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

CLASSIFICATION CHANGED TO:
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SUBJECT: GROUP LEADERS' MEETING, March 15, 1954

To: Group Leaders

From: D. R. Brown

Date: March 17, 1954

Present: J. W. Forrester, C. W. Adams, D. R. Brown, S. H. Dodd, R. R. Everett
A. P. Kromer, W. K. Edvill, J. C. Proctor, N. H. Taylor,
C. R. Wieser, P. Youta, and for Item 1, H. D. Bennington,
J. B. Bennett, J. R. Freeman, and W. N. Papien

- Agenda:
1. Quarterly Progress Report
 2. Duplex-Central Planning
 3. Electrical-Symbol Stencils
 4. Telephone Paging System
 5. Moving Schedule and Space in Lexington
 6. IBM Program
 7. Visits to the Cape Cod System
 8. Discussion of Telephone Equipment with ADES
 9. Assignment of Staff Members to Poughkeepsie
 10. Photographic Facilities at the Barta Building
 11. Typotron for Digital Information Display
 12. Advanced Development
 13. Production of Ferrite Memory Cores by IBM
 14. Membership of Test Equipment Committee

1. Quarterly Progress Report

Present status of the Division 6 Quarterly Progress Report due at the Lincoln Laboratory Publications Office on March 15 is as follows (The dates listed are those on which copy is to be submitted for J. B. Bennett's final review.):

Part I - Transition System Logic, March 17

Physical Description of XD-1, March 19

Ferrite Memory Cores, no date, but well along

Cape Cod Tests, March 24

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Part II - Group 60, complete
Group 61, indefinite
Group 62, 30-percent complete
Group 63, indefinite
Group 64, 95-percent complete
Group 65, complete

Feature articles should be available separately.

The technical editors appointed by the groups to write the March 15 Quarterly Progress Report should carry over some of their experience to the preparation of the June 15 report. J. B. Bennett will work with the present group of editors to accomplish this.

The tentative list of feature articles and authors for the June 15 report is as follows:

Cape Cod Test Program - B. Smulowicz
MTC - B. Farley
Engineering Features of the FSQ-7 (with emphasis on display and basic circuits) - R. vonBuelow
Vacuum Tubes - H. B. Frost
Reliability - H. D. Bennington
Cape Cod System Changes and Visit of ADC Controllers - C. A. Zrakat

A tentative list for feature articles for the September 15 report includes:

Duplex Central
Status of XD-1
Ferrite Synthesis
1954 Cape Cod System

In addition to the problem of writing the progress reports, is the problem of getting the staff to read them after they are distributed. A simplified but readable progress report is contained in the Joint Progress Report by the Army, Navy, and Air Force Liaison Offices. This should be made available to more staff members.

One valuable result of having technical staff members write and edit Quarterly Progress Reports is that they become more thoroughly acquainted with the laboratory program. The shortage of staff members who are familiar with all aspects of the laboratory program should receive

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more attention, and other methods of broadening their interest and experience should be considered.

2. Duplex-Central Planning

Two meetings have been held at IBM to discuss the duplex central. The first was attended by S. H. Dodd, E. E. Morris, D. Ross, and R. Martin; and the second attended by the same group, plus R. R. Everett, and M. Astrahan. The purpose of these meetings was to become familiar with the problem and to allocate responsibility. MIT is to study initially how the duplex central is to be run and IBM is to study how to perform input switching, estimate costs, etc. S. H. Dodd, R. R. Everett, and E. E. Morris have met with representatives of Group 61 to discuss the problem of how to operate and check the operation of the duplex central. The next joint IBM-MIT meeting on duplex-central planning will be held at MIT on March 10. Preparation of a time schedule will begin at this meeting.

S. H. Dodd plans approximately six staff members for the duplex-central planning group. Some of these will come from the present Group 62. This necessitates hiring some new staff members for Group 62.

3. Electrical-Symbol Stencils

The electrical-symbol stencils used in our Drafting Room cost approximately \$13 each and cannot be made available to all engineers. A stencil will be issued to an engineer from the Stockroom with the approval of the engineer's Group Leader. Less costly stencils, satisfactory for sketches, can be made available to all desiring them.

4. Telephone Paging System

The paging systems in the Barta and Whittemore Buildings were monitored for three days recently, resulting in the following data:

Barta Building - 333 pages for staff, 461 for non-staff

Whittemore Building - 552 pages for staff, 451 for non-staff.

This is approximately one page per man per day. Very little increase would be required to overload the system. Some restrictions may be necessary in the future. A one-page telephone directory will be prepared in hope that it will reduce the number of calls on the paging system.

