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ABSTRACT

The Joint University Libraries (JUL) of Nashville, Tennessee have found that as they become increasingly complex they must make optimum use of their resources. In 1972, JUL initiated a planning effort, called Comprehensive Organizational/Operational Planning (CO/OP), designed to provide information for intelligent management decisions. Policy problems were to be addressed by a steering committee, funding problems by program budgeting, and organizational problems by a task analysis and a management review. Extensive formats were developed for the task analyses. Program elements were defined for each task in the library. These definitions and a few organizational charts are included in the appendix. (PF)

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COMPREHENSIVE

ORGANIZATIONAL / OPERATIONAL

PLANNING

A Research Project

for

Management Planning

in

Libraries

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INTRODUCTION

Events, having important current and future implications for the JUL, have occurred with an accelerated frequency in recent months. The JUL's proposed 1972/73 budget was severely reduced (as was the 1971/72 proposal); a Management School group completed an "Environment Analysis" of the JUL which included some pointed and valid criticisms; and no less than four faculty reports were written dealing with the problems of the JUL. Individually, these events were adequate cause for personal and institutional dismay. Collectively, they raised questions regarding the viability of the cooperative library concept.

The whole story, however, is not to be found on one side of the balance sheet. Although the "positives" were intermingled with the "negatives" and occurred with the same rapidity, they were generally less obtrusive which may explain why they went relatively unnoticed. Some notable positives are: implementation of a classification system for the non-professional staff; increase in professional salaries during each of the past two years when our parent institutions were permitting faculty raises only under severely restricted conditions, if at all; and significant improvements in the JUL staff benefit program. Individually, no one of these events was cause for ecstasy. Collectively, however, they neutralize the sting of the "negatives" and refute the contention that the JUL has nothing going in its favor.

Tabulation of the progressive and regressive exploits of any institution may occasionally be a valid mental exercise. However, it must be observed that such an exercise is retrospective by definition, and tends to consume energy moving pegs on the cribbage board of institutional life, rather than permitting concentration on the reasons the peg was

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moved. Obviously then, the lasting value is not in the exercise, per se, but rather in its ability to help us discern the "hows" and "whys" of the present situation and to determine what needs to be done, what can be done, and how it is to be done.

The CO/OP project outlined in this document will not answer those crucial questions. It does not attempt to do so. Only those administrators, faculty, and staff charged with responsibility for the organization can provide the answers.

CO/OP will, however, create the mechanism for the concentrated use of management techniques to the end of a systematic assessment of all facets of the JUL. If pursued in a highly objective and truely professional fashion it will make certain that, in the context of the interaction among the libraries in the system and, in turn, each library within the University Center environment, all the elements needed to ensure maximum library effectiveness will be examined by the appropriate level of management.

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PRIVATE HIGHER EDUCATION IN TENNESSEE: AN OVERVIEW

In an attempt to epitomize American higher education, a highly placed HEW official recently wrote: "Hard hit by declining donations and rising cost, American colleges and universities are facing painful retrenchment if they are to stave off economic disaster."

The private institutions of higher education in Tennessee are included in this gloomy prediction. Traditional sources of income -- endowment, gifts, and tuition -- have not kept pace with program expension and inflation; also, enrollments are either declining or failing to increase as forecasts had indicated. In an attempt to cope with the situation various private institutions have, in recent years, employed imprudent economic practices which compound the problem. In some cases, the results were so negative that doubts were raised about the institutions' ability to maintain the breadth and quality of their educational offerings.

Almost all of the solutions that quickly come to mind -- raising tuition, deferring maintenance, deficit financing, reducing the library budget, reducing the number of faculty -- are actually counter-productive in the long run, if not immediately so. Each of these techniques has been tried. In most cases they provide only short term relief; in a few cases they provide no relief at all; in every case they provide no lasting solution.

The Nashville University Center

The institutions in this university center have faired little, if any, better than private educational institutions in the state as a whole. Financial and academic strength is relative, and even though

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Peabody, Scarritt, and Vanderbilt may be rated higher in some respects than other private academic institutions in Tennessee, they have not been strong enough financially to avoid problems afflicting private higher education generally. Ample evidence to support this conclusion can be found in a number of documents ranging from confidential memos to a series of articles in the local newspapers dated over the past thirty months.

Adversity is always less profound and less severe when it strikes the other fellow. It is only painful when it strikes home. Although there is little comfort in knowing others share the same experience, recent university center history makes one point clear: the JUL has not been singled out for adverse treatment. In fact the VLEF program, announced less than six weeks ago, points to an opposite conclusion. Moreover, the method of fund distribution formalized in this program recognizes the subtle, but sure, changes that have occurred in the JUL funding structure.

The Changing JUL Financial Structure

After the initial thrust of sizable extraordinary funding, which ended during fiscal 1941/42, the JUL did not receive any significant special funding for almost two decades. In the intervening period approximately 98% of the library operation was funded by basic support income, i.e., Formulas I and II, direct appropriations, endowment earnings, and a small amount of income from fines and lost books. Compared with today, the staff was small, the services rendered simple, and the scope of operations were not influenced by third party funding.

With the inception of NDEA funding, begun in 1960, the JUL entered into a phase of financial support which forecast the staffing problems to be faced subsequently with other federal funding. During the eight

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years ended June 30, 1960, the JUL received annual NDEA book procurement grants ranging from $9,000 to $45,000. None included a provision for associated processing costs. This unrealistic feature did not adversely affect library operations, fortunately, because the grants never exceeded 10% of the sum of other programed expenditures for books and periodicals.

Midway into the NDEA phase, another funding ingredient was added with the advent of the $1 million Vanderbilt Retrospective Purchases Program. Orginally scheduled for the purchase of high cost retrospective monographs and back files, it was estimated that only 20¢ on the dollar would be required for the associated processing costs. Enlarged pressing current needs and sizable "books only" federal funding soon proved the original estimate inaccurate. Two additional revisions, one in 1968 and another in 1969, were made in the ratio which divided the funding between book costs and processing costs.

Four years following the inauguration of the Retrospective Program, the JUL received the first of five Title IIA grants. Amounting to over $400,000, these awards, like the NDEA grants, did not make provision for the processing of the funded acquisitions. Unlike the NDEA phase, however, Title IIA funding placed an unrealistic workload on the processing staff which adversely affected technical operations for at least twelve months after the last federal dollar was spent.

The present JUL funding structure incorporates each of the previously noted phases, but with two important additional features. One is that the input absorption rate has been carefully calculated to prevent future assignment of unrealistic workloads relative to staff performance capability. The other is that the associated processing costs for a special purchase program, like the VLEP and SDP programs, will be predicated on

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internal performance standards rather than an intuitive estimate.

In summary, early changes to the JUL financial structure were influenced largely by a need to take advantage of sizable third party funding possibilities. The more recent modifications, made possible primarily as a result of improved cost accounting, were installed to ensure the integrity of basic library operations when the supplemental funding expired.

Advantages Of Private Higher Education

Despite their apparently more serious financial difficulties, private institutions of higher education are not without distinct advantages. They are in general smaller than public colleges and universities, allowing closer personal relationship among the members of the academic community. This intimacy enables them to give more direct attention to all aspects of student growth and learning. In addition they are relatively free from the pressures that tend toward uniformity and standardization in some aspects of public education. Consequently, the private institutions can more easily invent or adopt innovative educational programs than can their public counterparts and can, thereby, become pacesetters in the development of new patterns of education.

Similarly the JUL has some distinct advantages over those libraries which serve public institutions. Because it is a separate corporate entity serving three institutions having diverse academic programs and goals, it is relatively free from the constraints imposed on many library systems. This diversity, viewed as a burden by some librarians, is actually an opportunity unequalled in librarianship today -- an opportunity to be a pacesetter by finding innovative ways of doing traditional library functions and by creating new forms of library service.

PROBLEMS IN THE JUL

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All institutions have problems, and almost all have at least one innate advantage. The JUL is no exception. The paramount management task is to clearly identify the problems and to use existing advantages as a means of moving resolutely toward problem solving.

The JUL has suffered no lack of help in the area of problem identification. In fact, it seemed at times that the JUL was receiving entirely too much. Yet, the criticisms noted in this section must be seen as not only a list of problems but also as a measure of the need and desire for quality library service in this academic community.

The Environment Study

During the 1972 spring semester, a group of Management School students conducted an environmental analysis of the Joint University Libraries. At one point or another in the study, the team contacted every member of the supervisory staff. The following quotations from their final report, therefore, describe some of the JUL's problems from the perspective of middle management.

> The management and staff expressed an interest in developing and expanding their contacts. However, it must be emphasized that little has been done to cultivate two way communications. At this point, communications seem to be primarily limited to the giving of information to various external organizations as opposed to receiving information. Thus we conclude that the JUL appears to be primarily reactive to its environment.
>
> There is evidence to indicate that many departments act and function as individual entities as opposed to acting as members of a larger organization. This tends to create hostility, distress, and pettiness, as was expressed by the respondents.
>
> One extremely important point was made regarding the polarization of the JUL through the governorship of the three universities and with particular emphasis on the administrations.

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The survey revealed that the library administration does not have access to information regarding users' feelings about the library. There is no efficient method for determining and measuring user needs.

The unavailability of complete objectives has naturally resulted in the use of intuition or subjective assessment of alternatives. For this reason, as well as the under utilization of environmental entities, the JUL has not developed a formal strategic plan.

Faculty Opinion

In addition to individual conversations, the faculties have given voice to their concerns in a range of written reports providing additional insight into the magnitude and scope of problems facing the JUL. Their recommendations cover, but are not limited to, such points as:

The need to improve professional staff salaries.

The need to enlarge the professional staff and to fill currently vacant positions.

The need for officials of the several schools to have formal consultation with the JUL staff when considering substantial increases in student enrollment or the establishment of new academic programs.

The possible need to amend the trust indenture and create a substantially new entity where the JUL would become a library system in which each institution supports and controls its own library as part of a cooperative enterprise.

In addition, opinions have been expressed to the end that requests for the purchase of new titles do not result in orders quickly enough, faculty are not notified of the receipt of books, fund status reports are not available, and other similar specific operational complaints.

The Peterson Paper

Another attempt at problem identification was made by Stephen Peterson during the Henry Horton retreat. In the course of that meeting he stated:

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> There is [illegible] stance whereby we assume that the others' disposition is not toward cooperation, and in fact we assume that the other party is either incompetent or unwilling to work toward reasonable goals. Unity with disdain for each other is hardly the epitome of cooperation. It is this adversary stance that debilitates so much of our effort at quality library service.

Director Emeritus Kuhlman and others have answered such criticisms at various times. However, it must be observed that these criticisms may be an over simplification of the problem and the rebuttals ineffective because they deal with the criticisms one on one. The point is that at no time during the past decade has the JUL been looked at systematically and an attempt made to address the totality of its problems.

A Summary

The trends in higher education have had and will continue to have a major impact on the university library -- the primary vehicle for access to man's recorded knowledge. As universities continue to grow in size and/or complexity, so will university libraries. Moreover, the expectations and demands of library users have increased and changed in character. Teaching and research are becoming more diverse and specialized with stress on both individual and team research at the undergraduate and graduate level. In short, research libraries are not the simple organizations of yesteryear.

The growing complexity in research libraries has also affected the Joint University Libraries. As user demands and needs have grown and changed, the sharp delineation of responsibility of the units making up the JUL, noted in the founding charter, has become obscured. New graduate programs added without proper planning and adequate budgetary support, along with the advent of interdisciplinary and area study programs, have

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precipitated the need for immediate decisions in some cases, and in others it has brought about situations which were contrary to the fundamental assumptions underlying the JUL. Facing up to the changing situation frequently calls for decisions of a fundamental philosophical nature. Decisions which the directorate of JUL was not authorized to make, and decisions which the directorate could not bring others to make resulted in a growing pile of unanswered questions and issues, affecting the entire system. If it is agreed that the JUL is a very complex operation, serving an equally complex body of users, it is logical then to agree that the problems which beset the institution must also be complex. Those who think there are simple answers just do not understand the issues. There is no single answer; there is no single solution; there is no single mechanism that will address all the problems confronting the JUL.

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WHAT IS CO/OP?

