TO: F. J. Corbató, R.C. Daley

From: J. H. Saltzer

SUBJ: Proposal to phase out flexowriter documentation pattern in favor of on-line 645/Multics documentation.

General objective: Elimination of flexowriters and paper tape storage; on-line accessibility of the programmer's manual; use of Multics editing and formatting facilities to reduce effort in maintaining the MPM; encouragement of programmers and users to submit program writeups in directly useable form. Of the present manuals, only the /M/MPM would go on-line; the MSPM would become a typewritten book manual.

Strategy: Take advantage of present gap between usage and capacity and of present gap between MAC usage of its $400 K budget;and its needed usage.   These gaps can absorb the cost of resources of the transient required to move the manual from its present form into an on-line form.   Until on-line costs come into line or detachable storage is available, take advantage of card input and output as the bulk storage facility for Manual sections not currently being modified.

Tactics:

1. Return one flexowriter immediately, and replace it with a 2741 terminal.

2.   Have one of our student P DP-8 specialists put together a package which allows the PDP-8 to log in to Multics and act as an input device for paper tape.

3. Write a Multics PL/I programM which converts a raw flexowriter input stream into a Runoff format file.

4. All new M PM sections are typed on the 2741 using
   EDM and RUNOFF.

5. Begin methodically running in old MPM sections via
   the PBP-8 route, giving priority to those which are
   being currently updated. Each section, after ~~its~~ being
   read in and converted is edited until it produces
   correct; output, then a record ~~copy/is~~ output copy
   is made for the files and a card punch deck is requested.

6. Set up a 20-drawer card file to hold the resulting
   decks; organize appropriate cataloging.

7. Create a new project named MPM which is, for the
   moment, charged to M AC rather than considered non-
   paying. This account will pick up the initial cost
   of conversion into on-line mode on the basis that an
   on-line user's manual is a form of enhancement of
   Multics/ outside of the realm of system development
   or research. Sometime later it may be appropriate for
   the MPM maintenance cost to be borne another way.

8. Ultimately the storage cost of the manual should probably
   be picked up as part of the general system overhead,
   as it benefits all users. It will probably require
   dsu-170 or mss300 devices before costs are acceptable.

9. As soon as it is clear that the on-line system is producing
   useable results, return the second flexowriter and install
   in its place a second 2741 terminal. It may of course
   be possible that by that time use or a pool room terminal
   would be practical or preferable.

10. All future MSPM sections would be done with ordinary

typewriter techniques.

11. As the MPM system-programmer-s supplement, and other supplements come into being, they should also be placed on line; perhaps a mass transition of section BS could be attempted to get them started. (One suspects that on-line retyping would be more economical, to get the format right.)

12. The on-line MPM should be considered part of the system delivered to RADC and one of its selling points.