

Crown Agent M. Sted

D has at last received

Murphy's report of the McKie trial & the background to the disputed fingerprint evidence.

There were good grounds for the jury, doubtless, to be accused had left prints at the material time.

When SCRO material was shown the image of the defence material had cleared. (This has been pointed out to SCRO)

There was undoubtedly an element of ambush at its first use but to make sure productions are labelled in the only way the defence & Crown Agents pre-processed & our points given reflected the same. (One defence material under the

Note on Fingerprint & Other Evidence

ite, Deputy Crown Agent

ord Johnston in the High Court at Glasgow I appeared as Advocate Depute, assisted by ducted by Donald Findlay, Q.C., assisted by essrs Levy & McRae, Glasgow (for the Police d with perjury in the following terms:

Justiciary in Glasgow, having been sworn as a en proceeding in said High Court of Justiciary Her Majesty's Advocate against him charging d 8 January 1997, both dates inclusive, at the Campbell Ross at 43 Irine Road, Kilmarnock n Margaret Campbell Ross and did rob her of u did depone that at no time had [she] ever d, aforesaid beyond the porch area of said w that on an occasion the date of which is to ered said house beyond the porch area and, vicinity of an internal doorway between the bathroom within said house.

animously found not guilty by the jury. The e discovery of a fingerprint, designated "Y7", m doorway, close to the point where the body fingerprint was identified as the pannel's left n Criminal Records Office early in February mation had been conveyed to the police, Miss she had ever been in the deceased's house e was called by the Crown to give evidence at n indicted for the murder of Miss Marion Ross. nined on oath that she had ever gone into the s a major cause of concern to the trial A-D, nened on the discovery of his fingerprint on a

circumstances got lay found at the deceased's house, and of the deceased's print on a tin containing money found (initially by Shirley McKie) at his house; and the defence were aware of the identification of the Y7 print as WDC McKie's. Thus on the face of it her evidence could have cast serious doubt on the integrity of the SCRO fingerprint identifications in the Asbury case, although in the event the defence did not take up the point, preferring to maintain Asbury's alibi, and to allege that the deceased's fingerprint had been "planted" on the tin found at Asbury's house.

From an early stage it was apparent that there were serious problems in the Crown case against Miss McKie, and these did not relate solely to the fingerprint evidence. Indeed, I can think of no other case in which I have been involved where the picture

Our laboratory conditions 12 spots  
cannot offer a vein when presented in  
non material in Court.

While the  
defence witness Wentham did  
not have as much experience as  
the Crown witnesses Greve was  
apparently impressive & could say he  
was assisting Lane while in a more  
away from 16 points to non-numerical  
comparisons

As AD. says when the  
'jury were faced with a conflict  
of expert evidence they gave the  
accused the benefit of the doubt &  
for all we know they had doubts about the  
provenance of the fingerprints being left in  
the way alleged.

AD's conclusions are at pp  
9 & 10 & are worth referring to the  
Expert Evidence Committee.

  
6/6/97.

## HMA v Shirley Jane McKie - A Note on Fingerprint & Other Evidence

**F.A.O. the Home Advocate Depute, Deputy Crown Agent**

### Background

The above case was tried before Lord Johnston in the High Court at Glasgow between 21 April and 14 May 1999. I appeared as Advocate Depute, assisted by Mark Dennis. The defence was conducted by Donald Findlay, Q.C., assisted by Miss Victoria Young, instructed by Messrs Levy & McRae, Glasgow (for the Police Federation). The pannel was charged with perjury in the following terms:

