

Memorandum 6M-4138

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

SUBJECT: SAGE SYSTEM MEETING, 30 JANUARY 1956  
To: Distribution List  
From: J. J. Carson  
Date: 30 January 1956  
Approved: B. E. Morriss  
B. E. Morriss

Agenda:

1. MTC Tape Units
2. Convention Travel
3. Rand STP Program
4. Phone Line Error Rate
5. Production Tape Machines
6. MTC Modifications
7. Test Concept Memoranda

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1. MTC TAPE UNITS

The AN/FSQ-7 type tape adapter frame and associated tape units for use with MTC are expected to be three or four weeks behind schedule. They will arrive untested as originally expected. This equipment is to be the same as that used with XD-1 and will be taken from items intended for production units. Contractual coverage has not yet been obtained. Late delivery could delay checkout of XD-1 since the units are required to store simulated data and problems for test purposes. E. S. Rich is going to look into this problem.

2. CONVENTION TRAVEL

J. W. Forrester stated that all travel authorizations for conventions should be properly approved before the travel is performed. Since the AIEE and IRE conventions are at hand, an estimate of the staff members who will attend should be furnished to J. C. Proctor by the group leaders.

The regulation limiting staff attendance at conventions to one per man per year was discussed. It was indicated that this is to be considered an average and should probably not be interpreted to mean that each staff man has the right to attend a convention regardless of applicability. At any rate, it would be well to spread attendance at conventions throughout the year so that no large percentage of the division staff attends any single meeting.

3. RAND STP PROGRAM

The Rand System Training Program (STP) specifications and planning were reviewed during a recent visit to Rand by representatives of the 4620th ADW and Division 6. The STP proposed by Rand would require the addition of 5 situation display consoles to the AN/FSQ-7, the modification of 5 existing consoles, and between 5,000 and 10,000 additional program orders. As a result, all spare intervention bits, display slots, and computer storage would be used up. It was decided that this STP will not be made available for the first three sites. Simulated problems will be used at these initial sites.

No special equipment is planned for STP in Combat Centers. The Combat Centers will probably process a combination of live and simulated data during STP. It is intended that no active air defense will be carried on at a Direction Center during STP, but that adjacent subsectors will provide cover.

Rand plans to have 800 people on the STP work within the next year. Another 600 people will be assigned to the Air Defense Program work.

4. PHONE LINE ERROR RATE

A memo specifying the permissible error rates on SAGE data

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circuits was circulated by Group 61 for comments about one month ago. Only a few comments were received. The study was requested by BTL and the memo represents the most complete information. Group 61 intends to rewrite the memo incorporating comments, and then turn it over to the PCO for coordination.

Data circuit error rate is an important consideration from an operational point of view. Requirements vary with the type of circuit. S. H. Dodd pointed out that recent ADES publications indicate that they consider the low permissible rates to require an excessive amount of engineering. The PCO will look into this situation and report at the next SAGE Meeting.

5. PRODUCTION TAPE MACHINES

It is presently specified that four tape machines will be provided for each computer in the duplex AN/FSQ-7. Studies concerning the Standby and Duplex Program indicate that four operating tape units will be needed with each computer 100% of the time if STP is used. Negotiations with IBM indicate that they do not wish to supply a fifth tape machine with each computer even though no changes would have to be made to the computer.

The application of the tape units under operational conditions was discussed. Group 61 indicated that a memo has been written on this subject and it will be circulated for review. Further, a study of the storage capacity of the AN/FSQ-7 is underway and will take the use of the tape machines into account.

N. H. Taylor will look into the problem of additional tape units. J. A. O'Brien will make a report on it next week.

6. MTC MODIFICATIONS

MTC will be shut down at the end of this week for the installation of new controls. Since it is desired to test all modifications thoroughly, the shut down will last approximately one month.

E. S. Rich stated that W. A. Hosier is assuming new duties. H. L. Ziegler will be in charge of MTC.

7. TEST CONCEPT MEMORANDA

Divisions 2 & 6 have agreed that B. E. Morriss will be the contact at Lincoln for all matters related to the test concepts. J. A. O'Brien indicated that all test concept memoranda will be out soon. It was emphasized that these memoranda are intended to be a statement of the philosophy of the tests rather than detailed test plans.

Questions regarding the BTL and W.E. men being trained for the test work should be considered for submission to ADES. Lincoln's estimate of the personnel required to do the testing will be ready this

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week. This will be compared with the personnel being allocated by W.E. and BTL. J. F. Jacobs will prepare a letter to ADES on the subject.

F. Simon presently has between 40 to 45 people for his effort. Present planning by Western indicates that 13 people will be required per test team.

  
J. J. Carson  
Production Coordination Office

JJC:nkv

DISTRIBUTION LIST

Meeting Attendants

\*J. W. Forrester  
\*S. H. Dodd  
\*N. H. Taylor  
\*J. F. Jacobs  
\*H. E. Anderson  
\*J. A. Arnow  
\*D. R. Aufderheide  
\*W. H. Ayer  
\*P. Bragar  
\*D. R. Brown  
\*W. J. Canty  
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\*C. L. Corderman  
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\*D. R. Israel  
\*K. E. McVicar  
\*B. E. Morriss  
\*W. Ogden  
\*J. A. O'Brien  
\*T. R. Parkins  
\*J. C. Proctor  
\*E. S. Rich  
\*P. Yountz  
\*C. A. Zraket

Others

\*R. R. Everett  
\*H. D. Bennington  
\*R. J. Buzzard  
\*R. S. Fallows  
\*N. T. Jones  
\*H. J. Kirshner  
\*W. N. Papian  
\*C. R. Wieser

\*INDICATES RECIPIENTS OF COMPLETE MEMORANDUM