
This item was submitted to [Loughborough's Research Repository](#) by the author.
Items in Figshare are protected by copyright, with all rights reserved, unless otherwise indicated.

The use of computers in the collection management procedures (technical services) at the University of Guyana Library

PLEASE CITE THE PUBLISHED VERSION

PUBLISHER

Loughborough University of Technology

LICENCE

CC BY-NC 4.0

REPOSITORY RECORD

London, Hetty F.. 2021. "The Use of Computers in the Collection Management Procedures (technical Services) at the University of Guyana Library". Loughborough University.
<https://doi.org/10.26174/thesis.lboro.14350697.v1>.

THE USE OF COMPUTERS IN THE COLLECTION MANAGEMENT
PROCEDURES (TECHNICAL SERVICES) AT THE
UNIVERSITY OF GUYANA LIBRARY

by

HETTY FRANCINA LONDON

A Master's Dissertation, submitted in partial fulfilment
of the requirements for the award of the Master of Arts degree
of the Loughborough University of Technology

September 1992

Supervisors: Professor J P Feather, MA (Oxford),
MA (Cambridge), PhD, FLA;
Mr A J Poulter, BA, MA, MSc, ALA.

Department of Information and Library Studies

c Hetty London 1992

ABSTRACT

A study of the introduction of computers to the Collection Management Procedures (Technical Services), at the University of Guyana Library. The manual systems at the University Library are briefly outlined and an overview of the University and the Library; the difficulties and problems experienced are discussed.

An overview on the use of computers in collection management, as discussed in the literature on the subject, is dealt with, as well as a sample of libraries using computers in this area is also outlined.

The actual application of computers to the procedures in operation at U.G. library is discussed, using one of the two of the software packages evaluated. Features which obtain in the software and which could be applied to the procedures at U.G. Library, are also identified and discussed. Attempts to summarise the discussions in all the other and recommendations for the successful operation of automation at U.G. Library.

Finally, a summary of the points discussed and recommendations for the possible introduction of computers to the manual systems at the University of Guyana Library is outlined.

TABLE OF CONTENTS

	Page No.
ACKNOWLEDGEMENTS	iii
LIST OF APPENDICES	iv
CHAPTER 1: INTRODUCTION	1
1.1. Methodology	3
1.2. Objectives of the Study	3
1.3. Arrangement of Content	4
1.4. Acronyms	5
CHAPTER 2: OVERVIEW - UNIVERSITY OF GUYANA AND THE	
UNIVERSITY OF GUYANA LIBRARY	6
2.1. The University of Guyana	6
2.2. The Operations and Systems of the Technical	
Services Department	9
CHAPTER 3: OVERVIEW - USE OF COMPUTERS IN THE	
COLLECTION MANAGEMENT PROCEDURES	16
3.1. Definition of Terms	16
3.2. Sample Library Systems	21
3.3. Libraries using Computers in the	
Collection Management Procedures	26

CHAPTER 4: APPLICATION OF COMPUTERS TO THE TECHNICAL SERVICES - UNIVERSITY OF GUYANA LIBRARY	37
4.1. Areas where Computer application can be of assistance	37
4.2. How can Computers help?	38
4.3. Computer Application to Technical Services	48
4.4. Sample of Features of VTLS which can be applied in Technical Services - U.G.L.	53
 CHAPTER 5: SUMMARY AND RECOMMENDATIONS	 70
5.1. Summary	70
5.2. Recommendations	75
5.3. Requirements	76
 BIBLIOGRAPHY	 81
 APPENDICES	 85

ACKNOWLEDGEMENTS

I would like to thank the Vice-Chancellor of the University of Guyana, and University Librarian for affording me the opportunity to pursue this programme, by granting me the necessary leave from my job. My thanks also go out to my sponsors, the Association of Commonwealth Universities and the British Council, for their support during the year.

My thanks and gratitude are also extended to my supervisors, Professor J P Feather and Mr Alan J Poulter, for their unstinted guidance and assistance in the preparation of this thesis. I would also like to thank my colleagues and friends of the University of Guyana Library for their assistance and help; Mr Fred Guy and staff of the National Library of Scotland; Staff at the CARICOM Documentation Centre in Guyana; the Systems Officer at the Main Library, U.W.I., St Augustine Campus, Trinidad and Tobago; and all those other persons and organisations who assisted me in the preparation of this thesis. I would also like to express my heartfelt thanks to the typist, Mrs Sheila Mercer, for helping with the typing.

LIST OF APPENDICES

	Page No.
1. University of Guyana Library Organisation Chart - Staffing.	85
2. Breakdown of staff in Technical Services Department.	87
3. Breakdown of Library Budget - 1989/90; 1990/91.	89
4. Manual Procedures of Technical Services:- (a) Acquisitions - General Ordering Procedures (b) Acquisitions - Procedures relating to Serials Ordering (c) Cataloguing Procedures (d) Bindery Procedures	91
5. ISX/CIRC of CDS/ISIS System in use at CARCOM Documentation Centre	105
6. Examples of VILS Screens:- 1(a) What is VILS-89 (b) VILS-89 Subsystems (c) Special Features of VILS-89 (d) Other VILS Products 2(a) Author Menu (General and Intermediate Screens) (b) Authority Record Menu (c) Subject Menu (d) Subject Author Menu (e) See/See also References	108

7.	Floor Plan of U.G.L.	125
8.	Summary of I.D.B. Consultant's Recommendations	129
9.	Automated Requirements for Technical Services	134

CHAPTER ONE

INTRODUCTION

The introduction of computers into the operations of library systems has brought about quite a change. Computers are being used in such areas as circulation, bibliographic compilation, literature searching and many other areas.

Libraries serving institutions of higher education have either fully automated or are in the process of implementing fully automated library systems. This approach is the development goal of most libraries, who have the interest of their users at heart. Many of these libraries might be experiencing various difficulties such as shortage of staff, lack of space, and so on in their operations. Computers are seen as a means of alleviating some of these problem areas, and at the same time expanding and improving the services offered to the patrons.

The University of Guyana Library is about to take this step to introduce computers to its procedures. This decision is further supported by recommendations from an IDB Consultant who was

given the task to investigate this possibility becoming a reality.

This study is therefore concerned with computer application the collection management procedures in the Technical Services Department of the University of Guyana Library. This application is being viewed with much optimism both by the staff in the library and the rest of the University Community, as they too see this introduction as a way of handling some of the many problems which now exist in the section, and also of improving the services to the patrons.

It is envisaged that the system selected should adequately provide for the needs of Acquisitions, Cataloguing, Serial Control and the Bindery. It is also hoped that the data originating from the Technical Services area, can be used in Reader Services, possibly in the provision of an On-line Public Access Services (OPACS) in the Circulation Area. In short, the intention is to have a fully integrated system operating in Technical Services and ultimately the entire library.

1.1. METHODOLOGY

In this study, comparisons will also be made of two systems which are being considered for use in the Library. These are CDS/ISIS, a UNESCO Information/Automation package prepared by Virginia Tech Library Systems in Virginia, United States of America. The use of either of these two systems has been suggested by the Inter-American Development Bank Consultant in his report to IDB/University of Guyana, University Library Consultancy, 14 August - 8 September, 1989.

1.2. OBJECTIVES OF THE STUDY

The objectives of the study were:

- To analyse the manual systems being used in the Collection Management procedures in the Technical Services Department, University of Guyana Library;
- To show ways how the systems can be improved using computers;

- To reduce the duplication of files and records in various areas in the section;
- To provide a wide access to the library's collection of books, pamphlets, maps, manuscripts, serials and other non-book materials such as tapes, microfiches, and others.

1.3. ARRANGEMENT OF CONTENT

Chapter one discusses briefly some of the areas to be dealt with in the study and outlines the objectives. Chapter two gives an overview of the University of Guyana and the University Library. The range of services offered by the Library is discussed as well as the operations of the Technical Services Department; staffing; the difficulties experienced and possible solution(s) to these problems suggested. An overview of the use of computers in Collection Management Procedures as highlighted in the literature on this subject, and samples of libraries using automation in this area is discussed in chapter three. In chapter four, the discussion is centred on the actual application of computers to the operations in the Technical Services Department of the University of Guyana Library. Features which can be so applied are identified in one of the systems discussed in chapter three. This application is based

on the problems identified in chapter two. Finally, chapter five gives a summary and recommendations for the further improvement of the use of computers to the Technical Services Department.

1.4. ACRONYMS

Throughout this study the following acronyms will be used:-

CDS/ISIS	-	Computerised Documentation Systems/ Integrated Set of Information Systems
VILS	-	Virginia Tech Library Systems
U.G.L	-	University of Guyana Library
C.R.L	-	Caribbean Research Library
CARICOM	-	Caribbean Community Secretariat Documentation Centre
U.W.I	-	University of the West Indies Library
N.L.S	-	National Library of Scotland

CHAPTER 2

OVERVIEW - UNIVERSITY OF GUYANA AND THE UNIVERSITY OF GUYANA LIBRARY

INTRODUCTION

This chapter will give a brief overview of the University of Guyana and the University of Guyana Library. It describes how and why the institution was established; the number of staff and students and the disciplines offered to Guyanese and foreigners. Other things discussed include the services offered to the University community by the Library; the operations of the Technical Services Department - its manual systems; staffing in the Technical Services; difficulties experienced in operating this department; and, also the possible introduction of computers to the manual systems.

2.1. THE UNIVERSITY OF GUYANA

The University of Guyana was established by an Act of Statute in 1963, the aims of which are as follows: "... to provide a place

of education, learning and research of a standard required and expected of a University of the highest standard ..." (Extract from the University of Guyana Act, Chapter 39:2).

The University is the Highest Institution of learning in Guyana, and is situated in the capital city of Georgetown about two miles inland from the sea. It has a staff of over 3,000 comprising of academic, administrative, clerical and maintenance personnel. The student population is over 2,000 comprising of undergraduates, postgraduates and research levels.

University of Guyana has the following Faculties: Arts, Education, Social Sciences, Science and Technology which is made up of Natural Sciences, Technology, Agriculture, Mining, among others. There is also an Institute of Adult and Continuing Education, which caters for other ancillary programmes offered by the institution, for example, Distance Learning, Teaching of English as a foreign language, to name a few.

The University administration has recently taken a decision to automate all its files and records. This is one of the priorities in the on-going programme of expansion and improvement at the institution.

This decision to automate systems across the campus comes as a result of recommendations made by IDB and other consultants.

These consultants were brought to the University to evaluate existing procedures and operations and to make suitable workable suggestions which should improve and enhance the services offered to the University community.

Through a technical assistance arrangement with the IDB, several PCs have been acquired and placed in key administrative areas and departments of the institution, namely Personnel, the Bursary, Examination and Admission. A few have also been placed in one or two Faculties - Natural Sciences and Technology.

The University Library is one of the key areas which is to have automation introduced to its operations. As mentioned earlier, this application is the basis of this study, and more details will be given in ensuing chapters.

2.1.2. THE UNIVERSITY OF GUYANA LIBRARY

The University of Guyana Library was established to support the University in its objectives of pursuing teaching and research both in Guyana and overseas. One primary objective of the Library is therefore to make its collection readily accessible and available for use by the University community.

The University Library has a very large collection of both book and non-book materials, including rare items and historical maps of the country. There are three main divisions in the Library - Technical Services, Reader Services and the Caribbean Research

Library. Readers Services is further subdivided into three Subject Divisions - Humanities and Education, Social Sciences, Science and Technology.

The Caribbean Research Library is closed access likewise the Serials Collections. C.R.L. as its name denotes, is the repository of all publications on Guyana (this includes copyright materials) and the Caribbean.

The University of Guyana Library offers a service mainly to the University community. Private researchers and students from other educational institutions are allowed to use the facilities at the discretion of the University Librarian, on payment of a cautionary deposit depending on the status of the user and request made for use of the Library. This category of patrons is only given Reading Room privileges and is not allowed to borrow materials from the Library.

2.2. THE OPERATIONS AND SYSTEMS OF THE TECHNICAL SERVICES DEPARTMENT

2.2.1.

Most Library services are divided into two broad areas - Readers' Services and Technical Services. The Readers' Services

Division has direct contact with the patrons, while Technical Services does not have the same direct contact with the patrons. Technical Services is concerned with acquiring and processing materials for use by the patrons.

Service to the University community is one of the main objectives of the Library, which begins in the Technical Services Department. Without the support of this section, it would be impossible for the Library to offer any kind of service to its users.

The activities of this department revolve around three basic functions:-

- (a) Purchasing library materials -
Acquisitions Department;
- (b) Organising and processing the materials
to be used by the University Community -
Cataloguing;
- (c) Maintaining the collection and the records
i.e. the main public catalogues and the
shelf list, which provides the user ready
access to the Library's collections, and
the bindery.

The fact that the Library is always experiencing staff problems at all levels, this situation makes it difficult for the day-to-day operations to be conducted efficiently and effectively. The

other major problem area facing the Library is one of space, both for the staff to work in and the students using the reading rooms of the Library. One might suggest that more staff be recruited and larger work areas be created, but these would not necessarily help the situation. A similar situation will no doubt arise in the near future especially since both the student intake and the introduction of new programmes at the University is increasing every academic year. (See Library Organisation Chart - Staffing - Appendix I).

The operations in the Technical Services Department - the searching, typing of orders in Acquisitions, masters and cards in Cataloguing Department, filing of cards and on-order slips, maintaining files of correspondence, Bindery/Preservation records and statistics, etc., are all done manually.

The Technical Services Department is supervised by the Head of Technical Services, who delegates duties to the other staff through (a) the Head of Cataloguing and (b) the Head of Acquisitions respectively. (See Technical Services Staff Chart for breakdown of present staffing situation - Appendix II).

There is also the ever-present problem of scarce funds which Libraries everywhere are experiencing. This scarcity makes it difficult for institutions, more so Libraries, to adequately provide the kind of accommodation needed by its staff, and

services for its patrons. (See Appendix III for breakdown of Library Budget.

2.2.2. ACQUISITIONS DEPARTMENT

The provision of a service for the University Community really begins in the Acquisitions Department. This department manages the budget of the Library and the Faculties in relation to buying most, if not all, of the relevant materials needed for teaching and research. The Collection Management procedures begin here with the selection of materials to be used by both students and lecturers.

The selection of materials is done by both the Subject Division Librarians and the teaching staff in the Faculties. This process is carried out using publishers blurbs and scanning other relevant publications, e.g. journals, newspapers, etc. for notification of new publications.

Within the Acquisitions Department there are a number of other areas and sections which come under the supervision of this department. These are:-

- (i) Gifts and Exchanges
- (ii) Serials
- (iii) Bindery/Preservation.

2.2.3. CATALOGUING DEPARTMENT

This section is responsible for cataloguing and classification which includes determination of authorship, description of items, identification of subject headings and classification numbers. Classification and cataloguing is done using the Library of Congress Classification Scheme, the holdings of which, to the time of writing this study, is very much out of date. Steps are now being taken to update these schedules and other important tools which are vital to the smooth operation of the Technical Services as a whole.

To complete the process of cataloguing and classification, this department is also responsible for the physical preparation of the materials for use by the patrons - lettering the spine, preparing date due labels, etc. Maintenance of the card catalogues and the shelf list records is also done here.

As mentioned above, these procedures are all done manually, and no doubt is time consuming and tedious. It often results in deadlines not being met on time. It is important to note that the timings are not consistent as production in Technical Services is affected by a number of factors - manpower, stationery, power supply, among others.

It is hoped that with the introduction of computers to these manual and other systems, there will be some improvement in this

department (See Appendix IV for manual procedures of the Technical Services Department).

There is a conflict between the projections of the University of Guyana Library staff organisation chart and the present situation in the Technical Services Department. As indicated by the Technical Services staff chart, there are a number of unfilled vacancies. This is severely hampering the smooth operations of this department, thus, the application of computers to the present manual systems will greatly enhance and improve the operations in this department. For example, in the cataloguing and classification of materials where there is a backlog. The applications and benefits will be discussed in greater detail in chapter 4.

NOTES - CHAPTER TWO

1. Information used in this chapter is taken in part from the University of Guyana Handbook, 1984/85.
2. University of Guyana Act: chap. 39:02, Laws of Guyana.
3. Notes on the operations of Technical Services, University of Guyana.

CHAPTER THREE

OVERVIEW - USE OF COMPUTERS IN THE COLLECTION MANAGEMENT PROCEDURES

INTRODUCTION

The purpose of this chapter is to give an overview of the use of computers in the collection management procedures (Technical Services) as highlighted in the literature on the subject.

