MASSACHUSETTS INSTITUTE OF TECHNOLOGY

PROJECT MAC

UPDATED VERSION

Reply to: Projec

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APR 2 2 1970

J. H. SALTZER

Project MAC 545 Technology Square Cambridge, Mass. 02139

April 22, 1970

Telephone: (617) 864-6900 x6201

To:

J. C. R. Licklider

P. Brandler

D. E. Burmaster

Prof. F. J. Corbató

R. C. Daley

Prof. E. Fredkin

Prof. J. H. Saltzer

From:

M. M. Jones

Subject:

Multics Usage by Project MAC Users

This is a progress report on Project MAC's rate of expenditure under the agreement with I.P.C. to purchase \$400,000 of Multics service annually.

Figure 1 shows a plot of our monthly expenditures starting on January 1, 1970, the date our agreement with I.P.C. became effective. There was some usage in October, November and December 1969, amounting to a total of \$10,565.60 but since this does not count against the charge of \$400,000 it is not included. The charge for disk space did not take effect until February and is almost totally responsible for the \$3,000 increase between January and February 1970. The substantial increase in usage during March 1970 is the result of increased activity by established projects rather than new projects registered during the month.

Figure 2 is a cumulative plot and shows the current unexpended balance, which stood at \$356,039 effective April 1, 1970. An average monthly expenditure rate of \$39,560 would be necessary to exhaust the \$400,000 by December 31, 1970.

Figure 3 shows a plot of the total number of registered Project MAC users at the end of each month and Figure 4 shows the average charge per user per month. These two measures are frequently used by commercial time-sharing companies to monitor their business performance.

Table 1 lists, for each month starting in January 1970, the total number of Project MAC registered users, the total number of console hours they used, the average number of console hours per user, the average charge for these users, and the total charge for MAC users.

Table 2 lists the current registered projects which MAC is paying for and their current and cumulative expenditures.

I estimate that by June 30, 1970 Project MAC will have spent approximately \$125,000 of the \$400,000 annual requirement. This means that in order to spend the remaining \$275,000 by December 31, 1970 an average spending rate of approximately \$46,000/month would be required from July through December 1970.

Using the figure of \$15 per console hour, which is the current average for all MAC users, this means that we would have to use approximately 3,000 console hours per month. During March the 103 registered Project MAC users consumed only 1,239 console hours for an average of 12 hours per user. Only 9 of these users logged more than 40 console hours per month. It will be necessary to find or develop several more "big users" in order to exhaust the average of 3,000 console hours per month.

