

**TRANSACTIONS OF SOCIETY OF ACTUARIES  
1963 VOL. 15 PT. 1 NO. 43**

**INDEX TO VOLUME XV, PART I**

- ACTUARIAL ASPECTS OF A CONSOLIDATED FUNCTIONS ELECTRONIC SYSTEM—Murray L. Becker, 239; Discussion, 252.
- AGENCY PROBLEMS—Valuation of Nonvested Renewal Commissions—Ernest J. Moorhead, 430; Discussion, 449.
- ALEXANDER, PHILIP A.—Obituary Notice, 629.
- AMER, MOHAMED F.  
Discussion on: Analysis of the Rapidly Expanding Company (Peter L. J. Ryall), 143.  
The Mathematical Forces Operating on Reserves (John A. Mereu), 502.
- AMERMAN, GUY H.—Obituary Notice, 303.
- ANALYSIS OF THE RAPIDLY EXPANDING COMPANY—Peter L. J. Ryall, 113; Discussion, 139.
- ANDERSON, B. M.—Legal Notes, 193, 589.
- ASSET ACCUMULATIONS—Investment Generations and Asset Accumulations—John H. Turoff, 366; Discussion, 396.
- BAILLIE, DONALD C.—Paper: Cash Value as Death Benefit—Actuarial Note, 411; Discussion, 415.
- BARNHART, E. PAUL—Discussion on: Development of Expected Claim Costs for Comprehensive Medical Expense Benefits and Ratios of 1959 and 1960 Actual Experience Thereto (Burton E. Burton and Daniel W. Pettengill), 54.
- BARRY, DANIEL—Discussion on: Actuarial Aspects of a Consolidated Functions Electronic System (Murray L. Becker), 270.
- BEARD, ROBERT E.  
Discussion on: Coronary Disease as an Underwriting Problem (Annie Mary Lyle), 362.  
The Mathematical Forces Operating on Reserves (John A. Mereu), 493.
- BECKER, MURRAY L.—Paper: Actuarial Aspects of a Consolidated Functions Electronic System, 239; Discussion, 252.
- BLACKADAR, E. GORDON—Obituary Notice, 630.
- BLADGEN, HENRY E.—Discussion on: A Proposed Method of Valuing Variable Benefit Retirement Plans (Franklin C. Smith and Chandler L. McKelvey), 527.
- BOOK REVIEWS AND NOTICES—202, 600.
- BRONSON, DORRANCE C.—Discussion on: The Unfunded Present Value Family of Pension Funding Methods (Charles L. Trowbridge), 181.
- BUCHTER, GENE W.—Paper: The Testing of Year-End Reserves, 1; Discussion, 6.
- BUCKMAN, ALFRED L.—Discussion on: Continuance Study of Hospital Claims on Individually Underwritten Lives Age 65 and Over (Anthony J. Houghton), 551.
- BURTON, BURTON E.—Paper with Daniel W. Pettengill: Development of Expected Claim Costs for Comprehensive Medical Expense Benefits and Ratios of 1959 and 1960 Actual Experience Thereto, 10; Discussion, 49.
- CAMERON, WILLIAM J.—Obituary Notice, 304.
- CASH VALUE AS DEATH BENEFIT—ACTUARIAL NOTE—Donald C. Baillie, 411; Discussion, 415.
- CHANG, YUAN—Discussion on: Actuarial Aspects of a Consolidated Functions Electronic System (Murray L. Becker), 261.

