

Law Reform Commission

REPORT 17 (1973) - EVIDENCE (BUSINESS RECORDS)

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Preface

The Law Reform Commission is constituted by the Law Reform Commission Act, 1967. The Commissioners are-

The Honourable Mr Justice C. L. D. Meares, Chairman.

Mr R. D. Conacher, Deputy Chairman.

Mr C. R. Allen.

Professor K. C. T. Sutton.

Mr D. Gressier.

Mr T. W. Waddell, Q.C.

The Honourable Mr Justice Reynolds was Chairman of the Commission, and Professor D. G. Benjafield was a Commissioner, during part of the period of the Commission's work on the subject matter of this report.

The offices of the Commission are in the Goodsell Building, 8-12 Chifley Square, Sydney. The Secretary of the Commission is Mr R. J. Watt. Letters should be addressed to him.

This is the seventeenth report of the Commission on a reference from the Attorney-General. Its short citation is L.R.C. 17.

Report

Report on Evidence

To the Honourable K. M. McCaw, Q.C., M.L.A.,
Attorney-General for New South Wales.

INTRODUCTION

1. You have made a reference to this Commission-

“To review the law of evidence in both civil and criminal cases.”

2. This report deals only with that part of the hearsay rule which governs the admissibility in legal proceedings of statements in business records.

3. We began work on this topic because considerable use is made of computers by government and business for keeping and producing records. Yet, in civil proceedings, statements in documents produced by computers cannot be admitted in evidence if objected to. And, in criminal proceedings, the provisions of the Evidence Act, 1898, do not work satisfactorily in relation to such documents.

4. Special provision is made in the English Civil Evidence Act 1968 for statements in documents produced by computers. Similar provision is made in the Victorian Evidence Act 1958¹ and in the Evidence Ordinance 1971 of the Australian Capital Territory.² We thought initially that we might recommend the adoption of a like provision in this State, but, we are now satisfied that this is not the best course to follow. It would have the effect of making a document admissible if it was produced by a computer, but inadmissible if it was produced by other reliable means.³ There is, we think, no justification for that result. We were led, therefore, to consider the admissibility of statements in business records, whether the records are kept or produced by computers or by other reliable means.

5. In the result, we recommend that the Evidence Act, 1898, be amended to provide a statutory exception to the rule against hearsay evidence: an exception which will facilitate the admission in legal proceedings of reliable statements in business records, however kept or produced, as evidence of the matters recorded. For this purpose we recommend legislation along the lines of the bill in Appendix A to this report. Notes on the bill are contained in Appendix B. A summary of the effect of the bill appears in paragraphs 27-37.

WORKING PAPER

6. In August, 1972, we published a working paper on the law of evidence relating to business records which contained our then proposals in the form of a draft Bill.^{3A} This was circulated to the Judges of the Supreme Court and to the Chairman of the District Court Judges, the Chairman of the Bench of Stipendiary Magistrates, the New South Wales Bar Association, the Law Society of New South Wales, to the interested government departments, to the persons and bodies mentioned in Appendix G and to other law reform bodies.

7. We received valuable comment on the working paper. A committee of Judges of the Supreme Court made a number of comments to which we have had regard. The New South Wales Bar Association formed a committee to study the proposals. The Council of the Association did not formally come to a vote on the proposals but we have had the benefit of reading the report to this Committee and of the comments of the Council of the association on this report. The Institute of Directors of Australia, after examination of the working paper by the Legislation Committee of its New South Wales Branch, expressed its approval for the general approach of the working paper and support for the principles embodied in the draft Bill. The Institute of Chartered Accountants in Australia, New South Wales Branch, formed a subcommittee to review and report on the working paper. This

branch of the Institute expressed its general support for the draft Bill. However, it suggested that parts of the working paper could wrongly create an impression that computers were wholly reliable. We did not intend to give such an impression. We make some comments on the reliability of records made or kept by computers in paragraphs 38-46. Other interested persons and bodies have expressed general agreement with our proposals. These include the Chairman of the Bench of Stipendiary Magistrates, the Australian Bankers Association, the Government Insurance Office and the Registrar General. The report to the Council of the New South Wales Bar Association raised several objections of principle to our proposals. No one else raised any substantial objection to the proposals in the working paper.

8. As a result of comments received, and of our own further reconsideration, the draft Bill in Appendix A differs from the draft Bill in the working paper in a number of respects. The principles on which admissibility of statements in business records as evidence is based remain the same except that admissibility in criminal proceedings has been restricted, and a number of additional safeguards of the interests of persons, against whom evidence may be tendered under the proposed exception have been introduced. Other changes have been made in the interests of clearer and simpler drafting. The changes made meet all the comments made on our proposals except those in the report of the Committee of the Bar Association discussed in paragraphs 49, 521-55 and 79-82 of Appendix B.

BUSINESS RECORDS

9. The use of computers for keeping, and producing records is not widely understood. So far as we know there is no simple published account of such use available. In Appendix D to this Report we describe the operation of computers and their use for such purposes. The description is appropriate to I.B.M. equipment. Some modification may be necessary in the case of equipment from other manufacturers of which, there is a very great variety. Appendix D reproduces, with some alterations, Part 2 of the working paper to which we refer in paragraph 6.

10. In this report and in the proposed bill in Appendix A we use the term "business" with an enlarged meaning. It includes government activities and the pursuit or conduct of any profession, occupation, calling, trade or undertaking whether engaged in or carried on for profit or not, and whether within New South Wales or not. The purpose of using the term "business" with an enlarged meaning is to include within the application of the legislation we recommend the records of activities which, although not businesses in the ordinary sense of the word, can be expected to have a similar standard of reliability. Thus, the records of a hospital not carried on for profit, a doctor in private practice, a municipal council, and a charitable body would come within the legislation.

11. The following are examples of documents forming part of the records of a business, statements in which might be admissible under the draft Bill in legal proceedings as evidence of the matters stated: books of account; accounting records of all kinds; employment records; production, job and work records of all kinds; stock records; despatch, delivery or receipt of goods records; postage books; surveyors' field books; transport drivers' logs; hospital records; medical records of a doctor in private practice; interoffice memoranda; office diaries; files of correspondence.

12. In this Report we use the expressions "statement in a business record" and "statement in a document". In the draft bill "statement" is defined ⁴ as including "any representation of fact whether made in words or otherwise". It is in this sense that we use the word "statement" in this Report.

13. The following are examples of statements in the sense mentioned above which might be found in business records: an entry in a cash book "to rent \$25"; an entry in a job card "repair lighting circuit, 4 hours, 30-in cable, 2 socket power point"; an entry in a postage book "W. R. Smith, 7 Close Avenue, Ryde-\$1.20 express"; a table of motor vehicle traffic flow at a particular location in the records of the Main Roads Department; a graph showing daily production forming part of factory records. It will be apparent that some statements will be self-explanatory. Others will be in an abbreviated or in a graphical, statistical or accounting form, the meaning of which will not be apparent to a court except in the light of other evidence.

THE RULE AGAINST HEARSAY

14. A statement by a person in a document tendered by a party to a legal proceeding as evidence of a fact asserted in the statement is hearsay evidence. It is hearsay because the court is asked to find that the fact

existed on the ground that a person, who is not a witness, at some time in the past, said in a document that it did. The statement is not admissible as evidence unless it comes within one of the exceptions to the general rule which excludes the admission of hearsay evidence in legal proceedings.

15. As a consequence of the rule against hearsay, an entry in the ledger of a shop that a customer's account is unpaid, or an entry in a hospital record made by a nurse that a patient spent a restless night or had a temperature of 102° or by a doctor that the patient had appendicitis, or an entry in a bank manager's diary that Mr X called on a certain date to ask for overdraft accommodation is not evidence in legal proceedings of the facts asserted in the entry unless the circumstances come within one of the exceptions to the rule, no matter how clearly it appears to the court that the entry is reliable.

16. It is important to note the relationship between the rule against hearsay and the basic rule of admissibility of evidence in legal proceedings. This basic rule of admissibility is that all evidence is admissible which is sufficiently relevant to an issue before the court and that all evidence that is irrelevant, or insufficiently relevant, should be excluded. In this context, the word "relevant" means that "any two facts to which it is applied are so related to each other that according to the common course of events one either taken by itself or in connection with other facts proves or renders probable the past, present or future existence or non-existence of the other".⁵ Thus a statement in a business record which asserts the existence of a fact which is in dispute in legal proceedings is relevant evidence. But if the statement is objected to, it must be excluded as evidence on the ground that it is hearsay unless it comes within one of the exceptions to the hearsay rule. The rule against hearsay must be regarded, therefore, as a qualification of the basic rule of admissibility. It is concerned to exclude from the body of evidence on which a court must reach its decision a particular type of relevant evidence, that is hearsay evidence. We now turn to discuss the reasons given for the rule and the rationale of the exceptions to it.

17. The reasons given for the rule against hearsay are based on the idea that hearsay evidence is a substitute for the oral testimony of the person whose personal knowledge is embodied in the hearsay statement. Those, which are generally advanced are as follows. The reliability of a hearsay statement cannot be tested by cross-examination of the person who perceived the facts asserted in the statement. The court is deprived of the opportunity of assessing the demeanour of that person while giving evidence. This is unfair to the party confronted with the evidence and to the court. The statement is not made on an oath administered in court. If the trial is with a jury, the jury may prove incapable of properly evaluating the worth of the statement as evidence. Further, a hearsay statement is not the "best evidence" in the sense that oral testimony given in court by the person who perceived the facts asserted is intrinsically more valuable than a written statement recording what he perceived even if made at or near the time that the facts occurred.

18. We comment on the last three of these objections. It may be doubted that it is the religious sanction of the oath which induces most witnesses to tell the truth. We think that, in general, witnesses tell the truth from a recognition of a duty to do so and a sense of honesty and because of a fear that if they do not, an untruth may be exposed by conflict with other evidence or by cross-examination. Fear of prosecution for perjury is a deterrent to serious deliberate lying. Those who make, or supply information for, statements in business records have some corresponding motives for telling the truth. They have a duty to their employer to do so and, in general, no motive to misrepresent or conceal the truth. They fear the adverse consequences of inaccurate reporting being discovered by their superiors. They know that lying may result in dismissal.

19. We doubt that modern juries, properly instructed, find special difficulty in evaluating the worth of hearsay evidence. In private and business life most important decisions are based, at least partly, on hearsay information. Juries are as well equipped by experience to assess hearsay evidence as they are to assess direct evidence given by oral testimony. And, of course, all the common law exceptions and the statutory exceptions, including section 14CB of the Evidence Act (enacted in 1966, to provide for the admissibility of statements in business records in criminal proceedings), proceed upon the basis that juries are able to assess hearsay evidence. As far as we are aware, New South Wales is the only jurisdiction of the many which have adopted the provisions of the English Evidence Act 1938, as is done by Part IIA of the Evidence Act (enacted in 1954), to have restricted its operation to proceedings without a jury. This restriction is now generally thought to be unjustified.⁶ We see no reason to restrict our proposals to proceedings without a jury.

20. We do not think that it can validly be said that oral evidence of facts given in court is intrinsically “better” than a written statement of the facts made out of court. If the statement was made as a contemporary record, it will generally prove to be more reliable than oral testimony given when recollection has faded, and particularly where the witness has refreshed his memory from the statement, as is normally done, before giving his evidence. On the other hand, oral evidence would generally be regarded as preferable to a statement made long after the event for the purpose of the proceedings.

21. We now turn to the considerations which provide the rationale for the, present exceptions, to the rule against hearsay. The exceptions are provided partly by the general law and partly by statute. There may be said to be two such considerations: a necessity for the admission of the hearsay evidence in question; and, a circumstantial probability of its trustworthiness.⁷ This in some circumstances, the common law provides, that by way of exception to the rule against hearsay a statement made by a person may be admitted in evidence where the person who made the statement has died. The circumstances in which this exception applies are limited to rigid categories which provide some assurance that it is unlikely that the person would have lied for example, that he made the statement in the course of duty or that the statement was against his own interest.⁸ In the case of public documents both common law and statutory exceptions recognize a necessity which arises from the impossibility or practical difficulty of procuring better evidence. The character of the documents as public documents provides the circumstantial probability of trustworthiness.⁹ In the case of each of the exceptions to the rule against hearsay, the disadvantages of hearsay evidence are outweighed by the absence of any other evidence or the practical difficulties of obtaining other or better evidence and the reliable nature of the evidence which is admissible.

THE NEED FOR A BUSINESS RECORDS EXCEPTION

22. There are, in our view, three reasons why a new statutory exception to the rule against hearsay evidence of the kind we propose is necessary. In the course of stating these reasons we summarize the effect of the existing exceptions, both common law and statutory, on the admissibility as evidence of statements in business records. The present law is more fully set out in Appendix E to this Report.

23. The first of these reasons is that the present exceptions applicable to civil proceedings do not adequately provide for the admissibility of a statement in a business record where the person who made the statement is dead or otherwise for good reason unavailable as a witness. In civil proceedings with a jury only the common law exceptions for the written statement of a deceased person made in the course of duty or against interest are available. The great bulk of statements in business records, whether or not produced by a computer, are not in a form to which these exceptions apply because they are not made or signed or initialled by the deceased person.¹⁰ In civil proceedings without a jury the common law exceptions are, for practical purposes superseded by section 14B of Part IIA of the Evidence Act. While this section makes admissible statements made not only by deceased persons but also by persons who for other reasons stated in the section are not available as a witness, it contains requirements, as to form¹¹ which correspond to those of the common law exceptions and which make the great bulk of statements in business records inadmissible under it.

24. The second reason is that the present exceptions in the case of civil proceedings do not adequately cover the situation where, the trouble and expense of identifying and calling as witnesses the persons concerned with the statement, or proving that their evidence is not available, is not justified by the likely value of their testimony. This situation often occurs. In the case of proceedings with a jury there is no exception which meets it at all. In the case of proceedings without a jury section 14B (2) (a) of the Evidence Act applies. This enables a court to admit a statement “if having regard to all the circumstances of the case it is satisfied that undue delay or expense would otherwise be caused . . . notwithstanding that the maker of the statement is available but is not called as a witness”. However, because of the requirements, as to form, to which we have already referred, the great bulk of business records, whether or not produced by the use of a computer, are not admissible under section 14B. Further, we consider that it is not satisfactory in the practical conduct of civil litigation for the admission of evidence to be dependent upon the exercise of a discretion such as that provided by the section. Our reasons for this opinion are stated in paragraphs 54-55.

25. The third reason concerns section 14CB of Part IIB¹² of the Evidence Act. This provides an exception for criminal proceedings under which statements in business records are admissible if the person who supplied the information recorded in the statement is dead or for some other specified reason not available as a witness or

cannot be expected to have any recollection of the matters in question. However, this exception is too narrow, and has a number of practical disadvantages. Our reasons for saying this are stated in paragraphs 20-24 of Appendix E.

RECOMMENDATION

26. We recommend that a statutory exception to the hearsay rule be enacted to the effect of the proposed new Part IIB of the Evidence Act which the draft Bill in Appendix A would substitute for the present Part IIB.¹³ We summarize the proposed new Part IIB in paragraphs 27-36. We also recommend that some related amendments be made to the Act to the effect of sections 3 and 4 of the draft Bill which we summarize in paragraph 37.

Proposed New Part IIB

Application

27. The proposed new Part IIB applies to all legal proceedings both civil and criminal but there are some special requirements for criminal proceedings. The term business is given the extended meaning referred to in paragraph 12.¹⁴

Admissibility of Statements in Business Records

28. Where a fact or expert opinion is relevant in the proceedings, a statement, in any form, of the fact or opinion is admissible as evidence of the fact or opinion if the statement is in a record of the business and was made in the course of or for the purpose of the business and either-

- (1) was made by a person engaged in the business who had personal knowledge of the fact or was an expert qualified to express the opinion; or
- (2) contains information which reproduces or is derived from information in one or more statements each made by persons engaged in the business who had personal knowledge of the facts or who were qualified to express any expert opinion involved or from information supplied by recording or measuring machines (s. 14CB).

29. In civil proceedings such a statement is admissible without it being necessary to call any person concerned with the statement as a witness or to show that any such person is not available to be called. For the reasons given in paragraphs 51-53 it is safe to assume that in the overwhelming majority of civil proceedings business records will not be tendered as evidence unless it is necessary to do so.

30. In criminal proceedings, however, such a statement is admissible only if-

- (1) each of the persons who supplied the information is called as a witness; or
- (2) no opposing party requires him to be called; or
- (3) he is not available or cannot be expected to have any recollection of the matters in question; or
- (4) it appears to the court that undue delay or expense would be caused by requiring him to be called.

These grounds are specified in greater detail in section 14CD (2). The reasons for recommending these provisions in criminal proceedings are stated in paragraphs 56-60.

31. Where a statement is admitted in evidence it merely becomes part of the material to be considered by the court in reaching its decision. The proposed Part does not make the statement *prima facie* evidence which the court must accept as true unless there is evidence to the contrary. The court is to give such weight to the statement as seems appropriate in all the circumstances. The court may come to the conclusion that it is so unpersuasive as to be of no weight at all. On the other hand, it may come to the conclusion that it is reliable because, for example, it fits in with other evidence or that the circumstances, in which it was made, make it likely to be reliable.

Absence of Business Record

32. Where in the course of a business a system has been followed to make and keep a record of all events of a particular kind, the absence of a record of such an event is evidence that it did not happen (s. 14CE). This

provision serves the same kind of practical necessity as is referred to in paragraph 24. Evidence admissible under this provision has the value described in paragraph 31.

Computer Records

33. The proposed new Part IIB applies to records made or kept by the use of a computer. See the wide definition of "document" in section 14CA (1) and the provisions as to proof in section 14CK (1) (c) and (2). A statement in such a record, or evidence of the absence of such a record is admissible in exactly the same way as similar evidence relating to records made or kept by other means.

Machine Information

34. Statements in business records which reproduce or are derived from information produced by automatic counting, measuring, identifying or recording machines are admissible as evidence in the same way as if the information had been supplied by persons (s. 14CB (6) (b.) (ii))

Safeguards

35. The interests of parties against whom evidence may be tendered under the proposed new Part IIB are protected in the following ways-

(1) Before a statement in a business record is admitted as evidence, or evidence is given of the absence of a record of the happening of an event, evidence must be given which establishes that the statutory requirements for admissibility have been satisfied (paras 28-30 and 32 above). This evidence is subject to cross-examination.¹⁵ This enables the party against whom the statement, or evidence of the absence of a record, is tendered to contest its admissibility, reliability or completeness. It may also enable him to elicit that a person connected with the business who might be expected to be called is available as a witness. Cross-examination may, moreover, lead the court to reject or exclude the statement on a ground mentioned, in subparagraphs (2) or (3) below.

(2) Evidence tendered under the proposed new Part IIB may be rejected or excluded if its weight is too slight to justify the court acting on it, or if its utility is outweighed by a probability that it would unduly prolong the hearing, or be unfair, or, if there is a jury, mislead the jury (s. 14CM).

(3) A statement or evidence of the absence of a record may be rejected or excluded unless related records which the court thinks should also be in evidence are tendered (ss. 14CC (2) and 14CE (2)).

(4) Evidence affecting the credibility of the person who supplied the information contained in a statement is admissible to the same extent as if he had been called as a witness (s. 14CH).

(5) The court is required to take into account on the question of the weight of a statement or of evidence of the absence of a record all matters from which any inference, as to the accuracy or otherwise of the evidence can reasonably be drawn (ss. 14CF and 14CG).