3.1. DEFINITION OF TERMS

What is meant by the terms "Collection Management and Collection Development?" The activities carried out in the Technical Services Department are often identified by either of these two synonymous terms. Frederick C Lynden in an article in the American Library Association Yearbook, 1980, (ALA Yearbook) makes this comment about the terms:

Collection Development is no longer a suitable title for the series of activities which now take place in libraries. The title collection management describes more accurately the process now taking place ... The collection manager is concerned not only with

selection, but also with access (resources sharing), not only with collection management maintenance and preservation, not only with budget, but also with the politics of use, and not only with weeding, but also with storage alternatives. Selection decisions are no longer determined solely by local issues, but are affected by state, national, and international considerations. (1)

More recently, Clare Jenkins and Mary Morley have sought to establish clearer distinctions between the terms in their book

Collection Management in Academic Libraries:

Collection development is perceived as a concept more appropriate to earlier times of expansion in higher education and academic libraries. It implies building and growing, dealing with the selection and acquisition of library materials. Collection management is a more demanding concept, which goes beyond a policy of acquiring materials, to policies on the housing, preservation and storage weeding and discard of stock. Rather than selection and acquisition, collection management emphasises the systematic maintenance and management of a library's existing collection. (2)

3.1.2. PRINCIPLES OF COLLECTION MANAGEMENT

The definitions quoted in 3.1. give an indication of how the collection management principles operate. These principles which are common to all libraries, fall into three distinct areas: how to acquire what - selection and acquisition: how to treat it in the library - cataloguing and classification; and when to withdraw it to where - stock evaluation, weeding and storage, binding/preservation. These principles should operate

in close conjunction with the laid down principles and objectives of the library, and the governing institution.

For example, the operation of weeding the collection is one of the techniques used to keep a balance on the stock. It is also used as a means of evaluating the use made of the stock over a period of time. Materials are scrutinised and a decision taken to withdraw them from circulation. They might be withdrawn because they are dated; badly mutilated in one way or the other; they might no longer be relevant to the curriculum; or there might just be too many copies which are not being used.

However, having withdrawn these materials from the shelves, there are other related problems to be considered. These items have to be de-accessioned, records removed from the catalogues and the necessary notations made, lists of the materials removed compiled and, more important, whether they will be discarded completely, or where they will be stored for future use. Where and how to store the materials withdrawn from stock is usually a problem, since many libraries do not have the space to accommodate this operation.

Another principle of collection management is that of binding/preservation. This is a very important area which must be given serious attention, since failure to do so can result in

the depletion of the stock. A binding/preservation policy should be in operation, and the staff made aware of its usefulness, and the procedures surrounding this policy. Preservation policies should have provision for dealing with such issues as floods, fires, leaking roofs, mutilation of materials by the users.

It is concern for the management of the collection which has forced library administrations to look for new techniques in managing their respective collections. However, libraries are faced with various constraints such as limited funds, shortage of staff, and in the case of academic libraries, they have to contend with changes in the curriculum, research selectivity, the expansion of higher education, and the introduction of new information media. These constraints therefore disrupt the smooth coordination of all the procedures in the Technical Services Department of any library.

An example of the constraint placed on libraries by way of scarce funds, is their inability to purchase much needed materials for use by the patrons. The present economic situation has caused library budgets to be severely cut, thus making it impossible to acquire materials. Libraries are being forced to reduce their opening hours, and many useful services to the patrons are withdrawn. Some libraries have been forced

to reduce their staff to a bare minimum, and other cost cutting measures implemented.

In relation to the expansion of higher education, several changes take place, in the line of mergers between universities, polytechnics become universities, and newer methods of teaching are introduced. Example of the introduction of new courses is the Distance Learning Programme. This programme makes use of non-book materials such as tapes, videos, slides, together with the traditional book materials to promote its work. It is usually targeted to those persons who are unable for various reasons to formally attend an institution of higher learning. Libraries are expected to support such programmes, by the provision of materials for the students.

However, the limited staff to process these materials makes it difficult for libraries to adequately provide the service needed, thus, they are forced to look for ways to do so. The application of computers to operations in the libraries can assist to make this possible.

3.2. SAMPLE LIBRARY SYSTEMS

One method used to make the collections of libraries readily available and accessible to users is through the application of computers to the collection management principles. This new technology has had quite an impact on library operations. As indicated by Morley and Jenkins,

automated housekeeping procedures enable librarians to manage daily routines more efficiently, while providing them with detailed and specific management information on library stock and the use made of it, which can be used to assist in the decision-making process and for performance monitoring. (3)

The use of computers in collection management is an important way of improving these procedures and also a means of accomplishing work already being done manually. Items can now be processed at a fraction of the time once required for this. Examples of the use of computers in improving collection management tasks are many and varied. Many institutions in both the developed and in some developing countries have been using this technology to their benefit. In the United Kingdom and the United States, shared cooperative cataloguing schemes have been in operation for some time.

Computer services are readily available to libraries these days and have been in circulation since around the 1960s. Sources

from which library automation can be had include BLCMP - originally Birmingham Library Cooperative Mechanisation Project now BLCMP (Library Services) Ltd; ORACLE Libraries; LIBERTAS, VTLS, and CDS/ISIS - Computerised Documentation Systems/Integrated Set of Information Systems.

3.2.1.

BLCMP is one of the first UK cooperative cataloguing services established to provide a shared circulation and cataloguing service. This cooperative was formed in 1969, and has since developed into an independent company offering integrated, stand-alone systems.

The BLCMP System BLS also has the following features: Acquisitions; Serials Control; Inter-Library loans and Management Information.⁽⁴⁾

3.2.2.

Another service available is that of LIBERTAS. This service was designed and developed by SLS (Information Systems) Ltd., formerly South-Western Academic Libraries Cooperative Automation Project (SWALCAP), and is the other cooperative established in 1969 to provide a shared circulation and cataloguing service to libraries in the UK. Like BLCMP (BLS), LIBERTAS has since developed into an independent company also offering integrated,

stand-alone library systems. LIBERTAS offers the following user-defined parameters in several languages - System; Circulation; Cataloguing; Acquisitions; Interlending; External Services and Serials Control. This service is in operation at the seven colleges of the University of London.⁽⁵⁾

3.2.3.

Other systems available to libraries, is that of Integrated Systems. This development of automated library systems has largely reflected prevailing trends in data processing technology. It is a forward move from batch to online operations and the use of dedicated, on-site minicomputers instead of remote time-shared mainframes. (Clayton)⁽⁶⁾

This integrated automation system has a common database and is processed by applications programmes which perform a range of technical support functions. Some of the functions performed include acquisitions, cataloguing, circulation, serials control and online public access catalogues. As Marlene Clayton in her book Managing Library Automation, points out,

... the establishment of an integrated system in which all functions share one database eliminates or reduces data redundancy and therefore reduces costs. The main advantage in having such a system is to the user of the library, who will be able to use the public access catalogue to find out the current status of all library material.
(7)

3.2.4.

ORACLE Libraries is another library automation system based on the ORACLE Relational Database Management System. Key features of the system are: Client server configurations - ORACLE relational database; Total Transaction Security; Cataloguing; OPAC; Circulation; Management Information and Reporting; Inter-library loans; Serials and Acquisitions. The system will run on any ORACLE DBMS V6 - supported platform, with or without the transaction option. Preferred options include UNIX-based systems from IBM, ICI, Sequent and Sun, as well as PC compatibles running SCO UNIX.7.⁽⁸⁾

3.2.5.

Apart from those services using computers to aid manual systems, there are tasks which are carried out solely by computers, and which can aid the task in the Technical Service Department. These include networking facilities, and downloading information. A networking facility affords communication between the library and other areas on a campus, and also between libraries at various points. This communication can be done via electronic mail by means of which faculties and other users can get information relevant to their discipline and interests.

Downloading of information is done through the linking of a system with another system which has a database in a particular area. This interface between software systems allows users to search complete databases and download needed data speedily and easily for both editing purposes and adding local information to the library concerned. Systems which offer this facility include OCLC - Online Computer Library Center of the USA; Research Libraries Information (RLIN), and others. Data which can be downloaded include those needed in the cataloguing and classification section of libraries.

Many of these systems report on all the levels of library activities and lend themselves well to collection management needs. Library automation systems, as they are also called, are available in different features, some of which are stand-alone, some embody telecommunication networks, and others are distributed.

James E Rush in his article Library Automation Systems and Networks, describes each of these systems thus:

A stand-alone system is one in which users at terminals interact with software and data files resident in a single processor. Systems that embody telecommunications networks will be linked to those in which the bulk of communications links exceed 50 miles in length. Distributed systems are those that are configured in such a way that substantial portions of the processing that supports a user are carried out on a different processor, but in a manner that is

transparent to the user. (9)

3.3. LIBRARIES USING COMPUTERS IN THE COLLECTION MANAGEMENT PROCEDURES

3.3.1.

The development of computer technology has become so sophisticated that it could change the existence of many professions, especially those that deal with the transfer, retrieval or storage of information. Libraries are therefore seen as important agencies which can make full use of the facilities offered by the advent of computer technology in managing the flow of information.

Many libraries have already introduced computers to their daily operations. These applications are proving successful and have resulted in cutting down on the amount of time and effort used to perform manual tasks. The most popular area of the library to have computers applied to its operations is circulation. For a long time, computer application to libraries was only considered in this area. However, computers are now being applied to other sections. Chief among these are procedures of the Technical Services (Collection Management Procedures).

Libraries which have introduced this technology to technical services include the National Library of Scotland (NLS) in Edinburgh; the Caribbean Community Secretariat Documentation Centre (CARICOM Documentation Centre) in Georgetown, Guyana; the Main University Library and the Eric Williams Medical Science Library at the University of the West Indies (U.W.I.), St Augustine, Trinidad and Tobago, and many others.

3.3.2. USE OF VTLS AT NATIONAL LIBRARY OF SCOTLAND

The National Library of Scotland (NLS) has applied VTLS software to its Technical Services Department, and other libraries under the supervision of the NLS.

NLS which is over 300 years old, "can best be regarded as a research library serving a wide clientele, including scholars, students and others".⁽¹⁰⁾ The library's collection is estimated at 5,000,000 items and 80,000 plus monographs are received annually, 60,000 of these are received under the Copyright Act and 20,000 are purchased. As a Copyright library, NLS is entitled to claim a copy of every publication of and about Scotland and the United Kingdom. It is the largest major research library in Scotland.

The main library which is situated at George IV Bridge, the Computer and Research in Lawn Market Street, and the Scottish

Science Library in the Causewayside Building about half a mile on the outskirts of the city, are all closed access and offer reading room facilities only to the patrons. The Scottish Science Library is a reference library offering a comprehensive service in its subject areas. It exists to meet the needs of the scientific, industrial and business community of Scotland.

NLS does not have a large staff, hence the administration had to find a means of handling the influx of materials received on a daily basis, and also the requests from the patrons.

The introduction of automation to the operations of the library has greatly assisted in both respects. It has helped in the preparation and processing of materials and information, in terms of time formerly spent doing these manually. The software in use at NLS is VTLS-89. This software has the capacity to accommodate large databases and offers the kind of facilities which a library as large as NLS would require - Cataloguing, OPACS links to OCLC, Circulation, Serials and other modules. The functionality of the system was found to be suitable, and in March 1987, the contract for the new system was signed with the successful vendor chosen - VTLS Inc. Use of the system for current cataloguing commenced in January 1988.

NLS is the only British library currently using this software. Training for the operation of the software was done at NLS by experts from VTLS, who came to the UK from Virginia, USA. Maintenance is done by a Systems Programmer who was also trained in this area by VTLS personnel. NLS is visited twice a year by experts from VTLS to deal with any major problems and queries which the staff cannot handle. Staff from the library are currently active in the VTLS European Users' Group, which has members from France, Sweden, Finland, Spain and Russia among others. This is an independent association of VTLS licence holders in Europe. It exists to:

- provide a forum for all European users to consider matters of mutual interests.
- collect and disseminate information on matters of interest to users.
- advise VTLS Inc. of the needs of European users for enhancements and software developments.
- promote co-operation between European and other users of VTLS software. (12)

NLS is using the Cataloguing, OPAC and Authority Control modules from VTLS, and is in the process of carrying out a retrospective conversion of the serials holdings of the library. This conversion is expected to be completed before the end of the year. The library also has plans to shortly introduce the Circulation module to the library. Staff at the various library sites have all expressed satisfaction with the operation of the software, and are anxiously awaiting the installation of the

updated version - VTLS 92. Staff are currently being trained to operate this new version. It has a subject screen which is an improvement to the OPAC being used by the patrons. The library has recently inputted the one millionth record on the data base, using the cataloguing module. NLS is allowed to utilise the following facilities provided through the use of VTLS:

- links to OCLC - search and down load information easily to VTLS system using U.S. MARC.
- All LC records is on optical laser discs which could be connected to the computer and also using CD-ROM system of LC.

3.3.3. LIBRARIES AT THE UNIVERSITY OF THE WEST INDIES

The Main library and the Medical Sciences library at the St Augustine campus, University of the West Indies, Trinidad and Tobago, are also using VTLS Software in areas of Technical Services. In an evaluation of the use of this software in Collection Management Procedures, staff of both libraries report that generally they have found VTLS "quite straightforward to use". They have indicated that the interface with the OPAC module in particular is also very easy. Initially they did experience some problems with inputting the field for serials, but that they have now mastered this.

VTLS allows any user to use any command to a

permission matrix set by the system manager and switching between functions is also simple. The OPAC has general on-line help together with a 'novice-user' mode. Generally we have been satisfied with the software in terms of reliability. (13)

The Acquisitions and Fund Accounting module has not yet been implemented at either of the two libraries. As in the case of NLS in Edinburgh, Scotland, the system was installed in both libraries at U.W.I. by personnel from VTLS Inc., Virginia. Maintenance and other backup services are done by VTLS whenever this is required. Training of the staff at both libraries was also done by VTLS personnel. Staff of the libraries are also looking forward to using the updated VTLS-92 shortly.

3.3.4. USE OF CDS/ISIS AT CARICOM SECRETARIAT

The Caribbean Community Documentation Centre is a part of the Information Services Section in the CARICOM Secretariat. The Secretariat which is situated in Georgetown, Guyana, was formed by the Treaty of Chaguaramas in 1973 as a movement towards unity in the Caribbean. It replaced the Caribbean Free Trade of Association (CARIFTA) founded in 1965.

CDS/ISIS has been used in the Documentation Centre since 1988 to develop several databases which include:

- holdings of the Documentation Centre - 1988 to present;
- records pertaining to the Regional ISBN System;

- the shelf list of holdings of the Documentation Centre;
- directory of Regional Caribbean Organisations; and
- select annotated bibliography of documents pertaining to Regional Integration.

The catalogue has been computerised, and an Information Retrieval Database compiled from periodical articles and reports. A Current Awareness Bulletin is also produced using the computerised facilities. The Documentation Centre began using the network version of ISIS (3.0) in 1991⁽¹⁴⁾.

According to reports the staff at the Documentation Centre have found the software useful in the retrieval of data. It is said to be very quick and efficient in both respects. However, they have also indicated that problems are being encountered in the application of the software in the Cataloguing module of CDS/ISIS.

While it is recognised that the principles as outlined in AACR 2 are still to be followed, we have found total application of the rules impossible, e.g.

- (i) Where there is a work of shared author-ship, all authors appear in the entry once they have been entered in the relevant field.
- (ii) We can no longer include the statement of responsibility since the system does not accommodate this.
- (iii) In recording the descriptors, we have found that when these are placed between triangular brackets '< >' and used with indexing techniques '2' no descriptors were being generated. This was discovered when we were using the 2.3 version. We have not ascertained whether this would still occur with the Network

Version.

- (iv) From time to time there have been problems with the option "inverted file services" where, due to the failure of the "update" option, a full inversion became necessary. (15)

The package is currently being used for recording bibliographic data in the Documentation Centre. It is envisaged that it will also be used for Accessions and Periodical controls in the near future. Another software which has been developed in house by Data Processing Unit is being used for Acquisitions.

The Documentation Centre is using another package ISX/CIRC developed by Bibliomatics Inc., Canada, to control the Loan and Return of books, files and other materials. This package is written in CDS/PASCAL, using standard functions supported by CDS/ISIS. (See Appendix V).

Maintenance and other technical assistance for CDS/ISIS is obtained from within the Secretariat through one of their consultants, who has had considerable experience in the application of the software, and from U.N. ECLAC - United Nations Economic Commission for Latin America and the Caribbean, which is the regional institution responsible for the distribution of the software and maintenance of the system. U.N. ECLAC office is based in Trinidad and Tobago.

3.3.5.

The system chosen is dependent on the requirement criteria of the library. These are discussed in detail in chapter 4. The geographical location of the University of Guyana Library, and also the prevailing economic situation of the University, are two of the other deciding factors in the choice of a suitable system. (See Appendix IX for details of Automated Requirements of the system).

