



RLE

# undercurrents

Volume 2, Number 1 • December 1988

A Newsletter for the RLE Community at MIT

## DRAWING FROM EXPERIENCE



Senior Technical Illustrator Bob Priest provides RLE researchers and students with expert technical illustration services in the RLE Drafting Room (36-472B). Bob joined RLE on October 24, 1988, and is earning a reputation as an efficient and effective illustrator. He received the Bachelor of Fine Arts degree from UMASS, and has been a free-lance illustrator since 1983. Bob is also the author and illustrator of a children's book, *The Town That Got Out of Town*, that will be published next spring.

Please note that new hours for the Drafting Room are 8:00 a.m. to noon, Monday through Friday. The Drafting Room also has a new telephone extension, x8-5873. Bob welcomes your requests for technical illustration.

## CHANGING OF THE GUARD



Joe Sincuk (left) hands over keys to the RLE kingdom to Gerry Power, RLE's new Facilities Officer.

After 29 years at RLE, Facilities Manager Joe Sincuk retired on September 30, 1988. Joe came to RLE in 1959 as a utility man, and steadily progressed up through the ranks to manager of RLE General Services in 1980. His leadership, cooperation, dependability, and friendly disposition earned him a special place in the daily lives of RLE staff. Joe's retirement plans include landscaping and interior decorating around his home in Newton. He says he's working harder now than he did at RLE! All of us wish Joe and his wife Mary the best of luck and health in their retirement.

Gerrard Power, a native of Glasgow, Scotland, became RLE's new Facilities Officer on October 1, 1988. Gerry trained with Joe and his crew during September, and we know that he will continue the tradition of excellence Joe established. As the new Facilities Officer, Gerry's responsibilities will include: supervising the General Services and Facilities Group, serving as RLE safety officer, coordinating space changes, maintaining RLE vehicles, and supervising the RLE stock rooms and shops.

Before coming to RLE, Gerry was Facility and Lab Supervisor at MIT's Materials Processing Center since 1984. Gerry holds B.S. and M.S. degrees in mechanical engineering from Northeastern University. He and his wife Stefanina have three daughters, Sofia, Stefanie, and Kathryn. A family-oriented person, Gerry enjoys hiking, jogging, raquetball, and squash.

## COMPUTING AT RLE HEADQUARTERS

Headquarters is pleased to report that, in the year-and-a-half since the RLE IBM Computer Facility has come on-line, several steps have been taken toward automating central services.

**MIDAS.** The RLE Fiscal Group is participating in an MIT pilot project called MIDAS (MIT Information Distribution and Access System). This project allows account files from MIT's Central Accounting Office mainframe to be transferred to RLE's 4381 mainframe. Current accounting information can then be directly accessed from the RLE mainframe in the basement of Building 36 to selected personal computers in Headquarters that have been loaded with a modified form of R-base software. The goal of the MIDAS project is to provide for more timely and accurate research account reconciliation and forecasting.

**Networking.** Over the summer, RLE's mainframe became a BITNET node named MITRLEVM. It is now connected to the MIT campus network by the name MITRLEVM. MIT.EDU. The BITNET connection makes it possible for RLE system users to receive and send electronic mail to other universities and companies on the BITNET throughout the world. It also provides a fast data connection between the RLE system and Cornell University's supercomputer facility. RLE users are now able to log on and run jobs at Cornell using a reliable data connection.

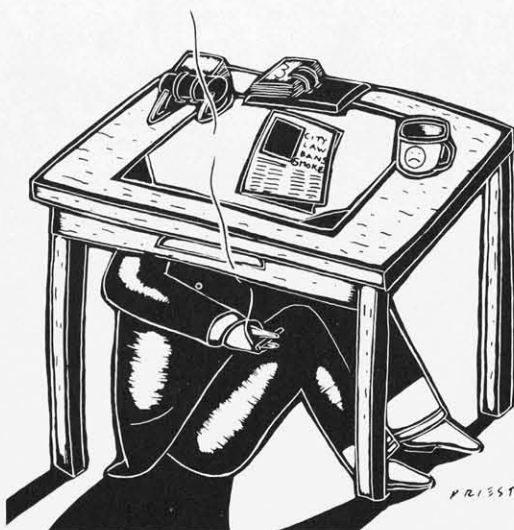
An arrangement between the MIT Telecommunications Department, RLE, EECS, and CAF enables these organizations to share the fixed cost of "owning" a campus subnetwork which runs through Buildings 34, 36, 38, and 39. This arrangement allows RLE users to connect their systems to the campus network without being assessed monthly networking charges. Previously, campus network users were charged a monthly connection fee. In conjunction with this effort, RLE is evaluating network bridging equipment that will be used to isolate traffic emanating from local clusters of machines. This will prevent unnecessary traffic that could clutter the RLE/EECS/CAF network. Based on networking surveys completed by users last summer, networking bridges will be placed throughout RLE, and will permit users to access the MIT campus network and its interconnected networks.

