a race track corner is the positioning and design of a barrier to arrest the vehicle/competitor and dissipate/absorb their energy safely. A number of different types of homologated barriers and materials are in existence for these purposes.

43. In the case of barriers positioned to protect spectators, marshals and competitors, a racing circuit will often use an 'Armco' barrier around the track, similar to those often seen beside motorways, but in this instance comprising as many as three formed metal rails, one above the other, fixed to upright posts. In addition, a variety of homologated Additional Protective Devices ('APDs') may be used against the track-side of an Armco barrier (or in some cases as a complete alternative to Armco). In the case of motorcycle sport these APDs are recommended or homologated by the FIM, the MCRCB, and/or the ACU. This case ultimately centres on arguments about the use of types A, C and D homologated Additional Protective Devices, to which I shall return. Types A, B and C are sometimes also referred to as Removable Protective Devices. Type D consists of adjacent towers of tyres, bolted together, with a conveyor belt around them and are often part of a circuit's permanent installations.

The process of design of the Snetterton 300

44. Snetterton was a circuit with a FIA international motor car racing track licence. When it came to re-designing the track in 2010, FIA had some computer simulation software which was able to take a CAD (Computer Assisted Design) drawing of a proposed motor car racing track, generate calculations of the likely maximum speeds that may be reached at various points around it for different grades of racing, and then superimpose a series of coloured lines to represent the straight-line trajectories and stopping distances for a vehicle coming off the track at those predicted speeds in those locations.

45. Mr Butterfield (the engineering manager working for the second defendant) explained how this was done with an early layout plan of the reconfigured circuit which they were in the process of designing. The simulation drawings were produced in evidence. He stated that the regulatory bodies do not 'approve' the design of a new track, but instead issue guidance which the designers must use. Once the new track is then finished the regulatory bodies inspect it to ensure it meets their requirements. Mr Butterfield's submitted witness statement said that he did not recall the FIA CAD simulation revealing any issues with the Palmer turn, and his own view was that it was safe as it could be and met the requirements. In cross-examination he agreed that this had been his view in relation to the positioning of the curved Armco barrier but he said that he deferred to Norman Williamson (of the fourth defendant) as a specialist to take into account the specific needs of motorcycles as opposed to motor cars when specifying what additional protection may be required. Notwithstanding that being his evidence, deferring to Mr Williamson did not in any sense relieve the second defendant of its duties of care towards motorcyclists using its track. The fourth defendant was not an independent contractor employed by either of the first or second defendants and there has been no pleaded case by any of the defendants whereby they have sought to claim they had passed on their liability by reasonably relying upon another.

46. Mr Butterfield described Armco barriers as being 'the first line of defence'. An Armco barrier would indeed defend non-racers (such as course marshals and the emergency services) from the dangers of a wayward car or motorcycle coming off the track on the outside of Turn 3. In the case of an Armco barrier on the outside of Turn 3 it would also protect those racing around Turn 1 which is on the other side of it. Calling an Armco barrier a 'line of defence' is however a rather less apposite term for the rider of a motorcycle who has come off the track at speed. Mr Butterfield did accept it was MSV which was responsible for creating the new race track for use by both motor cars and motorcycles, using the design expertise of Peter Brett Associates (who drafted the various drawings), but with input from MSV's people such as Mr Higgs and Mr Hopper.

47. Mr Butterfield was cross-examined about a letter he received from Mr John Symes, the Technical Director at the MSA, dated 14 October 2010, about the FIA computer simulations, to which his served witness statement had not made any reference whatsoever. The letter he had received contained these passages:

> "Firstly to clarify the situation on the FIA simulation they are merely a tool rather than a yes/no of acceptability and the information is passed to the FIA appointed inspector and is not passed to the venue owner... As you are aware I have sneaked copies of the two simulations, one for Grade 2 and one for Grade 3.
>
> "We have discussed your proposals before so you are well aware that I think the overall design is a little too compact...
>
> "...Since our meeting last week I have mused further and in particular have engaged my bike brain. Not sure if anyone from the bike world has looked at the proposals and I stress that the MSA has no involvement in motorcycles. With cars it is generally possible to accept a slightly smaller run off area than our two wheel friends for we can do a lot with barriers. Whilst this is so, the less likely a barrier impact the better, for barrier

> impacts equal car damage and expense together with lost track time, even if the risk of driver injury is minimal. With motorcycles they simply need space and I am confident you will find the bikers will be wanting more space than you offer with your proposals."

48. A week after receiving that letter from Mr Symes, Giles Butterfield emailed Norman Williamson on 21 October 2010 as follows:

> "We are working towards the final design for the newly revised Snetterton layout. I attach the latest drawing as a PDF and in AutoCAD format...Please can we have your feedback from a motorcycle/BSB perspective?... Do call me to discuss."

Importantly, there is no evidence of any written reply from Mr Williamson to that request and there was no evidence from the witnesses as to any specific oral conversation that followed that request for feedback. Mr Williamson had not been copied into the letter sent by Mr Symes to Mr Butterfield in October 2010 and he was clear in his evidence that he had not been shown the FIA simulations.

49. Mr Butterfield stressed that the drawings with the FIA simulations marked on them showed the proposed positioning of Armco barriers at the very beginning of the evolution of the design process. Ultimately an essential service road was added to the design between Turns 1 and 3 with gaps for marshals to be able to reach casualties. He was asked by defence counsel whether the final changes provided more or less run-off and he replied: "It depends which part of the corner – slightly less in the middle of the corner. In other parts, more." He said that there was a good deal of extra space between the predicted accident path and the barrier. His reference to the predicted accident path of a motorcycle was to a motorcycle which simply carried straight on without undertaking any steering into the corner at all, such as might happen from a critical component failing on the straight leading to Turn 3. He said that the distance he moved the barrier forward was about 6 meters and his view was that the CAD plans run-off had always been satisfactory. This is despite the letter he had had from Mr Symes, which he had not shown to Mr Williamson, and where in his mind he was deferring to Mr Williamson for any additional protection that might be required for motorcyclists in respect of barriers.

50. This topic has been visited by safety experts instructed on behalf of the claimant (Mr Barnard) and the defendants (Professor Troutbeck). Each has attempted to overlay the FIA simulation on the developing layout designs. Mr Barnard's version appears to show that the Armco barrier on the outside of Turn 3 was ultimately built significantly closer to the track than was shown in the FIA simulations and so, he suggests, the predicted Grade 2 motor car trajectory stopping lines demonstrate an even wider area for potential collisions with the barrier. Professor Troutbeck, on the other hand, in a supplementary report sought to show that, although the evolving barrier design was later drawn closer to Turn 3 with a much tighter arc, when it was actually ultimately built it had a more gentle curve and more splayed ends.

51. On Mr Barnard's overlay in my view it also has to be observed that the track at Turn 3 was also moved a little nearer the centre of the circuit towards the redesigned Turn 6,

so some care needs to be taken with the interpretation of the superimposed FIA simulation lines.

