## IN DIE HOOGGEREGSHOF VAN SUID-AFRIKA /455. 2

(TRANSVAALSE PROVINSIALE AFDELING)

SAAKNOMMER:	CC	482/85	DELMAS

1986-09-09

DIE STAAT teen: PATRICK MABUYA BALEKA EN 21

ANDER

SY EDELE REGTER VAN DIJKHORST EN VOOR:

ASSESSORE: MNR. W.F. KRUGEL

PROF. W.A. JOUBERT

ADV. P.B. JACOBS NAMENS DIE STAAT:

ADV. P. FICK

ADV. W. HANEKOM

NAMENS DIE VERDEDIGING: ADV. A. CHASKALSON

ADV. G. BIZOS

ADV. K. TIP

ADV. Z.M. YACOOB ADV. G.J. MARCUS

TOLK: MNR. B.S.N. SKOSANA

(SIEN AKTE VAN BESKULDIGING) KLAGTE:

AL DIE BESKULDIGDES: ONSKULDIG PLEIT:

KONTRAKTEURS: LUBBE OPNAMES

VOLUME 144

(Bladsye 7 163 - 7 220

## HOF HERVAT OP 8 SEPTEMBER 1986.

MR YACOOB: My Lord, before My Learned Friend starts, may I inform Your Lordship that accused no. 9 is not here, today being 8 September. He was to go for diabetes management. Then My Learned Friend, Mr Tip has handed to me AAS(8) and AAS(9), which I ask leave to hand back, accused no. 17 having duly completed and signed both the documents. Finally My Learned Friend, Mr Jacobs will be handing up another admissions document in relation to the chain. I just want to point out there that because the document was signed this morning(10) it does not bear accused no. 9's signature.

<u>COURT</u>: But the admissions are made on behalf of accused no. 9 as well?

MR YACOOB : Yes.

COURT: There is one further matter while we are busy with preliminaries. We today received a record which we think is the record relating to that portion of the proceedings that was - about which there is a question mark about the recording of it. We had some difficulty in court with the recording machine. That has been transcribed. I would like both sides (20) to have a good look at that transcription and inform me whether there is anything wrong in the transcription.

MR YACOOB: That would be 2 September?

COURT: I think it would be 2 September.

MNR. JACOBS: U Edele, die verdediging is bereid om sekere erkennings te maak wat op skrif gestel is. Die een is dan soos My Geleerde Vriend gesê het nie geteken deur beskuldigde nr.9 nie. Hierdie bewysstukke het ek my veroorloof om reeds te merk as <u>BEWYSSTUK AAS(10)</u>. Ek mag net sê die volgorde van hierdie erkennings is in die volgorde waarvan die (30)

stukke/...

stukke by die hof ingedien was en nie noodwendig in die nommervolgorde van 1 tot so h persoon nie, maar dit gaan oor sekere dokumente. Ek het dit probeer hou in dieselfde volgorde as wat die getuienis aangebied was. Ek vra dan verlof dat ek aan u ophandig die een wat deur die beskuldigdes geteken is behalwe beskuldigde nr. 9, sowel as twee afskrifte vir die geleerde here assessore en dan vra ek verlof dat ek hierdie dokument inlees in die oorkonde in.

HOF: Asseblief.

MNR. JACOBS: Dit is dan BEWYSSTUK AAS(10) Saak nr. CC 482/85 Die Staat teen P.M. Baleka en 21 Ander. Erkennings. Die beskuldigdes erken ingevolge die bepalings van artikel 220 van Wet 51 van 1977 dat:

- Ten aansien van BEWYSSTUK 6:
  - Dat A/O J.A. Nel, die tegniese opname BEWYSSTUK 6 (a) verseël het met amptelike polisieseël 1279 en oorhandig het aan A/O P.P. le Roux wat die seël gebreek en h transkripsie van die gemelde opname gemaak het, waarna die genoemde tegniese kasset geseël is deur A/O P.P. le Roux met amptelike seël 1279 en die (20) kasset gemerk UDF vergadering Claremont Burgersentrum, 26 November 1984 om 20h00. Sprekers dr. Allan Boesak en Reverend Frank Chikane. Die verseëlde koevert is in sy brandkluis toegesluit en bewaar.
  - (b) Op 1 Februarie 1985 het A/O Le Roux BEWYSSTUK 6 versend na kaptein Z. de Beer, Veiligheidspolisie, per vliegtuig.
  - Op 1 Februarie 1985 het kaptein Z. de Beer BEWYSSTUK 6 (c) ontvang van die lughawe, steeds verseël met amptelike seël 1279 en dit is in sy kluis verseël bewaar. (30)

(d) Op/...

- (d) Op 17 Mei 1985 het kaptein Z. de Beer <u>BEWYSSTUK 6</u>
  nog steeds verseël soos voormeld per hand aan kolonel Jansen van die Forensiese-wetenskaplaboratorium oorhandig.
- (e) Kolonel Jansen het seël 1279 gebreek op <u>BEWYSSTUK 6</u>
  en 'n heropname van die kasste gemaak en die oorspronklike van <u>BEWYSSTUK 6</u> analiseer en/of gehou.
- (f) Die heropname van <u>BEWYSSTUK 6</u> is oorhandig aan kaptein Z. de Beer wat die heropname gebruik het om V(6) na te gaan en te korrigeer en telling- (10) nommers op V(6) aan te bring, welke transkripsie daarna in boekvorm gebind is.
- (g) Kolonel Jansen het die oorspronklike van <u>BEWYS-STUK 6</u> na sy analise en/of bewaring daarvan in 'n koevert geplaas en verseël met amptelike seël 1385 en aan sersant J.P. van der Merwe op 21 Oktober 1985 oorhandig, wie dit steeds verseëld bewaar het.
- (h) Vandat A/O J.L. Nel <u>BEWYSSTUK</u> 6 aan A/O P.P. le

  Roux oorhandig het, en totdat dit by die hof alhier(20)

  ingehandig is, is daar op generwyse doelbewus

  gepeuter of enigiets bygevoeg of uitgevee van

  BEWYSSTUK 6 se klankbaan nie.
- 2. Ten aansien van BEWYSSTUKKE 7(1) en 7(2):
  - (a) Majoor A. Benjamin het <u>BEWYSSTUK 7(1) en 7(2)</u>

    aan kaptein V.N. Twala oorhandig wat onder majoor

    Benjamin se toesig die Zoeloe gedeelte van die

    transkripsie van BEWYSSTUK 7 gemaak het.
  - (b) Majoor Benjamin het <u>BEWYSSTUK 7(1) en 7(2)</u> in h koevert verseël met amptelike seël 266 en aan (30) kaptein/...

- kaptein Z. de Beer op 25 Maart 1984 oorhandig,
- steeds soos voormeld verseël, wie <u>BEWYSSTUKKE 7(1)</u>
  <u>en 7(2)</u> daarna steeds soos voormeld verseël aan
  kolonel Jansen van die Forensiese-wetenskaplaboratorium op 26 Maart 1984 per hand oorhandig het.
- (c) Kolonel Jansen het die seël van <u>BEWYSSTUKKE 7(1)</u>

  <u>en 7(2)</u> gebreek en 'n heropname van <u>BEWYSSTUKKE 7(1)</u>

  <u>en 7(2)</u> gemaak en die heropname aan kaptein Z. De

  Beer oorhandig.
- (d) Kolonel Jansen het die oorspronklike <u>BEWYSSTUKKE</u> (10)

  7(1) en 7(2) analiseer en/of bewaar en <u>BEWYSSTUKKE</u>

  7(1) en 7(2) daarna met amptelike seël 1385 verseël
  en <u>BEWYSSTUKKE</u> 7(1) en 7(2) op 21 Oktober 1985
  aan sersant J.P. van der Merwe oorhandig, steeds
  soos voormeld verseël.
- (e) Tot 21 April 1986 het sersant J.P. van der Merwe

  BEWYSSTUKKE 7(1) en 7(2) in veilige bewaring gehou.
- (f) Vandat majoor Benjamin <u>BEWYSSTUKKE 7(1) en 7(2)</u>

  aan kaptein De Beer op 25 Maart 1984 oorhandig het,
  tot dit by die hof alhier ingehandig is, is daar(20)
  geensins doelbewus daarmee gepeuter of enigsins
  weggelaat of bygevoeg tot die inhoud van <u>BEWYS-</u>
  STUKKE 7(1) en 7(2) nie.
- 3. Ten aansien van BEWYSSTUKKE 12(1) en 12(2):
  - (a) A/O K.M. Kock het h transkripsie laat maak
    van die opname op h kassetband in sy teenwoordigheid
    en deur sersant W.P. Masaila en terwyl die transkripsie gemaak was, het A/O Kock die band in sy
    bewaring gehou. (BEWYSSTUKKE 12(1) en 12(1) verwys.
  - (b) Na voltooiing van die transkripsie het A/O Kock (30) die/...

- die band <u>BEWYSSTUKKE 12(1) en 12(2)</u> in h koevert verseël met amptelike seël 1148 en in sy bewaring gehou.
- (c) Op 15 September 1984 het A/O Kock die verseëlde

  BEWYSSTUKKE 12(1) en 12(2) per vliegtuig versend
  aan kaptein Z. de Beer.
- (d) Sersant Stander het die verseëlde <u>BEWYSSTUKKE 12(1)</u>
  <u>en 12(2)</u> ontvang, die seël gebreek en die inhoud
  geïnspekteer en daarna weer verseël met amptelike
  seël 1350 en het <u>BEWYSSTUKKE 12(1) en 12(2)</u>, soos(10)
  voormeld verseël en dit per vliegtuig na kaptein
  Z. de Beer versend.
- (e) Op 15 September 1984 het kaptein Z. de Beer

  BEWYSSTUKKE 12(1) en 12(2) soos voormeld verseël

  ontvang en in bewaring gehou tot 17 Mei 1985 toe

  BEWYSSTUKKE 12(1) en 12(2) per hand aan kolonel

  Jansen van die Forensiese-Wetenskaplaboratorium

  oorhandig is deur kaptein Z. de Beer.
- (f) Kolonel Jansen het die seël gebreek van <u>BEWYSSTUKKE</u>

  12(1) en 12(2) en 'n heropname gemaak van <u>BEWYSSTUKKE</u>(20

  12(1) en 12(2) en aan kaptein Z. de Beer oorhandig.
- (g) Kolonel Jansen het die oorspronklike band van <u>BEWYS-STUKKE 12(1) en 12(2)</u> analiseer en/of bewaar en op 21 Oktober 1985 <u>BEWYSSTUKKE 12(1) en 12(2)</u> geseël met amptelike seël 1385 en die verseëlde koevert met <u>BEWYSSTUKKE 12(1) en 12(2)</u> daarin aan sersant J.P. van der Merwe oorhandig.
- (h) Sersant J.P. van der Merwe het <u>BEWYSSTUKKE 12(1)</u>
  en 12(2) in veilige bewaring gehou.
- (i) Vandat A/O Kock <u>BEWY SSTUKKE12(1) en 12(2)</u> verseël(30) het/...

het soos in (b) supra uiteengesit en totdat

BEWYSSTUKKE 12(1) en 12(2) by die hof alhier ingehandig is, is daar op gener wyse daarmee doelbewus
daarmee gepeuter of enigiets bygevoeg of afgevee
van die klankopname op BEWYSSTUKKE 12(1) en 12(2)
nie.

