



SOCIETY OF ACTUARIES

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# The Actuary

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## ARCH

ARCH Issue 1978.2 has made its welcome appearance in new format—275 pages in a light blue cover. Rather than to list the titles and authors, for which see John Beekman's article, *The Actuary*, November 1978, we prefer to whet reading appetites by quoting James C. Hickman's descriptive introduction, thus:

"Most actuaries have heard the criticism that their basic tool, the mathematics of life contingencies, solidified in the last century, and not much has happened since. Often this is followed by a series of statements of which the following are typical:

'Life contingencies, with its stress on expected values, misses the whole point that time until death is a random variable.

'The entire risk dimension is left out of most treatments of life contingencies.

'Actuaries don't seem to realize that construction of a life table is a statistical estimation problem.

'As if all this is not bad enough, life contingencies traditionally uses fixed interest rates and thereby neglects another important component of risk faced in an insurance enterprise.

'Actuaries persist in stating their basic formulas in terms of the two-centuries-old commutation functions, although these no longer represent efficient computing formulations'."

In many ways, the Ball State Conference (to which ARCH 1978.2 is devoted) was directed to answering the critics who have expressed these views.

(Ed. Note: Procedure for subscribing is given on page 8 of our September 1978 issue). □

## CONFIDENTIALITY OF FEDERAL STATISTICS

by Robert J. Johansen

Legislation to protect confidentiality of records maintained by the Federal Statistical System has been drafted under the President's Reorganization Project. This Act, if passed, will protect statistical information furnished to the Federal Government and aims to reduce burden and expenses on the public by setting

conditions for interagencies exchange of individually identifiable data.

Certain agencies, e.g. Census and BLS, are designated "Protected Statistical Centers." Files in other agencies can be designated "Protected Statistical Files." Individually identifiable records may not be published or disclosed except to a Protected Statistical Center. A Chief Statistician is made responsible for designating protected files and centers unless legislation has provided otherwise. Protection extends to copies in the possession of the person to whom the record refers or who was the source of the information.

This bill's importance is twofold. It plugs loopholes in present legislation and gives protection in instances where the present status is ill-defined. And it permits controlled interagency exchange of data to reduce duplication caused by two or more agencies requesting similar data from the public. This bill deserves support.

For further information, write to Dr. James T. Bonnen, President's Reorganization Project, Room 9225, New Executive Office Building, Washington, D.C. 20503. □

Mr. Johansen is the Society's representative to the Committee of Professional Associations on Federal Statistics.

## Bowditch

(Continued from page 5)

his annuity rates were 10 to 20 percent higher. In his own way of speaking about the Union Insurance Company's rates he observed that "on the whole nothing could be learned from these rates except to avoid them, being the rock on which the company split."

Bowditch was intrigued by the working conditions of the actuary of the Pennsylvania Company, remarking several times in his notes that "the actuary attends daily from 9 to 2 at the office and then it is shut up." He observed also that the actuary worked for an annual salary of \$1,200, a small fraction of his own salary, perhaps reflecting the difference in business hours. His comment about his own working conditions sounds more familiar to modern day actuaries. In December 1830, he wrote a plaintive note to his publisher, reading in part, "Dear Sir, It is now our busy time of settling the annual accounts of

the life office so that I put by for six weeks all mathematics . . . and have literally not a moment of leisure. . . ."

Bowditch developed methodology for examining separately the profitability of his annuity and of his life insurance operations. Despite his earlier accurate perception that the annuity rates of the competing companies were inadequate, he subsequently determined that between 1823 and 1834 his own company had lost approximately \$15,000 on its annuity business.

Upon completion of my investigation, I concluded that Bowditch had left an even more important inheritance to the life insurance business and the actuarial profession than any original scholarly work he may have done in actuarial science. This inheritance is the absolute integrity he demonstrated in the conduct of his office. In 1832 the Board of Control appointed to examine the operations of the company observed "it was an experiment, and the individual (Bowditch) who had the principal agency in putting it into operation was without a precedent to guide him. In the nine years that have elapsed since it was organized, numerous and considerable sums have been intrusted to its management by citizens of different parts of the country, which proves that such an institution was needed while it shows the confidence the public have in its stability as well as in the justice and liberality of its dealings."

Statements attributed to him also reflect his character. "Truth — truth — truth! Let that be the family motto." "Talents without goodness and moral work, I care little for."

Bowditch saw the company not only as a profitmaking concern, operated in part to benefit the hospital, but also as an institution serving the public interest in helping provide financial independence to widows and orphans. Nine days before his death, in his final message to the Directors of the company, he wrote, "Providence has seen fit signally to bless our efforts and make it an institution of public record. I am not aware of any change, the introduction of which into the present system of management I should desire or recommend."

Our profession covets for itself, quite properly, a reputation for integrity. Modern day actuaries have been well served in that regard by the integrity of our predecessors, in particular Nathaniel Ingersoll Bowditch. □