In the course of a speech at the Columbia University Faculty Club, Hofstra University Librarian Ellsworth Mason, stated:

> "At a time when we need hard headed thinking about the realities that seem always to hover in the crisis range, we have had a massive retreat from reality. To a very great extent, we know increasingly better how to do things, but we seem to have lost our grip on the reason for doing them. As we accumulate more exact knowledge, we seem to have less wisdom."

This quotation may not truly define the CO/OP Project, but does speak to some of its purposes and to the expected results. CO/OP is not an entity in itself -- its primary purpose is to provide the mechanism necessary for factual data gathering in support of decision-making throughout the organization. It is a planning effort geared to obtaining, translating, understanding, and disseminating information which will help improve the rationality of decisions in the light of current need and future expectations.

The specific objectives are:

To update institutional and departmental objectives and test their relevance to the expectations of our constituent institutions and users.

To evaluate the validity and effectiveness of current systems, procedures, and methods.

To develop revised and contingent plans of operation which reckon with the shifting emphasis of local academic programs and possible future developments in library technology and/or cooperation.

In the pursuit of these objectives policy problems will be addressed by a Steering Committee, funding problems by program budgeting, organizational problems by the task analysis and management review, operational problems by the systems study.

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CO/OP Project Organization

Because questions will be raised that affect the fundamental nature and form of the JUL, a steering committee has been appointed. It consists of:

The Joint Faculty Library Committee

A member of the Board of Library Trustees

A faculty member from the Peabody Department of Education, the Peabody Library School, and the Vanderbilt Graduate School of Management.

The committee will bring their particular expertise to bear by: providing a channel for sampling user opinion; providing a base for faculty input; and providing within the mechanism of CO/OP a body which will pass upon proposals and make recommendations to the Executive Committee of the Board of Library Trustees.

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MANAGEMENT AUDIT

Beginning January 1, 1973, the JUL, along with nine other research libraries, is scheduled to participate in the ARL's "Management Review and Analysis Program." To ensure broad benefit from the ARL program, CO/OP has been structured to include a similar internal management audit. Consequently, the appropriate way to describe this section is to quote from the ARL handbook:

> "The purpose of the ARL Management Review and Analysis Program is to provide a research library with guidelines for use in performing an internal study and evaluation of management policies, activities, and results. It focuses primarily on the internal decision making processes of the underlying functions of planning, budgeting, leadership and other important areas. This systematic investigation of the functions of library management is designed to pinpoint the causes of operational problems and then to guide the library in making appropriate changes that will improve the library activities of service to users, development of resources, and reduction of delivery costs. The product of this investigation will be an analytic description of the state of the library and a series of recommendations that will improve critical library programs. This systematic investigation will cover the following list of topics:
>
> How to prepare and use library objectives.
> Elements of library program planning.
> Formulation and use of policy.
> The budget making and control process.
> Library organization patterns.
> Approaches to leadership and supervision.
> The functions of the library personnel office.
> Staff development activities.
> Management information needed to make library operational decisions.
> The nature of library management in general as a process of coordinating and communicating."

The objectives of the study are to develop a manager's ability to recognize the interrelationship of library operational and administrative functions, and to develop the skill of seeing the library enterprise as a whole and relating the various activities of the organization to the successful achievement of library and university goals. The study does

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not spell out recommendations nor answer the libraries' problems. Indeed, it helps the library staff do the analysis itself and come up with their own recommendations according to their own unique immediate circumstances and requirement.

As the study team identifies areas that need particular attention, they will input such points of concern to the R&D Unit for review through CO/OP. The management audit team will not pursue detailed studies of any one issue or program.

At the appropriate time the Director of Libraries will appoint staff members to the study team.

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THE SYSTEMS STUDY

The committee on research libraries of the American Council of Learned Societies, after listing a number of library problems similar to those already noted, states that it cannot offer panaceas for the problems of the research libraries. The committee, however, has no doubt that the problems can be overcome by a systematic examination of the factors affecting library operations.

Such a systematic examination is central to the CO/OP Project because analysis provides a more vigorous way of asking and answering questions. It forces problem solvers and decision makers to tackle the library problem logically and systematically. It attempts to prescribe what action is to be taken and the expected results of that action against a backdrop of existing conditions, procedures and developmental trends. It permits examination of the significant variables operating in a system, manipulation of those variables, and prediction of the results with a fair degree of accuracy. More importantly, it relates goals and objectives to needs.

Surveying existing conditions, diagnosing the problem, searching for alternative solutions, testing these solutions, recommending the alternatives to the decision maker and providing for subsequent evaluation and feedback, are the essential steps through which a systems analysis must proceed.

Solution may lie in either adjusting present procedures or in a combination of procedural adjustments and the application of technological aids. However, to exercise either option, management must base its decisions on the comprehensive data only a systems analysis can provide.

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THE TASK ANALYSIS

Closely allied with, but not actually a part of the systems study, is the task analysis. This particular section of CO/OP is necessary for the construction of a management grid showing what is being done and who is doing it. The need to thoroughly understand present operations is of equal importance.

A critical part of the task analysis will be reporting. As presently planned the task analysis will be done periodically on a sampling basis and results distributed to each supervisor. At the time of the first tabulation a meeting will be held to explain and discuss the report and its implications.

Although generally doubted in the library profession, several similar studies have proved quite useful, most notably the work of Dennis Currey in the state of Washington, and the work of William Axford at Florida Atlantic University and Arizona State University. The importance of task analysis is that it provides a mechanism whereby we can better understand the staffing configuration required to accomplish a given work load. It should also be noted that staffing patterns must be predicated on and directly related to the amount of work assigned to any given unit. There is nothing inherently right about the staffing configuration in one year as we begin to view the subsequent year's budgetary needs. The task analysis complements the systems study in that it documents how much time it takes to do each particular function. Only in this way can alternatives be considered and valid management decisions made.

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PROGRAM BUDGETING AND FUNDING

Program budgeting and funding is the older [illegible] of the CO/OP Project. Committee work on the basic guidelines began over a year and a half ago. This committee, composed of President [illegible]son of Scarritt, Associate Provost Clanton of Vanderbilt, and Vice-President Pierce of Peabody, has been striving to find workable solutions to the complex financial problems of the JUL. At the outset of their discussions four objectives were listed as obtainable. They are:

1. Devise a plan of financial support which will ensure orderly library development based on budgets which fairly reflect the relative benefit to the academic programs of the parent institutions.

2. Provide the means whereby each parent institution may equitably distribute library costs to its schools and/or departments.

3. Establish a mechanism which will provide increased faculty influence over the movement of financial resources into selected areas of library service and/or collections growth.

4. Divorce, in so far as possible, the JUL budget approval mechanism from the disparate budgeting processes inherent in a tripartite ownership.

Due to the efforts of this committee, the Executive Committee of the Board of Library Trustees has established July 1, 1973 as the date for implementation of this budgeting/funding system.

What is Program Budgeting?

Program budgeting is nothing more than an explanation of the proposed expenditures in terms of accomplishments and results, rather than in terms of the material and manpower needed to achieve these results. Essentially, it is the practice of telling what the library intends to do with the money it requests and of showing how much money is needed to carry out each phase

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of the library program. In its simplest form, program budgeting involves two basic steps; i.e., determination of programs of work, and calculating the costs of these programs.

The first step, identifying programs, entails the grouping of like functions or activities. This is easily accomplished because the JUL organizational structure is essentially a functional one.

The second step, costing the identified programs, is less easily accomplished because it involves classifying all costs into one of two catagories:

1. Fixed costs - those which vary only with the size of the total operation and not with an individual programs workload; e.g., building maintenance and some administrative duties.

2. Variable costs - those which vary directly with the volume of work produced or the hours of service rendered; e.g., cataloging and reference.

This breakdown reveals to the budgeting authorities the costs which will be affected by their action on a specific program, while showing what the constant costs will be.

An important characteristic of program budgeting is that costs are not measured only in dollars. The other vital element is cost in terms of man hours. Because salaries vary from one level of employee to another, man-hours expended per unit of work accomplished or hours of service rendered becomes the meaningful measurement of program staff requirements.

In order to determine the number of man hours needed for each program an accurate work unit, measuring the amount of work performed by each program, must be discerned. This performance factor must express an output in terms of things produced, e.g., for Cataloging, the number of titles or volumes processed; for Reference, the meber of questions answered. The output selected must be the one which reflects the primary aim or purpose of the program.

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What is Program Funding?

Fundamentally, program funding is the process of disaggregating program costs in terms of benefit to specific user groups or academic programs. The resulting program cost-program benefit grid will permit the equitable allocation of library costs to the beneficiary parent institution, and in turn, to the specific beneficiary academic program or user group.

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APPENDICES

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TASK ANALYSIS

Objectives

The goal of the Task Analysis is to obtain information on what functions are performed, in what work area, approximately how much time is consumed, and, in some instances, what measured output can be associated with the task thus performed. For the study to be meaningful, every participant must make an honest effort to keep track of how he actually spends his time. No one must speed up to "look good" and no one should slow down in order to emphasize their currently understaffed condition (this might be interpreted as inefficiency!)

Since this is not a time and motion study, obviously figures obtained in some areas will be inexact. For example, an assistant at a circulation desk during a slow period may charge out only three books during an hour, answer a few questions scattered throughout the period, but spend most of her time filing charge cards. Although the total time will be an exact figure, it will be necessary to use estimates of time spent on each task. Supervisors are expected to ensure that the time and quantity data reported for their departments are accurate to within 25% of the true values. This tolerance is an upper bound for difficult to measure tasks; a much better estimate is expected on tasks less hard to measure.

On the following sheets are listed tasks (program elements) identified as they are performed in the various departments in the Central Division of the JUL. The Central Library was selected because its work is divided into more different units than the others in the system. Since the same tasks are performed in other JUL libraries, though not necessarily in the same sequence, major difficulties are not

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anticipated in using the same task format.

Much time has been spent on identifying and listing these standard tasks, but some items may have been omitted or misstated. Comments from supervisors will be appreciated. It should be kept in mind, however, that individual tasks are identified, not all activities connected with any position in any department.

Data Collection Procedures

On the appointed date, all personnel in the JUL system will start recording the amount of time they spend on each of the tasks and, if applicable, will measure the quantity of work connected with those tasks. If, in accounting for a full work day, it is discovered that some task appears not to fit any function listed, the supervisor should see that careful note is made of the work done and should communicate as soon as possible with Eleanor Morrissey (telephone 322-7438).

The exact technique used to keep track of time and quantities will not be prescribed but left up to the individual supervisor. Some departments may wish to make up tally sheets with only those tasks listed which concern an individual; others will ask that records be kept on a P-slip or desk calendar and transferred at the end of the day to a form sheet. In the end, however, each supervisor is responsible for turning in a full report of all activities in the department within the bounds of accuracy already stated.

There are some situations where work shows seasonal variation, such as, the time during which books are being pulled from regular stacks to be placed on reserve. The supervisors should inform the Systems Analyst of these periods in their work so that special provision can be made to cover the activities.

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Time Sheet Explanation

The time sheet has been designed to be both easy to understand and to use. A copy is included on page 27 and a few typical entries made to aid in explanation. The time sheet contains columns and rows. The rows running across the page provide spaces for recording data for many tasks each day and for entering weekly totals. The vertical columns are provided for recording data on each task undertaken by an employee during each day of the week. Any "block" on the sheet may contain either a time measurement or a time and quantity measurement. One "block" is used for each day that a particular task is performed. Time is to be recorded above the dotted line in a "block" and quantities below it. It is imperative that numbers of quantities be recorded for those tasks requiring it! The "quantity related tasks" are easily ascertained from the summary sheet for each module of work headed "Program Elements by Sector." If no quantities are measured for such tasks, zeros should be entered to indicate that the quantity measurement was considered, but that the number measured was zero.

Data fields for the time sheet are as follows with circled numbers indicating the one being described:

(1) Enter the day and month - the week ending always on Saturday.

(2) If you have more than 17 tasks during any one week, you will need to use more than one sheet. Enter the number of this sheet in the first space and the total number of sheets in the second.

(3) Circle the number in front of the proper employment classification.

(4) Enter employee number.

(5) Enter the four-digit task number for which data is to be recorded. Accuracy here is very important.

