SPECIFICATION

GIER ELECTRONICS

GIER SYSTEM LIBRARY

SOFTWARE

The GIER System Library is a centralized information service for GIER System users, providing information about existing publications, such as descriptions and tapes of programs and subroutines, books, reports, and surveys, and forwarding these to the user on request.

It is important that computer users have easy access to **library routines**, i.e. programs or subroutines that perform frequently recurring jobs. The advantages of applying library routines are:

1. that library routines exist in finished and tested form – the user is spared the task of programming and related debugging;

2. that library routines are intended to be as optimal as possible as regards program length, running time, and accuracy – they are programmed by specialists.

The library routine is prepared either as a **program** for solving a whole problem or as a **subroutine** to be incorporated in a program to perform a certain part of the processes of that program.

The GIER System Library includes programs and subroutines written in SLIP and programs and procedures written in ALGOL.

All literature and relevant program tapes in the GIER System Library are classified according to the decimal system illustrated here. While General Information, as its name implies, covers publications and books of general interest, Service Routines comprises the actual programs and their descriptions relevant to any GIER System installation. Apart from the GIER ALGOL Compiler, there is the HELP System, incorporating the symbolic loader program SLIP and numerous other debugging aids; among other useful programs are those for testing hardware and a flexible program for introducing corrections into copies of paper tapes.

The Basic Data Processing groups include procedures and subroutines for sorting and those catering for specialized input and output requirements. The remaining five subject groups cover differing applications of the GIER System to a wide variety of problems, such as mathematics, mathematical statistics, operational research, highway and railway planning, and optical design.

Periodically the GIER System Library publishes a complete, revised **Index** of all publications and five-line **Abstracts** of each publication, arranged according to the classification system, thereby making it possible for the GIER System user to be informed promptly of the existence of a particular publication, so that he may order it if he wishes.