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REPORT OF THE PRESIDENT 1986

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# RICE UNIVERSITY

## REPORT OF THE PRESIDENT 1986

## FROM THE PRESIDENT

*"The new institution thus aspires to university standing of the highest grade"*

EDGAR ODELL LOVETT  
OCTOBER 12, 1912

In his inaugural address at the formal dedication of The Rice Institute, President Edgar Odell Lovett announced what has continued to be our goal: a University of the greatest distinction, to be achieved through teaching and research in a physical setting of beauty as well as utility. The University has been steadfast in pursuing this goal for seventy-four years. Beginning with the very first class, admission has been selective, and today the Rice student body compares favorably with the very best by all measures of academic achievement. The faculty combines dedicated teaching with national and international recognition for scholarship, research, and professional accomplishment. The tradition for campus beauty and impressive architecture also continues to be vital to the identity of the University. Undergirding this triple achievement are the support of generous donors and the careful stewardship of the Board of Governors which together have given Rice an endowment that testifies eloquently both to the vision of the founder and to the devotion of alumni and friends over the years.

During this my first year, I have delighted in becoming better acquainted with the place and the people that embody these great strengths of our University. I was certainly impressed in general with Rice before coming. But I have thoroughly enjoyed discovering the particulars of just how remarkable are both the place and the people.

I have been especially pleased to find that members of the Rice community—students, staff, faculty, alumni, friends, and the Board—not only celebrate the very substantial achievements of the University but also share a sense that it can be

even better. This sense of expectation is, I think, integral to excellence in any institution. It is, therefore, indispensable as we build further on the great strengths that are here to realize even greater distinction in the years ahead.

That further building is under way, and it does build on our existing strengths.

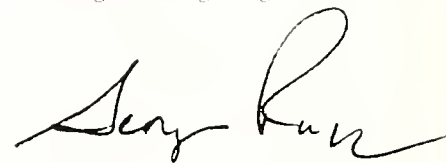
All members of the Rice community whom I have met agree that the central contribution of the University is the undergraduate education we offer. I certainly share this view. We are firmly committed to providing undergraduate education that is unsurpassed anywhere. To that end, we have under way a careful review of our undergraduate curriculum with the aim of enacting revisions that will make it even more effective.

This undergraduate education is now and will continue to be at the heart of Rice. That commitment distinguishes this institution from many—indeed, from almost all—other major universities. To be able to offer undergraduate education unsurpassed anywhere, we must continue to attract the outstanding faculty Rice students rightly expect. To do that, we must in turn be able to tell prospective faculty members not only that they will have the opportunity to teach outstanding undergraduates but also that they will have a critical mass of colleagues and excellent facilities to allow them to remain at the cutting edge of their own disciplines. Accordingly, we are developing plans for additional appointments that will enhance our achievements in research, scholarship, and professional accomplishment and thereby at the same time also enable us to attract more of the outstanding faculty members that are central to the education we offer.

The process of curriculum revision and the planning of further faculty appointments are central to our deliberations and decisions during the current year. I will, therefore, report on those developments in more detail in the annual report for 1986-87. In this report for 1985-86, I will

anticipate those developments only in that I illustrate the existing strengths which our further building presupposes.

Those strengths certainly do include our physical setting, which has gained markedly both in beauty and utility this past year with the completion of the lovely Ley Student Center and the activation of the cogeneration plant that now provides much of our electrical power. But this report, in addition to providing financial data for the 1985-86 fiscal year, will focus on people rather than the place—on students and faculty members who both illustrate our excellence now and at the same time represent our commitment to becoming even better as we continue steadfastly in the aspiration Edgar Odell Lovett set before us: to attain "university standing of the highest grade."



George Rupp  
President



## RICHARD SMALLEY

PROFESSOR OF CHEMISTRY

The unusual title in the journal *Nature* jumps out at you. "Carbon 60: Buckminsterfullerene," it read. A touch of whimsy, courtesy of Richard Smalley, Norman and Gene Hackerman Professor of Chemistry at Rice University, can find its way even to the hallowed pages of this British journal, arguably the most prestigious scientific publication in the world.

Last year Smalley and his colleagues at Rice astounded the scientific world with their discovery of a new molecular species of carbon, a stable sixty-carbon atom cluster suggestive of Buckminster Fuller's geodesic dome.

The Buckeyball, as they call it around the lab, also looks very similar to a soccer ball. Smalley announced his discovery with a cover story in *Nature*, and worldwide interest in it has been high ever since.

"When we first came out with the sixty-carbon cluster," Smalley says, "there was a lot of scepticism about its plausibility as a molecule. But research on it in many other laboratories has been in progress for over a year, and our molecule still holds up. Science is self-cleansing in that respect."

Although the Buckeyball has received a lot of glamorous attention, it is only one part of the research that is in progress in Smalley's laboratory.

Smalley works in the field of molecular surface chemistry. As part of his pioneering work in this area, he and his co-workers have developed techniques employing the laser vaporization of such substances as the transitional metals.

After vaporization, the molecules are supercooled in a supersonic jet to slow them down to a point where they can be studied in detail.

"By this method we can produce molecular clusters with surface properties," Smalley says. "The surface chemistry of clusters can thus lead to greater knowledge about the surface chemistry of bulk

materials. Our motivation is to bring surface experiments to the theorist and describe surface chemistry as best we can. Today molecular surface chemistry has many significant applications, such as in micro-electronic circuitry and in the catalytic converter of automobiles."

Since coming to Rice in 1976, Richard Smalley has enjoyed a rapid ascent not only through the academic ranks but also to the forefront of his specialty of chemical physics. In 1982 he was named to the Hackerman chair; he was recently appointed chairman of the Rice Quantum Institute, an association of chemists, physicists and engineers from the university.

He travels widely and gives several dozen invited lectures in this country and abroad each year.

"We just don't know enough about the catalytic reactions on metal surfaces, such as on the platinum element in the catalytic converter," Smalley says. "It would be extremely useful to find a non-noble metal for this purpose. The technology for studying surface catalysis is now starting to become available, and much of it we're developing here."

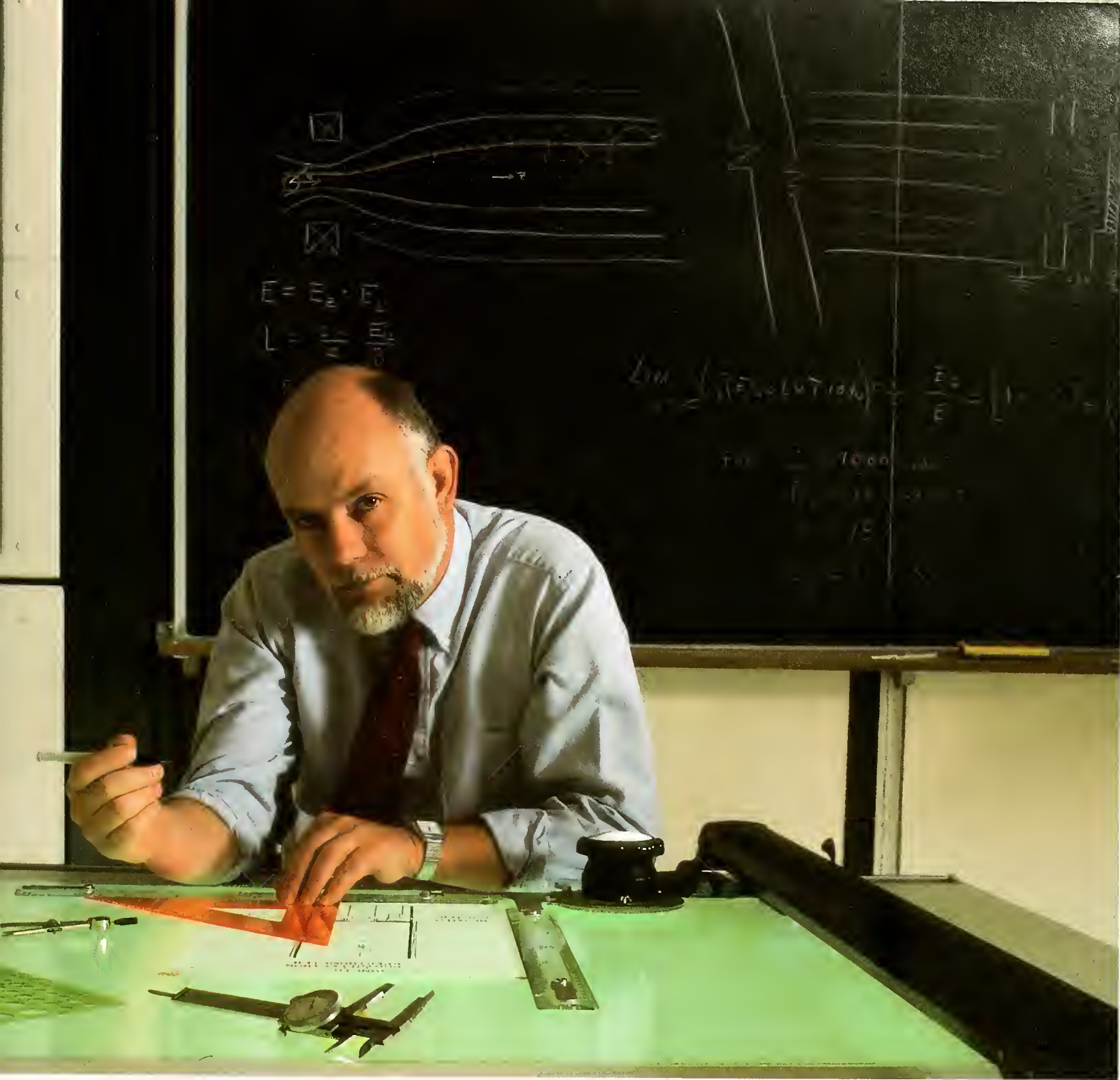
Smalley is a slender, balding man with a neatly trimmed beard who has a remarkable skill in explaining complex scientific problems with clarity and elegance.

"As components and reactants become smaller," he says, "surfaces and their interface with air or liquid or another solid surface begin to dominate the chemical properties of the system. The production and investigation of molecular clusters yields insights that we could have never arrived at through classical chemistry."

Smalley's laboratory looks more like a monument to the high-tech computer age than the familiar glass beaker-and-bunsen burner world of the traditional chemist. Laser apparatus, high pressure supersonic accelerators, powerful electromagnets, and all their bewildering tangle of wires and pipes and tubes make up the world of Richard Smalley and his students and colleagues as they probe the frontier between physics and chemistry.



