

Tuesday, 27th October 2009

1

2 (Afternoon session)

3 (1.55 pm)

4 MISS CARMICHAEL: Thank you, sir.

5 Mr MacPherson, I think you have been trying, with  
6 Miss Allen's help, to indicate on the image that is  
7 currently on the screen, which is an enlargement of  
8 PS0002, what we were talking about before lunch which  
9 was the part of the fingerprint you have been talking  
10 about in your report when you were discussing  
11 orientation.

12 A. Yes.

13 Q. What you have now got is an image bearing a light blue  
14 line and a light blue circle.

15 I wonder if you could tell us what the light blue  
16 circle shows us?

17 A. That's the area to the right of the core. It should be  
18 slightly over and a little bit more of an oval shape but  
19 that's roughly the area that I'm talking about when we  
20 said we identified and that's what I mean by it's facing  
21 inwards to the bathroom.

22 Q. So what you are actually meaning is the core is the part  
23 that is nearest to the bathroom?

24 A. Yes.

25 Q. But correct me if I am wrong, does that mean that the

1 part immediately to the right of the core would be the  
2 tip of the finger?

3 A. That's the area, the tip, yes -- or the middle to tip,  
4 yes.

5 Q. The part which, looking at a thumb pointing upwards,  
6 would be the part above the core?

7 A. Just to the very right of the core.

8 Q. I am sorry, I shouldn't put words in your mouth.

9 Perhaps the best thing I could do is perhaps try to add  
10 a marking of my own if I may, Mr MacPherson, and see if  
11 others agree or disagree with what I am saying.

12 If I choose a circle of a different colour, red, you  
13 would be denoting this sort of area, the red circle, as  
14 the area to the right of the core (**indicated**)?

15 A. Yes, but it's at the very core and to the right of it.

16 Could I try and do it myself?

17 Q. Yes. I will take my marking off because if it is  
18 unhelpful it is better if it is removed I think. If you  
19 would like to try to mark this in a way that you are  
20 happier with, we can take away the light blue circle as  
21 well and try again.

22 A. If I also put some arrows in to show you the ridge flow  
23 across the lines.

24 Q. We have found using the free hand tool can sometimes  
25 help with marking the ridge flow, Mr MacPherson, if

1 that's of help to you.

2 We can start again with a clean image perhaps.

3 Perhaps if we bring up PS0002 and start again. PS0002H

4 I think may blow up rather better and be in higher

5 definition for these purposes. If we can rotate it, we

6 may find this enlarges rather better for these purposes.

7 A. That's roughly what I'm talking about (**indicated**). It

8 should go further into the core and a bit up above the

9 core but that's what I'm trying to say, what we've

10 identified is facing in an inward direction and --

11 Q. What I do need to do is just get your markings into the

12 record here so we can marry things up with the image

13 when we save it and then I will ask you another question

14 about that, Mr MacPherson. You have drawn a series of

15 five dark blue arrows.

16 Can you tell me what those show?

17 A. Those signify the ridge flow and it's facing in towards

18 the bathroom when it's been deposited.

19 Q. And the light blue circle ...?

20 A. Is roughly the area that's been identified but not

21 exactly.

22 Q. So focussing on this lower part of the mark then, which

23 part of the thumb did you mean to indicate was pointing

24 into the bathroom?

25 A. I think it says in the statement the part that's

1 identified is pointing in towards the bathroom.

2 Q. This is what I am slightly unclear about, Mr MacPherson.

3 If I think of a thumb pointing into the bathroom, I

4 think of the tip of the thumb pointing into the

5 bathroom.

6 Is that what you are trying to show here or are you

7 trying to show something different?

8 A. It's not the extreme tip, it's just to the right of the

9 core. I don't know what I've said in my statement. I

10 can't remember.

11 Q. We can easily go back to that.

12 Save this, please.

13 MISS BAHRAMI: That's saved as FI2710.05.

14 MISS CARMICHAEL: Sorry, to assist you, Mr MacPherson, we

15 should go back to DB0004 and to the final page of that.

16 What you said was it was ascertained that the top of

17 the left thumbprint which was identified was facing in

18 an inward direction relative to the bathroom.

19 A. Okay.

20 Q. To the lay person perhaps one might think that if a

21 thumb is pointing -- if the top of a thumb is pointing

22 into the bathroom, the tip would be directly inwards

23 towards the bathroom and I'm still a little unclear as

24 to whether that's what you're indicating on the image

25 that we have been looking at.

1 A. If we take this as the bottom (**indicated**), as you go  
2 towards the core we're going towards the tip and then  
3 you have the very extreme tip, which is, the ridge  
4 flow is showing it's going in the opposite direction but  
5 that's something that happens in a left thumb. Normally  
6 you have fault lines or fault ridges they're called and  
7 in a left thumb, when you have a rolled impression of a  
8 left thumb, the fault ridges at the top of the left  
9 thumb slope to the left. That's an indicator that shows  
10 you it's a left thumb but in this instance it's not this  
11 area (**indicated**) on the left-hand side that's come in  
12 contact with the door surround, it's this area  
13 (**indicated**).

14 Q. You are indicating --

15 A. The very tip is what's showing the ridge flow in an  
16 opposite direction, if you like.

17 Q. If we can go back to the image, please. If we had to  
18 draw on this freehand a thumb to show us the outline of  
19 where somebody's thumb was on it, would you be able to  
20 do that for us, perhaps using the free hand tool -- just  
21 the shape of a thumb, just so we can understand where  
22 you say, perhaps what we as lay people would understand  
23 the tip of the thumb to have been.

24 A. You want me to draw a thumb. (**Pause**)

25 Normally on a left thumb at the left-hand side of

1 the thumb you have these fault ridges that I'm going to  
2 describe (**indicated**) --

3 Q. I'm sorry, I have been unclear in my question. What I  
4 am asking you to do is try and superimpose the shape of  
5 a thumb over the part of the mark that you identified to  
6 try and give us a picture of where you say the person  
7 who made this mark put their thumb and in what  
8 orientation.

9 A. What I'm showing there, if the left-hand side of the  
10 left thumb had been shown, the ridges would have sloped  
11 in that direction but what you are seeing here is a  
12 thumb that's been either put on, lifted and then rolled  
13 up to the tip in that direction (**indicated**) or it's been  
14 put on and you can see from the lighter ridges, lifted,  
15 slightly turned and put back down again. I can only  
16 speak to the area that I have identified. From my own  
17 perspective the tip roughly of the line which I've shown  
18 you --

19 Q. This is the red line in the --

20 A. This red line here (**indicated**). Roughly in that area.  
21 I'm not saying it's exact in case it gets thrown back in  
22 my face that it's not exact but that area to me is  
23 subject to compression of ridges, probably the bone at  
24 the tip of the thumb has pressed really hard when it's  
25 been deposited and caused that compression. You

1 basically have now what's become called the Rosetta  
2 characteristic. It's there in isolation and possibly a  
3 bifurcation above it but you can't, for me anyway, I  
4 can't count through this to -- there's one or two  
5 characteristics up the top. These to me are  
6 insufficient. That's always been my belief, I think, if  
7 you look at transcripts from the trial originally.

8 That's always been my belief that they are fragmentary  
9 and insufficient. So the only area I can speak to is  
10 the area that I identified. The area I identified is  
11 pointing in an inwards direction to the bathroom.

12 I know its been said that because of the ridge flow  
13 it cannot be a left thumb. That's just not the case.  
14 And you don't make an assessment, an initial assessment  
15 and just say, "Oh, the ridges are going the wrong way.  
16 It can't be a left thumb".

17 If you look at these ridges here --

18 Q. Would it help you to mark what you're indicating?

19 A. Sorry, if you look at the ridges here, they are all  
20 flowing in that direction (**indicated**). That is  
21 indicative of a left thumb. If it was a right thumb,  
22 somehow, if you could get a right thumb, on there ...

23 **(Pause)**

24 Q. What you have just been marking when talking about the  
25 ridge flow is a series of red lines inside the pale blue

1 circle?

2 A. Yes. A right thumb, the ridges would be flowing in that  
3 direction (**indicated**).

4 Q. What you are just marking just now is a series of pale  
5 blue lines.

6 A. Pale blue lines, yes.

7 Q. In the bottom right-hand corner of the image.

8 A. Again, this is just an indicator. If you have a right  
9 thumb that was a nutant loop, a nutant loop is a radial  
10 loop on the thumb, the ridges may flow as indicated on  
11 the right or if it was a right forefinger the ridges  
12 again may flow in that direction, but that is -- they're  
13 a nutant loop on any of the thumbs is very, very rare, a  
14 radial -- a radial loop in a left thumb.