- 4. Ten aansien van BEWYSSTUKKE 14(1) en 14(2):
  - (a) h Transkripsie is gemaak deur sersant Plessis in teenwoordigheid van kaptein Soms van h kassetband <a href="BEWYSSTUKKE 14(1)">BEWYSSTUKKE 14(1)</a> en daarna is die oor- (10) spronklike van <a href="BEWYSSTUKKE 14(1)">BEWYSSTUKKE 14(1)</a> en 14(2) verseël in h koevert met amptelike seël 241 en in veilige bewaring gehou.
  - (b) Op 28 September 1984 het kaptein Soms <u>BEWYSSTUKKE</u>

    14(1) en 14(2) aan A/O Carr steeds soos voormeld

    verseël oorhandig, wie op 28 September 1984 <u>BEWYS-STUKKE</u> 14(1) en 14(2) steeds soos voormeld verseël

    aan kolonel Jansen te Forensiese-wetenskaplabora
    torium Pretoria oorhandig het.
  - (c) Kolonel Jansen het BEWYSSTUKKE 14(1) en 14(2) (20) se seël verbreek en het 'n heropname van BEWYSSTUKKE 14(1) en 14(2) gemaak en BEWYSSTUKKE 14(1) en 14(2) analiseer of bewaar en daarna BEWYSSTUKKE 14(1) en 14(2) verseël met seël 1385. Die heropname is aan kaptein Z. de Beer oorhandig wat die transkripsie BEWYSSTUK V(14) nagegaan het terwyl speurder adjudant-offisier C. Dubela die Zoeloe gedeeltes van opname in kaptein Z. de Beer se teenwoordigheid nagegaan het.
  - (d) Op 28 Oktober 1985 het kolonel Jansen <u>BEWYSSTUKKE</u> (30)

- 14(1) en 14(2) steeds soos voormeld verseël aan sersant J.P. van der Merwe oorhandig wie die BEWYSSTUKKE 14(1) en 14(2) steeds soos voormeld verseëld bewaar het.
- (e) Vandat kaptein Soms <u>BEWYSSTUKKE 14(1) en 14(2)</u>
  verseël het soos in paragraaf (a) supra uiteengesit
  is, en totdat <u>BEWYSSTUKKE 14(1) en 14(2)</u> by die
  hof alhier ingehandig is, is geensins doelbewus met

  <u>BEWYSSTUKKE 14(1) en 14(2)</u> gepeuter nie of enigiets
  bygevoeg of afgevee van die klankbaan van <u>BEWYS-</u> (10)
  STUKKE 14(1) en 14(2) nie.
- 5. Ten aansien van BEWYSSTUKKE 31(1) en 31(2):
  - (a) A/O Beneke het 'n transkripsie V(24) gemaak van <a href="BEWYSSTUKKE 31(1)">BEWYSSTUKKE 31(1)</a> en sersant Z. Mafa het die Zoeloe gedeeltes op <a href="BEWYSSTUKKE 31(1)">BEWYSSTUKKE 31(1)</a> en 31(2) in die teenwoordigheid van A/O Beneke getranskribeer en daarna is <a href="BEWYSTUKKE 31(1)">BEWYSTUKKE 31(1)</a> en 31(2) verseël met amptelike seël 266 en in veilige bewaring gehou.
  - (b) Op 5 Augustus 1983 is <u>BEWYSSTUKKE 31(1) wen 31(2)</u>(20) steeds soos voormeld verseël aan kaptein Z. de Beer oorhandig, wie dit steeds aldus verseël op 27

    Januarie 1984 aan kolonel Jansen van die Forensiese-wetenskaplaboratorium oorhandig het te Pretoria-
  - (c) Kolonel Jansen het die seël van <u>BEWYSSTUKKE 31(1)</u>

    <u>en 31(2)</u> gebreek en h heropname van <u>BEWYSSTUKKE</u>

    <u>31(1) en 31(2)</u> gemaak en die oorspronklike analiseer en/of bewaar.
  - (d) Die heropname is aan kaptein Z. de Beer oorhandig, wie die heropname aan adjudant-offisier Beneke (30) gegee/...

gegee het.

- (e) Adjudant-offisier Beneke en sersant Z. Mafa het daarna die heropname met die transkripsie nagegaan.
- (f) Kolonel Jansen het <u>BEWYSSTUKKE 31(1) en 31(2)</u>

  verseël in h koevert met amptelike seël 1385 en dit

  aan sersant J.P. van der Merwe op 12 Oktober 1985

  oorhandig steeds geseël en sersant J.P. van der Merwe

  het <u>BEWYSSTUKKE 31(1) en 31(2)</u> steeds soos voormeld

  verseël bewaar.
- (g) Vanaf die datum waarop <u>BEWYSSTUKKE 31(1) en 31(2)</u>(10) deur adjudant-offisier Beneke verseël is, totdat dit by die hof alhier ingehandig is, is daar op gener wyse doelbewus daarmee gepeuter of enigiets bygevoeg of afgevee van die klankbaan van <u>BEWYS-STUKKE 31(1)</u> en 31(2) nie.
- 6. Ten aansien van <u>BEWYSSTUKKE 1(1) tot (7)</u> en <u>BEWYSSTUKKE</u>

  6, 7, 12, 14 en 30:
  - (a) Op 19 Februarie 1985 het majoor H.S. Miles beslag gelê op <u>BEWYSSTUKKE 1(1) tot (7)</u> in die kamer van Eunice Mohammed te 28 Mount Edna Court, 155 (20) Warricklaan, Durban en op dieselfde dag is <u>BEWYSSTUKKE 1(1) tot (7)</u> aan kaptein Z. De Beer oorhandig.
  - (b) Kaptein Z. De Beer het op dieselfde dag <u>BEWYSSTUKKE</u>

    1(1) tot (7) verseël met seël 266 en dit in veilige
    bewaring gehou tot hy ditop 17 Mei 1985 aan kolonel
    Jansen van die Forensiese-wetenskaplaboratorium,
    Pretoria oorhandig het.
  - (c) Kolonel Jansen het die seël verbreek, heropnames

    van <u>BEWYSSTUKKE 1(1) tot (7)</u> gemaak, die (30)

    oorspronklikes/...

- oorspronklikes van <u>BEWYSSTUKKE 1(1) tot (7)</u>
  analiseer en/of bewaar en die heropnames aan kaptein
  Z. de Beer oorhandig, wie die heropnames gebruik
  het om transkripsies daarvan te maak.
- (d) Adjudant-offisier Dubela het in die teenwoordigheid van kaptein Z. de Beer die Zoeloe gedeeltes van die transkripsies gemaak.
- (e) Kolonel Jansen het die oorspronklikes van <u>BEWYS-STUKKE 1(1) tot (7)</u> geseël met seël 1385 en aan sersant J.P. van der Merwe op 21 Oktober 1985 (10) oorhandig.
- (f) Sersant J.P. vander Merwe het al die voorgaande bewysstukke, naamlik 1(1) tot (7), 6, 7(1) en (2), 12(1) en (2), 14(1) en (2), 31(1) en (2), in veilige bewaring gehou tot 22 Oktober 1985, toe hy dit aldus geseël aan kaptein A.P. van Niekerk per hand oorhandig het.
- (g) Kaptein A.P. van Niekerk het al gemelde bewysstukke in bewaring aldus geseël bewaar en het dit op 19 Desember 1985 aan adjudant-offisier Carr aldus (20) geseël oorhandig.
- (h) Adjudant-offisier Carr het al die gemelde bewysstukke aldus geseël bewaar en dit op 16 Januarie 1986 aan sersant J.P. van der Merwe terug oorhandig, wie die bewysstukke aldus geseël terug oorhandig het op 21 April 1986 aan luitenant D.F. Joubert.
- (i) Luitenant Joubert het al die bewysstukke aldus geseël aan kolonel Jansen van die Forensiese-wetenskaplaboratorium, Pretoria oorhandig, die seël is deur kolonel Jansen gebreek en hy het (30)

K446.14

heropnames van al die bewysstukke gemaak, die oorspronklikes analiseer en dit almal weer verseël met seël 1385 en in bewaring gehou toe 31 Julie 1986 toe hy dit aan luitenant Joubert oorhandig het wie al gemelde bewysstukke steeds verseël aan sersant J.P. van der Merwe op 31 Julie 1986 gegee het.

- (i) Sersant J.P. van der Merwe het al gemelde bewysstukke in vewilig bewaring gehou aldus verseël totdat dit by die hof ingehandig is.
- Nadat op BEWYSSTUKKE 1(1) tot (7) op beslag gelê is(10) (k) soos voormeld, totdat dit by die hof ingehandig is alhier is daar op gener wyse doelbewus daarmee gepeuter of enigiets gewysig aan BEWYSSTUKKE 1(1) tot (7) nie.

Dan verskyn die handtekeninge en die name van die beskuldigdes. MR YACOOB: I confirm that. Those are the admissions having been read out by Mr Jacobs.