*on 28 May 1997 in the High Court of Justiciary in Glasgow, having been sworn as a witness in the trial of David Asbury then proceeding in said High Court of Justiciary upon an indictment at the instance of Her Majesty's Advocate against him charging him that between 6 January 1997 and 8 January 1997, both dates inclusive, at the house occupied by Marion Margaret Campbell Ross at 43 Irine Road, Kilmarnock he did assault and murder said Marion Margaret Campbell Ross and did rob her of a tin containing a sum of money, you did depone that at no time had [she] ever entered the house at 43 Irvine Road, aforesaid beyond the porch area of said house, the truth being as you well knew that on an occasion the date of which is to the prosecutor unknown you had entered said house beyond the porch area and, in particular, you had been in the vicinity of an internal doorway between the downstairs hallway and a downstairs bathroom within said house.*

On 14 May 1999 Miss McKie was unanimously found not guilty by the jury. The case against her was based upon the discovery of a fingerprint, designated "Y7", on the facing of a downstairs bathroom doorway, close to the point where the body of Miss Ross had been found. This fingerprint was identified as the pannel's left thumbprint by officers of the Scottish Criminal Records Office early in February 1997. From the point when this information had been conveyed to the police, Miss McKie had consistently denied that she had ever been in the deceased's house beyond its front porch. Eventually she was called by the Crown to give evidence at the trial of David Asbury who had been indicted for the murder of Miss Marion Ross. In the course of that evidence she denied on oath that she had ever gone into the house beyond the porch. This was a major cause of concern to the trial A-D, because the case against Asbury turned on the discovery of his fingerprint on a Christmas gift tag found at the deceased's house, and of the deceased's print on a tin containing money found (initially by Shirley McKie) at his house; and the defence were aware of the identification of the Y7 print as WDC McKie's. Thus on the face of it her evidence could have cast serious doubt on the integrity of the SCRO fingerprint identifications in the Asbury case, although in the event the defence did not take up the point, preferring to maintain Asbury's alibi, and to allege that the deceased's fingerprint had been "planted" on the tin found at Asbury's house.

From an early stage it was apparent that there were serious problems in the Crown case against Miss McKie, and these did not relate solely to the fingerprint evidence. Indeed, I can think of no other case in which I have been involved where the picture

became so much more confusing as more and more evidence was led. I shall summarise the various problems in turn below.

#### Difficulties 1: non-fingerprint evidence

It was accepted by both sides that there was no evidence to suggest that Shirley McKie had ever set foot in the house at 43 Irvine Road before the commencement of the enquiry into Marion Ross's death. Extensive police record checks had indicated that the police had called at the house on a couple of occasions in the preceding decade in relation to minor matters. Miss McKie had had no connection with any of those calls. There was nothing to indicate that she had ever known the deceased.

On the evening of Wednesday 8 January 1997 the body of Marion Ross was discovered within her house by a neighbour. The death was treated as murder once post mortem examination was completed on the morning of the following day. DC McKie and her companion, DS William Shields, were appointed to the murder enquiry team on 9 January. The house was sealed on the evening of 8 January, and from that point onwards all persons calling at the house were recorded by uniformed police officers operating a logging system at the door. Initially there were always two officers engaged in this duty at any time; but after about lunchtime of Friday 10 January this was reduced to one except for the long, boring night shift. The hallway woodwork including the bathroom door facings were dusted for fingerprints with aluminium powder on 9 January. At that stage Y7 did not come to light. The area was retested with black powder at about noon on Tuesday 14 January. This examination brought Y7 up.

The first difficulty for the Crown arose with regard to the log. There was no indication of Miss McKie ever going into the house beyond the porch recorded in the log. According to the log she had entered the porch behind DS Shields on the evening of Thursday 9 January in order to establish which of several doors had been unlocked by the neighbour who had discovered the body. It is inconceivable that she could have entered the house and gone to the area of the bathroom door surround at this time because she was in the company of DS Shields throughout the visit and she was observed along with him by the duty loggists entering and leaving the porch area only. Furthermore a team of Scenes of Crime Officers and forensic scientists were working in the hallway between the porch and the bathroom at that time, all of them suited up in protective clothing to preserve the area. She could not have got to the bathroom door area without coming to their attention.