"Molecular surface chemistry, as any other field of science, must not be only descriptive," Smalley says, "it must also be predictive. We must be able to know how a particular system of chemical surfaces will interact. We are far from having a predictive theory in the chemistry and physics of surfaces, but we are working toward it. That is what science is all about."



## RICHARD SMITH

PROFESSOR OF HISTORY

The first time visitor to historian Richard Smith's office on the fourth floor of Fondren Library will know instantly what his specialty is.

The room is crammed with newspapers, magazines, texts, and reference books, all in Chinese. A bottle of Tsingtao beer — unopened — and a Coca-Cola bottle, lettered in Chinese, sit on a bookshelf.

"I can't say I have had a life-long interest in China," says Smith, Professor of History and Master of Hanszen College. "I didn't really get interested in it until my junior year in college, when I took a course at the University of California at Davis in nineteenth century Chinese history. Up to that point I was rather unfocused as an undergraduate. I started out in biology, played varsity baseball, and was seriously considering going into professional sports. I graduated in political science, but my introduction to Chinese history opened up a whole new world for me. Besides, I don't think I would have made it in the big leagues."

Smith's primary interest is the Ch'ing Dynasty, which extended from the mid-seventeenth century to 1912. He also teaches courses in Chinese history from neolithic times up to the Communist revolution of the 20th century.

His most recent book, entitled *China's Cultural Heritage*, brought laudatory reviews from leading authorities in the field. Professor Michael Gasster of Rutgers University said of it: "An outstanding work... learned, lively, and sharply insightful... full of original ideas and perceptions."

Smith is a slight, intense man with a fast, firm handshake who has an irrepressible enthusiasm for his work.

"For me," he says, "the Ch'ing Dynasty is particularly absorbing because it provides the necessary background for an understanding of modern China."







An additional area of research that keeps Smith travelling, writing, and lecturing is the history of divination in late imperial China.

"Divination, or fortune-telling, has been an intrinsic part of Chinese culture for thousands of years," Smith says. "Regardless of how we in the West may view it, divination can teach us a great deal about Chinese thought and behavior."

He is currently writing a book on divination in the Ch'ing period, which he hopes to finish next year.

Smith's enthusiasm and knowledge have been amply demonstrated in the classroom. He has won the Phi Beta Kappa Teaching Award, the George R. Brown Award for Superior Teaching (three times), and the George R. Brown Award for Excellence in Teaching.

"I love Rice students," he says. "I find them intelligent and inquisitive, and easy to talk to and fun to teach."

"They show an enormous range of talent. They are not only outstanding in academics, but also in drama, music, art, and athletics. As a college master, I take pride in what they accomplish, even though I have very little to do with it."

Smith has travelled extensively in Europe and Asia for his research, and he has given invited lectures in the Soviet Union, Taiwan, and Hong Kong. He has directed or participated in numerous workshops on Chinese history, and presently serves on the faculty of the Center for Asian Studies at the University of Texas at Austin, on the board of Directors of the Houston Center of the Asia Society, and on the National Committee on U.S.-China Relations.

But Smith's primary devotion is to the Rice community. "We are privileged," he says, "by the quality of our students and our faculty."

# GEORGE SCHROEPFER

PROFESSOR OF BIOCHEMISTRY

In the laboratories of Rice biochemist George Schroepfer, you won't find the nostalgic image of the solitary scientist toiling by lamplight at his benchspace. Schroepfer commands a small army of several dozen scientists, students, and technicians who are working on one of the most urgent medical problems of modern times—the problem of cholesterol and its relation to heart disease.

The specific target of Schroepfer's research efforts over the last several years has been the development of a drug that will lower blood cholesterol. This drug, a 15-ketosterol, has been synthesized and demonstrated to have inhibitory properties over cholesterol synthesis.

"We have shown that this oxygenated sterol," Schroepfer says, "is very active in inhibiting cholesterol biosynthesis in cultured cells and in lowering blood cholesterol levels in animals."

Schroepfer, who holds the Ralph and Dorothy Looney Chair in Biochemistry, believes in recruiting from all academic levels of the campus to carry out research and to prepare students for careers in biomedical science.

In addition to a large number of Ph.D. and M.D. scientists and graduate students, more than 140 undergraduates have worked in Schroepfer's laboratories since he founded Rice's Department of Biochemistry in 1972, including 25 undergraduate biochemistry majors who completed individual honors research programs for academic credit.

"The broad range of individual research efforts in our program," Schroepfer says, "and their requirements for a wide variety of experimental approaches and techniques presents a good opportunity for students who are considering careers in medicine or biomedical research."

Schroepfer, who has both M.D. and Ph.D. degrees from the University of Minnesota, doesn't spend as much time doing hands-on research as he once did, but instead carefully oversees the activities of his various research groups.

Schroepfer is an intensely dedicated researcher who devotes his full energies to his science and expects his staff to do likewise.

His academic pedigree descends directly from the most preeminent scientists in the field of cholesterol biochemistry. After receiving his M.D. and completing an internship in internal medicine, Schroepfer undertook graduate study at Minnesota under Dr. Ivan D. Frantz, a physician-scientist who helped carry out the first demonstration of cholesterol biosynthesis in a cell-free preparation.

Schroepfer then joined the faculty of the University of Minnesota, but under a special fellowship from the National Institutes of Health, he spent two years at other academic centers. One year was spent at a Medical Research Council Unit in London working with Dr. George Popjak and Sir John Cornforth. Following his year in London Schroepfer returned to the U.S. to work in the Laboratory of Professor Konrad Bloch in the Chemistry Department at Harvard University. Bloch and Cornforth were to later receive separate Nobel Prizes in Medicine and Chemistry, respectively, for their work on the biochemistry of cholesterol.

Schroepfer returned to Minnesota but shortly thereafter joined the faculty at the University of Illinois at Urbana-Champaign, where he served as the first director of the School of Basic Medical Sciences. In 1972 he came to Rice.

"We are very proud of our undergraduate program in biochemistry," he says, "and in particular of the graduates of the program." As Rice enters a new era under a fresh administration, the laboratories of George Schroepfer will be bringing the fundamentals of biochemistry to bear upon the health and welfare of the nation.





## JANE GALLOP

PROFESSOR OF HUMANITIES

The term "feminist" carries a range of connotations, but Jane Gallop has carried that controversial designation to a high plane of intellectual achievement.

Although the thirty-four year old Professor of Humanities at Rice is an active feminist, she is an activist not in the traditional political arena but within the university through the pursuit of knowledge. Gallop believes feminist theory can bring about a radical change in modes of knowledge as well as subject matter in many fields.

"We always assume," she says, "that there is an inadequacy if we place too much subjectivity in the pursuit of knowledge. Feminist theory proposes that behind knowledge there always is an essential element of subjectivity. It recognizes that there is a subjective basis to any study."

Gallop also studies and teaches the works of Sigmund Freud toward the same goal of "analyzing the paradigms of knowledge: the ways it is acquired, tested, communicated, and interpreted." A complete set of the works of Freud sits on a shelf in her neat but sparsely appointed office in Rayzor Hall.

"Freud was not a feminist," she says, "but he likewise called into question the ways we think and know and pursue knowledge."

Gallop does work which does not fit within the boundaries of any single academic discipline. She has taught a graduate seminar in the English



Department, and other courses listed as "Humanities." "I work at the juncture of several different fields," Gallop says, "namely, literary theory, psychoanalytic theory, and feminist theory."

Her most recent book, *Reading Lacan*, which she wrote under a Guggenheim Fellowship, explores the thought of the French psychoanalyst Jacques Lacan. She has written two other books, including *The Daughter's Seduction: Feminism and Psychoanalysis*. Gallop has given invited lectures at Harvard, Yale, Princeton, and many other universities; she is currently working on a book on feminist literary criticism.

She received her Ph.D. from Cornell in 1976, and has been at Rice two years. On her students at Rice, Gallop says, "They are a lot smarter than I realized at first. They're hungry for challenges that make them think. And thinking is all-important. I believe women may have more rights than they did in the past, but society's ways of thinking about women have not fundamentally changed."





## ANGELO MIELE

PROFESSOR OF  
ASTRONAUTICS AND  
MATHEMATICAL SCIENCES

To get to Angelo Miele's office, you walk around the vast central space of Ryon Hall, go up a concrete-dreary flight of stairs and enter a hallway crowded with shelves that are loaded with books and papers. A suite of two small rooms sits off to the side; Miele's office is in the back.

The four walls, and most of the floor-space is taken with filing cabinets and bookshelves and boxes of papers and letters. There is very little room in which to move.

Miele sits at his desk, hastily leafing through a notebook.

"I must get ready to present a paper in Austria," says Miele, Professor of Astronautics and Mathematical Sciences at Rice University and Director of the university's Aero-Astronautics Group.

The phone rings. "Yes, that's correct. No, that's not, it's like this..." he says in the accent of his native Italy.

"That was Aviation Week," he says as he hangs up. "They are doing an article on my work on the windshear problem."

From this cramped room and hectic pace, Miele explores one of the most exciting realms of human experience—man in flight. He has achieved international renown for his work on flight mechanics, astrodynamics, applied aerodynamics, and optimization theory, the theory that investigates the theoretical basis for optimal performance of an airplane or spacecraft in flight.

A native of central Italy, Miele does not fly a plane himself or work in an elaborate laboratory; he works with numbers and equations and computers, developing mathematical theories that express the laws of flight. "I fly with the mind," he likes to say.

The sixty-four-year-old Miele's present work, an area that he is clearly excited about because of its importance to the

air traveller, deals with the weather phenomenon of windshear and its effects on flying aircraft.

With Capt. William Melvin, a senior pilot with Delta Airlines who has been serving as his consultant, Miele has been formulating the mathematical basis for determining the best means by which to handle an aircraft through a windshear. He is also developing laws of guidance for the automatic and semi-automatic steering of an aircraft in a windshear.

"The biggest problem a pilot faces with windshear," Miele says, "is not a downward wind, but a sudden reversal of the horizontal wind from a headwind to a tailwind. A sudden transition from headwind to tailwind, as it happens in a windshear, causes an acute and severe decrease in airspeed, and the plane may crash.

"We have found that the optimal trajectory for the aircraft, that is, the best way the pilot should handle his plane, will vary with the severity of the windshear."

In 1982 Miele was honored for his many significant contributions to the science of astronautics on the occasion of his sixtieth birthday when the *Journal of the Astronautical Sciences* dedicated an entire special issue to him. The following year he was again so honored by the journal *Optimal Control Applications and Methods*.

