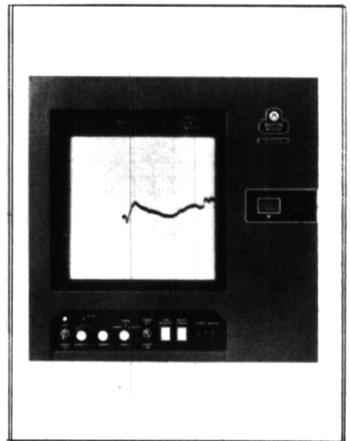


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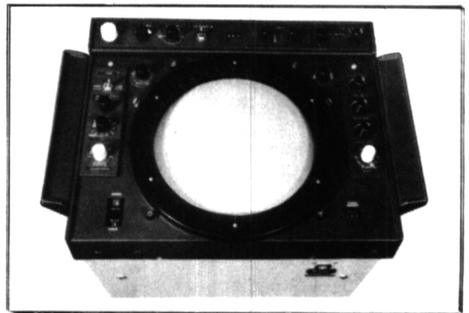
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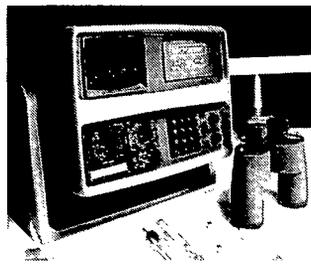
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The Institute of Mathematics and its Applications Conference Series

Mathematical Aspects of Marine Traffic

edited by S. H. Hollingdale

1979, x+252pp., £19.40 (UK only)|\$47.00, 0.12.352450.4

This book contains papers that were presented at a two-day conference held at London University and organized by the Institute of Mathematics and its Applications in collaboration with the Royal Institute of Navigation and several other organizations. The two-fold purpose of the conference was: to bring marine traffic to the attention of applied mathematicians as a rewarding field of research, and to inform marine navigators and technologists of the varied contributions that a mathematical approach can make in their field.

With the post-war growth of marine traffic there has been increasing need for some means of traffic control in congested waters. This usually takes the form of 'linear routing' as used in the Dover Straits and occasionally of more complex 'areal' arrangements such as are to be found in Tokyo Bay. Most of the studies in this book make use of the technique of mathematical modelling. This enables the effects of changes in the 'real world', for example of traffic density or control procedures, to be examined 'on paper' before operational decisions are taken. Several papers deal with collection and analysis of statistical data on traffic flow or casualties; others with special problems, for example those posed by the Suez Canal or Japanese waters.

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'NAVIGATION (USA)'

Navigation, the quarterly Journal of the American Institute of Navigation, is available to Members of the Institute at a reduced subscription of £7.00 a year. Volume 27, No. 3 (Fall 1980) contains the following papers.

Optimal Processing of GPS Signals

E. M. Coppins, G. J. Geier, W. C. Fidler and P. A. Grundy

Flight Test Investigation of Loran-C for Civil Aviation Applications

R. H. Pursel

Evaluation of Loran-C for Non-Precision Approach Applications

E. D. McConkey

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D. B. Beringer

Design of an Adaptive Autopilot for Commercial Marine Use

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Charles H. Cotter

Analysis of Helicopter Operations and the Use of MLS in the Offshore Environment

R. Loh

The Institute's Professional Forum

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Navigation (Paris), the quarterly Journal of the French Institute of Navigation, is available to Members of the Institute at the preferential subscription rate of £10.00. The April 1981 issue contains the following papers.

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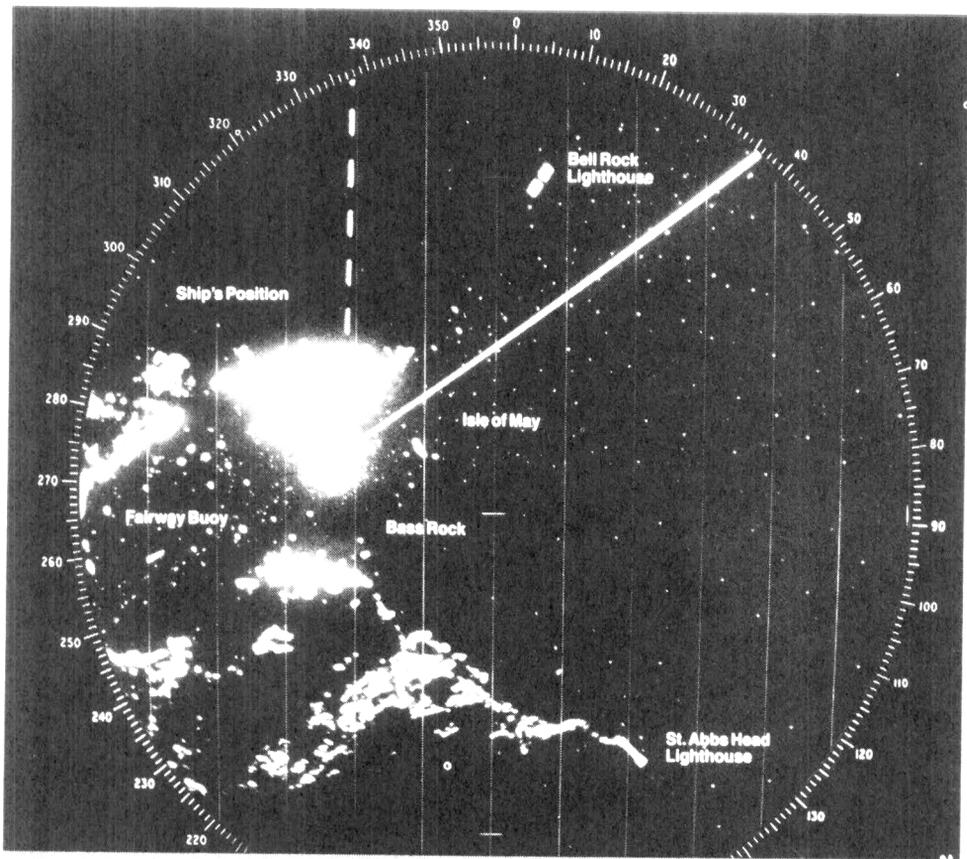
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- 2 Emploi des signaux Decca monofréquence pour la localisation à grande distance, *par* J. D. LAST
- 3 Le MLS - Un exemple d'utilisation du microprocesseur, *par* B. LÉTOQUART et J.-M. SKRZYPCZAK

II. LA CHRONIQUE DU NAVIGANT

- 1 Les perspectives de l'utilisation civile du Navstar/G.P.S., *par* W. C. EULER et L. J. JACOBSON
- 2 Utilisation des INS en percée dirigée indirecte, *par* G. DUGUET
- 3 Épuration et dépollution des hydrocarbures, *par* P. MARCHAND
- 4 Une traversée mouvementée, *par* M. W. RICHEY
- 5 Un calculateur d'orientation polaire, *par* J. HAMELIN

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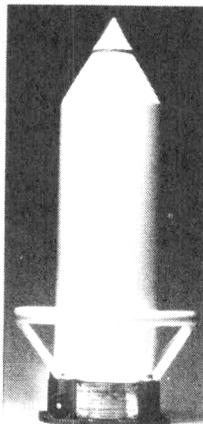
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THE OBJECT of the Institute is to unite in one body those who are concerned with or who are interested in the science and art of navigation. Membership is not restricted to those who hold professional qualifications, but is open to others who wish to further the aims of the Institute.

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