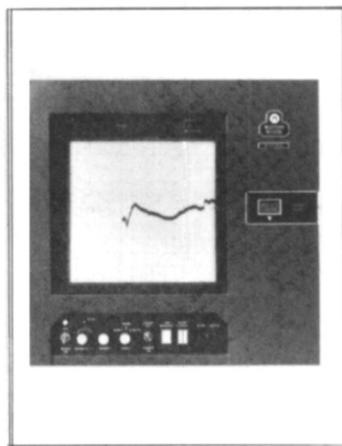
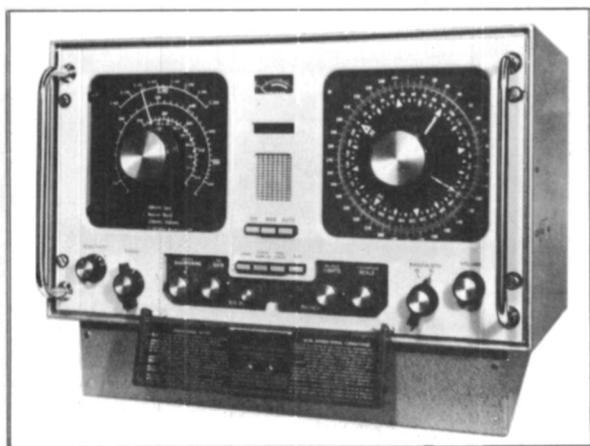


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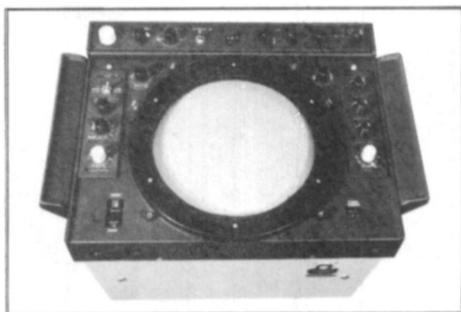
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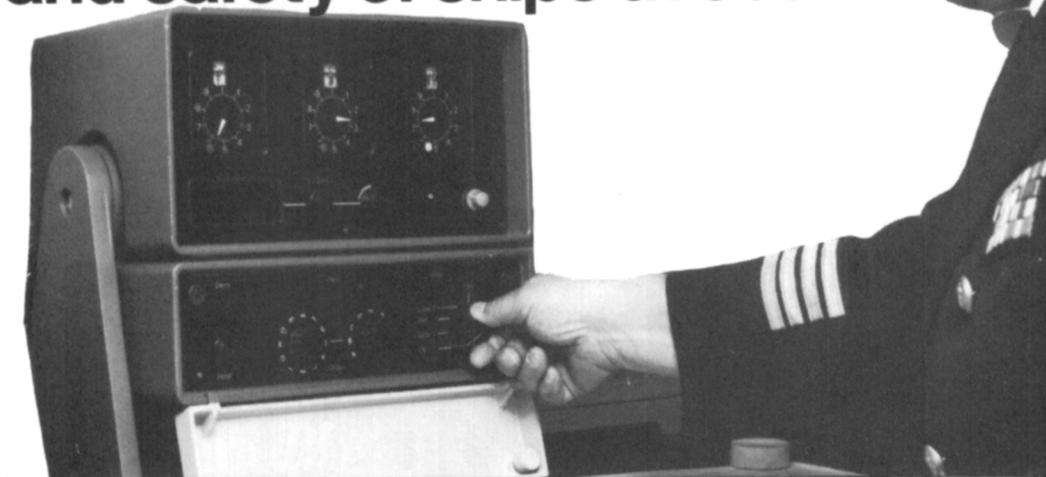
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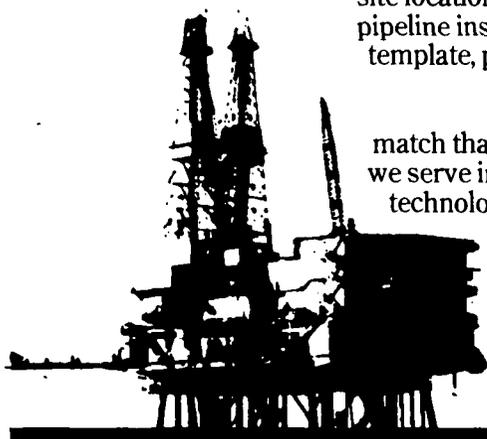


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Among the papers of interest in the January 1981 issue are:

- Selection criteria for shipboard automated systems
(C. G. WEEKS)
- Correlation of surface and underwater position fixing techniques
(P. H. MILNE)
- The Star/Planet Detector
(C. MOLARONI)

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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 £5.00 a year. Volume 27, No. 1 (Spring 1980) contains the following papers.

Guidance Accuracy Considerations for the Microwave Landing System
Precision DME

R. J. Kelly and E. F. C. LaBerge

Aircraft Automatic Landing

J. A. McDonald

Selcall Applications: The Key to Advanced Marine Communications

Joseph J. Fee

Weather Effect on Loran-C Propagation

S. N. Samaddar

Status Report – Global Positioning System

D. W. Henderson and H. Coriat

Standard Ins Program Status

H. L. Daniel and D. B. Hulslander

Nuclear Magnetic Resonance Gyro Development

F. A. Karwacki

Reviews of Recent Books

The Institute's Professional Forum

R. G. Huenemann and G. C. Weiffenbach

Marfix Satellite Navigator Bringing the space age down to sea level

Marconi's Marfix satellite navigator uses signals received from orbiting satellites to calculate your exact position anywhere in the world. Between fixes the unit will continue to produce dead reckonings based on the last satellite fix and the ship's heading and speed. Set and drift are automatically calculated and entered.

Two primary objectives dictated the design philosophy behind Marfix. Exceptional reliability: and operational simplicity. The first involved exhaustive selection of all components and the extensive use of solid-state technology.

The second demanded easily mastered procedures and clearly understood control panels.

After all, it's not much use having satellites flying around if the information goes over your head.

Practically any navigator can learn to operate Marfix with a couple of hours' practice. All inputs are

entered through the keyboard; all outputs are displayed in a concise, easily understood format.

Once the Marfix is under way, the system will continue automatically computing and displaying accurate, up-to-the-minute navigational data as long as power is supplied.

Even when faced with a power black-out, Marfix will keep shining through. An internal battery back-up system provides protection of memory content and automatic re-start. Upon resumption of external power, it automatically recharges itself.

All data is displayed in its most immediately relevant form: location in latitude and longitude, direction in degrees, time in hours, minutes and seconds, distance in nautical miles.

Marfix keeps itself in check. Without interrupting normal operation the unit conducts an automatic self-test of all major functions approximately once every two hours. Simple plug-in modules are available to replace any defective part.

For a unit of such sophistication, installation is surprisingly simple, and can be easily accomplished in a few hours. The externally mounted antenna/pre-amplifier is ruggedly constructed to withstand vibration and temperature extremes, and is sealed against the effects of water, sun, wind and salt.

Marfix options include a printer output for hard-copy records and remote display monitors that can be located anywhere on board to duplicate main unit information.

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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 record of current navigational work, reviews of important books, and general papers of interest to navigators and those with similar interests.

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