(6) Enter the time in minutes spent on the task covered by this column on the day covered by this row.

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(7) If there are measured quantities associated with the task in this particular column, record the measured number of units of the quantity.

(8) Add up the minutes spent during the week on the task covered by this column and enter the total here. It is the sum of the minutes recorded above the dotted lines in this column.

(9) The sum of the weekly totals for tasks should be recorded in this block in the column at the right edge of the sheet. The total number of minutes in a 40-hour week is 2400.

(10) Add the figures below the dotted lines in the column to arrive at the weekly total for each task for which measured quantities are required.

(11) Enter name of the employee.

(12) Enter total hours scheduled per week. For full-time employees, this will be identical with total time reported under all tasks (Block 9). For part-time employees, the hours scheduled per week may not equal the figures in Block 9.

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(3) Full-Time: 1. Professional, (3) Classified — Part-Time: 2. Professional, 4. Non-Professional

(4) Employee No. 0410

(1) Week Ending 11-18-72

TASK NO.	2595	2572	7220	8815	(5)														TOTAL MINUTES
Sun.		(6) / (7) ---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Mon.		15 / -	60 / 45	60 / 20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	480
Tues.	10	15 / -	200 / 210	30 / 12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	480
Wed.	15	30 / -	60 / 15	60 / 10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	480
Thurs.		15 / -	180 / 100	20 / 8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	480
Fri.	10	- / -	180 / 100	60 / 15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	480
Sat.		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
TOTAL MINUTES	35	75	680	230	(8)													(9)	2400
TOTAL UNITS	-	-	470	65	(10)														

(11) Employee Name: JANE E. DOE

(12) Hours Scheduled Per Week: 40.0

IMPORTANT: Record units for all tasks requiring measured quantities.

KEY

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LISTING BY SUBJECTS

Supervision and General Activities Module		Measured Quantities
2510	Staff and/or department head meetings	-
2515	Policy formulations, implementation and monitoring	-
2520	Budget development and modification	-
2523	Budget control	-
2525	Facilities planning and utilization	-
2530	Personnel management	-
2535	Staff problem solving	-
2540	Operations problem solving	-
2545	Public relations	-
2550	Security and behavior problems	-
2555	Reports	-
2564	Annual leave	-
2566	Holidays	-
2568	Sick leave	-
2570	Leave without pay	-
2572	Rest breaks	-
2574	Educational release time	-
2576	Travel	-
2578	Non-job oriented meetings	-
2580	Entertaining guests	-
2595	Time keeping	-

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JUL Unit Codes

TASK ANALYSIS

01XX ADMINISTRATION

- 0101 Director's Office
- 0103 Comptroller's Office
- 0104 Data Processing
- 0106 Assistant Director's Office
- 0108 Personnel
- 0109 Research and Development

10XX CENTRAL

- 1011 Book Acquisitions
- 1013 Book Cataloging
- 1015 Catalog Maintenance
- 1016 Serial Acquisitions
- 1018 Serial Cataloging
- 1020 Reclassification
- 1025 Circulation
- 1026 Documents
- 1027 Inter-Library
- 1028 Reference
- 1029 Reserve
- 1036 Special Collections
- 1037 Science
- 1038 TV News
- 1040 Observatory

20XX DIVINITY

- 2010 Unit Administration
- 2011 Acquisitions
- 2013 Cataloging
- 2016 Serials
- 2025 Circulation
- 2028 Reference
- 2035 Kesler

30XX LAW

- 3010 Unit Administration
- 3011 Acquisitions
- 3013 Cataloging
- 3016 Serials
- 3025 Circulation
- 3028 Reference

40XX MEDICINE

- 4010 Unit Administration
- 4011 Acquisitions
- 4013 Cataloging
- 4016 Serials
- 4025 Circulation
- 4028 Reference

50XX PEABODY

GENERAL

- 5010 Unit Administration
- 5011 Acquisitions
- 5013 Cataloging
- 5016 Periodicals
- 5025 Circulation
- 5028 Reference

Branches

- 5051 Music
- 5053 Library Science
- 5055 PCBC
- 5060 Dem. School

6062 MANAGEMENT

6065 SCARRITT

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(With indication of area of library using each)

Module number and title	Administration	Technical Services	Public Services
2001 Keypunch or verify	2001		
2101 Sort	2101		
2201 Accounting machine	2201		
2301 Data processing manual tasks	2301		
2501 Supervision and general activities	2501	2501	2501
2701 Office	2701	2701	2701
2801 Collections development	2801	2801	2801
2901 Bibliographic search		2901	2901
3101 New title acquisitions		3101	3101
3301 Old serial title acquisitions		3301	3301
3501 New title receipt		3501	3501
3701 Old serial title receipt		3701	3701
3901 Binding		3901	3901
4101 Exchange		4101	
4301 Standard catalog		4301	
4501 Original catalog		4501	4501
4701 Subject authority		4701	
4901 Analytics		4901	
5101 Added volume and identical copy		5101	
5301 Record control		5301	
5501 Marking		5501	
5701 Typing		5701	
5901 Filing		5901	5901
7001 Book charge			7001
7201 Book discharge			7201
7401 Hold, recall, lost books, and replacement		7401	7401
7601 Overdue and long term loan			7601
7801 Borrower records			7801
8001 Reserve preparation			8001
8201 Non-book			8201
8301 Audio-visual			8301
8401 Copying			8401
8601 Shelving		8601	8601
8801 Reference and information		8801	8801
9001 Interlibrary loans			9001

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PROGRAM ELEMENTS BY SECTOR

2001 KEYPUNCH OR VERIFY MODULE		MEASURED QUANTITIES
2010	SOLVE PROBLEMS. Unforeseen contingencies directly related to the functions noted below which would not ordinarily be handled by routine procedures associated with the functions as defined.	-
2015	ORDERS, SEARCHEDS, AND BOOKS. Keypunching order decks; also correcting errors. (Daily)	Decks keypunched
2020	STATUS CHANGES. Keypunch change and deletion cards to alter records on orders outstanding. (Weekly)	-
2025	SERIALS. Keypunching and correcting decks. (Daily)	-
2030	BINDING AND BOOK FUND ACCOUNTING. Preparation of encumbrance and payment cards. (Weekly)	-
2035	GENERAL ACCOUNTING. Preparation of payment cards and corrections for liability listing. (Weekly)	-
2040	BI-WEEKLY LISTS: PAYROLL. Keypunching for Payroll Control, keypunching from Payroll Control, Payroll distribution, Budget Status, FICA report, and any changes.	-
2041	BI-WEEKLY LISTS: ANNUAL LEAVE INTERIM REPORT. Keypunch activity.	-
2050	MONTHLY LISTS: MONTH ENDING LEDGER. Keypunch journal entries.	-
2051	MONTHLY LISTS: STOCK. Keypunch from requisitions and purchase orders.	-
2052	MONTHLY LISTS: PERSONNEL. Keypunch changes and additions.	-
2053	MONTHLY LISTS: BENEFITS. Keypunch changes and additions.	-
2054	MONTHLY LISTS: MONTHLY PAYROLL. Keypunch changes.	-
2055	MONTHLY LISTS: WORK CREDITS. Keypunch changes and additions.	-

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PROGRAM ELEMENTS BY SECTOR

2001 KEYPUNCH OR VERIFY MODULE (CONTINUED)		MEASURED QUANTITIES
2060	QUARTERLY LISTS: PERSONNEL LISTS. Keypunch additions and changes.	-
2061	QUARTERLY LISTS: BUDGET.ANALYSIS. Keypunch additions and changes.	-
2070	YEARLY LISTS: EMPLOYEES LETTER. Keypunch.	-
2071	YEARLY LISTS: INVENTORY ON EQUIPMENT. Keypunch and changes.	-
2080	PROGRAMS, TASK ANAIYSIS	
2085	MISCELLANEOUS	

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PROGRAM ELEMENTS BY SECTOR

2101 SORT MODULE		MEASURED QUANTITIES
2110	SOLVE PROBLEMS. Unforeseen contingencies directly related to the functions noted below which would not ordinarily be handled by routine procedures associated with the functions as defined.	-
2115	ORDERS, SEARCHES, AND BOOKS. Separating payment cards. (Daily)	-
2120	STATUS CHANGES. Sort changes and deletions to alter listing on orders outstanding. (Weekly)	-
2125	SERIALS. Sequencing by I. D. Number. (Daily)	-
2130	BINDING AND BOOK FUND ACCOUNTING. Sort by fund and division. (Weekly)	-
2132	STATISTICAL REPORTS. Sequencing cards. (Monthly)	-
2134	DEPARTMENTAL BOOK FUND REPORT. Sequencing cards. (Monthly)	-
2135	GENERAL ACCOUNTING. Sequencing cards. (Weekly)	-
2140	BI-WEEKLY LISTS: PAYROLL. Sequencing cards.	-
2141	BI-WEEKLY LISTS: ANNUAL LEAVE INTERIM REPORT. Sequencing cards.	-
2150	MONTHLY LISTS: MONTH ENDING REPORT. Sequence cards.	-
2151	MONTHLY LISTS: STOCK. Sequence cards.	-
2152	MONTHLY LISTS: PERSONNEL. Sequence cards.	-
2153	MONTHLY LISTS: BENEFITS. Sequence cards.	-
2154	MONTHLY LISTS: MONTHLY PAYROLL. Sequencing cards.	-
2155	MONTHLY LISTS: WORK ORDERS. Sequencing cards.	-

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PROGRAM ELEMENTS BY SECTOR

2101 SORT MODULE (CONTINUED)	MEASURED (Y/N)
2160 QUARTERLY LISTS: PERSONNEL. Sequencing cards.	-
2161 QUARTERLY LISTS: BUDGET ANALYSIS. Sequencing cards.	-
2170 YEARLY LISTS: EMPLOYEES LETTER. Sequencing cards.	-
2171 YEARLY LISTS: INVENTORY ON EQUIPMENT. Sequencing cards.	-
2180 PROGRAMS, TASK ANALYSIS	
2185 MISCELLANEOUS	

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PROGRAM ELEMENTS BY SERIES

2201 ACCOUNTING MACHINE MODULE		MEASURED QUANTITIES
2210	SOLVE PROBLEMS. Unforeseen contingencies directly related to the functions noted below which would not ordinarily be handled by routine procedures associated with the functions as defined.	-
2215	ORDERS, SEARCHES, AND BOOKS. Printing order control and order forms. (Daily)	-
2220	BINDING AND BOOK FUND ACCOUNTING. Proving payment cards, detail and summary listings. (Weekly)	-
2225	STATISTICAL REPORTS. Printing and summary punching statistics. (Monthly)	-
2230	DEPARTMENTAL BOOK FUND REPORT. Selective printing. (Monthly)	-
2235	GENERAL ACCOUNTING. Proving cards, cost distribution, liability listing, checks and check register. (Weekly)	-
2240	BI-WEEKLY LISTS: PAYROLL. Produce Payroll Controls, prove Activity cards, from time sheets; cost distribution, Budget Status, FICA report.	-
2241	BI-WEEKLY LISTS: ANNUAL LEAVE INTERIM REPORT. List without summary cards.	-
2250	MONTHLY LISTS: MONTH ENDING REPORT. Prove journal entries' monthly report. Suffix run.	-
2251	MONTHLY LISTS: STOCK. Cost distribution and Budget Status.	-
2252	MONTHLY LISTS: PERSONNEL. Position Reports, employee lists. Annual, sick, and personal leave.	-
2253	MONTHLY LISTS: BENEFITS. TIAA, Life, Hospital Disability.	-
2254	MONTHLY LISTS: MONTHLY PAYROLL. Cost distribution.	-
2255	MONTHLY LISTS: WORK ORDERS. Produce list.	-

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PROGRAM ELEMENTS IN MODULE

2201	ACCOUNTING MACHINE MODULE (CONTINUED)	MEASURED QUANTITIES
2260	QUARTERLY LISTS: BUDGET STATUS REPORT. list and summary cards.	-
2261	QUARTERLY LISTS: PERSONNEL. Staff mailing, Departmental mailing lists. Date of hire. Date of birth.	-
2270	YEARLY LISTS: EMPLOYEES LETTER. Produce letter.	-
2271	YEARLY LISTS: INVENTORY ON EQUIPMENT. Sequencing.	-
2280	REPORTS ON REQUEST: CHART OF ACCOUNTS.	-
2281	REPORTS ON REQUEST: BUDGET STATUS ANALYSIS.	-
2282	REPORTS ON REQUEST: HOURS REPORT.	-
2290	MISCELLANEOUS	

