

**A** IN THE CROWN COURT

**B** Before:

HIS HONOUR JUDGE R.A.R. STROYAN, QC

**C**  
**D** Held At:  
The Law Courts,  
Teesside.

On: 6th April, 1981

**E** R E G I N A

.v.

JOHN ALEXANDER SYMONDS

**F** Transcript of: Defendants speech from dock (cont"d)  
Mr. Taylor  
Mr. Ford

**G** Transcript of the shorthand notes of Miss A. Dixon of Messrs.  
Humphreys, Barnett & Co., Official Shorthand Writers, 19 Queen  
Victoria Street, Leeds.

**H** Mr. Rivlin Q.C. appeared as Counsel for the Crown  
Mr. John Alexander Symonds conducted his own defence

I N D E Xpage Nos.

<b>A</b>	Defendant (Mr. Symonds) Speech From Dock		
	continued	1 - 4	
	MR. TAYLOR	- Examination In Chief	4 - 25
		- Cross-Examination	25 - 35
		- Re-Examination	35 - 41
			see also page 39
<b>B</b>	MR. FORD	- Examination In Chief	41 - 52
		- Cross-Examination	53 - 62
			to be continued on following day
<b>C</b>			
<b>D</b>			
<b>E</b>			
<b>F</b>			
<b>G</b>			
<b>H</b>			

6th April, 1984

DEFENDANTS STATEMENT FROM THE DOCK (continued)

HIS HON. JUDGE STROYAN: Yes.

**A** MR. SYMONDS (defendant): Members of the Jury, I must apologise for Friday, I understand I appeared rambling an incoherent, the reason for that are that I was on the limits of exhaustion, which you may have realised I have reached on Thursdays and Fridays during the weeks this trial has been going on.

**B** I was told that I had the right to make a speech to open up I made a few criticisms I took that and I decided to make a statement from the dock to give my version of events. What I propose to do now without wasting too much time is just to put everything into a nutshell. You have heard  
**C** the Prosecution version, my version is I joined the Police Force after giving up a career in the Army. I was making myself a career in the Police Force and on promotion to Sergeant I was sent to Camberwell Police Station. Mr. Perry and the others came to my notice, I was keeping a dossier on them, it seems they also noticed my noticing them because  
**D** there was it appeared later a plan to fit me up sometime during the late summer of 1969. When Mr. Perry was first arrested, together with the Nuneaton Officers we entered into an arrangement whereby I would speak to him and convince him that his case was hopeless, that there were finger prints and he should plead guilty. That is what I did and I submit the Nuneaton Officers did their part, they took him back to Nuneaton and  
**E** locked him up to think on it for a bit after also telling him his finger prints had been found.

**F** I also helped Mr. Perry over his motor car, which I think has also come out in evidence and on that occasion I telephone his mother giving my name and telling her that he was in custody and to ask her if his brother would collect it and she did. I submit that is how my name came to the notice of the Perry family.

**G** Some weeks later, about the 22nd October whilst meeting another informant of mine a man called Williams, Perry came with me to the public house and asked me once again about his car and appeared to be adopting a friendly attitude towards me. I knew that Perry was at the very heart of (inaudible) offences and I decided to cultivate him as an informant. But as I believe has already come out I was very busy at that time working on apart  
**H** from my ordinary duties but also involved in a very complicated abortion

A case. I also told you that it was my habit to take my lunch in the Grove Tavern which I had been doing for some time and it was known not only to my fellow Police Officers but doubtless to other people that that is where I was to be found every lunch time.

B Some time later Mr. Perry started telephoning me up giving me the impression that he was amenable to becoming an informant of mine. I met him several times, many more times than have been brought before the Court in evidence and then on the 29th November my career in the Police Force finished with an article published in the Times newspaper. The Times newspaper as you may know is now part of the Sun/News of The World group but at that time it was run by a Canadian self-made multi millionaire, a man named Thompson and at that time the Times was in financial trouble and was looking for ways to increase their circulation. As a result of the allegations made in the newspaper an investigation was started, I was suspended from duty but I was very pleased to learn not too long afterwards that there appeared to be no evidence against me capable of gaining a conviction because it had been discovered there was serious discrepancies in the evidence supplied to the Police by the Reporters. I understand ... understood the tapes had been sent for examination to E.M.I. and that E.M.I. Experts had found them unsatisfactory from the evidence point of view, - and he is now a Defence witness.

E Some time later to that I heard that there was a change around. The original Officer in charge of the case had been taken off and another one put on, a man called Moody, I also heard that it had now been decided that I was going to be convicted. I submit to you that Mr. Moody set out to convict me by changing around original evidence - original statements are now missing, original documents had been changed and the tapes have been altered. Having heard this news that I was not to be put up if you like as a sacrificial goat or whatever <sup>1</sup> decided that I would counter attack by threatening Mr. Moody that unless he stopped what he was doing I would bring the matters to the most senior authorities that had come to my attention. As a result of that pressure started coming on me to leave the country, first of all in the ways of promises and inducements and later pure threats. Eventually I did decide to leave the country but only on a short time holiday, timed so that I would know the result of the other case. Now there was another case which was brought to your notice during the course of this trial, Mr. Robson and Mr. Harris - they were convicted, sentences to twelve months imprisonment

each on corruption charges.

A I was then informed, by Mr. Moody, no less, that it might be better to  
stay away until after the appeal, the conviction was sure to be over-  
turned on the appeal. I continued to stay away, I started to make a  
new life for myself abroad. My previous life up till that time had  
B been either soldiering or police work, I was finished with Police work  
and I went back to soldiering, in Africa. That's where I spent most of  
the following years until my health broke down under too many attacks  
of malaria and I moved across to New Zealand and Australia.

C I eventually decided that I wanted to come back to England and I got  
in touch with certain senior officers at Scotland Yard who told me  
that, in one instance I was told ...

HIS HON. JUDGE STROYAN: No.

D DEFENDANT, SYMONDS: No, I can't use it. Well, as a result of what I was  
told I came back to England.

HIS HON. JUDGE STROYAN: There's another thing you might like to know,  
you said Robson and Harris were sentenced to twelve months imprisonment ...

E DEFENDANT, SYMONDS: On corruption charges.

HIS HON. JUDGE STROYAN: Yes, my recollection is their sentences were  
heavier than that.

F DEFENDANT, SYMONDS: Yes, but there were other offences, Your Honour.

HIS HON. JUDGE STROYAN: Very well.

G DEFENDANT, SYMONDS: Having returned to this country I went straight away  
to the Director of Public Prosecutions Office and told them I had  
returned to clear this matter up and all I was hoping for was a fair  
trial. It may also have come to your notice members of the Jury that I am  
in custody, because having returned to this country and given myself  
up in respect of the offences from 1969 the Police saw fit to oppose my  
having bail. The result is I have now spent nearly a year in custody  
which is equivalent to serving eighteen months in prison. So why am I  
H

A fighting this? I am fighting this members of the Jury to prevent myself going to my grave with a criminal conviction against my name. I haven't been fighting it very well, I know but I would like to say this and that is this, you were presented with evidence right from the very beginning of tape-recordings, you were also taken through transcripts from the very beginning. Now there is an opinion that all I should be concentrating on is trying to account to you for the words on the tapes, - what did I mean when I said this, what did I mean when Mr. Perry said that, etc.

B All I put to you members of the Jury is that those tapes are fraudulent and the first thing you must think about before you start to put your mind to what are on the tapes are are the tapes genuine, are they original, because I say they are not.

C In the course of my Defence I shall be calling expert witnesses to try to convince you that you should pay no attention whatsoever to these tape-recordings and then you will be left with very little evidence if any at all to consider and that is the evidence that Mr. Perry had fifty pounds on him allegedly before a meeting and allegedly he didn't have it

D after the meeting. I also put it to you that the evidence of Mr. Perry is not worth two-pence and the only thing you have got to worry about is the evidence of the reporters because apart from the expert witnesses they are just about the only people that matter in this case as far as credit concerns. To that end I have attempted to show you that when it comes to matching one credit against another because I've never been in

E trouble in my life, I ask you or I will ask you eventually, I submit to you my credit stands as good as theirs, if not better.

F I now call my first ... I ask for a five minute break, Your Honour to discuss matters with my solicitor before calling my first defence witness.

HIS HON. JUDGE STROYAN: Yes, very well.

(BREAK)

G HIS HON. JUDGE STROYAN: Yes Mr. Symonds?

MR. SYMONDS: I call my first witness Mr. Taylor.

MR. GEORGE HENRY ROY TAYLOR (sworn)

EXAMINED IN CHIEF BY MR. SYMONDS (defendant)

H Q. What is your full name please?

A. George Henry Roy Taylor.

Q. And what is your profession please? A. I am an audio engineer employed by EMI Limited as Deputy Technical Manager in the Magnetic Tape Division.

Q. Your home address? A. 58.a. High Street West Wickham in Buckinghamshire.

Q. For how long have you been with EMI? A. Something of the order of 16 years.

Q. Before that? A. I was with the Dutch Phillips Organisation as Chief Engineer.

Q. And may I ask you to tell the Court of your qualifications please? A. Yes. I am a member of the Audio Society, I am a member of the Royal Television Society. I am a member of the Society of Motion Picture and Television Engineers. I am a member of the British Standards Institution which is responsible for standardisation of measurements in magnetic recording tape. As such this gives me the post of the United Kingdom representative on the International electro-technical Commission which is affiliated to the International Standards Organisation which is responsible for producing international standards of measurements of magnetic recording tape.

Q. Would that be working group twelve? A. I am chairman of working group twelve. Working Group Twelve is a group of international experts who are assigned to me with a view to producing this standard.

Q. And so what is the Audio Engineering Society? A. It is a learned technical body which is formed for the technical exchange of research and development information, it publishes learned papers.

Q. And could you please explain the letters I.E.C.? A. International Electro-Technical Commission.

Q. Thank you very much. I don't wish to embarrass you Sir but I suggest from your answers your status and reputation is not merely national but international at the highest level. So I am now going to ask you a very general question. Do you think it is easy or difficult to judge whether or not any given tape recording is an original recording or a copy of an original recording?

A. It is extremely difficult to the point of being almost impossible if the copying recording has been well done. I assume you mean that there could have been an editing process between the original and the copying?

Q. Yes. A. If it is well done it is virtually impossible to tell, for an expert, even the more qualified expert to tell whether or not it is an original or a copy.

Q. Following from that Sir, if you were handed a tape which had been edited and copied could you be confident through the use of the technical means at your disposal of detecting edits?

A. No I could not detect edits. Perhaps it may be best illustrated by example, that were I given - and indeed I have been - original tapes which had been mastered by my own Company for the manufacture of grammophone records, I have no known way of telling which of these sections have been edited. In the case of an original tape of course the technique would be such that the tape would be cut and a piece of

sticky tape placed over the tape so this would be the give away. If it is of any interest to the Court I do have an example of this technique stuck on a card, if you wish me to display it.

A Q. Yes I wonder if you could produce that Sir.  
my notes My Lord, from my brief case?

A. May I obtain

HIS HON. JUDGE STROYAN: Yes.

A. Yes, I have an illustration here of the tape which has been ... The illustration of it, the method or the steps of editing a tape. It would be firstly to put two marks on the tape with a chinagraph pencil, the tape would then be cut at an angle and the two angles then butted together and joined, put over it with sticky tape. I have not shown the last stage in the operation because if one wished to make a copy from it then obviously on the new tape this piece of sticky tape would disappear.

B Q. Thank you Sir. So when editing tapes what is the normal method of identifying edit points?  
A. I don't think I fully understand the question.

C Q. Well what I'm getting at is what you've just mentioned - marking with a chinagraph pencil.  
A. Oh I see. Yes, normally one would play the tape at its normal playing speed, you would decide you wished to extract your section from the tape, you would then listening rotate the tape by hand in contact with the head so you could hear the sound on say a loud speaker and you would then mark the tape in the way I have illustrated here with a well defined mark, such that you could cut it at that point.

D Q. And to your knowledge is such editing a common practice in the music, film and broadcasting industry?  
A. It is very common and not only in the industry but also in the amateur recording world, I think this technique I have just explained is well known to every amateur recordist in the country.

E Q. Perhaps you could explain why is such editing used?  
A. It is used shall we say to cover up or to remove some of the defects/faults which have been generated by artists, you know, wrong notes on instruments, somebody sings an incorrect note, this can be removed and then replaced with another one.

F Q. In your opinion Sir is it possible to say what is the maximum number of edits that it would be technically possible to insert into a recorded interview of say thirty minutes duration?  
A. I have had experience of as many as 200 edits in this time. This is common practice in my company.

Q. I know we have touched on this before but I would like you to say whether or not such edits would normally be detectable either aurally or by technical means?  
A. No, in my opinion they would not.

G Q. If I can turn to the exhibits in this case, the tape recordings. I must ask you did you examine some of the tapes which are now exhibits before this Court known as the Times Recordings and which related to legal proceedings against Robson and Harris and subsequently me?

A. Yes I did. My company was approached by the Metropolitan Police. I think this was ... just a moment ... it was early 1970. A Detective Chief Superintendent Lambert approached the commercial division in my company - sent them a letter and they asked if we would examine them, a number of tapes, which I did. In fact I think it would be fair to say



I was working for the Metropolitan Police on this matter for possibly nearly two years.

A

Q. And may I ask you whether your work was carried out on the originals, the copies or both? A. It was on the originals.

Q. And were the original tapes ever in your sole custody?

A. Never. The examinations which I made at all times I was accompanied or supervised (that would be a better word) by two Police Officers.

B

Q. Are you aware that certain marks have been found on the base film side of some of these tapes? A. I am.

Q. I must therefore ask you Sir whether or not you yourself using any kind of writing instrument did at any time inscribe any mark on the base film of any original tapes to which you had access?

A. No Sir I did not. I would regard that as an improper act.

C

Q. You would regard it as an improper act for an authorised investigator to put such marks upon such tapes? A. Yes, unless of course this person had Police permission, but certainly in my experience the Police were most insistent that nothing was done to those tapes at all.

Q. I would like you to look at exhibit 4 which are tapes 3.a and 3.b and looking at the markings upon the box and the spool, would you say that this would appear to be the tape you actually examined in 1970?

A. Yes I would say that is the tape.

D

Q. And if I could now ask you to examine exhibit 3? A. I'm sorry but exhibit 3 ...

Q. Is tape 5 JDM7? A. Oh tape 5, okay. I'm sorry about the time but I had trouble in identifying a number. Yes, I would agree that is the tape.

E

Q. And if you would now look at exhibit 6 tape 13?

A. Yes I am satisfied.

Q. And exhibit 5 tape 4.

A. Exhibit 5 tape?

Q. JDM18.

A. Yes I am satisfied that is the tape.

F

Q. And lastly tape 1 exhibit 1 and tape 2 exhibit 2. that one is also consistent with my report.

A. Yes

HISHON. JUDGE STROYAN: What are you pointing out about those - those are the ones you examined earlier? A. Yes. I'm sorry My Lord it's taken me a moment or two because I am cross-checking all the numbers.

HIS HON. JUDGE STROYAN: You examined them when?

A. 1970, January, 1970.

G

Q. Would it be correct to say when you examined these tapes just now you referred to writing upon the box did you, the batch number?

A. Yes I looked at the batch number on the leader of the tape, which is stamped on the leader, and also to make sure it was consistent with the number on the box and in some other instances the box was in fact stamped with the letters 8126PWB which is the contents of my original report.

H

Q. So the references you made Sir were to the batch number on the tape and the batch number on the box? A. That is correct.

Q. Now did you find that in some cases the batch number on the tape does not agree with the batch number on the box?

A. Yes on the tape I have just looked at, tape 5, I found no number at all on the leader.

Q. Would you describe this as ...

HIS HON. JUDGE STROYAN: Tape 5 exhibit 3, is that the one you mean?

A. Tape 5 not exhibit 5, yes My Lord.

HIS HON. JUDGE STROYAN: No batch number on the leader?

A. That is correct.

Q. And in that case ... In other cases did you find in fact the batch number on the box and the tape leader differed? A. Yes there have been ... there was an instance of that yes.

Q. And in your experience should the batch number on the box match the batch number on the leader? A. It should indeed.

Q. Is it possible for tapes to leave your factory with different batch numbers on the box and leader? A. All I can say is at that time all tapes were inspected a hundred percent by the Quality Control Department and when I say a hundred percent I mean operators were employed to make sure that batching was indeed correct because this is considered very important in dealing with professional customers. They all insist that the batch of the tape is clearly identified because of alignment requirements on professional tape recordings. So we do have a very stringent system in the factory but on the other hand I really cannot answer for some possible error that was made by one of our operators.

Q. And when you referred to the batch number on the box and on the tape leader would it be correct to say that you are in fact only truly identifying the tape leader and the box? A. That is correct.

Q. Because is it right to say that tape leaders are easily removed and replaced. A. Yes they are very easily. Kits are supplied and our own company does supply spare leaders to go on tapes,

Q. And would these spare leaders be un-numbered? A. They would.

Q. Apart from the marks which were later found on certain tapes and which were brought to your attention did you find any other form of marking on the tape as a form of identification or upon the white leaders? A. No.

