Alumni Racing for Success

Vol. 2001-2002, No. 1

On Campus
Campus Responds to Tragedy

Alumni Achievement
Distinguished Young Alumni Awards
heard in the halls of Moench

"This is one of those days that you’re just thankful to have everyone in the family alive and well at the dinner table.

I’ll be back at work tomorrow. I tell you what, all the normal headaches of the office— which projects are we going to fund, how do we get things approved, et cetera— seem like very, very small concerns compared to the families whose lives have been destroyed or forever altered.

— by Chuck Sigman, Class of 1980
Financial Manager, Information Systems and Technology Division, Executive Office of the President
(This message was sent to campus the evening of the Sept. 11 following the terrorist attacks that forced Sigman to evacuate his Washington, D.C., office across from the White House.)
ON THE COVER

Victory Circle at the Indianapolis 500 had a definite Rose-Hulman influence this year. Tim Cindric (class of ’90), left, helped guide Penske Racing to a one-two finish in the "Greatest Spectacle in Racing." He is pictured on the cover with winner Helio Castroneves and Roger Penske. This issue features three alumni who are putting their Rose-Hulman educations to work in three different segments of the racing business. Of course, alumni success is not limited to race tracks. We also introduce you to this year’s Distinguished Young Alumni.
Educing people who can bring the life sciences to life is one of the crucial needs facing our society. I am pleased to report Rose-Hulman is poised to play a role in meeting that need.

What the physical sciences were to our society in the 20th century, the life sciences will be in this century. From unraveling the gene structure to tissue engineering to helping fight disease to environmental management, the life sciences will play a larger role in our quality of life. Just how effective that role will depend on engineers and applied biologists who can transfer scientific ideas into useful solutions.

This fall, Rose-Hulman took a major step in helping meet that need with the unveiling of its bachelor’s program in applied biology. Our program will produce applied biologists with the chemistry, mathematics, and physics background needed to solve biotechnological problems in the coming decades.

Rose-Hulman’s applied biology program is not our first offering in the biological sciences. We had one of the first bioengineering programs in the country several years ago, and we have offered a biomedical engineering minor and an area minor in biology at the undergraduate level as well as a master’s in biomedical engineering. The new degree will take our curriculum to the next level as we strive to produce graduates who are up to meeting the life sciences challenges of this century. We also are studying the feasibility of a complete undergraduate major in biomedical engineering.

Why this focus on the life sciences? The answer is simple — there is a need for people educated in applying these scientific ideas to practical solutions. A gap exists between new scientific theories and applications that turn them into products that benefit humankind. This is particularly true in the area of life sciences where many ideas exist to cure cancer and other diseases. Bringing those ideas to reality will depend on engineers and applied biologists who will transfer them to working solutions. You can’t do it just because you want to do it. You need a strong background in physical sciences, mathematics and molecular biology.

Although the time lag between concept and implementation has grown shorter in recent years, things could move faster with properly trained engineers and applied biologists available to work with the theories. I have witnessed this lag in one of my specialty areas — tissue engineering and bone repair. Twenty-five years ago, a scientist discovered proteins in bones that have a dramatic impact on stem cells becoming bone-forming cells. The first products from that research are just now moving into clinical trials. Developing the research was cost prohibitive until engineers came along who solved production problems of the protein.

Many times we are limited by lack of human talent in solving the problems of the world more than we are in actual dollars available to spend on those problems. I am proud of the direction Rose-Hulman is taking in helping fill that talent pool. Through careful planning and acquisition of resources, we are ready to play a crucial role in the life sciences just as we have in the physical/engineering sciences. Our applied biology program is the result of two years of intensive planning, and we have hired outstanding faculty members in that area. Plans are under way to expand physical facilities available for the program.

I don’t think any college could lay claim to being the best without working on the interface between engineering and the life sciences. Rose-Hulman’s reputation rests on the commitment it made to applied physical sciences in the last century. We will continue to focus on the disciplines we have offered for decades, but we must commit to the same level in the area of applied life sciences. As new scientific breakthroughs occur, it will be good to know Rose-Hulman played a role in educating people who can turn those ideas into useful products.
For the third year in a row, national engineering deans and senior faculty have ranked Rose-Hulman Institute of Technology as the nation's best college among schools that offer the bachelor's or master's as their highest degree in engineering.

The ranking was determined from the results of an annual quality of education survey conducted by U.S. News & World Report magazine.

Ranked No. 1 for the second consecutive year were all five Rose-Hulman engineering programs: chemical, civil, electrical, computer and mechanical engineering.

The percentage of education officials responding to the survey increased to 52% from a 44% survey response rate last year.

The U.S. News survey asked higher-education officials to rate the academic quality of peer institutions. Respondents rated each school on a scale of 1 (marginal) to 5 (distinguished). Rose-Hulman earned a 4.5 rating.

"To be ranked as the best for three years in a row by our colleagues is an endorsement of Rose-Hulman's leadership in undergraduate engineering education," stated Rose-Hulman President Samuel Hulbert. "The ranking is another indication that Rose-Hulman's national reputation has reached a high level because of the quality of people, programs and the successes of our alumni."

The rankings of the top three schools in Rose-Hulman's category did not change from last year's results. Harvey Mudd College of California was ranked second, followed by Cooper Union in New York City.

Rose-Hulman also ranked ahead of the military academies, Bucknell, Villanova, and Bradley universities as well as Swarthmore and Lafayette colleges.

The rankings were published in the magazine's America's Best Colleges 2002 guidebook. The guidebook is available in bookstores until next September. The complete rankings can be accessed at the magazine's web site www.usnews.com.

FRESHMAN CLASS INCLUDES RECORD NUMBER OF FEMALES

Six years after first enrolling women students, Rose-Hulman welcomed its largest freshman class of female students this year.

Females make up 93 of the 405 freshmen — nearly 23 percent — in the incoming class. That percentage is slightly more than the national average of female enrollment at engineering colleges (20 percent). Rose-Hulman had 80 female students in the first year of coeducation in 1995 and 73 in last year's freshman class.

This year's incoming class is once again filled with National Merit Scholars, valedictorians and students with perfect SAT scores. Freshmen boast a median SAT score of 1300 (680 mathematics/ 620 verbal) out of a possible 1600.

Other statistics of the 2001 freshmen are:

• 20 students earned a perfect mathematics score on the SAT.
• 94% ranked in the top fifth of their high school classes.
• 289 of the 405 students participated in varsity sports in high school.

For the fifth straight year 50 percent or more of first-year students are coming from outside Indiana, showing Rose-Hulman's growing national reputation.

In assessing the increase in female enrollment, Dean of Admissions Charles Howard said: "We gave special emphasis to our recruitment efforts for female students, introducing several new programs."

Vans, cars and trucks were packed to the top when the Class of 2005 rolled onto campus this fall.
Mark Richter will find it easy to explain to donors the benefits students receive from their Rose-Hulman educations. That's because he'll get a first-hand, student perspective from his son, Tom, a member of the 2001 freshman class.

Richter moved into his Templeton Alumni Center office August 1 as the new vice president for development and external affairs. He replaces Darrell Loyless, who is now vice president of the Texas Methodist Foundation in Austin.

"One of the things I'm most proud of is that my son and I have entered Rose-Hulman together," said Richter. He and his wife, Libby, are also parents to Kate, a high-school senior.

"Tom's interest in Rose-Hulman is what first drew me to the college. He received a copy of the admission viewbook and it was probably the best admissions publication I'd ever seen," he recalled. "I thought that if a college can produce a marketing piece that communicated its excellence in such a creative way, then it was a special place."

Richter joins the Rose-Hulman administration after serving 13 years in development positions at Hillsdale College (Mich.) and Michigan State University. For the past seven years, he was executive director of the Office of Gift and Estate Planning at Hillsdale, a private liberal arts college with an enrollment of 1,200 students.

"I was especially attracted to Rose-Hulman because of the strong commitment the campus community has to excellence," said Richter. "I've quickly learned that everyone at Rose-Hulman is committed to continuous improvement."

Rose-Hulman President Samuel Hulbert noted that Richter has extensive leadership experience in development programs that are among the most successful in higher education.

"His talents will be vital to continuing the unprecedented progress Rose-Hulman has experienced in development and public relations," Hulbert said.

Richter said he plans to build on the successes achieved under the leadership of retired vice president Ron Reeves and Loyless. "One of our first goals is to exceed the $200 million goal of the Vision to be the Best campaign," he emphasized. "We are at $189 million, so the goal is within sight. I know the generous support of our alumni and friends will put us over the top."

The need for additional scholarship funds and donations that will build Rose-Hulman's endowment remain top fundraising goals, according to Richter.

"Rose-Hulman is behind peer institutions in regard to the resources we have in both areas," he noted.

Richter earned a law degree from Ohio Northern University and received the MBA from Capital University in Ohio. He received the bachelor of arts degree from Ohio University. Before entering higher education, Richter was a senior attorney for the Battelle Memorial Institute's Columbus Division and director of finance and administration for the Edison Welding Institute at Battelle.

"Working with philanthropists who have a strong commitment of giving back, who want to help others and are optimistic about the future is one of the most rewarding aspects of my job," he explained.
350 RECEIVE DEGREES AT 2001 GRADUATION; SIX HONORED WITH SPECIAL AWARDS

The 2001 graduating class at Rose-Hulman was told that they are challenged with nothing less than defining the 21st century. That challenge to the 350 students receiving bachelor's or master's degrees was voiced by commencement speaker David Swain, senior vice president of engineering and technology and president of Phantom Works at the Boeing Co.

Swain was one six who received an honorary degree during the college’s 123rd commencement May 26 in the Sports and Recreation Center. Six faculty, students and staff received special awards.

Swain told graduates they will have a significant impact on this century because, “Science and technology are dominant in determining the conditions of mankind, and you are the leaders of tomorrow.”

Students receiving special honors were: Kevin Schaaf, Heminway Gold Medal for highest grade point average; Tonya Cole, John Tuller Royse Award; and Karen Hill, Herman Moench Distinguished Senior Commendation.

The Dean’s Outstanding Teacher Award was presented to Roger Lautzenheiser, professor of mathematics. Phillip Cornwell, associate professor of mechanical engineering, received the Board of Trustees Outstanding Scholar Award. Linda Gilbert, assistant to Rose-Hulman President Samuel Hulbert was the recipient of the President’s Outstanding Service Award.

In addition to Swain, other honorary degree recipients were Rose-Hulman alumni Robert Bright, (’57, Chem.E.), retired division vice president, Electrical Specialties Division, 3M Company, Austin, Texas; Robert Cooney, (’48, C.E.), retired director of public works for the State of Indiana, Naples, Fla.; and William Schindel, (’69, Math), president, International Centers for Telecommunications Technology, Terre Haute. Joining them as honorary degree recipients was Terre Haute Honey Creek Middle School mathematics teacher Robert Fischer.