MMJ:em Attachments

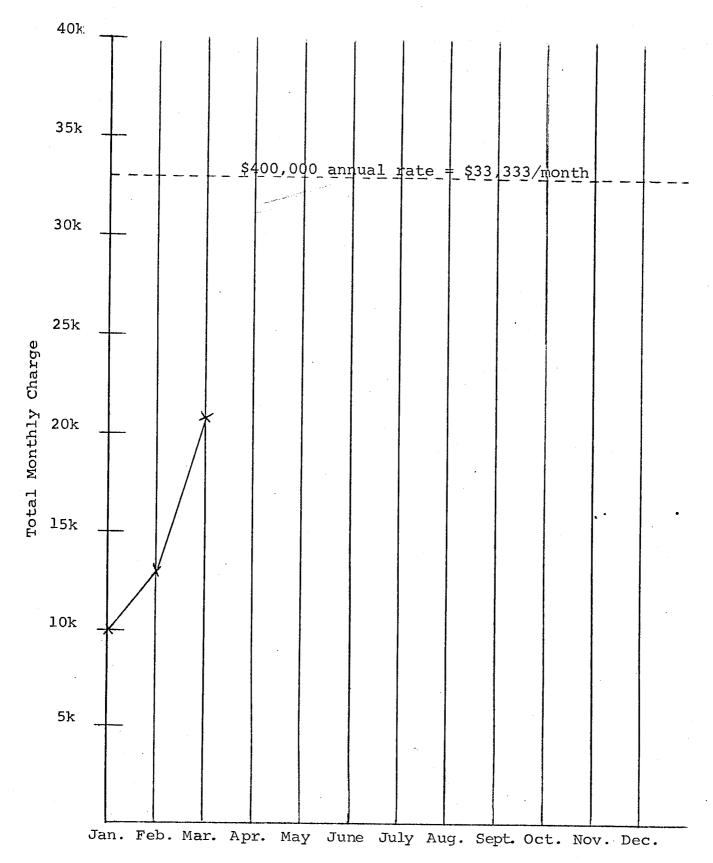


FIGURE 1
Monthly Multics Expenditures

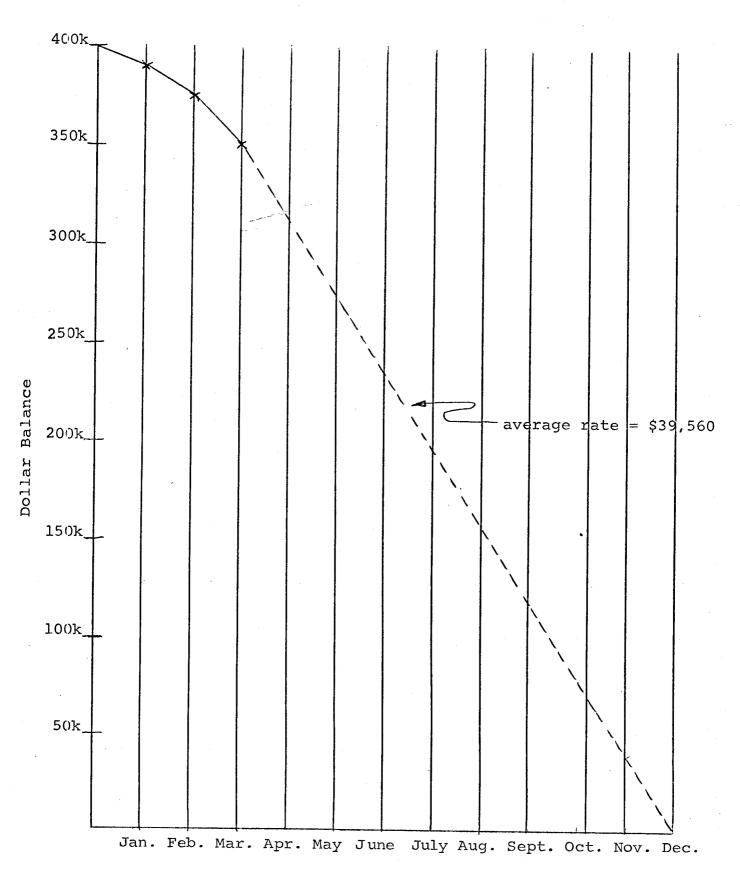


FIGURE 2
Unexpended Balance

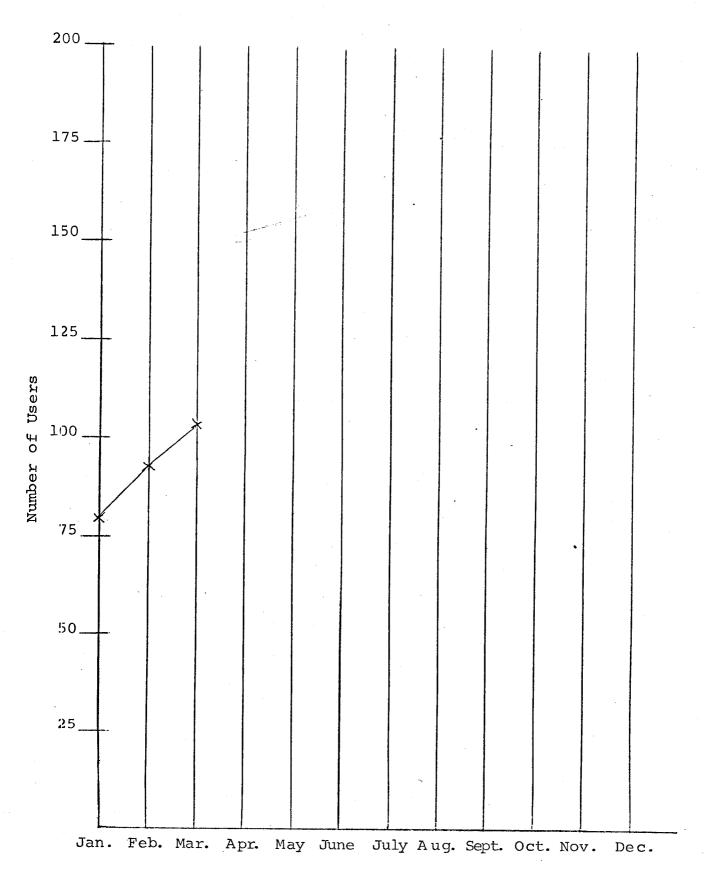


FIGURE 3
Registered MAC Users

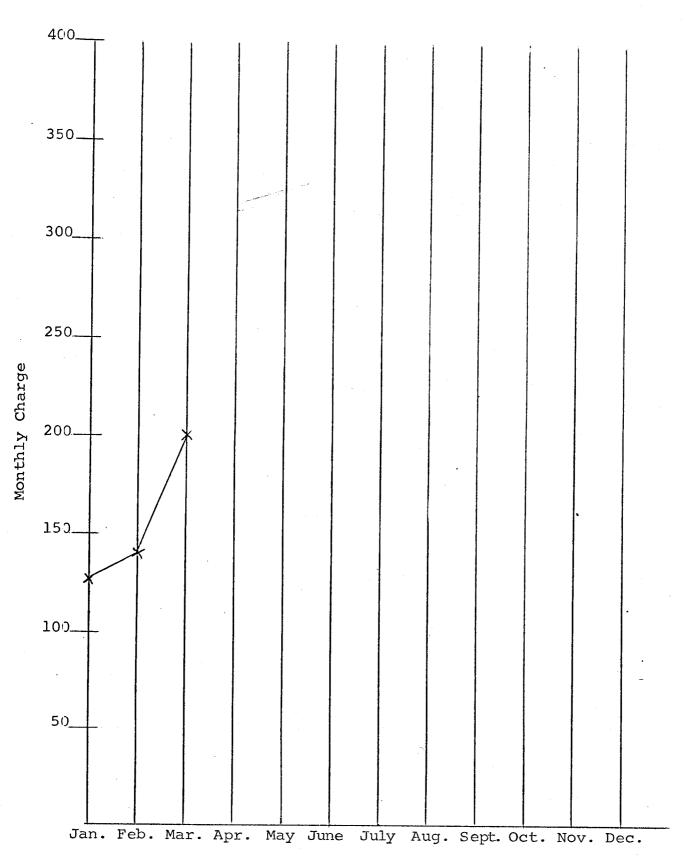


FIGURE 4
Average Monthly Charge Per User

\$356,039.27

Unexpended Balance April 1, 1970

TABLE 1 Multics Statistics for Project MAC Users

er Total <u>Charge</u>	\$ 10,049.26	13,137.06	20,774.41	\$ 43,960.73
Average Charge Per <u>User</u>	\$127	141	202	
Average Number Console Hours <u>Per User</u>	8.5	8.7	12.0	
Total Number of Console <u>Hours</u>	699	812	1239	
Number of	76 62	93	103	
	January 1970	February 1970	March 1970	Total To Date

TABLE 2

Registered Multics Projects

Supported by MAC

Project Name	Last Month	Current Month	Total This Year
AI	\$1,241.34	\$1,678.34	\$3,228.59
CompNet	37.02	38.88	100.53
Dyna Mod	116.32	127.13	327.64
GASP	408.53	326.07	1,389.96
LISP	131.26	17.15	188.30
LPS	1,249.98	2,671.66	4,324.40
MAC	508.30	1,425.84	2,384.41
MacAIMS	1,341.31	2,374.06	3,810.24
MIS	16.70	54.12	83.52
MultLab	2,485.13	4,197.13	8,307.01
ProgLing	3,630.20	2,913.14	8,709.12
ROME	337.52	1,230.56	1,966.20
SIMPLE	25.52	210.85	256.37
SIPB	1,217.32	2,893.42	5,416.41
Teach	-	-	
6.531	102.72	79.70	182.42
6.803	287.95	536.36	3,285.58
TOTALS	\$13,137.06	\$20,774.41	\$43,960.73