REFERENCES - CHAPTER THREE

1. Lynden, Frederick C. Collection Management. IN: ALA Yearbook, 1980, p.117.
2. Collection management in academic libraries. Clare Jenkins and Mary Morley, eds., 1991, p.xvi.
3. Jenkins and Morley, ref.2, p.xix.
4. Foster, William. BLCMP: library automation, an introduction. Part 1. n.d.
5. Libertas: the world of information at your fingertips. n.d.
6. Clayton, Marlene. Managing library automation, 1989, p.24.
7. Ibid, p.25.
8. ORACLE Libraries, 1992.
9. Rush, James E. Library automation systems and networks. Advances in computers, Marshall C. Yovits, ed., 1982, 21, p.349-50.
10. Guy, Robin Frederick. Evolution of automation in national library: the experience of the National Library of Scotland from 1978-1989. Program, 1990, 24 (1), p.1.
11. Ibid, p....
12. European VTLS Users' Group Directory. Directory of member organisations, 1992, p.2.
13. Graham Taylor to Hetty London, 2 July 1992.
14. Maureen Newton to Hetty London, 11 June 1992.

15. Ibid.
16. Janke, Eberhard. UNESCO's CDS/ISIS data base as an information management tool in libraries. Information Trends - News Magazine, 1991, 4 (2).

CHAPTER FOUR

APPLICATION OF COMPUTERS TO THE TECHNICAL SERVICES

UNIVERSITY OF GUYANA LIBRARY

This chapter discusses the actual application of computers to the Collection Management Procedures in operation in the Technical Services Division at the University of Guyana Library. Areas within the department which are currently proving problematic, and how the application of computers can help in overcoming these difficulties, will be discussed.

4.1. AREAS WHERE COMPUTER APPLICATION CAN BE OF ASSISTANCE

As outlined in chapter 2, this department is divided into the following sections:

- Acquisitions Department, which in turn has responsibility for these other areas:
- Gifts and Exchanges;
- General acquisition and processing of serials for the respective Subject Divisions;

- Bindery/Preservation.
- Cataloguing - which processes all the materials for the library and maintains the catalogues - shelf list, author/title and subject.

4.2. HOW CAN COMPUTER APPLICATION HELP

4.2.1. ACQUISITIONS

The process of acquiring materials for the library involves several functions and decisions which relate to the type of items to be added to the stock.

As James E Rush points out, "for an academic library, decisions are based on curriculum, faculty and student needs, book reviews, selection committees, and staff judgement".⁽¹⁾ He continues, "some of these functions include much work in record keeping, invoice processing, accounting, receipt processing, claiming of missing items or unfilled orders, returns, fund transfer and so on".⁽²⁾ Many of these functions are carried out at the University of Guyana Library manually, and are very tedious and time consuming. However, as Rush indicates, "they are quite amenable to computer application".

The acquisition section which can be described as the miniature finance department, has all its relevant files stored in large cabinets, catalogue drawers, kalamazoos and card indexes, which occupy much valuable space. Because of the staffing situation in the library, it is difficult to maintain these adequately. Not to be forgotten is the repetitious typing which has to be done to produce copies of records for these files.

4.2.2. SAMPLE OF SOME OF THE ACQUISITION PROCEDURES

4.2.2.1. Ordering - Book & Non-Book Materials, Others

When requests are received from the subject divisions and faculties, they are checked against the library catalogues, on order and in process files to determine their status.

The suggestion order slips are checked initially in Books in Print to verify that the item is still in print, the bibliographic information contained on the slip is correct, and also to get an idea of the cost of the item for budgetary purposes.

These checks are necessary to avoid unnecessary duplication of orders. The checked suggestion order slips are then passed in batches to the typist. Order numbers are assigned to each order by the typist, who also makes a record of each order being sent off to the supplier in the On Order Book. The On Order Book

contains information thus - date order is typed, order number, vendor, and the signature of the typist. The order is number made up in the following way:

LIB 92/08/1-50, explained thus -

LIB - meaning Library;

92 - the year in which it is being typed;

08 - the month;

1-50 - the number of items being ordered.

The checking of the suggestion order slips and the completed orders are done by the Assistant Librarian in charge of book orders or the Senior Library Assistant.

Each order is signed by the Assistant Librarian in charge on behalf of the University Librarian. The file containing all orders is then sent to the University Librarian who makes the final check and gives consent for them to be despatched to the respective vendors.

For each batch of orders typed and despatched to the vendor slips are prepared and placed in the on order file, to await the arrival of the items ordered.

The application of computers to the manual procedures of the acquisition section, can help in alleviating many of the repetitive tasks like typing and filing. It can also assist in the storage and easy retrieval of information, thus eliminating

the need for the present bulky filing cabinets and catalogue trays.

Commenting on the application of computers to the acquisitions processes, Ian Lovecy says "computerisation of acquisitions has largely been driven by two aims: more efficient, quicker, and less staff intensive ordering and accessioning procedures; and the desire to reduce keyboarding by entering a record into the system at the earliest possible moment".(3)

4.2.2.2. Receiving

On the receipt of books, the invoices are checked against the slips in the order file. Books are also matched with their respective slips and then accessioned and ownership stamp put on each item. The books, together with a copy of the accession slip is then sent to the cataloguing section for further processing. The invoice is then sent to the Bursary for payment through the Library Accounts Clerk, who keeps a check of the status of funds being spent.

4.2.2.3. Gifts and Exchanges

This section is concerned with the acquisition and exchange of materials, both book and non-book, in the form of gifts. Legal deposit materials are also dealt with in this section of acquisitions. This programme entails quite a lot of record keeping, maintaining files of exchange partners both locally and

overseas, statistics of items received and sent out on exchange, compilation of lists of items received and those available for exchange. Responsibility for the day-to-day operation of this programme is that of a Senior Library Assistant.

Computer application in this module will assist in the compilation of the lists of items received and those available for exchange. At the moment this task is not easy to perform and is somewhat neglected. The maintenance of statistics and other records pertaining to this operation can be more easily stored and retrieved from the computer. It will eliminate the present need for filing cabinets and files in the department.

4.2.2.4. Serials Control

The acquisition, sorting, recording and general processing of all serial material is done in the Acquisitions Section. Requests for new serials is usually done by the Subject Division Librarians in conjunction with the teaching staff of the University. It should be noted here that the library's collections are arranged according to subject divisions - Humanities and Education; Social Sciences and Science and Technology.

The suggestion slips are checked in Ulrichs Periodical List for full bibliographical information, on order and in process files, and also the serials collection before any typing is done. When the order has been typed, it is verified by the Assistant

Librarian in charge of Serials, and then sent to the University Librarian for final vetting, before being sent off to the respective vendors.

4.2.2.5. Receiving

On receipt of the titles, they are checked against the invoices, on order slips, and entered in the Kalamazoo record file. Ownership stamps are placed on each item, and then they are sent to the respective subject divisions. Problems which arise in the processing of serials are difficult to keep track of in a manual system. Some of these are the changes in title and in some cases mergers, changes in publishers, changes in frequency, items which do not arrive on time, thus making claiming for them difficult.

These problem areas can be adequately dealt with in the serial module of an automation system. Many of the systems have provisions for this, and an example of this will be given in a later section of this chapter.

4.2.2.6. Bindery/Preservation

Traditionally, this area is attached to the Serials section. However, at the University of Guyana Library it is under the supervision of the Head of Acquisitions Department, in the absence of a Master Binder or an Assistant Librarian who has been specially trained to take charge of this unit.

This section is responsible for repairing and preserving all material in the library, and occasionally, from the university community. The bindery/preservation processes are all done manually. This includes the maintenance of statistics of items sent to and returned from the bindery, as well as the actual processes of binding and preservation.

In the case of the Bindery/Preservation processes, the application of computers can assist in tracking items sent to and returned from this area. It can also be used to make statistical evaluations of this area for future performance measurement, as part of the overall collection management procedures.

4.2.3. SAMPLE OF CATALOGUING PROCEDURES

The cataloguing section has full responsibility for the cataloguing and classification of all material housed in the University of Guyana Library.

Items are received in the section, sorted alphabetically by author or title and shelved in a temporary area to await processing. Those items which contain (C.I.P) Cataloguing in Process information are handled by Senior Library Assistants and Library Assistants of a senior grade. Those materials requiring original cataloguing and also those of a more difficult nature are handled by the senior professional staff.

All cataloguing and classification is checked by the Chief Cataloguer or the most senior librarian so assigned. Items are catalogued according to Library of Congress classification, and appropriate call numbers so assigned, as well as subject headings found for each item. Checks are also made in the shelf list catalogue to verify if the call number has already been used, and the necessary adjustments will be made. A check is also made in the subject headings catalogue to verify if the headings have been used and here again adjustments are made. These verifications are done before the cataloguing sheets are handed to the typist for the master to be typed.

After the master has been typed, it is checked for correctness, and then passed to the attendant operating the mimeograph machine for the cards to be run off. These cards are checked by the S.L.A, and then each typist is given a batch to type on the various headings. These are checked once more, and then sorted for filing in the catalogues. While the masters are being typed, and cards processed, the books or non-book materials are also being processed for shelving in the reading rooms. The materials are lettered appropriately and if they are for the open access shelves, date due labels are pasted in.

If, on the other hand they are for the Caribbean Research Library (C.R.L), the serials section, United Nations (U.N)

collection, or any of the other closed access areas, they are routed to those sections for shelving.

4.2.3.1. Sample of Problems in the Cataloguing Section

The above process is ideally how things should be, but, unfortunately, due to a number of factors, they are not operating as such. The major problem facing the section is one of staffing. There is not enough staff in the section to carry out the processes consistently and quickly. This results in frequent backlogs of work in the section.

The other problems facing the cataloguing section are shortage of stationery; erratic electricity supply which interferes with the typing of the masters and the production of the cards on the mimeograph machine; shortage of catalogue cards - these are usually bought from overseas, since the locally produced cards are not compatible with the mimeograph machine; and outdated cataloguing and classification tools, among others.

Because of the staffing situation, there are not enough S.L.As to supervise the filing of cards in the various catalogues, and this results in many errors of mis-filing going undetected. Mis-filing most naturally leads to valuable materials going "missing" on the shelves.

The introduction of computers to the cataloguing section can show considerable improvement and savings in staff time, reduce the repetition, reduce the number of files now existing and still allow for effective retrieval of library materials. It will also reduce the amount of space currently occupied by the catalogues in the Reading Rooms. It can also help in the reorganisation of the author/title and subject catalogues, which are used by the patrons to find materials housed in the Reading Rooms of the library. As mentioned above, the state of these catalogues leaves much to be desired. The reorganisation of the catalogues will take the form of OPACS, a spin off of the cataloguing section of technical services, situated in the Circulation Department.

The OPAC facility will replace the present card catalogues and the tedious system of filing these cards. There will be no need for someone to check catalogues as such, since this will be done initially when data for an item is being inputted from the acquisitions process, and then modified during the cataloguing and classification processes. More details will be given later in the section highlighting features applicable to collection management procedures (technical services).

As regards the erratic power supply, a request was once made by the University Administration for the institution to be put on a

special supply line by the Electricity Corporation. This was done, but there seems to have been a deviation somewhere along the line, because the situation has since become worse. Recommendations have been made for a stand-by generator to be bought and installed near the library to remedy this situation. It is hoped that with the introduction of computers to the library and the setting up of a Learning Resource Centre with modern teaching technologies, this recommendation will be acted on by the University Administration.

4.3. COMPUTER APPLICATION TO TECHNICAL SERVICES

Clearly anything which reduces the manual labour of writing up duplicate copies of suggestion request slips; typing of orders, masters and catalogue cards; filing cards and slips; and so on is likely to improve the present situation in the University of Guyana Library. As indicated in chapter 3, there are computer systems which apply themselves very well to these situations.

4.3.1. FURTHER SAMPLES OF SYSTEMS

Rush in his article Library Automation Systems and Networks describes what he calls a "home-grown" or local system. These "home-grown" systems have been developed 'in house' by companies

and in some instances Universities. One such is VTLS - Virginia Tech Library System. VTLS was developed by the Virginia Polytechnic Institute and State University (Virginia Tech) Library, in Blacksburg, Virginia, USA, on a stand-alone minicomputer. It was initially designed to handle two problem areas within the Polytechnic and the Universities - circulation and catalogue access (public access).

Manual circulation had become an intolerable burden by the mid-1970s and automation was looked to for relief. Also, the main library is organised into subject divisions, each occupy one floor of the building. For these and other reasons, it was decided that on-line system would best serve the library's needs, and VTLS (Release 1) was therefore developed and installed in 1976.⁽⁴⁾

VTLS was developed for the Hewlett-Packard (HP) 3000 minicomputer, and employs HP's base management system (DBMS) Image/300, standard operating system (MPE/3000), and COBOL for applications software. This VTLS software has now been developed into a full functioning integrated local automation system for libraries.

This system along with others described in chapter three, all have features which can be applied to the procedures in operation in the Technical Service Department of the University of Guyana.

4.3.2. SYSTEM PROFILE OF VTLS

The operational characteristics of VTLS software is written in COBOL, uses Hewlett-Packard's IMAGE, a database management system to achieve data integration. QUERY, an online inquiry package is used for diagnostics and ad hoc reporting. VTLS runs on both the classic Hewlett-Packard mini-computer and the new Spectrum series. Hewlett-Packard's new RISC architecture provides a state of the art operating environment and improved performance.

Hardware: Hewlett-Packard HP/3000 line

Operating Systems: MPE, MPE/XL

Minimum Memory: 4Mb main memory.

VTLS provides services for automating cataloguing, authority control, online catalogue searching and retrieval (including keyword searching with full Boolean operations), serials control, circulation, reserve collection control, closed stacks, material retrieval, and statistical management reporting. Acquisitions and fund accounting was released in January 1989. It is functionally designed around MARC bibliographic record, and is routinely updated to incorporate new and modified national standards for library data. (5)

Deborah Hall McGrath and Carl R Lee in their article The Virginia Tech Library System (VTLS) quotes the licencing cost of this software in 1989 as being in the vicinity of between \$35,000 - 95,000 (US), and maintenance cost as \$9,200 - 18,000 (US) depending upon the size of machine.

4.3.3.

Another system which has been developed to suit the needs of libraries, and has features applicable to the collection management procedures is CDS/ISIS - Computerised Documentation Systems/Integrated Set of Information Systems software package developed by UNESCO. This package is available free of charge to non-profit organisations in member states.

Alan Hopkinson in his evaluation of the software says:

The CDS/ISIS package for microcomputers has concentrated mostly on the requirements of information retrieval, though it could be used for other library functions such as ordering, acquisitions and loans, such is the flexibility of the system. The system runs on an IBM AT with 256k RAM, 8086/80286 CPU minimum of 20Mb hard disk. It can support a maximum of 32,000 records in a database. The only limit to the number of databases is the storage capacity of the hard disks on the computer. (6)

Hopkinson further states of the software:

The database can accommodate up to 256 data elements which can be labelled from 1 to 999 and could therefore host a format such as UK MARC or UNIMARC. There is no special provision for the indicators found in MARC, but they could in fact be entered as the first two characters of each field as in the ISO 2709 exchange tape specifications (ISO 2709 is the international standard on which the structure of the MARC record as it is found on the exchange tape is based). (7)

The system is not "ready to run" like most other systems. The database design has to be done first before input screens and

output formats are designed. It comes with a demonstration database consisting of records of documents from the UNESCO Library. Databases can be designed using this demo as a model.

4.3.4. System Profile of CDS/ISIS

The basic features of the micro-version of CDS/ISIS are:

- a generalised database management system for an unlimited number of databases;
- designed for the storage and retrieval of variable length textual information;
- written in PASCAL for IBM compatible micro-computers with a minimum 512k RAM and a hard disk;
- menu-driven, interactive and multi-lingual;
- implemented in many different countries and in many different languages (English, French, German, Hungarian, Spanish);
- of a non-relational simple single master architecture.

However, even though CDS/ISIS software has features to be used in areas of the library, they are not altogether easy to use. The cataloguing module is difficult to use with AACR 2 of the Library of Congress classification system. This is highlighted in the evaluation of the system by staff of the CARICOM Documentation Centre in Guyana. (See chapter 3 for details).

In the case of VTLS, this software has been tried and proven to be very successful in many libraries. This package is being used in libraries in the West Indies - University of the West Indies, Trinidad and Tobago; Edinburgh - National Library of Scotland; Finland; France; among others. Reports from these libraries all indicate that they are quite satisfied with the interface they get from using VTLS. (See chapter 3 for evaluation comments from NLS, Scotland and U.W.I Trinidad and Tobago).

4.4. SAMPLE OF FEATURES OF VTLS WHICH CAN BE APPLIED IN TECHNICAL SERVICES - U.G.L.

VTLS Integrated Library System offers fast, easy and reliable methods for performing daily library activities, whether these are manual or a collection of disjointed automated systems. The system can operate as a stand-alone system or as an addition to another system. Outlined below are some of the features which can be applied to the Technical Service Department procedures at the University of Guyana Library.

4.4.1. FEATURES OF THE ACQUISITIONS AND FUND ACCOUNTING SYSTEM (AFAS) include:

* Orders - Bibliographic fields in the order record automatically filled by linking it to a bibliographic record. Eighteen order types - including prepaid, blanket, continuing (subscription), and standing orders - are accommodated by the system. Vendor and account information for the order is provided by linking the order record to the appropriate vendor and account records.

