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Memorandum L-129

Division 6 - Lincoln Laboratory  
 Massachusetts Institute of Technology  
 Cambridge 39, Massachusetts

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NO.	017354
BY	RRE
DATE	3-15-60

SUBJECT: GROUP LEADERS' MEETING, December 7, 1953

To: Group Leaders

From: David R. Brown

Date: December 7, 1953

Present: Jay W. Forrester, D. R. Brown, S. H. Dodd, R. R. Everett,  
 J. C. Proctor, W. H. Taylor, C. R. Wieser, P. Youtz, and  
 for item 7, R. A. Nelson and F. C. Ryder

- Agenda:
1. Future of MTC
  2. IBM Cost Estimate and Time Schedules
  3. Core Testing Program
  4. Students
  5. Government-Furnished Equipment
  6. Release for Order Code and Instruction Frame
  7. Recruiting
  8. New Liaison Officer
  9. Case Cod Demonstration Held December 3
  10. Revised Budget for Extraordinary Expenditures During Fiscal 1954
  11. Partitioning for the First Floor of Building B

1. Future of MTC

If MTC is moved to Lexington, the move should not take place until approximately January, 1955. The principal reason for leaving MTC in Cambridge is to use it in conjunction with a basic development program to be staffed largely with research assistants. Forrester and/or Everett will prepare a definite proposal for keeping MTC in Cambridge, including the amount of space required. We have estimated that approximately 10,000 sq. ft. would be necessary.

2. IBM Cost Estimate and Time Schedules

A recent IBM estimate for the cost of XD-1 and XD-2 was much higher than seemed reasonable. This estimate was reviewed in Poughkeepsie on December 1, 2, and 3 and revised to less than \$18,000,000. Many parts of the system were reviewed in detail. For example, the power-supply system was found unnecessarily complicated. The initial specifications were revised somewhat to permit a simpler and more reliable power-supply system at no reduction in essential system performance. A significant reduction was accomplished by revising the estimates for the number of spare parts required. Additional revisions are in process and the details of these will be reviewed. \$18,000,000 should allow some for contingencies.

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IBM has accepted the necessity for making detailed time schedules and is assigning manpower to do this. R. Whitehorne will work three-quarter time with two others, G. Mills and J. Hunton. H. Ross from the IBM Systems Office will also spend some time on time schedules. By the end of January, an initial set of uncorrelated detailed schedules will be available. These schedules will be issued and assumed valid while they are being revised and correlated. The detailed time schedules will be posted weekly and summarized in the IBM Biweekly Report.

The schedules will be issued directly to those most concerned at monthly intervals. Complete detailed schedules will be maintained in the central file of the Schedules Office. The detailed schedules include check points such as the issuance of written approval or release. The work in individual groups will not be scheduled in great detail, but will specify end dates.

### 3. Core Testing Program

Cores for the first memory bank are to be jointly tested by MIT and IBM and be ready by January 15. The facilities being set up by the production group for core testing at Plant 2 appear inadequate and late.

The third shipment of cores from General Ceramics was delivered to IBM on December 1 in accordance with the delivery schedule specified by IBM. Unfortunately, IBM is just now evaluating the second shipment and finding that all lots in this shipment must be rejected according to the specifications. The extent to which the third shipment misses the specifications is unknown. To obtain sufficient cores for the first memory bank in time, some modification of the specifications, which would permit a greater yield but not alter the performance of the memory, may be necessary.

### 4. Students

Students doing thesis research in the laboratory have been issued extended visitors badges. Proctor should be notified of any cases where students work during off-hour periods so that the guards can receive proper notice.

### 5. Government-Furnished Equipment

Division 6 anticipates no request for government-furnished equipment. Any requirements for government-furnished equipment in the Cape Cod or Transition Systems will be made by Division 2.

### 6. Release for Order Code and Instruction Frame

Forrester and Everett will give top priority to consideration of a release for the order code and the instruction frame for XD-1. The first step will be to specify a release procedure. Approximately one week should be required for the entire procedure.

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7. Recruiting

The laboratory is losing staff faster than it is hiring. The senior staff members are devoting very little effort to recruiting. More applicants are needed, and more time will be required of our senior engineers. Ryder will prepare weekly reports of the recruiting situation and each senior engineer in the organization will be expected to devote a day per month to recruiting. We must prepare now to interview June graduates and look for research assistants for the basic development program.

The Lincoln Laboratory Technical Advisory Committee visited the laboratory on December 3 and 4 and pointed out that a five-percent-per-year turnover will be necessary for a healthy program. These five percent, however, should be from the bottom of the list. The Technical Advisory Committee also pointed out that the starting rate for men with Bachelor's degrees and Master's degrees is low compared to that in industry.

The desirability of having MIT courses presented in Lexington was discussed along with the possibility of having engineers in Lexington travel to Cambridge to attend classes.

8. New Liaison Officer

A new Lincoln Laboratory Army Liaison Officer, Col. S. Foote, has been appointed by General Lewis to represent the anti-aircraft command and army field forces.

9. Cape Cod Demonstration Held December 3

Representatives of the Naval Research Laboratory, Air Material Command, and Lincoln Laboratory Technical Advisory Committee attended the Cape Cod demonstration held December 3. They were impressed by the smooth functioning of the electronic system and the programs, but were disturbed by the lack of good radar data. AMC asked when Lincoln Laboratory radar developments would be ready for the field.

10. Revised Budget for Extraordinary Expenditures During Fiscal 1954

A revised budget for extraordinary expenditures is being prepared. We must know how much has been spent to date, how much spending is planned, and what additional items must be provided for.

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11. Partitioning for the First Floor of Building B

Proctor presented drawings to show the proposed partitioning for the first floor of Building B, which includes office and laboratory space for Groups 62 and 63.

Signed David R. Brown  
David R. Brown  
Secretary

DRE/jk

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