Q. Is it a common practice in your profession to mark the white leader in order to identify the tape? A. Yes it is very common.

Q. And would it be true to say that that tape may be easily removed from a spool and replaced with another tape? A. Yes.

Q. If you could turn your mind Sir to the investigations you made upon these tapes and upon your laboratory findings and comment at that time. And if I could ask you first of all about tape 3.a and 3.b. What was your general opinion regarding tapes 3.a and 3.b?

A. I came to the conclusion that the tapes 3.a. and 3.b. did in fact consist of two recordings. May I have just the Court's indulgence for a moment as this is a long time ago.

A HIS HON. JUDGE STROYAN: Yes. A. Yes, the conclusion I reached there was that the recording which I know as 3.b did in fact erase some of the recording which I know as tape 3.a. I can recall I made a film of the joint in the tape and found it, you know, perfectly continuous, so there is no doubt there is no interval between them, the two recordings. From that one can conclude 3.b. certainly had erased part of 3.a.

B Q. When you say there was no interval does that mean you could find no trace of a machine being switched off at the end of 3.a and or of a machine being switched on at the beginning of 3.b? A. That would be correct. I went to a great deal of trouble on this as I have explained. I did make a film which I haven't with me but it still exists of that showing there was absolutely no break in continuity at all. I could not find any break in continuity between those two recordings.

C Q. And can you think of a way Sir in which a tape could end up in that condition as it were with one recording following immediately on another with no signs of any switching on or switching off?

A. Yes, it would have to be wound back to a specific point by hand. This particular tape has always seemed rather odd to me, that somebody should wish to start a recording in the middle of a tape. I can perhaps understand somebody who might perhaps pick up a tape ...

D HIS HON. JUDGE STROYAN: Just a moment please. You said that 3.b erased some of 3.a? A. Yes.

HIS HON. JUDGE STROYAN: You filmed the tape and it was continuous. Does that mean that 3.a both preceeded and followed 3.b? A. 3.b was the second recording on the tape.

E HIS HON. JUDGE STROYAN: I understand that. The point is did it start at the beginning of the tape without erasing the whole of the first part? A. No, no it was in the middle of the tape.

HIS HON. JUDGE STROYAN: That's what I wanted to know. A. Which is ...

HIS HON. JUDGE STROYAN: Just a moment. "Erasure was in middle of tape". A. It gave me a great deal of concern this tape because the original brief I was given by the police said that a new tape had been ...

F HIS HON. JUDGE STROYAN: No, no. A. I am sorry?

Q. I am going to ask that next.

MR. RIVLIN: May I say Your Honour I have absolutely no objection at all.

HIS HON. JUDGE STROYAN: Very well.

G MR. RIVLIN: I should have thought by now the Prosecutions position as regards three tapes is crystal clear, but I have no objection to this matter being put to the witness at all.

Q. When you were given these tape recordings to examine Mr. Taylor were you given their alleged history also? A. Yes.

Q. And would you consider that knowing the history or the alleged history of the tape recordings you are about to examine is a vital part or component in carrying out a full examination?

A. It is absolutely essential for the expert to know the history of the tape because only in that way can he say his findings are reasonable or consistent with the information which he was given.

Q. And were you given sufficient information to know that these recordings had been made under certain conditions whereby at least one party didn't know they were being made?

A. I don't think I understood that question, could I ask you to repeat it.

Q. Were you given the background to how the tape recordings were made?

A. Yes.

Q. And were you also told that the tape recordings were alleged to be brand new virgin tapes?

A. I was.

Q. Bearing this information in mind together with your scientific results is that how you came to the conclusions you are putting before the Court now?

A. It is.

Q. Now if we could go back to what you were saying Sir before I interrupted you, about what you found unusual about tapes 3.a and 3.b?

A. Yes. Well it became apparent that there were speed differences between the two recordings. The recording 3.a was running very slowly so it was very easy to understand particularly as it was a back up tape for another one, but part of that recording 3.a. was missing and it was obvious to me that by definition that the recording 3.b. occurred somewhere through the middle of the tape. And as I've said previously, the conclusion I reached that 3.b. had in fact erased part of 3.a. Now for that to have happened I formed an opinion that the tape would have had to have been carefully placed on a recorder somewhere halfway through its length when the recording 3.b. was made which quite frankly in terms with the information I'd been given I thought was unreasonable to say the least. I mean normally one perhaps may make a mistake and pick up a tape that has already been recorded but in this case this tape certainly had a recording on it but it was started in the middle or somewhere near the middle, I can't remember now, but it was not started from the beginning.

Q. And is this tape a 5 inch tape Sir?

A. Yes indeed it is.

Q. And as the background to the taking of the recording was that it was to cover a meeting which would last an unknown period of time, would you consider it unusual to set up recording equipment with a 5 inch tape playing on the second half of the second track in which to cover this meeting?

A. I would consider it would be most unusual and indeed a very silly thing to do.

HIS HON. JUDGE STROYAN: Is that because it would only play for a short time?

A. That's right.

Q. And were you later shown a mark made upon this tape Sir?

A. I was.

Q. And did you note where this mark was made?

A. I did.

Q. And was this mark in the form of an editing mark as discussed previously this morning?  
A. Yes one could construe that as being an editing mark, as if somebody wished to start the tape from that specific point. Perhaps the editing ... the term 'editing mark' might be a little strong - it was an indicating mark perhaps I might describe it as, to start the tape from a specific point.

HIS HON. JUDGE STROYAN: Just a minute.

Q. I think I may ask you this Sir. If the tape had been started from about the point of the editing mark would it then have erased on tape 3.a certain words and phenomena which caused you serious doubts on the back up tape of 3.a tape 4?  
A. That is correct it occurred at precisely that point.

HIS HON. JUDGE STROYAN: I don't quite follow that. If that tape 3.a. 3.b had been started at the indicating mark it would have done what?

A. I think the point that was being made My Lord was in fact this tape 3.a was in fact a back up to a tape known as tape 4.

HIS HON. JUDGE STROYAN: Yes.  
A. And there were matters which concerned me on tape 4 and I think ...

HIS HON. JUDGE STROYAN: Tape four has nothing to do with this case.

A. No, but as I understood that was the question put to me.

Q. Yes Your Honour.

HIS HON. JUDGE STROYAN: Yes.  
A. It has nothing to do with this case as far as I know.

HIS HON. JUDGE STROYAN: Yes that's right. What I am trying to get clear is the conclusion you formed as to the meaning to be derived from the editing mark or indicating mark on tape 3.b. You said if the tape had been started at the mark it would have indicated what?

A. Well it would have given me the effect, you know, which I observed on the tape. It would have erased the part of the recording which is known as 3.a.

HIS HON. JUDGE STROYAN: Yes.

Q. The point I am trying to make is that part erased on 3.a. was the part which caused serious doubts and grave suspicion on back up tape to 3.a which is tape 4. which is not in this case.

HIS HON. JUDGE STROYAN: The part of 3.a. which might have been erased but was not ...

Q. On tape 4.

HIS HON. JUDGE STROYAN: ... created doubts on tape 4. Is that right?

A. No Sir. My Lord I'm sorry. The situation was that I and other experts at the time on tape four all had grave doubts about a certain section in it. It so happened that the tape 3.a was a back up for tape four and the section was erased from around that point where myself and other experts thought tape four was dubious.

HIS HON. JUDGE STROYAN: I see.

Q. So following on from that Sir, would you say ...

HIS HON. JUDGE STROYAN: Just a moment. The part erased on 3.a corresponded to the dubious part on tape four, is that right?

A. That is correct.

Q. Did you in fact make a plan to elaborate that point? A. I did, yes.

Q. I wonder if we could exhibit this plan Your Honour because then the jury ... It might help the jury to see that, in fact words were taken off.

MR. RIVLIN: Your Honour I have no objection at all, I think that the defendant is perhaps pushing at an open door because he knows very well we agree with all of this. But if he wishes the plan to go before the jury, of course no objection.

HIS HON. JUDGE STROYAN: Yes, very well.

Q. Could we round off by saying it would not appear to be a coincidence that tape 3.b starts exactly where it does start? A. It would be stretching probability I think very much indeed, I think, you know, that such a coincidence could exist.

Q. Now if you could turn your mind Sir to... Could you please produce this plan if you have the original. Thank you. If you could turn your mind ...

HIS HON. JUDGE STROYAN: Exhibit number what?

MR. RIVLIN: I think we are up to 49 or fifty now. Fifty, Your Honour.

Q. Could I ask you again Sir what was your general opinion regarding tape 5 in 1970? A. When I first examined this tape in 1970 I found a break in continuity just after the sentence occurred "Let's put it in this car shall we" and there was a complete absence of audio signal, absolutely nothing, it wasn't produced, it was completely absent indicating to me a break in continuity.

Q. I notice that this comment has been made several times by yourself and the judge 'a break in continuity' or a continuous recording and you've indicated I believe that certain tapes are not or could not be continuous recordings. A. Indeed, and this was one such tape.

Q. And by this expression Sir, 'could not be a continuous recording' ...

HIS HON. JUDGE STROYAN: Does that mean switched off and then on again?

A. No. I now ... I mean the question that was asked My Lord was regarding my report which I made when I examined the tape in 1970.

HIS HON. JUDGE STROYAN: What I was trying to ask you was a rather simple question, whether when you say it is not a continuous recording that means it was switched off and then on again. A. It could well mean that.

HIS HON. JUDGE STROYAN: Thank you.

A Q. Would it be right to say with the information you had been given as to the alleged history of these tapes and that is they were virgin tapes which had been placed onto a machine before a meeting, the machine had been switched on, the tapes had recorded throughout a meeting, the machine had then been switched off - would you expect that if that information be true you would find certain things upon that tape which should lead you to believe it is a continuous recording? And if you found any phenomena such as unexplained gaps or any unusual electrical matters you would then decide that that tape is not a continuous recording and therefore it does not comply with this alleged history?  
A. That is correct.

B Q. So would it be true to say of the two tapes we have discussed so far, 3.a. and 3.b and tape 5 you decided both were not continuous recordings and did not comply with their alleged histories?  
A. They did not comply with their alleged history, but however, I did say earlier the tape 3.a and 3.b were continuous recordings at the point of my concern. It was in fact continuous. Tape five was not continuous.

C Q. Thank you. And while we are still on general opinion Sir could we go on to tape 13. And if I could ask you the result of your examinations upon that tape in 1970?  
A. This tape contained a number of breaks in continuity. I know from my report it was in fact done with a radio microphone/radio transmitter and receiver and I certainly commented again that this was not a continuous recording, but I did not rule out of course the possibility of failures, technical failure or loss of transmission as being one of the factors that could cause this.

D HIS HON. JUDGE STROYAN: Just a moment. Yes.

Q. And if the breaks noted during the music recording were caused by a mechanical failure would you think that self-repair of the device was likely?  
A. No I would not.

E Q. And apart from the one possibility that is complete failure with the audio signal whilst the recorder was running could it be that you would regard this tape as a not continuous recording in accordance with your strict regulations?  
A. Yes I certainly have listed in my report it is not a continuous recording. There were many breaks in continuity. I noticed I measured two noise levels and I think if you just give me a moment to digest the contents of my report ... Yes, this is a different difficult one, I think it is one of these 'either or' situations. I do say in fact that part of the noise measurements and breaks in continuity would be typical if the tape had been subjected to bias erase field. But of course in the normal recording process a tape is subjected to these fields anyway. So if there was complete technical failure or loss of signal that would be ... it could well be I would find that on the tape.

F Q. Now moving on to tape 14. Could I ask you for your general opinion regarding tape 14 in 1970?

G HIS HON. JUDGE STROYAN: Exhibit 5?  
A. Yes. The comment in my report says I noted excessive overload distortion during some music recordings that were on there but I was unable to really find any sort of other technical fault other than that - that there was some overload distortion.

A Q. And would it be right Sir that this tape was recorded throughout its length?  
A. Yes I would say according to my report ... I can't remember of course, I must rely on this. Only microphone background noise was heard so from my report it would suggest it was recorded throughout its length.

B Q. And I believe tape 14 is back up tape to tape 13 or vice versa and on tape 13 you found breaks in which you could measure bias erase noise or whatever.  
A. Yes.

B Q. But would it be so that because tape 14 was run throughout its length there were in fact no breaks or lengths of virgin or alleged virgin tape to which you could apply your measurement apparatus?  
A. That is correct I was unable to apply any ... make any noise measurements on tape 14.

C Q. Can I ask you how important in terms of your technical examination are those sections of tape before and after that section containing the interview recording?  
A. In order that I may understand the question ... We are now referring to 13.

C Q. Well going on from there, the fact that perhaps there were no breaks during the conversation part in which you could measure phenomena ...

HIS HON. JUDGE STROYAN: On 14?

D Q. Yes, but on 13 I believe the break came in the music section afterwards?  
A. That is correct.

E Q. And in general, leading on from that I would ask you when making a technical examination of a tape would you not examine all of it, those parts before and after recording and those parts before and after speech recording?  
A. Indeed, that is absolutely correct. I mean no matter what is on the tape the actual recorded material whether it be music, speech or whatever was no concern of mine. I was asked to look for specific breaks in continuity and also the technique I adopted was to make sure that the unrecorded sections of the tape were consistent with tapes we manufacture. This is a very important point to be able to detect whether a tape is an original or a copy.

F Q. So Sir is it right to say in such circumstances it is right to look at the tape as an entity?  
A. Yes indeed, absolutely. It is essential an expert should do that in my opinion.

F Q. Could you have carried out an expert examination and offered your opinions for example by just concentrating on listening to the speech recorded section?  
A. One can of course express an opinion by listening to a speech conversation. An expert in that role in my opinion would be listening for, shall we say, truncated syllables or something symptomatic of poor editing.

G Q. Would it be true to say that if that speech recording had been edited even competently, not expertly but even competently, it is quite likely such a speech expert would find no fault?  
A. Yes that would be absolutely correct.

H Q. If I could refer you to tape 2 exhibit 2. Is it right to say that this in fact was a five inch tape?  
A. Yes.



Q. And was the information that it had been recorded full track at a tape speed of  $7\frac{1}{2}$  I.P.S. A. Yes indeed.

A Q. Would it be right to say a five inch tape running at a speed of  $7\frac{1}{2}$  I.P.S. would run for approximately 16 minutes? A. If you will give me a moment. Yes that is correct, yes 16 minutes approximately.

B Q. So if the alleged history of this tape was that it was switched on whilst going early, that is sometime between five and half past five, to a meeting due to commence at half past five and would last for an unknown interval of time, would you say it would be most unusual to set up a five inch tape and switch it on to play at  $7\frac{1}{2}$  minutes to cover that meeting, that is  $7\frac{1}{2}$  I.P.S. A. Yes it would be again a very very foolish thing to do.

HIS HON. JUDGE STROYAN: Because it would not last long enough?  
A. Because it would not last long enough.

C Q. Now I wonder if you would give us your comment on this tape Sir?  
A. The gear that I had on this was the radio receiver and recorder were functioning correctly because I detected in the breaks in continuity ignition interference and that the microphone transmitter was rather faulty or was switched on and off during the recording or something, but there was a technical fault arising from the microphone or transmitter, that was the opinion I formed of this tape.

D Q. So on that tape in 1970 you came to the conclusion, or one of your conclusions was that the microphone transmitter could have been switched on/off during the recording? A. Yes.

HIS HON. JUDGE STROYAN: Just a moment. You said the radio receiver was functioning correctly, it was a fault in the radio and transmitter?  
A. Yes, the exact words I used were that the radio receiver and recorder were functioning correctly and the microphone transmitter was either faulty or switched on and off during the recording.

E Q. Can I ask you Sir if you ever had cause to examine equipment allegedly used during these tape recording exercises? A. No. My understanding of the matter ... I did of course ask for this but these had ... I can't remember the exact reason but the actual equipment I asked for, the recorders and radio equipment weren't available - the actual ones used for this operation, because of course I did ask for these.

F Q. Yes. And if evidence was given Sir about a microphone around a mans neck connected to a transmitter in his pocket would it be possible for that person to switch on and off the transmitter by plugging or unplugging a lead or some such matter? A. I would imagine this would be feasible.

G Q. So therefore that person would be controlling what was recorded in fact? A. Yes, were that of course the case.

Q. I would like to ask you about something else now Sir, about noises. On all the tapes used apart from the single Grundig cassette is it right to say they are all EMI type 812? A. That is correct.

H Q. And could you please tell the court what are the manufacturing tolerances in terms of noise performances? A. Of the order of half a Db. 0.5 Db.

Q. Does this mean that any tape outside the limit you have defined would not be sold? A. No. That would be considered as a reject tape.

A Q. Does that mean as far as brand new 812 tape is concerned the noise values for all manufactured batches regardless of the batch number will be identical except only for the small variation you have quoted?

A. Yes, I think on page 30 which is appendix 3 in my report I have the noise figures, bias figures are in fact quoted and the tolerance there in the tapes used throughout this matter show no more than half a Db. tolerance, a measured tolerance. There is an extract from a quality control record.

B Q. My next question is if you consider the use of 812 tape on a Nagra 3 recorder do you know what the measured difference would be between bulk erased noise on brand new tape and bias erase noise produced by running the tape through the recorder in the record mode? A. Yes, it could be in the order of as much as 3Db.

