## EDITORIAL

Until the middle of 1980 when a new Director took office, the Applied Physics Laboratory of The Johns Hopkins University had only four Directors in its nearly 40 years of existence (Merle Tuve, 1942-1946; Lawrence R. Hafstad, 1946-1948; Ralph Edward Gibson, 1948-1969; and Alexander Kossiakoff, 1969-1980). During this time span, the Laboratory changed from a Navy-sponsored and Johns Hopkins University-managed establishment into a full-fledged Division of the University. It grew from a few hundred employees to more than 2500. Its area of concern expanded from the pursuit of a single concept (the proximity fuse) to over 100 projects in space, in the air, on and under the oceans, in biomedicine, in energy and safety-related topics, in fundamental research, and in teaching.

Many of these changes came in the late 1950's and early 1960's. Most of the key staff positions were then held by a remarkable group that had joined APL in 1946, having previously worked together on rockets at the Allegany Ballistics Laboratory during the World War II years. That group included R. E. Gibson, A. Kossiakoff, R. B. Kershner, the late F. T. McClure, and (within a year) W. H. Avery. It is fitting that in this issue of the *Johns Hopkins APL Technical Digest*, the "theme" articles are dedicated to Alexander Kossiakoff on the occasion of his retirement as Director of the Laboratory and written by two of his early colleagues who, for more than 30 years, served with him in the most influential positions at APL.

Dr. Gibson presents the outlines of a management system and philosophy within which APL has been operating with considerable success for most of its existence. Dr. Richard B. Kershner, in turn, presents highlights from the APL space program that for 23 years has made remarkable contributions to the design and construction of a multitude of space vehicles.

In the Special Topics section, the current Director, Dr. Carl O. Bostrom, looks toward the future, suggesting how a large technical organization goes about maintaining its vitality by redefining its objectives.

> WALTER G. BERL Chairman, Editorial Board