

ABOUT THE AUTHORS



E. Paul Barnhart, F.S.A. 1960, has spent all but the first three months of an actuarial career spanning more than 30 years in the field of health insurance, beginning as an actuarial student with Transamerica Occidental Life in 1954. In 1964 he opened a consulting practice in St. Louis, specializing in health insurance. St. Louis has served as his "home office" location ever since. Mr. Barnhart has served on the Board of Governors of the Society and on the Board of Directors of the American Academy of Actuaries. He served as President of the Society of Actuaries for the 1978–79 year and as original chairperson of the new Health Insurance Section of the Society in 1982 and 1983. He has served as chairperson of the American Academy of Actuaries' Committee on Health and is currently a member of the Actuarial Standards Board. His paper "The Benefit Ratio Reserve Method," appearing in this volume of the *Transactions*, is his tenth paper to be so published.



David N. Becker, F.S.A. 1979, is second vice president and individual life product actuary at Lincoln National Life Insurance Company, a company he joined in 1975 as an actuarial student. He received a bachelor's degree in mathematics from St. Louis University in 1967, a master's degree in mathematics from Washington University in 1969, and a Ph.D. in mathematics from St. Louis University in 1973. Mr. Becker has served on the Society's Part 5 Examination Committee and the Professional Development Committee and is currently a member of the Society's Product Development Section Council and Research Policy Committee and of the Academy's Life Committee and Universal Life Task Force. His papers have appeared not only in *Transactions* but also in *Best's Review* and *Reinsurance Reporter*.



James D. Broffitt, A.S.A. 1980, received a B.A. in mathematics from DePauw University in 1963, an M.S. in statistics from Colorado State University in 1965, and a Ph.D. in statistics from Colorado State University in 1969. He is currently a professor in the department of statistics and actuarial science at the University of Iowa, where he has been on the faculty since 1970. From 1970 until 1980 he taught statistics, but in 1980 switched to the field of actuarial science. He was also a visiting professor at the University of Western Ontario during the 1985–86 academic year. He has published about two dozen papers in statistical and actuarial journals. His most recent publications in the field of actuarial science concern the estimation and graduation of mortality rates. He was awarded the 1984 Halmstad Memorial Prize for his paper “Maximum Likelihood Alternatives to Actuarial Estimators of Mortality Rates,” *TSA*, Vol. XXVI, 1984, pp. 77–142.



Donald D. Cody, F.S.A. 1939, received an A.B. degree, summa cum laude in mathematics, from Harvard in 1934. From 1934 to 1950, he was with Equitable Life, where he became associate actuary. During World War II, he was a member of the famous Navy Anti-Submarine Warfare Operations Research Group and later developed Navy airborne fire control systems. From 1951 to 1967, he was with the New York Life, where he had the title of vice president and group actuary. In 1967 he joined New England Life as senior vice president of ordinary operations and later of long-range corporate planning. Retiring in 1978, he has since been a consulting actuary and has been very active in the development of the valuation actuary concept. From 1984 to 1987, he was a member of the Society’s Board of Governors. A member of the Committee on Valuation and Related Areas, he was its chairperson from 1981 to 1985. He also is a charter member of the Joint Committee on the Valuation Actuary and of the NAIC Standing Technical Advisory Committee and its Subcommittee on Surplus and Solvency. His two papers in this volume of the *Transactions* were written to fill perceived voids in the valuation actuary literature. He is the author of numerous papers in the *Transactions* and *Record*, some of which are cited in the bibliographies of the two papers. He also wrote a chapter in the *Valuation Actuary Handbook*.



Christian J. DesRochers, F.S.A. 1976, received a bachelor's degree from the University of Connecticut in 1970. He joined the Hartford Life Insurance Co., being an actuary there until 1982. He has been a consulting actuary since 1982 and is employed by Chalke, Incorporated in Washington, D.C. He specializes in life insurance company matters, including product development, statutory and GAAP financial reporting, the appraisal of life insurance companies, and the federal income taxation of life insurance companies and policyholders. For the Society, he is chairperson of the Fall Core Examination Committee and a member of the Product Development Section program committee. He is a member of the Academy's Committee on Continuing Care Retirement Communities. A frequent speaker and author, he has published papers in the *Transactions* as well as in *Insurance Tax Review*, *the New England Insurance Times*, and the Product Development Section newsletter.



