

EDITORIAL

The primary objectives of the *Johns Hopkins APL Technical Digest* or any similar journal are to record and to disseminate. Dissemination informs and recording makes new knowledge available. Intrinsic to R&D management are two additional objectives: to require the discipline that writing an article provides to the scientist or engineer to ensure a logically thought-out program, and to provide recognition for the dedicated work of the authors. The broad spectrum of activities at APL and the broad spectra of interests of the *Digest's* readers can be difficult to match. We sincerely hope that most issues of the *Digest* contain some articles of interest to each reader, and that the majority of articles can be followed, even if not understood in complete detail, by someone whose background is in a discipline other than that central to the article. We recognize that often some articles may be "impenetrable" (a favored word of our editorial staff) to some readers, and occasionally an article may be impenetrable to most. We sincerely apologize, knowing this will occur, but we recognize that even the "renaissance man" of tradition would have an impossible task in today's ever-expanding world of science and technology.

Many issues of the *Digest* have been and will continue to be theme issues. Earlier this year, the "Tenth Anniversary" theme, manifested by a selection of articles representing ongoing programs that started during the first decade of the journal, was best presented by a double issue. Once again this year, 1990, we request your forbearance for another double issue, this time with three themes representing some APL activities in "Space, Air, and Oceans." The first theme is concerned primarily with some recent observations of the physics of near-Earth space. The expansion of space physics in recent decades is associated with the capability of space flight, and APL has been involved since the beginning of space flight. The other two themes represent a sampling of considerably larger sets of material to be published elsewhere. The National AeroSpace Plane Program is one of the major scientific and technical efforts of this decade, and

is likely to shape the future of aerospace technology through much of the next century. APL has been a significant player in this program, particularly in the area of supersonic propulsion. The politics and economics of the international world do not, however, permit unlimited dissemination of all the knowledge gained to date. To permit the broadest dissemination of the openly releasable material, we have therefore selected articles that provide an excellent cross section of APL's role in the propulsion aspects of the program. Additional material of necessarily limited distribution is contained in a sister publication, the *APL Technical Review*. The third theme, the LEWEX Ocean Wave Experiment, is represented by a limited selection from a much larger publication for a different reason. Many, perhaps most, of our readers are concerned in some ways with naval technology and consequently the characteristics of ocean winds and waves, their interaction, and their effects on seafarers. We have sought to extract, from a major symposium, a cross section of articles that will be of interest to those readers; the complete symposium, with many significant articles of much more specialized interest to researchers in the still unfolding story of wind-wave interaction and wave dynamics, will be published in a separate volume. Thus, by presenting some portion of these two additional themes to our *Digest* readers, we hope we will be accomplishing our objectives of dissemination and recording within the boundaries of classification (not ours to determine) and the limits of specialization (our judgment call). Your comments and suggestions as to our choices of subjects and depth of technical detail, in this and past issues, are earnestly solicited.

With apologies for this intrusion, I leave you to our three guest editors and their authors.

SAMUEL KOSLOV
Editor-in-Chief