

Wednesday, 4th November 2009

1

2 (Morning session)

3 (10.00 am)

4

ALEXANDER CHARLES MCGINNIES

5

Examined by MISS CARMICHAEL (continued)

6

Q. Good morning, Mr McGinnies.

7

A. Good morning.

8

Q. Yesterday afternoon we were talking about analysis and current training and practice, that was in SPSA.

10

I used the language of an event in a mark with you

11

yesterday and I would like to explore that a little

12

further at this point.

13

Would it be fair to say that an event could be a

14

ridge characteristic?

15

A. Yes.

16

Q. It may be that you don't know when you first view a mark

17

what that ridge characteristic is, whether it is a

18

bifurcation or a ridge ending?

19

A. That would be correct.

20

Q. Would you agree also that an event in a mark might be

21

something else, dirt or some other artefact, that you

22

can't tell what it is?

23

A. I would say that, yes.

24

Q. When you come to the point that you are looking at the

25

known print, is it only those events that would be ridge

1 characteristics that you would be seeking to compare to  
2 the known print or might you also be looking to see  
3 whether something else that may or may not be a ridge  
4 characteristic, that may for example be dirt or an  
5 artefact has some explanation in the known print?

6 A. That's correct. It may be a scar; there may be movement  
7 in the crime scene mark that obviously wouldn't be  
8 present in the known print if it was taken under  
9 controlled circumstances, rolled (inaudible) the edge  
10 with even pressure.

11 It also may be something like a ridge break or a  
12 crease that you are looking to understand why it looks  
13 like that on the unknown print and when you go to the  
14 known print that will give you more information on why  
15 it looks like it does.

16 Q. So you may have something that looks, at first sight,  
17 simply as an event as something that is there but you  
18 can't determine what it is, whether it is truly part of  
19 the finger-mark at all?

20 A. That's correct.

21 Q. When you go to the known print, you will be looking,  
22 amongst other things, for a potential explanation for  
23 that in terms of some sort of feature, whether that be a  
24 ridge characteristic or a scar, something of that  
25 nature?

1 A. Yes, I would say that.

2 Q. Yesterday I asked you some questions about the Mayfield  
3 report and the marking-up, what seemed to be a  
4 recommendation for quite substantial marking-up and  
5 note-taking of the analysis stage down to the point of  
6 noting ridge characteristics at that stage.

7 A. Yes.

8 Q. The Inquiry has also heard evidence about work done by  
9 Mr Glen Langenburg as to annotation of the analysis  
10 stage involving marking up particular ridge  
11 characteristics with different colours to indicate the  
12 level of confidence that the examiner has in a  
13 particular characteristic that he or she has observed in  
14 the mark.

15 Do you have any comment on that as a way of  
16 proceeding?

17 A. Would that be before you even look at the -- any  
18 comparison stage? Would that be marking-up totally  
19 before we do any further comparison?

20 Q. That's my understanding, Mr McGinnies. We may hear  
21 further about it from another witness later.

22 A. I take it this would be done electronically.

23 Q. Yes, that's my understanding also but, as a matter of  
24 principle, can I suggest to you it wouldn't necessarily  
25 have to be. One might take, I suppose, a photograph and

1 different coloured pens and do something similar and one  
2 would have a similar record to marking it on a digital  
3 image electronically?

4 A. Would that be proposed to do that for every single scene  
5 of crime mark that comes in prior to looking at  
6 any ...? That would be really time consuming and not  
7 practical, I don't think.

8 Q. I think I perhaps have your response in the form of the  
9 question you have just put that if one did that for  
10 every single mark that would be very time consuming.

11 A. Certainly.

12 Q. Let us suppose then that one confines that to serious  
13 crime. What would be your comment if that was the  
14 situation?

15 A. Again, in serious crime -- actually, in more serious  
16 crime you would be more likely to have more impressions  
17 received in at the office. You may have 200 or 300  
18 photographic lifts to start doing that for every single  
19 mark before you do any comparison would be time  
20 consuming and I don't think that it would be a  
21 worthwhile exercise in that, again, as I said yesterday,  
22 if you've one suspect to compare and he has only loops  
23 and this is definitely a whorl pattern then by the time  
24 you have marked up all these 200 photographs with what  
25 you think are characteristics and then look at what

1           you're comparing it against and it can't be a match  
2           you'd waste a lot of time and energy on something that  
3           you didn't really need to do.

4       Q.    Let me narrow this further, perhaps in a similar way to  
5           the recommendation 11 that we looked at yesterday in the  
6           Mayfield report. Let us suppose we narrow that to a  
7           situation where one has a complex latent print and  
8           following perhaps an initial comparison that seems to  
9           indicate there may be some similarity, one then puts the  
10          known print aside, as the OIG recommended, goes back to  
11          the mark and then starts to mark it up in the way I am  
12          suggesting with confidence levels designated by  
13          different colours.

14                 What would be your comment on the practicality of  
15          that as a suggestion?

16       A.   I think that it's something that experts do without  
17          actually colouring in on a mark. I think they would  
18          look at target areas, they would look at what they see  
19          in the mark mentally, sometimes people even still will  
20          draw target areas as we'd seen yesterday on the ACE-V  
21          sheet, which they then would look to take in the  
22          comparison, they would be looking for unusual  
23          characteristic groups, they would be looking at maybe  
24          some of the movement or the features that you mentioned  
25          earlier, scars or creases that are quite prevalent next

1 to strong features or groups that make up the target  
2 area. They would then use that in their comparison.

3 To any benefit of it for every single case  
4 marking-up on acetate or a colour chart or anything  
5 before they actually undertake that I don't know what  
6 the benefit would be. In an ideal world it may be  
7 something that could be looked at and tried, obviously  
8 Mr Langenburg has tried it and advocates it but I don't  
9 know whether it would be practical on a day-to-day basis  
10 with the amount of work that a bureau has to undertake.

11 Q. Just touching on what you said about the target group,  
12 would we understand rightly that normally the target  
13 group is something that the examiner will hold in his  
14 head in his memory as he goes to look at the known  
15 print?

16 A. That's correct.

17 Q. What we saw yesterday on the ACE-V sheet was the work of  
18 a trainee noting a target area?

19 A. That's correct.

20 Q. But it wouldn't, again if I understand you rightly  
21 yesterday, be not day-to-day practice in examination to  
22 note down the target area in the way that we saw the  
23 trainee doing yesterday?

24 A. No.

25 Q. Can I make this suggestion to you perhaps, that

1           annotating a mark at the analysis stage, particularly if  
2           one is dealing with a difficult print, with a complex  
3           print, might have the advantage that one would be able  
4           to go back and tell what features, if any, had been  
5           added by virtue of the comparison, by virtue of what one  
6           had been able to discern by looking at the known print  
7           as opposed to the mark.

8                        Would you have any comment upon that suggestion?

9    A.    Yes, I could see where that would be of benefit and when  
10       people mark things possibly on a comparator they would  
11       obviously be marking up the unknown -- it's possible  
12       they would mark up the unknown print first with these  
13       strong features that they see before they look as  
14       before, as you said correctly, that they do it mentally  
15       on a comparator, they may do it by actually marking up  
16       and then looking at the unknown to carry over the  
17       comparison to see what explanations there are for these  
18       features that they're seeing.

19   Q.    Just taking that a little further, some analysis would  
20       be done with an individual glass looking at a mark?

21   A.    That's correct, yes.

22   Q.    Are you indicating then that some of the analysis by  
23       some examiners might be done on a comparator?

24   A.    A comparator is just another tool. It's another way of  
25       making a comparison. Some experts may take more complex

1 marks to a comparator to enlarge it and let them carry  
2 out the comparison further, with further detail on the  
3 comparator, yes.

4 Q. Might they go to the comparator before they had looked  
5 at the known print at all?

6 A. They could but it's not usual practice, no.

7 Q. I would like to ask you a little bit about a document  
8 MM0065 which has an extract from the NPIA training  
9 manual. We have here section 6 from that.

10 I wonder if you could tell the Inquiry a little bit  
11 about this manual and how it's used in the training  
12 process?

13 A. Certainly. This is section 6 of the National Policing  
14 Improvement Agency. If you like, it's almost like the  
15 sort of training manual for the UK. It's what trainees  
16 use to go through the training. It's like the phrase  
17 yesterday: the Bible for trainees. It breaks down all  
18 the various processes they would go through from history  
19 of fingerprints, through to taking fingerprints, going  
20 to court, the identification process, ACE-V. They use  
21 that throughout their training almost on a daily basis  
22 to support them, the work that they're doing on their  
23 modules and to support, to give them more underpinning  
24 knowledge across the whole of their fingerprint career.

25 This section is a section, 6, which takes you

1 through the identification process.

2 Q. This is a section, I think, that deals with ACE-V?

3 A. That's correct.

4 Q. We see at the third bullet point there:

5 "What is meant by ACE-V".

6 If we move on to the next page we see a discussion  
7 and in the third paragraph a passage:

8 "Friction ridge identification applies equally to  
9 fingerprints, palm prints, toe prints and plantar  
10 prints. Identification is based upon on the unique  
11 agreement between the mark and the print by careful  
12 analysis, comparison and evaluation of all disclosed  
13 features held within First, Second and Third Level  
14 Detail whilst establishing that any apparent differences  
15 can be accounted for."

16 So this is, I suppose, the summary account in the  
17 Bible for trainees. Would I be right in saying also  
18 that there may be some reference to the training manual  
19 in some of the developing standard operating procedures  
20 within your own organisation?

21 A. That's correct, yes.

22 Q. We can take that passage down.

23 If we look at the paragraph starting, "The mark is  
24 initially analysed", what we see here is:

25 "The mark is initially analysed in order to

1           ascertain and establish the amount of friction ridge  
2           detail that is present. Because fingerprints are found  
3           in varying degrees of clarity, the quantity of detail  
4           present for comparison and evaluation is variable,  
5           resulting in various levels of increasing detail that  
6           can be used in the identification process. Clarity also  
7           has significant repercussions on the amount of tolerance  
8           for discrepancies when comparing the mark to a print."

9           Again, this is what the trainees are told about the  
10          analysis process and what they should be looking for?

11        A.   That's right.

12        Q.   Looking to the next paragraph, we see:

13                 "As an area of the unknown mark is viewed, the brain  
14                 stores that detail in memory. When the print is  
15                 examined, the stored information is compared with the  
16                 information from the unknown mark. It is important that  
17                 comparison occurs by viewing the unknown mark prior to  
18                 the known print in order to avoid preconceived thoughts  
19                 or expectations from influencing the comparison and  
20                 identification."

21                 Essentially, from day 1, it is received wisdom --

22        A.   That is day 1 training, yes.

23        Q.   -- for the trainee that there is a risk involved in  
24                 going from the known print to the mark?

25        A.   Yes.

1 Q. And that is something to be avoided?

2 A. Definitely.

3 Q. We can take that down as well. We should look at the  
4 last paragraph there, moving on to the next page if we  
5 can, please. We read next:

6 "Before the mark is examined, it is orientated such  
7 that the skin area or digit that created the mark can be  
8 decided. When found in a group, this is quite easily  
9 determined by using the relative position of the marks.  
10 Pattern types and their frequency of occurrence on the  
11 digit in question also helps in determining which finger  
12 made a mark. Palm prints are determined by ridge flow,  
13 patterns disclosed, size and the position of flexion  
14 creases. This is referred to as digit/palmer  
15 determination."

16 Again, we are still on a description of what we  
17 discussed yesterday as part of the analysis process, the  
18 process of determining which digit may be involved,  
19 whether the impression is a palmar impression?

20 A. That's right, yes.

21 Q. If we can take that down, we next see a section headed  
22 "Holistic approach", and what we see there is a passage  
23 that starts:

24 "When the mark has been orientated, features of both  
25 the unknown mark and known print are compared

1 systematically to determine if they are similar. The  
2 overall fingerprint pattern does not have sufficient  
3 uniqueness to individualise. However, recognising the  
4 pattern will narrow the number of possibilities of  
5 donors when searching through collections of  
6 fingerprints."

7           Should we take it from the mention there of  
8 "systematic comparison", that we have moved here in  
9 description from the analysis phase to the comparison  
10 phase of the exercise?

11 A. It's talking about the highest level of detail. So it's  
12 talking about pattern types and subdivision of the  
13 pattern types, loop, arch and whorl. At that stage, it  
14 is easy to do a comparison to determine whether or not  
15 you have a pattern match. As I was saying earlier, if  
16 you're comparing something that is a whorl and you're  
17 comparing it against a loop then you don't need to go  
18 any further than that first level of detail or within --  
19 if you have a loop, for instance, if it's an ulnar loop  
20 to the left and you have a ridge count, that is the  
21 number of ridges between the delta and the core, of  
22 three and you're comparing against a loop that has a  
23 ridge count of, say, 20, again you can quickly close  
24 that comparison off. Then you would go back to your  
25 analysis if you have to go further into the print.

1 Q. Would I be understanding rightly that there may not be,  
2 in practice, a very bright line between the end of  
3 analysis and the beginning of comparison?

4 A. Yes, that would be correct, that you can take part of  
5 the analysis at an early stage and then you go back to  
6 further comparison.

7 Q. I wonder if we could take that down.

8 A. Sorry, that was the wrong way round. You start with --  
9 you're doing your analysis, you do an early comparison  
10 and then go back to your analysis if you have a whorl  
11 and you are matching it with a similar familial pattern  
12 whorl then you would need to go to the next stage of  
13 analysis, yes.

14 Q. Let us perhaps run with that a little further,  
15 Mr McGinnies. We're not in a situation where we are  
16 discarding something because it is obviously an arch  
17 where what you have in the mark is a whorl. You have  
18 found another whorl and you want to look more closely at  
19 it. You say at that stage you return to the analysis.

20 What do you actually do in practice at that stage  
21 where you have your two whorls?

22 A. That is the stage you would then look out for target  
23 areas. Considering you have carried out the rest of  
24 your analysis on the mark, as we looked through, as we  
25 went through yesterday, what it's made on, what it's

1           made with, what it's developed with, what pressures  
2           there are, are there any reg flag areas, any movement.

3           You would then look for your target area. You would  
4           start to look at areas that naturally draw the eye,  
5           areas that you are going to then look to compare with,  
6           taking this, as I said, this mental note across with you  
7           to start looking on a one-to-one comparison stage.

8        Q.    I understood yesterday -- and I may have been wrong --  
9           that you may in fact identify a target group, something  
10          that catches your eye, at the stage that you look at the  
11          mark before you have looked at any of the known prints.

