Consequences of departure from the assumption of known r are investigated by comparing OC curves.

39. **On Continuous Inspection Plans. (Preliminary Report.)** GERALD J. LIEBERMAN, Stanford University.

This paper presents two extensions of the first continuous sampling plan devised by H. F. Dodge (*Annals of Math. Stat.*, Vol. 14 (1943), pp. 264–279). Dodge's scheme provided for 100% inspection until i consecutive non-defective units were observed, at which time partial inspection was instituted, namely, one out of $1/f$ units was inspected. As soon as a defect was observed, 100% inspection was reinstated. It is proven in this paper that whether the process is in a state of statistical control or not, an AOQL is assured. In fact, it is shown that always AOQL $\leqq (1/f - 1)/(i + 1/f)$. The second problem considered was that of obtaining a continuous sampling plan for the individual characteristics constituting an item. This paper presents a continuous inspection scheme similar to Dodge's for r such characteristics, where r is any finite integer. It guarantees an overall AOQL provided the process is in a state of statistical control. The procedure is as follows: units are divided into segments of i items as they are manufactured. The k^{th} characteristic $(k = 1, 2, \cdots, r)$ is inspected 100% until the preceding full segment is found free of defects in characteristic k, at which time partial inspection is instituted, namely, one out of $1/f$ units is inspected for characteristic k. Full inspection is reinstated for any charactistic as soon as a defect in that characteristic is observed.

40. **An Acceptance Procedure with Two-Sided Specification Limits.** GEORGE J. RESNIKOFF, Stanford University.

A two-sided acceptance test in sampling inspection by variables is devised. The test is based on an estimate of the proportion defective which is optimum in the sense of minimum variance among unbiased estimates. In the one-sided case this estimate leads to the well-known test $\bar{x} + ks \leqq U$, where U is a single upper limit defining quality. Graphically the test is a region in the $(\bar{x}, s)$ plane. The probability of a sample point $(\bar{x}, s)$ falling in the region is a function of the lot mean as well as of the proportion defective, but the resulting band of OC curves is so narrow, for the cases investigated, as to enable it to be considered a single curve insofar as industrial applications are concerned. Numerical investigation indicates that this property is itself virtually independent of the sample size. Since the acceptance region is inherently associated with the one-sided test, $\bar{x} \pm ks$, the OC curve of this one-sided test may be used as an approximation to the OC band of the two-sided test.

NEWS AND NOTICES

Readers are invited to submit to the secretary of the Institute news items of interest

Personal Items

Mr. Richard Berger, formerly with General Aniline & Film Corporation, is a Sales Analyst with General Dyestuff Corporation, New York City and is an Instructor in Statistics at Rutgers University.

Professor D. A. Darling, on leave from the Department of Mathematics, University of Michigan, is Visiting Assistant Professor of Mathematical Statistics at Columbia University for the academic year 1952–53.

Miss Marjorie Easterbrook, who recently received her M.A. degree from the University of Michigan, has accepted a position in the Research Department of the Holley Carburetor Company, Van Dyke, Michigan.

Dr. N. L. Johnson of University College, London will be engaged in teaching and research in the Department of Mathematical Statistics of the University of North Carolina for the year 1952–1953.

Mr. Edward C. Molina was awarded the Honorary Doctor of Science Degree by the Newark College of Engineering.

Dr. Ingram Olkin, formerly research assistant at the University of North Carolina, accepted an assistant professorship in Mathematics at Michigan State College.

Dr. Howard Raiffa, formerly at the University of Michigan, has been appointed Assistant Professor of Mathematical Statistics at Columbia University.

Professor Herbert Robbins of the University of North Carolina has been awarded a Fellowship by the John Simon Guggenheim Memorial Foundation and will spend the year 1952–53 as a member of the Institute for Advanced Study.

