

The JOURNAL of NAVIGATION

VOL. 40 NO. 3

SEPTEMBER

1987

The Conflict Resolution Process for TCAS II and Some Simulation Results R. L. FORD	283
Planning of the Navigational Channels in the Gulf of Suez Following IMO Regulations G. A. MOKHTAR AND I. HUSSEIN	304
Omega in the Land Environment ANDREW STRATTON	322
The Navigator – Man or Machine? RALPH MAYBOURN	334
Radar Reflectors, Radar Beacons and Transponders as Aids to Navigation IAN MCGEOCH AND W. B. STAWELL	344
The Automatic Detection of Real-Life Ship Encounters ROBERT G. CURTIS, ELISABETH M. GOODWIN AND MARK KONYN	355
The Nuclear Magnetic Resonance Gyroscope: a Review K. F. WOODMAN, P. W. FRANKS AND M. D. RICHARDS	366
Navigational Ideas and the Yorkshire Ripper Investigation STUART S. KIND	385
Position Fixing with Neither Dead Reckoning nor GMT W. B. FU	393
Resurrecting the Lunar Distance BRUCE STARK	394
Record	396
Reviews	400

THE ROYAL INSTITUTE OF NAVIGATION
OXFORD UNIVERSITY PRESS

THE ROYAL INSTITUTE OF NAVIGATION

Patron

HRH THE PRINCE PHILIP DUKE OF EDINBURGH, KG, KT, OM

OFFICERS AND COUNCIL 1986-7

President

J. E. D. Williams

Vice Presidents

Sir John Charnley, CB

D. W. Newson

Treasurer

G. A. B. King, CBE

Chairman of the Technical Committee

M. G. Pearson

Chairman of the Membership & Fellowship Committee

Commander A. E. Fanning, MBE, DSC, RN

Other Members of Council

H. J. Agnew

J. C. Bell

W. F. Blanchard

Wg Cdr D. W. Broughton, MBE, RAF

N. Dahl

Captain J. D. Eames

P. F. C. Griffiths

D. Halliwell

S. G. Smith

Rear Admiral A. F. R. Weir, CB

Director Rear Admiral R. M. Burgoyne, CB

THE JOURNAL OF NAVIGATION

The *Journal* is published three times a year by Oxford University Press and is edited by Professor J. F. Kemp. It contains original papers contributing to the science of navigation, including those presented at the meetings of the Institute together with the ensuing discussion. In addition the *Journal* includes a record of current navigational work, reviews of important books, and other matters of concern to those interested in navigation. The views expressed in the *Journal* are not necessarily those of the Institute, or of any organization or department to which the authors may belong. Crown Copyright may be reserved.

The *Journal* (ISSN 0373-4633) is issued free to all Members of the Institute. The subscription price to non-members for Volume 40, 1987, is £43 (USA and Canada US \$100.00) post free; single parts are available at £16 (USA and Canada US \$36) plus postage. Orders, which must be accompanied by payment, may be sent to any bookseller or subscription agent or direct to the publishers, Journals Subscription Department, Oxford University Press, Walton Street, Oxford OX2 6DP. Back volumes are also available from the publishers at £27 each.

Enquiries for advertising space should be addressed to the Journals Advertising Coordinator, Journals Production Dept., Oxford University Press at the address given above.

The postal address of the Institute is The Royal Institute of Navigation, at The Royal Geographical Society, 1 Kensington Gore, London SW7 2AT (Telephone: 01-589 5021).

© 1987 The Royal Institute of Navigation