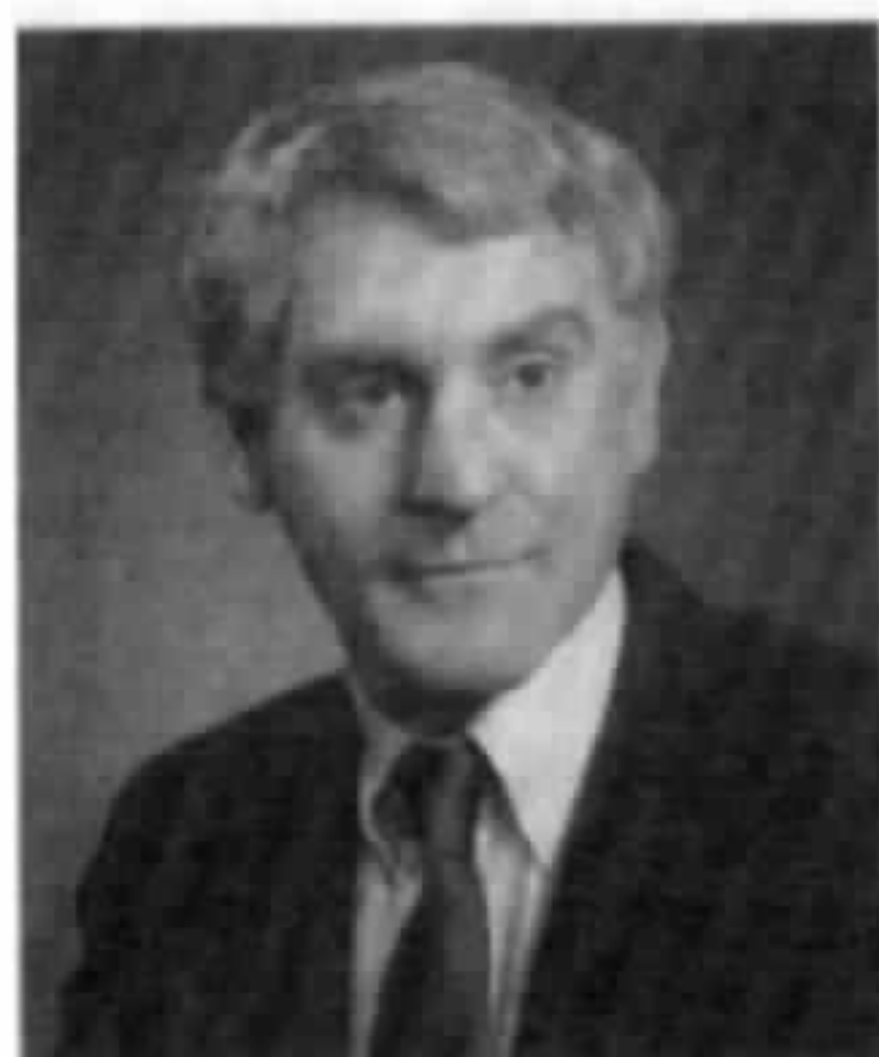
Mark D. J. Evans, F.S.A., received a B.S. with high distinction from the University of Nebraska-Lincoln in 1977. He has been assistant vice-president and actuary at Capital Holding Corporation since 1980. Previously, he was assistant actuary at American National Insurance Company (1977-80). For the Society he has served on Examination Committees since 1982. He is also a member of the American Academy of Actuaries, Phi Beta Kappa, and Mensa, and a Fellow of the Life Management Institute. In addition to the paper in this volume of the *Transactions*, he has published "Increasing Insurances under the Uniform Distribution of Deaths Assumption" (with Calvin D. Cherry, *ARCH* 1979.2), "Exponential Decay Model for Withdrawal Rates" (*The Actuary*, February 1987), and "FAS No. 97 Brings Sweeping Changes" (*The Actuary*, July/August 1988).