Among his numerous editorial duties, Miele serves as editor-in-chief of the *Journal of Optimization Theory and Applications*, and he is editor of the textbook series *Mathematical Concepts and Methods in Science and Engineering*.

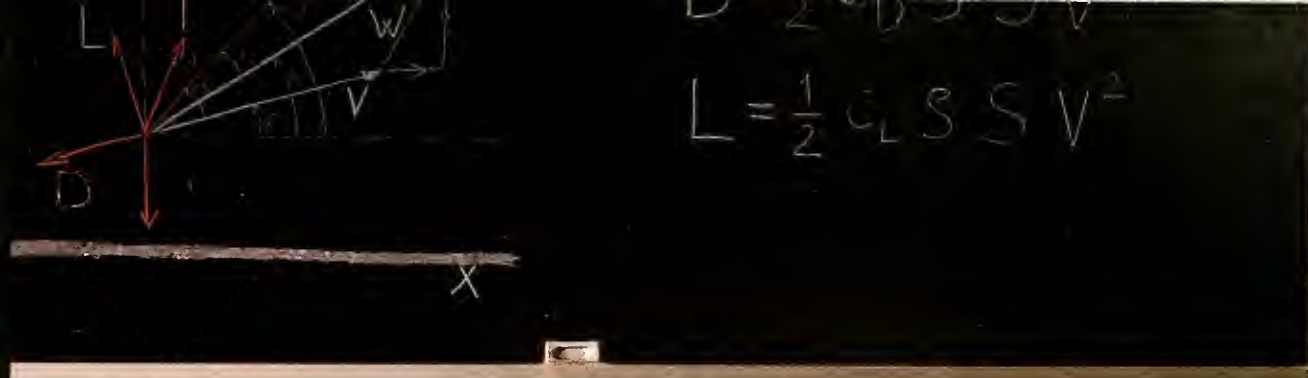
He has been awarded the Levy Medal of the Franklin Institute, the Brouwer Award of the American Astronautical Society, the Flight Mechanics Award and the Pendray Aerospace Literature Award of the American Institute of Aeronautics and Astronautics, and he is a member of the International Academy of Astronautics and a Fellow of the American Astronautical Society as well as of the American Institute of Aeronautics and Astronautics.

The popular Miele has been at Rice since 1964. He consistently receives high

praise from his students, and he presents seminars and gives lectures with the personal ebullience one would expect from a native Italian.

"The windshear problem is not the most complex problem I have ever worked on," Miele says, "but I am extremely enthusiastic about it because of the possibility of saving human lives."





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Downburst { Microburst  
              { Macroburst

A diagram on a chalkboard showing a flow field characteristic of a downburst. A horizontal line is labeled 'X'. Above it, a series of arrows originate from a point and curve downwards and outwards, illustrating the spreading and downward flow of air.



## ROD AND SUSAN McINTOSH

ASSOCIATE PROFESSORS OF  
ANTHROPOLOGY

When archaeology graduate students Rod and Susan McIntosh were exploring the West African nation of Mali in the late 1970s, they came across a number of mysterious earthen mounds along the floodplain between the Niger and the Bani Rivers.

Once they began excavating, the startling truth began to come forth—they had discovered the remains of a once-thriving city that later proved to be the oldest known urban site in West Africa.

The McIntosh's discovery of the site of Jenne-jeno—"ancient Jenne"—near the present Malian city of Jenne, dramatically altered the prevailing belief concerning the origin and development of cities in West Africa.

"It was previously thought that West African cities arose well after the tenth century under the influence of North African Arabs who had established trade routes in the area," says Rod McIntosh. "But Jenne-jeno was founded around 250 B. C. by inhabitants native to the area."

As they dug up shards of pottery, funeral urns, foundations of houses and buildings and numerous other remnants of life in this ancient city, there emerged a picture of a prosperous community of 25,000 inhabitants trading in grain, fish, gold, copper, iron, and other commodities.

Then, as mysteriously as it appeared, the city was abandoned around 1400 A. D., about the time the modern city of Jenne was founded.

Today, as Rice University's only prehistoric archaeologists, Rod McIntosh and his wife Susan are still unravelling the mysteries of Jenne-jeno.

They both received their Ph.D.s in 1979—Rod at Cambridge in England, Susan at the University of California at Santa Barbara. Their demanding schedule of study and research wasn't enough to keep them from getting married in 1976.



The McIntoshes came to Rice in 1980, where they both serve as Associate Professors in the Department of Anthropology. Since then they have journeyed to Africa every several years to continue their excavations and survey of Jenne-jeno. "Finding West Africa's Oldest City," written by the McIntoshes, appeared in the September 1982 National Geographic.

In addition to their field work, Rod and Susan carry out a widely varied teaching load. Rod teaches such courses as

Early Civilization, African Prehistory, and Geomorphology, while Susan teaches Human Evolution, Human Osteology, and World Prehistory.

They share a great enthusiasm for Rice's college system, and they both serve as Masters of Baker College.

"The college system is one of the strongest aspects of life at Rice," says Susan. "It allows an interaction among students that doesn't happen at schools





*The McIntoshes traveling by donkey cart near Jenne in West Africa*

without it. The student gets to know a much broader range of other students and faculty.”

“Rice students are bright,” says Rod, “and are enjoyable to teach. The research atmosphere at the university is very good.” Rod has received two major teaching awards at Rice, the Phi Beta Kappa Teaching Award in 1983 and the Brown College (Rice University) award for Teaching Excellence in the Humanities in 1984.

Each summer the McIntoshes spend five weeks in France where they relax as well as keep in touch with European researchers in prehistoric archaeology.

They both originally favored Africa as the site of their research, because, as Rod says, “the archaeological questions there are more interesting, and there are fewer archaeologists.”

# KEN KENNEDY

CHAIRMAN

DEPARTMENT OF COMPUTER SCIENCE

At the time Ken Kennedy became the first chairman of the Department of Computer Science in 1984, his goal was simple: to make Rice University's program in computer science one of the very finest in the nation.

"We wanted to be among the best in both graduate and undergraduate education," Kennedy says, "Right now we are on track toward that accomplishment. Even in today's weak local economy, Rice graduates are highly recruited by industry. This year, three of the ten Bell Fellowships, a prestigious award given nationwide to students for graduate study, were awarded to Rice graduates. The top schools for graduate study in computer science, such as Stanford, M. I. T. and Carnegie-Mellon, always show great interest in Rice graduates."

Ken Kennedy has been an imposing presence on the Rice campus since his undergraduate days here. He graduated from Rice *summa cum laude* in 1967 with Phi Beta Kappa honors and the Hugh Scott Cameron Award for Service to Rice University. He spent the next four years obtaining his Ph. D. from New York University, and in 1971 returned to Rice as a faculty member in the Department of Mathematical Sciences. In 1985 he was named Noah Harding Professor of Mathematics in the Department of Computer Science.

"Like most people who have been to Rice," Kennedy says, "I have developed a strong attachment to it. My father was in the military, and we had moved sixteen times by the time I graduated from high school. Rice was the first place at which I had spent more than three years.

"When I was looking for a college to attend, Rice and M. I. T. both stood out because of their high standards. I was accepted at both schools, but I came to Rice because it showed more interest in me as a person."





Kennedy stresses not only teaching but also research within his department.

"Research is an important criterion for our faculty members," Kennedy says. "We have the responsibility not only to pass knowledge on to the student but also to engage in major research efforts."

Kennedy himself works in the area of software engineering and automatic detection of parallelism in programs for sequential machines.

In addition to conducting research and providing education, Kennedy believes a university should complement the community around it.

"I think Rice is a great asset to Houston," he says. "Rice is one reason Houston could be a leader in the field of supercomputers, for example. The Houston Area Research Center, in which Rice participates, has one of the fastest computers in the world. Supercomputers are extremely useful in computer modelling and have great potential in industry. Rice can be a leader in high-tech development to support the petroleum industry. There is also great potential here in the interaction between computer technology and the biomedical industry."

Kennedy's interests extend well beyond the computer field. He jogs regularly and is a devotee of dance and modern ballet; he was recently appointed to the Board of Directors of the Society For The Performing Arts.

Above all else, Kennedy strives toward making Rice's computer science program one of the very best anywhere.

"We are well on our way toward enlarging the faculty and increasing the number of Ph.D.s granted each year, and are working toward steadily increasing our research funding each year," Kennedy says. "Goals should be ambitious, don't you think?"

## WILLIAM MARTIN

PROFESSOR OF SOCIOLOGY

When William Martin began holding revival meetings at age fourteen in his native South Texas, he wasn't thinking of a future academic career.

"Religion has always been a big factor in my life," says Martin, Professor of Sociology at Rice.

"It was in a freshman Bible course in college that I decided that I wanted to be a college professor."

