PL-KK 120

Division 6 - Lincoln Laboratory
Massachusetts Institute of Technology
Cambridge 39, Massachusetts

SUBJECT: BIWEEKLY REPORT, September 11, 1953

To: Jay W. Forrester

From: Division 6 Staff

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SECTION I - CAPE COD SYSTEM

1.1 Group 61

1.10 General

(C.R. Wieser) (CONFIDENTIAL)

A teletype for picket-ship communication will be installed shortly.

South Truro FPS-3 data is now available on a request basis. Requests for data should be made at least 24 hours in advance. Two tapes of data from the FPS-3 have been recorded.

Modifications of the Track-While-Scan programs have been made and should be completely tested on the computer by the end of the next biweekly period.

A complete NTWS Program (NTWS-1) has operated successfully under a variety of tests. The final NTWS program (NTWS-2) is expected to be ready for testing the weekend of September 19-20.

2.16 Transistors (Continued)

Junction Flip-Flop

(E. U. Cohler) (UNCLASSIFIED)

A trip was made to Lincoln to discuss the results of the study of the d-c conditions of the junction type flip-flop with R. H. Baker. It was found that similar results had been obtained in both spots. Mr. Baker had some interesting suggestions on graphical methods which he had developed for doing this analysis. We are now proceeding with an analysis of the triggering and transient conditions in such a flip-flop.

2.17 Display

(R. von Buelow) (UNCLASSIFIED)

A new Display Section was formed in Group 62. C. Corderman is Section Chief.

At a meeting between IBM and MIT display personnel it was decided to continue development of the Triest (of IBM) type character generator, to have interleaved track data, to reduce the number of history points if necessary, and to have two intensification levels. See M-2403 for further details on this.

Two 19" Charactron tubes were received from Convair. The first phase of the evaluation of these tubes is being carried out in the Storage Tube lab by C. Corderman.

A conference was held with IBM, MIT, and Convair personnel regarding all phases of the Charactron. Convair is looking into the possibility of providing large rectangular tubes. It seems the greatest difficulty of this tube is getting a satisfactory post acceleration. Separate dag bands and a spiral dag are being considered. Convair is also putting tubes on life test immediately.

Charactron Display Scope

(H. E. Zieman) (UNCLASSIFIED)

An intensification amplifier has been designed in a plug-in form and will be tested in the 16-inch scopes in MTC. A single amplifier consists of one of Hal Boyd's flip-flops plus a second plug-in unit. A separate amplifier will be required for each intensity level desired; the present setup will permit up to three levels to be displayed at random. If more than one level is to be used, an extra plug-in unit will be required to mix the various levels.