



RLE

undercurrents

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A Newsletter for the RLE Community at MIT

RADLAB/RLE REFLECTIONS



In 1991, we celebrate two big anniversaries: the MIT Radiation Laboratory's 50th and RLE's 45th. As most of you know, the Research Laboratory of Electronics, which was established in 1946, grew out of MIT's wartime Radiation Laboratory (1941-45), popularly known as RadLab. RadLab alumni are participating in a major reunion at the Hynes Convention Center in Boston, and RLE plans to celebrate its 45th anniversary this fall. In honor of the milestones that we are sharing this year, undercurrents highlights two individuals who were employed by both the RadLab and RLE: Betty Campbell and John Sanroma. Betty and John brought to RLE the warmth, camaraderie, and strong work ethic that grew out of the RadLab experience of working together for a common purpose. Betty and John are but two of many RadLab/RLE alumni and, in highlighting them, we honor the dedicated service of many. — DMT

"It was like four more years of college," recalls **Elizabeth (Betty) J. Campbell** as she fondly remembers her RadLab days, "because it was a continuation of the learning experience, and something special in the atmosphere fostered bonds of friendship among colleagues and loyalty towards the RadLab. I look forward to seeing everyone at the reunion this June."

A New England native, Betty joined RadLab immediately after graduating from Boston University in 1942 with a bachelor's degree in mathematics. She was hired at \$150 a month and worked 48 hours a week as a mathematician in the Theory Group of Division 8 (Fire Control and Army Ground Forces). Betty and other members of her group provided computing services to the division, which was located in the old Building 22. This was before the advent of sophisticated computers and calculators, and Betty performed complex mathematical analyses using logarithm tables, slide rulers, adding machines and eventually, calculators. One important project was to analyze the accuracy of the equipment used for radar tracking. Betty remembers the fervent patriotism and excitement at RadLab during World War II. Because it was involved with top-secret research, RadLab was heavily guarded by soldiers, and all staff members were required to wear identification badges.

When RLE started operations in 1946, it was located in Building 20, and Headquarters was on the first floor of the A Wing. Betty recalls RLE as a close-knit organization in those early days. One tradition was to chat over 50-cent lunches that were made by two local women. Betty became a member (and later supervisor) of MIT's Joint

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"I saw the beginning of everything!" proudly remarks **John B. Sanroma**, who came to the RadLab as a precision instrument maker in 1942. During World War II, John worked in RadLab's Group 34 machine shop and built components for radar sets. After the end of the war, John continued on in RLE's machine shop, at that time earning \$1.55 an hour.

John Baptista Sanroma was born in 1899 in Puerto Rico to Spanish parents. His family moved to Boston so that his brother Jesus could attend the New England Conservatory of Music. (Jesus Maria Sanroma later became a world-renowned pianist with the Boston Symphony Orchestra and also composed and conducted music.) John also attended the Conservatory for a year. He has had a life-long interest in music and plays both the flute and piano. Hanging in his home in Newton is a large photograph dedicated to him by the famous cellist Pablo Casals.

John earned a certificate in electronics from Wentworth Institute in 1928, and also attended the Samuel Curtis Radio School. He began taking pictures for a hobby in 1929. From 1933-34, John was the nation's first "Candid Camera," photographing important people and events for the old *Boston Traveler* newspaper. He even rode the roller coaster at Revere Beach 19 times (standing backward!) for a series of photographs. He also made flutes and piccolos for 12 years at the William S. Haynes Company before coming to the RadLab.

In the early days, most RLE equipment was designed experimentally and custom-made in the lab's shops that included a machine shop,

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Welcome to RLE

When newcomers engage in the venerable tradition of signing in at the Headquarters' front desk, they are in for a surprise. As of January 1, 1991, all new faculty, staff, and students in RLE have been presented with "Welcome to RLE" packets. The packet contains a letter of welcome, the *RLE Procedures Manual*, *RLE Personnel Directory*, the latest issues of *currents* and *undercurrents*, a Document Room journals list, an *RLE Collegium Prospectus*, and RLE stationery. These materials will more quickly acquaint newcomers with the Laboratory.

Safety First!

Safety Escort Service is Going Your Way. MIT Campus Police now offers an upgraded shuttle service called: "A Safe Ride." RLE night owls who work late and need a ride to a parking garage or dormitory can call Campus Police and receive a free ride to their destination. The service will operate seven days a week: Sunday through Thursday, 6:00 p.m. until 3:00 a.m.; Friday and Saturday, 6:00 p.m. until 4:00 a.m. The number to call is 3-2997 or 253-1212 from pay phones.