There was no other record of her being at or near the house at any time contained in the log. Every logging officer who had been on duty at the locus from the setting up of the system on the evening of 8 January until the finding of Y7 on 14 January was called to give evidence. No one had seen her at or near the locus with the exception of the loggist who had been on duty when DS Shields and the pannel had returned to collect the log itself on the Saturday evening. The details of this visit are set out below. The defence even called a logging officer who had been on duty after the finding of Y7 - he hadn't seen her there either!

The problem which this body of evidence created was that the Crown case necessarily involved the suggestion that one of these officers was lying, or that he or she had been absent from position long enough for Miss McKie to have entered the house and gone along to the bathroom door area. None of these officers appeared to be lying; those on logging duty before Friday lunchtime had always been accompanied by another officer; and when asked they were all meticulous in explaining the procedures which were followed if they required to leave their post for any period of time. None admitted leaving their position while on a logging shift. While there was evidence to suggest considerable slackness had crept into the system, the worst practices seem to have developed well after 14 January. Furthermore, while it was possible to point to some obvious errors in the log, once again these overlapped with times when there were SoCOs and scientists inside the house. It was not possible to establish which, if any, officer was not being truthful in relation to log keeping duties.

There was evidence that Miss McKie and DS Shields had returned to the locus on the evening of Saturday 11 January to collect the log from the porch so that the entries to date could be entered into the HOLMES computer system which had recently come online in relation to the Marion Ross murder enquiry. DS Shields remained in the car while Miss McKie went to the porch to collect the log. Having taken it to the nearby police HQ and photocopied it for HOLMES entry, they returned it to the loggist in the porch about 15 minutes later. Once again DS Shields stayed in the car while Shirley McKie took the log back to the officer in the porch. These movements were not recorded in the log, but were spoken to by DS Shields, by Miss McKie herself, and by the loggist concerned, PC Mark Lees (although his evidence was unsatisfactory in certain respects). The senior officer responsible for the operation of HOLMES spoke to instructing this action by Shields and McKie and to its being carried out. DC Jim Kerr, one of two locus production officers, spoke to seeing Miss McKie in the porch speaking to a logging officer some time during the late afternoon of that day. PC Lees's evidence was to the effect that Miss McKie had not even entered the porch when collecting or returning the log, under explanation that she had made reference to the possibility of contamination of the scene. This made no sense, since by that time the forensic examination of the porch had been completed two days earlier, and dozens of officers, SoCOs, and scientists had tramped through the porch. While this aspect of his performance looked plain daft to the jury, he was adamant that Miss McKie had not entered the house at that time. Mr Kerr had seen her no further than the porch. On the Saturday evening he was working at the back of the house, and two scientists were carrying out black powder testing in the kitchen. It was plainly possible that someone could have entered at this time without attracting the attention of the productions officer or the scientists. From the evidence of another officer who had nipped in for a peek while on logging duty, it was known that it was possible to go from the porch to the bathroom door again within a matter of seconds. At the end of the day, the Saturday evening visits were a clear window of opportunity for Miss McKie to have entered the house. She had earlier spoken, on Friday, to Mr Kerr, requesting access to the house, and she had been refused. In a way this evidence also pointed towards Saturday entry, because the request would have been meaningless if she had already been in, and would have been an unnecessary way of coming to the attention of the locus officers. Once again, the

house had been heavily occupied by scientists, SoCOs, and visiting members of the Serious Crime Squad on the Friday after the time of her request.

However, one very important piece of evidence arose to contradict this line. Unfortunately, the terms used by the officers concerned at precognition conveyed a very misleading picture so that this aspect came as something of an unpleasant surprise for me at the trial. (This is a difficult and complex matter, and I do not consider that any obvious error was made by the precognoser). The two Identification Bureau officers who brought up Y7 on 14 January both expressed the clear opinion that the print had almost certainly been there prior to the aluminium powder testing on the 9 January. They explained this by saying that a subsequent contact would have left a disturbance on the aluminium powder which would have been visible to them when they later applied the black powder, which they did by careful brushing of the area under intense local light supplied by their special lamps. They spoke to the aluminium powder being visible as they worked, and to it being undisturbed to their eye. They also spoke to prints later identified as those of the deceased coming up in the same way on the same surface under black powder on Tuesday 14 January; and the defence made much of the fact that Miss Ross certainly could not have touched the doorframe between the 9 and 14 January. The officers could not be 100% certain that the print Y7 had not been laid between aluminium and black powder dusting; but each said that if he had to express a firm opinion he would consider that it had been laid before the first test.

