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SUBJECT: Proposed Multics Monographs

This note is part of a continuing review of plans for external publications about Multics. It proposes that the various papers about Multics, both already given and proposed, be grouped together in monographs of reprints on a single subject, with additions, introductory and summary sections added to each monograph. This format would make all Multics papers of significance equally accessible, and would allow the specialist, say, in languages, to get quickly at all relevant material from Multics. Eight such monographs, with suggested contents, are listed below. One could also add the various guides to the use of Multics, or at least Organick's "Guide for Subsystem Writers" to the series.

#### Multics Monographs

- A. Lessons from the management of Multics (from N.S.A. Seminar)
  1. Introduction to Multics
  2. Critical Issues of large systems
  3. Techniques of technical management used in Multics
  4. Roles in the operations of a computer utility
  5. Summary

B. Parallel Processing in Multics

1. MAC-TR-30 (Traffic Control)
2. Rappaport thesis
3. Multiprogramming Control
4. Spier IPC documents
5. Bensoussan locking documents
6. Review of Parallel Processing; future problems

C. PL/I as a description of Multics

1. EPL subset and compiler
2. PL/I as a system programming language
3. Code generation for the Multics environment
4. The Multics PL/I Compiler
5. The CIMPL language (or else, where to go from here)
6. Clark thesis
7. Walden thesis

D. An overview of the design of Multics

1. General overview
- 2-n Updated MSPM overviews
- n+1 page removal algorithm
- n+2 Summary of privacy and protection mechanisms in Multics
- n+3 Comparison of 1969 and 1965 design.

E. Building and Maintaining Multics: a case study

1. Bootstrapping from CTSS: 6.36, etc.
2. Grochow thesis

3. Greenbaum thesis
4. Performance analysis tools
5. Segment library and maintenance
6. Observations about certification of large systems

F. Input and Output: Multics Techniques

1. I/O system structure
2. Usage of ASCII in Multics
3. How to modify a 2741 to make it useful
4. Multics standard tape format and usage
5. General I/O Controller Programming
6. The GIOC concept and the future

G. 6.233 Class Model of a Multics-like system

H. Miscellaneous Multics Papers

1. FJCC 1965 Papers
2. 1968 IFIP Paper
3. Gatlinburg papers
4. System clock design
5. Multics summary paper
6. Dietel thesis - absentee users