



RLE

Undercurrents

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A Newsletter for the RLE Community at MIT

Tom DeFilippo Looks at the Whole Picture

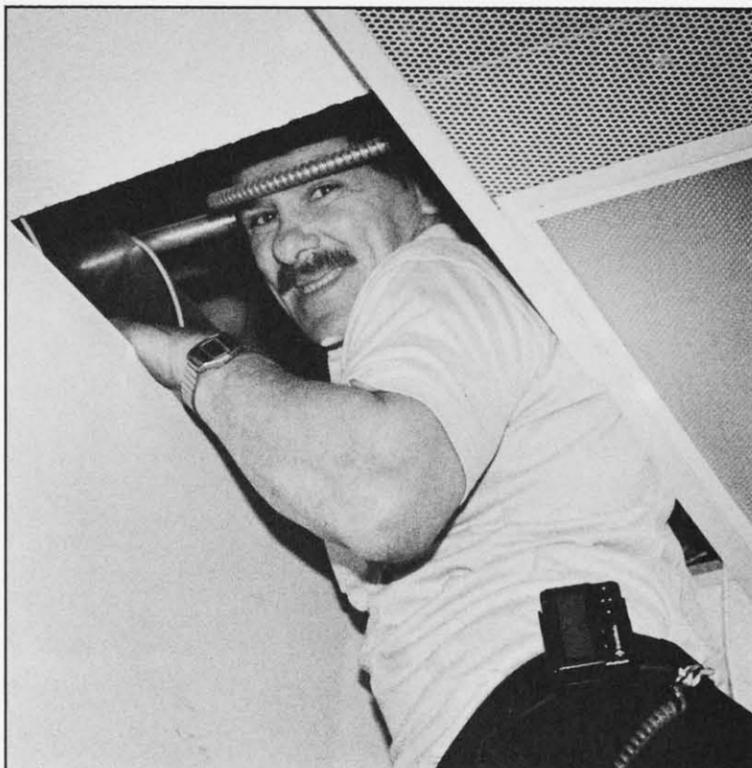
"There's light at the end of the cable," says Maintenance Mechanic Thomas L. DeFilippo, "with fiber optics." Tom has been involved in the challenging task of installing over two miles of fragile fiber optic cabling and several thousand feet of other network cable throughout RLE space in buildings 26, 34, 36, 38, and 39. Under the supervision of Gerrard F. Power, RLE's Facilities Officer, Tom competently handles a myriad of duties from packaging materials for shipping to designing and constructing complex carpentry projects such as customized wooden bookshelves. When reorganizing and renovating offices, Tom "likes to look at the whole picture, thinking over the move carefully, so that the job goes smoothly and safely."

Tom is a native of the Bronx, NY. When he was 16, Tom's family including his five sisters and two brothers moved to Boston where he attended Dorchester High School. Tom's father, who was born in Italy, was a general contractor, mechanical engineer, and chef who owned restaurants. Tom maintains his dad's tools, using them for his many carpentry projects, and plans to hand them down to his own sons. Tom's Irish mother taught him cleaning, cooking and sewing. He loves to cook, and it's a family tradition for him to prepare Easter dinner.

Tom transferred to RLE on October 24, 1994, from MIT Lincoln Laboratory. Before coming to Lincoln Lab, Tom worked as a roofer. As a member of Roofing Local 33, Tom worked on the John Hancock building. He also "dabbled" in building new homes and renovating burnt out buildings through Shannon Real Estate. During a two-year-long project in Lawrence, he helped convert a six-story hotel into 20 apartments. Tom made frames for mirrors and laid marble for the lobby. He fondly remembers that Lawrence's Mayor Kevin Sullivan shook his hand and remarked that, "he was helping to make the community a better place."

Because he can operate and repair almost any household appliance without consulting written instructions, his wife Anna calls him "her own owner's repair manual." Tom enjoys coaching and watching his four sons, Thomas, 21, Christopher, 18, Nicholas, 11, and Joseph, 8, in their many sports activities.

