

COMPANY CONFIDENTIAL

MEETING OR CONTACT REPORT

Date of Report: November 17, 1958

Organization & Location: 7050 Planning, Poughkeepsie	Date: November 24, 1958
	Reported By: G. A. Blaauw
Project: (7) 7000 X Committee Investigation of 7050	Department: 539
	Follow-up Date:

PERSONNEL PARTICIPATING:
(Place asterisk next to those on
distribution list. Other distribu-
tion show at end of report)

G. A. Blaauw*
W. C. Foin*
H. G. Kolsky*
P. D. Poux*
R. W. Shirk*

Subject

Subject of the meeting was the proposed 7050 computer and its appli-
cation.

I. Application

The 7050 is a solid state computer which represents a step-up in capacity from the present 705 III computer. The computer provides at least complete upward program compatibility with 705 III. Planning is aware of strong customer resistance against even small changes in the instruction set. Since almost the entire market for the computer will be obtained from 705 users, the investment in current 705 programs, which can amount to 1/4 - 1/2 million dollars per customer, is of great importance. Of the 160 750 customers, about 100 have a machine installed, 60 have one on order.

II. Machine Description

The computer makes use of standard Stretch current switching drift transistor circuits as used in the 7090 and Stretch memory circuits. The use of recent circuit improvements such as double density cards and three level logic is contemplated. The Stretch memory units cannot be used as such because decimal, rather than binary addressing is required. New frames of 80 x 100 cores must be designed. Possibly the 100 x 100 frames of the 7070 can be used. The memory cycle has been conservatively estimated at 2.8 usec, which gives a 3.2 times improvement over the present 9 usec 705 III cycle.

III. Future Expansion

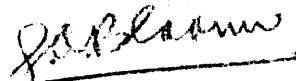
Since the instruction format makes use of all available bits, it does not seem possible to address more than 80,000 characters without resorting to indirect methods of addressing. Of the present 705 III orders, 40% are for 80,000 characters.

Added features such as indexing, input-output interrupt, advanced disk file and SWIFT tapes are being considered. A large random access memory device is considered as a back-up memory which may eliminate the need for larger core memory. An improved console is being considered with direct display as opposed to present coded display. The display units used in the Stretch console would be used.

IV. Schedule and Prices

A schedule has not yet been decided, and will depend to a great extent upon available manpower and transistors as well as upon the sales outlook.

Prices are expected to be 10 to 15% above present 705 III prices. A typical 705 III installation rental at present is \$43,000.



G. A. Blaauw
Advisory Engineer
7000 Planning

GAB:pf

cc: Dr. W. Buccholz
Mr. D. W. Sweeney