MNR. JACOBS: Nadat hierdie erkennings dan ingegaan het, voltooi dit die getuienis wat die Staat van voornemens is om aan te bied oor die toelaatbaarheid van hierdie tegniese (20) opnames.

COURT/...

COURT: I would just like to make one remark, and that is this that I permit the calling of Mr Atkinson at this stage because it was done in the procedure before the court in Pietermaritz-burg. I have some doubts as to whether in this type of proceedings, at this stage, the expert for the defence is to be called. No doubt I will have to come to some conclusion on this aspect as well eventually when I give a judgment on the admissibility. But as it was done in Pietermaritzburg I think it is advisable to do it here as well.

TIMOTHY PATRICK SHERIDAN ATKINSON: d.s.s. (10)

EXAMINATION BY MR YACOOB: Mr Atkinson what do you do for a living at the moment, that is apart from the work that you have done in connection with this case? -- I have my own company which is engaged in the production of television programme material for commerce and industry in Cape Town and engaged in the hiring of audio-visual and television equipment for the reproduction of such material.

Now what sort of qualifications do you have? -- I have a degree in electrical engineering from the University of Cape Town. (20)

Is that a B.Sc. degree? -- It is a B.Sc. Electrical Engineering. That is light current. You can do either heavy current or light current.

Now before that what sort of experience do you have with tape recordings, can you give the Court some idea? -- Well I started as a youth experimenting with tape recordings when I in about Standard 6 and from there I went on to build my own tape recorders and to increase the quality of the tape recording equipment and the range of work that I did with it, gradually becoming more adventurous in the sorts of recordings we were (30)

446.17 - 7 174 - ATKINSON

making and culminating, when I left University, in the starting of a professional recording studio in Cape Town.

What kind of work did you do at the professional recording studio? -- Well the first thing we had to do was to try and upgrade the standard of the recordings being made in this country, to try and get them to match with the sort of work that was being done in England and America and to that end I introduced the concepts of multi-track recorders, limiters and compressors and various other developments which at that time were quite milestones in the industry. (10)

And your studio at the moment, what sort of work do you do there now? -- Well primarily the production of television material. As I say for commerce and industry and a certain limited amount of work for use by the SABC.

<u>COURT</u>: What is the name of your production company? -Atkinson Audio-Visual.

MR YACOOB: Now have you investigated tape recordings for other
court cases before, and given evidence in other court cases?
-- Yes I have.

COURT: Mr Atkinson if you want to sit down during the (20) proceedings you are at liberty to do so. -- Thank you My Lord.

MR YACOOB: Sorry, we were talking about evidence that you gave in other court proceedings. -- Yes.

Can you give the court a brief idea of when and where?

-- Well I was first asked to assist in this kind of work in

I suppose about June or perhaps August of 1985 in a case in

the Supreme Court in Cape Town. Subsequently I was consulted

on a rather smaller matter in East London and while that was

going on I was also involved in assisting the defence in the

treason trial in Pietermaritzburg. (30)

Were/....

Were you given certain tape recordings to investigate in this case? -- Yes I was.

Have you prepared a report pursuant to your investigation?
-- Yes I have.

And would you like to hand that report in? -- If it please the Court I have here a report which has been typed and for which I have copies for the Court. There seems to have been some difficulty in finding which was the original and which was the copy so I have signed every page of one of the bound volumes which I will hand to the Court as the original plus (10) two copies for the use of the assessors.

My Lord may that be ABD8.3.

COURT: It will be one report, there will not be a number of
reports?

MR YACOOB: No My Lord.

COURT: 8.3. Thank you. -- And if it please the Court two copies for the State counsel and their witness and a further copy for the assistance of the translator.

MR YACOOB: Now you start off your report by dealing with your qualifications and experience. Is there anything you (20) wish to add to what you have already said in that regard? -No I omitted to mention that the recording studio was primarily designed and built to make recordings for gramaphone records, and I did not mention the work that I did in the audio-visual and multi-vision industry from 1972 to 1978, that is on page 3 of the report.

Have you had any experience in editing work? -- Oh yes, extensively. Right from the very beginning the thing that attracted me to the medium of recording was the creative opportunity to make recordings which were, shall we say, (30) improved/....

improved on what the original recording had been. So from the outset I was involved in doing a lot of editing on reel-to-reel machines and of course today an enormous amount of editing is carried out using electronic control of the recording devices, the players and the recorders, particularly and exclusively of course in the television business where there are certain restraints which make it essential that it be done that way. So I have experience in reel-to-reel recording and editing, electronic editing on a machine-to-machine basis, and of course television editing and the sound editing on tele- (10) vision as well.

Now you deal with general matters such as your experience and so on up to page 4 of your report, ABD8.3, where we find the heading "Material supplied for investigation". Without going through all of that in detail do you, can you quickly go through it and say whether you confirm that everything in the report up to that point is true and correct? -- Yes that is correct.

Right. Then you have given us after that, starting on page 4 under the heading "Material supplied for investiga- (20) tion" a list of material which you had in your possession to conduct the investigation. There is no need to read out that list, would you please look ...

COURT: Did you not have EXHIBIT 6? -- It appears to have been left off in the typing process and I am grateful to you for having called my attention to the omission. I did have EXHIBIT 6.

And <u>EXHIBIT 7?</u> -- And <u>EXHIBIT 7</u>, and they were both investigated and they should both appear on this report.

Just a moment, before we start amending, is your (30) numbering/....

446.21

numbering correct as far as the names are concerned?

MR YACOOB: That is right My Lord, the copy I checked yesterday seemed to have been alright. -- I see what the problem is
here, they have given <a href="EXHIBIT 2">EXHIBIT 2</a> which does not, I think is not
a tape recording, that should clearly be <a href="EXHIBIT 6">EXHIBIT 6</a> and not

EXHIBIT 2. <a href="EXHIBIT 6">EXHIBIT 6</a> is the UDF meeting.

COURT: Yes Claremont was 6 and Krish Rabilal was 7 if I remember correctly. -- That is correct.

So we amend that 2 to 6 and the 3 we make 7. -- Thank you My Lord. (10)

MR YACOOB: Could you just look through it once again, that is the list of the material supplied, and confirm that that is correct please? -- Those were the, the tapes which were made available to me by the Court for investigation, listed on page 4, and on page 5 I received copies of Colonel Janson's I have called it affidavit, it would perhaps be more accurate to call it evidence, and that is of course the ABD series, ABD1,2,3,4,5 and 6, and during cross-examination we received further oscilloscope photographs which became ABD7.

Right. Thereafter I would like you please to deal with (20) the range of the investigation which was requested, and go through that fairly carefully please. What was the range?

-- I was given two responsibilities and I broke them down into two areas. A specific request which I was asked to carry out, and general work that I was asked to carry out. Specifically I was asked to read the evidence which had been given in this court in respect of the tape recordings. I was specifically asked to examine the tape recordings, both physically and in respect of their content, and I was specifically asked to comment and report on, and this was to the legal team, any (30) discrepancies, inaccuracies or erroneous claims which had

446.22

been made in evidence, that is to say where evidence had been led and what I found on the tapes did not accord with the evidence that had been led. I was also asked to prepare independent reports on some or all of the tapes, depending on the time available, and I cover that particular aspect in a little more detail later in the report. The general request to me was to conduct a preliminary investigation of the tape recordings before the Court and to list and report the findings, and most important of all to establish or to state whether it is possible by scientific examination alone to (10) tell firstly if any particular tape recording is an original or not, whether the recording in question is continuous and whether or not any or all forms of interference are detectable. And that was my general briefing.

Now you say, before we get to the nature of the investigation you in fact carried out, you say that your investigation was to be a preliminary investigation. What do you mean by that? -- It takes a very great deal of time to analyse a tape properly in depth and in detail. Normally, or should I perhaps say in previous cases, I have had weeks, if not months, to (20) work through the particular exhibits and to give them a great deal of care and attention. Also in some previous cases I have been able to gain access to, or have been given, a large amount of background information on the circumstances which were alleged to have been taking place at the time that the recording was made. With that kind of information one can do a more detailed investigation without finding a whole lot of red herrings or starting a whole lot of hares when one gets to court. In this case we had two problems, or three problems really. The first one was we had very limited amount of (30)

time/....

time in order to examine a fairly large amount of tape recording, in terms of running time, and certain of these tape recordings also contained sections which were in the vernacular languages with which I am not conversant. So I made it plain from the outset that it would not be possible to carry out anything more than a preliminary investigation and what is included in a preliminary investigation is covered in some little detail a little further in the report.

Right, let us move on then to the nature of the investigation which you conducted. Could you give the Court some (10) idea of that please? -- Yes. That section on page 7 deals with the problem of the large amount of recorded material and the short time available and what I had to do was first of all to try and split up the work and also to get a general overview of the whole project to try and set up priorities and to get the whole project on stream in a relatively short space of The first problem we met, which is covered in paragraph time. 2, was the difficulty which the Court had itself identified of cross-referencing something which might have been found by the State's technical expert against one counter number (20)would appear in a transcript against another counter number and then just to confuse matters even worse would appear on my logs against a third counter number. So the very first thing we had to do was to make up a series of look up tables which will enable us to try and correlate the various counter numbers and to relate these to pages on the transcript. third area that I had to attend to fairly rapidly was to brief the legal, the defence legal team, on the technical background as to how recordings are made and edited. Without this knowledge it would have been difficult for them to examine the (30) technical/....

technical evidence. As part of this brief it was necessary for me to demonstrate the various ways of tampering to the lawyers and to show them how it is done, how easy it is to do, what the end result sounds like and how difficult it would be to determine whether similar effects, present on the recordings before the court are or are not evidence of tampering. the, I found it useful in the past to make up examples which demonstrate the various ways of tampering and I always do this from copies of the recordings before the Court. The particular example that we made up for this case of course has now(10) become EXHIBIT 34, and EXHIBIT 34, in a microcosm encompasses most of the things that one would find or need to discuss in all of the tapes before the Court. Finally I could get round to doing an independent examination of some or all of the tapes and correlating this with the technical evidence and recording and reporting my findings and indicating where there were discrepancies between what I found and other evidence. Paragraph 7 deals with two specific exclusions. Due to the pressure of time the following recordings were specifically excluded from the investigation. I did not investigate EXHIBIT 1, (20) which is the UDF launch rally and I did not investigation EXHIBIT 14, the Transvaal Indian Congress. Later in the report I will indicate where my findings are specific to those tapes which I have investigated and where my findings are generic to all tape recordings and may be assume to include those two specific groups of recordings. The last task was to prepare a written report of the nature, extent and method of investigation listing the results and conclusions reached on the basis of those results. Perhaps I should in passing mention that the initial preliminary investigation logs for the tape (30) recordings/....

recordings which we did investigate run to some forty pages of single spaced computer printout and it was not my intention to burden the Court with all of that material, but that it is available and I have obviously copies which I have been referring to during the course of cross-examination.