TIL PANARANTO DIES AT THE AGE OF 79

Til, just mention his first name and it would bring a smile to the face of former Rose-Hulman student athletes. And, it wouldn’t take them long to tell a “Til story.” He was more than just an athletic trainer to Rose-Hulman student-athletes and coaches.

“Til was a Rose-Hulman institution,” recalls former Rose-Hulman athletic director and basketball coach John Mutchner. Til retired in 1987.

Til passed away Sept. 5 in Melbourne, Fla.

“Every school needs a Til Panaranto, but Rose-Hulman got the only one,” says Mutchner.

“He was a unique and special person. Til was a father, counselor and friend to our student-athletes. When they were disappointed, Til always had the ability to say the right things to give them a lift.

When alumni learned of Til’s illness, the response in the form of cards to him and e-mails to Mutchner was tremendous, according to Mutchner. “He received more than 125 cards in just a few days.”

The Til Panaranto Memorial Fund has been established at Rose-Hulman. Donations should be sent to the Rose-Hulman Development Office, 5500 Wabash Avenue, Terre Haute, Ind. 47803.

A memorial service in Til’s honor was conducted on campus at the White Chapel during Homecoming weekend. Among those attending was his wife, Florence.

KAHNs ANNOUNCE $100,000 CHALLENGE GIFT TO SUPPORT FUNDRAISING FOR OUTDOOR TRACK

Robert and Louise Kahn have announced a challenge gift that will match alumni donations totaling $100,000 toward a $1.1 million goal to renovate the outdoor track surrounding Phil Brown Field.

The poor condition of the track has prevented Rose-Hulman from having a home varsity track meet for the past seven years.

“Our goal is to raise the funds during the next six months so construction can begin in March,” Rose-Hulman President Samuel Hulbert stated.

The construction schedule is important because Rose-Hulman is slated to host the Southern Collegiate Athletic Conference Spring Sports Carnival in April, 2003.

The improvements would include installation of new track surfaces, replacement of scoring and timing systems, moving the north bleachers, construction of storm water lines and basins, and upgrades that would enhance the condition of the football field.

Robert Kahn, chairman of the board for St. Clair Resources, is a 1939 Rose-Hulman chemical engineering graduate. In 1981, Kahn received an honorary doctor of engineering degree from Rose-Hulman. Two large meeting rooms in the Hulman Union are named in the Kahn’s honor for their longtime support of Rose-Hulman.

Alumni who want to contribute to the track renovation project and have their gifts matched by the Kahn’s challenge should contact Bruce Landis, director of development, at 812-877-8444 or at Bruce.Landis@Rose-Hulman.Edu.
Seventeen Indiana-based companies poised for significant growth have a strategic advantage. Their advantage is Rose-Hulman Ventures. Each of the technology-reliant companies is using the comprehensive services at RHV to bring new products to the market faster than their competition.

The success stories range from new products for the life sciences and medical services to new equipment to improve roadways. The companies include NoInk Communications, Camile Products, and Maddock Industries. Each used Rose-Hulman Ventures resources to transform great ideas into viable products. Other companies currently affiliated with RHV include Buildings to Go, Contamination Studies Laboratories, Inc., Distortion Graphics, Inc., Gateway Electronic Medical Management Systems, Home Data Source, Ministry for Clergy Families, Music Rebellion, OnCall Solutions, ShockVentures, Suros Surgical Systems, Technology Partnership Group, Techwell, and Veregon, Inc.

Rose-Hulman Institute of Technology graduates and NoInk founders, Aaron Nelson, Dustin Sapp and Rose-Hulman Senior Robert Harris utilized RHV to make their idea a reality. They created personal digital assistant solutions for industries in need of wireless database access. NoInk developed software that reduced paperwork by automating forms, allowing employees to securely access corporate data instantaneously; and push real-time vital information to a hand-held wireless device.

Rose-Hulman Ventures provided space, computer infrastructure, and office support that helped NoInk in its success and growth. NoInk contracted with Rose-Hulman computer science students to assist in the development of the product. NoInk is now a thriving business with 11 full-time employees.

"Rose-Hulman Ventures was established to create the infrastructure for an innovation economy in Indiana," said Jim Eifert, president of Rose-Hulman Ventures. "We are excited about the opportunity to provide entrepreneurial firms with access to full-time engineering staff, the technical talents of the Rose-Hulman faculty, student body, and venture capital funds not accessible from traditional incubators."

Camile Products, an Indianapolis high-tech firm, had the idea to create a small-scale production system for the life sciences and chemical industries. Rose-Hulman Ventures staff built a prototype of the instrument which allows chemists to synthesize new chemical compounds faster, shortening product development time, and increasing profits.

"The development of the chemical synthesizer provided an excellent opportunity for chemical engineering, electrical engineering, applied optics, and mechanical engineering students to put their classroom knowledge to work on real projects and gain invaluable experience," stated Brij Khorana, vice president, Rose-Hulman Ventures. "The team of students was led by our engineering staff augmented by several faculty members."

Argonaut Technologies subsequently acquired Camile. Argonaut vice president Spencer Vawter commented, "By taking advantage of engineering expertise at Rose-Hulman Ventures, we were able to bring our chemical synthesizer to market in half the time originally estimated. Speed to market is critical in our marketplace, which is characterized by exploding demand and little supply."

Maddock Industries, located in Bloomington, Ind., designs and manufactures equipment used in road building and asphalt recycling. David Maddock, president of Maddock Industries, had the idea to create a single piece of equipment that could be adapted to accomplish multiple road construction tasks.

Rose-Hulman Ventures is helping Maddock Industries design specialized highway construction equipment faster and less expensively. Although construction equipment is not often seen as a highly technical end product, the embedded technology and engineering expertise used in the creation of construction machinery are very technical. In addition to the venture capital fund, the skills of civil, mechanical, and electrical engineers were crucial to the success of the project.
Alumnus Clyde Willian was elected as the new chairman of the Rose-Hulman Institute of Technology Board of Trustees during the board’s September meeting. He succeeds Terre Haute Attorney Guille Cox who served for six years as board chairman. Cox becomes chairman of the trustees’ board affairs committee and also serves on the investment/management and executive and planning committees.

Willian had served as vice chairman of the board. He graduated with honors from Rose-Hulman in 1952, earning a degree in chemical engineering. Willian has been a trustee since 1989. In 1995, Rose-Hulman presented him with an honorary doctor of engineering degree for his professional accomplishments and service to the college.

Willian is a noted intellectual properties attorney and a retired partner from the Chicago-based law firm of Sidley, Austin, Brown and Wood. He has represented numerous multi-national clients and serves as the general counsel to the Licensing Executives Society International, Inc., a worldwide organization promoting technology transfer. Willian also serves as a trustee for the Hadley School for the Blind.

Elected as the new vice chairman of the board is Don Scott, chairman and CEO of the Sycamore Agency in Terre Haute. Re-elected as the board’s treasurer was Hal Brown (’57) and Mike Thomas (’64) will serve another term as the board’s secretary.

Rose-Hulman alumni interested in pursuing an MBA from Harvard University can receive financial assistance by qualifying for a fellowship created by Rose-Hulman alumnus Michael Percopo (’43).

One Rose-Hulman alumnus has already benefitted from the Michael W. Percopo and Catharine W. Percopo Fellowship Fund. The amount of monetary support will be based on the student’s financial need.

“Early in my career, I realized that an engineering education combined with an MBA would be important to a successful career in business,” Percopo said. “I want to help other Rose-Hulman graduates whose goal is to earn an MBA from Harvard.”

Percopo used his chemical engineering degree from Rose-Hulman along with his Harvard MBA to become a successful international business executive. He retired as president of Squibb International. He currently serves as president of MWP Associates International.

“I strongly encourage any alumnus who has at least three years of management experience to consider applying for the fellowship,” stated Percopo, who is a member of the Rose-Hulman Board of Trustees.

Interested alumni should contact the Harvard MBA Financial Aid Services, Baker Library, Soldiers Field, Boston, MA 02163 or via phone at 617-495-6640.

A variety of planned giving arrangements are available to alumni and friends of Rose-Hulman. From a simple will bequest to gift annuities and trusts, our Development Office can assist you and your attorney or financial advisor to insure Rose-Hulman’s future and our Vision to Be the Best while offering lifetime income and tax advantages to you!

For more information and our brochure, A Guide to Creative Planned Giving Arrangements, contact:

David D. Haynes
DIRECTOR OF PLANNED GIVING
(800) 248 - 7448, Extension 8453
email: giftinfo@rose-hulman.edu
SOFTBALL WINS EASTERN DIVISION CHAMPIONSHIP

In its second season as a varsity program, the Rose-Hulman softball team won the Southern Collegiate Athletic Conference Eastern Division championship and placed third in the league tournament held at DePauw University. The team had a 22-18 record.

BASEBALL TURNS ON LIGHTS, ENJOYS 29-WIN SEASON

The baseball team won 29 games for the second time in school history during a season that featured the first-ever night game at Rose-Hulman's Art Nehf Field. After starting the season with a 20-6 record, the Engineers welcomed DePauw University for the first home night game in school history on Apr. 6. Unfortunately, the visitors withstood several Rose-Hulman rallies to earn an 11-7 victory in front of a season-best crowd. The Engineers went on to finish the season 29-15 with a 9-7 mark in conference play.

Five Rose-Hulman players earned all-SCAC honors for their efforts.

ROSE-HULMAN TO HOST NCAA DIVISION III WOMEN'S BASKETBALL NATIONAL CHAMPIONSHIP

The NCAA Championships Committee has selected Rose-Hulman as host for the 2002 and 2003 NCAA Division III Women's Basketball National Championships.

The 2002 NCAA Division III Women's Basketball Championship takes place March 15-16, with the 2003 Championship scheduled for March 21-22. The Rose-Hulman Sports and Recreation Center, constructed in 1997 with a capacity of 2,100 for basketball, will serve as the event site.

"Rose-Hulman is honored to be the college chosen to host the NCAA Division III Women's Basketball National Championship for the next two years. We will work with the NCAA and the Terre Haute community to ensure that this will be an outstanding event for both the student-athletes and fans," said Rose-Hulman President Samuel Hulbert.

Two semifinal contests will open the Championship on Fri., March 15 beginning at 6 p.m. A third-place game will precede the 8 p.m. national championship contest on Sat., March 16.

Rose-Hulman previously hosted the 1995 NCAA Division III Golf National Championships and served as host for the 1997 NCAA Division III Cross Country Regional.

GOLF PLACES 7TH AT SCAC CHAMPIONSHIP

The Rose-Hulman golf team concluded a season of development with a seventh-place finish at the SCAC championship.

Junior Jeremy Roehm emerged as the team's No. 1 player. Junior Adam Summerlot compiled the top score at the SCAC championship.

