## A MULTICS BIBLIOGRAPHY

- A. Manuals which are Generally Available.
  - 1. Multics Programmers' Manual. An updateable Reference manual giving calling sequences and reference information for all user callable subroutines and commands. Includes an introduction to the Multics programming environment and a guide to typical ways of using the system.
  - The Multics Limited Service System. A reference manual containing a tutorial guide to Multics console usage and writeups for the so-called "Limited Service" Commands, a set of commands designed for extraeconomical use of the system. This manual consists primarily of selected sections of the Multics Programmers Manual. (In preparation: available 10/15/70) 50 pages.
  - 3. A Guide to Multics for Subsystem Writers, by E.I. Organick. A hard cover book describing in some detail how Multics works. The description is from the point of view of a programmer developing a large program or subsystem, who wishes to gain the extra insight to help him intelligently choose among available alternatives of his implementation. (In preparation: M.I.T. Press edition available in Summer, 1970; early drafts of chapters 1-6 are available for reference in documentation rooms at present.) 600 pages.
  - 4. A User's Guide to the Multics FORTRAN Implementation, by R. A. Freiburghouse. A document which provides the prospective Multics FORTRAN user with sufficient information to enable him to create and execute FORTRAN programs on Multics. It contains a complete definition of the Multics FORTRAN language as well as a

description of the FORTRAN command and error messages. It also describes how to communicate with non-FORTRAN programs, and discusses some of the fundamental characteristics of Multics which affect the FORTRAN user. - 68 pages.

- 5. Multics PL/I Language Specification. A reference manual which specifies precisely the subset of the PL/I language used on Multics. 174 pages.
- 6. User's Guide to the Multics PL/I Implementation, R. A. Freiburghouse et al. Provides detailed information about how the PL/I language is embedded in the Multics programming environment. 53 pages.
- 7. EPLBSA Programmer's Reference Handbook, by D. J. Riesenberg. A manual describing the only currently available assembly (machine) language for the GE-645 computer. (Needed only by programmers with some special reason to use 645 machine language.) 85 pages.
- 8. <u>GE-645 Processor Manual</u>. A hardware description, including opcodes, addressing modifiers, etc. Of interest only to dedicated machine language programmers. (In preparation: available June, 1970.) 250 pages (est.)
- B. Manuals which may be examined in the Project MAC or information Processing Center Document Rooms.
  - 1. <u>Multics System Programmers' Manual</u>. The complete reference manual describing how the system works inside. This document contains many sections which are inconsistent, inaccurate, or obsolete; it is in need of much upgrading. However, its overview sections are generally accurate and very valuable if insight into the internal organization is desired. 3,500 pages.

- 2. System Programmers Supplement to the Multics Programmers' Manual. This updateable reference manual, in the same format as the Multics Programmers' Manual, provides calling sequences of every system module. (In preparation: available June, 1970.) 350 pages.
- 3. <u>Multics Operators Handbook</u>. A reference guide for the machine room operator. 100 pages.
- C. Technical Papers About Multics.
  - Corbato, F.J., and Vyssotsky, V.A., "Introduction and Overview of the Multics System", AFIPS Conf. Proc. 27 (1965 FJCC), Spartan Books, Washington, D.C., 1965, pp. 185-196.
  - Glaser, E.L., et al., "System Design of a Computer for Time Sharing Application", AFIPS Conf. Proc. <u>27</u> (1965 FJCC), Spartan Books, Washington D.C., 1965, pp. 197-202.
  - Vyssotsky, V.A., et al., "Structure of the Multics Supervisor", AFIPS Conf. Proc. 27 (1965 FJCC), Spartan Books, Washington, D.C., 1965, pp. 203-212.
  - 4. Daley, R.C., and Neumann, P.G., "A General-Purpose File System for Secondary Storage", AFIPS Conf. Proc. 27 (1965 FJCC), Spartan Books, Washington, D.C., 1965, pp. 213-229.
  - Ossanna, J.F., et al., "Communication and Input/Output Switching in a Multiplex Computing System", AFIPS Conf. Proc. 27 (1965 FJCC), Spartan Books, Washington, D.C., 1965, pp. 231-241.
  - 6. David, E.E., Jr., and Fano, R.M., "Some Thoughts About the Social Implications of Accessible Computing", AFIPS Conf. Proc. 27 (1965 FJCC), Spartan Books, Washington, D.C., 1965, pp. 243-247.