52. I am quite satisfied, however, that the letter of 14 October 2010 to Mr Butterfield from Mr Symes appending the FIA simulation for Grade 2 racing cars, did put MSV (the second defendant) on notice of there being a greater risk of contacts being made with the Armco barrier outside Turn 3 and that this was likely to be of even greater concern for motorcyclists. Even taking a cautious approach to the interpretation of overlays of the FIA Grade 2 car simulation diagram on the plan of the track as finally built, I am nevertheless satisfied that those simulated lines do reach the Armco barrier in the region of where I will come to explain the claimant's collision occurred. I have no doubt that this contributed to the decision to ask Mr Williamson for his views a week later and, although there is nothing in writing in response, there was evidence of them having spoken.

53. There is some documentary evidence of Mr Williamson (working for the fourth defendant) addressing run-off distances in the design phase. Mr Williamson was engaged in an email exchange at the end of January 2011 (copying-in Mr Higgs, Mr Hopper and Mr Symes) in which he expressed concern about a much shortened run-off at Turn 4 and referring to: "your own speed prediction plan". I was interested to see that, but no such speed prediction document has been produced by any of the defendants. Plainly it would be a significant part of the design process. Mr Butterfield told me "I don't believe we ever gave Norman Williamson a speed prediction plan for this circuit". Mr Williamson told me he had seen a plan which showed various predicted speeds during one of his meetings. It is a surprise that such important documentation, together with any detailed mathematical calculation for run-off distances required at the new corners of the Snetterton 300 course, have not survived the period of 7 years between its completion and the accident suffered by the claimant. One might reasonably have expected important design work to have been archived and kept so as to assist with determining just the sort of issues which have arisen in this case. The engineering drawings as they evolved through the design phase have been retained, but nothing has been exhibited as regards safety calculations for the corners at the likely speeds achieved.

54. When Mr Butterfield was pressed about what makes one decide about the appropriate design features for a particular barrier, given that there were no computer simulations available for motorcycles nor (on his evidence) any motorcycle speed prediction plans discussed with Mr Williamson, he said that "initially when in design it is based on expertise." As for predictions or calculations he asserted that that could be for Norman Williamson or someone else, but as for the necessity of Additional Protective Devices it was not for him. He said it was for Mr Higgs (i.e. for the first defendant) or Mr Williamson (i.e. for the fourth defendant), one or the other. In re-examination he said that FIA's guidance for motor cars was well developed and had been in existence a long time; with experience, experts had a reasonable idea of the differences for motorcycles, but it was not his area of expertise. He said people will have a feel for it and have worked it out.

55. I do not accept his propositions insofar as he was suggesting that parties other than the second defendant bore all of the responsibility for ensuring the appropriate use of Additional Protective Devices for BSB racing at their circuit over and above the permanent Armco barriers built into the fixed design and type 'D' bolted tyre towers

fronted with a conveyor belt. The second defendant was re-designing its circuit for racing by both cars and motorbikes and needed to incorporate into the design what was going to be reasonably necessary for the safety of visitors for each planned use.

56. Mr Higgs (whose roles for the first defendant I describe at paragraph 12, above) said in his served witness statement that he had general input into the reconfiguration of the track. He accepted he had input on anything, ranging from operational to commercial matters. He operated the events and so he said he had a global opinion on everything, including general safety and assessing where he thought additional barrier protection may be required. He said he never had any concerns with the way the track was being redesigned or reconfigured.

57. Mr Hopper (the Circuit Manager for the second defendant) said in his statement that he was involved in the reconfiguration and worked closely with Mr Butterfield and the contractors. Their discussions included the type of barriers to be installed along each part of the circuit. He participated and contributed to these discussions due to his many years of experience and the number of circuits he had visited. He said that they had in mind both two and four wheeled racing when designing the track, barrier placement and type.

58. Mr Williamson is a self-employed Consultant Automotive Engineer and Traffic Collision Investigator, but was engaged part-time as the Safety Delegate for the fourth defendant. He was also a motorcycle racing competitor for several decades on motorcycles of up to 750cc. His evidence about the fourth defendant's involvement at the design stage of the Snetterton 300 was to explain they occasionally give advice or apply conditions on how a circuit's configuration may be changed. He stipulated various requirements, which included increasing the runoff area for one turn and the installation of some debris fences in other areas. He said that discussions were mainly verbal and not written down, but he exhibited a few email exchanges. He accepts that his opinion was sought on the new track configuration by Mr Butterfield and he carried out track inspections prior to licensing it.

59. I have approached my assessment of the defendants standard of care in this specialised world of constructing, operating and authorising a very high level of motorcycle circuit racing by considering whether or not they acted in accordance with a standard of practice recognised as proper by a competent, reasonable, respectable and responsible body of those skilled in these particular activities. This assessment may also require me to consider whether an asserted standard of practice of such a body of skilled people cannot be logically supported. (Bolam v Friern Hospital [1957] 1 WLR 583; Bolitho v City and Hackney Health Authority [1997] UKHL 46).

60. The licensing and safety inspections at Snetterton were conducted concurrently by representatives present together from both branches of motorsport. Norman Williamson from the MCRCB inspecting for motorcycles, an inspector from the MSA for motor cars (John Symes), sometimes someone from MSUK, representatives of MSV - the track owners, who ran both motor car and motorcycle racing (Giles Butterfield and Jamie Hopper) and Mr Higgs for MSVR.

61. The evidence given before me was that these inspection visits involved collaborative discussions and all those present were able to contribute.

62. For BSB motorcycle racing, Mr Williamson would in due course produce a Race Track Inspection Report on behalf of the MCRCB which noted those who had participated in the track inspection day.

63. On 27 January 2011 he inspected the track with representatives of the first and second defendants (as well as of the MSA and ACU) and produced a Provisional Race Track Inspection Report on 3rd February 2011. The report said it was:

> "for the purpose of identifying the positioning of barriers, runoff areas, [etc.] My inspection and report is to establish what (if any) further alterations are required to the circuit and what additional temporary protection may be required in order for the circuit to receive an MCRCB Race Track Licence."

He observed that a considerable amount of work was still to be completed, including barrier installation. There is no particular reference to Turn 3.

64. A further inspection by Mr Williamson took place on 7 March 2011, but the Race Track Inspection Report generated from it was not produced until 15 June 2011. It said it represented a Basic Risk Assessment and Annual Inspection and endorsement of alterations to the circuit, with particular regard to Rider and Marshal Safety. The reason expressed for the delay is that Mr Williamson had been awaiting the final and definitive scale plan of the circuit showing the positions of the tyre barriers and other points he had requested. He had still not received the plan when he finally issued his report. He says that there had still been a considerable amount of work to be done at the time of his inspection, including the installation of tyre barriers.

65. Section 13 of that report comprises a fairly standard paragraph which appears in many of his reports identifying the various homologated Additional Protective Devices which the fourth defendant may stipulate for use. The Type 'A' devices listed are various manufacturers' energy absorbing systems which, in general terms, involve foam-type barriers incorporating air or which are inflated. Type 'B' devices comprise a list of firmer types of manufacturers' air fences or barriers. Type 'C' is a list of modules which, in general terms, consist of bales of material (including straw in fire-resistant bags), or soft slick racing car tyres, with or without a conveyor belt cover. Type 'D' is a car tyre barrier covered with conveyor belt. Type 'D' is what was in place permanently on the track side of the Armco barrier outside the run off area for Turn 3 where the claimant's accident occurred. This was a permanent installation for racing of all types and standards at the track, including both motor cars and motorcycles.