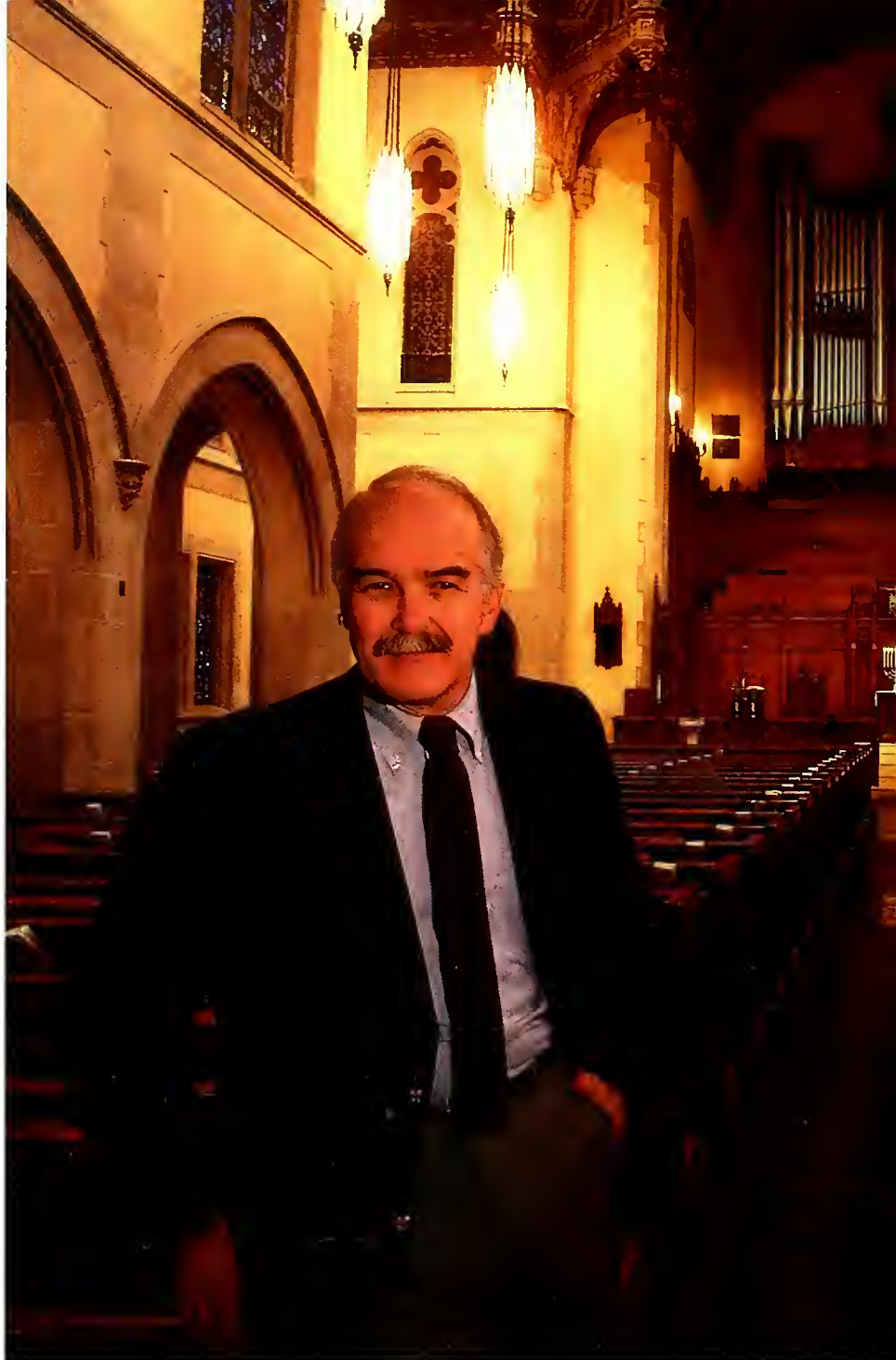
After graduating from Abilene Christian College, Martin attended both the Harvard Divinity School, from which he graduated in 1963, and Harvard's graduate school, from which he received his Ph.D. in Religion and Society in 1969.

From Harvard, Martin came directly to Rice.

"I wanted to come to a place at which I felt I had a chance to stay. Although I had no particular intention of returning to Texas, I was aware of the quality of the university and that attracted me. If Rice hadn't been what it was, I probably wouldn't have been interested in returning."

During his time here, Martin has enjoyed a resurgence of interest in his primary field, the sociology of religion, which has accompanied the worldwide resurgence of evangelical Christianity.

Martin studies the evangelical movement in general, but his specific interest lies in religious broadcasting and radio and television evangelists. He has published widely in the national press, and has appeared on national television to discuss the phenomenon of evangelists in broadcasting. Martin has become a nationally recognized authority in his field.



Martin takes a direct approach to the study of the evangelical movement. "I attend services, watch the preachers, observe and interview the participants," says Martin, who travels a great deal in the course of his research. He also teaches four courses in a typical year — Introductory Sociology, Sociology of Religion, Criminology, and Popular Culture.

Martin was among the first sociologists to point out that the apparent upsurge in evangelical religion and the allegedly enormous audience for television evangelists were, in fact, largely "journalistic artifacts."

"When Jimmy Carter announced in 1976 that he had been 'born again,' the press made a big fuss about it," he says.

The media acted as if, all of a sudden, there were fifty million brand-new



evangelicals out there, and all of them were watching TV preachers. There were a lot of evangelicals—probably thirty-five million, but they were out there long before Time Magazine discovered them, and no more than fifteen million listened to religious broadcasters on anything like a regular basis, Martin says.

“While evangelical Christianity has been increasing in popularity worldwide and evangelicals have gained considerable political influence and power in recent years, religion has always been a powerful influence in American culture.”

In 1977 Martin wrote an article for *Texas Monthly*, a magazine for which he serves as contributing editor, on perhaps the best-known American preacher of modern times, the Reverend Billy Graham. The article caught Graham’s attention and he wrote Martin praising it for its fairness and objectivity.

“Graham and his staff apparently read other things I had written,” Martin says, “and when he decided to have someone undertake a study of his ministry and its role in American religious history, he approached me about writing it. Of course, I accepted immediately. It was the chance of a lifetime. Mr. Graham offered me full access to him and his staff and archives, but made it quite clear that I would have full editorial control. What else could I ask for?”

“Two things that bring me great pleasure are teaching and writing,” Martin says. “It’s hard to say which I enjoy more.”

Martin has won ten teaching awards since he has been at Rice, including the George R. Brown Award for Excellence in Teaching (twice), the George R. Brown Award for Superior Teaching (4 times) and the George R. Brown Certificate of Highest Merit.

During the course of his travels to study the Graham ministry, he visited England to interview people who have worked with Graham in that country. Among these was the former Bishop of Norwich, a Lord of Parliament.

“While interviewing the Bishop in the robing room at Parliament,” Martin says, “I sat in the chair usually reserved for the Archbishop of Canterbury. I loved it. That was a long way from holding revival meetings in Dilley, Texas.”

## SCOTT SNYDER

STUDENT

If there was ever a traditional image of the Rice student as a one-dimensional, career-driven intellectual bulldog, Scott Snyder doesn't match it.

Of course, he has excelled academically, as have most of his fellow collegians. But to Scott Snyder, Rice '87, a college education is as much an opportunity for service and for involvement in university and community affairs as for gathering course credits.

When he was only a sophomore, the Memphis-born Snyder was serving as sports editor of the Rice student newspaper, *The Thresher*. By his junior year he was editor-in-chief, and he is spending his last year at Rice as senior editor.

He presently serves on the University Council and the Committee for Undergraduate Teaching and has been active each year at Rice in the Campus Crusade for Christ. These have not been empty tasks for Snyder, an English and history major. Although he entered Rice as a science major, he eventually changed to his present field while taking such diverse courses as philosophy, sociology, religious studies, and French.

"Working on the University Council has given me a good feel for how the university works," Snyder says. "That is the kind of experience most students won't ever have."

His editorship of *The Thresher* provided him the chance "to produce some positive input into the school, to try and make the Rice community a better place."

Snyder looks upon Rice's small size and college system as two of the university's greatest assets.

"At a larger university, I probably would have never had the opportunities for participation that I had so soon at

Rice," says Snyder, a member of Hanszen College. "And the college system allows a close interaction among students and faculty that would be hard to equal at a larger school."

"Most people around here are really bright," he says, "but with all the work they have to do to be good at their field, they don't get the chance to learn important social skills, to deal with different kinds of individuals. When you go to school here for four years, you come to expect a lot from others. Rice students don't tolerate incompetence."

"A lot of what President Rupp is trying to do now is right on target, in my opinion," he says. "He is very forward looking, and is good at analyzing where the university needs to be improved."

Snyder is undecided about what career he will pursue, but he is maintaining several options. He has been recently named a finalist in the competition for a Watson Fellowship, which provides for overseas study in an area of research proposed by the recipient. Snyder submitted a proposal to study the growth of Christianity in a non-Western culture, specifically South Korea.

As advice for incoming Rice students, Snyder recommends "not to worry too much about what others are doing academically around them. Rice is very competitive, and that can be detrimental. Some students tend to be too career-oriented, and their education becomes vocational. There is a great need for a broad, basic liberal arts foundation to education."

"Being in the intense environment that Rice cultivates," he says, "can lead to self-centeredness, but we have the college system to counteract that."

When he was a senior at the Memphis University School, a private high school in his home town, Snyder investigated several top-rank universities along the East Coast. It wasn't until after he came down for an Owl Day visit that he decided on Rice.



"The high quality of education and moderate cost made the decision for me," he says. "I like being here."

"I received a phone call from Time magazine the other day," he says. "I thought they were going to try and sell me a subscription. They wanted to know if I would be interested in writing for them."



## ANNE WIERZBICKI

STUDENT

When Anne Wierzbicki decided that she didn't want to continue her education at the U.S. Naval Academy, she was confronted with the problem of choosing another college.

"I was in my second year at the Academy," says Wierzbicki, a native of Buffalo, N.Y., "and I realized that a military career was no longer attractive to me, but I still wanted to pursue my original goal of a degree in chemical engineering.

"I had decided that I wanted a small school with good access to the faculty, preferably a university in the South, and one with an outstanding program in engineering and an overall first rate reputation. I asked numerous faculty members and classmates at the Academy for their suggestions, and they all said that, given those criteria, there was simply one place to go—Rice University in Houston."

After her transfer to Rice in 1984, Wierzbicki soon realized she was in an entirely new world of academics.