12       A.    That would be correct, yes.

13       Q.    Let us suppose you have got to the stage -- can we take  
14          it just at the moment, after you have looked at a mark  
15          only there's something that's caught your eye and you do  
16          have a target group. What do you do then?

17       A.    In a physical comparison?

18       Q.    Yes.

19       A.    You would have the scene of crime mark on your left-hand  
20          side. You would have your glass over that. Different  
21          people compare in different ways using different types  
22          of glasses, different numbers of glasses but you would  
23          compare the unknown to the known. So we would take that  
24          target area, with your orientation of the print say, for  
25          instance, it's in roughly the, sort of, 3 o'clock

1 position in the orientated print and you would take that  
2 across to your known mark and look in that same area for  
3 similar characteristics that would be in sequence and  
4 agreement.

5 Q. We have heard in evidence in the last week from  
6 Mr MacPherson who described a process where he was  
7 looking simultaneously at a mark and a print using, as I  
8 understood it, both his eyes through two linen glasses.  
9 He said that this was a skill that he had gained through  
10 experience and training.

11 Is this a skill in which you instruct the current  
12 trainees?

13 A. Actually, sir, if I may be permitted, I have two  
14 fingerprint glasses here and I can demonstrate. Would  
15 that be ...?

16 THE CHAIRMAN: Yes.

17 MISS CARMICHAEL: Please do. This might be an occasion when  
18 people may want to stand up to see more clearly what  
19 Mr McGinnies was doing or if there's some better way we  
20 could lay things out for him --

21 THE CHAIRMAN: Well, he could always leave them for  
22 inspection at the break.

23 A. Yes, I don't mind leaving them for the course of the  
24 Inquiry if anyone wants to ...

25 As I say, there are different types of glasses.

1           Neither of these are a linen tester. A linen tester is  
2           a small square one with a square on that flips out.

3       Q.    Just so I can get this into the record, in your right  
4           hand you are holding a black glass that appears to be on  
5           a little stand. Can you tell us what that is?

6       A.    This is a fingerprint glass that is adjustable for eye  
7           relief.

8       Q.    So you are indicating you can move it up and down from  
9           the stand?

10      A.    That's correct, yes, and it locks off with a wheel.

11                The other ones are fixed position, brass, of the  
12           brass type. Unfortunately, I didn't have any linen  
13           testers but they are small square ones which fold out.  
14           What would happen is you would place -- the way we  
15           instruct trainees is we place one of the fingerprint  
16           glasses over the unknown mark, over the scene of crime  
17           mark, and one of the fingerprint glasses over the  
18           corresponding fingerprint that we were looking at or the  
19           area of friction ridge, sorry, that we were looking at  
20           and they would go between the two.

21                What Mr MacPherson, I believe, was saying is that  
22           his technique was to put them over both and, at a  
23           distance, look between the two. Some people use it by  
24           putting them right against their eye, closing one eye  
25           and looking. Some people use one glass and go between

1 one and the other.

2 When we are instructing trainees early in their  
3 career I would give them two glasses, always instruct  
4 them to work from unknown to known but through time and  
5 through their experience and using different glasses  
6 they would find what eye relief was best for them, which  
7 way of comparison was best for them and even which type  
8 of glass that they use was best for them.

9 As long as the results were consistent, then that's  
10 something that would be up to each individual examiner  
11 on how they use the glasses. I would never say to  
12 anyone, "That's not how you use a glass". I would say,  
13 "If it works for you, then that's what you do".

14 Q. What I am wondering about is if we have a description of  
15 looking at a known print and an unknown mark  
16 simultaneously, how that squares with the idea of going  
17 from the unknown to the known.

18 A. I don't understand what ... I don't know that you can  
19 look at two things at the one time, look at one thing  
20 with your left eye and look at one thing with your right  
21 eye and ...

22 Q. If that is simply something that you don't understand  
23 then that's perhaps the answer to the question,  
24 Mr McGinnies. I think when you were indicating what you  
25 were doing you were, in fact, moving your head somewhat

1 from one to the other?

2 A. That's the way -- the way I would look is keep both eyes  
3 open and I would move my focus from one mark to the  
4 other. Some people close one eye; some people use one  
5 glass. As I say, unless a trainee was having a problem  
6 very early on -- and this would happen very -- unless  
7 they were having problems making comparisons one of the  
8 things I would look at is the type of glass, try them  
9 with a different glass, try them with a different eye  
10 relief or the way they are looking at things but that  
11 would be done very early on. People get into their  
12 comfort zone quite early.

13 Q. I wonder if you can perhaps have document CO4118.5.  
14 This is a presentation which I think you prepared and  
15 gave for Advocate Deputes earlier in the year, back in  
16 June?

17 A. That's correct.

18 Q. If we start at page 1 just so we can see what it is. We  
19 will see it is your seminar for Crown Counsel. I wonder  
20 if we could go to page 5, please.

21 A. That actually demonstrates someone using pointers and  
22 looking at an unknown mark to a mark on a fingerprint --  
23 an impression on a fingerprint form, yes.

24 Q. On the left the person is holding a pointer apparently  
25 over a photograph, that would be an actual size

1 photograph of an unknown mark?

2 A. Yes.

3 Q. And on the right-hand side he's looking at something on  
4 a ten-print form?

5 A. Yes, that's correct. For that photograph I would say  
6 that possibly his eye relief is for the photograph so  
7 that he's not that close to -- normally, I don't think  
8 he would be -- in fact, I know who it is so he wouldn't  
9 be looking at it from that distance. I think that's  
10 probably for the photograph.

11 Q. So would he be looking at it more closely --

12 A. Yes.

13 Q. -- in terms of how close he was to the glasses?

14 A. Yes. Actually, in practice if you look from that  
15 distance at something through this, because of the way  
16 that it's set for focus, if you look at something at  
17 that distance it's out of focus. You actually need to  
18 have your eye relief closer to it.

19 Q. So you would need to be nearer than the man in the  
20 photograph is?

21 A. Yes.

22 Q. But that should give us a general idea of the sort of  
23 working position you described?

24 A. Yes, that's correct.

25 Q. I wonder if we can simply run through some of the slides

1 that you prepared for the Advocate Deputes. Can we move  
2 on to the next one, please. You are explaining there  
3 the basis of fingerprint identification, I will not  
4 dwell on this, telling the Deputes about the way that  
5 fingerprints were formed and about the persistence of  
6 features in fingerprints.

7 A. That's right.

8 Q. Move on to the next one please.

9 Again, we are on the same scene here.

10 THE CHAIRMAN: We need to pause just for a few seconds.

11 MISS CARMICHAEL: Have we got a technological difficulty?

12 THE CHAIRMAN: We have a technical problem with the  
13 transcript for a moment. **(Pause)**

14 We can proceed.

15 MISS CARMICHAEL: Thank you, Mr McGinnies. In fact, we can  
16 perhaps jump forward to page 14 of this PDF where your  
17 presentation moves from perhaps the underlying aspects  
18 of fingerprint identification, how fingerprints are  
19 developed in the womb and so on, to the methodology that  
20 we have been talking about and here we see you setting  
21 out the ACE-V.

22 A. Yes.

23 Q. If we can move on to the next slide, please. In this  
24 slide we are dealing with the part of the analysis you  
25 told us about, what surface is the mark on.

1                    Move on to the next slide, please. What does the  
2                    latent mark consist of. Again, we saw the example  
3                    yesterday on the sheet where the mark was deposited by  
4                    sweat.

5                    If we can move on to the next slide, please, again  
6                    we are still on the analysis phase, what is the latent  
7                    developed with. Then if we can pause a little at the  
8                    next slide, where you come to comparison. You say there  
9                    are visual comparative measurements, sequential and  
10                   spatial in nature.

11                   Can you put that in ordinary language for us,  
12                   please?

13    A.    The visual comparative measurements are, again we're  
14           looking for -- and the sequential and spatial nature --  
15           we're looking for features in sequence and agreement  
16           with none in disagreement in order to help us come to  
17           the next part which is evaluation of the print. So  
18           we're looking, as I just said, whether we're using  
19           glasses or it's on a computer screen through an AFR  
20           system or whether it's on enlargements or whatever the  
21           medium is, we're looking at comparing these with our  
22           eyes and looking for characteristics or features in  
23           sequence and agreement with none in disagreement in  
24           order to come to help us come to a conclusion.

25    Q.    I think we have already touched on the idea that

1 pre-conceived thoughts and expectations should not be  
2 part of the process. I'd like to ask about the third  
3 bullet point here where you say others must be able to  
4 see what you see.

5 Who do you have in mind by way of "others" in this  
6 context?

7 A. Anyone else who looks at the mark with the same  
8 qualifications, training and expertise. In other words,  
9 what you have to guard against is a mindset of saying,  
10 "Yes, it's in there. Can't you see it? I'm telling you  
11 it's there", type of thing. It needs to be -- you need  
12 to be able to demonstrate when asked what it is that you  
13 have actually used as a feature in your comparison.

14 Q. What you said there was that you needed to demonstrate  
15 it to other people with similar qualifications and  
16 experience. I would like to take this theme a little  
17 bit further with you if we can think in the first  
18 instance perhaps about lawyers who might be interested  
19 in the case, whether Crown lawyers or defence lawyers.  
20 Must they also be able to see what you see in the mark  
21 and the print?

22 A. I think I hear the phrase recently it's hard to make  
23 experts of people who aren't experts. It takes a  
24 certain period of time to be able to compare marks,  
25 et cetera, and to qualify. Sometimes I would say it's

1 very difficult to make ... how to put it. Sometimes  
2 it's very difficult to be able to demonstrate some of  
3 the characteristics or features in the way you see them.  
4 However, they can't be explained away, you can't say,  
5 "I'm telling you it's there. I'm an expert, believe  
6 me". You must be able to demonstrate it.

7 Q. I am thinking there are perhaps two stages to this,  
8 Mr McGinnies. In the first instance if a case goes to  
9 court and fingerprint evidence is being relied on,  
10 perhaps the first thing that you would have to persuade  
11 a lawyer or a member of the jury of or a single judge, I  
12 suppose, in the Sheriff Court is there is actually a  
13 feature there where you say there is feature, perhaps  
14 particularly on an unknown mark where things may be less  
15 clear than on a known print?

16 A. Yes.

17 Q. What is your position on this? Should, once you have  
18 pointed to what you see, that lawyer or juror be able to  
19 see, "Yes, there is something there and I can see that  
20 it's the ridge ending that Mr McGinnies is telling me  
21 about"?

22 A. Yes, you should be able to explain what it is that you  
23 see, if you think it's movement or you think it looks  
24 the way it does because of deposition pressure or  
25 fill-in from powders or whatever, you must be able to

1 explain what it is that you see. There must be  
2 something there for you to be able to explain. You need  
3 to have an answer for why it looks as it does, whether  
4 you're saying it's a ridge ending and someone else is  
5 saying it's a bifurcation or you've marked it as a ridge  
6 ending or there's movement or whether it's in a dark  
7 area, you must be able to explain your findings.

8 Q. If I can take an example perhaps where to the lay eye  
9 one sees a black line but there is an interpretation of  
10 that line by an examiner to the effect that we shouldn't  
11 see that as a continuous ridge for some reason. Might  
12 it be that the viewer, the juror, the lawyer, should be  
13 accepting that explanation, even though they can see  
14 nothing themselves but a continuous ridge?

15 A. Fingerprint Examiners are that, they are Fingerprint  
16 Examiners. They are only experts when they're in court.  
17 It's up to the Fingerprint Examiner to be accepted by  
18 the court as an expert. It's up to the court to  
19 accepted by the court as an expert. It's up to the  
20 court to accept that as expert opinion, evidence. So,  
21 therefore, he needs to be able to demonstrate what it is  
22 he is seeing. He needs to be able to explain his  
23 training, his qualifications. He needs to be able to  
24 explain about the formation and structure of the skin.  
25 He needs to be able to explain why it would look like it

1 would, if it's not a clear ridge ending comparable with  
2 a ridge ending, if he has some other explanation why it  
3 looks as it does, he must be able to explain that and  
4 the jury must be able to accept his expert opinion.

5 No-one should be able to say, "I'm an expert. I see it  
6 as a ridge ending so therefore take my word for it.

7 It's a ridge ending". He's only acceptable as an  
8 expert, his opinion is only acceptable if he can explain  
9 his findings to the satisfaction of the jury or whoever  
10 he is explaining it to.

11 Q. If I can perhaps take what may seem like a silly and  
12 extreme example, Mr McGinnies, if you will forgive me,  
13 if we have quite a large area of white in the middle of  
14 a mark, the juror may simply say, "I cannot accept that  
15 there's anything there for me to see or to understand,  
16 whatever explanation I hear for it". There may just be  
17 that situation where there's just nothing to see for the  
18 lay person before one even gets to an explanation of why  
19 that might be.

20 Would you accept at that point the juror might be  
21 justified in stopping and saying, "I'm not really very  
22 interested in hearing any more about this. I just can't  
23 see anything"?

24 A. Again, we're talking hypothetically, so I wouldn't know  
25 of the situation you're talking about. I think that,

1           again, as I say, the examiner has to be able to explain  
2           his findings to the decision-makers. He's there to put  
3           his facts, if you like, forward and have it scrutinised  
4           and believed. He would need to explain his findings in  
5           order for the jury to believe it, the person he's  
6           explaining it to to believe it. I think there shouldn't  
7           be the case of, "Accept what I'm saying because I am an  
8           expert".

9        Q.    You said at the beginning of this passage of your  
10        evidence that you couldn't make experts out of people  
11        that weren't experts.

12       A.    That's correct.

13       Q.    Are there ever going to be situations where the lay  
14        person who is hearing evidence could legitimately be  
15        left in a position where the examiner is saying, "Well,  
16        I can see this because I have experience. I have  
17        training. If you cannot see it, well, that may be  
18        unfortunate but I'm here and I'm giving my explanation  
19        and I'm asking you to accept it"?

20       A.    Yes. Sorry, I thought -- I should maybe be clearer on  
21        that, that if they are accepting his testimony as an  
22        expert, then they've got to believe what it is that he's  
23        saying, if he has an explanation for it.

24       Q.    But can I take it then there might have to be, I  
25        suppose, leaps of faith at more than one stage. There

1            might have to be a leap of faith as to accepting that  
2            there is a characteristic where the expert examiner says  
3            there is one?