B. J. Winer has accepted a post-doctoral Ford Foundation Fellowship at the Institute of Mathematical Statistics of the University of North Carolina. The fellowship was set up for the purpose of having the incumbent study the possible applications of recent advances in mathematical statistics to experimental design in psychology. The Department of Psychology at North Carolina is co-sponsor of the fellowship.

Dr. T. O. Yntema has recently been appointed Vice President of Finance at Ford Motor Company, Dearborn, Michigan.

During the academic year of 1952–53, the following members of the Institute will be in residence at Cornell University: Robert E. Bechhofer, I. Blumen, W. T. Federer, C. R. Henderson, Mark Kac, Jack Kiefer, P. J. McCarthy, Garnet E. McCreary, J. E. Morton, T. A. Ryan, A. Schultz, Milton Sobel, R. G. D. Steel, and Lionel Weiss. Professor Bechhofer will be on leave from Columbia University to serve as Director of the Statistical Laboratory in the newly formed Statistics Center at Cornell. Dr. Milton Sobel will work with him on an Army Air Force Research Project. R. G. D. Steel, formerly of the Mathematics Department, University of Wisconsin has accepted a position as Associate Professor in the Biometrics Unit of the New York State College of Agriculture. Professor Lionel Weiss will be on leave from the University of Virginia to teach in the Department of Mathematics during the absence of Professor J. Wolfowitz, who will be on leave during the coming year.

Announcement has been made of competition for Fulbright awards for university lecturing and post-doctoral level research of Americans in Austria, Belgium and Luxembourg, Denmark, Egypt, France, Greece, Iraq, Italy, Japan,

Netherlands, Norway, Pakistan, Turkey, Union of South Africa, United Kingdom and Colonial Dependencies. Application must be made to Conference Board of Associated Research Councils, Committee on International Exchange of Persons, 2101 Constitution Avenue, Washington 25, D. C., no later than October 15, 1952.

Preliminary Actuarial Examinations

Prize Awards

The winners of the prize awards offered by the Society of Actuaries to the nine undergraduates ranking highest on the score of Part 2 of the 1952 Preliminary Actuarial Examinations are as follows:

First Prize of $200

Freimer, Marshall ..... Harvard University
Lew, John S. ..... Yale University

Additional Prizes of $100

Bauman, Norman ..... Harvard University
Guinane, J. E. ..... Brown University
Horowitz, Michael ..... Cornell University
Kerr-Lawson, Angus ..... University of Toronto
Krause, Ralph M. ..... Harvard University
Muckenhoupt, Benjamin ..... Harvard University
Potthoff, Richard ..... Swarthmore College

Ordinarily only one $200 prize is offered, but this year two candidates tied for first place. Each candidate was awarded a $200 prize.

The Society of Actuaries has authorized a similar set of prizes for the 1953 examinations based on the Part 2 scores.

The Preliminary Actuarial Examinations consist of the following three examinations:

Part 1. *Language Aptitude Examination.*
(Reading comprehension, meaning of words and word relationships, antonyms, and verbal reasoning.)

Part 2. *General Mathematics Examination.*
(Algebra, trigonometry, coordinate geometry, differential and integral calculus.)

Part 3. *Special Mathematics Examination.*
(Finite differences, probability and statistics.)

The 1953 Preliminary Actuarial Examinations will be prepared by the Educational Testing Service and will be administered by the Society of Actuaries at centers throughout the United States and Canada in May 1953. The closing date for applications is March 15, 1953.

Detailed information concerning the Examinations can be obtained from:

The Society of Actuaries
208 South LaSalle Street
Chicago 4, Illinois.

New Members

The following persons have been elected to membership in the Institute

(March 3 to May 30, 1952)

Acker, Robert D., B.S. (St. Peters College, Jersey City), Research Assistant in Underwriting Studies, Actuarial Division, Metropolitan Life Insurance Company, 1 Madison Avenue, New York 10, New York, also Graduate Student at New York University and Columbia University.

