

## E. Theses in preparation:

1. Schell, Roger W. "Dynamic Reconfiguration of a Computer Utility," Sc.D., February, 1971 (est.)
2. Frankston, R., "A Limited Service System on Multics," S.B., June, 1970.

## F. Papers in preparation:

1. Ossanna, J. F., and Saltzer, J. H., "Human and Technical Factors in connecting terminals to a computer system," submitted to 1970 FJCC.

## G. Potential papers for which work is essentially complete:

1. Traffic controller organization and block/wakeup primitives.
2. Multi-processor locking strategies; Bensoussan's deadlock avoidance algorithm.
3. Full ring protection hardware with automatic gate crossing.
4. Observations on the minimum mechanism required to support a process.
5. EPL: the subset and the compiler.
6. Techniques of achieving I/O independence. (I/O switch, etc.)
7. Techniques for communication between ASCII and EBCDIC computers.
8. Magnetic tape reliability techniques.
9. User control and administrative facilities of a computer utility.
10. File system reliability measures in Multics.
11. Dynamic linking and binding in Multics.
12. Hash code algorithms in a virtual memory environment.
13. Desirable aspects of a console command language.
14. Assembler organization for pure procedure, stack environment.

15. Interactive editor systems in Multics.
  16. Segment management and library search strategies.
  17. A simplified model of Multics. (Clics)
  18. Large system development tools and techniques.
  19. Library, consolidation, and system maintenance pattern for a large system using a large system.
  20. Summary of surveillance, privacy, and protection mechanisms in Multics.
  21. Management of information system development: the Multics experience.
  22. Research frontiers in information systems.
- H. Potential papers for which work still is in progress:
1. Interprocess communication, 1970/71 version.
  2. The CIMPL language for information system implementation.
  3. Long computations and absentee users in an interactive system.
  4. Multiprogramming, page selection, scheduling, and pre-paging algorithms in Multics, and their interactions.
  5. Multilevel and detachable storage in the virtual memory environment.
  6. Dynamic reconfiguration of the computer utility.
  7. Input/output buffering in information systems.
  8. Console concentration and multiplexing in the computer utility.