(6) Where a statement is proved by means such as the production of a copy, or the production of a document produced from magnetic tape by the use of a computer, the court may reject or exclude the evidence unless the original document or the tape is produced to the court or to the parties for examination or testing (s. 14CK (3)). If the statement is in a sound recording or cinematic film, the court may exclude or reject the statement unless a record of the statement is produced to the court in the form of say a transcript or of still prints (s. 14CK (4)).

(7) Where the proceedings are with a jury and it appears to the court that if the jury were to have the document containing the statement with them during their deliberations they might give the statement undue weight, the judge may direct that the document be withheld from the jury during their deliberations (s. 14CN).

(8) For the purpose of any rule requiring the evidence of a person to be corroborated a statement in a business record is not to be treated as corroborating the evidence of a person who supplied information contained in the statement (s. 14CO).

(9) The power of a court in criminal proceedings to reject evidence which, if admitted, would operate unfairly against a defendant is expressly saved (s. 14CP).

(10) Rules or regulations may be made as to-

- (a) giving notice of intention to tender a statement in a business record;
- (b) giving notice of intention to give evidence of the absence of a business record;
- (c) production of relevant documents for inspection (including those in the possession of a person who is not a party to the proceedings).

36. Nothing in the proposed Part IIB prejudices the admissibility of business records as evidence on a ground not provided by the Part. See section 3 (b) (ii) of the proposed Bill. ¹⁶

37. The draft Bill in Appendix A also provides for section 14B of Part IIA of the Evidence Act referred to in paragraph 23 to be amended so as to apply to civil proceedings, with a jury as well as to those without a jury. Section 14B would also be amended so as to provide a discretionary power in the case of proceedings with a jury to reject a statement which would be, unfair or might mislead the jury and to withhold a statement from the jury during their deliberations if it is likely that they might give undue weight to it. The draft Bill also provides for definition of "bankers' books" in section 3 of the Evidence Act to be amended so as to include modern forms of accounting records such as loose leaf cards and computer print out sheets. We state our reasons for the amendments mentioned in this paragraph in Appendix B, paragraphs 1-7.

ACCURACY OF COMPUTERS

38. Before returning to our general reasons for recommending the proposed new Part IIB we comment on the accuracy with which records are made or kept by the use of computers. The factors relevant to accuracy are considered in more detail in Appendix D, paragraphs 44-56.

39. There is no doubt that business records can be made and kept by a computer to a degree of accuracy which cannot, as a practical matter, be attained by a corresponding clerical system. Commonly they are so made, and kept. But errors in such records do occur. The cause of error is rarely a malfunctioning of the computer equipment. Where error in such records does occur the source of it, in almost every case, is human error. It is relevant to consider the sorts of human error which may be involved. As we explain, in paragraphs 45 and 46, the conditions of admissibility which we recommend should ensure that the occurrence, or any likelihood of such error is the subject of evidence given either in chief or under cross-examination.

40. First, the program inadvertently may not provide for all the circumstances which may arise because the person who compiled the program, or who analysed the system which was to be recorded, made a mistake. As a result the computer may print out information which is quite wrong. Generally, the information will be obviously wrong but sometimes the error will be apparent only on comparison with other documents or with known facts. Errors of this kind are normally corrected within a reasonable time after the computer system is commenced. Occasionally a failure to provide for an unusual combination of circumstances may be undetected for years.

41. Secondly, it occasionally happens that, to save money, a program deliberately does not provide for all the circumstances which may arise. Those conducting the business may rely on any error being discovered either by their own employees or by those, with whom they are dealing. Sometimes to save money, the program deliberately does not include editing or checking procedures which, if used, should detect errors of various kinds.

42. Thirdly, human errors do occur in the transferring of information into the computer from the source documents. Errors in the transfer of information are inevitable in any business system, whether or not a computer is used. Methods commonly used for transferring information into a computer provide verifying procedures which keep errors to a small fraction of one per cent. There is, however, currently a tendency in some computer applications to adopt new methods which are quicker and cheaper but do not provide verifying procedures or an adequate opportunity to check that the information has been transferred to the computer correctly.

43. Fourthly, the accuracy of information put out by a computer depends on how frequently the information already recorded by it is brought up to date by subsequent information being put into it. How frequently such records are "updated" depends upon the nature of the computer equipment used, the use to which the records are put in the business and the expense involved. Perhaps the greatest justified source of complaint in respect of records produced by computers is that they have not been brought up to date.

44. Finally, no matter how adequately a computer is programmed, how extensive are the editing and checking procedures and how accurately information is transferred into a computer, the records kept and produced by the computer will be wrong if the information supplied to the computer is wrong. It is because of this that we recommend that a statement in a computer record be subject to the same condition of admissibility as a statement in a record kept by other means that is that the information in the statement must originate from a person, with personal knowledge, engaged in the business in question.

45. As is mentioned in paragraph 35 (1), before a statement in a business record is admitted as evidence or evidence is given of the absence of a record of the happening of an event, evidence must be given which establishes that the statutory requirements for admissibility have been satisfied. In the case of records made or kept by the use of a computer, the person or persons who give such evidence should have knowledge of the occurrence of errors or the kind mentioned and of the matters relevant to any likelihood of such errors occurring. He should, for instance, know what method was used to transfer information to the computer and what procedure was followed to check that it has been correctly transferred; whether the information transferred originated from the personal knowledge of a person engaged in the business; what procedure was followed to update the records; by what steps and subject to what checks the information put out by the computer was derived from the information put in; and whether the computer has malfunctioned during any relevant time.

46. Accordingly, a party against whom such a statement, or evidence of the absence of a record, in a record made or kept by the use of a computer is tendered under the proposed Part would have an opportunity of testing by cross-examination all the matters relevant to the admissibility and reliability of the statement or evidence. ¹⁷

FURTHER REASONS FOR PROPOSED NEW PART IIB

General

47. We now add to our reasons for proposing the new Part IIB. The legislation we recommend is designed to apply to all legal proceedings where the rules of evidence apply. Such legislation must for instance be appropriate to proceedings in the Supreme Court, a Court of Petty Sessions or in a private commercial arbitration. Equally it must be appropriate to all conceivable factual situations. The course which we have followed is to provide for the admissibility of business records as evidence in a way which we think will do the greatest good in the greatest number of instances in which a need for the use of business records as evidence is likely to arise. We have provided for exceptional cases by the safeguards mentioned above. Throughout we have borne in mind that the legislation we recommend must be appropriate to the adversary system of litigation which is a basic element of our judicial system.

48. Statements in business records of the kind we recommend should be admissible are likely to be inherently reliable. They originate in the personal knowledge of a person engaged in the business or in an expression of his expert opinion which, in the course of the business, he recorded or passed on to others in the business to record. The purpose of such statements is to provide a reliable record for future use. There is, therefore, in general, a strong incentive for accuracy.

49. The keeping of records in any large organization ordinarily involves the participation of a large number of people in supplying information and in recording and processing it. It is often difficult to identify the people involved in any particular transaction and sometimes difficult to prove, according to the rules of evidence, that they cannot be identified. The persons who have supplied information are generally likely to be unable to add anything to the information recorded and will often have little real recollection of the matters in question.

50. These considerations apply with particular force to records kept or produced by computers. Ordinarily, only a large number of transactions justifies the use of computers. Identification of the persons who supplied any particular item of information is made more difficult by the usual practice in computer applications of keeping the source documents in random order. ^{17A}

51. We think that experience indicates that in the great majority of cases in which a party would wish to rely upon a statement in a business record as evidence of the matter stated, some or all of the following circumstances would be present:

- (1) The statement would be reliable evidence of the matters dealt with by it; it might in fact be the best evidence.
- (2) The fact or expert opinion which it is sought to prove would not be the subject of bona fide dispute.
- (3) The statement would be unlikely to be the only evidence of any fundamental fact in issue in the proceedings.
- (4) The persons who made the statement or supplied the information from which it was made would either have no recollection of the matters recorded or would not be able to give any further or better evidence than that provided by the statement.
- (5) It would be difficult to identify the persons who made the statement or supplied the information for it or to prove that such persons cannot be identified.
- (6) If such persons can be identified, they would be numerous or engaged in important work ;and it would be a hardship to bring them to court, both to the party calling them and to the business in which they are engaged.

Many instances in which some or all of the above circumstances would exist can readily be envisaged in relation to most of the records mentioned in paragraph 11.

52. We think that what we say in paragraph 51 is supported by the general course of litigation. Each party to litigation is anxious to win the case and ordinarily calls the most persuasive, evidence available. We think that experience indicates that in nearly all cases in which a fact can be proved either by the testimony of a witness who is available and by a statement in a business record and the fact is of any importance in the proceedings, the witness will be called if it is practicable to do so. He will be called either because oral testimony will carry the most conviction in the mind of the tribunal of fact, or to avoid damaging comment on the failure to call a relevant witness, or to avoid any risk that the statement may be rejected or excluded pursuant to the safeguard mentioned in paragraph 35 (2).

Civil Proceedings

53. It follows from the considerations mentioned in paragraphs 51 and 52 that the exception we recommend should be appropriate to the great majority of civil proceedings. What of the exceptional cases? Sometimes, of course, a party might for tactical reasons not call an available witness but seek to tender in evidence and rely on a statement in a business record. In order to prove that the statement was admissible it would under the legislation we propose be necessary to lead evidence to prove that the conditions of admissibility have been fulfilled.¹⁸ In the light of that evidence, and of cross-examination, it is highly unlikely that such a manoeuvre would not become evident to the court with a resulting adverse effect on the case of the party concerned which would more than balance any benefit sought to be achieved. However, there may be circumstances of this or some other kind in which it would be unfair to admit a statement. Accordingly, we recommend that a court have power, in the exercise of a discretion to reject a statement otherwise admissible. This safeguard should we think make a party hesitate not to call available oral evidence but rely solely on a business record when such oral evidence would be or might be thought to be, likely to assist the court.

54. We now mention an alternative approach which might be made to, provide in civil proceedings for the necessity mentioned in paragraph 24 to admit a statement in a business record where the inconvenience and expense of identifying or calling as witnesses the persons who, supplied the information in the statement is not likely to be justified by the value of their testimony. An example of this approach is provided by section 14B (2) (a) of the Evidence Act¹⁹ which enables the court to, dispense with calling the maker of a statement notwithstanding that he is available to be called as a witness if to do so would cause undue delay or expense. It might be said that we should follow a similar course and recommend an exception for civil proceedings expressed to be conditional upon it being established that there is a practical necessity in a particular case to admit the evidence. No one has suggested to us that we should follow such a course. However, we think that we should give our reasons for not following it.

55. To follow such a course would have the result that in the great majority of cases in which a party would wish to rely on the proposed exception, admissibility would be discretionary. The party would not know whether the evidence would be admitted until it was tendered. In the Supreme Court and the District Court this discretion might be exercised on the motion for directions, but a preliminary decision is not available in other courts. In any event, very frequently, the necessity for tendering a statement in a business record might not arise or be recognized until after directions are given or during the progress of the trial. Again, the hearing of many

proceedings such as equity and commercial matters is expedited, and generally it is not practical to seek or make preliminary orders as to the admission of evidence. Finally, it will very often not be satisfactory to the court to be asked to exercise a discretion as to admission of evidence before a proceeding is taking its final shape at the trial. We think that, as far as possible, parties should know where they stand on the question of admissibility before the trial. In our view this object is best achieved by providing that reliable business records be admissible, but that the court have power, in the exercise of a discretion, to exclude such evidence if to admit it would be unfair to another party or if, where there is a jury, it might mislead the jury. A party should nearly always know whether the tender by him of a statement in a business record is likely to be unfair to another party or to mislead a jury.

Criminal Proceedings

56. In our working paper we expressed the view that the considerations we have mentioned in paragraphs 51 and 52 applied with at least equal force to criminal proceedings. In short, we said that as each element of a crime has to be proved beyond reasonable doubt it is highly unlikely that any prosecutor would rely solely on a business record when oral evidence was available because to do so would expose the case for the prosecution to damaging comment and invite an acquittal. No one has suggested to us that this view was wrong.

57. However, on reconsideration, we have come to think that while practical considerations, and the safeguards mentioned in paragraph 35, should ensure that statements in business records are properly used as evidence in civil proceedings, there are aspects of criminal proceedings which indicate that the use of such evidence in these proceedings should be conditional upon the court being satisfied that it is justified. These aspects are the standard of proof beyond reasonable doubt required, the basically oral nature of proceedings, the absence of interlocutory procedures, the difficulty of granting adjournments in trials with a jury, the fact that some prosecutions are conducted privately and the substantial number of prosecutions in Petty Sessions in which the accused is not represented. For these reasons, we make the recommendation summarized in paragraph 30.

58. We comment on our recommendation in paragraph 30 (4), namely, that a statement in a business record should be admissible if it appears to the court that undue delay or expense would be caused by requiring the person who supplied the information in the statement to be called as a witness (s.14CD (2) (vi)).

59. The present section 14CB does not make a statement in a business record admissible in a criminal proceeding on such a ground. In recommending that such a statement should be admissible on this ground, we adopt in respect of all business records, whether or not made or kept by the use of a computer, section 55 (7) of the Victorian Evidence Act 1958. This was inserted by the Evidence (Documents) Act 1971. This provision and section 55 (2), to which it refers, are in terms which apply to all business records. But there is no need to rely on it in the case of a statement in a document produced by a computer because under section 55B, such a statement is admissible irrespective of whether the person who supplied the information is called as a witness. Under our recommendation, however, the circumstances in which a statement is admissible do not depend in any respect on whether it is in a document produced by a computer.

60. We think that in criminal proceedings important practical advantages would be secured by providing that a statement in a business record be admissible on this ground. Delay or expense would be undue, within the meaning of this ground, if not justified by a likelihood that the oral testimony of the person who supplied the information in the statement would add something of significance. These advantages are, preventing the hearing being prolonged and issues being obscured by unnecessary oral evidence, and preventing unnecessary expense and inconvenience to the parties and to the business concerned. Such a provision would be of particular value in cases where it is necessary to tender voluminous or complex records, for example, of an accounting nature.²⁰ It is unlikely that the prosecution would rely on such a provision if to do so would expose it to damaging comment. An accused may well be assisted by such a provision, for instance where an entry in accounting records or in a hospital record first assumes importance to his case during the trial.

CONCLUDING COMMENTS

61. The exception to the rule against hearsay which we recommend is not by any means novel. In substance, our recommendation for civil proceedings is to the effect of statutory business records exceptions which have been in force in the Federal judicial system of the United States²¹ and in a majority of the States²² for many years. These exceptions also apply to criminal proceedings but, for reasons mentioned in paragraph 57, we recommend

some restrictions on admissibility in such proceedings. The United States exceptions have worked well in a country having a common law legal system and an economic organization very close to our own. We have avoided using the language of these exceptions in the proposed new Part IIB. Although each of them is expressed in attractively simple terms, they cannot be understood without reference to a mass of case law, in which many of the decisions are in conflict, and which is not readily available in Australia. The draft Bill expresses, in general, the effect of the American exceptions as interpreted by the consensus of court decisions. We reproduce in Appendix H the business records exception in the Rules of Evidence recently adopted for the Federal judicial system in the United States as the most recent example of such a statutory exception. As we mention in paragraphs 9 and 10 in Appendix F one of these exceptions has been adopted in Tasmania and a variant of it in South Australia for both civil and criminal proceedings.²³

62. We now say something as to what would be the relationship between Part IIB of the Evidence Act, if it were amended along the lines we recommend, and other exceptions to the rule against hearsay evidence. The proposed new Part IIB would provide for the admissibility of a statement in a business record as evidence where the information in question originates from a person engaged in the business. Where the information in such a statement does not originate from such a person, the statement is admissible only if it comes within some other exception, as for instance, in a civil case, within Part IIA of the Act.

63. Finally, we comment on the length of the proposed new Part IIB. It is longer and more detailed than might be expected for an amendment of this kind. There are two main reasons for this. The first is that although this Report is concerned only with business records, we envisage that some of the provisions of the proposed Part IIB may later be applied to all evidence²⁴ and others to all hearsay evidence.²⁵ The second reason is that it is important that the law of evidence anticipate, as far as possible, all questions which may arise in the day to day business of the courts. Some of the provisions of the proposed new Part IIB are intended to prevent questions arising for decision which have arisen under similar legislation.²⁶

C. L. D. MEARES, Chairman.

T. W. WADDELL, Commissioner.

11th July, 1973.

FOOTNOTES

¹ S. 55B, inserted by the Evidence (Documents) Act 1971.

² Part VII, ss. 39-45.

³ See the examples in Appendix F, para. 6.

^{3A} See 47 A.L.J.I where the working paper is summarized.

⁴ By s.14CA (1) of the proposed new Part IIB of the Evidence Act.

⁵ See Cross, p. 16. The quotation taken from Cross is from Stephen: *Digest of Evidence*, 12th ed. it is unnecessary for present purpose to debate whether the word "relevant" should be given some other meaning. See *Seminars on Evidence*, ed. H. H. Glass, Q.C., p. 53.

⁶ See also paras 4-5 of Appendix B.

⁷ V Wigmore, paras.1420-22.

⁸ See Appendix E, paras 3 and 4.

⁹ See Cross, pp.540-1.

¹⁰ See Appendix E, paras 3 and 4.

¹¹ S. 14B (4)-see Appendix C.

¹² See Appendix C.

¹³ See Appendix C.

¹⁴ See the definition in s. 13CA (1) of the proposed new Part IIB. Hereafter we refer to sections of this Part unless we indicate otherwise.

¹⁵ See Appendix B, para. 36.

¹⁶ Thus the principle discussed in *Potts v. Miller* (1940) 64 C.L.R. 282 is unaffected. As to this principle see Appendix E, para. 7.

¹⁷ We regard the provision of such an opportunity for cross-examination as important. It is for this reason that we do not follow the provisions in the Victorian and South Australian legislation mentioned in paragraphs 5 and 12 of Appendix F which enable admissibility to be proved by a certificate.

^{17A} See Appendix D, para. 58.

¹⁸ See para. 35 (1) and Appendix B, para. 36.

¹⁹ Another example is s. 55 of the Victorian Evidence Act 1958.

²⁰ See, for example, *R. v. Seifert* (1956) 73 W.N. (N.S.W.) 358 where the admissibility of such records under the general law for limited purposes was upheld by the Court of Criminal Appeal. The Court followed *Potts v. Miller* which is discussed in Appendix E, para. 7. However, the correctness of the former decision was doubted by Owen, J., in *Commissioner for Motor Transport v. Collier Moat Limited* (1960) 60 S.R. (N.S.W.) 238 at 243. For a further example of such records see *R. v. H. G. Palmer* (1969) 90 W.N. (Pt 1) (N.S.W.) 188.

²¹ Federal Business Records Act of 1936. See 28 United States Code Annotated, para. 1732.

²² Principally the Uniform Business Records as Evidence Act promulgated in 1936 by the Commissioners on Uniform State Law and since adopted by thirty or more States. See 9A Uniform Laws Annotated, p. 504.

²³ Statutory exceptions based on the American exceptions have also been adopted for the Federal judicial system in Canada (Canada Evidence Act, s. 30) and by some of the Provinces (e.g., Ontario Evidence Act, s. 36).

²⁴ E.g., ss. 14CI, 14CL, 14CM, 14CN.

²⁵ E.g., ss. 14CH, 14CO.

²⁶ E.g., ss. 14CA (2), 14CB (2), 14CB (3) (d).

REPORT 17 (1973) - EVIDENCE (BUSINESS RECORDS)

Appendix A - Bill

A BILL

To make business records admissible as evidence in all proceedings; to amend the Evidence Act, 1898; and for purposes connected therewith.