Then you, then you give us some detail of the equipment you used. Again there is no need to read all that out in detail but to the best of your knowledge and recollection does that list, and the specifications, correctly indicate the nature of the equipment which you had available to you in (10) the case itself? --Yes. We did not use any other machinery of any consequence. Obviously we used splicing blocks and knives and splicing tape. Oh and there was one small portable recorder, a Blaupunkt 360, which I do not have with me in court here today but which we had used to do certian tests in respect of suggestions by the State that there might have been pieces of dirt which got stuck on the head of a recorder. That has not been included as part of the test equipment but it was used in making up that exhibit.

COURT: What is a report monitor? -- The Uher 4000 is the (20) portable reel-to-reel recorder which is in quite wide use by the police and there are several version of the Uher 4000. The particular version which was supplied to me carried the name on the very front saying "Uher 4000 Report", which means that it is intended for use by new reporters or radio reporters and the word "Monitor" implies that it has certain monitoring facilities enabling you to listen to what you have just recorded over the loudspeakers or over headphones and you can also monitor off-tape play back levels, and various other facilities which were not initially provided on the earlier models of (30)

the/....

the Uher recorders.

MR YACOOB: Alright. So you have got your equipment, you have got your tapes. -- Yes, there is a correction under the Akai 1730 DSS, it says "4 ins line", it should in fact be "4 in line", that is to say the machine scans the four tracks of a quarter inch tape all at once in whichever direction you are playing the tape.

Alright, having all this I take it you then went to work and the next heading on the report is "Method of Logging".

Could you please deal with that? How did you go to work (10) and what did you do? -- Well the first point I would make here is that this section deals of course with the cassette recordings which we investigated because as we were not investigating EXHIBIT 14, that was a reel-to-reel recording, the whole section is written in terms of cassette recordings.

Yes? -- The first important point is that all cassette recordings are played back or replayed on the said stereo cassette player. We are not jumping from one player to another so we try and pin down that particular variable. The second point is that the output from the tape player, most tape (20)players have an output where you can, marked either "Earphone" or "Extension speaker" and you can get a kind of signal out of that socket which is not particularly clean and is dependent on the settings of the volume controls and the tone con-The particular Sanyo recorder which I used has what we call a line output, that is to say the signal comes out at what is known in the trade as line level and this output is taken before the volume control, tone control or balance control and thus gives you for any tape the level coming out on line output is directly related to the strength of the (30)

signal/....

signal recorded on the tape, and as it is a stereo machine I take the two left and right channel, take left and right channel to the two tracers of the dual trace oscilloscope.

Right. -- Now initially one listens through to the recording over the built-in loudspeakers until one ...

COURT: Just a moment. A dual trace model oscilloscope. Does it show stereo of both tracks at the same time? -- Yes, it has, or you can set it to have two little waving lines and you can use the one wavy line to monitor what is going on, to show you what is going on on the left-hand channel and the other to (10) show you what is going on on the right-hand channel. Thus you can see what is happening on the left channel immediately above what is happening on the right channel and of course you can hear in your left ear what is happening on the left channel and in your right ear what is happening on the right channel. Finally you can combine the left and the right channel by switching a switch on the top of the Sanyo recorder to mono, monoral which combines both channels to both ears.

MR YACOOB: So as I understand it your method would be to listen and watch at the same time, overall, is that correct? (20) -- Correct. And as soon as anything is heard over the loud-speakers which is in the least bit suspicious then we put on the quality headphones and we wind the tape back a very short space and repeatedly listen to the section. That is in fact covered a little later in the report, and I think My Lordship's question in terms of the oscilloscope may have been partly dealt with in Section 4.

You are saying you initially listened through loudspeakers,

I think that is the point at which His Lordship asked the

question about the oscilloscope. -- Yes, yes it is extremely(30)

tiring/....

tiring to listen to this kind of recording for protracted periods of time with headphones, particularly in my case where I wear glasses for reading and writing I find it very painful to wear headphones for long periods of time. So the initial play through is done using the loudspeakers in, in this case, a quiet hotel room in Johannesburg. Later on more detailed work is carried out using headphones at points that need to be more fully investigated.

Alright. -- Section 4 deals with the possibilities of observing on the oscilloscope the electronic wave form of the (10) recorded sound at the same time as it is being heard. Any oddities may be instantly replayed as often as is required to establish their nature. I think the Court has heard me using what is called the "cue and review" facility on the tape recorder. You get just past the point you want and then you just press the rewind button and everything shrieks at you as the tape whizzes back past the playback head and then you release the cue and review and it commences playing from a point a little before where you went into your review mode. So we can very quickly whizz back repetitively, having a (20)look at any particular seciton, and also listening to it. Ι then deal with the left and the right channels and the ability to listen and observe them independently or together.

Right. -- Section 5 deals with the method of recording what we hear and what we see and details of the contents of the recording and the counter numbers at which these events occur and the transcript page references, where possible, are all entered simultaneously into a word processor. I have a small portable computer which I have on the desk in front of me with the cassette recorder at the side of me and the (30) oscilloscope/....

oscilloscope also slightly to the side of me. So as the events occur and as I am following the content in the transcripts I try and keep the cross-referencing system going on the computer. So the cross-referencing system is then, and the other point of course of having this kind of thing on a word processor is that if you come across something you can say how many times have I heard this before on this particular recording, has it at all happened before, and then you can instruct the word processor to go and look for certain key words further back in its memory and it simply hunts back (10) and finds these key words and you can say oh yes on page so and so I found something like that and then you can skip back and you can find perhaps a number of references to the same kind of event. That can often be important in recognising a pattern of events and it is very useful to me on this occasion. The second point about putting the material straight into a word processor is that there is no doubt about it the more you listen to tapes the more you hear on those tapes, and as you hear more you have to find the space to write in the additional information that you have heard. Word processors allow you (20) to simply open up a space electronically and type in the additional information. So one can accommodate expansions, changes and updates directly on the master log. The sixth point which I found to be important in my investigation was that it was necessary, and certainly desirable, to be able to slow down the rate of playback, or the speed of playback of the cassette recorder particularly for looking at critical pieces where rapid changes of sound information followed one upon the other. A number of these rapid changes have in fact been played to the Court and Mr Yacoob has put to the State's (30)

Digitised by the Open Scholarship Programme in support of public access to information, University of Pretoria, 2017

witness/....

witness that we hear certain types of sound, or certain sorts of sound, in very quick succession and in order to break those very quick successions up it is often necessary to run the tape recorder slow. In very critical cases one can make a copy of the actual section on a reel-to-reel machine and then one can simply reduce the speed of the reel-to-reel machine by a half and go through everything at half speed. Item 7 deals with the use of the preliminary investigation logs, they are printed out as initial reports to the legal team and for use by myself in court during cross-examination and the Court will have (10) seen me running up and down these computer printouts as questioning has progressed.

We now get to the stage of your report where we deal with your preliminary findings. I wonder whether this would not be a convenient stage to take the adjournment.

COURT ADJOURNS FOR FIFTEEN MINUTES. COURT RESUMES.

TIMOTHY PATRICK SHERIDAN ATKINSON: d.s.s.

FURTHER EXAMINATION BY MR YACOOB: Mr Atkinson we had reached the stage at page 10 of your report where you have the heading "Preliminary Findings". Before you go ahead with them why (20) do you regard your findings as preliminary? -- Well for the reason that I mentioned earlier that it takes a very great deal of time and a lot of background information is really required before findings can be anything more than preliminary. In a preliminary investigation I go through the tapes making notes of those factors which are apparent at the first or second playings and where possible analysing the more important ones. But as I have said earlier repeated listenings to a tape can very often reveal other factors which should require further investigation and if such further (30)

investigation/....

investigation were to be carried out then a lot more background information and access to the particular equipment would be required and I actually cover that in the latter part of my report.

Right, let us deal with your preliminary findings one by one please. -- As an overall introduction to the preliminary findings the findings themselves relate obviously to those tapes which have been investigated. Where I have added to a finding a caveat that caveat would apply to all tape recordings in all those before the Court and in fact to the wider range of all(10) tape recordings. The first findings was that some discrepancies were discovered between what factual witnesses had said had occurred and what was actually found to be on the tape recordings. And these were subsequently raised with the State's technical expert. An example is on EXHIBIT 6 towards the end of side two where the factual witness claimed that he spoke with a woman and no female voice is heard on the recording. The second area which we found of some concern was that a number of technical explanations given in the ABD series, that is ABD 1, 2, 3, 4, 5, 6, were found to be not in accor-(20) dance with what was on the tape recording and these were taken up with the State's technical expert.

COURT: When you say "taken up" does that mean in crossexamination? -- Indeed.

