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

SUBJECT: EPSCOM BIWEEKLY REPORT FOR 15 JUNE 195

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From:

R. P. Mayer

Date:

20 June 1956

Approved: K.S. Uu

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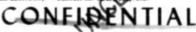
Abstract: The EPSCOM force still stands at 40

chart and schedule is included along with reports from

programmers.



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A new Biweekly Report form for EPSCOM programmers has been distributed. This form includes spaces for reporting percent of progress on various phases of a program, as well as for discussing the problems encountered and progress made.

Further details on the EPSCOM programs can be found below.

(R. P. Mayer)

## Single Track Tracking Program: 8500

The new version of the tracking program has been run with data. There is a major bug in the program in that all of the data is concentrated at about 5 points on the scope and at this time I am trying to determine what causes the error in the radar display. It appears to be in the conversion routine. Another bug is the inability to initiate on any of the radar data.

(W. M. Gramling)

#### Height-Finder Flight and Equipment Test Program: 8209 & 8102

The Height-Finder Flight program is considered to be complete to the point where it should be combined with the tracking program. A deck of octal corrections was used to simulate, as far as possible, the input to the Flight Test program. All print-outs have been checked and all variations in program logic have been tested as far as possible.

The Height-Finder Equipment Test program has been operating to the requirements of the test team. A few changes have been made and some trouble has been localized to card processing errors.

The documentation is in process for both programs, being in total about 40% complete.

(J. J. Maroney and F. J. Sweeney)

#### Quick Radar Recapitulation Program: 8905

About 70% of the coding has been done and about 2/3 of that will be sent to the card room this week.

(Helen E. Quirk)

## LRI\_GFI Pattern Check Program: 8201

This program is complete except for the conversion to SAGE and to the FST-1 pattern. A new assembly will be made and checked out before attempting to convert the program for the FST-1 pattern. This assembly contains all known modifications requested for this program.

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#### Pattern Punch Generator: 802501

The pattern punch program has been checked out and is operating correctly. A few minor corrections will be necessary before it can be combined with another completed program. The combination will provide the means to punch radar data cards and make insertions by using the A and B toggle switch registers. Because of conflicting tags in the two programs, more changes will be necessary before a combined compilation of the two programs can be made. For checking out purposes, we are using the program to be integrated as a subroutine.

(Joseph A. Palermo and Glenn F. Paulsen Jr.)

## Pattern Card Conversion Program: 801702

The routine to convert the LRI data has been successfully completed. The routine to convert the GFI data needs more refining.

(C. Toohig and B. Awad)

### Pattern Check Tape Printout: 8024, 8510, 8560

An error was found in the Pattern Check Program which made this program inoperative. The error has been fixed and this program has been modified to handle any similar situations. Three subroutines have been added, bringing the program from its original form of 158 cards to its present (mod. 09) form of 239 cards. These extensive modifications and additions have necessitated revision of all flow diagrams previously drawn.

(David L. Greenhalgh)

#### LRI Single Message Test: 8903

The cards will be finished (from the card room) this Wednesday (20 June) and I expect to run the program on the computer for the first time this Friday. All research for the program has been completed. Conversion to the SAGE version of this program has been considered throughout the coding and could easily be facilitated by octal correction cards for changing a few minor instructions. This program should be completely finished by 9 July 1956.

(D, F. O'Neill)

I am now coding the print out procedure.

(Marilyn R. Lynch)

#### Manual Input Keyboard Test: 8501

Coding for the operational part of the program is about 25% complete, and should be finished around the 20th of the Console E-21 was tested on 12 June and the results indicated the trogram was operating satisfactorily. As each row of the console was tested, an indication of "good"

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or "bad" was shown on the DD together with the row number and console being tested.

Consoles presently installed in ESS are not in their finalized form. The program will be written to test ESS keyboards as they will be and not as they are at present, to avoid constant modifications as the consoles are brought up to date.

(John T. Tadler)

The computer test proved that the program methods generated will work satisfactorily. There now remains the job of modifying this program to include not only one console and its associated DD & SD, but 105 consoles and as many DD's. This modification has progressed satisfactorily and it is expected to be ready for compilation by Wednesday 20 June.

(Wilmot H. Hansell)

#### Crosstell Test Program: 810400

The test team is currently satisfied with 810400, as modified by a large number of octal correction cards.

The program will be documented in its present form; octal corrections will not be incorporated into a re-assembly. (810400 makes use of the old assembly program)

The deadline for documentation is mid-July. The requirement for extensive detailed flow charts could seriously upset meeting the deadline.

(L. J. Rose)

#### Teletype Message Test: 8011

Continued operation of this program through use of the checker has revealed errors both in this program and in the checker. Considerable progress has been made, however. Conversion of the card data from Hollerith to teletype code stored on the A.M. drums is now successful.

(George C. Cox)

## Ground/Ground Message Display: 830306

Documentation of this program is the last major thing to do. During the last week, pictures were taken for this document on the SD camera console. A few flow diagrams have been typed. These flow diagrams are based on Wes Marston's method. A rough draft has been written, which Chris Sherrerd has looked over. This document does not describe the flow diagrams, so it must be modified or an addition must be added to describe the flow diagram.

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Square Root Subroutine: 801204

An overflow has been detected. Correction of the program will involve the changing of some constants.

(Marcia J. Tobin)

Dual Precision Arithmetic: 8027, 8014, 8020, 8021, 8022

The dual precision subroutines (except for division) are completed and checked out. The memo is written but may require changes in the division appendix. Division is almost done except for a few details. We ran the conversion program and expect to start debugging.

(Elaine Colleran and Paula Titiev)

RPM/br

Signed: R. P. Mayer

Attached:

G-533204 (BTL) = SB-66595 (Lincoln)



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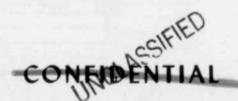
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