BE it enacted by the Queen's Most Excellent Majesty, by and with the advice and consent of the Legislative Council and Legislative Assembly of New South Wales in Parliament assembled, and by the authority of the same, as follows:-

1. This Act may be cited as the "Evidence (Amendment) Act, 1973".

Short title.

2. The Evidence Act, 1898, is in this Act referred to as the Principal Act.

Construction.

3. Part I of the Principal Act is amended-

Amendment of Part I of Principal Act.

(a) by omitting from section 1 the words-

Sec. 1 (Short title and division).

"PART IIB.-ADMISSIBILITY OF DOCUMENTARY EVIDENCE AS TO FACTS IN ISSUE IN CRIMINAL PROCEEDINGS-SS. 14CA-14CC."

and by inserting instead the words-

"PART IIB.-ADMISSIBILITY OF BUSINESS RECORDS-ss. 14CA-14CS.";

(b) (i) by omitting from the matter relating to bankers books in section 3 (1) the words "and other account books" and by inserting instead the words "account books and other accounting records";

Sec. 3 (Interpretation).

(ii) by omitting from section 3 (2) the word "or", and by inserting after the figures "1966," the words "or the Evidence (Amendment) Act, 1973,".

4. Part IIA of the Principal Act is amended-

Amendment of Part IIA of Principal Act.

(a) by omitting from section 14B (1) the words "without a jury";

Sec. 14B (Admissibility of documentary evidence as to facts in issue).

(b) by omitting from section 14B (2) the words without a jury";

(c) by inserting at the end of section 14B the following new subsections-

(6) Where the proceedings are with a jury, the court may reject a statement notwithstanding that the requirements of this section are satisfied with respect thereto if it appears to the court that the weight of the statement is too slight to justify its admission, or that the utility of the statement is outweighed by a probability that its admission will be unfair or mislead the jury.

(7) Where the proceedings are with a jury, and it appears to the court that, if the jury were to have a statement admitted under this section with them during their deliberations, they might give the statement undue weight, the court may direct that the statement be withheld from the jury during their deliberations.

5. The Principal Act is amended by omitting Part IIB and by inserting instead the following Part-

Amendment of Part IIB of Principal Act.

PART IIB.

ADMISSIBILITY OF BUSINESS RECORDS.

14CA. (1) In this Part-

Interpretation.

“Business” includes-

Vic. Act No.6246, s.3(1).

(a) any business, profession, occupation, calling, trade or undertaking, whether engaged in or carried on-

(i) by the Crown (in right of New South Wales or any other right) or by any other person;

(ii) for profit or not; or

(iii) in New South Wales or elsewhere; and

(b) public administration of the Commonwealth (including a Territory of the Commonwealth), of a State or of any country, carried on in New South Wales or elsewhere.

“Derived” means derived, by the use of a computer or otherwise, by calculation, comparison, selection, sorting, consolidation or by accounting, statistical or logical procedures.

cf. Vic. Act No.6246, s.55B(8).

“Document” includes any record of information.

“Qualified person”, in relation to a statement made by a qualified person in the course of or for the purpose of a business, means a person who., at the time when the statement was made

(a) was-

(i) an owner of the business or a person carrying on the business;

(ii) a servant or agent employed or engaged in the business;

(iii) a person retained for the purpose of the business; or

(iv) a person associated with the business in the course of another business;

and

(b) (i) in a case where the statement is not admissible in evidence unless made by an expert on the subject matter of the statement, was such an expert; or

(ii) in any other case, had, or may reasonably be supposed to have had, personal knowledge of the fact stated.

“Statement” includes any representation of fact whether made in words or otherwise.

(2) For the purpose of this Part, a statement in a document is made by a person if-

(a) it was written, made, dictated or otherwise produced by him; or

(b) it was recognised by him as his statement by signing, initialling or otherwise.

(3) For the purpose of this Part a person is concerned in the making of a statement if-

(a) he made the statement; or

(b) if he made a statement containing information which the statement in question reproduces or from which the statement in question is derived, wholly

or in part.

14CB. (1) Subject to this Part, where in a legal proceeding evidence of a fact is admissible, a statement in a document of the fact is admissible as evidence of the fact, if the requirements of subsections (4), (5) and (6) are satisfied.

Admissibility generally.

(2) In subsection (1) "fact" includes opinion.

(3) This section makes a statement admissible notwithstanding-

(a) the rules against hearsay; or

(b) the rules against secondary evidence of the contents of a document

and notwithstanding

(c) that any person concerned in the making of the statement is a witness in the legal proceeding, whether or not he gives testimony consistent or inconsistent with the statement; or

(d) that the statement is in such a form that it would not be admissible if given as oral testimony-

cf. *Tobias v. Allen* (No.2) [1957] V.C. 221 at 224-5.

but does not make admissible a statement which is otherwise inadmissible.

(4) The document must be or form part of a record of a business, but the business need not be in existence at the time when the question of admissibility arises.

(5) The statement must have been made in the course of or for the purpose of the business.

(6) The statement must either-

(a) be made by a qualified person; or

(b) reproduce or be derived from one or other or both of the following descriptions of information-

(i) information in one or more statements, each made by a qualified person in the course of or for the purpose of the business;

(ii) information from one or more devices designed for, and used in or for the purpose of the business for, recording, measuring, counting or identifying, not being information based on information supplied by any person.

14CC. (1) Section 14CB does not make admissible in a legal proceeding a statement made or obtained for the purpose of, or in contemplation of, the proceeding or any other legal proceeding arising out of the same or substantially the same facts.

Restrictions on admissibility under section 14CB: general.

(2) Where a person proposes to tender, or tenders, a statement in evidence under section 14CB, the court may require that any other document related to the statement be produced and, in default, may reject the statement or, if it has been received, exclude it.

14CD. (1) Subsection (2) applies where a statement is tendered in a criminal legal proceeding for admission under section 14CB and the statement tendered-

Restrictions on admissibility under section 14CB: criminal proceedings.

(a) is a statement made by a person; or

(b) reproduces or is derived from information in a statement made by a person.

(2) The statement is not admissible under section 14CB unless, as to each person concerned in the making of the statement tendered-

- (a) the tendering party calls him as a witness in the proceeding if any opposing party so requires; or
- (b) it appears to the court that-
 - (i) that he is dead or is unfit by reason of his bodily or mental condition to attend as a witness;
 - (ii) that he is outside New South Wales and it is not reasonably practicable to secure his attendance;
 - (iii) that all reasonable steps have been taken to identify him and he cannot be identified;
 - (iv) that his identity being known, all reasonable steps have been taken to find him and he cannot be found;
 - (v) that, having regard to the time which has elapsed since he supplied the information and to all the circumstances, he cannot reasonably be expected to have any recollection of the matters dealt with in the statement; or
 - (vi) that having regard to all the circumstances of the case undue delay or expense would be caused by calling him as a witness.

(3) Section 14CB does not make admissible in a criminal legal proceeding a statement made in connection with the proceeding or with any investigation relating or leading to the proceeding.

14CE. (1) Where in any legal proceeding the happening of an event of any description is in question, and in the course of a business a system has been followed to make and keep a record of the happening of all events of that description, oral or other evidence to establish that there is no record of the happening of the event in question is admissible to prove that the event did not happen.

Non-occurrence of event.
cf. California Evidence Code s.1272.

(2) Where evidence is, or is proposed to be, tendered under this section, the court may require that the whole or part of the record concerned be produced and, in default, may reject the evidence or, if it has been received, exclude it.

14CF. In estimating the weight, if any, to be attached to a statement tendered for admission or admitted under section 14CB, regard shall be had to all the circumstances from which an inference can reasonably be drawn as to the accuracy or otherwise of the statement, including-

Weight of evidence: s.14CB.

- (a) in the case of a statement made by a person or a statement wholly or in part reproducing or derived from a statement made by a person-
 - (i) the recency or otherwise at the time when he made his statement of any relevant matter dealt with in his statement; and
 - (ii) the presence or absence of any incentive for him to conceal or misrepresent any relevant matter in his statement; and
- (b) in the case of a statement wholly or in part reproducing or derived from information from one or more devices, the reliability of the devices; and
- (c) in the case of a statement reproducing or derived from any information, the reliability of the means of reproduction or of derivation.

14CG. In estimating the weight, if any, to be attached to evidence admissible under section 14CE regard shall be had to, all the circumstances from which an inference can reasonably be drawn as to the accuracy or otherwise of the evidence including whether any person concerned with the system had any incentive to omit recording the happening of the event in question.

Weight of evidence: s.14CE.

14CH. (1) This section applies where

Credibility of the maker of a statement.
cf. U.K. 1968 c.64, s.7.

- (a) a person makes a statement;
- (b) that statement, or a statement wholly or in part reproducing or derived from information in that statement, is tendered for admission or is admitted under section 14CB; and
- (c) that person is not called as a witness.

(2) Evidence is admissible which, had he been called as a witness, would be admissible for the purpose of destroying or supporting his credibility.

(3) Evidence is admissible to show that his statement is inconsistent with another statement made at any time by him.

(4) This section does not make admissible evidence of any matter of which, had he been called as a witness and denied the matter in cross-examination, evidence would not be admissible if adduced by the cross-examining party.

14CI. The court may, for the purpose of deciding questions of admissibility under this Part, draw inferences as well from the form or content of the document in which the statement concerned is contained as from other matters from which inferences may lawfully be drawn.

Inferences concerning admissibility.

14CJ. (1) Evidence touching the matters, mentioned in section 14CB, 14CD or 14CE may, if given by a person who had, at the relevant time or afterwards, a responsible position in relation to the making or keeping of the records concerned, be given on information and belief.

Ancillary evidence.
cf. U.K. 1968 c.64 s.5(4).

(2) Evidence given under subsection (1) may include evidence of the contents of a document notwithstanding that the document is not produced and that its non-production is not accounted for.

14CK. (1) For the purpose of section 14CB-

Production of document etc.

- (a) a statement in a document may, as may be prescribed or by leave of the court, be proved by the production of a copy of the document, or of the material part of the document;
- (b) a statement in a document which is designed to be used to reproduce the statement in the form of a visible display or of sound may be proved by reproducing the statement in that form in the presence of the court;
- (c) a statement in a record of information made by the use of a computer may be proved by the production of a document produced by the use of a computer containing the statement in a form which can be understood by sight.

(2) For the purpose of section 14CE, the absence of a record of the happening of an event in a record of information made by the use of a computer may be proved by the production of a document produced by the use of a computer containing a statement based on the absence of such a record.

(3) Where a person proposes to prove, or proves, a statement in a document otherwise than by producing the document, the court may require that the document be produced or be made available to the court or to other parties for examination or testing and in default, may reject the statement, or if it is in evidence, exclude it.

(4) Where a person proposes to prove, or proves, a statement by reproducing

the statement in the form of a visible display or of sound, the court may direct a record of the statement to be produced and in default, may reject the statement, or if it is in evidence exclude it.

(5) For the purpose of this section “computer” means any device for storing or processing information.

Vic. Act No.6246, s.55B(8).

14CL. For the purpose of this Part, a document, a copy of a document or a copy of part of a document may be authenticated in such manner as may be prescribed or as the court approves.

14CM. (1) Where a party to a legal proceeding in a court tenders any evidence under this Part, and it appears to the court that the weight of the evidence is too slight to justify its admission, or that the utility of the evidence is outweighed by a probability that its admission will unduly prolong the proceeding or that the evidence may be unfair to any other party, or (where there is a jury) mislead the jury, the court may reject the evidence or, if it has been received, exclude it.

Rejection for unfairness etc.

(2) This section does not affect the admissibility of any evidence otherwise -than by virtue of this Part.

14CN. Where in a legal proceeding there is a jury, and a statement in a document is admitted in evidence under this Part, and it appears to the court that if the jury were to have the document with them during their deliberations they might give the statement undue weight, the court may direct that the document be withheld from the jury during their deliberations.

Withholding statement from jury room.

14CO. For the purpose of any Act or rule of law or practice requiring evidence to be corroborated or regulating the manner in which uncorroborated evidence is to be treated, a statement admissible under section 14CB shall not be treated as corroboration of evidence given by a qualified person who was concerned in the making of the statement.

Corroboration.

14CP. This Part does not affect the power of a court in a criminal legal proceeding to reject evidence which, if admitted, would operate unfairly against the defendant.

Rejection of evidence in criminal proceedings.

14CQ. A court may make orders concerning the admissibility of any statement or evidence under this Part at any stage of a legal proceeding.

Time for order.

14CR. (1) The Governor may make regulations, and rules may be made, as prescribed in section 14CS, not inconsistent with this Part, for or with respect to any matter which by this Part is required or permitted to be prescribed or which is necessary or convenient for carrying out or giving effect to this Part and, without limiting the generality of the foregoing for or with respect to-

Rules and regulations.

(a) the giving by a party, who proposes to tender any statement under section 14CB or evidence under section 14CE, to the court or to other parties of notice of his intention to do so and of particulars of the statement or evidence (including copies of any statement or document);

(b) the giving by a party, who has received notice from another party of his intention to tender any statement under section 14CB or evidence under section 14CE, to the court or to other parties of notice of his intention to dispute the statement or evidence and of particulars of the grounds on which he intends to dispute the statement or evidence;

(c) the production by a party, who proposes to tender any statement under section 14CB or evidence under section 14CE, or who proposes to adduce evidence in answer to any such statement or evidence, to the court or to other

parties for inspection of any document he proposes to tender or any document related to any such statement or evidence he proposes to tender;

(d) the making by a court of orders requiring a person not a party to a proceeding in, the court to produce to the court, or to parties to the proceeding, for inspection any document which a party desires to inspect for the purpose of the application of this Part to the proceeding;

(e) the making by the Supreme Court or the District Court of orders in respect of proceedings in a court other than the Supreme Court or the District Court requiring a person not a party to a proceeding in such a court to produce to the court or to the Supreme Court or District Court or to parties to the proceeding for inspection any document which a party desires to inspect for the purpose of the application of this Part to the proceeding;

(f) the proof of any of the matters mentioned in section 14CB, 14CD or 14CE by affidavit or statutory declaration provided that any such rule or regulation shall, if it is not otherwise so provided, provide for the attendance at the proceeding of the deponent or maker of any such affidavit or statutory declaration for cross-examination by any party who desires to cross-examine him; and

(g) the making by a court of orders under this Part at any stage of a legal proceeding.

(2) Subsection (1) does not affect any power to make rules or regulations under any other Act.

14CS. (1) Where there is any authority having for the time being power to make rules or regulations regulating the practice and procedure of any court, that power shall extend to the making of rules under this Part for the purpose of proceedings in or before that court.

Power to make rules or regulations.

(2) For the purpose of a legal proceeding before an arbitrator, rules for giving effect to this Part may be made under the Supreme Court Act, 1970.

(3) Subsection (2) does not apply to a legal proceeding before an arbitrator in respect of which rules or regulations may be made by an authority referred to in subsection (1).

(4) In the case of a court to which neither subsection (1) nor subsection (2) applies the Governor may make regulations under this section for the purpose of proceedings in or before that court.

Appendix B - Notes on Proposed Evidence (Amendment) Bill

Section 3 (b)-Amendment of s. 3, Evidence Act-Interpretation

1. Section 3 of the Evidence Act provides that "Expressions relating to 'bankers' books' include ledgers, day-books, cash-books, and other account books used in the ordinary business of the bank". This definition may not include accounting records such as loose ledger cards or loose leaf books comprising, for example, statements and day sheets printed out by a computer. The purpose of the amendment is to include such records in order that they will be admissible under Part IV of the Act.

2. The definition as proposed to be amended is limited to accounting records. This may be contrasted with the definition of "bankers' books" in section 6 of the Australian Capital Territory Evidence Ordinance which includes "diary and any other document used in the ordinary course of the business of a bank". Such records would be admissible under the proposed new Part IIB. We do not think that non-accounting records of a bank, for example, a branch manager's diary, should be more readily admissible than corresponding records in other businesses.

3. It has been said by *Windeyer J.* that "at the most. . . entries [in bankers' books] are evidence of matters and transactions in which the bank was a party".¹ "Bankers' books" as proposed to be defined are probably unlikely to record matters or transactions to which a bank was not a party. However, an entry which did so could be admissible under the proposed new Part IIB.

Section 4-Amendment of s. 14B-Admissibility of Documentary Evidence as to Facts in Issue

4. Section 14B of the Evidence Act is now limited to civil proceedings without a jury. Section 1 of the English Evidence Act 1938, from which section 14B is taken, applies to any civil proceedings. Section 1 of the English Act has been adopted by all States and Territories of the Commonwealth and by New Zealand, in each case without limiting its application to proceedings without a jury. We think that this limitation has no justification and we recommend that it be deleted as provided in paragraphs (a) and (b) of section 4.

5. Apart from this consideration, the proposed new Part IIB applies to civil and criminal proceedings whether with or without a jury. It would be out of harmony with this proposal for section 14B to be limited to proceedings without a jury.

6. Paragraph (c) of section 4 provides for the addition of two new subsections which apply where the proceedings are with a jury. The proposed subsection (6) may be compared with the corresponding provision in section 1 of the English Act which also applies only where the proceedings are with a jury. It is in similar terms to section 14CM³ of the proposed new Part IIB except that because the admission of a statement under section 14B is unlikely to prolong unduly a proceeding, no provision is made for rejection on such a ground. The reason for a provision such as subsection (6) is discussed in the notes to section 14cm, in paragraphs 70-78 or this Appendix.

7. Subsection (7) corresponds to section 14CN. The reasons for this provision are discussed in paragraphs 83-85 of this Appendix.

Section 5-New Part IIB-Business Records

Section 14CA

8. The definition of "business" is based on that in section 3 of the Victorian Evidence Act 1958, as amended by the Evidence (Documents) Act 1971, the principal application of which is to section 55 (1) (b) which relates to the admissibility of statements in business records.

9. Unlike the Victorian definition, the definition specifically includes “business” outside New South Wales. We think that this should be made clear because of the considerable volume of interstate and overseas transactions which take place. See section 17 of the Interpretation Act, 1897.

10. The definition of “derived” in section 14CA (1) is intended to limit the application of that word to procedures of an objective nature and to those commonly accepted as accurate although involving some subjective judgment.

11. The definition of “document” in section 14CA (1) is intended to extend to all things used to record information which have been or may be devised. Apart from written documents, these include at the present time -the various forms of computer storage, punched cards and punched paper tape, cinematic film and sound recordings. We prefer to define “document” in functional terms, rather than by including in the definition a list of things used for recording information based on the current, or perhaps some past, state of technology as is done in section 10 of the English Civil Evidence Act 1968 and adopted by the Victorian Evidence Act 1958, section 3.

12. The definition of “qualified person” in section 14CA (1) provides a term used in section 14CB to impose a condition of admissibility of a statement made by, or containing information supplied by, a person. Put shortly, the statement must originate from a person with knowledge who was engaged in the business in question.

13. Paragraph (a) (iv) of the definition of “qualified person” is intended to include within the meaning of that term persons such as a medical practitioner who operates on his own patient at a public hospital or an equipment operator whose services are hired along with equipment. Such a person is often required to make, or supply information for statements in the records of the business with which he is associated.

14. The definition of “statement” in section 14CA (1) is taken from section 14A of the Evidence Act which defines its meaning where used in section 14B. It has been held, in relation to equivalent provisions, that a statement in a document includes a statement of opinion.⁴ Any doubts left by the decisions are resolved by section 14CB (2).

15. Section 14CA (2) is intended to resolve doubts and prevent debate about who is to be considered the maker of a statement in situations such as where a person dictates a statement to a typist who transcribes it from shorthand notes and the person who dictates it does not sign or initial it.