It will be apparent from the above that before the fingerprint evidence is considered in detail the other surrounding evidence militated against the likelihood of the pannel having entered the house beyond the porch between the commencement of the enquiry on the evening of 8 January and the discovery of the mark Y7 at noon on the 14.

Shirley McKie gave evidence. She was a good witness, and undoubtedly attracted sympathy from the jury. Both the A-D and the Crown junior from the Asbury trial had reported that she was a strong and convincing witness when giving evidence in that case.

#### Difficulties 2: the fingerprint evidence

Y7 was identified as matching Shirley McKie's left thumbprint by four SCRO officers: Charles Stewart, Hugh MacPherson (both senior fingerprint officers), Fiona McBride, and Tony McKenna. During the trial Tony McKenna was taken into hospital suddenly for an urgent operation so that he was unavailable to give evidence. The defence agreed not to make waves over this, and each of the others gave evidence. They had all carried out the comparison exercise at least three times, and they were all firmly of the opinion that they had correctly identified the mark. Each had impressive experience of fingerprint comparison work. I had met Charles Stewart and Hugh MacPherson for expert consultation prior to the trial, and they had examined the defence fingerprint production (Def. Pro. 2) in my presence and had given me some important pointers to criticise the approach of one of the defence experts, Pat Wertheim. Before embarking upon the analysis evidence relating to Y7, Charles Stewart went through a most useful "tutorial" with

the jury , explaining how fingerprints may be deposited and how they are lifted or photographed and examined. This was done with the use of illustrative materials which had been earlier supplied by SCRO and had been copied for the use of the jury. In any case where there is to be detailed fingerprint evidence such an exercise may be of great use, and Mr Stewart carried it out very well in my view. As far as the identification evidence was concerned, the SCRO officers spoke to the one-to-one photographs and to the comparison fingerprint forms which they had used. They had identified 16 points of comparison in the usual way (and, since two of the three comparison exercises had not been carried out in quite the same way, some 18 points were actually demonstrated to the jury) and SCRO had plotted these on illustrative documents. These were copied for the jury in the customary way. Serious presentational problems arose here because the illustrative materials prepared by Pat Wertheim for the defence were of superior quality. When the SCRO points as plotted were placed on the imager to demonstrate them to the jury, the magnification brought out the pixelling of the digital reproduction so that the enlarged image seemed blurry and unclear. Similarly the digital reproduction of the comparison fingerprint forms on magnification were clearly seen to be misaligned in part. By contrast, the reproduction quality of Def. Pro. 2 was superior (although it was of an inferior quality photograph of the mark) so that its features remained clear on magnification. This had the general effect of making the defence points seem clearer to the jury than the Crown evidence.

The defence had not lodged any reports from its experts, Messrs Wertheim and Grieve, in advance of trial, and the copies of Def. Pro. 2 arrived shortly before trial because of printing difficulties. The lack of any report was, I am sure, the result of a tactical decision by senior counsel for the defence. However, several days before trial, and before my expert consultation with Charles Stewart and Hugh MacPherson, Donald Findlay and I discussed the fingerprint evidence to be led, and he explained to me the defence line in some detail under reference to a copy of Def. Pro. 2. He and I have been friendly for several years, and I was at one time his regular junior for murder cases. I believe that he was considerably more forthcoming with me than he may have been with another depute who was on less open terms with him; in short he may not have said anything at all in advance of trial as he was clearly trying to play his cards very close to his chest beforehand.