Aggarwal, Om P., M.A. (Delhi Univ.), Research Assistant, Department of Statistics, Stanford University, Stanford, California.

Anderson, Sigurd L., B.S.E. (Cornell Univ.), Graduate Student, Department of Experimental Statistics, North Carolina State College, Raleigh, North Carolina.

Bell, Charles B., Jr., M.S. (Notre Dame), Research Laboratory Analyst, Operation Design Evaluation Group, Engineering Department, Santa Monica Division, Douglas Aircraft Company, *1726 W. 24th Street, Los Angeles, California.*

Brewer, Robert A., B.S. (Univ. of Michigan), *12857 Longacre, Detroit 27, Michigan.*

Canu, Jean-Francois, M.Sc. (Univ. of Chicago), Mathematician, B.O.Q., Naval Proving Ground, Dahlgren, Virginia.

Clemans, Kermit G., M.A. (Univ. of Minnesota), Instructor in Mathematics, Department of Mathematics, University of Oregon, Eugene, Oregon.

Cox, Paul C., A.M. (Univ. of New Mexico), Analytic Statistician, White Sands Proving Ground, Las Cruces, New Mexico, *P. O. Box 43, Las Cruces, New Mexico.*

David, Herbert A., B.Sc. (Sydney, Australia), Graduate Student, University College, London, *26 Curzon Road, London, N. 10, England.*

Diamond, Earl L., A.B. (Univ. of Miami), Graduate Student, Department of Mathematical Statistics, University of North Carolina, *Room 227, Connor Dormitory, Chapel Hill, North Carolina.*

Exselsen, Robert M., Ph.B. (Univ. of Chicago), Graduate Student, Department of Mathematical Statistics, Columbia University, *468 Riverside Drive, New York 27, New York.*

Fosler, Edward A., B.A. (Wayne University, Michigan), Quality Control Engineer, *2206 John B., Hazel Park, Michigan.*

Gardner, Leland A., Jr., B.A. (Columbia Univ.), Graduate Student, Department of Mathematical Statistics, Columbia University, New York 27, New York, *3081 Edwin Avenue, Apt. 1-E, Fort Lee, New Jersey.*

Gordon, Mary A., Ph.D. (Columbia Univ.), Research Psychologist, United States Air Force, Lackland Air Force Base, *128 Main Plaza, San Antonio, Texas.*

Graybill, Franklin, Ph.D. (Iowa State College), Assistant Professor, Mathematics Department, Oklahoma A. and M. College, Stillwater, Oklahoma.

Greenberger, Charles B., Student, Wayne University, *18971 Santa Rosa, Detroit, Michigan.*

Guttman, Irwin, B.Sc. (McGill Univ., Canada), Graduate Student, Toronto University, *16 Sussex Avenue, Toronto, Ontario, Canada.*

Hadden, Elizabeth S., A.B. (Univ. of Mich.), Student, University of Michigan, *413 Betsy Barbour, Ann Arbor, Michigan.*

Hall, William J., A.M. (Univ. of Mich.), Research Assistant and Graduate Student, Department of Mathematical Statistics, Institute of Statistics, University of North Carolina, Chapel Hill, North Carolina.

Hamblen, John W., A.B. (Indiana Univ.), Graduate Assistant and Graduate Student, Mathematics Department, Purdue University, West Lafayette, Indiana.

Harris, Bernard, B.B.A. (City College of New York), Mathematical Statistician, Census Bureau, also Graduate Student, George Washington University, Washington 19, D. C.

Hunter, John S., M.S. (North Carolina State), Graduate Assistant and Graduate Student, Institute of Statistics, *P.O. Box 5457, College Station, Raleigh, North Carolina.*

Hurst, Frederick V., Jr., B.S. (Wagner College), Graduate Student, Department of Mathematical Statistics, Columbia University, New York 27, *82 Van Brunt Street, Staten Island 12, New York.*

Kallianpur, Gopinath B., Ph.D. (Univ. of North Carolina), Lecturer and Research Associate, Statistical Laboratory, University of California, Berkeley 4, California.