4    A.    Yes.

5    Q.    There might also have to be a leap of faith then as to  
6            the interpretation to be placed on that characteristic.  
7            For example, we have heard in evidence that because of  
8            differences in the way that impressions are deposited  
9            what may appear on one as a ridge ending may have at  
10           least the appearance of a bifurcation on another. So  
11           there has to be an acceptance not just that there is  
12           something there but sometimes as to what it is?

13   A.    That's correct.

14   Q.    It may be that that is something that is simply not  
15           apparent at either one of those two stages to someone  
16           who is not a fingerprint expert?

17   A.    That would be correct, yes.

18   THE CHAIRMAN:    If you are leaving that area, can I just ask  
19            when you are demonstrating to a jury, for example, would  
20            you use the print first and then move to the mark as  
21            opposed to the way you would as an examiner, go to the  
22            mark first and then the print?

23            I am asking that because I think, to the layman, it  
24            is much easier if you go to the print and you see what  
25            it is you are supposed to be seeing in the mark.

1           However, there are certain dangers about that, I  
2           appreciate. I am just wondering what would be your way  
3           of going about it, if you were demonstrating to the  
4           jury, to which would you go first?

5       A.    If I was demonstrating to the jury I would probably,  
6           after going through my explanation of the mark -- bear  
7           in mind this is not a thing that we do practice in  
8           Scotland now on every case, we don't prepare marked-up  
9           enlargements for every case now -- I would have them  
10          side-by-side. Though explaining that that's not the way  
11          I would carry out my examination, I would have them be  
12          able to work between the two and be able to look and see  
13          if that helped them to understand what it is I'm looking  
14          at here. Yes, sir, I definitely agree it would be much  
15          easier to see it on the controlled print that's been  
16          rolled evenly and then work across the way. For them  
17          that would be easier to see what I'm seeing and I would  
18          use that to help with my explanation but I would  
19          certainly let them understand that that's not the way  
20          that I -- there was no reverse reasoning in the way I  
21          came at my conclusions, no.

22       MISS CARMICHAEL:   Thank you, sir.

23                 I wonder if we could move on to the next of your  
24                 slides here. You are describing here analysing the  
25                 basic shape of the ridge flow. If we can move on to the

1 next one, please, there you have marked in with yellow  
2 an arch pattern.

3 A. Correct, yes.

4 Q. Move on to the next one, please. You are explaining  
5 there that the pattern is compared against the  
6 fingerprints of possible candidates.

7 A. Yes.

8 Q. We have, I suppose, a more graphic description of what  
9 you have already told us about looking to pattern, in  
10 the first instance, to eliminate?

11 A. Yes.

12 Q. If we can go on to the next slide, please.

13 You have given us here a scene of crime impression  
14 and a fingerprint form at page 22 of the pdf.

15 A. Yes.

16 Q. I wonder if we can start to move through to the next  
17 slide, please.

18 What you are demonstrating here is on the scene of  
19 crime impression finding your first characteristic and  
20 you have marked a yellow dot?

21 A. Yes.

22 Q. I think you had originally done this perhaps as a  
23 PowerPoint?

24 A. Yes, it was, yes.

25 Q. If we can move on to the next slide, please.

1                   What you are describing is finding the corresponding  
2                   characteristic on the form. Should we take it that this  
3                   is a fairly realistic depiction of the way that you  
4                   actually work?

5     A.    Yes. I use this to demonstrate to them how we go from  
6           the unknown to the known, how we look for target areas  
7           and how we build up coincident sequence.

8     Q.    If we can perhaps just move through these slides.

9                   Again we have found another characteristic on the  
10           left-hand -- and next one, please -- again, we move to  
11           the right one and find a corresponding characteristic.  
12           We are now on to page 28 and we have a third  
13           characteristic now on the left-hand side and on 29 a  
14           third characteristic on the right-hand side?

15    A.    Yes.

16    Q.    I will not go through the enquire sequence but it would  
17           be fair to say it goes left to right, left to right on  
18           each occasion adding another characteristic?

19    A.    That's correct, yes.

20    Q.    When one is at this stage and accepting that one is  
21           working from the left to the right, where is the guard  
22           in this process against carrying information from the  
23           right-hand back to the left-hand as you go?

24    A.    You do. You don't use that as your starting point. If  
25           I'm looking at an area, and this is particularly where

1 Third Level Detail sometimes comes in, if you look at  
2 the point that's extremely in the uppermost there of  
3 the --

4 Q. What we are looking at at the moment is page 30 of the  
5 pdf which has four yellow dots on each side.

6 A. Yes, if we look at the yellow dot that's closest to the  
7 centre of the print, the very top yellow dot, when I'm  
8 going from left to right over there I may look at the  
9 right-hand print and what actually draws my eye there is  
10 that little, it's almost like an incipient ridge or  
11 something just below that yellow dot, I may carry that  
12 back over to the left-hand side and use that. If I find  
13 that there I may use that as a sort of further check.

14 So you do sometimes, when you go from left to right you  
15 will see, okay, I've gone from left to right but right  
16 next to that is a bifurcation and when you go over  
17 there, that's there.

18 You would then, after having used that for  
19 confirmation, I would still say you then work from left  
20 to right again. You would go from that bifurcation and  
21 work out the way again on the left-hand print and take  
22 it over to the known mark.

23 Q. But what you are describing is that you see an incipient  
24 ridge on the right and you will go back to the left and  
25 look for it there?

- 1 A. Yes. What you wouldn't do then is fall into the trap of  
2 going back over to the right and looking for something  
3 else and trying to work back the way. You again go from  
4 unknown to known but if your eye is naturally drawn to  
5 something when you're looking at the known print, when  
6 you go back you would use that in the unknown.
- 7 Q. So, if I have this right, you might spot something on  
8 the known and go back to the unknown to look for it but  
9 you would then go from left to right, again?
- 10 A. I would say that you're next --
- 11 Q. You don't immediately go back to the right?
- 12 A. No, the next set of ridge counting or features that you  
13 look for would again be taking it from the unknown  
14 across to the known.
- 15 Q. But it is not, to be fair, altogether a process that  
16 goes in one direction only?
- 17 A. No.
- 18 Q. Just dwelling for a moment on this particular process  
19 and how you do it one of my colleagues has kindly  
20 brought me some examples of pointers and I think when we  
21 looked at page 5 of this presentation, in fact, we saw  
22 the gentleman using some pointers.
- 23 A. That's correct.
- 24 Q. It may be helpful at this point to go back to that shot  
25 at page 5. I think we can see quite clearly in his left

1 hand he has one of the pointers and we can just see in  
2 his right hand he has one of the pointers as well?

3 A. Yes.

4 Q. Can you describe how the pointers are used in this left  
5 to right process?

6 A. Certainly. Again, this is a tool that not everyone uses  
7 pointers. This gentleman is using pointers. He will do  
8 that left to right comparison. He will look for his  
9 target area and he may put his pointer on a bifurcation.  
10 If you like, he's keeping his place, if you like. He's  
11 going over to the right-hand side and he will look for  
12 the corresponding feature on the unknown, then he'll go  
13 back over and use the pointer. As you will see they are  
14 very sharp and have a very fine point. He can use that  
15 on the actual ridges to count, say he counts three  
16 ridges out and there's a ridge ending, he'll go over and  
17 count the same three ridges and, as I say, it's a  
18 marker. Some people can do it mentally, go back over  
19 and be able to keep their place. He's using that, if  
20 you like, to keep his place in the print.

21 It's good, especially for trainees, because it helps  
22 them to be able to find their place. They don't  
23 suddenly miscount ridges or start moving out, "Where was  
24 I", and short of using the comparator to actually mark  
25 the points it's a good way of them keeping their place

1           when they're training.

2       Q.    I would like to ask you a little about the training on  
3           verification, what that involves and at what stage  
4           training occurs.

5       A.    Verification takes part of the -- again on the national  
6           training programme they have three modules that they go  
7           through. One of the modules is ACE, the module where  
8           they look at the analysis, comparison, evaluation. The  
9           V part of that is left until later on in their career  
10          and they carry that out with the verification, preparing  
11          and presenting of court evidence. It is actually in one  
12          of the modules and we will have examples within the --

13      Q.    I think what you have helpfully given us are a couple of  
14          examples of a student's verification case study as well?

15      A.    That's right. What the modules have the students do is  
16          put themselves in the place of a qualified expert. All  
17          the modular training now is work-based. If you like,  
18          they have the underpinning knowledge from the Durham  
19          notes and the inputs provided by SPSA training and they  
20          use that underpinning knowledge to then do reports and  
21          research on how they actually do things within the  
22          workplace. So there's my understanding of the black and  
23          white of it, here's how it actually worked in experience  
24          and they write reports on how that intellectual  
25          framework fits into everyday work, and those two

1 verification reports are examples of someone's work in  
2 that area. So they put themselves in the place of an  
3 expert and set into the verification side of the  
4 process.

5 Q. I would like to look, probably quite briefly, at PS0411.

6 This is one of those verification case studies. What we  
7 have is the trainee describing that she'd selected the  
8 case from the idents for second check tray in the team  
9 cupboard. So in doing that is she doing what somebody  
10 doing a real verification, if I can put it that way --

11 A. Yes, she's reflecting local work instructions. She's  
12 reflecting -- she'll have the underpinning knowledge of  
13 what verification of a case is. Then she'll go and say,  
14 "That's my understanding of what verification is. This  
15 is how I actually apply it in the workplace", and as you  
16 say correctly that's her understanding of where she sits  
17 in that if she was doing a proper verification.

18 Q. If I can move to the last sentence of the first  
19 paragraph there, what she writes is:

20 "Before I began my verification I confirmed that all  
21 the paperwork was with the case; all photographs,  
22 fingerprint forms, disposition sheet, diary page and  
23 Locard sheet."

24 I only want to trouble you about the Locard sheet  
25 because it was something I wasn't sure I recognised from

1           any of the paperwork I had seen and I wondered if you  
2           could tell me more about that?

3       A.    Isn't there an example of a Locard sheet in that case?

4           Possibly not.

5       Q.    We can run forward and you may be able to tell me.

6       A.    What the Locard sheet would be would be a list of

7           everything that they received from the scene of crime.

8           It's a generated form from the Locard system, from our

9           mark enhancement lab, scene of crime, so that would come

10          over with the details of the case so she would just

11          check that the Locard's sheet's there and it's all

12          correct. This is almost part of the analysis. The

13          first stage of analysis is making sure all the paperwork

14          and the photographs are all in order.

15       Q.    I will not trouble you further about that but it is a

16          piece of internal paperwork. I think I was perhaps

17          deceived by the name Locard, which we have heard about

18          in the historical context and I thought perhaps it had

19          more significance than that.

20       A.    Again, I would actually draw your attention, possibly,

21          to the last line in the first -- sorry in the second

22          paragraph there.

23       Q.    Yes, please, do.

24       A.    That's it.

25                    "Although these stickers mark the previous

1           examiner's findings I carried out my own ACE analysis of  
2           each mark to reach my own conclusions."

3                     That's part of the verification process that the  
4           trainee wouldn't normally sit in because they would have  
5           the case first. So they would be the first person to  
6           look at it. So that's one of the things she's drawn  
7           from this is the fact she has now second in the chain  
8           and she has no preconception, although she's reading  
9           what the findings are, she's no preconception about her  
10          own conclusions. She has to carry out her own ACE-V,  
11          her own ACE analysis of the mark.

12    Q.    In fact, I had been going to go to another example of  
13          this but we should perhaps touch on it using this  
14          example. We see a mention of stickers marking previous  
15          examiner's findings and I wondered if you could tell us  
16          what those are.

17    A.    Within -- I believe this is -- yes, it is. It's been an  
18          identification so you can see the next bit says this  
19          mark has been identified 6, 7, 8, 9, 9. There would be  
20          actually adhesive stickers placed below these  
21          impressions on the photograph to indicate the findings  
22          of the previous person that, for instance, if it had  
23          been a trainee would be the trainee would put those on.  
24          So the next person coming along to do the verification  
25          process would carry out the whole ACE process again

1 independently and on their own so the stickers are  
2 there, as she says:

3 "Though the stickers mark the previous examiner's  
4 findings I carry out my own ACE analysis of each mark to  
5 reach my own conclusions."

6 Q. But where we have these stickers the numbers that we  
7 see, we should take as the numbers of the digits?

8 A. That's right, sorry, yes.

9 Q. So the person doing the verification knows from the  
10 stickers which digits have been identified by the first  
11 examiner?

12 A. That's correct.

13 Q. When this trainee is referring to carrying out her own  
14 ACE analysis of each mark, is she doing that by  
15 reference only to the identified digits or on some other  
16 basis?

17 A. No, she'll take the whole case from beginning as if she  
18 was the first to look at it and carry the whole process  
19 through from beginning to end.

20 Q. So she would not be in any way guided by even the digit  
21 numbers here?

22 A. Obviously, if it has a number 6 under it she's going to  
23 be carrying out her own analysis of the mark, her  
24 own comparison, but she's going to use -- she's going to  
25 go to that impression and compare that impression.

1 Q. I am sorry, it's probably my fault. I am still not  
2 quite clear about that. She is examining the impression  
3 against the number 6 of the suspect or against --

4 A. Yes -- she wouldn't only verify the identified marks.  
5 It's not just a verification. She's actually doing the  
6 whole case again and that way she's checking anything  
7 that hasn't been identified, anything that's been  
8 eliminated, anything that remains outstanding or even  
9 has been marked as insufficient.

10 Q. If we can take that stage by stage, she would check the  
11 marks that were designated as fragmentary or  
12 insufficient?

13 A. Correct.

14 Q. And check whether she agreed with that conclusion.

15 If we take out of this, perhaps, the potential  
16 conclusion that there are a number of digits identified  
17 and we imagine that we only perhaps have the mark  
18 identified as number 6 --

19 A. Right.

20 Q. -- when she comes to check that identification, does she  
21 check it only against the number 6 of the suspect?

22 A. She would actually compare it against that impression  
23 first. What she wouldn't do, if there were four  
24 suspects, she wouldn't ignore that and go to the first  
25 suspect, she would compare it against that impression

1 first, yes.

2 Q. If she agrees with that presumably she looks no more  
3 widely in the case?

4 A. Correct, yes.

5 Q. I would like to take this one down and go to, I think,  
6 another example you have given us of similar work at  
7 PS0412.

