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Corderman

Memorandum 6L-265

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Massachusetts Institute of Technology
Lexington 73, Massachusetts

CLASSIFICATION CHANGED TO:
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Subject: Group Leaders Meeting - June 18, 1956

To: Group Leaders and Associate Group Leaders

From: C. W. Farr

Date: June 20, 1956

Present: R. R. Everett, J. A. Arnow, H. D. Benington, D. R. Brown
C. L. Corderman, S. H. Dodd, C. W. Farr, D. R. Israel
J. F. Jacobs, K. E. McVicar, B. E. Morriss, Jr.
J. A. O'Brien, W. N. Papian, J. C. Proctor, E. S. Rich
N. H. Taylor, C. A. ZrakatAgenda: 1. Building 10 Program
2. Philco Subcontract
3. Computer Time
4. Salary
5. Study with Western Electric Regarding Testing
6. Cycle Time--ADES Report
7. Vacation Review
8. Building "B" Basement1. Building 10 Program

Brown reported the status of the Building 10 program covered by a DIC contract currently being reviewed for renewal. Professor Linvill, who has been Project Supervisor, is on leave with WSEG. In the past years 10 Research Assistants participating in the program had been given Staff privileges at Lincoln including badges and use of facilities. The program will continue on the same basis and will include 3 Staff Associates and 6 Research Assistants plus Buck, Shoulders and Loeb. To date the program has concentrated on components and materials; we have made progress in the fields of transistors and Cryotrons. Loeb has been appointed a Lecturer with authority to endorse theses. Brown discussed the desirability of increasing Lincoln Staff association with thesis supervisors for mutual MIT/Lincoln benefit.

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The Staff Associate program presently totals 12 appointments (out of a quota of 20) of which approximately half are Lincoln Staff.

Everett suggested the inclusion of one or more faculty representatives from the EE Department at the evening meeting June 19, to discuss TX-2, etc.; possibly faculty representation should also be included in the Group 63 Steering Committee.

Everett reviewed the meeting with D. R. Brown and Gordon S. Brown last week; MIT/Lincoln common interest exists in establishing a program of data processing research not limited to computers but including pattern recognition, voice recognition and other self organizing system studies. Taylor pointed out that the June 19th meeting will discuss the possible relationship of TX-2 system design to the study of self organizing systems.

2. Philco Subcontract

Brown discussed plans for renewing the Philco Subcontract covering transistor research. Activity at the \$150,000 per year level is contemplated. Renewal is justified on basis of transistor improvements forthcoming, including SBT's with improved emitter efficiency, higher gain and higher current; Brown reported that 6 samples have been received of a diffused base transistor for work in the 10 Mc. frequency range. Work is contemplated in high speed transistors to serve as core memory drivers, also high voltage transistors for display applications. He explained that the micro-alloy transistor is an SBT which shows higher performance efficiency and can be produced without a major manufacturing process change by the inclusion of a short recrystallation time at approximately 200 C.

3. Computer Time

Arnow reported that the $10\frac{1}{2}$ hours per day of XD-1 time assigned to Group 67 needs to be increased by $1\frac{1}{2}$ to 2 hours per day, six days per week. Benington supported this position with figures indicating that 100% of the high priority parameter checkout runs requested on XD-1 last week were made, but only 75% of the low priority runs. Arnow believes that the need for additional time is independent of recent reliability difficulties on XD-1.

O'Brien reported that a recent allocation study of XD-1 time indicated 12 hours a day maximum assignable to Group 67, 7 hours per day to IBM (he considers any reduction of this figure unwise); this leaves 5 hours per day to divide among all other XD-1 users.

Discussion ensued concerning the possibility of further reduction of XD-1 time assigned to EPSCOM and others.

Dodd reported discussion at the recent IBM Coordination meeting of possible use of XD-2. IBM has not replied and Dodd will follow-up. Dodd requested information concerning Division 6 readiness to use XD-2;

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it was concluded that initial use of XD-2 would be by Division 2 and Combat Center parameter checkout by Division 6.

Discussion of the study of acquisition of a 704 at Lincoln emphasized the long range nature of any help from this direction.

4. Salary

Everett reported progress at Cambridge in the approval of requested salary increases; administrative routine approval is now pending.

5. Study with Western Electric Regarding Testing

Morriss reported that Ong's committee (Ayer representing Lincoln) is studying system testing required at the initial installation, differentiated from system testing required at subsequent installations; results will be available July 15.

6. Cycle Time-- ADES Report

Israel reported that Lincoln needs to make a statement to ADES late in July concerning the need for additional core memory to reduce cycle time; he expressed the preliminary opinion that 16,000 registers of core memory would be marginal and that the order magnitude of 32,000 registers would be desirable. Certain program changes are also desirable for cycle time reduction. Israel and Zraket are studying this problem and will meet with Taylor June 18, to consider assignment of additional manpower to the study. Everett pointed out that the system requirements will increase rather than decrease, therefore long-range solutions need to be compatible with additional tracking capacity.

7. Vacation Review

Proctor reviewed the vacation schedule of Group Leaders and Associate Group Leaders in Division 6 reporting no disturbing voids in summer supervision.

8. Building "B" Basement

Proctor reported satisfactory progress in making space available for occupancy in Building "B" basement; partitions and light fixtures have been ordered, bids are due June 18 on masonry walls; six week delivery has been quoted on air-conditioning equipment; conditioning of conference rooms was discussed as an interim solution.

CWF:ssm

C. W. Farr
C. W. Farr, Secretary

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