**MIT Libraries Link.** The Institute Library Catalog can now be accessed from an IBM PC in the RLE Document Room (36-412). In minutes, the Document Room staff can locate materials available in the MIT library system. This service is available during the Document Room's regular hours, Monday through Friday, 8:30 a.m. to 5:00 p.m.



**Computerized Print and Photography Catalog.** Currently, the Document Room staff is evaluating software to assist in the automation of RLE's collection of reprints, reports, books, and journals. In addition, an automated catalog of RLE's extensive photography collection is being developed with IBM's Structured Query Language (SQL). Photos will be digitized with an IBM 3117 flat-bed scanner connected to an IBM 3193 terminal. Catalog users will be able to search the database for photographs and view them immediately. For more information, contact Barbara Passero, x3-2566.

**Electronic Publishing.** RLE Headquarter's personnel involved in the Lab's publications were interviewed recently for an IBM booklet that describes RLE's efforts in electronic publishing. Through a generous grant, IBM has provided the Lab with hardware and software for mainframe and desktop publishing. The RLE Communications Office produces RLE *currents*, *undercurrents*, the annual *Progress Report*, *RLE Publications Update*, proposals, and other documents with these newly acquired resources.



## ABSOLUTELY NO BUTTS ABOUT IT

As you know, the City of Cambridge and MIT have prohibited smoking in public buildings. Most RLE smokers have graciously complied with the new rule—we know this has not been easy, and we commend you for your cooperation and good citizenship. However, reports of smoking in RLE space, particularly in the rest rooms, continue to be received in Headquarters. To those individuals who do not comply with the smoking ban, please be advised that violation of the no smoking rule will be treated as a violation of Institute rules, and will be handled accordingly.



# SPOTLIGHT ON JIMMY CARTER

Research Specialist James Carter believes that flexibility, adaptability, and long hours are the keys to the smooth operation of RLE's Submicron Structures Laboratory (SSL) in Building 39. As Manager of SSL, his ability to solve difficult technical problems has made him a valuable asset to Professor Henry Smith, Head of SSL.

After graduating from Boston Technical High School, Jimmy worked as a Senior Stock Clerk in RLE's Tool Crib in 1972. When a Technician B position became available in the Submicron Structures Lab in 1979, Jimmy took a pay cut in exchange for the opportunity the position offered. His hard work paid off when he was promoted to sponsored research staff in 1985.

Since he came to the lab, the number of graduate students conducting research in SSL has increased



Research Specialist Jimmy Carter views a nanostructure on a scanning electron microscope.

from five to 38. With assistance from Technician Tim McClure, Jimmy oversees the use of the lab by students, faculty, and research staff. His job requires a wide range of technical skills to operate the many pieces of complex technical apparatus and to oversee a variety of fabrication procedures. Jimmy must understand these procedures, and has developed several of them himself, in addition to the operation and maintenance of the lab's equipment. Recently, he attended the 1988 Micro-circuit Engineering Conference in Vienna where Professor Smith presented their joint paper, "Optical Projection Lithography Using Lenses with Numerical Aperture Greater than Unity."

Jimmy and Denise, his wife of 13 years, live in South Weymouth.

## COMINGS AND GOINGS

RLE welcomes the following individuals who have joined the Lab since December 1987:



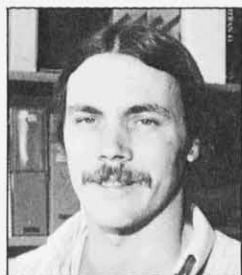
**Carol Costa** joined RLE as an Administrative Assistant to Professors Daniel Kleppner and David Pritchard in the Atomic, Molecular and Optical Physics Group on September 8, 1988. Previously, Carol worked with the ALCATOR Group at MIT's Plasma Fusion Center, and attended Bunker Hill and Mass Bay community colleges.