One serious problem arose in cross-examination of the SCRO officers. It is very unusual to the point of being almost unknown (before this trial) for SCRO experts to be cross-examined as to the merits of an identification. In certain respects their evidence was less assured than it might have been, perhaps because they are not used to explaining themselves in detail. The mark Y7 was clear at the bottom, where SCRO had plotted the identification points. The upper two-thirds of the mark had not been used by them for comparison purposes because it showed signs of distortion. The defence experts disputed this analysis, arguing that only part of the upper two-thirds was unusable, and that the remainder contained features which proved that the mark could not have come from Shirley McKie because it contained certain features which did not appear on her thumb. In the light of this, both Donald Findlay and I asked each of the SCRO experts to explain what their position was with regard to the upper portion of the mark. The answers were unsatisfactory. Each stated that to the trained eye there was clearly

something unsuitable about that part of the mark. This was attributed either to superimposition or to excessive pressure. However, none of the SCRO experts was able to explain in detail (or even in layman's language for the jury) which features of the problem part of the mark indicated to them what was wrong with it. Each remained fixed to general comments as to its unsuitability. By contrast, the defence's American experts were confident in their handling of the "problem" area of the mark, indicating which parts were unusable, and explaining why (excessive pressure obscuring the features); but they were also able to explain in readily-understandable terms why they were prepared to make use of other parts of the upper portion of the mark. They are used to fingerprint evidence being open to challenge in their jurisdiction, where there have been a number of wrong identifications brought to light in recent years in court. They were also critical of the SCRO's use of features at the very lower edge of the mark, arguing that these were either indistinct or at the edges of acceptability. Oddly, David Grieve accepted that most of the SCRO's 16 points were located in or near one of the areas of greatest clarity on the latent. They were also able to advance cogent reasons why they considered the mark to be one continuous contact, whereas the SCRO officers were rather less clear in explaining why they did not consider this to be the case.

Particular comment deserves to be made of the evidence of Fiona McBride. She came under sustained attack in cross-examination over the issue of the unusable upper portion and the defence were critical of her performance in the witness box. I do not accept their criticism of her, and I felt that she responded very well to persistent questioning after a shaky start. Her ultimate position was that she would not be drawn into a hasty comment while under defence pressure in open court when she was without the examination equipment necessary for the performance of her job. I thought that she held up well in responding in this way - but it does tend to highlight the difficulty of explaining matters in intelligible terms to a jury.

Each of the SCRO officers was able, on request, to trace out on the Crown productions certain features used for their identification. Some of this was lost on the jury, however, because of the problems inherent in the copy productions which I have mentioned above. The SCRO's methodology was accepted as a valid and correct approach by both defence experts in cross-examination.

The defence witnesses were more skilled at presenting their case to a jury, possibly because they were used to having their evidence challenged. Pat Wertheim accepted that a number of SCRO's points were acceptable to him, but because of the presence of certain apparent bifurcations in the upper portion of the mark he was satisfied that Y7 was not Miss McKie's print. He was in reality less experienced or qualified than the defence originally made out, and it was relatively easy to establish this. He also accepted readily that different interpretations of the mark were possible. He trains US fingerprint analysts in courtroom presentation skills. He was well able to speak clearly and simply to the jury. Personally, I found him to be somewhat patronising in approach, and I would have been hesitant to accept his evidence if I had been a juror. He was more showman than expert.

David Grieve was the opposite. He had extensive experience with one of the largest and most respected of the US bureaux, in Illinois. He had a lifetime's experience in fingerprint analysis. His manner was that of an academic. He rejected the SCRO analysis outright, basing his view that Y7 could not be Shirley McKie's print on his examination of the upper portion. His evidence was less flamboyant and more logical and convincing than that of Wertheim. He was a very impressive witness, and the defence repeatedly pointed out that he was one of the experts whom the Home Office had consulted with a view to retraining UK analysts in non-numeric assessment techniques. My cross-examination of him was designed to have him accept that experts could differ, and to bring out the subjective nature of the approach of the two US witnesses. On reflection, I accept fully my learned junior's criticism that the latter portion of my cross-examination was ineffective - despite getting most of the answers I was seeking - because it went right over the heads of the jury. After some complex sparring, he did accept that his approach was very subjective, and possibly more so than the older standard still followed by SCRO.

