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WPI journal

The Hazzard Years

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Editor: H. Russell Kay

Alumni Information Editor: Ruth S. Trask

Publications Committee: Walter B. Dennen, Jr., '51, chairman; Donald F. Berth, '57; Leonard Brzozowski, '74; Robert Davis, '46; Robert C. Gosling, '68; Enfried T. Larson, '22; Roger N. Perry, Jr., '45; Rev. Edward I. Swanson, '45

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It snowed . . .

by Russell Kay

Many cars were nearly buried by the drifting snow . . .

During the middle of Monday morning on February 6, it began to snow and the wind started blowing. Some 30 hours later the storm finally stopped, leaving over two feet of new snow behind, with the average drifts being six to eight feet high. And while Worcester was spared the devastation of the seacoast towns and the incredible traffic snow-in of Route 128, there was still an enormous volume of snow to be dealt with. Governor Dukakis declared a statewide emergency, including an absolute ban on motorized travel except for essential services, that lasted in Worcester until Friday.

According to meteorologists, the Blizzard of '78 was the biggest ever to hit New England. It managed to set another record, too. It shattered WPI's long-standing policy of never closing because of weather conditions.

(Physics Professor Ralph Heller recalls that once, during President Harry Storke's early days, he closed WPI for a snowstorm. But Storke was quickly informed of WPI's "tradition" and from then until February 7, 1978, the Institute always opened during bad weather. Staff might be let go early in the day, but the school would have been opened. Another weather incident, from the editor's first winter at WPI, occurred when President Hazzard, apparently upset by an unusual amount of absence and lateness during the heavy snows that year, issued a memorandum referring to "the recent rash of snowstorms." That brought forth an answering note, written anonymously, which said that the "rash of snowstorms" was something we usually call "winter" here in New England!)

During the late afternoon on Monday, things got to looking pretty ominous outside. The wind was howling at 40 and 50 miles an hour (in Boston they recorded gusts over 90!), the snow kept on coming (up, down, and sideways), and most people left campus early. Many didn't bother to leave, because of the distances involved. Economics professor Lyle Wimmergren decided not to try to get home to southern New Hampshire. English professor Ed Hayes didn't figure he could make it to Whitinsville. And so it went. Some others (including yr. editor) tried to drive home just within the city of Worcester and, after hours on the streets, limped back to the safety of the campus.

Many of these refugees found shelter with friends or faculty who lived nearby. Some, like physics professor Dick Tuft, spent the night on a couch in one of the campus buildings. Others found lodgings with students.

At breakfast Tuesday morning, the student dining room was unusually busy. It was, in fact, the only place around one could eat. The storm continued throughout the day, sometimes abating for a bit but never stopping. The wind blew and carved the snow into strange shapes and awesome drifts. The floor-to-ceiling windows of the Wedge were, at times, more than half covered with drifting snow. Yet other spots were completely free of snow, right down to bare ground. All according to the way that furious wind happened to blow.

Norman Rossi, food services director, was snowed in for the duration, and at times he feared that food supplies might run out as the dining rooms enjoyed a record business. But new stocks arrived, on the heels of a snowplow, before it came down to peanut butter sandwiches for all.

Fuel oil for the WPI power plant became a major concern at one point, as the stored supply ran dangerously low. Steam was cut off from all unoccupied buildings. Finally, Norton Company diverted a tank truck load of their oil to the campus so that the dormitories could remain heated.

It may be trite, but it is nonetheless true, that events such as this blizzard tend to bring out the best in most people (and the worst in just a few). Faced with the sudden shock of the storm, confronted with a common enemy, people tend to forget their differences and pull together, working to keep the common enterprise going. That was nowhere more true than at WPI.

Commenting on the storm, Dean of Student Affairs Donald Reutlinger said that "during the blizzard emergency, cooperation throughout the campus was splendid, but special thanks for providing early, essential services are due to several people who kept the campus going. Gardner Pierce and his tireless Plant Services crews, who did such a great job of clearing the snow; Norman Rossi and his dining hall staff, with hastily recruited student helpers, who kept people on campus well fed; Mrs. Brophy in Health Services; Al England, Mike Montecalvo, and George Sullivan of the campus police; Glenn DeLuca and Debby McGarry in Student Affairs; and the several people who ran the switchboard, handling all sorts of calls. Many other people were extremely helpful, but without these named here, those three days could have been a disaster instead of just an emergency."

The job of clearing the snow was handled by a grounds crew that just never quit. Beginning about 5 A.M. Tuesday, they worked around the clock for essentially the whole rest of the week. With the aid of a borrowed front-end loader, they constructed a snow mountain nearly twenty feet high at one end of the quadrangle, and the beech tree between Higgins and Alden was soon invisible from many angles. With shovels and plows, they kept pushing the snow back, clearing out entrances and walkways.

Combating boredom became a real problem for many of our resident students beginning Tuesday. The high drifts alongside the Wedge attracted innumerable jumpers to the low roof, thence to leap over the edge and see if they got stuck! Tuesday night, as the storm finally passed, students cleared a "lane" down one

This snowbank was nearly picked up by a front-end loader until the operator realized it had an antenna in the middle!

side of Institute Road in back of Sanford Riley down to glare ice. Then they started skiing down the hill . . . but without benefit of skis. Some came down on their backs, others on trays "borrowed" from the cafeteria, and many kept on their feet all the way . . . until they hit the snowbank at the end, however, when they proceeded tail over teakettle through the air. The Infirmary was kept busy treating sprains, scrapes, and a few fractures resulting from these activities. The Goat's Head Pub enjoyed its best business ever, and the Cinematech movie Wednesday night played to a packed house.

Wednesday morning came with clear blue skies and bright sun — so bright that it hurt the eyes to go outside without sunglasses or goggles. As I wandered around campus, taking the photographs that accompany this article, I was amazed at just how far the job of clearing and plowing had progressed. I went down to the parking lot below Gordon Library to see if my car was accessible, and I found that it had been pushed free and plowed out. (It wouldn't start, however, and one look under the hood gave a clue: it was packed full of snow.) Don Peterson, one of the groundskeepers, pointed out another car that was somewhat less fortunate than mine. All you could see of it was the lone spike of the radio antenna . . . and it was well that that showed, because one of the front-end loaders almost tried to pick it up until the sharp-eyed driver realized he had more than just a snowbank to contend with.

The parking lot below Gordon Library, largely cleared out and usable on Wednesday.

For the many whose cars were reluctant to get going after the storm, this was a common situation.

As my wife and I started the four-mile walk home, we went out onto Salisbury Street, which was down to about 1.1 lanes wide. Two cars could barely pass . . . if they were both small. We decided to hitchhike, and got two rides up Park Avenue and West Boylston Street. What was most amazing about this was that, while traffic was moderate under the conditions, almost nobody refused to stop and offer a ride. One driver told of spending Monday night at Food Village, one of Worcester's largest supermarkets. "It wasn't bad at all," he said. "They gave us shelter, plus coffee and doughnuts all night and eggs in the morning. The people there couldn't have been nicer."

As WPI reopened on Friday, parking was the most critical problem. At the best of times, WPI doesn't have quite enough parking spaces to accommodate faculty, staff, and the large number of commuting students. But this wasn't the best of times. The many and large snow piles had shrunk the capacity of campus lots alarmingly. The City of Worcester had apparently forgotten that West Street was a public road, for they plowed one lane through it once and never came back. That meant that another 40 spaces were unavailable.

With an estimated 60 percent of normal parking spaces available, car-pooling was an absolute necessity. And, as if tailor-made, a student interactive project came into view. Three students had been working all year on an energy-saving project designed to promote car-pooling by making it easy for people to get in touch with other staff members from the same area. The three students, Daniel Casey, James Mastalerz, and Thomas Rockwood, all '79, had reached the point of having computer printouts ready for the 131 people who had filled out their initial questionnaire. These were quickly distributed as an important way to save space on campus.

As this Journal goes to press, rather later than expected because of THE BLIZZARD, it is a week since the snow stopped. The city . . . and the campus . . . are still digging out.

West Street at the top of the hill, with Salisbury on the right. The city never did come back to finish the job, and it was left for WPI's plant services crews to widen the street.

This is the broad expanse of Salisbury Street on Wednesday morning, after the storm. Atwater Kent and Goddard are on the left side.

Here's the pitch . . .

Paul G. Josephson, '77, a star pitcher at WPI for four years, has been signed by the Montreal Expos.

"Paul is the first WPI alumnus ever to be drafted by a major league baseball organization," says Charles McNulty, WPI baseball coach. "We all wish him the best of luck."

While at WPI, Josephson, a sidearm pitcher, started 29 games and completed 22. His ERA during his last three years was 2.42, and as a sophomore it was 1.96. Over a four-year period he struck out 155 and walked 87.

Josephson was a tenth-round draft choice of the Expos. He was signed on January 15th. In late February he is slated to attend spring training with the club in Daytona, Forida.

He feels it was pure luck that he was ever seen to be signed. "I was working for General Dynamics-Electric Boat in Groton, Conn.," he says, "when suddenly I was laid off. So, in November I decided to attend a baseball camp in Clearwater, Florida."

The camp lasted five days. "And for four of those five days it rained," he explains. "I did manage to pitch two innings during an intra-squad game, however." (He is currently changing his motion to a ¾ style of pitching.)

Those two innings proved to a turning point for him. Expos scout Larry Bearnarth, who is also the Expos minor league pitching instructor and a former New York Mets pitcher, was watching. He liked Josephson well enough to recommend that he be signed and sent to spring training.

"What happens in Daytona will definitely affect my future," Josephson says. "Tentatively, I expect to play with the Expos minor Class A affiliate in Jamestown, N.Y. in the New York-Penn League after spring training."

There is always a chance, of course, that Josephson's good luck will continue. He may pitch so well in Daytona that he'll begin his professional career as a starter for Montreal.

It's happened before—with Mark Fidrych and Detroit. And Mark and Paul pitched against each other in high school. Good luck, Paul!

Kudos

Dear Friend: From time to time I have commented favorably on the splendid job you and your staff are doing. This latest issue is outstanding.