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Thomas DeFilippo, working with RLE Computer Facility Manager Dave Foss to enhance the network, is installing thousands of feet of cabling. (Photo by John F. Cook)

Historical Crossroads



RLE will celebrate its 50th anniversary this year on Friday, November 1, and Saturday, November 2, 1996. To mark the 50th, RLE is planning some exciting events. A welcome reception in the Grier Room on Friday afternoon, along with poster sessions and Lab-wide open house, will begin the activities. Friday evening, RLE

director Jonathan Allen will open a wonderful exhibit at the Compton Gallery celebrating RLE's innovative research and impact on society. A reception will be held in the lobby of Building 13. At the exhibit opening, founding members of the Lab will be honored.

On Saturday morning, there will be a reunion breakfast at the Faculty Club. A technical symposium will follow at the new Tang Center. Speeches by MIT President Dr. Charles M. Vest and well-known television series host and writer James Burke will be presented on Saturday afternoon. The day will end with a jubilee dinner.

The 50th anniversary planning committee includes Dorothy A. Fleischer, Joseph F. Conolly, John F. Cook, and Barbara Passero. RLE is encouraging our alumni, faculty, staff, and students to participate, and we welcome your suggestions.



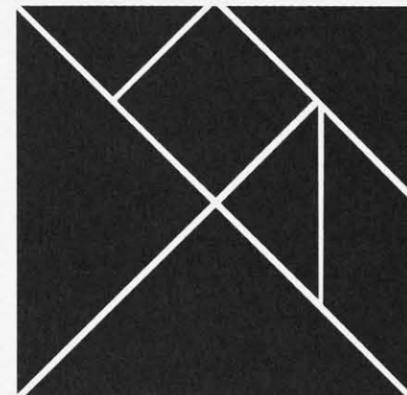
Into the Winds

Dr. **Barbara Shinn-Cunningham**, postdoctoral associate in the Sensory Communication Group, has been playing the oboe since 7th grade. Currently, she plays the oboe with *Ventus*, a wind quintet, and oboe and English horn in the Concord Orchestra.

Ventus is Latin for winds. The quintet has been playing together for six years and perform in two or three major recitals each year. They played a concert at the St. Gaudens historical site in New Hampshire for their 1994 summer concert series and have played recitals in Littleton, Sudbury, and Concord, MA.

Last year, *Ventus* played at MIT in the noon chapel concert series, performing works by Mozart, Lefebvre, Ibert, Farkas, and Arnold. In addition to doing full-blown recitals, *Ventus* also performs for special occasions such as wedding receptions and often plays for a free brunch at a restaurant in Harvard, MA.

Barbara says, "Busy as this schedule is, I love playing too much to think of stopping. Credit should be given to my husband, Rob—not only does he not mind my spending my time playing, but now that 20-month-old Nicholas is in the picture, he spends a lot of time watching our son while I go off to make music!"



RLE Web Update

RLE's web pages are up and running with over 800 graphics and text files presently on the web. From the home page (<http://rlweb.mit.edu>), viewers can link to extensive information on RLE history, administration and fiscal operations, the 50th anniversary, research groups, personnel, a calendar of events, publications, and lots of other information. There are home pages for each research group and each principal investigator, and we are encouraging everyone to send us their links, corrections, and suggestions. Some groups have developed their own information, and we would be happy to include links to other web pages. As time allows, we can also scan graphics and photos for the web.

You may be wondering about the graphic present on every web page. This puzzle is one posed by Pythagoras, sixth century BC Greek philosopher and mathematician whose games lead to a number of important theorems.

Pythagoras' puzzles piqued the interest of Plato and even Galileo. That the classic design should display the efforts of the Laboratory show a relationship with the past and the energy and excitement to move forward.

For more information on RLE's web presence, contact Barbara Passero, RLE communications officer, Room 36-412, x8-5869.