66. Mr Williamson's report did not include any plan or stipulation for the use of anything in addition to, or in place of, Type 'D' protection on the Armco barrier at Turn 3 for BSB Championship motorcycle racing. In section 15(e) he said:

> "any surplus Type 'A' protection is to be deployed on instruction from the MCRCB Safety Delegate [himself] and or MSVR Race Director [Mr Higgs], during or after the pre-event inspection."

67. Another document was created by Mr Williamson from his inspection of the track on 7 March 2011. It was titled "Race Track General Risk Assessment Form" and its purpose was described as follows:

> "To identify the risks arising from high speed motorcycle competitions on the race track, that is based on reasonably potential and previous incidents, which may affect Marshals, Officials, Team Members, Riders and Spectators, and to action any safety procedures deemed necessary in order to mitigate those risks."

He considered each turn and described the hazard at Turn 3 by reference to Turn 1, which read as follows: "Collision between machines, Rider falling from machine during braking or mechanical failure. Also higher risk of collisions in early laps of race. Fire." In respect of Turn 3 he added: "possible collision with barriers at an oblique angle." He explained in his evidence to me that he meant by this something in the region of 45 degrees. With a number of other turns he referred to possible collision with barriers in the head-on. As will be made clear later in this judgment, words such as 'oblique' or 'low angle' or 'glancing' is critically important when considering foreseeable risks of injury and the proper selection of barrier types. His assessment of the risks at Turn 3 was classified with letters '**A**' and '**U**' representing, according to his footnote on those pages: "Adequately controlled" and "Unknown risk". (In an 'action plan' section identifying 'further action required' he typed 'N/A' for Turn 3.) In the 'Notes' section of this report the letters representing the result of the risk assessment gives a different explanation for the use of the letter 'U'. Here 'U' is not "Unknown risk", but instead is:

> "**U = unable to decide. Further information required.** This designation is used if the assessor is unable to complete any of the boxes, for any reason. Sometimes, additional information will need to be obtained but sometimes detailed and prolonged enquiries might be required…**For**…**'U' results**, more work is required before the assessment can be signed off."

68. Mr Williamson's written evidence was that he completed this MCRCB risk assessment as part of his own work process. It was not provided to anyone external to the fourth defendant. He said instead that the Track Inspection Reports were the effective risk assessment. He explained that his inspections were at least annual. He would consider the history of each corner, previous significant incidents, the general maintenance of the circuit, any improvements that can be made, and protection required based on information available including crash data. It is right to observe that there had been no other similar accidents to the one involving the claimant at Turn 3 in the seven years after the Snetterton 300 circuit was constructed.

69. At Turn 3 Mr Williamson said the angle of possible impact with the barrier would be expected to have been at approximately 45 degrees with estimated possible contact speeds of less than 30 mph. He said in his witness statement that Type 'D' protection was assessed as the minimum level of protection required. He pointed out that there is no document issued by any motorcycle racing controlling body which details where the different types of homologated barrier soft protection should be placed. The MSA (MSUK) dictated where type 'D' was to be installed for motor car racing but he said he was the person who stipulated what was additionally required for motorcycle racing at MCRCB events. He said that track safety was updated as speeds of machines increased over time and more effective barrier protection devices became available, together with

the history of accidents and their results. I infer, therefore, that it was accepted that for motor car racing type 'D' was regarded as necessary at Turn 3 rather than simply the metal Armco barriers. He stipulated nothing additional for BSB Championship racing.

70. Mr Williamson was a witness who did express himself in a frank and straightforward fashion while giving evidence. He struck me as someone who was not likely to be overly influenced by others when reaching his own conclusions on matters of safety, albeit that he would take account of the views expressed by those others who were present at meetings and inspections. He was ready to explain his reasoning. In making his decisions about Turn 3 in 2011 he said under cross-examination that he assessed the potential speeds of approach of a motorcycle being 115-120 mph at that time; he thought "we worked it out at 185 m before the barrier line"; and, "I use the Newtonian equations of motion – if it lost control and slid 185m and slid/bounced – then there'd be an impact with the barrier at less than 30mph at angle of around 45 degrees. I didn't think any rider would hit the barrier, because he could stop well before." When I questioned him about the details of the Newtonian calculations he said he had completed at the time when he was assessing the run off distance for Turn 3, he gave figures which did not reassure me at all. The figures he gave for likely speeds, distances and coefficients of friction of the track and run off area did not comfortably coincide with his conclusions about the unlikelihood of an impact with the barrier at all, quite the reverse. His figures did not accord at all with the expert evidence provided to me. This so undermined his credibility as to lead me to the conclusion that either he did not undertake such calculations at all or got them significantly wrong. He had kept no records of undertaking them and made no reference in his served witness statements of carrying out these calculations. Instead his statement provided the rather nebulous assertion that:

> "…a number of factors are considered when assessing the barrier required at a particular turn. A certain degree of foresight is required which is assisted by the amount of experience of those involved in the reconfiguration; experience and knowledge of other tracks; statistics regarding previous incidents and falls at similar corners."

The accident

71. The Claimant had had his first national BSB race in 1997, 21 years before the accident. He listed his hugely successful career and I note that he won the BSB Championship in both 2016 and 2017 riding with the PBM Ducati team. He was very familiar with Snetterton and had won something like 8 of the previous 10 races he had competed in there.

72. He describes how on the 17 May 2018 he arrived before 9am and the weather was clear. The track surface was dry and he was on the track soon after 10:10am on the type of motorcycle he had been riding since about February 2016. This was the motorcycle with which he had been very successful in the preceding two years and was very familiar. His first lap went fine; he timed its start so as to avoid other traffic; he got the tyres and brakes up to temperature. The beginning of his second lap began without incident. He accelerated hard after Turn 2 and moved up from 1st gear through to 3rd as he gradually moved to the right-hand side of the track on the straight leading to Turn 3. He adduced a sheet from the MoTec data recorder on his motorcycle which his team's

data analyst told him shows he reached 121 mph before closing the throttle and applying front and rear brakes. His account is that almost immediately his rear wheel lost grip with the track and slid sideways dramatically towards his right. He had to counter-steer into the slide to regain stability and in so doing was aiming slightly further right instead of turning into the imminent left-hand turn. He had reduced his speed to 91mph. He continued to brake as much as he could without locking up the rotation of his wheels, but the motorbike ran out of tarmac and went onto the grass. There he did his best to reduce his speed as much as possible and turn to the left in an effort to rejoin the track but he was unable to do so because of the lack of grip between his slick racing tyres and the grass run-off surface.

73. He realised that he was heading towards the barrier which was coming up in front of him. To avoid what would have been a more dangerous collision whilst still astride the motorcycle he made a split-second decision to jump off. A sequence of photographs shows him rolling the motorcycle towards its left-hand side and leaving it from that side. He slides on the grass, initially with his left leg out in front of him and trailing his right leg. He rolls onto his left hand side and if one was looking down from the sky his body began also to rotate in a clockwise direction. His helmet struck the barrier and was compressed towards his chest as his body followed. He then rebounded away from the barrier continuing to rotate in a clockwise direction before coming to rest on the grass.

74. The claimant stated that he did not feel any pain upon falling, his inflating body armour and helmet protecting him, but when his head impacted the barrier he felt excruciating pain. He suffered a fracture of the top of his sternum (the manubrium septum), several fractures of his cervical and thoracic vertebrae, and numerous fractured ribs, as well as his left clavicle. There were several serious internal soft tissue injuries and haematomas. He was led to believe that he was in a critical condition and initially it was not clear to those at the hospital in Norwich that he would survive his injuries.

