

for different values of the parameter a , and $0.05 \leq x \leq 1$ (origin: atomic physics). The equation was solved with step-wise integration, using TAYLOR's series up to and including terms of 7th order, and the result was accurate within one or two units in the 6th decimal place for most values of a . The functions y and y' were computed for about 3000 points. The machine time was 42 hours. The table will be published by C-E. FRÖBERG in *Arkiv för Fysik*.

4. Solution of symmetrical systems of linear equations with the GAUSS' elimination method (origin: surveying). Matrices of orders $n = 8, 14, 20,$ and 28 were treated. The machine time for $n = 28$ was 4.8 hours.

5. Inversion of symmetrical and unsymmetrical matrices of orders $n = 8$ and 20 with JORDAN's method (origin: surveying). The machine time for $n = 20$ was 7.5 hours.

Conclusion.—It was found that the coding on BARK is on the whole straightforward and easy. Flow-diagrams, of the type described in the reports on the computing machine under development at the Institute for Advanced Study, Princeton, N. J., are excellently suited for the planning of programs. The plugging of the order panels is time-consuming (the approximate speed being 50 instructions an hour) but may on the other hand be done while the machine is working on some other problem. The greatest advantage of the sequencing system is its flexibility—at any point in a computation the machine may be stopped and the program modified, e.g., by the insertion of a new instruction or subsequence or by skipping another.

The cost of the machine, including planning, designing, construction, and experimental work, does not exceed 100,000 dollars. The main bulk of the design work was done by HARRY FREESE and GÖSTA NEOVIUS. The machine was built by the Swedish Telegraph Administration, which also supplied most of the parts. Under the direction of Dr. Palm, the following persons participated in the general planning, design, and experimental work: C-E. FRÖBERG, O. KARLQVIST, G. KJELLBERG, B. LIND, A. LINDBERGER, P. PETERSSON, and M. WALLMARK.

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