15 So the ridge flow there I've indicated by red lines  
16 and by the blue arrows indicate to me that that is a  
17 left thumb. The size and shape of it also indicate to  
18 me that it's a left thumb.

19 I don't know -- there was a demonstration done  
20 previously using the door standard. I don't know if you  
21 want to replicate that demonstration or ... I don't  
22 know.

23 Q. Just give me a moment, please. (**Pause**)

24 THE CHAIRMAN: What about the ridge flow in the top part of  
25 the mark? It seems to be consistent with your drawing

1 of the ridge flow for a right thumb.

2 A. Yes, that's the confusion, yes, and yet that's something  
3 that you have to be aware of when you're ... everything  
4 is just a pure guide, fault lines, anticlockwise,  
5 spirals, size, shape. You have to be very careful when  
6 you're doing these examinations. It looks like that  
7 should be a right thumb but it's not. It's just the way  
8 the mark has been placed on the door surround.

9 MISS CARMICHAEL: At the risk of asking a very simplistic  
10 question here, just to try to understand how you say the  
11 thumb was placed on the lower part of this mark,  
12 Mr MacPherson, can you show us on this image where the  
13 thumbnail would be.

14 A. This is just a guesstimate. I don't know if you want me  
15 to paint it or wherever ... that's the area.

16 **(Indicated)**

17 Q. I appreciate the difficulties of drawing in free hand  
18 but in answer to my question about the thumbnail what  
19 you have drawn is a shape, free hand, in green lines at  
20 the top right-hand corner of the page and that certainly  
21 clarifies things for me, Mr MacPherson, so I will not  
22 labour this topic any further but thank you for that.

23 Can we now save this image, please, with  
24 Mr MacPherson's markings on it.

25 MISS BAHRAMI: That's saved as FI2710.06.

1 MISS CARMICHAEL: If you can take the image down and go back  
2 to the last page of DB0004, which is how we got to this  
3 topic.

4 This was, I hope you will take from me, a sentence,  
5 the last sentence, that does not appear in other  
6 reports, in the other report in the case. Do you recall  
7 whether anybody asked you to include this description of  
8 the orientation or a description of the orientation in  
9 the report?

10 A. Yes. Who it was I don't recall but we were certainly  
11 what our feelings were on how the mark had been  
12 deposited on the door surround and that's how we came up  
13 with this. I mean, obviously I can't go any further but  
14 I don't know whether it was facing in the way or was  
15 coming out the bathroom or whatever I wasn't there  
16 but ...

17 Q. As to why that sentence comes to be absent from the  
18 later report, can you help us with that?

19 A. It's just a **pro forma** joint report that we made up at  
20 the time. Obviously, we've done this for someone. We  
21 would pass this on. What they did with it after that  
22 was not down to us. If the prosecution services had  
23 wanted us to add that in to a report we would have done  
24 so.

25 Q. But do you recall being asked specifically to do a

1 report without that sentence in or anything of that  
2 sort?

3 A. No, but the joint reports or **pro formas** didn't have this  
4 information in it. Perhaps that's why it was asked for.  
5 I don't recall.

6 Q. I will leave DB0004 and ask you about another document  
7 where we are not necessarily entirely clear where it  
8 fits into the picture and see if you can help us with  
9 that, Mr MacPherson.

10 Could we look, please, at DB0011. Scroll through to  
11 the third page, first of all.

12 We see that that is production number 180 from the  
13 case against Ms McKie. If we carry on further, we see  
14 the front page of an SCRO photograph booklet but unlike,  
15 I think, most of the booklets in the criminal cases we  
16 don't see four signatures, we only see two, for yourself  
17 and Mr Stewart.

18 A. Yes.

19 Q. I think you were asked yourself when you gave your  
20 statement as to how this apparently extra production  
21 came into being and at paragraph 167 onwards you were  
22 being asked about it under the reference SG0125 but it  
23 is the same document as this.

24 You say in paragraph 167 that it might have been  
25 prepared because of the March report that we've looked

1 at and you weren't sure why it was signed only by two  
2 experts.

3 There are at least two other possible explanations  
4 which have emerged for this document being in existence  
5 and I would like to put each of them to you for comment.

6 The first of them I have taken from something that  
7 Mr Stewart said at Ms McKie's criminal trial in his  
8 evidence. He thought that it may have been meant to  
9 illustrate a comparison of prints taken on 18th February  
10 but, in fact, used the prints that were taken on the  
11 earlier date, 6th February, because the 18th February  
12 prints had been poorly taken.

13 Is that an explanation that would ring any bells  
14 with you?

15 A. I'm sorry, it's possible. I really don't know why it  
16 was only signed by two people.

17 Q. Can I put one other possible explanation to you for your  
18 comment as well, Mr MacPherson, and it might be help you  
19 at this point to see CO0345.13.

20 What we have here is an excerpt from Mr Wilson's  
21 internal disciplinary report from Strathclyde Police and  
22 what we have at paragraph 6.43 is mention of you  
23 confirming that you positively identified photograph  
24 impression number Y7 as being identical with the left  
25 thumbprint of Detective Constable Cardwell and it says

1           you have provided the relevant book containing the  
2           fingerprint for comparison.

3                     If we take 6.44 and 6.45 together, please, we have  
4           Mr Stewart similarly confirming his identification of Y7  
5           and signing the relevant book. Again, if we take that  
6           down we then have a mention of Ms McBride at 646 but no  
7           mention of her signing. I won't bring up the statement  
8           from Mr Wilson but I think I am right in saying that  
9           Mr Wilson confirmed to the Inquiry that notwithstanding  
10          the content of a slightly confusing police statement he  
11          had not had a book that was signed by Ms McBride as  
12          well. I will corrected if I am wrong about that.

13                    What that may suggest is that a book bearing the two  
14          signatures of yourself and Mr Stewart may have been  
15          handed over to Mr Wilson for the purposes of his  
16          investigation. Is that something --

17    A.   Well -- sorry.

18    Q.   Is that something that you recall happening?

19    A.   From reading that, it seems likely. I think I've said  
20          in my statement because it was only for information and  
21          that may tie in with this, that only two of us signed  
22          it. Maybe only two needed to sign it at the time. So  
23          that may be a possible explanation for it.

24                    Was there a report that went with this book?

25    Q.   I think not, is the answer. My focus in looking at this

1 has been trying to tie in the book with it. What I can  
2 say is the Inquiry asked if Mr Wilson or Strathclyde  
3 Police had retained that book with the report and the  
4 answer to that was no, Mr MacPherson.

5 If we scroll on another page I may be able to help  
6 you with the report question. There is certainly, third  
7 from the bottom of the section, just before 8, I  
8 think --

9 A. Yes, that looks as if it's for the Asbury trial. I have  
10 to say over the years all these reports, production  
11 books, they've all become mixed up over the years so I  
12 wouldn't have prepared the book unless I was asked by  
13 someone in authority to do so and that's what I did.

14 Q. I would like to put up, please, an image of what was  
15 production 152 in Mr Asbury's trial, which was a book  
16 prepared relating to Y7. The image would be ST0006.7  
17 alongside the image from production 180. I think we  
18 have a pre-prepared image of FI2710.02. So if we can  
19 just bring up on the right what is on the screen,  
20 please, what we are seeing at the top is image  
21 ST0006.007. We should have originals for you to look at  
22 as well here but for the purposes of those who are  
23 viewing on the as screens I will give go on with the  
24 description here, the top image is from what was  
25 production 152 and the bottom image is from production

1 180, which is what we have just been looking at. I hope  
2 we have got original images for you to look at.

3 **(Handed)**

4 If you just want to take a moment with those so you  
5 are happy with looking at what we are looking at as  
6 well, Mr MacPherson. **(Pause)**

7 Would you agree that the chartings in each of these  
8 seem at least to be very similar to each other and  
9 certainly to seek to identify the same points as between  
10 the two booklets?

11 A. Yes, that appears correct, yes.

12 Q. Again, correct me if I am wrong but the only difference  
13 that I can detect between the two is that in production  
14 152 the picture of Y7 itself seems to be located  
15 slightly further up the image, if I can put it that way,  
16 than its equivalent in 180?

17 A. Yes. They basically look identical. The charting PC  
18 had a facility where the images would be stored for a  
19 certain period of time and it may be -- I'm not saying  
20 for definite -- but it may be I was asked to prepare the  
21 bottom one, which is the one signed by two people, I may  
22 have been asked to provide a further enlargement,  
23 production, whatever and it may be that rather than go  
24 through all the bother of basically marking it up again  
25 the stored image has simply been printed out again.

1 Q. That is something that could happen, you could simply be  
2 pressing the button and essentially getting the same  
3 thing out?

4 A. I can't remember how exactly it worked but obviously  
5 they are not the exact same. You had to recapture the  
6 area again, I think. It may be that the area was  
7 slightly different.