- 7. Bensoussan, A., Clingen, C.T., and Daley, R.C.,
  "The Multics Virtual Memory", ACM Second Symposium
  on Operating System Principles (October 20-22, 1969)
  Princeton University, pp. 30-42.
- 8. Clingen, C.T., "Program Naming Problems in a Shared Tree-Structured Hierarchy", NATO Science Committee Conference on Techniques in Software Engineering, 1, Rome, Italy (October 27-31, 1969).
- 9. Graham, R.M., "Protection in an Information Processing Utility", Comm. ACM, 11, 5 (May, 1968) pp. 365-369.
- 10. Daley, R.C., and Dennis, J.B., "Virtual Memory, Processes, and Sharing in MULTICS", Comm. ACM, 11, 5 (May, 1968) pp. 306-312.
- 11. Corbato, F.J., and Saltzer, J.H., "Some Considerations of Supervisor Program Design for Multiplexed Computer Systems", Proc. IFIP Conf. 1968 Invited Papers, pp. 66-72.
- 12. Corbato, F.J., "PL/I as a Tool for System Programming", Datamation, 15, 6 (May, 1969) pp. 68-76.
- 13. Corbato, F.J., "A Paging Experiment with the Multics System", In Honor of P.M. Morse, M.I.T. Press, Cambridge, Mass., 1969, pp. 217-228.
- 14. Saltzer, J.H., and Gintell, J.W., "The Instrumentation of Multics", ACM Second Symposium on Operating System Principles (October 20-22, 1969) Princeton University, pp. 167-174.
- 15. Spier, J.M., and Organick, E.I., "The Multics Inter-Process Communication Facility", ACM Second Symposium on Operating System Principles (October 20-22, 1969) Princeton University, pp. 83-91.
- 16. Freiburghouse, R.A., "The Multics PL/I Compiler", AFIPS Conf. Proc. 35 (1969 FJCC), AFIPS Press, 1969, pp. 187-199.
- 17. Grochow, J.M., Real-Time Graphic Display of Time-Sharing System Operating Characteristics", AFIPS Conf. Proc. 35 (1969 FJCC), AFIPS Press, 1969, pp. 379-385.
- 18. Saltzer, J.H., and Ossanna, J.F., "Remote Terminal Character Stream Processing in Multics", AFIPS Conf. Proc. 36 (1970 SJCC) AFIPS Press, 1970, pp. 621-627.

- D. M.I.T. Theses Related to Multics.
  - Saltzer, J.H., "Traffic Control in a Multiplexed Computer System", Sc.D., 1966 (MAC-TR-30).
  - Rappaport, R., "Implementing Multi-Process Primitives in a Multiplexed Computer System", S.M., 1968. (MAC-TR-55).
  - Deitel, H., "Absentee Computations in a Multiple-Access Computer System", S.M., 1968. (MAC-TR-52).
  - 4. Greenbaum, H., "A Simulator of Multiple Interactive Users to Drive a Time-Shared Computer System", S.M., 1968. (MAC-TR-58).
  - 5. Grochow, J., "The Graphic Display as an Aid in the Monitoring of a Time-Shared Computer System", S.M., 1968. (MAC-TR-54).
  - 6. Ancona, R.I., "A Compiler for MAD-Based Language on Multics", S.M., 1968.
  - 7. Clark, D., "A Reduction Analysis System for Parsing PL/I", S.M., 1968.
  - 8. Schroeder, H.D., "Classroom Model of an Information and Computing Service", S.M., 1969.
  - Vogt, C.M., "Suspension of Processes in a Multiprocessing Computer System", February, 1970.