- COATES, ROBERT P.—Discussion on: New York Life Morbidity Experience under Individual and Family Major Medical Policies (Lowell M. Dorn), 292.
- COBURN, ARTHUR—Obituary Notice, 630.
- COMMUTATION FUNCTIONS AND NET SINGLE PREMIUMS FOR WIDOWS' MONTHLY BENEFITS—ACTUARIAL NOTE—A. M. Niessen, 79.
- CONNOLLY, CHARLES H.—Discussion on: The Testing of Year-End Reserves (Gene W. Buchter), 6.
- CONTINUANCE STUDY OF HOSPITAL CLAIMS ON INDIVIDUALLY UNDERWRITTEN LIVES AGE 65 AND OVER—Anthony J. Houghton, 530; Discussion, 548.
- CORONARY DISEASE AS AN UNDERWRITING PROBLEM—Annie Mary Lyle, 324; Discussion, 351.
- DEVELOPMENT OF EXPECTED CLAIM COSTS FOR COMPREHENSIVE MEDICAL EXPENSE BENEFITS AND RATIOS OF 1959 AND 1960 ACTUAL EXPERIENCE THERETO—Burton E. Burton and Daniel W. Pettengill, 10; Discussion, 49.
- DEWEY, HARLEY W.—Obituary Notice, 305.
- DIVIDENDS—Actuarial Aspects of a Consolidated Functions Electronic System—Murray L. Becker, 239; Discussion, 252.
- DORN, LOWELL M.—Paper: New York Life Morbidity Experience under Individual and Family Major Medical Policies, 275; Discussion, 286.
- DOYLE, MARTINA E.—Discussion on: New York Life Morbidity Experience under Individual and Family Major Medical Policies (Lowell M. Dorn), 296.
- DREHER, WILLIAM A.—Discussion on: The Unfunded Present Value Family of Pension Funding Methods (Charles L. Trowbridge), 182.
- DUFFIELD, DICKINSON C.—Discussion on: Investment Generations and Asset Accumulations (John H. Turoff), 396.
- EIDE, K. ARNE—Discussion on: Development of Expected Claim Costs for Comprehensive Medical Expense Benefits and Ratios of 1959 and 1960 Actual Experience Thereto (Burton E. Burton and Daniel W. Pettengill), 57.
- ELDRED, ALLEN W.—Obituary Notice, 631.
- ELECTRONIC DATA-PROCESSING—Actuarial Aspects of a Consolidated Functions Electronic System—Murray L. Becker, 239; Discussion, 252.
- FEAY, HERBERT L.—Discussion on: Term Insurance and Minimum Cash Values (Frederick S. Townsend), 482.
- FLEXIBLE FUNDING OF GROUP ANNUITY CONTRACTS THROUGH SEPARATE INVESTMENT ACCOUNTS—Edward A. Green, 566; Discussion, 585.
- GARBER, HARRY D.  
Discussion on: Investment Generations and Asset Accumulations (John H. Turoff), 398.  
Valuation of Nonvested Renewal Commissions (Ernest J. Moorhead), 454.
- GILBERT, DATON—Discussion on: Valuation of Nonvested Renewal Commissions (Ernest J. Moorhead), 449.
- GOLD, MELVIN L.—Paper with David T. Wilson: Payment of Cash Value in Addition to Face Amount, 418; Discussion, 424.
- GRAHAM, WILLIAM J.—Obituary Notice, 221.
- GREEN, EDWARD A.  
Paper: Flexible Funding of Group Annuity Contracts through Separate Investment Accounts, 566; Discussion, 585.  
Discussion on: Valuation of Nonvested Renewal Commissions (Ernest J. Moorhead), 451.
- GROSS PREMIUMS—Analysis of the Rapidly Expanding Company—Peter L. J. Ryall, 113; Discussion, 139.

