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A Newsletter for the RLE Community at MIT



Catherine Lorusso pays a visit to the St. Paul Evangelical Church in West Somerville, where her brother is the founding minister. (Photo by John F. Cook)

Reflections on Catherine Lorusso

Senior Technical Typist *Catherine Lorusso* has worked in RLE since 1974. She smiles and says, "I came to MIT right out of my kitchen in Belmont. Working here is a challenge, and I enjoy the busy atmosphere of my office." For her first four years, Catherine worked with Professors Bernard F. Burke and the late Alan H. Barrett. In 1979, she transferred to the Plasma Physics Group to work with Professor Coppi on a part-time basis.

Catherine is devoted to her family and church. She is active in the St. Paul Evangelical Church in West Somerville, where her brother, the church's founder, has served as minister since 1956. Catherine was church treasurer from 1956-1968 and taught Sunday school for many years. In addition, she prepares baked goods for many church functions and is a Sunday school aide, teaching the third- and fourth-graders once a month. "I occasionally serve Sunday dinner to visiting missionaries and Bible school students from all over the world," she relates. In Catherine's opinion, "It will be a crowning day when science acknowledges that, 'In the beginning God created the heavens and the earth' (Gen. 1:1)."

Although Catherine does not play a musical instrument, her husband George, a semi-retired precision tool-and-die maker, and their four grown children are quite musically inclined. "While the children were growing up, we had our own little ensemble which sometimes performed in church programs at Easter and Christmas," Catherine remembers. George and David both play the violin, Stephen plays the flute, Christine plays the piano and organ, and Loretta is a professional pianist in Vienna.

Professor Coppi remarks, "Catherine truly treats us all just like family, at times bringing in homemade cookies to share among the group members. She's quite a unique person and deserves the best."

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Lowell B. Nesbitt's Red and Yellow Tulip was purchased by MIT's List Visual Arts Center from the Andrew Crispo Gallery of New York in 1975, and is displayed in RLE's Conference Room (36-428). Born in Baltimore in 1933, artist Lowell Nesbitt has had many one-man shows and group exhibitions worldwide. He also served as official NASA artist for the Apollo 9 and Apollo 13 space missions. In 1963, while living and painting in Washington, DC, he turned his attention from abstract painting to realism. In 1964, he began his first flower studies. His small-to-greatly enlarged oil paintings, which are rendered with meticulous accuracy, are the works with which he is most frequently identified. Unlike Georgia O'Keefe, whose flower paintings are somewhat abstracted by pulling in close to the form, Nesbitt's detailed giant flowers are isolated and tend to be less abstract while bordering on the surreal. Nesbitt's flower paintings (which include irises, daffodils, and tulips) are disarming in their formal, coloristic beauty and remind the observer of the spiritual perfection found in the natural world. Red and Yellow Tulip and the other subjects in the flower series have established Lowell Nesbitt's personal style while illustrating his brilliant technical skill.



Red and Yellow Tulip by Lowell B. Nesbitt

Z—— a—— p! Laser Safety at RLE



Michelle Fitzgerald of MIT's Radiation Protection Office presents laser safety tips to RLE faculty, staff, and students. (Photo by John F. Cook)

Last July, an informative program on laser safety was presented to the staff and students of the Atomic, Molecular, and Optical Physics Group. Assistant Radiation Safety Officer Michelle Fitzgerald of MIT's Radiation Protection Office covered issues related to laser safety, particularly how eye and skin damage can result from the misuse or misalignment of lasers, and discussed how to select the proper safety eye wear. Michelle recommended that people who use high-power lasers (class III or IV) should not work alone and should be trained in CPR. Michelle also distributed the pamphlet *The MIT Laser Safety Program (Beam Hazards)*.

Organized by RLE Facilities Officer Gerrard F. Power, the presentation was first in a series that will be offered to RLE students and staff as part

of the lab's chemical hygiene plan. MIT requires safety training for research personnel at three levels: general and personal safety, handling and disposal of toxic and hazardous waste materials, and specialized areas such as laser safety. According to Gerry, "It is the obligation and responsibility of MIT and RLE to ensure that everyone who works with lasers participates in a laser safety program. This will be documented in RLE's safety and training database, and becomes part of an individual's permanent personnel record." Gerry urges all RLE staff or students to register their laser applications to ensure that everyone is protected. Please contact Gerry (x3-2541) if you would like more information on upcoming presentations, or if you would like to submit suggestions on safety-related issues pertinent to your research. (Photo by John F. Cook)

A Warm Welcome To . . .



Administrative Assistant Sally C. Bemus started work with Professor Alan V. Oppenheim in the Digital Signal Processing Group on July 13, 1992. A native of Scituate, Massachusetts, Sally joined RLE after five years with the Laboratory of Computer

Science (LCS). Before coming to LCS in 1987, she worked on a horse farm near Houston, Texas, for two years. An animal lover with three cats, Sally enjoys drawing and painting horses, gardening, cooking, and singing in the MIT Women's Chorale. She also teaches Sunday School at the Good Shepherd Lutheran Church in Quincy and serves on the church council. (Photo by John Cook)



Administrative Officer Joseph F. Connolly joined RLE Headquarters on October 5, 1992. Since 1986, Joe has served as Assistant to the Director at MIT's Haystack Observatory in Westford, Massachusetts. He has worked in various capacities at MIT

since 1965, including the Center for Space Research, the Office of Institutional Studies, the Joint Center for Urban Studies, and the Office of Sponsored Programs. A graduate of Boston College (BS '70), Joe and his wife Kay have a son, Jason, and a daughter, Eileen, who both attend Western New England College in Springfield, Massachusetts. Joe and Kay love to golf. Joe also enjoys reading mystery stories. The couple live in Stoneham with their bulldog Clyde. (Photo by John F. Cook)



