To: Multics Administrative Distribution

From: J. H. Saltzer

Date: November 8, 1972

Subject: Multics costs for editing and running off memos

The cost of using Multics for small and medium sized jobs is frequently debated with insufficient facts. In the typing and editing of the Multics Programmers' Manual and System Programmers' Supplement we have an easily measureable point for a very specific kind of fixed use. This use consists almost exclusively of the edm, runoff, and absentee runoff facilities, under control of a governor. I am told that if on-line runoff is restricted to small (1 or 2 page) files that the governor only occasionally enforces a slowdown of work rate.

Under these conditions, on-line first-shift charge amounted to an average of about $8.00 per console hour for the month of October, including dialup time charges. Other recent months have produced similar figures. By way of comparison if the same work had been done on other shifts, the charge would be as follows:

Shift 1	$8.00/console hour
Shift 2	$6.30/console hour
Shift 3	$3.35/console hour
Shift 4	$4.60/console hour

These figures ignore the possibility that on lightly-loaded shifts, a user might work slightly harder because of improved response time.