EDITORIAL

With this issue of the *Johns Hopkins APL Technical Digest*, the hands-on editorship passes from Walter G. Berl to myself. It is most pleasant to assume the captaincy of such a well-received publication (our mail seems to tell us that is the case, in any event), but the pleasantness is tempered by the nagging concern that it will be difficult to do the job nearly as well as did the founding father of the present version of the *Digest*.

Those who know Walter personally know him as a man who is a rare combination of grace, intellect, and civility. A chemist by training, a friend or an acquaintance of much of the scientific establishment, and a man of vision and energy, he has transformed the publication into a projection of the Applied Physics Laboratory that tries to speak to scientists and engineers on the one hand, and to program sponsors and government officials on the other. The always difficult task of presenting complicated technical material clearly, accurately, and with visual impact has been one of his major objectives; our readers appear to agree that he, his authors, and the editorial staff have done essentially that. The success of the journal is mainly due to this exceptional man. We wish him well in his new venture, that of editor-in-chief of a forthcoming companion publication to the present one, the APL Technical Review, a journal that will carry peer-reviewed technical papers that for one reason or another cannot appear in the open literature.

This edition of the *Digest* continues the "theme issue" practice of recent years by presenting early results from

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the Polar BEAR spacecraft, whose mission is to make auroral and ionospheric observations. David G. Grant of APL, Guest Editor, tells in his introductory article the fascinating story of an Oscar satellite that had hung from the roof of the Smithsonian Air and Space Museum in Washington, D.C., since its opening in 1976, only to be reclaimed and refurbished by the Laboratory in 1984 and flown as Polar BEAR. William McCloskey's rendition of the human side of that activity provides an infrequently seen picture of the building, testing, and launching of a spacecraft, and of the elation felt by the team that did so flawlessly. Polar BEAR later had the bad luck to lose its vertical orientation and to restabilize itself upside down; the article by John Hunt and Charles Williams tells of the three attempts (the last one successful) to put things right. The remainder of the theme articles report on the engineering going into, and the science coming out of, the program to date.

The slimness of this issue is not due to the change in management or to new editorial policy but rather to the oversized editions of the *Technical Digest* published earlier this year on ocean waves from space and on GEO-SAT. We want to maintain the annual page count about constant, so the next edition will be similarly lean.

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JOHN R. APEL Editor-in-Chief