On May 18, 1992, Research Specialist Joyce Manzella started work with Research Scientist Dr. Joseph S. Perkell in the Speech Communication Group. A native of Attleboro, Massachusetts, Joyce earned a bachelor's degree in electrical

engineering from the University of Rhode Island, a bachelor's in speech and hearing from Northeastern University, and a master's in speech and hearing from the University of California at Santa Barbara. Joyce enjoys running (she has two Boston Marathons to her credit) and playing the piano. (Photo by John F. Cook)



Charles P. Rocheleau joined the Plasma Physics Group on August 12, 1992, as a part-time Senior Staff Assistant for Professor Abraham Bers. A native of Salem, Massachusetts, Charlie attended the Berklee College of Music and New Hamp-

shire College. He has served in the Massachusetts National Guard and worked as a systems programmer at General Electric in Lynn. From 1974-1984, he toured the U.S. and Canada extensively as an entertainer. In 1985, he signed up as a headliner in the travel industry and performed on over 600 cruises to Alaska, Mexico, and the Caribbean. Charlie has also made appearances on local television and has cut three albums. A licensed pilot and a ham radio operator, he enjoys photography, sailing, and backpacking. (Photo by John F. Cook)

A Fond Farewell



Director Jonathan Allen presents Administrative Officer Donna Maria Ticchi with farewell gifts and good wishes. Last June 18th, RLE staff and students gathered to say good-bye to Donna after seven-and-a-half years with the lab. She is now Assistant Dean for Financial Administration with MIT's Dean of Science Robert J. Birgeneau. (Photo by David W. Foss)

In Memoriam



Lawrence E. Sprague of Boxford, 91, died May 27, 1992. Mr. Sprague, a Lynn native, worked as a Technician in Group 62 (Indicators) of MIT's Radiation Laboratory from 1944-45. As an original RLE staff member in 1946, he worked as an Electrical Technician with Professor Wayne B. Nottingham's research group. Mr. Sprague retired from RLE in 1968 as a Project Technician. He is survived by his wife Sally R. Sprague.

Man of Merit



Be Prepared! cautions the sign in RLE's Tool Crib, announcing that it will be closed for two weeks in July. This will be no ordinary vacation, though. Senior Stock Clerk Bruce Russell, in his role as Assistant Scoutmaster of Arlington Boy Scout Troop 96, will shepherd eight scouts to Camp Quinapoxet in Rindge, New Hampshire. As one of 20 volunteer staffers at the Cambridge Council-owned camp, Bruce helps to oversee merit badge instruction and the daily activities of up to 200 scouts. His eight years of Navy experience lend authenticity to many camp activities such as knot tying and boating.

Although Bruce grew up hunting, fishing, and camping in the small dairy farm community of Whitingham, Vermont (pop. 800), he had no early scouting experience. He was eventually lured to scouting by his three sons: Steffan, 22, a Star Scout; Shane, 18, an Eagle Scout; and Brian, 13, a Life Scout who is three merit badges away from Eagle Scout. In 1990, Bruce received the Silver Beaver, the Cambridge Council's highest award. He and his sons belong to the Order of the Arrow, a society of honor campers who dedicate their lives in cheerful service of others. The society held its New England Regional Conclave at Camp Quinapoxet last June. In preparation for the conclave, Bruce spent his weekends in May at the camp. When not involved with the camp or attending scout meetings, Bruce lives in Arlington with his wife Sylvia, a native of Belfast, Northern Ireland, and son Brian.

The Cambridge Council Boy Scouts of America is one of the many groups that receives support from the United Way of Massachusetts Bay (Photo by John F. Cook)

Short Waves . . .

In May 1992, Francis M. and Laura B. Doughty were both elected to volunteer positions with the Town of Wendell, Massachusetts. Fran, a part-time Administrative Assistant to Professor Donald E. Troxel, was elected to a three-year appointment on the Wendell library's board of trustees. Laura, a part-time Administrative Assistant to Professor Abraham Bers in the Plasma Physics Group, was elected to the Wendell planning board for a three-year term. The couple have lived in Wendell since building their house there in July 1990.

Administrative Assistant Cindy LeBlanc and Senior Staff Assistant Debra L. Harring, both with the Advanced Television and Signal Processing Group, received certificates in applied mathematics from the Lowell Institute in Februarv 1992.

Administrative Assistant Susan E. Nelson of the Circuits and Systems Group and Robert Chafe were married in the backyard of her home in Holbrook, Massachusetts, on September 19, 1992. The new Mr. and Mrs. Chafe honeymooned in Newport, Rhode Island, and live in Holbrook with Susan's sons James and Ethan.

Professor Gregory W. Wornell of the Digital Signal Processing Group and Kimberly Faye Katz were married on June 13, 1992, at the Princeton University Chapel in Princeton, New Jersey. Kim is a doctoral candidate in economics at the University of Pennsylvania in Philadelphia. Greg is on leave of absence through May 1993 at AT&T Bell Laboratories in Murray Hill, New Jersey.

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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 F. Cook, Dorothy A. Fleischer, David W. Foss, Barbara Passero, and Robert H. Priest.

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A Note To Our Readers

Keeping in step with today's cost-conscious environment, RLE wants you to know that the cost of producing *currents* and *undercurrents* is borne by the limited discretionary funds available to the laboratory. There is no additional cost burden to RLE's allocation or research accounts or MIT indirect costs for producing these publications.

RLE Holiday Party in the Grier Room (34-401) on December 16th, noon to 2 p.m. 公司的自己的 公司的 Wanted

Desperately searching Santa seeks surogate Rudolf; m/f. Experience helpful but not necessary. Established company Call John Cook x3-2556