ATTENTION: ENTREPRENEURS
WIN CASH AND THE CHANCE TO PITCH YOUR IDEA!

RENSSLEAER BUSINESS PLAN COMPETITION

The Center for ENTREPRENEURSHIP of New Technological Ventures in the Lally School of Management and Technology announces the 1997 Rensselaer Business Plan Competition.

If you are an alum, student, faculty, or staff member with hopes of starting a business or plans to expand current business operations, you could win a CASH PRIZE and pitch your idea to an audience of venture capitalists hosted by Rensselaer alumni.

Steve Kaplan '67, co-founder of Cypress Semiconductor; president of Cycle Time Associates; and 1995 Rensselaer Visiting Entrepreneur, states, "Many of us are asked to review business plans and invest in START-UPS on a regular basis. Why shouldn't Rensselaer entrepreneurs get our bucks, if their plans reflect good opportunities? I'm really looking forward to continuing to work with the Lally School of Management and Technology and with my fellow alumni on the Rensselaer Business Plan Competition."

The business plans will be judged for originality, thorough market analysis, solid financial planning, and a coherent business strategy.

For more information, CONTACT: Jane McCumber, Manager, Center for Entrepreneurship of New Technological Ventures, The Lally School of Management and Technology, Rensselaer Polytechnic Institute, Troy, NY 12180, (518) 276-8398 or mccumj@rpi.edu.
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### Audio Visionary

World-renowned acoustician Christopher Jaffe '49 pioneers the art—and science—of acoustic design.

### Alumni News

**Reunion '96**

**The Final Frontier**

Two recent space missions are part of a long line of Rensselaer forays beyond Earth's boundaries.

**www.rpi.edu**

How Rensselaer is using the World Wide Web to educate and communicate.

### Staying Connected

Regional chapters help you stay in touch with Rensselaer.

*West Hall, lego-style!*

See page 8
Spread the Word

Adapted from President R. Byron Pipes' State of the Institute address to alumni returning for Reunion '96

Last year, in the State of the Institute address, I discussed our new mission statement and the goals we set for academic excellence. That message was published in a document titled “Charting Rensselaer’s Course.” And, indeed, we set out on a bold course:

- to renew the curriculum
- to attract and retain outstanding faculty
- to provide a beautiful and efficient campus
- to develop new sources of revenue
- to eliminate the structural deficit

We undertook all of this to support our mission that states: “Rensselaer educates the leaders of tomorrow for technologically based careers. We celebrate discovery, and the responsible application of technology, to create knowledge and global prosperity.”

This year I want to focus on what others are saying about us. The firm mark of success is that your reputation is growing, and that is exactly what has been happening.

That is what we said about ourselves a year ago. This year I want to focus on what others are saying about us. The firm mark of success is that your reputation is growing. And that is exactly what has been happening.

The world is beginning to notice Rensselaer’s accomplishments! Educators have taken notice. Government leaders have taken notice. The national media—radio, television, magazines, journals, and newspapers—have taken notice. And they are issuing glowing reports about what is happening at Rensselaer.

In the U.S. News & World Report “Best Colleges” issue, the School of Engineering ranked 13th; the School of Management and Technology ranked 37th; Rensselaer ranked 39th overall; and Rensselaer was judged a “Best Value” among the top colleges.

Rensselaer’s leadership position in technological education is taking the spotlight. Perhaps one of the most important areas setting Rensselaer apart is our ground-breaking work in interactive learning.

The Wall Street Journal, under the headline “Leading the Way,” wrote about how Rensselaer’s interactive learning curriculum focuses on a technology-rich curriculum utilizing studio-style classrooms, greater professor-student interaction, and team-based learning.

When Newsweek magazine heard of our work, they visited our campus to find out for themselves. A reporter sat in on one of Rensselaer’s new calculus courses and described the experience in the April 29 issue of the magazine.

But it is not just our interactive learning initiatives that have been making news this year. All over campus, new courses and growing programs have received significant media attention.

Our new course in Environmental Science caught the attention of USA Today. Our new Electronic Media, Arts, and Communication program in on-line communications even appeared in Cosmopolitan magazine.

And Rensselaer’s Lally School of Management and Technology continues to win rave reviews for its “management and technology” focus and its emphasis on technological entrepreneurship. Kenneth and Thelma Lally’s generous gift of $15 million kicked off a breakthrough year for the management program, and it is quickly taking its place in the rankings among the country’s top business schools.

Success magazine ranked Rensselaer among the 25 best schools for entrepreneurs. Computerworld ranked Rensselaer 15th among the top 25...
"techno MBA" schools. *Entrepreneur* magazine gave Rensselaer's Incubator program its top honor and said that entrepreneurship is setting Rensselaer apart.

Of course, Rensselaer's School of Engineering is the heart of our technological university, and this has been an exciting year in curriculum and research news.

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**OUR MISSION, EDUCATING LEADERS TO TAKE THEIR PLACE IN AN EVER-INCREASING TECHNOLOGICAL WORLD, IS MORE IMPORTANT AND MORE RELEVANT THAN EVER BEFORE.**

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The professional master's program is making headlines as it meets the needs of students and industry. And our efforts to re-invent undergraduate engineering education are also in the news.

*The New York Times, Business Week, Discover* magazine, and *The Wall Street Journal* all featured Rensselaer research initiatives this year. In fact, Rensselaer research is featured in hundreds of publications throughout the country every year. But one research experiment in particular stood out in 1996. Professor Martin Glicksman's crystal-growth experiment aboard the space shuttle *Columbia* in February marked the first time in U.S. history that an experiment in space had been controlled from a site other than NASA—in this case from the Rensselaer campus (see page 16).

Finally, it is not just our academics and our research that are making news. Rensselaer's athletic programs have been in all the sports pages for history-making seasons (see page 9)! Baseball had its best-ever season and went to the Division III College World Series for the first time ever. Football established 20 new school records. Hockey, even in a rebuilding year, clinched an ECAC bid. Women's hockey made history this year, joining the varsity program. Men's lacrosse won its first conference championship. And men's basketball had a record-breaking year.

So, you can see, others are beginning to say what we've been saying—that Rensselaer is on the right track. Our mission, educating leaders to take their place in an ever-increasing technological world, is more important and more relevant than ever before.

As alumni, you can take great pride in our accomplishments. And we count on you to be messengers and share the great news with others.

Spread the word to prospective students, to parents, to teachers in the local schools, to colleagues at other universities, to friends in business, to contacts in government, and to community leaders.

Spread the word that:

- this university has an excellent and dedicated faculty, carrying out leading-edge pedagogy and scholarship;
- we have a student-centered learning environment where young men and women can succeed and become leaders in the global marketplace;
- we have more than 65,000 alumni who are making a genuine difference for good in this world;
- we have renewed our curriculum to maintain rigor and relevance;
- ours is a diverse student body with intellect and vigor;
- our historic green-roofed campus includes facilities for state-of-the-art teaching, learning, and research.

Spread the word that Rensselaer continues to be one of the premier technological universities on this planet. For that truly is the "State of the Institute."
Mixed Signals!
I enjoyed the photograph of "WHAZ" on the contents page of the June issue. I well remember the station's transmitting antenna—a classic top-loaded multiwire vertical—which graced the roof of Russell Sage Laboratory for many decades.

However, I think the photo is miscaptioned.
Clue #1 is the lettering on the doorway glass. 2SZ and 2CDC are very early amateur radio call signs.
Clue #2 is that the operators are wearing headphones and writing. While modern broadcast studio people often do wear headphones, and a microphone is clearly in evidence, modern intercom systems were not in use in the 1920s. The leftmost operator is most likely copying Morse code, not broadcasting. The operator on the right appears to be sending, and may be sending code practice to the other man.

Clue #3 is found on the third shelf from the floor, in back of the operators: a semiautomatic Morse key, or "bug." The conclusion, my dear Watson, is that the picture is of the RPI Amateur Radio Club station, 2SZ, which now moves up the hill as W2SZ.

Garry R. Shapiro '63
Los Gatos, Calif.

Editor’s Note: Keen eye! Our cropping of the photo left out the WHAZ call letters on the door. The amateur radio club, 2SZ, moved into a corner of the Sage Laboratory offices of WHAZ in December 1924. Thanks for the lesson.

Ferris Facts
In your June '96 issue you credit George W. Ferris, Class of 1881, with his wheel, but you did not tell the whole story "Of Engineers and Dreamers". He submitted the wheel as the design required for graduation. But the faculty said it was impractical, and so did not give him a diploma. After the Chicago World's Fair the faculty relented, and belatedly gave him the credit.

I know one of the faculty who turned Ferris down, Waddell of the famous bridge designers Waddell and Hardesty. Mr. Waddell told me he regretted the initial decision.

William H. Cook '34
Bellevue, Wash.

Editor’s Note II: Your story prompted a trip to the Institute Archives. George Washington Gale Ferris is listed in the program for Rensselaer's commencement ceremonies of June 15, 1881, as a candidate for the degree of civil engineer. Another book, which lists "RPI Theses 1855-1922," says Ferris wrote a "Review of Wrought Iron Deck Bridge on the

Boston, Hoosac Tunnel and Western Railway, at Schaghticoke, N.Y." in 1881. Perhaps his initial thesis proposal was rejected?

Gurley Men
Your timeline research people need to know that RPI was founded in 1824 and if William Gurley '39 and L.E. Gurley '45 are included, then they should be alert to the fact that this could be 1839 and 1845. I graduated in 1939 and had a W. & L.E. Gurley transit given to me many years before I went to RPI. Perhaps they founded the company in 1845?

Louis H. Shornick '39
Jackson, Miss.

Editor’s Note III: The Gurley Company was founded in 1845 and the brothers Gurley graduated in 1839 (William) and 1845 (L.E.). The error was a proofreading one; those facts are correct in the Engineering timeline.

DuMont's Days
The Rensselaer magazine is a welcome visitor at every issue date, generating

nostalgic and pleasant thoughts of those long-ago days at RPI beginning in September 1919.

I've always meant to write to you, but somehow lazily put it off, until now it seems that I'm the only '23 left. However, I had to kick myself in the pants this time because the proofreader in me discovered an apparent error in your June issue. In the article titled "Of Engineers and Dreamers," you show a photo of Allen DuMont with the class year '24. Al DuMont was in the Class of '23 and in our freshman year I was in some classes with him.

Isadore Warshaw '23
Sarasota, Fla.

Editor's Note IV: OK, so it's back to the Archives! This time, we found out that Allen DuMont did indeed matriculate with the Class of '23, as you remember. However, according to an article in an old edition of the alumni magazine, "One summer during his RPI years DuMont embarked for Copenhagen, expecting to return in time for the opening of the school, but it was about Christmas time when he did get back...the extra time cost DuMont an extra year at college."

In order to provide space for as many letters as possible, we often must edit them for length. Please address correspondence to: Rensselaer, Office of News and Communications, Rensselaer Polytechnic Institute, Troy, NY 12180, or e-mail at alum.mag@rpi.edu.

Check us out on-line at: http://www.rpi.edu/dept/NewsComm/Magazine/Sept96/
School of Engineering Loses Two Early Leaders

Lawrence Parsegian, first dean of engineering, and Arthur A. Burr; professor emeritus and dean of engineering from 1962-1974.

The School of Engineering lost two former deans recently. V. Lawrence Parsegian, Rensselaer's first dean of engineering, died April 2 in Troy. He was 87. Arthur A. Burr, professor emeritus and dean of engineering from 1962 until 1974, died May 20 in Wynantskill. He was 82.

Parsegian, a former director of research for the Atomic Energy Commission's New York office and an active participant in the formulation of national policies on atomic energy, is perhaps best known for the passion that occupied his later years — the compilation of a massive chronicle of Armenian architecture.

This monumental seven-volume project, which cost more than $1 million, was funded by contributions from the Armenian community. More than 100 university libraries have purchased copies. Last year, Parsegian was elected a foreign member of the Academy of Science of Armenia and was awarded an honorary doctorate by Yerevan State University in Armenia.

Parsegian was born May 13, 1908. He earned a bachelor's degree in physics in 1933 from the Massachusetts Institute of Technology and a doctorate in nuclear physics from New York University. After 12 years in industry, he served nearly five years as director of the Research Division of the New York Operations Office of the U.S. Atomic Energy Commission.

In 1954, he came to Rensselaer, where the relatively small faculty was organized into four groups: engineering, science, architecture, and general studies. Parsegian was named chair of the Engineering Group and professor of nuclear engineering. In 1957, the four academic groups were converted into schools, and Parsegian became Rensselaer's first dean of engineering.

During his tenure, Rensselaer began a new program in nuclear science and engineering and built a linear accelerator. The School of Engineering renewed and strengthened the faculty, modernized the curriculum, and initiated a strong program in graduate education and research.

Arthur Burr received his bachelor's and master's degrees in physics from the University of Saskatchewan and his doctorate from Pennsylvania State University.

After serving as a research physicist for Armstrong Cork Co. for three years, he joined the metallurgical engineering faculty at Rensselaer in 1946 as an assistant professor. He was named professor and head of the Department of Metallurgical Engineering in 1955 and in 1961 was appointed head of the newly named Department of Materials Engineering and acting dean of the School of Engineering.

Under Burr's leadership as dean, the Materials Research Center was completed, and construction was begun on the Jonsson Engineering Center. Graduate enrollment doubled. The school instituted the pre-engineering program and the professional degree concept, which made the master's degree a terminal degree separated from traditional research-oriented graduate degrees.

Burr radically restructured the school, eliminating departments and introducing a matrix system that organized the faculty into seven expertise groups, an innovation that won national attention. The school returned to a department system in 1974, but the experience with the matrix system left a tradition of interdisciplinary education and research.

Lawrence Parsegian
Researchers work in the CIEEM's 8,000-square-foot Class 100 clean room.

Rensselaer Lands $15 Million Semiconductor Research Center

The Semiconductor Research Corporation (SRC), the national research arm of the semiconductor industry, has designated Rensselaer Polytechnic Institute to be the site of a new Center of Excellence for Advanced Interconnect Science and Technology. The designation carries an award of $10 million in SRC funding over the next five years.

The center will also receive $4.5 million from the state of New York over the next five years, making it the first SRC-funded Center of Excellence to receive state support. The center will receive additional funding from industry and from Rensselaer.

“This award from the SRC is an acknowledgment by the semiconductor industry of our extraordinary research accomplishments in microelectronics,” says Rensselaer President R. Byron Pipes. “We are especially pleased to be carrying out this research in partnership with both New York state and industry,” Pipes adds.

“Rensselaer has been selected by the SRC as an SRC Center of Excellence to do leading-edge, interdisciplinary research in interconnect technologies,” says Larry W. Sumney, president and CEO of the Semiconductor Research Corporation.

The new center represents a major collaboration between the SRC, the Institute, and the state of New York. Both New York State Senate Majority Leader Joseph Bruno and Assembly Speaker Sheldon Silver attended the announcement of the new center to talk about the center’s potential for attracting new industry and high-paying jobs.

The news was immediately hailed by the local media, which used phrases like “a second Silicon Valley” to describe the possible contribution to the area’s economic growth.

“Interconnects are currently the main roadblock to faster and more powerful computers,” according to Shyam Murarka, director of the new center. “Devices on integrated circuits have gotten faster and circuits have gotten smaller, but it has not been possible to get the full advantage of this speed because traffic jams occur on the pathways between the devices.”

The new center will develop technology to make interconnects as fast as the devices on computer chips, Murarka says. The center’s work will help the semiconductor industry maintain its competitive edge while also playing a major role in strengthening high-tech industrial development in New York state.

Rensselaer’s Center for Integrated Electronics and Electronics Manufacturing on the Troy campus will receive about 60 percent of the funding, which will also support programs at SUNY-Albany, Clarkson University, the University of North Texas, Georgia Tech, the University of Texas at Austin, and Cornell University.

State funding includes a $500,000 annual commitment in the state budget as well as $400,000 in funding from the New York State Energy Research and Development Authority and the New York State Center for Advanced Technology at the State University of New York at Albany.

In the last eight years, scientists and engineers at Rensselaer have conducted pioneering research in three interconnect technologies. They have helped develop the technology to replace aluminum interconnections with copper ones to take advantage of copper’s lower electrical resistance and higher reliability. Rensselaer researchers developed and tested low-dielectric polymers used for insulating the thin metal lines on chips to enable signals to pass more quickly. Rensselaer also has been advancing the technology for chemical-mechanical planarization since late 1988. This technology creates the very flat surfaces needed to build multilevel chips.

In addition to increasing collaboration, the Center of Excellence will enable Rensselaer to expand interconnect research to include modeling and simulation and design and to develop better methods of testing performance and reliability.

The SRC, the research arm of the Semiconductor Industry Association, plans and implements research conducted at 48 North American universities, national laboratories, and research institutions.
NEW WINGS ON WEST HALL

Rensselaer is proud to announce the birth of three new family members.

A pair of red-tailed hawks, who have been returning to campus for the last five years, once again chose a campus building on which to build their nest and raise a family. The sticks-and-twigs creation, about three feet wide, was located safely underneath a pediment on the western face of West Hall. The hawks also have nested on the Carnegie Building, and Walker and Sage laboratories in past years.

The three young hawks were hatched in late April; they were fledged (left the nest) at the end of June.

Red-tailed hawks, sometimes known as red hawks, do not commonly nest on inhabited buildings. Rensselaer’s location—on a hillside overlooking the Hudson River—has proven to be a desirable location to the nesting pair, however.

The red-tailed hawk family served as inspiration for Rensselaer’s new mascot, Red Hawk.

Robbee Kosak Named Vice President for Institute Relations

Robbee Kosak was named vice president for Institute Relations April 1. Kosak, who had served as acting vice president since last September, was chosen following a nationwide search conducted by a committee of faculty, alumni, and staff.

“T was delighted to recommend Robbee Kosak to the Board of Trustees,” Rensselaer President R. Byron Pipes said in announcing the appointment.

“Her previous experience in the full scope of university relations makes her well-suited to lead Rensselaer’s communications, alumni relations, and fund-raising initiatives,” Pipes said.

Kosak joined Rensselaer as director of development in November 1994. Prior to joining Rensselaer, she was vice president for university relations at Bucknell University in Pennsylvania.

“I am deeply committed to Rensselaer and to what can be accomplished here,” Kosak said. “This Institute is taking a national leadership role in revitalizing higher education. I am proud to be part of the Rensselaer community as it demonstrates the value and relevance of technological education in today’s world.”

Kosak says she has been impressed with the accomplishments of Rensselaer alumni and the pride alumni express about their Rensselaer education.

“RPI alumni are committed to a bright future for Rensselaer. Our division’s greatest priority is building long-term relationships with Rensselaer’s 65,000 alumni, and encouraging positive, life-long associations with the Institute,” she added.

At Bucknell University, as vice president for university relations,
Novel Polymer: Muscles Without Pumping Iron

A novel polymer gel that may have potential for use in artificial muscles and in electrically stimulated delivery of medication has performed well in electromechanical studies at the New York State Center for Polymer Synthesis, where new plastics are created for industries that depend on novel materials.

The polymer develops new products such as plastics needed by the state's electronics and advanced telecommunications industries, high-performance composites, and biodegradable polymers for such uses as food packaging. It also helps new companies get started and trains industrial personnel, corporate researchers, college faculty, and high-school teachers.

Scheduled for completion by August 1997, the $4.5 million facility will link Cogswell Laboratory and the Materials Research Center, making interdisciplinary cooperation far more convenient for Rensselaer researchers, according to Ted Mirzak '66, senior director of campus planning and facilities design.

Principal funds for construction of the new polymer center were provided through a New York state grant through the Higher Education and Applied Technology program. An additional $225,000 comes from Rensselaer energy program funds, which are made available because the new building will be energy efficient, Mirzak says.

(above) The Voorhees Computing Center; (below) the Houston Field House
Undergraduate engineering students can learn how to initiate a new business venture and develop it into a self-sustaining and profitable enterprise through a cooperative program in technological entrepreneurship designed by Rensselaer's School of Engineering and its Lally School of Management and Technology.

Through team-based experiential learning, engineering students are taught, among other things, how to analyze business opportunities, select appropriate products and markets, develop a comprehensive business plan, and secure necessary resources.

"A technical discipline can create a natural affinity for entrepreneurship and the delivery of new products and services to the marketplace," says Mark Rice, assistant dean of the Lally School. He points out that all six winners of Rensselaer's Entrepreneur of the Year Award hold either engineering or science degrees from Rensselaer.

Practical field work with entrepreneurial companies, housed in Rensselaer's expansive Incubator Center or at the Rensselaer Technology Park, is a featured part of the program. Students work in teams to prepare business, marketing, and financial plans for new start-up ventures. The Rensselaer incubator was named "1995 Incubator of the Year" by the National Business Incubation Association.