"The DNA dilemma" is well written and meaningful to me in several ways. Having lived in Shrewsbury for twenty-one years until 1962, I can appreciate some of the jumbo mumbo my friend Hudson Hoagland must have had to parry.

I am reminded of Galileo's scientific entanglement with some papal "bull" in the 1630s.

Daniels must have done a tongue-in-cheek when he stated ". . . Shrewsbury residents who voiced their disapproval . . . said they held moral reasons." Sounds like religious undertones.

The article on my respected classmate, Francis Wiesman, '29, was another highlight to us. We have known Frank since high school days.

I am enclosing a check for $5.00. Please send me two more copies of the *WPI Journal* for December 1977.

Congratulations again and keep up the good work.

Arthur W. Knight, '29
Lower Waterford, Vermont

Editor: Just a note to tell you how impressed my husband and I were with the most recent issue of the *WPI Journal.* The variety of areas and levels of interest kept my attention from front cover to back, and it was—in my opinion — one of the most absorbing alumni magazines that I have read in many moons. Your layout and photographic planning are always excellent, but the variety really added the spice. Bravo!

— from a reader of Bowdoin, Oberlin, University of Pennsylvania, and Harvard alumni mailings —

Kay Wear Draper
Groton, Massachusetts

Council has new representatives from classes

The WPI Alumni Association has taken a step in a new direction and the key word is "involvement."

As a direct result of the implementation of proposals put forth in the recent Organizational Study Report, the Alumni Association has broadened its scope of representation by reorganizing the Alumni Council to include representatives from each class.

Formerly, Alumni Council representation was done proportionately on a purely regional basis. The present Council consists of one member from each organized club and one representative from each class.

The Alumni Council is the governing body of the Alumni Association and sets policy and directions for alumni programs and activities. For instance, the Organizational Study Report, frequently referred to as the "Densmore Report" after its chairman, William P. Densmore, '45, is an example of the Council's establishing new directions so that the Association can better serve its two constituencies, the individual alumni and the college.

Recently, the first class representatives, listed below, were named to the Council by their class presidents or elected by class members themselves. "In many cases 50 percent or more of the class voted," says Stephen J. Hebert, '66, secretary-treasurer of the Alumni Association. "The response was most gratifying and reassuring. The representatives elected are super and the strong voter response has reaffirmed that alumni want to be involved with WPI."

Class	
50-Yr. Assoc.	Wayne E. Keith '22
1928	Gabriel O. Bedard
1929	Stephen D. Donahue
1930	Carl W. Backstrom
1931	A. Francis Townsend
1932	Donald W. Putnam
1933	Robert E. Ferguson
1934	Dwight J. Dwinell
1935	Thomas F. McNulty
1936	Walter G. Dahlstrom
1937	Richard J. Lyman
1938	Robert M. Taft
1939	C. John Lindegren, Jr.
1940	Kenneth R. Blaisdell
1941	Robert A. Muir
1942	Norman A. Wilson
1943	Behrends Messer, Jr.
1944	John A. Bjork
1945	Robert E. Scott
1946	George R. Morin, Jr.
1947	John G. Hambor
1948	John J. Concordia
1949	James F. O'Regan
1950	Philip A. Wild
1951	John L. Reid
1952	Philip B. Crommelin, Jr.
1953	Henry J. Camosse
1954	Roger R. Osell
1955	Ralph K. Mongeon, Jr.
1956	Edwin B. Coghlin, Jr.
1957	Alfred E. Barry
1959	Philip H. Puddington
1960	John W. Biddle
1962	Richard J. DiBuono
1963	Joseph J. Mielinski, Jr.
1964	Barry J. Kadets
1965	Patrick T. Moran
1966	Dr. Donald H. Foley
1967	Raymond C. Rogers
1968	Robert C. Gosling
1969	Michael W. Noga
1970	Domenic J. Forcella, Jr.
1971	Paul B. Popinchalk
1972	Lesley Small Zorabedian
1973	Robert R. Wood
1974	Lawrence J. Martiniano
1975	Frederick J. Cordella
1976	Lynne M. Buckley
1977	Christopher D. Baker

Pictured above are a few WPI alumni employed at Norton Company in Worcester who met in February as part of the recently launched "Corporate Contacts Program" of the WPI Alumni Association. Included in the group, clockwise from bottom left, are Lee Solaroli, '68; Dave Pryor, '76; Norm Stotz, '58; Jack Bresnahan, '68; Emmanuel Milias, '54; Greg Backstrom, '70; WPI Assistant Alumni Director, Bob Anderson; John Biddle, '60; Dorothy Franciscus O'Keefe, '73; Mark Dupuis, '72; Les Erikson, '76; Dick Kennedy, '65; and Bill Densmore, '45.

Clark Poland, '48, is the National Chairman for the program and has so far initiated activity at the following corporations: Bell Telephone Laboratories, Inc.; Combustion Engineering, Inc.; Electric Boat Division, General Dynamics Corporation; Foxboro Company; Pfizer, Inc.; Polaroid Corporation; Stone & Webster, Inc.; Torrington Company, Division of Ingersoll-Rand Company; and Pratt & Whitney Aircraft, Division of United Technologies.

The Hazzard Years at WPI

A look at the impact and achievements of WPI's eleventh president

by Russell Kay

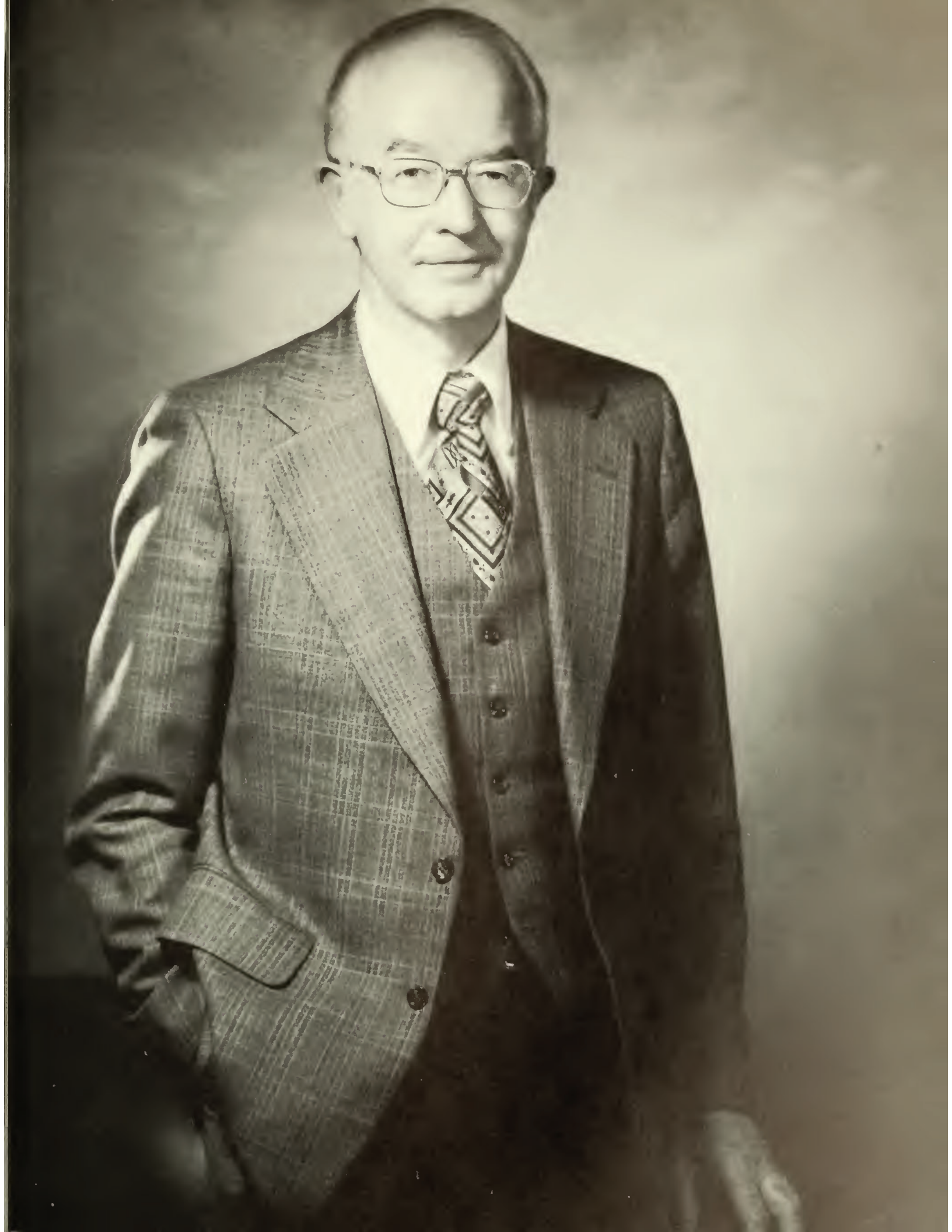
The year was 1969. The sorrows of the past year, with its war and assassinations and the bitter election campaign, were breaking out in many ways. College campuses were in a state of turmoil, mostly political, as the antiwar movement flourished.

At WPI — then called "Worcester Tech" — the student body (including the first two women undergraduates) was relatively quiet; it was the faculty who were the activists. They had just fought for — and won — a tenure system which gave them specific rights and security for the first time. Growing dissatisfaction with WPI's academic program had crystallized in December 1968 with President Harry Storke's appointment of a faculty planning committee to draw up long-range recommendations for WPI's future.

Within the next half-year, the group published two reports, *The Future of Two Towers* and *Two Towers II.* Within another six months, a successor group had worked out the final blueprint for what was to become the WPI Plan.

Right into the middle of this came George W. Hazzard, the newly elected president of WPI. He came because he was intrigued with the directions being taken by the planning committee. "It amounted to bringing WPI into a national leadership role for the twentieth century," he later commented. But it was apparent that he would have to play a major role in bringing about the revolution.

Now, after nine action-packed years in which WPI has transformed itself from an average school into a nationally recognized innovator and leader in engineering education, George Hazzard is stepping down.