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PROGRAM ELEMENTS BY SECTOR

2301 DATA PROCESSING MANUAL TASKS MODULE		MEASURED QUANTITIES
2310	SOLVE PROBLEMS. Unforeseen contingencies directly related to the functions noted below which would not ordinarily be handled by routine procedures associated with the functions as defined.	-
2315	ORDERS, SEARCHES, AND BOOKS. Stamping order numbers, checking and separating card decks, proofreading. (Daily)	-
2320	ORDERS OUTSTANDING STATUS. Prepare tapes and cards to go to the Computer Center, make corrections after orders outstanding is received from the Computer Center. (Weekly)	-
2325	BINDING AND BOOK FUND ACCOUNTING. Checking cards. (Weekly)	-
2330	DISTRIBUTION OF BOOK FUNDS. Taking reports to xerox and addressing. (Weekly)	-
2335	PROCEDURES UP-DATE.	-
2340	ACQUISITIONS AND SERIALS. Error detection and correction.	-
2345	COMPTROLLER. Error detection and correction. Accounting: find the reason for report being out of balance. Specify the areas.	-
2350	SERIALS. Proofing cards or print-outs. Interfiling slips. (Daily)	-
2360	MISCELLANEOUS	

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[illegible] DEVELOPMENT

2501 SUPERVISION AND GENERAL ACTIVITIES MODULE

2510 STAFF AND/OR DEPARTMENT HEAD MEETINGS. Attendance at regular and special meetings.

2515 POLICY FORMULATIONS, IMPLEMENTATION AND MONITORING. Work on policy matters affecting a department, a division, or the entire JUL system. This will include development of policies which extend into the community, e.g., use of the JUL by persons outside the university center.

2520 BUDGET DEVELOPMENT AND MODIFICATION. Planning budget for staff, equipment, supplies, etc.; also modifications to approved budget.

2523 BUDGET CONTROL. Control of time sheets and payroll action reports; requisitioning and receiving of supplies; monitoring free balances in various funds; preparation of money for deposit.

2525 FACILITIES PLANNING AND UTILIZATION. Plans for best use of physical area and furniture presently available to a library unit; also proposals for needed expansion.

2530 PERSONNEL MANAGEMENT. Interviewing persons for employment; preparation of job descriptions, evaluation reports; arranging work schedules; planning for annual leaves; training new staff members on methods and procedures.

2535 STAFF PROBLEM SOLVING. Handling of any problems concerning staff members in a library unit, such as, morale, rapport within department and within system, career plans, benefits program of the JUL, etc.

2540 OPERATIONS PROBLEM SOLVING. Work on problems connected with established methods and procedures within library unit.

2545 PUBLIC RELATIONS. Includes inter-departmental and inter-divisional activities; also contacts with the faculty, students, and general public which do not fall into one of the Standard Tasks identified.

2550 SECURITY AND BEHAVIOR PROBLEMS. Involves following established procedures in dealing with incidents.

2555 REPORTS. Includes regular reports to the JUL administration, also special reports as needed.

2564 ANNUAL LEAVE. Paid vacation time.

2566 HOLIDAYS. Paid holiday time.

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2501 SUPERVISION AND GENERAL ACTIVITIES MODULE (CONTINUED)

2568 SICK LEAVE. Paid time while away from work because of personal illness.

2570 LEAVE WITHOUT PAY. All leave without pay for whatever purpose.

2572 REST BREAKS. Time spent on coffee breaks and any other excused time not included in another category. Lunch time is not counted in a working day and should not be reported here.

2574 EDUCATIONAL RELEASE TIME. All excused time spent in regularly scheduled classes, special training sessions, conferences, etc.

2576 TRAVEL. Time spent for which pay is received, in getting to a location other than an employee's regular work station in order to perform an assigned task. For instance, attendance at a meeting might include two days of travel and three at the meeting. Two days should be reported as Travel and three days as Educational Release Time.

2578 NON-JOB ORIENTED MEETINGS. All excused time spent in activities not directly connected with the employee's regular work, i.e., time spent in committee work on campus, on library association activities.

2580 ENTERTAINING GUESTS. Time spent showing guests around the library, taking them to lunch, etc.

2595 TIME KEEPING. Includes only the time needed to keep up with minutes spent and quantities produced under the Standard Tasks.

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Office Module		Measured Quantities
2710	Solve problems	-
2715	Handle mail	-
2720	Answer telephone	-
2725	Receive and file order requests	Requests received
2730	Type and file	-
2735	Make records on gifts	-
2740	Return requests to faculty	-
2745	Update vendor file	-
2750	Take books to Book Cataloging	-
2755	Sort LC depository cards	-
2760	File and pull from depository catalog	Cards filed
2765	Assign carrels and lockers	Spaces assigned
2770	Handle new additions to collections	-

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PROGRAM ELEMENT DEFINITIONS

2701 OFFICE MODULE

2710 SOLVE PROBLEMS. Unforeseen contingencies directly related to the functions noted below which would not ordinarily be handled by routine procedures associated with the functions as defined.

2715 HANDLE MAIL. Opening, sorting, and distribution of all mail other than packages.

2720 ANSWER TELEPHONE. Receiving and handling calls concerning activities not specifically defined by one of the Standard Tasks.

2725 RECEIVE AND FILE ORDER REQUESTS. Routine receipt of request cards, stamping date of receipt, and interfiling in file of order requests awaiting processing.

2730 TYPE AND FILE. Typing of letters, reports, etc. and maintenance of correspondence files.

2735 MAKE RECORDS ON GIFTS. Typing of cards for gift file, adding to such cards, typing gift labels for books, selecting gift plates from file, inserting in volumes.

2740 RETURN REQUESTS TO FACULTY. Routine return of cards for titles already in the collections or on order. Other questions concerning a request will put the activity into Task 3115, CONTACT FACULTY REGARDING ORDERS AND FUNDS.

2745 UPDATE VENDOR FILE. Involves assignment of vendor number to new name to be added to the file, notification of proper units of the addition; also periodic weeding of file.

2750 TAKE BOOKS TO BOOK CATALOGING. Pulling, from proper category of volumes awaiting cataloging, books for a particular cataloger or standard cataloger, removing records, and delivering books to the cataloger and record cards to proper units.

2755 SORT LC DEPOSITORY CARDS. Selecting cards for certain categories of material to be sent elsewhere or discarded.

2760 FILE AND PULL FROM DEPOSITORY CATALOG. Interfiling of cards to be filed into catalog, filing of cards and/or slip from multiple order form into catalog. pulling of cards or slips from catalog as bumped by matching cards or slips.

2765 ASSIGN CARRELS AND LOCKERS. Assigning space, making records, issuing keys, collecting deposits.

2770 HANDLE NEW ADDITIONS TO COLLECTIONS. Receiving from technical services new material for collection; removing request cards and returning them to faculty member requesting purchase.

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Bibliographic Search Module		Measured Quantities
2910	Solve problems	-
2915	Check requests against Public Catalog and Orders Outstanding	Requests checked
2920	Check requests against Serial Record and Serial Publications in the JUL	Requests checked
2925	Complete bibliographic verification	Requests completed
2930	Revise bibliographic verification	-
2935	Perform post-receipt check	Titles checked
2940	Check gifts or blanket orders against Public Catalog and Orders Outstanding	Gifts checked
2945	Make decision on unsolicited gifts and deposits	-
2950	Prepare gifts for Data Processing	-

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PROGRAM ELEMENT DEFINITIONS

2901 BIBLIOGRAPHIC SEARCH MODULE

2910 SOLVE PROBLEMS. Unforeseen contingencies directly related to the functions noted below which would not ordinarily be handled by routine procedures associated with the functions as defined.

2915 CHECK REQUESTS AGAINST PUBLIC CATALOG AND ORDERS. Involves picking up of all information called for by procedure manual: call number of identical copy, verification of names, etc.

2920 CHECK REQUESTS AGAINST SERIAL RECORD AND SERIAL PUBLICATIONS IN THE JUL. Involves checking under title of serial to pick up information on holdings in system, possible standing order, etc.

2925 COMPLETE BIBLIOGRAPHIC VERIFICATION. Includes entire searching procedure to (1) pick up depository card or LC copy from catalogs; (2) verification from other accepted bibliographies; (3) establishment of status: not yet published, in print, out of print.

2930 REVISE BIBLIOGRAPHIC VERIFICATION. Checking of work of bibliographic searchers for accuracy and comprehensiveness, including return of cards to searchers with suggestion for further work,

2935 PERFORM POST-RECEIPT CHECK. Attempted verification, with book in hand, of titles not completely verified prior to order. Also re-verification of an item which does not entirely match order.

2940 CHECK GIFTS OR BLANKET ORDERS AGAINST PUBLIC CATALOG AND ORDERS. Involves picking up of all information called for by procedure manual: call number of identical copy, verification of names, etc.

2945 MAKE DECISION ON UNSOLICITED GIFTS AND DEPOSITS. Includes making decision or obtaining decision from another staff member or faculty member on whether a title or volume should be added to collection or discarded.

2950 PREPARE GIFTS FOR DATA PROCESSING. Includes writing necessary information on checking slips to enable Data Processing to keypunch and run processing slips.

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PROGRAM ELEMENTS BY SECTOR

New Title Acquisitions Module		Measured Quantities
3110	Solve problems	-
3115	Contact faculty regarding orders and funds	-
3120	Review requests, assign fund numbers, select vendors	-
3125	Interchange with other acquisitions units	-
3130	Monitor all funds	-
3135	Prepare request cards for Data Processing	-
3140	Receive material from Data Processing and mail orders	Orders mailed
3145	Check new Orders Out lists for possible duplication	-
3150	Claim overdue orders	Orders claimed
3155	Handle reports from vendors	-
3160	Handle work on back serial volumes or out-of-prints	-
3165	Solicit gift, exhange, and deposit titles	Titles requested

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PROGRAM ELEMENT DEFINITIONS

3101 NEW TITLE ACQUISITIONS MODULE

3110 SOLVE PROBLEMS. Unforeseen contingencies directly related to the functions noted below which would not ordinarily be handled by routine procedures associated with the functions as defined.

3115 CONTACT FACULTY REGARDING ORDERS AND FUNDS. Includes all communication with faculty: solicitation of orders, questions on individual requests, establishment of priority on requests if funds are not sufficient, etc.

3120 REVIEW REQUESTS, ASSIGN FUND NUMBERS, SELECT VENDORS. This task may be performed as requests are taken from file awaiting processing, or immediately prior to Task 3135, PREPARE REQUEST CARDS FOR DATA PROCESSING, or in connection with Task 3130, MONITOR ALL FUNDS.

3125 INTERCHANGE WITH OTHER ACQUISITIONS UNITS. Referring of requests to the proper department. It is not always obvious to the requestor which department will handle an order -- Book Acquisitions, Serial Acquisitions, Documents. Also, this fact may be discovered only through the verification process.

3130 MONITOR ALL FUNDS. Includes determination of need for soliciting orders or for notification that requests must be held for lack of funds. Also includes activity in Documents Department to replenish deposit accounts.

3135 PREPARE REQUEST CARDS FOR DATA PROCESSING. Involves sorting, after bibliographic searching, by vendor and by fund with appropriate flags inserted to enable Data Processing to function effectively and efficiently.

3140 RECEIVE MATERIAL FROM DATA PROCESSING AND MAIL ORDERS. Includes bursting multiple forms for both orders, gifts, and blanket orders. For orders, includes typing and stuffing of envelopes, inserting Order Control sheets in binder, adding order folders to file, as well as actual mailing of orders.

3145 CHECK NEW ORDERS OUT LISTS FOR POSSIBLE DUPLICATION. Scanning of new Orders Out list or supplement for indication of possible duplication; determining if duplication exists and proper course of action.