For more information, contact Mark Rice, assistant dean, Lally School of Management and Technology at (518) 276-8398 or ricem@rpi.edu.

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WINNING SEASONS

Rensselaer continued its emergence as one of the top Division III programs in New York as a record 11 teams qualified for post-season play.

The baseball team went 26-3 over the regular season to qualify for the NCAA Tournament for the fifth consecutive year and made its first-ever appearance in the NCAA Division III College World Series. After sweeping all three games in the NCAA New York Regional, Rensselaer joined the other seven top teams in the nation at the World Series in Salem, Va., where Rensselaer was eliminated after the second round. Rensselaer fielded three All-Americans—pitchers Dave Lohrman and Bill Snyder, who were part of a staff that owned the lowest ERA in the nation, along with rightfielder Jim Willard.

The men's lacrosse team capped off its finest season in nearly three decades with its third consecutive ECAC playoff appearance, as the Engineers defeated Hartwick, 7-4, in the first round before falling to Oswego in the championship game. While not being able to gain an ECAC title, the Engineers did secure the UCAA title—their first championship in 28 years the Engineers have been part of a conference. Mike Sexton and Brian Proefrock were both selected to play in the North-South game.

The outdoor track team's season was highlighted by All-American performances at the NCAA Championships. At nationals, Cathy Moran finished second in the 1,000-meter run with a time of 36:08.43, eight-tenths of a second off the first-place finisher, and took fifth in the 5,000-meter run (17:44.72). Krishaun Gilmore clocked a 10.83 in the 100-meter dash to place seventh, while Shawn Hanrahan threw 52.54 meters in the hammer for a personal best, as well as fifth place overall.

The 1995-96 season was clearly the sweetest the Rensselaer men's basketball team had ever tasted, as the Engineers made only their sixth appearance in the NCAA Tournament, advanced for the first time ever in the tournament, and made it as far as the Sweet Sixteen. After defeating Hartwick and St. Lawrence, Rensselaer fell to host and eventual Final Four contender Franklin & Marshall in the East/MidAtlantic Sectionals.

Tailback Dan McGovern broke four school records, and Rensselaer set as many ECAC Division III playoff marks, as the Engineers football team recorded a 69-12 thrashing of Worcester State in the 1995 Division III ECAC Northwest Championship game. The ECAC Northwest Title capped off a season in which Rensselaer went 7-2 and broke some 20 school records.
The Structure of Design

"Dealing with the engineers has kept us grounded," according to Dan Dyer, a junior majoring in architecture and a participant in The Structure of Design, a course taught last spring by Donald Watson, professor of architecture. Dyer and his architecture classmates worked side-by-side with seven engineering students, who used the course to fulfill their civil engineering capstone requirements.

The course, which finished with an eight-week design project based on the Albany/Rensselaer railroad station, falls under the auspices of the new Advanced Construction Technology (ACT) program. ACT was created to forge a close working relationship between students and faculty in architecture and civil engineering.

Ed Allen, considered a maverick in architecture and engineering, was Watson's guest lecturer. An expert on the integration of architecture, technology, construction, and engineering, Allen directed the students through an activity designed to help them shape structure.


Following the demonstration, engineering and architecture students worked in small groups to construct and analyze a truss of their own design.

New Dean of H&SS Named

Faye Duchin, director of the Institute for Economic Analysis at New York University, has been named dean of the School of Humanities and Social Sciences. She joined Rensselaer Sept. 1.

An economist whose work concerns the globalization of the world economy, Duchin has worked extensively in ecological economics and was named the 1994-95 Boutros Boutros-Ghali Scholar for Europe and North America for her contributions in the area of global economic development and the environment.

"Dr. Duchin brings a wealth of experience at the intersection of technology and the humanities to her tenure as dean," Rensselaer President R. Byron Pipes says. "I am enthusiastic about her vision for the school and its important role within the Institute."

"The prospect of leading a school of humanities and social sciences at a technological university is a special and exciting challenge for me," Duchin says.

Scholars in the humanities and social sciences at technological uni-

Mark Dixon, senior civil engineering major, and Bernadette Muncy, sophomore architecture major, use the Maxwell Diagram to analyze the soundness of a sloping truss.
versities tend to focus on issues related to technology and to work across disciplines, both important qualities, she says. These qualities, plus the strengths of Rensselaer's faculty and programs and the potential for program growth, attracted her to the Institute, she says.

Holder of degrees in computer science and experimental psychology, Duchin joined the Institute for Economic Analysis at NYU in 1977 and has served as director since 1985. She also has served as a faculty member in NYU's Wagner School of Public Service since 1984. She has been a fellow at the United Nations University in Tokyo since September 1994, and was an AT&T fellow in industrial ecology for 1993-95.

Before joining NYU, Duchin was an economist with Mathematica Inc. She is co-author of *The Future of the Environment: Ecological Economics and Technological Change*, published by Oxford University Press, New York, in 1994. She was founding managing editor of the journal *Structural Change and Economic Dynamics* in 1990 and founding co-editor of *Economic Systems Research: Journal of the Input-Output Association* in 1989, and has been a member of the editorial advisory board of *Ecological Economics* since 1992.

Duchin earned a bachelor's degree in experimental psychology from Cornell University, and master's and doctoral degrees in computer science from the University of California at Berkeley. She also studied at the universities of Grenoble and Paris.

She is vice president of the International Society for Ecological Economics and is a member of the American Association for the Advancement of Science and the American Economics Association.

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**FACETS**

**ROBERT MCCAFFREY** was named chair of the Department of Earth and Environmental Sciences, effective Jan. 1. McCaffrey succeeds E. Bruce Watson, who was recently named Institute Professor of Science. McCaffrey, a geophysicist with extensive research experience in subduction zones in the southwest Pacific and in seismology and plate tectonics of that region, joined the Rensselaer faculty in 1988 as assistant professor of geology. He was promoted to associate professor with tenure in 1993.

**E. BRUCE WATSON**, Institute Professor of Science and professor of earth and environmental sciences, has been made a fellow of the American Academy of Arts and Sciences, in recognition of his distinguished scholarship in earth sciences. The Academy was founded in 1780 by John Adams and other early leaders "to cultivate every art and science, which may tend to advance the interest, honor, dignity, and happiness of a free, independent, and virtuous people."

**GREGOR KOVACIC**, assistant professor of mathematical sciences, has been named a 1996-98 Alfred P. Sloan Research Fellow. The honor, which includes a two-year research-support grant of $35,000, recognizes outstanding young scientists around the country. A scholar in singular-perturbation and chaos theory, Kovacic will use the research funding to help support his new work in investigating and developing mathematical models of non-linear fiber optics. Kovacic joined the Rensselaer faculty in 1991.

**EDDIE KNOWLES**, dean of students, has been elected to the board of trustees of the Edwin Gould Foundation for Children. The foundation was created in 1923 by Edwin Gould, the philanthropist son of financier Jay Gould, to serve the needs of underprivileged children. Michael Osheowitz, foundation president, said Knowles brings to the foundation an enormous understanding of the key ingredients for success for high-school, college, and graduate students. "In fact, I can't think of another individual with such extraordinary insight into student development as Dean Knowles," he said.

**JEROME MAHONE** has returned to campus to serve as managing director of the Center for Entrepreneurship of New Technologies Venture in the Lally School of Management and Technology. Mahone served as an investment officer for Rensselaer and as the first full-time director of the Incubator Center in the 1980s. After leaving Rensselaer in 1987, Mahone served as assistant dean and director of the Entrepreneurship Center at George Mason University and later established a consulting firm.

**TOM APPLE**, associate professor of chemistry, received the 1996 Trustees Outstanding Teacher Award, which was established in 1994 to recognize outstanding accomplishments in the classroom. Of particular importance in Apple's selection was his work co-develo-

**MICHAEL ABBOTT '61**, professor of chemical engineering, received the 1996 David M. Darrin Counseling Award from Phalanx. The award honors a faculty member who has shown extraordinary efforts in counseling students both inside and outside the classroom.

**S. VENKATARAMAN**, who holds the Bruggeman Distinguished Professorship in the Lally School of Management and Technology, received the 1996 Eugene G. Gomolka Award for Innovation, Leadership, and Excellence in Entrepreneurship Education. Presented by the International Center for Leadership & Enterprise Development, the award recognizes "innovation, ingenuity, perseverance, and cutting-edge research." Venkataraman has written extensively on entrepreneurship, corporate venturing, business policy and strategy, adoption of new technology, and emerging economies. He is editor of the *Journal of Business Venturing*.
World-renowned acoustician

Christopher Jaffe '49

pioneers the art—and

science—of acoustic design

By Meg Gallien

With an engineering education, an interest in theater, and a fortuitous discovery about reflected sound, Christopher Jaffe '49 embarked on a quest to improve concert hall acoustics. Thirty-five years later, he is a recognized leader in the field of acoustic design. He has consulted on more than 200 concert halls, opera houses, theaters, and musical pavilions in the United States, Mexico, and the Far East. He has built a company that now numbers 18 and serves a broad range of acoustic needs, from performance halls to corporate boardrooms. He has built new halls, improved old halls, and patented systems for “electronic architecture.”

He has also raised a few eyebrows along the way.
No v o Teatro, Sao Paulo, Brazil
IN THE '80s he told The New York Times music critic Harold Schonberg that with electronic tools it would be possible to duplicate the natural acoustics of the great halls of the world, a comment that elicited a great deal of skepticism among his fellow acousticians. The field was small and Jaffe was considered a maverick.

Today, says Jaffe, that label no longer holds. Just look at his record. No other acoustical consultant has worked directly with as many orchestras and opera companies.

“I guess I’m part of the establishment now,” he says.

While it was his early development of an electronic sound enhancement system that bothered “purists,” Jaffe is eager to point out that working with natural acoustics is always his first choice. “We only use electronics in situations where there’s no other solution,” he says.

As it happened, Jaffe came along at a time when there was a great need for acoustic enhancement due to the popularity of multi-purpose halls, which had sprung up around the country following World War II. While the renowned halls of the 19th century, like Carnegie Hall and Boston’s Symphony Hall, had been built for one purpose—symphonic music—these multi-purpose halls were intended to showcase everything from orchestras to operas to touring Broadway shows.

But they were destined to disappoint. It was against all laws of physics, says Jaffe. “An opera house needs a short reverberation period, like 1.2 or 1.3 seconds. A concert hall needs 1.8 to 2.2 seconds. How can one hall do both?”

Few cities could afford the luxury of separate halls.

So Jaffe invented the Electronic Reflected Energy System (ERES), which employs microphones, amplifiers, time-delay devices and loudspeakers to simulate sound waves reflecting from internal architectural surfaces. The system does not amplify sounds; it simply changes the acoustics. It is tailored to the specific hall, and once installed, is left alone.

Jaffe achieved great success installing his systems into halls that had proved to be acoustical duds, “making silk purses out of sows’ ears,” as one writer put it, and earning grudging admiration from skeptical critics.

But the opinions that mattered most to Jaffe were those of the conductors and musicians who played in the halls, and throughout his career he has earned high marks from the likes of violinist Isaac Stern, who praised Jaffe for his ability “to look for that intangible magic and warmth that really makes for a great hall and an additional instrument for us to work with in performance.”

CHRIS JAFFE CRAFTED A CAREER as an acoustician almost by accident. After earning his Rensselaer degree in chemical engineering (“my father said I should be a doctor, lawyer, or engineer”) and serving a short stint in the Army, he studied drama and theater at Columbia University. While producing and designing off-Broadway plays, he discovered that fiberglass panels set up on stage for scenic projections also acted as effective reflectors of musical sound energy.

After testing his ideas with the New England Opera Theatre at Tanglewood’s summer music festival, he started a business centered on the design and construction of symphonic shells.

The Cincinnati Symphony was the first major orchestra to incorporate a Jaffe shell in its famed Music Hall. Then in 1962 the design of an outdoor shell for the White House lawn led to important commissions, including a portable shell for the New York Philharmonic and Metropolitan Opera parks concerts.

In 1964 Jaffe was named the acoustical designer for the Meadow Brook Music Pavilion, the summer home of the Detroit Symphony. This established his reputation as an architectural acoustic designer and led to many new assignments in the musical field.

“That project has a special place in my heart because it really started me on my way in the architectural work,” says Jaffe.

Jaffe’s reputation surged again in 1976 when he designed the Sala Nezahualcóyotl in Mexico City, the first surround concert hall in the Western Hemisphere.

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Jaffe’s reputation surged again in 1976 when he designed the Sala Nezahualcóyotl in Mexico City, the first surround concert hall in the Western Hemisphere.

The hall’s architects chose the less common surround form to create a greater sense of intimacy between the audience and performers, but they still wanted to maintain all the traditional sound qualities of older halls, says Jaffe. This challenged him to define the room geometry to produce the appropriate acoustic.

To achieve the early reflections that occur naturally in the...
more traditional long, narrow halls, Jaffe designed the wide surround hall in "terraces"—narrow "rooms" within the main room. He also developed an acoustical moat—a chamber under the orchestra that allows the reverberant sound to develop before it is reintroduced into the hall through a series of louvres under the first rows of seats. Jaffe soon followed success with another surround hall in Denver, the Boettcher Concert Hall.

In 1987 he was selected to design the acoustics for the Wortham Theater Center in Houston, Texas, a facility housing two theaters built for the sole use of the Houston Grand Opera and the Houston Ballet. It opened to great critical acclaim, was called one of the best opera facilities built in this century, and was cited by critics as far away as France, in Le Monde: "It would be worth going all the way to Houston just for the acoustics of the new opera house."

For Jaffe, it was a rare privilege. "There are very few opportunities to design opera houses," he says. "They are so expensive that not many American companies can afford to build them."

Jaffe's current projects include the Tokyo International Forum, a $1.4 billion performing arts and convention center in downtown Tokyo that includes four performance spaces; the Nancy Lee and Perry R. Bass Performance Hall, a 2,200-seat multi-use performance center in Fort Worth, Texas; a European-style grand opera house in Sao Paulo, Brazil; and a renovation of the concert hall at the Kennedy Center in Washington, D.C.

WHILE JAFFE HAS MADE A NAME for himself in the specialized area of concert hall acoustics, his firm has developed acoustical consulting expertise in a wide range of building types, including corporate offices, restaurants, sports arenas, educational institutions, and conference and government centers.

One growing area of opportunity is museum acoustics. "Today's museums are very interactive," says Jaffe. Many exhibits include audio and are situated in open-plan spaces. "It’s essential to create the right ambiance for the rooms," he says. With sound-reinforcement equipment that his firm designs, they are able to drop isolated sound into adjacent exhibits.

Another area keeping the firm busy is capitol restorations. "Every year or so now, another state capitol is celebrating its centennial," says Jaffe. When the buildings were built, acoustic materials didn’t exist. Tra-

ditional legislative chambers, with high ceilings, are very reverberant, making it hard to understand speech.

"That’s why these old bombastic speakers, like William Jennnings Bryan, spoke slowly, in very measured cadence," says Jaffe. "They were usually speaking in rooms that were very poor acoustically." Jaffe’s firm can, in certain rooms, introduce absorption panels. Also, they have designed sound systems that put a mini-speaker at each legislator’s desk.

WITH CONTINUED GROWTH and breadth of work, Jaffe’s company, originally Jaffe Acoustics, has grown to include a mix of engineers, musicians, architects, and “one we brought in strictly from the rock ‘n’ roll world,” says Jaffe. In 1992 he took on two partners, and the firm became Jaffe Holden Scarbrough Acoustics. Mark Holden, educated in engineering at Duke University, is director of design. Paul Scarbrough ’83 studied architecture at Rensselaer and is a designer and administrator. The firm is located in Norwalk, Conn., with affiliated firms in Hong Kong and London.

Jaffe, who was awarded an honorary doctorate in engineering from Rensselaer in 1980, continues to keep close ties to his alma mater. He has served on the advisory committees of the schools of Architecture and Humanities and Social Sciences. He and his wife, Marcia, recently funded a joint program between the School of Architecture and the Department of the Arts to encourage innovative collaborations between artists, musicians, and architects, and to extend the exploration, research, and application of advanced acoustics as an art and architectural science.

This spring, as part of the Jaffe grant, the iEAR (Integrated Electronic Arts at Rensselaer) Studios commissioned Alvin Lucier to compose a score for five musicians plus a score for the room, using Jaffe’s enhancement reverberation system. The piece, called Forty Rooms, was performed on campus and in New York City.

"In normal use, you do not adjust the enhancement system during a performance," says Jaffe. “But I’ve always thought that, since we have that capability, why not compose a reflecting response from the room to change as the score is being performed.”

After a successful career of making innovation an established art, Chris Jaffe can still raise a few eyebrows.
While the space shuttle Columbia sped through the atmosphere 170 nautical miles above Earth last March, half a billion miles away the
two recent space
Galileo spacecraft had successfully entered Jupiter's orbit and begun its two-year mission around our solar system's largest planet. The
missions are part of a
fact that Rensselaer people were involved in both missions shouldn't come as much of a surprise, actually. The Apollo program, the Mars
long line of Rensselaer
rover, numerous experiments on space shuttles, even space vehicles—Rensselaer and its alumni and faculty have long played signifi-
cant roles in space-related research and exploration. • The Columbia and Galileo missions are only the most recent examples in Rens-
boundaries
selaer's outer space continuum. • By Tracey Leibach • Additional writing and reporting by Sheila Nason, Bruce Adams, Kathy Fitzgerald

THE FINAL FRO

In a crowded room on the fifth floor of the George M. Low Center for Industrial Innovation, the excitement was palpable. Rensselaer was about to make history as the first university ever to guide a space shuttle experiment directly from its campus.
The location was fitting. Former Rensselaer President George M. Low '48, a founding official of NASA and head of the Apollo manned spacecraft program that first put man on the moon in 1969, was also credited with being a strong advocate of the space shuttle.
"Paycom, this is RPI. We are ready to start commanding."
With television cameras recording the moment, NASA's Rensselaer control room began sending commands to a crystal-growth experiment aboard the Columbia.
"This is the beginning of a new way of operating experiments in space. It is a historic event," said Martin Glicksman '57, John Tod Horton Professor of Materials Science and Engineering and principal investigator for the Isothermal Dendritic Growth Experiment (IDGE). Glicksman uses the microgravity environment of space to learn more about how dendritic crystals are formed in metals and alloys.
During relatively brief shuttle flights, university and industrial investigators monitor and control experiments from the
Marshall Space Flight Center in Huntsville, Ala. But NASA officials know they will need better ways to communicate with experiments on the space station, the multinational research facility scheduled to be built in space early in the next century. Researchers will not want to abandon students and laboratories for many months while their experiments orbit the Earth.
NASA decided to experiment with improved teleoperation using Glicksman's project.
In 1994, Glicksman's first shuttle experiment was one of the first to include significant downlinked data and extensive teleoperation without significant astronaut assistance. In Huntsville, Glicksman and Matthew Koss, Rensselaer research assistant professor and lead scientist for the IDGE, sent images and other data beamed from the shuttle to Rensselaer by Internet, phone, and fax, where students performed analysis that helped determine what commands to send back to the experiment from Huntsville.
This time, Glicksman and Koss began the experiment in Huntsville, then Glicksman and three NASA engineers joined the team in Troy to issue their commands for the last four days of the mission.
Working alongside the NASA engineers were 21 Rensselaer graduate and undergraduate students who were able to talk and work with NASA scientists in Huntsville and at the Lewis Research Center in Cleveland, Ohio. They listened in on voice communication “loops” to the astronauts in flight, the mission control center in Houston, and the Payload Operations Control Center in Huntsville. They also assisted with compiling data as it was relayed from the shuttle.

“The remote operations control center typifies the synergy among teaching, learning, and research,” Glicksman says. “Our students performed real-world science and operational support while learning new skills.”

Edward Winsa, project scientist for the IDGE and project manager for NASA’s Space Station Fluids and Combustion Facility, says remote teleoperation will save NASA millions of dollars by allowing researchers to control experiments from their own labs.

Glicksman expects to control his third space experiment, scheduled for late 1997, entirely from Rensselaer.

FROM RENSSELAER TO JUPITER

While Rensselaer was making history from its campus, four of its graduates participated in history being made half a billion miles from our Sun.

When the Galileo probe plunged into Jupiter’s swirling cloud layers on Dec. 7, 1995, after a six-year journey through the solar system, it successfully made what NASA officials call the most difficult planetary atmospheric entry ever attempted.

Entering the Jovian atmosphere, the probe survived entry speeds of over 106,000 mph, temperatures twice those on the surface of the Sun, and deceleration forces up to 230 times the strength of gravity on Earth.