Just the Fax Ma'am. Senior Office Assistant Rita C. McKinnon is visited by RLE's new Crime Prevention Coordinators, Research Scientist Dr. Dennis M. Freeman (left) of the Auditory Physiology Group, and RLE Facilities/Safety Officer Gerrard F. Power. Denny and Gerry gave Rita pointers on securing office equipment, such as the fax machine in the photograph. MIT Campus Police has established a new crime prevention program that includes the use of departmental coordinators, like Denny and Gerry, to combat the recent high rate of theft on campus. For more information, please contact MIT's Crime Prevention Unit at 3-9755. (Photo by John F. Cook)

MIT Community Service Fund

Publications Assistant Mary S. Greene of the RLE Document Room is continuing to solicit for the MIT Community Service Fund. You still have time to respond with a generous contribution. Your tax-deductible donation directly benefits our Cambridge community and is a wonderful opportunity to "give at the office." By the way, thanks for your generous support of the United Way campaign last fall. We are proud to announce that RLE increased its participation in that fund raising drive to 15 percent. MIT surpassed its goal of \$300,000 with 2,414 gifts totaling \$303,509.

Headquarters Welcomes Bill Smith



undercurrents is pleased to introduce Bill Smith, RLE's new Assistant Fiscal Officer, who joined the Headquarter's Fiscal Group on November 1, 1990. A native of Seattle, Washington, Bill spent his early years in Korea and Thailand. He

came to Boston in 1981, and after receiving a bachelor's degree in economics from UMASS, Bill settled in the area. His first job was as a research assistant with Abt Associates, where he developed basic computing skills. Bill expanded upon these skills during a two-year stint as Financial Staff Assistant in MIT's Biology Department, where his responsibilities included database development and account projections.

Bill brings MIT financial experience and strong computing skills to the Fiscal Group. He is openly enthusiastic about developing mainframe-based products and services for RLE researchers in the financial area. Working under the direction of Fiscal Officer Don Duffy, Bill's fresh new ideas will build on the strengths and dedicated service of the other members of RLE's Fiscal Group. RLE principal investigators can look forward to a new wave of automated fiscal services.

(Photo by John F. Cook)

Campbell from pg. 1

Computing Group, a pool of programmers and mathematicians that served RLE, the Laboratory for Nuclear Science (LNS), and the Acoustics Laboratory. This group programmed the Whirlwind, MIT's first major on-campus computer, and later the IBM 704. During both her RadLab and RLE years, Betty worked with such notables as Walter Pitts, Jerome Lettvin, Manuel Cerrillo, Robert Fano, and Lan Jen Chu. At RLE, she remembers that Norbert Wiener would wander into an office, propound a new idea or concept, and wander out again.

In 1964, Betty transferred to LNS, and retired from MIT in 1982 after 40 years of service. Today, she is President of MIT's chapter of the American Association of Retired Persons (AARP), attends courses at the Harvard Institute for Learning and Retirement, volunteers in the Brookline schools, and occasionally tutors students in math. She was recently appointed to the state legislative committee of AARP. Betty lives in Brookline and is a neighbor of Phyllis Elfman, who was a secretary to Professor Emeritus Albert Hill (also a RadLab alumnus and former RLE Director) and a long-time friend from both RadLab and RLE.

Sanroma from pg. 1

glassblowing lab, tube lab, and chemistry lab. John loved to work on very small projects, and he was often seen with a magnifying glass perched in one eye. On one occasion, he was instructed to make a hole measuring 1/1000th of an inch and tapered to a feather edge. Another project was a facsimile machine that received and transmitted pictures via radio waves. John also improved test microphones for Amar Bose. Particularly adept at camera design, construction, and repair, John built the first underwater camera for Professor Harold "Doc" Edgerton during the late '50s, and worked solely on cameras during his last three years in RLE.

In 1969, John retired from RLE and began working as an instrument maker for Northeastern University, finally retiring from Northeastern in 1989. John is active in MIT's Quarter Century Club and recently received a letter commending him for 45 years as an Eagle Scout. As active as ever, John is presently taking a night course in auto mechanics. John and his wife Maude, a violinist, have been married since 1930. The couple has four children, 15 grandchildren, and 12 great-grandchildren.