C Q. And I believe you weren't in Court when a Prosecution expert gave his answer to this question. May I ask you if anyone has told you what his answer was? A. I don't know anything about it I'm afraid.

Q. If someone had said that this difference is less than 0.5 Db what would be your comment? A. The difference between bulk erase and bias noise was only 0.5 of a Db. if I understand your question correctly. No, I would have to disagree with that quite strongly I'm afraid, it's considerably more than that.

D Q. Three Db. And may I ask you would you expect noise values to vary slightly for the first and last few inches of tape on a reel? A. Yes they can vary slightly if the tape gets damaged and it is a fact that the end and beginnings of tapes do tend to get handled rather more so it is possible.

E HIS HON. JUDGE STROYAN: The ends of tapes get handled more, so what?

Q. Slightly damaged possibly? A. So one could envisage the possibility, My Lord, of a slight noise improvement due to the tape damage.

HIS HON. JUDGE STROYAN: Increase in noise? A. No. Decrease.

F Q. And one or two further questions in connection with editing Sir. In commercial editing would you expect edits to be made only in the silent part of the programme? A. No, no. My Company wouldn't be able to survive in business if this was only possible to do editing during silent passages.

G Q. And would it be normal for example to edit in just part of a note sung by for example an opera singer? A. Yes I do know of occasions where this has been done, where an opera singer has sung one note on one day and it should have been longer and has come back in a weeks time and sung the same note and they have been joined together.

H Q. I would like to move onto the subject of 30 htz. tone bursts. Perhaps I could ask you this - if I was to refer to a 30 htz. tone bursts in the context of this case would you understand what I am talking about? A. Yes indeed.

Q. Is it right that when you were listening to these tape recordings in your laboratory you listened to them through head phones?

A. I did

Q. Was this because your investigation was being carried out under conditions of confidentiality.

A. That is correct.

Q. You did not want to play out aloud through a loud speaker the alleged conversation?

A. Indeed. In fact the police instructions was to examine these tapes, I think there was some form of subdudicy on the whole matter at the time I looked at them, unfortunately there were other persons working in my laboratory and although it was initially started by listening on loud speakers and getting everybody out of the laboratory obviously this was uneconomic to my Company - we had to make some sort of compromise with the police officers and the head phones was the compromise.

Q. Would it be right Sir that as an expert you would expect to pick up 30 htz. tone bursts by playing the recording through a loud speaker and not through head phones?

A. No I don't think I can agree with that. The 30 htz. tones to which you are referring I heard when I examined these tapes. I attributed them at the time to slight demagnetisation on the tape. So they were there. They could not be heard under normal playing conditions, but part of playing tape recording particularly if one used a special recorder which I did - I used a laboratory recorder when the tape was re-spooled you could hear these sort of blopping sounds. The frequency was increased to where the ear was sensitive so they were audible. In my case I dismissed these as being magnetisation of the tape in other words if one carries tapes around and gets them near steel or ...

HIS HON. JUDGE STROYAN: Demagnetisation?

A. No. Magnetisation.

HIS HON. JUDGE STROYAN: You did say demagnetisation.

A. I beg your pardon I meant magnetisation, accidental magnetisation can produce noises similar to this that can be heard on spooling and I dismissed it. Now later on in 1971 Mr. Ford did indicate and analyse these tones and he asked me ... I hadn't taken the trouble to actually analyse them, he had ... and he asked me certain questions about these - how could they have been caused, could it be caused by magnification, would I do an analysis to give an opinion on this which I duly did and gave Mr. Ford a copy of the report.

Q. So it would be right to say that you yourself did not establish the presence of this phenomena within these recordings, I mean as you've just described?

A. I was aware there were signals on the end of the tape which were audible to me when spooling but I did not analyse them I just dismissed them.

Q. Could I ask you just to describe to the Court as briefly and as non-technically as possible the characteristics of this phenomena, 30 htz. that I believe you say you did establish later after being approached by Mr. Ford?

A. Yes. As I have said previously this is a sort of effect that can happen with accidental magnetisation of tapes if they get exposed to straight magnetic fields. Mr. Ford asked my view on this and he went further than that he asked me to form an opinion as to whether these small signals which were in the unused (and this is the important thing, they were in the unused section of the tape) a section of tape which should contain nothing but noise and here we've got the recorded signals.

HIS HON. JUDGE STROYAN: Which tapes are these?

Q. Is it 1, 3.b and 13?  
were tape four and tape seven.

A. The tapes I examined for Mr. Ford

HIS HON. JUDGE STROYAN: On the unused section of tape four and tape seven.  
Tape four I don't think we are concerned with.

Q. So far as this case is concerned would the 30 htz. tone bursts have  
been on tapes one, 3.b and 13. Just a moment.

HIS HON. JUDGE STROYAN: He's just said 4 and 7.

Q. Sorry, one and five. Tapes one and five.  
of all the tapes that had the tone bursts. I know I went to Mr. Ford's  
laboratory and heard some there but I have no record I'm afraid of all the  
tapes I listened to. I cannot answer that question all I can say is I  
have a report which says I looked at tape 4 and 7.

Q. We have heard evidence that this has been established and agreed on  
I believe on tapes one and five. If I can go back to my original question  
Sir when I was asking you to describe as briefly and as non-technically as  
possible the characteristics of 30 htz. hum. I believe you got as far  
as saying you found this in unrecorded sections of the tape.

A. Yes, they existed in the unrecorded sections of the tape which of course  
should be free from any signals. Now I had to ask myself the question  
when Mr. Ford put this to me - could in any way my factory have put  
these signals on, in other words instead of giving perfect bulk erased  
noise or virgin tape noise on the new tape could there be some defect  
or some other happening in my factory, something that missed the quality  
control that could put these signals on the tape. So I conducted a  
series of experiments. I deliberately magnetised a sister tape which I  
must explain so the Court understands - it was one we happened to have  
in our stores from the same batch as was used in this case. I had in  
my possession a virgin tape. I found that this did not contain these  
signals so the implication was from that that my factory could not have  
put it on - because when I open a box of virgin tape I find these signals  
are not there.

HIS HON. JUDGE STROYAN: I don't think there is any dispute about this.

MR. RIVLIN: None at all Your Honour.

Q. About this noise being on the tapes or how they came to be on the  
tape?

HIS HON. JUDGE STROYAN: What is not disputed is virgin tapes did not  
contain 30 htz. tone bursts.

Q. Yes. But do the Prosecution accept that these tone bursts came  
on during a copying process, in which case there is no dispute and we  
can leave that subject.

HIS HON. JUDGE STROYAN: Mr. Taylor what do 30 htz. tone bursts happen  
to sound like if you happen to meet one?  
it My Lord if you spool the tape. 30 htz. has a very low frequency.  
It would ... It's like the longest pipe on an organ, it's very low.  
If you were to ... you would be more likely to feel it than hear it.  
It's of a very low level, it would need enormous amplification and people  
cannot hear that unless the tape is fast-spooled which is the only chance  
you have of hearing it at all, this has the artificial effect of highering  
the frequency thus making it audible.

HIS HON. JUDGE STROYAN: So it doesn't effect the ordinary hearing of recording speed on a tape at all? A. No it wouldn't. The thing is it should not be there in the virgin section of the tape, the unused portion.

Q. So if it was in fact a brand new tape taken from its plastic wrapper ceremoniously unsealed, put on a recorder and played through, taken away and locked up in a steel cabinet or whatever that noise should not be on the tape? A. That is correct.

Q. Would you regard these noises being on ... Would you regard the presence of this phenomena to be a common occurrence, a rare occurrence, or a unique occurrence? A. It would be unique.

Q. So for the benefit of the jury, if I could ask you to break down the history of all tapes manufactured in EMI factory. For example can I put it into three stages - stage one the actual manufacture of the product from its original components up to the point where it becomes a finished product in a sealed box locked in your warehouse and awaiting despatch? A. Yes.

Q. Stage two would be its life time through wholesalers and retailers? A. Yes.

Q. The second stage sir would be its life time through wholesalers and retailers and into the hands of the user which would be the time up to the moment the seals were broken? A. That is correct.

Q. And it is placed on a recording machine. A. Yes.

Q. And stage three, I would like to regard this as the period of time between the first breaking of seals and therefore first recording and the moment when it is discovered such tone bursts are present. Have I made that clear Sir. A. Yes, I think so.

Q. So to summarise briefly we are looking at the history of the tape in terms of manufacture, distribution and final use. A. Yes.

Q. Stage one, manufacture. Within your knowledge and experience is it at all possible that such tone bursts could be recorded onto new tape during manufacture. I believe you have answered that. A. Of that character certainly not.

HIS HON. JUDGE STROYAN: I think you've got all this already.

Q. You see the thing is Your Honour we've already had one crazy theory about this. - the television transmitter.

HIS HON. JUDGE STROYAN: This is not the time for crazy theories.

Q. Well we've had one put up by the Prosecution.

HIS HON. JUDGE STROYAN: It is the time for you to ask relevant questions.

Q. I am trying to completely cover it so that everyone is quite sure, the jury and everybody is quite sure what it means, these noises on the tapes, what it means - how important it is. It is the crux of the matter. So far as packaging is concerned ... We've dealt with manufacture. So far

as the packaging is concerned is there any way these 30 htz. tones could have got on to these tapes during the packaging process in your factory?  
A. No. No way whatsoever.

A Q. Then we come to distribution. We are speaking of tapes in general, not just the exhibits in the Court. If you could apply your mind to the most roundabout routes imaginable through wholesalers, retailers, consumers involving many different forms of transport and handling right up to the moment when the user breaks the seal and begins to record - and assuming under such circumstances the sealed boxes might conceivably be subjected to a variety of magnetic and electrical fields or whatever, have you ever known phenomena of this kind we are discussing to have been produced during this stage of any of your tapes?  
A. No. The answer to that question is certainly no. This as I said earlier, the basis of my experiment was to consider the effect of the tapes being accidentally magnetised to which you've just referred and the basis of the experiment was such that this accidental magnetisation on a sister tape from the same batch as was used in this affair produced noise signals completely different in character to these 30 htz. tone bursts.

B C Q. Thank you. Therefore we are now left with just stage three Sir. Would you say that if 30 htz. tone bursts conforming with your description were to be present in one or more of these exhibits now before the Court they must have originated from some process or processes which took place within stage three. That is the time between when the seals were first broken by the first user and the time when their presence was initially discovered?

D HIS HON. JUDGE STROYAN: I think everybody has been agreed about this for weeks now.

Q. That is not so. There is a dispute and it is particularly about the noise level.

E HIS HON. JUDGE STROYAN: Very well. We've got the point now.

F Q. For instance can I ask Mr. Taylor whether 30 htz. tone bursts are in bias erase or bulk erase noise or ..  
A. They are in the bulk erase sections of the tape.

Q. You see that's the importance your Honour in view of one of the answers made on Thursday or whatever. You see normal recording would produce a noise level which we call bias erase, is that right?

F A. That is correct. If a tape is being used and erased on a recorder which is a straight forward erase on a recorder it produces a higher level than the noise found on the end of these tapes which contain the 30 htz. tones.

G Q. So would you confirm the tone bursts to which we are referring relate to signals of fixed frequency recorded at random points on tape whose noise characteristic is that which is known as factory bulk erase or virgin?  
A. That is correct.

Q. So what does that signify?  
A. It signifies to me that the tapes which contain these signals could not have been factory fresh or new tapes. They had noise character which was completely different from that. And furthermore, they have been subjected to some form of sophisticated erasure, but ...

H Q. Would it appear that someone has taken steps somewhere to make used

A used tape look as if it is in fact virgin? Because for example if a conversation had gone on for say half an hour and it was decided to erase the last quarter of an hour we would have bias erase noise left on the tape, is that right - a higher level of noise bias erase. But if someone wanted to erase part of a tape, music, speech or whatever to give an impression that it was a virgin noise left would that be the sophisticated erasure method you are referring to Sir to make a tape appear virgin?

B A. I really didn't sort of have that in mind what I had in mind and it seems more probable to me is that I established in my laboratory that the tapes originally which were erased on our factory eraser had obviously been subjected to some other erasing operation to simulate bulk erased noise and it was rather a sophisticated one because the tones tell us this. It's not as if the tapes were bulk erased on a normal bulk eraser because it would have then produced a similar sort of noise pattern to the erasers used in my factory.

HIS HON. JUDGE STROYAN: Are you saying it has been bulk erased on a different sort of machine? A. On a different sort of machine, a very specialised machine would be my opinion.

C HIS HON. JUDGE STROYAN: So be it.

Q. If I was to suggest to you that these tone bursts were the result of motor noise from a Nagra 3 leaking into the record process, could you accept this as an explanation? A. If, only if the tapes had been, shall we say, erased in a very special way on such a machine.

D Q. Could such a leak occur whilst the Nagra 3 was in the play-back mode? A. No.

Q. And so bulk erased noise levels in what should be virgin sections of the tape? A. No. If I recall when the Nagra is in the play-mode the record head is in fact shorted out, or disconnected and shorted to a (inaudible).

E Q. If you had been ...

HIS HON. JUDGE STROYAN: So could this have been done by a motor noise from a Nagra 3.

Q. I did put that question, the leak theory.

F HIS HON. JUDGE STROYAN: Is that right? A. We may have a misunderstanding here My Lord.

Q. I believe the answer was no.

HIS HON. JUDGE STROYAN: I asked the question because I thought there might have been a misunderstanding. I'll ask it again, I want to get it clear. Could it have been caused, this erasure, by motor noise from a Nagra 3 recorder? A. It is possible.

G HIS HON. JUDGE STROYAN: Yes. Yes?

Q. So to clarify that could such a leak occur whilst a Nagra 3 was in the play-back mode? A. No, I think not.

H Q. So in this instance that theory would not apply if offered, about the leak? A. If I understand you, you are saying could they have been put there in the natural playing-back of the tapes on a Nagra. I think that is where I got hazy. In my opinion it could not but

it would be possible to produce it with the recorder in the record mode with some other sophistications.

A. As this has come up perhaps you can describe the sophistications you have in mind to produce this phenomena. A. Firstly I think we have to understand the physics of bulk erase and bias noise. I will try and put this as simply as I can. If a tape is demagnetised which is what we do on a recorder in contact with an iron circuit you loose an effect of self-demagnetisation. If you take the same tape and demagnetise it not in contact with an iron circuit such as you would do on a bulk eraser, you then get an additional magnetisation due to the non-presence of iron. One could regard perhaps simply to take us back to school physics, there's the head working like a keeper and this is one of the theories put forward why bulk erase noise is better, lower if you like than bias erase noise because it hasn't got the iron keeper there, namely the head of the machine. So what would we have to do to a recorder to achieve this. One method of course - a very simple one would be to space the tape away from the head which is a well known technique. Certainly my company has written reports on this and I have done it many times myself and it is then possible on a machine if you use spacing between the heads and the tape (with splicing tape) it is possible then to produce a very effective form of bulk erase noise using a tape recorder. But this is the sophisticated method I would describe.

Q. And would this sophisticated method of cleaning the tape, not normally but with a spacer or keeping it away from the head, with this method ... Could this method possibly cause 30 htz. tone bursts to come on the cleaned tape? A. Indeed if it was done on such a machine as a Nagra it is likely.

Q. So if you were told Sir that factory fresh virgin EMI tape had been used for a recording which did not extend throughout its length but you then found contained the tone bursts in what should be its virgin section which is that part of the tape after the recorder had been switched off and had not been recorded upon, would you then have serious doubts as to the originality of the recording? A. If I was informed, as indeed I was in this case, that a virgin tape was used, then yes I would have doubts about it because it would be an indication to me that the tape was second hand or been used previously and erased in a peculiar way.

Q. In other words possibly or probably a copy would you say? A. You know that's a very difficult question to answer. I think it more probable that the second hand one is a more probable answer.

Q. May I ask you if you have been asked to examine the tapes in this case since your original investigation some ten years ago? A. No, not in this case here being discussed in this Court today, no.

Q. Your Honour, I wonder if I could ask for a five minute break before I go on to the next subject which will be 50 htz. hum because Mr. Taylor has been standing in the box now for two hours.

HIS HON. JUDGE STROYAN: Mr. Taylor appears to be doing very well. We've had all this about 50 htz. hum and it's agreed already. Is there something new about 50 htz. hum which is not agreed?

Q. Well 50 htz. hum in my opinion, in my submission to the jury goes on through a copying process. The Prosecution thinks it comes on by an act of God via Crystal Palace Television Tower, so I would say there is a great difference in opinion.



HIS HON. JUDGE STROYAN: I hope we are not going back to Crystal Palace.

Q. We will eventually because you see ...

A HIS HON. JUDGE STROYAN: Very well. Enough, enough, enough.

Q. The jury will want to know why these tapes have been copied.

HIS HON. JUDGE STROYAN: Enough. You can have three minutes to shorten it down a bit.

(BREAK)

B Examination In Chief Of Mr. Taylor cont'd.

Q. Mr. Taylor I would now like to ask you some questions about 50 htz. hum. I would like to deal with the presence of 50 htz. hum within magnetic recordings in general terms and ask for your general opinion. Do you understand? A. I understand the question, yes.