* Subscriptions - The AFAS provides subscription ordering and renewal functions for VTLS. (Serials check-in is provided by the Serials Control Subsystem). Subscription orders include a subscription expiration date that enables the system to generate a renewal alert for all subscriptions due to expire in a specified period of time.

* Cancellations - Full order cancellation capability are provided. When orders are cancelled, the system automatically generates cancellation notices and updates fund account records.

* Claims - When an order does not arrive by the expected receipt date, the AFAS automatically qualifies the order for claiming. The system generates listings of items that qualify

for claiming, allows order due dates to be changed, and prints claim notices. When claims are issued, the system automatically records the claim in the order record.

* Fund Accounting - The AFAS allows each library to set up multi-level fund account structure to reflect the library's budget and accounting practices. Individual accounts can be established for different budget groups and for departments within each budget group. Authorised personnel can transfer funds between accounts and add or delete funds. The system maintains records of encumbrances and expenditures, immediately updating account records online to reflect orders and payments as they are entered.

* Online Help - The AFAS provides context sensitive help screens that the library can modify to provide instructions for data entry or descriptions of library policy for acquisitions and accounting functions.

* Pre-Formatted Reports - The AFAS generates a variety of reports, including reports on vendor performance, accounting, orders and invoices/credit memos.

Preformatted reports provided include:

Vendor Performance

Accounts Summary

Account Details
Audit Trail (by Account)
Expiring Continuing Orders
Orders to be Claimed
Orders Placed (by Vendor)
Orders Placed (by Account)
Payable Invoices (by Vendor)
All Invoices (by Vendor).

4.4.2. ONLINE PUBLIC ACCESS CATALOG

The VTLS Online Public Access Catalog provides easy access to current bibliographic, item, holdings, and status information about the library's collection.

Users can access the OPAC with any of four different user interfaces. Each of these interfaces provides different capabilities to suit the needs of different users, from novice to most advanced. Every VTLS system provides menu-driven and command-driven user interfaces, which can be used interchangeably from any terminal.

(See section 4.2.3.1 for explanations on how the introduction of this facility can be useful).

* Menu-Driven Searching - VTLS provides a complete, easy to use menu-driven search system that includes author, title,

subject, call number, keyword, Boolean, reserve course, and reserve instructor searches. VTLS menu-driven search screens provide instructions for searching and examples of searches to assist novice users. Users can access menu-driven searching by entering a simple command.

* Command-Driven Searching - VTLS provides simple mnemonic search commands that allow direct access to records without passing through menus of search options.

Search commands can be entered from any point in the system, even from search menus. VTLS allows users to combine the ease of use offered by menu-driven searching with the power and flexibility of command-driven searching.

Within the OPAC catalog, there are other features such as Cataloguing; Authority Control; Serials Control; Status Monitoring; Reserve Room Control; Reporting and Collection Management; and Parameters and Library Profiling.

4.4.3. FEATURES OF THE CATALOGUING SUBSYSTEM INCLUDE:

* Standards - VTLS conforms to all accepted cataloguing standards, including the US MARC bibliographic and authority formats and US MARC Format for Holdings and Locations. The system includes input and translation capabilities to support a

variety of languages and AUSMARC, UKMARC, FINMARC, LIBRIS MARC, and MALMARC formats.

* Original Cataloguing - VTLS provides a simple process for original cataloguing of bibliographic, authority, and serial records. The system prompts for control number and call number. When these have been entered, the system displays an abbreviated temporary record. The system assigns initial fixed field values based on library defined defaults. Variable fields are entered individually until the record is complete. VTLS imposes no limit on the length of MARC records.

* Copy Cataloguing - VTLS facilitates the cataloguing process by providing interfaces with OCLC, RLIN, WLN and UTLAS. The VTLS-RIM software option allows copy cataloguing from Gaylord's SupercatTM and BiblioFile, and access to OCLC's LS ConnectTM from any VTLS terminal. These interfaces allow downloading of MARC bibliographic, authority, and serial records from tape, videodisc, and bibliographic utility networks, and CD-ROM. With VTLS, one can also copy bibliographic and authority records from other libraries in a VTLS network or copy records from your own data base to streamline record entry.

4.4.4. FEATURES OF VTLS AUTHORITY CONTROL INCLUDE:

- * Author Authority Control - VTLS provides full authority control capabilities for author headings in records in the bibliographic data base. All author fields, author/title mixed fields, and authors used as subjects are managed by VTLS Authority Control.
- * Subject Authority Control - VTLS provides full authority control capabilities for subject headings in records in the bibliographic data base. All subject fields, authors used as subjects, and titles used as subjects are managed by VTLS Authority Control.
- * Title Authority control - VTLS provides full authority control capabilities for title, series title, and serial title headings in records in the bibliographic data base. All title fields, and titles used as subjects are managed by VTLS Authority Control.
- * See and See Also References - VTLS Authority Control provides automatic See and See Also references. These references appear when a user makes a search for an author, title, or subject that is related to other headings in the authority file.

* Broader/Narrower Guidance - VTLS supports the entry of broader and narrower terms in subject authority records to provide broader/narrower guidance in the OPAC. The system displays broader and narrower headings in addition to qualifying records when an OPAC search is made. (For examples of these screens see Appendix VI).

4.4.5.

The VTLS Serials Control Subsystem provides fully automated check-in, claiming, and cataloguing functions for serials. VTLS uses the US MARC Format for holdings and Locations to provide truly automatic anticipation of next issues without requiring manual entry of expected arrival dates for each issue.

Features of the Serials Control Subsystem include:

* Holdings Record Entry - VTLS Serials Control provides a simple method for creating holdings records. A single command entered from the MARC bibliographic screen creates a brief holdings record. Holdings information is entered on this screen and edited online using the editing facilities of the system. For initial loading, OCLC local data records can be used to generate VTLS holdings records.

* Receipts and Check-in of new serials is performed on a check-in screen attached to the holdings screen. The system provides for check-in of regular issues and irregular issues or supplements. Special notes or instructions can be entered for each line of check-in information.

* Irregular Serials - The Serials Control Subsystem provides check-in management for irregular serials by allowing manual entry of received issues. The system can be set to generate periodic reminders so that staff may check to see if all published issues have been received.

* Missing Issues - To facilitate check-in, VTLS provides automatic anticipation of issues beyond the next expected issue. A skipped issue remains in the system as an expected issue and can be checked in when it is received.

* Bindery Control - The Serials control Subsystem allows entry of binding information for each serial. Special Status Reporting allows the generation of binding alert lists. Serials "checked out" to the bindery are assigned a status of "At Bindery". The system also generates reports of items past due for return from the bindery for claiming.

4.4.6. REPORTING AND COLLECTION MANAGEMENT

VTLS provides management and statistical reporting capabilities designed to assist in collection management. Brief online statistical reports, automatic batch reports, and standard (on-demand) batch reports are provided. Many VTLS reports include parameters for modifying the sort of order or limiting the range of the report. Editing features of HP and IBM systems allow offline reports to be reviewed and edited prior to printing.

* Management Reports - VTLS management reports are generated in batch. Some, like the Data Buffer Report, are automatically generated as a result of data base updates and report errors or problems encountered by the system. Other reports are available on demand for circulation and collection management. Most reports are parameterised to provide maximum flexibility. Libraries can determine the sort order of reports, specific content, or designate reporting thresholds.

Management Reports generated by VTLS include:

Cataloguing Management

Data Buffer Report

Items in Data Buffer in a selected State

Collection Management

Circulation Activity

Items with Outstanding Holds or Recalls

Items with Special Status

Items with Special Status (Age Threshold)

Patron/Circulation Management

Blocked Patrons

Itemised List of Fines

Items Eligible for Billing

Items in Circulation to Patrons

Overdue items

Patrons by Patron Type

Patrons with Circulations

Patrons with fines near Blocking Amount

Patrons with Overdue Items

Hold/Recall Management

Expired Holds

Items to be Recalled

Reserve Room Management

Reserve Records

Expired Reserve Items

Serials Check-in Management

Agent Claim Count (Serials)

Items Eligible for Claiming (Serials)

Miscellaneous

Selected Bibliographic and Item Records

Selected Bibliographic Card Screens

Selected Holdings Screens

Selected MARC Record Screens

* Collection and Use Analysis - VTLS includes standard pre-formatted reports for listing items in collections by titles, material format, subject, branch libraries, library locations, or any combination of these criteria. In addition, VTLS provides statistical reports showing collection use by call number range and reports listing the number of times items have circulated within a specified period. These reports provide useful information for planning library budgets and future acquisitions, and assist libraries in making decisions regarding the purchase of additional copies and the withdrawal of library materials.

4.4.7. PARAMETERS AND LIBRARY PROFILING

VTLS provides unparalleled flexibility by including a Parameters and Library Profiling Subsystem. This subsystem includes over 3000 parameters that allows libraries to customise the software to suit their needs without the assistance of a programmer. Parameters are provided for every subsystem.

Features of the Parameters and Library Profiling Subsystem include:

- * Online Access to Parameters - VTLS parameters are accessed online with the entry of a command. Access to the subsystem is password protected, preventing unauthorised modification of parameters. The subsystem features a nested menu structure to facilitate access to specific parameters: the initial menu divides the parameters by subsystem or system function and the secondary menus list the individual parameters.

- * Online Modification of Parameters - Although some of the parameters are system switches and settings that are set only when the system is installed, most can be modified after the system is in operation to reflect changes in library policies or to accommodate new needs. VTLS displays the current parameter

setting and provides prompts listing possible parameter setting and command options for executing the modification.

4.4.8. CUSTOMER SERVICE AND ONGOING SUPPORT

* Installation - VTLS Inc. works with Hewlett Packard or IBM to provide complete initial installation services for library systems. For each customer, Hewlett Packard or IBM will provide site inspection and full installation and testing of the hardware and system software. VTLS Inc. provides pre-installation consulting, software installation, initial parameter setting, initial record loading, and staff training.

* Training - Complete staff training at the customer site is a standard part of the installation process of the company. VTLS also offers a variety of training courses at their offices throughout the year. These additional training opportunities are useful for training new staff and for providing advanced instruction to experienced staff.

* Documentation - VTLS Inc. provides comprehensive end-user documentation for all library software functions. Documentation updates accompany each new release of the software. Hewlett Packard and IBM provide complete sets of system and system software manuals with the purchase of their products.

4.4.9

From observation and evaluation, the Acquisitions and Cataloguing modules outlined above appear to be suitable for application to the Collection Management Procedures at the University of Guyana Library.

This package was observed in operation at the National Library of Scotland during a brief visit. The software was found to be both user friendly and easy to use. Positive evaluations have also been carried out by the Systems Staff at U.W.I (See chapter 3 - 3.3.3), and by the staff of NLS.

The cataloguing module will be of great assistance in the provision of up-to-date information in cataloguing and classification, especially subject headings and see/see also references; original and copy cataloguing. It is important to have security for software packages, and this is provided by VTLS Inc. for their system.

As a part of the complete package offered to libraries purchasing or contemplating doing so, is a training and maintenance feature. The company offers this facility to all its customers, and an officer from the head office makes a visit to deal with problems which cannot be handled by the staff, who has been trained to deal with those areas which might arise.

Management information is just as important to library

operations, and this feature will prove a great assistance to the library. As indicated all record keeping is done manually and entails the use of file cabinets, files and trays to store information, and also the use of scarce manpower and time to perform such tasks.

As a spin off to the cataloguing and authority file modules, the provision of OPACS will remove much of the present frustrations and problems experienced through the use of author, title and subject headings catalogues. This can be seen as a forerunner to the introduction of computers to the Circulation Department, which is no doubt, envisaged as the next stage in the automation of operations at University of Guyana Library.

REFERENCES - CHAPTER FOUR

1. Rush, James E. Library automation systems and networks. In: Marshall, C. Yovits, ed. Advances in computers, 1982, 22, p.336.
2. Ibid, p.338.
3. Lovecy, Ian. The impact on collection management of automated systems and services. In: Clare Jenkins and Mary Morley, eds. Collection management in academic libraries, 1991. p.35.
4. Rush, ref., 1. p.356.
5. McGrath, Deborah Hall and Carl R. Lee. The Virginia Tech Library System (VTLS). Library Hi Tech, 1989, 25, p.17.
6. Hopkinson, Alan. Library software package for free. IT News - The newsletter of the Library Association Information Technology Group, 1987, 12, p.21.
7. Ibid, p.21.
8. All information used in the description of features of VTLS is taken from information catalogues supplied by VTLS Inc., of Blacksburg, Virginia.
9. Examples of the various screens were provided by the staff of the National Library of Scotland, from their VTLS-89 system.

CHAPTER FIVE

SUMMARY AND RECOMMENDATIONS

5.1. SUMMARY

The problems identified at the University of Guyana Library are not unique to this organisation. Similar situations exist in other academic institutions and libraries the world over.

The problems of scarce funds with which to buy books and other materials for libraries and bookshops; machinery; shortage of staff at all levels; offering attractive salaries to the staff; providing stationery; erecting new buildings to cope with the space problem; to name a few, are all based on the economic situation facing both the developed and developing countries.

In the case of the University of Guyana Library and the University as a whole, this institution has been seriously affected by the economic recession which hit Guyana during the mid 1970s. The University has not been in a position to attract the calibre of staff needed because of unattractive salaries and fringe benefits. This negative factor has and is still having an effect on the institution, especially the Library which is

expected to offer a quality service to the University community regardless.

Jennifer Jackson, (1980) discusses this problem in her dissertation at great length.

The problem seems to be that the salaries and conditions of service in areas outside of librarianship are much better, and subject specialists are often not attracted to a career in Librarianship, or leave when better positions elsewhere are available. (1)

She further points out, "there is difficulty also in recruiting staff for those areas of Librarianship which demand technical expertise, areas such as cataloguing and classification. Perhaps if library assistants and other library staff could be satisfied with the remuneration they received, it would in some means compensate for the less than satisfactory conditions of work." (2)

Hence, the proposal to introduce automation to the University Library is seen as a means of coming to grips with the problems of staff shortage and the limited space available, even if this is on a limited scale. This step will help tremendously, because of the kind of tasks the computer will be expected to perform, as outlined in chapters 3 and 4. Most important of all, computerisation will free staff both at the senior and

junior levels to operate in other areas of the library where their skills are more urgently needed. (See Appendices I and II on staffing and Appendix VII - Floor Plan, which gives some idea of the space situation in U.G. Library).

For example, the senior professional staff will be in a position to address their minds to doing much needed research in their discipline which, sadly they are not in a position to do now, because of having to perform duties which should be done by the junior staff members - working at the Issue Desk in Circulation; typing masters and cards, correspondence, bibliographic lists, and other tasks. They will be able to operate as professionals, as supervisors and trainers. The juniors and the other para-professional staff can then properly take over those tasks which fall within their job descriptions. The library will be in a better position to provide a higher quality of service to the University community.

5.1.1. CHOICE OF SOFTWARE

Based on the evaluations of the software packages it is evident that VTLS is more suited for application to areas of the Technical Services, at the University of Guyana Library. This system has modules which have been applied successfully in other libraries. (See chapter 4).

The same cannot be said for CDS/ISIS. There are some modules within the system which are not yet fully developed. The cataloguing module falls into this category as indicated by the evaluation of the software by the staff at the CARICOM Documentation Centre. The system is not "ready to run" like other systems (Janke)⁽¹⁾, and if the library wishing to use it does not have the necessary expertise readily available within their organisation or home country, then it would be impossible and expensive to implement.

The mini-micro CDS/ISIS manual on version 2.3. is also very complicated and difficult to understand. Libraries using Library of Congress classification are finding it difficult to apply using this software as indicated by the staff of CARICOM Documentation Centre. The system is not altogether "user friendly", and much modification will have to be done altering the system to suit the needs of the particular library. This operation can be very expensive for organisations with limited budgets and staff.

However, VTLS is less complicated and easier to use. Anyone can follow the instructions in the literature and the Demo supplied by VTLS Inc., and apply them to the relevant area of their library. It is also important to note that backup maintenance is readily available for the system from VTLS Inc., Virginia, USA. The University of Guyana Library certainly cannot cope

with these cataloguing and other problems which exist in the operation of the CDS/ISIS software. As indicated above, the Library has staff, financial and other problems, and would be better off using a system which offers consistent maintenance and other ready assistance in any area of operation, and also which is simple to use and understand.

5.1.2. FUNDING

An undisclosed sum of money has been allocated by I.D.B. - Inter-American Development Bank to the University for the introduction of automation to the Library. A part of the funding is being spent in the construction of a building to house the Learning Resource Centre, which will be managed by the Library. The LRC will have a range of technology including OHPs, computers, and other electronic aids to be used by the Library and other Faculties and Departments on the campus. It is envisaged that the on-line computer link and other important basic equipment will be sited in the LRC, since there is not enough space within the existing Library building to house same. This equipment and other infrastructure needed for the proposed automation of the Library will be provided through the technical assistance and funding provided by the IDB.

