4. *Distributions Associated with Continuous Stochastic Processes.*
   Dr. R. B. Leipnik, University of California, Berkeley.
5. *On Some Methods of Evaluating Railway Costs.* (By title)
   Miss Evelyn Fix, University of California, Berkeley.

There was a dinner on Monday evening for members and guests at the Hotel Claremont and an informal discussion and coffee on Tuesday afternoon.

REPORT ON THE NEW YORK MEETING OF THE INSTITUTE

The Tenth Annual Meeting of the Institute of Mathematical Statistics was held at the Commodore Hotel, New York City, on December 28–30, 1947. The meeting was held in conjunction with the American Statistical Association. The following 173 members of the Institute were in attendance:

F. S. Acton, R. L. Anderson, H. E. Arnold, L. A. Aroian, M. Astrachan, H. M. Baldwin, W. D. Baten, R. E. Bechhofer, G. W. Beebe, M. H. Belz, A. A. Bennett, A. J. Berman, A. Blake, C. I. Bliss, P. Boschan, A. H. Bowker, A. E. Brandt, T. H. Brown, M. A. Brumbaugh, M. C. Bruyere, P. T. Bruyere, T. A. Budne, R. W. Burgess, R. S. Burington, B. H. Camp, G. C. Campbell, P. G. Carlson, Jr., U. Chand, H. Chernoff, Kai-Lai Chung, P. C. Clifford, W. G. Cochran, D. D. Cody, J. Cornfield, G. M. Cox, J. H. Curtiss, J. F. Daly, G. B. Dantzig, D. G. Deihl, H. F. Dorn, A. J. Duncan, C. W. Dunnett, D. Durand, J. Dutka, P. S. Dwyer, G. L. Edgett, C. Eisenhart, B. Epstein, M. W. Eudey, W. D. Evans, Will Feller, C. D. Ferris, C. B. Fine, M. M. Flood, L. R. Frankel, J. E. Freund, B. Friedman, Hilda Geiringer, M. A. Geisler, H. H. Germond, M. A. Girshick, Abraham Golub, C.H. Graves, S. W. Greenhouse, J. A. Greenwood, T. N. E. Greville, J. I. Griffin, E. T. Gumbel, M. Gurney, K. W. Halbert, Max Halperin, M. H. Hansen, T. E. Harris, B. Harshbarger, Alex Hart, P. M. Hauser, J. D. Heide, L. H. Herbach, M. W. Hirsch, Harold Hotelling, H. M. Humes, C. C. Hurd, S. Jablon, C. M. Jaeger, A. S. Kaitz, Leo Katz, T. L. Kelley, L. S. Kellogg, L. F. Knudsen, A. K. Kury, Jack Laderman, M. LeLeika, Joseph Lev, Howard Levene, J. E. Lieberman, Julius Lieblem, S. B. Littauer, Eugene Lukacs, Geo. A. Lundberg, J. C. McPherson, Benjamin Malzberg, Sophie Marcuse, E. S. Marks, H. C. Mathisen, J. W. Mauchly, A. L. Mayerson, Margaret Merrell, E. B. Mode, E. C. Molina, M. E. Moore, D. J. Morrow, J. E. Morton, Jack Moshman, Hugo Muench, D. N. Nanda, M. G. Natrella, Doris Newman, G. E. Nicholson, Jr., Harold Nisselson, Nilan Norris, H. W. Norton, P. S. Olmstead, A. L. O'Toole, A. E. Paull, C. N. Payne, Katherine Pease, M. P. Peisakoff, E. W. Pike, O. A. Pope, G. B. Price, L. J. Reed, J. S. Rhodes, S. F. Robinson, A. C. Rosander, Ernest Rubin, P. J. Rulon, Rose Sachs, Frank Saidel, Arthur Sard, M. M. Sandomire, F. E. Satterthwaite, E. D. Schell, Bernice Scherl, O. N. Serbein, R. G. Seth, Harry Shulman, Rosedith Sitgreaves, C. DeW. Smith, G. W. Snedecor, Herbert Solomon, D. E. South, Arthur Stein, G. T. Steinberg, Joseph Steinberg, A. I. Sternhell, S. A. Stouffer, J. V. Sturtevant, B. R. Suydam, W. R. Thompson, Gerhard Tintner, J. W. Tukey, D. F. Votaw, Jr., A. J. Wadman, H. M. Walker, Dzung-shu Wei, Sidney Weiner, Samuel Weiss, Sophie R. Wilkey, R. I. Wilkinson, S. S. Wilks, C. P. Winsor, Jacob Wolfowitz, W. J. Youden.