75. He described how there was no cushioning effect or 'give' in the barrier which he collided with and it was like impacting with a solid wall.

76. Under cross-examination he accepted that Jonathan Palmer's racing circuits were well presented, but expressed the view that he didn't have a choice about where he raced because his job entailed him being signed up to a team in a Championship which did not have a competitor; he had no ability to have a course's layout changed. Although he had walked the course he said: "For me as a rider the only thing I am interested in is the ribbon of tarmac. I would discuss how to make my bike go fastest. The run off or barriers were irrelevant to me." Asked why he wouldn't look at the run off he responded: "What's going to change if I looked at the run off area?" When asked about the barriers he replied: "I'm only interested in the track – they are down to Stuart Higgs – I can't tell them they have the wrong barriers – I concentrate on my job and they look at theirs."

77. Mr Higgs' position, for the first defendant, needs to be examined by contrast. Surprisingly it appears that for some time the defendants did not accept that the claimant had even come into contact with the barrier. The original pleaded Defence did not admit that he had. None of the defendants' witnesses witnessed the incident. Mr Higgs didn't see the incident with his own eyes and rather defensively stated he couldn't confirm what he hadn't seen with his own eyes. He said that he couldn't see it on the

CCTV (which was a poor quality distant view) and the closest thing to an eye-witness' account was a flag marshal who was closest to the scene. The only 'account' from a marshal was a single pro-forma tick box sheet completed by someone called Samuel Cross (albeit that there is a second marshal named on it as an eye-witness, from whom no material was produced). Mr Cross wrote: "Rider went straight on at Palmer corner and dismounted bike at speed. Rider tumbled on grass at speed but did not appear to make contact with bike or tyre barrier." That was wrong, but no one asked the claimant about it. Mr Higgs' served witness statement said he assumed that the claimant must have reached the barrier but that the evidence of it was inconclusive. He went on to say that after the claimant was immobilised, stretchered into an ambulance and transferred to hospital no formal investigations took place initially as the injuries were not considered to be life or limb threatening.

78. In terms of an investigation being undertaken later on, Mr Higgs said he followed the fourth defendant's procedures for a full investigation, most of which he said was done. He said he did not follow the ACU's procedures, but it remained unclear to me as to how an ACU full investigation differed from those required by the MCRCB. He said that his investigation began after the extent of the claimant's injuries became apparent. He explained that this consisted of checking the motorcycle, taking a statement from the marshal, obtaining still images, and getting data from things like the rider's air vest and the bike.

79. An email was sent to Mr Higgs on 22 May 2018 from the claimant's racing team (Mr Borley) in which the preliminary view was expressed, using their data, that there didn't seem to be an issue with the motorcycle. There was more speed difference/slip than normal between front and rear wheels when the throttle was closed before commencing turn 3. Mr Borley said it had reached 195 kph (121 mph) on the straight but the speed when he went off the tarmac was 147 kph (91 mph). The front and rear brakes had been used for the next 100m to slow down to approximately 80 kph (50 mph) before either the claimant jumped off or lost control. Mr Borley approximated 80 kph because the GPS data showed 89 kph but the front speed was recorded at 69 kph. He said GPS can be inaccurate because of delays in reading whereas front speed can be affected by lean angle and locking. Mr Borley then said: "There was a heavy impact where both front and rear suspension are strongly compressed a further 20m later where the GPS speed was 52 kph [32 mph] and front speed was 46 kph [29 mph]. Looking at the trajectory he went off the circuit at…and distances I believe this is when the bike hit the barrier."

80. Mr Waite, counsel for the claimant, enquired of Mr Higgs, "What about asking the claimant?" The reply given was, "I can say with reasonable certainty in all incident investigations the rider is not generally asked." When challenged he added, "I would say the most usual situation is the investigation of a fatal accident. The processes of those cannot obviously include asking the rider and I would also say in terms of an investigation – can one always be sure that the account of the driver will be objective to the point of trying to find out the cause of the accident? It is inherent in motorcycle drivers they do not like to admit they made a mistake, so it is much better to rely on factual proven data. Yes, of course, there can be some assistance from the rider, but there has to be some caution."

81. I find it incredible that it was thought a 'full investigation' of this incident could include the deliberate decision not to ask the rider for his account. It should have been perfectly obvious to the first and fourth defendants that all reasonable lines of inquiry needed

pursuing. This is something which is made clear by the Health & Safety Executive who provide free publicly available guidance on investigations into safety incidents.

82. Mr Waite put to Mr Higgs that some of the reliability and accuracy of what Mr Higgs had referred to as the "factual proven data" which came from the motorcycle's MoTec unit had been discounted by the defendant's own expert Mr Jowitt, and the manufacturers of the claimant's body vest sensors when providing their data had expressly included a caveat that it was a purely indicative estimate rather than a real measure. He said he could not account for the conflict of opinion and that indicative information is better than nothing. In his written statement he had opined, "…I would have expected Mr Byrne to attempt to rejoin the track utilising the verge/run off area or to immediately lay the bike down. It is inexplicable to me that he arrived at the barrier or at the run off area faster than I would have imagined and gave himself less and less options to recover." He insisted under cross-examination, "I will still say I do not understand why he did not get off the flipping thing." By contrast Mr Higgs also commented favourably about having had a good relationship with the claimant, valuing his opinion and regarding him as credible on racing matters. He would even sometimes take Mr Byrne to look at something in the course car and ask for his opinion about matters.

83. Mr Williamson said during his cross-examination that his interpretation of what had happened after the event was that the claimant was going a lot quicker than he should, he missed his braking point and he braked too hard. However, the motorcycle data from MoTec contradicts the suggestion he was going a lot faster than he should. His witness statement had used the same phraseology as Mr Higgs and he added in evidence, "[g]iven there's no other explanation for his loss of control, that's what I decided." Just as with Mr Higgs, his approach to an investigation (as the Safety Delegate of the governing body for BSB Championship racing) was astonishingly complacent or decidedly defensive - he had not asked the claimant if there was another explanation.

84. I have examined the claimant's credibility carefully because it was very robustly challenged in cross-examination, including with the proposition that the cause of the collision with the barrier is inexplicable by anything other than rider error. The suggestion was made that he has been inconsistent about his account of the day of the incident and that his description of how it occurred is inaccurate in various significant respects. It is important when assessing these matters to bear in mind a number of factors: the events occurred 6 years ago, the actual collision involves a consideration of a series of events which took place within the span of no more than 5 seconds before the impact, the claimant is acknowledged as having been at the top of his sport, a hugely experienced rider and very familiar with this particular racing circuit.

85. He was extensively questioned about the description of the incident in his autobiography, which was in fact ghost written for him by a Mr J Matthews. It contains this passage:

> "I chopped the throttle shut, not using too much brake, but the engine braking was really tight. As a result, the rear of the bike locked and came around on me as if it was going to high-side me, off the throttle, and throw me over the top. I managed to control it and catch the high-side, but the bike pinged back so violently that it practically turned right, rather than left.