3150 CLAIM OVERDUE ORDERS. Includes individual claims and periodic sending of claim letters.

3155 HANDLE REPORTS FROM VENDORS. Proper action taken to change from one vendor to another, to cancel, to change status from order to search or vice versa, to note date due, etc.

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3101 NEW TITLE ACQUISITIONS MODULE (CONTINUED)

3160 HANDLE WORK ON BACK SERIAL VOLUMES OR OUT-OF-PRINTS. Includes advertising, searching vendor catalogs, receipt of quotations, acceptance of quotes, change of internal records.

3165 SOLICIT GIFT, EXCHANGE, AND DEPOSIT TITLES. Writing letters to issuing agencies for separate books or to have the JUL added to the mailing list for free serials. This includes requests for government publications.

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Old Serial Title Acquisitions Module		Measured Quantities
3310	Solve problems	-
3315	Check receipt records	-
3320	Notify other units of changes	-

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PROCESS ELEMENT DEFINITIONS

3301 OLD SERIAL TITLE ACQUISITIONS MODULE

3310 SOLVE PROBLEMS. Unforeseen contingencies directly related to the functions noted below which would not ordinarily be handled by routine procedures associated with the functions as defined.

3315 CHECK RECEIPT RECORDS. Includes regular checking of records on titles supposedly received currently and claiming of inactive titles.

3320 NOTIFY OTHER UNITS OF CHANGES. Includes notice to various other units of change in title of a serial or ceased publication, etc.

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PROGRAM ELEMENTS BY SECTOR

New Title Receipt Module		Measured Quantities
3510	Solve problems	-
3515	Unpack orders, gifts, exchanges, and deposits	-
3520	Receive new material	-
3525	Make permanent records and handle invoices	-
3530	Correspond with vendors	-
3535	Handle changes in Orders Outstanding records	-
3540	Accession volumes or assign identification numbers	Vols. or ID numbers

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PROGRAM ELEMENT DEFINITIONS

3501 NEW TITLE RECEIPT MODULE

3510 SOLVE PROBLEMS. Unforeseen contingencies directly related to the functions noted below which would not ordinarily be handled by routine procedures associated with the functions as defined.

3515 UNPACK ORDERS, GIFTS, EXCHANGES, DEPOSITS. Involves selection of packages which belong to one work unit and rejecting those belonging to another; unpacking and placing volumes on truck with label from package, watching for enclosed or attached invoices and packing slips.

3520 RECEIVE NEW MATERIAL. Includes pulling order folders from file, checking against records in folders to determine whether or not correct material has been sent, checking against invoice. Also includes checking of government publications against depository shipping lists.

3525 MAKE PERMANENT RECORDS AND HANDLE INVOICES. Posting of receipt and preparing invoices for payment.

3530 CORRESPOND WITH VENDORS. Includes all communication about problems of receipt or non-receipt of material and/or invoices, returning books, maintaining control of file of unpaid invoices.

3535 HANDLE CHANGES IN ORDERS OUTSTANDING RECORDS. Includes sending information to Data Processing to change records to reflect material in process of cataloging, partial receipt of order, material received without invoice, advance payments, etc.

3540 ACCESSION VOLUMES OR ASSIGN IDENTIFICATION NUMBERS. Includes actual stamping of books and routing to proper destination and sending punch cards to Data Processing; also assigning of ID numbers to serial titles.

3545 CLEAR RECORDS AND NOTIFY FACULTY. Marking and shifting of acquisitions records, after cataloging; also sending notices to faculty of new titles being received on standing order.

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PROGRAM ELEMENTS BY SECTION

Old Serial Title Receipt Module		[illegible]
3710	Solve problems	-
3715	Receive new pieces on old standing order or deposit	Pieces received
3720	Claim missing pieces	Pieces claimed
3725	Renew subscriptions	Subscriptions renewed

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3710 SOLVE PROBLEMS. Unforeseen contingencies directly related to the functions noted below which would not ordinarily be handled by routine procedures associated with the functions as defined.

3715 RECEIVE NEW PIECES ON OLD STANDING ORDER OR DEPOSIT. Involves posting on holdings records and routing of material to proper destination; also, posting payment records and approving invoices for payment; noting volumes to be picked up for binding.

3720 CLAIM MISSING PIECES. Routine claims for material noted as missing when another issue is received.

3725 RENEW SUBSCRIPTIONS. Includes check of records to see if payment is due, etc., also posting and coding invoices for payment.

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PROGRAM ELEMENTS BY SECTION

Binding Module		Measured Outputs
3910	Solve problems	-
3915	Pick up material from shelves	-
3920	Order missing numbers	Numbers ordered
3925	Prepare and send to bindery	Items sent
3930	Receive from bindery	-

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PROGRAM ELEMENT DEFINITIONS

3901 BINDING MODULE

3910 SOLVE PROBLEMS. Unforeseen contingencies directly related to the functions noted below which would not ordinarily be handled by routine procedures associated with the functions as defined.

3915 PICK UP MATERIAL FROM SHELVES. Notations made under Task 3715, RECEIVE NEW PIECES ON OLD STANDING ORDER OR DEPOSIT, or as a result of special checking of records, initiate a gathering from shelves of material to be bound.

3920 ORDER MISSING NUMBERS. Following special procedures, missing numbers are ordered, received, payment made, added to other issues to go to bindery.

3925 PREPARE AND SEND TO BINDERY. Separate books marked to show binding title; regular binding slips and records made on serial volumes; lists typed.

3930 RECEIVE FROM BINDERY. Includes checking volumes against invoice, making proper records, routing volumes to proper destination, approving invoices for payment.

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PROGRAM ELEMENTS BY SECTOR

Exchange Module		Measured Quantities
4110	Solve problems	-
4115	Correspond with other Libraries	-
4120	Obtain material to be sent on exchange	-
4125	Mail exchanges	Items sent
4130	Record material sent	-

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PROGRAM ELEMENT DEFINITIONS

4101 EXCHANGE MODULE

4110 SOLVE PROBLEMS. Unforeseen contingencies directly related to the functions noted below which would not ordinarily be handled by routine procedures associated with the functions as defined.

4115 CORRESPOND WITH OTHER LIBRARIES. Includes writing about titles desired by the JUL and those sent by the JUL to other libraries.

4120 OBTAIN MATERIAL TO BE SENT ON EXCHANGE. Involves maintaining records of source of material to be sent on exchange, actual solicitation of material, and sending for it.

4125 MAIL EXCHANGES. Requesting address labels from Data Processing, stuffing envelopes, and mailing.

4130 RECORD MATERIAL SENT. Recording each mailing in proper files.

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PROGRAM ELEMENTS BY SECTOR

Standard Catalog Module		Measured Quantities
4310	Solve problems	-
4315	Handle titles with LC copy	Titles cataloged

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PROGRAM ELEMENT DEFINITIONS

4301 STANDARD CATALOG MODULE

4310 SOLVE PROBLEMS. Unforeseen contingencies directly related to the functions noted below which would not ordinarily be handled by routine procedures associated with the functions as defined.

4315 HANDLE TITLES WITH LC COPY. Involves work, according to established procedures, of examining book and LC copy to determine that they match, handling slips and material.

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PROGRAM ELEMENTS BY SECTOR

Original Catalog Module		Measured Quantities
4510	Solve problems	-
4515	Verify bibliographic information	-
4520	Check authority files	-
4525	Make decision on monographic series	-
4530	Revise series decisions	-
4535	Catalog and classify library material	Titles cataloged
4540	Recatalog and/or reclassify library material	Titles handled
4545	Make reports to Serial Project	-

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PROGRAM ELEMENT DESCRIPTIONS

4501 ORIGINAL CATALOG MODULE

4510 SOLVE PROBLEMS. Unforeseen contingencies directly related to the functions noted below which would not ordinarily be handled by routine procedures associated with the functions as defined.

4515 VERIFY BIBLIOGRAPHIC INFORMATION. Includes searching for LC copy missed by searchers, finding LC copy on related titles, searching for needed information in other bibliographic sources.

4520 CHECK AUTHORITY FILES. Involves both subject and corporate authority files; also addition of cards and initiation of changes as needed.

4525 MAKE DECISION ON MONOGRAPHIC SERIES. Decision on whether or not series will be listed in the JUL catalogs, whether it will be classed together or parts classed separately.

4530 REVISE SERIES DECISIONS. Checking of decision made to see if it conforms with the JUL policy; may result in book and cards being returned to cataloger.

4535 CATALOG AND CLASSIFY LIBRARY MATERIAL. Includes the professional work of descriptive cataloging, assigning of classification and Cutter numbers, and preparation of copy for typist.

4540 RECATALOG AND/OR RECLASSIFY LIBRARY MATERIAL. Redoing of cataloging or classification if it is found to be faulty or out of date.

4545 MAKE REPORTS TO SERIAL PROJECT. Preparation of slip as input to computer project.

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PROGRAM LANGUAGE AT SECTOR

Subject Authority Module		Measured Quantities
4710	Solve problems	-
4715	Check headings on cards	Headings checked
4720	Make new cards	-
4725	Notify catalogers of changes	-

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PROGRAM ELEMENT DEFINITIONS

4701 SUBJECT AUTHORITY MODULE

4710 SOLVE PROBLEMS. Unforeseen contingencies directly related to the functions noted below which would not ordinarily be handled by routine procedures associated with the functions as defined.

4715 CHECK HEADINGS ON CARDS. Involves check of all subject headings on LC cards submitted by catalogers.

4720 MAKE NEW CARDS. Includes making new cards for the Subject Authority File and the Public Catalog.

4725 NOTIFY CATALOGERS OF CHANGES. Notification of the changes made in the headings on the cards submitted by catalogers.

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[illegible]

Analytics Module		Measured Quantities
4910	Solve problems	-
4915	Add to contents cards	Titles added
4920	Search entries	-
4925	Order LC cards	-

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PROGRAM ELEMENT DEFINITIONS

4901 ANALYTICS MODULE

4910 SOLVE PROBLEMS. Unforeseen contingencies directly related to the functions noted below which would not ordinarily be handled by routine procedures associated with the functions as defined.

4915 ADD TO CONTENTS CARDS. Involves pulling the cards from the Public Catalog and adding each piece after entry is is established, also making new cards for the Public Catalog and branch catalogs.

4920 SEARCH ENTRIES. Establishing proper entries through checking bibliographic sources.

4925 ORDER LC CARDS. Includes order of the cards, maintenance of the order records, and receipt of the cards.

PERMISSION AVAILABLE

PROBLEM ELEMENTS BY TECHNIQUE

Added Volume and Identical Copy Module		Measured Quantities
5110	Solve problems	-
5115	Check against the Shelf List	-
5120	Correct problems	-
5125	Add to the Shelf List and the Public Catalog	Volumes added

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PROGRAM ELEMENT DEFINITIONS

5101 ADDED VOLUME AND IDENTICAL COPY MODULE

5110 SOLVE PROBLEMS. Unforeseen contingencies directly related to the functions noted below which would not ordinarily be handled by routine procedures associated with the functions as defined.

5115 CHECK AGAINST THE SHELF LIST. Includes determination that volume can or cannot be added without problems.

5120 CORRECT PROBLEMS. Decision on whether the problem is understood and is small enough to be corrected or must be referred to a cataloger.

5125 ADD TO THE SHELF LIST AND THE PUBLIC CATALOG. Actual addition to both records of the volume number and the accession number.

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PROGRAM FLOWCHARTS BY SECTOR

Record Control Module	[illegible]
5310 Solve problems	-
5315 Stamp and file punch cards	Cards filed
5320 Pull punch cards	-

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PROGRAM ELEMENT DEFINITIONS

5301 RECORD CONTROL MODULE

5310 SOLVE PROBLEMS. Unforeseen contingencies directly related to the functions noted below which would not ordinarily be handled by routine procedures associated with the functions as defined.

5315 STAMP AND FILE PUNCH CARDS. Includes stamping on each card the cataloger's initials and the date and interfiling in the file of titles in the process of cataloging.

5320 PULL PUNCH CARDS. Includes matching the main entry card, just before it is filed in the Public Catalog, to the the punch card, withdrawing the punch card, and sending it to Data Processing.

