accuracy in the roots due to ill-conditioned polynomial coefficients, even when the eigenvalues are well-conditioned, is only hinted at. Indeed, the author takes the whole matter of "stability" or "instability" of a method with regard to numerical computation much too lightly. One gets the impression that the author's primary experience and concern is with methods for hand computation, hardly appropriate in this day and age.

J. VARAH

Applied Mathematics Department
California Institute of Technology
Pasadena, California 91109

28 [3, 4, 5].—A. S. HOUSEHOLDER, *KWIC Index for Matrices in Numerical Analysis*, Volume I: Primary Authors A–J, viii + 124 pp., Volume II: Primary Authors K–Z, vii + 151 pp., 1969, Oak Ridge National Laboratory, Oak Ridge, Tennessee, 28 cm. Available from National Technical Information Service, U. S. Department of Commerce, Springfield, Virginia 22151. Price: Printed copy $3.00, Microfiche $0.65, each volume.

Here are listings of papers and books which Professor Householder has compiled during the last ten years. Subjects included are numerical linear algebra, theory of real and complex matrices, difference schemes for differential equations. For the most part, the subjects of infinite matrices, Banach spaces, Hilbert spaces, matrices over arbitrary fields, combinatorial and functional analysis are not represented.

The 2600 items are listed alphabetically by author and also in a KWIC (Key Word in Context) Index. The authors are also listed separately.

All people who work in the field of matrix computations should be grateful to Professor Householder for making available to us this valuable information retrieved from the passing flood of scientific publications.

A third volume will contain more recent titles and also foreign titles which have not yet been translated.

B. N. P.

29 [3, 4, 5, 8, 13.35].—R. V. GAMKRELIDZE, EDITOR, *Probability Theory, Mathematical Statistics, and Theoretical Cybernetics*, translated from Russian, Plenum Press, New York, 1969, vii + 112 pp., 24 cm. Price $15.00.

This book is a peculiar combination including, as it does, two papers entitled: "Markov Processes and Differential Equations" by M. I. Freidlin and "Discrete Problems in Mathematical Programming" by A. A. Korbut and Yu. Yu. Finkel'shtein. As such, two subject matters, entirely and fundamentally disparate, are presented, and the likelihood of finding readers, let alone reviewers, interested in the contents or competent to judge the merits of both, is nil.

This reviewer's competence extends only to the second paper. The first is devoted largely to a survey of the Russian literature (viz., on p. 2, "A great deal of work