Laurent, Andre. G., Certificate of Probability and Statistics (Paris), Administrator, Institute of Statistics and Economics, *141 Rue du Ranelagh, Paris XVI, France.*

Lopez, Alvaro, Degree in Engineering (Escuela National de Minas, Colombia, South America), Statistician, Asociacion Nacional de Industriales, Medellin, Colombia, South America.

Loural, Edgard de Aimeida, Civil Engineer (Univ. of Brasil), Aircraft Maintenance Engineer, Panair of Brasil, Aeroporto Santos Dumont, Rio de Janeiro, *Rua Marques de Abrantes, 189 Apt. 605, Rio de Janeiro, D.F., Brasil.*

MacKay, John H., M.A. (State Univ. of Iowa), Assistant Professor of Accounting (on leave of absence), College of Commerce, Tulane University, New Orleans, (at present) Graduate Student, Department of Mathematical Statistics, University of North Carolina, *106 Church Street, Chapel Hill, North Carolina.*

Marascuilo, Leonard A., B.A. (Univ. of Minnesota), Student and Teaching Assistant, Biostatistics Department, University of Minnesota, *602 North Hazel Street, St. Paul 6, Minnesota.*

Marshall, Ross D., M.A. (Univ. of Mich.), Graduate Student, Department of Mathematics, University of Michigan, *915 Green St., Ann Arbor, Michigan.*

McAdams, H. T., B.Ed. (Illinois State Normal), Research Chemist, Aluminum Research Laboratories, 3300 Missouri Avenue, E. St. Louis, *564 Logan Street, Bethalto, Illinois.*

Mesner, Dale M., M.S. (Northwestern Univ.), Graduate Assistant, Department of Mathematics, Michigan State College, East Lansing, Michigan.

Morse, Norman, B.A. (Cornell Univ.), Teaching Assistant and Graduate Student, Statistics Department, New York State School of Industrial and Labor Relations, Cornell University, Ithaca, New York.

Ohman, Carl R., B.A. (Knox College), Graduate Student and Assistant in Research, Department of Mathematics, Princeton University, Princeton, New Jersey.

Ortega, Jose A., Agricultural Engineer (Havana Univ.), Economic Adviser of Ministry of Commerce of Cuba and Economic Adviser of Cuban's Works Confederation, *Carmen No. 157, entre Tenerife y Monte, Havana, Cuba.*

Pachares, James, B.S. (Univ. of Akron), Graduate Student, Department of Mathematical Statistics, University of North Carolina, Chapel Hill, North Carolina.

Pelto, Chester R., M.S. (Penna. State College), Chief, Petrographic Section, M.R.D. Laboratory, Corps of Engineers, U. S. Army, *2008 Spencer Street, Omaha 10, Nebraska.*

Rao, V. K. R. V., Ph.D. (Cambridge Univ.), Dean, Faculty of Social Sciences; Professor and Director, Delhi School of Economics, University of Delhi, Delhi 9, India.

Resnikoff, George J., M.S. (Stanford Univ.), *1054 Myrtle Street, Palo Alto, California.*

Roeloffs, Robert, B.S. (Columbia School of Engineering), Associate Physicist, U. S. Steel Co., Research Laboratory; Graduate Student, Department of Engineering Statistics, Columbia University, New York, *38-15 Fifty-second Street, Long Island City 4, New York.*

Rohloff, Albert C., M.S. (Purdue Univ.), Teaching Assistant and Graduate Student, Department of Mathematics, Purdue University, W. Lafayette, Indiana.

Severo, Norman C., B.A. (Univ. of Buffalo), Graduate Student, Department of Mathematical Statistics, *Porter Hall 119E, Carnegie Institute of Technology, Pittsburgh, Pennsylvania.*

Simmons, Leo D., M.S. (Louisiana State Univ.), Mathematician, Research Department, United Gas Corporation, Shreveport 92, Louisiana.