Yes. -- An example is on <u>EXHIBIT 7.2</u> at the start of side one where the <u>ABD</u> explanation was a radio microphone interruption and it was subsequently agreed in cross-examination that the interruptions in question were what has come to be known as "erasures after the fact". Item 3 expands this to say that a number of obvious and audible interruptions are (30) present/....

present in the recordings. Many have not been correctly identified and typical cases only were raised with the State's technical expert. I feel that I should at this stage point out that where we had a number of occurrences all of which fell within the same pattern we did not take up every example with the State's witness, once it had been established by cross-examining that one of a group of examples had been incorrectly identified. We did not, as you might say, continue to stab the corpse by going through all the others. A typical example of that would be in the EXHIBIT 7.1, the end of side two and EXHIBIT 7.2, the start of side one. We dealt with some erasures after the fact which had been incorrectly described as radio microphone onderbrekings on the start of 7.2 side one. There are in fact another crop of the same thing at the end of 7.1, side two. And that qualification that we did not raise every point with the State witness extends beyond the obvious interruptions to include some of the more minor points, the changes in background noise, changes in background level. There are a great number of these which could have been raised. Mindful of the Court's injunction (20) we did not raise them all. I make the caveat under item 3 that great care should be exercised at these points where there are obvious and audible interruptions because the interruption may conceal an otherwise unacceptable edit, the concept which has come to be described as the "Elastoplast edit". Item 4 deals with the very large number of interruptions which have been loosely identified as "verbinder" problems or "batterykontak" problems. Now these are in my opinion incorrectly identified and we have some considerable amount of cross-examination about certain obvious and audible (30)

interruptions/....

interruptions on the tapes which were alleged to be a combination, an accidental combination of "verbinder" and "battery-kontak" and in our view was something quite different. Equally there are a number of other areas which have been ascribed to being "verbinder" problems which in my view quite clearly are overload trips. The very short interruptions which have been loosely described as "verbinder" problems might very well be deserving of more detailed investigation since they may well be evidence of editing or tampering. The problem of course is that there is a very large number of them and that will (10) take a very long period of time. Item 5 is not of major significance but numerous dropouts have been identified in EXHIBIT ABD, in the range of the ABD series. A little care should be exercised in these areas because the ...

What do you understand under dropouts? -- That is a tape dropout, and the State witness has asked me to be specific when I am talking about tape dropouts as opposed to signal dropouts. Those areas where he deals with tape dropouts due to poor contact of the recording tape with the recording head at the time of recording he has quite rightly identified that in (20) some of these areas it is possible to hear the sound on one channel but not the other channel.

Just for clarity sake does a dropout mean that no sound can be heard or does a dropout mean that sound diminishes but is still audible? -- It can mean both.

But that was not the definition used by Dr Janson. Dr Janson's definition is that a dropout is something where the sound becomes less audible but still is audible. So now we are using a different nomenclature. -- Well in tape dropouts Colonel Janson is correct in that the sound can be reduced. (30)

A/....

A severe tape dropout the sound can disappear completely.

Those that he called attention to the sound was reduced,

particularly reduced in one channel relative to another and

I am referring in this paragraph to exactly what he was describing and I do not wish to extend the defintion for the purposes of this paragraph.

So we stick to his definition, yes. -- If it please My Lord.

Yes, thank you.

MR YACOOB: Carry on. -- Care should be exercised in these (10)areas where we have this shift of sound from one channel to another because the effect of a diagonal splice copied onto a stereo cassette recorder would give a very similar effect. That is of course if the diagonal splice on a reel-to-reel maching is reproduced on a stereo playback machine. Colonel Janson deals with the effects of the diagonal splice very adequately in this section of his evidence and it is not necessary to go through it again, just to express the caveat that you could get a similar situation in certain circumstances where you are playing back on a stereo tape recorder a quarter inch tape which has been spliced and if it was being recorded on a stereo take-up machine you would in fact have a shift of sound from one channel to the other as the splice went through. It would be one method in fact of detecting a Item 6 deals with a document which I think was set up with good intent but may have become a little misleading, both to the authors of the document and others who had to work on the technical evidence, and that is ABD3. It could be a particularly misleading document. In my view it is from the outset fatally flawed in that it does not contain the most(30)

obvious/....

obvious and the only really reliably identifiable signature, or group of pulse patterns, and that is the erasure after the fact. And since I am here talking about cassette recordings the erasure after the fact which was carried out on the Uher reel-to-reel recording is of no value to me in my investigation. I say there is no example of a cassette recording erasure after the fact on ABD3 and I would have thought that to be the first and most essential example to have been included. possible that because it was not included that is why the State's technical expert failed to identify correctly a (10)number of these occurrences. The risk here is that if you set up a template, or if you wish an electronic fingerprint file, and you then try and crowd everything that you find into the available fingerprint file you may well overlook other possibilities and you may well become sidetracked in a mass of detail which in fact blinds you to what is actually going on. In particular here I am unhappy with certain of the claims made about the repeatability of certain types of pulses and the ability to identify certain types of recorders from traces which are left on the tapes. I have found in practical (20)research that I have done that it is possible to have certain types of traces generated by one recorder doing one kind of sequence of operations which very closely duplicates the set of traces which you get from another recorder doing a different kind of sequence of traces and I am very reluctant to pay too much attention to the tiny little details in those pulses. I would have preferred to see more broad strokes, particularly the very obvious erasure after the fact with its very obvious five second piece of clean erased tape.

Do you mean five seconds? -- Point five seconds. It (30) does/...

7 192 -

does seem to be stretching. A further concern for me in EXHIBIT ABD3 is that the examples contained in ABD3 where the recorders have been stopped, started and paused in what appears to be a completely random manner in speech can hardly be used as a quide as to what would happen in the real world of editing or tampering which would take place in natural pauses or during applause. And again the examples given, the templates made up for ABD3, could be misleading. Colonel Janson himself has indicated that the pulses, or the group of pulses, may be modified in certain respects as a result of the sound that (10) had been received by the machine before they were generated or by the sound that was being received by the machine at the switch on moment. So a little care in taking the, making up the templates might have made the document more useful.

Would you care to indicate other factors which in your experience do or could cause a modification of pulses? -- Well obviously different machines different pulses, different sequences of operation different pulses. I think the classic case here was the one in which we were involved in Cape Town which dealt with a small Olympus dictating type recorder (20) and Colonel Janson in his laboratory set out to do some work, some details of which he gave use here and I in a laboratory in Cape Town set out to do something similar. After two weekends of solid work it became quite clear from the work that we were doing that they were going to, we were going to end up with something like 56 different possible signatures for any one type of recorder and even those that we were getting, which were supposed to fall into 56 classes were not in any way, were not nearly repetitive enough to be definite, and then the horrible truth dawned on me that there were of course (30)

quite a wide variety of Pearl(?) recorders, starting from a Series 5 and going through to the Series 9 or 10 as it probably is now, and of course there were variations within each type of thing. So that one Series 7 would not necessarily give the same response as the other Series 7. So it was very clear that we were heading down a road with a wealth of detail and no definite conclusions to be reached at the end of it.

Does the condition of the tape recorder have anything to do with the pulse pattern or not? -- Well it can very much so, yes. Obviously both the mechanical condition of the tape (10) recorder and the electronic condition of the tape recorder, and also the condition of the power supply being utilised by the tape recorder can all have an effect.

Carry on please. -- So having dealt with ABD3 I moved on to the recordings which were investigated and here I said all recordings investigated contained numerous points at which edits could have been taken. I would ask your indulgence to change that word "could" to the word "may". I am sorry to introduce a note of semantics but "could" implies that it could have been done but was not done whereas "may" I think(20) implies that it may well have been done and simply not noted. And it seems that page 13 is unlucky because when we move to paragraph 7.2 it will be clear from EXHIBIT 34 that should of course be, oh it is 34, is the example which I made up for the Court, that is correct. EXHIBIT 34 was the demonstration example which I made up and which contains a number of known edits which can be seen by reference to the transcript. Now the signs of these edits ...

Sorry, before you go any further, My Lord I am sorry I did not check it out too carefully. My recollection is (30)

that this is in fact <u>EXHIBIT 33</u> which was in fact the edit sample which was put up. If we could check that quickly.

<u>COURT</u>: I wonder if <u>34</u> is not correct. I will have a quick look. <u>33</u> had an experiment on of the defence relating to <u>EXHIBIT 6</u>, the last portion of side B. <u>34</u> was a tape edited by Mr Atkinson.

MR YACOOB: Oh, thank you My Lord. -- Thank you for Your Lordship's clarification. It is in fact EXHIBIT 34 that I am referring to, the demonstration edit exercise and it contains a number of known edits and I think it is fairly clear to (10) every listener that the signs of these edits, if audible at all, are very small and difficult, if not impossible, to detect unless of course you have a transcript or something of that nature which focusses your attention upon them. Furthermore there are many of these tiny signs present in all of the recordings and it would be a prohibitive task to try and list them all, never mind investigate them all. So very small signs can have very big implications and there are a lot of these very small signs dotted around in these recordings and it would be, I think as the Afrikaners express it very well(20) "n onbegonne taak" to try and list them and investigate them.

Before you pass on from the editing arena, difficult to describe but how do you describe the process? Is it easy to do, difficult to do, how do you sort of respond to that sort of question? -- Well editing is not difficult to do if you have a natural sense of rhythm and if you have a modicum of common sense and if you have either had the opportunity to play with tape recorders and editing equipment or if you have had minimal instruction in it. I used to say that I can teach the average attorney to edit and splice in half an hour but (30) perhaps/....

ATKINSON

perhaps that is being a little unkind to the members of the legal profession. It is really not a difficult skill to acquire. But there are different levels of difficulty within the editing process. Editing within music is generally regarded as being the most difficult of all the editing processes. Editing within speech by comparison is relatively simple. Editing within general background noise or editing within applause or what I might call saturation white noise, is very easily done. So there are different scales of editing or different scales of difficulty in editing. But equally (10)there are different techniques available which the editor may use in order to deal with more or less difficult problems. So on balance it is a difficult question for me to answer because of course I am experienced in editing but I have observed that people who are not acquire the necessary skills with a fair degree of ease.

Does the fact that you have experience in editing help in, is that fact helpful in any way, does it have any relevance at all to trying to detect them? -- Yes I think it is a, does help me to look at a recording with a different approach. (20 If you know what you are going to be obliged to do if you are going to be making edits then you will know that anybody who is trying to make edits will be obliged to follow those same routes and you can say there are certain basic obvious routes which one follows. One extends an edit or extends a recording either in a piece of neutral silence or in a piece of white noise applause. There are ways of taking an edit in such a way that the ear is bluffed in the same way that the magician keeps your attention with his left hand while he does his trick with his right hand so you can bluff the listener by using (30)

a/....

a particularly loud sound or a particularly sudden change of sound and he says "Oh a chair fell over" and so the sound in the hall is different. Well that may well be the case. man may also just have taken the edit immediately after the sharp sound or immediately before the sharp sound. So there are many ways in which you can take an edit so that it sounds very natural. And if you know how editors go about their work then of course when you meet an example of something that could be an edit you make an instictive note, this needs to be checked out, is there anything else around it which may (10) point to the fact that there has been an edit, has there been a sudden change of context, has there been a jump backwards in time, is there anything else that I can find around it that says that this effect which I know could have been used to conceal an edit might well in fact be concealing an edit. you do not know too much about how edits are made and how they are taken then you may very well miss the telltale signs.