> "The problem was that I was now going at 130 mph in completely the wrong direction. Usually there would be air fencing in a corner like that, and you would pretty much just aim for whichever part of it you wanted to hit. But ahead of me, looming large, all I could see was the vast, dense blackness of the tyre wall.
>
> "I had just a few metres of tarmac to get on the brakes as hard as I could and scrub off speed before running onto the grass. With no gravel trap there to slow me down, I tried everything to get the bike to change direction again as it skidded across the grass. I grabbed the brakes but the front wheel locked and almost made me crash, so I let go and tried again, and again, and again… battling to wash off speed and get the bike to change its course without locking the front.
>
> "Those couple of seconds felt like minutes before I finally thought, 'F*** it, This ain't gonna happen. I'm going to have to jump.' The last thing I remember seeing is the bike veering off away from me as I slid head first into the crash barrier."

86. It was suggested to him that this account so grossly exaggerates his true speed and the mechanism of what may have led to him leaving the track that his veracity is wholly undermined. Also, his expert in spinal injuries (Dr Soopramanien) recorded in his report that the claimant was saying he went onto the grass at 130 mph. The claimant's responses were that the data logging available to his team showed him "accelerating up to about 120, not that I'd've known then, and initially braked down to about 90." (His motorcycle had no speedometer on it.) He said he had explained he struggled to brake; the wording in his autobiography should be put down to 'artistic interpretation'; and he knows he scrubbed off some speed just before going onto the grass.

87. It was suggested to the claimant he should have been able to turn in an arc to avoid any collision with the barrier and regain the track. The claimant's response was that "you are failing to take into account the loss of control initially and I had to remain upright to brake and I couldn't brake enough to avoid it…I attempted that for as long as possible to reduce speed and not damage the bike. I realised I couldn't do it and had to jump off the bike."

88. Into this conflict I have had the benefit of hearing experts for the claimant (Mr Wheeler) and defendants (Mr Jowitt) on the topic of the loss of control. Mr Wheeler, started his career as a motor vehicle engineer but developed into investigating damage to vehicles and accident reconstruction. In his witness statement he had largely confirmed the views of Mr Borley on the interpretation of the motorbike's MoTec data. From the photography and air vest data he thought that both motorcycle and claimant hit the barrier at about the same time with a speed of approximately 30 mph, the claimant was repelled back at a slightly slower speed by the barrier, and the combination of his approach speed and being repelled back would certainly be 40 mph (called the 'delta') which was the force on the body caused by the change in velocity by the transfer of direction. Although there is a mark on the top of the claimant's helmet from the contact with the conveyor belt on the barrier, he disagreed that this represented anything

substantial by way of a sliding along the barrier because the photographs show a rebound.

89. Under cross-examination he insisted that there was only a slight slide of the helmet against the conveyor belt and you will get a small slide with an angle of incidence of 45 degrees, but not what he would call a sliding contact along the surface of the barrier with the repelling effect being significantly reduced. He said he felt confident in this opinion because there was a fairly obvious conclusion to be reached from a careful examination of the photographs of the crash. As for Mr Jowitt's detailed assessments of the 'g' force to which the claimant was subjected, Mr Wheeler considered that whether it was 16g or 27g the fact of the matter is that the claimant received catastrophic injuries. In assessing the claimant's account of the rear of his motorcycle unexpectedly moving to the right when he was about to start Turn 3, Mr Wheeler did not think that the level of accuracy of the GPS data (accurate down to about 1m) would enable a movement of the rear wheel of the motorcycle to have been detected. He did not think the lateral movement at the back of the motorcycle would necessarily be revealed on the GPS track. In order to demonstrate the sort of event in question he showed a video of the current world champion at the MotoGP in Belgium the previous weekend whose front wheel 'twitched' by way of a small movement which would not be detected in any data, but which led to the world champion running out of tarmac and coming off a bend. He considered that the trajectory of the motorcycle from the MoTec GPS data is not a straight one, but shows an arc with a large radius. He agreed that the speed at which the motorcycle had in fact left the edge of the track appeared to be about 65 mph on the MoTec GPS data. The angle at which the claimant contacted the barrier could not be measured but he had not disagreed with Mr Jowitt's estimation of about 40 degrees. He considered the speed of impact to be about 30 mph, Mr Jowitt had said 25 mph and so their joint statement had given that as a range. He was very clear that if there had been a soft barrier there would have been less force on the claimant's spine and he would not have been repelled back away in the same manner.

90. Mr Jowitt is a Principal Consultant in the Investigations Group at the Transport Research Laboratory and he was called on behalf of the defendants. I was impressed with the extent of his investigations into the sources of information available. His report concluded that Mr Byrne most probably collided with the barrier at about the same speed as the motorcycle. The data appeared to him to show the motorcycle gaining a rebound speed of about 30 mph after contacting the barrier. I observe that, if correct, that would imply a higher approach speed because some of its energy would have been absorbed by the conveyor belt and towers of tyres. However, later in his report he observed that the GPS data for the motorcycle approaching the impact point is most probably erroneous because it would suggest the motorcycle was travelling at about 10 kph, which is inconsistent with the reported damage and the impression given by the photographs of the crash. Mr Jowitt ended up assessing that the motorcycle was travelling at about 25 mph when it struck the barrier and Mr Byrne about the same.

91. He reached a conclusion that, "[t]he significant movement of Mr Byrne along the conveyor belt after contact shown in the photographs also prove that he was moving partially parallel to its surface during contact" and that the accelerometer data from the Alpinestars air vest he was wearing suggests he was in contact for somewhat longer than 0.8 seconds. He suggested the flexing of the barrier would have reduced the overall level of force on him in that time period. He then posited the comment that

there has been no testing of additional 'energy management units' (i.e. homologated type 'A', 'B' or 'C' airfences) to show that they serve to reduce injury potential. He said the FIM has based its criteria based on containment of a mass representing a motorcycle. He then baldly stated that his view is that such units "would not have limited the contact forces on the head by any measurable amount" and declared "[t]he use of a softer contact surface would, in my view, most probably have allowed pocketing of the head, giving rise to additional forces on the head, and thus the spine." He said that photographs of the helmet damage (he did not examine the helmet itself) look similar to what his laboratory has achieved from a 15mph contact speed when dropped onto a solid anvil, which he then converted into a conclusion that the barrier in this case "deformed locally to reduce the effective speed head contact speed from about 25 mph to 15 mph, showing that the fence was effective in absorbing some of the contact energy and reducing the severity of the head contact force to a far lower level."

92. Mr Wheeler did not agree with these conclusions at all and in their joint statement of points of agreement and disagreement observed that the subsequent addition of a type 'A' airfence on the barrier adds more cushioning over and above the energy absorption of the tyre barrier, which would be likely to have significantly reduced the energy of impact and as a result the speed and distance the claimant was thrown back.

93. I have come to the firm conclusion that, notwithstanding the fierce criticisms made of him, the claimant was an honest witness who did not seek to overstate his account; nor did his account conflict with my assessment of where the scientific expert evidence can reliably assist in an analysis of what happened. The descriptions in his autobiography and to his spinal expert of the incident and his speed have not led me to alter my conclusions. The book was no doubt intended to excite a reader's interest and must be looked at with an appreciation of artist's licence to achieve that objective; it was never expected to be read as a carefully worded proof of evidence for the purpose of litigation. A medical expert's examination was similarly never intended to be the forum for a precisely accurate second-by-second account of what had led to his injuries.