At the Jet Propulsion Laboratory in Pasadena, Calif., four Rensselaer alumni paused for a moment to enjoy the glory, then quickly turned back to the work at hand.

“The arrival date at Jupiter was really the end of one major phase of the mission—the interplanetary phase to get it from launch to Jupiter—and the beginning of the orbital phase,” says Louis D’Amario ’68, Galileo’s deputy navigation team chief. For D’Amario, the first phase was actually much longer than the six years it took the spacecraft to reach Jupiter.

“We worked for a long time on many designs for the mission, because of reschedulings, delays in the shuttle program, decisions in Congress,” recalls D’Amario, who earned a bachelor’s in aeronautical engineering. When he joined the Galileo project in 1977, launch was scheduled for 1982 and arrival in 1985.

“In the end the launch occurred in 1989 and we didn’t arrive at Jupiter until December 1995. So after all that, it was tremendously gratifying to finally get to Jupiter and get into orbit.”

D’Amario’s team, which controls the spacecraft’s flight path, interacts with many other JPL team members, including Leo Cheng ’91. Cheng is a sequence integration engineer (SIE), creating command sequences that get relayed to the spacecraft.

Most of the spacecraft’s operating commands are planned in advance for execution in timed order, Cheng explains. Creating a single command sequence can take up to six months, he says, because of the coordination necessary among the different subsystem teams.

“They need information about our trajectory to plan science observations, and we need them to create windows in the sequence to do trajectory correction maneuvers,” D’Amario says.

Cheng, who earned his master’s in physics, spent three years as Galileo’s assistant science coordinator, creating commands for specific science instruments. It was a natural progression to SIE, Cheng says, where he now is responsible for integrating commands from all the science
instruments and some commands that affect the entire spacecraft, such as firing the rocket thrusters. He also makes sure NASA’s ground antennas are allocated to receive the spacecraft’s radio signals.

Cheng also has interactions with another Rensselaer alumnus, Randy Herrera ’87. He’s the science coordinator for the radio science team, one of eight science teams for the spacecraft. “We plan, implement, and monitor the radio science experiments on Galileo,” he says.

“He uses the radio signals from the spacecraft to do his science on Earth,” explains Cheng. “Randy’s experiments still need to be scheduled, and that’s where I come in—he schedules his experiments with me and I make sure that he can configure the radio transmitter, that the ground receiver is freed up to do his experiments here.”

Herrera earned his master’s in electrical, computer, and systems engineering. “My background prepared me well, absolutely. My specialty at RPI was communication theory— modulation of frequencies, finding carrier noise, stuff like that. When I got here it all made sense. I already had the vocabulary.

“When you study engineering your task is to break a problem down, solve each piece, and put it all back together. That’s been my task here as the team chief and science coordinator for the radio science team. I don’t do the analysis of the data—that’s left to our investigators, but they rely on us to get the best quality data to them.”

Herrera’s team uses the radio signal to investigate the atmosphere of a planet or its moon, to measure gravity, to investigate the plasma surrounding the sun, and to search for gravitational waves (radiation). They record the signal at the ground antennas using specialized equipment.

When Galileo reached Jupiter and the probe entered the atmosphere, Herrera was too busy with experiments to celebrate. “Everyone else was in the cafeteria watching the tracking information coming back indicating where the spacecraft was. We had experiments that started at midnight that day on the spacecraft. We had to focus on getting the experiment done.”

Not so for Greg Klotz ’91. “It was a glorious day,” he remembers. “I helped explain things to the public who came to JPL for the arrival day ceremonies. We didn’t have pictures at that point. We had engineering data that many people didn’t understand, so we had to explain what they were looking at. I had my son and some

To the Moon, Almost

Space program devotees may recognize the name John Leonard (“Jack”) Swigert, who was portrayed by Kevin Bacon in the recent movie Apollo 13. Swigert served as the command module pilot for the mission, safely piloting the crippled spacecraft carrying three astronauts back to Earth in April 1970. After leaving the space program in 1973, Swigert served as executive director of the Committee on Science and Technology of the U.S. House of Representatives from 1973-79. He ran for—and won—the Congressional seat in the newly formed 6th District of Colorado in 1982. Tragically, Swigert died Dec. 27, 1982, of bone marrow cancer, just days before he was to assume office.

What many people may not know is that Swigert received a master’s degree in engineering science from Rensselaer’s Hartford Graduate Center in 1965. A current Rensselaer student has made it his own mission to find out more about Swigert and to spread the word about his Rensselaer roots.

Mark Overberg ’95, who earned a bachelor’s in engineering physics and is pursuing his master’s in that subject, happened upon the Rensselaer connection when he was reading a book in Folsom Library.

“I had seen Apollo 13,” he recalls, “and I was itching to get back into being a space program buff like I was when I was younger.” He picked up a book on astronomers’ biographies, “and I looked up the ones whose names I knew offhand.”

When he saw Swigert’s connection to Rensselaer, Overberg eagerly brought it to the attention of Les Gerhardt, assistant dean of engineering and one of the organizers of the new Engineering timeline display in the Jonsson Engineering Center (see Rensselaer, June ’96). Gerhardt agreed that Swigert should be included in the timeline, and gave him the go-ahead to gather materials for the display.

Overberg contacted NASA, the Colorado Republican Party, the U.S. House of Representatives, and colleagues and personal friends of Swigert.

“The thing I like most is the process of trying to find this stuff,” Overberg says. “It’s sort of like writing a research paper—where can I go to find out more?” His search was rewarded with literature and memorabilia from the Congressional campaign, as well as much background material on Swigert. He also received personal letters from astronauts Walter Schirra and Fred Haise, Apollo 13’s lunar module pilot (portrayed by Bill Paxton in the film).

“One major untruth in the movie Apollo 13 was the inference that Jim Lovell and I had a technical concern about the crew changeout a couple of days before launch,” Haise wrote in his letter to Overberg. “Jack was one of the most knowledgeable people in the program about the workings of the CSM [command and service module]. His initial major contribution as an astronaut was to develop the first ‘malfunction book’ for the CSM. This document is your on-board bible on how to diagnose and deal with system failures.”
friends come watch the orbiter insertion, and the burn, which slows the spacecraft to the right speed so that it is captured by Jupiter's gravity. If it's going too fast, it will exceed the gravitational field and just fly by Jupiter like the Voyagers did. The orbit insertion was performed flawlessly."

Klotz, who received a master's in biomedical engineering, began building hardware for Galileo in 1981. He left JPL in 1985 and returned in 1991, rejoining Galileo this time as an engineering analyst for the orbiter engineering team. He worked on the attitude control subsystem responsible for controlling the spacecraft's pointing, stability, and configuration, as well as the pointing of the spacecraft's remote sensing platform, which holds the spacecraft 'cameras,' Klotz explains.

One disappointment in the mission occurred when Galileo's high-gain antenna failed to open as planned. The backup antenna would only transmit at about 10 bits per second from Jupiter, according to Klotz; the main antenna, however, was designed to transmit at 1,200 bits per second.

"We couldn't get data back as fast as we'd have liked," Klotz says. "So my colleagues and I helped write new software to compress the image data and feed it back to the main computer on the spacecraft for storage on the tape recorder and eventual downlink to Earth. Since I had been working on the attitude control computer, I was a key person in developing the data compression software.

"That job allowed me to integrate many skills," says Klotz, who has since left the Galileo project and returned to building hardware. "I had opportunities to analyze spacecraft telemetry data using existing software packages, to program my own tools to aid in data analysis, and to learn to use new software tools. But most of all, I had the opportunity to work on a complex spacecraft that has, and will, continue to make some of the most exciting space discoveries of this century."

That sense of discovery is what drew all four alumni to NASA and JPL. "I like doing stuff that no one else in the world is doing," Herrera says. "Every task and job is an opportunity to do something that hasn't been done before."

"I've always wanted to work in space exploration, especially JPL, since all the great discoveries of the solar system were made from JPL spacecraft, like Voyager and Viking," says Cheng. "When I was young, those programs inspired me, and to have the opportunity to work here was very much a dream come true."

For D'Amario, who has worked on this mission for 19 years, Galileo represents an end of an era. "I'd like to work on something different than Galileo. Galileo is the old megabucks, big science mission. The new missions are less expensive, their science is more focused, there are fewer science instruments and the whole development of it, the way you operate the spacecraft, is simplified to reduce costs."

"Galileo is a grand mission with lots of wonderful science," says D'Amario. "It's an outer planet mission, which is inherently more difficult and has greater payoffs. There are not going to be many more like this." ▼

Crystal Growth Pioneer

Heribert Wiedemeier, a research professor of chemistry, holds the record for the most space-borne experiments by a single researcher.

Wiedemeier, who pioneered crystal growth experiments in space with the first Skylab mission in 1973, had two experiments aboard the March Columbia flight.

He has been looking for ways to improve the production of crystals in laboratories here on Earth—something that's critical to advances in electronics.

In his most recent space experiments, Wiedemeier has been growing crystals of mercury cadmium telluride on a cadmium telluride substrate. This crystal holds great promise for improvements in night-vision devices and medical instruments that sense minute differences in temperature. Such devices require crystals more nearly perfect than those that can be produced on Earth at the present time.

On Earth, for example, newly grown crystal layers of mercury cadmium telluride are degraded by gravity-caused convection and by imperfections in the cadmium telluride substrate.
As Martin Glicksman and his team gear up for the next shuttle flight—scheduled for 1997—other Rensselaer researchers have their own NASA-funded projects under way:

Aleksander Ostrogorsky, associate professor of mechanical engineering, has received NASA support to prepare an experiment that will try to create a "nanogravity" environment aboard a spacecraft.

Ostrogorsky, who has received ASA support for ground-based experiments since 1993, has been approved for "flight-definition" research that could send his crystal growth experiment into space in 2001.

Ostrogorsky has developed a system that dramatically reduces the effects of gravity in ground-based crystal growth experiments. In his system, a baffie placed in the melted material as it solidifies slows down fluid motion, eliminating much of the mixing that normally results from gravity. NASA hopes to send this system into space to see if it can slow mixing during solidification in microgravity, reducing the effects of gravity and creating an effective "nanogravity" environment.

Linnda Caporal is considering what might be done to make life and work in space easier and more productive. Caporal, associate professor of psychology in Science and Technology Studies, is a member of a NASA Disciplinary Working Group on psychology and behavior, a team of scientists considering research to help humans survive and thrive during—and after—long missions in space.

The group has begun outlining goals and guidelines for research that would help enhance the well-being, performance, and flexibility of workers in space and would help them cope with unexpected events and poorly understood psychological phenomena. The group was formed in anticipation of the International Space Station Assembly project, known as ISSA.

"The ISSA project provides an unprecedented scientific opportunity to study the development of a microsociety," she says. "The opportunity to study how people of different cultural backgrounds interact to achieve a common goal will have far-reaching ramifications."

NASA also has approved a four-year preflight grant for a Rensselaer experiment in thermo-fluid physics that is expected to go into space in about the year 2001.

Chemical engineers Peter Wayner Jr. and Joel Plawsky are co-principal investigators on the project, which is designing a heat exchanger with no moving parts to control the temperatures of critical components inside a space capsule. The research also is advancing scientific understanding of how intermolecular forces govern the interfaces between solids, liquids, and gases.

Wayner and Plawsky are working on a constrained vapor bubble thermosyphon (CVBT), a small, wickless heat pipe built by introducing a liquid into a small, glass cell. On Earth, liquids within such a heat exchanger flow under the influence of gravity, capillarity, and intermolecular forces. In space, the goal is to use only capillarity and intermolecular forces, making pumps unnecessary.

Leil Myrab, associate professor of mechanical engineering, has been working on ultra-lightweight spacecraft, boosted by lasers and microwaves, for eight years with funding from NASA, the Air Force, the Strategic Defense Initiative, and the Space Studies Institute.

With Professor Henry Nagamatsu, who has an important role in American rocket and spacecraft design since the 1950s, graduate students Jack Marsh and Don Messitt tested the "air spike" concept in Rensselaer's hypersonic shock tunnel last fall. The test was successful at Mach 10—less than the speed needed to bring a spaceship to orbit, but fast enough to show that the concept works, they say.

In the air spike system, focused microwave beams create shock waves ahead of the spaceship to drive the air out of the vehicle's path. These shock waves act as an efficient hypersonic inlet for the craft's air-breathing magnetohydrodynamic fanjet engine.

Scientists, engineers, and government officials are beginning to realize that the aerospaceplane and similar launch vehicles that depend upon on-board fuel systems are too heavy and expensive and may never be an affordable approach to routine access to space, according to Myrab. Many also believe that chemical fuels are simply not energetic enough for this purpose.

But a personal "lightcraft" could be in our future, says Myrab. The inflated, lens-shaped craft would weigh less than a small automobile (1,200 lbs.) but would cover one side of a tennis court (33 feet in diameter).

Powered by space-based microwave transmitters, the craft could speed people from New York to Australia in 45 minutes or take visitors on a trip to the moon in five and a half hours.
While an estimated 17 percent of Americans have access to the Web, all students, faculty, and staff on Rensselaer's campus can browse the Web 24 hours a day, seven days a week. And, according to a recent survey, nearly 55 percent of our alumni have Web access.

**YOU CAN'T IGNORE IT ANYMORE. The World Wide Web—that part of the Internet that allows for the time-efficient exchange of visual and interactive multimedia content between networked computers anywhere in the world—is quickly becoming as much a part of our everyday life as the billboards we drive by and the magazines and TVs we turn to for news and entertainment.**

More than two and a half years ago, Rensselaer's Web site (http://www.rpi.edu)—the front door to Rensselaer's vast library of Web content—made its debut. In the time since, the Rensselaer community—prospective students, students on campus, faculty and staff, alumni and friends—has experienced developments in the Web that are enhancing both the way we connect with Rensselaer and the way students learn while they are a part of our academic environment.
Connecting with campus via the World Wide Web

Over the past year hundreds of high school students visited campus without ever speaking to an admissions officer, scores of alumni attended the Big Red Freakout without ever setting foot in Troy, and dozens of corporations recruited students without ever seeing a printed resume. They all had one thing in common: they used the World Wide Web to connect to Rensselaer in a way not possible only a few years ago.

TO APPLY TO RENSSELAER, CLICK HERE

"Perhaps the greatest impact the Web has had for us so far is our ability to communicate with international students," says Theresa Duffy, dean of undergraduate admissions. "The Web allows them to explore RPI in their own time horizons," she says, referring to the 24-hours-a-day, seven-days-a-week availability of admissions information on the Admissions home page. Interested high school students can access a myriad of information including links to financial aid resources, answers to the most common admissions questions, and the full text from Rensselaer's academic catalog.

Students are contacting the school via e-mail and this fall for the first time Rensselaer received applications that were downloaded from the Web. Is the Web ready to replace the traditional admissions process? "Not yet," says Duffy, "but, within five years things will be different." Right now even the most generous estimates say that less than 50 percent of high school students have access to the Internet; however, Duffy points out that "the students that are most likely to come to Rensselaer, those who are strong in math and science and comfortable with technology, are also the ones who are going to utilize the Web."

TO GET A JOB, CLICK HERE

Decades of graduating seniors eager to complete a job search have experienced some of the traditional rites of passage: writing and typesetting a resume, researching potential employers, preparing the envelopes, and making follow-up calls. Today things are different. You write a resume, convert it to HTML, hotlink it to your portfolio, post it on the Web, and check your e-mail daily.

Rensselaer's Career Development Center (CDC) was a pioneer in the use of the Web. The office had a home page almost two years ago (a veritable eon in Web history) before many universities were even on-line. "CDCs have traditionally been huge paperwork brokers," says CDC Director Tom Tarantelli. "We've seen a 75 percent reduction in paperwork and are not far from a completely paperless recruiting office."

The CDC is expanding its services and within the next year will allow students to regis-
December, memory in the 3033 mainframe was expanded by 50 percent, to total 12 megabytes, significantly improving service.

1983—A new IBM 3081D — at first with only one processor running, but equipped with 16 megabytes of memory — was installed on campus. At about the same time, the last keypunch machines were removed from the computing center.

1985—RPI connected to the University of Michigan via a leased line as part of an effort to tie together all sites using MTS.

1986—On March 25 Rensselaer registered the Internet domain name “rpi.edu” and became the 112th organization with a Class B license. All campus buildings were connected electronically with a broadband network, allowing faculty and staff to hook up their desktop machines to the network.

1988—Rensselaer opened the Public Access Workstation Laboratory, the first lab that gave students access to high-powered computers running Unix. Usenet was made available on campus via MTS and in the PAWL. Late in December, the 3081 mainframe was replaced with an IBM 3090.

1989—The World Wide Web information service appeared, but information browsers such as Mosaic and Netscape hadn't yet been developed.

1993—Early in the year, a member of Rensselaer's computing staff sat in on a “works in progress” session that included a preview of the Mosaic browser. In June, the staff began testing it on campus and in September, began preparations for a server.

1994—In January, www.rpi.edu, Rensselaer’s main Web server, was launched to bring together the growing number of Web information sites on campus.

1996—Slightly more than two years after information browsers went into widespread use, World Wide Web traffic has surpassed all other loads on the Internet.

AlumServ lets alumni around the world stay connected with what’s happening at Rensselaer today.

Sponsored by the Rensselaer Alumni Association, the AlumServ Web site provides easy, one-stop access to news and information about Rensselaer today. “AlumServ provides timely campus news in an entertaining format, and helps reconnect Rensselaer graduates to the school and to their classmates,” says Peg Aldrich, director of alumni relations.

AlumServ has links to more than 30 sites, grouped into six categories for ease of browsing. The “Take Note” section highlights the latest university news and events. “Alumni Connections” includes links to alumni resources such as the alumni e-mail directory and regional club contacts. It also gives information about upcoming alumni events and allows you to update your current address and employment information on-line. The “In the Spotlight” section has included photos and notes from this year’s Reunion, a “virtual GM Week” tour complete with an interactive game and video footage, and sights and sounds from the Big Red Freakout.

AlumServ also includes links to several on-campus publications, including the Polytechnic, and this month will debut the on-line counterpart of the alumni magazine. Rensselaer.MAG will carry the feature stories of the printed version along with many of the same departments. In addition, the on-line version will have unique content, indicated in the print version with the following icons: more text related to a story, additional photos, audio/video footage, and links to related Web sites.

“Rensselaer Athletics” is already one of the most popular features of AlumServ. It links alumni to information on Rensselaer’s sports teams including up-to-date hockey, football, and basketball scores.

A recent survey of Rensselaer alumni indicated that almost half are accessing the Web. “We’re reaching out to people who haven’t connected before,” says Aldrich. “With a couple of clicks, alumni can be part of what’s happening on campus.”

*You can access all of the Web sites referenced in this article from the following Web page within our on-line version of this magazine: http://www.rpi.edu/dept/NezvsComm/weblinks.html. Also, read about John December, a Rensselaer doctoral candidate and widely published author on communicating via the World Wide Web.
Integrating the Web into the academic experience

When instructor Mick Doherty walked into the Sage UNIX lab for the first session of the course he was teaching last spring, he carried no paper with him. No syllabi. No dreaded first-day-of-class homework assignment. No lecture notes.

Had Doherty, a doctoral student in rhetoric and communication, failed to prepare? Hardly. Each student in his class had in front of him or her a computer workstation with access, via the World Wide Web, to all the information they would need for the course. The syllabus, homework assignments, class notes, and the course text—the World Wide Web itself—were all available from the course’s home page.

It’s not surprising that Doherty’s course relied so heavily upon the Web. After all, what else would you expect from an experimental course called Writing to the World Wide Web?

Faculty and instructors across campus are integrating the Web into their curriculum, and, in the process, pioneering the kind of education Rensselaer will deliver in the 21st century.

Last spring semester, more than 50 courses had home pages registered on Rensselaer’s Web site. Even in its most rudimentary form, a course home page can serve as a convenient central space where class members can go to find homework problems and solutions, lecture notes, and links to related resources on the Web.

But beyond using the Web as a handy tool for class administration, a number of teachers, such as Doherty, are exploring how they can use the Web to draw their students into broader and more invigorating academic communities that go well beyond the traditional classroom walls of Rensselaer’s campus.

In Writing to the World Wide Web students find themselves challenged to think differently about their writing because they are publishing their work to real people all over the world. “The students are not just writing to me anymore,” says Doherty. “The second they realized that everything they put on the Web was available to the world, it changed the way that they thought about what they were writing.”

The class created a virtual town on the Web, called Filigree, that serves as an interface to the class’s final projects. A visitor to Filigree will find Web sites ranging from a home page for the men’s basketball team to a collaborative work of hypertextual fiction titled Coraline Dreams.