New Faces



Margaret S. Beucler began working as administrative assistant to Professor Alan V. Oppenheim in RLE's Digital Signal Processing Group on December 1, 1994. A graduate of Hickox Secretarial School, Maggie has

been employed at MIT since 1977. Before coming to RLE, Maggie was administrative assistant for two years in the Mechanical Engineering Department. Prior to that, Maggie worked in the Mathematics Department for 12 years and in the Bursar's Office for three years. Maggie's twin sister Maureen also works at MIT.

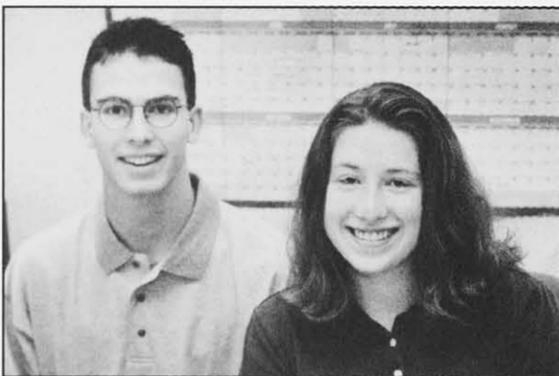
Maggie and her husband Ed, a HVAC technician, reside in Arlington with their children, Barbara Ann, 9, and Edward William, 12, who both enjoy music, computer games, and sports. Maggie likes to read nonfiction, especially biographies, watch movies, and do cross-stitching.



Edward R. Murphy has been working as part-time technician for Jimmy Carter in RLE's NanoStructures Laboratory since December 7, 1994. Ed supports Professor Henry I. Smith's Quantum-Effects Devices group's work in

advanced fine-feature lithography technologies. Ed is also employed as a process technician at Quantum Corporation (formerly Digital Equipment Corporation) of Shrewsbury, MA.

Ed has two children, Katelyn, a freshman at Salem State College in the nursing program, and Patrick, a sophomore in the honors program at Arlington High School. He is a fan of the Boston Red Sox, Boston Bruins, and Harvard University hockey. Ed completed two years at Harvard College toward a bachelor's degree in Electrical, Computer and Systems Engineering.



Stacey A. Favaloro, daughter of OSP's Anthony F. Favaloro, and **Gregory S. Young**, son of Mary E. Young, RLE Assistant Fiscal Officer, are working for RLE Headquarters this summer. Stacey is a sophomore at Villanova University, where Greg will be a freshman this fall. Stacey worked last summer for RLE, winning rave reviews. Welcome! (Photos by John F. Cook)



RLE 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: Joseph F. Connolly, John F. Cook, Dorothy A. Fleischer, David W. Foss, Barbara Passero, and Mary J. Ziegler.

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Retirements

RLE bid farewell to Project Machinist **Manuel Cabral, Jr.**, on June 30, 1995, after 36 years of service. Manny came to RLE in 1959 as a machinist B. Manny and his wife Clare are spending their winters in Boynton Beach, FL, and summers in South Yarmouth on Cape Cod.

On April 26, 1996, **Rita C. McKinnon**, senior office assistant in RLE Headquarters, retired from RLE after 16 years of service. She had been in charge of the RLE copy facility for the past nine years. Rita, who was well-liked for her cheerful outlook and helpful manner, was honored at a party on April 18th. Rita and her husband Dan, residents of Somerville, enjoy gardening and will spend the summers at their second home in York, Maine. (Photo by John F. Cook)



Antarctic Adventure



Professor **Bernard F. Burke** (left) of RLE's Radio Astronomy Group, is shown with Professor Ernest J. Moniz (right) of the Physics Department and Carl Erb of NSF, while spending a week in the antarctic in December 1995 as a distinguished visitor from the National Science Board. While "at the ice," Professor Burke toured operations at the United States base at McMurdo station and flew by helicopter to different points around the Pole.