Alright, please carry on. -- Now dealing further with EXHIBIT 34 and the tapes which we have before us in paragraph 7.3 I note that the problem of identifying whether certain (20) effects on the tape are edits or not is made worse by the presence of a number of much more noticable clunks, bangs, level changes and changes in the nature of applause. In fact in EXHIBIT 34 the sections that were used for that demonstration were deliberately chosen to contain a number of examples of changes in background noise, changes in other levels, which were much more noticeable than those which were implicit in the opening process. So we have an additional problem. We are now not only looking for tiny weeny little signs, we have actually got quite a lot of very noticeable ones, and if (30)

edits/....

edits had been taken at these points there would be no real way of knowing it unless there are obvious contextual changes that might reveal some of them. But I think again if you look at EXHIBIT 34 and the texts that go with it I doubt that there are in fact, with the exception of the two Indian gentlemen who got swopped over, any obvious contextual changes. edits may very well go past without being noticed. I deal then with the question of identifying copies by obvious means and this is covered in Seciton 8. The majority of the cassette. recordings, in fact the recordings investigated, commence in the leader tape, that is to say the clear non-magnetic tape at the beginning of the cassette has been opposite the record head when the record process has been initiated and that passes over the record head and eventually a piece of magnetic, the magnetic material starts to pass over the record head, and many of them end in the leader tape, that is to say the tape has been recorded all the way through right up into the leader on the end and so in paragraph 8.2 I point out that in these cases ...

COURT: Just a moment, before we get to that. This means then (20) that a portion of the proceedings was not recorded because it fell on the leader tape? -- It certainly means that and it could mean more as well of course. We have no idea when in the proceedings the record/play button was actually pressed.

Yes, very well. -- The average length of the leader tape is around four to six seconds. So the bit that has been lost on the leader tape is perhaps small but might well be significant.

MR YACOOB: Can you tell by looking at these tapes whether in fact the recording button was pressed at the proceedings? (30)

COURT:/...

<u>COURT</u>: How do you mean the recording button pressed at the proceedings?

MR YACOOB: Well ...

<u>COURT</u>: If nothing was recorded there will not be a recording button.

MR YACOOB: NO My Lord, I am talking about the situation where the recording button is pressed earlier at the stage where there is a leader tape and the recording comes on after that. Is there anything from the tape to indicate that this recording was actually made of the proceedings itself? -- Well I can (10) deal with that in two parts. Obviously if you have a recording before you which is purported to contain things which took place at a certain meeting or something then there must at one time have been an original recording of some or all of the meeting. But dealing with it on the second level there is of course no way which the tape recorder which is making a recording on a cassette has any idea of whether the electrical signals which it is receiving are coming to it from a microphone which is converting the original sound in the hall or the meeting into a series of electrical signals and passing them (20) down a set of wires to the tape recorder or whether, from the point of view of the tape recorder that is making the actual recording on the cassette, whether in fact the electrical signals which are being received by it, the recorder, are coming from another playback machine. As far as the recorder is concerned it is receiving electrical signals, it is converting them into magnetic fields and putting down a series of magnetic patterns on the tape.

Sorry, you were dealing with 8.2 I think at the stage when I interrupted you. -- Correct. 8.2 deals with the question (30) that/....

that you may find at the beginning of a recording as Colonel Jansen did - he found it in ABD(6)1 which deals with the UDF Launch Rally which I believe is EXHIBIT 1 and he did find there the case that there was some tape noise at the beginning of the recordings and he did produce oscilloscope photographs of it. So, clearly in looking to find out is there any definite indication of a copy, this is a good thing to look for but we are prohibited or prevented from carrying out this investigation in any of these tapes as the recordings do not start nicely as they did in EXHIBIT (10) 1. On the magnetic material they start in the leader tape. So, in these cases it is not possible to detect any signs that the recording may be a copy and it should be by looking for tape noise at the start.

COURT: Are you saying that where we have a recording which starts and ends on the leader tape, one cannot determine whether that recording is a copy of an original? -
Not by looking for the telltale increases in noise which Colonel Jansen has identified for us and provided the photograph for us. Perhaps I could give the reference. (20)

Yes, I remember that evidence. That is where you have a double increase in sound. -- A double increase in sound.

We can say you do not have that. Is there anything else then from which you can gleem that this is a copy and not the original vice versa? -- No.

So, basically then, for all practical purposes, if you have a recording on the leader tape at the beginning and the end of the tape, you cannot discern whether it is a copy or the original? -- No, not unless you have a great deal of other information about the nature of the (30) machine/...

machine allegedly used to make the recording and a whole host of other variables which may have been present at the time.

I said for practical purposes that means for the purposes of this case? -- Correct, for the purposes of this case. I deal with the exceptions to that majority situation in 8.3 where Colonel Jansen identified in EXHIBIT 1, the typical signs that the recorder being started before the player where he got the double increase in sound. Note incidentally that it is not necessary to get a double (10) increase in sound. You can also get a single increase in sound. It depends on the exact sequence of operations and which stapes are standing at which positions. He does find that on EXHIBIT 1 and he agreed that there was a similar audible hiss before the start on EXHIBIT 7(1) side 1. So, there were two cases where we had this hiss because the recordings had not been started directly in the leader. The problem unfortunately does not rest there. It continues, because even where you do have a recording which starts in the magnetic material, you may very well not find a (20)double increase in noise. You may very well not find a single increase in noise and that is because it must be borne in mind that in a copy process the player could be started first and when the sound was being heard, the recorder could be started, which would give the same effect as starting an original recording during an original live speech. There would be no double increase in noise, no single increase in noise. It would just go banging to the middle of the speech exactly as you would have if you had in a live situation pressed the record button while (30)

a live speech was going on.

So, the process is then, you have a tape, you play that tape, you do not record and the moment you hear something you start recording. That little bit you hear, is that not left on the tape then? -- No, what you are listening to which is coming off the player is not specifically affecting the recorder which is, shall we say, lying at When you hear something that you want to start rest. recording, both fingers depress the record and play button (10)and you start the recorder up from cold as it were and go into the recording process. So, what you have been listening to on the feed machine prior to the time that you decide to start the recorder, has made no influence at all on the tape that you are recording onto. Your Lordship would obviously have gathered that this is one method which you can selectively leave out pieces of an earlier recording. The same situation of course exists at the end of making a copy recording. The recorder stop button can be pressed, in other words the recorder can be switched off while the player is still running and this would give the (20) same effect as stopping an original recording during and in the middle of an original speech. One must keep in mind the possibility of people doing things in a sequence other than that perhaps being carried out by somebody who was anxious to record everything that was on the original tape onto the copy tape. You can see the need for Colonel Jansen making copies for transcription, copies for the defence. It is obviously his responsibility to be sure that the copy contains everything that was on the recording which he is copying and he is also very accurate in that (30)

he refers to a copy only when he means that the copy contains all content of the original recording. I think he refers to a "heropname" where the new recording may not contain everything that was on the original recording and I have tried to follow that. I am not referring to copies when I mean selective re-recordings, but of course, you do not have to follow the process Colonel Jansen is obliged to follow. It is quite easy to do it the other way. So, 8.6 sums that up and says that in the above cases we would not find any tell-tale hiss either at the start or the end of the (10)recording. I have to extend it in 8.7 to deal with something that we have typically in **EXHIBIT** 7(1) and 7(2) where the evidence is that the recording has been stopped before the tape ran out, the tape has been turned over and the recording has been commenced or re-commenced at, as you might say, the opposite point from where the tape had stopped on side 1. You start recording side 2 directly opposite it. The process above of allowing the player to run while you were carrying out this stop/record/ flip tape and recommence record is exactly compatible with what would have happened (20) if you had been recording a live speech and you had pressed the stop button, flipped the tape and then pressed the trecord and play, giving you a natural break and tape turnover point. So, the existence of a natural break at a tape turnover point does not prove anything either way. Finally in section 8.8.1 I make a note about this question of continuity of recordings. I deal with this because Colonel Jansen was quite correct in his approach. He starts off by identifying those activities which he can detect on the tape which imply that there may have been a passage of time during which the tape (30)

recorder/...

- 7 203 - <u>ATKINSON</u>

recorder was not running. That is to say he identifies the stop, an unknown delay and then the start or the operation of a pause control, an unknown delay and then the release of the pause control and he has extendeddhis definition of stop/start to include the situation where you have or might have been recording something, you stop, you rewind, you play back some or all of what you have previously been recording and then you stop and then you wait again for an unknown period of time and recommence recording. So, those three known gaps in continuity are (10) identified by Colonel Jansen quite correctly. The problem of course is that they are not the only gaps in continuity that can exist. I deal with this in section 8.8.1. recording may appear to be continuous simply because no obvious stops or starts, pauses or interruptions were found within its length. It would be very easy to say that there was no interruption in the speeches. So, I mean we have got all these stops and starts in the singing, but that is not important. That may be a little dangerous, because if we look at EXHIBIT 34, that is the edited example which I prepared, we have a large number of things which took place which is simply not on the final edited recording. We have edited out a whole introduction by Archie Gumede. We have left out the whole people that he was introducing. We have left out whole sections of descriptions about these people and yet the recording appears to be continuous. I deal with that danger in 8.8.2 and extended in 8.8.3 to give the typical example of the pick-up edit or extend edit, where you can simply join onto the end of the applause which followed say speech 14(30)

You/...

You can just get about half way through the applause from the first speaker, hold things for a moment, run all the way down your feed machine until you get to about to the middle of the applause for the second speaker and just press the two buttons and away you go. You just nicely join up two pieces of applause and just nicely lose the whole of the second speech. In fact in EXHIBIT 34 I have a number of examples where I have joined up an applause and I have given a number of examples where I have left out bits of (10)a speech. It is just as easy to in fact leave out a whole speech or a paragraph or a sentence. Any where where there is a nice piece of handy applause, you can take out the stuff between the applause and nobody is going to notice the break in continuity. So, the main warning here is contained in 8.8.5 ... (Court intervenes)

Before we get to that. At 8.8.4 we have <u>EXHIBIT 33</u>.