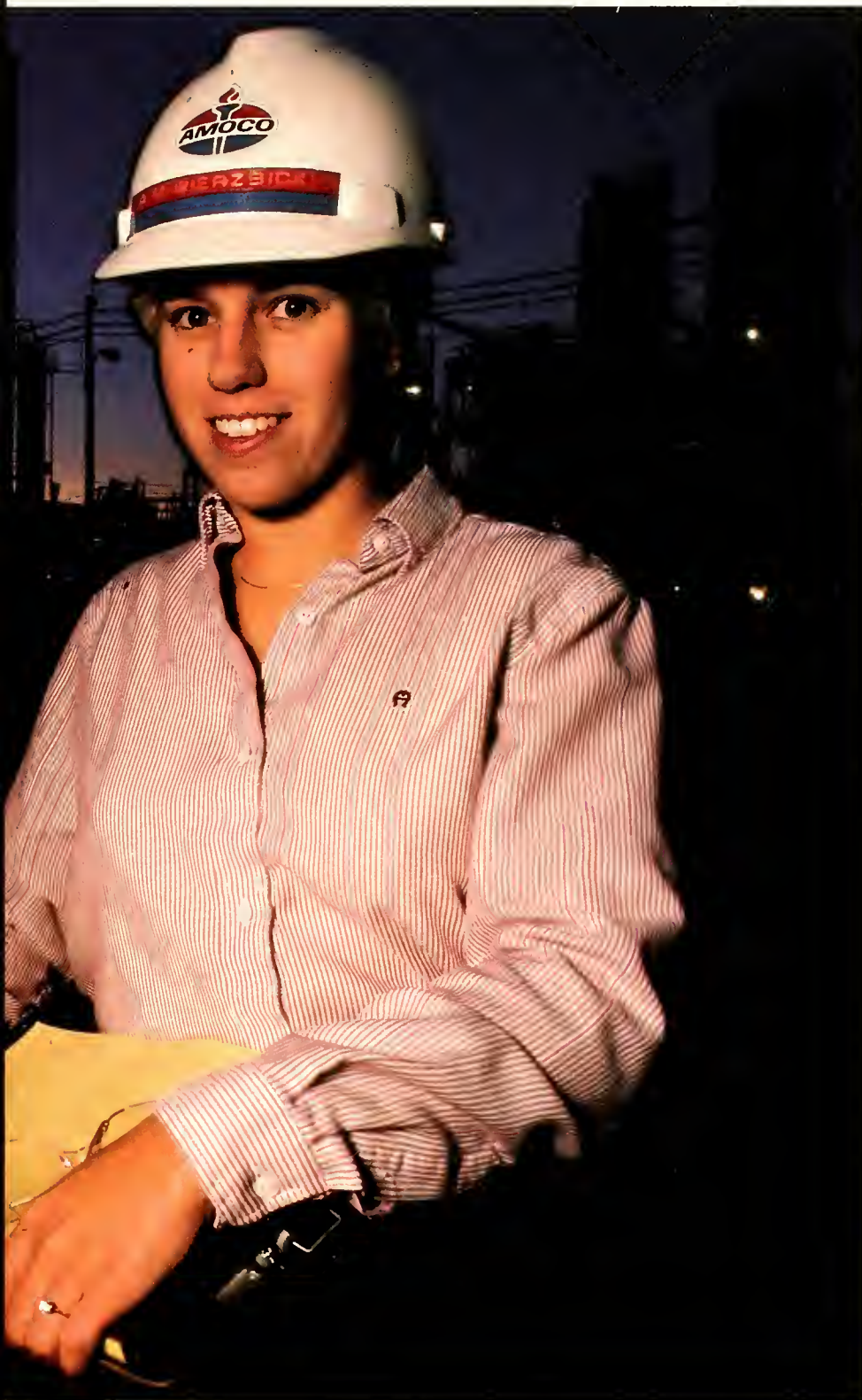
"It took every bit of self-discipline that I had developed at the Naval Academy to get through my first year here and to maintain the high grades I wanted to," she says. "I have never had to work so hard at studies as I have here. The academic demands at the Academy are nowhere near as difficult as they are at Rice."

The college system at the university was to quickly demonstrate its importance to Wierzbicki, a member of Hanszen College who expects to graduate in May of 1987.

"Living on campus was a big help," she says. "Many of my friends took the time to make sure I did more than just study. The community spirit that develops at the colleges is very valuable, especially to new students. At Hanszen, the upperclassmen and the college masters, Richard and Lisa Smith, encourage everyone to take part in college activities according to their own interests."







Although her academic schedule has not allowed a great deal of time for extracurricular activities, Wierzbicki has devoted a portion of her time outside the classroom to activities concerned primarily with her field of chemical engineering.

She is President of the Rice chapter of Tau Beta Pi, the national engineering honor society, and is Treasurer of the university's chapter of Phi Lambda Upsilon, the national chemical honor society. She has been on the President's Honor Roll several times, and has received the Brown Engineering, Max Roy, and Thomas W. Moore Scholarships.

As her graduation approaches, Wierzbicki looks forward to beginning her career in the petroleum or chemical industry as well as marriage to her fiancé, a naval flight officer stationed in Jacksonville, Fla

Among the greatest assets that Wierzbicki feels that Rice has to offer are the students and faculty.

"The diverse group of students that comes to the university," she says, "gives Rice a broad spectrum of styles and personalities as well as academic achievement. I find that each student brings unique characteristics to the school."

"And the faculty here takes a strong interest in the undergraduates," she says. "They don't just lecture and then disappear into their research laboratories. They'll discuss a problem concerning the classroom material or something of special interest to the student. The professors at the Academy were also very accessible and receptive to the students, and I was afraid that once I left there I wouldn't find another situation like that. At Rice those fears were never realized."

## TODD JONES

STUDENT

It was easy for Todd Jones to feel at home when he arrived at Rice. In addition to having relatives here in Houston, the name of his residence didn't even change: Todd moved from the Jones household in Los Angeles to Jones College at Rice, and he says that living at Jones College is like being part of an entirely new family.

"I like Jones [College] because it is so secluded from the other colleges that people there are forced to get to know each other and they do everything together," says Todd, who has served as a Jones freshman advisor for two years and has also been elected an associate justice for the college. "It's also integrated with the college system so that if you want to you can go other places and get to know other people."

Todd is a junior double major in art history and English, and hopes to work in advertising after he graduates. "In terms of what Rice has taught me," he says, "it's to enjoy living with people with different ideas, and different habits, and different attitudes. The people and the atmosphere are Rice's greatest strengths."

In addition to his activities as part of Jones College, Todd is a running back for the Rice football team, which is like having yet another family. "Football in itself means knowing 89 other guys in other colleges," says Todd.

In fact, if it hadn't been for football, Todd probably wouldn't have even come to Rice. He looked at other schools including Florida State and some of the Ivy League schools, but after talking to Coach Watson Brown, Todd finally decided on Rice. He hoped Rice would encourage him and challenge him to be involved with other activities, in addition to football.

In addition to constantly balancing academic, athletic, college, and social activities, Todd wishes he could find a way to eke out some more time to be involved in all the other things he has wanted to do since he's been here.



"I'll probably have to stay for a fifth year. I'm looking forward to being a student for a year and seeing what Rice is really like. Of course I know what goes on, but I really haven't gotten a chance to get involved with many things that I'm interested in, which is probably one weakness of being an athlete. There are some things I just can't do. I couldn't be a music major; I couldn't be an architect."

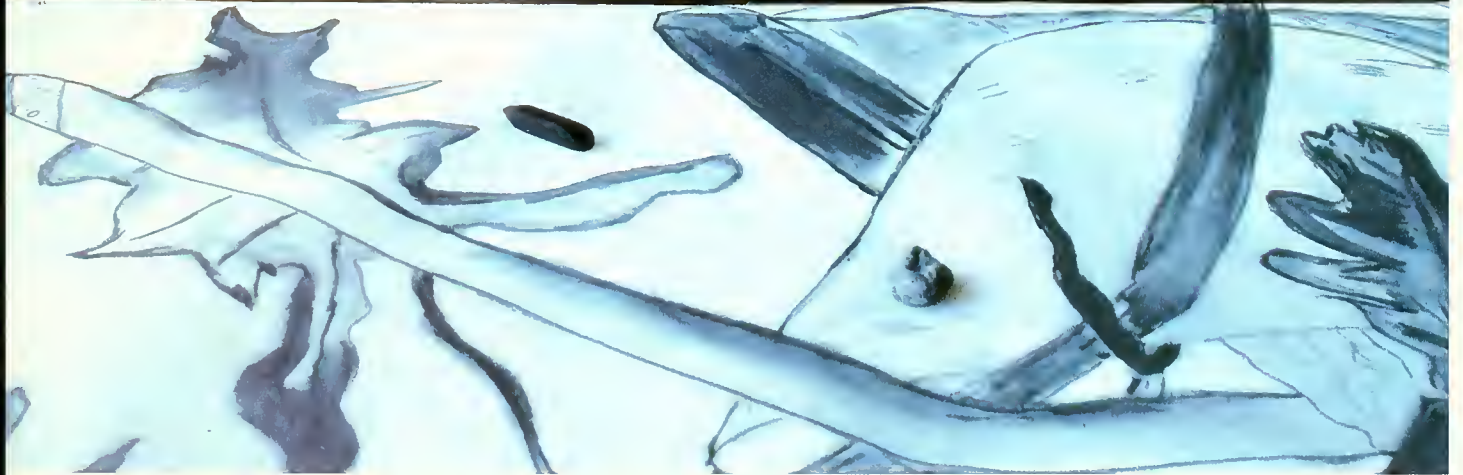
Todd's list of things he still wants to do includes working on the *Thresher*, taking a semester abroad in France, coaching women's powderpuff football, and being more involved in freshman orientation week and Owl Day.

Todd has many dreams for the rest of his Rice career, but he is most committed to seeing Rice win while he's still on the field. "If we turn the program around, I won't forget that. That is the thing I want to do that will make the biggest mark on Rice University. The way sports is emphasized in society now, it's more than a game these days. When Rice wins, the student body wins, the alumni win, teachers win. Nothing would be better than to win at Rice."

Todd Jones is most excited, however, about playing football at Rice University because "the football player here is a student too. He isn't somebody that walks down in the field and plays on Saturday and nobody knows who he is. The large university contrasts with [Rice's] college system because your whole college is

yelling for you; they're watching you and they know who you are. It's like you've got family in the stands. You go home after the game and they'll either sympathize or cheer you on."

Even though his parents live in Los Angeles, Todd Jones has found a new family at Rice.



## LAURA DRESSER

STUDENT

Anyone who follows Rice campus theater knows that Laura Dresser is adept in many roles onstage. But not everyone knows how she practices for her parts.

In fact, if someone were to write a play based on Rice undergraduate life, Laura could easily try out for even the biggest parts because she has been extensively involved in a wide range of activities, including starring in campus theater productions, participating in student government, and working a part-time job.

It didn't take Laura long at all to try out Rice and like it. "Freshman week was just incredible. I remember when I got back home the first time, my friends were saying, 'Yeah, my school's OK.' There were very few people who said, 'Yeah, I love it.' I liked it because you're immediately in Rice and not in a freshman dorm, so you're not so associated with a class when you come in. It's small and you know the professors."

Laura, a junior from Pullman, Washington, is majoring in economics and policy studies, and has taken courses in environmental science in order to prepare for a career in environmental policy.

Since she has been involved in campus theater, Laura has contributed to both the quantity and quality of Rice plays. Laura has had no trouble winning parts in campus productions because "there are so many opportunities and so many parts." In all, she has appeared in five Rice plays, and has won two "Sammy" awards from the Thresher for her performances, including Best Supporting Actress her freshman year for her role as Mrs. Drudge, the maid in the Jones comedy *The Real Inspector Hound*. Last year, she received the award for Best Actress in a Comedy for her performance as Helena in Baker Shakespeare's *A Mid-Summernight's Dream*.

When she's not on stage, Laura acts as Associate Vice-President of Jones College, plays intramural soccer, basketball, and track, competes for Jones College in the annual Beer-Bike race, has served as a freshman advisor for Jones and Baker Colleges, and works a part-time job in the Rice Placement Office.