**Laura Doughty** became an Administrative Assistant to Professor Abe Bers in the Plasma Physics Group on July 18, 1988. She previously worked in MIT's Department of Earth, Atmospheric and Planetary Sciences, and holds a B.A. in psychology from UMASS Boston. Her husband, Fran, has been an Administrative Assistant to Donald Troxel since June 1987.



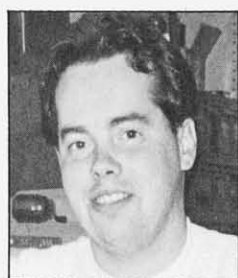
**Toni Fischer**, Senior Secretary for Professor George Bekefi in the Plasma Physics Group, joined RLE on July 11, 1988. After living in Arizona and California, Toni returned to her native New England last spring and worked as a temporary for three other RLE professors before landing her permanent position.



Research Specialist **Seth Hall** came to RLE as a Systems Manager for both the Speech Communication and Sensory Communication Groups on August 1, 1988. Seth has a B.S. in computer and information science from UMASS Amherst, and worked at the UMASS Engineering Computer Services Department on systems management for the last four years.



**Wendy Hunter** started a part-time position as an Administrative Assistant to Professor Bernard Burke in the Radio Astronomy Group and Professor John King on September 28, 1988. Wendy has a bachelor's degree in music from the New England Conservatory and is pursuing a singing career in musicals and opera.



**Brian Ray** succeeded Joe Mitchell as Senior Stock Clerk in RLE's Electronics Stock Room on May 2, 1988. Previously, Brian worked in MIT's Office of Lab Supplies for four years. He also serves as an Executive Board Member of the Research and Development Employees Technical Union.



**Yung-fu Shue**, a native of Taiwan, joined RLE as a part-time Administrative Assistant to Professor Jin Au Kong in the Electromagnetics Group on July 18, 1988. She holds a bachelor's degree in education from National Taiwan Normal University, and is currently working towards a master's degree in computer science at Boston University. Yung-fu previously worked on software testing for Visual Communications, Inc. in Cambridge.

And RLE bids a fond farewell to...



**Kyra M. Hall** retired from MIT on October 31, 1988, after 22 years of service as a Senior Editorial Staff Assistant in the RLE Document Room. Before coming to MIT, Kyra worked in the payroll office of the U.S. Army in Rome, Italy. She studied political science at the University of Rome, and had mastered several foreign languages, including Italian, French, and Russian. Not one to remain idle upon retirement, Kyra has taken a new position with the U.S. government.

## HEADQUARTERS STAFF TURNS 259



September was a popular month for birthdays at RLE Headquarters. The celebrants (from left): Eric Watson, Vicky-Lynn Taylor, Anita Sloan, Donna Maria Ticchi, Dolores Sullivan, Maureen Howard, and John Cook. (Photo by Dave Foss)

## WE HEAR BELLS...

**Roz Wright**, a graduate student in the Digital Signal Processing Group, and **Len Picard**, a Research Affiliate in the Image Processing Group, were married on September 3, 1988, at Grace Chapel in Lexington. The couple is living in Wilmington.

Senior Research Scientist **Nat Durlach** of the Sensory Communication Group and **Dr. Rosalind Barnett** were married in August 1988. Dr. Barnett conducts research in psychology at the Wellesley College Center for Research on Women and also has a private clinical practice.

## BABY BOOMING

**Carol Espy-Wilson**, Research Associate in the Speech Communication Group, gave birth to twin girls, Ayana and Ashia, on October 28, 1988.

**Maxine Samuels**, Administrative Buyer Assistant in the RLE Purchasing Office, gave birth to a boy, Roshawn Omar Laforce, on September 27, 1988. Maxine is also mother to Roshawn's "big brother," four-year-old LeMar.

Research Scientist **Pat Zurek** and Research Associate **Charlotte Reed**, both of the Sensory Communication Group, are proud parents of John Edward, born on May 3, 1988. Pat and Charlotte also have two girls, six and four years old.

## RLE undercurrents

*undercurrents* is a publication of the Research Laboratory of Electronics for the RLE community at MIT. The following individuals contributed their time and energy to this issue: John E. Cook, Dorothy A. Fleischer, David W. Foss, Barbara Passero, Robert H. Priest, and Donna Maria Ticchi.

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