Do you mean 34? -- That should clearly be 34. Thank you for the correction.

It is amended. -- So, in 8.8.5 absence of obvious interruptions does not in any way mean that the recording is (20) either continuous or complete.

MR YACOOB: We now get to the stage where you make certain conclusions arising out of the work which you have done. Would you deal with those? -- May I preface this with the comment that the concluding statements are set out as concluding statements and not conclusions, because they are not based exclusively on the work that I have done for this case. They are based genericly on the work that I have done of tape recordings all my life and in court cases in recent years. So, these are generic too all tape recordings (30) including/...

including those that we investigated and the others before the court but not investigated as well as the wider range of tape recordings out there in the world. The first statement is magnetic recordings may be copied and may be altered, the degree of alteration can vary in such a way that even experts cannot detect the alteration and if I might extend that, they may also not detect the evidence of the copying. It is a feature of magnetic recordings that the nature of the storage of information is a semi-permanent arrangement of magnetic particles and this semi-permanent arrangement (10) can be unarranged by erasures, by bulk erasures. It can be unarranged in whole by bulk erasures and the evidence is gone for ever. It can be unarranged in part by selective erasure or what we have come to call an erasure after the fact, that is to say some section of the earlier information can be replaced with an equivalent length of new information and if you extend this erasability and replaceability by the concept of the copy-ability, then you are no longer even restricted to replacing certain information wich information of an equivalent length. Perhaps I could illustrate (20) that - not perhaps, in the form of a legal example. Supposing a document was brought to the court which had been written in pencil and this was an important document upon which great reliance is going to be placed. Then it would be selfevident that as the document was prepared in pencil a word or words could have been erased with an erasure and somebody making a fair imitation of the handwriting, could have replaced words of a similar length, but perhaps with a totally different meaning within the document. We have exactly the same sort of situation in a magnetic recording. (30)

K447

Words of equivalent length can be changed. To try and give again what I may call a paper work example of the process of copying and changing perhaps we could look at what is known as the cut and paste process which you are working with a Xerox copying machine. You have probably got five or ten pages of different paragraphs and you find you want to leave out a certain paragraph, and so you simply make copy - you cut out the paragraphs you want, join them together and make new copies of those paragraphs and of course a glance at any one of the transcripts put before the court will show that there has been a whole lot of this kind of thing going on in the photocopying process. So, in the same way that you can cut your shall we say block oftext around, stick them down in whatever order you want, photocopy them without the join necessarily being seen. So, in magnetic recordings the same processes can be gone through. That is the substance of paragraph 1 in the concluding statement. Paragraph 2 deals with the very vexing question whether it is possible to determine from the examination of a tape recording alone and in isolation whether it is an original or not and it is not possible to do this. There is no positive sign that says a tape recording is an original. There are various signs that might be added to try and make it more original for example EXHIBIT 34 has my voice identifying what it is, the date on which it was recorded, the time on which it was recorded, and even to the extent of the batch number of the particular make of tape on which it is recorded. Any body who wanted to make a copy of that recording would be obliged to find a similar TDK tape with a similar batch number. Otherwise it will be quite obvious to anybody (30)

looking/...

looking at the tape that it was not an original recording since the batch numbers on the back of the tape would not tie up with the batch number spoken on the slate. Regrettably that is not the end of the story, because the determined faker will simply open up the cassette and swop the tape pancake and the little spools that they are on amd we would be back to square one. This has particular significance where efforts have been made for example to sign the outside cover of the tape cassette. Nothing to stop somebody undoing the screws, opening a cassette, removing the (10) tapes, putting it to one side, put another tape back in, screwing up the screws and giving you back your original container complete with all the authorised signatures that you wish, but the recording within in, does not have to be the genuine recording.

How easy or difficult is that to do? -- It is an international multi-million dollar racket in the video tape business. It presents no practical difficulties to anybody with an average size small screwdriver or set of jewellers screwdrivers. Of course you may or may not be able to (20) detect evidence on the actual screws holding the cassette together that this has been done. You may or may not be able to detect variations in the type of leader tape which had been used by the manufacturer to code his particular type of tape and in the brave days of old manufacturers used to rubber stamp the back of the tape recordings with the manufacturers' brand name , but I think that has fallen by the way today. So, the changes of - it is very easy to do and the changes of detecting that this has been done are not good. In the video business there are other (30)

in such a way that evidence may not be found. So, just because you say there is no obvious or I cannot find any, does not mean to say there is not any and what is worse in paragraph 6 you may have both of them obvious and unobvious signs together in one recording. You may have subtle tampering and obvious stops, starts and erasures, both present together in the recording and there are an enormous number of side implications of the fact that they may exist together. At this stage I would only mention that certain of the tamperings may have been carried out at one level of (10) copying and others carried out at another level of copying and you have to keep your eyes very sharply peeled to see what I call the date of birth of a particular sign. In other words, which came first, the chicken or the egg. from this - section 7 deals with it is not enough to consider only the obvious interruptions. If anything as much or more attention should be given to the less obvious signs. Typically many obvious interruptions prove harmless. It is the sneaky ones that are likely to be doing the damage and you see, anybody who is going to go around, to go about the business (20) of tampering would like obviously to do it in a way where it would not obvious and I think that is the real risk about making broad based assumptions on tape recordings. Section 8.1 deals with with the problems of making a final decision. A great deal of time is required to investigate a tape recorder fully for possible signs of tampering and the task is practically impossible without a great deal of background information and access to the equipment allegedly used to make the recording. Neither Colonel Jansen or I have had access to the equipment allegedly used to make the (30)

recording

recording and in the case in Cape Town where we did, matters dragged on for a considerable period of time without I think any definite finality being reached. So, I extend that in 8.2 where I say even in those cases where the original equipment and I put it in inverted commas for a very good reason can be obtained, it may still prove possible to come to a conclusion due to the difficulty of controlling the many variables present at the time the recording was alleged to have been made and the reason for the inverted commas is the question asked me recently by Mr Yacoob about the con-(10) dition of the equipment when you get it now when the recording you are trying to investigate was made two years ago. Things have changed in the interim. Machinery has become worn out, heads have worn, all sorts of changes could have taken place and you are very handicapped in trying to say because I have now in my possession the actual machine which was used to trap Mr so and so, you may still not be able to come to a definite conclusion.

Before we deal with certain specific matters, you deal with certain conclusions in your last page. Can we just (20) finish that, please. -- Having regard to the investigation carried out and the generic properties of tape recordings as covered in the previous section, it is necessary for me to come to the following conclusion in respect of the recordings before the court and of course these conclusions are essentially in respect of those investigated and I will leave to My Lordship to decide whether they are sufficiently coached to include those not investigated. The first conclusion is that it is entirely possible that the recordings are copies even if the obvious signs may not have been (30) detected/...

detected. The second conclusion is that the majority of the recordings which I investigated have been altered since the recording was prepared. Note further the fact that a recording has been altered after it was made does not make the recording an original. It is quite possible to tamper with a copy. So, perhaps the expression which seems to be running round the court erasure after the fact is misleading. I think it has got some legal connection, accessory after the fact, or something. In that context I understand the factors are something which has been established. So, let us be clear (10) that an erasure after the fact does not in this case prove the fact genuine. There is no reason just because you have some tampering of the recording, that you can say the recording that was tampered with was an original, might perfectly well be a copy and it had been tampered with subsequently.

COURT: When you refer to tampering, do you mean intentional alterations or do you mean both intentional alterations and unintentional alterations? -- I have to include both under the grounds of intentional as Your Lordship has himself (20) pointed out that you cannot say whether an amendment after a recording has been made was intentional or accidental. Whatever was on the tape before it was done, has gone for ever and unless we are fortunate as we were in Krisch Rabillal to have some other form of recovery, you really cannot say. It is not possible to say whether tampering is deliberate or accidental.

No, tampering to my mind so far has had a sort of sinister connotation to it and I do not think you use it in that sense entirely. It may have but also may not have. (30)

ATKINSON

I am thinking of the case where a man has butter fingers and when instead of playing the thing back, he re-records. We had instances of that here. Would you call that tampering or would you call it, as Dr Jansen has called it recording on top of an existing recording? -- It is definitely a recording over an existing recording and bay stating it as such, you are not imputing any evil intent or any innocent intent to the person who made it. The problem that I have is that and perhaps I can illustrate it by way of an example. Supposing I am faced with an absolutely untakeable edit, (10) it is necessary because of contectual reasons to join up something which is taking place in a hall with say a motorbike driving past outside to something which is taking place in a hall five minutes later when there is no motorbike and the particular words which have to be exised or moved or changed have to come out, because that is the purpose of doing the malicious intent or tampering. If I simply joined up the motorbike and make a noise which will go bzzzzz motorbikes do not do that. They go bzzzzzz past you. other words they have a continuous effect. If I would end(20) up with a motorbike chopped off in midd buzz as it were, just so that I could join up my words, I would have what would be obviously an unacceptable edit and which would be obviously very detectable. Motorbikes just do not stop in mid buzz. There has to be something wrong here. So, in such a situation one would take the words one wanted, take them a little bit further than one needed with the buzz bike, a little further down the recording that we were making, you would put the rest of the words that you wanted, you would then get out your friendly stop-watch, time more or less the gap between (30)

where the last word that you needed was said and the first word that you next needed was said and you will say well, that is about so many seconds. I will now wind the tape recorder back, I will wait until I hear the keyword and I will press my record/play button and say "Oeps, I am sorry, I pressed the wrong button." Then I will press the stop button. Nobody will know it was an accidental erasure, because I can hear the man saying "Oeps, I have done it wrong." But it it not necessarily an accidental erasure. It may be a (10)deliberate attempt to conceal an otherwise unacceptable edit and therefore I cannot say and I am not prepared to say when I find an alternation of an existing recording that it was deliberate or not deliberate and I cannot say whether it may or may not have concealed some other shall we say nefarious actions. The only way you are going to get that one sorted out is as for example we did in Krisch Rabillal where you have an alternative source of reference and curiously enough I agree 100% with Colonel Jansen in this particular case, because there is a running through that particular series of interruptions, a particularly continous (20) sound effect which tells me that there was no particular sinister joining up going on under those interruptions and when Colonel Jansen showed that there were no sinister words missing, well that particular problem area was clarified, but you do need this other kind of information in order to make a decision. That dealt with the second conclusion. The third conclusion is tampering may well have been carried out but simply not be apparent on limited investigation which with respect is all that these recordings have Therefore it is not possible for me to form an received. (30)opinion/...

opinion as to originality or to lack of tampering.