8 Q. I was going to ask you how, if it were simply a case of  
9 pressing the same button, it would come to be that we  
10 see the difference between the two images of Y7 that we  
11 see there?

12 A. No, I don't think it was just a case of pressing a  
13 button. You had to go through some of the system to  
14 basically print out another copy.

15 Q. If I can explore that a little further as to how far  
16 through the system you would have to go, would you for  
17 example have to mark each of the points on again or is  
18 that something that you would be able to avoid on this  
19 second run through?

20 A. Well, it doesn't look as if I have. They look exactly  
21 the same, so ...

22 Q. But do I understand you correctly to be saying there may  
23 be some point in the process in terms of the section of  
24 the image that you capture that may vary as between the  
25 two?

1 A. It's very similar as to the IT stuff you have here. You  
2 have to capture a certain area or a smaller area and it  
3 blows it up in a, sort of, half-decent way. If you go  
4 too big, it pixillates. It's just exactly the same as  
5 what's happening here. So that's from memory. That's  
6 what I remember anyway.

7 Q. Again on the image appearing further up on production  
8 152 than it does on the image of Y7 on 180, it follows  
9 that the charting must be adjusted to some extent, if  
10 only to allow the lines to be extended sufficiently far  
11 for us to see them and the numbers in the positions that  
12 we do in 180. Would that be correct?

13 A. I don't know. I can't help you any further about that.  
14 Basically that's what I remember and, sorry, that's ...

15 Q. If you cannot assist us further, I will not ask you any  
16 more questions about that.

17 I would like to ask you now, please, about a  
18 production that was prepared for Shirley McKie's trial  
19 using an arrest form from March 1998. Again, we have an  
20 original of that for you to look at. The rest of us, I  
21 think, can look at DB0012.6. The charting here -- I  
22 think it is not disputed -- is different from the ones  
23 we have seen in the previous items and it uses the  
24 arrest form image of Ms McKie's fingerprint.

25 Would I be right in saying that the known left

1 thumbprint used in the last two items we looked at,  
2 production 152 and 180, was a plain impression rather  
3 than a rolled impression?

4 A. I believe so, yes.

5 Q. What we see on the right of this image, can you help me  
6 as to whether it is a plain impression or a rolled  
7 impression?

8 A. I don't know.

9 Q. What I can't give you, unfortunately, is an original  
10 fingerprint form because I understand those are  
11 elsewhere at the moment, but what I can do, and it may  
12 be of some assistance to you at least, is put up on  
13 screen DB0009.3.

14 I understand there may be a high definition ... if  
15 we put up DB0009H.3 I think we may get a better image  
16 for Mr MacPherson. I do not know if it assists you at  
17 all to have the left thumb enlarged on this. I am not  
18 sure how well it will enlarge for you.

19 A. Yes, it certainly looks like the rolled, yes.

20 Q. So it looks as if the rolled print has been used  
21 in that.

22 A. Yes.

23 Q. Can you recall whether using the rolled image made any  
24 difference to your assessment of matters when you came  
25 to use it for the charting for production 189?

1 A. My assessment --

2 Q. Did anything new reveal itself to you? Did your view  
3 alter in any way at all by reason of using the rolled  
4 impression for this rather than the plain impressions  
5 that you had used in the previous production?

6 A. The only difference that I recall was that we didn't use  
7 exactly the same characteristics as I'd used previously.

8 Q. I think, again we know that there is one characteristic  
9 from the previous production that is not used and a new  
10 one that comes in and I think that probably falls more  
11 to Mr Moynihan's chapter than mine to investigate that  
12 further with you. I suppose my question to you is a  
13 more general one, as to whether you found this of any  
14 particular assistance?

15 A. No, obviously, again to illustrate the enlargement, I've  
16 used the best thumb, there are only two thumbs, but  
17 obviously if you want to highlight the plain impression  
18 of left thumb it may give you an idea of why I used the  
19 rolled impression.

20 Q. Yes, certainly. Please, we take that out to the larger  
21 form and identify the plain left thumb which is just on  
22 the bottom there.

23 A. It seems slightly cut-off towards the right. So I would  
24 believe that's why I've used -- yes. Basically, it's  
25 cut off some of the characteristics that I would be

1 using so -- maybe just one or two -- but I've obviously,  
2 again to assist the court, I've used the clearest  
3 impression.

4 Q. So what that would come to be for you is a choice  
5 between what you thought the better of the two images  
6 was from this particular arrest form?

7 A. From that form, yes.

8 Q. There is just one further matter I would like to ask you  
9 about before I hand over to my learned friend,  
10 Mr Moynihan. That is about your meeting or meetings  
11 with Mr Murphy (now Sheriff Murphy) before Shirley  
12 McKie's trial?

13 A. Yes.

14 Q. If I can take you to paragraph 172 of your statement.  
15 That would be page 39 of F10055, page 39 on to page 40,  
16 what you tell us is that prior to **HMA v McKie** you say:

17 "We spoke to a representative of the Crown."

18 If I can just clarify who do you mean by "we"?

19 A. It was Mr Charles Stewart.

20 Q. And yourself?

21 A. And myself, yes.

22 Q. You say you believe it was Mr Sean Murphy:

23 "It was a brief discussion regarding the fact that  
24 there was an expert disagreed with our opinion on mark  
25 Y7. I don't recall a discussion about the basis for our

1 opinion or looking at any production books, et cetera,  
2 with the Crown representative. I believe we were shown  
3 Mr Pat Wertheim's enlargement of mark Y7 with a brush  
4 stroke through it, which had a clear plastic overlay  
5 attached to it. There was no discussion about the best  
6 way to present my evidence; Charles Stewart had  
7 discussions with the Procurator Fiscal."

8 A. Yes.

9 Q. There are a number of parts of what Mr Murphy (now  
10 Sheriff Murphy) has told the Inquiry which I would like  
11 to put to you for your comment and to see if it  
12 refreshes your recollection or alters it in any way.

13 The first point is that Sheriff Murphy tells the  
14 Inquiry in his statement that he first met with you and  
15 Mr Stewart on 30th March 1999, that being the earlier of  
16 the two meetings that he had with you.

17 What he tells us is that the meeting was a general  
18 briefing for him where you and your colleague explained  
19 to him what you were looking for when you were examining  
20 a fingerprint and he noted that at that meeting that you  
21 would like time to consider defence materials and  
22 methodology.

23 Do you recall that earlier meeting that is at a  
24 stage before Mr Wertheim's production has come in? Do  
25 you recall that taking place at all?

1 A. No, I don't. I don't recall it. I don't know if  
2 Mr Murphy said he attended SCRO or something for that  
3 meeting, I don't know, but I certainly don't remember  
4 it.

5 Q. But would you accept that that is something that may  
6 well have happened if Sheriff Murphy is telling us that  
7 it did?

8 A. It may well have done but I don't recall it.

9 Q. If we can move on then to the second meeting, that was  
10 the meeting -- well certainly, the second meeting as  
11 Sheriff Murphy has it -- which was a meeting of an  
12 afternoon in a courtroom with yourself and Mr Stewart.

13 A. Yes.

14 Q. This was at a stage when the defence production from  
15 Mr Wertheim had become available.

16 A. Yes. What I remember, I think Mr Swann was shown a  
17 booklet. All I remember was seeing the exact same as  
18 Mr Swann so I was --

19 Q. Sorry, I am becoming a little confused. You are  
20 mentioning seeing something that was the same as  
21 Mr Swann?

22 A. Yes. He was handed a booklet, a booklet from  
23 Mr Wertheim with about three or four pages in it.

24 Q. I am sorry, was that during the Inquiry that you saw  
25 Mr Swann's statement?

1 A. Yes.

2 Q. Sorry, I misunderstood you.

3 A. All I remember seeing -- again I could be wrong but all  
4 I remember seeing was the photograph with the brush mark  
5 through it and then a plastic overlay with some drawing  
6 on it. That's all I remember seeing.

7 Q. What you told us in the passage that I have just read  
8 out is that you don't recall any discussion about the  
9 basis for your opinion or looking at production books.

10 Sheriff Murphy's account was one of perhaps quite a  
11 detailed discussion with you about Mr Wertheim's  
12 production and that there was discussion particularly of  
13 the top part of the mark being fraught with difficulty  
14 and that it shouldn't be relied on.

15 Do you remember any discussion of that sort with  
16 Mr Murphy?

17 A. That would tie in with, basically, what I've said about  
18 10 minutes ago about I've always felt that the mark was  
19 insufficient.

20 Q. Would you accept that you may have had a fairly lengthy  
21 and detailed discussion with Mr Murphy that afternoon?