George Hazzard and WPI

In this review of George Hazzard's presidency at WPI, one has to ask the question: How do you separate the accomplishments of the individual from those of the college as a whole? The Hazzard years present such a complex texture of events that, while many individuals stand out here and there, the dominant impression is of the collective momentum of hundreds of faculty and staff.

Hazzard has commented on the difficulty of trying to place credit. "You know, the problem is that it looks as if you're arrogating to yourself credit that doesn't really belong. But if pressed, I would say that I think I've been able to open up participation in running the college. This place used to be pretty hierarchical in structure, with orders coming down from on high and everybody snapping to. Also, just before I came, the faculty put together the faculty constitution, and I think my encouragement of that probably helped release some energies and commitments to the institution."

The WPI Plan

The faculty of WPI voted full adoption of the WPI Plan in 1970, with implementation to begin in the 71-72 school year. For the next five years, one crisis followed another as the various elements of the Plan were put into operation. First it was the seven-week terms that caused the groans and screams (from both faculty and students), then came projects, competency exams, and a new advising system that seemed constantly under revision. The faculty workload increased significantly, as also did the administrative problems. The student population kept growing, up toward the once-stated goal of 2,000 undergraduates and on to reach nearly 2,400 in 1977. And all the while there was a chorus of outsiders looking on, expressing skepticism, saying that WPI had bitten off much more than any institution could chew.

But looking at all of this, how do you evaluate the contribution of any one individual, including the president? What does George Hazzard himself think he contributed to the Plan and it implementation?

"Well," he said, "the successor to the original planning committee came to me, saying they really couldn't do much if they weren't able to work throughout the summer of 1969. So, as is often the case, the presidential act was to provide money for salaries so they could work through that summer. If they hadn't done that, Lord knows whether we would have really gotten far enough along so the faculty could act. That was one critical point.

"In terms of the mechanics of implementation, full credit has to go to Bill Grogan, who was on the firing line. My role was to make Bill Dean of Undergraduate Studies — and put him on the firing line. That's a proper administrative function: getting the right people in the right place at the right time is critical." This became a real problem for Hazzard, when Dean of Faculty M. Lawrence "Cookie" Price had to retire early, for health reasons, right near the beginning of Plan implementation.

Another area where Hazzard had a significant effect was in WPI's relationship with NSF. "The contacts I made at the National Science Foundation, which then led to the million dollar funding and the NSF Visiting Committee, was certainly helpful at a critical point. If we hadn't had that million dollars from NSF, we probably couldn't have done what we did. If I take any credit there, it's just being at NSF, knowing the right people, getting their encouragement and support for us to submit a really major proposal — getting their sights up for a really large dollar figure. But don't forget, we had a great faculty team that wrote that proposal."

Implementing the WPI Plan was a staggering undertaking. Just take a look at the changes that were made at WPI during those six years of transition:

- Every course had to be reconceived and redesigned to fit a term half as long and twice as intense.
- Hundreds of student projects annually had to be created, supervised, and evaluated.
- New ties with industry and governmental agencies had to be forged to help provide project opportunities, and off-campus project centers and sites had to be set up.
- A new type of project, linking science and technology with social needs and human values, had to be conceived, tested, refined, and administered hundreds of times a year.
- A brand new type of examination — to measure competence in a student's major field — had to be created for each student.
- A new faculty advising system had to be developed to help students plan their academic programs.
- Faculty had to learn new skills, and they were strongly encouraged to extend their interests into other areas as interdisciplinary work became more common.
- Two new departments — Life Sciences, and Social Science and Policy Studies — were established to meet new needs.

Did Hazzard ever get discouraged in the face of the massiveness of the job of getting the WPI Plan going? "No, I don't think so. We have lots of committed people, and I've seen them tackle and overcome this obstacle and that obstacle. I guess I'm a perpetual optimist, and I figure that if we've done it once in one particular area, then we ought to be able to do it again in another area. We could have gotten very discouraged after listening to Harvard's David Riesman say we ought to have a revolution; but we just proceeded merrily on our way with the optimistic assumption that we could work things out. Sure, when you're trying to raise the money you can get pretty discouraged, but I don't think I ever felt more than the normal amount of work-related discouragement."

Growth

Probably the two words that best characterize the Hazzard years at WPI are *change* and *growth*. Change was a constant factor while the Plan was being created, installed, and made to work. But growth has been pretty constant too. In 1969 there were 1,659 undergraduates in a total student population of 2,176. At the beginning of the 1977-78 year, undergraduate enrollment had risen to 2,365 and total students to 3,205.

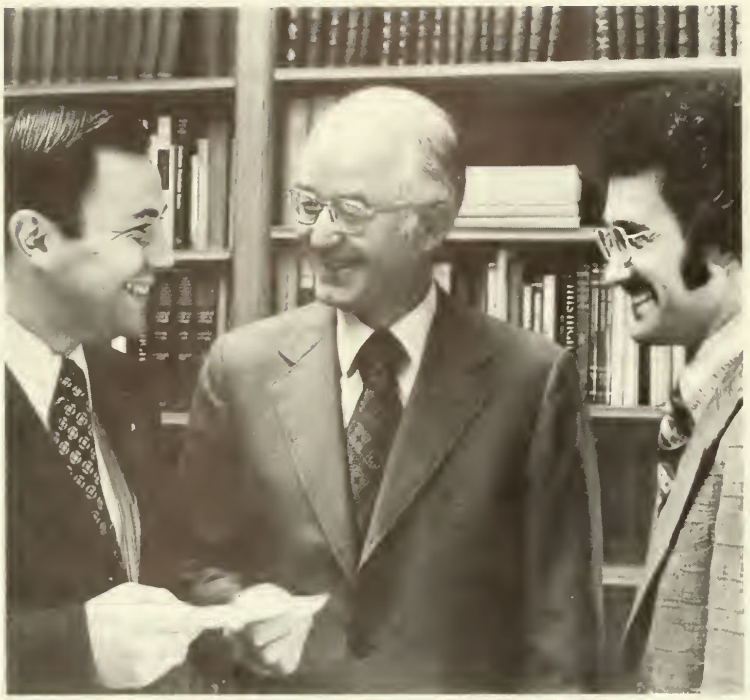
There was academic growth, too, separate from the WPI Plan. When Hazzard arrived at WPI in 1969, computer science was only a graduate department. Now, as an undergraduate program, it is the second most popular major declared by incoming students (although many, of course, will change their minds as time goes by).

Besides computer science, though, two brand-new departments have been added to WPI in the past eight years. The first of these was Life Sciences, created in recognition that WPI students needed access to more than four biology courses on campus! According to President Hazzard, "we had the graduate program in biomedical engineering, and it just seemed so important to create an awareness in our engineers of the existence and importance of the life sciences.

"Seventeen presidents have passed through the Consortium colleges since I arrived in 1969. George is the only original left. But he's not a survivor. George is really a surpriser.

"Just when I thought I had him completely figured out, he'd say or do something that made me know I had missed something else important about George. We were talking about his retirement recently, when he suddenly punched the air and said, 'But we haven't raised enough money this year.' And he meant it. He'd restored the balance, but it wasn't enough. Nearly retired, his motor is still running full throttle, and I'm sure it always will."

Lawrence E. Fox
Executive Director
Worcester Consortium for Higher Education, Inc.



President Hazzard in some of the myriad official duties that go along with the office.
Top left, receiving a donation to the college.
Above, at the dedication of a new campus building.
At left, engaged in an across-the-desk meeting.

I want to give credit to Bob Plumb, then head of chemistry, who supported the life sciences program and was very helpful in getting the whole thing started. 'Cookie' Price was also very helpful."

The second new department was Social Science and Policy Studies, created in 1974. This was an important addition to WPI because it offered our students access to the measuring and analytical tools of the social sciences, tools which have been and will be a vital part of many interactive projects carried out under the Plan. Of his role in starting this department, Hazzard has said, "I guess I was a pretty active ingredient, more than anybody else, perhaps, although it's hard to say because people like Boyd and Keil and Moruzzi saw the need."

One of Hazzard's biggest tasks relating to the new departments was political. "It meant pointing out to the department heads that if we put in a Life Sciences department and it grew, that meant less growth for the engineering departments. At the beginning, everybody had to understand that it was a matter of reallocating resources away from them." Was there serious opposition on this count? "No. Everybody agreed that, so long as we didn't reallocate *too many* of their resources, things would work out fine."

Finances

One of the most persistent and important jobs facing any college president is the raising of money and keeping the institution above water. "I don't think anybody who comes in to be a president really appreciates the amount of effort, the intensity of effort, that has to go into fund-raising." And how did Hazzard bear up? "It's like so many other things . . . when you have something you believe in, you get to be a missionary about it. We were selling a good product, and it was fun to sell it."

These have been banner years for WPI in fund-raising. The just-concluded WPI Plan to Restore the Balance, a five-year drive, exceeded its goal by raising $18.9 million, the largest ever in WPI's history. In this fund drive, orchestrated by University Relations Vice President Thomas J. Denney, WPI was supported by virtually every major national foundation involved with higher education: the Alfred P. Sloan Foundation, the Carnegie Corporation, the National Science Foundation (which alone provided more than $1.1 million), the Kresge Foundation, the Dana Foundation, the National Endowment for the Humanities, the Ford Foundation, the Andrew W. Mellon Foundation, the National Foundation for the Arts and Humanities, the Lilly Endowment, and the Rockefeller Foundation.

George Hazzard was instrumental in achieving this support. As one of the most-traveled spokesmen and salesmen for the WPI Plan, he pled our case wherever there was a chance for support. There are those who say that this was the role Hazzard did best in, representing WPI to the outside world.

But raising money is only one side of the financial picture. On the other, it is the president's responsibility to see that it gets spent wisely and well . . . and not too much, either. When Hazzard became WPI's president, he took charge of an institution which had been running deficits for several years in the wake of construction of six major campus buildings — Daniels Hall, Goddard Laboratory, Gordon Library, Harrington Auditorium, Stoddard Residence, and the Alden Research Laboratories' administration building. He wasn't too worried by this. "I felt that my time at Washington University gave me a great deal of insight into academic budgets and academic accounting, which is a weird and mysterious field to most people." After being in office for a year, Hazzard approved a one-year freeze on all salaries at WPI. However unpopular, that move, combined with increased giving, resulted in the college's first surplus in six years and freed WPI from having to borrow against endowment. In the latest

"I've known George Hazzard as long as he's been at WPI. I was on the committee that picked him to be president, and I think we've been very fortunate in having him.

