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Memorandum 6M-3827

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

SUBJECT: MINUTES OF SECTION LEADER'S MEETING, JULY 29, 1955

To: Group 61

From: C. H. Gaudette

Date: 9 August 1955

Approved: H. D. Benington  
H. D. Benington

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Persons Present: J. A. Arnou, H. D. Benington, C. H. Gaudette,  
J. F. Jacobs, J. D. Madden (RAND), W. S. Melahn (RAND),  
W. I. Wells, C. R. Wieser, C. A. Zraket.

Abstract: The Agenda for the section leader's meeting on 27 July 1955  
was as follows:

- 1 700 Study
- 2 Plans for Duplex Standby
- 3 Equipment Changes in FSQ-7
- 4 Secretaries
- 5 S & EC Group - Cooperation on Utility Programs
- 6 Report on the Dissection of SAGE Test Activity
- 7 Schedules for Operational and Mathematical Specs
- 8 Air Traffic Control
- 9 Reduction of XD-1 Time
- 10 Air Defense Programming Course
- 11 SAGE Familiarization Course - October 1955
- 12 Space Coordinator for Group 61

CLASSIFICATION CHANGE TO:  
A th: DD354  
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Date: 1-4-60

1. XD-1 704 Tape Compatibility

H. D. Benington summarized the results of the July 26 meeting between Lincoln, RAND and IBM representatives concerning magnetic tape compatibility. 704 and XD-1 tape can be made compatible if 704 tape units must be modified to accomplish the function. The 704 records data at 4/5 the speed of the XD-1 tape units. J. Arnou commented that 704 recordings can be recorded by XD-1 to obtain maximum XD-1 density during operation.

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Madden presented a list of companies which have ordered 700-type machines. The list included the number of machines, the type, and the amount of peripheral equipment ordered.

## 2. Plans for Duplex Standby

A proposal for the duplex standby function was issued as an interoffice memo on Wednesday, July 27. A. Shoolman has been taken out of this subsection (headed by Vance) and placed in Attridge's subsection. W. Ladd and M. Feldstein have been assigned to the Duplex Planning and Checkout subsection. Operation specifications for the Start Over program will be prepared by Ladd and Feldstein and will be issued by Sept. 15. J. Jacobs indicated that the duplex philosophy should be talked over more fully at sometime in the future.

## 3. Equipment Changes in FSQ-7

Benington questioned whether Group 61 takes equipment changes seriously enough. Zraket proposed that when a change is requested, H. Rising should evaluate the need for the change and report back to person requesting change. Zraket suggested that Rising should have one or two technical assistants to assist him in this work. Arnow suggested that Rising could probably use staff member assistance and that this staff member might be obtained from outside Group 61.

## 4. Secretaries

Jacobs indicated that Group 61 has requested nine more secretaries. In addition to regular typing jobs, these new secretaries could perform routine administrative functions for the section leaders. Jacobs suggested that the problem of new administrative assistants and secretaries should be studied by Israel and Arnow.

## 5. S & EC Group - Cooperation on Utility Programs

Benington has talked to the S & EC Group and proposed that they would provide up to 1/2 man-years of work in the utility program area. The group does not want to do coding but wish to be consultants. Arnow and Zraket pointed out that consultants are not needed and might cost extra time. Jacobs suggested that further discussion of this problem be postponed until D. Israel's return.

## 6. Report on Discussion of SAGE Test Activity

C. R. Wieser described the proposed SAGE Test Program. A recent memo (6L-212, Test Program for the 1954 CCS, H. W. Boehmer C. R. Wieser) evaluates the existing test program associated with the 1954 CCS and the requirements of such a Test Program. The difficulties in the present program are:

- a. system is incomplete; i.e. sections of the program and equipment do not work as specified in operation specifications;

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- b. the Test Program has too many objectives;
- c. there is no existing document defining the program.

The purpose of the SAGE Test Program is to support development, not to evaluate the system. The proposed program is designed to be completed by April 1956.

The Test program and the long range tracking study are independent studies.

7. Schedules for Operational and Mathematical Specifications

Zraket stated that new schedules have been prepared, and that the work to be done during the period October 1955 to April 1956 should be scheduled. Jacobs commented that schedules should be conservative.

Zraket suggested that simulation should not be restricted to radar data generation but that there is a need for a dynamic (or manual) simulation program as was used in the 1954 Cape Cod System.

8. Air Traffic Control

C. R. Wieser stated that government sources are interested in how SAGE can contribute to air traffic control. Colonel Taylor of the Air Navigation Development Board has recommended the CRC carry out this investigation.

9. Reduction of XD-1 Time

The 700 Series Study, being conducted by M. Feldstein, will be extended to prepare a detailed reevaluation of the XD-1 computer time required through April 1956.

10. Air Defense Programming Course

P. Bagley indicated that a four week Air Defense Programming Course will be given at the completion of the AN/FSQ-7 Programming course conducted by IBM. The 4 week course will be conducted by people in Benington's and Zraket's sections.

11. SAGE Familiarization Course

A. Hill indicated that the next SAGE Familiarization course will be conducted in October 1955 and would be a 9 day course of 60 hours. The time will be distributed as follows:

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reading	14 1/2 hours
breaks	6
tours	3 1/2
student seminars	2
film	1
operation	<u>3</u>
	30
lectures	<u>30</u>
total	60 hours

Twenty-four hours of the lectures will be given by Group 61 staff members. J. Jacobs indicated that the amount of assistance provided by members of Zraket's and Benington's sections should be limited and the course should begin on October 15.

Signed by:

C. H. Gaudette  
C. H. Gaudette

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