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Memorandum 6M-3485

page 1 of 2

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

SUBJECT:

SAGE System Meeting March 28, 1955

To:

See Distribution List

From:

E. D. Lundberg

Date:

28 March 1955

Approved:

A. P. Kromer

Agenda:

1. Second Source of Tubes

2. Display Caples

3. Questions and Problems for Western Electric

Demonstration of Large Board Display
 XD-1 Telephone System Costs and Figures

6. Ferrite Memory Cores

7. Auxiliary Memory for AN/FSQ-8

1. Second Source of Tubes

The Air Force requirement for an alternate supply source for each type of tube presents a number of problems, e.g. (a) pricing; the price differential between two sources has reached the magnitude in one particular case of 50%, (b) technical problems; engineering and manufacturing techniques of different organizations frequently lead to different performance characteristics in the tube, (c) inspection problems; it is often extremely difficult to prove just where the discrepancies from the specifications do exist when tubes are procured from different sources. IBM and the contracting officer are considering the possibility of placing the burden of procurement on the prime source with the stipulation that the prime source establish a secondary source.

2. Display Cables

The detailing of the air cooling ducts in the Direction Center Building prior to receipt of information on the requirements of the console cabling now appears to present serious problems of interference with the display cabling. Work is currently underway in conjunction with Hazeltine and Western Electric to overcome the problems and retain the maximum possible flexibility on the basis of current building and cabling design. Western Electric has stated that any great delay in receipt of cable layout information will delay the cable rack installation schedule with resulting delay in the construction of the first building.

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Memorandum 6M-3485

page 2

3. Questions and Problems for Western Electric

The Systems Office and the PCO are to make up a list of questions and problem areas to be submitted periodically (weekly) to Western Electric. These are items on which we can ask specific questions such as, quantities, dates, commitments, etc. Included should be items whose importance warrants their discussion at the monthly Status and Progress Meetings.

4. Demonstration of Large Board Display

Every effort will be made to provide a demonstration of the large board display, using current photographic techniques, for Colonel Halley here at the Laboratory next week. After ADC has approved the kind of display and the techniques that we recommend be used, the engineering and design of the equipment should be turned over to IBM.

5. XD-1 Telephone System Costs and Figures

The estimate submitted to AFCRC by New England Tel. & Tel. on the cost of the XD-1 System is about \$50,000 per month based on a ten year termination charge of about \$190,000. The SAGE System Experimental Subsector Planning Committee will study the problem of assuring a flexible means of making changes to the XD-1 communications system.

6. Ferrite Memory Cores

At a meeting held in Poughkeepsie last Wednesday between Lincoln and IBM representatives, IBM indicated that it agreed to the desirability of placing the specifications for the ferrite memory cores (and other "critical" components) on a concurrence basis as suggested by Lincoln. It was pointed out that the ferrite memory core specifications had been changed about a month ago and Lincoln had no knowledge of this change.

Auxiliary Memory for AN/FSQ-8

A study by Lone and Heart has indicated that about 45,000 registers of auxiliary memory will be required for the AN/FSQ-8 Combat Center. This is opposed to 24,000 registers currently planned without additional auxiliary memory drums. Jacobs is preparing a memo based on the operational plan and ADC requirements and the study by Lone and Heart which will be ready for comments by 29 March and which will be sent to Western Electric and others concerned by the 31st of the month. It is planned that this subject will be discussed at a meeting to be held on April 12th (following the regular Status and Progress Meeting) rather than have a special meeting for the subject.

SIGNED:

E. D. Lundberg

EDL:mmc
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