POLE VAULTER SCHIPPER REPEATS AS ALL-AMERICAN

Sophomore pole vaulter Andrew Schipper continued his record-setting track and field career by earning his third All-American honor at the NCAA Division III Outdoor Track and Field National Championships at Millikin University.

Schipper cleared 15'9" on his first attempt to finish fourth after earning third-place honors at the 2001 NCAA Division III Indoor Nationals in March. He also claimed a Southern Collegiate Athletic Conference championship and defended his Little State individual title during the outdoor season.

TENNIS TEAMS ENJOY SUCCESS

The men's tennis team recorded their third consecutive winning season, while the women's team continued its development during the spring season.

The men finished 11-9 overall and placed ninth at the SCAC championship at DePauw University. The women topped Oglethorpe University to enter the championship bracket at the SCAC meet before finishing eighth.

HOMECOMING 2002
October 11-12
MAKE HOTEL RESERVATIONS NOW
The Rose-Hulman Athletic Hall of Fame membership grew to 97 members with the induction of 10 student-athletes during a special ceremony prior to a Sept. 8 football game against the University of the South.

**THE CLASS OF 2001:**

**Tim Cindric** (1990, mechanical engineering) – Four-year basketball letterman; team co-captain; two-time all-conference; honorable mention academic All-American; 1,083 career points; participant on two NCAA Division III tournament teams.

**Pat Daily** (1905, mechanical engineering) – Four-year letterman in football, basketball and baseball; held school pitching record with 67 strikeouts in a season for 88 years; top defensive football player; top forward for inaugural men's basketball team.

**Ed Huonder** (1991, electrical engineering) – Four-year letterman in football and baseball; Rue! Fox Burns Blanket winner; two-time team Most Valuable Player; Honorable Mention All-American; school records for receptions, receiving yards, punt returns and punt-return yards.

**Marty “Beasty” Cavanaugh** (1942, chemical engineering) – Offensive lineman for first undefeated football team; three-year team member, two-year starter; began career as guard before moving to tackle; team honorary captain; made several all-state teams.

**John Hanger** (1987, electrical engineering) – Qualified for nationals in the javelin three times; ranks second on Rose-Hulman's career lists in the old javelin (216' 2") and new javelin (198' 7 1/2''); Hulbert Award winner; Most Valuable in Field Events.

**Roger Hruskovich** (1987, chemical engineering) – First four-time all-conference cross country runner in school history; three-time Most Valuable Player; part of team's record time (129:08 at Purdue).

**Kevin Kluemper** (1991, mechanical engineering) – Four-year baseball letterman; GTE Academic All-American of the Year 1991; two-time Academic All-American; first-team all-region; ICAC Most Valuable Player; Logan Award.

**Earl “Mike” Michaels** (1942, electrical engineering) – Quarterback on Rose-Hulman’s first undefeated football team; two-year captain; made several all-state teams as a junior and senior; recognized as one of state’s top passers.

**Britt Petty** (1991, mechanical engineering) – Four-year basketball letterman; Ruel Fox Burns Blanket; two-time first-team all-ICAC; third on career scoring list (1,868), first in three-pointers (245), first and second in single-season three-pointers; seventh in career blocked shots (71).

**Chris Szaz** (1988, mechanical engineering) – Two-time all-conference; honorable mention All-American; 251 career tackles, 18 sacks and 12 tackles-for-loss in career.

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**CHRIS UNTON NAMED ACADEMIC ALL-AMERICAN**

Rose-Hulman men's basketball player Chris Unton earned third-team College Division Verizon Academic All-American honors for his efforts on the court and in the classroom last season.

Unton averaged 8.4 points and a team-high 6.5 rebounds per game while recording a team-high three double-doubles for Rose-Hulman during a season that resulted in the school's second conference championship in three years.

In the classroom, the computer science major maintains a perfect 4.0 cumulative grade-point-average.

Unton became the 49th Academic All-American at Rose-Hulman since 1978 and the 29th since 1990.

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**STUDENT-ATHLETES EARN ACADEMIC ALL-SCAC HONORS**

Rose-Hulman’s winter and spring sports athletes earned a total of 65 academic all-Southern Collegiate Athletic Conference awards.

The swimming squad led the pack with 14 academic all-conference awards. The tennis teams earned 13 academic all-conference awards, followed by track and field with 12, men's basketball with nine, softball with seven, baseball and women's basketball with four each, and golf with two.
Problem 1.

If the small rectangle is a square then find the ratio of the area of the square to the area of the large rectangle.

Two rectangles are shown in the figure. The length of the large rectangle is twice its width. The small rectangle has two of its sides along adjacent sides of the large rectangle and a vertex on the diagonal. Express your answers to the following problems in terms of the width W of the large rectangle.

Problem 2.

Find the ratio of the areas of the two rectangles when the small rectangle has maximal area.

Send your solutions to Herb.Bailey@rose-hulman.edu or to Herb Bailey, Math. Dept., Rose-Hulman, 5500 Wabash Ave., Terre Haute IN 47803.

Solvers of the Papus problems were:

Friends: C. Drake

The number of solvers was down a bit this time, perhaps spring fever. Some missed the problem of balancing the trapezoid by assuming that the areas on either side of the balance line must be equal. The correct requirement is that the moments must be equal. A sketch is shown in the figure. The moment of the rectangle around the vertical dashed line is \((3)(x)(x/2)\). The moment of the triangle about the dashed line is \(1/2(3)(5-x)(\frac{5-x}{3})\). Equating these two moments and solving the resulting quadratic gives \(x \approx 1.83\).
Several Rose-Hulman activities took place to support national relief efforts in the wake of the Sept. 11 attacks on New York and Washington, D.C.

A total of 462 Rose-Hulman employees and students donated blood — a record for Rose-Hulman’s quarterly blood drives. The event was sponsored by social fraternities and the Residence Hall Association.

Donations totaling $3,967.50 have also been collected on campus for the American Red Cross White Ribbon national campaign. The Office of Student Affairs coordinated that effort.

The Rose-Hulman football team donated $1,000 from homecoming gate receipts to the American Red Cross, and the team also contributed 21 sets of white athletic socks to a Salvation Army project providing clothing to emergency personnel working at the attack sites. In addition, Pi Kappa Alpha fraternity and Chi Omega sorority raised donations for the Red Cross during homecoming football and soccer games.

An evening prayer service coordinated by the Intervarsity Christian Fellowship was conducted Sept. 11 in White Chapel on campus.

At least four Rose-Hulman alumni were near ground zero in the Sept. 11 attack on the Pentagon. They were at the Pentagon for a college course titled Defense Policy in the 21st Century.

The course is part of an Indiana University certificate in public administration. It included a week in Washington with a day at the Pentagon.

Among the alumni present was David Reece (class of 1962), instructor and associate director for executive education at IU’s School of Public and Environmental Affairs. He was accompanying the class, which included Eric Moody (class of 1993), Doug Hackman (class of 1986) and Mat Hardman (class of 1985). Those three work at Crane Naval Surface Warfare Center in southern Indiana and are enrolled in the IU program through Crane.

On the morning of Sept. 11, the group was meeting in a room on the fifth floor of the Pentagon with the undersecretary of the U.S. Navy, Susan Livingstone.

“At first there was emergency lighting, and were scrambling to figure out which way to go,” said Reece. “We started down one hall, but it was so smokey that we turned around and went toward an exit.

Hardman noted they could feel heat from the fire on the walls as they moved down the halls.

“At the time, we had no idea what happened,” Moody said.

“At first there was emergency lighting, and were scrambling to figure out which way to go,” said Reece. “We started down one hall, but it was so smokey that we turned around and went toward an exit.

Hardman noted they could feel heat from the fire on the walls as they moved down the halls.

“At the time, we had no idea what happened,” Moody said.

“The plane hit on the lower three floors in the section where the class took place. It was almost underneath where the alumni were. “About 30 minutes after we were out, we heard what sounded like another explosion, but by newspaper accounts, we later realized it was that corridor we walked through falling in,” Reece said.

All four returned safely to Indiana.
ENGINEERING IMPROVEMENTS IN HEALTH AND MEDICINE;
NEW APPLIED BIOLOGY DEGREE LAUNCHED

By David Piker
"Rose-Hulman is preparing graduates who will have the ability to apply their biological sciences knowledge to solve practical problems. The undergraduate program is not focused on theoretical research."

— Lee Waite, head of the applied biology and biomedical engineering department and associate professor

The human genome project. The creation of a cochlear implant that enables children to hear. Those are just two recent examples of the rapid biomedical developments that are dramatically changing health and medical care. There exists an urgent need for more biologists who have the technical knowledge to achieve the next major medical breakthroughs in pharmaceuticals, gene therapy or non-invasive surgery.

The excitement related to biomedical advancements has significantly increased student and faculty interest in biology and biomedical engineering at Rose-Hulman. Enrollment in biomedical engineering courses grew five-fold in a recent three-year period. Last year, 68 students graduated with a minor in biomedical engineering. Twenty-seven alumni have earned a master's degree in biomedical engineering since 1993. Seven faculty teach in the Department of Applied Biology and Biomedical Engineering, which was created two years ago.

As a result of the interest on campus and society's need for biotechnologists who can continue improvements in health care, Rose-Hulman launched a bachelor's degree program in applied biology this fall after several years of planning.

"The difference between our program and the traditional biology major is illustrated by the word applied," stated Lee Waite, head of the applied biology and biomedical engineering department and associate professor. "Rose-Hulman is preparing graduates who will have the ability to apply their biological sciences knowledge to solve practical problems. The undergraduate program is not focused on theoretical research."

Waite said a strength of the program will be the interdisciplinary nature of a student's courses: "The applied biology program will produce biologists who will have the chemistry, engineering, mathematics and physics background needed to increase discoveries in gene therapy, create new pharmaceutical compounds and advance tissue engineering."

"Electrical engineers are designing implantable devices for muscle stimulation, mathematicians are involved in computational biology discoveries, and physicists are creating new ways to use lasers in medical technologies," he explained.

"Graduates will be versatile and very employable," Waite commented.

Seventeen students including 14 freshmen have already selected the new degree program as their major, according to Waite.

Andy Ham says a biology class his freshman year at Rose-Hulman triggered his interest in pursuing a career in molecular biology.

"That's when I started to think about what I could do with a biology degree," says the sophomore from Toledo, Ohio. "I got interested in DNA. I'd like to attend graduate school and maybe do research in the area of molecular biology and genetic diseases," he said.

Ham didn't have to wait for graduate school to get a chance to do research. He's working with applied biology and biomedical engineering professor Ric Anthony on research related to the genetics of yeast cells.

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Another asset for the program has been the Lilly Applied Life Science Research Center in Olin Hall. The Center is an important laboratory-based program that enables faculty and students to engage in multi-disciplinary projects. The Center has been funded by two gifts totaling $275,000 from Eli Lilly and Co. The second gift of $150,000 was received this spring.

Professor Ric Anthony is one of the faculty members serving the new degree area.