5.2. RECOMMENDATIONS

In order to make this improved service a reality with the introduction of automation to the Library, the University Administration, in conjunction with the Administration of the Library, must put certain systems in place.

It is recommended that the proposed automation be done in phases, and not altogether. This would give the staff in the library and the users time to make a configuration of the system in operation, and also to plan for the next phase properly.

Phase One of the project should take in the Technical Services and the procedures in this section, since this area is very crucial to the operations of the entire library. The acquisition and processing of materials for use by the patrons of the library take place in this section, and as such should be treated as a priority.

Phase 2 could take in the automation of Circulation and all the manual procedures in operation at the moment. Introduction of automation here should cater for conversion of systems such as filing of issues; borrowing and returning of by the patrons; registration of users in the library; catalogue of holdings in Reserve Collection; management information - generation of

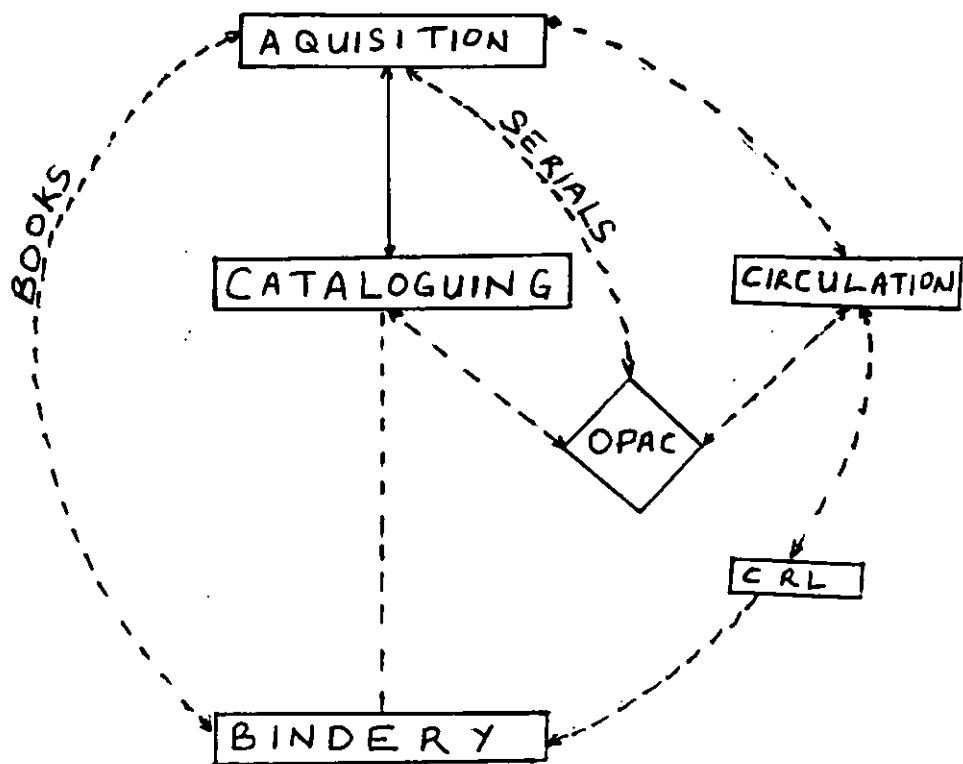
statistics, trapping of overdue and fines; in short, all circulation-related tasks.

Phase 3 will deal with other areas in the library, especially Caribbean Research Library (C.R.L), which is important to the library because it houses all materials on Guyana and the Caribbean - both historical and current which are used for ongoing research.

It is difficult to project dates for each completion phase, since the whole project depends heavily on the financial situation at the University, and also if overseas funding can be attracted. The completion also depends on a number of other factors which will be dealt with in the recommendations required later in this chapter. (See Flow Chart of proposed automation at U.G.L. Library on next page).

5.3. REQUIREMENTS

Some of the requirements needed to make the introduction of computers to the Technical Service Procedures successful include the following:



Flow Chart of proposed Automation at U.G.L.

1. A stable supply of electricity, in the absence of which, a stand by generator should be in place.
2. Having a reliable telecommunication link system in operation, especially for the online automation project which would allow for access to external sources of bibliographical records.
3. Adequate trained staff to man the system.
4. Key element in the successful implementation of any system is people. Consideration should be given to the people who utilise the output of the system. Hence, ongoing training for the staff at all levels should be one of the priorities during implementation. Training should be ongoing for the operators of the system, and education for the users.
5. Computers should be housed in air-conditioned environment with a steady flow of temperature.
6. More micros should be acquired.
7. Offering attractive incentives in the form of better salaries, improved working conditions to the staff in the employ of the University.

To further reinforce the recommendation made by the IDB Consultant, it is further suggested that the Acquisitions and Cataloguing departments be integrated and managed as a single unit under a Head of Technical Services. Such a merger is in

operation at the National Library of Scotland, and is functioning quite well. This merger will also save on operation costs, especially with the introduction of computers to the section, where the initial entry of data on materials can also be used in the cataloguing processes, and finally on the OPACS. (See Appendix VIII for Summary of IDB Consultant's Recommendations).

REFERENCES - CHAPTER FIVE

1. Jackson, Jennifer E. Staffing problems in academic libraries in developing countries with particular reference to Guyana. MLS dissertation. Loughborough University, 1980, p.25.
2. Ibid, p.25.
3. Boidhei, Susan Wangechi. Automating library services: special reference to the University of Nairobi. MA dissertation. Loughborough University, 1989, pp.75-76.
4. Adams, Roy James. Information technology and libraries: a future for academic libraries. 1986, pp.42/43.
5. Shinebourne, John. A report with recommendations for automation and improvements to manual procedures. 1989, pp.1-3.
6. Ibid, pp.22-30.

BIBLIOGRAPHY

- BOIDHEI, Susan Wangei. Automating library services: special reference to the University of Nairobi. MA dissertation. Loughborough University of Technology, 1989.
- CLAYTON, Marlene. Managing library automation. Hants: Gower 1989.
- CORBIN, John. Directory of automated library systems. 2nd ed. London: Neal-Schuman Pubs., 1989.
- ENCYCLOPEDIA OF LIBRARY AND INFORMATION SCIENCE. 1991, 48, supplement II. 270-280.
- EUROPEAN VTLS USERS' GROUP. Directory of member organisations. Helsinki: Automation Unit of Finnish Research Libraries, 1992.
- FOSTER, William. BLCMP: library automation: an introduction. Part I - overview. Birmingham: BLCMP, n.d.
- GODDEN, Irene P. ed. Library technical services: operations and management. New York: Academic Press, Inc., 1984.
- GOLDSTEIN, Charles and Richard S. Dick. Automation support for collection management and control. Collection Management. 1982, 4(1/2), 85-94.
- GUY, Robin Frederick. Evolution of automation in national library of Scotland from 1978-1989. Program, 1990, 24(1), 1-19.
- HOPKINSON, Alan. Library software packages for free. IT - the newsletter of the Library Association INFORMATION Technology Group, 1987, (12), 20-23.

- HORNY, Karen L. Fifteen years of automation: evolution of technical services staffing. Library Resources & Technical Services, 1987, 69-76.
- JACKSON, Jemifer E. Staffing problems in academic libraries in developing countries with particular reference to Guyana. M.L.S. dissertation. Loughborough University of Technology, 1980.
- JANKE, Eberhard. UNESCO's CDS/ISIS database system as an information management tool in libraries. Information Trends - News Magazine, 1991, 4(2), 69-82.
- JARAMILLO, George R. Computer technology and its impact on collection development. Collection Management. 1988, 10(1/2), 1-13.
- JENKINS, Clare and Mary Morley, eds. Collection management in academic libraries. London: Gower, 1991.
- KILGOUR, Frederick G. Effect of computerisation on acquisitions. Program, 1969, 3(3/4), 95-103.
- LIBERTAS: the world of information at your fingertipe. Bristol: SLS (Information Systems) Ltd., n.d.
- LYNDEN, Frederick Charles. Collection management by automation. Library Acquisitions: Theory and Practice, 1989, 13, 177-183.
- LYNDEN, Frederick Charles. Collection management. ALA Yearbook, 1980. Chicago: ALA, 1980.
- McGRATH, Deborah Hall & Carl R. Le. The Virginia Tech Library System (VTLS). Library Hi Tech, 1989, 25, 17-28.
- MICROCOMPUTER LIBRARY SYSTEMS. Library Technology Reports, 1990, 134-138.

ORACLE LIBRARIES: a new world of library automation. Berkshire:

ORACLE Corporation, 1992.

OSBURN, Charles B. Impact of collection management practices on intellectual; freedom. Library Trends, 1990, 39(1&2), 168-182.

REID, Marion. A general overview of collection building. Library Acquisitions: theory and practice. 1991, (15) 295-299.

SAFFADY, William. Library automation: and overview. Library Trends. 1989, 269-281.

SALISBURY, L. On-line access to international databases and its role in information provision in Trinidad & Tobago. International Library Review, 1985, 17, 425-433.

SASSE, Margo and Patricia Smith. Automation and collection development - threat or promise. Colorado Libraries, 1990, 10-13.

SHINEBOURNE, John. A report with recommendations for automation and improvements to manual procedures. IDB/University of Guyana Consultancy. British Council, 1989.

SWIHART, Stanley J. and Beryl F. Hefley. Computer systems in the library: a handbook for managers and designers. Los Angeles: Melville Publishing Co.

Graham Taylor to Hetty London, 2 July 1992.

Maureen Newton to Hetty London, 11 June 1992.

UNIVERSITY OF GUYANA HANDBOOK, 1984/85. Georgetown: University of Guyana, 1985.

VAN NIEL, Eloise. Automation for libraries in developing countries. International Library Review, 1974, 6, 373-386.

VIRGINIA TECH LIBRARY SERVICE (VTLS), Inc. VTLS-89; Release 1992. Brochure and Bulletin. Virginia: VTLS, Inc., 1992.

WELSCH, Erwin K. et als. Microcomputer use in collection development. Library Resources & Technical Services, 1985, 73-79.

YOVITS, Marshall C. ed. Advances in computers, 1982, 21, 333-415.

APPENDIX I
UNIVERSITY OF GUYANA LIBRARY ORGANISATION
CHART - STAFFING

APPENDIX II
BREAKDOWN OF STAFF IN TECHNICAL SERVICES
DEPARTMENT

ACQUISITIONS DEPARTMENT

Number of Senior Staff members - 1

Number of Junior Staff members - 7

Total 8

No. of Books per student - 1 8 book for every 20 students

Procedures - See photocopied material attached.

CATALOGUING DEPARTMENT

Staffing

Number of Senior Staff members - 2

Number of S.L.A. - 2

Number of L.A.II - 2

Number of L.A.I - 1

Number of Attendants - 4

Number of Typists - 0¹

Process Timing

Added Copy (same edition)² - 20 minutes³

CIP Cataloguing - 20 "

Original Cataloguing - 35 "

1. Work being done temporarily by (1) one attendant and (2) two clerks assigned to the Department (temporarily).
2. Added copies of a new edition/Publisher will demand a new catalogue entry.
3. Timing is not consistent as the production is affected by a number of variables: manpower, stationery, power-supply etc.

APPENDIX III
BREAKDOWN OF STAFF IN TECHNICAL SERVICES DEPARTMENT

BREAKDOWN OF LIBRARY BUDGET

Allocation of funds for purchasing materials as follows:

<u>1989/90</u>	<u>1990/91</u>
Books, films, etc. \$144,000 (G\$)	* \$25,000
Periodicals - \$172,800 (current)	\$6,000
Back Issues -\$60,000	** \$6,000
Binding & Preservation Material \$52,740	***\$10,000

* Reduced allocation on account of arrival of IDB books.

** Reduced allocation because of IDB funds material.

*** Bindery material reduced as a consequence of IDB funding.

Figures extracted from estimates of recurrent expenditure for the year 1990/91.

APPENDIX IV
MANUAL PROCEDURES OF TECHNICAL SERVICES

APPENDIX IV
Acquisitions Department - General Ordering Procedures

1. When publishers' catalogues, blurbs, etc., arrive in the library, general catalogues are filed in the boxes available for such, while the blurbs, etc. are sorted according to subject divisions and passed to the respective Subject Librarians.
2. The Subject Librarians will then despatch these to the respective Faculties.
3. Later, when Subject Librarians receive filled request forms, signed by Heads of Departments, they will pass these to the Acquisitions Department. All requests should be passed along with the blurb, catalogues, etc., from which the bibliographic information was extracted.
4. Request forms are filed in the request trays, these are later checked against the library's catalogues, the on order tray, the in process and the missing list, in order to avoid unnecessary duplication of ordered, or purchasing of material which is already in stock. Priority items are processed immediately.

In cases where the book is already in stock, on order, or in process, this information is added to the request form and returned to the Subject Librarian, who will forward it to the respective Heads of Department.

Additional copies of a book may be purchased depending on the nature of a book, and its demand. The policy of the library is to provide five copies of a title to every forty students.

5. Requests are then placed in batches according to place of publication (usually US or Great Britain), and Faculties (and Departments within Faculties).
6. Local purchases are then made. (See separate Flow Chart).
7. Order numbers are then determined. This is done by the following method:-
 - (a) A batch of slips for a department is extracted from the request tray. In cases where the Faculty is not departmentalised, the Faculty's requests are extracted.

(b) If this is the first order of 1990, and it has 20 items, it will be allotted the following order number:-

LIB 1/90/1-20

i.e. LIB - a library order

90 - ordered during 1990

1-20 - items listed 1-20.

8. The order number, origin of order, date of order, and the vendor is then recorded in the 'On Order Book'.
9. Order forms are then typed in quadruplicate - one each for the library files, the Bursary, the Bookdealer, and the Department from which the order originated.
10. Forms and slips are checked for mistakes, corrected and filed accordingly.

- 95 -

AUTHOR (Surname first)		Date required		
TITLE		Edition		
Place of publication	Publisher	Date of publication	Price	No. of copies
RECOMMENDED BY: (Lecturer)		Department	Date	
APPROVED BY: (Head of Dept.)		ESTIMATED NUMBER OF STUDENTS		
ESSENTIAL READING	RECOMMENDED READING	ISBN	SOURCE OF BIBLIO. INFO.	

Suggestion slip

(7) Order slips for each item on the order are typed, according to example below.

AUTHOR (Surname first)		Accession number	
TITLE		Edition	
Place of Publication	Publisher	Date	Price
RECOMMENDED BY		Date	No. of copies
VENDOR		Added copy	— GC
ORDER NO. DATE			— LC
INVOICE NO. DATE		Source of information	
DATE			

TECHNICAL SERVICES DIVISION
ACQUISITIONS DEPARTMENT
PROCEDURES RELATING TO ORDERING - SERIALS

- (1) The lecturers, through heads of departments, and senior library staff submit requests for serials.
- (2) The request slip is checked against selection aids e.g. Ulrichs for accurate bibliographic information and for current subscription rates.
- (3) A check is made as to the fund available for the respective department. If not available, the request is kept in the request file until funds are available.
- (4) The kalamazoo register and the 'Periodicals on order' file are checked in order to avoid duplication of titles.
- (5) The slips are then sorted into two categories - UK publications and USA publications.
The orders for UK publications will be placed with B.H.Blackwell, London and those for USA publications will be placed with Pergamon Press, New York.
- (6) Order forms are typed in duplicate, one set for each periodical dealer, according to the format (see attached).
- (7) Order slips for each item on the order are typed, according to example (see attached).
- (8) Order forms are signed by the Assistant Librarian and the top copy despatched to book dealers.
- (9) The duplicate copy is sent to the Accounts clerk for recording on the commitment sheet.
- (10) Duplicate copy is returned to department and filed.
- (11) Order slips are filed alphabetically by title in the 'Periodicals on order' file.
- (12) From request cards, form letters are sent to heads of departments to notify them that the serial title has been ordered.
- (13) On response from the dealer that he can supply, no further action is taken until invoice arrives.
- (14) In case of negative reply from book dealer, the on order slip is destroyed and alternative sources tried. Item reordered if possible.
- (15) Where it is not possible to reorder, the requester is notified that title is unavailable.