C Q. Are you familiar with the problem of hum being introduced into recordings? A. Yes I am very familiar.

Q. Would this hum generated from the A.C. mains electricity supply in this country and would it be of approximately 50 htz.? A. Yes this is a very common source of hum problems and you are right, it is approximately 50 htz.

D Q. Would you expect to find hum of this approximate frequency when using battery operated recorders out-doors? A. I may, I may not. I would have to qualify this - it will take a minute or two. Assuming if there were no sources of power transformers, the national grid, underground cables, anything carrying 50 cycle supply mains for domestic and industrial use - were we free from all those problems then I would expect it to be completely free from hum, after all it's on a battery machine.

E Q. In view of your answer would you please continue with the possibility of such a machine being used in close proximity for example to a very high powered trans ... television transmitting aerial, would you expect that to induce 50 htz. hum? A. Not 50 htz. hum as such. I think you would have to qualify the question slightly.

Q. Well can I qualify it now Sir. A. Yes, please do.

F Q. If it has been suggested that 50 htz. hum has been picked up from the Crystal Palace T.V. Transmitter - can I ask you three questions: first, could this in your opinion happen. Second, if the transmitter was picked up would it be the T.V. wave form that was picked up. And last, is a T.V. wave form a sound wave of 50 htz. or what is it.

G A. Now I understand, yes. If you are talking about a sign wave signal in my opinion the detection of a television transmission which certainly does contain a 50 htz. component, would not produce a pure sign wave. I think a simple parallel here maybe if one hears hum it's a pure tone, it's very recognisable. If you listen to a television transmitter such as when you detune television sets you can hear the video channel and the 50 htz. component, it sounds completely different and full of harmonics. So, you know, to answer your question the best I can, if its pure synisyllable hum that's got a definite specific sound character of a pure tone, whereas detector television transmissions and replayed back as audio has the prime sympluses that the ear would hear they start

H

off like a square wave and okay they contain harmonics. Indeed anybody can do the experiment - detune a television set and listen and it sounds quite different.

A HIS HON. JUDGE STROYAN: May I try and put it simply Mr. Taylor. Imagine yourself in a motorcar and a tape recorder switched on. Imagine that you are driving along just outside crystal palace admiring the view. Imagine that the television transmitters are putting out the most exciting television programme in every possible direction. Now as you flash by Crystal Palace in that way with your tape recorder switched on and nobody actually talking into it, would you expect to find some 50 htz. hum recorded on the tape? A. It could happen My Lord but it would be of a specific character.

B Q. I think you used the word harmonics in connection with that?  
A. Yes.

C Q. Could I ask you if you would expect to find other signals apart from this specialised hum, television hum, would you expect to find other signals from the television station? A. No I would not, no.

Q. If the recorder were to be used immediately beneath ... In my last question I meant to include sound channel also, speech?  
A. No not really the sound channel would not be connected, it is a component in the video wave form which produces the 50 htz. from television transmission.

D Q. And if the recorder were to be used immediately beneath a very high voltage electrical power cable, the national grid or grid lines, or in the environment of a large power station, would you say you could then expect some ... A. I would then expect to get some sort of problem, yes.

E Q. Would it be right to say if the recorder was used within a residential suburban environment miles from any major power installations you would not expect it? A. Then it becomes unlikely because if there is no mains power supplies in the vicinity it is then unlikely.

Q. And under such recording conditions I have outlined in my last question to you, have you ever known such a thing to happen? - 50 htz. hum to come on? A. I've only experienced 50 htz. hum when I've been known to be working in an area of mains cables, I have experienced that.

F Q. So changing the circumstances entirely have you ever known mains hum to be introduced within a copying process undertaken within a studio, laboratory or other indoor environment? A. It is very difficult to make a copy recording without any 50 htz. hum. However, in a studio or laboratory I would expect to be able to do that.

G Q. So when you say it is very difficult to make a copy from the mains as it were without inducing this hum from your answer can I take it that this effect is relatively common? A. It is common, it is very common to have hum on copy tapes unless extreme care is taken in the preparation of the copying.

H Q. I believe you said unless certain specific precautions are observed there is at least a strong probability that such hum might appear within a copy recording? A. Indeed.

Q. Now I would like to mention one point here which came up earlier and that is we've heard it's possible for one edit to take all day. Have you ever known this, one person taking one day to make one edit?

A. I can possibly imagine one remote circumstance, perhaps the opera singer we talked about maybe such a case where it could take several hours to get that right, but I think to keep this in context one has to indeed see and understand how the BBC operate, where tapes as they are going out on air are in fact being edited. You know the first part of the tape is going out on transmission so it is possible to do editing extremely rapidly and the BBC for example are doing this, yes. And I have witnessed this many times, it is quite incredible to see how fast they edit tapes and then they are out on air.

Q. And would it be right Sir that you were originally the Prosecution expert witness as it were, is it right to say you were approached by the police in order to examine the tapes on behalf of the Prosecution?

A. That would be correct and my company took on the job, the Commercial Division and I was internally nominated for the task and indeed I served as a consultant for the police on this matter for something like two years, almost right up to the Robson Harris trial at the Old Bailey which was ... When? I can't remember.

Q. 1972. So can you say why the Prosecution did not call you?

HIS HON. JUDGE STROYAN: No he cannot and you won't ask him.

Q. Right. So following on from this discussion Sir I would like to ask you a single, final, definitive question. In your opinion how reliable do you believe magnetic recording to be as evidence within a Court of Law?

A. I believe it to be unreliable to the point where I went to great lengths throughout my dealings with the matter to avoid saying any tape was authentic because I believe that no expert in the land or in the world should get up in a Court of Law and say that. Because of this enormous difficulty with tape recording, editing can be done which experts cannot detect and therefore I think and expert in a Court of Law is at an extreme disadvantage. All he can do really is to say "I can find no evidence which suggests the tape has been interfered with". But of course that does mean it could have been interfered with and he just doesn't know. So with all that in mind I would regard tape evidence as always being quite dangerous when used in Law.

Q. So those words "I can find no evidence that this tape has been interfered with" means precisely that - it could have been interfered with but the expert would find no evidence, no obvious evidence?

A. That is my interpretation.

Q. Thank you very much Sir.

MR. TAYLOR

CROSS-EXAMINED BY MR. RIVLIN

Q. Mr. Taylor you know this do you not that all evidence in a Court of Law whether it be tape evidence or otherwise is as reliable as the honesty of the people who produce that evidence?

A. Yes, of course.

Q. If the people who produce that evidence are reliable and honest people then the evidence may be reliable. You know that, don't you, Mr. Taylor?

A. Indeed. If the custody of the tapes ...

To put it another way if I made a tape recording or somebody else made a tape recording and it never left their possession and they came here and said under oath "I know this has not been interfered with, I know it hasn't because it's always been with me and I've had it locked away" - alright then that tape recording then is obviously reliable.

Q. Well I'm not going to spend any time on that Mr. Taylor, not for the time being. Can I just ask you a few more questions, I may not be able to complete them by lunchtime but it may not take much longer than that. You have, may I say we accept, you have a very considerable practical experience. May I ask you if you have an academic qualifications?

A. Yes indeed, I have City and Guilds. I am a member of the professional institutions which themselves of course ask for I think a University Degree or something equivalent.

Q. Yes, do you have a University Degree?

A. No I do not have a University degree.

Q. Mr. Taylor you have given evidence have you not already on an occasion in the Robson and Harris trial, is that right?

A. Indeed

Q. And you no doubt told the Court in that case what your views were about the various tapes, is that right?

A. Yes.

Q. Let us concentrate on this trial now and the first thing I would like to ask you is this: It was crystal clear to you was it not Mr. Taylor that the police were taking the custody of these tapes very seriously indeed?

A. Indeed it was.

Q. They were received by you in conditions of great security, is that right?

A. Yes.

Q. Did a Police Officer bring them along in a locked brief case?

A. Yes, I can't remember if it was locked but I seem to remember it was a brief case.

Q. The police would not let those tapes out of their sight, would they?

A. No.

Q. And perhaps it is important for us to appreciate this, they first came into your hands in January, 1970 didn't they?

A. Yes.

Q. And were you then aware of the fact they had then been in the hands of the police for approximately a month or thereabouts?

A. No I was not aware of that.

Q. The man in charge at the time was Superintendent Lambert ... Sorry, Yes, Superintendent Lambert. I think you've given his name?

A. Well, yes.

Q. I don't think you can query me on that one. And Superintendent Lambert ensured that those tapes were not interfered with in any way whilst you had custody of them, that's right isn't it?

A. His police officers who were there ... I can't remember ... There were so many police officers involved I cannot remember if actually Superintendent Lambert was there, he wasn't there all the time but the task was delegated to other police officers.

Q. Yes. That's what I mean when I say 'ensured'.

A. Yes.

Q. And indeed Mr. Taylor, did the Police take the tape recordings away with them in the evenings? A. Yes.

Q. And brought them back next day? A. Yes.

Q. They would not allow you even to keep them overnight, would they? A. No.

Q. And you were no doubt impressed, were you not, with the way in which the police were controlling the custody of those tape recordings?

A. Yes, they were extremely strict. In fact, you know, they were almost frighteningly so.

Q. Very well. Now can ... Given that you first came into possession of those tapes in January 1970, the position is that you were then allowed of course to hear them and to examine them, weren't you?

A. Yes.

Q. Not merely hear them and examine them but to do that in the greatest detail if you wished? A. Yes.

Q. You are not suggesting are you for a moment that anyone stepped in your way in conducting the examinations you wished to do? A. No.

Q. So given that you were permitted to examine them in that way in January 1970, I think you would agree with me, would you not, that it would have been playing with fire for anyone to tamper with those tapes after they had come through your hands? A. Indeed it would.

Q. And certainly in all the times you listened to the tapes you heard and saw nothing to suggest that after they had first come into your hands anybody had attempted to tamper with them, is that not right?

A. That is correct, there was a question of some damage I think on one tape I seem to recall, I don't know if it relates to this case or the other one, I cannot remember.

Q. I don't think we need trouble for a moment about that. I am concentrating if I may upon the content of the conversations and so far as they are concerned I think, can you not assure us, that after they came into your hands there was no question of those being tampered with? A. None whatsoever.

Q. That's right? A. Yes.

Q. And that as we know was January 1970? A. That is correct.

Q. Now you've told the jury something about marks. May I just ask you one or two questions about that please Mr. Taylor? A. Yes, please do.

Q. In relation to the question of marks, may I enquire whether you noticed those marks, the two you refer to whilst you were examining the tapes? A. No I didn't.

Q. If you had noticed them you would certainly have made some record of that, wouldn't you? A. I would indeed.

Q. And another matter in relation to marks please. Those marks, just so we know where we stand, do not come within the content of conversation allegedly between Mr. Perry and Mr. Symonds, you know that don't you?

A. I don't think that I do know that actually.

Q. Well I think if you look at your notes. You have no notes of them?  
A. No note of the transcripts of conversation, no.

A Q. I see. Well we will hear further evidence about the marks and the position of the marks. If you can't help further please say so. But I suggest to you that those marks did not come within the content of any conversation between Mr. Symonds and Mr. Perry?

A. I see, okay, that may be possible.

B Q. Alright. The fact is this, isn't it Mr. Taylor, that you were given a certain history, certainly as to the providence of those tape recordings and as to whether they had been factory fresh or not and you've told us about that?  
A. Yes.

Q. May I enquiry of you please about whether you can assist to this extent, how were tapes wrapped by your company in 1969, can you remember?  
A. Yes, they were wrapped in some sort of selophane paper.

C Q. Selophance paper?  
A. Yes, this sort of thing with a little seal, so far as I remember that was the case - and this had to be broken to get into the box.

Q. Right. And you were given a history about the province of the recordings in that you were lead to believe that they were all factory fresh?  
A. That is correct.

D Q. Now if it be the case that in fact three of the tapes, namely tapes one and tape number three and tape number five were not factory fresh tapes when they were first recorded upon ... Do you understand Mr. Taylor?  
A. I do understand.

Q. Then a very great deal fits into place doesn't it?  
A. Yes indeed. If this has been established. In other words you are saying that the original information I was given has changed and there is good reasons for this change - alright, then a logical explanation then appears.

E Q. A great deal fits into place?  
A. Yes.

Q. Now you see it is not for me to say what the evidence is or whether there is a good explanation for it or bad - that's for the gentlemen of the jury, do you understand?  
A. I follow.

F Q. I am just asking you about your expert opinion. Now certain it is that you have never, have you, suggested that these tape recordings have been fabricated?  
A. I have never suggested any juxtaposition of words or found defects in this group of tapes in this particular case where I've said well this is symptomatic of a tape being edited, no. The tapes exhibited here today I have not said that.

G Q. I think the simple answer to that question is 'yes', isn't it Mr. Taylor?  
A. It is.

Q. Very well. And nor do you suggest today, do you, to the members of the jury that there are any signs that these tapes have been fabricated, that is right, isn't it?  
A. Yes. I have found no defects which lead me to believe they have been interfered with. Certain anomalies we've talked about.

H Q. Oh yes.  
A. But that's all.

Q. Yes, certain anomalies but no defects of whatever nature to lead you to believe that the tapes have been fabricated. Now that is right?  
A. That is right.

A HIS HON. JUDGE STROYAN: Just a moment. We'll break off.

Q. Certainly. I shan't be more than a few minutes.

HIS HON. JUDGE STROYAN: Yes. I think I'll rise at 4.15 today, so we'll resume at 2 o'clock.

B LUNCHEON ADJOURNMENT

Cross-Examination Of Mr. Taylor (cont'd)  
By Mr. Rivlin

Q. Mr. Taylor, could I get the matter of Crystal Palace out of the way in one question. Have you ever been asked to conduct any experiments in relation to the signals given off by the transmitter at Crystal Palace?  
A. No Sir, I have not.

Q. No. A. The statement I made earlier was based on theoretical supposition.

Q. So the answer is no. A. Yes.

Q. Can I ask you another question. Are you an expert in speech or speech recognition? A. No, I'm not.

Q. You are not suggesting for a moment the words we hear on the tape were not uttered, are you Mr. Taylor? A. No I am not.

Q. And you've given some evidence to the jury ...

HIS HON. JUDGE STROYAN: Just a moment.

Q. I'm so sorry. Yes.

HIS HON. JUDGE STROYAN: You said "I do not suggest the words we hear on the tapes were not uttered?" A. That is correct.

Q. You have given evidence to the jury in relation to the editing of tape recordings? A. Yes Sir I have.

Q. It would seem from what you would say, but correct me if I'm wrong, that your experience in that regard appears to be confined to the professional editing of recordings that are used for commercial purposes, am I right about that? A. Yes, you are right.

Q. Your experience is not in the field of extemporaneous conversation between two people having a chat? A. No.

Q. And you have told the jury it's possible, and may I say Mr. Taylor, I fully accept this, it is possible in a commercial recording of for example an opera singer to replace a bad note with a good note.  
A. Yes Sir.

Q. Although you said depending on the circumstances that exercise could take up to a day? A. It could, that particular exercise could take some considerable time.

Q. And that is one note? A. Yes.

A Q. But in order to replace a bad note with a good note the opera singer has got to sing the good one hasn't he or she? A. Not necessarily Sir, the case I've got in mind - it's a well known example happening in a studio, the opera singer in question repeated the same note and the two notes were joined together.

Q. Yes. A. It wasn't the original note removed and a new note put it, the two notes were joined together.

B Q. Alright, what I meant to say was it is the same opera singer? A. The same opera singer.

Q. Yes. Now I suppose if you are looking to see if any tapes have been fabricated or dishonestly edited it might be helpful to know what to look at Mr. Taylor? A. Yes.

C Q. Have you ever been in this position when examining these tapes of knowing what it was that you were supposed to be looking for in terms of fabrication? A. Yes Sir I think I have. I have examined tapes previously and there I have heard shall we say truncated syllables which is a sound which is sharply cut off and sounds unnatural.

D Q. I don't think you are understanding me Mr. Taylor, it is probably my fault. In this case when examining these tapes have you ever been in the position of having it in mind to look for some particular passage or another which is said to be fabricated? A. I still think we have a misunderstanding Sir. I am sorry about this. But when I examined the tapes of course I was listening for sounds of truncated syllables or any unnatural happening even in the speech recording, so I was alerted to that.

Q. Yes of course you were Mr. Taylor. You told us you found nothing. A. Yes, that's correct.

E Q. But that is not what I was asking you about. Have you ever been in this position of being directed to any specific passage in any of these tapes to look more closely at that passage? A. No, nobody has given me such an instruction.

F Q. Thank you. Now you use this word anomaly. And what you told his Honour and the jury was this, was it not - that there are some anomalies on these tape recordings, right? A. Yes.

G Q. But given, if it be the case, that it is accepted that virgin tapes were not used in some instances then there's nothing really to trouble you, that's right Mr. Taylor, isn't it? A. Yes. If I accept the tapes given to me giving me concern, the one with the tones and indeed if I may elaborate some of those other tapes with breaks of continuity, if I have a reasonable explanation for it then there is nothing to trouble me and as you rightly say if some of the tapes were in fact second hand my concern then starts to disappear.