"He's a most unusual person. He seems to know how to get along with both students and faculty, and I think he's been an excellent leader for the school. George has been a great money-raiser, and that's very important these days. He's been very helpful in dealing with foundations. Perhaps his greatest asset is that he knows how to deal with people. He's kept the Board of Trustees very well informed, and he's a fine man to work with.

"I'm sorry to see him leave. I think WPI has been most fortunate in having George Hazzard as president as long as we have."

Milton P. Higgins
Chairman, WPI Board of Trustees

annual report, it was announced that, for the seven years since 1970, income and expenses have just about balanced out, and there was over the entire period a small net surplus of $217,000. (To put that figure in perspective, the operating budget for 1976-77 was $17.5 million.)

While a final report on the WPI Plan to Restore the Balance, to be published in the near future, will detail the major expenses, they can be summarized briefly here. WPI Plan implementation was an expensive undertaking. The immense amount of work involved many faculty over the summers as well as during the year, faculty involved not in teaching but in planning and structuring elements of the WPI Plan. A study of the campus indicated that many physical changes were needed to better serve the students and to provide appropriate teaching and learning environments for the new WPI Plan. In meeting these, two new dormitory complexes were built; the student dining room and lounge areas were enlarged and enhanced by connecting Morgan and Daniels halls; Sanford Riley, the oldest dorm, was extensively refurbished; the Bookstore was enlarged and remodeled; a central campus post-box system was created for students; and the Student Affairs Office was relocated to Daniels Hall, in the center of the "main street" of the student living area.

Academic buildings received considerable attention. Salisbury Laboratories was completely redesigned and rebuilt inside, providing a commuter lounge, classrooms, laboratories, and offices for the departments of Life Sciences, Management, Humanities, and Social Sciences and Policy Studies. The old foundry building, then the home of the Buildings and Grounds crews, was turned into a center for project activity with workshops, offices, and meeting rooms. The use of instructional television increased by leaps and bounds, and a studio complex and TV classroom were built in the basement of Higgins Lab while the rest of the campus was wired for closed-circuit TV. And wired for more and more computer terminals, too, as two new large computer systems (a DECsystem-10 and a Univac 90/60) were installed on campus.

Endowment has been increased, with the emphasis on increasing student aid (some $2.4 million added here) and establishing endowed teaching positions, which provide a vehicle for attracting and rewarding talented faculty without putting an extra burden on operating funds.

As Hazzard steps down from the WPI presidency, he leaves the Institute in better health — educational and financial — than when he came. To be sure, there's never enough money, at WPI as everywhere else, to do all the things that need doing and that we want to do. The whole matter of salaries, for example, raises problems in competing with industry and other universities for talented faculty and staff. That's a problem that Hazzard has wrestled with, on and off, for years, and it's one that his successor will have to confront, too.

But the school is financially sound, and its leadership position in engineering education will be an important factor in maintaining that soundness.

Whimsy

Hazzard's sense of humor has been well known on campus, especially by the many who have felt the sharp edge of his wit. Always one to revel in the cut and slash of wordplay, his reputation as the campus's chief needler is secure. So secure that Helen Bugdenovitch, his secretary, gave him a real needle one Christmas.

One recent example is contained in the following exchange of memoranda between the president and a faculty committee secretary:

> *Minutes of the Committee on Appointments and Promotions:* . . . The Committee did not find the candidate's qualifications inconsistent with the criteria. . . .
>
> *(signed)* Secretary

Dear Professor ——: Do you always like the double negative?

(signed) President

Dear President: Our resident logicians deny that the sentence in question includes a double negative in the sense that it could be replaced logically by a positive one as an exact equivalent. The sentence "John is not unhappy" does not mean that John is happy. In brief, a positive belief was expressed with extreme delicacy of phraseology.

Such artistry permits many interpretations. For examples, the Committee may be too legalistically inclined to make any firm statement without having *definitive* proof in support of it available — or it may be too dense to find an existing inconsistency — or it may be too diplomatic (highly unlikely) to say so if it found one — or . . .

The Committe authorizes me to say that it would not assert that none of these interpretations is neither correct nor incorrect.

With apologies to M. Python, I remain

Not insincerely yours,

Secretary

Dear Professor: Given your comments, which are not entirely unclear in their implications, I am not uninclined to hope for a less than unsatisfactory elucidation for all of us at the next Flying Circus (faculty meeting).

Not unappreciatively yours,

President

George Hazzard and the broader higher education community

WPI exists in a universe of institutions of higher learning, both public and private. That universe has been an important stamping ground to George Hazzard.

The Worcester Consortium for Higher Education was created shortly before Hazzard came to WPI. It has grown and fostered cooperation among member institutions, and WPI, under first Harry Storke and then George Hazzard, has been one of its prime leaders. Consortia are difficult animals to deal with at best, because every member has his own interests at heart and is not very anxious to give up anything. In reflecting on the Worcester Consortium, President Hazzard comments: "It's sort of like trying to bring a bunch of positively charged particles together. You think you have them all in a box and they repel each other away again. But we work away at it. It's probably one of the more successful consortia, but no consortium I've ever seen is fully effective."

He sees lean times ahead. "Things are going to get worse in the Consortium because of the inevitable decline in enrollments, which means everybody will be fighting for students. When economic pressures exist, friendships tend to evaporate. I think it will be harder to make the Consortium effective in the next ten years than it was in the last ten."

For several years, the presidents of WPI, Clark University, and Holy Cross have been meeting, looking for ways in which the "big three" could cooperate. "We've tried very hard to share things, but it's been hard to do. Not from lack of good will, but simply because we've been unable to find real or apparent

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"When I first met George Hazzard, it wasn't as college president, nor was it as a person to be interviewed. He had been chosen as a faculty affiliate for my dormitory floor, a fact that had most of us wondering what the outcome would be. We weren't quite prepared for what we saw: instead of the medium-height, imposing, business-suited executive we expected, we were greeted by a tall, lanky man whose only imposition was a rather loud tie (a piece of apparel I later discovered he was uniquely fond of). Most of us bordered between calling him 'Dr. Hazzard,' or 'Mr. President,' but, when we asked him his preference he simply said 'Call me George.' I decided to take him seriously.

"Since that first encounter I have spoken with George on many occasions; some of them social, some of them not. I have interviewed him on many subjects, and actually got him to sit in front of a TV camera for one. While he was an unconvincing ham, I'm sure he has potential as a guest replacement for Johnny Carson. My universal feeling after these interviews has been that George is a politician at heart. You can feel stonewalled or you can feel your cause taken to heart, but you can never be sure. Sometimes you think he hasn't got his eyes on the important things; later you realize that he has been watching all along. His actions are not always seen, and it can be difficult to tell from the outcome of a situation what he has done. Yet, what he really believes he will say out loud, well defined. It seems a curious mixture to me.

"He had a tough job as president during the inception of the Plan. Perhaps it was a good mixture after all. At least, it has carried us to a viable point, and that reflects well on George Hazzard.

"So do his ties."

Rory O'Connor, '78
Past editor, *WPI Newspeak*

economic and intellectual benefits. It's something like Egyptian President Sadat and Israeli Prime Minister Begin: good intentions are fine, but the details tend to make life very difficult."

"George Hazzard was the right man at the right time for independent higher education in Massachusetts. During his term — 1975-76 — as chairman of AICUM, the Association of Independent Colleges and Universities in Massachusetts, he sharpened the objectives of the organization and he took the lead in implementing them. A familiar presence on Beacon Hill, he gained the confidence and respect of state officials, many of whom were bemused to find a college president who spoke briskly and unambiguously, was not turned aside by soft answers, and still believed a straight line was the shortest and best route between two points. His leadership compelled the attention of legislative leaders and the confidence of his fellow college and university presidents because it was based, as might be expected, on knowing his facts, knowing his ground, and knowing what he wanted to achieve.

"His influence was equally pervasive in the creation of the National Association of Independent Colleges and Universities. Indeed, it led to his only miscalculation, but he even turned that to triumph. He went with a group of other college presidents for lunch at the home of President Barbara Newell of Wellesley College on a snowy day in 1977. When the group adjourned after advising President Newell about her duties as a new director of NAICU, the only car stuck in the snow was President Hazzard's. He was equal to the occasion, however, and directed rescue operations from behind the steering wheel. His car was successfully freed and pushed to safer ground . . . by five of his fellow college presidents. In many ways this symbolizes the way his fellow workers in the vineyard feel about George: for anybody else they'd have called AAA.

Statewide

One of George Hazzard's major activities has been with the Association of Independent Colleges and Universities in Massachusetts (AICUM). This organization serves to coordinate the activities of the private colleges in the state, making them aware of legislative situations, both good and bad, and lobbying for the interests of private higher education in the state. George Hazzard took a major role in the organization and helped bring it into a sharp focus, seeing that it was run with a professional executive structure. Hazzard served as president of AICUM in 1975-76.

These kinds of jobs, which bring wider publicity and visibility to the individuals involved, can be a strong temptation. Says Hazzard: "I have a strong belief that too many presidents and deans get involved in professional society activities which may be useful but which don't directly serve an interest of the institution. I tried to be careful not to get mixed up with too many of these that would take me off the campus. They're fun to do, but not very useful to WPI. That's why AICUM was so important. It could really help WPI."

Indeed, AICUM has accomplished a lot. It was instrumental in getting the state's constitution amended to permit state support of private higher educational institutions. Indeed, AICUM's thrust has been primarily directed toward affording all Massachusetts students the freedom of choice and opportunity in higher education, and not to limit taxpayer support only to public institutions. As a result, the state legislature has recently passed a bill providing for grants to Massachusetts residents attending private colleges, in amounts equal to what the private college would normally award itself, and including a matching grant directly to the institution. AICUM has actively supported a continuing dialogue between public and private institutions, and in 1973 sponsored a nationally acclaimed "Public-Private Forum," which brought together presidents of both types of institutions.