8 Again, in the second paragraph we have a passage  
9 similar to the one you pointed out about the photographs  
10 being marked with numerical stickers but nonetheless the  
11 student carrying out her own ACE analysis of each work.

12 If we take this page down and move on to the next  
13 page, please, her conclusions where she sets out some of  
14 her own thinking here and I wonder if I might simply  
15 read this out for your comment, Mr McGinnies, the  
16 student has written:

17 "I found the process of verification unusual because  
18 this was the first time that I had looked at a case on  
19 which conclusions had already been reached. Although I  
20 believe it is possible to put out of your mind the  
21 previous checker and the findings they have reached  
22 while you carry out the actual comparison work, I feel  
23 it must be very difficult not to be affected, even  
24 slightly, by the knowledge of what has been identified  
25 previously. The fact that the photographs have been

1           labelled indicating idents means there is no way of not  
2           being aware of this and I am unsure of the effect this  
3           could have on carrying out the work. It seems to me  
4           that the ideal solution would be to have the second  
5           checks carried out on unmarked photos. However, this  
6           would be considerably more time consuming, particularly  
7           on a large case, and given the current workload of the  
8           Department I don't think this could be managed."

9                     Simply looking at this paragraph, do you have any  
10           comment on that, Mr McGinnies?

11    A.    She's instructed in the verification process and then  
12           students are encouraged to go and take that underpinning  
13           knowledge and apply it to the work processes that are  
14           working within the Bureau and then write their findings  
15           and their conclusions. That is this student's  
16           conclusions on how she felt that to be, but then she  
17           rounds herself round to coming to, "However this would  
18           be considerably more time consuming, particularly in  
19           large cases." So she actually gets to the reason why  
20           it's carried out like that and she says it again further  
21           when she's talking about marking up --

22    Q.    In fact, it may be helpful to move immediately to the  
23           next paragraph there. She writes:

24                     "Before carrying out these verifications I was of  
25           the opinion that for best practice the photographs

1 should not be labelled as identifications before being  
2 checked. However, carrying out this work has made me  
3 aware of the time involved, even in simply checking  
4 labelled findings. If the case was to be carried out  
5 again from the start with no indication of findings this  
6 process would be even longer. Similarly, I am of mixed  
7 feelings about the current practice of marking up a  
8 piece of palm."

9 What would she be referring to there in terms of  
10 marking up palm? We have heard about stickers that tell  
11 you the digit number. How would it work with palms?  
12 A. Again, if you have a large piece of palm, the previous  
13 person may mark up a starting point, if you like, or  
14 they may mark up some features on the photograph to  
15 assist the next person with seeing their findings, if  
16 you like. Again, as she says, she had mixed feelings  
17 about this at the start. This is what we encourage  
18 students to do, is to think their way through the  
19 process and she said she felt there would be no need to  
20 mark up a piece of palm but then she realised that the  
21 process had been made much faster by being given a  
22 starting point. So she realises that there is no  
23 problem with it. She is still doing her ACE-V on it.  
24 She's not just saying, "This person has said it's number  
25 6. This person said that's a piece of palm", she still

1 has to satisfy herself to her own analysis, comparison  
2 and evaluation of the subject matter.

3 Q. But we should take it from this that the labels, whether  
4 they are digit number labels or whether they are labels  
5 on a palm indicating a starting point, are there to  
6 direct the subsequent examiner in a particular direction  
7 for speed so that in the case of a palm they start at  
8 the same place and in the case of a digit look at the  
9 digit first that has been previously identified?

10 A. That's correct.

11 Q. The student goes on after seeing the process is being  
12 made much faster by being given a starting point:

13 "A possible negative of this, however, is if the  
14 mark is of poor quality it might be possible that  
15 following examiners using the points marked by the first  
16 examiner could fall into the same error without  
17 realising it. I do believe that this is a highly  
18 unlikely scenario but the argument must be there that it  
19 could happen as I do not know of any research that has  
20 been carried out to discover if this does occur or not."

21 Again, I would like your comment on what the student  
22 is thinking there?

23 A. I think what she then goes on to say is, "Having carried  
24 out the verification process, I do not believe the  
25 findings of another expert would influence me simply to

1 sign something as an ident if I was not happy with that  
2 conclusion."

3 So, again, she goes through the whole thought  
4 process and realises that it wouldn't -- this is part of  
5 letting them do that, that stage of verification, that  
6 they realise they are not going to be influenced by peer  
7 pressure, realise they are not going to be influenced by  
8 someone writing number 6 on a photograph, that they are  
9 actually going to carry out their own analysis,  
10 comparison and evaluation of every mark.

11 Q. Would it be fair to say that in the final paragraph the  
12 trainee is picking up on two things. One of them is, I  
13 suppose, her own integrity that she wouldn't want to  
14 sign if she wasn't happy with the conclusion and,  
15 secondly, she has the knowledge that she might be asked  
16 about the matter in court, which would also be something  
17 significant for her.

18 Would you agree with that?

19 A. Yes.

20 Q. If we go back to the previous paragraph, I would suggest  
21 to you that perhaps what she is recognising is that  
22 there is at least a possibility, even for somebody with  
23 integrity and working in a proper way, of falling into  
24 some sort of error because they have been directed in a  
25 particular way in a scenario where there's a mark of

1 poor quality and really leaving aside the very important  
2 checks that she recognises in the final paragraph, what  
3 your comment on the first paragraph there is?

4 A. I would say that's why we have the checks in place that  
5 we have, that even though she recognises she would be  
6 starting at the same point she has come round to  
7 thinking of realising that because somebody's marked it  
8 up doesn't mean to say that's where I'm going to start.  
9 I think she realises that it's a highly unlikely  
10 scenario. She does say the argument has been there.  
11 She doesn't know of any research but dip sampling and  
12 the quality assurance process and the three verification  
13 or four verification of a trainee checks of marks help  
14 to prevent this from occurring.

15 Q. You see she does not know of any research. Can you help  
16 us with the question of whether there is any research on  
17 any error occurring in the way she speculates about  
18 here?

19 A. Not to picking up from someone else on a previously  
20 marked impression up, no. I can only say, as I say, the  
21 third verification process, I know of no instances where  
22 it's got to the third verification and anyone has gone,  
23 "Actually, do you know the first two have got it wrong",  
24 and gone back and looked at it and saying, "They got it  
25 wrong and did you just follow them", I know of no

1 instances of that happening and certainly dip sampling  
2 and the three checking and the procedures that are in  
3 place would prevent that from happening or certainly  
4 would highlight it if it happened.

5 Q. Are you aware in the first instance of dip sampling  
6 highlighting anything of that sort happening?

7 A. No.

8 Q. When you say "three checking", are you referring to  
9 something other than the ordinary verification process  
10 there?

11 A. No, sorry, that is the verification process, yes.

12 Q. Having spoken a little about ACE-V here, I would like to  
13 ask you about the way in which you train people to  
14 express their conclusions. We have heard evidence about  
15 the standard of certainty that Fingerprint Examiners use  
16 to express themselves in. We have heard witnesses say  
17 that they must be 100 per cent certain themselves as to  
18 identity and we have heard suggestions that one would be  
19 perhaps 100 per cent certain that another examiner would  
20 reach the same conclusion?

21 A. Yes.

22 Q. What do you teach trainees as to what their standard of  
23 certainty should be if they are saying that a mark is  
24 individualised to a particular human being?

25 A. We train them that if we take the empirical fact that

1 friction ridge skin is unique and permanent, we take it  
2 that that empirical fact is based on scientific  
3 research. Then we train them that anyone who has  
4 undergone the training, qualifications and experience  
5 that when they draw their conclusions that they can be  
6 100 per cent certain that anyone with that same  
7 training, qualifications and experience, a qualified  
8 examiner, would come to the same conclusions. So it  
9 would be 100 per cent certain that anyone would come to  
10 the same findings that they have.

11 Q. I would like to explore that a little further because to  
12 the lay mind it might seem that there are a number of  
13 possible areas of uncertainty in the identification  
14 process. We have heard that there can be differences  
15 between impressions from the same finger and you would  
16 agree with that?

17 A. Oh, yes -- dependent on pressure or --

18 Q. It could depend on pressure, it could depend on the  
19 amount of sweat on a finger, it could depend on the  
20 amount of grease on a finger --

21 A. Yes.

22 Q. It could depend on the amount of ink on a finger?

23 A. Yes, the whole analysis part of the --

24 Q. It could depend on the skill of somebody operating  
25 either inked printing or LiveScans?

1 A. Correct, yes.

2 Q. There may also be differences in appearance that emerge  
3 because different development media have been used?

4 A. Yes.

5 Q. Those are all areas which, on the face of it, would  
6 introduce some degree of uncertainty because one has the  
7 knowledge that impressions will differ even as between  
8 the same finger?

9 A. Yes.

10 Q. We have also heard that there may be differences in  
11 appearance as between something that might be on one  
12 print a ridge ending, on another (even from the same  
13 finger) a bifurcation?

14 A. Yes.

15 Q. When one has an unknown print and a known print and one  
16 sees on the known print, for example, a bifurcation that  
17 seems to be quite a clear bifurcation and one sees on  
18 the unknown mark a ridge characteristic which might be a  
19 ridge ending or it might be a bifurcation and one has  
20 then to decide, if it looks like a ridge ending, which  
21 direction it is going in if it is truly a bifurcation.

22 Again, that process of interpretation seems to involve  
23 judgment and, of necessity, the conclusion that one is  
24 in an area of less than 100 per cent certainty.

25 Would you agree with that?

1 A. Yes. They would need to be able to look at that  
2 individual mark and have an explanation for why it looks  
3 different from one and the other. It can't be a case of  
4 "and there's an event happening there, we'll take it as  
5 an event", you have to have some sort of reason why; is  
6 it pressure that's made the ridge end gone on away, is  
7 there movement through the print, is there something in  
8 the substrate, is there something to do with the  
9 development process? They need to have an explanation  
10 for why and that explanation, as we examined earlier,  
11 has to be -- you have to be able to explain that to  
12 anyone who is coming behind you to look at the same  
13 comparison.

14 Q. The very fact that one is making a judgment,  
15 Mr McGinnies, I would suggest to you introduces the  
16 possibility that another person might make a different  
17 judgment?

18 A. Yes.

19 Q. To that extent, one cannot have 100 per cent certainty  
20 as to the conclusion that is reached?

21 A. I would say again that the person -- we train our  
22 trainees that when they are reaching that conclusion,  
23 when they're signing that off as A1 belongs to number 7  
24 of Joe Bloggs, they are 100 per cent certain that anyone  
25 who comes behind them with the same training,

1 qualifications and experience would come to the same  
2 conclusion. That's the degree of certainty that they  
3 are putting on that because what they are saying is when  
4 they're signing that, when they sign that's an  
5 identification, that they could -- again, it's stressing  
6 that that identification may be presented as evidence in  
7 court and someone's liberty may be affected by it. So  
8 that is the degree of certainty they are putting on it,  
9 100 per cent of that opinion.

10 Q. When you say that they are 100 per cent certain that  
11 someone else would reach the same conclusion, would that  
12 be on the conclusion overall on the identification or  
13 would it be on the level of agreeing with them that,  
14 taking my example, one could conclude that the apparent  
15 ridge ending bifurcates in one direction rather than the  
16 other?

17 A. Again, the trainees are taught that they've got to be  
18 able to review their findings in light of new evidence  
19 or new findings. So if someone comes back and says,  
20 "Actually, you have marked that as a ridge ending or a  
21 bifurcation. I actually see it as that", but, again,  
22 there would need to be a comparison of that mark to  
23 establish their opinion to 100 per cent that we're going  
24 to conclude it was made by that person, that area of  
25 friction ridge skin and, therefore, that person and they

1 must be able to have an explanation for why they've come  
2 to that conclusion and that would include any features  
3 that they see within that mark.

4 Q. Just following up on that, how would it be that anybody  
5 would come back and say that they had marked something  
6 as a bifurcation or a ridge ending, because I'd  
7 understood myself that there wasn't any marking of that  
8 sort?

9 A. Sorry, no, if someone was asked to come back, for  
10 instance, in the second person brought -- the person who  
11 was second checking the case brought it back and said,  
12 "Actually, you've marked that as an identification. I'm  
13 having difficulty with that area. Can you demonstrate  
14 to me what it is that you see. I wouldn't be happy to  
15 sign that. I wouldn't be happy to -- I've not been able  
16 to work through that area. Could you show me what it is  
17 that you see there". I think that would be a case where  
18 they may mark it up on a comparator and take that person  
19 through their findings.

20 Q. Is that something that happens in practice on a  
21 day-to-day level?

22 A. Yes. There's very open forum for discussion on that  
23 that it's not a case of marking or -- I say marking  
24 something up. It's not a case of signing something off  
25 and saying, "That's my findings". If someone wants

1 somebody to demonstrate something, particularly trainees  
2 at early stages where it may be a complex mark or it may  
3 be something that they are unable to at that time work  
4 through or explain that would be for their coach or  
5 mentor or myself to take them through that and explain,  
6 "You said you can't get through that area. Here's my  
7 explanation of why there's movement. It's a double  
8 touch. It was pressure. It's reversal of colour", and  
9 that helps build them and I would put forward that every  
10 examiner -- every day is a school day. It's an  
11 experience thing that you are always looking at marks.  
12 Because of the very nature of the difference of crime  
13 scene marks there are always things that you are having  
14 to revisit and have a look at and look at other people's  
15 explanations for with an open mind to see what they see.

16 Q. You have explained that this is something that would  
17 happen particularly with trainees. If you can help us  
18 with how something like that might work in practice,  
19 Mr McGinnies, how it might arise that one examiner was  
20 going back to another to discuss an area of difficulty.

21 For the purposes of this question, if we can leave  
22 aside the trainees which you have told us about going to  
23 their mentors, if you could help us with practice, how  
24 it would come about that somebody came to another  
25 examiner saying, "I'm having a bit of difficulty with

1           this area of the mark. I see you've reached a  
2           identification", first, how that would come about and,  
3           secondly, how it would play out in practice?

4    A.    It may be the second person goes to their examination in  
5           the case, they go through their ACE analysis and the  
6           first person has marked number 6 as, sorry, impression A  
7           as number 6 of Joe Bloggs. That person maybe thinks  
8           there may be movement in it or there's maybe not sort of  
9           sufficient quantity and quality of characteristics or  
10          features to make them certain that it's an  
11          identification. So they may take it back to the first  
12          person and say, "I'm having a bit of difficulty with  
13          this", and it would be just a case of saying, "I'm  
14          having a bit of difficulty with this. Could you maybe  
15          explain what it is that you have, you have looked at",  
16          and it may be a case of them marking it up on a  
17          comparator for them to let them see the area they've  
18          looked through, what their explanations are in that  
19          case.