PROCEDURE TO CATALOGUE:

- (1) Use the manuscript provided to make an entry of the book.
- (2) Each newly accessioned book (including non-book material) should be checked in the Author catalogue to see if a previous copy has already been catalogued.
A check should also be made in the Catalogue of books to be re-catalogued and the new accession file for other uncatalogued copies of the work. All uncatalogued copies can then be processed at one time.
If the copy in hand is a second, third, etc. copy of the work, take out the main catalogue card and shelf list card, and give the book and cards that have been extracted to the Cataloguing Typist. She should type the accession number(s) of the book on it (one per volume).
- (3) Use the National Union Catalogue by Library of Congress (NUC) for checking the entry.
If no previous copy of the book has been catalogued, note its most recent copyright date or original date of publication and check for an entry in the relevant year of NUC. Check the entry in details for author, title, edition, place of publication, a publisher, date of publication, pagination, etc. against the copy in hand. The entry may be copied. Whenever necessary make the relevant changes to the entry, especially the punctuation according to the ISBD(M) rule.
- (4) Check through the British National Bibliography (BNP) or Cumulative Book Index (CBI) or other sources for the author's name, if NUC did not give the complete name of the author of the book in hand. Put tick on the manuscript for the sources which have been used in checking the entry concerned.
- (5) The call number assigned by Library of Congress should be checked in the pertinent schedule and if acceptable the shelf list should then be checked to see if the number has already been used. If unacceptable, the work should be referred to a professional member of staff who will give assistance in working out a more appropriate call number.
Call number consists of class number and author Cutter number. The class number of a book consists of the letter and number combination assigned by Library of Congress schedule signifying the nature of the subject content of the book, e.g. T 253 is the number assigned to all works on mechanical and technical drawing.
Works by different authors on this subject are differentiated by the Cutter number which consists of a letter signifying the first letter of the author's surname, followed by a number worked out from a table and dictated by the second letter of the surname (exceptions

to this are indicated in the classification schedule)
e.g.

Cutter number for Baker	.B3
" " Beckles	.B4
" " Billings	.B5

See the Table for further details.

- (6) If a Cutter number is duplicated under a particular class number, an adjustment will have to be made to fit in with the alphabetical sequence of authors. It is suggested to Cutterize the next letter to avoid the duplication of call numbers.

Examples: Baker .B34
Beckles .B43
Billings .B56

Edition of a work is differentiated by adding the date of publication to the class number. e.g. T 534

M3
1965

- (7) If the book is intended for the Caribbean Research Library, this should be indicated by writing c/c in front of the accession number, and if the book is for Reference collection, Ref should be put on the top of the call number, on the spine or on the card catalogue.

- (8) Subject headings that have been suggested by Library of Congress should be checked in the Subject heading use in the dictionary catalogues of the Library of Congress, 7th ed., 1966 (or the more recent edition if preferred).

If a blue tick appears alongside the entry, this means that the subject has already been used and is acceptable; if it is not marked, the necessary cross checking should be done by a professional member of the Cataloguing Department to ensure that the term can be used. When this decision to use a term is taken, then a blue tick is put against the term, by that professional member of the staff.

The necessary cross reference will have to be made for the subject catalogue.

- (9) The book and the handwritten entry (on the form provided) should then be passed to the Chief Cataloguer for checking.

- (10) The Cataloguing Typist then types the master and date due label for the book, and writes down the call number in pencil on the verso of the title page of the book as well as c/c for books going to the Caribbean Library and Ref. for books going into the reference stock. Do not type the date due labels for books going to Reference collection and Caribbean Library and also for the first copy of law books, because it should not be allowed for loan outside the library building.

The class number should then be written on the accession

- slip, and this slip then should be sent to Acquisition Department for filing.
- (11) The masters should then be checked by Chief Cataloguer, or the professional member of staff who has been appointed to do this job.
The number of cards to be run off on the Minigraph machine should be indicated on the master (on top right side). Each entry will need a shelf list card, an author card, cards for subject catalogue corresponding with the number of subject headings assigned, and a title card where indicated. For Caribbean collection books, at least three (3) extra cards should be prepared. One card is also needed for the additions to stock list. At times additional cards are necessary for other purposes e.g. the Acquisition Department may ask for a set of cards to facilitate their work in processing a very large gift.
- (12) The masters are passed to the Minigraph operator for processing, and the books and date due labels are sent to the Attendant who will letter (write) the call number on the book spine and stick in the date due labels. It is preferable for date due labels to be inserted on the back flyleaf of the book rather than at the front. After the cards have been run off, they are checked and sorted by the Senior Library Assistant (SLA) in the department and then passed to the Typist who is in charge of typing the headings on the top of the entry, and the typing must be checked by the chief Cataloguer, or the person in charge of the department or the person who was appointed by him/her.
The cards should then be separated in order of author, title, subject, shelf list cards etc., and filed in sequence. They should be stamped clearly on the back to show which section of the catalogue they belong to.
All cards should then be filed in the catalogue cabinet as soon as possible. Filing of cards in the catalogue cabinet will be done by the Library Assistants in Cataloguing Department.
- (13) When the lettering of the books has been completed, the lettering should be checked by a Library Assistant or other person assigned to this duty.
The books can then be sent to the Reader Services for shelving. It is suggested that before the books are sent to the shelves, they should be arranged in order by call number. The transportation of books will be done by Library Attendant of lettering. The Caribbean books will be sent, along with their cards inserted, to the Caribbean Research Library.

Example Form for cataloging

CLASSIFICATION	HEADING	
CHECK FOR AUTHORITY Main cat. NUC BNB CBI Other Shelf list	TITLE	
AUTHORITY FILE: Author Subject	IMPRINT	COLLATION
SEND SLIP TO:	SERIES	NOTES
ICBN:	TRACINGS	
ACQUISITION NO.		

PROCEDURES FOR THE PREPARATION OF MATERIALS FOR THE BINDERY

- (1) Materials to be bound must be channelled through Acquisitions Department which is responsible for co-ordinating work going to or coming from the Bindery.
- (2) Work from outside the Library must be sent to the Deputy Librarian (until the appointment of the SAL Technical Services) who will vet the work and pass it on to the Assistant Librarian (Acquisitions).
- (3) Any library staff member desirous of having minor work done in the Bindery must follow procedure outlined at (2) above.
- (4) Items for the Bindery from CRL, Readers' Services, Serials, Acquisitions, and Cataloguing Departments should be set aside on shelves clearly labelled 'for Binding' within the respective department.
- (5) Items from the office should be sent to the Assistant Librarian, Acquisitions with a completed binding slip.
- (6) The staff member who is responsible in each department for items to be sent to the Bindery should ensure that these items are ready to be sent to the Bindery. Each item should have a title page (except in special cases, e.g. rare or out of print books), all pages must be in correct sequence, positioned in the space created by the missing pages; books with loose sections or covers should be secured with rubber bands; any special instructions should be written on bindery form and placed in the book. (In special instances the Assistant Librarian of the respective departments may vary these rules, but in such instances an accompanying note must be attached to the item.)
- (7) The Library Attendant from Acquisitions Department will be responsible for collecting a batch totalling 50 items from the Departments. Paying immediate attention to those items addressed as priorities the Attendant is required:
 - (a) To write up slips in duplicate for items selected by the Department for inclusion in a batch.
 - (b) To assign a number to each item and record the number in the Bindery Record Book.
 - (c) To hand over duplicate slips to the staff member in relevant department responsible for items to be bound.
 - (d) To insert the original copy of the slip securely in the item to be bound.
- (8) When the Senior Binder indicates to the Assistant Librarian, Acquisitions that the Bindery is ready for a batch of books, the Senior Binder or his representative will be asked to come to the Acquisitions Department to advise on or to check the type of binding required for an item, he should communicate with the Assistant Librarian,

Acquisitions, who will ask the staff member in the department concerned to dialogue with the Binder if necessary.

- (9) Whenever a batch of 50 books is prepared for transmission by the Library Attendant (Acq.), the Assistant Librarian i/c Acq. will be responsible for the checking of these and ensuring that they are packed in a box. The Assistant Librarian will be expected to accompany the Library Attendant when he passes the Security Guard. The Security Guard will not normally be expected to examine the contents of the box.
- (10) All items in a batch with the accompanying form will be taken to the Bindery to the Senior Binder or in his absence to the next most Senior Binder who will sign or in his absence to the next most senior binder who will sign for receipt of the material in the Bindery Record Book.

TREATMENT OF URGENT ITEMS

- (1) All materials needing urgent attention must be sent directly to the Assistant Librarian i/c Acquisitions Department. (The 'Binding Requisition' forms for urgent treatment are of a PINK COLOUR. The reasons for urgency must be written on the back of these forms.
- (2) In cases where more than one item is sent to the Acquisitions Department for urgent binding, the Assistant Librarian i/c Acquisitions Department will be responsible for ensuring that the Departments making the requests will have agreed on the actual priorities, and will indicate these priorities to the Assistant Librarian i/c Acquisitions.
- (3) Urgent items should be handled immediately and should be returned to the Library as early as possible.
- (4) Assistant Librarian, Acquisitions may from time to time request through the Senior Binder urgent work to be done by a specific binder.

PROCEDURES IN THE BINDERY

- (1) The senior binder or his representative will sign for each item in each batch on receipt of a batch.
- (2) The senior binder will keep slips for each batch in numerical sequence.
- (3) The senior binder (or in his absence, someone specified by the Assistant Librarian, Acquisitions Department), will allocate work in such a manner as to ensure simultaneously completion of a batch. Priority items will be treated first and upon completion of these the senior binder will contact the Assistant Librarian,

Acquisitions Department so that these can be collected immediately. Whenever possible, attempts should be made to return all priority items together.

- (4) The senior binder will check, then stamp inside the back cover, and sign completed work of each binder as a mark of approval of work done. Each binder will then sign his own name on his work.
- (5) When a batch is satisfactorily completed and checked in the Bindery, the senior binder will contact the Assistant Librarian, Acquisitions, so that arrangements could be made for the collection of the completed batch, and deposit of a new batch.
- (6) The senior binder must ensure that the Library Attendant when collecting materials from the Bindery, indicates receipt in his Bindery Record Book of every item returned to the Library Attendant.
The senior binder should indicate reasons when the batch of 50 are not completed within the week.

PROCEDURES ON RETURN OF MATERIALS FROM THE BINDERY

- (1) The Library Attendant, Acquisitions Department, upon return to the Library with a completed set of books, will contact the Bindery personnel in the department concerned so that the work can be checked for quality. If quality is unsatisfactory, the item is referred to the Assistant Librarian in Acquisitions Department.
- (2) The Library Attendant, Acquisitions Department, letters materials and arranges for preparation of date labels, where necessary.
- (3) The Library Attendant takes material to respective departments and ensures that the Bindery slip for each item returned is cancelled in his presence.
- (4) If the departments feel that any matter needs re-examination, this will be referred to the Assistant Librarian in the Acquisitions Department.

APPENDIX V

**ISX/CIRC OF CDS/ISIS SYSTEM IN USE AT
CARCOM DOCUMENTATION CENTRE**



Bibliomatics Inc.

Library and Information Systems Consultants

**ISX/CIRC
Technical Specifications
Version 1.1
1991-02-02**

The ISX/CIRC system extends the capabilities of the CDS/ISIS database management system. Through the addition of special programs, menus, messages and worksheets, ISX/CIRC allows libraries and information centres to control the loan and return of books, documents or files-- in short, any kind of material that can be borrowed.

Compatible

ISX/CIRC is written in CDS/Pascal, using standard functions supported by CDS/ISIS, so that the system will be compatible with future versions of CDS/ISIS.

Flexible

Whether you are just starting to build a library database using CDS/ISIS, or whether you have already created a database describing your library holdings, ISX/CIRC can help you to automate your circulation procedures. ISX/CIRC works with any record structure in existing as well as newly created databases.

Adaptable

Values that reflect local decisions (such as database names, loan periods, field tags and display formats) can be easily modified by the user to reflect practices and policies of the local library.

Loan policies

ISX/CIRC supports the loan of different types of material to different categories of users. Different loan periods can be defined for any combination of up to 10 different material types and 10 different borrower categories. Loans can be for up to 99 days or for "indefinite" loan, where the due date is a date in the future fixed by the library. The library can specify a maximum number of items on loan to a patron at any one time. Renewals are processed with the same periods as original loans.

Holds

Holds (sometimes called reserve requests) can be placed for patrons on material that is currently out on loan. When the material is returned to the library, the system alerts the staff member checking the item back in that there is a hold. Staff can charge out the material to the person concerned. A number of patrons can place a hold on the same item; they will be served in the order of their holds.

ISX/CIRC 1.1

Overdue notices

Overdue notices or claims are printed for overdue materials as required by the library. Notices can be produced either for all overdue materials, or for different parts of the collection on a regular basis. Notices are printed from standard CDS/ISIS formats and normally include full patron information for quick and easy mailing.

Barcodes

ISX/CIRC uses a unique number to retrieve the record for an individual item such as a copy of a book. The number can be keyed in through the microcomputer keyboard; however if the number is on the item in the form of a barcode it can be read quickly with a barcode reader such as a light pen or wand.

Similarly ISX/CIRC uses a unique number to identify each patron or client of a library. If staff cards have a barcode with this number, it can be entered quickly into the computer with a barcode reader. However Library staff can always enter the number directly using the keyboard or search the library catalogue or patron database to determine the number required.

ISX/CIRC will support any IBM-compatible barcode reading equipment and any barcode format that can be read by that equipment.

Statistics

ISX/CIRC assists with library management, by capturing statistics on the volume of use for each item and each patron. You can tell which users borrowed the greatest or fewest number of books in a given period, and which items were borrowed the most or the least, allowing you to manage your collection more efficiently and to market your services more effectively to different groups of clients.

Logging

ISX/CIRC will log transactions to another system device, such as a printer, so that records of all loan and returns are not lost, even in the case of the worst system failure.

Multilingual

All dialogue with the user, including commands and prompts, is stored in CDS/ISIS message files and can be translated into other languages as required. Please contact Bibliomatics Inc. for information on the availability of a version in the language you require.

Documentation

The ISX/CIRC system comes complete with over 60 pages of installation, user and technical documentation.

ystem requirements

To use the ISX/CIRC system, you must have:

Mini-micro CDS/ISIS Version 2.32 or later
(The ISIS.EXE file creation date should be 01/02/90 or later)

IBM PC, XT, AT, 386 or compatible microcomputer with
640 K RAM
1 floppy disk (5.25" or 3.5")
1 hard disk
1 monitor
1 printer

You may also wish to install an IBM-PC compatible barcode reader (such as a light pen) and use barcodes to identify documents and/or patrons. The use of barcodes and a barcode reader is recommended for quick and accurate entry of item numbers.

If you wish to run the ISX/CIRC program on a VAX minicomputer, please contact Bibliomatics Inc. for further information.

nstallation

While ISX/CIRC is as simple to use as any manual circulation system, installation and setup of the ISX/CIRC program does require some basic knowledge and familiarity with some of the technical aspects of the CDS/ISIS software. You should know how to define a simple CDS/ISIS database; how to create print formats using the CDS/ISIS formatting language; how to build Field Select Tables for inverted files; and how to enter and modify records in a CDS/ISIS database. If you do not personally have these skills, we suggest you get someone more familiar with CDS/ISIS to assist you with the initial installation of the system. Assistance is also available from Bibliomatics Inc.

APPENDIX VI
EXAMPLES OF VILS SCREENS

Copies of Screens were given through the
kind courtesy of the National Library of
Scotland, Edinburgh, Scotland.

71

YOUR LIBRARY - - - - - VTLS-89 - - - - - HELP SCREEN [71]

WHAT IS VTLS-89?

VTLS-89:

- Is the latest release of VTLS Inc.'s automated library software.
- Offers an integrated system for academic, public and special libraries.
- Features open architecture.

TYPE:	FOR:
72	-- VTLS-89 subsystems
73	-- Special features of VTLS-89
74	-- Other VTLS products

-----OTHER OPTIONS-----

Press <Return> to exit Help

Enter a number for help screen with that number, or

0.....HELP MENU

1.....Menu-driven search

....Any command or

Novice	Advanced	Screen	Show	245	1	Catalog	Copies	Next	Prev
User	Help	Help	Again	n		Card	Avail	Screen	Sort

74

YOUR LIBRARY - - - - - VTLS-89 - - - - - HELP SCREEN [74]

OTHER VTLS PRODUCTS

- InfoStation: supports full text, graphics and CD-quality sound
- Remote Interface Manager: access to external data bases & CD-ROMs
- Intelligent Workstation: easy-to-use front end to OPAC
- Network Intelligent Link: linking between microcomputers and VTLS-89
- Cataloging Enhancer: full-screen cataloging and editing of MARC records
- Cataloging Interfaces: transfer records from utilities and CD-ROMs
- Micro-VTLS: microcomputer-based automation for smaller collections

-----OPTIONS-----

Press <Return> to exit Help

Enter a number for help screen with that number, or

0.....HELP MENU

1.....Menu-driven search

....Any command or

Novice	Advanced	Screen	Show	245	1	Catalog	Copies	Next	Prev
User	Help	Help	Again	109- n		Card	Avail	Screen	Sort

YOUR LIBRARY - - - - - VTLS-89 - - - - - HELP SCREEN [72]

VTLS-89 SUBSYSTEMS

Online Public Access Catalog	Reserve Room
Keyword Searching	Status Monitoring
Cataloging	Reporting
Circulation	Acquisitions and Fund Accounting
Authority Control	Document Delivery
Serials Control	Journal Indexing

TYPE:	FOR:
73	-- Special features of VTLS-89
74	-- Other VTLS products

-----OTHER OPTIONS-----

Press <Return> to exit Help

Enter a number for help screen with that number, or

0.....HELP MENU

?.....Menu-driven search

....Any command or

Novice	Advanced	Screen	Show	243	1	Catalog	Copies	Next	Prev
User	Help	Help	Again	n		Card	Avail	Screen	Scr

YOUR LIBRARY - - - - - VTLS-89 - - - - - HELP SCREEN [73]

SPECIAL FEATURES OF VTLS-89

- Adheres to national standard formats
- Maintains all records in MARC format
- Supports multiple character sets
- Runs up to 16 languages concurrently
- Interfaces with bibliographic and authority utilities
- Interfaces with remote microcomputers and their products
- Networks with multi-library systems
- Allows for more than 200 parameters

TYPE: FOR:
74 -- Other VTLS products

-----OTHER OPTIONS-----

Press <Return> to exit Help

Enter a number for help screen with that number, or

0.....HELP MENU

?.....Menu-driven search

....Any command to

Novice	Advanced	Screen	Show	248	1	Catalog	Copies	Next	Prev
User	Help	Help	Again	n		Card	Avail	Screen	Scr

YOUR LIBRARY - - - - - VTLS-89 - - - - - HELP SCREEN [0]

HELP MENU

TYPE:	FOR:
1	-- Getting started
2	-- Searching the catalog
3	-- Hints for using the computer
4	-- Accessing CD-ROMs & other data bases
5	-- Library information
6	-- Copyright guidelines
7	-- Information about VTLS Inc. and its products
8	-- Library programs & activities
9	-- Making suggestions & comments

-----OPTIONS-----

Type the number of the item you want to see.
After typing, press the <Return> key, which may be labeled <Enter>
on your keyboard.