Smith, F. Beckley, Jr., M.S. (Carnegie Institute of Tech.), Teaching Assistant, Carnegie Institute of Technology, *264 Atlanta Drive, Pittsburgh 28, Pennsylvania.*

Sprott, David, B.A. (Univ. of Toronto), *167 Glen Road, Toronto, Canada.*

Steinberg, Leonard M., B.A. (Univ. of Toronto), Graduate Student, Department of Mathematics, University of Toronto, *54 St. Patrick St., Toronto 2B, Ontario, Canada.*

Stubbs, Harold L., M.A. (Columbia Univ.), Research Associate, Electronic Research Project, Northwestern University, also Graduate Student, Department of Mathematics, Boston University, *355 So. Main Street, Sharon, Massachusetts.*

Terzuoli, Andrew J., M.S. (New York Univ.), Instructor, Department of Mathematics, Polytechnic Institute of Brooklyn, 85 Livingston Street, Brooklyn 2, New York.

Tung, Lloyd H., B.A. (Lingnan Univ.), Graduate Student, Department of Mathematics, University of Michigan, *6621 Gomberg, South Quadrangle, Ann Arbor, Michigan.*

Walter, John R., B.A. (Univ. of Toronto), Graduate Student, Department of Mathematics, Division of Actuarial Science, University of Toronto, *8 Norma Cres., Toronto, Ontario, Canada.*

Weiss, Irving, M.A. (Columbia Univ.), Graduate Student, Department of Statistics, Stanford University, *Building 415, Apt. 2, Stanford Village, Stanford, California.*

Whittlesey, John R. B., M.S. (Calif. Inst. of Tech.), Graduate Student, Department of Mathematical Statistics, University of North Carolina, *210 Ransom Street, Chapel Hill, North Carolina.*

Wiggins, Alvin D., A.B. (Univ. of Calif.), Graduate Student, Department of Mathematics, University of California, Berkeley, *4100 Day Ave., Apt. 2C, Richmond 6, California.*

Zelen, Marvin, M.A. (Univ. of N. Carolina), Mathematical Statistician, Stevens Institute of Technology, *67-60 150th St., Kew Gardens Hills 67, New York.*

REPORT OF THE EUGENE MEETING OF THE INSTITUTE

The fifty-second meeting of the Institute of Mathematical Statistics was held at the University of Oregon, June 19–21, 1952, in conjunction with the annual meeting of the Biometric Society, WNAR, the Eugene meetings of the Econometric Society, the Western Regional meeting of the American Mathematical Society and the Pacific Northwest meeting of the Mathematical Association of America. One hundred seventy-three persons registered, including the following members of the Institute:

C. B. Allendoerfer, Hjalmar Anderson, Jr., G. A. Baker, B. M. Bennett, C. A. Bennett, Mrs. C. A. Bennett, Z. W. Birnbaum, Jack Borsting, A. H. Bowker, Bernice Brown, D. G. Chapman, K. G. Clemans, E. L. Cox, E. L. Crow, G. B. Dantzig, R. C. Davis, W. J. Dixon, Robert Dorfman, Mary Elveback, E. A. Fay, R. S. Gardner, M. A. Girshick, C. H. Gordon, Margaret Gurney, K. D. C. Haley, W. C. Healy, Jr., H. M. Hughes, Mark Kac, R. B. Leipnik, J. C. R. Li, G. J. Lieberman, Eugene Lukacs, F. J. Massey, Jr., Paul Meyer, R. H. Moore, Sigeiti Moriguti, W. L. Nicholson, Donald Owen, Edward Paulson, Bayard Rankin, G. J. Resnikoff, Herman Rubin, Whitney Scobert, Paul Simpson, W. B. Simpson, Rosedith Sitgreaves, Andrew Sobczyk, D. Teichroew, F. H. Tingey, R. H. Titman, Elizabeth Vaughan, L. H. Wegner, Irving Weiss.