Last summer, in preparation for her career in environmental studies, Laura worked with a public interest group in Seattle, Washington, which helped to investigate and inform people concerning the safety of one of three preliminary sites which had been selected as potential nuclear waste storage sites.

The diversity of her own off-stage experiences is only surpassed by her diversity on stage. Among other roles, Laura has played a catatonic, a maid, one of three sisters in a Mississippi family, and the leading female role in Baker Shakespeare's *A Mid-Summernight's Dream*. "You don't have to be a theater major in order to get a part in a play," Laura says. "Rice is small enough that you can do anything you want to do, but it's enough quality that you can do it well."

The part of Helena in *A Mid-Summernight's Dream* was the most demanding part Laura has ever had, partly because Rice hired Jenny Stoller, an actress from outside the school who has toured regularly with the London-based Shakespeare Company, to direct the show. "It was exhausting and it took more time than I've ever put into anything, but it came out so well. It was very educational to be exposed to that kind of theatrical intensity—you're working on it all the time."

Is there any other activity that Laura Dresser could possibly want to perform at Rice? Of course. "I always wanted to get a shift at KTRU, but I don't have time, and I'd really like to get involved with the Rice Volunteer Program."

Because of the experience she has gained at Rice, Laura Dresser should certainly be prepared to tackle many new roles after she graduates, but campus theater aficionados undoubtedly will remember her best for the many roles she played while she was here.





## NORMAN BYRNE

STUDENT

For senior chemistry/biochemistry major Norman Byrne, attending Rice University was more than just an opportunity for an excellent education; it was a family tradition.

His father graduated from Rice in 1960, his grandfather in 1929. The third-generation Byrne had been interested in other universities while still in high school in his native Houston, but when the time came for a decision, Rice won out for reasons other than following in the family footsteps.

"I had been accepted at other colleges," Byrne says, "but when Rice accepted me I knew that was where I could get a superior education. The education here can't be surpassed. The faculty here constantly stresses the need to think, to reason on your own, in ways you have never done before. This, I feel, is perhaps the greatest benefit from an education at Rice."

Byrne has indeed made the most of his years at Rice. He is a five-time member of the President's Honor Roll, and is in Who's Who in American Colleges and Universities. He has been active in student government in Lovett College, where he serves as chief justice of the college court, a voting member of the college government, and he is also a member of the University Court.

"My interest in student government began here at Rice, not in high school," Byrne says. "The students, not the masters, run the colleges. I feel this is the best way to do it. You live and study here, so it's good to have a voice in what goes on."

In addition to maintaining outstanding grades in two of the most difficult programs on the Rice campus, chemistry and biochemistry, Byrne is a member of the varsity swim team and participates in a variety of intramural sports, such as softball, raquetball, and track.

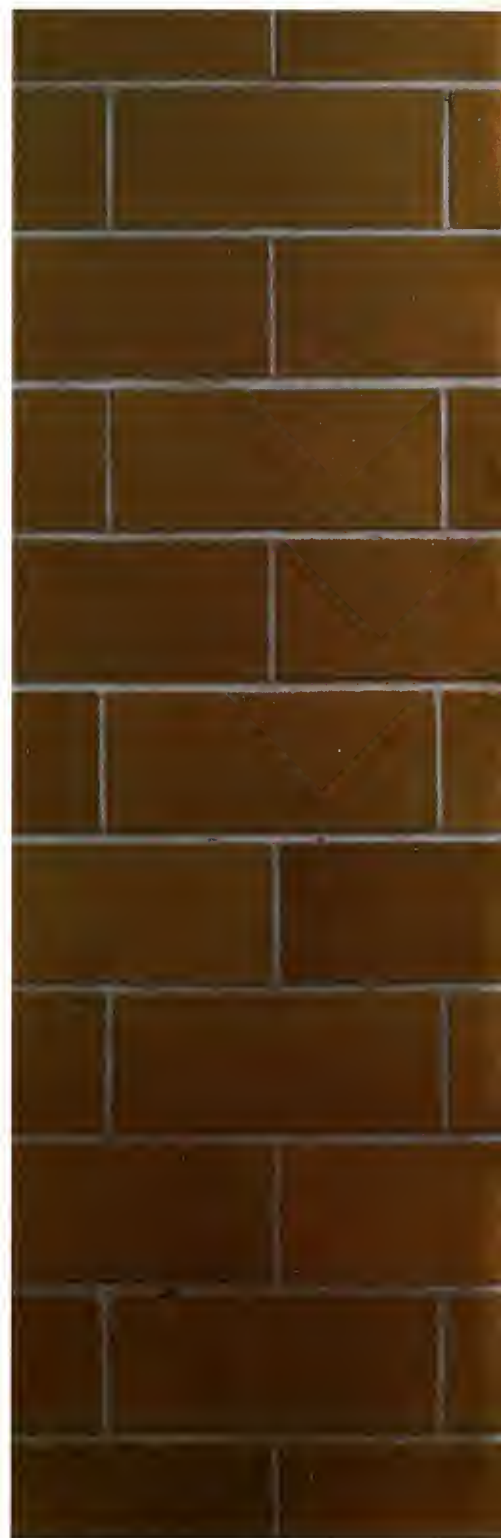
As with most members of the Rice community, Byrne highly praises the university's college system.

"The college system is great," he says. "It acts as a nucleus for students and faculty. I have been able to get to know over two hundred people really well, without all the nonsense involved in fraternities that you find at other universities. I enjoy the daily interactions that the college system provides and the proximity of everything within the campus."

Along with the college system, the honor system is, as he says, "one of the best things about the grading policy at Rice."

Byrne plans to receive his undergraduate degree in May of 1987. He intends to work in industry or research for a while, and then eventually to pursue a graduate degree.

Norman Byrne's many extracurricular pursuits and academic excellence are strong evidence of his belief that a college education should not be a one-dimensional experience. "I think," he says, "that students should seek out the many opportunities for a broad-based education that Rice has to offer."





# AUDITORS' REPORT

To the Board of Governors, William Marsh Rice University:

We have examined the balance sheet of William Marsh Rice University (a nonprofit Texas corporation) as of June 30, 1986, and the related statements of changes in fund balances and current funds revenues, expenditures and other changes for the year then ended. Our examination was made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the financial statements referred to above present fairly the financial position of William Marsh Rice University at June 30, 1986, and the changes in its fund balances and current funds revenues, expenditures and other changes for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

ARTHUR ANDERSEN & CO.

Houston, Texas  
September 24, 1986



WILLIAM MARSH RICE UNIVERSITY  
BALANCE SHEET

June 30, 1986, with Comparative Totals at June 30, 1985 (Dollars in Thousands)

	1986				1985	
	Current Funds	Endowment and Similar Funds	Plant Funds	Loan Funds	Combined	Combined
<b>ASSETS</b>						
<b>CASH, RECEIVABLES AND OTHER ASSETS:</b>						
Cash	\$ 235	\$ —	\$ —	\$ —	\$ 235	\$ 2,049
Accounts receivable	664	3,140	—	—	3,804	11,099
Loans, net of allowance for doubtful accounts of \$420 in 1986 and \$419 in 1985	—	—	—	6,742	6,742	7,789
Other assets	1,605	131	—	—	1,736	1,481
	<u>2,504</u>	<u>3,271</u>	<u>—</u>	<u>6,742</u>	<u>12,517</u>	<u>22,418</u>
<b>INTERFUND RECEIVABLE (PAYABLE):</b>						
Interest-bearing endowment fund advances (Note 6)	(213)	12,997	(9,255)	(3,529)	—	—
Noninterest-bearing advances	14,678	(6,645)	(9,353)	1,320	—	—
	<u>14,465</u>	<u>6,352</u>	<u>(18,608)</u>	<u>(2,209)</u>	<u>—</u>	<u>—</u>
<b>INVESTMENTS</b> (Notes 3 and 8)	<u>289</u>	<u>438,470</u>	<u>78</u>	<u>17</u>	<u>438,854</u>	<u>401,879</u>
<b>EDUCATIONAL PLANT</b> (Note 5)	<u>—</u>	<u>—</u>	<u>152,863</u>	<u>—</u>	<u>152,863</u>	<u>142,456</u>
Total assets	<u>\$17,258</u>	<u>\$448,093</u>	<u>\$134,333</u>	<u>\$ 4,550</u>	<u>\$604,234</u>	<u>\$566,753</u>
<b>LIABILITIES AND FUND BALANCES</b>						
<b>LIABILITIES:</b>						
Accounts payable and accrued liabilities	\$ 4,244	\$ 760	\$ —	\$ 1	\$ 5,005	\$ 10,070
Deferred income and deposits	582	—	—	—	582	676
Retirement funds (Note 4)	—	275	—	—	275	275
Total liabilities	<u>4,826</u>	<u>1,035</u>	<u>—</u>	<u>1</u>	<u>5,862</u>	<u>11,021</u>
<b>COMMITMENTS AND CONTINGENCIES (Note 7)</b>						
<b>FUND BALANCES:</b>						
U S Government and private grants refundable	—	—	—	3,044	3,044	2,976
University funds—						
Unrestricted	4,305	—	—	—	4,305	4,305
Internally designated	3,141	—	—	—	3,141	2,821
Restricted	4,986	—	—	1,505	6,491	6,979
Income unrestricted endowment	—	205,143	—	—	205,143	185,964
Income restricted endowment	—	106,935	—	—	106,935	96,187
Unrestricted funds functioning as endowment	—	107,503	—	—	107,503	104,666
Restricted funds functioning as endowment	—	27,477	—	—	27,477	24,128
Unexpended plant funds	—	—	(2,066)	—	(2,066)	2,018
Net investment in plant	—	—	136,399	—	136,399	125,688
Total fund balances	<u>12,432</u>	<u>447,058</u>	<u>134,333</u>	<u>4,549</u>	<u>598,372</u>	<u>555,732</u>
Total liabilities and fund balances	<u>\$17,258</u>	<u>\$448,093</u>	<u>\$134,333</u>	<u>\$ 4,550</u>	<u>\$604,234</u>	<u>\$566,753</u>

See notes to financial statements.