Much of AICUM's work has been defensive in nature. One example occurred a few years ago when a chemical fire broke out in a Paxton school chemistry lab. The state fire marshal immediately ordered all school chemistry labs to install deluge showers at regular, closely spaced intervals. This move, which would have cost millions across the state, didn't really address the main problem, which was supervision and prevention. AICUM staffer James True and WPI chemistry head Robert Plumb worked together with the regulating authorities and finally got a solution that was good for all concerned. In another example, AICUM supported repeal of the state meals tax as it was applied to college students living in dormitories (and only students in private colleges, at that!). The organization argued that this was equivalent to taxing family meals. This fight, supported by students across the state, was lost when the legislature chose not to exempt college students.

Nationally

The other organization that has felt the presence of George Hazzard is the Association of American Colleges. "I chose that one because I felt that WPI's form of engineering education was a real basic liberal education. AAC is focused on liberal education, and they've been pretty effective in disseminating that theme around the country. By being a part of the group, I could indirectly spread WPI's philosophy and accomplishments and achieve greater national recognition for the college."

Hazzard feels very strongly about this view of liberal education at WPI. He promoted the use of Sir Eric Ashby's term *technological humanist*, which he uses to describe the kind of graduate the WPI Plan is trying to produce. Hazzard has spoken and written so many times about this that he has become a national spokesman for the new breed of engineering education that started here at WPI.

The Personal George Hazzard

Being president of WPI has kept George Hazzard busy, but it hasn't been his whole life by any means. He's been very active in working for other organizations, too. He has served as a trustee of St. Lawrence University, Memorial Hospital, People's Bank, and as a director of the Worcester Area Chamber of Commerce, Riley Company (Chicago), St. Vincent Hospital Research Foundation, and State Mutual Life Assurance Company of America.

As if this wasn't enough involvement, his wife Jean Hazzard has also been active in community affairs. She has been president of the Child Guidance Association of Worcester, chairman of the Allen Fund Committee of Community Services, and president of the Social Service Corporation, all of which relate to her training as a psychologist. Jean Hazzard has also been a trustee of the Worcester Community School of the Performing Arts and a director of Worcester County National Bank. In 1976, she was one of five women honored by the Worcester Young Women's Christian Association as being "first in her field." She was cited as being a model of a woman who can combine home and family life with a career and/or public service.

George comments: "While Jean has been a gracious hostess, opening our home to alumni, students, and faculty, her focus has been on social services in the city, where she's led an independent career. In one sense, she has relieved me of some responsibilities by picking up a lot of the community service functions which I just didn't have time to perform. Then too, we attend an awful lot of parties and other affairs as a couple, and I look on that as basically being public relations for the college. Getting to know people is important. Tom Denney has pointed out that people give to people rather than to institutions. That is, while the institution must have a good reputation, the person representing the institution is very important to the donor."

After living for nine years in Jeppson House, WPI's home for its presidents, the Hazzards will be moving to a new home in nearby Petersham, Massachusetts. Although he has nothing definite planned for the immediate future, he expects to do some part-time consulting work in the general area of higher education. He hopes also to have some more time for his gardening, and perhaps to be able to get down to serious color photography and color printing more than twice a year, which is about all he can fit in as president. He'll probably have to find a new tennis partner other than current neighbor (and dean of faculty) Ray Bolz. And now, just maybe, there'll be time enough to read all those things he wants to read.

As he retires from the WPI presidency, George Hazzard will probably relax a bit. But don't bet on him slowing down.

"Above all, politicians and educators alike have always been acutely aware of George's possession and use of one of the most finely tuned baloney (to be polite) detectors known to western man. Coupled with a mordant wit, this ability to penetrate sophistry and disperse blather made George a formidable antagonist in a variety of educational and other public arenas.

"At AICUM, when we think of George, we think of a man who gave us fresh insights, who always had time for a word of encouragement and who inspired loyalty simply because of the loyalty which he gave. I don't think we'd want to play tennis with him, but we'd follow him anywhere else.

"On the matter of tennis, one day George swung into an AICUM meeting on crutches, explaining how he had injured his knee playing tennis. Thereupon one of his fellow college presidents chided him for not knowing, after years in office, one of the first rules of college administration: a president should never play any game that puts a weapon in the hands of a dean."

Frank A. Tredinnick, Jr.
Executive Vice President
Association of Independent
Colleges and Universities
in Massachusetts

Some reflections on being WPI president

Just what does it mean to be president of a college, or president of WPI? At one time, not too long ago, a college presidency carried with it much prestige and high social status. Then, in the late 1960s and early 1970s, as the problems multiplied enormously and the prestige withered away, it became all too often some kind of bad joke: "No one wants to be a college president anymore." Presidential search committees sometimes had to reconvene their deliberations two or three times as the desirable candidates proved not to be interested in the job. The wheel seems to be turning back now, but some questions must remain.

George Hazzard came to WPI right in the middle of this period of unrest and discontent. How does he feel about his job, and how does he think WPI compares with other places?

"In the first place," Hazzard says, "being a president at WPI is somewhat different from being president at a liberal arts college or at a major university. There has been, here at WPI, a unanimity of goals that you just don't find in many of those other places. When the troubles of 1970 appeared, the faculty and administration here joined together. At most other institutions faculty members were agitating and developing student antagonisms to the way things were done. Because of that one factor, agreement on goals, my job here has been an awful lot easier in terms of getting things done.

"I think the rewards here have been unusual, too. I was here at a time when a program was developing that clearly could have a major impact if it succeeded. And there was really a lot of motivation to make it succeed because, if it did, we would be highly visible. In fact, I've always been pleased because I made the choice not to be a finalist in a liberal arts college presidency search at the time the job was offered to me here. I did that because while WPI, as an independent engineering school, is not unique (there are about a dozen others), the impact it could have could really be unique. A lot of the things that a liberal arts college president would do are aimed at maintaining the status quo; whereas here at WPI we have been creating something really new and exciting. That's all in addition to the usual kinds of rewards — satisfaction with balancing the budget, adding faculty, increasing the number of students or getting better students. Those things can happen at any institution, but WPI offered something much more. I think I've been unusually fortunate in the administrative groups and faculty groups I've had to work with, and that's made my job very, very pleasant . . . even though we've had our little tiffs and differences, of course."

But it can't all be a bed of roses, right? Even for a gardener like George Hazzard. "No one's perfect, though we don't like to admit it. I think the few things I would do over have to do with people. Also, I would like to have succeeded more in bringing Clark and WPI closer together."

The future for WPI

Last June, when President Hazzard announced his plans to retire, he commented that "these have been very exciting and very satisfying years for Mrs. Hazzard and me. When we arrived in 1969, the WPI Plan was a magnificent concept just beginning to take its final form. Ahead of us then lay the task of completing the details and implementing what is clearly one of the most significant educational innovations in our time. Today the WPI Plan is a working reality. The implementation phase is behind us. I believe that the time has come for me to step aside so that a new president may lead WPI through the next stage of its continuing development."

"The arrival of George and Jean Hazzard on the WPI campus nine years ago was the harbinger of a renaissance which has transformed engineering and science undergraduate education as never before at any institution anywhere in the world.

"Although the previous president had challenged the faculty to be innovative and daring in plotting a possible new course for the WPI curriculum, the outcome was only a hazy dream in the minds of most. That this dream has become a notable reality, titled so simply 'The WPI Plan,' is the outstanding accomplishment of the Hazzard administration, with great credit due the entire WPI team.

"For WPI to achieve this remarkable evolutionary educational breakthrough required unusually talented leadership. Who else would have coined the phrase which is exactly right for our graduates — 'technological humanists'? Only our fine president, George Hazzard."

Paul S. Morgan
Vice Chairman
Board of Trustees

Above, George and Jean Hazzard relaxing in their new home in Petersham.
At right, outdoor work in the new garden.

Just what sorts of problems does Hazzard expect his successor will have to face in that next stage ahead?

"There are three major problems. One, of course, is just to continue to raise a lot of money, in what may or may not prove to be a difficult environment. You just can't tell. All you really know is, there's never enough money! The second problem, related because it costs money, is to solve the problem of faculty renewal: more faculty, more time off, more substitute faculty. The present faculty have been putting in an incredible amount of work for years on end, and they can't be expected to keep it up.

"The third major challenge is finding the next plateau to climb to. We have innovated, we have got things on line, we have a program in place. The faculty and staff have worked very hard to reach a goal — and, in effect, we have reached it. Now we have to establish some new goals to challenge us for the future. That, I think, is going to be the big problem."

THE ULTIMATE DRAGON??!

by Ruth S. Trask

WELL, IT'S ABOUT TIME! The Chinese began talking about dragons nearly 6000 years ago and finally somebody has done something about them. Genetically speaking, that is.

It took Intersession 1978 and the colorful imaginations of Dr. James Danielli and Dr. Richard Beschle of the Life Sciences Department, who offered a unique two-day course, "Dragons: Their Redesign."

In discussing the concept of the mythical beast, the thirty students in the class agreed that there is a strong similarity between dragons and dinosaurs. There is absolutely no evidence, however, that man ever saw living, breathing dinosaurs, which became extinct about 70 million years ago. The first mention of dragons came from the Chinese around 4000 B.C., long after the demise of the dinosaurs. Dinosaur bones were not even unearthed and reassembled until the last 100 years. When the bones were first discovered, they were put together to resemble dragons, so entrenched had the idea of dragons become.

Dragons have long existed in literature throughout the world. The Western dragon has scales, can breathe fire, occasionally employs wings and mental telepathy, eats people at night, loves to guard treasure, and has been known to do hard work. The Eastern dragon can fly without wings, has skin that shines at night and a pearl fixed beneath his chin. Sometimes he is fierce, sometimes timid. The chief difference between him and his Western counterpart is that he breathes out mist instead of fire.

It is thought that no remains of dragons have been found because they probably caused their own destruction by self-immolation. Any left-over bones were crunched up and eaten by jackals. The remaining bone chips were used for baby vulture food.