22 A. That's not how I remember it. I remember it as just a  
23 brief discussion. I went down, there was a challenge  
24 to -- I think I spoke already about this morning or this  
25 morning about a challenge to the evidence. I'm not too

1           sure what the challenge was but I don't recall it being  
2           a lengthy meeting.

3       Q.    You recall being handed the defence production?

4       A.    Yes.

5       Q.    You would understand from that that that was reflecting  
6           a view that a defence expert was going to be putting  
7           forward.

8       A.    It was to do with basically this was a bifurcation, we  
9           had it marked as a bifurcation, he had it marked as a  
10          ridge ending. That sort of thing. That's what I  
11          remember.

12      Q.    But you would understand that this production had been  
13          made because somebody else, Mr Wertheim, was going to  
14          come along and contradict what you and Mr Stewart were  
15          going to be saying about the identification of Y7?

16      A.    Yes.

17      Q.    There was discussion of the content of that production?

18      A.    There would have been, yes.

19      Q.    Do you recall discussion about the process of running  
20          the lines along the acetate tracing?

21      A.    I've heard the phrase "run the ridges" but I don't  
22          recall them using that phrase at the time. I know  
23          Mr Wertheim's used it before.

24      Q.    Leaving aside the use of the phrase -- and I am sorry if  
25          I have confused matters by using that, Mr MacPherson --

1 do you remember a discussion about the lines that  
2 Mr Wertheim had drawn on the production that you were  
3 shown that day?

4 A. Only in what I've said, "That looks like a bifurcation;  
5 that looks like a ridge ending". That was all.

6 Q. Do you remember either yourself or your colleague  
7 perhaps suggesting to Mr Murphy that this process of  
8 tracing the ridges on the acetate could introduce an  
9 unnecessary element of human error?

10 A. Well, for me, fingerprints are not suitable for  
11 geometrical drawings. The skin is flexible, elastic.  
12 For me, because you can draw a line, that's still your  
13 opinion of how these ridges flow. I don't know if it's  
14 some sort of confirmation you're looking for, the way  
15 you've drawn the lines, but again when I started in 1970  
16 again in the handbook that we were handed out is  
17 "fingerprints aren't a matter of mathematical precision"  
18 and that's always stuck with me.

19 Q. But if Sheriff Murphy remembers a discussion about  
20 whether or not it was appropriate to carry out this  
21 tracing process, he might be right about that?

22 A. Yes, he might be right.

23 Q. Similarly, if he remembers discussion about the  
24 striations or markings on Mr Wertheim's image at that  
25 meeting, again he might be right about that?

1 A. Yes.

2 MISS CARMICHAEL: I don't have any more questions for you at  
3 the moment but Mr Moynihan will certainly have some  
4 questions at this point.

5 THE CHAIRMAN: I just wonder would it be sensible to take  
6 the short break now and then let Mr Moynihan begin at  
7 2.55.

8 **(2.45 pm)**

9 **(A short break)**

10 **(2.55 pm)**

11 **Examined by MR MOYNIHAN**

12 Q. Mr MacPherson, just so that others understand, the split  
13 that I have agreed with Miss Carmichael -- I expected  
14 your evidence would have started on Friday of last week  
15 and not today -- was that she would explore the general  
16 factual sequence and then I would simply carry on with  
17 you as I had with other experts and discuss the analysis  
18 of Y7 and QI2.

19 A. Okay.

20 Q. So that explains the tag match that has just taken place  
21 in the interval.

22 I was going to proceed in the order Y7 first and  
23 then QI2, before I come I wish to actually look at some  
24 of the general points just as an introduction to Y7.  
25 What I want to begin with is an understanding of the

1 16-point rule as you were applying it. I follow that  
2 the 16-point rule looks for 16 points in sequence and  
3 agreement and we will look at what that means  
4 specifically when we come to look at Y7 and Q12.

5 Where I want to begin the discussion though is the  
6 understanding of differences. If I understand it  
7 correctly, at least the proposition I have been putting  
8 to witnesses and I have had a couple of different views  
9 of this so I put it to you in general, the 16-point rule  
10 is that for a unique identity to be proven there has to  
11 be 16 points in sequence and agreement between the  
12 latent and the known print and no unexplained  
13 differences.

14 First of all, is that a formulation of the 16-point  
15 standard that you would agree with?

16 A. Yes.

17 Q. Obviously, there can be a variety of reasons for a  
18 difference, the term you used earlier on today is that  
19 characteristics can take on different appearances due to  
20 a variety of circumstances, even the same characteristic  
21 can take on different appearances, for example different  
22 inked impressions of the same finger can have different  
23 appearances but just what I am wanting to understand  
24 from you is where you stand in relation to the existence  
25 of inexplicable differences. That is differences for

1 which there is no known or immediate explanation.

2 Can you conceive of the possibility that you might  
3 have as many as 16 points truly in sequence and  
4 agreement between a latent and a known and yet there to  
5 be no match because of a single unexplained difference?

6 A. Personally, no. Particularly with LiveScan now you have  
7 sometimes rogue characteristics that you just cannot  
8 explain why they are there. I've seen it on one or two  
9 occasions, a ridge ending or a bifurcation, possibly  
10 towards the periphery of the print, right enough, that  
11 you just cannot explain. But as I think I tried to say  
12 earlier that doesn't negate the hundreds of thousands of  
13 other characteristics that are contained within the  
14 other nine impressions. So as far as Y7 is concerned  
15 the area that I identified, there were no differences.

16 Q. First of all, you have answered my question by reference  
17 to LiveScan, electronic or digital fingerprints?

18 A. Mm-hm.

19 Q. In 1997 with Ms McKie, and for that matter Marion Ross,  
20 you were dealing with inked prints.

21 Is your answer the same, that if you had 16 points  
22 in sequence and agreement between a latent and an inked  
23 print of a known individual you would regard it as  
24 impossible to have an unexplained difference?

25 A. That would be my take on it, yes.

1 Q. I appreciate that you covered with my learned friend,  
2 Miss Carmichael, the question whether there can be any  
3 minimum number back then for an identification in  
4 fingerprint practice.

5 I understand your position to be that, depending on  
6 the print, it could be between 10 and 16 points is the  
7 minimum number consistent for unique identity.

8 Is that correct?

9 A. Yes. Well, I don't think I specifically said -- I can't  
10 remember what I said, if I would be happy with 10 or  
11 above. I mean, you would have to show me the mark  
12 itself whether I would be happy with maybe less than 10.

13 The problem with the AFR system now it searches  
14 purely on characteristics and what you have to be very  
15 wary of is what some folk refer to as lookalikes. There  
16 may be three or four characteristics that are very  
17 similar but they are not in sequence and agreement and  
18 with the introduction of the AFR you have to be very  
19 careful with, when you've sent back a respondent list of  
20 15 to 20 persons. It searches purely on  
21 characteristics, not on pattern or -- you can put that  
22 in but sometimes you would end up with what was termed  
23 as lookalikes, which they may have characteristics which  
24 are similar but they are not actually in sequence and  
25 agreement.

1 Q. The term you have used is "lookalikes", the term I have  
2 used with other witnesses is a close non-match?

3 A. Yes.

4 Q. It is the same term?

5 A. Yes.

6 Q. What I am interested in is plainly your view is if you  
7 have as many as 16 points in sequence and agreement then  
8 any alteration in appearance, by which I mean that's a  
9 difference, cannot be inconsistent with a match because  
10 16 points in sequence and agreement is sufficient for a  
11 unique identity?

12 A. Yes.

13 Q. Correct?

14 A. Yes.

15 Q. What I am trying to understand is whether you would say  
16 the same proposition can be true with fewer than  
17 16 points in sequence and agreement.

18 Did I understand you to say that the same can be  
19 true; in other words, if you have a sufficient number of  
20 characteristics in sequence and agreement, you could  
21 arrive at a conclusion of a unique identity even with  
22 the presence of one unexplained difference?

23 A. Yes, yes. That would be my view, yes.

24 Q. Where we enter the grey area is what a sufficient number  
25 of common characteristics would be for that conclusion?

1 A. Yes -- very difficult, yes.

2 Q. I will not press you because I think it satisfies me

3 that I understand what the principle is that we are

4 working with.

5 What --

6 A. Sorry, it's just when you get to a sufficiency of

7 characteristics that are in sequence and agreement you

8 know within yourself that the two have been made by one

9 and same person but where that comes in that is all down

10 to the quality, et cetera.

11 Q. What I am, in fact, wanting to concentrate on is the bit

12 that is silent in all of that. You could reach that

13 inner conviction, if I can call it that, even if there

14 is staring you in the face a difference between the two

15 that you cannot explain?

16 A. It would have to be outwith that area. You couldn't

17 have, say, 11 characteristics and in the middle of that

18 area there's one characteristic that is totally alien.