20    Q.    Is this something that happens quite informally outside  
21           of any questioned identification procedures or anything  
22           of that sort?

23    A.    Yes. It's a very -- yes, it's very open and you would  
24           expect -- you should be able at any stage and ready at  
25           any stage to explain your findings.

1 Q. What happens at the end of these sorts of discussions,  
2 Mr McGinnies?

3 A. It may be a case that the person just hasn't thought of  
4 the explanation. It may be the fact it is a double  
5 touch. It may be the fact there is some pressure that  
6 they haven't taken cognisance of. They may look at it  
7 and say, "Okay, I'll take those marks that you have  
8 marked for me and I'll work through that area with that  
9 new information, review of my findings, something that  
10 you've brought to my attention that possibly I hadn't  
11 thought of, the fact that I do now see that there's a  
12 double touch and there is something underlying", and  
13 they may work through that themselves and say, "Yes, I'm  
14 now quite happy to include that identification with that  
15 explanation".

16 Q. So you are describing the second person having the  
17 discussion with the first person, the first person  
18 perhaps marking things up on a comparator, a discussion  
19 taking place and the second person becoming persuaded  
20 that the first person was correct?

21 A. I wouldn't say they're persuaded. I don't think you're  
22 trying to say, "This is what I see so, therefore, you  
23 must be able to see it". They are only putting forward  
24 their hypothesis of how the mark looks as it is. It may  
25 be a case the second person says, "I'm still not happy

1 to work through that area, however, now you have pointed  
2 out another area I'll work through that". It's not a  
3 case of persuading. You're not trying to win that  
4 person over. You are only putting forward your  
5 explanation of how the impression looks as it does.

6 Q. I perhaps used the wrong word but would it be fair to  
7 say that they come to a conclusion in the light of the  
8 further information that the first person has given  
9 them?

10 A. Yes.

11 Q. That the first person was right?

12 A. Yes.

13 Q. Does it ever happen in practice that the first person  
14 listens to the second person and thinks, "Hmm, now you  
15 mention it, there is a bit of a problem here. I'm not  
16 so sure about my identification"?

17 A. That's where the -- I think it's actually part of the  
18 job description or role profile that you must be able to  
19 revisit your findings, have an open mind to looking at  
20 some other piece of information that comes along.  
21 Certainly if the second person had said to them --  
22 obviously, they put that forward as 100 per cent certain  
23 they made that identification. They may highlight  
24 something that they hadn't thought of and they may or  
25 may not change their mind but I would say that second

1 person's opinion would certainly be listened to and  
2 taken cognisance of.

3 Q. I think you have touched on something that I was about  
4 to come to with you, Mr McGinnies. If one has carried  
5 out one's examination in good conscience and has  
6 concluded to the 100 per cent standard that you are  
7 describing, it might strike the outsider as very  
8 difficult to have a discussion with somebody who is  
9 convinced to the standard of 100 per cent that they have  
10 reached the right conclusion and I wonder if you could  
11 comment on that?

12 A. What would normally happen in a case like that, if I had  
13 made my identification, marked up my identification,  
14 when I say "marked up" I mean recorded my identification  
15 and put it forward and the second person says,  
16 "Actually, I'm not convinced with that, that area", for  
17 instance, as we spoke about then. That may go to a  
18 facilitated discussion. In other words, one person  
19 would be saying, "I think there's enough on it to  
20 identify". The second person may be saying, "I'm not  
21 happy with a certain area", and that would then go to a  
22 verification team who would hold a facilitated  
23 discussion with the two individuals, letting them put  
24 forward their views on the process.

25 Q. So at that stage one moves into a formal procedure?

1 A. Yes.

2 THE CHAIRMAN: I am not sure that I have understood. Is the  
3 second person the verifier or just a person you consult?

4 When you speak of the second person to whom were you  
5 referring?

6 A. In this instance I was referring to it being the second  
7 person to check the case, so the next person has taken  
8 the case and is verifying -- is doing their --

9 THE CHAIRMAN: So the second person is the verifier?

10 A. Yes.

11 THE CHAIRMAN: Then the verification team, you say there is  
12 somebody beyond that, again, if there's a difference of  
13 opinion between the verifier and the preliminary  
14 examiner?

15 A. Yes.

16 MISS CARMICHAEL: Are you aware of any situations where the  
17 content of the verifier's doubts, if I can put it that  
18 way, have caused the first examiner to change his or her  
19 opinion without the matter moving to a formal process?

20 A. Not, that I can -- I would need to ... no, not that I  
21 can recall of it happening because that would then be --  
22 if that was formally recorded that would be a  
23 mis-identification because the first person says no --  
24 sorry, the first person says, "Actually, no, I've  
25 changed my mind". They may then say they are unhappy

1 to ... not unhappy, they are no longer satisfied with  
2 the conclusion. In other words, they are saying, "I'm  
3 not happy to put that forward as an identification". I  
4 can't recall any instance of that, no.

5 Q. We came to this discussion through a series of questions  
6 about 100 per cent certainty. Is the way that this is  
7 expressed, for example, by an examiner giving evidence  
8 as to his standard of certainty, is this something that  
9 comes up for discussion at all in court skills training  
10 that takes place for examiners?

11 A. Yes, it would come up in questions similar to this  
12 actually. If it's the examiner's court skills courses  
13 that are run by ourselves and the Crown Office and  
14 Procurator Fiscal Service then certainly the fiscals  
15 that are taking part would be free and certainly would  
16 ask questions exactly along these lines, whether it be  
17 of Scene Examiners, Fingerprint Officers or anyone else  
18 who was undertaking the Court Skills Course, yes.

19 Q. Tell me if I am wrong about this but my understanding of  
20 the court skills training is that both qualified and  
21 trainee examiners are put through their court paces by  
22 questions from Procurator Fiscals Depute?

23 A. That's correct, yes.

24 Q. The questions that are asked by the Fiscals in the  
25 course of this training, is there ever any challenge to

1 the idea of certainty of conclusion?

2 A. It's a question that they may ask in the course of the  
3 court skills, as may be asked in any court. Court  
4 Skills Courses very closely match an experience of being  
5 in court, as far as we're using Procurator Fiscals  
6 Depute and we use the court skills court room up at  
7 Tulliallan. So it's very much set up like that. So the  
8 instances of that may arise, that they are asked  
9 anything they may be asked in a normal court and,  
10 therefore, the examiners answer as they would in court.

11 What would happen then possibly in feedback or  
12 workshops, they would through the other observers that  
13 have taken part in the workshops and the Fiscals that  
14 have taken place in the exercise would then ask to  
15 discuss any of the answers that they've given in their  
16 mock trials.

17 Q. As to what the Fiscals do in the court skills training,  
18 are they experts only giving, if I can put it this way,  
19 evidence-in-chief in the way they would normally be led  
20 by the Crown or are they also cross-examined by the  
21 Fiscals, as it were, in the role of defence agents?

22 A. Yes, they are cross-examined. It's very much like the  
23 whole court experience. What we do with anyone who's  
24 been to court, we have a court debrief form. So anyone  
25 who attends court, they would fill in one of these court

1 debrief forms. We use that, we summarise those monthly  
2 to let us see the sort of areas that are being brought  
3 up in courts. We would then feed those to the Fiscals,  
4 in a summarised redacted state, to let them see the sort  
5 of questions that are current and they would use those  
6 in their scenarios.

7 Q. I see. So anybody who goes to court in real life will  
8 fill in a court debrief form, a record is kept of that  
9 and passed to the Fiscal and informs what the training  
10 comes to be in the mock court situation?

11 A. Yes.

12 Q. You answered some of my earlier questions about this in  
13 the form of how things would be done. Do you know --  
14 and if the answer is no, that's fine but do you know  
15 whether the question of certainty, of 100 per cent  
16 certainty, has been explored in the mock court  
17 situation?

18 A. I would need to read the summarised statements from the  
19 last year to look. So sorry I can't ...

20 Q. If you can't answer that, that is fine.

21 A. No.

22 THE CHAIRMAN: I imagine an experience in the courts,  
23 defence counsel will often ask how confident are you or  
24 how sure are you that your opinion is correct?

25 A. Yes. One of the things that normally runs off the

1 examination-in-chief is can you read from your statement  
2 your findings and the response to the end bit is  
3 usually, "Are you 100 per cent sure of your findings",  
4 and that is usually yes. So that opens it up. To my  
5 knowledge I don't recall any defence attacking anyone  
6 over the last year on their 100 per cent certainty.

7 THE CHAIRMAN: The lawyers brought this in, this  
8 100 per cent certainty then ...

9 A. Well, as I say, in the summaries, if there are one, it  
10 will be there.

11 THE CHAIRMAN: I think it is time we took the break now. We  
12 will sit, again at just after 11.50.

13 **(11.33 am)**

14 **(A short break)**

15 **(11.53 am)**

16 MISS CARMICHAEL: Mr McGinnies, still staying broadly with  
17 the theme of certainty, in the course of the Inquiry we  
18 have heard witnesses say, although they have been  
19 talking largely about a time when they were working to  
20 the numeric standard, that once one had a certain number  
21 of points in sequence and agreement then any difference  
22 that was observed elsewhere as between mark and the  
23 print was effectively irrelevant because, given the  
24 volume of agreement, the two really had to come from the  
25 same source.

1                   What is your view on that?

2     A.    The answer with -- it's one of these things, when we're  
3           about any impression, it would need to be show me the  
4           mark. We need to look at what it is we're talking  
5           about. Is it an explainable difference because of  
6           movement? Is it something that may be an erroneous  
7           ridge that's been created by LiveScan? What would the  
8           circumstances be?

9     Q.    If I can put it this way: in your own practice and in  
10          what you teach trainees, is there any number of points  
11          that when one reaches it you can feel safe in saying,  
12          well, okay, I don't know what the explanation for the  
13          difference is, but there must be some proper explanation  
14          because I have all this other information that points me  
15          in the direction of an identification?

16    A.    We were talking about the number of points. We're  
17          trying to put a quantitative number on what has to be a  
18          qualitative analysis so we need to look at the  
19          information that's there. If there's a full print of a  
20          left thumb on a rear view mirror, very clear print, it's  
21          been swept, it's been developed, it's on smooth glass on  
22          a smooth surface and we have, for instance, this is just  
23          using a number for example, we have pattern, ridge flow,  
24          creases, maybe a scar, 30 or 40 characteristics, but we  
25          have one, are you talking about, maybe have one

1 characteristic that's a bifurcation that we can't really  
2 explain with the rest of the information that's there,  
3 we still reach the conclusion that's a difference that  
4 we don't have a -- yes, it's because of movement but we  
5 can still make an identification.

6 Q. I am sorry, I perhaps didn't catch the last thing that  
7 you said.

8 Are you positing this as an example where you would  
9 be saying, yes, this a bifurcation must be a result of  
10 movement but --

11 A. Yes. You do have instances where there's so much  
12 information there that it can only be made by that area  
13 of friction ridge skin and, therefore, that person. It  
14 would need to be marked down as an unexplainable  
15 difference but you would need to explain in court the  
16 formation structure of the skin, I would be looking to  
17 explain how I carry out my analysis, I would be looking  
18 to explain what I did in that case and the wealth and  
19 the amount of features that are in sequence and  
20 agreement with none in disagreement was enough to make  
21 me sure that that was an identification and that was a  
22 difference that had to be explained through movement or  
23 a double touch then, yes, it is possible to make that  
24 identification, yes.

25 Q. Might you do that even in a situation where you could

1 not be sure as to what the explanation for the  
2 bifurcation actually was?  
3 A. Again, it's very difficult to think hypothetically  
4 because you would need to look at the mark and find out  
5 what it was on, what it was developed with. Sometimes  
6 in a print or an impression, for instance, if it's on a  
7 piece of plastic cowling you can have parts of the  
8 impression when developed with -- sorry, when developed  
9 with superglue, will go from being correct for direction  
10 for colour, in other words, the pressure shows in the  
11 ridges as white lines and the furrows as black lines, to  
12 something being reversed for colour so the pressure has  
13 made the ridges look black in cyano acrylate or in  
14 superglue and the furrows look white. In other words,  
15 within one print you have the two so you need to look at  
16 each impression, what it was developed on, what it was  
17 developed with and what pressures were -- you need to do  
18 your whole analysis to be able to explain why that could  
19 be there.

20 Q. If we go back -- and I appreciate it is difficult with  
21 hypothetical examples -- but to the example that you  
22 gave where you have the fingerprint nice and clear on  
23 the flat surface on the glass of a rear view mirror in a  
24 car and you have your, I think you said, 30 or 40  
25 characteristics --

1 A. Yes.

2 Q. -- but you have a bifurcation, a single bifurcation,  
3 that does not match.

4 A. You could still effect that as an identification. You  
5 could still say that area of friction ridge skin has so  
6 much features and detail in sequence and agreement that  
7 it could only be made by that area of friction ridge  
8 skin that you're comparing it with and, therefore, an  
9 identification to the same person.

10 Q. You would be saying in that situation then that there  
11 must be some explanation for the bifurcation that does  
12 not match?

13 A. Yes.

14 Q. But might it be that you would not know or be very sure  
15 yourself what that explanation was?

16 A. That's correct, yes.

17 Q. What I would like to try to explore is where you tell  
18 the trainees the cut-off is. In what circumstances can  
19 one and can one not disregard the feature that does not  
20 match?

21 A. They would be trained not to look, again from day 1, not  
22 to look to explain away things as movement. That's  
23 movement and that one over there that's probably  
24 movement as well and that's just a dark area. They  
25 would have to have done their complete analysis and

1 looked -- when they are doing their analysis again at  
2 the early stages they would be writing these things down  
3 before they look at the known or the exemplar mark.  
4 They would have that in their mind whether there's going  
5 to be red flag areas, maybe areas of double touch, areas  
6 of movement, areas of slippage that they are going to  
7 take and this is where it comes into like a clarity  
8 bridge or their tolerance levels. The more complex the  
9 mark, the more movement, the more deposition pressure  
10 there is, the more the development method may have  
11 affected the mark, the more tolerance they are going to  
12 build into their comparison for differences. If you  
13 have a nice clear mark on a rear view mirror and you  
14 have several discrepancies that can't be explained away,  
15 you shouldn't be looking to explain them away by that's  
16 movement. So they are trained at a very early stage to  
17 look at each mark on its own merit, to complete their  
18 analysis stage and to bear in mind any red flag areas or  
19 the tolerances they are going to build in to their  
20 comparison.

