Publishing in refereed journals is essential to the reputation of any high-quality technical organization. In research and emerging technology, a particular need exists to stimulate the prompt and accurate dissemination of information in the open literature.

For the fifth year, the Editorial Board of the *Johns Hopkins APL Technical Digest* solicited nominations for outstanding papers written by APL staff during the preceding year. Beginning with the 1987 awards, the publication awards program was expanded from five to eight categories, including a Lifetime Achievement Award. The recipients are presented their awards or honorable mention at the annual Fall Principal Professional Staff Dinner.

This year’s Lifetime Achievement Award was presented to Robert W. Hart for his significant contributions to the development of solid-propellant rockets and ramjet engines, and for his insight into basic problems in wave propagation. His expertise resulted in several influential articles on ocean surface electromagnetic scattering and the scattering of light in the cornea of the human eye.

Linda L. Maier

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### AWARDS RECOGNIZING PUBLICATIONS BY APL STAFF MEMBERS (1988)

### LIFETIME ACHIEVEMENT AWARD

Robert W. Hart "in recognition of his many outstanding contributions in research, writing, publication, editing, and research management during four decades of service at the Applied Physics Laboratory."

### OUTSTANDING FIRST PAPER Award


### Honorable Mention


OUTSTANDING PAPER IN THE JOHNS HOPKINS APL TECHNICAL DIGEST

Awards


OUTSTANDING RESEARCH PAPER IN AN UNCLASSIFIED REFEREED PUBLICATION

Awards


Honorable Mention


OUTSTANDING DEVELOPMENT PAPER IN AN UNCLASSIFIED REFEREED PUBLICATION

Award

Honorable Mention


**OUTSTANDING PAPER IN A CLASSIFIED REFEREED TECHNICAL PUBLICATION**

Award


**TECHNICAL BOOK AWARD**

Award


**SPECIAL PUBLICATION AWARDS**

**RESEARCH**

Award


Honorable Mention


**DEVELOPMENT**

Award


Honorable Mention

RESEARCH AND DEVELOPMENT AWARDS

For several years, the Laboratory's independent research and development activities were conducted under the able guidance of Robert W. Hart, first as Chairman of the Research Center and Assistant Director for Exploratory Development, and then as Assistant Director for Research and Exploratory Development. In recognition of his many contributions in these areas, the R. W. Hart Prizes for Excellence in Independent Research and Development were established in 1988 to encourage and recognize high-quality and innovative work at APL.

As with the selection process for the publication awards, nominations for the Hart Prizes are solicited from Laboratory departments and are judged by a committee that bases its selections on the overall importance of the work to the Laboratory. Prizes and honorable mention are given for both the best research project and the best development project. The recipients are presented their prizes in the form of certificates and cash awards at the annual Fall Principal Professional Staff Dinner.

Linda L. Maier

R. W. HART PRIZES HONORING EXCELLENCE IN INDEPENDENT RESEARCH AND DEVELOPMENT (1988)

RESEARCH

Prize Winner

Microphysics/High-\(T_c\) Superconductivity
Kishin Moorjani, Project Leader
Frank J. Adrian
Joseph Bohandy
William J. Green
Boris F. Kim

Honorable Mention

Biomedical Research
Richard A. Farrell, Project Leader
C. Brent Bargeron
Henry A. Kues
Russell L. McCally
David M. Silver

Ocean Engineering
Charles C. Sarabun, Jr., Project Leader
Mark D. Bulla
Frederick A. Carmen
William K. Clark
Arthur R. Croucher II
Robert H. Grauel
Robert C. Hendricks
Joseph E. Hopkins

DEVELOPMENT

Prize Winner

Custom VLSI/Spacecraft Systems
Robert E. Jenkins, Project Leader
Andreas G. Andreou

Honorable Mention

Multiprocessor Embedded Computer Using Forth Engines
Martin E. Fraeman

Computer Architectures
Kenneth W. Koontz