In preparing this article, Barbara Passero wishes to acknowledge the many insights into the past provided by RLE-ers Bob Aalerud, Jack Barrett, Manny Cabral, John Cook, Cosmo Papa, and Professors Emeriti Malcom "Woody" Strandberg and Henry Zimmermann. (Photos by John F. Cook)

NEW FACES



Part-time Administrative Assistant **Lisbeth Lauritzen** began working with Professor Peter L. Hagelstein in the Optics and Devices Group on November 22, 1990. A native of Denmark, Lisbeth holds a bachelor's degree in Italian and a diploma in French from the Copenhagen School of Economics and Business Administration. Last spring, she took a course in Italian economics and traveled to Italy with her husband Bent, who is a postdoctoral associate at the Center for Theoretical Physics in MIT's Laboratory for Nuclear Science. (Photo by John F. Cook)



On October 22, 1990, Research Specialist **Barbara Roman** joined the Center for Electromagnetic Theory and Applications, working with Professor Jin Au Kong. Barbara is involved with various software projects related to computer graphics and simulation. In 1989, she

received a bachelor's degree in visual arts from MIT, and a certificate in art and technology from the Art Institute of Chicago. Barbara hosts her own weekly radio show on MIT's WMBR. (Photo by John F. Cook)

SHORT WAVES...

Financial Administrator **Jeannie Lauricella** has been appointed to serve on the Advisory Committee for MIT Telecommunications Systems. Please share any ideas and problems with Jeannie so that she can represent RLE concerns to the Committee.

Financial Assistant **Gina L. Baskerville Milton** and husband Ron became proud parents of Christopher Paris, born on Christmas Day 1990 and weighing in at 7 pounds 9 ounces.

Professor **Jesus A. del Alamo**, of the Materials and Fabrication Group, and wife Noelle announced the birth of their son, Diego Pierre, on November 24, 1990. Diego weighed 8 pounds 9-1/2 ounces.

Professor **Louis D. Braida** of the Sensory Communications Group and Professor **Bernard F. Burke** of the Radio Astronomy Group were inducted into MIT's Quarter Century Club on March 26, 1991.

On October 1, 1990, Publications Assistant **Mary S. Greene** was appointed by the MIT President's Office to the Working Group on Support Staff Issues. Mary volunteers her time to the Task Group for Developing Support Staff Careers, which is trying to reinstate the Personnel Development Program.

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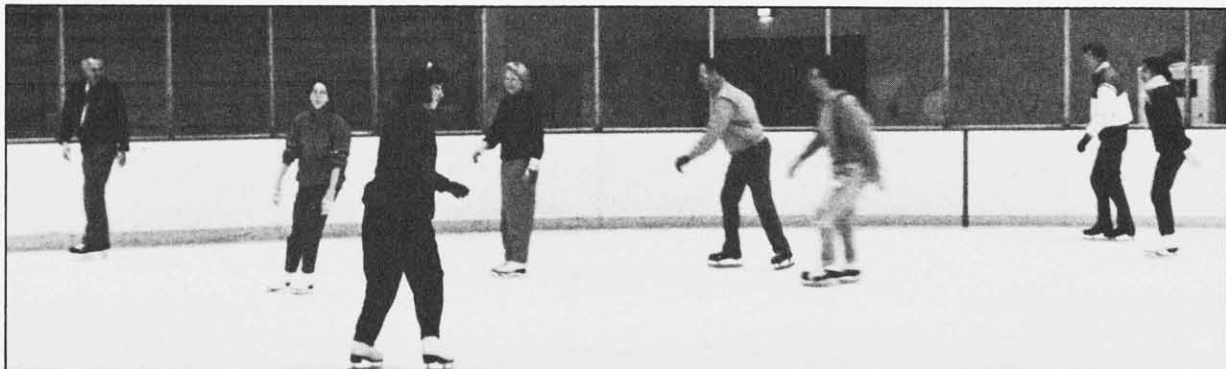
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Snowed Under. Santa honors Professor William F. Schreiber with a humorous retirement gift at RLE's Holiday Party last December. Professor Schreiber, founder of the Advanced Television Research Project, received a shovel to clear the "snow" from his TV screen. Staff members Xiao Dong Pang, Nat Durlach, Bill Rabinowitz, and Pat Zurek of the Sensory Communications Group look on with delight.



HQ on Ice. Headquarters staff got together for a lunch-time skate at MIT's Johnson Athletics Center last winter. Demonstrating their skating prowess are (from left): Purchasing Officer John Peck, Editorial Assistant Mary Ziegler, mystery skater, Publications Assistant Mary Greene, Facilities Officer Gerry Power, another mystery skater, Fiscal Officer Don Duffy, and Financial Assistant Gina Milton.

(Photos by Robert Priest (top) and John F. Cook)