The first session, a joint session with the American Statistical Society, was held on the morning of December 28 and was devoted to the topic *The Teaching of Statistics*. Professor W. G. Cochran of North Carolina State College presided. A paper entitled *Three Recent Reports Dealing with the Teaching of Statistics*,

the Training of Statisticians and the Crisis in Statistical Personnel was presented by Dr. James D. Paris of the Metropolitan Life Insurance Company. Many members participated in the general discussion which followed.

The second session on *The Teaching of Statistics* also with the American Statistical Association, was held at 1:15 P.M. Professor Francis G. Cornell of the University of Illinois was chairman. The main paper of the session was the paper by Professor George W. Snedecor of Iowa State College entitled *Syllabus for a Proposed Course in Basic Statistics*. This was followed by prepared discussion by: professors Elmer B. Mode, Boston University; Helen M. Walker, Teachers College, Columbia University; Samuel A. Stouffer, Harvard University; and Albert E. Waugh, Department of Economics, University of Connecticut. Many members participated in the general discussion. At the conclusion of this session, a film on Modern Quality Control was shown by Mr. Simon Collier of the Johns Manville Company.

Two Monday sessions, also held jointly with the American Statistical Association, and with the cooperation of the Operations Evaluation Group of the Navy and the Operations Analysis of the Air Force, were devoted to *Operations Research*. Professor Edward L. Bowles of Massachusetts Institute of Technology presided at the Morning session. The following papers:

1. *Operations Research in the Department of the Navy.*
   Dr. J. Steinhardt, Director, Operations Evaluation Group.
2. *Operations Research in the Department of the Air Forces.*
   Dr. Leroy A. Brothers, Chief, Operations Analysis.

were followed by discussion by Dr. Arthur A. Brown, Operations Evaluation Group, Dr. Thomas I. Edwards, Operations Analysis, Professor G. Baley Price, The University of Kansas and Wartime Operations Analyst and Dr. W. J. Youden, Douglas Aircraft Company and Wartime Operations Analyst.

Dr. Merrill M. Flood, Assistant Deputy Director of Research and Development, General Staff, U. S. Army, presided at the afternoon session. The following papers were presented:

1. *Operations Analysis in the Southwest Pacific Air War.*
   Dr. Roger I. Wilkinson, Bell Telephone Laboratories and Wartime Operations Analyst.
2. *Operations Analysis of Air-Sea Rescue.*
   Dr. E. S. Lamar, Operations Evaluation Group.
3. *Factorial Chi-Square in Test Shooting.*
   Dr. A. E. Brandt, Technical Director, Naval Ordnance Laboratory and Wartime Operations Analyst.
4. *Mathematical Techniques of Program Planning.*
   Dr. George Dantzig, Consultant to the Air Comptroller, Headquarters, USAF.

A session on the *Application of the Theory of Extreme Values* was held jointly with the American Statistical Association on Tuesday, December 30. Professor Jacob Wolfowitz of Columbia University presided at the session. The following papers were presented:

1. *Introduction: The Mathematical Theory of Extreme Values.*
   Professor Richard Von Mises, Harvard University.
2. *Applications to the Prediction of Flood Flows.*
   Professor Emil Gumbel, Brooklyn College.
3. *Applications to Meteorology.*
   Dr. Horace Norton, Weather Bureau, Washington, D. C.
4. *Applications to Fracture Problems.*
   Dr. Benjamin Epstein, Coal Research Laboratory, Carnegie Institute of Technology.

The session concluded with discussion by Miss Marion Sandomire, Navy Department, Bureau of Ships and Dr. Bradford Kimball, Port Washington, New York.

A session on *Statistical Techniques in Life Insurance* was held jointly with the American Statistical Association at 1:15 P.M., December 30. Mr. Robert J. Myers, Actuarial Consultant, Social Security Administration, was chairman of the meeting. The following papers were presented:

1. *Problems with Sampling Procedures for Reserve Valuations.*
   Mr. George C. Campbell, Supervisor, Actuarial Division, Metropolitan Life Insurance Company.
2. *Sampling Errors in Life Insurance Mortality and Other Statistics.*
   Mr. Donald Cody, Assistant Actuary, Equitable Life Assurance Society.
3. *Recent Developments in Graduation and Interpolation.*
   Dr. T. N. E. Greville, National Office of Vital Statistics, U. S. Public Health Service.