The fact that the old 16-point standard is in fact more objective than the non-numeric approach and that the former is being gradually abandoned partly because it does not permit as many identifications to reach court as the newer standard was somewhat lost because it was accepted that the UK bureaux are due to adopt the non-numeric approach in April 2000. It was difficult to upset the perception in the jury's mind that an out of date approach was being replaced by a more modern one.

I could have criticised the approach and methodology of the defence experts until the cows came home without affecting this essential point: where experts differ, and where they accept that in their discipline such disagreements do occur, it must be almost impossible for jurors to resist the thought that if the experts do not agree, lay people cannot possibly be expected to decide the issue. In such circumstances conviction becomes very unlikely. It is impossible to persuade a jury that the Crown has proved its case beyond reasonable doubt where one set of experts say the issue is black and another, apparently equally able set of experts, depone that it is white.

The defence were of the view that the SCRO experts had become insular and perhaps did not question their working practices, preferring to carry on in the same old way year after year. Certainly the impression that the defence experts were more aware of international developments in their field was well conveyed to the jury. The SCRO officers, particularly the senior officers, were obviously able and well-informed when I spoke to them; however, they did not convey this strongly to the jury, and it was beyond peradventure that they did not attend external conferences or publish as the defence experts did.

It was not simply a question of presentation: the SCRO experts inability to explain clearly why they rejected all of the upper two-thirds of the mark was fatal to the Crown case. On 30 May the DCA and I attended a meeting with SCRO and Strathclyde Police to discuss the fallout from this case. At that meeting the SCRO experts seemed surprised that they had been asked about the upper part of the

mark, and they opined that they could have explained themselves in detail if they had considered that the point would come up and had prepared themselves by working on that aspect of the latent. At the pretrial consultation I had indicated that the defence case depended upon their expert analysis of the upper portion and it was indicated that they could deal with this. I came from that meeting with greater confidence than I had entered it, and I was able to put to the defence witnesses a number of technical points to which I had been directed by the SCRO analysts.

At the end of the day every fingerprint examiner who gave evidence agreed that the best tool in the field was the trained eye of the experienced analyst. Wertheim rather eccentrically claimed that God-given talent was the most important factor of all. He did not seem to realise that this was the most impossible element of all to define objectively. The defence repeatedly criticised the SCRO experts for asking the jury to accept their opinions on trust, because they could not explain what they were able to see in layman's terms. I made a similar criticism of Mr Wertheim's claims, and even got him to accept that the Almighty might have bestowed greater talent on someone other than Mr Wertheim. These responses were ineffective in the light of the greater *perceived* clarity of the defence case.

It appears that the defence originally approached Pat Wertheim in order to seek his opinion on whether the mark Y7 could have been forged or planted on the bathroom door surround. At that stage the defence was proceeding on the hypothesis that the police had attempted to plant Asbury's fingerprint at the locus from the tin which McKie had found, and had accidentally deposited her print. On examining the materials provided, Mr Wertheim confirmed that the print had not been planted but he went on to add that he did not consider that it was McKie's. This took the defence agents by surprise and a second opinion was sought.

Before trial I received information that the defence had earlier had the print examined by other experts who had confirmed the SCRO identification. I asked that this be investigated. When the trial began the position was nothing more than that SCRO officers had heard gossip that this had happened and there was no way of confirming who the experts had been. One name was confirmed some time after the trial had started, by which time it was too late to cite the person concerned. I cross examined Shirley McKie about this in an effort to set up rebuttal admission of the evidence, but her position was that she had not been kept informed of the various steps taken by her representatives and that she was unaware that this had been done.