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PROGRAM ELEMENTS BY SUBJECT

Marking Module		Measured Quantities
5510	Solve problems	-
5515	Pencil information in volumes	-
5520	Type labels for volumes	-
5525	Put in bookplates	-
5530	Revise all marking in finished volume	Volumes marked

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PROGRAM ELEMENT DEFINITIONS

5501 MARKING MODULE

5510 SOLVE PROBLEMS. Unforeseen contingencies directly related to the functions noted below which would not ordinarily be handled by routine procedures associated with the functions as defined.

5515 PENCIL INFORMATION IN VOLUMES. Copying from the cataloger's work slip the call number and making other notations.

5520 TYPE LABELS FOR VOLUMES. Copying the call number and accession number on special tape for labeling volumes.

5525 PUT IN BOOKPLATES. Stamping the bookplate or pasting special plate into books.

5530 REVISE ALL MARKING IN FINISHED VOLUME. Involves comparison for accuracy of the call number as it appears in several places in the volume and on the cards.

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PROGRAM ELEMENTS BY SECTOR

Typing Module		Measured Quantities
5710	Solve problems	-
5715	Type cards on a regular typewriter	Cards typed
5720	Type cards on MCST	Cards typed
5725	Revise card typing	-
5730	Prepare cards for duplication	-

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[illegible] DEFINITIONS

5701 TYPING MODULE

5710 SOLVE PROBLEMS. Unforeseen contingencies directly related to the functions noted below which would not ordinarily be handled by routine procedures associated with the functions as defined.

5715 TYPE CARDS ON A REGULAR TYPEWRITER. Includes typing of the call number and other information on LC card, also typing of the headings on full sets of cards.

5720 TYPE CARDS ON MCST. Includes typing of main entry, also playing back of the unit cards.

5725 REVISE CARD TYPING. Revision of the main entries and sets of cards.

5730 PREPARE CARDS FOR DUPLICATION. Sort by the number of cards needed, tape together.

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PROGRAM LISTING OF SYSTEM

Filing Module		Measured Quantities
5910	Solve problems	-
5915	Separate card sets	-
5920	Arrange the cards for each catalog	-
5925	File in the catalogs	Cards filed
5930	Revise filing in catalogs	-
5935	Pull cards from catalogs	-

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PROGRAM ELEMENT DESCRIPTION

5901 FILING MODULE

5910 SOLVE PROBLEMS. Unforeseen contingencies directly related to the functions noted below which would not ordinarily be handled by routine procedures associated with the functions as defined.

5915 SEPARATE CARD SETS. Separating cards in set according to the catalog into which each card will be filed, i. e., the Shelf List, the Nashville Union Catalog, the Public Catalog, etc.

5920 ARRANGE THE CARDS FOR EACH CATALOG. Arranging alphabetically all cards to go into an alphabetically arranged catalog, e. g., the Public Catalog, or into call number order all cards going into the Shelf List.

5925 FILE IN THE CATALOGS. Interfiling in the Public Catalog, the Shelf List, etc.

5930 REVISE FILING IN CATALOGS. Checking filing done under Task 5925 for accuracy and understanding of filing rules.

5935 PULL CARDS FROM CATALOGS. Pulling of individual cards and sets of cards for correction of errors, for reclassification and/or recataloging, etc.

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PROGRAM ELEMENTS BY SECTION

Book Charge Module		Measured Quantities
7010	Solve problems	-
7015	Charge books	Books charged
7020	Intra-library loans	-
7025	Process charge documents	-
7030	Renew books	Books renewed
7035	Perform duties at checker's post	

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PROGRAM ELEMENT DESCRIPTIONS

7001 BOOK CHARGE MODULE

7010 SOLVE PROBLEMS. Unforeseen contingencies directly related to the functions noted below which would not ordinarily be handled by routine procedures associated with the functions as defined.

7015 CHARGE BOOKS. Routine charges to patrons, as well as to other locations, such as to Reserve, to bindery, etc.

7020 INTRA-LIBRARY LOANS. Entire special procedure for this type of loan.

7025 PROCESS CHARGE DOCUMENTS. Regular procedure of noting the date due, making any special records, interfiling in the correct file.

7030 RENEW BOOKS. Regular procedure for changing records to new due date.

7035 PERFORM DUTIES AT CHECKER'S POST. Includes the examination of all library material being taken from building to ensure that proper charges have been made.

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PROGRAM ELEMENTS BY SECTION

Book Discharge Module		Measurable Output
7210	Solve problems	-
7215	Unload book drops	-
7220	Discharge books	Books discharged
7225	Process discharge records	-
7230	Process books for rebinding, etc.	-
7235	Check books for holds	-

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PROGRAM ELEMENT DEFINITIONS

7201 BOOK DISCHARGE MODULE

7210 SOLVE PROBLEMS. Unforeseen contingencies directly related to the functions noted below which would not ordinarily be handled by routine procedures associated with the functions as defined.

7215 UNLOAD BOOK DROPS. Picking up of books from the several boxes where books may be returned.

7220 DISCHARGE BOOKS. Regular procedure for withdrawing charge cards from the files and marking books returned.

7225 PROCESS DISCHARGE RECORDS. Selecting records showing the fines due and sending others for further handling for statistical use.

7230 PROCESS BOOKS FOR REBINDING, ETC. Selecting volumes in need of repair, rebinding, or replacement; sending volumes or requests for handling to the proper unit of the JUL.

7235 CHECK BOOKS FOR HOLDS. As a regular part of discharge procedure, select these volumes for special handling.

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PROGRAM ELEMENTS BY SECTOR

Hold, Recall, Lost Books, Replacement Module		Measured Quantities
7410	Solve problems	-
7415	Receive requests for holds, etc.	-
7420	Issue recall notices	Notices sent
7425	Send notices of books available	Notices sent
7430	Work on volumes reported missing	-
7435	Contact faculty on collection needs	-

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PATRON [illegible] ENTITIES

7401 HOLD, RECALL, LOST BOOKS, AND REPLACEMENT MODULE

7410 SOLVE PROBLEMS. Unforeseen contingencies directly related to the functions noted below which would not ordinarily be handled by routine procedures associated with the functions as defined.

7415 RECEIVE REQUESTS FOR HOLDS, ETC. Work with the patron on identifying titles to be flagged.

7420 ISSUE RECALL NOTICES. Sending notices to patrons on titles needed immediately.

7425 SEND NOTICES OF BOOKS AVAILABLE. Notice to patrons that books are being held for them.

7430 WORK ON VOLUMES REPORTED MISSING. Regular search of the stacks and charging records for titles reported lost; also making circulation records when the title is declared lost.

7435 CONTACT FACULTY ON COLLECTION NEEDS. Involves the decision on the need for replacement, ordering additional copies, withdrawal of books, etc.

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Overdue and Long Term Loan Module — Data Card Files

7610	Solve problems	-
7615	Handle overdues brought to the desk	-
7620	Select overdues from the circulation file	-
7625	Send notices and/or bills	Notices sent
7630	Send notices on long term loan	Notices sent

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PROGRAM REQUIREMENTS

7601 OVERDUE AND LONG TERM LOAN MODULE

7610 SOLVE PROBLEMS. Unforeseen contingencies directly related to the functions noted below which would not ordinarily be handled by routine procedures associated with the functions as defined.

7615 HANDLE OVERDUES BROUGHT TO THE DESK. Figure the fine, accept and record payment.

7620 SELECT OVERDUES FROM THE CIRCULATION FILE. Routine pulling from the file by the date due.

7625 SEND NOTICES AND/OR BILLS. Regular procedure for sending notices on books overdue and bills for fines or for replacement of lost books. Includes making lists of delinquent borrowers to be sent to university financial office for collection.

7630 SEND NOTICES ON LONG TERM LOAN. Regular notices at intervals of books charged to persons with special circulation privileges.

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PROGRAM ELEMENTS BY SECTOR

Borrower Records Module		Measured Quantities
7810	Solve problems	-
7815	Issue borrower cards	Cards issued
7820	Maintain borrower file	-
7825	Handle permission slips	-

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PROGRAM ELEMENT DEFINITIONS

7801 BORROWER RECORDS MODULE

7810 SOLVE PROBLEMS. Unforeseen contingencies directly related to the functions noted below which would not ordinarily be handled by routine procedures associated with the functions as defined.

7815 ISSUE BORROWER CARDS. Includes following policies regarding eligible borrowers in addition to those in the university community.

7820 MAINTAIN BORROWER FILE. Filing records of currently valid cards and withdrawing those no longer valid.

7825 HANDLE PERMISSION SLIPS. Decision on accepting special requests to charge material in the name of a faculty member, also control of file of slips.

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Measured Elements by Sector

Reserve Preparation Module		Measured Quantities
8010	Solve problems	-
8015	Consult with the faculty	-
8020	Check lists against Public Catalog	-
8025	Work on titles not in collections	-
8030	Withdraw volumes from regular stacks	Volumes pulled
8035	Make charges for Circulation and Reserve	-
8040	Remove records from Reserve	-

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PROGRAM LEVEL DEFINITIONS

8001 RESERVE PREPARATION MODULE

8010 SOLVE PROBLEMS. Unforeseen contingencies directly related to the functions noted below which would not ordinarily be handled by routine procedures associated with the functions as defined.

8015 CONSULT WITH THE FACULTY. Includes obtaining information on the number of copies needed, desired use, also notifying the faculty of books on search, order, etc., either by special letter or by sending typed lists.

8020 CHECK LISTS AGAINST PUBLIC CATALOG. Involves noting the call numbers of copies in the collections, information on different editions, titles not found to be in collections.

8025 WORK ON TITLES NOT IN COLLECTIONS. Involves some check on bibliographical informati . to ensure that a book is not in collections under another entry; sending titles to Book Acquisitions for rush order.

8030 WITHDRAW VOLUMES FROM REGULAR STACKS. Includes picking up books from the shelves, searching the sorting shelves and the charging files, and noting titles not found.

8035 MAKE CHARGES FOR CIRCULATION AND RESERVE. Includes making charges for volumes in hand and proper records to institute search for those not located.

8040 REMOVE RECORDS FROM RESERVE. Pulling cards from Reserve files and sending books to Circulation Desk for discharge.

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PROGRAM ELEMENTS BY SECTOR

Handbook Module*		Measured Quantities
8210	Solve problems	-
8215	Locate item for patron	Items used
8220	Instruct patrons in the use of machines	-
8225	Maintain machines in working order	-
8230	Refile or reshelve	-
8235	Report loss and needed replacement	-

*Microform, Phonograph Records, Slides

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PROGRAM ELEMENT DEFINITIONS

8201 NON-BOOK MODULE (MICROFORM, PHONOGRAPH RECORDS, SLIDES)

8210 SOLVE PROBLEMS. Unforeseen contingencies directly related to the functions noted below which would not ordinarily be handled by routine procedures associated with the functions as defined.

8215 LOCATE ITEM FOR PATRON. Pulling from shelves, cabinets, etc., desired film reel, fiche, slide, record; making circulation records as needed.

8220 INSTRUCT PATRONS IN THE USE OF MACHINES. Work with various types of machines.

8225 MAINTAIN MACHINES IN WORKING ORDER. Watching for all kinds of mechanical trouble.

8230 REFILE OR RESHELVE. Putting back items into the proper containers in the proper location.

8235 REPORT LOSS AND NEEDED REPLACEMENT. Noting the condition of record, etc., or noting loss and activating a request for purchase.

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PROGRAM ELEMENTS BY SECTOR

Copying Module		Measured Quantities
8410	Solve problems	-
8415	Make copies as requested	Copies made
8420	Receive payment and maintain records	-

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PROGRAM ELEMENT DEFINITIONS

8401 COPYING MODULE

8410 SOLVE PROBLEMS. Unforeseen contingencies directly related to the functions noted below which would not ordinarily be handled by routine procedures associated with the functions as defined.

8415 MAKE COPIES AS REQUESTED. At work stations manned by library personnel, obtain instructions on the pages to be copied, reduction desired, etc., and make copies.