- GROUP INSURANCE—Development of Expected Claim Costs for Comprehensive Medical Expense Benefits and Ratios of 1959 and 1960 Actual Experience Thereto—Burton E. Burton and Daniel W. Pettengill, 10; Discussion, 49.
- GRUBBS, DONALD S., JR.—Discussion on: A Proposed Method of Valuing Variable Benefit Retirement Plans (Franklin C. Smith and Chandler L. McKelvey), 520.
- HALVORSON, WILLIAM A.—Discussion on: New York Life Morbidity Experience under Individual and Family Major Medical Policies (Lowell M. Dorn), 297.
- HAMMOND, H. PIERSON—Obituary Notice, 305.
- HARKNESS, ANDREW E.—Obituary Notice, 306.
- HEART DISEASE—Mortality of the Medical and Other Professions with Special Reference to Heart Disease—Arthur Pedoe, 83; Discussion, 103.
- HENNINGTON, HOWARD H.—Discussion on: Flexible Funding of Group Annuity Contracts through Separate Investment Accounts (Edward A. Green), 585.
- HICKMAN, JAMES C.  
Discussion on: Analysis of the Rapidly Expanding Company (Peter L. J. Ryall), 144.  
The Unfunded Present Value Family of Pension Funding Methods (Charles L. Trowbridge), 185.
- HICKOK, CLIFTON L.—Obituary Notice, 222.
- HILL, J. STANLEY—Discussion on: Actuarial Aspects of a Consolidated Functions Electronic System (Murray L. Becker), 269.
- HOFFMAN, RICHARD H.—Discussion on: Development of Expected Claim Costs for Comprehensive Medical Expense Benefits and Ratios of 1959 and 1960 Actual Experience Thereto (Burton E. Burton and Daniel W. Pettengill), 52.
- HOUGHTON, ANTHONY J.—Paper: Continuance Study of Hospital Claims on Individually Underwritten Lives Age 65 and Over, 530; Discussion, 548.
- INDIVIDUAL ACCIDENT AND SICKNESS  
New York Life Morbidity Experience under Individual and Family Major Medical Policies—Lowell M. Dorn, 275; Discussion, 286.  
Continuance Study of Hospital Claims on Individually Underwritten Lives Age 65 and Over—Anthony J. Houghton, 530; Discussion, 548.
- INVESTMENT GENERATIONS AND ASSET ACCUMULATIONS—John H. Turoff, 366; Discussion, 396.
- JAHN, GUNTER P.—Obituary Notice, 223.
- JONES, DONALD A.—Discussion with Cecil J. Nesbitt: A Proposed Method of Valuing Variable Benefit Retirement Plans (Franklin C. Smith and Chandler L. McKelvey), 519.
- KATTELL, SHERMAN C.—Obituary Notice, 224.
- KINGSTON, STUART J.—Discussion on: A Proposed Method of Valuing Variable Benefit Retirement Plans (Franklin C. Smith and Chandler L. McKelvey), 522.
- KOWALCHUK, THEODORE J.—Discussion on: Development of Expected Claim Costs for Comprehensive Medical Expense Benefits and Ratios of 1959 and 1960 Actual Experience Thereto (Burton E. Burton and Daniel W. Pettengill), 63.
- LEGAL NOTES—B. M. Anderson, 193, 589.
- LESLIE, WILLIAM—Obituary Notice, 224.
- LEW, EDWARD A.  
Discussion on: Mortality of the Medical and Other Professions with Special Reference to Heart Disease (Arthur Pedoe), 103.  
Coronary Disease as an Underwriting Problem (Annie Mary Lyle), 351.