Today, dragons are alive and well in literature and entertainment. Note the dragon in *The Hobbit*, the best selling modern children's classic, and the disappearing beast in the Disney production of "Pete's Dragon" which appeared at neighborhood theaters over the holidays.

Dragons, then, not only exist in the minds of millions; they are also big business. They might become even bigger business if they could be redesigned genetically to make the best use of their basic characteristics. For example, the fire belched from a Western dragon could prove to be a valuable heat source, while the mists expelled from the Eastern dragon might solve drought problems in desert areas. The beasts themselves have virtually no control over their expulsion of fire and mist. In the light of such massive lack of control by dragons over their various bodily functions, Danielli and Beschle proposed that each student design his own personal dragon so that it could best perform specific, useful tasks — with built-in, genetic controls, of course.

In order to design a proper dragon, one must have at least a thumbnail knowledge of the history of dinosaur evolution. About 450 million years ago, fish, which then had both scales and lungs, inhabited the oceans. A hundred million years later amphibians pulled themselves up out of the water and began dragging themselves across the ground on their bellies. Then, came the reptiles. Some, like the dinosaurs, had legs and grew to be fifty feet long. They had an efficient heart and lungs, a high metabolic rate, and were not nearly as cold blooded or as stupid as history has led us to believe.

Basically, the dinosaur developed from a fish which had paired fins. (So did we!) In the dinosaur, the paired fins became four limbs. Some beasts used all four legs for walking. Others assumed the upright position, then used two hind limbs for walking and two fore limbs for grasping


Nagis non facit salvum

and balancing like the kangaroo. The kangaroo-type dinosaur began to develop a skin flap between his puny fore limbs and his body, which gave his body a gliding type of lift. Eventually the skin flap grew until the dinosaur had a wing span of forty feet. With a body mass of only sixty pounds, the giant wings, although he could not flap them, allowed the dinosaur to glide and soar in wind currents.

Although it is doubtful that the average dinosaur could produce flame, it is certain that no self-respecting Western dragon would ever step out of his den without a working flame-thrower. Dragons are *expected* to belch flame. It's a part of their mystique. Not only can the dragon flame sizzle unwary foes, its noxious fumes can make them drop in their tracks.

In a word, dragon internal combusion stinks. Among the gases produced during the process are methane, propane, hydrogen, ethylene, and ether. When superheated, H_2S makes the most repellent stench of all. Obviously, none of this gas and heat production does much for the dragon's social life. It could, however, be put to good use commercially.

For example, the ethylene could help ripen fruit; the heat could help run a cold storage plant, warm homes, or melt ice and snow. The flame-throwing mechanism could be used in warfare, in consuming garbage or stripping paint from houses. The hot air could be used by a hot-air balloon taxi service. The innate telepathic characteristic of the dragon could also be brought into play in concert with all of these uses. Intuitively the dragon would know when to start and stop doing a given task, so it could be done most efficiently.

The problem for the students was to find genetic methods of controlling the dragon's ignition and combustion systems, and to redesign his body structure, if necessary, so that form could best support function. For instance, if one really wanted his dinosaur to fly instead of merely soaring on skin flaps, the addition of feathers might be worth considering.

In redesigning the dragon, one of the first steps might be to reduce the animal's overall energy requirement. (Constant ignition and combustion must be exhausting!) This might be done by implantation of electrical wires, or the addition of nerve cells or carbon filaments with living cells. Perhaps his stomach could be removed to improve his digestion. Humans have found ways to live without stomachs.

Combustion is a very complicated process. The rate of reaction is important. It depends on temperature and is affected by a series of catalysts and inhibitors. A lot of things are happening interdependently and can produce a mess. The dragon lives with just such a mess.

The electric eel, however, has gotten his ignition and combustion problems pretty much under control. In fact, a good sized electric eel in Africa or in the Amazon, can produce 500 to 600 volts of electricity and is able to light up a 50 to 60 watt bulb through his specialized muscle cells. The muscle cells are arranged in stacks. With thousands of such cells occurring in rows, high voltage is obtained. Perhaps such a system could be introduced into dragons.

The dragon cells would have to be kept cool. Reflective material, such as layers of separated metal foil, could do the trick. Aluminum foil also might be used. Tiny bubble spheres without too many points of contact, would probably work if something agreeable could be found to keep the bubbles together.

The ultimate dragon will undoubtedly be redesigned through pure genetic engineering, rather than add-on technology. To understand how this might be done, note first that he belongs to a species, a group of organisms which have the same genetic programming principle or sets of principles. Programming, as everyone knows, can be subject to change, and there are a number of mechanisms available for changing these genetic programs. For instance, genes can transfer through loose pieces of DNA, viruses, and plasmids, spontaneously adding new genes to organisms. In mating, the process is completed with existing genes, or mutants of existing genes. It is possible to construct new genes and chromosomes, but it is generally too complicated a process to start from scratch.

In redesigning the dragon's nervous system, one must be aware of a number of things: each nerve joins at a junction called a synapse, and information can pass in only one direction at this junction; synapses never occur by themselves, but meet where a number of fibers impinge on a single nerve (convergence); while in divergence a number of different nerve cells derive information from a single source. A new substance has been found that encourages nerve growth. Possibly the use of this could be helpful in revamping the dragon's nervous system.

There are several ways to transfer genes, which are made up of DNA, from one cell to another. One very successful method is to add cells to an embryo. Another is to fuse cells with the characteristic gene which is to be emphasized or reproduced. Then there is cell uptake when little cells, with the desired characteristics, are put into larger cells. Co-growth of genes occurs when DNA is transferred by a natural process. The introduction of viruses and plasmids can shift genes to other cells, a technique which has been proved to be very accurate. Through chemical synthesis, it is possible to create brand new genes, especially when an enzyme is added to make the various groups of DNA stay together.

Before sending the students off to their drawing boards and typewriters armed with genetic information and a dragon book reading list, Dr. Danielli and Dr. Beschle reminded them to take a conventional dragon and make it better. They stressed the importance of good design, the right configuration, and the necessity of putting social restraints on their hypothetical beasts. What they wanted, they said, were some clever ways of doing new things effectively.

So informed, class members tossed around proposed uses for tamed dragons as watch dogs, air taxis, domestic heaters, snow removers, telepathic interplanetary communications centers, garbage disposals, fertilizers, street lights, fortune tellers, secret weapons, cooks, gamblers, and airport security personnel.

In this writer's view, a mid-sized dragon with feathered wings and sharp eyes, could ride shot gun for Rudolph and Santa on Christmas Eve. He would sit in a special seat at the back of the sleigh, where he could keep watch over the bags of toys. (Dragons love to guard treasure!) As the sleigh stopped above each house, the dragons's inherent mental telepathy would allow him to tell Santa exactly what gift each child wanted. Then, he would swoop down on his fine, feathered wings, and with a single blast of his flame-thrower, melt the ice off of the house top so Santa wouldn't slip.

In order to save the sleigh, the toys, Santa, and the reindeer from going up in smoke during the trip, the dragon, whose seat would be at the very back, would breathe his fire into a large, wishbone-shaped, heat-resistant glass tube, which would extend up as far as Rudolph. The tube would provide illumination brighter than Rudolph's red nose. It would also provide welcome warmth in snow country. While over the tropics, Santa could throw an asbestos blanket over the tube to cut the heat. (The dragon, by the way, would have acquired his improved flying capabilities and keen eyesight from specialized American eagle cells added to his DNA when he was in the embryonic stage.)

All in all, Christmas Eve would be run far more efficiently. Santa Claus wouldn't have to waste time worrying about poor visibility, cold feet, the Grinch's stealing his toys, slipping on icy roof tops, or mixing up gifts. He'd finish all of his deliveries much faster.

The only problem might be that, with such early deliveries, some children might still be awake when Santa arrived. They might hear a creature stirring up on the roof and investigate. Not Dancer! Not Prancer! Not even a mouse! What self-respecting parent is ever going to believe that a feathered, fire-breathing dragon is de-icing the roof on . . . Christmas Eve? Now, if it were New Year's Eve — well, maybe.

van A

Prof. JOHN VAN ALSTYNE will tell you that he came to WPI in 1961 to teach mathematics for one year only.

"I had another teaching job all lined up for the following year," he explains. "WPI was going to be a brief, interim experience. I'd never taught at an engineering school before, and I had no idea whether I'd fit in or not."

Today, seventeen years later, he not only continues to teach, he has become the Dean of Academic Advising, and was one of the original architects of the WPI Plan. The life of every WPI student, professor, and administrator has been touched by him. Although he would be the last to admit it, John van Alstyne is more than a mere campus cog. He is a prime mover.

For example, one of his current major responsibilities is setting up the complete academic schedule for WPI. This means that he has to decide at what time the various classes will be held and which of some 2500 students will be scheduled for each class section. His scheduling personally affects every student and professor on campus.

"I try very hard not to put an out-of-town commuter into an eight o'clock class during the winter months," he says. "I don't like to have to put someone who works in the cafeteria at lunch time into a one o'clock class, either." He also endeavors to tailor schedules to fit the requirements of handicapped students.

Since he still teaches 250 students a quarter of the time, and has numerous advisees, Prof. van Alstyne gets to know many of the students well. "Knowing them personally and being familiar with their needs and wishes is most helpful when I set up schedules in the spring," he says. The personalized process is more individually effective than a computer-scheduling set-up could ever be.

Prof. van Alstyne's concern for the individual student and his selfless devotion to his advisees are legend at WPI. He always makes time for everyone — whether it be at 6:30 A.M., midnight, or on weekends.

Roger Perry, '45, director of public relations, used to have an office directly across from Prof. van Alstyne's. He likes to tell this story about his colleague: "It was a typical pre-registration day. Long lines of students extended down the corridor to John's office. Finally, at noon, the hall emptied. I knew that John must be bone tired and ready for a break. Then I heard a voice saying, 'Prof. van Alstyne, could I please see you for a minute?' and John's prompt, affirmative reply. The 'minute' lasted more than half an hour. I knew that John had missed his lunch. Again. As usual, he had put the needs of a student before his own."

