

Memorandum 6L-290

Page 1 of 3

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

Subject: Group Leaders' Meeting - 7 January 1957
To: Group Leaders and Associate Group Leaders
From: C. W. Farr
Date: 9 January 1957
Present: R. R. Everett, N. H. Taylor, J. A. Arnow, D. R. Brown,
W. J. Canty, C. L. Corderman, N. L. Daggett, S. H. Dodd,
R. S. Fallows, C. W. Farr, D. R. Israel, J. F. Jacobs,
B. E. Morriss, J. A. O'Brien, W. N. Papian, E. S. Rich,
and P. Youtz
Agenda: 1. Long-Range Program
2. 1960 Revision
3. Computer Time

ACTION

1. Long-Range Program

Everett reviewed the study which is in process at the Division 2 and 6 Headquarters level concerning overlapping efforts and responsibilities. Two additional meetings are scheduled in which Division 2 will propose a developed plan for improving air defense computer programs, and Division 6 will review the considerations necessary in changing the SAGE System at McGuire and in ESS.

Both Divisions 2 and 6 find their efforts involve activities of a development nature. A clean delineation of responsibility between shakedown and evaluation is probably impractical between the divisions; a joint approach to these problems is contemplated.

Everett will continue to pursue problem with Division 2 as rapidly as possible without sacrificing workability for speed.

Everett will pursue problem with Jacob's subdivision.

This document is issued for internal distribution and use only by and for Lincoln Laboratory personnel. It should not be given or shown to any other individuals or groups without express authorization. It may not be reproduced in whole or in part without permission in writing from Lincoln Laboratory.

The research reported in this document was supported jointly by the Department of the Army, the Department of the Navy, and the Department of the Air Force under Air Force Contract No. AF 19(122)-458.

Memorandum 6L-290

Page 2

ACTION

1. Long-Range Program (continued)

Problems to be ironed out include definition of responsibilities between Group 22 and Group 64, joint simultaneous use of airborne aircraft in CCS and ESS tests, and effective utilization of data from SOE's and SOT's.

Everett also discussed the need for an office to receive (and seek) proposals for changes in SAGE System and, furthermore, to gather data for decisions concerning action. This function was performed for FSQ-7 by the Systems Office.

2. 1960 Revision

Taylor emphasized the need for thoughtful consideration of the air defense capability attainable in the 1960 Revision of SAGE System. There is a tendency to imply, optimistically, capabilities which cannot be attained in this time period; failure to meet these implied conditions would result in disappointment; on the other hand, Lincoln must avoid continually "dragging its feet." Lincoln is in a position to recommend the incorporation of those features in each time phase which the state of the art will permit. The commercial organizations will naturally also make recommendations based on profit motive--all the more reason for sound thinking and sound recommendations from Lincoln.

Responding to question from Morriss, Everett briefly outlined the efforts of Lincoln and the Air Force to arrive at a better integration of the air defense program.

Everett inquired concerning steps taken to monitor WE-ADES testing at McGuire.

Everett and Dodd urged that Lincoln staff members convey to others a balanced attitude toward SAGE performance (i. e., avoid emphasizing its faults; avoid apologizing if it does not perform miracles; point out the cases where it does the job intended). Taylor urged that we avoid talk of changing the computer program to make up for inadequate radar data.

O'Brien stated Aronson will be spending Tuesdays, Wednesdays, and Thursdays at McGuire starting January 14; Everett asked Dodd to advise Schwartz, Clement, Ong, and Simon; Aronson will act in a consultant capacity.

Memorandum 6L-290

Page 3

ACTION

3. Computer Time

Jacobs reported on meeting January 4 at Kingston with IBM concerning test cell computer reliability. Mean free time between errors is approximately 15 minutes due principally to tape troubles, only good for most elementary kind of work.

Morriss reported similarly (15 minutes of mean free time) at McGuire. Usable time approximately 60% for each machine of duplex, tapes and drums are sources of trouble; discussion with Mills of IBM not encouraging.

Taylor proposed that acceptance specification include stipulation that master tape be run through machine a given number of times.

O'Brien was requested to prepare a test specification for inclusion in the acceptance spec.

Everett requested Dodd to advise Mills of Lincoln's concern over the 15 minute mean free time at Kingston and McGuire and our intention to report at ADES meeting.

Everett requested Arnow to arrange briefing (for Everett) to explain "abusive" use of tape units.

CWF:EH


C. W. Farr, Secretary