Edward W. Frees, F.S.A. 1986, is an associate professor of business and statistics at the University of Wisconsin–Madison. Professor Frees received a Ph.D. in mathematical statistics in 1983 from the University of North Carolina at Chapel Hill. Prior to being at Chapel Hill, he was employed by M & R Services, John Erikson's and Partners (a New Zealand actuarial consulting firm), and the United Kingdom's Government Actuaries Department. Research interests include stochastic models of insurance and finance and statistical inference. His articles have appeared in *Insurance: Mathematics and Economics*, *Journal of Finance*, *Journal of Business and Economic Statistics*, *Annals of Statistics*, *Journal of the American Statistical Association*, *Stochastic Processes and Their Applications*, *Sequential Analysis*, *Naval Research Logistics Quarterly*, *ASTIN Bulletin*, *Management Science*, and *Scandinavian Journal of Statistics*.



Charles Fuhrer, F.S.A. 1977, received a B.A. in mathematics from the University of Chicago in 1971. He joined Benefit Trust Life in 1973, being involved mostly in group insurance actuarial work until 1985; then he left to join Blue Cross/Blue Shield of Illinois, where he is involved with group health actuarial work. He is the chairperson of the Society's Committee on Research on Theory and Applications, coeditor of *ARCH*, and a member of the Research Policy Committee, the Committee on Papers, and the Publications Committee. In 1988, he won the AERF Practitioners Award for work entitled "A Method for the Calculation of Aggregate Stop-Loss Premiums." He presented some AIDS projections at the Society's AIDS Symposium in Chicago in May 1988, at the Society's Annual Research Conference in Connecticut in August 1988, and at an open forum at the Society's Annual Meeting in Boston in October 1988.



Thomas N. Herzog, A.S.A. 1977, is currently the chief actuary of the Federal Housing Administration, where he is primarily involved with the FHA mortgage guarantee insurance programs. He previously worked as a mathematical statistician for both the Social Security Administration and the National Highway Traffic Safety Administration. He has an Sc.B. in applied mathematics from Brown University and a Ph.D. in mathematical statistics from the University of Maryland. Dr. Herzog is the author of numerous technical articles, including the Society's Part 3 study note on credibility. He has also taught various science courses at a number of universities and companies in the Washington, D.C. area.



Merlin F. Jetton, F.S.A. 1980, received a bachelor of science in mathematics from the University of Illinois in 1973. He is an actuary with Allstate Life Insurance Co. He has extensive experience in the development and pricing of interest-sensitive products. He is currently responsible for asset liability management for Allstate's business sold through Dean Witter.



Rama Kocherlakota, not a member of the Society, is a graduate student in mathematics at Harvard University. He holds a bachelor's degree from Princeton and a master's from Harvard. He worked for several summers at the Great-West Life Assurance Company, supplementing his education with stimuli from the real world of business. Beginning in September 1989, he will be a National Science Foundation Post-Doctoral Fellow at the Mathematical Sciences Research Institute in Berkeley, Calif.



Louis J. Lombardi, F.S.A. 1982, is chief pricing actuary at Connecticut Mutual in Hartford. Mr. Lombardi's responsibilities include not only actuarial product development for participating and interest-sensitive products but also Connecticut Mutual's Group Universal Life product line. He has extensive experience in financial analysis, experience studies, reserve valuation and the development of large-scale information systems.



Robert J. Myers, F.S.A. 1940, served in various actuarial positions with the U.S. Social Security Administration from 1934 until 1970, including chief actuary (1947-70). Since then he has been a member of the National Commission on Social Security (1978-81), executive director of the National Commission on Social Security Reform (1982-1983), chairman of the Railroad Unemployment Compensation Committee (1983-85), and Deputy Commissioner of Social Security (1981-82). He

is currently chairman of the Commission on Railroad Retirement Reform. He also has been an actuarial consultant to various Congressional Committees and the Federal Judiciary, and a member of missions of technical assistance in connection with Social Security or pension programs in many foreign countries. He was President of the Society of Actuaries in 1971-72 and President of the American Academy of Actuaries, also in 1971-72. He is a Fellow of the Casualty Actuarial Society, the Conference of Actuaries in Public Practice, the American Statistical Association, the American Association for the Advancement of Science, and the Royal Statistical Society. His numerous awards include the Triennial Prize from the Actuarial Society of America and the Distinguished Service Award from the U.S. Department of Health, Education, and Welfare. Mr. Myers is the author of several books, including *Social Insurance and Allied Government Programs* (Richard D. Irwin, Inc., 1965), *Medicare* (Irwin, 1970), *Society Security* (Irwin, 1st ed., 1975; 2nd ed., 1981; 3rd ed., 1985), and *Indexation of Pension and Other Benefits* (Irwin, 1978). He has published 737 papers in technical and scientific journals, of which 31 have appeared in the *Transactions*, the *Transactions of the Actuarial Society of America*, and the *Record of the American*

Institute of Actuaries; about 567 discussions, book reviews, and letters to the editor; and 110 testimonies before Congressional Committees and advisory groups.