Unlike a traditional college composition course, students in Writing to the World Wide Web had to consider the visual components of communication that are central to the Web. This fall, Rensselaer’s new undergraduate program in Electronic Media, Arts, and Communication (EMAC) welcomed its first class of students who will study the art of communicating in the digital world.

“If students want to learn to communicate effectively today, they have to know how to write,” Doherty explains. “But writing doesn’t just mean text anymore. They also have to know how to design. But design doesn’t mean just pictures anymore. And it’s all blending together in this sort of wonderful chaos called the World Wide Web.”

Associate professor Selmer Bringsjord’s logic students have also benefited from the broader community of scholars they have become a part of when they enroll in one of Bringsjord’s Web-integrated classes. Using symbolic logic courseware, students work out solutions to logic problems that they then make public on Bringsjord’s Logic Web site—a site he believes is one of the most robust in the field.

Bringsjord has seen a noticeable jump in his students’ motivation and enthusiasm since he has begun integrating the Web into his classes.

Bringsjord relates the experience of one student: “Within 24 hours of one student posting a new, more efficient solution to a classic Turing Machine problem, we were bombarded by e-mail from other people saying, ‘How is this possible? How did he do that?’ This student really did an amazing thing with that machine and now he’s getting notoriety and a sense of satisfaction.”

The visual communication that the Web allows for has proven to be an intriguing medium for Distinguished Visiting Professor Brian Lonsway’s architecture students. “I hope my students can use the Web in the same way that architecture students have used paper or pin-up boards to express their ideas,” he says. In the upcoming academic year he plans to teach a course where collaborative expression between students and faculty can occur any time and anywhere via computer-mediated communication.
Alumni Support Adds Up
Rensselaer Annual Fund seeks to increase number of alumni donors

Dick Bouchard '58, national Annual Fund chair for 1996-97, has set an important goal for the fund: increasing the percentage of alumni who give.

"Alumni annual giving has always been important because it directly benefits students and faculty," says Bouchard. "Increasing alumni participation in the Rensselaer Annual Fund is vital because the fund supports financial aid and scholarships, curricular development, and renewal of the green-roofed campus—needs that continue yearly."

U.S. News & World Report and others include participation in annual giving as part of the formula used to set rankings of colleges and universities. By increasing the percentage of alumni who give, graduates can positively affect Rensselaer's standing in these rankings. Equally important is the benefit of alumni giving on others' perceptions of Rensselaer. For example, many potential students and their parents view participation in annual giving as a gauge of how alumni feel about the Institute.

Jay Webb '61 and Ray Weisner '75, who have more than 20 years of volunteer experience between them, are co-chairing the phonathon program that begins this month with 300 alumni, students, and friends working as volunteers. Other volunteer leaders are Glenn Brown '54 and Patrice LaBelle '72 (Patron-level support), Alex Young '58 (trustees), Ray Ash '60 (corporate match), Teresa Duffy and John Kolb '79 (faculty/staff), and Jay Stolzenthaler '65 (parents).

The entire Rensselaer community will be asked. Your gifts can be made with either cash, securities, or credit cards. If you or your spouse work for a company that matches gifts to institutions, you can double the impact of your gift.

RAA Backs Walker Renovation

Through their personal philanthropy, hundreds of Rensselaer graduates have generously supported the Walker Laboratory renovation project. Now the Rensselaer Alumni Association (RAA) has added its name to the list of leadership donors for this project with a $100,000 gift.

The gift was meant to challenge all alumni to become involved—not just in the Walker renovation but in the interactive learning initiative and other initiatives that influence student life, according to Peg Aldrich, director of alumni relations at Rensselaer. "The RAA has certainly supported a variety of campus initiatives over the years, but this is a huge step forward in demonstrating the RAA's partnership with the Institute," she says.

The resolution making the gift, which was passed at the RAA's March board meeting, affirmed Rensselaer graduates' commitment to the Walker project and to interactive learning, the pedagogical initiative that is the motivating force behind the Walker project.

"The strongest initiative in higher education in the United States today is interactive learning, which is being pioneered by the Institute," the resolution says. "The Walker/Carnegie initiative and its laboratories will provide the single most important platform upon which the Institute will continue and enhance its premier position of leadership among technological institutions of higher learning in the United States."

(Left to right) RAA President Michael Jbin '71, Paula Loring Simon '68, Rensselaer President R. Byron Pipes, and Mark Feinstein '77

As this magazine went to press, Rensselaer successfully completed "the Kresge Challenge." The challenge was created by a commitment of $750,000 from the Kresge Foundation—if Rensselaer's philanthropic supporters made $3.1 million in new gifts and commitments. The award, announced in June 1995, supports the renovation and re-equipping of the Walker Laboratory. Look for a complete report in the December issue of Rensselaer.

Max Bleck '50, retired president of Raytheon, and his wife, Gloria, have made a gift to support the renovation of Walker Laboratory by creating a charitable unitrust fund. Bleck is a member of the Advisory Board for Rensselaer's School of Science.

With two separate commitments, the Center for Entrepreneurial Leadership (CEL) at the Ewing Marion Kauffman Foundation has provided substantial new support for Rensselaer's educational programs in technological entrepreneurship. The center has awarded $65,652 to enable Rensselaer to implement the CEL's "EntrePrep," a program that introduces high school students to entrepreneurship. It has also pledged $50,000 to support internships for graduate students in entrepreneurial companies affiliated with Rensselaer.

Martin Schoffstall '82, a founder of the Internet provider PSINet, has donated shares of stock in his company to Rensselaer's computer science department. The gift will make possible a fellowship to a graduate student, a new colloquia series, and renovations to office and lab space in the department.
More than 1,150 alumni and their guests came to campus June 6 through 9 to celebrate Reunion '96.

"I can't begin to describe what a wonderful time I had at our 30th class reunion," says Walt Grube '66. "There was an instant bond with anyone I spoke to, from our class or other classes. As RPI grads, we all really do belong to a very special fraternity."

One event at which all classes enjoy a taste of each other's eras and an opportunity to "strut their stuff" is the annual Parade of Classes. With vintage cars interspersed, each class presents itself to a panel of judges, vying for parade honors. (Innovative bribes don't hurt.)

The Class of '76 brought along special guest President Clinton (who bore a striking resemblance to comedian Jim Flaherty '76). He deliv-
ered a “presidential proclamation” to the parade judges declaring his class the best. The judges tactfully awarded their parade entry the “Most Politically Correct.”

In addition to class dinners and receptions, alumni attended a variety of campus tours, academic open houses, and alumni college classes, including a popular session on “Untangling the Web.”

The highlight of every reunion is renewing old friendships and remembering old times.

“We spent three wonderful days and evenings together reminiscing about the good old days,” says Bill Baldwin ’41. “Funny thing, we griped most extensively while we were living through those undergrad years, but now all we heard about were those ‘glorious times’!”

As the weekend came to a close, future plans were already in motion.

“It’s the first time I have been back to RPI, but I know I won’t miss another reunion,” says Grube.
ALUMNA RECEIVES
RAA’S HIGHEST AWARD

Fitzroy, retired engineering manager of GE’s gas turbine division, was among the first engineers to work on the design of heat-transfer surfaces in nuclear-reactor cores. In 1995 she was elected to the National Academy of Engineering. She is a fellow and served as the first woman president of the American Society of Mechanical Engineers. At Rensselaer she has been an active volunteer and Patroon.

“Through ongoing enthusiasm, constant innovation, and consummate generosity, you have made yourself an example of success and spirited leadership,” said President R. Byron Pipes, who presented the award to Fitzroy.

Also at the awards ceremony, Albert Fox Demers Medals were awarded to four alumni in recognition of their outstanding efforts on behalf of the alumni body, and nine Alumni Keys were presented, in recognition of outstanding service to Rensselaer, particularly to alumni chapters and classes. (See photos.)

The Office of Alumni Relations awarded director’s chairs to Cynthia Banks ’84, Lynn Brown, Edward Dague ’65, Daniel Fridgen, Charles Player ’96, and Jan Pirrong ’69 for their contributions to the success of the RAA.

The RAA presented its third annual Teaching Award to Robert Messler Jr. ’65, associate professor of materials engineering. “Thank you for honoring me for what is an honor for me to do—teach,” said Messler.

The Craig W. Angell ’35 Outstanding Chapter of the Year Award was presented to the 50 Year Club. Val Dyer ’34 and all members of the club who were present stood to accept the award.

Andrea Karp Manfredonia ’92 accepted the Chuck B. Monis ’50 Most Improved Chapter of the Year award for the Rensselaer Chapter of Long Island. Jim Peta ’64 accepted the Phonathon Cup for the Rensselaer Chapter of Greater Hartford.

The RAA’s 10th annual awards dinner took place on campus in the Russell Sage Dining Hall during Reunion ’96 weekend.
Class Notes

Class Notes Deleted for Privacy Concerns
In 1929 I graduated from Saranac Lake H.S. I applied to GE for their Technical Training Course. What I got was a factory job making home-type radios. Till then these radios used A, B, or C batteries. We replaced them with a ‘socket power unit.’ My job was to test the S.P.U.s. The Schenectady plant was started to manufacture large electrical generators to supply power for Edison’s newly developed electric lamps. Edison became annoyed with GE when they decided they had to make A.C. generators to compete with Westinghouse. The A.C. system was promoted by Nicola Tesla. If Edison’s advice was followed we would not have worked on transformers. Without transformers we would not have long-distance, high-voltage, hydraulic power generators. Nor radios, TV, radar, worldwide telephones, computers, cosmic research. Everyone knows who Edison was. Did anyone ever hear of TESLA? (Rhetorical!)

“While I was working at GE I met two fellows from RPI doing summer work. After the October 1929 business crash GE shut down radio manufacturing. For five years most radio makers declared a moratorium. Most radios were made by RCA in Camden. RCA added other manufacturers’ labels, as required, and requested. I was laid off by GE, and signed up with RPI in September 1930.”

I heard from Dave Parry in March. He was planning to take the Auto-Train from Orlando to Virginia to visit his son and family in Virginia. He had recently received a genealogy of the Dyers in Harriet’s (his second wife’s) family. He met his Harriet in 1950 and she died in 1985. Only got to one 1934 reunion. My branch of the Dyers went from Ireland to New York during the potato famine, and were not here to foment the revolution in 1776. Irma and Herb Clark wrote in April: “We are living a quiet lifestyle. We enjoyed our 57th anniversary in February. We bowl in a senior league every Wednesday. I have gotten up to the 160s since bowling in Troy 58 years ago. Irma beats me. My leg mobility has prevented our resuming our travels.” They were planning to enjoy their boat on Lake Lanier in the spring.

Doris and Charles Horsfall ‘44 also wrote in April, from Boynton Beach, Fla.: “We are planning on closing this place in April and driving to Connecticut. Hope to see you up there. Bob Ducatte has written to tell me that I have been elected to the RPI Athletic Hall of Fame. This was a nice surprise, as I have been working on other members of the ‘40s classes.”

Florence and Warren Haring sent an article from the spring issue of the Tau Beta Pi magazine: “My memory of 62 years ago lit up when I ran upon the enclosed article by our classmate Ralph Peck. While Ralph states he has not included comments about the very fine professors under whom he was privileged to study, perhaps he would be willing to do so for the alumni news column.” Warren adds that he remembers Ralph as being our class valedictorian and recipient of citations at graduation. Florence and Warren escaped part of the brutal North-east by roaming some 3,300 miles through the national parks and Indian country of New Mexico, Arizona, and southern California. Warren says that he and Florence are still able to do all their household chores. Florence is the sister of Everett Burdick ’32. My memory is that Ev Burdick in May of ’31 succeeded Bob Warnecke ’31 as President of the Union. That could be a faulty memory.

Wier Smith confirms that they have sold their Florida condo and are now in Pennsylvania at: 427 Wyndham Court, Williamsport, PA 17701. George Fraga reminds me that a lot depends on health and taxes, including traveling 3,000 miles from California to Troy. When all falls in line they will come to the next reunion from: 624 Ninth St., Manhattan Beach, CA 90266, phone: (213) 379-0850. Classmates should phone him when they are in the area.

Arthur Hofmann
655 W. Lake Jasmine Cir.
Apt. H-107
Vero Beach, FL 32962

Please note my new address and then send me your news!

John Byron
34 Marlboro Road
Delmar, NY 12054

Our 60th reunion, held during the June 6-9 weekend, even though the monsoon season, started prior to the alumni picnic and lasted through the 50 Year Club banquet on Saturday night.

Eighteen ‘36ers all sound of mind and limb—relatively speaking—journeyed to Troy from various locations (Zemaitis from California) and all had a good time trading lies.

For brevity I will list only the surnames of the attendees: Abplanalp, Bacheller, Beddow, Beluscio, Byrion, Fratar, Glasscock, Grimm, Kestner, Knapp, Luenning, Marusi, McDermott, Morgan, Mussell, Ross, Ruggeri, and Zemaitis. The remainder of you reading this, eat your hearts out—you missed a good one.

Charlie Harper
22 Roxbury Road
Port Washington, NY 11050

60th Reunion: June 5-8

First—the mail. I’ve heard from three of you since taking on this job. Not bad for a start—but there are 139 names on the list of survivors, so I sure hope the mail will get heavier. Predictably, Bob Gorton was the first to check in. He had relatively little news, but several questions, some of which I was able to answer, and did. He did mention a visit to the campus of the University of Wyoming, where his daughter and son-in-law are spending a sabbatical year. He noticed that the fire plugs on the campus carry the name “Rensse­laer” cast in big letters—products of a valve company that we visited on field trips in RPI years. He indicates his intention to be at our 60th in ’97—more on that later.

Sam Johnson sends greetings, but again, no “hard news.” Says they are in Florida at a fly-in community, Oct. 15 to May 15, and in Maine, near Bath, the rest of the year. Invites visits.

Len Borg also says he intends to be at the 60th. He has a little more news. He just bailed from a trip to Israel and they were planning a family come-all-you in May to celebrate both his and Nat’s reaching the Big Eight-0.

I might add that my own kids put on an affair in December at No. 2 son, Tom’s, home in Houston to observe his 80th.

I’ve had word from the development office—our Scholarship Fund is doing well; has a market value of $257,750. Two New England kids have received substantial help this year. Once in a while I get a card or letter from one of our scholars, thanking us. Keep up your contributions, and think about a bequest so our contribution will outlive us.

It’s time to start thinking about Reunion ’97.”—our 60th. On April 13, Chuck Dauchy and I attended a meeting in Troy, called for the purpose of planning ’97 reunions. Most of the reunion classes from ’37 to ’92 were represented. It was fun—lots of chatter and give and take. Class reps were asked to state goals. Chuck and I said we had only two—to get as many guys as possible to come back, and to have some kind of event strictly our own. After the 50th, they tend to roll all the classes together into the 50 Year Club, but we think we got them to recognize the unique character of our class. We’ll probably have our own luncheon on Friday of the reunion weekend, any other time would conflict with major events of general interest.

So I guess we’ve got one of our goals pretty much in hand. As for the other one—getting everybody there—start thinking Troy, June 5-8, 1997. Plan to be there and let’s set a record for attendance by a 60-year class.

These notes are being written some time ahead of the deadline. I’m off for a month in the British Isles; tell you about it next time.

P.S. Following are additional notes submitted following Reunion ’96 Weekend, June 6-9:

First—I suppose you noted with sadness the death of Bob French in February. Thornton Stearns, who was close to Bob both geographically and personally, tells me that Bob was able to contribute to the care of his wife until her death just before Christmas, but declined rapidly after that. Always sad to lose another one!

Getting back to the recent reunion—I went up to join the fun. Went to the Awards Dinner Friday night, the picnic Saturday noon, and the 50 Year Club dinner Saturday night, featuring the induction of the members of the Class of ’46—kids! The food and the programs were well handled on all three occasions; menus showed some imagination. I’ve got to say I’m a great fan of the way Peg Aldrich and her staff handle a reunion; you should come and see! Peg has really grown in her job.

The Class of ’36 had 16 registered at reunion. Let’s hope we can beat that by a substantial margin.

Only other item is a note from Dick Anderson in which he suggests that attendance at reunion might be helped if some of you are able to get together with others who live nearby to share travel arrangements. If some of you have questions about who lives near you, I’d be glad to try to help; I have a list.
After months of anticipation, our recently had a telephone call and we extend our condolences to his family. We had an interesting career activities, which reported the death of her husband, and most pleasant conversation Aica l engineer in the Class of'39, and we enjoyed, and is now history. A total of 23 members of the Class of '41, nearly half with spouses, spent parts of three wonderful days and evenings together reminiscing about the good old days. Funny thing, we griped most extensively while we were living through those undergrad years, but now all we heard about were those "glorious times!" It is impossible to write about all the conversations we had with the other 22 classmates. However, we dined with Fred Schnatz, Lee Yager, Dick Lewis, Dot and John Williamson, Arlyne and Karl Winkler, and Ruth and Charlie Estey. Chatting with Frank Brockett revealed that two of his granddaughters graduated from college this year—one from Barnard in New York and the other clear across the country from Washington State University. Ted Brundage was there with his bride, Mary. Also much in evidence were Charlie Carman, Lloyd Hixon and Maria, Art Johnson, Pete Layton, Bob McCartney, and Frank Sherry. We also talked with Floyd Wondisford, Frank Tocher, Abe Slepian, Andy Nugent, Mike Misulka, Merve Cooper, and, of course, By Forster and our class president, Jack Davis. It has been suggested by a cohort that it would be interesting to hear what means of transportation everyone used to arrive at campus for your first days of classes in September 1937, or whenever you started. Mine was rather mundane—my parents drove me there! But I’ve heard a few rather wild and unusual tales of traveling to the hilltop in Troy that I will share with you when I have heard from all of you (I hope) as to how you got there. Watch for 50 Year Club meeting notices and try to meet us at some of these events. Beats waiting for the 60th reunion in 2001!

55th Reunion: June 5-8
Ellis Rowlands and Archie Love are making plans for your upcoming 55th reunion. Be sure to save the weekend of June 5-8, 1997, and plan to come back.

H.W. “Pete” Peterson sent the following note: “It seems like an eternity has passed since the days of thermodynamics and differential equations. The first few years as an aeronautical engineer with Chance Vought Aircraft were followed by a career in the Air Force, then eight years in a civilian capacity with NASA and the Department of Defense, followed by 10 years or so of having my own business. Now that I’ve retired three times, I think I’ve got the hang of it.

“Archaeology, civic activity, and retirement are now the pleasures to be enjoyed. We’re blessed by being able to live in a condo overlooking Clearwater Bay in Florida during the winter and having a home on Table Rock Lake near Branson, Mo., during the summer. The fields and streams of the Ozarks are an archaeologist’s paradise, and Florida also provides opportunities for archaeology digs. The foregoing, together with being chairman of the board of trustees for the Missouri Archaeology Society, consumes just about all the time available. It’s great to be involved and enjoy every moment of it.”

The New York State Society of Professional Engineers awarded Dr. Richard Schwartz, P.E., the 1996 NYSSPE Contributions to Education Award in June. Dr. Schwartz is professor emeritus of electrical engineering at SUNY-Binghamton. He retired last August after spending 10 years at SUNY. Prior to that he taught electrical engineering at Michigan Technological University, the University of Pennsylvania, and RPI, as well as spending some time as an engineer in industry. Walter “Mac” MacCarthy has volunteered to pick up the pen from “Mac” Schecty, who served well for many years as your class correspondent. (It really isn’t a requirement that your name be “Mac” to serve in this position!) He looks forward to hearing from you. Send your news to Mac at the address listed at the top of this column.

We recently had a telephone call from Elizabeth Banton, who reported the death of her husband, Clarence W. Banton. Clarence was a much-liked chemical engineer in the Class of '39, and we extend our condolences to his family. We had an interesting and most pleasant conversation recalling events in the life and career of Clarence. Elizabeth promised to send us details of his career activities, which will be reported at a later date.

Paul Frost 14 Belmont Ave. Camden, ME 04843
Bill Baldwin 376 Guenevere Drive Pittsburgh, PA 15237

After months of anticipation, our 55th-year reunion has come, was enjoyed, and is now history. A total of 23 members of the Class of '41, nearly half with spouses, spent parts of three wonderful days and evenings together reminiscing about the good old days. Funny thing, we griped most extensively while we were living through those undergrad years, but now all we heard about were those "glorious times"! It is impossible to write about all the conversations we had with the other 22 classmates. However, we dined with Fred Schnatz, Lee Yager, Dick Lewis, Dot and John Williamson, Arlyne and Karl Winkler, and Ruth and Charlie Estey. Chatting with Frank Brockett revealed that two of his granddaughters graduated from college this year—one from Barnard in New York and the other clear across the country from Washington State University. Ted Brundage was there with his bride, Mary. Also much in evidence were Charlie Carman, Lloyd Hixon and Maria, Art Johnson, Pete Layton, Bob McCartney, and Frank Sherry. We also talked with Floyd Wondisford, Frank Tocher, Abe Slepian, Andy Nugent, Mike Misulka, Merve Cooper, and, of course, By Forster and our class president, Jack Davis. It has been suggested by a cohort that it would be interesting to hear what means of transportation everyone used to arrive at campus for your first days of classes in September 1937, or whenever you started. Mine was rather mundane—my parents drove me there! But I’ve heard a few rather wild and unusual tales of traveling to the hilltop in Troy that I will share with you when I have heard from all of you (I hope) as to how you got there. Watch for 50 Year Club meeting notices and try to meet us at some of these events. Beats waiting for the 60th reunion in 2001!