21 Q. You said where there's a very clear mark they should be  
22 reluctant to try to explain things away. Where one has  
23 a complex mark, are you suggesting then there is more  
24 room for them to interpret what may appear to be things  
25 that don't match as between the mark and the print?

1 A. Yes.

2 Q. Again, looking at this from the lay perspective, if I  
3 may, Mr McGinnies, might it not be that there's actually  
4 more potential for error where one has a mark that is  
5 not clear and one should perhaps be more reluctant to,  
6 if I can put it this way, explain away things that look  
7 different in those circumstances.

8 A. Yes, and again we take it back to each mark on its own  
9 merit but they would have to be satisfied in their own  
10 mind why they are explaining these things. We are  
11 talking about features in sequence and agreement with  
12 none in disagreement, but when we talk about none in  
13 disagreement we have to look at the individual mark and  
14 this is why we carry out the analysis stage. This is  
15 why we look at what the marks on, what it's developed  
16 with, what pressures have been involved, if there's any  
17 movement, if there's any background disturbances. This  
18 will then be built into their tolerances when they are  
19 making their comparison, not to explain things away but  
20 to realise why things may look different. Yes, you are  
21 correct, in more complex marks there are more things  
22 they have to explain but it's not to explain away. If  
23 you're explaining away too many or putting in too many,  
24 "Well, if that's that, then that's that and that could  
25 be because of that", then you are probably looking at an

1 insufficient mark.

2 Q. If I am understanding you rightly, when one looks at a  
3 complex mark there may come a point whereby if one is  
4 having to make too many judgments to explain apparent  
5 differences then one perhaps should not be making them  
6 at all?

7 A. It's possible, yes.

8 Q. This may be a difficult question but how do you teach  
9 the trainees to recognise that point?

10 A. By carrying out their ACE-V analysis. Throughout the  
11 training we don't give them very complex marks very  
12 early on in the training. We have a training programme  
13 that follows a national programme through their  
14 foundation, intermediate and advanced course. On these  
15 courses they are assessed on various aspects of their  
16 profession, one of them being a practical assessment.  
17 These practical assessments grow in difficulty  
18 throughout their training, as will the tests that they  
19 sit in-house set by myself or other trainers.

20 It's in this building up to the more difficult  
21 marks, if you talk about working into a mark and looking  
22 in to more difficult and complex marks. It's an  
23 experience-led thing through continual assessment and  
24 gauging their progress that lets them come to their  
25 conclusions and realise why they can work into more

1           difficult marks.

2                    What we actually do -- what I do at this stage of  
3           training is let people -- and it's sometimes people  
4           contain it in their ACE portfolio, is looking at marks,  
5           revisiting marks that they weren't able to identify at  
6           an earlier stage in their career and realising how more  
7           easily they can identify them now and it's just been  
8           through their experience of looking at different marks  
9           and looking at different development methods, on  
10          different deposition pressures, the way that marks are  
11          left on different surfaces, that builds up that and  
12          that's carefully monitored throughout their career to  
13          make sure that they are making progress on that.

14    Q.    If I can just take movement as an example, Mr McGinnies,  
15          if I have understood what you have just been saying, it  
16          might be that when people become more experienced and  
17          start to work through more complex marks, they might  
18          become more ready or more able to identify that there's  
19          been movement in a mark and that's perhaps an  
20          explanation for some difference they have not been able  
21          to rationalise in that way previously?

22    A.    That's correct.

23    Q.    That, as you have said, is something through experience.  
24          Is there any, if I can put it this way, ground truth  
25          research that a trainee can go to and say, "Well, there

1 have been papers done that show how movement can affect  
2 a mark, people have done experiments that show how  
3 movement can affect a mark and when I go and look at a  
4 mark and try to assess whether movement is the cause of  
5 the difference in appearance that I see between the mark  
6 and the print", if they can gauge the correctness of  
7 their working by reference to any paper or research or  
8 objective information of that sort?

9 A. Certainly very early on in a trainee's career, on one of  
10 the portfolios is an attachment to -- it's recovering of  
11 friction ridge detail from scenes of crime, from the  
12 mark enhancement lab and from the mortuary. When they  
13 are on these attachments -- it's a three  
14 week attachment -- what they do is they conduct their  
15 own experiments. They are able to first hand see the  
16 effects on the developed mark on, for instance, glass,  
17 on ninhydrin. So if you take ninhydrin, the sweat onto  
18 the paper of ninhydrin, they look at the ninhydrin  
19 process with the ninhydrin reacting with the amino acids  
20 in the sweat and they see how the mark then develops.  
21 They see that it may appears pitted, it may appear,  
22 where on the fingerprint it would appear as a straight  
23 ridge because of the porous substance of the paper and  
24 because the sweat evaporates off they may see it as a  
25 dotted line. That's the first-hand experience of them

1            seeing that process taking place. So when a ninhydrin  
2            mark comes into the Bureau they are building that into  
3            their analysis stage by knowing from first hand  
4            experience, "I know that is why that that is why that is  
5            going to look like that. That's why when I look at the  
6            unknown against the known it appears as a continuous  
7            ridge on the fingerprint form but it appears like a  
8            series of dots and I know from my experience from my  
9            attachment that that's because of the way that ninhydrin  
10          reacts with the amino acids in the sweat and the sweat  
11          on the paper to make it look like that".

12    Q.    I can follow what you are saying so far as that might  
13          help people learn about how development methods affect  
14          the appearance of marks but dwelling, if we can, on the  
15          theme of movement. What is there by way of objective  
16          material that the trainee can go to to gauge whether the  
17          assumptions that they are making about movement as an  
18          explanation are correct ones?

19    A.    Again, this would be through the training department,  
20          letting them have a look at previous marks that we have  
21          within the training, that may be double touches, may be  
22          lateral reversals, may be reversal of colour. We let  
23          them see these so that they know what it is to look for.  
24          We let them examine these marks and do an ACE report on  
25          them so when they see this, when this recurs in their

1 daily working they know what it is they are looking for,  
2 they have had experience of what these marks look like,  
3 with different deposition pressures and different  
4 movements.

5 Q. Would I understand rightly that these examples would  
6 come from the everyday practice of other people in the  
7 office?

8 A. Yes. One part of the national trainers forum where we  
9 have regional meetings and national meetings, that is  
10 the sort of thing that's shared across the country and  
11 you would take along to your national/regional meeting  
12 an impression that was unusual or an impression that had  
13 posed some difficulty or an impression that could be  
14 used for training purposes. So we share that across the  
15 country.

16 Q. What the trainees learn from that is that another,  
17 probably a more experienced examiner has made an  
18 identification of a particular mark with a particular  
19 print and that that examiner has done so on the basis of  
20 understanding that there has perhaps been some movement  
21 when the mark was deposited?

22 A. Correct, yes.

23 Q. So, in a sense, that is another way of the experience of  
24 other examiners being handed to the trainee --

25 A. Yes.

1 Q. -- or to the less experienced person.

2 What I was wondering was whether there are examples  
3 in research where there is a known ground truth, if I  
4 can put it that way, because I am not suggesting that in  
5 these examples the individuals who have done the  
6 identification have got it wrong but there is no  
7 underlying known ground truth to that identification in  
8 the sense that it is known that they came from the same  
9 digit and in the sense that it is known how movement  
10 affected it in the way if I gave you my fingerprint form  
11 and you watched me smear my thumb across a piece of  
12 glass you could be quite certain in that circumstance  
13 that the difference between my ten-print form from my  
14 thumb and what you found on the piece of glass was that  
15 I'd moved it because you saw that and you had an  
16 absolutely objective basis for saying that that's what  
17 caused the movement.

18 A. Yes.

19 Q. What I am wondering is whether there is experimental  
20 work of that sort where there is the known truth and  
21 that the trainees are directed to, to help them gauge  
22 whether interpretations based on movement are correct  
23 interpretations?

24 A. That's some of the work that trainees will carry out on  
25 their placement. They will have the chance to, as you

1 say, using a control print, they know exactly when the  
2 print was left, they know the deposition pressure, they  
3 know the development medium because they created it.  
4 I've got several of my own that we use which I know are  
5 left in a certain pressure on a plastic bag, which has  
6 been vacuum (inaudible) and then I have my fingerprints.  
7 So I know that because that look's like that is because  
8 it was dealt with by a certain chemical process that  
9 made it look like that because those are my fingerprints  
10 I'm comparing with.

11 Trainees will do that for several areas of  
12 comparison. They'll do it for movement, they'll do it  
13 for pressure, they'll do it for looking at different  
14 development mediums and they'll bring those back and  
15 those will form part of the reports that they create for  
16 the recovery of friction ridge detail at a scene, in the  
17 lab and from the mortuary.

18 Q. So what they would have would be experimental material  
19 that they created themselves in the course of their  
20 training?

21 A. Yes.

22 Q. I had started asking you about, I think we came to this  
23 via, originally, a question about differences and  
24 unexplained differences at the start of this sequence of  
25 questions.

1                    In the context of the non-numeric standard where you  
2                    have the holistic analysis and, if I understand rightly,  
3                    possibly a mixture of Second and Third Level Detail --  
4                    is that correct?

5        A.    Yes.

6        Q.    -- how do you teach the trainees to assess the volume of  
7                    information, particularly where there may be a mixture  
8                    of that sort of Second and Third Level Detail that is  
9                    sufficient to individualise and to render irrelevant the  
10                    stray bifurcation that we talked about earlier?

11        A.    Again, this is taken from early training, it's taken on  
12                    just doing ACE reports on what they see. So they will  
13                    list features and bifurcations -- sorry, features,  
14                    breaking it down into bifurcations, maybe ridge endings,  
15                    taking it as far as writing down it's a ridge ending to  
16                    the right or a ridge ending to the left, it's a  
17                    bifurcation to the left or right or up or down, drawing  
18                    out their target areas. Then as we take them through  
19                    more complex marks, marks with less area of friction  
20                    ridge detail present, there may be impressions that  
21                    we'll let them have a look at that maybe have only eight  
22                    or nine characteristics but have other features in  
23                    sequence and agreement. There may be scars, creasing,  
24                    ridge edge shapes and let them do ACE reports on those  
25                    so they are building up a picture of how they can look

1 further into the mark and use more of the information  
2 that's available to come to their conclusions.

3 Under the numeric standard that was still done but  
4 there had been to be 16, 10 and 10 -- 16 points to take  
5 to court. The holistic -- sorry, under the numeric  
6 standard these features in sequence and agreement were  
7 still used not -- to come to a conclusion of identity  
8 however not to take it to court.

9 Q. Now that one is not looking for 16 points simply because  
10 a rule that says that you have to under the non-numeric  
11 standard now, if you can think about the situation where  
12 perhaps somebody has identified a target group in a  
13 series of, say, four or five features that leap out at  
14 them from the mark and they go to the print and they  
15 find those there, if they found their target group there  
16 in the print, is that it? Is that enough to identify?  
17 Would they stop there?

18 A. No, they would work across the print. They should be  
19 looking at any feature that they see on the print  
20 bearing that they work between any feature on the  
21 unknown print across the print to any feature on the  
22 known mark across. So if they're counting 12 ridges  
23 between a ridge ending and a bifurcation and 4 around to  
24 another ridge ending, they should be able to do that  
25 right across the print.

1                    They wouldn't concentrate on the target area. The  
2                    target area's only an area that naturally draws the eye  
3                    to get them a starting point, if you like, to see if  
4                    they can further compare. They would certainly look  
5                    right across the print for all the information that's  
6                    available, checking that it's all in sequence and  
7                    agreement.

8        Q.    If I can take that a step further, they start with their  
9                    target group. They work back and forth and find that  
10                    the target group are all there. They work back and  
11                    forward a little more and find more points in sequence  
12                    and agreement, at what point, if you can tell us, do  
13                    they have enough to be sure?

14        A.    Again, it's trying -- it's a quantitative and  
15                    qualitative analysis. You're looking at the whole mark.  
16                    So it would be when you're satisfied. That sounds a  
17                    bit sort of ... it's when they're satisfied that they  
18                    have enough, sufficient information of quality and  
19                    quantity within the two to effect an identification.  
20                    Depending on the mark, it may take longer or may take  
21                    more to convince them but it could be very early in the  
22                    comparison or, depending on the complexity of the mark,  
23                    it may take longer to work to get right across the mark  
24                    and make sure that everything's in sequence and  
25                    agreement.

1                    So, depending on the clarity of the mark and the  
2                    tolerance level, will depend on how soon they came to  
3                    their conclusions.

4        Q.    What do you teach them about what is enough for  
5                    satisfaction in that situation as they work across?

6        A.    Funny enough that is a question that comes up in our  
7                    mock courts is what -- we were just thinking back to  
8                    what you were speaking about earlier and that is a  
9                    question that is posed by defence, if you like. When  
10                    are you satisfied? What is satisfied?

11                    The answer to those would be by looking at each mark  
12                    on its own merit, by studying all the details, all the  
13                    features that are present, by taking into account all  
14                    your information, all your analysis, and it's when  
15                    you're satisfied to that conclusion of identification  
16                    that anyone else coming behind you with the same  
17                    training, qualifications and experience will come to the  
18                    same conclusion you've effected an identification. So  
19                    it sounds (inaudible) to say it depends on the mark but  
20                    that's what they are trained when they are satisfied.

21        Q.    Can I take it then that the answer to any question that  
22                    I ask you along these lines will always be it depends on  
23                    the mark?

24        A.    Yes. It's something that they're taught at NPIA as well  
25                    very early on is to -- it's something that in court and

1 in mock courts especially we try to hypothetically take  
2 people down the line of "could you identify on". So  
3 they've got to be aware that the answer has to be  
4 "depends on the mark" and they can only talk about the  
5 mark that they've identified in this case. They  
6 shouldn't really be drawn into going down a way, a line.  
7 They've got to talk about what they're there in court  
8 for that day to.

9 Q. Just following that theme, if a defence agent does ask,  
10 "Well, would you identify on four points?" is there any  
11 reason why he is not entitled to a straight answer?

