

SEVENTH SHIP CONTROL SYSTEMS SYMPOSIUM

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This article is designed to explain the background and purpose of the Ship Control Systems Symposia and to give a glimpse of some of the advanced work taking place which is being constantly assessed for applicability to R.N. needs.

The first Ship Control Systems Symposium was held in the U.S.A. in 1966, and subsequent ones were in the U.S.A. (1969, 1978), U.K. (1972), the Netherlands (1975) and Canada (1981). In 1984, it was once again the turn of the U.K. to host the event, the Seventh Symposium in the series being sponsored by the Ministry of Defence, Sea Systems Controllerate. Organization of this Symposium was undertaken by the Machinery Controls Group of the Director General Marine Engineering in conjunction with the University of Bath. The actual Symposium was held at the University of Bath, from 24 to 27 September.

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The technical papers presented spanned a wide range of ship control topics. From ship platform control, including manoeuvring, stabilization and steering, through to the control and surveillance of marine machinery. All of these aspects require the highest standards of engineering, science, and mathematics to improve constantly on present methods and to perfect new techniques. Indeed, technical papers for the Seventh Symposium were submitted from members of government organizations, navies, industry and universities, representing both military and merchant naval interests of some 10 countries. Such a blend of participants and the fact that these triennial Symposia have now been taking place for 18 years, is evidence of the continuing value of the event.

The advent of the microprocessor is now having its effect on Ship Control, as it is on many other fields of engineering. To reflect this trend, the theme of the Seventh Symposium was 'Recent developments in Ship Control Systems with particular emphasis on the practical problems associated with the implementation of digital systems'. As the technical papers showed, the use of digital techniques is not only facilitating new solutions of long-standing problems, but is also enabling erstwhile impossible tasks to be attempted. However, as the theme suggests, the implementation of ideas and concepts is never straightforward. Consequently, technical papers concerning software and data transmission continue to provide an increasing percentage of the topics addressed under the auspices of the Ship Control Symposia.

The response to the call for papers, sent out a year before the actual Symposium, produced over 70 potential ones, reduced in the event to 60. A well-balanced set of papers emerged, reflecting both practical and theoretical topics.

In the closing address Rear-Admiral J. E. K. Croydon remarked that the Symposium had been successful in its aim of promoting the exchange of knowledge between the many recognized experts in the field as well as in informing those who looked slightly aghast at such a rapidly moving sector of engineering. He went on to emphasize that it is the engineer's task to produce a cost-effective solution to the problem set and he urged the delegates to make use of each other's expertise and knowledge in the continuing quest of innovative yet cost-effective ship control.

Copies of the complete Proceedings of the Symposium, containing all the papers, are held by the Scientific, Technical and Management Library in the Old War Office, Whitehall, by the library of the Royal Naval Engineering College at Manadon, at the Defence Research Information Centre (DRIC), St. Mary Cray, Orpington, and by certain other technical libraries. Copies can also be obtained (at £40) from the Sea Systems Controllerate (ADMC), Block B, Foxhill, Bath.

