TO: Multics Performance Log

FROM: A. Sekino

SUBJECT: Results of Daily Multics Performance Measurements
           (Period: September 16 through September 18) and
           Result of Temp-wiring Experiment

1) Results of Daily Multics Performance Measurements
    (Period: September 16 through September 18)

time unit = second
average = per interaction

Date	Run No.	No. of Users	System	Total CPU Time	Total No. of P. F.	Total Real Time	Average CPU Time	Average No. of P. F.
9/16	MPM42	21	3.11	62.900	3337	3270	.953	50
9/17	MPM43	20	3.11	------	----	----	----	--
9/18	MPM44	21	3.12	61.911	3229	3090	.938	48
9/18	MPM45	20	3.12	62.199	3198	3090	.942	48

Notes:

    1. The number of temp-wired pages was 22K words in MPM42
        and MPM44., while it was 38K words in MPM43 and MPM45.

    2. Only the first half of the script was run in MPM43.

2) Result of Temp-wiring Experiment

        During some of the daily measurements, the segments bound-mini-shell,
bound-tty-active, and cc seg were temp-wired by R. J. Feiertag to see an effect
of the additional temp-wiring. Among those measurements, the following measure-
ments were selected to see this effect.

Additional temp-wiring	No. of temp-wired pages	Measurement Run No.	
		3.9 system	3.12 system
yes	38 K	MPM35(21)*, MPM37(21)	MPM45(21)
no	22 K	MPM39(21)	MPM44(21)

*The number in the parentheses indicates the number of users on
the system.

Though the result is subject to the statistical fluctuations, the following notable difference in performance was obtained. It is to be noted that the similar result was observed independently by R. J. Feiertag.

Effect of Additional Temp-wiring

Performance Measures	temp-wired pages		Difference (38K - 22K)	
	38K	22K	3.9 system	3.12 system
CPU Time	longer	shorter	1.4 ~ 6.2	0.2
No. of P.F.	more	fewer	2 ~ 7	0
Real Time	shorter	longer	-120 ~ -240	0