Q. Very well.

H HIS HON. JUDGE STROYAN: Just a moment. Is this right then, your evidence is: If I accept that a number of the tapes which gave me concern because of tones or breaks, if there is a reasonable explanation forthcoming that



the tapes were not virgin then my concern goes?

A. That is correct.

A Q. Can I just ask you very briefly about certain individual tapes and I promise that it will be brief. Tape 3.a and 3.b you've told His Honour and the jury you are satisfied the recording had started in the middle of the tape so far as 3.b is concerned? A. Yes.

Q. It was perfectly obvious to you that was the case, wasn't it Mr. Taylor?  
A. Yes it was quite obvious to me it started in the middle of the tape.

Q. And it's perfectly obvious to anyone listening to the tape that is the case?  
A. Yes.

B Q. So you are not suggesting, are you, and you wouldn't suggest there was any question of concealing something there, that's right, isn't it?  
A. No. My only comment would be that 3.b had in fact erased part of 3.a.

C Q. Yes, that is fully accepted Mr. Taylor, there's no dispute about your evidence. The point that I am making is this, whoever has put that tape in, has put in a tape in which that is quite obviously the case, right?  
A. Yes Sir.

Q. Right. And you found a mark on that tape didn't you?  
A. I did not find the mark.

Q. No, but you heard a mark had been put on the tape?  
A. Yes..

D Q. As regards all of these tapes, you've had the opportunity of looking at them, haven't you and you can see there's your own hand writing on the labels?  
A. Yes.

Q. And you are satisfied, are you not, the ones that you've had in your hands are the same ones that came to you in January 1970?  
A. I am satisfied.

E Q. And that goes for the tapes in the boxes?  
A. It does.

Q. So if there was a mistake about the tapes in the boxes it was all put in front of you in January, 1970?  
A. Yes.

Q. Yes, now as regards the mark which has been brought to your notice Mr. Taylor?  
A. Yes.

F Q. You told His Honour and the Jury that the word "editing" might be too strong a word and that 'indicating mark' might be the more appropriate expression.  
A. Yes I believe that to be the case.

Q. Would you accept this phrase "an examination mark"?  
A. Yes I would accept that.

G Q. Good. Tape number five, can we deal very briefly with that. You said that you found a break in continuity just after the sentence "Let's put it in this car, shall we". I would like you to look please at exhibit 35.b. I wonder if the jury would too. And if you go to page 18. Do you have page 18 Mr. Taylor?  
A. I do Sir.

Q. Would you look to line six?  
A. I beg your pardon?

H Q. Line six "Let's put it in this car shall we" - and that's a

transcription of tape number five, do you understand?

A. I understand.

Q. And it is there the break in continuity occurs, right?

A. Yes, that is in accordance with my report.

A

Q. Now we happen to know, if you would go back to page 17, that the alleged conversation between Mr. Perry and Mr. Symonds ended at line 14- "See you later" then car radio music, do you see?

A. Yes.

Q. So that this break doesn't occur during the recorded part of the conversation between the two men?

A. Yes, the transcript I believe would suggest that.

B

Q. And indeed Mr. Taylor I wonder if we can deal with this with a broad brush. You found nothing within the conversations of the two men on any tape to cause you concern, did you?

A. No. You are correct Sir.

Q. And as regards this break that you have pointed out to us "Let's put it in this car shall we" - what does the break signify to you, that somebody has switched off the recorder and then switched it on again?

C

A. It suggested to me that the tape contains I think two recordings. You will understand Sir that this report does not represent my complete opinion. But I am of the opinion that there are two recordings on this tape.

Q. Yes.

A. Which were done at different points in time.

And therefore, in fact if I may say, that the ... although we've said all along that virgin tapes were used throughout this case, this is one exception because the police having received this report came back to me and showed me statements that were made I think from Mr. Mounter which gave a reasonable explanation.

D

Q. Look, I've got to cut you short although it favours me for you to say that. There may be a reasonable explanation, you are giving expert evidence at the moment Mr. Taylor and I'm only entitled to ask you on the basis of your findings, not what other people said to you, do you understand. So we'll have to forget about what Mr. Mounter may have said. Alright. I'm sorry, but we must.

A. Okay.

E

Q. But you found evidence of another recording on this tape?

A. I did indeed.

Q. And it's obvious isn't it that that is the case Mr. Taylor?

A. Yes.

F

Q. No question of somebody hiding the fact there's two recordings - it's there for anyone to hear?

A. Yes.

Q. Right. I'm awfully sorry you with any sort of detail but you have said in relation to this tape there's a sign of the tape being as it were bulk erased before being used?

A. Yes, I didn't quite say that Sir, with respect.

G

Q. Well, bulk erased on sophisticated equipment?

A. What I have said is that the noise measured between the break in this recording was typical of that expected - and the word is typical Sir.

Q. Yes.

A. Of being erased on the bulk ... manufacturing company eraser.

H

Q. Right.

A. But the qualification here is the noise value

A being one Db. higher so in effect if we take this into account the one Db. higher I am in fact saying the noise in this break is one Db. higher than the bulk erased noise, so in truth it would sit between the two, it's a noise value which sits between bias erase noise and bulk erase noise. That is what my report says.

Q. Well now look, let's try and get this down to terms we can all understand Mr. Taylor. Have you made what is known as a pen recording of these noise levels? A. No I haven't.

B HIS HON. JUDGE STROYAN: Can you relate that break to the transcript we've just been looking at.

Q. That break is between the two recordings Mr. Taylor? A. Yes.

Q. It comes between the two recordings and just so we can understand the position there's a moment or a gap between the two recordings you've had a look at? A. Yes.

C Q. And you've looked at the noise level in that gap by comparison with noise levels on ... A. On a control tape.

Q. On a control tape. But you haven't made a pen recording of the noise between the gap have you? A. No.

Q. And compared it with the level at the end of the recording or at the beginning of the recording? A. No.

D Q. I wonder if you would look at this please. This is a pen recording. It was not exhibited Your Honour but it was produced by Mr. Hide last week and handed over to the experts on his behalf. Now I don't have a copy of that in front of me, but do you see the gap there, the level of the noise in the gap? A. Yes.

Q. And just compare that ...

E HIS HON. JUDGE STROYAN: Is that page 18.6?

Q. Your Honour I think it is. It is. And you can compare that can you not with the level of the noise at the beginning of the tape and the end of the tape, you can see it there, it is clearly marked?

F A. Yes. I noted the ... If I interpret this correctly that the noise during the gap, the gap between recording ... I'm just trying to work out what the divisions mean. But okay it's the same as the noise level after the speech at the end of the recording.

Q. Now that's the point. Now just pause there for a moment. It's the same noise level as the speech at the end of the recording. Now let's just take this in stages. You would expect the noise level in the gap to be machine erased noise, would you not ... A. Not quite ..

G Q. ... because it's accounted for by turning the button off and letting the button go, it's the width of the gap of the head, isn't it Mr. Taylor? A. It would be the spacing between the two heads.

H Q. The spacing between the two heads. A. And therefore I would expect and indeed have confidence in my report that because the tape has not yet been subjected to a bias field, it had only seen the field from the erase head, I think it is adequately explained in my original report.

A I would expect it to be not quite bias erase noise because the tension round the record head - and you may recall we talked about how critical tapes are in contact with the erase head, at the point of switch off you could well have a slight spacing effect and indeed that section of tape will not yet have seen the bias field, so it's only seen one of the fields. And if I put those two things together I would expect a level of noise such as I've put in my report which would explain it.

B Q. Now could you answer the question. Is it right the noise level in the gap could be machine erase noise? A. It could be ... Well, when you say machine erase noise you put me in a difficult position. If ... What would have happened in that incident is there is a section of tape which has only been subjected to a field from one head, whereas normally bias erase noise sees both heads and it's fairly well known in recording because of the tape wrap and the tension around the one head that that section of tape would have seen would more closely relate to bulk erase noise than it would to bias erase noise. Therefore I feel that my report is indeed correct.

C Q. Yes. Well, I've asked you twice, but is it right that it could be machine erase noise? Is the answer yes or no? A. No, I cannot see that it can be Sir because ...

Q. Well you said about two minutes ago that it could be.

D HIS HON. JUDGE STROYAN: The note I have "The noise level in the gap could be machine erase noise" and I underlined the word 'could'.

E Q. Thank you Mr. Taylor. Can I have that back please. If it is machine erase noise then it's clear isn't it that the rest is machine erase noise too because it's the same level, right? A. Yes.

Q. Only one more matter on that. Well, one or two. As regards tape 14 which is a fairly lengthy recording and I think we've heard one of the clearest recordings of the meeting of the 21st November you've got absolutely no criticism at all of that, have you? A. No, none at all, apart from as I mentioned earlier the overload distortion.

Q. That distortion is on the music and that may mean the tone control wasn't right, but apart from that no criticism whatsoever. A. Yes, that's correct.

F Q. And finally tape number two. I have very little to ask you about tape number two. But the position is this as regards tape number two it's a very badly broken up recording isn't it, very badly broken up? A. Yes. With failure of radio contact.

Q. Pardon? A. With failure of radio contact.

G Q. Yes. And have you considered in relation to whether the question of whether the transmitter may have been turned on and off what it would have been necessary to do in order to turn the transmitter on and off deliberately. You tell the jury what somebody would have had to do to disconnect the transmitter deliberately. A. It's a long time ago. I did look into this and I don't know if I've got a sketch of the transmitter equipment that was used. I seem to remember there was a plug on it but I really can't be certain. It would involve pulling a plug in and out.

H Q. Let's think about it. If there was a plug on it and this transmitter

was in Perry's pocket. In order to disconnect it and then connect it up again, somehow or another he's got to unplug it, then get the plugs stuck in again and pull it out and put it in again - getting it right each time. That's right Mr. Taylor, isn't it?

A. Yes, something of that order.

Q. Certainly not the sort of thing I think you could imagine someone doing without being detected, right?

A. Well I'm not aware of the circumstances so I really can't say exactly how this recording was done.

Q. Of course there is another explanation isn't there, namely that the equipment wasn't working correctly or the vehicle with the tape recorder was too far away from the transmitter and that it happened in that way?

A. Indeed Sir. In fact I did put in my report 'was either faulty' - I did offer that as one of the explanations.

Q. Well I appreciate that you did Mr. Taylor but that seems to be much more the likely explanation does it not?

A. It could well be Sir.

Q. Because apart from anything else you've no doubt been concerned to consider the noise levels here, is that right. Just let me ask you this - you've listened very careful to the tape no doubt, haven't you Mr. Taylor?

A. Yes, I certainly did.

Q. And if the transmitter was being switched on and off deliberately then you would expect a solid signal wouldn't you? Right?

A. If you give me just a moment.

Q. Yes, let me put a proposition to you Mr. Taylor so you understand what I'm getting at. I suggest to you that if it was being switched on and off deliberately you would expect a solid signal but what we have in fact got in this case in relation to tape number two is a messy signal. And just prior to many of the breaks you can hear a sort of noisy edge to the signal which indicates a drop in the received signal level?

A. I see. Well I can't recall that, it's at least eleven years ago when I heard this tape and I really cannot now recall the character of those breaks at all, I'm sorry.

Q. No. But you will have listened hard for them Mr. Taylor at the time?

A. I obviously did Sir (inaudible) I left it, it was either faulty or could have been switched on and off and that's what my report says. I did sort of say it could be faulty but I really can't recall the character now after all this time.

Q. Yes. Thank you very much Mr. Taylor.

HIS HON. JUDGE STROYAN: Mr. Symonds, you can ask him questions that arise out of cross-examination.

MR. TAYLOR  
RE-EXAMINED BY MR. SYMONDS (defendant)

Q. Just one or two questions. Could you talk again about this noise gap in tape five, could you say how the noise in the gap in tape five occurred?

A. Yes, I think that the machine was switched off at that point. The tape had already contained one recording and then another recording was placed on the tape and then the machine was switched off.

A. And as I have already explained that as I see it this leaves a section of tape roughly to the length of the erase record head which will have seen the field from the erase head. It may not have seen the full field from the erase head because of the relaxation in the tensions of the tape. And therefore I would expect the noise, as my report says, to be a little better than bias erase noise, but not quite as good as bulk erase noise. And that theory I think satisfies me as to what happened on this tape.

Q. You say it could be typical of bias erase noise produced when the tape was running? A. I am saying it is a little better than bias erase noise. I'm saying it is very close to bulk erase noise.

Q. Is it possible to say what is the measured noise level in the unused section of the tape, is it possible to say whether it is bulk erase or bias erase? A. I have no indication here that I have actually made measurements. If you give me another moment please. At the end of the tape or indeed whether it was fully recorded throughout its length ... No, I'm afraid I cannot answer that question. I haven't it contained in my report.

Q. Can you say Sir whether the tone bursts are in bulk erase or bias erase? A. The tone bursts are in the bulk erase noise, the tone bursts which we've talked about earlier.

Q. Would that be the measured noise level of the unused section of the tape? A. I'm sorry, I'm not aware if there are in fact tone bursts on the end of this tape. I have no record of it and it's not one I examined for tone bursts at the end. I'm sorry I can't help you with that question.

Q. Just one or two points on the questions you were asked Sir regarding tapes, the reliability of tapes as being equal to the honesty of people producing them. And is it to your knowledge that the Detective Chief Superintendent who was in charge of this enquiry was ...

HIS HON. JUDGE STROYAN: Mr. Symonds ...

Q. His sole responsibility ...

HIS HON. JUDGE STROYAN: Mr. Symonds, just a moment. This sounds as if it is going to be inadmissible Mr. Symonds. This is an expert witness who is limited to giving his view of the facts he has discovered.

Q. Yes. I believe you were asked whether the police ever stood in your way in connection with examining these tape recordings and I wondered if you recall a time after the committal proceedings when you asked to see the original tape recordings and I believe you were obstructed in that matter. Would that be right? A. Yes, there was a problem I recall when I was asked by Court order and we examined some breaks in continuity in tapes. And Mr. John Matthew was the Counsel I think who requested this ...

HIS HON. JUDGE STROYAN: I don't think we can go into what happened at another Court hearing.

Q. Just to clarify there was some obstruction to this gentleman at one stage. And would this be about the time ... Would it be true to say you submitted a report at the end of examining these tape recordings and you

were in fact sent a different report and asked to sign it.

HIS HON. JUDGE STROYAN: No. He can be asked if he ...

A Q. If he refused to sign a report.

HIS HON. JUDGE STROYAN: ... produced a report. He can't be asked if someone else produced a report.

Q. Did you produce a report in connection with these tape recordings?

A. I produced several reports, several to the police and also one to the Director of Public Prosecutions.

Q. And was there an amended report returned to you which you declined to sign?

A. A report was prepared for me by the Directors office which I would not sign as written, that is correct.

Q. And you were asked if it was suggested ... I believe you said it was not suggested words were not uttered ... But does this cover the possibility that they had been uttered in a different sequence or context at sometime?

HIS HON. JUDGE STROYAN: I'm sorry, I didn't follow that.

Q. The question where the Prosecuting Counsel put to this witness "are you suggesting these words were not uttered and he said no". I am saying was it possible that they were uttered in a slightly different context.

HIS HON. JUDGE STROYAN: Yes, that's alright. A. I could find no evidence of any juxtaposition of words and I think your question would suggest juxtaposition - I could find no evidence of that.

Q. Well would it be true to say - can I ask you is it not difficult to judge the ease of editing or editing without having access to the original material, without seeing the original material you could not.

A. The only hope an expert has, this is absolutely true, the only hope an expert has is to examine the tapes that are alleged to be originals.

Q. And to look for faults? A. Because this noise measurement which we've put a lot of weight on in this trial is of course very important to an expert and this would not or should not appear on copies.

Q. Yes.

HIS HON. JUDGE STROYAN: Mr. Taylor it was the alleged originals you were examining. A. Yes.

Q. And these noises should not appear on them, is that right. These noises should not have appeared on these tapes if their history was true - they were fresh virgin tapes. A. Can you please qualify the noises. The 30 htz. tone?

Q. And the 50 htz. A. The 30 htz. tones should not have appeared on virgin tapes which have been used for no other purpose. If they were brand new and had not been used previously those tones should not exist in the bulk erase noise.

A Q. And if they had been virgin tapes recorded under the alleged conditions, battery operated in the open air, would it be fair to say 50 htz. should not be there? A. Yes. 50 htz. are signals present in tape recordings, are unusual if the recorder is battery operated and it is away from all magnetic fields, of any sort - power lines and so on.

B Q. And is it right to say that you examined these tapes in 1970 and I believe there was a question put to you whether you had been requested to look at a particular passage claimed to be false and you said you had not received such a request? A. Not in this case, this related to another matter where I was asked to make specific notes of the breaks - this was in the other trial.

Q. Would that in fact have been after the committal proceedings in 1972? A. Yes.

Q. When the tapes were in fact heard for the first time.

HIS HON. JUDGE STROYAN: We cannot go into the other trial. A. I'm sorry.

C Q. It was put to you that if it was said, if it was said, that some of these tapes had in fact not been new your concern would disappear. From that I must ask you if you were present in Court or you have heard Mr. Hawkey, and the reporters speaking and stating that the tapes were in fact ...

