PROGRAM TEST SYSTEM C

SERIES 200

Program Test System C is an automatic checkout system for Series 200 programs which operate in the range upward from 12,288 characters of main memory storage. The system operates in conjunction with the Series 200/Operating System-Mod 1 (Tape Resident) and facilitates automatic program testing by providing utility functions such as dynamic and terminal memory dumps, emergency memory and tape dumps, program corrections, and test data generation.

Program Test System C consists of a set of nine utility programs which are executed under the control of the Tape Loader-Monitor C program. The system allows the sequential execution of both systems and object programs from a binary run tape (BRT). Programs may be arranged on the BRT in any combination that the user desires; however, a logical sequence is suggested in order to minimize the amount of time involved for tape searching. At the user's option, object programs may be stored on a separate BRT to increase the speed of operations.

The utility programs are requested by means of console call cards in a test director input deck. The Loader-Monitor program causes the test director deck to be read from the input device and the appropriate program to be loaded from the BRT. Both the system utility programs and the user object programs receive control from and return control to the Loader-Monitor. The Loader-Monitor automatically controls the loading and transition of programs according to the control statements in the test director deck. Since the user controls the makeup of the test director deck, the use of system functions is completely within his jurisdiction. He may include those functions which he desires to use for a particular checkout run and omit those which are unneeded.

The simplicity of the program testing procedures enables the user to process stacked sets of programs with minimal operator intervention. Temporary program corrections may be included in the test programs so that the user can modify and test the programs in a minimum amount of time. Selected portions of memory can be dumped dynamically and terminal memory and tape dumps specified to obtain necessary documentation for tested programs. An important function of the system is test data generation which includes options for the creation of several types of data file (tape) formats as well as for printed listings of the generated files.

System utility programs are varied in function and size. Depending on the function being requested, the utility programs may be executed before, during, or after the user's object program. The maximum number of storage locations occupied by the Program Test System is 2,045 characters for programs using three-character addressing or 2,585 characters for programs using four-character addressing; these amounts are in addition to that used by the Tape Loader-Monitor C program. System
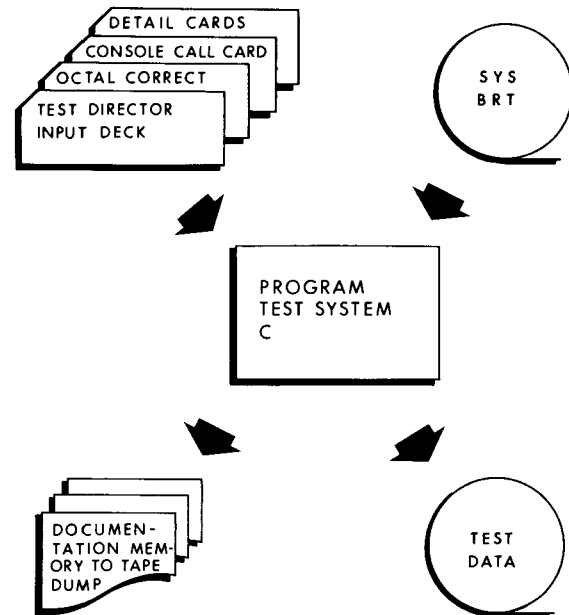
utility programs can be instructed to perform the following functions:

1. Automatic, sequential program testing,
2. Listing of messages and operator instructions,
3. Test data generation,
4. Octal program patching for specific programs,
5. Dynamic, terminal, and emergency memory dumping, and
6. Terminal and emergency tape dumping.

Program Test System C is open-ended and modular in design, thereby allowing for the incorporation of additional utility programs. In order to maintain continuity throughout the system, programs and specialized routines which are to be added to the system should adhere to certain conventions regarding addressing, transfer of control, fixed start areas, halt codes, and logical order of execution.

EQUIPMENT REQUIREMENTS
A minimum of 12,288 characters of memory
One Card Reader
One Printer
One Magnetic Tape Unit (Type 204B)

Optional Equipment Usable
One additional magnetic tape unit may be used for a separate object program BRT.

Honeywell
ELECTRONIC DATA PROCESSING