8420 RECEIVE PAYMENT AND MAINTAIN RECORDS. Handling of cash, departmental requisitions, etc.

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[illegible] BY SECTOR

Shelving Module		Measured Quantities
8610	Solve problems	-
8615	Move the volumes to the sorting shelves	-
8620	Prepare for shelving	-
8625	Shelve volumes in reading rooms or stacks	Volumes shelved
8630	Revise shelving	-
8635	Shelve unbound journals in the reading rooms	Pieces shelved
8640	Shelve unbound pieces in the stacks	Pieces shelved
8645	Plan needed shifts of collections	-
8650	Shift volumes	Volumes shifted
8655	Make labels and signs	-
8660	Read shelves	-
8670	Check volumes in studies and carrels	-
8675	Inventory collection	-

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PROGRAM ELEMENT DEFINITIONS

8601 SHELVING MODULE

8610 SOLVE PROBLEMS. Unforeseen contingencies directly related to the functions noted below which would not ordinarily be handled by routine procedures associated with the functions as defined.

8615 MOVE THE VOLUMES TO THE SORTING SHELVES. This may involve moving trucks from the Circulation Desk, gathering books left on the tables, desks, or sorting shelves throughout the stacks.

8620 PREPARE FOR SHELVING. Selecting by classification number and arranging in the correct order for efficient shelving.

8625 SHELVE VOLUMES IN READING ROOMS OR STACKS. Actual placing in the proper location on the shelves.

8630 REVISE SHELVING. Checking the work of the shelver to determine knowledge of the principles of arrangement and the care given to his work.

8635 SHELVE UNBOUND JOURNALS IN THE READING ROOMS. Includes shelving newly received pieces, picking up from tables, and reshelving items.

8640 SHELVE UNBOUND PIECES IN THE STACKS. Includes unfastening containers or board covers and putting pieces in proper sequence, preparing new board covers, inserting individual sheets in looseleaf volumes.

8645 PLAN NEEDED SHIFTS OF COLLECTIONS. Includes measuring the collection, determining growth space needed, and planning actual shifts.

8650 SHIFT VOLUMES. Moving quantities of books in case of overcrowding of some sections in the stacks or relocation of some classifications, etc.

8655 MAKE LABELS AND SIGNS. Includes labels for stack ranges, notices for bulletin boards, and any sign or poster in the stack area.

8660 READ SHELVES. Examination of books on shelves, one by one, to see that each is in the proper place in relation to the other volumes on the shelf.

8670 CHECK VOLUMES IN SECTIONS AND CARRELS. Includes comparison of charge records with the volumes actually in these areas.

8675 INVENTORY COLLECTION. Checking books on the shelves against cards in the Shelf List.

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PROGRAM ELEMENTS BY SECTOR

Reference and Information Module		Measured Quantities
8810	Solve problems	-
8815	Answer information questions	Questions answered
8820	Give reference service	Questions answered
8825	Conduct orientation sessions	-
8830	Establish "Selective Dissemination of Information" Service	-
8835	Select books	-
8840	Prepare bibliographies and guides	-
8845	Create, develop, and maintain reference tools	-
8850	Execute bulletin board displays	-
8855	Select and send material for binding	-
8860	Examine material to keep informed	-

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PROGRAM ELEMENT DEFINITIONS

8801 REFERENCE AND INFORMATION MODULE

8810 SOLVE PROBLEMS. Unforeseen contingencies directly related to the functions noted below which would not ordinarily be handled by routine procedures associated with the functions as defined.

8815 ANSWER INFORMATION QUESTIONS. Includes the answering of questions of a general or location nature.

8820 GIVE REFERENCE SERVICE. Involves answering a wide variety of questions requiring specific sources of information and instructing patrons in the use of reference tools.

8825 CONDUCT ORIENTATION SESSIONS. Instructing individuals and groups in the use of the library in general and the use of reference materials in particular. The groups may be miscellaneous new students or specific classes as requested by the faculty.

8830 ESTABLISH "SELECTIVE DISSEMINATION OF INFORMATION" SERVICE. Involves sending to faculty, other staff members, and students, memos, clippings, etc., on subjects of particular interest to them; also receipt from faculty of course outlines, assignments which will generate special library use, etc.

8835 SELECT BOOKS. Includes examination of various book-selection tools and picking out titles to be suggested for addition not only to the Reference collection but to the general stack collection; initiate orders for these titles.

8840 PREPARE BIBLIOGRAPHIES AND GUIDES. Involves the evaluation and selection of titles to be included in lists of material on certain subjects available in the JUL or of material on certain subjects regardless of availability. Also includes the preparation of descriptive statements on bodies of material in the JUL or statements on methods of use of material. For example: "Selected Sources for Biographies of Authors", "How to Find Book Reviews", "Newspapers in the General Library".

8845 CREATE, DEVELOP, AND MAINTAIN REFERENCE TOOLS. Clipping certain publications and maintaining vertical files; working on biography file, college catalog collection, etc.

8850 EXECUTE BULLETIN BOARD DISPLAYS. Select and arrange material.

8855 SELECT AND SEND MATERIAL FOR BINDING. Watching new material to see when volumes are completed; making records of material sent.

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PROGRAM ELEMENT DEFINITIONS

8801 REFERENCE AND INFORMATION MODULE (CONTINUED)

8860 EXAMINE MATERIAL TO KEEP INFORMED. Involves more than home reading. Rather, this task includes regular "on the job" examination of important publications including trucks of new material added to the library.

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PROGRAM ELEMENT [illegible]

Interlibrary Loan Module		Measured Quantities
9010	Solve problems	-
9015	Receive requests for titles	-
9020	Prepare requests for processing	-
9025	Check locations	-
9030	Process requests	Requests sent
9035	Receive material	Volumes received
9040	Handle requests from other libraries	Requests received
9045	Clear records on return	-

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PROGRAM ELEMENT DESCRIPTIONS

9001 INTERLIBRARY LOAN MODULE

9010 SOLVE PROBLEMS. Unforeseen contingencies directly related to the functions noted below which would not ordinarily be handled by routine procedures associated with the functions as defined.

9015 RECEIVE REQUESTS FOR TITLES. Includes work with patron to identify titles needed.

9020 PREPARE REQUESTS FOR PROCESSING. May involve bibliographic searching and verification.

9025 CHECK LOCATIONS. Procedure for locating copies of desired items.

9030 PROCESS REQUESTS. Interlibrary loan forms or TWX request sent, also record keeping.

9035 RECEIVE MATERIAL. Involves record handling procedures to note receipt, notification of patron, handling of payment, etc.; also receipt of information on unavailability of material.

9040 HANDLE REQUESTS FROM OTHER LIBRARIES. Includes obtaining photocopies to be sent or original copies from stacks, correspondence, etc.

9045 CLEAR RECORDS ON RETURN. Involves records both on material lent and borrowed.

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SYSTEMS STUDY

Because the importance of, and reasons for, the systems study have been noted previously, this section will deal only with the study sequence, staff involvement, and management activities associated with the analysis. Page 95 outlines the staff involvement and management activities associated with each phase. Page 96 illustrates graphically the study sequence.

The systems study section of CO/OP begins with a pre-entry briefing — a conference at which the department head will provide R&D with:

1. A list of employees including name, position title, employment classification and scheduled work week.
2. An outline of operating procedures and workflow.
3. A list of all files maintained.
4. A list of primary resource materials. Each item is to be identified by the name of the employee(s) using it.
5. A list of known suggestions for operational improvement, their source, and current disposition.

As an adjunct to the briefing, the department head and R&D will review the Task Analysis Report to determine the completeness of workload coverage, the validity of the test period, deviations from normal operations, possible points of stress in the staffing configuration, and other similar factors.

Individual interviews with department personnel, essential to the system authentication process, will absorb staff time normally constituted to routine operations. However, assuming a thorough pre-entry briefing, estimates indicate interviews will average a total of only two hours per classified employee and three hours per professional employee. Interviews will be scheduled in consultation with the department head.

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At the conclusion of the interview phase, the R&D staff will document the activities and operations of the unit under study. This documentation, based upon the task analysis review, pre-entry briefing, and interviews, will be checked for accuracy and completeness by the department head and affected personnel. During this meeting each person will be given the opportunity to suggest alternatives to the present system.

The synthesis phase will involve the department head, R&D and other levels of the JUL management in the identification, selection and analysis of alternatives. These activities will result in the preparation of an additional report which will bring problems and possible solution into perspective vis-a-vis objectives, budget, staffing and other restraining factors. Following a thorough discussion of the alternatives by the department head, the Administrative Council, and the Director of Libraries, a course of action will be recommended to the appropriate authority.

Once a decision has been made, implementation planning, scheduling, and testing will be conducted by the affected department and R&D. Test results will be reviewed by management and if a satisfactory evaluation is obtained, operational changeover will occur. If the test results prove unacceptable a different alternative will be required.

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CO/OP PROJECT ACTIVITIES

	Executive Committee	Steering Committee	Administrative Council	Director of Libraries	Dept/Division Heads	Department Personnel	R & D Unit
INITIATION:							
1. CO/OP Workshop.		X	X	X	X		X
2. Formulation of JUL Objectives.		X	X	X			
3. User Survey		X	X	X			X
4. Formulation of Program Category Objectives . . .			X	X	X	X	
EXAMINATION:							
5. Task Analysis					X	X	
6. Pre-entry Briefing.					X		X
7. Task Analysis Report and Review.					X		X
8. Interviews.					X	X	X
9. Program Sector Documentation							X
10. Documentation Review. . . .					X	X	X
SYNTHESIS:							
11. Alternatives Identification					X		X
12. Alternatives Selection. . .		X	X	X	X		X
13. Alternatives Cost Analysis.					X		X
14. Alternatives Advantage Analysis.					X		X
15. Cost/Advantage Integration.							X
16. Synthesis Documentation . .							X
17. Documentation Review. . . .			X	X	X		X
ACTION:							
18. Decision.	X	X	X	X			
19. Implementation Planning and Scheduling.			X	X	X		X
20. Pre-modification Testing. .					X		X
21. Parallel Operations					X	X	X
22. Final Test and Evaluation .			X	X	X	X	X
23. Operational Changeover. . .					X	X	X

