

Memorandum 6M-3517

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Division 6 - Lincoln Laboratory
Massachusetts Institute of Technology
Lexington 73, Massachusetts

SUBJECT: SAGE SYSTEM MEETING 11 APRIL 1955

To: See Distribution List

From: E. D. Lundberg

Date: 11 April 1955

Approved:

A. P. Kromer
A. P. Kromer

- Agenda:
1. Joint Services Advisory Committee
 2. Programming Meeting
 3. Coordination Meeting
 4. Display Meeting
 5. Computer Time on MTC
 6. Division 6 Participation in Radar Study
 7. Acceptance Tests and Changes (XD-1)
 8. Lighting Fixtures in Building F
 9. Engineering-Installation Phasing Committee Meeting
 10. Additional Auxiliary Memory for FSQ-8
 11. XD-1 Display Status

1. Joint Services Advisory Committee

The Joint Services Advisory Committee made its periodic visit to Lincoln Laboratory last week. The principle items discussed consisted of the following:

- (a) The Lincoln program in support of the budget for fiscal year 1956;
- (b) Antiaircraft and SAGE (no decision made);
- (c) Air traffic control (no decision made);
- (d) Radar improvement program

2. Programming Meeting

A meeting was held in New York on 7 April among ADES, AFCRC, IBM, JPO, and Lincoln to discuss computer programming manpower requirements and the various areas of responsibility in programming for the SAGE System. ADC has agreed that responsibility for task C as described in the draft of Lincoln Laboratory Memorandum 6M-3416-1, i.e., the adaptation of the master program to each specific subsector, would be assumed by an ADC operations group (consisting largely of Remington Rand people); however, Lincoln will be responsible for program adaptation for Subsector #2.

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BTL is sending fifteen people to Group 61, ten of whom will work initially on test programming for the 1955 Cape Cod System. IBM has written a letter to ADES agreeing to furnish material on machine logic and order codes to be used for training programming personnel. Although IBM will not do any actual training, they have agreed to assist in solving training problems as required.

3. Coordination Meeting

A Coordination Committee meeting was held at Kingston on 6 April and was attended by Everett and O'Brien. IBM and ADES have officially agreed that the current engineering-installation phasing schedule for subsector #1 will not be changed as a result of the additional auxiliary memory requirement. However, IBM has reserved the right to review the situation in January to determine whether any schedule revisions are required. The next coordination meeting will be held in Lexington on 20 April.

4. Display Meeting

A demonstration of the large board display was shown to the Joint Services Advisory Committee and ADC (Colonels Carey, Lee, and Halley) on 6 April. Photographs were taken on Polaroid positive transparent film of displays generated on MTC. These were projected onto a screen set up in the Command Post of Building "F". Fairly enthusiastic support was given to the projection system. ADC indicated that photographs taken from either the 19" or the 5" tubes were satisfactory, and that the use of either tube would be acceptable, depending on which was more expedient. Corderman is working on the engineering considerations involved in selecting the tube to be used. It was decided that specifications for the large board display should be written as soon as possible. They could be written on the basis of using a 19" tube, with the proviso that a 5" tube be used if this becomes technically advisable.

The command post DID desk was also discussed. Morriss stated that IBM can't determine cost estimates for XD-1 until the specifications for the DID desk are written. Because of a tight time schedule, it is proposed that a working mock-up model of the desk be installed in Building "F".

5. Computer Time on MTC

Wells is writing a memorandum to establish the amount of time we require on MTC, and justification therefore. It appears that ten (10) hours a day may be required, and it may be necessary for MTC to be run on a three (3) shift basis. The addition of the block transfer order to the machine is proposed. Anderson will check with Wells to determine whether the addition of the block transfer order will reduce the ten (10) hour time requirement.

6. Division 6 Participation in Radar Study

The Radar Coordination Committee was established about two (2) months ago with Dr. Valley as chairman and the leaders of all radar groups and others as members. On the basis of a report of this committee to the Lincoln Steering Committee, it was decided that Lincoln should prepare a document for a radar improvement program. A study group consisting principally of the members of the Radar Coordination Committee will make a detailed study of radar problems during the next two (2) months to consider what should be done to improve radars. Wells will represent Division 6 on this committee, as he has been working on radar simulation on MTC. Wells may contribute considerably to the radar study by pursuing simulation work on MTC and this should substantiate the request for more MTC time.

7. Acceptance Tests and Changes (XD-1)

IBM desires to have acceptance tests run during July on XD-1 equipment now installed in Building "F", and feels that these tests should be run before changes are put into the system. Actually most changes are small and will assist acceptance, and other changes won't affect acceptance tests. Also, certain changes, e.g., the additional index registers and the additional auxiliary memory, must be installed before XD-1 can be considered acceptable. Acceptance tests will be written by IBM, but must be approved by Lincoln. Because of the importance of these tests, it is essential that they be carefully studied before they are approved.

8. Lighting Fixtures in Building F

The question was posed whether additional lighting fixtures would be required in Building "F" when blue lights are installed. O'Brien is to gather all information on this and other aspects of the lighting problem in Building "F" for presentation at the SAGE System Meeting next Monday. Ormsbee (WE-ADES) should be kept informed of all work in this area.

9. Engineering-Installation Phasing Committee

The Engineering-Installation Phasing Committee will meet in New York on 13 April to discuss planning for subsector #2. This meeting will be attended by Kromer and McVicar.

10. Additional Auxiliary Memory for FSQ-8

A meeting will be held in New York on 12 April among ADC, JPO, ADES, IBM, and Lincoln to discuss the additional auxiliary memory for the FSQ-8. Lincoln will be represented by Everett, Taylor, Kromer, and Rich.

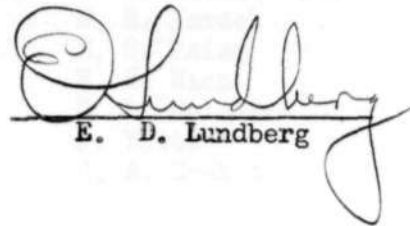
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11. XD-1 Display Status

A meeting was held at Endicott last week to outline the scope of work required in installing and testing display equipment in XD-1. IBM will be required to furnish in the order of 15 engineers and 30 to 40 technicians over a period of about three months for this work. If these personnel are not available, a delay will result in the installation and testing of the display equipment.

SIGNED:



E. D. Lundberg

EDL:mme

Attachment: Distribution List

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Meeting Attendants

R. R. Everett
H. E. Anderson
J. A. Arnow
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C. W. Farr
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H. J. Kirshner
A. P. Kromer
E. D. Lundberg (2)
K. E. McVicar
B. E. Morriss
J. A. O'Brien
J. C. Proctor
N. H. Taylor
C. R. Wieser

Others

J. W. Forrester
W. S. Attridge, Jr.
P. Bagley
D. R. Brown
D. R. Israel
B. B. Paine
E. S. Rich
R. L. Walquist
P. Youtz
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