HIS HON. JUDGE STROYAN: Now Mr. Symonds ...

D Q. ... brand new.

HIS HON. JUDGE STROYAN: You are ...

Q. I believe this is an expert witness and ...

E HIS HON. JUDGE STROYAN: Just a moment, listen to me. You are now re-examining the witness. You are not cross-examining him. You are re-examining just as the same way you examine in chief. You are not allowed to put questions which suggest their own answer - leading questions. We are not going back to what people may or may not have said in an earlier stage in these proceedings.

F Q. All I'm trying to do you see is to put right some misunderstandings as it might have arisen through the cross-examination Your Honour. I'll finish off Mr. Taylor with the last point. Would a drop in received signal level, could it be a sign of editing? A. Again, may I ask you to sort of perhaps quantify that. The received signal level, would this be the general level of speech - we are talking about the speech recording?

G Q. No. This follows on from the questions you were asked about failure in radio contact which I believed you had said in your report could be the failure of the transmitter or it could be switching on or off. And you were asked whether or not you noticed there had been drops in received signals. A. My answer to that question I think would be that I've left it as an 'either or' situation. It could be a fault, it could be switching off. If it was anybody did maliciously switch on and off a recording this could be construed as a form of edit of course.

H Q. You were asked whether you found any obvious edits or faults in the speech section and I would like to ask you once again that if the speech section had been even competently edited even by an amateur would you expect to find obvious faults? A. If it had been competently edited



I would not have expected to find anything wrong at all.

Q. Thank you very much.

A MR. RIVLIN: Your Honour the defendant put one matter in re-examination which does concern me and that is the question as to whether the witness was ever provided with a statement he refused to sign.

HIS HON. JUDGE STROYAN: Yes.

B MR. RIVLIN: Your Honour that cropped up and again we've got this little cloud hanging over the matter.

HIS HON. JUDGE STROYAN: Yes.

MR. RIVLIN: Your Honour there is ... I wonder if I can deal with it.

HIS HON. JUDGE STROYAN: Yes, I must say it concerned me when he put it.

C MR. RIVLIN: Your Honour yes.

HIS HON. JUDGE STROYAN: Yes, it should be done.

MR. RIVLIN: Your Honour there was no mention of it at all at an earlier stage.

D HIS HON. JUDGE STROYAN: No.

MR. TAYLOR  
Cross-examined By Mr. Rivlin (cont'd)

Q. Mr. Taylor is this right, I think you made your report, didn't you, and it's a very long and detailed report, is that right? A. Yes, indeed.

E Q. And would you just have a look at this document here please which I think was sent to you to ask you if you would sign it and I think it's just a distillation in one page of what was said to be in your report, is that right? A. Yes.

Q. And it says at the top "Further to my report" - not a substitution for your report, but further to my report? A. Yes.

F Q. And if I may say so it was quite obvious that you couldn't sign something that took up one page when you prepared a very long report, is that not right? A. I'm sorry, I don't follow.

Q. Alright. But just look at that document, as I say it's only one page in length with a number of bald conclusions? A. Yes.

G Q. But it's to be emphasised that it begins "further to my report" and it refers to your previous report, doesn't it? A. Yes.

Q. It isn't hiding the fact that you made an earlier report?  
A. No, no.

H Q. And it purports to distill your conclusions into one single page?  
A. That's correct.

Q. But of course you can't distill conclusions into one page, is that right?  
A. This was not the reason Sir. Would it help you if I was to explain and tell you the reason why I would not sign this piece of paper.

Q. Why not, let's have it out because you know, it's much better than having something ...  
A. It's quite simple, because "I am satisfied the following tapes are authentic" and I have said several times during this trial that I think no expert has the right to sign a paper that says tapes were authentic. It's simple as that Sir.

Q. There were a number of tapes about which you had no criticism to make, not only in this case but also the Robson and Harris case?  
A. Yes.

Q. And somebody has put down "I am satisfied they were authentic" and you won't commit yourself to saying that.  
A. Yes. I re-worded it to I can find no defects.

Q. You re-worded it to "I can find no defects"  
A. Yes.

Q. There it is. Thank you very much.

HIS HON. JUDGE STROYAN: You wouldn't sign it because you weren't prepared to say all the tapes were authentic or any tape was authentic?  
A. Any tape My Lord. It was a question of my strong feelings about saying any tape is authentic and use the words that strongly.

HIS HON. JUDGE STROYAN: Yes, very well. Thank you.

MR. SYMONDS: Thank you Mr. Taylor.  
A. Thank you.

MR. SYMONDS: I call Mr. Ford.

MR. RIVLIN: Your Honour if it saves time and I hope that it may, may I repeat that which has been known for a long long time in this case, namely that the Crown do not say that tapes numbers 1, 3 and 5 were virgin tapes when they were recorded upon.

MR. SYMONDS: I don't see how it can be said when the Crown's witnesses are holding a Bible in their hands and swearing that they were virgin tapes. If the matter is the Crown's witnesses say they were virgin tapes but in view of the difficulties discovered and possible things upon these tapes, the Prosecution Counsel is now saying they were copies - but the Crown's witnesses do not say they were second-hand tapes, they say they were new.

HIS HON. JUDGE STROYAN: Mr. Symonds we had all this weeks and weeks ago.

MR. SYMONDS: It can't be said Your Honour.

MR. RIVLIN: I look forward to the opportunity in my closing speech of reminding the jury what the evidence in fact was rather than what the defendant would like to believe it was.

HIS HON. JUDGE STROYAN: Yes.

MR. SYMONDS: I shall remind them in mine too. Mr. Ford, please.

MR. HUGH DERMOTT FORD (sworn)

EXAMINED IN CHIEF BY MR. SYMONDS (defendant)

A Q. Mr. Ford what is your full name? A. Hugh Dermott Ford.

Q. And what is your address? A. My work address is 24.a  
Trinity Road, Richmond, Surrey.

B Q. Do you have professional qualifications? A. Yes I do. I am  
a chartered engineer. A member of the Institution of Radio and Electronic  
Engineers. A member of the British Computer Society - amongst quite a  
number of other organisations. I am also a late Council Member for the  
Royal Television Society. I am past Chairman of the British Section of  
the Audio Engineering Society. And I am one of the Governors of the  
Audio Engineering Society which has its head office based in New York and  
has about ten thousand members worldwide.

C Q. Are you Chairman of the Association of the Professional Recording  
Studios? A. I am Chairman on one of their committees for (inaudible)  
standards for video/audio recording.

D Q. And do you serve on a number of other national and international  
committees? A. Yes I serve on a number of other committees.  
I serve on the Distral Audio Standards Committee with the Audio Engineering  
Society. I am a member of the Sound Committee at British Canomatograph  
Sound and Television Society. That society amongst other things organises  
lecture courses for audio engineers and I indeed lecture on these courses.  
I am also a member of the Institution of Electronic and Radio Engineers  
Recording Group. I am a member of the Electronic and Radio Engineers  
Committee for the International Convention of video and data recording.  
Also a member of the technical programmes committee of the International  
broadcasting convention.

E Q. Were you the author of a paper "Legal aspects of magnetic tape recordings"?  
A. Yes I was.

Q. And was this presented at the Audio Engineering Society Convention in  
Copenhagen in 1974? A. Yes.

Q. And subsequently published in the Journal of a number of other  
publications? A. Yes it's been published many times, sometimes  
under slightly different titles.

F Q. May I ask you if you currently write all the reviews of audio equipment ...

HIS HON. JUDGE STROYAN: Happily (inaudible)

Q. I beg your pardson?

G HIS HON. JUDGE STROYAN: I said happily perhaps it is not yet the work of  
the authority if it ever could be. The rule in law is that learned  
articles only become authoratitive after the author is dead and happily  
for us Mr. Ford is not. A. Thank you.

HIS HON. JUDGE STROYAN: Yes, I've got his qualifications.

H Q. Do you currently write all the reviews of Audio Equipment for  
Professional Magazine Studio Sound? A. Yes.

Q. Does this magazine have a circulation of about twelve thousand?

A. Over thirteen thousand and more than half goes abroad.

Q. What is your current occupation?

A. I am currently a consultant in audio electronics.

Q. And for how long have you been engaged as a consultant?

A. Since 1967.

Q. For how long have you been involved with magnetic tape?

A. I was involved with EMI Tape Ltd. from 1964 to 1967 and I've also previous experience of tape other senses, particularly computers.

Q. At the time of the Watergate affair C.B.C. did an experiment with tape editing, could you tell us about that please?

A. Yes I could tell you about that. They decided they wished to ...

HIS HON. JUDGE STROYAN: I am sure it will be very interesting but I don't think we can have it in this case.

A. I'll keep it very brief Your Honour, if you wish.

HIS HON. JUDGE STROYAN: I think we better get on with this case.

Q. Is it to do with ... This was an international experiment, if you like, Your Honour, which more or less shows it is pretty well impossible to detect edits. I think that is relevant.

HIS HON. JUDGE STROYAN: I have no doubt the witness can say that if you ask him, it's not the first time we've heard it. We are not going to go into Watergate, I can tell you that.

Q. Was this experiment to do with tape editing?

A. It was to show how difficult it was to detect edits.

Q. Returning to the tapes in this case, when did you first examine them?

A. In 1971, in September I saw the first tapes.

Q. I wonder if you could identify the boxes and spools.

HIS HON. JUDGE STROYAN: September, 1971?

A. Yes Your Honour, 21st September, 1971 was the first tape I saw, that in fact was concerned with the other case and the other tapes followed on.

MR. RIVLIN: Your Honour the witness has already identified these in the trial within a trial and if it helps I am prepared to admit that he has identified them.

HIS HON. JUDGE STROYAN: Very well.

Q. When you examined these tapes Sir, who else was present?

A. Mr. Killick was present and also two police officers.

Q. Have you examined them since?

A. Yes I have.

Q. And was there any change in their condition?

A. So far as the recordings themselves are concerned there is no significant change. However, the marks which were on the backs of the tapes, albeit rather indistinct originally have now virtually disappeared on some tapes.

Q. Would you expect to find such marks on new tapes? A. Most certainly not.

Q. And where exactly were the marks located? A. If we turn to tape 3, there was a mark very close to the conjunction recordings 3.a and 3.b. And if we turn to tape ...

HIS HON. JUDGE STROYAN: Just a moment please. Yes. A. In the instance of tape 5 the mark was close to the conjunction of the first recording and the second recording on tape five.

Q. May I ask what sort of person would use marks such as these? A. Marks of that type are normally used for editing and locating edit points with some accuracy.

Q. Did you find any other peculiarities about the tapes? A. Yes in the case of some tapes I found these 30 htz. tone bursts in what was then the allegedly unused sections of the tapes and in other tapes I found 50 htz. hum.

Q. Would you expect to find tone bursts on virgin tape? A. No, I certainly would not, that's the first time I've come across such a thing.

Q. Can you explain the difference between factory fresh and used tape - that is the noise differences? A. Yes I can. Factory fresh tape has been past over a device called a bulk eraser, this is always done at the end of tape production in order to remove any unwanted magnetic patterns from the tapes. And this produces the lowest noise or hiss level possible from a tape. When you pass your tape over a recorder it passes over the erase and record heads in contact with the metal pole pieces in the presence of what we call A.C. Bias. And this quite substantially increases the noise or hiss level of a tape.

Q. Could the tone bursts result from a normal recording process? A. According to my measurements they could not.

Q. Have you ever come across such tone bursts in other tapes? A. No, never anything similar to these, no.

Q. Can you explain Sir how the tone bursts could have originated? A. I have been think about this for a very long time, as I say it's a unique experience and the only reasonable explanation I can find is that these tapes had been erased on a Nagra 3 recorder but by an unconventional means. In a normal erasing process the oxide surface of the tape is in contact with the heads and this produces bias erase noise. However if you put a spacer between the oxide and the heads the oxide is then out of magnetic contact with the heads and this produces a very ...

HIS HON. JUDGE STROYAN: The oxide being the inside of the tape?

A. Yes, that's the bit the recording goes on, the oxide. If you space that away from the heads with say a piece of selotape this open circuits the magnetic circuit from the magnetic pole pieces and taken back again produces a very good bias erase noise. As an alternative using selotape there is another very simple way of doing this and that is purely to turn the tape inside out. If you turn the tape inside out the base or plastic side is in contact with the heads so it forms a spacer between the magnetic coating and the heads, similar to the bit of selotape I previously mentioned.

HIS HON. JUDGE STROYAN: In this theory someone who gets hold of a tape and turns it inside out and then runs it back with the spacer between the magnetic coating and the head. A. Or with the tape inside out.

HIS HON. JUDGE STROYAN: Yes. Or with the tape inside out. Well people don't usually spend much time behaving like that in their spare time. A. I wouldn't have thought so, no. But I have no other explanation for these tone bursts and it's peculiar to a Nagra recorder Your Honour.

Q. And when you say a very good bias erase noise does that mean the bias erase noise is of such a level that it could be mistaken for a bulk erase noise? A. It is a very good bulk erase noise, I'm sorry if I used the wrong wording. It is generally better than that which you get out of a factory eraser.

Q. And therefore is some person wished to pass off part of a tape or a tape as a virgin tape and in fact it had been partly erased could this method be used to create a virgin type noise. A. So far as the noise itself is concerned it is bulk erase noise or virgin tape noise, it's the same thing.

Q. You have examined two sets of copy tapes? A. Yes I have.

Q. Did you find tone bursts on any of these? A. On none.

Q. May I ask what did you regard as the significance of the tone bursts? A. Well as I said previously it is unique to these tapes so far as I am concerned I've never come across anything like this before. It appears that someone for reasons best known to themselves has used this particular method of erasure. And of course such a method of erasure does have one particular advantage over bulk erasure. If you bulk erase a tape you erase the complete contents of the whole tape. You cannot be selective. If you wanted to just remove part of a recording and make the rest of the tape appear to be virgin tape you could use this rather peculiar method.

Q. Thank you Sir. I would now turn to the 50 htz. hum. A. Yes.

Q. Is this a common problem? A. It is a common problem in mains machines and in recording in a mains environment, yes.

Q. And could 50 htz. hum occur in a battery powered recording? A. If you were close to other mains operated equipment it could, yes.

Q. And if the recording allegedly took place in an open space in a suburban area would it then be likely to occur? A. No it would not.

Q. Could the 50 htz. hum occur with a battery operated radio microphone? A. It certainly would not normally occur, no. These things are widely used on stages and in television studios and so on and 50 htz. hum would be completely unacceptable.

Q. Could the hum be picked up from a large transformer or power cable? A. Certainly if you were close to a large transformer or power cable carrying heavy currents you could pick up this hum.

Q. Have you checked at the Grove public house whether there are or have been such large transformers or power cables? A. I went to the

A Grove public house and indeed did do a visual inspection. Furthermore I went there equipped with a Nagra 3 recorder and Audio Ltd. R.S.9 radio microphone as was alleged to have been used for some of these recordings and I made recordings in the car park at the Grove and I did not experience any pick up of 50 htz. hum.

Q. If we could now turn to tape one? A. Yes.

B Q. The telephone calls. I wonder Sir if you would say what you found about this tape on your examination? A. Yes tape one is a series of recordings of telephone calls. It's a five inch tape recorded and three and three-quarter inches per second. I did not find any marks on that tape. However, there is cyclic 50 htz. hum during the telephone calls. By cyclic I mean not a constant size or amplitude of hum, but hum that varies in amplitude at a cyclic time of approximately four seconds. This implies two sources of hum which are very slightly different in frequency. After the telephone calls the unused piece of the tape appears to have bulk erase noise, it does however contain bursts of 30 htz. tone when replayed at its normal speed for three and three-quarter inches per second.

C Q. And even if this was not a new tape would you expect to find tone bursts. A. Well I don't understand how these tones would occur in any normal recording process.

D HIS HON. JUDGE STROYAN: When you say it has 30 htz. do you mean hum or tone bursts? A. Tone bursts Your Honour, after the audible recordings of speech.

HIS HON. JUDGE STROYAN: Yes. A. But these tone bursts would not occur in any normal recording process or any normal process of erasure.

E Q. I believe you might expect hum with a telephone pick up coil, would you expect the 50 htz. hum you found on this tape? A. 50 htz. pick up with a telephone coil is a normal thing, it is common. What I cannot explain here is the presence of cyclic hum, we have two sources of 50 htz. to create it.

F Q. May I ask you if you have any observations about the batch number on this tape? A. Yes, there is a slight peculiarity in that the batch number of alleged original tape one happens to coincide with the batch number of the copy of tape two. For some reason that batch has been around not only during original recording but during copying, or at least in production of those two tapes.

G Q. May I ask you your conclusions about the alleged original tape one? A. Well I am not satisfied firstly that it is virgin tape - and I understand that may be now admitted that it is not a virgin tape. Even if it was not a virgin tape I find this presence of 30 htz. tone bursts a most peculiar thing to find and thirdly the presence of cyclic hum could well be indicative of a copying process in the presence of a field of fifty htz. mains.