CO/OP Analysis Outline

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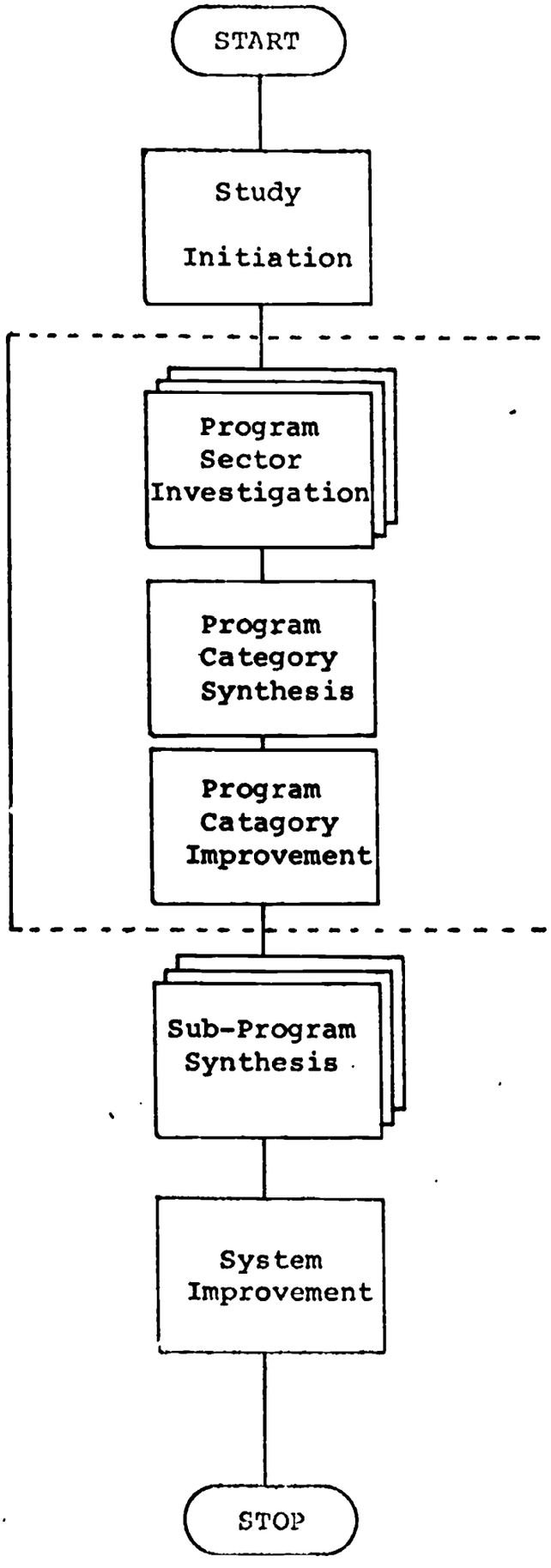
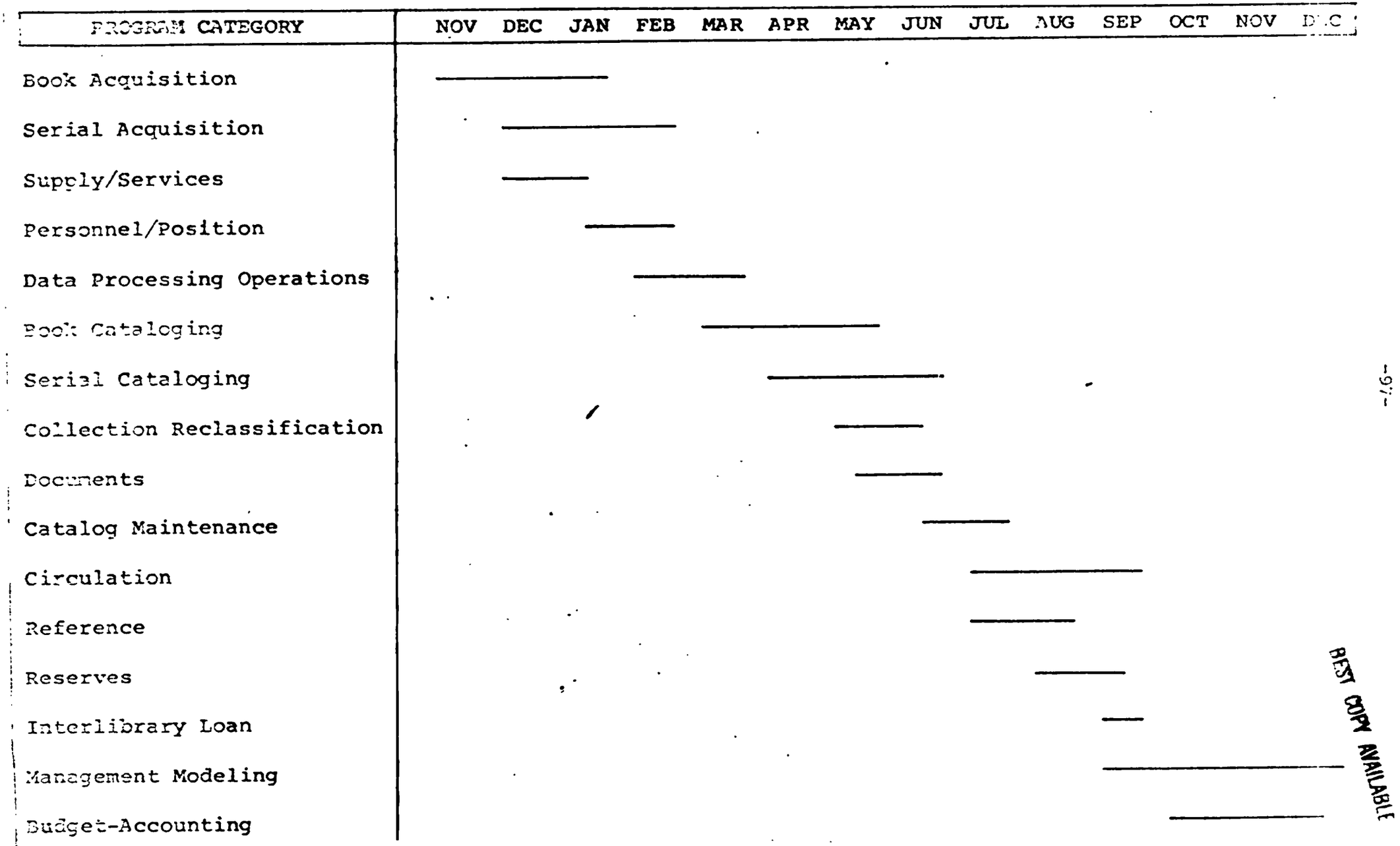


AREA STUDY SCHEDULE



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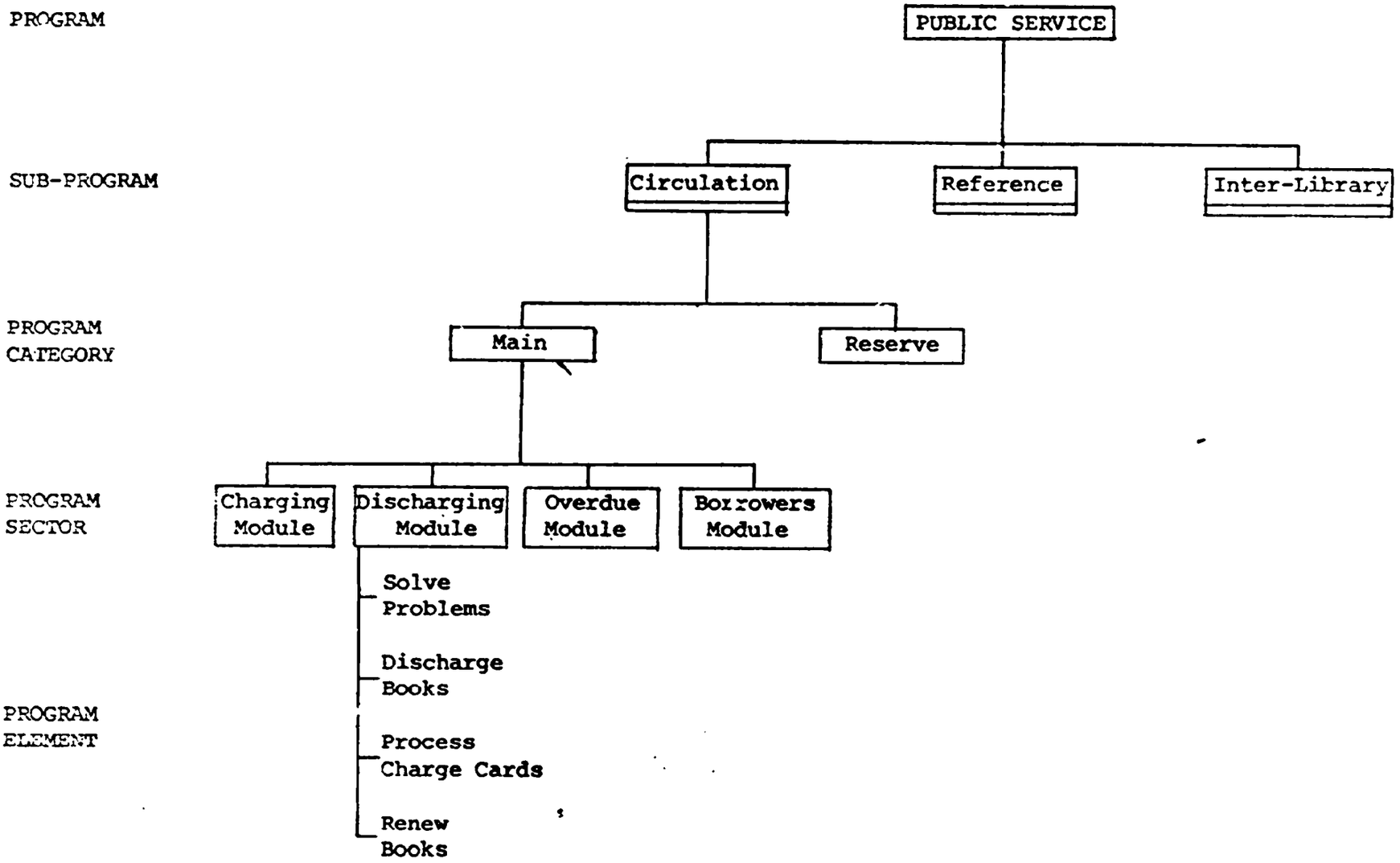
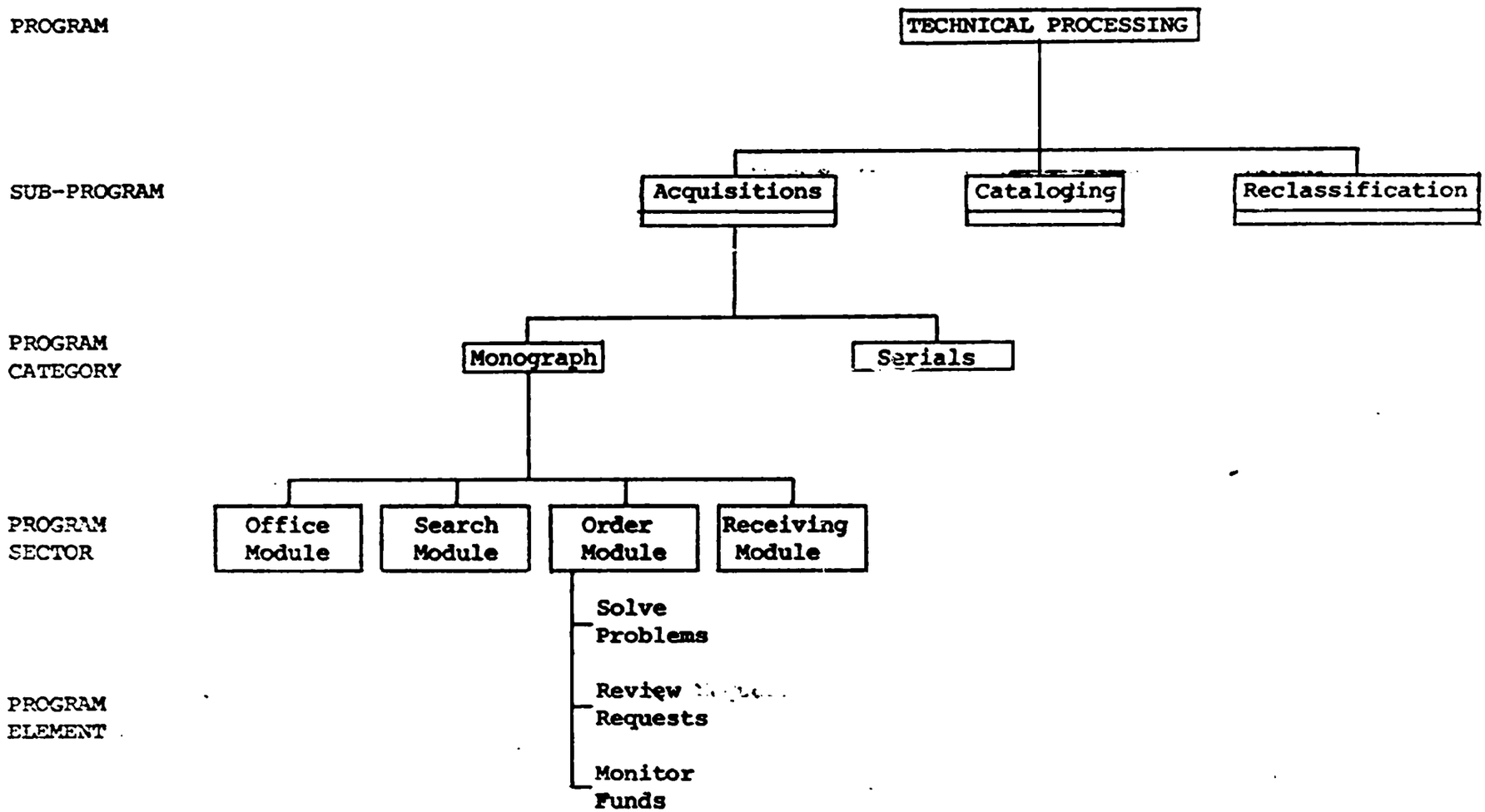


EXAMPLE OF PUBLIC SERVICE PROGRAM STRUCTURE



EXAMPLE OF TECHNICAL PROCESSING PROGRAM STRUCTURE

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