Harry H. Panjer, F.S.A. 1976 and F.C.I.A. 1977, is professor of actuarial science at the University of Waterloo, Ontario, and Director of the Institute of Insurance and Pension Research at the university. He received a B.A. in 1969, an M.A. in 1971, and a Ph.D. in 1975, all from the University of Western Ontario. He is currently serving on the Board of Governors of the Society and has served on numerous committees of the Society and the Canadian Institute of Actuaries. He chaired the

CIA's Task Force on AIDS subcommittee on modelling, which together with the valuation subcommittee proposed guidelines for valuation of the AIDS risk in life insurance. He is the author of more than 30 papers that have appeared in *Transactions*, *Journal of Risk and Insurance*, *Insurance: Mathematics and Economics*, *Transactions of International Congress of Actuaries*, *ASTIN Bulletin*, and *Journal of Econometrics*.



E. S. Rosenbloom, not a member of the Society, is an associate professor in the department of actuarial and management sciences at the University of Manitoba. He obtained a B.Sc. (Hons) degree in mathematics and a M.Sc. degree in mathematics from the University of Manitoba, in 1970 and 1971, respectively. He obtained a Ph.D. in operational research from the University of Waterloo in 1976. Before joining the University of Manitoba, Dr. Rosenbloom taught at the University of Leth-

bridge and at the University of Alberta. His research interests include manpower scheduling and operational research models in finance. Dr. Rosenbloom has published in *Mathematics of Computation* and *European Journal of Operational Research*.



Richard G. Schreitmueller, F.S.A. 1960, received a B.S. in electrical engineering from the University of Notre Dame. His employment history includes positions as group actuary and later director of group pension planning at Aetna Life & Casualty; consulting actuary, The Wyatt Company; vice president and actuary, William M. Mercer, Inc.; actuary, Social Security Administration; actuary, U.S. Senate Committee on Governmental Affairs; and acting chief actuary, Federal Retirement Thrift Investment Board. He is currently pension research actuary for A. Foster Higgins & Co., Inc. Mr. Schreitmueller is a member of the Society's Pension Section Council and Pension Research Committee. He has been chairperson of the Society's Committee on Review of Literature, associate editor of the *Enrolled Actuaries Report* of the American Academy of Actuaries, and president and executive board member of the Middle Atlantic Actuarial Club. He has written and spoken on a wide range of employee benefit subjects.



Elias S. W. Shiu, A.S.A. 1977, is a professor in the department of actuarial and management sciences at the University of Manitoba. He obtained a B.Sc. (Hons) degree and M.Sc. degree from the University of Manitoba in 1971 and a Ph.D. degree from the California Institute of Technology in 1975. He is vice-chairperson of the Committee on Research on Theory and Applications and serves on one of the Examination Committees of the Society. Since 1976 he has been a consultant for the Great-West Life Assurance Company. His current research interests are asset/liability management, graduation, and risk theory.