New scholarships for students interested in the life sciences will be created through two recent $150,000 gifts. The donations were received from the Guidant Foundation in Indianapolis and matched by Ronald Dollens, president and chief executive officer of the Guidant Corp.

In the early 1970s, a biological engineering degree program was offered at Rose-Hulman for about 10 years. Key faculty members departed the program and student interest declined. Alumni who received degrees during that period have become successful as the founders of medical device companies, medical school faculty and developers of new surgical procedures.

"Graduates of our program will continue the important advancements in biological sciences that many of our alumni have pioneered," Waite stated. "I'm excited that we're teaching students today who will significantly improve medical care in the future."
“The team has just jelled under Tim’s leadership. He brought discipline and experience. He is cool under fire and has a knack for making the right call on the track.”

— Roger Penske speaking about Tim Cindric

Calling the right moves
All the way to the winner's circle

BY DALE LONG

Tim Cindric’s road to Victory Circle at this year’s Indianapolis 500 was paved by more than left turns, quick pit stops and normally aspirated engines. It took a coordinated effort filled with transatlantic corporate flights, long hours of vehicle testing and a well-crafted race strategy.

With Cindric boldly calling the right moves.

In his two years as president of Penske Racing, the 1990 mechanical engineering graduate has played a key role in recapturing Roger Penske’s once-proud racing fortunes in the Championship Auto Racing Teams’ FedEx Championship Series and the Indianapolis Motor Speedway. Team Penske won the 2000 CART championship, with driver Gil de Ferran; has been the dominant two-car team this year; and posted an impressive 1-2 finish at the Greatest Spectacle in Auto Racing, led by driver Helio Castroneves’ fence-climbing victory.

“Tim came on board and really pulled the team together. He doesn't get the credit he deserves,” admits Penske, an 11-time Indy 500 winner. “He put the Indy program together, and he’s the guy who kept everything in cadence.”

Modestly, Cindric shrugs off such praise, calling attention to the contributions of Penske Racing’s 65-member team of engineers, mechanics, specialists and drivers. After all, it wasn’t too long ago that he was one of them as a design engineer for TruePower Inc. and TrueSports Racing.

“At the end of the day everybody looks at it as a team, not any one particular red suit or black suit (Marlboro team uniform). That’s what makes us proud,” said Cindric, who knows the importance of teamwork as a former all-conference basketball player at Rose-Hulman. “Racing is a team sport. The guys on the team are here every day doing the nuts and bolts, making sure all the T’s are crossed and I’s are dotted. And, we don’t sacrifice anything in any place. That’s very difficult to do.”

Upper Left: Cindric, right, confers with driver Gil de Ferran. Above: Cindric calls the shots from the Penske pits.
Penske Racing’s latest Indy 500 triumph culminated a whirlwind spring of red-eye flights, team equipment exchanges near the Mexican border and emergency helicopter rides to obtain replacement parts for a $20-million operation striving for perfection in two contrasting racing circuits.

The Indianapolis 500, the crown jewel of the Indy Racing League, utilizes a different equipment package than CART’s series. For that reason, Cindric joined other Penske team members at the 2000 Indy 500, assisting Jason Leffler in a race effort for Treadway Racing.

“It gave me the opportunity to see firsthand what the (Indy) game was and how it had changed,” Cindric said. “From the first conversation I had with Roger, Indianapolis was always on the radar screen. We wanted to have our own team in the 2000 race, even going so far as to purchase an IRL chassis package. However, it never got out of the bubble wrap (packaging) . . . We had a lot of work to do.”

Secretly, during the summer of 2000, Castroneves made his initial vehicle tests at the Indianapolis Motor Speedway. By the fall, both Penske drivers were becoming familiar with the famed 2 1/2-mile oval. Cindric officially confirmed in mid-January that Penske’s familiar red and black colors would be returning to IMS.

Two months later, Penske Racing made its IRL debut in the Pennzoil Copper World Indy 200 at Phoenix International Raceway - a week after CART’s season-opening race in Monterrey, Mexico. It was another learning experience: Castroneves placed 18th after suffering an engine failure, while an accident put de Ferran in 24th.

“We still weren’t ready for Indianapolis. We needed to work out the fine details,” Cindric admits. “We knew we had the equipment (Oldsmobile’s powerful 3.5-liter engine), the team and the drivers to get the job done. We were doing very well in the CART series. We just had to put everything together prior to Indianapolis.”

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THE CINDRIC FILE:

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<thead>
<tr>
<th>Date</th>
<th>Position</th>
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<tr>
<td>May, 1990</td>
<td>Engine Engineer, TruePower Inc.</td>
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<td>November, 1991</td>
<td>Gearbox Design Engineer, TrueSports Racing</td>
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<td>June, 1992</td>
<td>Interim General Manager, TrueSports Racing</td>
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<td>October, 1992</td>
<td>Production Manager, Rahal-Hogan Racing</td>
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<td>June, 1993</td>
<td>Engineering Coordinator, Rahal-Hogan Racing</td>
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<td>July, 1994</td>
<td>Race Team Manager, Rahal-Hogan Racing</td>
</tr>
<tr>
<td>November, 1995</td>
<td>Team Manager, Team Rahal</td>
</tr>
<tr>
<td>October, 1999</td>
<td>President, Penske Racing</td>
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The pace intensified even more in May with Indy 500 festivities surrounding CART’s Firehawk 500 in Motegi, Japan. Minutes after Castroneves’ second-place finish, Cindric had the Penske team on its way back to Indianapolis to take advantage of the final open track day.

A week later, Castroneves and de Ferran finished first and second at the famed brickyard, wiping away the biggest disappointment of Roger Penske’s 40-year racing career — failing to qualify for the 1995 Indy 500.

“We knew nothing could be taken for granted this year,” stated Penske. “We came here, we had good cars all month, and we tried to do our job. The pit stops were the best I’ve ever seen, and I think our strategy was right.”

The victory was especially significant to Cindric, who had literally grown up in and around the Indianapolis Motor Speedway. Ironically, his father, Carl, once built engines for Penske.

“It was unbelievable to finish 1-2, let alone winning the race . . . It was a dream come true. Racing is the only thing I’ve ever known. As a kid, my summers were spent at the track or playing basketball. I’m truly an Indiana boy. I remember watching Roger Penske from afar. I admired his professionalism and his attention to detail. I hoped to someday work for him,” said Cindric, also crediting the late Herb Porter, a respected engine builder, for being a mentor. “The victory was especially gratifying knowing that my father, mother (Janice) and sister were in the stands. So were many of my close friends, going back to my days at Rose-Hulman. The victory was as much for them as for me. They made it all possible.”

So did Penske, whose racing operation was marred in a four-year slump when he made a late-night recruiting call to Cindric in October 1999 to assume a management role in the open-wheel racing program that involves being on call 24 hours a day, seven days a week. He also oversees Penske Cars Ltd., the design and manufacturing facility located in Poole, England, and Racing Experience Inc., the performance driving experience program for Marlboro brand of Philip Morris U.S.A. Penske had admired Cindric’s leadership as team manager for CART rival Bobby Rahal’s Team Rahal.

“He’s a highly motivated guy,” said Penske in describing Cindric, who at age 33 is one of the youngest leaders in open wheel racing. “The team has just jelled under Tim’s leadership. He brought discipline and experience. He is cool under fire and has a knack for making the right call on the track.”

On race day, Cindric communicates with driver Castroneves on the radio, being a calming influence on the highly charged Brazilian. Penske does the same for de Ferran. Penske and Cindric also talk to each other about race strategy.

“There’s nobody who sets a better example than Roger does. He motivates us every day and makes us believe that everything is possible,” said Cindric, who now lives near Penske’s state-of-the-art race shop in Reading, Pa., with his wife Megan (the daughter of former race car owner Jim Trueman) and sons, Tanner, 5, and Austin, 3. “Roger and I have a pretty good understanding of where the line’s drawn. When I feel like I need to consult him on certain issues, I’ll find him anywhere in the world. And, I think he has the confidence that when somebody’s got to make a call, the call’s going to be made, and he’ll support it.”

All the way to the Winner’s Circle.

Rose-Hulman’s Solar Phantom VI solar-powered car survived the harsh July heat of the Mohave Desert, congested traffic in Chicago and Los Angeles, and interstate highways to complete the 2,300-mile American Solar Challenge. The team placed eighth out of 30 teams in the 11-day adventure that traveled along historic Route 66 from Chicago to Los Angeles.

Rose-Hulman finished ahead of Massachusetts Institute of Technology, Stanford (two entries), Texas A&M and Northwestern. The University of Michigan won the race and will represent the U.S. in the World Solar Challenge across Australia in November.

The American Solar Challenge was the longest solar car race completed in the world. “Just getting to the finish line was a victory for us in a competition of this magnitude,” stated Team Leader Brad Berron, a senior chemical engineering major.

Solar Phantom team members received honors for sportsmanship and strategy at the post-race awards ceremony. The team also helped promote Rose-Hulman through interviews on WGN-TV and WGN-Radio (Chicago), the Chicago Sun-Times, the Los Angeles Times and National Geographic Television, which will broadcast a documentary about the race.
When Spencer Geswein reaches his ultimate career goal, he can chalk it up to his drive to succeed ... literally.

A 1993 mechanical engineering graduate, Geswein wants to drive full-time in a major auto racing series. Using a baseball analogy, his current status as a driver would be described as being in the farm league knocking on the door to play in the majors.

Geswein is off to a good start with consecutive wins in the One Lap of America race. He and his co-driver, Brian Smith, drove a Dodge Viper to victory in 2000, and again in 2001 beating 100 teams each year. "One Lap", as it is known, is a 4,000+ mile race which is the modern version of the "Cannonball Run." (Movie aficionados will remember the race portrayed in the 1981 Burt Reynolds movie of the same name.)

An annual endurance competition, the One Lap race takes place over seven consecutive days. Drivers travel to seven different racetracks to compete against the clock, scoring points for their finishes at each track. This year, the race started in Watkins Glen, N.Y., and moved to tracks in Michigan, Kansas, Texas, Georgia, and Virginia. One of the interesting features of the race is that teams must drive their race cars to the different competition sites. Everything they take must be in their race car.

"Unfortunately, there are no big purses for winning this race, but it is a great way to promote one's self in automotive circles," Geswein explained. One of the perks is feature coverage in Car and Driver magazine (August 2000 and August 2001). "It's a good way to advertise ourselves and promote our racing careers."

Geswein's career has put him behind the wheel on 18 major racetracks and four proving grounds.

"We have experience in everything from streetcars to stockcars on road courses and ovals. We want to be at the top level of whatever series chooses us," Geswein said. He realizes that will be a tough feat. "The biggest challenge as a driver is getting your foot in the door. Being a no-name makes it difficult to break in and get opportunities. There are many drivers with significant talent who never get past this point. Money plays a big role. Fast, poor drivers abound; however, the key is being fast and bringing a sponsor to the show."