19 I would say then you couldn't make that identification.

20 It's where there's movement, like this print, where

21 there's movement, distortion, et cetera.

22 Q. Let us just help, for sake of argument. If you give me

23 just a second ... I don't know if you still have

24 production 152. **(Handed)** ST0006H, if we could have

25 that up, please. Just keep proceeding and I will tell

1           you when to stop. It is probably the last image. Just  
2           stop there.

3                   I have brought up ST0006H.007. That is the charting  
4           that was prepared for David Asbury's trial. It was also  
5           one of the productions in Ms McKie's trial. So it is  
6           common to them both and, as I understand it, it may well  
7           be the earliest charting. Correct?

8    A.    Yes.

9    Q.    While we are just looking at it, this would be an area  
10       of Y7 and Ms McKie's thumbprint which you have concluded  
11       has 16 points in sequence and agreement and no  
12       unexplained differences?

13   A.    That's correct.

14   Q.    With other witnesses we have called this sort of area a  
15       target area. Is that a term that you are comfortable  
16       with?

17   A.    Well, just characteristics that would catch my eye, I  
18       think I talked about previously, yes.

19   Q.    Let us take one step back from this. You have looked at  
20       Y7. You obviously have to start by looking at Y7 as a  
21       mark.

22   A.    Yes.

23   Q.    My learned friend asked you about ACE-V?

24   A.    Yes.

25   Q.    So we are looking at the original analysis as that

1 acronym has now come to be understood.

2 Your friend, Mr Geddes, simply said before the

3 acronym was coined it was just common sense.

4 A. Correct.

5 Q. In 1997, would you yourself have said that you practised

6 ACE-V or would you simply say you were practising as you

7 had been trained and others may have called it ACE-V but

8 you practised as you had been trained?

9 A. Yes.

10 Q. You practised as you had been trained?

11 A. Well, as I think I tried to say earlier, ACE-V was just

12 verbalising what you did, basically, the same with

13 ridgeology. Basically nothing is new under heaven and

14 earth, especially ridgeology. I think we have already

15 heard about Edmund Locard back in 1912 identified seven

16 or eight cases purely by the means of poroscopy. He

17 also was a sort of leading expert in edgeoscopy. In his

18 book, the Criminalistic, he discusses seven or eight

19 cases that he actually identified using pores on their

20 own with no Second Level Detail. So if anybody could be

21 called the father of ridgeology it would be probably

22 Edmund Locard.

23 Q. I don't want to confuse things by introducing acronyms

24 that may have had no actual relevance to what you were

25 doing.

1                   Let us then start then in the way that Y7 has been  
2                   looked at. If I understand Mr Swann's evidence  
3                   correctly, as the best sort of analogy for me to use,  
4                   what he said is he would look at a mark such as Y7 and  
5                   Q12. He would need to look at it first because  
6                   otherwise he does not know what he is searching for.  
7                   When he is looking at the mark he is looking at its  
8                   overall pattern, is it a whorl? Is it a loop? He is  
9                   trying to decide that.

10       A.    Yes.

11       Q.    He is also trying to decide if there is a target area to  
12           home in on, an area of, a combination of particularly  
13           clear characteristics?

14       A.    Yes, characteristics that would catch your eye, yes.

15       Q.    I do not really want to put words in your mouth but is  
16           that as you would have practised with the initial  
17           analysis of the mark, to look at its overall pattern,  
18           having looked at its overall pattern to decide an area  
19           that you would home in on?

20       A.    Absolutely, yes.

21       Q.    Having homed in on an area, you then carry out this  
22           binocular comparison you have described between that  
23           mark -- it happens to be Y7 in this case or Q12 -- and a  
24           series of suspect for elimination prints?

25       A.    Yes.

1 Q. You would, first of all, have been considering the  
2 overall pattern of the suspect or elimination print --

3 A. Yes.

4 Q. -- and are you also in your binocular comparison looking  
5 at the area you have homed in on, the target area?

6 A. Yes.

7 Q. Let us just assume for sake of argument that in the  
8 target area you find, as we see on the screen just now,  
9 16 points in sequence and agreement between the two, do  
10 you stop at that point?

11 A. Well, you certainly have confirmed identity by that  
12 time.

13 Q. So you have confirmed --

14 A. But I have I think already said this morning that you  
15 glean all information that you possibly can from the  
16 mark before you begin your comparison.

17 Q. Yes, but let us look at what we have got on the screen  
18 just now, which is ST0006H.007. There is what I am  
19 calling a target area. It has got 16 points in sequence  
20 and agreement. You would agree with me that it's only  
21 part of the mark Y7?

22 A. Yes.

23 Q. It is only part of Ms McKie's print?

24 A. Correct.

25 Q. However, if I understand your position, because there

1 are as many as 16 points in sequence and agreement with  
2 no differences in that locality --

3 A. That area, yes --

4 Q. -- these two must be -- must be -- identical?

5 A. Yes.

6 Q. There would, therefore, be no need to carry out a close  
7 study of the remainder of Ms McKie's thumbprint?

8 A. Well, because of movement -- I was going to come on to  
9 how I see the movement in the mark but you seem to  
10 have -- I mean, I can still do that eventually but there  
11 was one or two characteristics which weren't in  
12 alignment but I perceived that as being down to movement  
13 but, as I said already, the type of the print for me was  
14 insufficient. It's not that I ignored the  
15 characteristics but they were not differences because of  
16 movement.

17 Q. Yes, we will come to your charting just in a moment but  
18 I just want to understand this.

19 First of all, if I understand what you are saying,  
20 you would not confine your attention to the area that  
21 happens to be charted in these images?

22 A. No, you would be looking at the whole mark itself. It  
23 could be that it's two marks, one placed on top of the  
24 other. It should be superimposition. I think  
25 Mr Leadbetter showed you some very good examples of the

1 left-hand side of a mark and the right-hand side of a  
2 mark but there was no perceivable difference or there  
3 was no perceivable movement but the left-hand side of  
4 the mark was identical with one person and the  
5 right-hand side of the mark was identified as another  
6 person and that does happen. There are some subtle  
7 movements in marks that you just cannot explain.

8 Q. That takes us then to the next stage. If we go outwith  
9 the areas that are on these charts, did you study them?

10 A. Yes.

11 Q. On both Ms McKie and Y7?

12 A. I would think I would have done, yes.

13 Q. Why do you say you think you would have done?

14 A. Well, I would have done, yes.

15 Q. First of all, the reason why I am asking you did you is  
16 this: if 16 points in sequence and agreement in a  
17 limited area like this is enough for a unique identity  
18 even if you find elsewhere an inexplicable difference,  
19 one might think you wouldn't even bother to look  
20 elsewhere because it wouldn't make any difference to you  
21 what you find elsewhere?

22 A. It's possible it wouldn't make any difference to me but  
23 it's for your own satisfaction.

24 Q. When you looked elsewhere did you find elsewhere  
25 appearances that were inconsistent as between Ms McKie

1 and Y7?

2 A. I can't remember if I saw -- now you're speaking  
3 specifically about the Rosetta characteristic or ...?

4 Q. Not yet.

5 A. No.

6 Q. I am trying to avoid the word "differences". Did you  
7 find any appearances in the remainder of Ms McKie's left  
8 thumbprint and Y7 that were inconsistent between the  
9 two? Do you remember?

10 A. I don't remember, really.

11 Q. As you may recollect -- this is why I am being very  
12 careful -- Mr Swann, I understand, didn't even initially  
13 look outwith this target area because what we see on the  
14 screen is something like the photocopy he was given. So  
15 he didn't even know initially that there were  
16 differences. Do you follow?

17 A. You said "differences" again but --

18 Q. Yes, I know I've said "differences".

19 A. -- I don't think there were differences.

20 Q. The reason why I say "differences" is when it comes to  
21 the issue whether the difference can be explained or  
22 not, one needs to have the question in mind, first of  
23 all, namely there are differences and the question is  
24 can I explain them or not and, if I understand  
25 Mr Swann's evidence, he did not even know at this stage

1           because he hadn't looked elsewhere there was a question?

2     A.    Yes.

3     Q.    Let alone had he considered the answer?

4     A.    Right.

5     Q.    This is what I want to know from you: at the time of

6           your initial identification of Ms McKie's left

7           thumbprint in February 1997, were you conscious that

8           there was a question over the remainder of the print or

9           not?

10    A.    I can't remember. Sorry.

11    Q.    When did you first yourself become aware that there was

12           an issue about the remainder of the print?

13    A.    I'm not too sure.

14    Q.    If I show you -- and I can give you the original --

15           Mr Wertheim's DB0172H, so that is defence production

16           number 2. If we proceed through it, it is the one with

17           green circles we will stop at. So it is DB0172H.008.