16. Section 14CA (3) provides a meaning for an expression used in a number of places in the proposed new part.

Section 14CB

17. Section 14CB (1) provides an exception to the rule against hearsay evidence by specifying that subject to other provisions of the proposed part HB, if the requirements of subsections (4), (5) and (6) are satisfied, a statement in a document of a relevant fact is admissible as evidence of that fact. Subsection (2) is intended to ensure that statements of expert opinion are similarly admissible.

18. If section 14CB (1) were left in an unqualified form, doubts would be raised whether the exception operated to prevent the application of other exclusionary rules of evidence. On the one hand it could be argued that, upon the conditions specified in the subsection being fulfilled, admission of the statement in question would become mandatory. On the other hand, it could be argued that such a statement would merely become admissible and might be excluded by the application of any other exclusionary rule which was not necessarily abrogated by the terms of the subsection, for instance, the rule relating to legal professional privilege. Section 14CB (3) should set such doubts at rest.

19. Section 14CB (3) (b) provides that a statement is admissible under subsection (1) notwithstanding the rules against secondary evidence of the contents of a document. These rules provide that, subject to some exceptions, the contents of a document may be proved only by the production of the original document and not by secondary evidence unless the original document is proved to have been lost or destroyed. Subsection (3) (b) is essential to the purpose of so much of section 14CB as makes admissible a statement in a document which reproduces or is derived from information in another statement which may, of course, be, in a document. Were it not for subsection (3) (b), a statement in, say, a balance sheet might be said to be inadmissible because it reproduced or summarized the contents of the books of original entry unless these were also tendered in evidence.⁵

20. Section 14CB (3) (c) provides several exceptions to exclusionary rules which concern the admissibility in evidence of a prior statement made by a person who is called as a witness as evidence of the facts asserted by the prior statement. In most cases, if other evidence is available to establish that the statement is admissible under the proposed section, the effect of the exclusionary rule could be avoided by first having the statement admitted in evidence and later calling the person concerned as a witness. However, we think that, apart from the particular reasons advanced below, each of the proposed exceptions serves the useful purposes of not discouraging the calling of oral evidence of persons concerned in the making of statements which would be admissible under the section, of not inhibiting the order in which evidence might be tendered and witnesses called, and of enabling complete records to be given in evidence even though some or all of the persons concerned in the making of the records are called as witnesses. We have mentioned in paragraph 22 of Appendix E that the present section 14CB of the Evidence Act is unsatisfactory in this regard. In each case, of course, the witness is available for cross-examination. If to admit the statement in evidence would be unfair to another party or might, if the trial is with a jury, mislead the jury, the court could reject the statement under section 14CM.

21. First, section 14CB (3) (c) is intended to enable a witness merely to identify a statement which he previously made, or for which he previously supplied information, without giving oral testimony of the matters dealt with by the statement. This should be useful in two situations, where the witness has no recollection of the matters dealt with and where he is known to be hostile or to intend to depart from the statement. We think that this exception is justified on several grounds.

22. A statement in a business record will, unless the witness has an independent recollection, ordinarily be the best evidence available of the matters recorded. If the witness has an independent recollection, it is unlikely that he would be asked merely to identify the statement, because to do so would reduce his credibility as a witness. If the witness has an incomplete, or no recollection, it is better that a reliable statement be admitted in evidence than that recourse be had to the somewhat artificial rules relating to a witness's right to refresh his memory from contemporary documents. If the witness is known to be hostile or to intend to depart from the statement, it is better that a reliable statement be admitted without more ado, rather than have recourse to the procedure required by section 53 of the Evidence Act.

23. Secondly, section 14CB (3) (c) provides an exception to the so-called rule against self-corroboration under which prior consistent statements of witnesses are generally inadmissible.⁶ We think that it should generally assist a court to have in evidence a statement in a business record as such a statement generally provides a reliable contemporary account of the matters dealt with.

24. Thirdly, section 14CB (3) (c) creates exceptions to two related rules of evidence. The first is that, under section 53 of the Evidence Act, a party producing a witness is not allowed to prove that the witness has made at other times a statement inconsistent with his present testimony except by leave of the court which may be given only if, in the opinion of the court, the witness proves adverse. The second rule is that the previous inconsistent statement of a witness who is not a party, does not constitute evidence of the facts stated, but is merely something which enables the court to disregard the witness's testimony altogether.⁷ We think that the general reliability of statements in business records requires that these two rules should not exclude such a statement which is inconsistent with the testimony of a witness and is otherwise admissible under section 14CB, from the evidence before a court.

25. Section 14CB (3) (d) is intended to negative an argument to the effect that, to be admissible under the proposed section, a statement must be in a form which would be admissible if it were to be made by a witness while giving evidence in the proceedings. Such an argument would find support in the remarks of *Sholl J.* in *Tobias v. Allen (No. 2)* in which he said, that to be admissible under the Victorian equivalent of section 14B of the Evidence Act, a statement must be in an admissible form.⁸ We think that these remarks went further than was necessary to decide the point in question. Statements made out of court rarely obey the rules governing the form of testimony in court. This is particularly so of statements in business records. We think it wise to avoid such an argument being put.

26. The opening words of subsection (1) differ from those of subsection (1) of section 14B of the Evidence Act in that the expression "where direct [that is, as opposed to hearsay] oral evidence of a fact would be admissible" is not used. In our proposal the words "where . . . evidence of a fact is admissible" are intended to impose a

requirement that the fact should be relevant to the proceedings, that is, be a fact in issue or be relevant to a fact in issue. It does not assist in imposing this requirement to use the expression "direct oral evidence".

27. It is appropriate here to comment on the nature of the facts of which a statement of fact admissible under section 14CB (1) may be evidence. We refer first to facts other than that an expert holds an opinion and other than facts provided by machines of the kind mentioned in section 14CB (6) (b) (ii).

28. The effect of section 14CB is that such facts must be, or be derived from, facts of which one or more persons engaged in the business had or might reasonably be supposed to have had personal knowledge. See the definition of "qualified person" in section 14CA (1) and section 14CB (6). Thus, the "history" given by a patient in a medical record is not admissible to prove the facts stated but is admissible to prove that the patient said what he did if that fact is relevant, say as an admission, an inconsistent prior statement, as the foundation for a diagnosis, or to prove that he claimed to be allergic to a particular drug.

29. Secondly, we refer to statements of expert opinion. The admissibility of such a statement does not depend upon it being shown that the person who expressed the opinion had personal knowledge of any of the facts upon which the opinion was based. Generally, an expert has personal knowledge of some but not all of these facts. Of necessity, an expert must often, to some extent, base his opinion on information supplied to him by others. It is part of his expertise to assess the reliability of such information and to take it into account in expressing his opinion.⁹ The extent to which the facts on which an expert opinion admissible under section 14CB is based are identified or proved in the proceedings will, of course, be relevant to the weight to be attached to the statement.

30. Thirdly, we refer to facts in statements produced by automatic recording devices of various kinds. A statement reproducing or derived from facts in such statements is not hearsay if it is not made by a person or does not embody the perceptions of a person.¹⁰

31. We think there will be an increasing tendency for statements in business records -to- be based wholly or partly on information automatically collected and supplied by machines or measuring or recording devices. We refer to this as machine information. Machines are now used to measure or count goods sold and transmit the information to a computer which includes this information in the invoice which it prints out and which is despatched with the goods. We think that any provision for the admissibility of statements in business records should allow for the use of machine information, either alone or together with information supplied by persons.

32. We now come to the matters which are required to be proved to establish the admissibility of a statement under the proposed section. Unless the statement is admitted by consent, each of these must be proved by evidence. Such proof is facilitated by sections 14ci, 14ci, 14CK and 14CL.

33. Section 14CB (4) requires that the document is or forms part of a record of a business. This requirement needs no comment except to say that it is expressed in terms which should avoid argument, so far as admissibility is concerned, on the question whether a statement was made with the intention of making a record or with some other intention, for example, communicating with someone else in the business. The intention with which a statement was made is, of course, a question of weight which may assume some importance.

34. Section 14CB (5) requires that the statement was "made in the course of or for the purpose of the business". The alternative, "for the purpose of the business", is used to include statements in the records of a business made by say an independent computer bureau, a valuer or other expert, or a doctor in private practice using the operating theatre of a hospital. It could be argued in some circumstances that such statements were not made in the course of the business.

35. Section 14CB (6), in effect, imposes a requirement that the fact stated must originate in the personal knowledge or expert opinion of a person engaged in the business or in machine information. We have already commented on this requirement in paragraphs 27 and 31 of this Appendix.

36. The evidence necessary to establish the matters mentioned in section 14CB (4), (5) and (6) must be oral evidence unless it is given by affidavit or statutory declaration under rules of court or regulations made pursuant to section 14CR (1) (f). In each case the evidence is subject to cross-examination. This enables the party against

whom the statement is tendered to contest whether it is admissible, reliable or complete and to elicit whether any person connected with the business who might be expected to be called as a witness is available. ¹¹

Section 14CC

37. Statements of the kind mentioned in section 14CC (1) would, if admitted, lead to special dangers in the great majority of cases. It is in our view, better to prevent them being admissible under section 14CB (1) rather than to admit them subject to a liability to be rejected under section 14CM.

38. It is the practice of some government departments and of some employers to obtain signed statements from employees who witness an accident. No doubt in other businesses, statements are obtained from persons having knowledge of the events in question when litigation is anticipated. Unless expressly excluded, such statements could be admissible under section 14CB (1). Should this be so.?

39. Such a statement will be privileged from production for inspection on discovery if, as is usually the case, it was, brought into existence for the purpose of serving as material on which advice as to legal liability would be sought or as material which would be used for the purpose of conducting litigation arising out of the accident. ¹² Such statements are made as a record of what might be given as oral testimony by their makers should litigation result. The arguments which we have put forward in paragraphs 47-52 of the report in support of the proposed exception do not apply to such statements. If they are to be admissible it should be pursuant to an exception such as that provided by section 14B of the Evidence Act under which one of the requirements is that the maker of the statement should be called as a witness or shown to be unavailable to give evidence, not pursuant to a business records exception of the kind we recommend.

40. The problem is to express an exclusionary provision in terms which exclude such statements but do not exclude other statements in business records which do not suffer from the same vice. In a case concerned with privileges *Birmingham and Midland Omnibuses Co. Ltd v. London and North Western Railway Co.*, *Hamilton L.J.*, said ¹³

The larger the business and the better its Organisation the more necessary it is that written records should be regularly made of every detail and every occurrence, common and uncommon. In a sense not altogether illusory every one of these records, from the office boy's postage book to the chief cashier's ledger, comes into existence for the purpose, if peradventure there should be litigation or fear of it, of putting the legal advisers in a position to advise fully and to conduct the case successfully, though in 999 cases out of 1,000 no such use of the entries will ever be made. To hold such documents privileged merely because it be shown of them, not untruthfully, that the principal, who made them part of the regular course of business and of the duties of his subordinates, foresaw and had in mind their utility in case of litigation, feared, threatened, or commenced, would in my opinion be unsound in principle and disastrous in practice.

To exclude statements in such documents from admissibility under the proposed exception would defeat its object.

41. As we have said, it seems to us that statements of the kind now being discussed are outside the scope of the proposed exception. If it is possible to draft a satisfactory express exclusion, it would be better to do so rather than leave such statements to be excluded by the court in the exercise of a discretion.

42. Section 14CC (1) is proposed as such an exclusion. The words used should, we think, not lead a court to exclude records of the kind mentioned by *Hamilton L.J.* in the passage quoted above. Statements of the kind excluded would be admissible under section 14B of the Evidence Act wherever appropriate.

43. Section 14cc (2) is intended to meet such a case as where a plaintiff claiming a debt tenders only his ledger card relating to the defendant's account and not, say, the invoices or delivery dockets. Under this subsection the court could require the basic documents to be tendered as a condition of admitting the ledger card or allowing it to remain in evidence alternatively, it could reject the ledger card under section 14CM.

Section 14CD

44. Section 14CD (2) imposes restrictions on the admissibility under section 14CB of statements in business records in criminal proceedings. We have given our reasons for recommending such restrictions in paragraphs 56-60 of the Report.

45. Section 14CD (1) is merely intended to prevent section 14CD (2) applying to statements which reproduce or are derived from machine information which has we have explained in paragraph 30 of this Appendix, are not hearsay.

46. Statements of the kind mentioned in section 14CD (3) would, if admissible, present special dangers and be unfair to an accused person in criminal proceedings.

47. The activities of the Police Force come within the proposed definition of "business". It is possible that in the course of this business, a statement might be made in a document which becomes part of its records which is relevant to an issue in criminal proceedings. Such a statement might be made, for instance, in the course of investigating the offence in question or of preparing the case for the prosecution. Statements made in the course of a private investigation of an offence might similarly become part of the records of a business and become relevant. Such statements might, except for section 14CD (3), be admissible under section 14CB.

Section 14CE

48. As a matter of theory it is debatable whether evidence of the absence of an entry in the records of a business tendered to prove that an event which would have been recorded if it had happened, did not happen is hearsay evidence. The decision of the Full Court of the Supreme Court of New South Wales in *Commissioner for Motor Transport v. Collier Moat Limited* ¹⁴ indicates that such evidence is hearsay, or at least that it would be prudent to regard it as hearsay. This section is intended to make the position clear. It is adapted from the California Evidence Code adopted in 1965. There is a similar provision in the Federal Rules in Appendix H. This section also makes it clear that it is not necessary, as is sometimes thought, in order to prove the absence of a record, to produce and tender to the court all the records in question.

Sections 14CF and 14CG

49. Sections 14CF and 14CG each correspond to sections 14C (1) and 14CC of the Evidence Act. Similar provisions are to be found in recent legislation in other jurisdictions. ¹⁵ The proposed sections serve two useful purposes. First, they emphasize that the court before which evidence is tendered under sections 14CB and 14CE must estimate the weight to be attached to the evidence and -that it may conclude that the evidence should be given no weight at all. Secondly, the proposed sections make it clear that in estimating the weight to be attached to such evidence the court should have regard to all circumstances which are relevant to weight including those specifically mentioned, and that evidence of such circumstances is admissible if tendered by either party. ¹⁶

50. The question of what evidence is admissible on the issue of the weight to be attached to a hearsay statement is a matter of importance because such evidence cannot be tested by cross-examination of the person who supplied the information in the statement. It is, we think, right in principle that evidence should be admissible of any circumstances from which an inference as to weight may reasonably be drawn. ¹⁷ We do not think that it is practicable to provide for the admissibility of such evidence in any greater detail than is done by the proposed sections 14CF and 14CG.

51. In the working paper we proposed a provision, section 14CH in the draft Bill in the working paper, which listed a considerable number of circumstances to be taken into account on the question of weight. We now think that the more general approach adopted in the proposed sections 14CF and 14CG should be more flexible and practicable.

52. However, we should mention that it was suggested in the report of the Committee appointed by the New South Wales Bar Association ¹⁸ that two circumstances should be added to those we had proposed: the self-serving nature of the evidence; and the occurrence of any inaccuracies in the same or similar records of the same business.

53. We do, not think that any court needs to be reminded that a party who tenders his own records as evidence to support his case is relying on self-serving evidence. Moreover, the extent to which such evidence is self-serving may vary. For instance, the records of a one-man business may be regarded more critically as self-serving documents than records kept by employees who, have no real incentive “to conceal or misrepresent any relevant matter”. Accordingly, we do not specify in section 14C for section 14CG the first suggested circumstance.

54. We think that, if the accuracy of a statement tendered under section 14CB depends upon the reliability of a system of record-keeping, evidence of inaccuracies from which an inference can be drawn that the system was unreliable is necessarily admissible as a matter of general principle's Evidence of inaccuracies should similarly be admissible in reply to evidence tendered under section 14CE because the basis of such evidence is that a reliable system of recording events of the kind in question has been followed. Sections 14CF and 14CG make it clear that such evidence is admissible.

55. It cannot be said that evidence of any inaccuracy in the records in question will necessarily be relevant to the accuracy or otherwise of a statement tendered under section 14CB. Accordingly, we think it appropriate to refer to “reliability” rather than to the occurrence of errors. For the above reasons we have not adopted the second suggestion referred to in paragraph 52 above.

Section 14CH

56. Section 14CH is based on section 7 of the English Civil Evidence Act 1968. Section 55A of the Victorian Evidence Act 1958, as amended by the Evidence (Documents) Act 1971, is also based on section 7. Section 14CH enables the credibility of the maker of a statement to be impeached in the same way as if he had been called as a witness.

57. Although it has been held that evidence is admissible to attack or support the credibility of a deceased attesting witness whose attestation of a deed or will is relied upon,²⁰ it is not clear that evidence of the kind mentioned in section 14CH (2) would be admissible apart from this provision. It would seem that evidence of the kind mentioned in section 14CH (3) would not otherwise be admissible unless it came within one of the exceptions to the hearsay rule.²¹ Section 14CH, therefore, specifically provides for the admissibility of both kinds of evidence.

58. Evidence of the kind which would be admissible under section 14CH would also strictly speaking, generally be admissible under section 14CF. However, we think that it would lead to doubt to leave the matters dealt with specifically by section 14CH to be governed by the general terms of section 14CF.

Section 14CI

59. The purpose of this section is the same as that of sections 14B (5) and 14CB (2) of the Evidence Act. It is to enable the court to use, as evidence on the question of its admissibility, a document which is not yet in evidence.

Section 14CJ

60. Section 14ci (1) would enable persons whose responsibility it is to know facts relevant to the matters referred to, to give evidence of those facts even though they do not have personal knowledge of them. In particular it would facilitate proof of the system by which records were kept or processed. In many cases the inferences to be drawn from such a system should establish that most of the conditions of admissibility have been fulfilled. Section 14CI (1) has its origin in the provisions of section 5 (4) of the English Civil Evidence Act 1968 and of section 55B (4) of the Victorian Evidence Act 1958 relating to the admissibility of statements in documents produced by computers under which a certificate as to such facts may be given on information and belief. However, as we have said in paragraph 46 of the report, we think that the party against whom such evidence is tendered should not be deprived of the opportunity to test the evidence by cross-examination.

61. Section 14CI (2) supplements section 14CI (1) to enable a witness to state, for instance, the terms of a computer programme without having to produce the document containing the programme.

Section 14CK

62. This section is not intended to exclude the means by which, under the general law of evidence, statements in documents admissible under this proposed Part may be proved.

63. Section 14CK (1) (a) merely enables proof by means of a copy when, because the original is still in existence, a copy is not admissible under the general law. This provision will be useful where the documents in question are in every-day use or in some form which it is not convenient to move.

64. Section 14CK (1) (b) is merely declaratory of a means of proof presently available in the case of records such as cinematic films and sound recordings.

65. Section 14CK (1) (c) states a means of proof which would be appropriate where records are kept by computer and have not been printed out in the course of the business.²² A statement in such a record, for instance a magnetic tape or disc, is a statement in a document as defined by section 14CA (1). Section 14CK (1) (c) may perhaps be merely declaratory of means of proof which are available under the general law, but in view of the novelty of the use of such records as evidence, it may serve a useful purpose. It makes it clear that it is not necessary, as part of the proof, to produce to the court the device in which information is stored pursuant to some supposed application of the best evidence rule.²³ The present section 14CB of the Evidence Act requires the device to be produced. In general the production of the device is unlikely to assist the court.

66. Section 14CK (2) states a means of proof which would be appropriate to establish the absence of a record of the happening of an event in a record of information made by the use of a computer. The absence of such a record is often indicated by a statement in positive terms in a document produced by the computer. Under this provision a statement in such a document asserting in any terms the absence of such a record is admissible.