To help promote their dream, Geswein and Smith have formed a company called Full-Lock Industries Inc. (www.full-lock.com). Currently, operations focus on the Motorsports Division which provides race driving services, test driving services, chassis consulting, personal driving instruction, and some design and fabrication work.

All good dreams have some basis in reality and to that end, Geswein has kept his day job. But why shouldn't he? He is a test driver/development engineer for Michelin Tire Corp. in South Carolina at the company's only proving ground in North America.

"I work on subjective testing and evaluation for the replacement market and all original equipment Ford tire programs," Geswein explained. "I don't crunch many numbers, but the engineering principles and methods I use daily with my customers, most of whom are engineers as well." While helping Michelin, Geswein also advances his racing career by logging driving hours and honing his skills. "Michelin has been supportive of my off-hours racing pursuits. It makes me a better engineer and driver for the hours I spend at my regular job."

Although he knows the road to his dream will be filled with twists, turns and the occasional mechanical breakdown, Geswein enjoys the ride. "Just having the opportunity to pursue the dream is a reward in itself."
Roger VanDerSnick has the lead in a race that never ends. As director of brand marketing for NASCAR, VanDerSnick is responsible for increasing fan and corporate sponsorship interest in a professional sport that already is one of the most popular in America.

"The passion that fans have for NASCAR is a key reason why I find the job so interesting," says VanDerSnick from his office at NASCAR's marketing and licensing office in Charlotte, N.C. "The excitement for the sport makes this job a marketer's dream."

VanDerSnick ('85, ME) knows more about NASCAR fans than anyone. He is responsible for market research, advertising development, media planning, television broadcast promotions, brand management and brand marketing.

The market data VanDerSnick analyzes is critical to the ongoing challenge to acquire corporate sponsorships NASCAR needs to continue the rapid growth the sport has achieved in the past decade.

"Our research shows sponsors how NASCAR provides the exposure they need to reach potential customers. The research also illustrates the loyalty fans have for NASCAR sponsor's products and services," he explains.

"The competition for corporate, sports-related marketing dollars is intense. If the economy slows, we want our marketing advantages to be so strong that a company will not reduce or eliminate its sponsorship," he states. "We had to take our marketing to a higher level to communicate the tremendous passion fans have for the sport."

His marketing plans have put greater emphasis on television and involve media partners such as NBC, FOX, FX and Turner Broadcasting television networks that broadcast NASCAR races. VanDerSnick says the national marketing effort involves the development of up to 100 national and regional promotions across the country.

Analyzing data is a skill VanDerSnick learned during his years on campus. "I often use a database problem-solving approach to create a model for a marketing issue or strategy. The analytical skills I learned at Rose-Hulman have been valuable," says the Frankton, Ind., native.

What led a mechanical engineer from manufacturing to the marketing field? "After nine years with Procter and Gamble in Green Bay and Cincinnati, I became more interested in the business aspects of the job rather than manufacturing," he recalled.

After being involved in several new product initiatives where he coordinated manufacturing assessment, development and introduction of facial tissue products, VanDerSnick became assistant brand manager for the Bounty paper towel product.

That assignment led to experiences as a brand manager where he learned more about customer marketing, promotion, pricing and consumer trends.

"Bounty has a 40 percent market share. It was a powerful brand that was second only to Tide at Procter and Gamble. Bounty generated revenues exceeding a billion dollars annually," he says.

After 15 years with the company, VanDerSnick admits, "I thought I'd be a P&G lifer. I loved the company. It was a value-focused company that did business the right way," he stated.

A corporate recruiter's phone call to VanDerSnick changed his career path in September of 2000 when he accepted the offer to become NASCAR's first director of brand marketing.

VanDerSnick describes the current racing season as "a breakout year for NASCAR's marketing efforts. It's been a great year. The challenge is to build upon the momentum."

"NASCAR has a tremendous fan base. We want to strengthen their loyalty for the sport and recruit new fans," he explains.

VanDerSnick doesn't deny that being involved in sports marketing offers perks that are not available even at the best manufacturing companies.

"When I watch Sports Center, I'm doing my job. Not many people can say that."

"Our TV ratings have increased dramatically as a result of the change to NBC and FOX," he says. "In the first six months of this year, as many viewers watched our races as they did the entire season last year."

VanDerSnick partnered with international advertising agency Young & Rubicam to create an award-winning print and broadcast campaign called, "How Bad Have You Got It?" The ads won a prestigious Clio Award which is advertising's equivalent to an Oscar.

"The fan response to the ads has exceeded our expectations," he says. The ads use humor to show just how far some NASCAR fans might go to make the sport part of their everyday lifestyle.

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Each year, Rose-Hulman honors four alumni with the Distinguished Young Alumnus Award. It recognizes impact the alumni have made in their professional fields and communities. The honor goes to alumni who have graduated within the last 20 years.
David Boodt has a clear understanding of the value of education. The 1981 Rose-Hulman magna cum laude civil engineering graduate helps secure the legal health of USA Funds, the nation’s largest federal education loan provider.

USA Funds annually guarantees $9 billion in education loans with annual revenues of approximately $350 million. The company works in areas such as federal higher-education law, nonprofit law, consumer lending and general corporate-governance matters.

“I enjoy my job every day. We allow millions of students the opportunity to go to college, even though sometimes we have to act as the collector and demand repayment of loans. I work hard to treat clients well so they will choose to call our company, and I try to be accessible and return answers to make our clients feel more comfortable,” said Boodt.

Before serving as a legal champion of higher education, Boodt began his career in the oil industry, working as a structural design engineer with Brown & Root in Houston. He worked tirelessly on a $200 million project that placed an oil platform 1,000 feet offshore in the Gulf of Mexico, including the launch of the platform from the transporting barge.

Following four years at Brown & Root, Boodt moved on to Omega Marine, working in the Syrian Desert to construct an oil-production facility, base camp, airstrip and water pumping station.

After nine months at Omega Marine, Boodt began to evaluate his overall career plan.

“I came to the realization that I wanted to do something beyond design engineering. There was a certain top-limit career path in that field, and I needed a management degree or Ph.D. to separate myself from others,” said Boodt.

Following a one-year stint with Mid States Engineering in Indianapolis, Boodt entered the Indiana University Law School. He received a full-tuition scholarship and was elected editor-in-chief of the Indiana Law Review. Following the completion of his juris doctorate, Boodt worked 2 years as a clerk for Larry J. McKinney, judge in the U.S. District Court for the Southern District of Indiana.

“I was one of the few who thought that my undergraduate education was more difficult than law school. Five years of real-world experience may have helped, but I still remember my Rose-Hulman education being difficult,” said Boodt.

Boodt moved on to USA Group in Indianapolis, working with corporate issues, contract negotiation, and advising the federal Higher Education Act for eight years. Following this stint, he moved to United Student Aid Funds, Inc., to protect the legal interests of the nation’s largest provider of federal student loans.

He offered advice to upcoming Rose-Hulman graduates about planning for their individual futures.

“When you create a five-year plan, think about more education. Consider your options. Create a situation where education is a possibility. You may limit your future without further education,” said Boodt.

While at Rose-Hulman, Boodt served as a resident assistant, played on the school tennis team, and served on the NCAA football statistics crew. He received his first introduction to Rose-Hulman from his father Ernie, a 1959 graduate who built the water tower that is still on campus today.

Boodt currently resides in Carmel with his wife Julie, seven-year-old son Ben, and five-year-old daughter Laura.
BY BRYAN TAYLOR

In a world measured by the square foot, sales volume and completed deadlines, David Hannum's proudest moment was found in the hiring of a Russian defector.

Hannum, a 1981 mechanical engineering graduate and one of this year's Distinguished Young Alumni, is president of Garmong Design/Build Construction and Hannum Wagle & Cline Engineering in Terre Haute. When asked to cite the biggest reward of his career, Hannum did not list a multimillion-dollar construction project. Instead, he talked about the hiring of Russian defector, Yakov Smolgosky, in the early 1990s.

"We decided we wanted an architect and we interviewed 25, but we just couldn't get the right fit and finally had an inquiry from San Francisco," Hannum recalled. "I drove to the Indianapolis airport to pick up the interviewee and met a man who could barely speak English. I was ready to put him back on the plane to California, but I thought I'd see the interview process through.

"The next morning, we went to our office unable to communicate. So I pulled out a spec sheet with a building pro forma and indicated I wanted to see a floor plan. In 30 minutes he turned out two floor plans and building renderings of a beautiful medical office building.

"As our communication improved, I came to learn he was the former head of a 250-person architectural department in the Soviet Union who had been in San Francisco chiseling tombstones for a year since defection. No one had been willing to take a chance on him. Being a part of that changed life has been the proudest moment of my career."

That career started in 1981 when Hannum took his Rose-Hulman degree and went to work with Schlumberger as a geotechnical oil business consultant. He started as a field engineer and was promoted to operations manager for the company's South Texas division.

In 1989, Hannum returned to Indiana to take over the family business, Garmong Construction. "My struggle was to take my oil company education and blend it with the construction business. Customer service and satisfaction were important in the oil business, but the construction industry was price oriented."

To bolster the customer service philosophy, Hannum and Ralph Wagle ('83) formed Hannum and Wagle Engineering. That brought in the design component and allowed more control of the construction projects and higher client satisfaction.

Both companies flourished during the 1990s with the company now housing offices in six cities with 80 employees, including 12 Rose-Hulman alumni.

In 1996, Hannum founded a development company that leases industrial and municipal projects.

Projects in which Hannum and his companies have been involved include a $10 million automotive electronics assembly plant, a $10 million church, fire stations, city halls, and shipping/distribution facilities and design of all types of municipal projects.

The Rose-Hulman connection is strong. Hannum's father Kenneth was a 1956 alumnus and his grandfather K. Richard Garmong was a 1931 graduate. "We consider Rose as a gold mine of talent; so we pay attention to kids who are here," David said. The company provides internships, and the family endows a scholarship. Two other Rose-Hulman graduates have already moved all the way from summer interns to partners.

Hannum also pays attention to his family: wife Kathy and children Rachael, Mitchel, Eric, Greg and Alex. He is active in civic affairs, including an 18-month stint as president of the Terre Haute Chamber of Commerce, and membership in Rotary. He is a member of the Associated Building Contractors and the National Society of Professional Engineers.●
Improving manufacturing efficiency at one plant can be a serious challenge for an engineer. For Steve Jenison, such a task would seem almost simple. That's because Jenison is implementing plans to increase the efficiency of supply chain operations at over 20 Eli Lilly & Co. facilities in 15 countries involving 10,000 employees.

As manufacturing executive director at Eli Lilly's corporate headquarters in Indianapolis, Jenison is part of a Global Business Integration Project team (GBIP) that has a goal to "allow the business to grow without needing to grow the infrastructure to support it," he says.