### Difficulties 3: the effect of the McKie case on the Asbury conviction

The McKie case has no effect on the Asbury conviction. It is clear from the above that there were serious problems facing the Crown at each stage in the evidence, all of which may be expected to have had a bearing on the jury's decision. Even if the SCRO did make an error in the identification of Y7, it does not follow that the identifications in the Asbury case were flawed in any way. The jury's decision in HMA v McKie means nothing more than that an error may have been made in the identification of a difficult mark which had a large problem area within it. If the defence were to seek to challenge the SCRO evidence in relation to Asbury, it

would be necessary for an expert to come forward to set out cogent reasons for a jury to reject the findings of SCRO in relation to its findings in the Asbury case. Even if such a thing were to happen, the SCRO experts should be able to demonstrate and explain their findings so that the position would be sustainable.

Each identification made by SCRO stands or falls on its own merits. Where wrong identifications have come to light in other jurisdictions, the whole system has not been shaken to the core; rather, steps have been taken to ensure that future identifications could be justified before their presentation in the court.

### Conclusions

On reading the press reports at the end of the case one might have been forgiven for thinking that fingerprint evidence had been utterly discredited forever. This is not the case. Wrong identifications have been discovered in a number of cases in the USA. It has happened in England, as recently as last year in one case in Nottingham Crown Court. This is the first time that it has happened in Scotland. Fingerprint identification was formally recognised by the appellate court in **Hamilton v HMA 1934 JC 1** and the approach taken in that case remains unaffected by the McKie decision. Indeed, the problems faced by the Crown in McKie were that it was not possible to demonstrate to the jury's satisfaction that the fingerprint evidence was acceptable according to the approach commended in **Hamilton**.

I have asked that the SCRO officers who gave evidence in the McKie case consider with care the way in which I led their evidence; and I have requested that they contact the Home A-D with any areas of criticism or recommendations of any particular approach which they feel might be helpful to them in explaining their evidence.

Did SCRO get it wrong in this case? I do not know; but there was material before the jury which would have entitled them to hold such a view, or at least to have a doubt about the SCRO evidence.

I consider that there are three main lessons to be learned from the McKie case.

(1) In any future case the SCRO experts must be able to justify all aspects of their position to the jury in language which the lay person can understand. To this end it is essential that there be a full and detailed pretrial consultation between the A-D and SCRO witnesses - all of them - in any case where fingerprint evidence is crucial to the Crown case, *a fortiori* where a challenge is expected.

(2) To this end, in any case where fingerprint evidence is essential, and especially where a challenge is perceived, better quality reproductive materials must be used so as to permit the SCRO experts to demonstrate clearly to the jury what they are talking about.

(3) In cases where the expert fingerprint evidence is being challenged, the Crown must not commence until the experts have had a full and proper opportunity

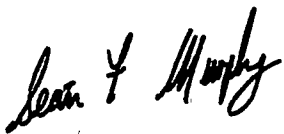
to consider any defence materials in detail; and if necessary an adjournment should be sought to allow this to happen *before* the Crown leads the evidence of its experts. This point was made with some force by the SCRO at the post-trial meeting with them. They considered in retrospect that they required more time in which to seek to analyse the methodology of the "rival" experts. Normally this ought to be done pretrial, but in practice defence productions commonly arrive at the last minute.

What this means overall is that A-Ds and fingerprint analysis witnesses must have regard to the general principles set out in Hamilton.

Postscript

Redacted

Redacted I gratefully acknowledge the excellent assistance I received from my junior, Mark Dennis, whose contacts at the District Attorney's office in Santa Rosa, Ca., helped to have me briefed on Pat Wertheim's background; and from Charles Stewart in particular of the SCRO officers who briefed me; and from Terence Kent of the Home Office who provided me with much helpful background information on recent developments in the fingerprint world.



Sean F Murphy  
Advocate Depute

3 June 1999