67. Section 14CK (3) and (4) provides safeguards designed to enable a court to make orders requiring the means of proof adopted or proposed to be adopted to be supplemented by additional evidence. Such orders might be made before trial, for example, in the Supreme Court on the appointment for directions.

68. Section 14CK (5) contains a definition of "computer" which corresponds to the definition in section 55B (8) of the Victorian Evidence Act 1958. The definition extends the meaning of the word "computer" to any device for performing the functions mentioned. At present computers are the most widely used of such devices. Others may be invented and be given a different name.

Section 14CL

69. Section 14CL merely enables a court, or rules of court or regulations, to dispense with strict proof of the authenticity of a document or a copy of or an extract from a document.

Section 14CM

70. Civil courts have no discretion to exclude admissible evidence for the reasons mentioned in the proposed section. However, it seems desirable that the courts should have such a power to safeguard the interests of parties against whom evidence is tendered under the proposed Part. The conditions of admissibility are such that it should seldom be necessary to exercise the power.

71. It is generally accepted in the United States that an exclusionary provision of the kind proposed applying to all evidence is desirable. Such provisions are to be found, for instance, in the California Evidence Code (s. 352), and the Federal Rules of Evidence (rule 403). We think that the principle involved is sound, at least as to hearsay evidence.

72. Section 55 of the Victorian Evidence Act 1958, which corresponds to Parts IIA and IIB of the Evidence Act, contains a provision for discretionary exclusion, subsection (9), as follows:

The court may in its discretion reject any statement or defer the admission of and subsequently reject any statement notwithstanding that the requirements of this section are satisfied with respect thereto, if for any reason

it appears to it to be inexpedient in the interests of justice that the statement should be then admitted or, as the case requires, should be admitted at all.

A similar discretion to exclude a statement in a document produced by a computer is given by section 55B (7) of this Act.

73. Section 14CM is more precise in stating the objectives of the discretion conferred on the court. The first is to reject or exclude evidence which is of so little weight that the court would not act on it unless it was supported by other evidence. This is of importance because otherwise a party against whom the evidence is tendered will ordinarily, not knowing the views of the court, feel obliged to call evidence in answer. This would cause undue expense and waste of time.

74. The second objective is to prevent the proceeding being unduly prolonged by the admission of evidence, the utility of which is outweighed by the time likely to be required for the reception of the evidence or of evidence which would become admissible in reply to it. In the case of oral testimony a similar objective is served by the rule "to the effect that the answers given by a witness to questions put to him in cross-examination concerning collateral matters must be treated as final".²⁴

75. The third objective is to prevent unfairness. A party might tender evidence under this Part instead of calling witnesses because he anticipates that if he did so, cross-examination would cut down their evidence or lead to evidence of other facts which would be against him. A party might tender evidence under this Part which was incomplete and there may be no other evidence readily available to fill in the gaps. A court normally has no problem in dealing with such situations by attaching the appropriate weight to such evidence. However, if it is difficult to do so, or for any other reason there is likely to be unfairness to another party, the evidence may be rejected or excluded.

76. The fourth objective is to avoid a jury being misled by evidence tendered under this part. It is possible, although we think it would seldom happen, that the problem of assessing the probative value of such evidence would be too much for the jury or it might be feared that evidence admitted for one purpose might be used by the jury unfairly against a party for another purpose. In such situations the evidence might be rejected or excluded.

77. In the case of the second, third and fourth objectives, the court, in exercising the discretion, is required to weigh the two considerations involved: the public interest in assisting the court to ascertain the truth; and preventing any unfair disadvantage being imposed on a party by the operation of this Part.

78. The discretion of a court to disallow evidence in a criminal proceeding is preserved by section 14CP.

79. A majority of the Committee of the Bar Association, mentioned in paragraph 7 of this Report, expressed the view that the provision, section 14GG, in the proposed Bill in the working paper corresponding to section 14CM placed too severe an onus on the party against whom the records were tendered and "that it would be rare indeed that one could even in a proper case persuade a judge that the strong words therein were applicable". They considered that the onus should be placed on the party tendering the evidence to prove that it is trustworthy as is the case with some of the American exceptions. We make two comments.

80. First, the provision has been redrafted and we think now places a lighter onus on the party against whom the records are tendered than the provision we proposed in the working paper.

81. Secondly, there is a point of principle at issue, namely, whether admissibility should depend on a preliminary finding of trustworthiness or upon compliance with objective standards designed to ensure trustworthiness in the great majority of cases such as those provided by section 14CB. We think that the latter approach is preferable because it leads to admissibility being more readily predictable. It is the approach adopted, for this reason, in the recent American business records exception in the Federal Rules set out in Appendix H.

82. The whole of the Committee of the Bar Association expressed the view that - "it would be wise and would tend to the object of certainty if it were explicitly provided that there were to be a full appeal against the exercise of an exclusionary discretion and not the ordinary limited type of appeal against discretion. We would hope that by this means appeal courts would be able to control the arbitrary exercise of discretion and to lay down after cases arise in practice, rules for the proper exercise of discretion. We recommend this with some hesitation

because of the obvious retort that it is not in the public interest for costs to be unnecessarily wasted in appeals". We have given close consideration to this objection and have come to the conclusion that it would not be wise to create any special type of appeal against the exercise of the discretion given by section 14CM. The rules concerning appeals from the exercise of a discretion are, we think, sufficiently flexible for the purpose in question.

Section 14CN

83. Where there is a jury it is the general practice of courts to allow the jury to have with them in the jury room documentary exhibits. The suggestion is often made that this might result in a jury giving more weight to what appears in such an exhibit than to the evidence given orally in court. Under section 14B (1) (i) (a) of the Evidence Act a statement might be admitted in evidence which, because the person who made it is dead or for some other reason is not called as a witness, is really in substitution for his oral evidence. Should the jury have such a statement with them in the jury room when they do not have the transcript of the evidence given orally in court? The same situation might arise under our proposal.

84. However, statements admitted under section 14B (1) (i) (b) of the Evidence Act and statements in documents such as accounting records and other records kept pursuant to a regular routine system admissible under the proposed section 14CB might not have the character of being essentially a substitute for oral evidence.²⁵ In such cases the mere existence of a statement made in a continuous record or pursuant to a system has probative value. Such a statement has value partly as real evidence and partly as a substitute for oral evidence.²⁶ We think that where documentary hearsay evidence is admitted there may be cases in which it will be undesirable, in the interest of a fair trial, that the document be with the jury during their deliberations. In other cases it will be desirable.

85. We know of no rule of law which requires the practice mentioned to be followed in all cases. The judge is in charge of the conduct of the trial and has a duty to, see that it is conducted fairly. We think that in the performance of this duty the judge has power to direct what exhibits should be with the jury during their deliberations. However, the response to our working paper indicates that many doubt the existence of such a power. This section sets those doubts at rest in relation to evidence admitted under this Part.

Section 14CO

86. Section 14CO corresponds to section 14C (2) of the Evidence Act and to similar provisions in other legislation, for example section 6 (4) of the English Civil Evidence Act 1968.

Section 14CP

87. "In every criminal case the judge has a discretion to disallow the evidence even if in law relevant, and therefore, admissible if admissibility would operate unfairly against the defendant".²⁷ In this rule preventing unfairness is paramount. It might enable a court to exclude a statement which could not properly be excluded under section 14CM. Accordingly the operation of this rule is expressly preserved. The discretion given by section 14CM could, however, be exercised to exclude evidence tendered by the defendant under the proposed Part. But it is suggested that it could not properly be exercised so as to operate unfairly against such a defendant.

Section, 14CQ

88. It is we think important that a court should have power to determine questions concerning admissibility of evidence before the trial. It is often not practicable to do so, but where it is, expense, delay or inconvenience may be avoided. Rules or regulations may be made with respect to the exercise of such a power under section 14CR (1) (g).

Section 14CR

89. The response to, our working paper indicates a generally held opinion that there should be a power to make rules of court or regulations requiring notice and particulars to be given of evidence which a party proposes to tender under this Part. The nature of such rules or regulations is a matter which it is the function of the Supreme

Court Rule Committee and the other rule and regulation making authorities to consider. Such rules or regulations may require amendment from time to time in the light of experience in particular courts.

90. We think that there should be such a rule or regulation making power but that it should be exercised sparingly in the sense that any rules or regulations should be flexible, and notice should not be required in types of cases where it is usual to rely on business records. In the lower courts it may be better to leave any question of prejudice arising from the tender of business records to be dealt with by adjournment rather than to require notice to be given in all cases. However, apart from expressing these views, we leave the questions involved to the authorities concerned.

91. We envisage that under section 14CR (1) (a), (b) and (c) rules might be made requiring notice and inspection of documents to be given by parties to a proceeding automatically or pursuant to an order of court.

92. Paragraphs (d) and (e) of section 14CR (1) concern the making of orders requiring a person not a party to the proceedings in question to produce documents for inspection to a party. We think that such a requirement should not be imposed under rules or regulations made under this Part otherwise than by an order of court. Rules made under paragraph (d) may provide for such an order to be made by the court in which the proceedings are pending. However, "court" is very widely defined by section 3 of the Evidence Act. It includes, for instance, an arbitrator in a private arbitration. It may not be thought appropriate for some courts to make such orders. In such a case the rule or regulation making authority may, by rule or regulation made under paragraph (e), confer power to make such an order on the Supreme Court or the District Court.

93. Section 14CR (1) (f) enables rules or regulations to be made relating to the proof by affidavit or statutory declaration of the matters mentioned subject to there being a right of cross-examination.

94. Section 14CR (1) (g) enables rules or regulations to be made with respect to the exercise of the power given by section 14CQ.

Section 14CS

95. The wording of section 14CS (1) is taken from section 26 of the Interpretation Act, 1897, but reliance is not placed on that section because the word "court" has a much wider meaning as defined in section 3 of the Evidence Act than it has in that section.

96. Section 14CS (2) is necessary because of the limited rule making power given by section 20 of the Arbitration Act 1902. Section 14CS (3) is intended to prevent rules being made by the Rule Committee of the Supreme Court for the purpose of arbitration proceedings under an Act if there is an authority having power to make rules or regulations regulating the practice and procedure of such arbitration proceedings. See, for example, section 38 (2) (b) of the Agricultural Holdings Act, 1941.

FOOTNOTES

¹ *Elsey v. Commissioner of Taxation (Cth)*, (1969) 121 C.L.R. 99 at 106.

² Vic. Evidence Act 1958-1971, s. 55; Qld Evidence and Discovery Acts 1867-1967, ss. 42B, 42c; S.A. Evidence Act 1929-1969, ss. 34c, 34d; W.A. Evidence Act 1906-1967, ss. 79B-79D; Tas. Evidence Act 1910-1965, ss. 78, 79; N.T. Evidence Ordinance 1960, s. 26D; A.C.T. Evidence Ordinance 1971, ss. 28-30; N.Z. Evidence Amendment Act 1945, s. 3.

³ Unless otherwise indicated, references to sections in this Appendix are to those of the proposed new Part IIB.

⁴ Cross, pp. 617-8.

⁵ See *Lakeman v. Finlay* (1959) 59 S.R. (N.S.W.) 5.

⁶ Cross, pp. 252-3.

⁷ Cross, p. 262.

⁸ [1957] V.R. 221 at 224-5. Cf. *Re Norman King & Co. Pty Ltd* (1960) 60 S.R. (N.S.W.) 98.

⁹ Cf. *English Exporters (London) Ltd v. Eldonwall Ltd* [1973] 2 W.L.R. 435 at 438-49 per Megarry J.

¹⁰ *The Statue of Liberty* [1968] 1 W.L.R. 739; [1968] 2 All E.R. 195.

¹¹ We have already commented on the relevance of such cross-examination in the case of computer records- see paras 45 and 46 of the Report.

¹² *Cataldi v. Commissioner for Government Transport* [1970] 1 N.S.W.R. 65.

¹³ [1913] 3 K.B. 850 at 859, cited in *Cataldi's Case by Reynolds J.*, at first instance, (1969) 89 W.N. (Pt 1) (N.S.W.) 549 at 552.

¹⁴ (1960) 60 S.R. (N.S.W.) 238.

¹⁵ E.g., the English Civil Evidence Act 1968, s. 6 (3); Evidence Ordinance 1971 (A.C.T.), ss. 32, 44. There is no such provision in the Evidence Act 1958 (Vict.) as amended with respect to documentary hearsay evidence by the Evidence (Documents) Act 1971.

¹⁶ It was suggested in the report of the Committee of the New South Wales Bar Association (mentioned in para. 7 of the Report) that such a section should specifically make such evidence admissible. However, we think that a statutory direction that regard shall be had to such circumstances necessarily makes evidence of such circumstances admissible.

¹⁷ See IIIA Wigmore, para. 884.

¹⁸ See the Report, para. 7.

¹⁹ This has been held to be the case in the United States. See 32 *Corpus Juris Secundum*, para. 691; V Wigmore, para. 1557.

²⁰ *Walker v. Stephenson*, 3 Esp. 284; 170 E.R. 617; 4 Esp. 50; 170 E.R. 638; *Bishop of Durham v. Beaumont*, 1 Camp. 206; 170 E.R. 931; *Reed v. Harris*, 7 Car. & P. 330; 173 E.R. 147.

²¹ *Stobart v. Dryden*, 1 M & W 615; 150 E.R. 581. For an acid comment on this decision see IIIA Wigmore, p. 1039 note 4; see also *Stapleton v. Clough*, 2 E. & B. 933; 118 E.R. 1016.

²² See Appendix D, para. 59.

²³ See *R. v. Matilews and Ford* [1972] V.R. 3, in which the Full Court of the Victorian Supreme Court held that original tape recordings were not documents for the purpose of the best evidence rule.

²⁴ Cross, p. 272.

²⁵ Cross, pp. 8-13.

²⁶ Cf. the remarks of Dixon J., quoted in Appendix D, para. 7.

²⁷ Per Lord Parker C.J. in *Callis v. Gunn*, [1964] 1 Q.B. 495 at 501, quoted Cross, p. 28.

Appendix C - Parts IIA and IIIB of Evidence Act, 1898

Act No. 11, 1898.

Evidence.

PART IIA.

New Part added, Act No.35, 1954, s.2(b).

Admissibility of Documentary Evidence as to Facts in Issue in Civil Proceedings.

Heading amended, Act No.1, 1966, s.2(c).

14A. In this Part of this Act-

Interpretation.

"Court" means the court, judge, justice of the peace, arbitrator or person before whom proceedings are held or taken.

cf. 1 & 2 Geo. 6, c.28, s.6(1).

"Document" includes books, maps, plans, drawings and photographs.

"Proceedings" means any proceedings or inquiry in which evidence is or may be given, and includes an arbitration.

"Statement" includes any representation of fact, whether made in words or otherwise.

14B. (1) In any civil proceedings without a jury where direct oral evidence of a fact would be admissible, any statement made by a person in a document and tending to establish that fact shall, on production of the original document, be admissible as evidence of that fact if the following conditions are satisfied, that is to say-

Admissibility of documentary evidence as to facts in issue.
cf. 1 & 2 Geo. 6, c.28, s.1.

(i) if the maker of the statement either-

(a) had personal knowledge of the matters dealt with by the statement; or
(b) where the document in question is or forms part of a record purporting to be a continuous record, made the statement (in so far as the matters dealt with thereby are not within his personal knowledge) in the performance of a duty to record information supplied to him by a person who had, or might reasonably be supposed to have personal knowledge of those matters; and

(ii) if the maker of the statement is called as a witness in the proceedings:

New section added, Ibid.

Provided that the condition that the maker of the statement shall be called as a witness need not be satisfied if he is dead, or unfit by reason of his bodily or mental condition to attend as a witness, or if he is beyond the seas and it is not reasonably practicable to secure his attendance, or if all reasonable efforts to find him have been made without success.

(2) In any civil proceedings without a jury, the court may at any stage of the proceedings, if having regard to all the circumstances of the case it is satisfied that undue delay or expense would otherwise be caused, order that such a statement as is mentioned in subsection one of this section shall be admissible as evidence or may, without any such order having been made, admit such a statement in evidence-

(a) notwithstanding that the maker of the statement is available but is not called as a witness;

(b) notwithstanding that the original document is not produced, if in lieu thereof there is produced a copy of the original document or of the material part thereof certified to be a true copy in such manner as may be specified in the order or as the court may approve, as the case may be.

(3) Nothing in this section shall render admissible as evidence any statement made by a person interested at a time when proceedings were pending or anticipated involving a dispute as to any fact which the statement might tend to establish.

(4) For the purposes of this section, a statement in a document shall not be deemed to have been made by a person unless the document or the material part thereof was written, made or produced by him with his own hand, or was signed or initialled by him or otherwise recognised by him in writing as one for the accuracy of which he is responsible.

(5) For the purpose of deciding whether or not a statement is admissible as evidence by virtue of the foregoing provisions of this section, the court may draw any reasonable inference from the form or contents of the document in which the statement is contained, or from any other circumstances, and may, in deciding whether or not a person is fit to attend as a witness, act on a certificate purporting to be the certificate of a legally qualified medical practitioner.

14C. (1) In estimating the weight, if any, to be attached to a statement rendered admissible as evidence by this Part of this Act, regard shall be had to all the circumstances from which any inference can reasonably be drawn as to the accuracy or otherwise of the statement, and in particular to the question whether or not the statement was made contemporaneously with the occurrence or existence of the facts stated, and to the question whether or not the maker of the statement had any incentive to conceal or misrepresent facts.

Weight to be attached to evidence.

cf. 1 & 2 Geo. 6, c.28, s.2.

New section added, Act No.35, 1954m s.2(b).

(2) For the purpose of any rule of law or practice requiring evidence to be corroborated or regulating the manner in which uncorroborated evidence is to be treated, a statement rendered admissible as evidence by this Part of this Act shall not be treated as corroboration of evidence given by the maker of the statement.

PART IIB.

Admissibility of Documentary Evidence as to Facts in Issue in Criminal Proceedings.

New part added, Act No.1, 1966, s.2(d).

14CA. In this Part of this Act-

Interpretation.

“Business” includes any public transport, public utility or similar undertaking carried on by the Crown or a statutory body representing the Crown within the meaning of the Local Government Act, 1919, as amended by subsequent Acts, or a municipal, shire or county council within the meaning of that Act, as so amended.

New section added, Ibid.

“Court” means the court, judge, justice or person before whom proceedings are taken or held.

“Document” includes any device by means of which information is recorded or stored.

“Statement” includes any representation of fact, whether made in words or otherwise.

14CB. (1) In any criminal proceedings, the hearing of which commences after the commencement of the Evidence (Amendment) Act, 1966, where direct oral evidence of a fact would be admissible, any statement contained in a document and tending to establish that fact shall on production of the document, be admissible as evidence of that fact if-

Admissibility of certain documentary evidence in criminal proceedings.

New section added, Ibid.

(a) the document is, or forms part of, a record relating to any trade or business and compiled, in the course of that trade or business, from information supplied (whether directly or indirectly) by persons who had, or may reasonably be supposed to have had, personal knowledge of the matters dealt with in the information they supplied; and

(b) the person who supplied the information recorded in the statement in question is dead, or beyond the seas, or unfit by reason of his bodily or mental condition to attend as a witness, or cannot with reasonable diligence be identified or found, or cannot reasonably be expected (having regard to the time which has elapsed since he supplied the information and to all the circumstances) to have any recollection of the matters dealt with in the information he supplied.

