THE ANNALS of MATHEMATICAL STATISTICS

(FOUNDED BY H. C. CARVER)

THE OFFICIAL JOURNAL OF THE INSTITUTE OF MATHEMATICAL STATISTICS

Contents

Limiting Distributions of Quadratic and Bilinear Forms. WIL- LIAM G. MADOW	
On a Test Whether Two Samples are from the same Population. A. Wald and J. Wolfowitz	
The Substitutive Mean and Certain Subclasses of this General	
Mean. EDWARD L. DODD	163
in Samples. Cecil C. Craig	177
Power Functions Independent of σ . George B. Dantzig A Method for Recurrent Computation of all of the Principal	186
Minors of a Determinant and its Application in Confluence Analysis. OLAV REIERSØL	193
Notes:	
A Criterion for Testing the Hypothesis that Two Samples are from the same Population. W. J. Dixon	199 204
A Simple Sampling Experiment on Confidence Intervals. S. Kull- Back and A. Frankel.	209
The Numerical Computation of the Product of Conjugate Imaginary Gamma Functions. A. C. Cohen, Jr	213
Comparison of Pearsonian Approximations with Exact Sampling Dis- tributions of Means and Variances in Samples from Populations	
Composed of the Sums of Normal Populations. G. A. BAKER A Least Squares Accumulation Theorem. W. E. BLEICK	219 225

Vol. XI, No. 2 — June, 1940

THE ANNALS OF MATHEMATICAL STATISTICS

EDITED BY

S. S. WILKS, Editor

A. T. CRAIG

J. NEYMAN

WITH THE COOPERATION OF

H. C. CARVER
R. A. FISHER
R. DE MISES
H. CRAMÉR
T. C. FRY
E. S. PEARSON
W. E. DEMING
H. HOTELLING
H. L. RIETZ
G. DARMOIS
W. A. SHEWHART

Manuscripts for publication in the Annals of Mathematical Statistics should be sent to S. S. Wilks, Fine Hall, Princeton, New Jersey. Manuscripts should be typewritten double-spaced with wide margins, and the original copy should be submitted. Footnotes should be reduced to a minimum and whenever possible replaced by a bibliography at the end of the paper; formulae in footnotes should be avoided. Figures, charts, and diagrams should be drawn on plain white paper or tracing cloth in black India ink twice the size they are to be printed. Authors are requested to keep in mind typographical difficulties of complicated mathematical formulae.

Authors will ordinarily receive only galley proofs. Fifty reprints without covers will be furnished free. Additional reprints and covers furnished at cost.

The subscription price for the Annals is \$4.00 per year. Single copies \$1.25. Back numbers are available at the following rates:

Vols. I-IV \$5.00 each. Single numbers \$1.50. Vols. V to date \$4.00 each. Single numbers \$1.25.

The Annals of Mathematical Statistics is published quarterly by the Institute of Mathematical Statistics. Subscriptions, renewals, orders for back numbers and other business communications should be sent to the Secretary of the Institute of Mathematical Statistics, P. R. Rider, Washington University, St. Louis, Mo.

COMPOSED AND PRINTED AT THE WAVERLY PRESS, INC. BALTIMORE, MD., U. S. A.