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“Archaeology, civic activity, and retirement are now the pleasures to be enjoyed. We’re blessed by being able to live in a condo overlooking Clearwater Bay in Florida during the winter and having a home on Table Rock Lake near Branson, Mo., during the summer. The fields and streams of the Ozarks are an archaeologist’s paradise, and Florida also provides opportunities for archaeology digs. The foregoing, together with being chairman of the board of trustees for the Missouri Archaeology Society, consumes just about all the time available. It’s great to be involved and enjoy every moment of it.”

The New York State Society of Professional Engineers awarded Dr. Richard Schwartz, P.E., the 1996 NYSSPE Contributions to Education Award in June. Dr. Schwartz is professor emeritus of electrical engineering at SUNY-Binghamton. He retired last August after spending 10 years at SUNY. Prior to that he taught electrical engineering at Michigan Technological University, the University of Pennsylvania, and RPI, as well as spending some time as an engineer in industry. Walter “Mac” MacCarthy has volunteered to pick up the pen from “Mac” Schecty, who served well for many years as your class correspondent. (It really isn’t a requirement that your name be “Mac” to serve in this position!) He looks forward to hearing from you. Send your news to Mac at the address listed at the top of this column.

Herb Asbury 4395 Kapalua Drive Santa Maria, CA 93455 h. (805) 937-0628 e-mail: asburyh@aol.com

Phil Marks (AE) reports that of all the roadside historical markers in New York state, there is not one that marks the historical significance of RPI. We came to the conclusion that the sign would have to be too big to contain all the pertinent information and may become a hazard to traffic safety. Maybe we should look into making that RPI Historical Marker become real. Phil, as I have mentioned before, has a computer collection on the RPI system that you can reach on your computer. (See the details of how to reach it in the March issue.) I haven’t ventured onto the World Wide Web yet, but plan to upgrade my computer system to provide fast access. I tried to get on Phil’s site one weekend, but my system wasn’t fast enough or big enough to handle the “traffic.” I didn’t even get out of the driveway, let alone find Phil’s Web site at RPI.

The fall issue of the International Hydrofoil Society newsletter reported that the QUEST trials in the Chesapeake Bay are going well. QUEST is a Hybrid Hydrofoil craft designed to make high speed possible through rough seas. John Meyer (AE) will tell you in on all the details. You can reach him at the Carderock Division, Naval Surface Warfare Center, in Maryland.

I’m looking for more mail or e-mail sources, so write and give us a hint about what interests you.

Ed Miller ’46, the correspondent for the Class of ’46, will probably have a lot to say about
We had a great 50th reunion. Forty-eight classmates plus lots of spouses. Lots of good times to spin tales and remember 50-year-old adventures. Amazing what we can remember long-term. Most of us can’t remember what we went down to the cellar to get.

We had a few classmates back on campus for the first time since 1945. Some things look the same but the deeper you look the more change you see. You can’t help but be impressed with the students, but the new facilities are pretty great, too. Our class can take some credit for the improvements. Bill Lehrer reported our class reunion gift was over $600,000. It’s a record class gift. Hooray for us!

At our class dinner I sat with Owen Brooks. Herb Bergamini, Veedor Nellis, Fred Janson, Dan Fisher, and Tom Davis and heard some wild tales of our assignment to escort vessels during one of those mid-term training cruises out of Staten Island. It seems four at our table were on a ship whose captain loved to watch antisubmarine missiles being launched and would come out on deck with his arms at the roar of the rockets. Pity the poor whales! Well, the ship ran out of toys so they had to make an unscheduled stop in Key West for more. That is where the oft-told tale of the blue-banded hats took place. (If you haven’t heard that story, come back to campus for our 55th reunion.)

Lois Graham and Mary Rathbun Kolb were back. They were the first women graduates and their story was in the alumni news a few years ago. Mary continued her RPI connection by marrying Ed Kolb ’44, who was dean at RPI for many years.

Herb is an unretired doctor in Lake Placid, N.Y. I found out he likes to canoe and we exchanged tips and engineers to keep up with the developments in their fields and help them to stay gainfully employed in their professions. He is an elder in the First Presbyterian Church as well as with several international committees of the United Nations.

Doug MacNary and his wife, Gail, live in Knoxville, Tenn. They have four children. Doug retired in 1993 from Martin Marietta Energy Systems in Oak Ridge, where he was responsible for total quality management. In his retirement he has been able to focus his attention on his first love, small wooden boats. He designs, builds, and sails. One of his proudest accomplishments is a swashbuckler, a three-meter trimaran, which he built in his own shop. Doug is also interested in helping the blind. He has read to the blind for many years, helping many through their college literature courses. Perhaps more significant are the recordings he produces of technical papers, which enable blind scientists and engineers to keep up with developments in their fields and help them to stay gainfully employed in their professions. He is the editor of the First Presbyterian Church’s active on the church’s refugee committee.

Donald MacPeek is retired from the Union Carbide Co., where he was associate director of R&D. His area of interest was organic chemicals. He holds more than 40 U.S. patents. Since his retirement in 1982 he has developed his interest in stamp collecting into a substantial business. He is also deeply interested in the genealogy of the MacPeek family. He has written a book about the family, which was published in a limited edition and is available in local libraries in West Virginia and in the major genealogical reference libraries. Although he has been able to trace his roots back several centuries, he has yet to turn up a title or a abandoned castle, either of which might be waiting
for him to turn up. Don and his wife, Edith Graves '51, live in South Charleston, W.Va. They have three children. Edith's father was a graduate of RPI, Class of 1919. Edith and Don enjoy travel as a hobby. They make many short trips to different parts of the USA each year. There are few areas of the country they have not visited.

50
James Moore
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Blacksburg, VA 24060
e-mail: moorej@vt.edu

Just about the time that this column is being written on May 17, Theodore Slaiby will be receiving the RAA Fellows Award. This award honors Rensselaer graduates, who by their life's work have set an example for Rensselaer men and women to emulate. Mr. Slaiby earned his bachelor's degree in aeronautical engineering in 1950. He is retired from the Pratt & Whitney Aircraft Group.

John Rigas, chairman of Adelphi Cable Corp., has received an honorary degree at the commencement at St. Bonaventure University. John's purchase of Coudersport TV Cable Co. grew into Adelphi. He serves on the board of trustees at St. Bonaventure and is active in the school's athletic booster club.

Cherry and White; write, write.

51
Fred Comstock
168 Main St. North
Bethlehem, CT 06751

Stan Lash, our reunion chairman, reported that the reunion was a great success: "We had an excellent time. Our class set up a headquarters in the Playhouse, which was filled to capacity. Al Harrison brought in a barbershop quartet that sang all our favorite old songs, and we enjoyed a community sing-along. We were honored to have President Pipes address us. And we got geared up for the Parade of Classes. Howard Clarkson, dressed in toga and laurel wreath, led our ambitious parade entry, which won the prize for best presentation. Our parade theme was "Whatever happened to...?" (You fill in the blanks—Gaynors, Notty Pine,....) We wore distinctive red hats (though they were on the small side!). We had the greatest turnout of all the reunion classes—106 alumni, including several widows of classmates, and an additional 71 spouses and friends. At our Saturday-night banquet, Father Tom Phelan spoke. He highlighted the earlier grads of Rensselaer and told the story of their accomplishments and how they affected the world. The reunion committee enjoyed meeting throughout the year, and it paid off with a great turnout and a great time. If we do as well or better for our 50th reunion, we'll have to find a larger room on campus for our headquarters."

"The reunion planning committee deserves praise for doing such an outstanding job: George Wheeler, who handled the Friday night event at the Playhouse; Al Harrison, who was responsible for communications; Bob DeSio, who organized the Saturday-night banquet; and Tony Reale and Howard Clarkson, who coordinated the parade entry. If not for them, our reunion would not have been the success it was."

Received a nice long letter from Ted Baglin, who knows a lot of the '51 class but actually graduated with the Class of '35. He keeps in touch with Bob Ostmann, Gail Brichford, and Doug Francis, and was planning to attend the reunion.

The bluebird season is under way for me, but it looks like we may have lost a lot of birds this past very severe winter as they have not nested in anywhere near the numbers they did in the past several years.

52
Jack Eggleston
1137 Glenwood Road
Vestal, NY 13850

45th Reunion: Fall '97

Paul Wyzenbeek took an MBA at NYU after RPI, finishing in 1954. After 13 years at Westinghouse in electronics and atomic power, four years at Gentee Glasscase, and 15 years at Pullman Swindell, surviving multiple takeovers, he retired in '82. A heart bypass operation has slowed his activities to stamp collecting and investing. Paul maintains contact with Ray Carlin and Frank Thompson. I helped Paul re-establish contact with Gene Pierson and Frank Wolz. Paul is in Monroeville, Pa.

Summering on Block Island, R.I., C. Richard Thave has retired from several businesses of his own ranging from testing printed circuit boards to selling boats. Now he enjoys custom carpentry and wintering on a boat in the Grenadines.

Howard Snyder earned his Ph.D. in physics in Chicago. After seven years at Brown and 28 years at the University of Colorado in Boulder, he has evolved into an expert in cryogenics, specifically with superfluid helium below 2 degrees Kelvin for cooling systems for space shots. Howard enjoys the research, so his only talk of retiring focuses on reducing his teaching load. He and his wife enjoy mountain climbing and skiing. Howard has regular contact with Bill O'Sullivan, who is head of the physics department at the University of Colorado.

Our class valedictorian, John V. Kelly, died in Framingham, Mass., on March 18, 1996.

Our class president, Graham Williams, has these classmates working on our 45th reunion next year: Phil Brock, Jack Feininger, Bill Hickey, Al Krause, Bill Lillis, Joe Mansfield, John Margenot, C.J. Nager, Bill Payne, George Rabe, Russ Roden, Cliff Werther, Harvey Zeve, and me. If you are willing to help, give Graham a call at (518) 272-2926.

Drop me a line. Your classmates like to hear how you are doing.

53
Arthur Goldstein
1 Avon Road
Larchmont, NY 10538
w: (914) 833-1039
fax: (914) 833-1048
e-mail: agaent@aol.com

Ron Secrest has always been involved with engineers and he has never met a poor-quality Rensselaer engineer. Ron and Audrey live in historic Washington Crossing, Pa., near New Hope. His factory, Kinetic Industries, is nearby in Trenton, N.J. He manufactures rectifiers and solid-state systems for the steel and oil industries. Since he left the Army in 1955, he has been running this company founded by his father in 1939. One of his three sons is now helping to run the business. As a matter of fact, two of his sons are RPI graduates, '81 and '83. With five grandchildren it seems like RPI may have more prospective candidates. Ron has been active as president of Rotary and in steel and electrical apparatus organizations. Audrey operates an antique store. For amusement they ski, play tennis, and bike. Ron graduated at the age of 20 and may be the youngest member of our class. He is planning on attending our 50th reunion, but I sincerely suggest he consider our 45th in '98 first.

Joe Gentiluomo has spent over 14 years trying to patent a better bowling ball based on the concept of inverting weight distribution. He is now suing four bowling ball companies for patent infringement. Joe promises to drag this suit on to victory regardless of his age. The Schebecady Gazette wrote up the entire dilemma on April 4.

Norm Eiss Jr., who is a professor of mechanical engineering at Virginia Polytechnic Institute and a world-class tribologist, was a panelist on "polymers" at the STLE annual meeting held in May in Cincinnati. Norm has
written three books and co-authored 50 papers, among a long list of accomplishments.

The Phi Sigma Delta reunion for classes '51-'54 was held in May at the Inwood CC, Inwood, N.Y. It was hosted by Marilyn and Stan Kahn '52. Representatives were Renee and Carl Puchall and Gloria and Arthur Goldstein. The Class of '51 had Marge and Irwin Goldstein. Susan O'Brien and Phil Brock, Pauline and Noel Siegel, Evelyn and Burt Seelig were from '52. Carol and Jerry Shaff represented '54. These reunions are fun, especially since those present seem to age so gracefully. (See photo, page 35.)

We are a well-traveled group. How about sending a fax or e-mail to me about a favorite trip, domestic or international, of recent vintage.

Sam Wait, associate dean of science and president of our class, was recently honored along with three other faculty for 35 years of service. Congratulations, Sam; your work has been inspiring.

The next 1953 Naval CE corps of officers and spouses reunion is scheduled at Carlene and Walt Wagner's house in Rawlings, Vа., in April '97. According to Ginny and Bud Cushman of Marietta, Ga., it seems these reunions are now scheduled every other year. Bad informed me and then rushed off to play his accordion and entertain at six nursing homes.

Admiral Lewis Combs '16, who was dean of the CE department for 15 years and taught all of our WWII armed forces and civilian CEs, passed away in May at the ripe old age of 101 in Red Hook, N.Y. He was credited with founding the Seabees, which was one of the best can-do organizations ever created.

Clockwise from top left: Carl Rosner '63, Martin Glicksman '57, Sheldon Weinbaum '59 and Arthur Goldstein '57.

Four of the 78 engineers elected to membership in the National Academy of Engineering this year hold Rensselaer degrees. They are Martin Glicksman '57, Arthur Goldstein '57, Carl Rosner '63, and Sheldon Weinbaum '59. Martin Glicksman '57 is the John Tod Horton Distinguished Professor at Rensselaer. This year he was the first principal investigator of a shuttle experiment to control an experiment from his lab rather than from a NASA site (see page 16). He was cited by the Academy for "contributions to the science and engineering of solidification and crystal growth processes."

Arthur Goldstein '57 is chairman and chief executive officer of Ionics Inc. in Watertown, Mass. He was cited for "inventing and developing membrane separation technology, which resulted in a world-scale desalination industry." Goldstein was awarded an RAA Fellows Award in May from Rensselaer's chemical engineering department.

Carl Rosner, M.M.G. '63, is president and chief executive officer of Intermagnetics General Corp. in Latham, N.Y. He was cited for "technical and entrepreneurial contributions to the practical application of superconductivity."

Sheldon Weinbaum '59, CUNY Distinguished Professor at the City College of the City University of New York, was the only academic elected to the NAE in the field of bioengineering this year. He was cited for "contributions to viscous flow theory, gas dynamics, and mass and heat transfer in biological systems."

This year's election of members to the Academy brings the total U.S. membership to 1,841 and the number of foreign associates to 136. Election to the NAE is among the highest professional distinctions accorded an engineer. Academy membership honors those who have made "important contributions to engineering theory and practice" and those who have demonstrated "unusual accomplishment in the pioneering of new and developing fields of technology."

Bob Meyers told me that he started a new job Jan. 1 as a regulatory counsel with Pamarco in Roselle, N.J. It has always been a good feeling to start off a new year with a fresh start. He had just returned from skiing at Killington with Marvin Menzin '56. He was planning on going on a Windjammer Cruise this summer and was in Jamaica (Caribbean, not Long Island) for four days to attend his son's (Ross Meyers '84) wedding on May 18. And he was planning a trip to Alaska in August. This sounds like my kind of idea on how to spend your life—Bon Voyage!

Remember the Poly newspaper and the Bachelor? Well, the former editor, Barry Jackson, dropped me a line. He told me that he went on after RPI to supplement his education with graduate work at a couple of universities and got his master of architecture degree from Berkeley in the '60s. He had his own architectural firm for a while but has been teaching at New Jersey Institute of Technology for what he refers to as his "second life." He says that he is much heavier than he was in school (so who isn't?) but he manages to get to the gym three times a week to keep it in the right places. Barry says that he keeps in touch with Lee Pomeroy in NYC, George Wasserman '55, and John Varsa '58. He got a little nostalgic when he started to mention the loft we archy's called home, located in the Greene Building, as freshmen. He talked about the Approach, his being a DJ on WRPI and WHAZ, and the Notty Pine and Tin Town. How much more do the rest of you remember?

I received Tirso Saenz's letter just after the last alumni news column was sent in so this news is now three months old. However, I think that you will enjoy his news as I did, other than his personal losses of his mother, and four months later, his dear wife of 39 years. He is still working as the general adviser of the Centro de Gerencia de Ciencia y Tecnologia in Cuba and was assigned the responsibility of opening an office in Spain, together with a Spanish enterprise to attract potential investors to Cuba with new products and technologies. He was to be in Aviles until May. He then expected to go to the University of Campinas, Sao Paulo, Brazil, as a guest lecturer and researcher regarding science and technology. In 1994 he was in the Dominican Republic, where he met a fellow Phi Iota Alpha fraternity member, Victor Thomen '53 (president, Itabo Industrial Park and SER-CITEC). He mentioned that Manuel Lorenzo Gomez '53 had unfortunately passed away in July 1995. Tirso said that he was made an active member of the Academy of Sciences of New York (a great honor!)

I tried to get in touch with my fraternity brother, Shelby "Put" Putnam '55, and his wife, Harris, when Ann and I were in Maine over the Memorial Day weekend, but they were on their boat, returning from their wintering in Florida, and hadn't arrived yet to the Portland, Maine, area, according to their daughter. She said that they have been retired now for five or six years and make their winter home in Florida each year.

Good news from Glenn Brown! His wife, Lynn, is doing very well with her cancer treatments. In between those she is working up to 12 hours a day in a very successful business. Keep that positive attitude you've always had, Lynn, so family and friends can continue to enjoy our gatherings as we have done in the past. See you at the next RPI reunion.

Joel Halop 2163 Paseo Cielo Santa Maria, CA 93456

As you might note from the address above, I have moved. This column's deadline finds me surrounded by boxes. I'll be back on track for the next issue. Feel free to send your news to the new address.

54 Garrett J. Geurtze P.O. Box 737 Clifton Park, NY 12065 h: (518) 664-7977

The past three months have been enjoyable with the receipt of two letters and three telephone calls from alumni with information that I can share with the rest of the classmates.

Bob Meyers told me that he started a new job Jan. 1 as a regulatory counsel with Pamarco in Roselle, N.J. It has always been a good feeling to start off a new year with a fresh start. He had just returned from skiing at Killington with Marvin Menzin '56. He was planning on going on a Windjammer Cruise this summer and was in Jamaica (Caribbean, not Long Island) for four days to attend his son's (Ross Meyers '84) wedding on May 18. And he was planning a trip to Alaska in August. This sounds like my kind of idea on how to spend your life—Bon Voyage!

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55 Joel Halop 2163 Paseo Cielo Santa Maria, CA 93456

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46 National Academy of Engineering

Four Alumni Elected to NAE

Clockwise from top left: Carl Rosner '63, Martin Glicksman '57, Sheldon Weinbaum '59 and Arthur Goldstein '57.
40th Reunion: June 5-8

We are beginning to get news through our e-mail address (noted above). We have established a database of e-mail addresses for '57 and will upload to RPI when appropriate. In the meantime, if you wish to tell us your address, we’ll put it in the file. If you want to know how to contact a '57 classmate, just signal and we’ll revert if we have it.

Just after the last issue went to press we heard from Lou Takacs. The Takacs group of companies is wide ranging in design, architecture, planning, construction, and financing, but Lou notes that he’s “proceeding at a more measured pace” these days. He’s still an active pilot, and went back to Homecoming this past fall to “watch RPI win everything but the game high-point score against Union.” Lou notes that he had a great time at Theta Chi and followed up with a Delta Theta Chi retreat in Lake George. He and Nan have five grandkids in Georgia and may have had no 6 by this writing. Summers find them often on Martha’s Vineyard, though not sailing as much as before.

Recently heard (by e-mail!) from old friends Bruce Collopy and Grant Heatitz. Bruce is in Atlanta and just retired from Cross Management. He and Jackie are very much involved with their four kids and seven grandkids. Heatitz wrote from Pointe-Noire, the Congo, and was recently in Gabon and Angola. He was headed off to Europe when he e-mailed, and current plans include our 40th next year.

We note from a recent news clip that Jim Forese, retired long-term IBMer, is now EVP, COO, and board member of Alco Standard. Jim is back near his home-stead of Coatesville, Pa.