18           This is an image of Y7, over which we lay acetates

19           and if you can lay the acetate such that you can see it

20           as on the screen just now -- do you see that?

21    A.    Yes.

22    Q.    Do you recollect this from the criminal trial, the McKie

23           trial?

24    A.    As I said earlier, I believe I saw just this page at the

25           meeting with Mr Murphy.

1 Q. You believe you saw just this page?

2 A. I think so, yes. That's what I recall anyway.

3 Q. Because if I understand it correctly, what this shows is

4 Mr Wertheim's attempt prior to Ms McKie's trial to do

5 three things: firstly, to plot on Y7 the 16 points that

6 were being relied on. It happens to be production 189

7 not 152 that you have before you but it matters not. So

8 he is trying to plot the points that you and your

9 colleagues were relying upon, yes? Do you agree?

10 A. Yes, it looks like that.

11 Q. Secondly, he is actually trying to run the ridges and to

12 see if he can reproduce by reference to the underlying

13 image of Y7, a coherent interpretation of the ridge

14 structure consistent with pinpointing these as prominent

15 characteristics, yes?

16 A. Yes.

17 Q. That running of the ridges, tracing of the ridges, is

18 something that you and your colleagues never did do?

19 A. No.

20 Q. The third thing that Mr Wertheim has done is, having

21 studied all the material, he has pinpointed by green

22 circles four points of difference, one of which is the

23 Rosetta characteristic?

24 A. Yes.

25 Q. If I simply had been the person, been Sheriff Murphy

1           that first time of meeting you when I handed you that  
2           sheet, would this have been the first time you had  
3           really studied the top of the mark closely to see if  
4           there were specific differences?

5     A.   No. I've already said I examined everything within the  
6           mark. You have two characteristics below what's become  
7           known as the black blob or the blob. As I said earlier,  
8           I couldn't count between that one characteristic or  
9           possibly two characteristics up to the top right. So  
10          basically for me it was insufficient. Two  
11          characteristics. I didn't ignore them, I looked at them  
12          but two characteristics in isolation and then another  
13          two characteristics in isolation did not invalidate my  
14          mark.

15                 Mr Wertheim has run the ridges but he shows no  
16                 cognisance of the movement within that mark and I  
17                 believe there is movement and that would explain why the  
18                 characteristics have moved over.

19     Q.   Let us take it then in turn.

20                 First of all, there are in the top right between the  
21                 numbers 14 and 15, there are three green circles in an  
22                 arc. Yes?

23     A.   Yes.

24     Q.   Those happen to be above and to the right of the area  
25          that's blank in the ridge tracings, the area that

- 1 Mr Wertheim refers to as the blob?
- 2 A. The blob, yes.
- 3 Q. So that if I take your point of reference, which I
- 4 understand to be the banana?
- 5 A. Yes.
- 6 Q. It so happens confusingly in production 189 to be called
- 7 point number 8 but for us it's point number 9.
- 8 A. Correct.
- 9 Q. Is that correct?
- 10 A. Yes.
- 11 Q. Your point is that because of the blob in the middle you
- 12 can't count ridges up to any one of these three --
- 13 A. Correct.
- 14 Q. -- so that you can't form any view about the association
- 15 between those three points and the core?
- 16 A. Correct.
- 17 Q. However, the Rosetta is beneath the blob?
- 18 A. Yes.
- 19 Q. You can count the ridges from the top of the banana to
- 20 the Rosetta?
- 21 A. Again, if at some point we were to show you these on the
- 22 overhead projector and I'll show you the ridge count and
- 23 I'll show you that it's out.
- 24 Q. What is out?
- 25 A. The ridge count is out to the Rosetta characteristic.

1 Q. When you say it's out, do you mean that it does not  
2 accord between --

3 A. It's not in sequence and agreement; therefore, I can't  
4 use it.

5 Q. This is what I was wanting to ask you about,  
6 Mr MacPherson. First of all, you can count the ridges?

7 A. Yes.

8 Q. Secondly, if one compares Y7 on the one hand with  
9 Ms McKie's thumbprint on the other, the Rosetta is in a  
10 certain position on Y7 relative to the core and there is  
11 no corresponding feature in the same position relative  
12 to the core on Ms McKie's thumbprint?

13 A. That's correct, yes.

14 Q. Do you accept from me that that warrants the description  
15 "a difference"?

16 A. It's an explainable difference, but it's ... yes.

17 Q. Mr MacPherson, let us just take it in stages. It is a  
18 difference.

19 A. It's not a difference contained within the area that  
20 I've identified, no.

21 Q. If we take it as literally as that, it's not a  
22 difference within the area that you have identified and  
23 established --

24 A. You see if you --

25 Q. Mr MacPherson, you have established that you would not

1 even be troubled by it because if you have 16 there has  
2 to be a unique match, even if --

3 A. Yes, that's correct.

4 Q. -- even if it is inexplicable?

5 A. Yes, that's right.

6 Q. So we come back then to it is a difference, yes?

7 A. An explainable difference.

8 Q. An explainable one.

9 What is the explanation for that characteristic, the  
10 Rosetta?

11 A. It's movement.

12 Q. What movement?

13 A. Movement either anticlockwise or clockwise -- very, very  
14 slight, almost imperceptible but there is a movement.

15 When you put two glasses on it and you've spent seven  
16 years looking at these things or, sorry, 36 years, yes,  
17 there is movement.

18 Q. If I were to look at your evidence at the criminal trial  
19 of Ms McKie would I find that you engaged with the  
20 Advocate Depute, Mr Findlay, on a precise argument about  
21 how the Rosetta had moved or did you simply discount the  
22 whole of the upper part, including the Rosetta, as  
23 something that was fragmentary and insufficient?

24 A. I think I did, yes.

25 Q. So if I put it to you the transcript says that you

1 dismissed the whole of the upper part as fragmentary and  
2 insufficient for comparison, that would be correct?

3 A. That would be correct, as far as I remember, unless you  
4 quote me now and say that's not accurate.

5 Q. Don't worry, I wouldn't mislead you. That is my reading  
6 of your evidence.

7 A. That's fine.

8 Q. So what we are now doing by focussing on the Rosetta as  
9 a point of difference which can actually be pointed to  
10 and for which some specific explanation is required, is  
11 a degree of sophistication to this argument that you did  
12 not engage in at the time of the McKie trial?

13 A. I probably didn't, no.

14 Can I just say, I don't know -- I haven't got the  
15 production in front of me but certainly the Rosetta  
16 was out to the right. I know you've spoken before about  
17 the Rosetta and the dot to the right of it and why it  
18 doesn't appear but, as far as I remember, on the elim  
19 form it was at the very edge of the print and because of  
20 pressure, et cetera, the Rosetta or the dot may not have  
21 been recorded.

22 Q. Let us look at the particular document, if we put the  
23 document we have here just to one side and bring up  
24 FI0170A. We will highlight -- this is the regular one  
25 that I use for this purpose. It is Mr Zeelenberg's

1 charting. I use it simply because it's got the  
2 convenient number 14 that points to the Rosetta  
3 characteristic, yes?

4 A. That's correct.

5 Q. We see, just if we compare side-by-side what Mr Wertheim  
6 has marked as the green arrow -- perhaps I should  
7 highlight that for comparison -- his green arrow is --  
8 you have got the original there so you can just check --  
9 his green arrow -- I can't somehow bring up thick enough  
10 arrows. **(Pause) (Indicated)**

11 Maybe that is just sufficient for my purposes. The  
12 arrow just now is on the Rosetta and we go to the other  
13 side.

14 A. Yes.

15 Q. Now, history might record that today you can debate  
16 whether point 14 as Mr Zeelenberg has marked it on  
17 Ms McKie's thumbprint is or is not the same as  
18 Mr Wertheim's green circle, yes?

19 A. Yes.

20 Q. What we have on the right-hand side is Ms McKie's left  
21 thumb from the elimination form of 6th February, yes?

22 A. Okay, yes.

23 Q. Therefore, that point was there to be observed when you  
24 first examined Ms McKie's thumb?

25 A. Yes, yes.

1 Q. Are you accepting that you did not see that association  
2 at that time?

3 A. I don't believe I did, no.

4 Q. What I am asking you -- I will give you a chance to pass  
5 over to your own charting shortly -- but because your  
6 target area was identical as far as you were concerned,  
7 and of course is below the Rosetta, yes?

8 A. Yes.

9 Q. Whether you even entertained the question about the  
10 Rosetta at that time?

11 A. I don't remember. I possibly didn't. I don't remember.

12 Q. You have some chartings that you want to display?

13 A. Yes, please.

14 Q. Perhaps with that in mind, if I let you display the  
15 chartings that you have.

16 A. Yes. Hopefully, most people have in front of --

17 Q. Give me just a second, I will explain. I think people  
18 around the hall should have copies of some chartings. I  
19 don't know if they are available for members of the  
20 public. They are about to be bring up on the overhead  
21 projector so that they can actually be seen. They are  
22 on the system.

