XXIV. COMPUTATION RESEARCH[*]

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A. FINDING THE ROOTS OF AN ANALYTIC FUNCTION

The root-finding method described in Quarterly Progress Report No. 84 (pages 351-352) has been implemented on the Electronic Systems Laboratory Display Console at Project MAC, using the TOCS (TACT On-Line Computing System) developed by Project TACT at Harvard University.[1,2]

TOCS is an interpreter intended for use by the scientist with no prior programming experience. It provides a set of operators to act on variable-length real and complex vectors created by the user. TOCS has been given additional power and flexibility by the addition of display facilities, capabilities for limited algebraic manipulation, the editing facilities of TYPSET, and facilities for incorporating user-created BSS files into the TOCS. The user may write his own "console program," employing both the TOCS operators and programs written in other languages, such as MAD.

We are planning to introduce TOCS to members of the Research Laboratory of Electronics to determine its usefulness in their research. If the response is encouraging, we shall explore the possibility of using the version being developed for the 360 computer by TACT.

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References

1. K. B. Winiecki, "TACT On-Line Computing System, Version II," Manual — Technological Aids to Creative Thought Project, Harvard University, Cambridge, Massachusetts, December 13, 1966.

2. A. Ruyle, "The Status of TOCS," Memorandum 44, Technological Aids to Creative Thought Project, Harvard University, Cambridge, Massachusetts, November 10, 1966.