(2) For the purpose of deciding whether or not a statement is admissible as evidence by virtue of this section, the court may draw any reasonable inference from the form or content of the document in which the statement is contained, or from any other circumstances, and may, in deciding whether or not a person is fit to attend as a witness, act on a certificate purporting to be a certificate of a legally qualified medical practitioner.

14CC. In estimating the weight, if any, to be attached to a statement admissible as evidence by this Part of this Act, regard shall be had to all the circumstances from which any inference can reasonably be drawn as to the accuracy or otherwise of the statement, and in particular to the question whether or not the person who, supplied the information recorded in the statement did so contemporaneously with the occurrence or existence of the facts stated, and to the question whether or not that person, or any person concerned with making or keeping the record containing the statement, had any incentive to conceal or misrepresent the facts.

Weight to be attached to evidence.

New section added, Act No.1, 1966, s.2(d).

Appendix D - The Use of Computers for Keeping and Producing Records

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THE USE OF COMPUTERS FOR KEEPING AND PRODUCING RECORDS

PART I.-WHAT IS A COMPUTER?

1. A computer may be described as a device which is capable of accepting information, storing and processing it in accordance with a predefined sequence of instructions and supplying the results. ¹ Processsing means performing mathematical operations, or comparing, sorting, analysing, editing, or consolidating items of data in accordance with mathematical or logical rules. In business applications the sequence of operations ordinarily is-

- (1) information is put into the computer;
- (2) it is stored and/or processed; and
- (3) the stored or processed information is retrieved or put out in a legible form, generally as a print-out.

In technical applications the output may be used to control machines, engines, instruments and so forth.

2. There are two basic types of computers-analog and digital. Analog computers are used mainly for scientific and technical purposes. They operate on the principle of creating a physical analogy of the problem to be solved. Variables in the data are represented by the magnitude of physical phenomena such as voltage or current or length. The result of the calculation is obtained by measurement.

3. In business and commercial applications digital computers are used. Digital computers operate by taking advantage of the binary system of numbers. This system uses a base of 2 rather than the base of 10 which is used in the decimal system. There are only two digits, 0 (called zero) and 1. ² In a computer these two digits are represented by such means as a switch being on or off, or a spot on a tape or disc being magnetized or not magnetized. Numbers and letters are represented in a binary or binary coded form, as a series of zeros and ones. Numerical and alphabetical data or information is stored and handled in the com-puter in this form. A similar principle is used in Morse Code in which letters and numbers are represented by combinations of dots and dashes.

4. Digital computers are classified into general purpose and special purpose computers. Special purpose computers are dedicated to one task for which they may be specially designed. General purpose computers perform a multitude of tasks. The computers used in most commercial undertakings are of this type. A typical general purpose computer consists of elements known as inPut devices, a central processor, external or peripheral storage devices and output devices.

Input Devices

5. Two input devices in common use are punched card or punched paper tape readers. Information contained in plain language documents (e.g., invoices), referred to as "source documents", is transferred to cards or paper tape on which it is recorded by holes punched by a machine having a keyboard like that of a typewriter. The cards or tape are passed through a sensing device which reads the information to the computer where it is stored. Input by these methods is comparatively slow, for example one card reader in current use reads 800 cards a minute each containing up to 50 or 60 characters.

6. Information which is printed in magnetic ink using a special script may be read direct into a computer by the use of an M.I.C.R. (magnetic ink character recognition) device. This method is used by banks to process cheques and deposits. There are also optical character recognition devices by which information in the form of distinctive marks (e.g., crosses on a census return) or printed in a special script or font may be read into a computer.

7. There are a number of devices having typewriter type keyboards which transmit information direct into the computer. These are referred to as "terminals" and are described as "on line", a term which describes the operation of peripheral equipment under the control of the central processor. The simplest of these terminals is like a teleprinter. The information may be typed out on paper by using the keys. It may then be checked by reading it and its transmission into the computer completed by pressing a further key. Such terminals can generally be actuated by the computer to type information which it is putting out.

8. Visual display terminals use a similar keyboard in association with a cathode ray tube screen like a television screen. When the information is typed it appears in printed form on the screen and may be read to check that it is correct. It is then transmitted to the computer by pressing a further key. Such terminals are often constructed for use to display information put out by the computer. Some terminals have facilities for producing very quickly a photographic type copy of the information displayed on the screen.

9. There are also terminals which enable the input and output of information in the form of maps, plans, diagrams and graphs. Other input devices will be mentioned later.

Central Processor

10. The central processor comprises the computer's memory, the control unit and the arithmetical and logical unit. Its operation is controlled by a control program wholly or partially resident in part of the central processor's memory. The control program is monitored and directed from a console. This is a teleprinter type terminal from which operating instructions may be sent (first being typed out by the operator) to the control program of the central processor and by means of which this program types out reports on the progress of the particular procedure and on any operating errors which have occurred. Such instructions and reports are recorded on a continuous sheet of paper on which the operator also types particulars of the procedure being carried out. This record is known as the computer log. It is generally made in duplicate, the original being retained and the copy supplied to the person for whom a particular program has been run, if this is appropriate.

11. The memory is also referred to as internal storage. It is used to store the application program (generally called "the program")³ and also the information or data while the latter is being processed. The most common storage device consists of a large number of small ferrite rings or cores interconnected by wires. The cores may be magnetized in one direction to represent 0 and in the other to represent 1. Pulses of electric current are passed along the wires to create the appropriate magnetization or to read what it is. Each core represents one "bit" (i.e., binary digit) of information. To increase the processing capacity of a computer it is necessary to increase the storage capacity or efficiency of its memory.

12. The arithmetical and logical unit consists of the components and circuitry by which the arithmetic and logical operations necessary for processing are performed.

13. The control unit is a device for causing the computer to perform the desired operations in the correct sequence. Its operation is directed by the program. The program is a series of instructions which are recorded on magnetic tape or disc. The instructions are in effect signals which actuate the computer's components and

circuitry. Before processing begins the program is read from the tape or disc into, the computer's memory, where it is stored during processing.

External Storage

14. External or peripheral storage is storage which is physically external to the central processor. Information is transferred to external storage from the central processor and may be read back to it when required. The devices commonly used for external storage are reels of magnetic tape, magnetic discs and magnetic drums. Information is recorded on these in a magnetic form. Each device is used with equipment which can "write" information on to it or "read" it off, such as a tape drive or a disc pack drive. Each device is capable of storing information for an apparently unlimited time.

15. Magnetic tape is the cheapest form of external storage. Information is recorded serially, that is one item after another, along the length of the tape. A standard reel of tape can hold about 20 million characters, that is, the contents of about ten paper-back novels. Magnetic tape is suitable for the periodic processing of large numbers of items in the order in which they are recorded on the tape.

16. It takes from 4 to 8 minutes, depending on the speed of the tape drive, to read the whole of a magnetic tape. Where it is desired to process items of information in a random order, or to retrieve quickly such items for display or printing out by a terminal, magnetic discs or drums are ordinarily used. Reading heads are able to search for and retrieve any desired item of information from storage in such a device within a small fraction of a second. Discs and drums may also be used for processing where the number of items involved is reasonably low.

17. Magnetic tapes and some discs are portable and may readily be stored away from their associated equipment. Fixed discs and drums are sizable installations and are not readily moved. An external storage device may be used with any compatible computer.

18. The storage devices mentioned vary considerably in expense, storage capacity, the average time required to obtain access to a particular item of information and the rate at which information may be transferred to or from the device. Choice of the method of external storage depends upon circumstances and the nature of the desired processing.

Output Devices

19. Output devices are used for putting out information which has been stored or processed by the computer. A common device is the machine printer. This prints out information from the computer in plain language at rate of from 450 to 2,000 lines each of up to 132 characters per minute. The computer may be programmed to print out using any desired layout. This enables preprinted stationery to be used, the printer filling in the appropriate blank spaces. Printing is on continuous paper perforated so as to be readily split into sheets of the required size. Thus cheques, invoices, statements, stock sheets and the like may be printed out.

20. Teleprinter type terminals and visual display terminals have already been mentioned. Microfilm output devices are available which print out microfilm at a rate of 30,000 characters per second. Other devices enable information to be put out in the form of punched cards or punched paper tape for use in business machines or further computer processing. Voice output is available but is usually limited to answers to enquiries such as for credit bureau information or stock exchange quotations.

Comparative Operating Speed of Elements

21. Each element of the computer has a different operating speed. Input and output devices are the slowest. The arithmetic and logical unit is the fastest. Accordingly, in some installations small computers are used for the input of information which is recorded in external storage. A larger and more expensive computer is used for processing, the results of which are transferred to external storage. A small computer is then used to print out the information. This enables the large computer to be as continuously engaged as possible in its most economic use, that is processing.

22. Other installations achieve maximum use of the arithmetic and logical unit by simultaneously accepting input from a number of terminals, processing a number of programs and operating a number of output devices.

Location of Elements

23. Input and output terminals need not be adjacent to the central processor of a computer. Each element may be, and often is, located hundreds or thousands of miles away from the other. They may be connected by the telephone system, or by coaxial cable, or indeed by microwave radio transmission between earth stations or via a satellite.

PART 2.-PROGRAMMING-OPERATION

24. As mentioned processing is controlled by a "program".⁴ A program is a sequence. of instructions to be executed by the, computer to solve a given problem or carry out a desired procedure. Each program requires the computer to take an enormous number of steps. Early in the development of computers, writing a program was a tedious and lengthy task because the programmer had to prescribe virtually every step using a complicated coded language which would be "understood" by the particular type of computer. Such a language is called "machine language". Each type of computer has its own machine language.

25. More recently, programming languages have been developed such as Cobol (Common Business Oriented Language) used for administrative or business applications and Fortran (Formula Translation) used for scientific and technical purposes. Cobol has a vocabulary of ordinary words and punctuation, the use of which has a defined meaning. Fortran uses standard technical expressions. These languages permit the user to state his problem or requirements relatively easily and simply. They are called "high level" languages. A program written in such a language is put in to the computer, generally using punched cards, and is processed using a special program which comes with the computer, known as an "assembly" or "compiler" program. This translates the program language used into the particular computer's machine language. The program in machine language form is generally recorded on a tape or disc which may be stored for use when required. Cobol and Fortran may be used for programming a sizable number of different makes of computers. Some special purpose computers have their own programming language.

26. A program designed for a particular job is called an application program. The task of preparing an application program is sometimes facilitated by a collection of commonly required utility programs and subroutines (called a "program library"), any one or more of which may be incorporated in the application program. The program library is accommodated in external storage, and the bulk of it may be supplied by the computer manufacturer. There is stored in the computer a supervisory or control program⁵ which is concerned with organizing the flow of work, dealing with input and output and, among other things, controlling the movements of all the other programs. The term "software" is used to describe compiler programs, supervisory programs and the program library as opposed to "hardware" which refers to the mechanical, electronic, magnetic, and electrical components of a computer system.

27. Originally programming by the user was costly and required high level skill. Now any intelligent young person without special qualifications can be taught to write programs in Cobol or other high level computer language in a matter of months. Some simplified programming languages are available which enable a non-programmer to use a restricted set of programming instructions after a few days.

28. A program is basically a recorded series of signals designed to operate the computer as required for the particular processing. In addition to the program, a set of written instructions is prepared to be followed by the computer operator. This lists the steps to be followed to carry out the procedure in question -and specifies details such as the identification number of the program tape or disc to be used and of any tapes or discs containing information to be processed, what drive units the tapes or discs are to be loaded on to, what stationery is to be used for printing out, the various steps which will be carried out by the program, and what to do when instructions -are, printed out by the program. There are many checks usually included in the program and the operating instructions to ensure that the correct procedure is followed by the operator.

29. A simple processing run might proceed as follows. The operator puts the program tape on the designated tape drive and instructs the computer to store the program in memory by typing an instruction on the console and transmitting it to the central processor. When this operation is complete a message to this effect will be typed out on the console. He then, having loaded punchcards into the reader and put a tape on a designated drive,

actuates the computer to operate the program to read the cards on to the tape. This brings into operation the edit part of the program mentioned in paragraph 47. During this process, the program may print out messages querying the validity of data on the cards. These error reports will be sent to the persons responsible for the data for checking purposes. When reading in is complete, the program prints out a message to this effect on the console. It may also print out data for checking purposes. If say the punchcards represent financial data, it will print out various totals specified by the program which may be compared with totals prepared when the data were in documentary form. If these do not agree the error may be located before processing continues or it may be left until after processing is completed.

30. Having read his instructions, the operator then loads the tape recording the data on to another drive, loads a second tape on to the appropriate drive, and instructs the central processor to commence the second part of the procedure, to sort the information on to the second tape in the order specified by the programme. The processing proceeds in this way, step by step, until finally the processed information is printed out on the machine printer.

31. It is important to appreciate that the computer cannot originate anything. It can do no more than operate on the material with which it is supplied in accordance with the instructions contained in the program. Consequently the program must contain instructions which enable the computer to produce a correct result no matter what combination of facts are presented to it for processing or in the course of processing.

PART 3.-AUTOMATIC DATA PROCESSING

32. The ordinary business use of digital computers is known as automatic data processing (A.D.P. for short) or, alternatively, electronic data processing (E.D.P.). This is ordinarily regarded as being divided into commercial type and mathematical type applications. Commercial type applications are divided into, accounting and non-accounting applications,, but sometimes, of course, both types are involved. A.D.P. is best explained by examples.

33. Commercial applications generally involve the acceptance of information, sorting it into an appropriate order, recording it, keeping it up to date, and making it available as occasion requires. The procedure adopted is to establish a "master file" of the information. This consists of one or more tapes or discs or other external storage devices in which the basic information is recorded after editing⁶ and sorting to a convenient order. This is then updated as required. If tapes are used, updating is performed at regular intervals when a convenient amount of new information has been collected. The new information is edited and sorted in the same order on to a tape. This and the master file are processed together to produce a new master file containing the updated information. The whole or parts of the current master file are printed out as required. If discs are used, it is possible to update the master file immediately new information is available, and to retrieve particular items of information at the time they are required by the use of a teleprinter or visual display type terminal. The reference number of the item required and the appropriate request code is transmitted to the computer and it prints out or displays at the terminal the information recorded.

34. A simple example of a non-accounting commercial type application is provided by the *District Court Weekly Index*. The minute sheets on which the entry of actions is recorded is typed on typewriters, which produce punched paper tape as an automatic by-product of the manual typing operation. The entries on the minute sheets are typed roughly in the order in which the documents commencing actions are filed and numbered. The paper tape thus contains in code form in approximate numerical order the number and the names of the parties to all actions commenced. At regular intervals the paper tapes are taken to the New South Wales Treasury A.D.P. Bureau. Using the computer's paper tape reader, the information is transferred to magnetic tape. The reel of magnetic tape then comprises a file of the information in approximate numerical order. The computer is used to sort this information into alphabetical order of defendants. The sorted information is recorded on another magnetic tape which is the master file. The contents of the master file are then printed out providing an alphabetical index of cases. From time to time this index is brought up-to-date. The information relating to additional cases is similarly recorded in alphabetical order on magnetic tape. The master file and this tape are then processed together to produce a new master file containing an up-to-date complete index and this is printed out. The production of this index by computer shows an economic advantage over the previous manual system of index cards. It also provides an index at intervals and in a form which it would not be practicable to make by manual methods.

35. An example of an accounting application is provided by the Bank of New South Wales computer system. A brief outline is as follows.⁷ The system uses magnetic ink character recognition (M.I.C.R.). Cheques and deposit slips have printed on them in magnetic ink the code number of the branch and the customer's account number. As customers' deposit slips and other documents such as cheques are received at the Bank's E.D.P. Centre, the documents are proved and balanced on accounting machines which automatically generate control totals to which the computer must balance. As a by-product of this accounting function, the written amount of the cheque or the deposit slip and the amount of the control totals are simultaneously printed out on the appropriate documents in magnetic ink. These documents are then run through an M.I.C.R. reading machine and the information on them recorded on magnetic tape on which it is necessarily in random order. This process goes on continuously during the day. At the end of the day the transactions recorded on magnetic tape are sorted by the computer in branch number order, in account number order within the branch, and if related to a cheque, in serial number order. The sorted information is recorded on other tapes. This file of sorted incoming transactions is then checked by the computer against a master file of stop payment information and the computer prints out details of any cheques affected.⁸ The transaction file is then processed against the master ledger information file. This already contains, in the same order, all the information which is shown on a customer's statement, complete up to that time. It is, in substance, a complete ledger account key on magnetic tape. This processing run, simultaneously with posting the ledger file with the day's transactions, prints out day sheets for each branch, listing by account numbers the day's transactions for each account and stating the balance of each account whether it has had any transactions or not. A reference is also given to the data on which each account was last operated. At the appropriate intervals, the master ledger information file is used to print out customers' statements. Copy statements and the day sheets are kept at the branches. Thus each branch has an historical record of its customers' dealings in the copy statements and the day sheets relating to the period since the close of the last statement. In essence the system is one in which the computer continuously generates documentary accounting records incorporating the results of the bookkeeping or accounting procedures which it has carried out.

36. Throughout the procedure, the program makes a large number of audit-type checks on the information the computer is processing. References are provided to each item of information so that when errors are detected the entries relating to the transaction can be traced back. This is called providing an "audit trail". External balance work is also carried out at various intervals during the processing cycle.

37. In addition, a total of some thirty-five types, of reports are printed out during processing. Some twenty of these are printed out daily, the others periodically as required. These reports provide each branch with such information as account balances, overdrawn accounts, changes made to a customer information, unposted transactions, and a great deal of other detail to keep the branch fully informed and to assist in the conduct of its daily affairs.

38. The Sydney Stock Exchange provides another accounting example.⁹ The information on every sale note made between operators on the trading floor is recorded on punched cards which are then read into the computer and stored in random order on magnetic tape. At various times during the day this information is sorted and processed to enable several lists to be printed out. One of these is a list, in categories of shares and in alphabetical order of companies of all transactions. Another is a list of all transactions, broker by broker. Each broker's section of this list is sent to him and forms his daybook. This list is again in alphabetical order of shares and shows the numbers and price of each parcel sold and whether the broker is buyer or seller for each transaction. Brokers who subscribe to the additional computer document service can complete punched transaction cards supplied to them from the computer which, when processed, result in the computer printing out their contract notes and share transfer forms for transmission to their clients.

39. The A.M.P. Society, the Government Insurance Office and other insurance companies make extensive use of A.D.P. Full details of all policies are recorded on magnetic tape or disc. These records are regularly updated by the addition of information relating to the payment of premiums, the making of claims, alteration of the terms of policies such as endorsements, expiry or renewal, or the issue of new policies. At appropriate intervals the computer is used to print out premium renewal notices and the like and accounts for the payment of interest due on loans secured by policies. The A.M.P. has an immediate access installation. Full details of all its more than 650,000 life policies in New South Wales are contained in the storage available in a cylindrical file of magnetic sheets called a "data cell drive". The details required relating to any policy can be displayed on any one of the society's visual display terminals within a fraction of a second of the request being transmitted to the computer. Within a further minute a photographic print of this information can be produced by the terminal.

40. So far reference has been made to computers operated by the organization which furnishes the information and makes use of the results. Much data processing is, however, performed by various organizations for a number of subscribers or customers. Thus the New South Wales Treasury A.D.P. Bureau does the processing for most government departments. Commercial organizations engage in the processing of particular programs for individual customers. Such an organization is called a "utility" or a "bureau". The customer may send his source documents to the utility which transfers the information to punched cards or he may produce his own punched cards or paper tape. These are read into the computer and, using the program written for the particular customer, or one of its own programs appropriate to the task, the utility has its computer print out the required records such as stock sheets, salary cheques, or statements of account. Such programs may be run serially, that is one after the other, this being known as "batch processing".