94. As for the expert evidence, I conclude that the claimant did make contact with the barrier at a speed of somewhere between 25 and 30 mph at an angle of between 40 and 45 degrees. Mr Wheeler and Mr Jowitt were in agreement as to that. However, applying the balance of probabilities, I do not accept Mr Jowitt's proposition that the data reliably leads to the conclusion there was a sliding of the helmeted head of the claimant along the conveyor belt for more than 0.8 seconds. On the contrary, I agree with Mr Wheeler's evidence that a careful examination of the photographs of the unfolding event and its aftermath do not depict Mr Jowitt's conclusions at all. They show what Mr Wheeler says they do – a repelling of the claimant with no significant sliding along the conveyor belt. The photographs in question are plainly a sequence taken from the same vantage point. An examination of the distinctive folds in the black polythene covered protective devices beyond the barrier in question enables one to identify where Mr Byrne's tumbling body had reached in each successive frame. This is what Mr Wheeler had done to reach his conclusion that there was no significant sliding along the conveyor belt of the claimant's helmet along the tyre wall. I accept his evidence as correct. One can see Mr Byrne being repelled from the tyre wall in close proximity to the area where he first made contact. The angle he would have been deflected from it would have been similar to his angle of incidence, 40 to 45 degrees.

95. I do not consider that Mr Jowitt's analysis of the air vest data can be a reliable guide, because that would involve ignoring what is shown in the photographs. After all, Alpinestars had themselves expressed caution about the accuracy of their own estimates taken from their data. Moreover, I consider that Mr Jowitt overstates what can reliably be concluded from looking at photographs of the helmet and its damage following what was a complex series of events in this crash. A comparison with simple laboratory experiments from dropping other helmets on an anvil is not, in my view, a reliable approach. Equally I was wholly unpersuaded by his unsubstantiated opinions about the lack of efficacy of type 'A', 'B' or 'C' airfence barriers in reducing injuries from impacts such as this or of his proposition that it would probably have made things worse by 'pocketing' the head. I will return to that topic in a little more detail.

Were any of the defendants in breach of their duties?

96. The claimant called as an expert witness Mr Robert Barnard. Notwithstanding various *ad hominem* attacks on his proficiency and experience I found him to be an impressive witness with a wealth of in depth experience from around the globe including Australia, Canada, China, Malaysia and the United States of America. His career spans over 37 years of designing, building, owning and operating a variety of motor sport facilities on four continents. In his written report he expressly stated his approach was to use the Bolam test.

97. He made references to the FIM's published standards as a starting point. Of course, the defendants were not designing Snetterton for racing which was to be governed by the FIM, but the principles of mathematics and the physics applicable to designing a motorcycle circuit are universal. In the absence of track design standards published by the ACU or fourth defendant he concluded that a designer ought to look to those published by the FIM. He stated that they are the best available standards to a track designer or inspector. I accept Mr Barnard's evidence as to this and conclude that all respectable, competent and reasonable practitioners in this field would consider the FIM published standards as a starting point.

98. It was his view that it was reasonably foreseeable that a competitive rider may not always be able to slow his machine sufficiently on the entry to a corner to ride around it. In those circumstances he will be travelling at such a speed that he may be forced to ride straight on. In doing so at Turn 3 on this circuit he would be travelling on grass which provides very little grip. In his view the speed the claimant was travelling at was reasonably foreseeable. In the light of the speeds that could be reached on the straight leading up to Turn 3 in the BSB Championship, he considers that the short run off was an inherent safety limitation for which an additional protective device in the form of type 'A' units in front of the type 'D' tyre wall should have been installed so as to absorb the force of the impact of a rider and his machine. He concluded that given the reasonably foreseeable speed of the machine and the distance involved it was reasonably foreseeable that the claimant and the machine would hit the type 'D' barrier. He considered that the selection of type 'D' alone fell far below the standards that should have been applied. His opinion was that the addition of a type 'A' protective device would probably have avoided, or reduced, the severity of the injuries to Mr Byrne had they been in place.

99. On reviewing the materials he had been supplied with, he had not seen any analysis having been undertaken using motorcycles which used the speed profile of a BSB motorcycle at Snetterton. He could only assume that no such analysis was carried out and therefore the methodology was deficient and had not followed accepted practices. He concluded that in granting a licence for the test day the fourth defendant did not apply proper safety standards that any responsible expert skilled in track safety would have applied in selection of the safety measures at Turn 3. In the statement of areas of agreement and disagreement between Mr Barnard and the defence expert (Professor Troutbeck), Mr Barnard had commented that in his view neither Mr Butterworth (the designer) nor Mr Williamson (the inspector) had made an analysis determining the run off required at every point for motorcycles to be brought to a halt. Instead it had been left to Mr Williamson to make a judgment in respect of the run off at Turn 3 without having had the basis for making it. He drew attention to the FIA Grade 2 motor car simulation for Snetterton sent by Mr Symes which he concluded showed the potential for impacting the barrier at Turn 3 in a nearly head on incident.

100. It was Mr Barnard's opinion that the claimant's incident was not at a low angle (where sliding would occur) and that is why there had been a high energy impact. He considered that a rider who loses control while braking for the corner and continues on will try to steer away, but their speed and lack of control will cause a collision in a more head on situation, with a rapid deceleration on impact, unless the correct type of additional protective device is in place. He pointed out how Professor Troutbeck states that type 'A' devices restrict sliding and are limited in reducing injury, but nevertheless Professor Troutbeck appears to have agreed with Mr Higgs' decision to use type 'A' protection after Mr Byrne's crash. Mr Barnard rejected the proposition that a type 'A' device would have risked the claimant's head being caught in a pocket and thereby risked increasing injurious forces on him because experience has shown that a soft type 'A' device deforms and is displaced over several feet either side of the point of impact and doesn't dangerously trap a helmeted head in it.

101. When cross-examined, Mr Barnard said that a type 'D' tyre barrier is extremely hard for a human body to hit - they were designed for cars. His view was that he wouldn't want anyone to hit such a barrier at almost any speed. He clarified that he wasn't saying the run off at Turn 3 was negligently short, but he was saying that if a run off was not long enough to bring a motorcycle to a halt you need to do something else about it and there are options to chose from. Although his original report addressed gravel beds in some detail, that alternative was not pursued by the claimant as part of his case and therefore I have considered it no further. It was his view that there was no question but that the run off was too short at Turn 3 because the claimant hit the barrier. He opined that self-evidently it had been predicted that this barrier was a likely impact area because a decision had been taken when designing it to add type 'D' protection to the trackside of the Armco metal barrier, which would not have been specified otherwise. He had initially thought probably type 'B' airfencing would be acceptable (which is only marginally less effective) but the more information he had gained had led to him asserting that it should have been type 'A'.

102. During his cross-examination there was a long exchange about what Mr Barnard would describe as a low angle or glancing type collision as opposed to a straight on or head on type collision. Mr Barnard considered that the latter description would apply to an impact angle of 30 to 90 degrees to a barrier. Approaching at angles of that order would

appear to a rider as if he was heading towards a barrier. A glancing blow, by contrast, would be one at an angle of below 30 degrees. He did not agree that the designers or Mr Williamson could properly have assessed probable impacts with the barrier at Turn 3 as being low angle ones nor did he agree that the claimant's impact was at a low angle.

