

EDITORIAL

With this issue, we complete the third year of the *Johns Hopkins APL Technical Digest*. Its original aims were to present, over a period of time, insights into the diverse individual and collective activities at APL and to publish personal impressions on development, research, and management. Is the journal meeting the goals that were set for it at the beginning? How do we justify another publication when technical journals in the thousands clamor for attention?

In contrast to physical and life scientists — whose discoveries are meticulously recorded in archival technical journals — inventors, designers, and developers of systems and builders of devices are not so well served by the traditional media. Innovative contributions that may be crucial to the proper functioning of a spacecraft (such as development of the Mag-sat Attitude Determination System) or that influence the effectiveness of a complex missile system (such as the AN/SYS-1 Integrated Automatic Detection and Tracking System) are often recorded only in blueprints, manuals, or patents, or as components of operating devices. They are rarely accessible to the technical community for emulation or improvement.

Also, when research contributions from a single laboratory have a common goal (such as advancing the ocean technology and science related to submarine detection or doing research, development, and engineering in biomedicine), the results are often dispersed among so many different technical publications and reports that it becomes difficult to appreci-

ate the direction and magnitude of the program and to weigh its impact.

The *Technical Digest*, by stressing these two problem areas, makes it possible to document and disseminate results among technical colleagues, both within APL and elsewhere. When complex APL-developed systems, with inputs from a team of contributors, are described, or when broadly related fields are explored by a group of APL investigators, the preferred method of presentation is in the form of “theme” issues. In that way, we have covered in detail the Fleet Defense System program; the Navigation Satellite (Transit) program; the development of the Talos missile; the Magnetic Field Satellite (Mag-sat); aspects of our biomedical, energy, and safety activities; and the APL ocean science program. In addition, as in this issue, a number of individual “Research and Development Updates” are published, to which is added a varied menu of “Special Topics” that deals with subjects beyond the immediate technical assignments to APL.

When articles are attractively presented and are written in a way that appeals to readers who are neither specialists nor are familiar with the technical shorthand of the authors, the *Digest* meets its goal — to inform an audience whose interests match the broad spectrum of problems that are being addressed by APL.

WALTER G. BERL