## LIFE CONTINGENCIES

- The Testing of Year-End Reserves—Gene W. Buchter, 1; Discussion, 6.  
 Commutation Functions and Net Single Premiums for Widows' Monthly Benefits  
 —Actuarial Note—A. M. Niessen, 79.  
 Cash Value as Death Benefit—Actuarial Note—Donald C. Baillie, 411; Discussion,  
 415.  
 Payment of Cash Value in Addition to Face Amount—Melvin L. Gold and David  
 T. Wilson, 418; Discussion, 424.  
 The Mathematical Forces Operating on Reserves—John A. Mereu, 493; Discus-  
 sion, 502.
- LONES, WILLIAM R.—Discussion on: Actuarial Aspects of a Consolidated Functions  
 Electronic System (Murray L. Becker), 271.
- LOUTH, JAMES F. R.—Obituary Notice, 306.
- LYLE, ANNIE MARY—Paper: Coronary Disease as an Underwriting Problem, 324;  
 Discussion, 351.
- MACDONALD, J. BRUCE—Discussion on: Analysis of the Rapidly Expanding Company  
 (Peter L. J. Ryall), 141.
- MACKINNON, MALCOLM D.—Discussion on: The Unfunded Present Value Family of  
 Pension Funding Methods (Charles L. Trowbridge), 173.
- MAJOR MEDICAL EXPENSE INSURANCE
- Development of Expected Claim Costs for Comprehensive Medical Expense Bene-  
 fits and Ratios of 1959 and 1960 Actual Experience Thereto—Burton E.  
 Burton and Daniel W. Pettengill, 10; Discussion, 49.  
 New York Life Morbidity Experience under Individual and Family Major Medical  
 Policies—Lowell M. Dorn, 275; Discussion, 286.
- MARSHALL, ERSTON L.—Discussion on: Payment of Cash Value in Addition to Face  
 Amount (Melvin L. Gold and David T. Wilson), 427.
- MATHEMATICAL FORCES OPERATING ON RESERVES—John A. Mereu, 493; Discussion,  
 502.
- MCKELVEY, CHANDLER L.—Paper with Franklin C. Smith: A Proposed Method of  
 Valuing Variable Benefit Retirement Plans, 512; Discussion, 519.
- MEREU, JOHN A.—Paper: The Mathematical Forces Operating on Reserves, 493;  
 Discussion, 502.
- MILLER, JOHN H.  
 Discussion on: New York Life Morbidity Experience under Individual and Family  
 Major Medical Policies (Lowell M. Dorn), 301.  
 Presidential Address: Problems of a Growing Society, 317.
- MILNE, JOHN L.—Obituary Notice, 307.
- MOORHEAD, ERNEST J.—Paper: Valuation of Nonvested Renewal Commissions, 430;  
 Discussion, 449.
- MORAN, JOSEPH W.—Discussion on: Development of Expected Claim Costs for Com-  
 prehensive Medical Expense Benefits and Ratios of 1959 and 1960 Actual  
 Experience Thereto (Burton E. Burton and Daniel W. Pettengill), 49.
- MORTALITY OF THE MEDICAL AND OTHER PROFESSIONS WITH SPECIAL REFERENCE TO  
 HEART DISEASE—Arthur Pedoe, 83; Discussion, 103.
- MORTON, ALTON P.—Discussion on: Coronary Disease as an Underwriting Problem  
 (Annie Mary Lyle), 363.
- MYERS, ROBERT J.—Discussion on: Continuance Study of Hospital Claims on Individu-  
 ally Underwritten Lives Age 65 and Over (Anthony J. Houghton), 548.
- NESBITT, CECIL J.  
 Discussion on: The Unfunded Present Value Family of Pension Funding Methods  
 (Charles L. Trowbridge), 170.  
 Payment of Cash Value in Addition to Face Amount (Melvin L. Gold and David  
 T. Wilson), 424.  
 The Mathematical Forces Operating on Reserves (John A. Mereu), 493.