"We're developing a common set of business practices and supporting systems that will be utilized at all the manufacturing facilities for planning what to make, where to make it, when to make it, making it and then distributing the products," said the 1981 Rose-Hulman chemical engineering honors graduate. "It's the largest project of its kind the company has ever undertaken." Completion is expected in less than three years.

Jenison said the process of simplifying the business infrastructure "allows us to focus resources on innovation and meeting the expected demand for several new pharmaceuticals currently in various stages of Eli Lilly's product development pipeline."

Jenison said it's the problem-solving skills he learned from professors Noel Moore, Sam Hite, Ron Artigue, staff member Ron Reeves and others that have enabled him to succeed in positions ranging from general manager of Indianapolis pharmaceutical operations to manufacturing director at Lilly's facilities in Mayaguez, Puerto Rico.

"It was the discipline I had to use to be successful in a demanding academic environment and as a member of the football team that has helped me when I've been faced with difficult decisions," Jenison stated.

Those difficult decisions began early because the demand in 1981 for chemical engineering graduates exceeded the supply. "We had an incredible number of job offers our senior year. I must have gone on 20 plant trips," recalls Jenison, a native of Paris, Ill.

Jenison began his career with FMC Corp., in Lawrence, Kansas. After five years, he returned to Indiana as part of the technical services engineering staff at the Eli Lilly laboratories in Clinton.

"It was the variety of engineering, operations, project management, finance and business jobs that have prepared me to work on a global project of this magnitude where corporate business strategy has to be aligned with a global manufacturing strategy," he explained.

Keeping up-to-date about campus developments is easy for Jenison. To find out the latest Rose-Hulman news, all he has to do is ask his daughter Sandea, a Rose-Hulman sophomore majoring in chemical engineering. The Jenison family also includes wife Sandee, and children Brianna, 13, and Wade, 4.

"The sense of a strong campus community really impressed Sandea, just as it did me 20 years ago," Jenison remarked. "I'm glad to see that the college's educational philosophy hasn't changed.

"Rose-Hulman faculty and staff remain focused on meeting the educational needs of each student. The academic demands haven't changed either," Jenison noted.
A former marathon runner, Steve Kennedy has gained a reputation for being a sprinter in developing successful technology-based companies by helping engineers and scientists leverage their experience and intellectual property.

The 1981 chemical engineering graduate did it as an executive officer with Utilities, Inc., the fastest growing privately held water utility in the United States. The company had $67 million in revenues in 2000 and recently agreed to be acquired by a Dutch company.

Kennedy once again performed his managerial magic as an initial investor and chief financial officer for Picolight Inc., a high-speed optoelectronic company that manufactures transceivers, modules and arrays using Vertical Cavity Surface Emitting Lasers (VCSEL). The company, started by a scientist from Bell Laboratories, has completed more than $56 million in funding, and currently employs more than 160 people.

Next, he was chief executive officer of EpiWorks, a start-up with its core technology from the University of Illinois. The company manufactures gallium arsenide (GaAs) and indium phosphide (InP) wafers for high-speed optical communication and radio frequency applications.

And, now, Kennedy's expertise is being called upon as chief executive officer of SiWave Inc., a MEMS-based, venture-supported company that wants to become the world's leading supplier of scalable optical switches for high-speed communication applications. It hopes to bring its first product to market early in 2002 and have large volume sales by 2003. The two founders are from the Jet Propulsion Laboratory.

All of these companies were developed through Kennedy's Constellation Ventures, which provides the business strategy, financial support and marketing background for companies that are able to commercialize new and multidisciplinary technologies.

"I help to leverage other people's ideas and provide a structure to make them successful," said Kennedy, who lives in Lake Forest, Ill., with his wife, Laura, and two children. "Starting a company is never easy and it can be risky in today's economy, but it's what I've done for the past several years and feel that my experience gives the founders a head start."

Each assignment is initiated with one or two technical founders and lasts approximately 18 to 24 months.

"The short incubation period is attractive to me and best utilizes my abilities," Kennedy said. "At the beginning, I may be running all aspects of the company. As it grows, people are hired with specific expertise in particular functional areas of the company such as business planning, finance and marketing. Eventually, I hire myself out of a position and move onto the next project."

Kennedy's business skills were nurtured at Northwestern University's Kellogg Graduate School of Business, earning a master's degree of business administration with specialization in business strategy and finance. However, he contends that his engineering background was essential to becoming successful in business.

"The engineering degree is what differentiates me from other business leaders and gives me credibility with the technical founders and the venture capital investors," said Kennedy, who has completed 10 marathons (three Boston Marathons) and numerous triathlons, including one Ironman. "I'm having as much fun as anytime in my career. It's great to work with wonderful people, who have such great ideas, and helping them achieve their goals of building businesses and bringing products to the market . . . I always felt that if you really believe in your capabilities and persevere, then just about anything is achievable."
ASSOCIATION NEWS

The Alumni Advisory Board has had a very productive year. One of the major accomplishments this year is the update of its Constitution and By-Laws, which is being mailed out to all alumni to vote on for approval. If approved, the new Constitution would allow for a progression of officers beginning with the secretary and continuing through the past president. The current procedure calls for a voice vote at the annual meeting for secretary, and no past president.

The Advisory Board Officers for 2000-01 were Pat Cahill ’67 president, Bob Schacht ’72 vice president, and Fred Goetsch ’57 secretary. The committee chairs are:

- Jeff Burgan ’77 Alumni Clubs
- Greg Holler ’79 Alumni Giving
- Bill Nicewanger ’63 Awards & Recognition
- Mark Owens ’72 Career Services
- Jacque Wilson ’96 Continuing Education
- David Jennings ’83 Homecoming
- Pat Goodwin ’95 Student Alumni Association
- Jeff Myers ’87 Student Recruitment

The alumni representatives to the Board of Trustees are:

- Tom Dinkel ’72 and Fred Clayton ’70

DETROIT GOLF OUTING

Twenty alumni and staff from Rose-Hulman played golf on August 18th at Heather Highlands Golf Course in Holly, Mich. The event was organized and hosted by Todd Anderson ’92.

ALUMNI TOUR AIRPORT TERMINAL

Detroit area alumni got a behind-the-scenes tour of the new Northwest Airline Midfield terminal in June. Ken Koziol ’92, senior design manager for Northwest Airlines, took time to tour the group of more than 40 around the terminal.

DETROIT AREA ALUMNI TOUR OF NORTHWEST AIRLINES MIDFIELD TERMINAL

Hard hats were the dress accessory of the day during a Detroit alumni tour of the Northwest Airline Midfield terminal this past summer.

FUTURE ALUMNI EVENTS

Contact Brian Dyer for more information on all the events listed below.

- Young Alumni Networking Night
  - Indianapolis
  - TBA

- Young Alumni Networking Night
  - Chicago

- Young Alumni Networking Night
  - Atlanta Area at U.S. Play
  - October 27
  - Atlanta

- Luncheon featuring Solar Phantom Team
  - November 1, 11:30 A.M.
  - Columbus, IN
  - Smith’s Row Restaurant

- Tour of GM Truck Plant
  - November 15, 5:30 P.M.
  - Fort Wayne, IN
  - Dan Brier ’99 will give tour
  - R.S.V.P. to Jwitulski@logikos.com
  - A Dutch treat dinner will follow the tour for those who wish to attend

FRESHMAN WELCOME PICNICS

Three alumni-office-sponsored picnics were held this summer to welcome incoming freshmen to Rose-Hulman. Jeff Myers ’87, our student recruitment chair on the Advisory Board, assisted in organizing these events intended to introduce incoming students and parents to alumni, faculty, staff and current students. The picnics were held in Indianapolis, Cincinnati, and Northern Indiana. Andy Stultz ’94 was the host in Cincinnati, and Jamie Funk ’00 assisted in Northern Indiana. Members of the Student Alumni Association, the admissions office and student affairs office also were on hand at each picnic to answer questions and meet the groups.
1953
Herbert L. Gatewood (Ch.E.) has retired from his law practice to take up a new career in stock photography. As a result, he is a world traveler. Recent trips included France and Lake Erie, where he photographed lighthouses.

1956
Robert Randolph (M.E.) has received the Governor’s Medal for Science and Technology in Utah. He was honored for his role in bringing the graphite composites industry to Utah. These compounds, which account for $250 million a year in sales in the state, are found in items ranging from tennis rackets to telescope components.

1964
Larry G. Clemons (E.E.) has retired from Detroit Edison after nearly 37 years of service.

1968
Gerald R. Dinkel (E.E.) has a new job as corporate vice president and CEO of Defense Group Cubic Corp. in San Diego.

1969
Jim Poehling (Math./Econ.) has accepted a position as senior vice president, sales and channel development, with United States Can Company headquartered in Lombard, Ill.

1971
Robert Penno (E.E.) is an associate professor at University of Dayton, where he earned his Ph.D. in electrical engineering.

1972
Michael L. Hoover (E.E.) has been appointed to the position of associate in the Charlotte, N.C., office of Hayes, Seay, Mattern & Mattern, an architectural and engineering design firm. He has served as electrical engineer, department head and project manager for a variety of projects.

1974
James Taylor (BIO) married Shirley Gaines of Milwaukee, Wis., last May. James continues to work for Boeing.

1976
Doug Hileman (Ch.E.) announces the formation of Advizidea Consulting, Inc., in Van Nuys, Calif. Advizidea offers services in environmental performance and reporting, environmental consulting and sustainability. He also assists other consulting firms in business development strategies.

1978
Christopher Bolte (E.E./C.S.) has moved to Georgia with SAIL testing software at Lockheed for the C130. He also has purchased a horse farm.

1979
Dinh Ngo (M.E.) has transferred from the GM Desert Proving Grounds back to Allison Transmission Div. of GM in Indianapolis, and he has been promoted to manager, analytical design, product design staff.

Scott Sanders (M.E.) has been appointed general manager of the Howmet Group of Companies.

ALUMNUUS STAMPER SELECTED AS NATIONAL OUTSTANDING NEW TEACHER

Alumnus Richard Stamper, assistant professor of mechanical engineering at Rose-Hulman, is one of the nation’s outstanding new teachers, according to the American Society for Engineering Education (ASEE).

Stamper, a 1985 mechanical engineering graduate, has been selected as the recipient of a national ASEE award presented annually to faculty who have shown a strong commitment to mechanics education. Mechanics education deals with the interactions between force, motion, and stress in machines, structures and fluids.

No more than three recipients are selected each year for the Ferdinand Beer and E. Russell Johnston Outstanding New Mechanics Educator Award. To be eligible, a nominee must have less than five years teaching experience. Stamper was nominated by colleagues at Rose-Hulman.

He received the honor at the ASEE annual conference and exposition June 26 in Albuquerque, N.M. Stamper won teaching awards last year from Rose-Hulman’s Triangle fraternity and The Rose Thorn student newspaper.