12 A. No, certainly not but the answer would be I would need  
13 to see the four points. Hypothetically could I identify  
14 four points? Yes, if they were clear, if there were  
15 other features in sequence and agreement, yes, but it  
16 would need to be qualified by, "Yes but I would need to  
17 see the mark". You would need to see the four points.  
18 But there would never be an evasion. There would be no  
19 evasive answer of, "No, I couldn't answer that". They  
20 would give their opinion obviously.

21 Q. I would like to ask you a little bit more about the  
22 Court Skills Course just following on from that. Before  
23 I move on to that, I am being asked to highlight just  
24 something we touched on earlier about tolerances and, in  
25 particular, are there any documented standards that one

1 can go to in the first place as to how one should assess  
2 the quality of a mark in determining how much tolerance  
3 to give?

4 A. No.

5 Q. Is there any anything written down as to what one should  
6 tolerate for or is it simply the sorts of things that  
7 you have been talking that are passed on through  
8 experience: the idea there may be movement; there may be  
9 pressure; there may be a difference because of a  
10 development medium, that sort of thing?

11 A. Yes. It's through training, through experience and  
12 through demonstration of this is what reversal colour  
13 looks like, this is what a double touch looks like, and  
14 let them see these things, let them work through them  
15 for themselves and that give them the experience to  
16 recognise these things when they come up in day-to-day  
17 work. There's no manual of tolerance levels like you  
18 would have for a machine, no.

19 Q. That is helpful to know. Thank you.

20 Moving on then to the Court Skills Course, I have  
21 been asked to clarify with you some things you say at  
22 paragraph 75 and 76 of your statement if we could have  
23 that, FI0193 at page 19 to on 20. At paragraph 75, if  
24 we can start with that, you describe a course prepared  
25 and presented with the Crown Office and Procurator

1 Fiscal Service at Tulliallan. Who goes on that? Is  
2 that just trainees or is it qualified officers as well?

3 A. That one's -- that's the sort of basic criminal justice  
4 system and that's for trainees. There's nothing to say  
5 that if an expert wanted a refresher or something like  
6 that an expert couldn't go along on that, but it is  
7 designed at trainees who are learning about the criminal  
8 justice system, the sort of basics of roles, who sits  
9 where, what their responsibilities are. That's the  
10 basis of that one and a very, sort of, brief  
11 introduction of court etiquette, et cetera.

12 Q. Is that one where they would get the mock court  
13 examination or does that --

14 A. No, that would be a further course.

15 Q. I see. You describe at paragraph 76, if we could go to  
16 that, please, another Court Skills Course specific to  
17 the NPIA Court Assessment Element to assist trainees  
18 developing skills in the area. In the first place, is  
19 that a Tulliallan course as well?

20 A. That can either be run at SPC(?), because it's good to  
21 use the courtroom facilities up there, but that can be  
22 run anywhere. That's run by ourselves, SPSA Training,  
23 in accordance with NPIA as well or sometimes by trainers  
24 from other bureaux in England and Wales and Northern  
25 Ireland.

1 Q. Are the Fiscals involved in that course?

2 A. If I run it at Tulliallan, the Fiscal -- the last time I

3 ran it, I had the Fiscal come along as a sort of

4 evaluation of the course. The reason we don't involve

5 Fiscals at that stage is because it's not

6 Scottish-specific. It's geared towards the NPIA court

7 assessment and it's more across a national standard.

8 It's court skills in general as opposed to dealing with

9 specific court practices in Scotland.

10 Q. Sorry, staying on that course, how long is the course

11 you describe the paragraph 76?

12 A. That's a two-day course as well.

13 Q. At what stage do we come to a course where the Fiscals

14 come along and carry out examination in-chief and

15 cross-examination in the mock court?

16 A. That's an expert -- we term it an expert or an

17 examiner's court skills course. Those are run at

18 Tulliallan and those are run for -- those have been run

19 recently. We had two for fingerprints but those are

20 going to be run for Forensic Services-wide. So, for

21 instance, on the day it would be a two-day course and we

22 would have a Fingerprint Examiner, someone from the Mark

23 Enhancement Lab, and somebody from DNA all involved in

24 the same mock case given to them as if it was an actual

25 court case. They would prepare the court case, submit

1 it to the Fiscals who were taking part in the exercise  
2 and would appear on the day and go through the court  
3 process. That would involve workshops and would also  
4 have about another eight or nine delegates from across  
5 SPSA Forensic Services attend on the day to observe.

6 The reason for that one is to let everyone across  
7 the forensic services see where they fit in in the  
8 picture and let people know what other areas are  
9 responsible for and what they actually do in court.

10 Q. Is that a course that has been run yet or have the court  
11 skills courses with the Fiscals so far only been for  
12 fingerprint people?

13 A. The two that we've run have been for fingerprints. The  
14 next one is February and that will be across Forensic  
15 Services.

16 Q. Is there a course for trainees where they get the mock  
17 court treatment with examination and cross-examination  
18 by the Fiscal?

19 A. Yes. That's ... the first of those two depending on  
20 where that's been run it may have Fiscal input to the  
21 court part of it. Otherwise that would be run currently  
22 by Fingerprint Officers within the Bureaux. In other  
23 words, I myself would do mock courts with them.

24 When they qualify, then they will go on the experts'  
25 Court Skills Course. I'm currently working with the

1           Fiscals at the -- sorry, at the Scottish Police College  
2           to have them more involved in the Scottish input with a  
3           view to having them doing inputs for them going to  
4           court; in other words, the Scottish Court Skills Course  
5           for trainees as well.

6           The reason they don't do two in tandem, if you like,  
7           is when they are preparing for Durham they don't -- in  
8           your Durham assessment, you don't talk about anything  
9           that is specific to law. It's a generic Court Skills  
10          Course. The questions that are asked are generic. They  
11          won't be asked about anything on Scottish law, they  
12          won't be asked about anything regarding the law side of  
13          how they prepare their joint report. That's kept  
14          separate so that there's no cross-confusion on how they  
15          carry that out.

16    Q.    If I have understood this rightly, they may go for their  
17          Durham court skills assessment without necessarily  
18          having had Fiscal input at that stage?

19    A.    That's correct.

20    Q.    When we get to the stage where we have the qualified  
21          examiners going for the court skills training and having  
22          the examination-in-chief and cross-examination from  
23          Fiscals, I take it that is done on the basis of current  
24          practice as it would arise in the courts now?

25    A.    Yes. They are asked to prepare a court case as if it

1 was a court case that they were taking to court that  
2 week. So, yes, it's reflective of current practices  
3 using joint reports and the information that they would  
4 provide to the Crown, yes.

5 Q. We have heard that current practice is not to prepare  
6 charted enlargements.

7 A. No.

8 Q. How do the people on the course, the examiners, explain  
9 their reasoning about the mark and the print in the mock  
10 court without a charted enlargement?

11 A. They would explain the basis for friction ridge  
12 identification, they would explain the basis -- in other  
13 words, they would explain how friction ridges are  
14 formed, how they are unique and permanent and  
15 individualising, they would explain how they carry out  
16 their ACE process and they would explain that that's  
17 what they did in this case. There would be no marked-up  
18 enlargement. There would be no way of them showing on a  
19 day-to-day court presentation how they actually came to  
20 their conclusions.

21 Q. Are they ever challenged about that in the course of  
22 these mock courts, ever challenged to explain what they  
23 have seen, where a characteristic is, anything of that  
24 sort?

25 A. Yes and recently we've challenged in court as well

1 regarding that. This was a decision that was made to  
2 stop doing the generic enlargements but recently we've  
3 been asked a couple of times. On these court feedback  
4 forms that I talked about, a couple of examiners have  
5 come back and said that they were asked in court how  
6 they can demonstrate that to the jury and they had to  
7 obviously say that they had no means.

8 However, if it helped the to court and there was a  
9 request for enlargements, then that could have been  
10 requested.

11 THE CHAIRMAN: So there is no graphic assistance at all?

12 A. No, sir.

13 THE CHAIRMAN: You just describe what a ridge ending looks  
14 like in words rather than by demonstration.

15 A. We actually are currently in talks with the Crown Office  
16 about regarding preparing some sort of PowerPoint or  
17 some sort of mark-up, electronic. That was asked for in  
18 a trial recently. It wasn't used on the day but they  
19 were asked recently -- two experts were asked to prepare  
20 a presentation, an electronic presentation, to assist in  
21 how they use their identification and certainly at that  
22 very seminar we use that PowerPoint that we looked at  
23 earlier, requests soon after that to ask if we could use  
24 that in a court so talks are ongoing that we are looking  
25 for a -- in fact, I'm very interested, at the end of

1 this, to find out the electronic process that you have  
2 for the mark-ups that I've been looking at this week  
3 because that's the sort of technology we would require  
4 to do it on mark for mark basis.

5 Q. In terms of what is being discussed at the moment is  
6 this some sort of generic presentation showing how you  
7 go about your job in the same way we looked at in your  
8 presentation for the Advocate Deputes?

9 A. Yes, I think it would need to be because I think  
10 currently the technology of the time doesn't allow for  
11 us to do it for every single case but that's being  
12 looked at.

13 Q. Now --

14 A. Sorry, for trainees we have a generic enlargement that  
15 we use. Part of the Durham assessment is that they have  
16 to have a visual aid, they have to use a visual aid in  
17 their demonstrating of how they come to their  
18 conclusions. This is a generic enlargement and this is  
19 what we use. This is what we use on our Durham  
20 training.

21 Q. You are holding up a document. We can put it on the  
22 screen so people can see it and maybe take a copy of it  
23 for later. We can put it up on the screen even if we  
24 don't have it on the system. **(Handed)**

25 A. This was put together by ourselves because it is a

1 requirement for the Durham assessment that they use a  
2 visual aid to demonstrate how they came to their  
3 conclusions.

4 Q. When do that they are using the generic aid?

5 A. It's a generic aid.

6 Q. Is there any recent experience at all in your Bureau of  
7 doing anything on a case specific basis or is that  
8 simply ancient history now?

9 A. I don't have a bureau. I cover the whole of Scotland  
10 but certainly there was a case in Dundee recently, a  
11 high profile case, where they were asked to prepare a  
12 generic PowerPoint but there's been nothing to my  
13 knowledge that's been asked for, case specific, for any  
14 mark ups, no.

15 Q. So what you have on the generic, which is what we are  
16 looking at here, is simply a sample mark with points  
17 marked up.

18 A. Yes.

19 Q. Bifurcations are marked in green and ridge endings are  
20 marked in red.

21 A. Yes, I'm actually in the process of changing that  
22 because it was only after I submitted that to be put  
23 together I realised those are the two colours people  
24 with colour blind deficiency have so I'm going to have  
25 to change those.

1 Q. But this gives us an idea of what a generic example  
2 might look like.

3 In the mock court situation does anybody ever run  
4 into trouble trying to explain themselves because they  
5 don't have a case-specific enlargement to be able to  
6 show people where they have seen a bifurcation on one  
7 and a bifurcation on the other, for example?

8 A. Yes and, again, in the mock court situations, if they  
9 are asked about, as they were in the actual court, how  
10 they can demonstrate their findings, then currently they  
11 have nothing that they can demonstrate their findings on  
12 by a point to point analysis, no.

13 Q. We can take that down. Carrying this forward, perhaps,  
14 to thoughts of disclosure of how people have gone about  
15 their working, would I be right in thinking there's no  
16 way for either the Crown or the defence to know what  
17 points have been relied on?

18 A. No.

19 Q. Or whether it is Second Level Detail or Third Level  
20 Detail?

21 A. No.

22 Q. Or how much of it is Second Level Detail as opposed to  
23 Third Level Detail?

24 A. Currently, no.

25 Q. That's simply something that there's no mechanism for at

1 the moment?

2 A. That's correct.

3 Q. Staying perhaps with that theme of disclosure for the  
4 moment, I would like to ask you about, in the first  
5 place, precognition in the context of disclosure and  
6 then about some other disclosure issues.

7 What is the current practice regarding precognition  
8 of experts within SPSA?

9 A. This is another area that's in a state of change, quite  
10 recently. We have now received instruction there will  
11 be precognitions for all High Court cases and this is  
12 actually happening and we have a document that's sitting  
13 just now with the unit managers that sets out a  
14 precognition structure for the precognition of  
15 Fingerprint Examiners and it goes through stage by stage  
16 asking in more detail, of the precognition process, of  
17 what's going to be required.

18 Trainees are taught on that course at the SPC (**sic**)  
19 about what a precognition is and what they should expect  
20 in a precognition and what their duties round a  
21 precognition are and then they carry that forward to  
22 when they are qualified examiners.

23 Q. You say you have now received an instruction about  
24 precognition for all High Court cases. Can you tell me  
25 when that happened?

1 A. It wasn't long after I gave the presentation to the  
2 Advocate Deputes. So it probably would have been -- I  
3 received the documentation for the proposal which I put  
4 to heads of unit and that would have been in the last  
5 month. Prior to that, there have been a marked increase  
6 in the number of precognitions that have been received  
7 across all four bureaux.

8 Q. I think we know you gave your presentation to the  
9 Deputes back in June of this year.

10 A. June.

11 Q. Picking up on what said about what trainees were taught  
12 about precognition can you tell me what they are taught  
13 to expect as to what they should do if they are  
14 precognosced?

15 A. As I say, this is an input that's delivered by the  
16 Fiscal Depute who is at the college but they are taught  
17 what the precognition process is. They are taught why  
18 they are being precognosced. Obviously, they are taught  
19 that it's reflective of what they may be asked in court,  
20 it's in evidence-gathering that you may be precognosced  
21 by defence or prosecution and to treat, obviously, both  
22 exactly the same and just to state what their evidence  
23 is going to be and anything that may be of assistance.

24 Q. Is there anything they are taught to volunteer or are  
25 they taught they are simply reacting to questions from

1 the lawyer who is precognosing them?

2 A. I would actually need to check with the content from the  
3 Crown Office on that but I think they would be taught to  
4 answer the questions that they are put regarding what  
5 they will say, in other words their statement and their  
6 evidence.

7 Q. It may be from what you are saying this is a question we  
8 should be directing to the witness who comes from Crown  
9 Office eventually rather than to yourself and if that is  
10 the case, please, just say so?

11 A. Possibly, yes, thanks.

12 THE CHAIRMAN: Before we leave that, do you ever actually  
13 produce, as experts, a report if a case is going to,  
14 say, the High Court?

15 A. Part of our joint report, sir, would have detailed all  
16 the productions in the case. It would detail everything  
17 that had happened with the case.