Missed meals mean little to Prof. van Alstyne. He thoroughly enjoys his contact with students and confesses that they help him more than he helps them. "I consider myself as everybody's great grandfather," he says, smiling. "My advisees ask me all kinds of questions: 'What should I major in?' 'Do you know a good eye doctor?' 'I'm having trouble with my parents (girl friend, siblings, roommate, etc.) What should I do?' They inquire so often about graduate schools, that I've prepared a special graduate school fact sheet for juniors."

It does not take long for incoming students to learn who is on their side, who will point them in the right direction, and who will be there to catch them should the bottom fall out. Prof. van Alstyne heads the list. Upon hearing that his freshman friend had drawn van Alstyne for an adviser, a sophomore was heard to remark, "Oh, wow! van A.? You've got it made. How did you manage to get so lucky?" The students know who has their best interests at heart.

Sometimes those best interests prove to be not strictly academic in nature. "A number of students and alumni ask me about insurance and financial planning," he reports. "That's what I get for mentioning in class that I once worked as a "ghost writer" for the First National City Bank of New York."

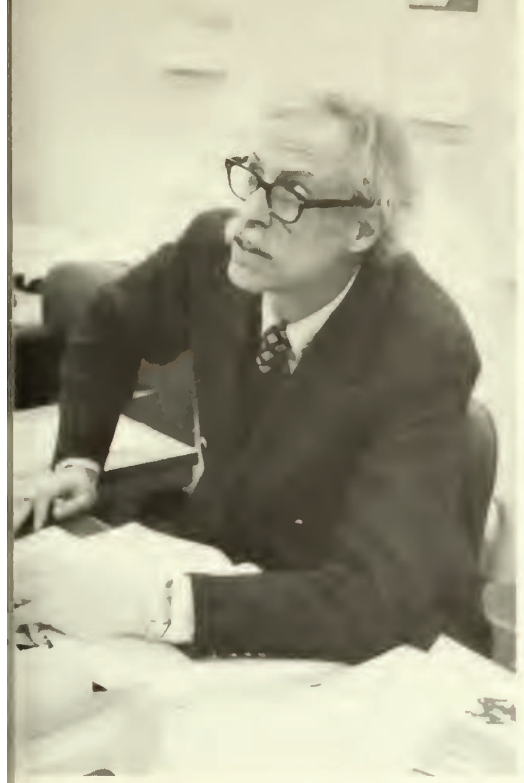
A ghost writer?

He laughs and explains. "After World War II, I was hired to write 100 letters a day for bank executives who had little writing ability. My fellow letter writers were a diverse, interesting group. They included a valedictorian from Harvard, a salutatorian from Stanford, and a couple of people who never completed high school.

"I also had eight private investigators working for me at the bank. It was our responsibility to look into the credit ratings of various companies in this country and abroad in the interest of furthering world trade.

"The job was fascinating. I earned a good salary and learned a lot about investments. In fact, earnings from my bank job enabled me financially to change my career to teaching late in the game. Switching to teaching cut my income directly in half."

So teaching hadn't always been his ultimate goal?



"Oh, no. Originally I wanted to be an architect. To design buildings to reflect the culture in which we live. However, while still an undergraduate at Hamilton, I was pushed into teaching. At the time, I thought it was the last thing that I ever wanted to do."

John van Alstyne was a senior at Hamilton College during World War II. "It took me two and a half years to get through that last year," he says, "because I was asked to teach mathematics and meteorology to Air Force students. I taught between 8 A.M. and noon, 1 P.M. and 5 P.M., and 7 and 9 P.M. five days a week. My students included farmers, coal miners, and recruits from the Chicago slums. They really wanted to learn. About 25 of them went on to advanced degrees. I still hear from several of them."

At Hamilton, he majored in mathematics, but also studied English and German. He won a full year's scholarship there in German. Later, he attended graduate school at Princeton. In 1952 he received his master's degree from Columbia.

After graduating from Columbia he joined the bank for three years, and then returned to Hamilton, where he taught for thirteen years. ("In 1961 I left Hamilton. I was the first tenured faculty member ever to quit at the college.")

"It was during my years at Hamilton that President Hazzard and I nearly crossed paths. We both belonged to professional societies and were named to separate committees to upgrade the New York State certification requirements for teachers. I was on the mathematics committee, and he was on the physics committee at precisely the same time. The two committees didn't meet jointly, however, so we never realized until years later that we had so narrowly missed meeting." Prof. van Alstyne was subsequently asked to be one of the writers of the New York State Regents Scholarship Examination.

It was after he arrived at WPI that Prof. van Alstyne discovered how the Regents exam that he had helped to prepare was working out. He learned that one of his advisees had scored high on the exam and congratulated him. "Oh, that exam," the student complained. "It was tough. A terror. The questions were awfully difficult."

"Give me some examples," Prof. van Alstyne said. The student obliged him, repeating practically word for word the questions that he had devised a few years before.

Did he tell the student that he was the author of the exam? "No. Sometimes it's better to be discreet," he confides.

He still believes in giving rugged exams. He likes to make his students think. He agrees with Alfred North Whitehead that no question requiring a yes or no answer is worth asking.

"With one notable exception," he says with a grin. "When I asked someone to marry me, I wanted a yes or no answer. Immediately."

Prof. van Alstyne's writing ability, his creative talents, and his genius for organization were noted early on at WPI. He was a member of both the appointed and the elected committees that created the WPI Plan.

"I enjoyed working on the Plan very much," he says. "It was exciting looking to the future of WPI. It was also rewarding to work with people who had such wide-ranging interests. Three faculty members on the committee could read the prologue to Chaucer's *Canterbury Tales* in the original old English. Can you imagine that—at an engineering school?" (Prof. van Alstyne can also read Malory's *Mort d'Arthur* in the original. "I learned how to do it in order to pass the time away when I was sick years ago," he explains.)

As valuable as Prof. van Alstyne has been in helping to shape the Plan, it is his service on behalf of the students that has proved to be his most valuable contribution to the school. The students, many of whom he has personally befriended, affectionately refer to him as "Chips" behind his back, sensing his similarity to the sympathetic teacher in the movie "Goodbye, Mr. Chips." They have also accorded him their highest honors by voting him into Skull and dedicating the senior yearbook to him.

He is aware that many of their academic problems are manifestations of other problems. "So often a student who is struggling academically will come to me and say, 'I have a friend who is in trouble. What would you advise him to do?' It goes without saying that he, himself, is the friend. When somebody lingers in my office after asking a few initial questions, that's a clue something is bothering him besides grades. And when someone starts to leave, and cries at the door . . ." There are nights when John van Alstyne does not sleep.

But there are rewards. He gets grateful letters from transfer students and alumni. He is proudest of the fourteen former students who have gotten best teacher awards on their respective campuses. "Currently I have more than 100 former students teaching in colleges and medical schools," he reports.

Seventeen years ago M. Lawrence Price, '30 (dean emeritus of the faculty) and Richard N. Cobb (professor emeritus, mathematics) interviewed John van Alstyne for a post as associate professor of mathematics.

"I was thoroughly impressed with both men," says Prof. van Alstyne. "I also liked the office personnel, the students, and the campus itself. WPI, I decided, would be a very nice place to teach. For a year."

1913

William Stults writes: "Still drive my car and get around some. Made three trips to North Carolina last summer and one to Florida in the spring."

1928

Francis King, who retired last spring as manager of the Holyoke (Mass.) Gas & Electric Department, currently serves as president of the Massachusetts Municipal Wholesale Electric Company (MMWEC). MMWEC, a cooperative of more than two dozen municipally run utilities, recently signed a contract with GE for $55 million worth of equipment for a new power plant which is scheduled to start generating power in Ludlow by 1982.

The oil-fired power plant is being built at Stony Brook Energy Center on land that was formerly part of the mostly defunct Westover Air Force Base. The contract is expected to provide 250 new jobs in Ludlow. The plant will be the first major power generator in New England built through cooperative efforts of publicly held utilities. Gov. Michael Dukakis said the contract would aid the state's economy and provide an efficient new source of electrical power.

1929

J. Bernard Joseph and his wife have moved into a condominium on the Gulf of Mexico at Fort Myers Beach on Estero Island. "Our health seems to be better here," he writes. . . . The **Arthur Knights** are considering moving from their 15-acre mini-estate in Lower Waterford, Vt. "We will stay in this area, however, within easy walking distance of libraries, museums, and shops." . . . During the warm months **Carleton Nims** keeps busy gardening, mowing the lawn, and raking leaves. Recently, with another man, he built an addition to a tool shed. He says that between December and April he hibernates.

1930

Edward Milde, who retired several years ago as technical staff engineer in hydraulics at Sperry-Vickers, continues to do some hydraulic consulting work part time. He is located in Bloomfield Hills, Michigan, and keeps busy working around his house and acre lot. He also enjoys taking short trips.

1931

Joseph Bunevith has retired from the Welfare Department of the Commonwealth of Massachusetts.

1934

Luther Leavitt, who formally retired last August, currently serves as a state officer in the Sons of the American Revolution. The Leavitts maintain homes in Cleveland Heights and Ogunquit, Me. One daughter is in her second year of medical school at Case Western Reserve. "To provide her with malpractice legal protection in the future, our second daughter is completing Dickinson Law School in June," he writes.

In December, **Paul J. Sullivan,** superintendent-director of the Blackstone Valley Regional Vocational Technical High School (Upton, Mass.), was honored at a retirement party in Northboro which was attended by 350 persons. He had served in the post for fourteen years, and said that his part in the planning of the school had been most rewarding and afforded him his greatest challenge and his greatest satisfaction. During his retirement the Sullivans hope to start new interests and indulge in one of their favorite old ones, travel.

1936

Bill Maine retired in August. He had been a plant engineer for Torrington (Conn.) Co. He and his wife, Evalyn, now have a nice home close to Columbia Lake in Connecticut with ample garden area and plenty of yard to maintain.

1938

Tom O'Neil serves as a resident mechanical engineer for Kuljian Corp. and is presently helping to construct a power plant in Amman, Jordan.

1939

William Lyhne, Jr. holds the post of assistant director of reports at American Management Association, New York City.