8

Novice	Advanced	Screen	Show	218	1	Catalog	Copies	Next	Prev
User	Help	Help	Again	n		Card	Avail	Screen	Scr

- Press <Return> after typing.
- You may type upper or lower case letters.
- Type one space after each word.
- Don't worry about punctuation.
- Don't use a space before or after the slash (/) when typing a command.

-----OTHER OPTIONS-----

?.....Menu-driven search

.....Any command or /?

```

5) HP ASCII terminal
6) Scandinavian ASCII 7-bit terminal
7) PC with special fonts
8) PC with PC-8 character set
9) PC ASCII terminal
0) Other ASCII terminal

```

fr

```

+ . . . . .
+
+               Welcome to VTLS
+               (Release 1993)
+
+ VTLS is a proprietary library software product
+   of VTLS, Inc., Blacksburg, Virginia 24060
+
+ . . . . .

```

* We don't predict the future; we create it.

Enter Location Code

Novice User	Advanced Help	Screen Help	Show Again	218 n	1 Catalog Card	Copies Avail	Next Screen	Prev List
----------------	------------------	----------------	---------------	----------	----------------------	-----------------	----------------	--------------

Pre-Release of VTLS-92 software. VTLS-92 is a proprietary library software product of VTLS, Inc., Blacksburg, Virginia 24060

AUTHOR

MENCL

①

Copies of Screens were given through the kind courtesy of the National Library of Scotland, Edinburgh, Scotland.

- percent) is "Prophet Muhammad")
4. 670 Vernet Ginbes, J. Mahoma, c1987.
5. 670 rHen, Z. rHaye bebsorah, c1979: Nb t.p. (Murhamad)

Enter NEW COMMAND or UPDATE

cancel

WORK SPACE HAS BEEN CLEARED

Enter NEW COMMAND; or 'HELP'; or '?' for the NOVICE USERS MENU.

/am

NATIONAL LIB OF SCOTLAND- - - - - VTL5-29 - - - - - QUALIFYING AUTHORS

1. 1 Muhammad al-Hajj 1932-
2. 1 Muhammad Ghazali Shafie, Tan Sri.
3. 1 Muhammad, Hazrat Pir Manzoor.
4. 1 Muhammad ibn Heatim, Badr al-Dein al-Yeamei al-Hamdeanei.
5. 1 Muhammad ibn Ya.keub Majd al-De8n al Fe8reuzeabeade8.
6. 1 Mhammad Mufeid, fl. 1565-1575.
- 7. 7 Murhammad, Prophet, d. 632.
8. Murhammad, the prophet.
9. 1 Mujshammad, Zakare8yea.
10. 3 Muhammadi Trust of Great Britain and Northern Ireland.

Enter NEW COMMAND or LINE # of selection or 'HELP'

COM: A 9600 N81 A NO LOG

AUTHOR MENU
INTERMEDIATE
SCREEN

② Bib. Screen

Enter NEW COMMAND or LINE # of selection or 'HELP'

7

NATIONAL LIB OF SCOTLAND- - - - - UTLS-89 - - PUBLICATIONS BY SELECTED AUTHOR

7 Author: Murhammad, Prophet, d. 632.

1. MAIN TITLE - Izbrannye rechenikila svkilatogo proroka Islama : Mir da
 pociet na nem:

AUTHOR ----- Murhammad, Prophet, d. 632.

EDITION ----- 2nd ed.

PUB. DATA -- Tilford, Surrey : Islam International Publications, 1991.

2. MAIN TITLE - Jewels of guidance compiled by Hamzah Muhammad Salih
 Ajjaif

AUTHOR ----- Murhammad, Prophet, d. 632.

PUB. DATA -- Dar al Taqwa c1987

3. MAIN TITLE - Selected Hadees : Ga translation.

AUTHOR ----- Murhammad, Prophet, d. 632.

PUB. DATA -- Tilford, Surrey : Islam International Publications, 1991.

Enter 'NS' for more

Enter NEW COMMAND or LINE # of selection or 'HELP'

COM1 A 9600 N8: A NO LOG

3

AUTHORITY RECORD

Enter NEW COMMAND or LINE # of selection or 'HELP'

7 a

NATIONAL LIB OF SCOTLAND- - - - - VTLS-89 - - - - - MARC AUTHORITY SCREEN

Local lvl: 0 Indirect: n Subdiv: Bib lvl: x
ARN: 79130881 Rec Stat: c Entrd: 840819 Used: 920701
Type: z Geo subd: n Govt Agn: A Lang: Source:
Roman: A Subj: a Series: n Ser num: n Head: aab
Ref status: a Upd status: a Auth status: a Name: a
Enc lvl: n Auth/Ref: a Mod rec: Rules: c

1. 005 19920625120327.0

2. 010 n 79130881

3. 035 1138-54080 - *auth. ltr. id*

4. 040 DLC Ac DLC Ad DLC Ad DLC-R -

5. 100 00 Muhammad, Ac Prophet, Ad d. 632. - *leading used*

6. 400 00 Mahomed, Ac Prophet, Ad d. 632.

7. 400 00 Marhmeud, Ac Prophet, Ad d. 632.

8. 400 00 Mahomet, Ac Prophet, Ad d. 632.

9. 400 00 Mohammed, Ac Prophet, Ad d. 632.

10. 400 00 Magonet, Ac Prophet, Ad d. 632.

11. 400 00 Mu-han-mo-to, Ac Prophet, Ad d. 632.

Enter 'NS' for more

Enter NEW COMMAND or UPDATE

COM1 A 9500 NS1 A NO LOG

Enter 'NS' for more

Enter NEW COMMAND or UPDATE

ns

NATIONAL LIB OF SCOTLAND- - - - - VTLS-89 - - - - - MARC AUTHORITY SCREEN

1. 400 00 Muhammad, Ac the prophet.

Aw naas

2. 400 00 Nabi Muhammad, Ac Prophet, Ad d. 632.

3. 400 00 Mukhammed, Ac Prophet, Ad d. 632.

4. 400 00 Macnetto, Ac Prophet, Ad d. 632.

5. 400 00 Mahometto, Ac Prophet, Ad d. 632.

6. 400 00 Mohammad, Ac Prophet, Ad d. 632.

7. 400 00 Mahoma, Ac Prophet, Ad d. 632.

8. 400 00 Murhamad, Ac Prophet, Ad d. 632.

9. 667 Heading based on the form: Prophet Muhammad. Approved by
ALA Comm. on Cataloging: Asian and African Materials, June
30, 1986.

10. 670 Luther, A. R. Epic of faith, 1981: Ab t.p. (Mohammad)

11. 670 Encyc. Brit., c1979 Ab (Muhammad; full form of name: Abou
al-Qasim Muhammad ibn QAbd Alleah ibn QAbd al-Murtalib
ibn Heashim; b. c. 570; d. 632)

Enter 'NS' for more

Enter NEW COMMAND or UPDATE

COM1 A 9600 NS1 A NO LOG

ALA Comm. on Cataloging: Asian and African Materials, June
30, 1986.

10. 670 Luther, A. R. Epic of faith, 1981: Ab t.p. (Mohammad)

11. 670 Encyc. Brit., c1979 Ab (Muhammad; full form of name: Abou
al-Qasim Muhammad ibn QAbd Alleah ibn QAbd al-Murtalib
ibn Heashim; b. c. 570-1162)

Enter 'NS' for more

Enter NEW COMMAND or UPDATE

ns

NATIONAL LIB OF SCOTLAND- - - - - VTL5-89 - - - - - MARC AUTHORITY SCREEN

1. 670 Encyc. Amer., c1975 Nb (Mohammed; b. betw. 570 & 571; d. 632)
2. 670 Collier's, c1973 Nb (Muhammad; also spelled Mohammed; b. c. 570; d. 632)
3. 670 LC data base, 6/2/86 Nb (hdg.: Muhammad, d. 632; most frequent usage (58 percent) in publication titles is name alone, without a title or epithet; next most frequent (25 percent) is "Prophet Muhammad")
4. 670 Vernet Ginbes, J. Mahoma, c1987.
5. 670 rHen, Z. rHaye bebsorah, c1979: Nb t.p. (Murhamad)

Enter NEW COMMAND or UPDATE

COM1 A 9500 N81 A NO LOG

④

*All reference
screen*

Enter 'NS' for more

Enter NEW COMMAND or UPDATE

cancel

WORK SPACE HAS BEEN CLEARED

Enter NEW COMMAND; or 'HELP'; or '?' for the NOVICE USERS MENU.

a/magomet

NATIONAL LIB OF SCOTLAND- - - - - VTL3-39 - - - - - QUALIFYING AUTHORE

1. Magomet, Prophet, d. 632.

Enter NEW COMMAND or LINE # of selection or 'HELP'

1

NATIONAL LIB OF SCOTLAND- - - - - VTL3-39 - - - - - REFERRAL SCREEN

Magomet, Prophet, d. 632.

THE ABOVE VARIANT FORM HAS NO ASSOCIATED TITLES

THE FOLLOWING RELATED TERM(S) WILL HAVE ASSOCIATED TITLES IN THE SYSTEM:

To search related terms, enter LINE# SR

1. 7 Muhammad, Prophet, d. 632.

Enter NEW COMMAND or LINE # of selection or 'HELP'

COM1 A 9600 NS: A NO LOG

8. 400 10 Scott, Walter, Ac Sir, bart., Ad 1771-1832.

Aw nnaa

9. 400 00 Paul, Ad 1771-1832.

10. 400 10 Scott, Sir, Walter, Ad 1771-1832.

Enter 'NS' for more

Enter NEW COMMAND or UPDATE

cancel

WORK SPACE HAS BEEN CLEARED

Enter NEW COMMAND; or 'HELP'; or '?' for the NOVICE USERS MENU.

a/ashmole elias

NATIONAL LIB OF SCOTLAND- - - - - VTLS-89 - - - - - QUALIFYING AUTHORS

1. 1 Ashmole, Elias.

2. 1 Ashmole, Elias 1617-1692.

3. 1 Ashmole, Elias, 1617-1692.

Enter NEW COMMAND or LINE 2 of selection or 'HELP'

1 to 3

AUTHORITY RECORD FLAGGED FOR MERGE

Enter NEW COMMAND or LINE 2 of selection or 'HELP'

2 to 3

AUTHORITY RECORD FLAGGED FOR MERGE

Enter NEW COMMAND or LINE 2 of selection or 'HELP'

COM1 A 9600 N81 A NO LOG

602
16. 1 Sociology -- Bulgaria.

Enter 'NS' for more

Enter NEW COMMAND or LINE # of selection or 'HELP'

1

NATIONAL LIB OF SCOTLAND- - - - - VTLS-89 - - - - - REFERRAL SCREEN

1. 454 Sociology.

Enter 'NOTE' for Notes

RELATED TERM(S) ALSO USED:

To search related terms, enter LINE# BR

2.	172 Communication.	INARROWER TERM
3.	50 Religion and sociology.	INARROWER TERM
4.	15 Sociology, Rural.	INARROWER TERM
5.	42 Social history.	INARROWER TERM
6.	1 Social stability.	INARROWER TERM
7.	75 Social problems.	INARROWER TERM
8.	150 Social change.	INARROWER TERM
9.	91 Women.	INARROWER TERM

Enter NEW COMMAND or LINE # of selection or 'HELP'

COM: A 9600 N81 A NO LOG

5-b

- | | | |
|----|----------------------------|----------------|
| 2. | 172 Communication. | INARROWER TERM |
| 3. | 50 Religion and sociology. | INARROWER TERM |
| 4. | 15 Sociology, Rural. | INARROWER TERM |
| 5. | 42 Social history. | INARROWER TERM |
| 6. | 1 Social stability. | INARROWER TERM |
| 7. | 75 Social problems. | INARROWER TERM |
| 8. | 150 Social change. | INARROWER TERM |
| 9. | 91 Women. | INARROWER TERM |

~~Enter~~ NEW COMMAND or LINE E of selection or 'HELP'
note

*** NOTES ***

Here and with local subdivision are entered works on the discipline of sociology. Works on the social conditions of particular regions, countries, cities, etc., are entered under the name of the place subdivided by Social

00

conditions.

Hit any key to return to the referral screen

COM1 A 19800 N81 A NO LOG

SUBJECT
MENU

Enter NEW COMMAND or LINE # of selection or 'HELP'
s/sociology

NATIONAL LIB OF SCOTLAND- - - - - VTLS-88 - - - - - QUALIFYING SUBJECTS

1. 454 Sociology.
2. 1 Sociology -- Abstracts -- Periodicals.
3. Sociology and art.
4. Sociology and religion.
5. 1 Sociology -- Asia.
6. 1 Sociology -- Australasia.
7. 1 Sociology -- Austria -- History -- 20th century.
8. 2 Sociology, Bahai Faith.
9. 11 Sociology, Biblical.
10. 3 Sociology -- Bibliography.
11. 1 Sociology -- Bibliography -- Catalogs.
12. 1 Sociology -- Bibliography -- Periodicals.
13. 3 Sociology -- Biographical methods.
14. 1 Sociology -- Book reviews -- Periodicals.
15. 1 Sociology, Buddhist -- Burma.
16. 1 Sociology -- Bulgaria.

Enter 'NS' for more

Enter NEW COMMAND or LINE # of selection or 'HELP'

COM1 A 9500 N21 A NO LOG

SUBJECT
AUTH
SCREEN

Ref status: a Upd status: a Auth status: a Name: n
Enc lvl: n Auth/Ref: a Mod rec: Rules: n

1. 010 sh 85124200
2. 035 0577-43080
3. 040 DLC Ac DLC Ad DLC
4. 053 HM

5. 150 0 Sociology. — *leading*
6. 450 0 Science, Social.
7. 450 0 Social science.
8. 550 0 Social sciences.

Nw g

9. 680 ③ Ni Here and with local subdivision are entered works on the discipline of sociology. Works on the social conditions of

Enter 'NS' for more

Enter NEW COMMAND or UPDATE

ns

NATIONAL LIB OF SCOTLAND- - - - - UTLS-89 - - - - - MARC AUTHORITY SCREEN
particular regions, countries, cities, etc., are entered
under the name of the place subdivided by Na Social
conditions.

Enter NEW COMMAND or UPDATE

COM1 A 9500 N81 A NO LOG

*2nd undecision 9
generates 'note'*

9. 1 Social sciences and management.
10. Social sciences and state.
11. 1 Social sciences and state -- Asia.
12. 1 Social sciences and state -- Finland.
13. 2 Social sciences and state -- Great Britain.
14. 1 Social sciences and state -- United States.
15. 1 Social sciences -- Arabian Peninsula -- Periodicals.

Enter 'NS' for more

Enter NEW COMMAND or LINE # of selection or 'HELP'

1

NATIONAL LIB OF SCOTLAND- - - - - UTLS-89 - - - - - REFERRAL SCREEN

1. * 203 Social sciences.

