

~~CONFIDENTIAL~~
UNCLASSIFIED

Memorandum M-2698

Copy No. 42 of 50 Copies
Page 1 of 2

CLASSIFICATION CHANGED TO:
Auth: DD 254
By: R.R. EVERETT
Date: 2-1-60

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

LINCOLN LAB. DIV. 6
DOCUMENT ROOM
DO NOT REMOVE
FROM
THIS ROOM

SUBJECT: PROGRESS REPORT FOR AN/FSQ-7 - 19 February 1954
To: J. W. Forrester, R. R. Everett, Division 6 Group Leaders
From: P. J. Gray

1. General

To relieve the load on Project High engineering manpower, certain portions of the engineering design, including preparation of full sets of drawings for construction, will be carried on at MIT. Portions of the machine involved and the responsibilities are as follows:

1. Output Frame - IBM will do all engineering on this item.
2. Central Display Frames - MIT will do engineering development and equipment packaging and layout for these items.
3. Digital Data Transmission - MIT will do development and packaging design.
4. Memory - MIT will provide manpower to assist IBM in completion of engineering on this item.
5. Installation of XD-1 - MIT will have prime responsibility for this item.

The output data transmission equipment for XD-1 will be built or subcontracted by Lincoln (Group 62 or Group 24).

This program has been established to help insure meeting the planned date of July 1955 for having the full XD-1 System operating.

2. Concurrence and Approvals

Engineering concurrence has been reached for the design specifications of the program element, drums, test memory (toggle switch storage) and marginal checking of central machine. Formal Lincoln release approval for these will be issued shortly. Lincoln approvals have been given for first floor and basement layout of XD-1 and equipment cooling specifications.

~~CONFIDENTIAL~~
UNCLASSIFIED

~~CONFIDENTIAL~~
UNCLASSIFIED

3. Display

Consideration of Dumont as an alternate source to Convair for Charactron tubes indicates that their development has not sufficiently progressed for them to be considered as a source for XD-1. Activity leading toward a second source for production machine requirements is being continued.

Recent considerations have included a proposed display selection system using cores with decision scheduled for March 16, 1954.

4. Instruction Control Frame

All material for construction of the instruction control frame has been delivered (pluggable unit frames, components, etched cards, module stock). All drawings except two concerned with back panel wiring have been released to Production Control. Twenty-five per cent of the pluggable units for this frame are completed and being inspected.

5. Program Element Frame

All parts have been ordered for the program element frame with the exception of the etched cards.

6. Etched Cards

Investigation into material procurement and use of "Epo glass" for etched wire cards has led to the conclusion that the sole supplier of this material does not have sufficient control over the material to provide the desired uniformity and reliability. Paper base phenolic material will be used. Plated hole techniques involving use of silver will not be used in order to avoid silver migration breakdown.

Signed


P. J. Gray

Approved


A. P. Kromer

PJG:hpm

~~CONFIDENTIAL~~
UNCLASSIFIED