The opening session on Thursday morning was on *Stochastic Models.* Professor M. A. Girshick, Stanford University was chairman. The speakers and their subjects were:

1. *The Auditory Cortex—A Probability Model.* Archie R. Tunturi, University of Oregon Medical School.
2. *Testing Message Diffusion: The Utilization of Mathematical Models.* Stuart C. Dodd, Richard J. Hill, and Susan Huffaker, University of Washington.

This was followed by two invited addresses. Professor Frank J. Massey, Jr., University of Oregon presided. The papers were:

3. *On the Method of Collective Marks.* Herman Rubin, Stanford University.
4. *On Asymptotic Properties of Estimates.* Lucien LeCam, University of California, Berkeley.

On Friday afternoon Professor Albert H. Bowker, Stanford University presided at a session at which the following contributed papers were presented:

1. *The Principle of Invariance Applied to a Problem of Classification.* Rosedith Sitgreaves, Stanford University.
2. *Optimum selection procedures.* Edward Paulson, University of Washington.
3. *A Theorem on Convex Cones with Applications to Linear Inequalities.* Jerry W. Gaddum, Institute for Numerical Analysis.
4. *On the Prediction of Nonstationary Stochastic Processes.* R. C. Davis, Bureau of Ordnance.
5. *Power Efficiency Function for Normal Alternatives for Several Nonparametric Tests.* W. J. Dixon, University of Oregon.
6. *Bounds for Second Moments of the Sample Range.* Sigeiti Moriguti, University of North Carolina and University of Tokyo.
7. *Estimates, Tests, and Tolerance Intervals for Lump Data from a Normal Distribution.* Harry M. Hughes, University of California, Berkeley.
8. *A Computing Formula for the Power of the Two-sided t-test for Even Degrees of Freedom.* Wesley L. Nicholson, University of Oregon.
9. *On the Analysis of Data Matched in Pairs.* (By title.) Frank J. Massey, Jr., University of Oregon.
10. *The Power Function of the Haldane-Smith Test.* (By title.) B. M. Bennett, University of Washington.
11. *Spectral Analysis of Stationary Time Series. Preliminary Report.* (By title.) Ulf Grenander and Murray Rosenblatt, University of Chicago.
12. *Asymptotically Subminimax and Asymptotically Admissible Statistical Decision Procedures.* (By title.) Jack Laderman, Columbia University.
13. *Note on the Problem of Combining Independent Tests of Significance.* (By title.) Allan Birnbaum, Columbia University.
14. *On Judging all Contrasts in the Analysis of Variance. Preliminary report.* (By title.) Henry Scheffé, Columbia University.
15. *Further Moving Average Methods in the Estimation of LD-50.* (By title.) B. M. Bennett, University of Washington.
16. *Nonparametric Theory: Confidence Regions and Tests for Location and Scale Parameters. Preliminary Report.* (By title.) D. A. S. Fraser, University of Toronto.
17. *Random Functions Satisfying Certain Linear Relations. I.* (By title.) S. G. Ghurye, University of North Carolina.

Professor Robert Dorfman, University of California presided at the opening

session Friday. This session was devoted to *Developments in Linear Programming* and the following papers were presented:

1. *Computational Experience in Solving Linear Programs.* A. J. Hoffman, National Bureau of Standards.
2. *Duality of Multi-valued Means.* Theodore S. Motzkin, University of California, Los Angeles.
3. *A Note on a Dynamic Leontief Model with Substitution.* George B. Dantzig, The Rand Corporation.

Later in the morning following an address of welcome to the University by President Harry K. Newburn, Professor Mark Kac, Cornell University, presented an address titled *On Some Discrete Non-Markovian Processes.*

Friday afternoon Professor Mary Elveback, University of California, Los Angeles, presided at a session at which the following contributed papers were presented.