H HIS HON. JUDGE STROYAN: That means "I think a person doing the copying would have been doing so in the presence of some highly charged mains or transmitter"? A. Well not anything particularly high powered Your Honour. It's a normal hazard of any copying process it's very easy to get hum introduced and this could account for the cyclic nature of the 50 htz. - given we've already got 50 htz. pick up from this telephone coil which is rather a crude device.

HIS HON. JUDGE STROYAN: Someone copying would be presumably trying not to have this hum on? A. They would try to, one always does but its a hazard in any studio. Hum is a very well known problem to not only amateurs but also professionals. One goes to great lengths in a recording studio to devise systems for connecting up equipment together without picking up hum.

Q. If we may turn to tape two? A. Yes.

Q. Did the quality of this recording hamper your investigation?

A. Yes the quality is very bad, the tape is largely unintelligable and there are an awful lot of radio microphone mutes in it.

Q. Did you find tone bursts in this recording? A. No I did not find tone bursts, however this tape was recorded throughout it's length and if there had been any existing I would not have been able to pick them up anyway.

Q. Did you find hum in this recording? A. No I did not.

Q. What are your conclusions about tape two? A. Well it's a poor recording. It's a difficult recording to investigate. I have found nothing that is basically wrong with it but I can't see anything good about it either.

Q. And was this the only tape you examined allegedly recorded on a Nagra at a speed of  $7\frac{1}{2}$  inches per second? A. Yes, it was out of this lot of tapes.

Q. And noting that, is it the only five inch reel allegedly recorded on a Nagra which can accept 7 inch reels? A. Yes it is.

Q. Bearing in mind the circumstances of the alleged observation and tape recording exercise can you imagine why a five inch tape was set at this speed to cover the meeting? A. I can only see one reason for using a five inch tape, I can see no reason for running  $7\frac{1}{2}$ " per second rather than three and three-quarter because this halves the available recording time. A possible reason for using a five inch tape is you can shut the lid on a Nagra but you can't with a 7 inch. But that is all I can say about it - it would seem stupid to waste recording time.

Q. If we may turn to tape three. Did you make a note of what recordings this tape contained? A. Yes, this tape has three recordings.

Q. Did you find any marks on tape three? A. Yes I did. There was one mark on tape three and this was on the second side of the tape. The tape was first used to make recording three and then for some reason run off the machine and turned over and recording 3.a starts on the second side of the tape. Going along to recording this tape 3.a. suddenly turns into a second recording 3.b and close to the conjunction of those recordings there is a mark on the tape.

Q. And does this mark correspond in position with any other marks you found? A. Yes, it corresponds very closely with the position of a mark on tape four.

HIS HON. JUDGE STROYAN: Tape four of course concerns another matter.

A. Yes Your Honour.

Q. Can you offer an explanation as to how recording 3.b came to be



made? A. From a technical point of view I believe that a short section on tape three where recording 3.a. and 3.b overlap, this suggests that recording 3.b was started by putting a Uher tape recorder into record mode using what is known as a pause control, this means you can put the machine into record mode without the tape actually moving. What I suggest is the tape was then moved back by hand a certain distance which is a minimum of about an inch - maximum unknown. ~~And~~ in order to start recording 3.b the pause control was operated and this doesn't leave any click or other evidence on the recording.

HIS HON. JUDGE STROYAN: I'm not quite sure that I follow that.

Q. Well maybe I can ask you if you could think of any professional reason for starting the tape in this way? A. No I cannot.

HIS HON. JUDGE STROYAN: I'm not sure that I follow this. The evidence so far has been that the recording 3.a was made and then towards the middle of it recording 3.b was put on top of it. A. Yes.

HIS HON. JUDGE STROYAN: Thus erasing what was underneath?

A. Yes that is correct, but there is a peculiarity. That normally in starting a recording would leave a large click on the tape. There is no click present at the conjunction of recording 3.a/3.b. This suggests that the tape must have been wound back after the machine was put in the record mode in order to make recording 3.b.

Q. And did you find 50 htz. hum in recording 3.b? A. Yes I did.

Q. Can you explain the presence? A. This most certainly should not be present. The recording was alleged to have been made using a battery operated radio microphone with a battery operated tape recorder. And as I've previously said we should not find hum on this recording unless it was made close to a large transformer or indoors near electrical equipment. But certainly you shouldn't find hum when the recording has been made outdoors using this type of equipment.

Q. Could I ask you if you have used similar equipment at the Grove public house? A. I used the same type of radio microphone but a Nagra battery operated tape recorder, yes.

Q. And what was your conclusion about tape three? A. My feeling is as I have said, that certainly there should not be hum present in recordings made in open spaces using battery operated equipment. Hum is commonly introduced in a copying process however.

Q. If we now turn to tape five. A. Yes.

Q. Can you suggest how this was made? A. Tape five consists of two separate recordings. From the evidence left on the tape there has been a previous recording or recordings and remains are to be found after what is now the first recording on the tape. What now appears to be the first recording starting at the tape leader is in fact a recording subsequent to the remains that are now on the end of the tape.

Q. Can you say if tape five is or is not a continuous recording? A. It is not a continuous recording, there are two separate recordings.

Q. Can I ask if you found a mark occurring at the junction of these two recordings? A. Yes, indeed I did.

Q. And may I ask if you found any tone bursts on tape five?

A. Yes, after the second recording there is a bulk erased section of tape which extends to the end of tape five. This section does contain 30 htz. tone bursts.

HIS HON. JUDGE STROYAN: Bulk erase where?

A. It is bulk erased Your Honour from the end of what is now the second recording along the tape, that is the second recording if you start playing the tape until the leader, the red leader of the tape - that is a bulk erased section of the tape.

HIS HON. JUDGE STROYAN: I thought it was called a trailer?

A. I beg your pardon - a red trailer. Between the end of the recording and the junction of the trailer there is bulk erase noise.

HIS HON. JUDGE STROYAN: That is very short, is it?  
how long that is, it will be apparent from the transcript.

A. I forget

Q. So if you were told tape five started as a virgin factory fresh tape what would you say?

A. I don't know Mr. Symonds whether you are considering the start point to be, but certainly there is peculiarity in the 30 htz. tone bursts and also there are two recordings on the tape.

Q. So what would be your conclusion on tape five?  
start of the existing recordings it was not a factory fresh virgin tape.

A. At the

Q. Yes. Turning now to the 21st of November. There were three tapes 13, 14 and 15. Can you describe these tapes?

A. Yes, tape 13 is a tape alleged to have been made on a Nagra, 7" spool and it is a radio microphone recording made at three and three-quarter inches per second. Tape 14 is again a 7" spool alleged to have been made on a Nagra and is what is termed to be a direct recording - that is a microphone was directly connected to the recorder. The tape was at three and three-quarter inches per second. Tape fifteen is a Grundig micro cassette and its recording, quite frankly at very poor quality

Q. Do you regard tape 15 therefore of any significance?

A. Of very little significance.

Q. And have you any criticism of tape 14?

A. As far as tape 14 is concerned I have not found any defects, it is recorded throughout its length and therefore if there had been tone bursts I would not have been able to find them.

Q. And did you find any phenomena on tape 13?

A. Again I didn't find tone bursts - which would not be possible to find anyhow. However, I did find some 50 htz. hum on tape 13 and clearly that is made with a battery operated microphone and a battery operated tape recorder the hum should not be present.

Q. Can I ask you if you have examined other EMI tapes of similar batches for the presence of tone bursts?

A. Yes indeed I have. I have examined batch number 35553 which is close to the batch numbers of the tapes we are concerned with here. And also I have examined a large number of other samples of not only EMI tape and I've never come across anything like these tone bursts.

Q. Your Honour I am now going to go onto the subject of Crystal Palace. I would like a five minute break here because I need to ask some advice before I put these final questions.

A HIS HON. JUDGE STROYAN: We are going to have a rest in a few moments when Mr. Rivlin starts cross-examining. I am anxious to go on, if you can manage it. Would you like a word with your solicitor now?

Q. Well I will do the best I can.

B HIS HON. JUDGE STROYAN: I don't know after all this time if we need spend a great deal of time at Crystal Palace.

Q. That is why I was asking for a break Your Honour to take advice to possibly reduce it to half a dozen simple questions. Yes Mr. Ford. Mr. Ford has a report by one of the prosecution scientists Mr. Eley which has been brought to your notice? A. Yes it has.

C Q. And it is only a short report. I will read it out to you now if I may.

HIS HON. JUDGE STROYAN: I don't think we can have reports read out. Did you hear his evidence? A. I did.

HIS HON. JUDGE STROYAN: So did the jury.

D Q. Very well. Does Mr. Eley's report state that he had recently carried out tests in connection with the transmissions coming from Crystal Palace transmitter? A. Yes it does.

Q. Does he say that he is now able to state that the level of 50 htz. component present in a typical transmission would account for the 50 htz. sign wave to be found in the gap on tape 15?

E HIS HON. JUDGE STROYAN: I don't think he said 'would' - I think he said 'could'. A. Yes he does.

F Q. May I ask you ... In the first place if you could comment on the statement regarding the tests as to the spectral content of off air television transmissions that emanate from the Crystal Palace television transmitter? A. Yes. There's nothing peculiar to Crystal Palace transmitters as such. All television transmissions have what is known as synchronisation pulses. These pulses control the rate at which the picture is reproduced on your television screen and how long it takes for one line to go across the screen and gets all the things in the right place. As far as 50 htz. is concerned it happens that is the frequency of the frames of synchronisation rate so there is a 50 htz. component in a television transmission. However, there are very many other components in a television transmission some of which we can hear, some of which are below our hearing ability and some which are above our hearing ability.

G HIS HON. JUDGE STROYAN: I think I can put it quite shortly. The view expressed by Mr. Eley was this "I would put forward the view that the transmitters at Crystal Palace could account for the 50 htz. hum on tape 15". Is that a view with which you agree or do not agree? A. No I do not agree.

H HIS HON. JUDGE STROYAN: Very well.

A Q. Would you say all the frequencies in use at Crystal Palace are well above the 174 megga htz. radio microphone? A. Not all of them no. There's the old B.B.C. 1 transmitter which works below the radio microphone frequency. However this could not have caused interference due to harmonics from the television transmitter because if you multiply the frequency of the television sound and vision transmitters by any number they do not come to 174. So any interference from that transmission or any of the others was not resulting from what we call harmonic radiation. And as a result of that any pick up of the interference would not have been selective.

B Q. Mr. Eley says "I am now able to say the level of the 50 htz. component present in a typical transmission is such as to account for the 50 htz. sign wave that can be found in the gap on tape 13".

A. The first point about that is that there is no 50 htz. sign wave in any television transmission under normal circumstances.

C Q. Does that knock it flat there and then? A. Well I just don't agree with it. I cannot see any technical explanation for what we find on tape 13 so far as Crystal Palace television transmitter is concerned. There would be all sorts of other interference present if it had been from that source, in my opinion.

Q. Would you say so far as the level of the 50 htz. tones is concerned it is utterly impossible to relate those to a television transcmision?

A. Well I can't relate it to a television transmission.

D Q. Would you say therefore that the statement is extremely misleading? A. In my opinion yes.

Q. Mr. Eley also goes on to say "It is in my knowledge that the Crystal Palace transmitters are responsible for many complaints from the general public who live in the area regarding interference on their domestic radio and hi-fi equipment.

E HIS HON. JUDGE STROYAN: He said that in reply to you and its inadmissible.

Q. I beg your pardon.

HIS HON. JUDGE STROYAN: I said I think he said that in reply to you and it was inadmissible anyhow.

F Q. Did you make any enquiries in connection with this? A. Yes I have made enquiries as to the situation in 1969 and the information I've obtained says there was a number of complaints from television users only.

Q. And the the BBC ever come across a complaint relating to the pick up of 50 htz. hum ...

G HIS HON. JUDGE STROYAN: No Mr. Symonds. There are limits and that is one of them.

Q. Well you've answered it for me Your Honour.

HIS HON. JUDGE STROYAN: I think it is quite clear now this witness disagrees with Mr. Eley on the subject of Crystal Palace.

H Q. The thing is on the Crystal Palace thing, the Prosecution case is so hopelessly weak. They are literally scraping the barrel for some thing

scrap of evidence ...

HIS HON. JUDGE STROYAN: Mr. Symonds you can say all that in your speech.

A Q. And they are the ones who are dragging up these red herrings in an effort to mislead and confuse the Court with a mass of misleading technical evidence. So a chap stands up and says this thing came on the tape ...

HIS HON. JUDGE STROYAN: I have a fiew too about that.

B Q. ... in some outlandish way from a television aerial and I am forced to fight against this because someone on the jury might be tricked into believing that is possible. And of course it's not possible, it's a nonsense and I hope I'm making that perfectly clear to the jury.

HIS HON. JUDGE STROYAN: Yes you have. Let's go on. Have you got anything else?

C Q. Yes Your Honour. Last question on that. Would you say that the suggestion that the 50 htz. hum on tape 13 originates from television transmission is a figment of the imagination with no scientific basis whatsoever? A. That is my apparent opinion, yes.

Q. Would you say ...

D HIS HON. JUDGE STROYAN: I think as an expert the wiser thing to do would be to say you don't agree. A. I don't agree Your Honour, I strongly disagree.

HIS HON. JUDGE STROYAN: Very well, I've got that too.

E Q. Would you say the theory or proposition serves any useful purpose towards determining the origin of the 50 htz. tone? A. So far as I am concerned taking into consideration the information I have been provided, no.

Q. Your Honour may I have a five minute break please. This is my last chance.

HIS HON. JUDGE STROYAN: Have you finished?

F Q. I think so, but I have a nagging feeling at the back of my head that I have missed out something and I am trying to think what it is.

HIS HON. JUDGE STROYAN: I am anxious to get on. If you think of something I will give you leave to ask it when Mr. Rivlin is finished.

G Q. Thank you. Mr. Ford at the ... Do you have any confidence in the authenticity and originality of the recorded exhibits before this Court? A. I find it very difficult to have much confidence in them in view of the fairly large number of deficiencies and unexpected events I have found in them.

Q. Is there anything else you would like to add at this stage? A. I don't think so.

Q. Thank you.

H HIS HON. JUDGE STROYAN: Yes Mr. Rivlin.

MR. FORD

CROSS-EXAMINED BY MR. RIVLIN

A Q. Now Mr. Ford do you appreciate that the one thing that everyone in this Court wants to know from you is whether you have found any evidence whatsoever that these tapes have been tampered with or doctored. Now just look at the jury and tell them have you found any evidence whatsoever that these tapes have been tampered with or doctored?

B A. Well the presence of these 30 htz. tone bursts to me is a completely unnatural event in tape recording. I have put forward an explanation for it, if that is how it got there I would suggest there has been some effort to disguise these tapes.

Q. You've already been asked the same question, have you not in the absence of the jury, right Mr. Ford? A. Yes.

Q. I repeat my question once more. Have you found any evidence to the effect that these tapes have been tampered with or doctored?

C A. So far as the speech recordings themselves are concerned I have not, and I believe that was my answer on a previous occasion.

Q. You do understand, don't you Mr. Ford, we are concerned with ascertaining whether the speech recordings, that is the conversation between Perry and Mr. Symonds have been tampered with or doctored? A. Yes, naturally this is the point of interest but ...

D Q. Interest? A. But one must regard the whole tape as an entity. One cannot just take out a particular section of tape and say this is the only section which is of technical interest. I entirely appreciate the speech recordings are of the greatest interest in many ways but as an engineer and investigator I have to consider other parts of the tapes.

E Q. I see. Well let's consider you as an engineer and an investigator. You've told us a very great deal about yourself Mr. Ford and what you've described as your qualifications and your various activities and may I say I accept all of them. A. Yes.

Q. I didn't however hear you tell the jury and you will correct me if I am wrong, that you've got any degree, is that right?

A. No I don't have a degree, I am a chartered engineer.

Q. Have you ever taken a degree course? A. I did in fact, yes.

F Q. What happened? A. It was mathematics and physics. I passed the physics section but unfortunately failed the mathematics section and didn't take it up again.

Q. So you failed. A. I failed overall, yes.

Q. Mr. Ford ...

G MR. SYMONDS: My mother has a degree!

HIS HON. JUDGE STROYAN: Mr. Symonds you don't do yourself any good muttering from the dock.

Q. Mr. Ford can I just ask you about your attitude towards this type of case? A. Yes.

Q. You feel very strongly about this type of case don't you Mr. Ford?  
A. I feel very strongly about the use of magnetic recordings as evidence, yes and the type of case is irrelevant.

A  
Q. You have expressed the view have you not that magnetic recordings should never be considered as being reliable evidence?  
A. Yes I have.

Q. And you still hold to that view? A. Yes.

B  
Q. A view that you've held over a number of years? A. Yes, for very good reasons.

Q. Yes. A good reason being that you say that it's possible to tamper with tapes and edit them without experts being able to detect that is what has been done? A. Yes, this is almost the sole reason why tapes are used in broadcasting - they are easy to edit.

C  
Q. Yes. But you see tapes are permitted in evidence by the Law, you know that don't you? A. Yes all too well.

Q. Despite your own view. And I think that really you have been campaigning on this issue for a number of years, haven't you?  
A. I have not been campaigning. I've discussed it with various colleagues and if I am asked questions in public such as the questions you have put to me I am going to give my honest opinion. I have not been campaigning as such.