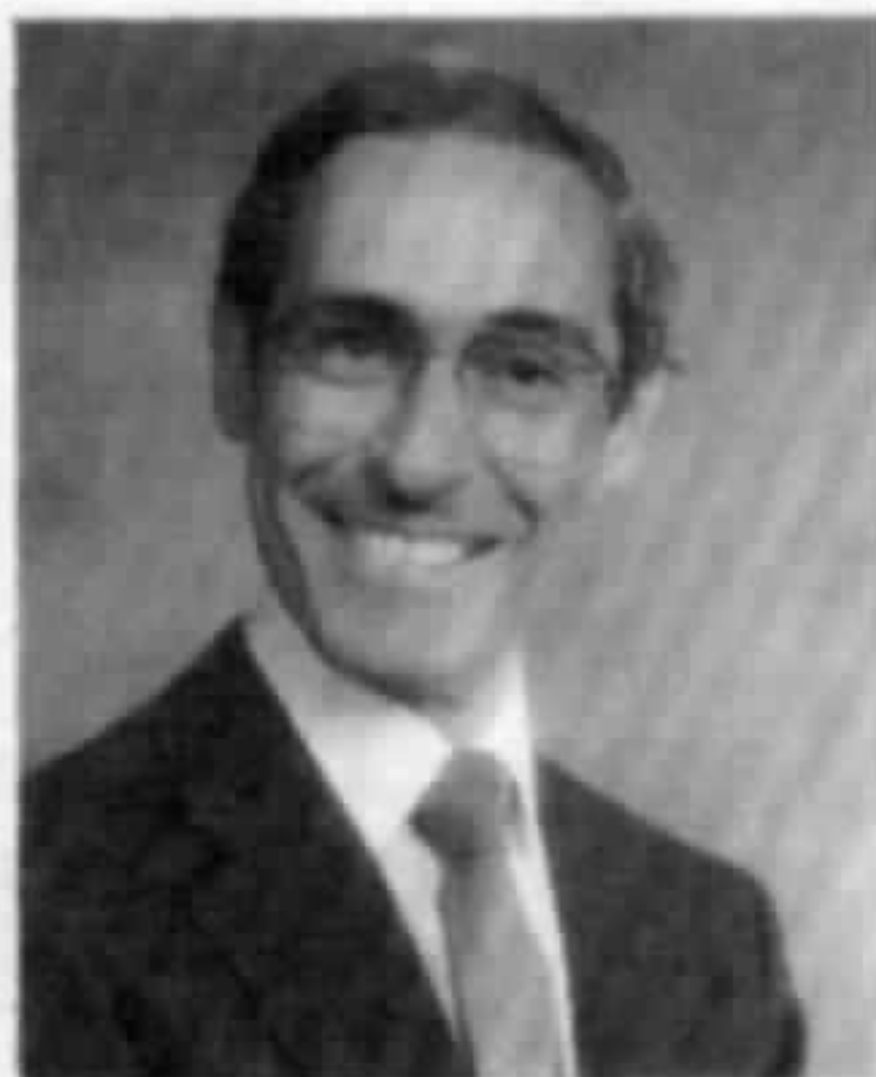


Robert W. Stein, F.S.A. 1974, received a B.S. and a B.A. in accounting and actuarial science from Drake University. He is national director of actuarial services for Ernst & Whinney and managing partner of Huggins Financial Services. He provides senior consulting services to the life and health insurance industry in the areas of mergers and acquisitions, financial planning and forecasting, performance measurement and line of business reporting, asset/liability management, financial reporting, and other insurance company and managerial issues. Mr. Stein is chairperson of the Society's Committee on Valuation and Related Areas, a member

of the American Academy of Actuaries' Committee on Relations with Accountants, and past chairperson of the Society's Financial Reporting Section.



Joseph H. Tan, F.S.A. 1984, is a senior consultant in the New York office of the actuarial, benefits, and compensation consulting division of Coopers & Lybrand. Prior to joining Coopers & Lybrand, he was the financial planning and control director of the individual insurance products division of CIGNA. Before that, he was associated with Penn Mutual Life Insurance Co. He graduated magna cum laude with a bachelor of science degree in statistics from the University of the Philippines. He also received his master of science degree in mathematics (actuarial science) from the same university. He received his doctorate degree in business administration from Temple University; he also received the Conwell Russell Fellowship from Temple University. He is a Fellow of the Life Management Institute and a member of the American Academy of Actuaries. Mr. Tan spoke at the 1988 and 1989 Society spring meetings on sources of profit analysis. As a member of the Financial Reporting Section, he has published papers on GAAP accounting and return on equity in the Financial Reporting Section newsletter. His paper "Source of Earnings Analysis under FAS 97 Universal Life Accounting" will appear in Volume XLI of the *Transactions*.



Naftali Teitelbaum, F.S.A. 1973, received a bachelor's degree in mathematics from Yeshiva University. He has held actuarial positions with Consulting Actuaries International, Inc., Bankers Security Life Insurance Society, Actuarial Analysts, Inc., Executive Life Insurance Company, and The Equitable Life Assurance Society of the United States, and is currently vice president and actuary at The North Atlantic Life Insurance Company of America. His principal areas of work are pension and insurance company valuation and managing actuarial department, life and annuity product development. A major accomplishment was the implementation from scratch of the structured settlement annuities line of business in a large company. He is a member of the American Academy of Actuaries and an Enrolled Actuary.