Reunion ’97 is set for June 5-8. Co-chairs are Frank Kelliher (Boston), Rob Ryan (Troy), and Ed Ugelter (California). Neil Fox (Boca Raton) is gift chair. Doug Hasbrouck (Albany) is coordinating communications. He is designing a Class of ’57 Reunion home page for the alumni association’s Web site. Look for it on the RAA home page (http://www.rpi.edu/dept/alumni/raa/). Doug says ’57 set an all-time record attendance for 35th reunions at RPI with 86 classmates in 1992, and only one class topped us for their 30th (we had 76, ’51 had 87). Historically, 40th reunions are the largest. This is our chance to shatter Rensselaer’s all-time reunion record for any class, now held by ’52, who had 122 at their 40th. Be part of this record-setting event. Get June 5-8 on your calendar NOW and organize a “cluster” of classmates to meet in Troy. If the “cluster” concept is new to you, call Doug at (518) 439-9484.

Send your e-mail address and Web page if you have one, and send news. Let’s all start gearing up for a big 40th in Troy next June 5-8.

58 Todd Walsh

12759 Plymouth Drive Saratoga, CA 95070

Schenectady County Community College awarded George Potter, professor in the mathematics, science and technology department at SCCC, the SCCC Foundation Award for Excellence in Teaching. He received his Ph.D. at RPI in organic chemistry and joined SCCC in 1976. He holds eight U.S. patents in the area of plastics and polymers, and received the 1995 Chemical Manufacturers Association’s Catalyst Award for his ability to inspire students toward careers in chemistry and science-related fields.

Todd Walsh has taken on the AWESOME job of replacing Jim Augstel as class correspondent. For a long time, Jim did just an outstanding job for us.

After a career in orthodontics and business, I retired last year, and am enjoying my children, asset management, tennis, and skiing. The Walsh children are doing their best to support Silicon Valley: Kelly and Todd are at Silicon Graphics, and Julie is a mover and shaker at Cisco Systems.

Our Big 40th reunion is just 20 months away. Let’s hear from you all!

59 Bob Styczynski

10 Sunset Drive Latham, NY 12110
tel: (518) 783-5683
fax: (518) 782-1219

George Vogel has been named president and general manager of McLean Engineering, a ZERO Corp. company located in Princeton, N.J. He has been with Zero for the past 11 years after selling his company to them in 1984. George, accompanied by his wife, June, has just completed a 27-month assignment in Birmingham, England, where he started a new division of the corporation. This unit, called ZERO McLean Europe, designs and manufactures fans, blowers, heat exchangers, and air conditioners for electronics and telecommunications equipment cooling. He reports that this was an exciting few years with the growth of the business combined with the opportunity to see much of England and Europe. While the States will be home, there will be frequent trips to Europe as he will be responsible for the English operation as well. Starting in January they will be living in their new home at 105 Colfax Road, Skillman, NJ 08558.

Marty Markson is president and chief operating officer of Sprague-Goolden Electronics Inc. of Westbury, N.Y. Sprague-Goolden is a supplier of trimmer capacitors, inductors, and precision metalization services. Marty has been with the firm for seven years, beginning as VP of marketing, and has been the president and CEO for two years.

Dr. Sheldon Weinbaum has been elected to the National Academy of Engineering (see page 36). His field, bioengineering, overlaps many disciplines. It includes biotechnology, biophysics, medical imaging, neural prosthetics, biomaterials, biomechanics (which is his specialty), and other areas.

Dr. Weinbaum’s election to the NAE is the second major recognition he has received for his work in the past 12 months. Last year he received the H.R. Lissner Award of the American Society of Mechanical Engineers (ASME). The award is the highest honor bestowed by the Bioengineering Division of ASME. They cited Prof. Weinbaum for his “seemingly contributions in the broad application of engineering principles to the understanding of processes in biology and medicine.”

In addition, Dr. Weinbaum has published more than 155 papers in journals and books, making major contributions to a broad range of biomechanics and biophysical problems at both the cellular and whole-organ level that have changed existing views or modeling approaches.

60 Bill Blanchfield

2610 Sunset Ave.
Utica, NY 13502

After one issue of no news, I received some letters.

Lee Stuart Goldie (BMG, MGR) wrote, in response to my question about the nice lady with white hair who arranged Phalanx dates, that he recalls “Helen Warren, who insisted ‘you’re in college, don’t date girls from Troy High.’” Right on the money, Stu!

Phil Richardson (MD, BEE) wrote a long letter saying that he, Jay Hargrove (AE ’59), and Larry Doff (ME ’60) got together in Washington, D.C., to see the Vermeer Show at the National Gallery.

Jay owns a vending machine business. Larry is in real estate and lives on a house boat, and Phil is a physician in San Francisco.

Phil’s only regret about his Rensselaer degree is that he was able to graduate with almost no education in liberals arts. A familiar story that I hear a lot from our classmates. When we are young we undervalue the economic and social benefits of a liberal education. But it’s not too late, as Phil would attest, to enjoy a wonder-
ful day at the National Gallery.

Keep those letters coming.


Sol Levine retired from IBM, now lives in Raleigh, and is the college transfer chemistry instructor at Durham Technical Community College. He is also a summer adjunct at North Carolina Central University. Sol also has a side business in nature and wildlife photography, has been published in this area, has won several awards, and has had some one-man exhibits. One being scheduled is at the Dept. of Interior Museum in Washington, D.C. You can see his work at annual shows in Virginia Beach, Va., Ocean City, Md., Havre de Grace, Md., Chincoteague Island, Va.; Easton, Md., and Washington, N.C. E-mail address: bmdr71a @prodigy.com or levine@nccs.cnc.us.

61

Brian McManus
Bass Brothers Ent.
201 Main St., 32nd Flr.
Fort Worth, TX 76102
w: (817) 338-2681
fax: (817) 338-8366

35th Reunion: June 5-8

My parents gave me their 1950 maroon Dodge Coronet for use during my senior year. It was a sluggish car, an inefficient car. But it was built like a tank and ran and ran and ran—well, except one winter morning, the engine decided to hibernate. So Robb Frederickson '63 hopped into his 1953 Ford wagon and pushed me and my car up Hoosick Street to the Atlantic station. In order to see where I was steering, I first sprayed the windshield with an ether-based defroster. By the time we arrived at the service station, I too was in need of service and headed straight for the rest room. The car was fine. All it needed were new distributor points. I needed another breakfast. Now, on to the celebrities.

We have word that E. Burrell Fisher (BME) is quality control manager for the Cherry-Burrell division of United Dominion International. In the old days, QC folks were those eagle-eyed perfectionist inspectors who sent things back for rework—or worse, for retrofit. Mr. Fisher lives in Little Falls, N.Y., with his wife, Martha.

On May 17, at the commencement luncheon for the Department of Chemistry, Matthew McMahon received the proverbial retiree's gift—an engraved gold watch—and an RAA Fellows Award certificate. Dr. McMahon, a retired fellow at Texaco Research and Development, was honored for his outstanding support, counsel, and commitment to the Department of Chemistry. He received his Ph.D. degree in chemistry from RPI, and lives with his wife, Carole, in Wappingers Falls, N.Y.

Four-leaf clovers are Charles O'Donnell's specialty—the concrete ones, that is. Mr. O'Donnell is a regional design engineer for the U.S. Department of Transportation's Federal Highway Administration. He received his bachelor's degree in civil engineering from our slightly older arch-rival in Schenectady and his master's degree, also in civil engineering, from RPI. Mr. O'Donnell is assistant treasurer of the National Society of Professional Engineers. He resides in Albany.

President Selects Gajarsa '62 for U.S. Court of Appeals

President Clinton nominated Arthur Gajarsa '62 to serve on the U.S. Court of Appeals for the Federal Circuit April 18.

Upon confirmation, he will be one of 12 judges on the U.S. Court of Appeals for the Federal Circuit, which has nationwide jurisdiction over appeals involving patents, trademarks, copyrights, federal contracts, fraud, and intellectual property appeals from the U.S. Court of Federal Claims, the Court of International Trade, the International Trade Commission, the Merit Systems Protection Board, the Court of Veteran Appeals, the Board of Contract Appeals, and from federal sector labor arbitrations. Appeals from the U.S. Court of Appeals are heard by the U.S. Supreme Court, which has ultimate authority and jurisdiction in the interpretation of the law.

Gajarsa is a partner in the Washington, D.C., law firm of Joseph, Gajarsa, McDermott & Reiner, where he maintains a diverse civil practice in corporate law, international trade, commercial litigation, and the representation of Native American Tribes in water rights, land claims, and gaming matters.

He earned his bachelor's in electrical engineering from Rensselaer, a master's in economics from Catholic University, and his law degree from Georgetown Law Center. In addition to professional affiliations, he has been active in the National Italian American Foundation, the Georgetown University Board of Regents, the Institute for Contemporary Culture, the Foundation for Improving Understanding of the Arts, and Outward Bound.

At Rensselaer, he has been active on the School of Humanities and Social Sciences Advisory Board, the Newn Foundation Board, and Rensselaer's New Century Campaign.

Gajarsa and his wife, Melanie, have five children and reside in Potomac, Md.

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Jay Winderman
1988 Bridgeport Ave.
Claremont, CA 91711

63

Jack Tilety
151 Hamilton Ave.
Watertown, CT 06795

Absolutely not a single piece of communication from anyone. I feel like the Maytag repairman. It has been a great summer spent vegetating in the sun on Cape Cod. About the only classmate I see is Bill Woodward when I run into him at the boat yard. Bill comes east from Arizona to do some fishing. I play a little golf and occasionally try to bounce a ball off his back deck. You all know the routine: write, fax (860) 738-6439, or e-mail (NY_Ti tley@apollo.commmnet.edu). The process is relatively painless.

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John L. Shahadian, Esq.
114 Essex St.
Rochelle Park, NJ 07662
fax: (201) 843-1864

65

Al Griggs
15 Park Road
Simsbury, CT 06070

"Leave it to New England." We no sooner leave the worst winter on record and we're already breaking 30-year records for heat in May!

Once again, I'm not receiving many news updates from class members.

I did receive word that Bruce Zeitlin has been appointed corporate vice president and general manager of IGC's wholly owned subsidiary, APD Cryogenics Inc., in Allentown, Pa. He received a bachelor of science degree in physics from Rensselaer and a master of science in solid state physics from Stevens Institute of Technology. He was most recently vice president of IGC Advanced Superconductors in Waterbury.

I recently spoke to John Blaney. John would like to hear from Chi Phi fraternity brothers. Issa, Doug, Kevin, etc., are you out there? Call John at (508) 486-9139. John asked that I send his best wishes to Al and Kathy DeTuerk.

Got news? Write to the address above or call me at (800) 527-7162.

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Walter Grube
149 Overlook Road
Glastonbury, CT 06033

I can't begin to describe what a wonderful time I had at our 30th class reunion. It's the first time I have been back to RPI, but I know I won't miss another reunion. I arrived on Thursday, and there was such a feeling of nostalgia walking around campus. Much is new, but much is the same, too. The green-roofed buildings look the same, although some have had major renovations. The Notty Pine and Red Front are still in business.

There were many persons from our class who I didn't recognize or remember, but that didn't seem to matter. There was an instant bond with anyone I spoke to, from our class or other classes. At breakfast on Saturday, I had a great time with four members of the Class of '41, who were all teammates on RPI's winningest football team. As RPI grads, we all really do belong to a very special fraternity.

The only sad note of the
reunion was the news that my good friend, Dick GroescheL, had passed away. I saw his class ring in a display case of RPI rings at the Heffner Alumni House. It was donated by his sister. If anyone knows the details of his passing, please drop me a line.

I hate to mention names, because I know I'll leave someone out, but I really do hope to see Don, Peter, Dave, Rich, Roger, Mike, Bill, John, Jeff, and Jim at our 35th reunion, along with many of my other friends who I didn't see this time. But we really don't have to wait five years to get together. Give me a call, write me a letter, or, if you find yourself in Glastonbury, please drop in. Let's keep in touch!

Jack Lippert
18 S. Main St.
Franklinville, NY 14737

30th Reunion: June 5-8
George Derrick was presented with the Rensselaer Alumni Association's Fellows Award. He received the award last May during the commencement luncheon for the civil engineering department. The prestigious award honors those graduates of Rensselaer whose life's work provides a benchmark for other Rensselaer students and graduates to emulate. George's son, Timothy, is presently a student at Rensselaer majoring in civil engineering.

Jack Lippert is a contributing author of a book recently published by the New York State Bar Association. Jack wrote a chapter describing the use of computers in a small law firm. It described a "day in the life" of one partner in a fictional two-woman law firm.

Let's fill this column for the December issue! Please send information to me at the above address or fax (716) 676-5570 or e-mail 70570.719@compuserve.com.

Linda Lebsack
1795 Oneida St.
Denver, CO 80220

Howard Henze
445 County Highway 101
Gloversville, NY 12078
h: (518) 773-8589

Just one bit of news this time albeit exciting on its own. Henry Kurland has published a monograph in the Memoirs of the American Mathematical Society titled "Intersection Pairings on Conley Indices." Impressive to one who couldn't figure the "why" of Diff-E.

We seem to be in a news slump. Please write or phone.

70

Rick Hart
Rensselaer Union, RPI
Troy, NY 12180
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fax: (518) 276-6920

David Hamby has moved to Columbia, S.C., and works for Queue Systems Inc., a small company of about 20 that specializes in process monitoring systems for power generation, pulp and paper, and metal manufacturing. He's a software analyst. He adopted a retired racing greyhound who kept him sane between jobs. Dave enjoys swapping greyhound stories. His e-mail address is hambyd@queueys.com.

Our 25th reunion was a big success. Our class made a good showing at the Reunion Parade, where we had the best cheerleaders and signs and won the "Most Up and Coming Class" award. The signs had names of '60s songs, and no one can dispute that our college years were part of the best era for rock music. Quote of the weekend: "What is 'Inna-Gadda-Davida'?

I enjoyed talking with Ellen and Peter Wallack. Their son, Timothy, is teaching windsurfing in Maui this summer between college semesters (I am only slightly envious). During the Reunion we visited the RPI Model Railroad (30' x 120' layout in Davison Hall basement) and were pleasantly surprised. It has some very interesting scenes of Troy and surrounding area including a beach on Lake George.

James Balinski has become director of the analysis division in the office of procurement at NASA in Washington, D.C. He will be responsible for contract financing, pricing, and cost accounting. He also has been appointed a member of the Senior Executive Service. Members fill the top managerial, supervisory, and policymaking positions in the executive branch of government, ranking just below presidential appointees. Jim and his wife, Francine, have four children: Janine, 15; twins Timothy and Kyle, 10; and Leanne 3.

Here are excerpts from recently returned Class of '71 surveys: One of My Best Memories of RPI is...

Martin Nadelman: Graduation Day! Being residence hall director and working with underclassmen; Neil Palmer: worldwide new friends made; Todd Jaife: Grand Marshall week, freshman year; Jorge Goldstein: graduation day 1971, OIA (the Latin American fraternity); Stephen Madigan: hockey excitement;

Tom Chmura: RPI hockey games (of course), especially beating Cornell and Ken Dryden when they were no. 1...Professors Wallace, Vitaliano, and Shafritz;

George Bode: playing football 1967-1969 seasons; Joe Jesulec: fraternity life, friends, hockey games, parties, intramural sports; Allen Abel: hockey road trips to Clarkson/St. Lawrence; post games at Tracey's; Geoffrey Smith: studying social psychology during the war protests; Bob Cunningham: sunrise at the water tower with the schmoo; Rich Junken: RSE, friends, pledge raids, athletics, frosh baseball team, Dr. Wiberly, Dr. Hansen, Dr. Ross, Father Tom Phelan, opening of the Chapel + Cultural Center, fluid mechanics on pass/fail, actually graduating on time [it said one, Rich];

Charlie Lapp: the big, big hall, intramurals, baseball, especially beating Syracuse, all-night hearts games, hockey, especially beating Dryden, quad, ROTC; Philip Farrelly: my fraternity, Sig Ep.

In conclusion, here is my first (fun) alumni newsletter database:

Class of '71 Spreadsheet

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Source: R. Evans—late nite tabulation of RPI database.

If you have any creative ideas on how to "cut the data," please write/call me. Signing off...

Bob Dvorak
2 Mill Lane
Saugerties, NY 12477
e-mail: bdl@fttysystems.com

25th Reunion: June 5-8

Jackson Tai, Western Region managing director for J.P. Morgan, has been appointed by President Clinton to the 17-member Commission on United States Pacific Trade and Investment Policy. The commission advises the President and Congress on the steps the United States should take to achieve a significant opening in Japan, China, and other Asian and Pacific markets.
News is a little scarce this spring although I did get a couple of letters from old friends, which was great to see. As for the rest of you, please start writing or sending e-mail, or else I’ll have to start making up stories again.

My old freshman roommate and erstwhile bridge partner, Craig Newman, sent me a note and a tape of an old Firesign Theater album. I hope he is doing well. I sent a Polaroid camera in the June issue: good hearing from him. For the rest of you, congratulations, John. Craig says he is doing fine with his autonomous navigation system. That’s the project selected one team’s design for the project. We plant ed more than 1,000 perennials and built several nesting boxes. It was a great day! We finished up by making clay trail markers based on the fossil record of the area fin ished up by Pete Hart. Thanks to Steve (a.k.a. Gunner) Cardamone noted the following correction to his e-mail address, which was printed here in the June issue: pcardamone@gnu.com.

James C. Wernicke, P.E. 11609 Sky Valley Way Albuquerque, NM 87111

Loris Johnston Chen 4-28 Grunau Place Fan­lan, NJ 07410 e-mail: L.Chen428@aol.com

Dr. John Enderle received the RAA Fellows Award in May. Dr. Enderle was recognized for outstanding support, counsel, and commitment to the Department of Biomedical Engineering and for outstanding research and teaching accomplishments. Dr. Enderle is currently professor and head of the Department of Electrical and Systems Engineering at the University of Connecticut. The RAA Fellows award honors graduates of Rensselaer, who by their life’s work, have set an example for Rensselaer men and women to emulate. The award consists of an engraved gold watch and framed certificate. Congratulations, John.

Craig is the owner and president of Starfire Lighting Inc. in Jersey City, N.J. They engineer and manufacture custom lighting and electronic products mainly for high-end commercial applications. Not bad for an old chemistry major. Craig was developing software for Apple Computer as a sideline and professes to be a loyal Macintosh fan. I hope Craig is not counting on royalties for too long given Apple’s current financial predicament. My advice is to get payment up front in cash.

Craig says he is doing fine with two kids and one on the way. I talked to his wife on the phone last year and she sounds very nice although I don’t remember her name. Craig, you will have to write us again and give us more of these important details.

I also received a nice letter from Tom Congalosi. Tom is still with Decora Manufacturing Co. in Fort Edward, N.Y., which makes, among other things, sticky paper (a.k.a. Rubbermaid branded contact paper), which we all, I am sure, use on our kitchen shelves. Tom is manager of planning and logistics, which now includes procurement as well as customer service. That’s the problem with these downsizing; your job gets expanded to twice its size and there is no money to change your business cards. Tom is now separated from his wife, which seems to be amicable, and I am sure he is still coaching his children’s soccer and baseball teams.

The Medical Care Center of Beth Israel Hospital and Children’s Hospital, Lexington, Mass., Kurt Rockstroh ’75, principal in charge.

Congratulations to the “most politically correct class” as determined by the judges of the Reunion Parade of Classes. Jim Flaherty (as Bill Clinton) talked “president to president” with Dr. R. Byron Pipes (one of the judges), surrounded by his dark-shaded Secret Service entourage. Catherine Hettinger passed out samples of her latest invention, the Spinfinger. Thanks to Steve Derby for organizing the Friday gathering at Holmes and Watson. Steve (also known as Gunner to his hockey teammates) is still at RPI after 24 years, although he has hung up his hockey stick. Dr. Alan Meltzer was presented with a “Class of 1976” shirt at our Saturday night dinner at the RPI Playhouse. Dr. Meltzer talked about the evolution of the large lecture approach (including the Physics Magic Show) to an interactive “studio” format. Jim Flaherty worked on entertainment with a mock press conference with Bill Clinton and an improv version of Jeopardy with answers supplied by the audience.

