Volume XII

October 1958

Number 64

Mathematical Tables and other Aids to Computation



* * * *

Published Quarterly

by the

National Academy of Sciences-National Research Council

Published quarterly in January, April, July, and October by the National Academy of Sciences-National Research Council, Mt. Royal and Guilford Aves., Baltimore 2, Md., and Washington, D. C.

Second-class postage paid at Baltimore, Md.

Editorial Committee Division of Mathematics National Academy of Sciences—National Research Council Washington, D. C.

C. B. TOMPKINS, Chairman, University of California, Los Angeles, California

C. C. CRAIG, University of Michigan, Ann Arbor, Michigan

ALAN FLETCHER, University of Liverpool, Liverpool 3, England

EUGENE ISAACSON, New York University, New York 3, New York

A. H. TAUB, University of Illinois, Urbana, Illinois

C. V. L. SMITH, Ballistic Research Labs., Aberdeen Proving Ground, Maryland

* * *

Information to Subscribers

The journal is published quarterly in one volume per year with issues numbers serially since Volume I, Number 1. Starting with January, 1959 subscriptions are \$8.00 per year, single copies \$2.25. Back issues are available as follows:

Volume I (1943-1945), Nos. 10 and 12 only are available; \$1.00 per issue.

- Volume II (1946–1947), Nos. 13, 14, 17, 18, 19, and 20 only available; \$1.00 per issue.
- Volume III (1948–1949), Nos. 21–28 available. \$4.00 per year (four issues), \$1.25 per issue.
- Volume IV (1950 through 1958), all issues available; \$5.00 per year, \$1.50 per issue.

All payments are to be made to the National Academy of Sciences and forwarded to the publications Office, 2101 Constitution Avenue, Washington, D. C.

Agents for Great Britain and Ireland: Scientific Computing Service, Ltd. Bedford Square, London W. C. 1

* * *

Microcard Edition

Volumes I-X (1943-1956), Nos. 1-56 are now available on Microcards and may be purchased from the Microcard Foundation, Box 2145, Madison 5, Wisconsin, at a cost of \$20.00 for the complete set. Future volumes will be available on Microcards in the year following original publication.

* * *

Information to Contributors

All contributions intended for publication in *Mathematical Tables and Other Aids to Computation* and all books for review should be addressed to C. B. Tompkins, Department of Mathematics, University of California, Los Angeles 24, California. The author should mention the name of an appropriate editor for his paper if this is convenient.

Mathematical Tables and other Aids to Computation

A Quarterly Journal

Edited by

C. C. CRAIG ALAN FLETCHER EUGENE ISAACSON C. V. L. SMITH A. H. TAUB C. B. TOMPKINS, Chairman

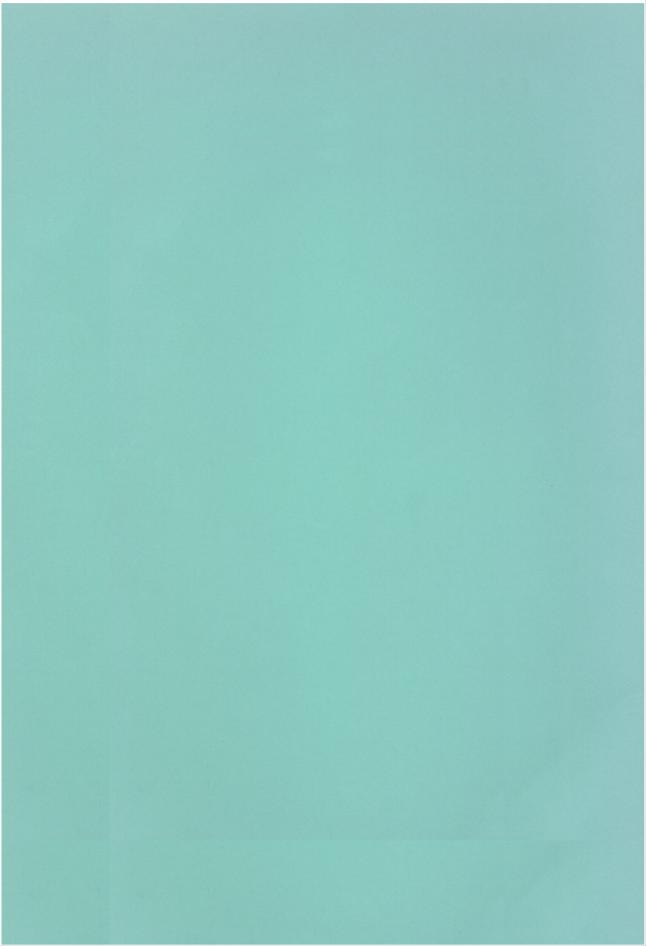
XII

NOS. 61–64 1958

Published by

THE NATIONAL RESEARCH COUNCIL

Washington, D. C.



CONTENTS

OCTOBER 1958

A Method for the Numerical Integration of Ordinary Differential Equations L. STOLLER & D. MORRISON	269
Numerical Evaluation of Multiple Integrals II PRESTON C. HAMMER & ARTHUR H. STROUD	272
TECHNICAL NOTES AND SHORT PAPERS	281 281
REVIEWS AND DESCRIPTIONS OF TABLES AND BOOKS. BROWN 126, TARBELL 127, RIORDAN 128, GRENANDER & ROSENBLATT 129, ROY & LAHA 130, RAMAKRISHNAN 131, TUKEY 132, SAKODA & COHEN 133, OWEN 134, OWEN 135, WEINGARTEN 136, PALMER 137, HARTLEY & PEARSON 138, MITRA 139, ST. PIERRE & ZINGER 140, SARHAN & GREENBERG 141, GRUNDY, HEALY & REES 142, FINNEY 143, KITAGAWA & SEGUCHI 144, KITAGAWA & SEGUCHI 145, LEONE, NOTTINGHAM & ZUCKER 146, KOZELKA 147, JAMES 148, GUTTMAN 149, GUPTA & SOBEL 150, GEISSER 151, ANIS 152, MOORE 153, ROY & MITRA 154, RESNIKOFF & LIEBERMAN 155, KUDO 156, JENKINS 157, SAVAGE 158, TRICKETT, WELCH & JAMES 159, TSAO 160, TUKEY 161, WALSH 162, WOOLF 163, KIMBALL 164, FOSTER & REES 165, IYER & BHATTACHARYYA 166, FOSTER 167, BARTON & DAVID 168, NBS AMS 169, KARPOV 170, LOHMANDER & RITTSTEN 171, BRAUER & GAGER 172, LING 173, CONDON & ODISHAW 174, LOTKIN & BERNDTSON 175, Proc. of Symposium (IBM-New York University) 176, PECK & HAZELWOOD 177, NBS AMS 178, PANOW 179, SOKOLNIKOFF & REDHEFFER 180, FISCHER 181, WILKES, WHEELER & GILL 182, GOTLIEB & HUME 183, SUSSKIND 184.	281
TABLE ERRATA KULIK 267	317
NOTES Announcements of New and Nearly New Journals and Series	
INDICES TO VOLUME XII. Author Index, Papers and Technical Notes. Reviews by Author of Work Reviewed	320