WILLIAM MARSH RICE UNIVERSITY  
STATEMENT OF CHANGES IN FUND BALANCES

For the Year Ended June 30, 1986, with Comparative Totals for 1985 (Dollars in Thousands)

	1986								1985	
	Current Funds			Endowment and Similar Funds		Plant Funds			Combined	Combined
	Unrestricted	Internally Designated	Restricted	Endowment	Functioning as Endowment	Unexpended	Investment in Plant	Loan Funds		
<b>REVENUES AND OTHER ADDITIONS:</b>										
Investment income (Note 3)	\$28,781	\$ 16	\$ 8,422	\$ 3,967	\$ 2,309	\$ 344	\$ —	\$ 86	\$ 43,925	\$ 43,052
Realized gains on investments (Note 3)	—	—	—	18,697	9,481	9	—	—	28,187	17,180
Gifts and bequests (Note 2)	2,654	—	3,824	6,845	—	2,583	188	30	16,124	23,884
Tuition and fees	14,197	2,172	—	—	—	—	—	—	16,369	15,737
Grants and contracts	3,630	—	17,055	—	—	—	—	—	20,685	18,533
Unrestricted revenue of auxiliary enterprises	12,717	349	—	—	—	—	—	—	13,066	13,702
Additions to investment in plant—										
Direct expenditures (including \$4,169 charged to current funds expenditures in 1986)	—	—	—	—	—	—	14,453	—	14,453	13,065
Repayment of advances from endowment funds	—	—	—	—	—	—	301	—	301	536
Interest on loans receivable	—	—	—	—	—	—	—	402	402	616
Other	1,668	1,041	171	(62)	—	234	(12)	208	3,248	3,087
Total revenues and other additions	<u>63,647</u>	<u>3,578</u>	<u>29,472</u>	<u>29,447</u>	<u>11,790</u>	<u>3,170</u>	<u>14,930</u>	<u>726</u>	<u>156,760</u>	<u>149,392</u>
<b>EXPENDITURES AND OTHER DEDUCTIONS:</b>										
Educational and general expenditures	50,160	3,604	25,445	—	—	—	—	—	79,209	72,899
Auxiliary enterprises expenditures	14,330	324	549	—	—	—	—	—	15,203	16,827
Indirect costs recovered	—	—	3,630	—	—	—	—	—	3,630	3,207
Refunded to grantors	—	—	69	—	—	—	—	—	69	20
Expended for plant facilities	—	—	—	—	3,876	6,408	—	—	10,284	8,993
Repayment of advances from endowment funds	—	—	—	—	—	301	—	—	301	536
Interest on endowment fund advances	—	—	—	—	—	656	—	345	1,001	1,268
Amortization of auxiliary and educational service facilities	—	—	—	—	—	—	1,883	—	1,883	536
Retirement of plant assets	—	—	—	—	—	—	2,336	—	2,336	2,451
Loan cancellations and collection costs	—	—	—	—	—	—	—	204	204	75
Other	—	—	—	—	—	—	—	—	—	—
Total expenditures and other deductions	<u>64,490</u>	<u>3,928</u>	<u>29,693</u>	<u>—</u>	<u>3,876</u>	<u>7,365</u>	<u>4,219</u>	<u>549</u>	<u>114,120</u>	<u>106,812</u>
<b>TRANSFERS AMONG FUNDS—ADDITIONS (DEDUCTIONS):</b>										
Mandatory—										
Undesignated gifts (Note 2)	(442)	—	—	442	—	—	—	—	—	—
Provision for plant improvements (Note 5)	(2,747)	—	—	—	2,747	—	—	—	—	—
Funding of unrestricted current expenditures for equipment	2,069	—	—	—	(2,069)	—	—	—	—	—
Funding of principal and interest payments for plant additions	(957)	—	—	—	—	957	—	—	—	—
Other voluntary transfers, net	2,920	670	(398)	38	(2,406)	(846)	—	22	—	—
Total transfers	<u>843</u>	<u>670</u>	<u>(398)</u>	<u>480</u>	<u>(1,728)</u>	<u>111</u>	<u>—</u>	<u>22</u>	<u>—</u>	<u>—</u>
<b>NET INCREASE (DECREASE) FOR THE YEAR</b>	<u>—</u>	<u>320</u>	<u>(619)</u>	<u>29,927</u>	<u>6,186</u>	<u>(4,084)</u>	<u>10,711</u>	<u>199</u>	<u>42,640</u>	<u>42,580</u>
<b>FUND BALANCE AT BEGINNING OF YEAR</b>	<u>4,305</u>	<u>2,821</u>	<u>5,605</u>	<u>282,151</u>	<u>128,794</u>	<u>2,018</u>	<u>125,688</u>	<u>4,350</u>	<u>555,732</u>	<u>513,152</u>
<b>FUND BALANCE AT END OF YEAR</b>	<u>\$ 4,305</u>	<u>\$3,141</u>	<u>\$ 4,986</u>	<u>\$312,078</u>	<u>\$134,980</u>	<u>\$(2,066)</u>	<u>\$136,399</u>	<u>\$4,549</u>	<u>\$598,372</u>	<u>\$555,732</u>

See notes to financial statements

WILLIAM MARSH RICE UNIVERSITY  
**STATEMENT OF CURRENT FUNDS REVENUES, EXPENDITURES  
AND OTHER CHANGES**

For the Year Ended June 30, 1986, with Comparative Totals for 1985 (Dollars in Thousands)

	1986				1985
	Unrestricted	Internally Designated	Restricted	Combined	Combined
<b>REVENUES:</b>					
Educational and general—					
Endowment income (Note 3)	\$28,781	\$ 16	\$ 8,422	\$37,219	\$35,232
Tuition and fees	14,197	2,172	—	16,369	15,737
Government grants and contracts	2,784	—	9,287	12,071	11,445
Private grants and contracts	846	—	4,352	5,198	4,365
Gifts and bequests (Note 2)	2,654	—	3,225	5,879	5,963
Departmental sales and services	1,535	924	130	2,589	2,512
Other sources	133	117	29	279	288
Total educational and general	50,930	3,229	25,445	79,604	75,542
Auxiliary enterprises	12,717	349	549	13,615	14,173
Total revenues	63,647	3,578	25,994	93,219	89,715
<b>EXPENDITURES:</b>					
Educational and general—					
Instruction and departmental research	21,389	2,861	9,271	33,521	30,196
Sponsored research	—	—	12,514	12,514	11,517
Other sponsored programs	—	—	912	912	1,183
Library	3,328	441	167	3,936	3,942
Scholarships and fellowships	6,848	—	2,008	8,856	8,553
Student services	2,386	57	6	2,449	2,197
Operation and maintenance of plant	8,568	—	227	8,795	7,728
General administration	5,248	222	333	5,803	4,953
Institutional development	2,393	23	7	2,423	2,576
Total educational and general	50,160	3,604	25,445	79,209	72,845
Auxiliary enterprises expenditures	14,330	324	549	15,203	16,827
Total expenditures	64,490	3,928	25,994	94,412	89,672
<b>TRANSFERS AND ADDITIONS (DEDUCTIONS):</b>					
Mandatory transfers—					
Undesignated gifts (Note 2)	(442)	—	—	(442)	(78)
Provision for plant improvements (Note 5)	(2,747)	—	—	(2,747)	(2,718)
Voluntary transfers, net	4,032	670	(398)	4,304	1,573
Other additions (deductions)—					
Amount of restricted receipts under transfers to revenues	—	—	(152)	(152)	(384)
Refunded to grantors	—	—	(69)	(69)	(20)
Net transfers and additions (deductions)	843	670	(619)	894	(1,627)
Net increase (decrease) in fund balances	\$ —	\$ 320	\$ (619)	\$ (299)	\$ (1,584)

See notes to financial statements.

WILLIAM MARSH RICE UNIVERSITY  
**NOTES TO FINANCIAL STATEMENTS**  
 JUNE 30, 1986

**(1) Summary of significant accounting policies—**

**Basis of accounting—**

The financial statements of William Marsh Rice University (the University) have been prepared in accordance with generally accepted accounting principles for colleges and universities. Accordingly, the financial statements have been prepared on the accrual basis of accounting, except for depreciation of educational plant facilities, as explained below. Limitations and restrictions placed on the use of available resources are recognized in the financial statements through the use of fund accounting. Fund accounting is a procedure by which resources are classified for accounting and reporting purposes into separate funds in accordance with specified objectives or activities. Funds having similar characteristics together with all related financial transactions have been combined into fund groups in the accompanying financial statements.

The financial information shown for 1985 in the accompanying financial statements is included to provide a basis for comparison with 1986 and presents summarized totals only.

**Current funds—**

The statement of current funds revenues, expenditures and other changes is a statement of financial activities of current funds related to the current reporting period. It does not purport to present the net income or loss for the period as would a statement of income or a statement of revenues and expenses.

The unrestricted current fund is used to account for those transactions related to the University's operating budget as approved by the board of governors and for certain resources which have been designated for specific purposes by the University administration. These latter items are presented under the internally designated caption. With the exception of the internally designated fund balance, it is the policy of the board of governors to transfer any net increase in the unrestricted current fund balance for the year to unrestricted funds functioning as endowment.

The restricted current fund is used to account for funds expended for current operations but restricted by donors or other external sources for specific purposes. Restricted current fund receipts are reported as revenues when expended.

Current funds used to purchase equipment are accounted for as expenditures of the current funds. Equipment expenditures of the unrestricted current fund are funded by a transfer from that portion of unrestricted funds functioning as endowment mentioned in Note 5.

**Endowment and similar funds—**

Endowment funds are generally subject to the restrictions of gift instruments requiring that the principal be invested and only the income be expended. Gains and losses arising from the disposition of the investments are accounted for as changes in principal. Endowment funds are either income restricted or income unrestricted as stipulated by the donor. Investment income from income restricted endowments may be expended only for the purpose specified by the donor; unrestricted endowment income may be expended for any purpose approved by the board of governors.

The board of governors has designated certain restricted and unrestricted funds to function as endowment funds. Restricted funds functioning as endowment are comprised of (1) restricted current gifts transferred to this fund by the board of governors and (2) any excess of restricted investment income over current expenditures. The principal of these funds may be expended, but only in accordance with the original specifications of the donor. Investment income from these funds is also subject to the same restrictions as the original gifts. The principal of unrestricted funds functioning as endowment is spendable at the discretion of the board of governors.

Generally, income from unrestricted endowment and similar funds is reported as revenue of the unrestricted current fund, and income from restricted endowment and similar funds is reported in the fund to which it is restricted. However, investment income from developed real

estate and oil and gas properties equal to amortization of the properties is retained in the endowment funds for the purpose of asset recovery. In addition, 27½% (\$1,502,000 for 1986) of the net receipts from oil and gas royalties are retained in the income unrestricted endowment fund after the related properties are fully amortized.