5. Moving Schedule and Space in Lexington

A moving schedule prepared by Group 60 shows the order in which various activities are to move, rather than dates on which the moves are to take place. The Whittemore Building Stockroom is to move first and the entire move will take approximately four weeks. The schedule shows Groups 62 and 63 moving after most of Group 60. This schedule may be revised so that Groups 62 and 63 move during the middle of the moving period.

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A duplicate set of power supplies, presently available, will permit continuous supply of d-c power.

Some discussion of space allocation in the Lexington Laboratories continues. The desirability of having available approximately 10 percent of the total space for assignment to new projects and to allow for some flexibility in the laboratory program is recognized. Since all of the space is allocated at the present time, this can be achieved only by having space relinquished for this purpose.

Merger of the Division 6 shops with the main Lincoln Laboratory shops has been proposed as a method of obtaining more space. The present Division 6 shops are listed below in order of their importance to the Division.

1. Inspection Shop
2. Wiring Shop
3. Sheet Metal Shop
4. Machine Shop

Nearly all of the space in the new building, Building F, has been allocated for hardware. Some difficulty will be encountered in housing the personnel necessary for the activities in the building. These personnel will include MIT and IBM staff members and technicians and Air Force Officers and Airmen.

Space provided for maintenance and for Air Force personnel is inadequate. In addition, space has not been provided for record keeping and files, IBM customer engineering office, and storage for spares and repair parts.

6. IBM Program

IBM proposes to inform ADES that it does not wish to provide MG sets, power transformers, power-switching equipment, cooling equipment, and cable racks for production installation.

IBM has specified no funds in its production contract with AMC for additional development engineering. The Air Force will authorize production money for engineering development when requested. However, specific authorization should not be necessary in all cases.

7. Visits to the Cape Cod System

Requests to visit the Cape Cod System continue to be received. A program for those responsible for FSQ-7 design and operation should be prepared so that they can see the Cape Cod System without seriously interfering with the Group 61 program. The visit should include a briefing, a view of the control room with the lights on, and a view of the control room with the lights off and operators present. A. P. Kromer, R. A. Nelson, and R. J. Horn will make the necessary arrangements.

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8. Discussion of Telephone Equipment with ADES

No manufacturer or party responsible for the test, installation, and maintenance of telephone terminal equipment has been selected. Representatives of Bell Laboratories feel that it is their problem and they will undoubtedly undertake to solve it. The difficulty in writing the specifications for the telephone terminal equipment occurs in attempting to specify the noise in the telephone system.

9. Assignment of Staff Members to Poughkeepsie

Several staff members of Group 62 have been asked to live in Poughkeepsie, necessitating moving their families, renting houses, etc. MIT will underwrite the cost of these moves on a no-loss, no-gain basis. Since the individuals making the move are doing so at considerable personal inconvenience, MIT will do everything it can to assist them.

10. Photographic Facilities at the Barta Building

Continued operation of the photographic facilities at the Barta Building is planned after the move to Lexington.

11. Typotron for Digital Information Display

C. Corderman will be able to demonstrate a Charactron and Typotron connected to MTC on March 16 between 1:00 and 3:00 pm. At 3:00 pm the feasibility of using the Typotron for digital information display will be discussed in the Whittmore Building Conference Room.

12. Advanced Development

An advanced development activity is to be established in Building 10, and is expected to occupy space on the third floor soon after the move to Lexington. The work in Building 10 is to be closely coordinated with other activities in Division 6 and some similar activities, such as the development of magnetic-core circuits, will be carried on in Lexington. The advanced development activity should start before the move to Lexington so that a smooth transition will be possible.

N. Daggett may participate in this activity. S. H. Dodd and J. W. Forrester will discuss his program with him.

13. Production of Ferrite Memory Cores by IBM

D. R. Brown will attend a meeting in Poughkeepsie on March 18 to discuss the IBM core fabrication program. High Street is uncertain whether or not it should undertake to support IBM's position as a producer of ferrite memory cores for the FSQ-7 program. The core fabrication group at IBM is going ahead with plans to establish facilities which will be adequate for memory core production.

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11. Membership of Test Equipment Committee

At the present time, the membership of the Test Equipment Committee is as follows:

Group 60 - L. Sutro
Group 61 - E. Rich
Group 62 - R. Best, C. Corderman, J. O'Brien, L. Sutro
Group 63 - D. Brown, chairman
Group 64 - E. Rich
Group 65 - C. Corderman

The functions and membership of the committee are being reviewed; suggestions will be welcomed.

Signed

David R. Brown
David R. Brown
Secretary

DRE/jk

cc: A. P. Kromer
W. K. Linvill

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