41. Other organizations offer "time-sharing" facilities. In this kind of application, customers have their own input/output terminals at their premises by means of which information may be fed into the computer at the bureau, the appropriate program selected, and the output after processing received back. These terminals may be of the teleprinter or visual display type or the customer may, in some instances, have input devices such as card or tape reading units and output printing machines. One time-sharing facility used by many subscribers in Sydney is the Honeywell G.E. facility, the computer of which is located in Melbourne.

42. It is already not uncommon for a computer in one State to be linked by telephone line to terminals or a computer in another State and for input data and output to be transmitted from one State to the other. Such usage of computers is likely to increase. The Postmaster General's Department is now installing special cables to provide high speed computer links between Canberra, Sydney and Melbourne. It is likely that, in some years from now, banking clearances will be made by the use of an interstate computer network. Clearance information may be transmitted from one State to a computer in another and the output be printed out in a third. Further, regular data processing involving the use of or co-operation with computers in other countries linked by telex or satellite communication may be not far off.

43. There are, of course, regular computer-users who are not concerned with the storage, processing or retrieval of information, but use general purpose digital computers for the purpose of calculations. For instance, the Lands Department now does much of its mapping from aerial survey. The dimensions on the photographs are corrected by information derived by ground survey of control points. This correction involves lengthy, complicated and tedious calculations. These calculations are regularly performed by computer, the output being on punched cards which are used to actuate automatic mapping or map drawing machines. The computer processes in 20 minutes calculations which previously took 3 months using mechanical calculating machines.

PART 4.-ACCURACY OF AUTOMATIC DATA PROCESSING

44. There can be no doubt that records may be kept by computer to a greater standard of accuracy than is possible by other means. On the other hand there are occasionally accounts in newspapers of errors, sometimes of a capricious and absurd kind, which are said to have been committed by a computer. What are the factors on which the accuracy of computer processing of information depend?

45. The first and basic factor is, of course, the accuracy of the source documents. Apart from errors detected by the edit program referred to in paragraph 47, the reliability of the output from the computer can be no greater than that of the input. As computer men say, "garbage in equals carbage out". For this reason, the hearsay exception which we recommend is subject to conditions which ensure that any statement produced by a computer which would be rendered admissible as evidence is based on reliable information. ¹⁰

46. Secondly, the information in the source documents must be accurately put into the computer. There are a great variety of means by which this process is verified. If punched cards are used they are first punched by an operator using a typewriter type machine who reads the source document. Another operator then repeats the process using a verifying machine which signals if the punching differs, and if it does not, punches a verification mark in the card. Under this system a card does not go forward unless both operators make the same error or the second operator fails to do her job. Similar methods may be used to verify punched paper tape or reliance may be placed on a visual check of a plain language document produced simultaneously. If information is transferred direct from the source document into the computer using a typewriter type on-line terminal, the check used may be a visual comparison of a typed copy produced simultaneously or of a copy showing on the cathode ray tube

screen of the terminal. Or the information may be transmitted twice and only accepted by the computer if the second transmission completely matches the first. There are other means employed to put information into a computer although those just mentioned are at present the most common. Whatever means are adopted, both the user and the supplier of the equipment are naturally concerned to avoid inaccuracy and various methods are used to do this.

47. The computer program ordinarily includes a number of checks both on the accuracy of the information in the source documents and on the accuracy of its transfer to the computer. Generally the information in source documents can be expected to be within predetermined limits. The computer can be programmed to reject any information outside these limits. For instance, if mortgage payments to a building society are being recorded, any payment outside the ordinary limits of the instalments can be rejected when the card for that payment is read in, and the computer will print out an error report to enable the payment to be checked. If it is wrong it may be corrected. If right, it can then be read into the computer. In most situations many such checks can be devised and errors in the source documents detected which might not be found at such an early stage by manual processing. This often includes corresponding checks but they are not always made. This part of the program is called the "edit program". A great deal of attention is generally paid to it and the checks involved are often very ingenious. For instance, where items are given reference numbers an extra digit, called a "check digit", is often added to the number in the source document. This is derived by applying a formula to the reference number. When the reference number with the added digit is read into the computer, the computer calculates for itself what the check digit should be and rejects the information, printing out an error report, if it is not the same as that read in. Checks of the kind mentioned not only validate the accuracy of the information in the source document but also ensure that it has been accurately read into the computer.

48. Thirdly, the same kind of checks are constantly made during processing. These checks further validate the source information, the accuracy of its transfer from one part of the computer to another, and the accuracy of any mathematical or logical procedures involved in the processing. They include various kinds of balancing procedures made possible by the logic of the processing. For instance, as non-numerical information is recorded in a numerically coded form, the accuracy of its transfer from one part of the computer to another may be checked by balancing its numerical sum in one part against that in another. Generally two-thirds of an A.D.P. program is devoted to the edit program and to checks and verifying procedures of this kind.

49. What is called a "parity check" also guards against loss or distortion of information in transit. Information, whether alphabetical or numerical, is recorded in the form of binary digits, that is 0's and 1's, in blocks of magnetic representations. Extra digits called "parity bits" are added automatically to each lateral and longitudinal row of representations so that, for instance, there is always an even number of 1's in every row. The computer rejects any item in which the requisite parity is absent. It then may print out an error report. In some systems the logic of the check enables the error to be corrected automatically. The technique is called adding "redundancy" to each representation. It may be applied so as to achieve a greater or less standard of error detection as circumstances are thought to require.

50. Generally speaking it may be said that with a well-prepared program the possibility of undetected error being caused by technical defects in the processing of information is very remote indeed. Apart from this, the reliability of the components now used in the electronic circuitry of computers and modern techniques of regular preventive maintenance make technical error a rare occurrence. Further, failure of a component automatically stops processing. It is not allowed to continue exposed to error resulting from the failure.

51. Fourthly, the adequacy of the program is an important factor. Errors of the dramatic kind mentioned in paragraph 44 are caused by deficiencies in the program. Such deficiencies must be attributed to human failure, not machine failure. They arise from two sources. The first step in the application of A.D.P. to any system of record keeping is to analyse the data system concerned to find out what is involved in terms of the logic employed by the computer, what are the possibilities which must be provided for and to set up a system which can be maintained by A.D.P. Errors may creep in at this stage if all possible combinations of circumstances are not provided for or if the analysis is incomplete.

52. The next step is to write an application program which is appropriate to the system set up. Here errors may creep in, particularly in the failure to provide for all possibilities or in omitting some necessary step in the procedure. It is said that very few programs are free from error on the first attempt.

53. However, it is usual to subject programs to rigorous and exhaustive testing of various kinds before they are relied upon in processing. When these tests have been completed, the previous system is normally continued for a substantial period after computer processing is begun so that the results of the A.D.P. may be checked against it. Sometimes, however, an error in a program may go undetected for years, until the unusual combination of circumstances not provided for occurs. Inadequate system analysis or hurried programming undoubtedly lead to error in many cases. In general such errors are detected at an early stage but often an accurate system is not established for a substantial period.

54. Finally there is the question of error at the output stage. Line-printers or teleprinter type terminals are, of course, subject to mechanical breakdown. A line-printer may omit a letter or a figure but it will be rare for the mistake not to be obvious to the reader. A teleprinter type terminal may omit a character or print a wrong character. Here again the mistake will rarely not be obvious. It is routine to test printers and teleprinter type terminals every few hours during operation by the use of a test program to ensure that every letter, figure and punctuation mark is being printed or typed correctly. A visual display screen type terminal might because of some malfunction, not display complete letters or figures. Once again the error will be obvious.

55. Generally on the question of accuracy of A.D.P. in relation to record-keeping, it must be remembered that as the whole purpose of any such application is to provide documents and records which are accurate so that they may be used in business, or business decisions taken in reliance upon the information contained in them, a system known to be unreliable is unlikely to be retained.

56. The general conclusion to be drawn is that, where a computer system has been properly established and is properly controlled, the information in documents printed out or displayed on a screen in A.D.P. for business or similar purposes which is apparently regular and sensible should be as accurate as the information put into the computer from which it is derived.

PART 5.-A.D.P.-DOCUMENTARY RECORDS

57. In most traditional methods of record-keeping, the passage of information through the system is documented and the documents are arranged in an order which facilitates searching for a particular document. A simple example is purchase of an item out of petty cash recorded first by a voucher, entered in a cash book and then as a part of a total carried to a ledger account. The vouchers would normally be kept in the order in which they are entered. This is not necessarily the case if A.D.P. is employed.

58. Because of the sorting capacity of computers, it is not necessary that the source documents be in any particular order. A file containing, say, 75,000 items each comprising approximately 100 characters can be sorted from completely random order into any predetermined sequence in one hour or less. The source documents may be first recorded in random order on tape or disc but, as there is generally no point in printing out the information at this stage, no document is produced which indicates the order in which the source documents may be stored. In the Stock Exchange application¹¹ the sale notes are stored in completely random order on a day to day basis. Consequently it may sometimes be impractical to search out source documents. In a particular case, this may affect the weight to be attached by a court to a statement in a document produced by a computer, but it is not a consideration relevant to admissibility.

59. Printing out of information is expensive and generates large volumes of paper. In the early days of A.D.P. computer users were prone to have the information stored printed out in full frequently, to provide visual evidence that the system was in fact working. There is a growing tendency to be selective as to what information should be printed out and how often. Thus, for instance, if stock is recorded by A.D.P., instead of printing out a list of the entire stock at intervals, the computer might be programmed to print out only a list of items the number of which has fallen below a predetermined level. Consequently, there may be cases where information is stored by a computer in which no print-out has been made in the course of business containing a statement of a fact recorded by the computer of which it is desired to give evidence. There should be provision that a print-out made solely for the purpose of proceedings should be admissible.¹²

60. Another consequence of selective printing out is that there may not be a documentary record of the progress of particular items through the system of record-keeping. In many accounting applications steps are taken to record an "audit trail" and this enables items to be followed through the system for checking purposes. In some

accounting applications records are kept in an historical form and print-outs made which provide a complete and self-contained documentary set of accounting records. An example is the banking application described above.

¹³ Inability in a particular case to trace a statement in a document produced by a computer through the system of record-keeping to the source documents may affect the weight to be attached by a court to the statement but should not affect its admissibility.

61. In some cases, for reasons of business convenience, some documents may not be retained for any length of time, for example, where the object of the application is the production of statistics. Again in the law this may affect weight but should not affect admissibility.

62. In applications which involve the recording of information and its updating from time to time, steps are ordinarily taken to preserve a record of recent changes. For instance, if the processing is done on tape, it is usual to retain the three previous master tapes and their corresponding transaction tapes. The current tape is known as the son tape and the three previous tapes as the father, grandfather and great grandfather tapes. There is always an available record of the previous three generations of change in the information on the son tape even if printing out has been incomplete. If the processing has been on disc there may not be such a record. For mechanical reasons, an individual item on a tape cannot be erased by recording over it, but on disc this may be done. Information recorded on discs is often updated by recording the new information in the same physical place on the disc thus erasing the old. This is known as "destructive updating". The new information is often simultaneously recorded on tape and filed thus providing a record of change referred to as "tape back up". In other cases no such record of change is kept but periodically the contents of a disc are transferred to tape, the term used is "dumped", which is then filed. In cases of the latter kind it may be difficult to establish the immediate past history of an item of information except by recourse to the source documents. The matters mentioned in this paragraph may on occasions be relevant to the weight to be attached by a court to a statement, but not to its admissibility.

63. In traditional systems of record-keeping it is usual to, keep copies of documents sent to other parties, for example, statements of account, invoices, and insurance policy renewal notices. If these are produced by A.D.P. they can be printed out in duplicate but often there is no business reason for doing so. Proof of the contents of such a document may depend on the tender of a print-out of the information in question made for the purpose of the case, and on evidence that on a particular day the program which would have resulted in such a document being printed out was run, and on evidence of the system pursuant to which the documents printed were then posted. Under our proposal, the computer log should be admissible evidence of some of these matters ¹⁴ and a print-out made for the purpose of the case should be admissible. ¹⁵

PART 6.-A.D.P. IN THE FUTURE

64. A number of areas of change are indicated by present developments. In-put of information is now one of the slowest and most expensive aspects of A.D.P. Dramatic changes are inevitable. It seems that transfer of information to punched cards or paper tape, as a first step to reading it into the computer, will give way either to direct entry from the source document to the computer by the use of a keyboard terminal, or to transfer by means of a keyboard terminal to magnetic tape in a cassette from which the information may be read into the computer at a much higher speed than from punched cards or tape. Systems can be envisaged in which there will be no source documents, information being entered direct to magnetic tape, the evidence of entry being the next printout.

65. What is called "remote batch processing" seems likely to increase. The customer has his own terminal with multikeyboard input, a videoscreen for checking and a printer. Information to be processed is recorded by the customer on cassette tape using his own input equipment. When the customer's turn to use the utility's computer has arrived, the information is read into it from the cassette over the telephone line, processed, and returned to the terminal where it is recorded again on cassette tape. This is run through by the customer and operates the terminal's printer to print out the results of the processing. Such a terminal may include its own "minicomputer".

66. Smaller and cheaper computers are becoming available. Also there is a growing supply of good secondhand computers. These factors may mean that many relatively small organizations will acquire their own computers. An increasing supply of cheap computers and the growth of remote batch processing may cause an enormous increase in the use of A.D.P. during the next decade.

67. Another likely change is the increasing use of computers linked to each other although considerable distances apart. B.O.A.C. has a worldwide computer network, said to have cost £42 million, which not only processes all seat bookings but handles accounting, statistics, stock control, maintenance schedules and, among many other tasks, calculates the most economical flight paths having regard to weather conditions and other factors. Four computers, in London, New York, Sydney and Hong Kong are linked to the central computer in England which is called "BOADICEA". As previously mentioned, it is possible that some time in the future clearing operations for banking in Australia will be carried out by a network of computers.

68. Programming is an area of A.D.P. which is very costly. It can be expected that greatly simplified programming languages will be developed which will eliminate the lengthy periods of time now required for programming. The use of computers will become much simpler so far as programming is concerned.

69. In summary it may be said that the use of A.D.P. is likely to increase greatly. The technical skill required to operate computers and their peripheral equipment will become less. The general user will become more and more dependent on the software supplied with the computer, or upon the bureau or utility with which he deals.

PART 7.-COMPUTERS AND THE LAWYER

70. How much can the average lawyer reasonably hope to understand about computers? From a technical point of view, he cannot expect to understand any more about the electronic functioning of computers than he can about the functioning of a television set, the transistorized ignition and fuel injection system of a motor car or about a modern telephone exchange. All he will ordinarily know about such things is that they are complicated, they work, they sometimes go wrong and experts have to be called in to fix them.

71. The average lawyer can hardly expect to understand the logic and the mathematics which are the basis of computer design and operation. He must take the word of an expert on these matters. He has slightly more chance of understanding the mechanical devices used such as line-printers, tape drives and so forth but these have little relevance to evidentiary problems.

72. It is suggested that the only useful way for the average lawyer to approach computers and any evidentiary problems which may be caused by their use is to regard the computer as a machine which, if worked by trained persons who know what they are about, will produce useful and accurate results. He can make himself familiar in a general way with the nature of the equipment, the functions it performs, the broad principles of its operation, the role played by the various experts associated with its use, the procedures ordinarily followed in A.D.P., and the factors which may lead to error.

PART 8.-SUMMARY AND CONCLUSIONS

73. The more important of the matters mentioned in this Appendix, which are relevant to the admission in evidence of statements in business records produced by computers, may be summarized by saying that-

- (1) It is generally accepted that computers can provide a reliable and accurate means of keeping and producing business records.
- (2) The technical matters relevant to the operation and accuracy of computers in business are widely known and understood by the persons responsible for computer processing of business records.
- (3) Statements in business records produced by computers should be reliable if the information from which the statement was derived is reliable.
- (4) The use of Computers in business is now widespread and is likely to increase.
- (5) Much of the use of computers is and will be by time sharing or by remote batch processing. In these procedures the user does not control the operation of the computer.
- (6) There have been, and are likely in the future to be, dramatic technical changes in computers and associated equipment. It is likely that the reliability of programming will come increasingly to rest upon the

provision by the manufacturer of reliable and appropriate software. It is possible that a demand for faster methods of putting information into computers may lead to acceptance of methods which are not so reliable as those hitherto most commonly used.

74. The main conclusions to be drawn from the matters mentioned in this appendix are that-

(1) There is a need for a statutory provision facilitating the admission of statements in business records produced by computers. Without such a provision a large section of business and government would continue to be deprived of admissible evidence essential to the establishment of its legal rights in litigation.

(2) Any such provision should be in general terms and not tied to any particular technical requirements.

(3) In drafting any such provision, conditions should be imposed to safeguard the reliability of the source material.

(4) For practical reasons, it is essential to relieve businesses using computers from the burden of proving strictly in legal proceedings the various steps involved in the keeping of their records. To prove such matters strictly would generally require calling numerous witnesses, including experts to explain the operation of the computers often employees of an outside computer bureau or utility, and sometimes persons engaged in distant places or other States in the keeping of the records in question. This would cause expense and disruption of business and be of no practical benefit to the parties or to the court.

(5) A person holding a responsible position in relation to the keeping of the records of a business by the use of a computer should be able to give reliable evidence, even though some of it is on information and belief, as to the system involved and other similar matters which are relevant to the admissibility of the records as evidence in legal proceedings.

(6) A party to legal proceedings against whom business records kept by a computer are tendered as evidence should have an opportunity of testing the reliability of the records by cross-examination of a person holding a responsible position in relation to the keeping of the records.

FOOTNOTES

¹ We are not aware of any simple published explanation of how computers work. This appendix is based on information gathered from a number of sources. We have been greatly assisted by the Automatic Data Processing Bureau of the New South Wales Treasury. A Commissioner and a research officer attended a course of instruction at the Bureau. Senior officers of the Bureau kindly read this appendix in draft form and made a number of suggestions. Any errors which remain are our responsibility. We have also been assisted by the A.M.P. Society, the Bank of N.S.W., the Sydney Stock Exchange Ltd and I.B.M. (Aust.) Ltd. We have referred to a number of publications and in particular to: *Electronic Computers*, S. H. Hollingdale and G. C. Toothill, Pelican Books, 1970; *Computers and the Lawyer*, Institute of Criminology, Faculty of Law, University of Sydney, 1968; *Computers and the Law*, ed. R. P. Bigelow, published by the Standing Committee on Law and Technology, American Bar Association, Commerce Clearing House Inc., 2nd ed., 1969.

² The binary system works like the decimal system, except that instead of moving to the next column to the left every time you reach a multiple of 10, you do so every time you reach a multiple of 2. Thus 1 in the decimal system is 0001, 2 is 0010, 7 is 0111, 10 is 1010. The extra 0's are added to keep the binary counterpart of each conventional digit the same length.

³ See part 2.

⁴ Para. 13.

⁵ See para. 10.

⁶ See para. 47.

⁷ Described as at November, 1971.

⁸ The "files" mentioned may consist of more than one tape.

⁹ described as at November, 1971.

¹⁰ See the proposed new section 14CB in Appendix A.

¹¹ Para. 38.

¹² See the proposed section 14CK (1) (c) in Appendix A.

¹³ Para. 35.

¹⁴ See the proposed s. 14CB in Appendix A.

¹⁵ See the proposed s. 14CK (1) (c) in Appendix A.