**Plant funds—**

Plant funds consist of the total invested in the educational plant together with unexpended gifts, grants, income and administratively designated funds which are held for acquisition, replacement or construction of physical properties. The educational plant is stated at cost for purchased assets and fair market value at the date of donation in the case of gifts. Auxiliary and educational service facilities financed with advances from endowment funds are depreciated over their estimated useful lives. Although no other educational plant assets are depreciated, it is the University's policy to retire capitalized equipment at the rate of 6½% per year.

**Loan funds—**

Loan funds include (1) gifts and grants which are limited by donors to the purpose of making loans to students or faculty, (2) the National Direct Student Loan Program financed primarily by the federal government and administered by the University and (3) advances to the loan funds from unrestricted funds functioning as endowment.

**Life income funds—**

Life income funds arise from gifts which are subject to the requirement that the University periodically pay the income earned on the assets to designated beneficiaries. Such payments terminate at a time specified in the agreements, usually upon the deaths of the designated beneficiaries. The amount and timing of the ultimate distribution to the University of its remainder interest in the assets is therefore not determinable, and the assets are not recorded in the accompanying financial statements.

At June 30, 1986, the assets (valued at market) and liabilities in the various trusts in which Rice has a remainder interest are as follows:

Marketable securities	\$30,929,000
Real estate	6,150,000
Other assets	423,000
Less—Related liabilities	(425,000)
	\$37,077,000

In 1986, \$235,000 of income was distributed from these trusts to the unexpended plant fund.

**(2) Gifts and bequests—**

It is the policy of the University to include gifts as revenues or additions to the appropriate fund balances only when received. Gifts and bequests without any designated obligatory use are required to be added to endowment, according to a legal interpretation of the University's charter. These gifts are recorded as revenues of the unrestricted current fund and as mandatory transfers to the endowment funds.

Pledges outstanding at June 30, 1986, which will be recorded as revenues upon receipt of the gifts, are as follows:

Current funds—	
Unrestricted	\$ 60,000
Restricted	417,000
Total current funds	477,000
Endowment funds	251,000
Plant funds	2,886,000
Total pledges	\$3,614,000

### (3) Investments—

Investments are recorded at cost at date of acquisition or fair market value at date of donation in the case of gifts, except for donated interests in certain undeveloped real estate which are recorded at nominal values and investments in wholly owned corporations. These corporations are accounted for in the endowment funds under the equity method. Property taxes and maintenance costs on the donated real estate interests have been capitalized (accumulated costs of approximately \$1,629,000 at June 30, 1986).

Most income restricted endowment funds, restricted funds functioning as endowment and some unrestricted funds functioning as endowment participate in two common investment pools which are operated on a market value basis. Those income restricted funds, which by the terms of the gifts may not participate in such pools, are maintained on a separate investment basis. Other endowment funds are commingled for investment purposes in the general investment pool for unrestricted funds.

Investments of endowment and similar funds at June 30, 1986, are as follows:

	Recorded Amount
Marketable securities (\$755,782,000 market value)	\$407,667,000
Developed real estate	18,192,000
Undeveloped real estate	4,935,000
Mortgage loans	4,693,000
Wholly owned corporations, at underlying equity	2,105,000
Oil and gas properties (net of accumulated amortization of \$26,686,000)	878,000
	\$438,470,000

The following tabulation summarizes investment performance (excluding unrealized gains from market appreciation) for the year ended June 30, 1986:

	Investment Income		Realized Gains (Losses), Net
	Current Funds	Endowment and Similar Funds	Endowment and Similar Funds
Marketable securities	\$30,341,000	\$2,309,000	\$28,138,000
Wholly owned corporations	871,000	2,465,000	—
Oil and gas properties	4,076,000	1,502,000	—
Other investments	1,931,000	—	40,000
	\$37,219,000	\$6,276,000	\$28,178,000

### (4) Retirement plans—

Substantially all employees are eligible to participate in a defined contribution retirement plan which is administered by an outside agency. The University's contributions to the plan of \$2,213,000 in 1986 were recorded as expenditures of the unrestricted current fund. The contributions of the University and the plan participants, who are fully vested, are applied to individual annuities issued to each participant.

The University also has a defined benefit retirement plan administered by the same outside agency covering participants who began receiving retirement benefits prior to July 1, 1976, and certain other employees. The University was not required to make any contributions to this plan in 1986. As of the most recent benefit information date, June 30, 1986, the sum of the plan's assets of \$1,048,000

exceeded the actuarially computed value of vested benefits by \$44,000. The assumed rate of return used in determining the actuarial present values of vested plan benefits was 8%.

### (5) Educational plant—

Property and equipment of the educational plant at June 30, 1986, were as follows:

Land	\$ 8,499,000
Buildings and improvements	100,157,000
Equipment, furniture and library books	49,217,000
Construction in progress	4,785,000
Less—Allowance for amortization of auxiliary and educational service facilities	(9,795,000)
	\$152,863,000

Many plant improvements are funded with gifts and pledges restricted to major construction and renovation projects. Since pledges are not recognized as revenues until received as gifts (Note 2), some plant improvement expenditures precede the receipt of the revenue designated to fund the expenditures. The \$2,066,000 deficit fund balance at June 30, 1986, in the unexpended plant fund is the result of expenditures made prior to receipt of the related gifts.

As a provision for plant improvements, a transfer equal to approximately 10% of unrestricted endowment income has been made from unrestricted current funds to unrestricted funds functioning as endowment. The portion of the unrestricted funds functioning as endowment fund balance that applies to this provision is \$5,230,000 at June 30, 1986.

### (6) Interest-bearing endowment fund advances—

Certain capital projects, major maintenance projects for auxiliary enterprises and student loans are funded with interest-bearing advances from unrestricted funds functioning as endowment. The advances for capital and major maintenance projects bear interest at rates from 4% to 19%. The interest received on student loans financed by these endowment fund advances is repaid to the endowment funds.

### (7) Commitments and contingencies—

There are several suits and claims pending against the University, the effect of which cannot be estimated at this time; however, officials of the University and legal counsel believe that the ultimate liability, if any, will not be material to the University's financial position.

The University was committed under contracts at June 30, 1986, for capital improvements of approximately \$2,676,000 to be financed primarily from funds functioning as endowment and gifts. Commitments of \$531,000 in the unrestricted current fund and \$1,121,000 in the restricted current fund were outstanding at June 30, 1986.

The fund balance of unrestricted funds functioning as endowment includes a \$5,000,000 provision for contingencies at June 30, 1986. If funds are expended from this balance, it is replenished by transfers of unrestricted endowment income to maintain the balance at \$5,000,000.

### (8) Collateral for loaned securities—

The University occasionally loans securities to brokers for a fee. As of June 30, 1986, securities with a market value of \$11,284,000 and cost of \$4,841,000 were loaned to a broker. A \$11,400,000 letter of credit secured the loan.

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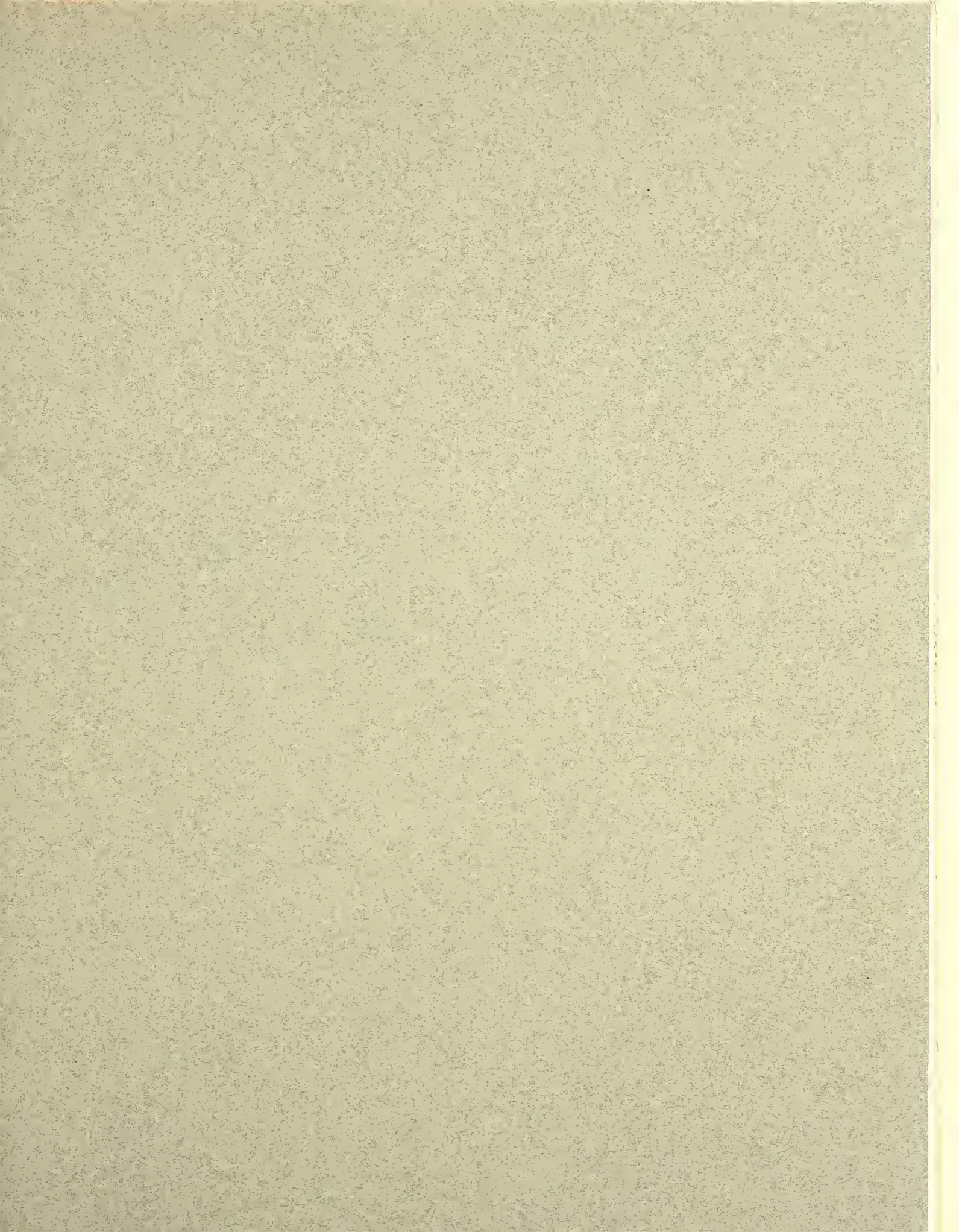
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