I believe that we had over 50 classmates return to RPI for the festivities. As for people seen during the weekend...Lisa (Hallquist) Bolly has defected to the sales profession and is selling semiconductor product equipment for Applied Materials. Sean Corrigan has retired from the Navy Civil Engineer Corps and is facilities director for 31 campuses with 18,000 K through 12th-grade students in Thousand Oaks, Calif. Kris Costa also made a career change from biology to coordinator of facilities maintenance for the New York State Thruway. Many of us (including myself) pooled the clean rest spots as we drove to RPI for reunion weekend. Trudy DeGraff is still working on her Ph.D. in computer science at RPI. During home hockey games, Trudy and husband Rick Pfeiffer ’74 operate a train horn, which they donated to the Field House. She is the first woman to be qualified to fly C-130 transport aircraft to both the North and South poles. Trudy is a major in the New York National Guard and serves at their Schenectady base as aircraft commander. Rusty Gordon is an electronic commerce consultant currently working for Whirpool in St. Joseph, Mich. He has been very active in recolonizing his fraternity, Chi Phi. Doc Kirch­gessner distinguished himself by having worked on six of the seven continents and having lived on three of them. He is working for W.R. Grace supporting their petro refinery business. You may have seen Doc’s scenic photos in Earth magazine. Adam Levin is decommissioning nuclear power sites. He lives in Bridgewater, Conn., with wife, Emily, and two beautiful daughters, Jennifer, 12, and Elissa. 10. Donald Lipscomb is amazed
that his company, Del Studio Architects, is still in business after eight years. He lives in Alexandria, Va., with wife Janet and sons Erik, 9, and Joseph, 6. Robert Matthews has bowled a perfect 300 both left- and right-handed. His day job is a property and casualty insurance actuary. Harry and Larry McElroy own a software startup they founded in Los Angeles, Calif. Harry was proud of his TV-star twins Loren and Meghan, startup they founded in Los Angeles.

Olson is at the U. S. Department of Defense working on strategic planning. Sari Ostermayer has completed her doctorate as a psychiatrist in child psychology. Harlan Rosenthal is developing voice mail software for Dialogic. He is on his fourth job having survived two layoffs. Carl DeStefano is still in business after 35 years. He didn’t make it to the News as a leading analyst of the real-estate development consulting business. "I am now president and CEO (and an original investor) in Interactive Response Technologies. IRT created a desktop software package (DiverCTI) for the telemarketing industry. We sell the product through a division of Rockwell International. We also have a number of unique Internet applications at both Rockwell and our call center. For me the challenge of moving from real estate investment banking to an operating business has been tremendous. We are seeing the light at the end of the tunnel, where software sales are taking off and the call center business is moving toward break-even, and with a little luck, profitability. Like all new companies, we are exploring going public and, surprising to me, the interest from the ‘Street’ is high on our combination of software and call center business.”

Paul Sicard 1424 Kenilworth Parkway Baton Rouge, LA 70808 h: (504) 769-7761 w: (504) 381-3666 e-mail: psicard@entergy.com

20th Reunion: June 5-8

News from a married couple: Joann (Hatch) Michalik was recently admitted to the Partnership in the High Technology Industry Practice. This practice focuses on manufacturing clients either producing high-technology products or in need of high-technology services. She will be involved in Just-In-Time, Business Process Reengineering, and engineering new processes for emerging companies. Rich Michalik works for Stanford Telecom as a lead engineer. They have two children, Sarah and Thomas.

Lenny Gaines 18 Loucst Park Albany, NY 12205

Gordon Hirschman has joined Power Technologies Inc. in Schenectady, N.Y., as its manager of software products.

Lenworth Johnson was recently promoted to full professor of ophthalmology and neurology at the University of Missouri-Columbia. This makes Len the only African-American professor of neuro-ophthalmology in the world. Way to go, Len. Len and his wife, Patricia, have four children: Gabriella, Lenworth ("Jay"), Andrew, and Meredith. He says he would love to hear from his classmates.

Jim Heagle, who got his MBA with us, has retired as Mobil's general manager, Manufacturing Films Division, Americas, after 24 years with Mobil. He and his wife, Mary Lou, live in Rochester, N.Y.

Steve Levy has recently been in the news as a leading analyst of the telecommunications equipment industry for Oppenheimer & Co. Joseph Phillips married Margaret Ann Hill in May. She has three children from a previous marriage, and is a staffing services administrator for the N.Y.S. Department of Civil Service in Albany. Joe is an actor (currently working in summer stock) and freelance writer, frequently published in the "Troy Record" and other Capital Region newspapers. He remains active with the RPI Players—he recently directed their spring production of "Me & My Girl."

Jeff Owen is now flying international routes for Delta Airlines; he still lives in Park City, Utah, with his wife and two children.

Antonio Bastos recently started a two-year term as director of the Latin American region of the Institute of Electrical and Electronics Engineers (IEEE). Antonio is currently the general secretary of Companhia de Electricidade do Estado da Bahia in Salvador, Bahia, Brazil.

Evans Findings of East Providence, R.I., and David Evans, their director of technology, were recently featured in a Providence "Journal-Bulletin" article. By using its own technology and using outside research, including from Los Alamos National Laboratory, the company is developing miniaturized capacitors with enhanced electricity storage capabilities. The business was founded by David's grandfather, who had developed a stamping machine for jewelry findings and then went into business for himself.

Howard Glass sent in a long update on his life, excerpted here: "I am married to Lorraine and we have two wonderful boys, Jeffrey, 7, and Danny, 5. We live in sunny Hollywood, Fla., where we are active in our temple and the community, and I have been on the planning and zoning boards. After attending Harvard Business School, I worked as a real-estate investment banker for Sonnenblick-Goldman Co. After 11 years I left the company as president and manager of the Southeast region. I am now president and CEO (and an original investor) in Interactive Response Technologies. IRT created a desktop software package (DiverCTI) for the telemarketing industry. We sell the product through a division of Rockwell International. We also have a number of unique Internet applications at both Rockwell and our call center. For me the challenge of moving from real estate investment banking to an operating business has been tremendous. We are seeing the light at the end of the tunnel, where software sales are taking off and the call center business is moving toward break-even, and with a little luck, profitability. Like all new companies, we are exploring going public and, surprising to me, the interest from the ‘Street’ is high on our combination of software and call center business.”

Paul Sicard 1424 Kenilworth Parkway Baton Rouge, LA 70808 h: (504) 769-7761 w: (504) 381-3666 e-mail: psicard@entergy.com

Victoria Centonze has been appointed deputy director of the Integrated Microscopy Resource, an NIH-supported Biomedical Research Resource, at the University of Wisconsin-Madison. Dr. Centonze and her husband, Charles Frohlich, make their home just outside Madison, along with their 2-year-old son and baby daughter.

Aline Rizk-McCabe 29 Brookside Circle Bronxville, NY 10708 h: (914) 793-8776 e-mail: mccabe@access3000.net

Bob Barney married Donna in 1987. They have three children: Bob and Jennifer, 5 (twins!), and Melanie, 3, and live in Moodus, Conn. Bob and Donna both work for Aetna Health Plans. Bob says: "I have enjoyed trading notes with a few alumni in recent years and would encourage everyone who can to add their e-mail address to the RPI alumni e-mail directory (see page 7). I can be reached at bbarney@conix.com."
Kate and Ken Ryan welcomed their first child into the world on March 21. "Molly Madeline weighed in at 7 lbs., 13 oz., if you don't count the drawing pen. Best of luck to the captain, first mate, and crew, the hand!"

Aline Rizk-McCabe has volunteered to serve as class correspondent and looks forward to hearing from you.

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The Internet has again provided the best way of keeping in touch with RPI grads. I heard from many people these last few months. If I didn’t reply, it’s due to our recent move, the addition of a dog to our family, and my busy work schedule.

Jeff Tiller sent a note in April. He’s currently the vice president of a small engineering firm in the Tidewater, VA, area. He completed his MBA from William and Mary last year. In addition, he mentioned he’d seen John Tyhac between his wife, Megan, and daughter, Elizabeth, recently in New York.

Stephanie Foster and I played a game of Internet guess who. She kept sending me e-mails with a little more info until I guessed who she was. She and Paul are doing well. They still live in Kennett Square, PA, and are slowly renovating their old house. Stephanie received her fellowship in the Academy of General Dentistry this year and is still working hard on her private practice. For fun, they took the kids to Disney World and spent a week on Maui in November.

My apologies to Paul Cohen. His wife’s name is Pat, not Jayne. Their daughter Olivia was standing May 6 so is certainly tearing around their house by now.

Wendy Smith Leo sent a note to announce the birth of her daughter, Rosemary Elizabeth Leo (Dec. 27, 1995). She and her husband, Matthew, live in the Boston area. Wendy returned to work part time as project manager for marine studies at the Massachusetts Water Resources Authority. The agency is responsible for the “Boston Harbor Clean-up” as well as supplying water and sewage services to the greater Boston area. Wendy manages environmental monitoring data and oversees research projects carried out by local universities.

Lucy Cabrera is the executive director of Food for Survival, a New York City-based food collection agency. She was recently appointed to New York’s Commission on the Status of Women.

Dave Beale sent me a note last December. He and his wife, Cathy, had a baby girl, Victoria Ann, in November ’95. Dave is working for Federal Express in Memphis in aircraft maintenance and engineering in the powerplant group. He and Cathy are enjoying Memphis BBQ, riverboat casinos, and claim to have seen someone that looks a lot like Elvis around town.

David Parker started in April as director of operations for the Massachusetts Corp for Educational Telecommunications. He bought a house in West Newbury and married Denise Carter in July.

I hope I’ll be hearing from you soon. I will be attending the career fair so if you’re on campus that weekend, stop by the Lutron booth and say hello!

Karol Anne Liu Madulka wrote in March: “After my husband, Tim, and I finished a two-week vacation in the Greek Isles and Albania, where American tourists are a most welcomed novelty, we decided to seriously start a family. Our daughter, Kassandra Anne, was born Feb. 28 and will be keeping her parents stateside for a while. We’re still residing in lovely Ballston Spa, N.Y.”

Peter Reynolds and his family are still enjoying life in Holland. The family just grew with the addition of daughter Victoria in February. Peter is a senior scientist at the NATO G3 Agency in The Hague.

Judith and Willie Alvarado and their children, Brianna and Matthew, moved to Guangzhou, China, in September ’94. Writes Judith: “While Willie is busy as the China Management Systems manager for Proctor & Gamble, I’m busy taking care of our new little boy Zachary, born Oct. 30, ’95. We have had the opportunity to travel throughout Asia, including a wonderful two-week vacation to New Zealand and many retreats into Hong Kong. We expect to remain in China for several more years. If any alumni find their way to the Far East on business, vacation, exploration, relocation, or adoption, we welcome the visit. Our address is: Alvarado Family, Garden Hotel, Garden Tower #2108, 368 Huanshi Dong Lu, Guangzhou, China; tel: (86) (20) 8333-8999 (x-2108).”

Tori Kozikowski
1150 Hidden Ridge Dr.
Irving, TX 75038
h: (214) 550-0187
w: (214) 719-6055

After nine years in Dallas with Con vex and Cyrix, Marc Quattromani and his wife, Renee, moved to Beaverton, Ore., where Marc was promoted to hardware manager at Pyramid Technology Corp.

Jessica Morgenthaler
338 Eden Road
Stamford, CT 06907
h: (203) 461-9023

Hope everyone had a great time at the reunion. Here are some updates on what our classmates have been up to.

Joe Mueller and Linda Wong, husband and wife, have moved to Thailand and are both working for Andersen Consulting there. Joe’s actually running the technology practice. They’re looking for visitors!

Rich Recoberta has sent word that he’s now in Santa Barbara, Calif. Rock hooked up with entrepreneur John MacFarlane ’88, for a total of nine RPI grads, and is helping him as VP of engineering to build a very successful business out there.

David Chaput is a pre-sales engineer with 3COM in Virginia,
where he lives with his wife, Teresa, and his two daughters. Janice Cormier and Tom Mitchell are also living in Virginia with their new son, Ben. Phil Biegler is an associate with Morgan Stanley in New York and is married with one daughter. Ron Conley has started his own technical writing company, Defined Documentation, in New York and is living in Stamford, Conn. Gordon Elliot, a financial systems analyst/associate director at Swiss Bank, lives in Irvington, N.Y., with his wife, Pat, and two children.

Joe Bell and wife Abby were expecting their first child in July and are settled in Louisville, Ky., where Joe is a first officer in United Parcel Service. Karen Chisholm DeSanto is a technical service manager for Cummins and lives in Lakewood, N.Y., with two children, Marcus and Christine. Jeffrey Whitefield is a naval flight officer living in Oklahoma with his wife and four children. Christopher Alexopoulos is a sales engineer at Southworth-Milltec, Pittsburgh Systems.

Kenneth Viglucci is now a manufacturing technician at IBM in Burlington, Vt., having left the Air Force in 1991. Carol (Swierzowski) Victor is a project engineer in environmental engineering at PSI, living in Winter Park, Fla., with her husband and daughter. Lana (Cheng) Truong is a senior engineer at Siemens' Energy and Automation Systems in Minneapolis and is married with one daughter. Paul Sullivan is a senior experimental engineer at the Hamilton Standard division of UTC in Simsbury, Conn., and lives with his wife and two children. David Seelye is a cost controls engineer at Quality Project Management in Batavia, Ill., with his wife and three children.

Douglas Peloquin is a senior systems programmer analyst at MassMutual in Springfield, Mass., and is a deacon at the First Central Baptist Church. Philip Mosca is married with two sons and is anesthesiology resident/chef at the University of Louisville. Masaki Minato is an R&D chemist at ITW Adhesives in Danvers, Mass., and is working on his Ph.D. in chemistry. Abraham Mantell is an instructor at Nassau Community College and is married with a daughter.

Brian Jordan is a military officer/ADP liaison officer in the Air Force living in Virginia with his wife and two sons. Judy Jarnefeld is with NYSERDA in Albany, N.Y. Jay Jacobs is a product manager with Valve Corp. and lives in Milford, N.H., with his wife. Michael Hochberg is a systems engineer with Boeing in Seattle. Elizabeth Harris is an analytical chemist with Emissphere Technologies in Hawthorne, N.Y. Bruce Goldstein is a captain in the Air Force working as program manager at T.E.C. Robert Fergesen is a manager at Andersen Consulting, living in Philadelphia with his wife. Lisa Derman is a manager at Loral Electronic Systems living in Hartsdale, N.Y. Nelson Corcho is a senior technical advisor with Fidelity Investments in Boston and is married with two children. Erika Choi is a senior engineer with weekly '87, and is an advisory engineer with IBM's PSP Division in Austin.

Marty Holloway is a project engineer at OSD Envision. Jim Gillen Jr., a senior process engineer with W.L. Gore & Associates in Maryland, lives in Delaware with his wife and two children. Denise (Maddock) Griffig, a volunteer diver and biology aide with the Seattle Aquarium, is married to Jim Griffig '85 and has a son. David and Jennifer (Eastwick) Allen married in 1989 and have moved to Fremont, Calif., where David is a software engineer and staff scientist for Sente, and Jennifer is a technical writer for Quintas. Todd Cinnamon, a project manager for AMR/RCA/ABF Decision Technologies, is married and has two children.

Alec Gallimore received the 1938E Award from the College of Engineering at the University of Michigan, where he is assistant professor of aeronautical engineering. The award is presented to a younger member of the faculty to recognize outstanding teaching in both elementary and advanced courses.

Deborah (Weiner) Covello sent the following news: “I’m pleased to announce the birth of my second son, David Michael Covello, on Aug. 15, 1995. His brother, Daniel, age 5, is happy to have a wrestling buddy. I reside in Sterling, NJ, with my husband, Dan, and continue to work as a quality assurance manager for a leading RF and microwave manufacturer.”

Derek Soohoo, M.D., announces the birth of his son, Ryan Stuart Soohoo, on June 4. Ryan is a grandson of alums Philip Soohoo '59 and Lee Stuart Goldee '60. Derek is in practice with a gastroenterologist in the specialty of otorhinolaryngology.

Ande Smith

10th Reunion: June 5-8

Tracy McDonnell (formerly Matsu), her husband, Michael, and their son, Cooper (born July 30, 1995), have recently moved to Hillsboro, Ore. William Lynch received his Ph.D. in science and technology studies from Cornell in May. He previously earned an M.S. from Virginia Tech and an M.A. from Cornell. He will teach at Cornell this fall. Michael Berger and his wife, Catherine Mulligan, live in New Jersey, where Michael works at Bell Communications Research. They have three kids: Laura, 4, and twins Benjamin and Marissa, five months.

Nick and Ann (Wiesner) Bischoff would like to hear from classmates. Their e-mail addresses are: NBischoff@Delnet.com and ABischoff@psg.com. Ann is a nuclear engineer at Public Service Electric and Gas in Salem, N.J., and recently started her MBA at the U. of Delaware. Nick continues to practice law in Wilmington, Del. Michael Leiblein completed his Ph.D. and moved to South Carolina to take a position as an assistant professor at the U. of South Carolina’s College of Business Administration. His e-mail address is: leiblein@daire.bahm.sc.edu.

Mary Dery received an R.A.A. Fellows Award in May from the Department of Chemistry. She is a former research chemist at Texaco's Research and Development department and is a driving force behind Texaco's Science on Wheels project with the American Chemical Society. Heidi Jo Newberg received a Fellows Award from the Department of Physics, Applied Physics and Astronomy. She earned her Ph.D. from The U. of California at Berkeley and is a research associate at the Fermi National Accelerator Laboratory.

Brian Fiedler (BrFiedler@aol.com) lives in East Amherst, N.Y., and works for General Physics, where he develops software that monitors the performance of power plants. He received a patent for a process to recover helium from natural gas. "Also, I have gotten into auto racing. After attending the Skip Barber Racing School, I competed in my first races in Florida in January (I finished 10th and 11th). I'd like to do more racing, so if anyone is interested in sponsoring me, let me know!"

Karen Glasgow Parnham

88 Karen Glasgow Parnham c/o Class Notes Office of News and Communications RR 1, Troy, NY 12180

Karen Glasgow Parnham was the first of many to volunteer to serve as class correspondent. She is in the process of moving to Mexico, and will establish a new address soon. Jeffrey Miller was promoted to major in the U.S. Air Force. He is in charge of a staff of 70, supporting an 8,000-user metropolitan area network.

Joseph Hom

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Hi there! As you read this column, baseball season is winding down to the pennant races, and football is starting up. Go Jaguars... ROAR!!!

E-mail: Chris Kiegle (chris_kiegle@vnet.ibm.com) wrote to tell me that he went off to Michigan to visit an old friend and his friend's new baby girl. He's going to be the godfather and will return in two months for the christening.

And now from Mike Barton (mibarton@oxhp.com) via Harry Winski (twinski@mgcraw-hill.com). It's official! The Bartons are expecting a BABY!!! The due date is Oct. 5. "Mother and baby are doing fine (thanks for asking) although the father is a nervous wreck. We don't know the sex (and we don't want to know) so don't bother asking." Congratulations!
As for Harry, he made it to Israel finally. "We had great weather and a great time. We spent a lot of time in Jerusalem and some other time in other parts of Israel. We spent a day in the Dead Sea region where we swam and ascended to Masada, a mountain fortress. It was a fascinating trip." Harry also went to a wedding reception for Naveen Sarma and there were RPI graduates there. There was a group picture and I hope that I can arrange to get that published.

The West Coast brings us a note from Mark terrano (terzj@foda.com). "I'm happy to report that I passed the California Bar exam. Whew! That's a monkey off my back. Hopefully no more exams for a long time!" Amen to that, Mark! Russ Woodbridge (russingrid@land.com) wrote in to say that he has moved from Frankfurt, Germany, where he was vice president of equity derivatives trading at Salomon Brothers, to Wake Forest, N.C., to pursue his master of divinity degree at Southeastern Baptist Theological Seminary. Also, he and his wife, Ingrid, are expecting an addition to their family in November.

Something new from the fax machine: Patricia (Paddy) Conners-McKee wrote to say that she moved to Florida two years ago, where she works at a large company in Sarasota. She started out in the accounting department but now heads the purchasing department. She and her husband, John, built a brand new home and have been in it since November 1995. Good thing, too, since Shayne William was an addition to the family in January. Congratulations! They can be reached at 3326 Tusket Ave., Westport, CT 06880. (914) 426-7807. Russ Woodbridge (russingrid@land.com) writes: "I left RPI in Dec. '89 and became a ski bum in Colorado for three months, following which I reported to Pensacola, Fla., for Aviation Officer Candidate School and received my commission in the Navy in Nov. '90 (a la Officer and a Gentleman). Following flight school as a naval flight officer, I came to the great Pacific Northwest to fly A-6 Intruders. I have made two cruises to South Asia (Persian Gulf), and with the demise of the Intruder I am learning to fly the EA-6B Prowler. On the personal side, I got married last year to Christine Whittester and we are expecting our first child in January."

In the news: Barry Fougere (M.S., Mech.E.) was elected a principal of A.T. Kearney, which is a global management consulting firm. He serves clients in the Chicago area in the areas of global organizational process effectiveness, new product development, and critical capabilities management.