RELATED TERM(S) ALSO USED:

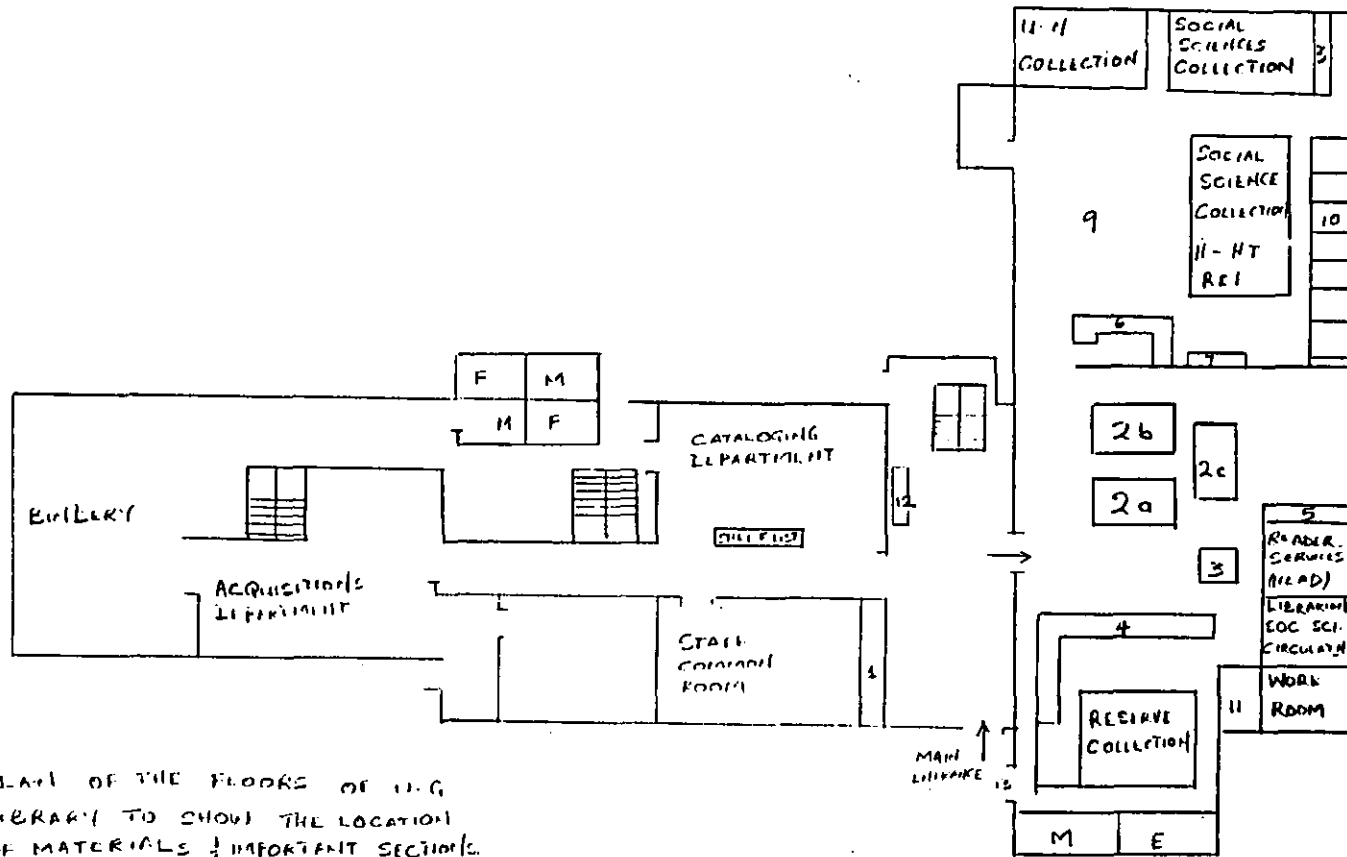
To search related terms, enter LINE# BR

2. 792 Economics. INARROWER TERM
3. 454 Sociology. INARROWER TERM
4. 25 Criminology. INARROWER TERM
5. 150 Social change. INARROWER TERM

Enter NEW COMMAND or LINE # of selection or 'HELP'

COM1 N 9500 N81 N NO LOG

APPENDIX VII
FLOOR PLAN OF U.G.L.



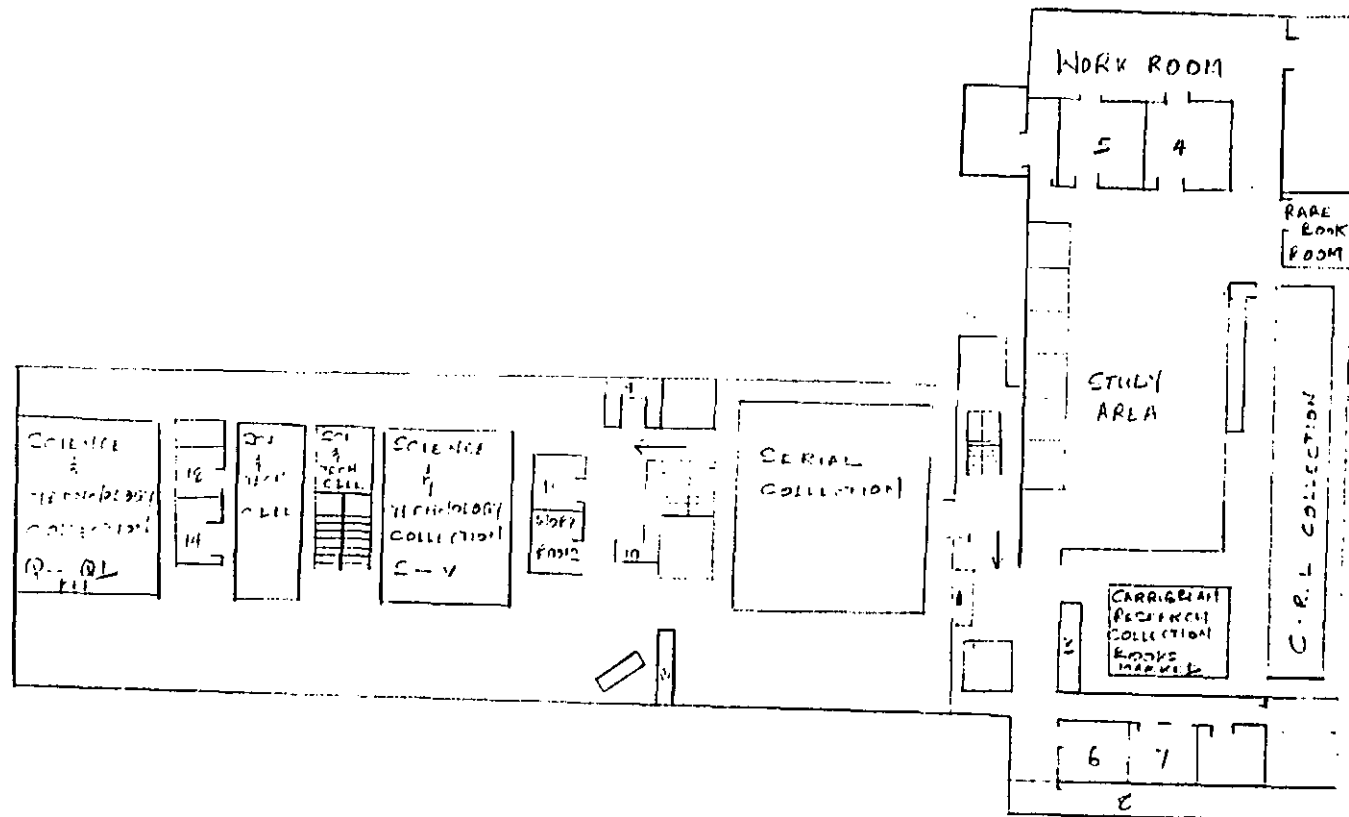
PLAN OF THE FLOORS OF U.S.G.
LIBRARY TO SHOW THE LOCATION
OF MATERIALS & IMPORTANT SECTIONS

①

DRAWN NOT TO SCALE

GROUND FLOOR

1	BAG BAY
2	CATALOGUES & REF.
3	INFORMATION DESK
4	CIRCULATION DESK
5	QUICK REFERENCE COLLECTION
6	SOCIAL SCIENCES INFO. DESK
7	DISPLAY RACK (SOC SCI.)
8	SORTING BAY (SOC SCI.)
9	STUDY AREA
10	CARRELS
11	PHOTO COPYING ROOM
12	DISPLAY OF NEW BOOKS
13	EMERGENCY EXIT
MF	WASHROOMS (STUDENT)
ME	WASHROOMS (STAFF)



PLAN OF THE 1ST FLOOR OF U.S. LIBRARY TO SHOW THE LOCATION OF MATERIALS & IMPORTANT SECTIONS.

③

DRAWING NOT TO SCALE

1ST FLOOR

- 1 C.R.L. SHELF LIST
- 2 C.R.L. CATALOGUES
- 3 C.R.L. ISSUE DESK
- 4 C.R.L. LIBRARIAN'S OFFICE
- 5 C.R.L. LIBRARIAN'S OFFICE
- 6 C.R.L. LIBRARIAN'S OFFICE
- 7 C.R.L. PHOTOCOPYING ROOM
- 8 EMERGENCY EXIT
- 9 SORTING BAY (C.U.B. TECH.)
- 10 ABSTRACTS & INDEXES
- 11 LIBRARIAN'S OFFICE
- 12 INFORMATION DESK (CUB. TECH.)
- 13 ISSUE DESK - SERIALS
- 14 LIBRARIAN - SCIENCE & TECH.
- 15 LIBRARIAN'S WORK ROOM

APPENDIX VIII
SUMMARY OF I.D.B. CONSULTANT'S
RECOMMENDATIONS

APPENDIX VIII

SUMMARY OF I.D.B. CONSULTANT'S RECOMMENDATIONS

As a part of the Technical Assistance to the University of Guyana Library, a consultant was brought to evaluate the manual and other systems and make appropriate recommendations.

Consultants terms of reference were:

1. To analyse present manual operations in the University of Guyana library with specific reference to circulation, serials control, cataloguing, acquisitions and information retrieval systems;
2. To make recommendations relating to the feasibility of the introduction of automation in limited or complete form in the University library;
3. To advise on the development of bibliographic databases;
4. To advise on the creation of on-line retrieval services.

Based on these Terms of References, the Consultant came up with the following recommendations:-

A. Automation

1. The Library should acquire seven IBM/PS2 machines, each with at least 20 Megabyte Disc Drives, at least one of

which must have capability of reading 3" and 5" floppy discs. The exact specification of hardware and operating systems software should conform to those that the University as a whole acquires. (3 in Technical Services; 1 in CRL; 1 in Readers' Services; 1 in Administration and 1 for Public Use; plus computer stationery and diskettes).

Comment: I do not agree with the allocation of computers across the Library, especially in Readers' Services and for the Public Use. These are areas where the public tend to converge most requiring information and assistance. I would suggest at least 6 computers - 3 Readers' Sgenerally and 3 for the Public Use.

2. General training in the use of computers and in particular applications such as word-processing should be offered to staff.
3. The latest version of the MS DOS operating system for the Datamini be obtained and installed and the back-up power unit be repaired.
4. Steps be taken to monitor UWI's progress with VTLS (e.g. receive papers associated with the development of VTLS).

B. On-Line Services

1. The uncertainty over the telecommunication facility requires resolution.
2. A budget should be set aside for refreshing the skills of professional staff in the library, who have already had, as part and parcel of their professional education, training in the effective use of on-line searching techniques. Some skills have atrophied through lack of opportunity to use them.
3. In the absence of a capability to provide on-line searches in Guyana, U.G. should continue to use the good offices of the University of Indiana and the British Lending Library ...

C. Manual Procedures

1. UB (junior) staff trained in cataloguing, especially Senior Library Assistants, should be deployed in Technical Services to boost processing output.
2. The Acquisitions and Cataloguing Departments should be integrated and managed as a single unit under a Head of Technical Services.
3. Stock awaiting processing in Technical Services should be arranged in a single chronological sequence on a 'First-

in/First out' basis.

4. A Technical Services Librarian be appointed to coordinate the work of the Acquisitions and Cataloguing Departments ...
5. One professional Librarian within Reader Services should be responsible for delivering and developing User Education Programmes for U.G. students.
6. One professional Librarian should be made responsible for cataloguing uncatalogued materials in the Caribbean Research Library.
7. The staff development programme should be vigorously maintained, with further emphasis on the use of computers in Libraries. It should be enhanced by a programme of short (3 month) attachments for UA (Senior Staff) to libraries in the process of automating or already automated. UB staff should receive training in word processing and computer appreciation.
8. The possibility of recruiting new staff with the help of voluntary agencies such as VSO should be investigated.

APPENDIX IX
AUTOMATED REQUIREMENTS FOR TECHNICAL SERVICES

REQUIREMENTS FOR AUTOMATED TECHNICAL SERVICES

UNIVERSITY OF GUYANA LIBRARY

BACKGROUND INFORMATION

At the present time there is a backlog of about 38,000 - 40,000 items awaiting processing. Staff shortages at the University Library and other problems make this impossible to achieve.

ACQUISITIONS AND SERIALS

About 1,000 books and 2,000 journal items are received each month. These items have to be accessioned, and ownership stamp put on each of them, records prepared for the various files - on order, inprocess, and others. These processes are all carried out manually, with limited staff.

GIFTS AND EXCHANGES

About 1,000 items are received each month. Correspondence, statistics and other files have to be maintained on this operation.

BINDERY

About 1,000 items are repaired in this department each month. This includes both books and journal items, manuscripts and others. This section is under the supervision of the Head of the

Acquisitions, and all the records and files are kept there.
Procedures are all manual.

CATALOGUING AND CLASSIFICATION

About 12,000 items are likely to be processed in this department each year. There is a considerable backlog at the moment, which has arisen because of a number of problems in the department. Chief among these are shortage of staff, outdated cataloguing tools, and others. Processes are all done manually.

C.R.L. MATERIALS

There are about 8,000 items awaiting processing - sorting, accessioning, cataloguing and classification.

FUNCTIONS TO BE PERFORMED BY COMPUTER

ACQUISITIONS AND SERIALS MANDATORY - YES

This module should have facilities to deal with order generation and processing; subscriptions for serials; gifts and exchanges. Access keys should include order number, ISBN number, bibliographical control number; author, title, vendors' names and/or codes.

Other requirements to be included:

1. **Order Preparation**

- Receipt of requests of items to be purchased
 - Verification of status of requests i.e. in stock, on order, in print, in process
2. **Order Creation and Despatch**
- Inputting of order data
 - Controlling fund adjustments
 - Despatch using order forms
3. **Administration of orders and Subscriptions**
- Should have facility to create, review, renew, amend or cancel orders, including standing orders and subscriptions
4. **Receipt of Items**
- Should have feature for the receipt of ordered and unsolicited items, e.g. gifts
 - Should be able to record arrival of serial parts, including unexpected parts such as special issues or supplements
 - Verification of items received
 - Control of fund adjustments
 - Provision for the return of damaged or incorrect items.
5. **Claiming**
- Unfulfilled orders or parts not received
 - In the case of serials, it should include features to cater for predicting patterns which shows different publication patterns

6. - Should have the facility to provide communication with vendors via the system by printed or electronic means
7. **Processing Invoices**
 - Should have the means of processing invoices and payments.
8. - Should have facility for the maintenance of desiderata files - e.g. for gifts and exchange schemes.

BINDERY

This module should cater for both monographs and serials, providing control of selection and preparation of items to be bound.

- Selection of items should be manual
 - Preparation processes should cater for the entry of records of items to be bound
 - Should have facilities for marking items returned or due to be returned from the bindery
- Should have facility for generating statistics of items sent to and returned from the bindery on a monthly basis.

CATALOGUING/DATA ENTRY MANDATORY - YES

The Cataloguing module should have the facility to generate records for selecting, creating and editing bibliographic data for all kinds of library materials. Should have the capacity to

accommodate more than 1,000 records in the database. Online access should be available to the complete database for inputting, searching and editing purposes.

Essential search keys should include control numbers, author and title. Searching on keywords and key phrases from the whole or specified parts of the database are also required. The system should provide for the use of Boolean operators.

Other requirements to be included:

1. - System should also have provision for the selection of bibliographic records from external sources, e.g. OCLC or others, and for their transfer to local files; online selection and transfer, and magnetic tape exchange. Should have provision for the conversion of records to the required format, e.g. U.S.MARC.
2. - Provision for the creation of original catalogue records
- Validation of control numbers
3. - Provision for editing records
- adding fields and sub-fields
4. **Maintenance of Authority Files**

System should be able to specify and maintain authority files for many purposes and for different sets of headings, e.g. personal name, corporate names, subject headings or series, see and see

also references. This facility provides the library with a tool to help the users of the Online Public Access Catalogue.

OPAC - ONLINE PUBLIC CATALOGUE

This catalogue which is a spin off from the cataloguing module should serve as the access point for users of the library. It will enable users to search for all types of material included in the database. This will also replace the present card catalogues - author, title and subject through a conversion process which is to be determined through the library and the producers of VTLS.

This module should have:

- ability to access help screens
- ability to search selected parts of database
- ability to search specified index terms, e.g.
author, title, subject heading, keyword

OPAC module should also contain the following:

- provision for truncating search terms
- provision to use Boolean operators
- ability to browse back and forth through indexes.

Generally system should be able to accommodate bibliographical data in AACR 2 format. It should allow for 100% growth of the database.

MANAGEMENT INFORMATION SCREEN IS MANDATORY to generate statistical data in all the sections of the Department.

LANGUAGE DESIRED: ENGLISH.