Professor Burke also enjoys spending time at the ocean in warmer locales as captain of the *Io*, a 33 foot racer-cruiser of J33 class. Last summer, the *Io* placed first in both the Manchester Yacht Club Fall Series and the Patton Club and came in fourth in the New England PHRF Championships.



DeFilippo, continued from page 1

A resident of Medford, Tom finds nature calming. Camping, canoeing, horseback riding, boating, water skiing, and downhill skiing are some activities he enjoys. He also likes to watch nature programs on TV. Tom has coached Little League, and each summer plays shortstop on the Laboratory for Nuclear Science softball team.

Tom likes the people he works for and says, "I couldn't find a better boss than Gerry." Everyone in RLE enjoys working with Tom because of his cheerful outlook and enthusiasm.

SHORT WAVES...

Professor **Srinivas Devadas** of RLE's Circuits and Systems Group and his wife Lochan had a baby girl, Sheela, on August 21, 1995.

Ann K. Dix, administrative secretary in the Sensory Communication Group, married research affiliate **Vladimir Barsukov** on May 26, 1995.

Professor **Clifton G. Fonstad** of RLE's Materials and Fabrication Group and **Gerrard F. Power**, RLE's facilities officer, were inducted into the MIT Quarter Century Club in March 1996.

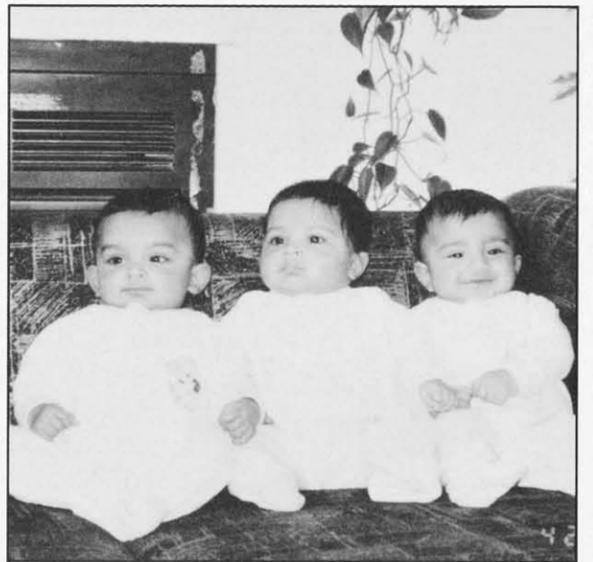
Research Scientist Dr. **Julie E. Greenberg** of the Sensory Communication Group and her husband Ron Cheney of Lincoln Laboratory are the parents of Benjamin Israel Cheney, who was born on August 18, 1995.

Adriana Heath, eight pounds, was born on March 18, 1996, to Dr. **Stefano Migliuolo**, research scientist in the Plasma Physics Group, and his wife Sarah.

Barbara Passero, RLE communications officer, and Zulfiqar Hyder were married in Pasadena, CA, on June 12, 1995.

Graduate student **Michael J. Schwartz** of RLE's Radio Astronomy Group and his wife Susan Savitt Schwartz, a writer, had a baby girl, Natalie Rose Savitt Schwartz, on June 27, 1995.

Dr. **Barbara G. Shinn-Cunningham**, postdoctoral associate in the Sensory Communication Group, and her husband Rob are the parents of Nicholas, who was born on October 4, 1994.



Principal Research Scientist Dr. **Mandayam A. Srinivasan**, Sensory Communication Group, and Dr. Anuradha M. Annaswamy, assistant professor in the Mechanical Engineering Department, are the parents of triplets. The two boys and a girl, Suma Mandayam Anand, Giridhar Mandayam Anand, and Aneesh Mandayam Anand, were born on November 29, 1995.

Dr. **Hong Z. Tan**, postdoctoral associate in the Sensory Communication Group, and her husband Jamie are the parents of Michael, who was born on December 4, 1994.

Professor **Jacob K. White** of RLE's Circuits and Systems Group and his wife Barbara Bratzel are the parents of a girl, Audrey White, who was born on November 12, 1994.