Appendix E - Business Records: Present Law as to Admissibility as Evidence

1. We have already defined in paragraph 14 of the Report the rule against hearsay evidence in relation to business records. We now describe the exceptions to that rule under which entries or statements in business records may become admissible as evidence of the matters asserted. Some of these exceptions are of general application. Others apply only to a statement in a record of a business. We turn first to the common law exceptions and then to the statutory exceptions.

Admissions of the Parties

2. A statement in a business record made by or with the authority of a party which is adverse to the party's case is admissible against that party as evidence of the truth of the matters stated under the exception for admissions of a party against interest. Thus, in an action against a hospital for injuries caused by alleged negligent medical treatment, entries in the records of the hospital sued were admitted as evidence of the facts recorded.¹ To be within this exception entries made by the servants or agents of a party must be made for the purpose of fulfilling a duty of their employment to make such entries as and for their employer's record. Statements in documents created by servants or agents merely for the purpose of communicating between each other or with the employer are not admissible as admissions.² Such statements may, of course, be reliable evidence of facts which a party might not be able to prove except by calling the servant or agent of his opponent. This often has unfair consequences. A party may be forced to call a witness who is anxious only to help his employer and because of the rules prohibiting cross-examination or any reflection on the credit of his own witness may be obliged to accept evidence which is partial to his opponent.

Declaration by Deceased Persons Made in the Course of Duty

3. "The oral or written statement of a deceased person made in pursuance of a duty to record or report his acts is admissible evidence of the truth of such contents of the statement as it was his duty to record or report, provided the record or report was made roughly contemporaneously with the doing of the acts, and provided "the declarant had no motive to misrepresent the facts."³ The duty referred to is not limited to the duty of an agent or servant to his employer. To be the written statement of a deceased person the statement must be written, or, presumably produced in writing as by typing, or acknowledged in writing, for example, by his signature or initials, by the deceased person. The statement of the rule indicates the limited nature of the facts of which such a statement is evidence.

Declaration by a Deceased Person Against Interest

4. "The oral or written declaration by a deceased person of a fact which he knew to be against his pecuniary or proprietary interest when the declaration was made, is admissible as evidence of the fact and all collateral matters mentioned in the declaration provided the declarant had personal knowledge of such fact and matters."

⁴ Under this exception, for instance, an entry made by a deceased person in his accounts acknowledging the receipt of money on behalf of a third person or the payment of a debt due to him would be admissible as evidence of those facts. The idea behind this and the exception mentioned in the last paragraph is that no statement by a deceased person is sufficiently reliable to be received in evidence unless it was made either in the course of duty or against his pecuniary or proprietary interest. The obvious absurdity of this idea was colonized in the enactment of the English Evidence Act 1938 which was adopted by Part IIA of the Evidence Act.

Public Documents

5. In certain circumstances statements in public documents are admissible evidence of the truth of their contents. However, for a variety of reasons this exception has little practical application.

Accounting Records

6. Because it would be against good sense to object, books of account and other financial records are frequently admitted in evidence by consent of the parties as evidence of the various facts stated in them. However, there is no common law exception to the hearsay rule which permits accounting records to be received in evidence as proof of some particular fact recorded in them. If objected to, entries in accounting records are admissible only if within one of the exceptions mentioned in this Appendix.⁵ If an entry is not admissible, the fact recorded or asserted by it must be proved by other evidence, generally by calling as a witness the person who has personal knowledge of that fact.

7. The statement in the last paragraph is subject to one qualification. In *Potts v. Miller, Dixon, J.*, as he then was, discussed a principle that-

The books of account kept according to an established system in organized business are receivable in evidence as proof, not of the occurrence of some particular fact recorded or indicated by a specific entry or narration, but of the financial progress or result of business operations conducted on a large scale.⁶

His Honour suggests that the grounds on which the principle is based are that-

Where a routine system is established for the very purpose of ascertaining the financial result of business operations consisting in multitudinous individual transactions then, in spite of the use of living persons as part of the machinery for producing the result, the record is to be treated as the consequence of a system, and where, according to the common understanding and practice of business, the financial consequences would be ascertained from those records, then, when the issue submitted to the court is of that character, the court must receive that record as the appropriate evidence.⁷

It would seem, therefore, that this principle does not form an exception to the rule against hearsay. The principle stated is that the entries in records produced by such a system should be regarded as relevant facts or original evidence and be admissible as such. The entries are not to be regarded as having a testimonial character and hence as hearsay.

4 Evidence Act, 1898, Part IIA

8. Part IIA, as well as Part IIB, of the Evidence Act, 1898, are reproduced in Appendix C. Part IIA is confined to civil proceedings heard without a jury. In our notes to the draft Bill in Appendix B we state our reasons for extending the application of this Part to proceedings with a jury.⁸

9. Part IIA is inadequate as an exception under which business records may be admitted as evidence for a number of reasons. The main reason is that the great bulk of business records do not fall within the two categories of documents which it makes admissible. These are statements made in conformity with section 14B (4) by a person of a description mentioned in either paragraph (a) or (b) of section 14B (1) (i).

10. The requirement in section 14B (1) (i) that the statement be made by a person in a document, and the definition of document in section 14A, take documents produced by computers outside the exception. A statement in a document produced by a computer as a result of automatic data processing cannot sensibly be said to have been made

Evidence Act, 1898, Part IV

25. Part IV of the Evidence Act facilitates the admission as evidence of entries in bankers' books. The provisions of this Part should be seen as an exception to the rule against hearsay of the same type as that which we propose. However, it does not contain a condition that the entries be based on information supplied in the course of business by a person who had or might reasonably be supposed to have had personal knowledge of the

matters in the information. In the case of bankers' books such a condition is not necessary to ensure that the entries made admissible are reliable.

FOOTNOTES

¹ *Warner v. The Womens Hospital* [1954] V.L.R. 410.

² *Ibid.*, at p. 412.

³ Cross, p. 513.

⁴ Cross, p. 503.

⁵ See para. 24 of this Appendix as to entries in bankers' books.

⁶ (1940) 64 C.L.R. 282 at 303.

⁷ *Ibid.*, 304.

⁸ Paras 4 and 5.

Appendix F - Some Comparable Legislation in Other Australian States

1. In this appendix we comment on some legislation in other Australian States which affects the admissibility of statements in business records as evidence. We comment first on the provisions introduced into the Victorian Evidence Act 1958 by the Evidence (Documents) Act 1971. These provisions fall into three parts.

2. First, section 55 provides for the admissibility of documentary evidence. In civil proceedings a statement in a document is admissible if made by a person having personal knowledge of the matters in the statement. In civil and criminal proceedings a statement in a document is admissible if the document is, or forms part of, a business record made in the course of the business from information supplied by persons who had, or may reasonably be supposed to have had, personal knowledge of the matters dealt with in the information. In each case admissibility is conditional upon the person who made, the statement or who supplied the information being called as a witness or it being shown that his evidence is not available for one of the reasons specified in the section. The court may, in its discretion, admit such a statement notwithstanding that such a person is available but is not called as a witness. It thus follows the course which we criticise in relation to civil proceedings in paragraphs 54 and 55 of the Report. Section 55 is a modernized form of Parts IIA and IIB of the Evidence Act, 1898, and serves the same purpose.

3. Secondly, section 55B¹ provides for the admissibility in civil and criminal proceedings of statements in documents produced by computers. The main conditions required for admissibility are that the document was produced during the period during which the computer was regularly used to store, and process information for the purpose of any activities regularly carried on over that period whether for profit or not; that over that period there was regularly supplied to the computer in the ordinary course of those activities information of the, kind contained in the statement or of the kind from which the information so contained is derived; and that the information contained in the statement reproduces or is derived from information supplied to the computer in the ordinary course of those activities. Fulfilment of any of the conditions of admissibility may be proved by a certificate purporting to be, signed by a person holding a responsible, position in relation to the computer or to the management of the relevant activities whichever is appropriate. The court may in its discretion reject any statement "if for any reason it appears to it to be inexpedient in the, interests of justice that the statement should be admitted".

4. A number of criticisms may be made of this provision. The first criticism is that, although there is a discretion to reject, there is no condition of admissibility which requires the information supplied to the computer to have any particular standard of reliability as is the case with statements in business records not produced by a computer which are admissible under section 55. There is no practical reason for not specifying a standard of reliability for the source material whether or not the record in question was produced by a computer. We think that, in failing to specify such a standard of reliability, section 55B goes further than is either necessary or desirable to, meet the practical necessity for the admission of statements in documents produced by computers.

5. The second criticism of section 55B is -that the provision for proof by certificate that the conditions of admissibility have been fulfilled goes too far. A party against whom such a certificate was tendered might often find it difficult to claim effectively that oral evidence of the matters in the certificate should have been called because he would ordinarily have no, knowledge or means of knowledge of the record-keeping process in question. We think that an opportunity for cross-examination should be given by requiring oral or affidavit evidence of such matters.²

6. The third criticism of section 55B involves a comparison with section 55. It depends upon the fact that any system of records may be kept or produced either by the use of computers or by other means. The different standards of reliability imposed by sections 55 and 55B produce anomalous results. Take for example hospital

records. These are now kept by use of computers in some hospitals in circumstances which would satisfy all the requirements of admissibility imposed by section 55B. A statement in a print-out of such a record would be admissible as evidence of the facts asserted. If the records were kept in the usual written form, and the same statement appeared in them, the statement would not be admissible under section 55 unless there was evidence that the person who made the entry or supplied the information from which it was made had personal knowledge and was not available as a witness, or pursuant to an exercise of the court's discretion. Another example is provided by credit bureau operations. A print-out from the records of a credit bureau if kept by use of a computer would be admissible under section 55B as evidence of the facts asserted. But if the records were kept in a written form, a statement in the records would not be admissible under section 55 without proof of knowledge and unavailability of the person who, supplied the information, or in the discretion of the court as mentioned above. A print-out of the closing price of shares on the New York Stock Exchange made by the Sydney Stock Exchange computer would be admissible evidence under section 55B of that fact, a similar statement in the New York Times would not. The law of evidence requires reform, but not by providing that a statement in a document produced by a computer should be admissible when the same statement in a document produced by equally reliable means is not.

7. The third provision made by the Victorian Evidence (Documents) Act 1971, was to substitute in place of the provisions of the Evidence Act 1958 relating to the admissibility of entries in bankers' books, a general provision that an entry in a book of account used in the ordinary business of a bank or in the ordinary course of any other business "shall be *prima facie* evidence of the matters transactions and accounts therein recorded". The term business is widely defined. See sections 3, 58A-58J.

8. The only distinction in substance between these provisions and the business records exceptions we proposed is that our proposal extends to the whole class of business records, not only to books of account and, therefore, contains additional specific safeguards of reliability. It might be said that books of account, as defined, are inherently more trustworthy than other business records. But is say a stock card of so much greater inherent reliability than say a hospital record, a firestation log, a police accident report or an employment record recording information supplied in the course of business by a person engaged in the business having personal knowledge of the matters in question, that the former should be admissible and the latter not? Both books of account and other business records may vary greatly in reliability. The better course is that all should be made admissible, reliability becoming a question of weight only.

9. The Tasmanian Evidence Act, 1906-1967, contains provisions in similar terms to Part IIA of the Evidence Act, 1898. In 1966 a new section 40A was inserted which created an exception to the hearsay rule for business records applicable to both civil and criminal proceedings, in very much the same terms as that in the United States Uniform Rules of Evidence. We think that an amendment in such terms must invite the raising in a local context of all the legal questions on the American statutory exceptions which have been raised in the American courts and some of which remain undecided. To adopt the language of any of the American exceptions seems to us to invite continuous reference to American case law. This has indeed been the tendency in Tasmania. This is highly inconvenient because of the bulk and limited accessibility of this material.³

10. The South Australian Evidence Act, 1929-1972, contains provisions in the same terms as Part IIA of the Evidence Act, 1898. In 1972, a new section 45a⁴ was inserted providing a business records exception applicable to both civil and criminal proceedings. Subsections (1), (2) and (3) of that section are as follows:

(1) An apparently genuine document purporting to be a business record-

- (a) shall be admissible in evidence without further proof; and
- (b) shall be evidence of any fact stated in the record, or any fact which may be inferred from the record (whether the inference arises wholly from the matters contained in the record, or from that matter in conjunction with other evidence).

(2) A document shall not be admitted in evidence under this section if the court is of the opinion-

- (a) that the person by, or at whose direction the document was prepared can and should be called by the party tendering the document to give evidence of the matters contained in the document;

- (b) that the evidentiary weight of the document is slight and is outweighed by the prejudice that might result to any of the parties from the admission of the document in evidence; or
- (c) that it would be otherwise contrary to the interests of justice to admit the document in evidence.

(3) For the purpose of determining the evidentiary weight, if any, of a document admitted in evidence under this section, consideration shall be given to the source from which the document is produced, the safeguards (if any) that have been taken to ensure its accuracy, and any other relevant matters.

11. A number of criticisms may be made of this provision. We do not think that it is sufficiently certain to enable parties to prepare their cases for trial. The absence of any assurance of reliability as a condition of admissibility and the completely unfettered discretion to exclude must give rise to a great deal of uncertainty as to what documents will be admissible in any particular case. This uncertainty is unlikely to be cured by decisions of the courts because each decision must depend upon its own peculiar facts. In the course of time, no doubt, a general understanding of what will or will not be admitted by particular judges will be gained by the legal profession. But we think that any such amendment should by its terms give more guidance both to the courts and to the legal profession as to what documents should be admissible. We also think that section 40a is open to criticism that it will leave for decision many of the questions which have arisen in the United States, for instance, is a diagnosis in a hospital record admissible? Such a question should not, in the light of the experience of the working of statutory business records exceptions in that country, be left available for argument. These are we think, most important criticisms of a provision intended to apply in all courts, in civil and criminal proceedings, in commercial arbitrations and in any other proceedings where the rules of evidence apply. However, the aim of section 45a is the same as that of our recommendations namely, to provide for the practical necessity to admit business records as evidence.

12. Also in 1972 new sections 59a and 59b were inserted to provide for the admissibility of "computer output" in any civil proceedings. These appear to be derived from section 5 of the English Civil Evidence Act 1968 but are somewhat different in substance and drafting. These two sections do not call for special comment.

13. We do not comment separately on the Evidence Acts of the other States and on the Australian Capital Territory Evidence Ordinance because each of these contains provisions which correspond to the Victorian or New South Wales Acts.

FOOTNOTES

¹ S.55B is taken from s. 5 of the English Civil Evidence Act 1968.

² Admissibility under s. 5 of the English Civil Evidence Act 1968 is subject to rules of court which, in the case of the High Court, require the appropriate persons to be available for cross-examination if desired. See Order 39i rules 20-26.

³ In the only reported decision on the section, *O'Donnell v. Dakin* [1966] Tas. L.R. 87, *Burbury*, C.J., after an examination of American decisions and texts, and observing that some cases were not available in Hobart, held that an entry in a hospital record as to sobriety fell within the section. In an unreported decision, *Mather and Deegan v. Morgan*, 12th July, 1971, the Full Court in deciding whether entries in documents were made in the regular course of business referred to Wigmore, McCormick: Evidence (a leading American textbook), and to an article "Revised Business Entry Statutes, Theory and Practice", 48 Columbia Law Review, 920.

⁴ By Act No. 53 of 1972.

Appendix G - List Of Certain Bodies To Whom Working Paper Was Sent

Australian Bankers' Association. ²
Australian Computer Society Incorporated.
A.M.P. Society.
Chamber of Manufacturers of N.S.W.
Council for Civil Liberties.
Commercial Law Association.
Government Insurance Office of New South Wales. ²
I.B.M. Australia Limited. ²
Institute of Chartered Accountants in Australia (N.S.W. Branch). ²
Institute of Directors in Australia. ²
Insurance Brokers Association of Australia.
M.L.C. Assurance Co. Ltd.
Retail Traders Association of New South Wales.
Sydney Chamber of Commerce. ²
Sydney Stock Exchange Limited.

FOOTNOTES

¹ See Report, para. 8, for other persons and bodies to whom it was sent.

² Responded to invitation to comment.

Appendix H - Rules of Evidence for the United States Courts and Magistrates

RULES CONCERNING ADMISSIBILITY OF BUSINESS RECORDS

RULE 802

Hearsay Rule

Hearsay is not admissible except as provided by these rules or by other rules adopted by the Supreme Court or by Act of Congress.

RULE 803

Hearsay Exceptions: Availability of Declarant Immaterial

The following are not excluded by the hearsay rule, even though the declarant is available as a witness:

(6) Records of Regularly Conducted Activity. A memorandum, report, record, or data compilation, in any form, of acts, events, conditions, opinions, or diagnoses, made at or near the time by, or from information transmitted by, a person with knowledge, all in the course of a regularly conducted activity, as shown by the testimony of the custodian or other qualified witness, unless the sources of information or other circumstances indicate lack of trustworthiness.

(7) Absence of Entry in Records of Regularly Conducted Activity. Evidence that a matter is not included in the memoranda, reports, records, or data compilations, in any form, of a regularly conducted activity, to prove, the nonoccurrence or nonexistence of the matter, if the matter was of a kind of which a memorandum, report, record, or data compilation was regularly made and preserved, unless the sources of information or other circumstances indicate lack of trustworthiness.

(24) Other Exceptions. A statement not specifically covered by any of the foregoing exceptions but having comparable circumstantial guarantees of trustworthiness.

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<i>Bishop of Durham v. Beaumont</i> , 1 Camp. 206		B57
<i>Callis v. Gunn</i> [1964] 1 Q.B. 495		B87
<i>Cataldi v. Commissioner for Government Transport</i> [1970] 1 N.S.W.R. 65		B39
<i>Commissioner for Motor Transport v. Collier Moat Ltd.</i> (1960) 60 S.R. 238	60	B48
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<i>Lakeman v. Finlay</i> (1959) 59 S.R. (N.S.W.) 5		B19
<i>Mather and Deegan v. Morgan</i> , Tas. Sup. Ct 12-7-71		F9
<i>Mills v. Mills</i> (1920) 36 T.L.R. 772		E14
<i>Myers v. Director of public Prosecutions</i> (1965) A.C. 1001		E20
<i>Newton v. Piper</i> [1968] 1 N.S.W.R. 42		E12
<i>O'Donnell v. Dakin</i> [1966] Tas. L.R. 87		E9
<i>Potts v. Miller</i> (1940) 64 C.L.R. 282		E7
<i>R. v. Matthews and Ford</i> [1972] V.R. 3		B65
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<i>Reed v. Harris</i> , 7 Car. & P. 330	60	B57
<i>Stapleton v. Clough</i> , 2 E. & B. 933	60	B57
<i>Statue of Liberty, The</i> [1968] 1 W.L.R. 739		B30
<i>Stobart v. Dryden</i> , 1 M. & W. 615		B57
<i>Tobias v. Allen No. 2</i> [1957] V.R. 221		B25
<i>Walker v. Stephenson</i> , 3 Esp. 284		B57
<i>Warner v. The Womens Hospital</i> [1954] V.L.R. 410		E2

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1898 No.11	Evidence Act, 1898- s. 3 s. 14B s. 14C (1) s. 14C (2) s. 14CA s. 14CB s. 14CC s. 44 s. 53	37 23, 24, 37, 54 25	B1-3 B4, E8-19 B49 B86 E21, 22 E20-24 B49 E25 B24
1941 No.55	Agricultural Holdings Act, 1941- s. 53s. 38 (2) (b)		B96
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1 Geo. V. c20	Evidence Act 1910-1965- ss. 78, 79 s. 40A	61	B4 F9
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1929 No.7	Evidence Act 1929-1972-		

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