23 A. Yes. TC2310 ...

24 Q. I am sorry, I apologise. I follow the references. I  
25 should be looking in the bottom right-hand corner. If

1 we start as you wish to start, TC2310.01?

2 A. Unfortunately, I tried to -- if people have this in  
3 front of them, if they could keep the mark on the  
4 left-hand side and rotate the mark in an anticlockwise  
5 direction using the top -- no, I don't need this  
6 rotated, sorry.

7 I tried to rotate this impression but unfortunately  
8 when it was rotated it lost some definition so,  
9 unfortunately, it's not exactly what you have in front  
10 of you.

11 If you rotate --

12 THE CHAIRMAN: I don't appear to have it.

13 A. If you rotate the mark in an anticlockwise direction to  
14 try and align there's a characteristic that is a ridge  
15 ending that looks like, basically, a sharpened spear.

16 If you can rotate that and align it with the thumb  
17 print, what -- all I was hoping --

18 MR MOYNIHAN: Sorry, I don't see, when you said there's a  
19 characteristic that looks like a sharpened ...

20 A. I am now pointing to the characteristic **(indicated)**  
21 that's like a sharpened spear.

22 Q. Let's put an arrow --

23 A. I was hoping just to go through this mark and then go  
24 through the left thumbprint without putting anything on  
25 it because once you start putting anything on it and

1 numbers, et cetera, it detracts completely from the  
2 identification.

3 Q. What we can do -- it is easy enough -- what we can do,  
4 we have done with others, is we can mark on one version  
5 so we can just record what you are referring to and then  
6 take that away and bring up a clean version of it so  
7 that we can progress from there. All I wanted to do was  
8 to record the start point of your evidence.

9 So the start point is the red dot?

10 A. Yes, but unfortunately now you have put an arrow in  
11 there which is obliterating the --

12 Q. That's okay ...

13 First of all, am I correct in my understanding of  
14 where you want to start?

15 A. Yes, that's correct.

16 MR MOYNIHAN: Can we save that image, please.

17 THE CHAIRMAN: Do you want to record it?

18 MR MOYNIHAN: Yes. It is being saved, sir.

19 MISS BAHRAMI: That's saved as FI2710.07.

20 MR MOYNIHAN: What we can do, Mr Mackenzie (**sic**), is return  
21 to the original image --

22 THE CHAIRMAN: You have become Mr Mackenzie now.

23 A. He's slightly older than me so --

24 MR MOYNIHAN: I apologise. I do this all the time. I get  
25 the two names confused. I do apologise. You call me

1 Mr Carmichael if you wish!

2 TC2310.01 I believe is the original image and if you  
3 can just enlarge it. So we are now back to a clean  
4 image.

5 A. So basically the starting point and adjacent to what  
6 I've referred to as a sharpened spear there is a v-shape  
7 one ridge ending above it and one ridge ending below it.  
8 We then go intervening ridge and we come to what is a  
9 Galton detail, namely a spur, which is a bifurcation  
10 going to the left and it goes along and stops a short  
11 distance.

12 If we follow down the ridge from the bifurcation we  
13 come to a ridge ending up and underneath, again with one  
14 intervening ridge, we have an island or a long  
15 independent ridge. Underneath that, again one  
16 intervening ridge, there's a small, I have to say, which  
17 looks like an incipient ridge.

18 Again we go one intervening ridge and there is  
19 another long island. I believe those are  
20 characteristics 12 and 13 on the SCRO chart that was  
21 prepared.

22 Q. Which are characteristics 12 and 13?

23 A. That one **(indicated)** and that one **(indicated)**.

24 Just below that there's a bifurcation and if we  
25 follow that ridge round, it comes to another bifurcation

1 so that would be points 10 and 11. Interestingly, in  
2 between the two characteristics there's damage to the  
3 ridge and we will be able to look at that on Shirley  
4 McKie's left thumbprint also.

5 Above point 10 we have -- I think this was the one  
6 that was used as an extra characteristic in the actual  
7 perjury trial, number 17. The ridge comes along and  
8 bifurcates and that's point 17.

9 If you go back to I think it was 12 or 13, on this  
10 this descending ridge it's as if this ridge here --  
11 sorry these characteristics (**indicated**) are sort of  
12 piggy-back on that ridge. There's a ridge ending, you  
13 follow that down and you come to another ridge ending.  
14 We then go to the intervening ridge and what has been  
15 referred to as the banana or I've said myself a hump  
16 backed bridge, there's a bifurcation.

17 Moving along from that, there's what is a small  
18 island which is marked as basically two bifurcations --  
19 sorry not an island, a small lake to -- marked with the  
20 two dots.

21 If you follow this right leg down we come to a small  
22 day or independent ridge. On the inside of that there  
23 is a long island, again marked with two dots and to the  
24 right of that island there's a bifurcation down.

25 To the left of the island there's a bifurcation up

1 and if we trace that ridge up, it takes you to what  
2 would be point 8, I believe, on the SCRO chart.

3 Significantly, next to that there's a small lake  
4 that I've marked with two dots. If we go back to the  
5 small independent ridge, you've go one intervening ridge  
6 and, again, there's a small island. Next to that  
7 there's a bifurcation down. Now, I'd seen in previous  
8 presentations the placement of yellow lines to show this  
9 ridge comes up and admittedly there is a lot of force,  
10 it's been pushed out the way, but if you actually follow  
11 that up, that ridge up, it comes up and joins to the  
12 ridge to the left.

13 Now there was earlier evidence that you had to put  
14 in some kind of yellow line to show that's how it joined  
15 but I think looking at that you can see it's very dark.  
16 It goes light but it goes back in and joins the ridge to  
17 the left, so it's a bifurcation down.

18 You go just above the bifurcation down -- sorry, go  
19 to the left, just above the small island there's a kink  
20 in the ridge which I'll show you when I come to the left  
21 thumbprint. We then go one intervening ridge and  
22 there's a bifurcation down. Follow the right leg -- oh,  
23 sorry.

24 Q. It's the cross. If you -- sorry, you have done it.

25 A. If you follow the, again, I think artificial yellow

1 lines were put in but I think if you look at that you  
2 can actually see it's very faint and there has been  
3 pressure, there's been movement towards the right-hand  
4 side but you can actually see the ridge kinking in to  
5 the left and joining, so that's a bifurcation down.

6 You follow that bifurcation down and we come to  
7 another bifurcation. Go one intervening ridge and  
8 there's another bifurcation down. We then move two  
9 ridges out and we come to what I would term as an  
10 overlap, one ridge below the other, one ridge above the  
11 other and if you follow that down, admittedly it's not a  
12 great characteristic but there is a bifurcation there  
13 which you can see marked with a red dot.

14 We then go one intervening ridge and it takes you to  
15 another bifurcation down. To the right-hand side of  
16 that there's an elongated lake I've marked with two red  
17 dots and to the right of that there is a ridge ending  
18 up.

19 If you follow that out one, two intervening ridges  
20 there's a ridge ending up and a ridge ending down. I  
21 have further charts which I would like to show which I  
22 believe show the movement in the mark but if I could  
23 call up TC23100.02 --

24 Q. Mr MacPherson, could you help me actually because I'm  
25 staring at it just now. Where is the movement in this

1 mark? Roughly in what area?

2 A. Well, I'm only going to mark this very roughly. **(Pause)**

3 I'll just draw it in roughly.

4 Q. Yes, please.

5 A. That's very rough. That's very rough. **(Indicated)**

6 Q. That's fine?

7 A. I think you can see the black shape that I've tried to  
8 outline and I was wanting to show you this later but if  
9 you count one, two, three, four you come to the Rosetta  
10 characteristic but on the mark -- sorry, on the left  
11 thumbprint of Shirley McKie, I can't remember now, I'd  
12 have to put it up but I think it's five or six. So  
13 that's indicative of movement.

14 You also can see the ridges to the right here come  
15 up and it's like as if they have been chopped down.  
16 It's like a tree that's been broken. You can see where  
17 I am at the moment, the ridges are basically it's like a  
18 chopped tree, they've been chopped down and to me that's  
19 indicative of some movement as well. So that's roughly  
20 where I see the movement.

21 MR MOYNIHAN: Can we just save this image, please.

22 MISS BAHRAMI: That's saved as FI2710.08.

23 THE CHAIRMAN: What sort of movement do you say would create  
24 this?

25 A. The thumb's been placed on, lifted ever so slightly and

1           turned either that way (**indicated**) or that way  
2           (**indicated**).

