## The Computer Journal

Published Quarterly by The British Computer Society, 23 Dorset Square, LONDON NW1, England

The Computer Journal is registered at Stationers' Hall, London (certificate No. 24690, June 1966). The contents may not be reproduced, either wholly or in part, without permission.

Subscription price per volume $£ 5$. (U.S. $\$ 12.00$ at $\$ 2.40$ ). Single Copies $£ 15$ s. (U.S. $\$ 3.00$ at $\$ 2.40$ ).
All inquiries should be sent to the Secretary at the above address.
EDITORIAL BOARD

| P. G. Barnes | R. G. Dowse | I. H. Gould | T. H. O'Beirne |
| :--- | :--- | :--- | :--- |
| D. V. Blake | L. Fox | J. G. Grover | E. S. Page |
| M. Bridger | H. W. Gearing | P. Hammersley | R. M. Paine |
| R. A. Brooker | P. Giles | T. Kilburn | D. Rogers |
| E. C. Clear Hill | S. Gill | A. McG. Leckie | P. A. Samet |
| L. R. Crawley | J. A. Goldsmtih | J. G. W. Lewarne | P. A. Spooner |
| G. M. Davis | E. T. Goodwin | J. C. P. Miller | K. H. Treweek |
| A. S. Douglas | T. F. Goodwin | M. O. Mutch | H. P. Voysey |
|  | R. M. Needham | P. H. Walker |  |

G. Barnes<br>L. Fox<br>H. W. Gearing<br>E. C. Clear Hill<br>S. Gill<br>G. M. Davis<br>E. T. Goodwin

J. G. Grover
E. S. Page
R. M. Pain
D. Rogers
A. McG. Leckie
P. A. Samet
M. O. Mutch
H. P. Voysey
F. Yates (Chairman)
P. H. Walker

Mathematical Proof Reading: Mrs. D. Sargent, Mrs. J. Bourne Correspondence Secretary: Mrs. H. Hedge
Communications: Papers submitted for publication should be sent to P. Hammersley, The University Mathematical Laboratory, Corn Exchange Street, Cambridge. Intending authors should first apply for Notes on the Submission of Papers, as the onus of preparing papers in a form suitable for sending to press lies in the first place with the authors.

Opinions expressed in The Computer Journal are those of the authors and do not necessarily represent the views of The British Computer Society or the organisations by which the authors are employed.
(c) The British Computer Society, 1969.

## INDEX TO ADVERTISERS

| Ampex (G.B.) Ltd. | vii |
| :--- | ---: |
| Cossor Electronics | OBC |
| Computime International | v |
| I.C.L. | vi |
| I.B.M. (U.K.) Ltd. | iii-iv |
| Lewes Technical College | IBC |
| Memorex | between iv-v |
| B. Russell Booth | loose insert |
| Rolls-Royce | loose insert |
| Share Time Services | IFC |
| John Wiley \& Sons | IBC |
| Wandsworth Technical College | IBC |

