

An Integrated Approach to Marine Navigation

Rediffusion has just introduced a new integrated navigation management system, the NV10. Combining the accurate, all-weather, worldwide satellite fixes of Transit with the continuous position fixing capability of Omega, the NV10 offers the navigator directly in latitude/longitude a constant VDU display of any one of three position computations (Omega, Satnav updated by log/gyro and 'most probable').

This versatile system combines Rediffusion's long experience of radio navigation. Just three elements make up a basic installation - a single, combined antenna, a compact VDU control and display terminal and a receiver/processor unit which can be located in any convenient position remote from the control and display unit.

In addition to a state-of-the-art Satnav receiver, NV10 also monitors all four Omega frequencies which is one up on most of its competitors! Additional monitor or slave displays can be provided elsewhere in the

ship and a printer connected to provide hard copy data.

A major feature of the NV10 is the simplicity of the man-machine interface, enabling the system to be interrogated or updated easily without recourse to special codes. Comprehensive navigation information is displayed in discrete pages. In addition to the three position pages, NV10 offers nine other pages of data and an index page, all of which can be called up at the touch of a button.

With Rediffusion, you always know where you are! Why not contact us for more information, today.



Rediffusion Radio Systems Ltd., Broomhill Road, London. SW18 4JQ Telephone: 01-874 7281 Telex: 264029 Cables: Redifon London Telex

'NAVIGATION' No. 116

The October 1981 issue of Navigation (Paris), the quarterly Journal of the French Institute of Navigation, contains the following papers.

AVIS IMPORTANT

- I. CHRONIQUE DU NAVIGANT
 - 1 Le routing dans la Manche, par A. N. COCKCROFT
 - 2 Capacité résiduelle de manœuvre de pétroliers privés de propulsion ou de moyens de gouverne, par B. NIZERY, I.R.C.N.
 - 3 Les grandes zones de manœuvre terminale, par J. L. GARNIER, D.N.A.
 - 4 Parade exemplaire d'un puissant cyclone, par J. DARCHEN
 - 5 Vingt ans après, par J. P. BOILLOT
- II. ÉTUDES, MÉTHODES ET ARTIFICES DE NAVIGATION Le procédé de demain: Le segment capable sphérique
- III. L'HISTOIRE ET LA NAVIGATION
 L'art pervers de la navigation, par J. P. NERAUDAU
- IV. INFORMATIONS
- V. CHRONIQUE DES LIVRES ET REVUE

'NAVIGATION (USA)'

Volume 28, No. 1 (Spring 1981) of *Navigation*, the quarterly Journal of the American Institute of Navigation, contains the following papers.

Most Probable Fix Position Reduction

G. D. Morrison

Safer Navigation at Minimum Cost

D. G. Hindle

A Handheld Collision Avoidance Aid

J. D. Luse

Aids to Navigation Positioning Project

James E. Smith, Jr.

The Role of the Earth's Shape in Navigation; An Example W. Kuebler and S. Sommers

Navigation Systems for Dynamic Positioning Vessels

Thor K. Skoland and Victor Prushan

An Analytical Solution of the Two Star Sight Problem of Celestial Navigation

James A. Van Allen

K-12 Method by Calculator: A Single Program for All Celestial Fixes, Directly or by Position Lines

S. Kotlaric

Unambiguous Two Body Fix Methods Derived from Crystallographic Principles

Torben Kjer

Vertical Sextant Angles Short of the Horizon

W. C. Marlow

Reviews of Recent Books

The Institute's Professional Forum

T. D. Davies, Norman G. Cubberly

The Institute's Professional File



More than 20 navies and coast guards around the world use Magnavox 1100 series Satellite Navigators. On duty, day in and day out. In submarines, frigates, and coastal patrol boats. The models they use are off-the-shelf commercial production units. The same reliable, hardworking equipment you'd buy for your commercial fleet.

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Number One In Satnav

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THE INTERNATIONAL HYDROGRAPHIC REVIEW

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Among the papers of interest in the January 1982 issue are:

- NAVSTAR Global Positioning System
 (J. H. NORTON)
- U.K. charting practice in the implementation of IALA Maritime Buoyage System "A"

(P. WAINWRIGHT)

- Loran-C coordinate converters - Plague or panacea (D. H. Gray & T. Mortimer)

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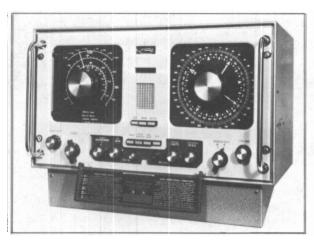
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- ■Sense of motion across track

The pilot takes aboard this hand held display and a self contained masthead-mounted receiving unit which is simply hauled aloft on a signal halyard. Position data is transmitted ashore to a control centre computer; guidance data is relayed back to the

pilot's hand held display—all by UHF radio link. The shore control centre operator has a VDU presentation of all ships operating within the system. For ships that regularly use a particular port there's a permanent ship's equipment installation available.

One of several Racal-Decca radio positioning systems may be used as the basis of the Racal-Decca Survey Pilotage Guidance System including the well known Hi-Fix/6 equipment. So there's an added advantage in that the Hi-Fix/6 transmissions may be used simultaneously to give high accuracy positioning control for survey, dredging and other marine engineering work in the area.

The Racal-Decca Survey Pilotage Guidance System is a major contribution to the efficiency and safety of port operations. More details from the address below.

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THE ROYAL INSTITUTE OF NAVIGATION

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.

By coordinating the knowledge and achievements of marine and air navigators, scientists and those associated with the development and production of navigational equipment, the work of the Institute is directed towards raising the standard of navigation. In the field of education it is the aim of the Institute to bring practical navigators into contact with teachers and research workers to increase a common appreciation of the issues involved. It is an object of the Institute to encourage research in equipment and methods; through its publications it gives a wide circulation to original work on navigation so that new developments and suggestions can be appreciated by those most directly concerned with them.

The activities of the Institute include the holding of monthly meetings to discuss specific problems, the publication of a Journal and of other works concerned with different aspects of navigation, and such other activities as the Council may deem necessary to promote knowledge in navigation and its associated sciences.

The Journal of Navigation is issued free to all Members and contains a full account of the Institute's proceedings. It prints the papers which are presented at meetings, together with their ensuing discussion, and other original papers contributing to the science of navigation. It also contains a record of current navigational work, reviews of important books, and general papers of interest to navigators and those with similar interests.

The work of the Institute is coordinated with that of similar societies abroad, whose proceedings are available to members.

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- (4) STUDENT MEMBERS, who shall be persons under twenty-five years of age studying with a view to making navigation, or an allied interest, their career.
- (5) CORPORATE MEMBERS, who shall be companies, universities, navigation schools, government departments and other organizations, here and abroad, who are directly or indirectly interested in the science of navigation. Corporate Members are entitled to send representative to all Institute meetings and to receive six copies of the *Journal*, and other publications. They are encouraged to take an active part in the Institute's work. Applications should be sent by letter addressed to the Director.

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