March 13, 1969

TO: Multics Performance Log

FROM: R.J. Feiertag

SUBJECT: Multics performance history as recorded by typical user
           script.

     The enclosed chart provides a comparison among all Multics
Standard Systems which have been certified to date. Systems
without bars could not be certified. Since these certifications
use the typical user script they are more representative of system
performance than those used to derive the chart issued March 6.
Note that MSS1.9 in this chart is not the system designated 1.9
on the earlier chart.

     Included is a prediction, based on system 2.2.B, of the
effect of installing a file system which is three times faster
and smaller than the present file system.

P - page fault
S - segment fault
L - linkage fault
W - wall crossing fault
N - non fault
I - interrupts

Script Certification   4 users

using script "cert 1"

and certifiers:

multics_test_c - 1.9, 1.12

multics_test_d - 2.1, 2.2, 2.3

Time to run script in seconds

← multiprogramming control

AST/page table coupling

TW Dim in ring 0

Predicted new file system

700

600

500

400

300

200

100

0

P
S
L
W
I
N

1.9   1/10   1.11   1.12   2.0   2.1   2.2   2.3

12/10/68   1/7/69   1/27/69   2/7/69

mss