103. Mr Barnard considered that the Minutes drawn up by Mr Higgs' secretary of the post-event meeting from the BSB races at Snetterton a month after the accident, in June 2018, were notable in supporting his assertion. Present at the meeting were Mr Higgs and Mr Williamson. Under the heading of a "Report of the MCRCB Safety Delegate" the Minutes include these words:

> "Additional type A protection added at the head on position on turn three, where the incident had occurred during the recent test day, but it was noted that no previous incidents of this type had occurred at this location. The remaining excess type A protection was added to the head on position at turn four."

I should mention that Mr Williamson did not accept Mr Higgs' secretary had accurately recorded his words and thought that it was a misinterpretation; he thought he had probably said it was "ahead". I do not consider that 'head on' or 'ahead' are very much different expressions in this context if his view had been that this barrier would, at worst, be pretty much beside a rider who had come off the track. He never asked for the Minutes to be altered. I have come to the conclusion that the defendants had become somewhat complacent about the safety of Turn 3 by giving too much weight to the history of accidents, rather than a proactive assessment of risk.

104. What had happened after the claimant's accident was that Mr Williamson had specified type 'C' be used, but because only type 'A' was available he allowed that instead to be fixed to the front of the type 'D' tyre wall. In describing this in his evidence to me he interestingly referred to allowing type 'A' as it was "a superior type". The following year (2019) Turn 3 was changed again and was given three layers on the trackside of the Armco metal barrier – types 'D', 'C' and 'A'.

105. Mr Barnard repeated that as far as he was aware Mr Williamson had failed to calculate the run off distances for a BSB championship rider and the potential angles of impacts, but instead had primarily relied over time upon the fact that such an incident had not occurred so as to give him comfort in not specifying a type 'A' protective device for the barrier. Mr Barnard said it was not OK for an inspector to simply say "that looks alright".

106. The defence expert - Professor Troutbeck, is a distinguished expert also. He reached contrary conclusions to those of Mr Barnard. It was his view that the run off area outside Turn 3 was acceptable and the protection provided on the barrier acceptable. Mr Williamson had used his considerable experience in his assessments and his approach was reasonable given all the variables which had to be considered. He pointed out that there may be many trajectories for errant vehicles on a circuit which might require different forms of protection but those with the greater risks should be treated first; this is to use available resources responsibly because it is unwise to expend scarce resources on a negligible reduction in risk. However, I observe that in this case it has never been suggested on behalf of the defendants that there was a conscious cost/benefit analysis in the choice of homologated protective devices to be used. The first and second defendants had an adequate stock of type 'A' units at the time of the claimant's

crash and during the course of evidence my attention was drawn to the increasing use of it around the circuit from year to year. Moreover, it is an established principle that reasonable actions must be taken to address a foreseeable risk of a highly dangerous outcome, even if it has a low probability of occurrence, if it could be prevented at relatively low cost. Mr Williamson accepted that principle.

107. In Professor Troutbeck's view the expected impact in the run off area on the outside of Turn 3 was judged to be at a low angle and in his opinion the type 'D' tyre barrier and conveyor belt provided a surface that promoted sliding which was a better approach than bringing a rider to an abrupt stop. I find this rather surprising in view of his opinions to the court in the case of Wattleworth (supra). In that case at paragraph 149 he is described as agreeing 'low angle' collisions are ones at less than 30 degrees and at paragraph 156 is quoted as saying: "…conveyor belting,…had no experimental or scientific support. He said that conveyor belting...would not assist in helping cars to slide. On the contrary, his view was that…the belting would on impact follow the shape of the tyres...to the extent that they compressed and so, he said, would neither facilitate sliding nor reduce the risk of pocketing." Professor Troutbeck considered that no further protective devices were required or necessary at Turn 3 and if he had been asked to give his professional opinion on the day before the claimant's incident he would have required no changes to be made.

108. Professor Troutbeck's assessment of the available length of run off for Turn 3 was 95 metres for a completely straight errant trajectory at the end of the preceding straight, such as might occur if there was a component failure on the motorcycle. He stated that if the rider had not followed that trajectory and had been able to make some adjustment towards his left then the runoff distance reduced to 60 metres, however in this scenario the rider would be travelling at a lower speed and would stop or steer away from danger. That latter proposition is plainly not supported by what happened to Mr Byrne.

109. He did not accept that the FIM standards for circuits were applicable to the design of Snetterton and in any event they are guidelines which are open to interpretation. They would not be the sole basis on which a track inspector assesses a circuit for licensing. The FIM document does not provide detailed guidance on the choice or placement of additional protective devices or dimensions for a run off area. He referred to a Health and Safety Executive publication: 'Managing Health and Safety at motorsport events' (HSG112) but that is not a document which is referred to by the fourth defendant in its Yearbook publication. It is only very general in nature and provides no specific guidance of relevance to this case.

110. Professor Troutbeck was trying to make the point that the term 'head on' in a racing circuit refers to 90 degree impacts and said that the HSE guidance indicates that properly constructed tyre walls can be used to absorb head on impacts. I have to say that that opinion misrepresents in a somewhat partial way what the HSE says in paragraphs 62 and 65 of HSG112 about the need to take into account the different types of motorsport event, the types of vehicles, their speeds and the level of protection the vehicle gives to the participant. It did not provide any support for how a 45 degree impact should be treated.

111. In considering the Bolam test I was waiting to hear what other body of opinion Professor Troutbeck was going to refer me to, so as to demonstrate that the defendants had not been negligent. His references to some Australian material did not persuade

me of this. Essentially he was expressing his own opinion that Mr Williamson and the other defendants took a reasonable approach, which he said he himself would have taken. I would have first to be persuaded that the defendants could be properly be described as comprising that body of competent, reasonable, respectable and responsible practitioners (who, of course have a self-interest in justifying their actions). Alternatively, that he himself was the example of that body which I should accept. I was not persuaded of either in regard to the decisions taken in this case. Moreover, I do not consider that view can be logically supported in the light of the persuasive logic of Mr Barnard.

112. I have necessarily summarised the evidence as succinctly as reasonably possible so to explain my conclusions. The trial hearing spanned ten court days and the various bundles of pleadings, statements, documents etc extended to fill twelve lever arch files. Almost every point has been hotly contested by the defendants and consequently took time to be addressed.

113. As stated, I have reached the clear view that Mr Barnard's analysis of the evidence on the question of breaches of duties of care is to be accepted. In my view the length of run off which was ultimately provided on the outside of Turn 3 involved a number of compromises being made so as to accommodate various other design features such as an access road for emergency vehicles. The consequence of the final design that emerged involved limitations in the space available on the outside of Turn 3 for vehicles which were going to be used at Snetterton to run off the track and either come safely to rest or regain the track. For motor cars that recognised risk was adequately provided for by the type 'D' tyre wall which was incorporated into the design. Mr Symes of the MSA had nevertheless recognised at the time that there would be likely to be an issue for motorcycle racing given the limited run off space and he alerted the second defendant to this. In turn the second defendant asked for advice from the fourth defendant, but there is no record of what advice was received. Although I do infer from the evidence that at the design stage all three parties' representatives had estimates of the maximum speeds that would be likely to be achieved by BSB Championship motorcyclists at the various proposed corners, on the balance of probabilities I have concluded that they did not undertake comprehensive calculations of the likely run off distances those would require. All three of the defendants were engaged in different ways when the design exercise was going on. They contributed to the decisions which were made.