1. *Confidence Intervals on the Slopes of Regression Lines when both Variables Are Subject to Error.* C. O. Junge, Jr., University of Washington.
2. *Statistical Estimation from Time and Population Samples.* Julius A. Jahn, Washington State College.
3. *The Analysis of Samples from Mixed Populations. Preliminary Report.* D. G. Chapman, University of Washington.
4. *Some Applications of the Log-Normal Distribution to the Study of Survival Times in Chronic Fatal Diseases, Particularly Leukemia.* Harold Tivey, University of Oregon Medical School.
5. *Field Trial Problems.* G. A. Baker, University of California, Davis.
6. *Population Forecasts, State of Washington, 1950–1960: Methodological Summary.* Calvin F. Schmid, Vincent A. Miller and Warren E. Kalbach, University of Washington.
7. *On the Addition of Chi-squares. Preliminary Report.* Jack Borsting, University of Oregon.

On Saturday morning Professor Paul B. Simpson, University of Oregon presided at a session on *Decision Theory* at which the following three papers were presented:

1. *Decisions Based on Incomplete Information.* Norman Dalkey, The Rand Corporation.
2. *Method of Synthesizing an Autonomous Shipbuilding Industry for an Interindustry Input-Output Model.* Captain J. E. Hamilton, George Washington University.
3. *A Mathematical Model of the Shipbuilding Industry.* R. F. Williams, George Washington University.

Saturday afternoon, Professor Z. W. Birnbaum, University of Washington presented a Special Invited Paper, *Distribution-free Tests of Fit for Continuous Distribution Functions.* Professor D. G. Chapman, University of Washington, presided.

The final session was on *Inspection Sampling.* Professor Albert Bowker, Stanford University, was chairman and the following papers were presented:

1. *Acceptance Inspection by Variables when the Measurements Are Subject to Errors with Known Variance.* Edward A. Fay and John E. Walsh, U. S. Naval Ordnance Test Station, China Lake.

2. *A Two-sided Criterion for Acceptance Inspection by Variables.* Edwin L. Crow, U. S. Naval Ordnance Test Station, China Lake.
3. *Acceptance Inspection by Variables in the Presence of Measurement Error.* Edward A. Fay U. S. Naval Ordnance Test Station, China Lake.
4. *On Continuous Inspection Plans. Preliminary Report.* Gerald J. Lieberman, Stanford University.
5. *An Acceptance Procedure with Two-sided Specification Limits.* George J. Resnikoff, Stanford University.

Social events included a banquet sponsored by the mathematical organizations, followed by an open house at the Faculty Club Friday evening.

W. J. DIXON
Assistant Secretary

PUBLICATIONS RECEIVED

ABRUZZI, ADAM, *Work Measurement*, Columbia University Press, New York, 1952, xviii + 290 pp., $6.00.

MELTZER, HANS, *Wahrheit und Wahrscheinlichkeit in der Statistik*, Wirtschaftschochschule Mannheim, 1952, iv + 35 pp.

Quaderni dell' Istituto di Scienze Economiche e Statistiche, xiv, Università degli Studi di Milano, Milan, 1951, iv + 52 pp., L. 400.

Recenseamento Geral do Brasil (1° de Setembro de 1940) *Censo Demográfico* and *Censos Econômicos*, Serviço Gráfico de Instituto Brasileiro de Geografia e Estatística, Rio de Janeiro, 1950, 12 volumes in addition to those listed in March, 1952.

Statistical Method in Industrial Production, (Papers given at a Conference held in Sheffield in 1950), Royal Statistical Society, London, 1951, v + 89 pp., 7 shillings and sixpence.

WAUGH, ALBERT E., *Elements of Statistical Method*, McGraw-Hill, New York, 1952, xv + 531 pp., $5.50