- Discussion with Donald A. Jones: A Proposed Method of Valuing Variable Benefit Retirement Plans (Franklin C. Smith and Chandler L. McKelvey), 519.
- NEW YORK LIFE MORBIDITY EXPERIENCE UNDER INDIVIDUAL AND FAMILY MAJOR MEDICAL POLICIES—Lowell M. Dorn, 275; Discussion, 286.
- NIESSEN, ABRAHAM M.—Paper: Commutation Functions and Net Single Premiums for Widows' Monthly Benefits—Actuarial Note, 79.
- NONFORFEITURE VALUES
- Analysis of the Rapidly Expanding Company—Peter L. J. Ryall, 113; Discussion, 139.
- Actuarial Aspects of a Consolidated Functions Electronic System—Murray L. Becker, 239; Discussion, 252.
- Term Insurance and Minimum Cash Values—Frederick S. Townsend, 465; Discussion, 478.
- OBITUARY NOTICES
- Alexander, Philip A., 629.
- Amerman, Guy H., 303.
- Blackadar, E. Gordon, 630.
- Cameron, William J., 304.
- Coburn, Arthur, 630.
- Dewey, Harley W., 305.
- Eldred, Allen W., 631.
- Graham, William J., 221.
- Hammond, H. Pierson, 305.
- Harkness, Andrew E., 306.
- Hickok, Clifton L., 222.
- Jahn, Gunter P., 223.
- Kattell, Sherman C., 224.
- Leslie, William, 224.
- Loutit, James F. R., 306.
- Milne, John L., 307.
- Weaver, Chalmers L., 308.
- OLSEN, JAMES J.—Discussion on: New York Life Morbidity Experience under Individual and Family Major Medical Policies (Lowell M. Dorn), 289.
- PARSONAGE, JACK O.—Discussion on: Actuarial Aspects of a Consolidated Functions Electronic System (Murray L. Becker), 253.
- PAYMENT OF CASH VALUE IN ADDITION TO FACE AMOUNT—Melvin L. Gold and David T. Wilson, 418; Discussion, 424.
- PEDOE, ARTHUR—Paper: Mortality of the Medical and Other Professions with Special Reference to Heart Disease, 83; Discussion, 103.
- PENNINGTON, THOMAS K.—Discussion on: Term Insurance and Minimum Cash Values. (Frederick S. Townsend), 480.
- PESTAL, CHARLES F.—Discussion on: Actuarial Aspects of a Consolidated Functions Electronic System (Murray L. Becker), 252.
- PETTENGILL, DANIEL W.—Paper with Burton E. Burton: Development of Expected Claim Costs for Comprehensive Medical Expense Benefits and Ratios of 1959 and 1960 Actual Experience Thereto, 10; Discussion, 49.
- PHILLIPS, WILLIAM H.—Discussion on: Actuarial Aspects of a Consolidated Functions Electronic System (Murray L. Becker), 273.
- PICKERING, JOSEPH R.—Discussion on: Actuarial Aspects of a Consolidated Functions Electronic System (Murray L. Becker), 255.
- PROBLEMS OF A GROWING SOCIETY—Presidential Address of John H. Miller, 317.
- PROPOSED METHOD OF VALUING VARIABLE BENEFIT RETIREMENT PLANS—Franklin C. Smith and Chandler L. McKelvey, 512; Discussion, 519.
- PROUTY, JOHN O.—Discussion with George E. Wallace: Actuarial Aspects of a Consolidated Functions Electronic System (Murray L. Becker), 258.