He received his doctorate from the University of Maryland and joined the Rose-Hulman faculty in 1998 after teaching at Auburn University.
LaPorte Casting operation in LaPorte, Ind. Sanders has been with Howmet, an Alcoa business, for 20 years. He previously was general manager of Howmet Wichita Falls Casting in Wichita Falls, Texas.

1982
Kevin Bartley (C.S.) reports the birth of son Robert Nicholas, born last year. He joins big sisters Christina, Samantha and Melissa as members of the Bartley household.

1984
John Bingle (M.E.) and his wife, Erin, report the birth of first child Connor Matthew.

Clifford Carnes (Ch.E.) has been promoted to the position of assistant plant manager at Indiana-Kentucky Corporation’s Clifty Creek Plant. He has been at the plant since 1985.

Stuart H. Guinther (Ch.E.) has been appointed vice president of cement operations at Dragon Cement and Concrete, Maine’s largest concrete supplier. He will serve as plant manager at Dragon’s Thomaston plant, which produces about 450,000 metric tons of cement each year.

Charles Snyder (E.E.) has successfully passed the Project Management Institute’s Project Manager Professional Exam. He is a project manager in the IT Project Management Office at Humana, Louisville, Ky.

1985
Steve Nerney (M.E.) now is vice president of operations for Kenra, LLC. He resides in Carmel, Ind.

Gerald Roberts (E.E.), an attorney with the Indianapolis-based law firm of Bose McKinney & Evans, will serve on the External Advisory Council for the Department of Humanities and Social Sciences at Rose-Hulman.

Roger VanDerSnick (M.E.) has left Procter & Gamble to become director of brand marketing for NASCAR in Charlotte, N.C. (See expanded article on page 18.)

1986
Nick Jokay (M.E.) has graduated from Purdue University with a master’s in Earth and Atmospheric Sciences.

1987
Steve Highsmith, Jr. (C.S.) and his wife, Carol, welcomed their second daughter, Abby Lynn Highsmith, last spring. A year ago, Steve was promoted to president and CEO of Unified Financial Securities.

1988
Thomas Doerr (C.S.) reports the birth of his second daughter, Stephanie Nicole, born last June. Jacqueline Marie is an excited big sister.

Adrian Lawhorn (Math.) reported a new web site for his company Wizard Sports. It is http://www.angelfire.com/in/wizardsports/.

1989
Todd Cartwright (M.E.) now is business development manager with Arabian CBI Ltd. in Dammam, Saudi Arabia. Arabian CBI is a subsidiary of Chicago Bridge and Iron Company based in Houston, Texas. Todd and his wife Maria have completed their sixth year in the

The alumni affairs staff is creating new opportunities for young alumni to maintain a close relationship with Rose-Hulman Institute of Technology. Ideas about what events, programs and services would be of interest to alumni 21-30 years old are being developed with the help of a 15-member Young Alumni Council.

“Alumni who graduated since 1990 represent one-third of all living Rose-Hulman alumni,” noted Bunny Nash, assistant director of alumni affairs, and adviser to the newly created council.

“We want to ensure we’re providing activities of interest to such a large segment of our alumni population,” she said. “The council will generate ideas and evaluate events aimed at their age group.”

A Homecoming party for alumni who graduated between 1992 and 2001 was hosted by the Young Alumni Council Sept. 14. The event took place at the Champagne Velvet Tap Room near downtown Terre Haute. The council also is discussing events

Recent grads Alyssa Riley, Kenneth Patricio and Matt Kahle visit during the young alumni homecoming party.

for young alumni in Indianapolis, Chicago and Detroit.

“A lot of exciting ideas have been discussed during the council’s first two meetings,” Nash said. “An alumni weekend that would be reasonable in regard to cost and only require a day or two away from work is being considered.”

If you’ve got an idea or comment for the Young Alumni Council to consider, send your message to Sharon Foltz (’00, Ch.E.) at Foltz_Sharon_S@lilly.com or Nash at Bunny.Nash@Rose-Hulman.Edu.
Middle East and they have two daughters, Annika and Abigail.

MAtt White (M.E.) has moved to the Greenville, S.C., area as operations manager for the Piedmont facility of Air Products and Chemicals. He resides in Simpsonville, S.C.

1990

Tim Cindric (M.E.) realized one of his dreams when Helio Castroneves won the Indianapolis 500 in a Penske Racing car. Cindric is president of Penske Racing and has always wanted to be part of a winning team in the race. (See cover story on page 14.)

Joseph A. Hentz (M.E.) reports the birth of son James Paul, born last February.

Tony Kochert (E.E.) and his wife, Lane, have a son named Zack. Tony completed a master's in physical therapy and will work for Health South at one of their locations near Columbia, S.C.

1991

Paul Boenitz (M.E.) and his family welcomed second child, Joel Marcus, last August. Paul has accepted a new position within Boeing as a test engineer at the propulsion wind tunnel.

Chad Elmore (Chem.) reports the birth of second son, Lucas Augustine, born last March.

Rob Hochstetler (E.E.) and his family now reside in Rochester, N.Y. Rob works as plant manager for Cinergy Solutions, operating two power plants for Eastman Kodak.

John Knight (Ch.E.) has accepted a new job with Zimmer as a process engineer. He resides in Warsaw, Ind.

Joseph E. Matthews IV (E.E.) has been promoted to commodity team leader of electrical passive components in purchasing for Delphi Automotive Systems. In January, he assumed the additional responsibility of purchasing supervisor of electrical passive for Delphi Delco in Kokomo, Ind.

Rod West (M.E.) and his wife, Laurie, announce the birth of a second daughter, Nora Lorraine, born last April. She joins sister Alyssa. Rod is a staff engineer with Square D. Co., Oxford, Ohio. He and his family live in Liberty, Ind., where Rod sits on the town council.

1992

Andrew Causey (M.E.) has separated from the Air Force after nine years of service and moved from Dayton, Ohio, to Charlotte, N.C., where he started a new job as a mechanical engineer with the McCracken & Lopez engineering firm.

Bill Flodder (M.E.) updates Echoes that he and wife, Jen, are the parents of Aili Rose, born last July in Tokyo. Bill continues to work for

Legacies

Rose-Hulman is proud of its legacy graduates each year. Among the legacies this year were, from left: Erica Wassel, granddaughter of the late Benedict Wassel (Class of '31); James Hicks (73) and his son James Hicks; John Richard White ('47 and grandfather of Clinton), Clinton White and his father John Robert White ('74); and Shawn Denlinger and his father Daniel Denlinger ('74).

More Legacies

Other legacies included, from left: Colin Hill, grandson of the late Edward Coons ('39); Greg Holler ('79) and his son Travis Holler; William Schott ('74) and his son Andrew Schott; and Richard D. Moss ('73) and his son Richard Moss.

HOMECOMING 2002
October 11-12
MAKE HOTEL RESERVATIONS NOW
Johnson Controls, Inc. The company supplies automotive interior parts around the world. He moved to Yokohama, Japan, last year as manager for the company’s Toyota business unit.

Jason Karlen (Ch.E.) married Kelly Ryan last May. They live in Wildwood, Mo. Jason is new product launch leader at the Ford St. Louis Assembly Plant.

Scott G. Minnich (C.E.) reports a May addition to the family on May 27 with Mei-Li Tan. She is the first child of Scott and wife, Vuoch Tan.

Greg Orcschell (M.E.) and his wife, Mindy, report the birth of Jenna Elizabeth last June. She joins brothers Joshua and Jacob.

J.R. Shrader (Ch.E.) and his wife, Laura, welcomed their first child, Joseph Warren, last May. J.R. continues to work on a Ph.D. in philosophy at the University of Notre Dame.

Jack Wright (M.E.) has been promoted to the position of engineering manager for Roll Forming Corp., Shelbyville, Ky.

Perry Carr (Ch.E.) received his professional engineering license in Indiana this year.

Jared K. Frederick (C.E.) and wife Joy welcomed Jared Collier to the family last April.

Bryan Hales (A.O.) married Holly Dalman last June.

Robert Hastings (Ch.E.) wed Kimberly Perkins last June. He has completed anesthesiology residency and is an attending anesthesiologist at Deaconess Hospital, Evansville, Ind.

Jeffrey L. Papa (Econ./Math.) has joined Barnes & Thornburg’s Indianapolis office as an associate. He practices in immigration law and governmental services.

Joe Schmits (M.E.) completed his MBA at the University of Southern Indiana last May. He has taken a position with Morton Powder Coatings as a sales representative.

Eric M. Smith (C.E.) and Debbie Bierlein were married last December.

Steve Varga (E.E.) reports the birth of son Stephen last April.

1994

Aaron Barr (A.O. and MSAO ’96) and his wife, Lisa, became parents of Nathan William last May. He joins big brother Nicholas.

Cash Canfield (C.E.) reports the addition of son Jaden William to the Canfield family last May.

Damon Swope (M.E.) and his wife, Tracey, announce the birth of their second child, Kyle David, born last April.

1995

Brian Blair (Ch.E) and his wife, Tara, had their fourth child, Sean Christian Blair, born Feb. 9. Sean joins sister Brianna and twins Caitlin and Zane.

Brett Chermansky (E.E.) married Meredith Catherine Reason last March.

Anthony Hammack (M.E.) exchanged wedding vows with Laura Warfield Allport last November.

Dan Harshbarger (E.E.) wed Holly Robertson last May. Also, Dan received his master’s in electrical engineering from Purdue University last spring.

Gory Whitesell (C.E.) reports the birth of son Caleb Tyler, born last May.

1996


Joseph Julicher (CO) reports the birth of third child, Rebekah Ann, who joins big brothers Michael and Nathan.

Jon Davis (E.E.) and his wife Liza Saunders, (Class
of '99) had a daughter, Annalise McKayla in November of 2000.

**John D. Goodhue (CO)** now is a patent attorney at Zarley, McKee Thomte, Voorhees & Sease in Des Moines, Iowa.

**Eric Hansen (E.E.)** and his wife, Becky, became parents when Jarod John was born in October of 2000. In April of last year, Eric began his position as a product engineer for Flint & Walling.


**1997**

Jason Castor (E.E.) wed Robin Matt last May.

**1998**

Lawrence Paul Drury III (E.E.) graduated last May with honors from Johns Hopkins University with a master’s degree in electrical engineering. He now works for Sippican, Inc., in Marion, Mass.

Jay Turner (E.E.) became a parent when Georgia Rose was born last March.

**1999**

Kim Hayden (Ch.E.) has been awarded a National Science Foundation Fellowship for 2001. She is working toward a Ph.D. in chemical engineering at Purdue University.

Chuck Requet (M.E.) recently obtained the certification of Leanmaster at Rockwell Automation's Madison, Ind., plant. He is a manufacturing engineer, and had the distinction of earning the highest score ever in a Rockwell facility, which includes 64 worldwide locations. The Leanmaster certification recognizes achievement in a Rockwell program aimed at improving process, flow, and total productive maintenance.