I want to get on to some specific matters.

You are not dealing with page 20? -- I think I should deal with that, because it has been raised previously. It is customary when preparing a report to give references on which the research work or the conclusions may have been based and in this case I find - in fact in all such cases I find a particular difficulty that the question of determining originality or not of tapes - there does not appear to be any accepted literature on the subject and I have put internationally acceptable, because I have had other lawyers running through law libraries in other countries and they have not been able to find anything either and I am not certain whether Colonel Jansen has found anything. So, I state in section 2 that the whole subject of determining whether tapes are original or copies appears a reasonably specialised subject and perhaps more under the control of the law than under the control of science or engineering. The absence of any absolute tests which we can apply to recordings means that each case or each example, perhaps (20) it would be a better word there, has to be examined in its particular context and against such background information which may be available. I note that it is possible to find books on this practice of editing and dubbing, but this would not relate specifically to the question of determining originality.

## MR YACOOB:

Do you confirm the contents of this report, of course bearing in mind the extent to which changes have been made to it from time to time while giving your evidence? -- That is correct.

When/...

When you were not here on Friday Colonel Jansen gave evidence to the effect that the looked for the pulse on EXHIBIT 32 at the point where I had under cross-examination indicated where it was and had in fact not found the pulse there. Do you have any reaction to that? -- Yes. I owe Colonel Jansen and the Court an apology. There was a break down in communication between myself and Mr Yacoob in respect of the particular location of the sole surviving pulse on EXHIBIT 32. Colonel Jansen is quite correct that it is not between the slate for EXHIBIT 6 and the example - between (10) the slate for photograph number 6 and the sound example which was used for photograph humber 6. It is in fact between the slate for photograph 3 and the sound example for photograph 3. I apologise for the confusion there and I would probably have made efforts to rectify that, except that to us it is not where the pulse was that was important, it was the fact that it was the only pulse within something like forty different pieces of information which had come and come and we had really meant the whole thing more as a compliment to Colonel Jansen than as an identification of a (20) specific pulse.

COURT: Just give me some clarity. Was this debate the debate which originated on I think (7)3 and ABD (7)4 taken together with ABD (7)2, that pulse and is the answer then that that pulse was not the pulse which this witness had in mind but that there was a different pulse which he has not identified?

MR YACOOB: I do not remember that pulse having been related to the aspect which Your Lordship mentioned. <a href="EXHIBIT 32">EXHIBIT 32</a> is the tape produced by the witness. We have put it to him(30) that/...

that there was a pulse at a particular point in that tape, the general point being made was that although that was obviously a recording made with lots of stop/starts, that there was no pulse there and some point was made of the fact that even the same machine can be variable because there is one pulse at a particular point. If I recall correctly between the slate or the introduction of the sound effect if I can put it that way for photograph attached to ABD(3) and the beginning of that sound effect. We specifically said that that is where that one single pulse was. (10)Colonel Jansen on Friday gave evidence to say that he has examined the record and at that point there is no pulse, but that there is a sound at that point. court, apart from tape 32 which is just an example.

COURT: So, this had nothing to do with the tapes before

MR YACOOB: That is so. Then you heard me put to Colonel Jansen that the bias, the removal of the bias, the total removal of the bias effect when a tape recorder is recording results in an increase in sound level. Do you recall that? -- Yes, this is an area of misunderstanding again between myself and Mr Yacoob. I had not understood it as being a total removal of the bias. The time at which this question arose was when Colonel Jansen was giving evidence about a relatively short "battery onderbreking" which was allegedly taking place in one of the examples which we were examining with him and because of the shortness of the battery onderbreking" I was trying to point out the bias does not just die instantly as the battery power is disconnected. There are certain capacitors and circuits which keep the bias running but at reduced level and eventually dies away and (30)

similarly on reconnection of the battery there may be delays before the bias builds up. Depending on the exact length of the interruption which Colonel Jansen was suggesting and the exact design of the machinery and also where the bias had been set on that machinery relative to the particular tape which was being used, one would have expected one of two effects. If the machine - that is to say the machine making the recording was in what I call an over-biased situation, then as the voltage being used by the bias (10)oscillators, reduced because of the absence of battery power, we would expect to see the sound level rising as the bias level dropped. If the machine was in an under-biased situation then as the bias dropped further the recording level would drop further, but no matter whether it was under-biased or over-biased, sooner or later power has to come back, the process has to be reversed. So, in either the dying off stage or in the recovery stage one would have expected to see change in the level of the signal being recorded as a result of the bias dying away and such change is not evident in that part of the trace where it would (20) have had to have been recorded.

You will recall that I put to Colonel Jansen the pause in <u>EXHIBIT 31</u> at counter number 002 on the 7700. Do you recall that? -- Yes, indeed. That is quite correct.

Would you say that that pause was difficult for you to discover or easy to discover or what? -- No, it was no problem for me to discover at all. In fact this tape was playing in the hotel room, I think one of the lawyers was about to start checking a transcript or something and I was moving around in - I have a suite for this purpose where (30)

I have a work room and another room and I was in fact in the other room when I heard that pause go through and I yelled from the other room. I said "Stop, you have gone through a pause" and we ran back and had a look at it and found that it just was not recorded on any of the analyses which have been put before the court. It was audible, shall I say a room and a half away. There was nothing unobvious about it.

Is it possible for you to look at your look-up table and give the Court some idea of what the difference in (10)time is or would be between the reading 002 on the 7700 and the same reading that is 002 in the machine which Colonel Jansen has been using for the exercise, in other words what would be the difference in time between his counter number 002 in Luthuli, that is EXHIBIT 31 and the 7700 002? -- Yes. Of course our look-up table is in increments of 30 seconds. That is to say at 0 seconds the counter is standing at 000. At 30 seconds our Sanyo counter is standing at 5,5. So, you are looking at about two-sixth or one-third of 30 seconds, which is about 10 seconds. If you go to Colonel Jansen's NAD 6140 - I will have to check that, that was the machine that he used to log EXHIBIT 31, he may have used a different machine. He used the 6140. So, on that machine his 30 second point is 12 counter readings and therefore his 10 second point would be one-third of that about 4 counter readings.

<u>COURT</u>: Having said all that, what is the result? -- Our counter reading 002 would translate in my view to his counter reading 004.

MR YACOOB: Where would his counter reading 002 be? -- At(30) the/...

the 5 second point.

<u>COURT</u>: His counter reading 002 is at the start of the recording? -- That might well be because there is a 5 second leader approximately on the tape.

But what do you want to determine? Do you want to determine where exactly on his counter reading the pause is? Or what are you after, Mr Yacoob?

MR YACOOB: All I wanted to do was to determine what the time difference was between his counter reading 002 and our counter reading 002. (10)

COURT: That may be very interesting to you, but what relevance is that to me? If I understand it, what is the use?

MR YACOOB: One of the points I am going to make in argument in this case is the fact that the witness Colonel Jansen did not pick up many of these things. Your Lordship will recall ... (Court intervenes)

COURT: Well, he conceded that he did not pick up the pause.

I thought you would tell me where the pause is to be picked up between 002 and 024? (20)

MR YACOOB: No. Your Lordship will recall that what I said to Colonel Jansen on a particular day was that this pause was on our counter reading 002. He came back the next day and said he had not picked this up on the basis that he thought that we were referring to his counter number 002. Thatis the reason why he did not pick it up. I need to make certain submissions about that and it is for this reason that I wish to establish what the difference in time was between his counter number 002 and ours.

reference - where the pause is on his counter reading. How near it is to 024 and how near it is to 002.

MR YACOOB: The witness has said that would be on 004 on his counter reading.

COURT: On whose counter reading?

MR YACOOB: On Colonel Jansen's counter reading.

<u>COURT</u>: Is that correct? -- That is correct. Approximately within 10 seconds of the start of audible signals on the tape.

MR YACOOB: For the rest, at different points in time (10) during the cross-examination different aspects were pointed out to Colonel Jansen and different interpretations were put on different parts of the recording. Is that correct?

-- That is correct.

In general terms would you be able to confirm or not to confirm that what was put in relation to each specific portion of the recording would have been your contention in relation to that portion of the recording? -- Yes, with the - I think with the understandable proviso that there is always a loss of transfer in transferring technical information from a technical person to a legal person, that I am very satisfied Mr Yacoob has transferred as accurately as possible what I have put to him.

MNR. JACOBS VRA VIR 'N KORT VERDAGING TEN EINDE DIE GETUIE-NIS VAN HIERDIE GETUIE IN OËNSKOU TE NEEM.

WITNESS STANDS DOWN.

HOF VERDAAG TOT 9 SEPTEMBER 1986.

ways that you catch the pirate.

I think may be we should avoid the video business at this stage. Go on with your concluding statements, please. -- The third concluding statement that it may be possible to prove that the tape recording is definitely a copy if definite signs of the copying process can be found. dealt with that under the heading of the rises in noise, but equally if no obvious signs for the copy are found, this does not mean that the recording is not a copy. (10)simply means that no signs were found. That sound a bit Irish, but it is very difficult to express it shortly. if you do not find signs it may just mean that you have not looked well enough or you have not had the necessary background to enable you to look in the right places. Just because you have not found them does not mean that they are There are many classic cases in science where not there. people have been unable to find things but that they have known very well that they are there. I think the obvious one is the existence of the rare earth metals, the cesiums, berylliums, lithiums and all the other iums, whose exis- (20) tence in the periodical table of elements was forecast many years before science advanced to the point where they could actually isolate and identify the elements. In other words, they were there all the time, but the people who were looking for them just not finding them. The next one we have to look at is section 5 editing and tampering can be carried out obviously in a variety of ways. It can be carried out in such a way that evidence may be found for example we have no difficulty in tracking down these erasures after the fact, but of course it can also be carried out (30)