A session of contributed papers was held at 3:30 P.M. on December 30. Dr. T. N. E. Greville of the National Office of Vital Statistics presided. The following papers were presented:

1. *Distribution of the Circular Serial Correlation Coefficient for Residuals from a Fitted Fourier Series. (Preliminary Report.)*
   Professor R. L. Anderson, North Carolina State College and Professor T. W. Anderson, Jr., Columbia University.
2. *Some New Methods for Distributions of Quadratic Forms.*
   Professor Harold Hotelling, Institute of Statistics, University of North Carolina.
3. *Frequency Functions Defined by the Pearson Difference Equation.*
   Professor Leo Katz, Michigan State College, East Lansing.
4. *Distribution of the Sum of Roots of a Determinantal Equation Under a Certain Condition.*
   Mr. D. N. Nanda, Institute of Statistics, University of North Carolina.
5. *Applications of Carnap's Probability Theory to Statistical Inference.*
   Professor Gerhard Tintner, Department of Economics, Iowa State College.
6. *Circular Probable Error of an Elliptical Gaussian Distribution.*
   Dr. H. H. Germond, S. W. Marshall & Co., Washington, D. C.

The annual business meeting of the Institute was held at 4:30 P.M., December 29, 1947 in the ball room of the Commodore Hotel. There were reports by the President, Secretary-Treasurer, Mr. Morris Hansen, Chairman of the Committee on Planning and Development, and Dr. John Curtiss, Chairman of the Program Committee. Mr. Hansen presented a tentative form of the proposed new constitution while Dr. Curtiss discussed program plans. There was some discussion on these general questions from the floor.

Professor A. Wald was elected President, and Dr. Churchill Eisenhart and Professor Henry Scheffé, Vice-Presidents.

PAUL S. DWYER,
Secretary.

REPORT ON THE CHICAGO MEETING OF THE INSTITUTE

The thirty-second meeting of the Institute of Mathematical Statistics was held at the Sherman Hotel, Chicago, Monday and Tuesday, December 29–30. The meeting was held in conjunction with the one hundred fourteenth meeting of the American Association for the Advancement of Science and Co-operating Associated Societies. The following twenty-eight members of the Institute attended the meeting:

W. Bartky, D. H. Blackwell, G. M. Brown, I. W. Burr, A. G. Carlton, M. Castellanos, C. W. Cotterman, A. T. Craig, J. H. Davidson, R. C. Davis, W. E. Deming, M. Elveback, M. L. Garbuny, W. W. Gutzman, T. J. Jaramillo, E. S. Keeping, T. C. Koopmans, E. L. Lahti, M. M. Lavin, K. May, J. A. Pierce, O. Reiersol, H. Rubin, L. J. Savage, J. Silber, W. A. Wallis, E. L. Welker and J. W. Wilkins.

The Monday afternoon session was devoted to contributed papers of Section A, AAAS, and of the Institute, and to the Vice-Presidential address of Section A. The following papers were presented:

1. *On the Boundary Layer Motion along a Periodically Oscillating Plane in Compressible Viscous Fluids.*
   Dr. M. Z. Krzywoblocki, University of Illinois.
2. *Variations of the Probability of Unfair Election Results.*
   Dr. Kenneth May, Carleton College.
3. *Normal Equations with Nearly Vanishing Determinants.*
   Dr. M. Herzberger and Dr. R. Norris.
4. *Composition of Binary Quadratic Forms.*
   Professor Gordon Pall, Illinois Institute of Technology.
5. *A Proof of the Asymptotic Analogue of the Theorem of Cramèr and Rao.*
   Dr. Herman Rubin, Institute for Advanced Study.
6. *The Solution of Differential Equations in the Presence of Turning Points,* Vice-Presidential address of Section A.

The Tuesday afternoon session was also a joint session of Section A and the Institute, with Dean Walter Bartky of the University of Chicago presiding. The following two papers were presented upon invitation of the Institute:

1. *Application of the Radon-Nikodym Theorem to the Theory of Sufficient Statistics.*
   Professor P. R. Halmos and Dr. L. J. Savage, University of Chicago.
2. *Unbiased Sequential Estimation.*
   ProfessorDavid Blackwell, Howard University.