3       THE CHAIRMAN:   But is it lifted and turned or --

4       A.    I would say lifted because of the ridge count.

5       THE CHAIRMAN:   Just wait, is it turned in situ or is it  
6           lifted clear and turned.

7       A.    Very, very slightly lifted and turned, I would say, and  
8           that would account for the ridge count being out.

9           If I could call up the thumbprint now.

10      MR MOYNIHAN:   Do you want to just have the thumbprint alone  
11           or do you want it with the marking?

12      A.    It's with the dots. It's TC2310.02 and, again, it's  
13           just a case of -- if I could go through it again, I have  
14           the --

15      Q.    Can we just stop. I am looking down at a sheet of paper  
16           I have. First of all, the marking that you have done on  
17           Y7, I understand that that is taken from Terry Kent's  
18           image?

19      A.    It's Mr Kent's image, yes.

20      Q.    What we are about to look at as the thumbprint of  
21           Ms McKie, what is the base for this?

22      A.    It's taken from Mr Swann's chart M, M for Mike.

23      Q.    M for Michael?

24      A.    Yes.

25      Q.    Is it just copied from his chart, is it, or ...?

1 A. Yes, it is. I mean, I'd never seen these images before  
2 so I just thought they were some of the best images I've  
3 seen so this is what enabled me to do this basically.

4 Q. If you allow me just a second, please. **(Pause)**

5 I am just trying to recollect, the M would be  
6 Mr Swann's use of a rolled impression?

7 A. It certainly looks like a rolled, yes.

8 Q. That's okay, if we proceed just on that basis.

9 A. So the starting point was the ridge like a sharpened  
10 spear. Above it and below it we have the v-shape, we go  
11 one intervening ridge and there's the spur, the  
12 bifurcation with a ridge ending and a very short  
13 distance, we come back along the ridge and above that  
14 there is a ridge ending, one intervening ridge to the  
15 long island, one intervening ridge to the one that is  
16 probably, I would say, an incipient ridge but it's still  
17 there and it's in both impressions.

18 Follow along there and we come to the bifurcation  
19 which I think was 17 in the chart. Follow back and you  
20 come to another long island and then we have the ridge  
21 that I was saying was sort of piggy-back on another  
22 ridge. This long island that's on sort of piggy-back of  
23 this ridge below it. Come along and there's a  
24 bifurcation and at the other end there the other  
25 bifurcation which are points 10 and 11. But, as I said

1           previously, you can see the damage. There's a break in  
2           the ridge there which also corresponds to the mark.

3                   Below that we have the hump backed bridge, the  
4           bifurcation and to the left of that we have the lake.

5           You follow the hump backed bridge down, when it comes to  
6           the small dot, one intervening ridge and come to a long  
7           island and to the left of the island is the bifurcation  
8           up where if you trace and it comes to a ridge ending and  
9           to the right of that ridge ending is the lake at the  
10          core.

11                   To the right-hand side of the ridge ending up  
12          there's a bifurcation down and follow that, there's  
13          another bifurcation down there. You follow that up and  
14          it comes to a small dot with the bifurcation next to it  
15          and just above that dot is the kink in the ridge which I  
16          haven't marked but there's a few more things that could  
17          be marked in it but I didn't want to clutter it  
18          completely.

19                   So just above that dot there is a kink in the ridge  
20          which appears in both. There's a bifurcation, you go  
21          out one ridge and you have a bifurcation down, follow  
22          the right leg and there's a bifurcation down, one  
23          intervening ridge, bifurcation down, two intervening  
24          ridges to another bifurcation down and if you follow  
25          that up, you come to the overlapping ridge, one ridge

1 under another.

2 The right-hand leg there, the ridge ending down, you  
3 go one intervening ridge to a bifurcation down and to  
4 the right of that bifurcation down is a long lake with a  
5 ridge ending at the right of it and you move two out and  
6 you come to the ridge ending up and ridge ending down.

7 As I say, I had never seen these impressions before.

8 I don't know what the protocol is. Obviously, I would  
9 like both these impressions to be sent to every  
10 fingerprint bureau in Britain and see what the result  
11 might be but I don't know if that's ...

12 THE CHAIRMAN: Could I just ask while I remember, the damage  
13 that you show on this, does that show on any of the  
14 plain prints?

15 A. I don't know, sir. As I say, this is the first time --

16 THE CHAIRMAN: I was just wondering whether on the one you  
17 used originally whether it shows on that.

18 A. I don't know. I don't know when this impression was  
19 taken, if it was adjacent to when the mark may have been  
20 deposited and that's why there's such a correlation  
21 between the two. I don't know.

22 If I could carry on, I've just another couple of --  
23 if you look at TC2310.03, all I've tried to illustrate  
24 here is that's the same sequence of dots and I think I  
25 said earlier that it was the hump backed bridge and the

1 lake next to it that caught my eye and that's exactly  
2 what you can see that I've marked, the hump backed  
3 bridge and next to it we have -- well, it's a small  
4 lake.

5 If we go out one and on the second ridge out from  
6 that you see there's basically what looks like -- this  
7 is I think somebody said earlier in evidence that edge  
8 shapes are very important and I think that's quite  
9 correct. If you follow that it's like a zig-zag on that  
10 ridge and I'll show you that in a minute or two.

11 Below the spur, the bifurcation and the ridge  
12 ending, below that spur, this ridge here (**indicated**)  
13 comes along and there's an unusual shape to it. I don't  
14 know, it looks like a backwards 3, if you like, and,  
15 again, I would like to show you that on Shirley McKie's  
16 left thumbprint.

17 If we could call up TC2310.04, as I say this is what  
18 caught my eye originally, hump backed bridge and we have  
19 adjacent to it a small lake. We go out one ridge and we  
20 have the zig-zag shape to the ridge. If we go back one,  
21 two intervening ridges there is also just above the dot,  
22 as I said, there's a kink in the ridge and hopefully you  
23 can see that where I'm pointing to at the moment,  
24 there's a small -- just a kink in the ridge.

25 If you follow the zig-zag ridge up, you come to the

1 backward 3. The reason for just dotting two of the  
2 images, obviously if somebody maybe can't see this, if  
3 they take away -- look at the original mark and the  
4 thumb they will be able to see that unusual shape of the  
5 ridges.

6 There are other characteristics. If you go above  
7 the v-shape and along this ridge, there's a gap in the  
8 ridge which also shows on the mark but, as I say -- and  
9 some people may wish to use -- there's also this ridge  
10 ending which I'm pointing to **(indicated)** which is to the  
11 right of the V and if you follow that down it takes you  
12 back to what I called the overlap. But for me it's  
13 starting just to get into the part of slightly starting  
14 to get into movement there. So I haven't marked that.  
15 Some people may wish to mark that. Some people may wish  
16 to mark the break in the ridge there. There may be  
17 other things that people see. If you follow this ridge  
18 down, to me it's like possibly a lake but it's possibly  
19 more pores rather than lakes but that is how I see the  
20 mark. That's all I can say really.

21 Q. Is it by reference to these documents that you have just  
22 shown us you primarily wish to defend the identification  
23 of the mark Y7 as Shirley McKie?

24 A. No. All I was trying to show was when you have perhaps  
25 a well-taken form and a good image. I've just marked as

1           much on it as I possibly could. When we made these  
2           enlargements we were constrained by 16 points, if you  
3           like.

4       Q.    Mr MacPherson, do you know by whom the mark of Shirley  
5           McKie that's currently on the screen was taken?

6       A.    No.

7       Q.    How do you know that it's well-taken?

8       A.    It's very clear.

9       Q.    Very clear because it happens to show the details that  
10          you wish to see?

11      A.    Yes, that could be argued, yes.

12      Q.    Do you know whether you have on the screen a first  
13          generation, second generation or what generation of copy  
14          of that mark?

15      A.    No. Does it really matter? I still have my chart here  
16          that I believe is showing 16 points in sequence and  
17          agreement. I think Mr Mackenzie labelled it as the  
18          shackles being taken off when they went non-numeric so  
19          all I've tried to do here -- if you didn't want me to do  
20          it, fair enough.

21      Q.    I am just asking you, you have gone through the detail  
22          of this and one can then look at this as a copy of a  
23          mark that may be Miss McKie's compared with a copy of Y7  
24          and what we know about each of these two copies,  
25          whatever generation they are, you had neither of them in

1 February 1997.

2 A. That is correct. I mean, I only took the provenance of  
3 them to be accurate because they were on your database.

4 I basically printed these out on my own home computer.

5 MR MOYNIHAN: I think what we will do, sir, I see the time  
6 is simply invite you to adjourn and come back tomorrow.

7 THE CHAIRMAN: Yes, it is 4.00. We will return tomorrow  
8 morning, please, at 10.00.

9 **(4.00 pm)**

10 **(Adjourned until 10.00 am the following morning)**

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