



SOCIETY OF ACTUARIES

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## EVERYTHING YOU ALWAYS WANTED TO KNOW ABOUT COMPUTERS

### (But Were Afraid to Ask)

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The purpose of this article is to list some of the sources of information that may be useful to an actuary who wishes to increase his knowledge of data processing. It is being written as part of the effort of the Computer Sciences Subcommittee of the Committee on Continuing Education, of which I am Chairman. It draws heavily on my own experience in my first year assigned to a data processing department. It would be a help to continuing education in this field if readers whose experience has been different from mine would write letters to the Editor on this subject.

#### Periodicals

Computer science is a rapidly changing field and so periodicals play a very significant part in keeping up to date. Those I see regularly, in order of their usefulness to me, include:

1. *Computerworld* (797 Washington St., Newton, Mass. \$9 per year). A weekly tabloid (about 48 pages on the average). Between news columns and advertising, everything of significance in the computer field is covered in at least enough detail to let you know whether or not you want to know more about it.

2. *Datamation* (35 Mason St., Greenwich, Conn). A magazine published twice a month with long articles on a wide variety of computer subjects. Among the most interesting features are "Look Ahead" and "News Scene," which are made up of short news and opinion notes.

3. *EDP Analyzer* (925 Anza Ave., Vista, Calif., \$36 per year). A monthly newsletter (no advertising) with a single article in each issue. Several issues are often devoted to a single theme, such as Management Information Systems or Systems Analyst Training. If a subject you are interested in is covered by this publication, it will be handled in much greater depth than would be possible in either *Computerworld* or *Datamation*.

4. *Data Processing Digest* (6820 La Tizera Blvd., Los Angeles, Calif. \$36 per year). This is a monthly publication

(about 30 pages) combining a feature article (recently these have concentrated on "The EDP People Problem") and brief digests of recently published books and articles in a wide variety of publications.

*Datamation* will send you free copies of the magazine, if you can convince them that you are a "qualified individual employed by a company involved with automatic information handling equipment." They will ask you to fill out a form, but it's worth doing. The others, as far as I know, must be paid for.

The above publications all cover computers in general. There is very little specific information on computers as applied to insurance, pensions, and other topics of special interest to actuaries. The Computer Sciences Subcommittee of the Committee on Continuing Education is attempting to locate and publicize such information.

#### Jargon

Many people are baffled by computer jargon and feel the need for a glossary. I have never found one, however, which offered as great as a 50% chance that the word or phrase I was looking for would be included. There is no real substitute for finding knowledgeable people and asking them questions. If you ask for a definition every time you hear an unfamiliar phrase, you will soon learn the difference between simulation and emulation and between multi-processing and multi-programming.

One of the most frustrating and disillusioning experiences in entering computer work is encountering a wide range of acronyms only to discover that even those who know what they are talking about don't know what the initials stand for. After you've been on the job for a while, it becomes clear that it doesn't make any difference how the acronym was derived but only what it refers to. Thus, it is useless to know that ASP stands for Attached Support Processor, but important to know that it refers to a software package by which one computer handles the scheduling and allocation of core and devices for a combination of two or more computers.

Another opportunity to learn about computers is through courses. These may be given for a fee, or may be part of the executive program of a computer manufacturer. The AMA offers a wide variety of courses related to data processing. Computer manufacturers offer courses covering computer concepts in general and courses which deal specifically with applications in the insurance industry. In the case of industry-related courses and, to a considerable extent, in courses dealing with computer management, the value of the session depends to a large degree on who the other participants are and whether or not their experiences are likely to be relevant to your needs.

Before going to such a course, it is a good idea to ask for an outline of the agenda and a list of prospective participants. If you can't get one, that's a bad sign. Another problem is that not everyone on the list of participants will actually show up at the course. However, if you find a course with a suitable group, this is certainly a good way of learning about data processing.

What else can you do? Try to find time to do a little programming, even if it isn't part of your job. BASIC, the language used by most time-sharing systems, is easy to master and can be used to solve problems and provide useful reports. FORTRAN, which is available both for time-sharing and batch environments, is another language which can be very helpful to an actuary. □

#### Social Security Notes

No. 12-1970 National Health Insurance: A Comparison of Five Proposals.

"This Note is designed to meet the need for an objective description and comparison of the major proposals. For this purpose, five plans illustrating various approaches to a national program, all of which have significant sponsorship, have been chosen for analysis: (1) Griffiths bill (H.R. 15779); (2) Committee for National Health Insurance (Health Security Program); (3) Javits bill (S. 3711); (4) American Medical Association "Medicredit" plan; (5) Pettengill-Aetna proposal.

Copies of this note may be obtained from Publications, Office of Research and Statistics, Social Security Administration, Room 3643, Washington, D. C. 20201.