That's it for now and keep those messages coming. I'll be waiting for them as I nurse my sunburn or some other outdoor-related ailment.

Rajeec Arora wrote to say that he married Laurie Heywood from Russell Sage in September 1992. And, after five years in California, they moved back to the East Coast in February 1995. They now can be found at 212 Valley Lane, Newburyport, MA 01950. The very same night they moved into their new home, Laurie gave birth to their daughter, Asha. Congratulations to both of them.

Peter Strentantino is trying to track down any of the "Harvard On the Hudson" transfer students that he used to study with, especially Larry Eschelbacher and his buddies. Peter left Knolls Atomic Power Laboratory in 1994 and is now working for Quantum Engineering doing embedded systems software design. He can be found at 1832 Grassington Way, Jacksonville, FL 32223.

Dave Dwight e-mailed to tell me that he is working for Gates Rubber Co. as a product design and development engineer for the Automotive Air Springs Division. He and his wife, Cindy, of three years, are living at 1074 Harrison Street, Denver, CO 80206. Or, he can be reached at dwight@windor.gates.com.

Christopher Christuk was recently promoted to manager of the Research and Development Laboratory of Failmark Inc. He and his wife, Amy, can be found living at 63 Sunset Drive, Newbury, MA 01951. Joe Hammer is currently attending Yale's School of Management. His address is 702 Orange St., Apt. 1, New Haven, CT 06511. His e-mail address is hammer@nppm.com. He is now enjoying civilian life after being in the Air Force until September 1995.

William Telesco should, by the time you read this, be enjoying his first year at the Wharton School at the University of Pennsylvania. He has entered their two-year MBA program after spending a good deal of his time working for a design architect named Paul Rudolph. At the time he wrote, he was living at 33 Armourvill Ave., Tuckahoe, NY 10707. Hopefully, he will write with an updated address when he gets settled.

Stephen Engler has quite a bit of news. He was married to Diana Srodin on Nov. 12, 1995. They have moved to 95 Orient Way, Apt. 4D, Rutherford, NJ 07070. Also, he has changed jobs within Public Service Electric and Gas Co. in Newark, N.J. He is now a business analyst for one of their key electric generating stations. At the same time, he has been going to Seton Hall pursuing an MBA with concentrations in finance and international business. He is eager to hear from anyone in the NY/NJ area from our class.

That's it for this time. Keep sending me updates.

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Chris Adams
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Larry Burke writes that he is living in Washington, D.C., working towards his M.S. in museum studies at George Washington University. He and his wife were expecting their first child in July. Timothy Riley has taken a position with Rist-Frost Associates in Glen Falls, N.Y., as a process engineer. He previously worked at GE Silicone and the Watervliet Arsenal. Karen Reuter, who studied management at Rensselaer, is working in the Information Management Division of ComputerWorld Inc. in Framingham, Mass. She is living at 34 Cherry St., 1st Flr., West Newton, MA 02165, and her phone is (617) 969-6360.

Joanne Peck writes that she has spent three years living in Savannah, Ga., restoring dozens of historic buildings in Georgia and Florida, including an 1816 carriage house/slave quarters. She is a historic preservation consultant with a B.S. in building science and an MFA in historic preservation. Her home address is 1607
Georgia Ave., West Palm Beach, FL 33401, and her home phone is (407) 835-0563. She also writes that, for the past three years, she has been dating Greg, a nautical archaeologist, who is involved in the excavation of an 18th-century loom in St. Ann's Bay, Jamaica.

Lance Strayer, who has been working since graduation as an engineer with General Motors in Flint, Mich., married Lisa Norman of Lapeer, Mich., last year.

92 Gregg Nichols
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5th Reunion: June 5-8

Hi, folks! I'll bet you hated to see summer go—hope you had a great one. I hope I did, too. (It's just starting as I'm writing this.) Sheryl Terry wanted me to inform you that the reunion committee has started planning our fifth reunion. If anyone would like to help with the planning, please contact Bill Connors at home (302) 368-4103 or at work (410) 996-8428. Sheryl will head up publishing a Web page located within RPI's Web site that will enable on-line address updates, present reunion information, etc. Watch for it.

David Spenciner is the supervising engineer of the Fatigue Testing Laboratory at Thielsch Engineering Inc. in Cranston, R.I. I didn't hear from Dave; instead I ran across an article he published in the Testing & Management magazine. It was good reading, too. He even included a Dilbert.

Eric Lambioso received the 1995 Honor Award from his company, Architecture Design Development Inc. He was recently promoted to project manager for the Cambridge, Mass., based firm. Nice gig, Eric.

David Brennan married Laura Lindsay Kestner on Dec. 30, 1995, in Waterville, N.Y. She works for Kestner Engineers. (I know. We all wish we'd had a family business getting out of school.) And he's working as a town justice while pursuing his law degree at Albany Law. They live in Green Island, N.Y.

Also on Dec. 30, Jeff Oskin married Courtney Beth Caola in good ole Troy. She graduated from Russell Sage and John Jay Criminal Justice (plenty of business in that it seems), and he's continuing his MBA at BU while working at Teraedny in Boston.

Hiro Daryanan returned to Hong Kong; where he started out as an engineer but moved into the corporate/commercial side of telecommunications services. He writes: "I have aspirations of starting my own technical services or trading company. If any alumnus has a bright idea, then I know a good market (Asia). Feel free to e-mail me: hiredo@bklinkage.net."

Lastly, I received an e-mail from Brian Hinman (MBA '92) saying he's moved back into the area. He left Westinghouse in South Carolina and joined IBM in Yorktown Heights, N.Y. He's the new manager of business development. And another e-mail from Brian Burroughs says he has returned to RPI to get his master's in mechanical engineering.

If you want to find someone you wonder about from in a while, drop me a line. If you want to get something printed, remember to send it AT LEAST 3-4 months ahead of time. I'll be sipping some lemonade in the shade. (I'm betting it's still warm yet.) Good luck out there.

93 Kimberly Makuch
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Are we entering the stable years of our lives?? Not many of you are writing with what you're up to, so I have to wonder.

George Kalli is working for the Army Corps of Engineers in Portland, Ore., as an environmental engineer. Jen Petrich wrote to let me know of her whereabouts. She is now with Smith Environmental Technologies Corp. in Plymouth Meeting, Pa., which is near Philadelphia. Jen is now engaged to Dominic Valente with a wedding planned for November of this year. Congratulations! Her future brother-in-law is also an RPI grad (Charlie Hess '73). Jen also provided some information on others: Kris McKay is working in Williamsport, Pa., at Larson Design Group. Mona Eleris is working at International Paper in Corinth, N.Y. Scott Appel is going to U.V.A. for his Ph.D., however was in California for a while doing research at NASA.

I also received a phone call from Kristin Youngman in D.C., who at the time was with the Army International Affairs Office, but will probably have moved by the time this article is printed. She mentioned that Christine MacKay has been accepted to Harvard for the MBA program. Christine is presently the associate director of international finance at Bell Atlantic International.

Joyce Peterson Weiner wrote in and fulfilled her duties as secretary for her cluster. (I wonder how my cluster is doing?) Joyce received an M.S. degree in optical sciences from the University of Arizona and is now working for Intel as a process engineer in Arizona. She married Keith Weiner in 1995. Kate Spilker received her second B.S. from the University of New Mexico in geology and is now a graduate student in geophysics at the University of Nevada–Las Vegas.

Howie Goldowsky received an M.S. in physics and is getting an M.E. degree at the University of Buffalo. Howie spent this past summer with Harris Communications in Rochester. Kipp Larson is working on a graduate degree in astrophysics from the University of New Hampshire. Greg Recine did some postgraduate work at the University of New Mexico and is now living in the New York metro area.

Gilbert Elhay has been named senior vice president of investments at the Springfield Institution for Savings in Massachusetts. And out of Norfolk, Va., Gregory McMahon was recently designated a Naval Aviator. Amy Johnston is still out in Spokane, Wash., however is now working for Northern Technologies. Julio Izquierdo has moved from Albany to Brooklyn, a brokerage firm, as manager of research information systems and as security analyst recommending stock to brokers.

Jose Tavarez, who is presently an electrical engineer for Polaroid Corp. in Massachusetts, in engaged to Salpe Archanian. Lori Rosasco, who is employed in technical writing/computer documentation work at JD Edwards in Denver, Colo., was married last October to Kevin Eronimous. Lori and Kevin reside in Denver.

Thomas Ring has been working for a year with a small software consulting firm in Atlanta, Ga., specializing in object-orient ed and client-server database applications. He biked 50 miles in the Multiple Sclerosis Spring Challenge in April. "Enjoyed the warm winter, but sorry I missed the best ski season in the past decade."

And believe it or not, some one asked what I was up to. I am still with Parsons Engineering Science here in Syracuse working as an engineer. I am presently in the hazardous waste department, however am looking forward to future assignments involving New York's upcoming air quality Title V regulations this fall. Should be a fun challenge. I am still mountain biking, working out, and enjoying the life of a single 24-year-old!
Whazzup! As you can see, I have moved, again! So make a note of my new address. Hope that everyone is enjoying the last weeks of summer. Not much information has come in, but a few people did contact me.

Betty Chan has completed her master’s of engineering degree in mechanical engineering and now works as a senior engineer for the technology division of International Paper.

Lonnie McLaughlin is in Newark, Del., working for W.L. Gore and Associates as a process engineer. Chris Blain is moving to Santa Cruz, Calif., to take a job as a manufacturing engineer for Bontrager Cycles. His e-mail address is blainc@rpi.edu, and he would like to hear from anyone who is in the Santa Cruz area.

Elizabeth Hudson is attending medical school at the College of Osteopathic Medicine of the Pacific in Pomona, Calif. David Fields has just graduated from Albany Medical School and is going into a family practice residency at the University of Maryland in Baltimore.

Todd Baldini ran in the 100th Boston Marathon. He finished the race in 2:37:31, which was good for 231st place.

Theresa Schermerhorn (M.S., Mgmt.) recently accepted the position of human resources manager for Nordco in Milwaukee, Wis., a division of Oak Industries, Waltham, Mass. Felicia (Perry) Johnson and Hugh Johnson were married in November 1995 and live in Austin, Texas. Hugh is a software engineer for Motorola, and Felicia is looking for a teaching position in the local school district.

Ron Goldman (MBA '94) lives in Montreal, where he is manager of marketing communications for Cimmetry Systems, a software firm specializing in document viewing and markup solutions. He also designs Web pages in his spare time and can be reached at rgoldman@citinet.net.

Thank you for all of the news, and keep in touch. Feel free to contact me if you are in Central New Jersey. I know that people are doing good things out there. Just send the information to me, and it will get placed in the magazine. Take care, everybody!

Kevin Wheatley celebrated their first wedding anniversary on Aug. 18. They are living in Albany.

Congratulations, graduates!! The past four years seem to have flown by, but now it is all over (for most of you, anyway). Congratulations. For those of you dying to know what your classmates are up to, I spent the last few weeks of school collecting as much information as possible on the post-RPI plans of the Class of '96, and here's the breakdown (in no particular order):


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Geoffrey Davis '95

Kevin Wheatley celebrated their first wedding anniversary on Aug. 18. They are living in Albany.

John Wojewoda and Leah Collins will also be celebrating their first anniversary this fall. They were married on Oct. 21 of last year and are living in Ocean, N.J.

Jason Affourtit married Diana Mason (Russell Sage '96) June 29. Jason is continuing his graduate work at RPI. His e-mail address is affourtit@rpi.edu.

That's all the news for now. Please write and let me know what's going on in your life, or in the lives of any alumni with whom you're in touch. I hope to hear from a lot more of you for next time.

Hank Carbone
Sunset Terrace
Troy, NY 12180

Congratulations, graduates!! The past four years seem to have flown by, but now it is all over (for most of you, anyway). Congratulations.

For those of you dying to know what your classmates are up to, I spent the last few weeks of school collecting as much information as possible on the post-RPI plans of the Class of '96, and here's the breakdown (in no particular order):


Lewis B. Combs '16, retired Navy rear admiral who helped create the Seabees—Naval Construction Battalions—during World War II, and former head of civil engineering at Rensselaer from 1947 to 1963, died May 20 at age 101. (See Rensselaer, June 1995.)

Henry V. Urban '27, retired from the Buffalo school system after many years in secondary education; April 15. Joseph J. Bavasso '29, retired office manager of the Fitzgerald Brewery in Troy, former accountant with AT&T, WWII Army veteran and recipient of the Bronze Star; March 25. Oliver C. Chase '31, former police officer in Peekskill, N.Y., semiautomatics and WWII Navy veteran; March 14. Gustave J. DeTraglia Sr. '31, retired City of Utica, N.Y., Engineer, former chair of engineering at Mohawk College, honored with a scholarship in his name at Utica College; April 26.

Jerome L. Seelig '31, retired from the company he founded, Stylecraft Distributors Inc. in White Plains, N.Y., Feb. 12. Irving A. Oehler '32, former chairman and president of American Refrigeration Sales Corp. in Cleveland, Ohio, and founding president of the National Association of Refrigeration Contractors; Feb. 28. Carmen C. Barrea '34, retired vice president of Pegles Power Service Corp. in Minneapolis; Feb. 11.

William B. Campbell '34, former plastic application engineer for the Fellows Shaper Co. and other companies; May 10. A. Bruce Downes '34, a dentist in practice for 55 years in West, Mass., an ardent conservationist and trout fisherman, and WWII Army veteran; March 30.

Robert P. Meister Sr. '34, retired president of Meister Contracting Co. and of Retsimi Realty Co. and a longtime Rotarian; April 13. Sheldon E. Dahlin '35, a former independent wholesale news dealer; April 15. James T. MacKenzie '36, retired engineer with the U.S. government and active car racer and pilot; May 5.


William P. Switzer '40, retired supervisor of plant engineering at the Ford Motor Co. in Green Island, N.Y., and WWII Navy veteran; Feb. 2. Douglas S. Gormly '41, retired chief metallurgist at Endicott Forging and Manufacturing Co., and former school board president in Fredonia, N.Y.; March 4.


Joseph E. Carley Sr. '47, president and owner of Montclair Bloomfield Ford in Montclair, N.J., and WWII Army veteran; April 1. Donald McRae '48, former partner and owner of Bartlett, Ludlum and Dill, a surveying firm in Brooklyn, N.Y., and WWII Navy veteran; April 27. Paul D. Sahler Jr. '48, retired civil engineer for the Wyoming Highway Department, and Navy veteran; April 30. Heinz H. Brustle '49, retired electrical engineer for GE's power plants; former department, and WWII Army Air Corps veteran; April 10. George W. Cameron '49, retired engineer with McDonnell Douglas; Nov. 26.

Frank C. Codola '50, retired engineering professor at City College of New York and a WWII Navy veteran; Feb. 18. Joseph R. Pratt '50, retired electrical engineer with General Electric Co., where he helped pioneer the development of sonar, and a WWII Navy veteran; April 21. Roger S. Swain '50, founder, past president, and CEO of Infox Inc. of Wolcott, Conn., and WWII Navy veteran; May 4.

Gerald D. Geczy '51, retired vice president of power contracts for Niagara Mohawk Power Corp., and avid boater, fisherman, and pilot; May 25. Victor E. Johnson '52, retired senior engineer for Pinney Bowes, WWII Army veteran, and pioneer heart patient, who proved the benefit of exercise following his 1966 heart attack; May 19. John V. Kelly '52, retired senior mechanical engineer for the Raytheon Co. and avid rose gardener; March 18. Michael A. Gerardi '54, former principal welding engineer at Knolls Atomic Power Laboratory and patent holder; Feb. 9. Robert A. Seufert '56, retired commander in the U.S. Coast Guard and former grants administrator for the New Hampshire Department of Environmental Services; April 24. Robert W. Benway '58, retired computer programmer and analyst for the General Electric Research and Development Center; March 29.


James E. Tremblay '69, an electrical engineer for the General Electric Co. in Albany, N.Y.; June 12.


Grad school: Jason Hylan, Luis Gardell, Kris Daniel, Ron Lewkiewicz, Anita Athoughies, Mike DePoint, Andy Chen, Mike Brown, Jana Spilker, Richard Tossavainen, Maureen Halligan, Mike Banas, Brutos Youn, Jeff Massa, Mike Nucci, Jennifer Taylor, David Carlson, Steve Lanne, all at RPI.

Rob Liander, Columbia; Julie Richards, U. of Rochester; Michael Lavagnino, U. of Michigan; Dawn Leeb, New Mexico State; Jeffrey Pfeiffer, Nathan Slingerland, U. of California, Berkeley; Shelly Saquet, Oregon Health Sciences U.; John Karcz, U. of Arizona; Verushka Martinez, N.Y. Chiropractic College, Seneca Falls, N.Y.; Zoltan Hazos, U. of Florida; Dimitrios Aivaliotis, Florida State U.; Meg Scott, URI School of Oceanography.

Leah Platenik, Albany Med.; Adam Berman, U. of Washington; Kristen Humiston, Albany Law; Tracy Goldberg, Health Science Center, Syracuse, N.Y.; Chay Pierce, Dartmouth; Seward (Chip) Pulitzer, MIT; and Michael Wojcik, U. of Idaho.

And at undeclared schools: Ivan Chinn, Karen Kinel, Kofi Aidoo, Bryon Knight, Dawn Belanger, Gregory Knott, Jen Watts, and Jeff Braiewa.

Those still at RPI include: Michah Abelson, Marty Polinski, Allan Kormel, Debbie Mack (until end of August), Sarah Stiens, Pratice Patel, Wendy Babiarch, Bryce Vaessen, David Abbondanzio, Kobie Boykins, Bob McKay, Su jan Patani, Tim Snyder, Mike Bettuch, Karen Cramer, Keith Wong, Dana Haagensen, Gerald Jackson, Tony Klinowski, Melissa Gelman, Mike Camire, Jill Maloney, Matt Patricia, Sue Keaveny, Eric Kolb, Natalie Turner, Anthony Fiory, and myself.

And Tom Doherty has the best deal of all: He will be traveling abroad in Europe. If you noticed any errors in the above information, please let me know, either by mailing a letter to the address listed at the top of this column or e-mailing me at takbob @rpi.edu. Also, if you want any information about you published here, please send it to me. Thanks, and keep in touch.

P.S. I would also like to add a personal congratulations to Kevin Miller, who became engaged to Jennifer Samp '97 this past spring.
Rensselaer Is Where You Are

Your local alumni chapter is the perfect connection between you and Rensselaer and it offers many ways for you to stay involved with the Institute and with your fellow alumni.

But the chapters are also about bringing Rensselaer—the excitement, the companionship, the learning—right to your hometown.

Rensselaer has more than 30 U.S. chapters in regions from New York to California, and several international groups like the newly formed Alumni Chapter of Hong Kong, and affiliate groups that transcend regional boundaries. Each chapter has a group of dedicated leaders and volunteers who work with Rensselaer to provide programs and services to their members.

Chapter Programming

Your time at Rensselaer is a common bond between you and many other successful professionals in your area. Chapter programming encourages Rensselaer alumni to reconnect with the Institute and each other.

Programs vary from chapter to chapter. Most programs are membership-driven, so if you’re interested in a particular type of event, speak up! Examples include:

- Networking and career development events
- Educational and information sessions, both Rensselaer- and region-specific
- Visits from campus faculty and administration
- Social events such as wine tastings, tours, plays, picnics, and of course, Rensselaer hockey games

How Chapters Support Rensselaer

Your involvement through volunteerism can make a real difference at Rensselaer today. Regional chapters provide vital support in many ways, such as:

- Enhancing Rensselaer’s admissions efforts by bringing alumni to local college fairs and holding events to honor local winners of the Rensselaer Medal
- Hosting visits by current students with alumni for a day of mentoring
- Participating in phonathons to raise critical dollars for the Annual Fund

Join Today!

Local chapters depend on membership dues to support programs and services. Each chapter, including affiliates, collects yearly dues to fund special events, services, and programs for their members.

If you haven’t yet, please consider joining your local chapter. Or support their efforts by attending one of the events in your region. To learn more, fill out and send the business reply card in this issue. Or contact Heliena Fox, assistant director, at (518) 276-2794, e-mail foxh@rpi.edu, or write her at Rensselaer, Heffner Alumni House, 1301 Peoples Avenue, Troy, NY 12180-3500.
NEW MATH? No, it is the equation Rensselaer uses to remain a leader in technological education—and it all adds up to your support. ■ Tuition alone is not enough. Your participation in the 1996-1997 Rensselaer Annual Fund allows us to award scholarships to deserving students, offer academic courses that have real-world applicability, and maintain the heritage of our green-roofed campus. ■ Be part of the solution. Say "YES" when asked to give to the 1996-1997 Rensselaer Annual Fund.
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