114. I have also concluded that when they considered what might happen at Turn 3 from the point of view of potential accidents they only ever looked at it in a binary way. This was ongoing in the inspections which followed in subsequent years and in the fourth defendant's licensing decisions. They seemed to think that either a component would fail on the approaching straight or the rider might miss taking the corner altogether, in which case the straight-line run off trajectory provided an adequate run off distance, or, a rider would have reduced his speed sufficiently to bank his machine over to commence the turn but nevertheless if he did come off the track for any reason he would be at a speed where he could either steer back onto the track or drop his machine and have sufficient grass to slide to a stop before the barrier. The fact that this happened from time to time no doubt encouraged them to hold to that view and it may well have given them a false sense of security.

115. What they did not properly consider was the scenario which Mr Barnard concluded was also reasonably foreseeable and which happened in the claimant's case. I agree with Mr Barnard's conclusion. The claimant was travelling at an entirely foreseeable speed; he had a foreseeable type of racing incident when his rear wheel slid sideways such that he had to counter the consequent instability by steering to avoid being 'highsided'. Mr Williamson fairly conceded in his evidence that something like this had happened to him once. It is my conclusion that because of Mr Byrne's location, speed and direction when this happened he had an inadequate amount of track left to brake and to recover from the incident; he was therefore propelled onto the grass - a surface with a substantially lower co-efficient of friction; to maximise his braking efficiency he had to keep the bike relatively upright; he used both brakes to reduce as much speed as possible without locking-up his wheels; with the need to maximise braking forces he followed a reasonable course which limited his opportunity to steer significantly to his left; the barrier appeared to be coming up fast in front of him; he made a reasonable decision to deliberately part from his machine, tumbled, rotated and collided head first with a conveyor belt enclosing a solid bolted tyre wall at around 25 to 30 mph at an angle of 40 to 45 degrees; there was a small sliding of his helmet against the conveyor belt but he rebounded and was propelled back away from the barrier; he continued to rotate and came to rest several meters away from it. I am satisfied that the incident was not caused by rider error. Mr Byrne was not the author of his own misfortune and he was not contributorily negligent.

116. The type of incident which the claimant was involved in was properly foreseeable. To put Mr Barnard's point succinctly, the claimant foreseeably entered the run off at Turn 3 astride a motorcycle travelling on slick tyres at 65 mph with only some 60 metres of grass available to him before a barrier intervened. As the run off area was not capable of being increased by design changes, it required specific consideration of the type of barrier to be deployed when BSB Championship riders were visiting the circuit. This engaged the need to address the use of Additional Protective Devices (APDs) at Turn 3.

117. Mr Higgs, the first defendant's Clerk of the Course, knew well of the advantages of type 'A' devices. Indeed, he enthusiastically lends his name to endorsing one particular manufacturer's type 'A' product in its published marketing materials as follows: "Over recent years the BSB Championship promoters have invested in the world's best racetrack protection devices. Classified as type A, the gold standard by the FIM, the…barrier has proved highly effective in advancing safety precautions. Its robustness in coping with contact…make it the obvious choice." It is described as being engineered to control the movement of air by creating air pockets within the foam construction, to provide graduated deceleration and cushioning for the rider. Its advantages are listed as including minimum impact rebound and allowing controlled compression upon impact, generating a cushioning effect. The owners of Snetterton, as its designers and occupiers, were obliged to address APDs themselves when enabling the use of its circuit for BSB Championship riders because motorcycling was always intended to be an equally important part of its operations as motor car racing. The fourth defendant was the body which decided if a licence should be granted for a test day and took it upon itself to stipulate the use of APDs as part of that licensing exercise in its acknowledged role as ensuring the safety of such activities.

118. It was a breach of the OLA common duty of care and it was negligent not to have concluded that type 'A' additional protective devices were required on the outside barrier at Turn 3 for this test day. The foreseeable collision that occurred was not a low angle sliding or glancing type of impact. I find that on a balance of probabilities the use of type 'A' APDs would not have resulted in what has been posited as a potential for 'pocketing'. It would not have created a more serious outcome for the claimant than the type 'D' tyre wall which he struck with considerable force. None of the defence evidence, including the opinions of their various experts, has persuaded me that the type 'A' units (which the defendants themselves put into the location soon after the claimant's accident) would not have protected the claimant from his injuries.

Causation

119. The claimant's evidence was that his falling from the motorcycle to the ground and tumbling towards the barrier did not cause him serious pain or injury. He was accustomed to coming off his motorcycle quite a number of times each year and he had from time to time been injured, including fracturing bones. His evidence was clear that the excruciating pain came from his impact with the tyre wall.

120. Expert medical evidence was called on behalf of the claimant (Professor Soopramanien) and the defendants (Mr Natali). In general terms it can be split into two topics: (1) on a balance of probabilities were any of the claimant's injuries sustained before his impact with the barrier as a result of his fall from the motorcycle / tumbling across the ground and, therefore, not caused by any tortious fault of the defendants; (2) on a balance of probabilities would the injuries he sustained from impacting with the type 'D' barrier have been any less serious if he had impacted with a type 'A' APD.

121. The expert medical evidence when tested in the witness box turned out in my view to be largely speculative and inconclusive on the first issue. The precise movements of the claimant's body, the mechanics and forces involved, are all extremely unclear and complex. The absence of eye-witnesses, the lack of reliable data, film or a sufficient quantity of photographic evidence rendered the opinions of the experts on the first topic of very little value to my assessment. I was really left with no greater clarity after hearing from them than I had been beforehand. I do not think that I can draw any reliable inferences from the photographic material or the data as to this. Accordingly, I come back to considering what the claimant's evidence was and, on a balance of probabilities, I have concluded that he did not sustain any serious injuries as result of jumping clear of his motorcycle and tumbling towards the barrier. The impact with the barrier, however, materially caused the infliction of his injuries.

122. Turning to the second topic, the position the experts were placed in was unsatisfactory. There was no research to which they could draw my attention on the topic. Manufacturers clearly made claims about the safety of their devices, but it was not backed up by empirical evidence. Further, on several occasions when the claimant's expert tentatively proffered any observations about his views concerning the disadvantages of a human body colliding with one type of barrier as opposed to another he was criticised for encroaching upon an area of expertise which was not his. There was much discussion of the relevance or irrelevance of the 'delta' value, which combines the velocity of approach and rebound, bearing in mind the stiffness or

flexibility of the material impacted upon. During the course of the trial I had various videos played to me showing other collisions with air fences of various kinds. Each had points of difference and similarity with this case. Ultimately, on the basis of all of the evidence in the case from everybody - the witnesses of fact, all of the experts and the documentation in the bundles, I have reached the view that if the claimant's impact had been into type 'A' APD material he would not have sustained any of the serious injuries he did sustain on the day. Nothing presented in the evidence on behalf of the defendants dissuaded me from that conclusion and I regard the theory which was put forward of 'pocketing' in the scenario of this case to be nothing more than just that - a theory which was not substantiated by anything I heard.

123. Accordingly, I find each of the defendants liable for the injuries sustained by the claimant.