- RETIRED LIVES**—Continuance Study of Hospital Claims on Individually Underwritten Lives Age 65 and Over—Anthony J. Houghton, 530; Discussion, 548.
- RETIREMENT PLANS**  
 The Unfunded Present Value Family of Pension Funding Methods—Charles L. Trowbridge, 151; Discussion, 170.  
 A Proposed Method of Valuing Variable Benefit Retirement Plans—Franklin C. Smith and Chandler L. McKelvey, 512; Discussion, 519.  
 Flexible Funding of Group Annuity Contracts through Separate Investment Accounts—Edward A. Green, 566; Discussion, 585.
- ROSENTHAL, IRVING**—Discussion on: New York Life Morbidity Experience under Individual and Family Major Medical Policies (Lowell M. Dorn), 286.
- ROSSER, HARWOOD**  
 Discussion on: The Unfunded Present Value Family of Pension Funding Methods (Charles L. Trowbridge), 184.  
 Cash Value as Death Benefit—Actuarial Note (Donald C. Baillie), 415.  
 Term Insurance and Minimum Cash Values (Frederick S. Townsend), 481.
- RYALL, PETER L. J.**—Paper: Analysis of the Rapidly Expanding Company, 113; Discussion, 139.
- SMITH, COURTLAND C.**  
 Discussion on: Coronary Disease as an Underwriting Problem (Annie Mary Lyle), 361.  
 The Mathematical Forces Operating on Reserves (John A. Mereu), 507.
- SMITH, FRANKLIN C.**  
 Paper with Chandler L. McKelvey: A Proposed Method of Valuing Variable Benefit Retirement Plans, 512; Discussion, 519.  
 Discussion on: Payment of Cash Value in Addition to Face Amount (Melvin L. Gold and David T. Wilson), 425.
- SOCIETY OF ACTUARIES**  
 Financial Report, 598.  
 Meetings  
 Earlier Regional Spring, March 28 and 29, 1963, New York City, 227.  
 Later Regional Spring, June 6 and 7, 1963, Minneapolis, 309.  
 Annual, October 28, 29 and 30, 1963, Atlantic City, 633.  
 Presidential Address—John H. Miller, "Problems of a Growing Society," 317.
- SONGERGELD, DONALD R.**—Discussion on: The Unfunded Present Value of Pension Funding Methods (Charles L. Trowbridge), 177.
- STEARNS, JOHN B.**—Discussion on: Flexible Funding of Group Annuity Contracts through Separate Investment Accounts (Edward A. Green), 586.
- SURPLUS**—Analysis of the Rapidly Expanding Company—Peter L. J. Ryall, 113; Discussion, 139.
- SUTTON, RUPERT L.**—Discussion on: Actuarial Aspects of a Consolidated Functions Electronic System (Murray L. Becker), 265.
- TERM INSURANCE AND MINIMUM CASH VALUES**—Frederick S. Townsend, 465; Discussion, 478.
- TESTING OF YEAR-END RESERVES**—Gene W. Buchter, 1; Discussion, 6.
- TOOKEY, ROBERT C.**  
 Discussion on: Mortality of the Medical and Other Professions with Special Reference to Heart Disease (Arthur Pedoe), 105.  
 The Unfunded Present Value Family of Pension Funding Methods (Charles L. Trowbridge), 179.
- TOWNSEND, FREDERICK S.**—Paper: Term Insurance and Minimum Cash Values, 465; Discussion, 478.
- TROWBRIDGE, CHARLES L.**—Paper: The Unfunded Present Value Family of Pension Funding Methods, 151; Discussion, 170.
- TUCKER, SAMUEL L., JR.**—Discussion on: The Testing of Year-End Reserves (Gene W. Buchter), 6.

- TUROFF, JOHN H.—Paper: Investment Generations and Asset Accumulations, 366; Discussion, 396.
- UNDERWRITING—Coronary Disease as an Underwriting Problem—Annie Mary Lyle, 324; Discussion, 351.
- UNFUNDED PRESENT VALUE FAMILY OF PENSION FUNDING METHODS—Charles L. Trowbridge, 151; Discussion, 170.
- VALUATION
- The Testing of Year-End Reserves—Gene W. Buchter, 1; Discussion, 6.
  - Actuarial Aspects of a Consolidated Functions Electronic System—Murray L. Becker, 239; Discussion, 252.
  - The Mathematical Forces Operating on Reserves—John A. Mereu, 493; Discussion, 502.
  - A Proposed Method of Valuing Variable Benefit Retirement Plans—Franklin C. Smith and Chandler L. McKelvey, 512; Discussion, 519.
- VALUATION OF NONVESTED RENEWAL COMMISSIONS—Ernest J. Moorhead, 430; Discussion, 449.
- WALLACE, GEORGE E.—Discussion with John O. Prouty: Actuarial Aspects of a Consolidated Functions Electronic System (Murray L. Becker), 258.
- WEAVER, CHALMERS L.—Obituary Notice, 308.
- WELLS, EDWARD H.—Discussion on: The Unfunded Present Value Family of Pension Funding Methods (Charles L. Trowbridge), 187.
- WIDOWS' BENEFITS—Commutation Functions and Net Single Premiums for Widows' Monthly Benefits—Actuarial Note—A. M. Niessen, 79.
- WILSON, DAVID T.—Paper with Melvin L. Gold: Payment of Cash Value in Addition to Face Amount, 418; Discussion, 424.
- WINTER, BERT A.—Discussion on: Analysis of the Rapidly Expanding Company (Peter L. J. Ryall), 139.
- ZARET, FRANK—Discussion on: Term Insurance and Minimum Cash Values (Frederick S. Townsend), 478.

**RUSHMORE MUTUAL LIFE  
LIBRARY**