D  
Q. Yes. Well it's interesting to have your view. And in the light of your view can we now just look at one or two of the tapes about which you have given evidence. Tape number one. It is a continuous recording ...  
A. No it's not, it's a series of recordings.

E  
Q. Tape number one. A. The telephone calls - it's a series of telephone calls - separated, it is not a continuous recording.

Q. Yes I'm sorry. What I meant to say was this: I think I have misread my note here. It's a recording of what you have described to be of relatively innocuous content. A. Well I have no particular opinion about the content. It is a series of telephone calls, a lot of which were failures and one appears to be of interest and that is the transcribed call.

F  
Q. It is a telephone call you have listened to where one man rings up another man and they arrange to meet somewhere? A. Yes.

Q. No physical damage to that recording? A. No.

Q. No abnormality? A. Well we have the 50 htz. cyclic hum.

G  
Q. Well I'm going to deal with that but subject to that no abnormality?  
A. Subject to that and the tone bursts no abnormality.

Q. No evidence of doctoring of its contents? A. No but it's so discontinuous, there might have been other things but one doesn't know, it's all bits and pieces.

H  
Q. Let's stick to the telephone call. A. Within the telephone conversation itself ...

Q. No evidence of doctoring ... A. It appears to be one of a continuous recording of one particular telephone conversation.

Q. And no evidence of doctoring? A. No.

Q. Or tampering? A. No.

Q. Cyclic hum. Would you just listen to this Mr. Ford and there are no prizes for guessing where it comes from because it comes from your own article on the matter. A. So it would appear.

Q. "Cyclic changes in recorded hum are a slightly different matter and can be a result of adding hum when copying a recording which already contains hum". A. Yes.

Q. On your account ... Here again there are quite innocent origins which must be considered such as the mains frequency beating with the recorder's tape speed (inaudible) tones. Naturally the investigations demand the use of replay equipment which itself introduces negligible hum or other tones in its replay output". Right so far?

A. To my recollection yes, it's a long time ago since I read it.

Q. "Recordings of telephone calls present the worst difficulties in these respects as telephone systems commonly have fairly high inherent hum levels which may or may not bear any relation to the hum which is often simultaneously induced from the public electricity supply".

A. It is a possibility.

Q. And what you say in your paper on the topic is that telephone calls present the greatest difficulties in relation to cyclic hum, right?

A. Yes.

Q. Why didn't you tell the gentlemen of the jury that?

A. I have not been asked the question.

MR. SYMONDS: I didn't ask him.

Q. Oh no Mr. Ford, I'm sorry. You put that matter - cyclic hum before the jury as being a sinister feature of this recording. A. It is.

Q. Not as a perfectly innocent one which it can well be, right?

A. It can be, it may be, it may not be. One cannot tell.

Q. But you put it before us as a sinister feature without telling us that it could equally and just as easily be an innocent feature.

A. Well my experience of using this horrible telephone pick up coils is you do not get cyclic hum. You get hum, awful hum yes, but not cyclic. But there are other possibilities.

Q. "Recording telephone calls present the worst difficulties in these respects"- according to Mr. Hugh Ford. A. Yes.

Q. And the paper that he delivered. A. That was delivered seven years ago, I have added to my knowledge since then.

Q. You gave evidence in the Robson Harris trial too, didn't you and told the jury about it - your worries and concerns. A. Of course.

Q. Yes. Now you explain would you please why it is that you now put on cyclic hum this sinister connotation that you expressly did not put on cyclic hum (indeed quite the reverse) in 1974? A. I have since



then investigated some parameters of the public telephone net work. In fact most exchanges are driven off batteries and any hum pick up in the system would be therefore from the mains. It would therefore be impossible for the telephone system in this country to normally produce beating with the mains.

Q. Mr. Ford ... A. However, one does have to consider possibly the ringing tone generator in the Post Office which do work by my recollection at either 17 or 25 htz.

Q. Mr. Ford you were living in England when you wrote this paper, weren't you? A. Yes I was.

Q. You were living in Middlesex right. And you know do you not that telephone calls do present a well known and indeed notorious situation or difficulty in relation to cyclic hum. A. In relation to hum, yes.

Q. Cyclic hum. A. I no longer agree that they are difficult in some respects they are awkward customers because if you are using one of these horrible coils they pick up hum to start with.

Q. What you are saying is this in essence, isn't it, and please don't think I am being (inaudible) because I'm not - it's too serious for that. You are disagreeing now with yourself, aren't you.

A. At the stage of writing that paper I hadn't had the opportunity of investigating these matters in detail with the post office. I have however in the past seven years learned a lot more about tape recordings in a number of respects.

Q. You are disagreeing with yourself? A. I am saying there are other possibilities.

Q. You are disagreeing with yourself, aren't you? A. Yes if you say so.

Q. And it is, let us have it, it is a perfectly feasible and innocent explanation for cyclic hum? A. I can't understand it. There may have been something else around.

Q. You know that the use of a telephone is a perfectly feasible and innocent explanation for cyclic hum. A. That is not my experience.

Q. Well you told us that it was only a few minutes ago. A. I have said that there are other possible explanations and that the presence of cyclic hum is not exclusive to a copying process, there are other possibilities I believe.

Q. Tape two. You have got no criticism.

HIS HON. JUDGE STROYAN: Mr. Ford I think I should remind you that you are here to give unbiased and disinterested evidence to the jury. When you are asked the sort of questions you have just been asked by Mr. Rivlin I think it is important to consider the answers very carefully indeed and then you guard your position in which you put yourself forward to the jury. Would you like to ask the question again Mr. Rivlin in the light of what I've just said.

Q. Yes. You know do you not Mr. Ford that the presence of cyclic hum

on a recording from a telephone is a perfectly possible feasible innocent explanation, do you not. A. I have said that it is possible. I have not said it is common which I believe you put to me.

A Q. I'm sorry Mr. Ford but I suggest that you have now given three different answers to that question.

HIS HON. JUDGE STROYAN: May I have the last answer from the shorthand note.

SHORTHAND WRITER: "I have said that it is possible. I have not ... "

B MR. SYMONDS: This is the most outrageous form of cross-examination.

SHORTHAND WRITER: "I have not said it is common, which I believe you put to me".

HIS HON. JUDGE STROYAN: Yes, thank you. Would you just mark that passage.

SHORTHAND WRITER: Yes Your Honour.

C Q. Tape two. A. Yes.

Q. There is no evidence whatsoever is there that tape number two is not a genuine original recording? A. No, none.

Q. You agree with me? A. Absolutely.

D Q. Tapes three and five? A. Yes.

Q. First tape number three. A. Yes that's the one in relation to Harris and Robson.

Q. Yes, I am sorry, tape 3.b that's the one I would like to concentrate on. A. Yes, I just wanted to be clear.

E Q. In relation to the whole tape, tape 3 it obviously contains different recordings, doesn't it? A. It is pretty obvious, yes.

Q. And certainly to any expert it is almost immediately obvious? A. Yes.

Q. Isn't it? A. Yes.

F Q. So if anyone here had been setting up, embarking on a plan to deceive I think you would agree that in relation to this tape they are making a pretty poor show of it. A. If they are trying to make out continuous recordings, very obviously not.

Q. Very obviously not? A. Yes, yes.

G Q. And it's perfectly obvious, is it not, that is not as it were a recording on a virgin tape? A. Well the tape has got three separate recordings on it.

Q. Three separate recordings. A. And how it started out before that I don't know.

H Q. There is a mark on it isn't there? A. Yes there is.

Q. Did you notice that mark when you first examined these tapes?  
A. Not when I first examined them - it came to light eventually.

A Q. Would you please tell the jury when it was when you first examined the tapes.  
A. I first examined the tapes on the 21st of September, 1971.

Q. 21st of September, 1971 and you noticed no mark on tape three?  
A. Well that day I didn't examine tape three, we started tape four but it was from then onwards that we examined all these tapes in one degree or another.

B Q. From then on... A. Yes.

Q. When you came to examine that tape for the first time you noticed no mark on it.  
A. From my recollection No Sir, I think it would be most unlikely.

C Q. And I think the mark was subsequently brought to your attention or a mark was subsequently brought to your attention by Mr. Killock, the gentleman who is here?  
A. Yes, we worked together on this problem.

Q. Yes. That mark comes, if I can use this very ordinary expression, the join between two conversations.  
A. It's very close, yes.

Q. There is no sign that the tape has been cut up or anything like that, is there?  
A. No, none at all, no, no.

D Q. Somebody has chosen to mark what is obviously the position as to where one conversation finishes and the other begins?  
A. That is where the mark now is, why it was put there I have no idea.

Q. When you say that is where the mark now is - it hasn't been moving, has it Mr. Ford.  
A. No, but it's possible for instance the second recording might have been put on subsequent to the mark, I don't know.

E Q. Anything is possible. A. The mark happened to be there.

Q. Anything is possible? A. Yes.

F Q. But you used the word and 'editing mark' didn't you? And that might have certain connotations in the minds of those listening to this case.  
A. Yes it might.

Q. That mark could just as easily be an examination mark couldn't it?  
A. Well certainly I for one would never use a mark of that type and I can't see any purpose in using it for examination maybe someone has.

Q. Maybe you can't. A. But we've all heard the evidence and know what it is.

G Q. Mr. Ford maybe you would not do that. A. Certainly not.

Q. But it is just as consistent with being an examination mark for somebody who has found the join and is marking the place, is it not?  
A. Well I can't see why anyone should use such a mark for the purpose of examination. Maybe it is an examination mark, I just don't know.

Q. Well let's just consider it because it might be worth going beneath the surface here. Let's assume that it's not an examination mark but an editing mark - in other words something sinister, right?  
A. Yes.

Q. The fact is that the recording has been put in for examination with that mark on it.  
A. Yes.

Q. Plain for anyone to see, although you didn't see it when you first examined the tape did you?  
A. It was never easy to see.

Q. But you didn't see it when you first examined the tape, did you?  
A. I had no chance whatsoever, even if it was a very good mark there, it would be most unlikely anyone would see it during examination.

Q. And if you've got some clever fraudulent trickster who is tampering with and doctoring tapes, it would seem this clever chap has left a mark on the tape?  
A. Yes it would.

Q. And not merely left a mark on the tape but left a mark on what presumably is a copy tape. Right?  
A. Not necessarily, no.

Q. Let me help you Mr. Ford. If he's been busy with his pair of scissors cutting up the original and made a copy of his fabrications ...  
A. Yes.

Q. Presumably he's left the mark on the copy tape.  
A. Yes okay that's logical, it's a possibility.

Q. You know that that doesn't make any kind of sense, don't you Mr. Ford?  
A. I've just got no idea what that mark was for.

Q. Very well.  
A. All I can say is like other marks it marks a change of programme.

Q. Tape three and tape five, as you know they are tape recordings of the same alleged conversation.  
A. Yes.

Q. They are identical in length are they not?  
A. In length of recording?

Q. Yes. Of those conversations.  
A. No, I don't think so.

Q. You say not.  
A. I'm sorry I'll have to refer to my notes for this.

Q. Tape 3.b and tape five, the conversations, Perry and Symonds - they are identical in length are they not?  
A. If you wish I shall refer to my notes.

Q. Please do.  
A. I believe so far as the transcribed conversation between Symonds and Perry is concerned, yes they are.

Q. Very well. You have heard Mr. Hyde's evidence, haven't you?  
A. Yes I have.

Q. That the noise level or the sound levels on those two recordings are consistent with the microphones being placed in the different positions alleged by the Crown.  
A. Yes.

Q. Do you agree with that or disagree with it? A. I agree with it certainly that is useful evidence. I don't believe it is impossible to manufacture such things but I believe it to be somewhat difficult.

A Q. Let us have it in stages. First do you agree with it or disagree with it? A. I agree with that statement of Mr. Hyde, yes.

Q. Very well, but then you go on to say, do you not Mr. Ford, although I agree with it I do not think it is impossible to fake?  
A. Not impossible.

B Q. Is that really the way in which you approach evidence in this type of case, always to believe that there must be some way of faking?  
A. Certainly not.

Q. Tape five. There is a mark just as there is on tape three but in a different place. A. That is correct.

C Q. Marking the position of the join of the two different recordings?  
A. That is correct.

Q. There is no mark on either tape within the space that is under enquiry in this case, is there? A. Well we've certainly been unable to find one.

Q. And I suppose you've looked hard enough, haven't you?  
A. We've looked pretty closely, I must say.

D Q. Yes. And not merely are these two recordings identical in length but just let's think about it, you've listened to and examined the Times copy recordings, haven't you? A. Yes I have.

Q. And these alleged originals are of an identical duration and identical content with the Times copies, aren't they? A. Yes they are.

E Q. That is the copies in the possession of the Court that were given to the Times in the beginning of December 1969 or late November 1969 - the Times copy recordings. A. Yes.

Q. So if there's been any fiddling, tampering and the like it must have been done before then, mustn't it Mr. Ford?  
A. One would assume so, yes.

F Q. Yes. And do you understand that is before they came into the possession of the Police, do you know that? A. That's what I've heard, I entirely agree.

Q. Yes. Do you agree with Mr. Taylor that given that these recordings one, three and five - tape one, three and five were not virgin tapes?  
A. Yes.

G Q. The anomalies one finds to which you've referred, the hums and whatever, all this sort of thing evaporates into thin air. A. I don't entirely agree with that, no.

Q. Very well.

HIS HON. JUDGE STROYAN: I'm sorry. Given that what?

H

Q. Given that the anomalies one finds really evaporate into thin air. But you have found nothing, have you, to suggest that 3.b or five are tapes that have been tampered with or doctored. A. Within the what I might call 'interview sections' - no.

Q. When you say the interview section we are talking about those long passages of recorded speech in the tape. A. Precisely.

Q. You have found nothing whatsoever to suggest they have been tampered with or doctored in any way? A. No I have not.

Q. And the feature of the hum or whatever comes, does it not, on 3.b. outside of the period of the recorded conversation? A. That is where it is measureable, yes.

Q. Yes. Now I wonder if you would just like to listen to this one sentence I am going to read out and may I tell you where it comes from. It comes from a book entitled "Sound Recording Practice" by a gentleman called John Borick. A. Yes, I know him well.

Q. Very well. But before I read it to you may I remind you that 3.b. was a tape that came from a radio mike. A. Yes, that is correct.

Q. "The modern radio microphone is greatly improved, but it is still unpredictable in city conditions and some freak effects can always be expected". A. Mmmmm.

Q. Do you agree with that statement? A. Yes but I wouldn't include hum in freaks. Certainly there are many freaks with radio microphones.

Q. Tapes 13, 14 and 15. A. Yes.

Q. Can I ask you about those. Let's deal first with tape 14. Now that one is perhaps the clearest to the ear of the three? A. Yes.

Q. You have found nothing whatsoever to criticise in that tape, have you? A. No.

Q. The criticism that you have, if at all, comes in tape 13 exhibit number 6 which is again a radio microphone recording. A. That is correct.

Q. These three tapes contain the alleged recorded conversation between Mr. Perry and Mr. Symonds the defendant? A. Yes.

Q. They are all identical in length, are they not, one with the other? A. If we are referring purely to the ...

Q. To the recorded conversation. A. The transcribed section, yes they are, yes.

Q. You found nothing to criticise in tape 14? A. No.

Q. You say the cassette recording, tape 15 is a poor quality? A. Indeed it is.

Q. We have all had the opportunity of listening to it and you appreciate it is certainly possible to make out conversation when listening to that

recording?  
variable.

A. You can certainly make out bits of it, it is

A

Q. More than bits I think, but be that as it may ...  
we'll agree it's not a good recording.

A. I think

Q. Well we've got a transcript the police did of this a long long time ago and they haven't just got bits of it. But Mr. Ford subject to the fact it's a poor recording you've got no criticism of it whatsoever?

A. No I haven't. Quite frankly the quality of it was such that we didn't bother to investigate it in detail.

B

HIS HON. JUDGE STROYAN: Is this tape 13?

Q. Tape 15. That's the cassette recorder. We've all listened to that one and had the opportunity of hearing what was said between the two people and you say that you didn't even bother to investigate it.

A. Not in detail, no.

C

Q. But no criticism.  
being a poor quality recording.

A. No, I have no criticism other than it

Q. You have heard the Times copy tapes, have you not?  
heard the cassette copy tapes, I've heard the Times copy tapes, yes.

A. I haven't

Q. No, but you've heard the Times copy tapes of this conversation?  
A. Yes.

D

Q. Identical length? A. Yes.

Q. Identical content? A. Yes.

Q. So if there's been any fabricating, tinkering or dishonesty it's been done before the Times copy tapes were brought into existence?  
A. Yes.

E

Q. Yes.

HIS HON. JUDGE STROYAN: Just a moment. I'm afraid I'll have to rise there.

MR. RIVLIN: If Your Honour pleases.

F

(COURT ADJOURNED)

G

H

I certify that I took the shorthand notes in the case of Regina .v. Symonds on 6th April, 1981 and the pages numbered 1 - 62 is a complete, true and accurate transcript of the said shorthand notes according to the best of my skill and ability.

*A. Dixon*  
A. Dixon

*Humphreys, Barnett & Co.*

19th October, 1984