Liza Saunders (Ch.E./Chem.) and husband Jon (a 1996 graduate) had a daughter, Annalise McKayla, last November.


John Straigis (Ch.E./M.E.) recently graduated from Stanford University with a master's in aero/astro engineering. He will continue at Stanford for a doctorate in aero/astro.

**2000**

Stephen M. Burnside (Ch.E.) has accepted a process engineering position in the metallization group with Dominion Semiconductor in Manassas, Va.

Don Cole (Ch.E.) recently accepted a job with the process safety management group at Abbott Labs in North Chicago, Ill.

Douglas Hansel (E.E.) married Kristi Lee Roberts last April.

Airen (Schuetter) Springer (M.E.) and her husband Jasen became parents with the birth of Madeline Jae last April.

Erin M. Swango (M.E.) has been promoted from associate engineer to performance engineer at the Indiana-Kentucky Electric Corp. Clifty Creek Plant.

**2001**

Andrew Smith (Ch.E.) married Sara Donathen last August.

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OBITUARIES

1929
Abe Silverstein (M.E.) died June 4. (See expanded obituary on page 31)

1931
Harry J. Loving (Ch.E.) died July 20.

1935
Arthur W. Hess (C.E.) died May 8. He was retired president of Garwick and Ross. He lived in Columbus, Ohio, at the time of his death.

Louis Lyon (Ch.E.) died April 20. His wife, Lillian, survives him. He was a retired regional director for the U.S. Civil Service Commission.

1936
James D. Hufford (M.E.) died last March. His wife, Loretta, survives him. He was a retired works manager for United States Gypsum.

1937
Stephen Koos (E.E.) died Jan. 1. He was retired factory engineer with Sony Music Entertainment.

Charles F. Rich (Ch.E.) died April 19 at the age of 84. He was an industrial appraiser for 24 years for American Appraisal before retiring in 1978. Survivors include daughter Marilyn Sue Reed.

1942
Arthur Johnson (C.E.) died April 8. He is survived by his wife Ruth, a daughter Kirsten and two sons, Bill and Bob. He was retired from Chevron USA.

1943
Carl N. Miller (E.E.) died May 29 at the age of 80. He was part of the Miller-Sargent real estate firm in Terre Haute for several years and vice president and director of Newlin-Johnson Co., also in Terre Haute. He was active in church, community and professional activities. Survivors include his wife, Theodora; a son, Carl N.; and three daughters, Theodora "Teddy" Lenderman, Melinda Willis, and Kimberly Barnes.

1945
William C. Waldbieser (C.E.) died June 23 at the age of 76. His wife Edwina and three children survive him. He was a retired director of engineering service for Amax.

1949
Kenneth Arney (E.E.) died July 4. He was a retired electrical engineer for the U.S. Air Force. Survivors include his wife, Helen.

William Orbaugh (Ch.E.) died June 9. He is survived by his wife, Cindy. He was a retired manager of industrial sales for Eli Lilly and Co.

Gerald "Gerry" Stambaugh (Ch.E.) passed away May 6. Survivors include his wife Emajean. He was retired from Aerojet-General Corp.

1951
Byrl Jedlicka (M.E.) died in 2000, according to word received in the alumni office. He was retired from Caterpillar.

1954
J. Donald Easton (E.E.) died April 24, 2000. He is survived by his wife, Myra Jean, and he was a retired general supervisor for Northern Indiana Public Service Co.

HONOR ALUMNI

Honor Alumni awards were presented during the Homecoming Awards Brunch. Recipients were, from left: Morris Cleverley (Class of '62), Fred Cartwright (Class of '80), Dorothy Goodwin (wife of the late honoree Max Goodwin, Class of '63), Pat Goodwin (Max's son and member of the class of '95), and Craig Stucky ('91).
1956
John Fidinger (E.E.) died Feb. 23. He was a retired senior gear engineer for General Electric.

1957
Clyde R. Frump (Ch.E.) died Aug. 6. He was living in St. Landry, La., at the time of his death. He was president of Quad City Boiler.

1956
Larry C. Sollman (M.S.E.E.) died in September of 2000. He was a project engineer for Naval Surface Warfare Center at Crane, Indiana. Survivors include his wife, Mary Ann.

1957
Dennis Townsend (M.E.) died in June of 2000. His wife, Carolyn, and two children survived him. He had been manager of business development for B.F. Goodrich Co. He lived in Arlington, Texas.

1961
Gale Hurst (E.E.) died April 6. Survivors include his wife, Barbara. He was manager for Quadrex Corp., and lived in San Jose, Calif.

1968
Robert Deneen Gravitt II (M.E.) died July 20 at the age of 55. He was an aeronautical engineer for General Electric Aircraft Engine for 32 years. Survivors include his wife, Janet, and children Brian Gravitt, Robert Gravitt and Alison Gravitt.

1973
Paul Heller (Math.) died in October of 2000. Survivors include his wife, Ker Chen. He was a senior software engineer for Cisco Systems Inc.

1969
Frederick Warren Woodruff (E.E.) died June 8 at the age of 45. Survivors include his parents Frederick and Dorothy Keer Woodruff. He had been a systems technologist with Raytheon Systems in Indianapolis.

1994
Timothy W. Floyd (M.E.) died April 20 from injuries sustained in an automobile accident. He had taken a job with Toyota. Survivors include his parents, Tim and Ruth Floyd of Brazil, Ind.

Faculty / Staff
Ralph M. Ross, retired faculty member and dean of students, died Sept. 4 at the age of 90. He served Rose-Hulman for 39 years prior to his retirement in 1975.

Ross joined the faculty in 1946 and was appointed professor of mathematics in 1956. In 1961, when the college decided to implement the first phase of a plan to increase enrollment from 400 to 1,000 students, Ross became the college's first full-time dean of students. He was named its first vice president of student affairs in 1973.

He managed staff responsible for all aspects of student life outside the classroom, including athletics, counseling, discipline, housing and operation of the student union. He supervised the expansion of the varsity and intramural athletics programs, and he was instrumental in establishing a health service on campus.

Survivors include his wife, Leanna Dahmer Cunningham Ross and children Debby Thompson and Carl Cunningham. He lived in Speedway, Ind., at the time of his death.

NASA SPACE PIONEER SILVERSTEIN DIES

Abe Silverstein, who was honored as one of America's most outstanding leaders in aerospace engineering, and served as the first director of space flight operations for NASA, died June 1 at his home in Fairview Park, Ohio, a suburb of Cleveland.

Silverstein, a native of Terre Haute, received a mechanical engineering degree from Rose-Hulman in 1929. He returned to campus to earn an advanced degree in mechanical engineering in 1934. The college awarded him an honorary doctor of engineering degree in 1959.

Silverstein helped direct efforts leading to the Mercury program that put John Glenn into space and he made important contributions to the Gemini program. He named and laid the groundwork for the Apollo missions that put the first man on the moon.

He is credited with proving that liquid hydrogen was light, powerful and safe enough to use for rocket propulsion, therefore, making it possible to launch the nation's space program. Silverstein designed and constructed the first United States supersonic propulsion wind tunnel which supported the development of supersonic aircraft.

In 1997, he received the prestigious Guggenheim Medal for his technical contributions and visionary leadership in advancing aircraft technology and propulsion performance and foresight in establishing the Mercury and Gemini manned space flight activities. The only other recipients of the award have been Orville Wright, Charles Lindbergh and William Boeing.

DEAN RALPH ROSS DIES AT AGE 90

Retired dean of students and professor of mathematics Ralph M. Ross died Sept. 4 at the age of 90. He served Rose-Hulman for 39 years prior to his retirement in 1975.

Ross joined the faculty in 1946 and was appointed professor of mathematics in 1956.

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Survivors include his wife, Leanna Dahmer Cunningham Ross and children Debby Thompson and Carl Cunningham. He lived in Speedway, Ind., at the time of his death.
Another academic year is upon us and the eager members of the class of 2005 have started the path to a Rose-Hulman degree. They arrived with lots of brains, healthy amounts of ambition, and probably some slight doubts about their decision to come. In other words, the class of 2005 is like every other class since 1883. Like most, they want to make friends, know how to get the good profs, how to log onto the network and collect e-mail, best pizza place and, lastly, the rules of Rose — written and unwritten — that will govern their lives for the next four years. And that's normal, there are rules everywhere. For Rose, they will be found in a forty-six page document tucked inside each freshman packet titled Academic Rules and Procedures.

Not so many years ago The Student Handbook, as it was known for generations, was a slim little volume 3” x 5” that could be tucked into a shirt pocket. It had the rules and a liberal amount of fatherly advice.

Under “Suggestions for New Students” (circa 1932), the young matriculants found the following: “Too many stories of college life convey false impressions. It is best not to let your reading in juvenile literature determine your ideas about temptations in college.”

FRESHMAN CAP

Now, down to business – the beanie. For generations freshmen had to cover their heads with the distinctive if none too attractive green beanie. The handbook of 1922-23 was quite explicit.

“It is the custom for Freshmen at Rose to wear skull caps during the whole of the Freshman year to distinguish them from the more learned Engineers.....The caps must be worn, both on the campus and about town, from sun-up to sundown, on all days but Sundays. It is very unsafe to bring any other caps about the Institute grounds. Any Freshman violating this green-cap rule will be subject to severe discipline at the hands of the upperclassmen.”

See, we do make progress at Rose!

FRESHMEN COMMANDMENTS (CIRCA 1943)

Woe be unto the entering frosh who did not commit to memory the key laws handed down from on high since time immemorial.
1. No walking on cinder path at any time.
2. No smoking on campus.
3. No corduroy to be worn at any time.
4. Green caps (see above)
5. Caps must be obtained not later than two days after their arrival at the bookstore.
6. All freshmen (in old clothes) must be at all home games with Rosie.
7. Must carry matches at all times.
8. All freshmen must wear garters.
9. May not smoke pipes anywhere.

The goal was noble. The upperclassmen, in enforcing the rules, only wanted “to bring up the freshmen to be nice, courteous gentlemen.” Penalties are also listed so as to not surprise the guilty. Failure to follow rule 3 would lead to a student being “divested of their trousers because they happen to be of the sacred corduroy variety.”

ROOM AND BOARD

New students in the early 1920s were advised to introduce themselves on arrival in Terre Haute to Train Committee men, who would guide them to campus. The Train Committee men could advise on rooming houses and help find roommates. “It is best to find your roommate before renting your room, so that both will be satisfied with it....Good rooms may be rented by one person for $7 to $10 a month.” Those not able or not wishing to dine in their rooming house were advised to find board nearby for convenience in bad weather and to have it understood with the owner of the rooming house that “you are to leave whenever you feel like it.”

The next issue will continue a historic review of the handbook.
The bonfire tradition continued this year as the freshmen muscled railroad ties into position for the celebratory pyre. The outhouse-topped construction blazed into history after the homecoming pep rally.