18 THE CHAIRMAN: Yes, but an actual report saying, "I have  
19 examined this fingerprint and I found so many points in  
20 agreement", nothing like that?

21 A. No, sir. Currently, no.

22 MISS CARMICHAEL: I think I had asked you about whether  
23 people would know to volunteer particular things and I  
24 think you say in your statement at paragraph 141, if we  
25 can go to that, please, that a facilitated discussion is

1 something that would not routinely be disclosed. That  
2 is page 34.

3 I think you say:

4 "We would not as a matter of course disclose that  
5 experts had disagreed about the inclusion or exclusion  
6 of a mark as identified, ie a facilitated discussion."

7 A. Under current disclosure, no, I don't think -- that  
8 hasn't been. That might be something that is  
9 exculpatory so I think in future that is something that  
10 would have to be disclosed. That is something that  
11 would, obviously -- obviously, they would need to look  
12 at, whoever is making the decision on what is disclosed  
13 for the fingerprint sort of business area they would  
14 need to look at to see -- understand what disclosure is  
15 and they would have to make sure that everything that  
16 can be exculpatory or inculpatory is put forward under  
17 disclosure.

18 Q. If there has been a difference of view at some stage in  
19 the process, even if it seems to have been resolved,  
20 that is something that might indicate to the Crown and  
21 to the defence that there is at least room for a  
22 difference of view?

23 A. Yes.

24 Q. So that is something that they should probably know  
25 about; isn't that right?

1 A. Yes.

2 Q. I appreciate you are saying that is something that might  
3 need to be looked at and is maybe not something that has  
4 been done up to now, but how as a matter of practicality  
5 would something of that sort come to be disclosed?

6 A. It would possibly be recorded or it would be recorded on  
7 the diary page for the case. In other words, the diary  
8 page is almost like contemporaneous notes regarding the  
9 tracking of what happens in that case. So it would  
10 possibly be recorded on there. I would possibly stand  
11 corrected on that but I think it would be recorded on  
12 that, in which case if the diary page was being  
13 submitted that would highlight it.

14 Q. Do you know -- and, again, if you don't and there's  
15 somebody else we should ask please say -- but do you  
16 know whether the diary page is sent to the Crown?

17 A. I would say it's not but I would say that may be  
18 something to ask possibly somebody from the verification  
19 unit, whether it's sent as a matter of course. I would  
20 think under full disclosure it would probably need to  
21 be. Again, that would again be something they would  
22 need to look at.

23 Q. So, again, that is perhaps an area of practice that  
24 needs to be looked at.

25 If, thinking to the precognition process, an

1 examiner comes to be precognosced, is this something  
2 they would think perhaps to volunteer to, in the first  
3 instance, the Fiscal who is speaking to them, that there  
4 had been this bit of history in the case where there had  
5 been some level of disagreement?

6 A. I wouldn't know. I would think currently it wouldn't be  
7 volunteered but again I would stand to be corrected on  
8 that with someone who deals with precognitions on a  
9 daily basis and is certainly since they've moved on in  
10 the last month or so.

11 Q. Thinking with your trainer's hat on, is that something  
12 that you would be expecting your trainees to know to do,  
13 to volunteer something like that?

14 A. Under full disclosure, yes. I would be looking for --  
15 and again on this document that's, as I said, being  
16 ratified or gone through by the unit managers then I  
17 would think that would be something that would be on  
18 there or would be volunteered under full disclosure,  
19 yes.

20 Q. But we should take it that there is perhaps a dynamic  
21 situation at the moment where there is discussion of  
22 perhaps more being disclosed by way of precognition and  
23 more instruction in precognition than has previously  
24 been the case?

25 A. Yes.

1 Q. That might be something we should ask either SPSA or  
2 Crown Office about further?

3 A. Yes, I would think so.

4 Q. Do you know yourself, thinking of perhaps a situation  
5 where somebody has been found to make a mistake, whether  
6 that's picked up in dip sampling or verification or  
7 incompetency testing, whether a mistake of that sort is  
8 something that would be brought to the attention of the  
9 Crown if they were thinking of leading the individual as  
10 a witness?

11 A. Currently, no, I don't think that would be volunteered.  
12 I don't think that's something we would disclose, "You  
13 have called Alec McGinnies as an expert and,  
14 incidentally, he failed his last competency test". I  
15 don't think that's something that we would disclose just  
16 now. Again, it would need to be something looked at, do  
17 we need to disclose that.

18 Q. I suppose looking at it as a defence agent might, they  
19 might think that's an indication that Mr McGinnies has  
20 made a mistake in the past and that is something I want  
21 to ask him about, to challenge him and challenge his  
22 expertise.

23 A. Yes.

24 Q. Why would it be that they should not know about it?

25 A. Oh no, excuse me, I didn't mean -- sorry, that was

1 misleading. Yes, I think, it's possible that should be  
2 and that's something, when we're looking at disclosure  
3 and full disclosure, then we would need to, obviously,  
4 look at what we're disclosing.

5 Q. So, again, that might be something for ongoing and  
6 future discussion?

7 A. Yes.

8 Q. Before we leave precognition, you say there's been an  
9 upturn in precognition of High Court cases. When  
10 somebody -- and, again, if you don't know and I should  
11 ask somebody else please say -- but when somebody goes  
12 off to be precognosced by the Crown now do they take the  
13 case file with them?

14 A. Yes, I believe they would. Precognitions very often  
15 happen within the individual bureaux, with the  
16 precognoscer attending at the unit but, yes, they would  
17 have the case file to refer to, yes.

18 Q. You say there's been an upturn in High Court  
19 precognition. What about Sheriff and juries?

20 A. I think, again, I would need to check with the court  
21 liaison officers to find out what the actual figures are  
22 but there has definitely been -- and I think this has  
23 come about through better communication with the Crown  
24 Office and two-way communication that this is now  
25 something that is more to the front.

1 Q. I asked you some questions in that disclosure context  
2 about mistakes that had been picked up and disclosed.

3 I would like to ask you a little bit more about how  
4 mistakes are treated and I suppose those might be picked  
5 up in verification. Is that something that happens  
6 sometimes?

7 A. When you say mistakes, what do you mean by ... do you  
8 mean missed identifications?

9 Q. Either a mis-identification, I suppose, or a missed  
10 identification?

11 A. Yes, that would be picked up through the verification  
12 process in an actual tracking of the case or it may be  
13 picked up at dip sampling. It may be picked up at  
14 process checking. So you want to know how these would  
15 be dealt with on an individual basis?

16 Q. What I am interested in particularly is whether they  
17 would be dealt with as perhaps a disciplinary matter  
18 that would create a problem for somebody or how you,  
19 wearing your training hat, might come in in that sort of  
20 situation?

21 A. If we're talking about missed identifications, for  
22 example, if there's two or three or four identified on a  
23 mark and the first checker has picked up the two, three  
24 and just missed the four and it's picked up in the  
25 subsequent checker's -- second checker's sort of -- that

1 would then be returned to them and they would obviously  
2 revisit the mark and pick it up.

3 If someone was doing that on a regular basis that  
4 would be highlighted probably by the line manager or by  
5 the verification unit. That would then be a process  
6 where they would speak to the individual. Where  
7 training would be involved would be if it was somebody  
8 who was missing say, for instance, it was always bits of  
9 palm, they've had four or five cases back and they have  
10 missed identifications and it's always pieces of palm I  
11 would look at it as a trainer then to assist them with  
12 further training in palms, possibly a demystifying palms  
13 course, either internal or externally, putting together  
14 some suspect packs with palm identifications in them  
15 with known outcomes, to ask them to do ACE-Vs and work  
16 through how they carry out that process and then that  
17 would, along with support from their line manager, would  
18 hopefully address the problem.

19 You would obviously keep monitoring their progress,  
20 make sure all their stuff has been second-checked and  
21 verified anyway so that would highlight anything else.  
22 Dip sampling of their work, maybe more stringent dip  
23 sampling of that person's work to see if they've missed  
24 anything in the past which hasn't gone through. So  
25 that's where training would come into that.

1                   As for a missed identification, if you had a  
2                   missed-identification -- sorry, a mis-identification --

3       Q.    Sorry, a mis-identification?

4       A.    Yes, a mis-identification -- then training would  
5            certainly be involved through the processes and  
6            procedures that are in place. In the procedures manual  
7            they would be -- I would be involved in putting together  
8            a training plan. For a training plan I would take the  
9            person through everything from formation and structure  
10           of skin right through to the verification process. I  
11           would take them through the whole thing again in a  
12           training plan, with set inputs. That would be to  
13           reinforce and underpin their knowledge that they have.  
14           I would ask them to do an ACE-V report on the  
15           mis-identification so they can see -- ACE-V reports for  
16           trainees who miss a mark is employed to let them see  
17           where it is they missed the mark. Very often they can  
18           look at the mark with their ACE-V report and say, "I can  
19           see the reason I didn't pick it up is because I was  
20           looking in the wrong area. The reason I didn't pick it  
21           up was my digit determination was maybe in the wrong  
22           direction".

23                   As with a mis-identification, doing an ACE report we  
24           let the individual see where they went in the wrong  
25           direction. They would obviously have their work dip

1 sampled or all their work checked for the period before  
2 and all their work checked for the period after and then  
3 a progress report from myself, their line manager and  
4 probably their supervisor would have to go to the unit  
5 manager to say that the corrective measures, if you  
6 like, or the training plan had gone full circle and the  
7 person was back on track. I think that's what would ...

8 Q. When you say you think that's what would happen, do we  
9 take it from that it's not actually happened and you're  
10 describing a procedure or should we take it that it has  
11 occurred and you've had to go through that?

12 A. It has occurred and that's the process that I would go  
13 through.

14 Q. It has occurred?

15 A. It has occurred, yes.

16 Q. What about if a problem is disclosed during competency  
17 testing? How would you handle that from the training  
18 point of view?

19 A. Again, that would be something that would be looked at  
20 by the person's line manager. They would revisit the  
21 mark. It maybe a case of again asking them to possibly  
22 do an ACE report on it to look and see why it was that  
23 they had missed the mark. Then again it may be a  
24 possible case that they require some further training in  
25 an area say, for instance, the mark they missed was a

1 piece of flexion I may put together training packages on  
2 that, may give them further inputs on digit  
3 determination, again have their work checked round about  
4 that area for a ... it would depend on the level  
5 of ... sorry, the discussion between the line manager  
6 and the individual as to how they thought they had  
7 missed that mark and it came about whether training  
8 would be involved at all or whether it was just  
9 something that they moved on with.

10 Q. Should we take it from that that competency testing will  
11 involve testing whether people miss identifications?

12 A. Yes.

13 Q. Rather than whether they mis-identify?

14 A. The way it works with collaborative testing systems is  
15 they distribute the tests, we set them in  
16 October/November time. That's all sent --  
17 independently, that's all sent away back to  
18 collaborative testings and they then publish the  
19 findings and send back the individuals their feedback,  
20 if you like, the scores of the marks that they marked,  
21 they will tell them, of everyone who sat the test, what  
22 percentage had it as an identification. So they will be  
23 able to look at that and then see if there were any  
24 mis-identifications.

25 That will also go through our quality assurance who

1 deal with the CTS test now and they will highlight any  
2 problems to the individual's unit manager, line manager  
3 and, if necessary, training will be involved.

4 Q. Sorry, it was my question that perhaps was not clear.

5 Are there ever times when people find a match in the  
6 competency testing when they shouldn't?

7 A. To my knowledge that hasn't happened.

8 Q. Do you know whether the competency testing tests that or  
9 whether it is really just testing whether people can  
10 make identifications in situations where they ought to?

11 A. CTS -- I believe CTS use exemplar marks so they know the  
12 donor, they know where they came from. So they are set  
13 up Scenes of Crime mark, if you like, so they know who  
14 made the mark and they know who's fingerprints they are  
15 by taking the prints and using that as the test.

16 Q. But they are not throwing in one, for example, where it  
17 looks like Mr McGinnies but it isn't quite Mr McGinnies,  
18 to see if anybody --

19 A. No. It's a fair and even test. There's nothing that's  
20 meant to mislead. I think it's just there, as you say,  
21 to test a person's competence in comparing impressions.

22 Q. I have some more questions for you, hopefully slightly  
23 briefer ones, Mr McGinnies.

24 You tell us at paragraph 92 about the National  
25 Register of Fingerprint Experts. If we can go back,

1 please, to page 23 where you tell us about the National  
2 Register of Fingerprint Experts. Really a very simple  
3 question: who keeps that?

4 A. The National Register is maintained by NPIA at Durham.  
5 It's actually -- when an individual goes through their  
6 foundation, intermediate and advanced courses, and they  
7 pass the advanced course that enables them to be entered  
8 onto the National Register of Fingerprint Experts. That  
9 decision as to whether they are entered or not comes  
10 from the unit manager responsible for that individual.  
11 They will then apply to the National Register to have  
12 them inserted on the National Register and they will  
13 receive a number. In Scotland we also apply to the  
14 Executive to have the person deemed under section 280  
15 for making joint reports as well.

16 Q. Shall we take it that once one is on the National  
17 Register of Fingerprint Experts, having passed all the  
18 necessary courses at Durham and the supervisor having  
19 put you forward, there isn't any test thereafter that  
20 would take you off it?

21 A. No. I spoke to head of fingerprints at NPIA regarding  
22 this because it was something I had recalled him talking  
23 about bringing in for England and Wales and they are  
24 still in the process of talking about having a  
25 re-accreditation. Certainly, if you leave the

1 fingerprint practice for more than two years you would  
2 have to resit the advanced practical course to be  
3 allowed back on to the advanced register.

4 Q. How would you come off it in the meantime, if that makes  
5 sense?

6 A. You could be long-term sick. It could be you are  
7 seconded to another --

8 Q. Again, sorry, it's my question that's at fault,  
9 Mr McGinnies.

10 If you are off, for whatever reason, away from  
11 fingerprint practice, how does your name come to be  
12 removed from it?

13 A. SPSA or across the country, whoever is responsible for  
14 that person, the unit manager for instance, would  
15 contact NPIA and let them know that this person should  
16 be removed from the register for whatever reason,  
17 they've retired or whatever.

18 MISS CARMICHAEL: This might be a convenient point, sir. I  
19 do have a few more questions.

20 THE CHAIRMAN: We will sit again at 1.50.

21 **(1.00 pm)**

22 **(Luncheon Adjournment)**

23

24

25