1940

George Bingham, who was chief engineer at Bonneville, has joined Ebasco Services, Inc., Portland, Oregon, as regional manager. . . . **Zareh Martin** is an instructor in management at Northeastern University in Boston and also teaches high school courses. . . . **Dick Scharmann** is very active in his retirement. He has been doing some contract work for the Navy. . . . After 31 years with the Avionics Division at ITT, **Thomas Wingardner** has retired. He is residing in East Dennis, Mass.

1946

John Goeller presently serves as manager of the World Trade Systems Center in San Jose, California. . . . **John Lee** has received his master of arts degree in teaching from Bridgewater State College. He continues teaching at Plymouth-Carver Regional High School. His son, who graduated from Massachusetts Maritime recently, is now on a tug, "The Braden Point."

1949

Continuing with Turner Construction Co., **Russell Bradlaw** has returned from Pakistan and is now on assignment at the company's New York office. . . . **Harold Gibbons** has retired from Westinghouse.

1950

George Barna presently holds the position of director of engineering at Singer-Link in Binghamton, N.Y.

1951

John Marley was co-author of "Automotive electronics II: the microprocessor is in" which appeared in the November issue of *IEEE Spectrum.* He is a member of the technical staff of Motorola's IC Division, assigned to the automotive systems task force. For six years he has dealt with the partitioning and identification of automotive custom integrated circuits and specialized central-processor-unit chips for automotive electronic systems. Previously he had worked for ITT Laboratories and Hazeltine Research Corporation.

Class of 1927

Our FIFTIETH REUNION! It was truly a glorious regathering with no assist, may we add, from the weatherman who found fit to clobber us with a typical New England Nor'easter, presumably for the benefit of far-travelling Purdy Meigs (from New Mexico where it rarely rains) and Pete Whittemore (from California then plagued by drought). Not to be outdone by these wayfarers from remote distances came Bob Johnson from Arizona, Vic Hill and Nick Nahigian from Florida, and Charlie MacLennan arrived from River John, Nova Scotia, representing our North Country cousins of Canada.

One can suppose that every WPI alumnus entertains the honest conviction that *his* class was the very best of all classes and that *his* classmates were the salt of the earth, none better. In that conviction he would be absolutely right. It would perhaps be difficult for any God-fearing and virtuous alumnus (and the class of 1927 was particularly God-fearing and virtuous . . . or almost so) not to feel a close kinship with his colleagues with whom he spent so many happy days and years of learning together, competing together, raising a little hell together, and making the transition from youth to manhood together.

Wonderful years indeed were those undergraduate days we shared in that so-long-ago era of the mid-twenties. Perhaps more than a bit of what we have since viewed with nostalgia was recaptured in the June days of our Fiftieth Reunion.

Forgive our enthusiasm, if we sound repetitious, these few days celebrating our 50th Reunion were a very happy experience — from the Thursday evening Reception, hosted so graciously by President and Mrs. Hazzard, at their charming home (the Jeppson House), through to the Alumni Luncheon and Annual Meeting at Morgan Hall on Saturday noon. The spirit engendered at the President's home was continued, Thursday evening, in the Great Hall of Higgins House, where we were served a delightful roast beef dinner as guests of the Alumni Association. During the evening, the Association presented each member with a copy of "Two Towers" (the story of Worcester Tech 1865–1965), which is a well written history, that all Tech men will enjoy and be proud to own. The highlight of the evening was the comments by President Hazzard and his personal congratulations to each member, upon the individual delivery of a beautifully crimson colored, leather bound "presentation of Worcester Polytechnic Institute in recognition of Fifty Years of service and loyalty to his college." Cliff Fahlstrom, as chairman of the 50th Reunion Committee, expressed the thanks and appreciation of the class of '27 to the Alumni Association and to President Hazzard.

Friday was a busy day, with visits with classmates, Campus Tours (which for those who haven't been back is an eye-opener), a buffet luncheon at Morgan Hall followed by a presentation on "WPI Today" under the direction of Dean Grogan as moderator with a panel of faculty and students.

The high spot, for most, had to be our Class Reunion Social Hour and Dinner at the Isaiah Thomas room of the Sheraton Lincoln Inn, where several of our members had rooms during reunion. This festive and joyous occasion was sobered a bit, to be sure, in a pause of tribute to the classmates of old, no longer with us but whom some day we shall meet again at the river. This cheerful and happy gathering, as with all other reunion events, had added grace and charm, by the attendance of the lovely wives of the many classmates who brought their spouses.

The only class business of any consequence arose from the suggestion that the class might possibly be more easily represented by members living closer to WPI and thus be more readily available to serve the members whenever the occasions arose. The suggestion was endorsed by two former class officers. It was thus voted that to serve as Class Officers would be Cliff Fahlstrom, President; Phil MacArdle, Vice President; Ed Cahalen, Treasurer; Bill Rauha, Secretary.

As will be evident, a picture of the 50th Reunion Class was taken. Some of us, to be sure, have perhaps changed a bit and all of us have gotten a lot smarter, and some of us have gotten better looking, or heavier, or grayer, or balder, or whatever. But, basically, none of us has changed much at all and from the picture one should easily recognize (Top Row, l. to r.) Wahlin, MacLennon, Hoaglund, Rauha, Nahigyan, Meigs, Swenson, Bob Johnson, Fred Pomeroy, Manning, Eus Merrill; and (Bottom Row, l. to r.) Parmelee, Bob Parker, Dean Merrill, Bush, Whittemore, Stephenson, Hill, King, Beth, Southwick, Searle, Fahlstrom, MacArdle, Charly Parker, Lewis, Cahalen.

(Editor's Note: Because of an unfortunate series of delays, this account of the 50th Reunion, last June, of the Class of 1927 has not been ready for publication until now. We hope this story will bring back warm memories for those who were there, and we hope even more that it will be interesting and enjoyable for those class members who weren't able to make it back to campus for the reunion. Best wishes to all.)

1953

Ted Fritz, Jr. serves as a manager of product development for Armstrong Rubber in New Haven, Connecticut. . . . **Gene Kucinkas,** who has several important process control "firsts" to his credit, has joined Arthur D. Little, Inc. Formerly with LFE Corporation and the Foxboro Co., he is now a member of the Electronics Systems section of the Cambridge-based research, engineering, and management consulting firm. Among his original digital systems applications was the first industrial use of TV as a video display device for computer output and the first digital monitor and control system for the tire industry. In 1969 he founded Total Systems Computer, Inc., which was acquired in 1972 by the LFE Corporation. He is a registered professional engineer in Massachusetts.

1954

F. Raymond Anderson, SIM, is with the Heald Division of Cincinnati Milacron in Worcester. . . . **Leigh Hickcox** has been elected vice president of Capintec, Inc. and general manager of Capintec Systems Division. He will be responsible for all functions related to computer-based systems marketed by Capintec, such as the Radiation Therapy Planning System. Formerly he was product manager for the firm's radiation dosimetry product line. Before joining Capintec in 1976, he was marketing and sales manager for Science Accessories Corp. He had also been product manager for Picker Corp. (nuclear physics instruments) and Philips Electronic Instruments (nuclear products), as well as regional sales engineer at Packard Instruments Corp. He received his MBA from Harvard University. The Hickcoxes have three children.

Donald McEwan was recently named president of ITT Avionics Division in Nutley, N.J. He is responsible for organizing, planning and directing operations of the division which is engaged in design, development, and production of integrated communication, navigation, and identification systems, and electronic defense systems for aircraft, ships, and ground-based applications. In 1974 he was elected vice president. Since 1976 he has served as vice president and director of operations and has been responsible for organizing, planning, and directing activities of the engineering, manufacturing, procurement, product assurance, and program management departments. He joined ITT in 1956. The McEwans have a daughter, Pamela, and two sons, Jeffrey and Donald, Jr. . . . **Harry Mirick** presently holds the post of business manager at Digital Equipment Corp. in Acton, Mass. . . . After serving for many years with Crompton & Knowles, most recently as chief engineer, **Howard Nelson** has now joined Jamesbury Corp. of Worcester as a senior engineer. Howard also serves as a member of WPI's Alumni Fund Board and is National Phonothon Chairman.

1955

Louis Axtman, Jr. is with the Corps of Engineers in Maynard, Mass., where he is resident engineer in the support group. . . . **Stanley Clevenger** is with Spectra International, Inc. in Portland, Oregon.

1956

Robert R. Baer is a self-employed marketing consultant in Colorado Springs, Colorado.

1957

Philip Backlund serves as an environmental energy superintendent for FMC Corporation, South Charleston, W.V. . . . Susan Kimberly Beckett, 17, daughter of Mr. and Mrs. **Robert Beckett,** has been named Pennsylvania's Junior Miss for 1978. She was awarded $5,600 in scholarship money, which she plans to use this year when she enrolls at Grove City College to study management engineering. Susan, who competed against 39 other contestants, also won the youth fitness, poise and appearance Kraft Hostess Awards, and the McGlinn Photo Award during the competition. She did an interpretative dance to the music of "The Lord's Prayer" for her talent role. For community service she coaches a Little League girls' softball team and is a Leukemia Association volunteer. In high school she is treasurer of the senior class, president of the Future Business Leaders of America Club, a member of student government and the Honor Society. In May she will compete in the America Junior Miss Pageant in Mobile, Alabama.

John "Bill" Braley, Jr. is with Mosley Machinery Co. in Waco, Texas. . . . **Ralph Schlenker** holds the post of manager of engineering technology for Esso Engineering Division (Europe) Ltd. in New Malden, Surrey, England.

1959

George Fotiades owns and manages Webster House Restaurant in Worcester. . . . **Burton Siegal,** SIM, has been promoted to vice president of sales for Nylco Corporation and for its Delco Division. He has been identified with Delco since 1970, first as a field salesman, later as product manager, and most recently as sales manager. Previously he was president and general manager of Empire Rubber Corp. of Worcester until it was acquired by Worthen Industries in 1969. In his new post, he will be responsible for product development activities as well as marketing and sales of Delco products. The line consists of Del-Soft cushioning foams, Velvet-Glow counter pocket materials, Delco thermo counters, and other lining materials.

1961

Robert Hale is a specialist on the technical staff of the Aerojet Electro Systems Co. in Azusa, Calif.

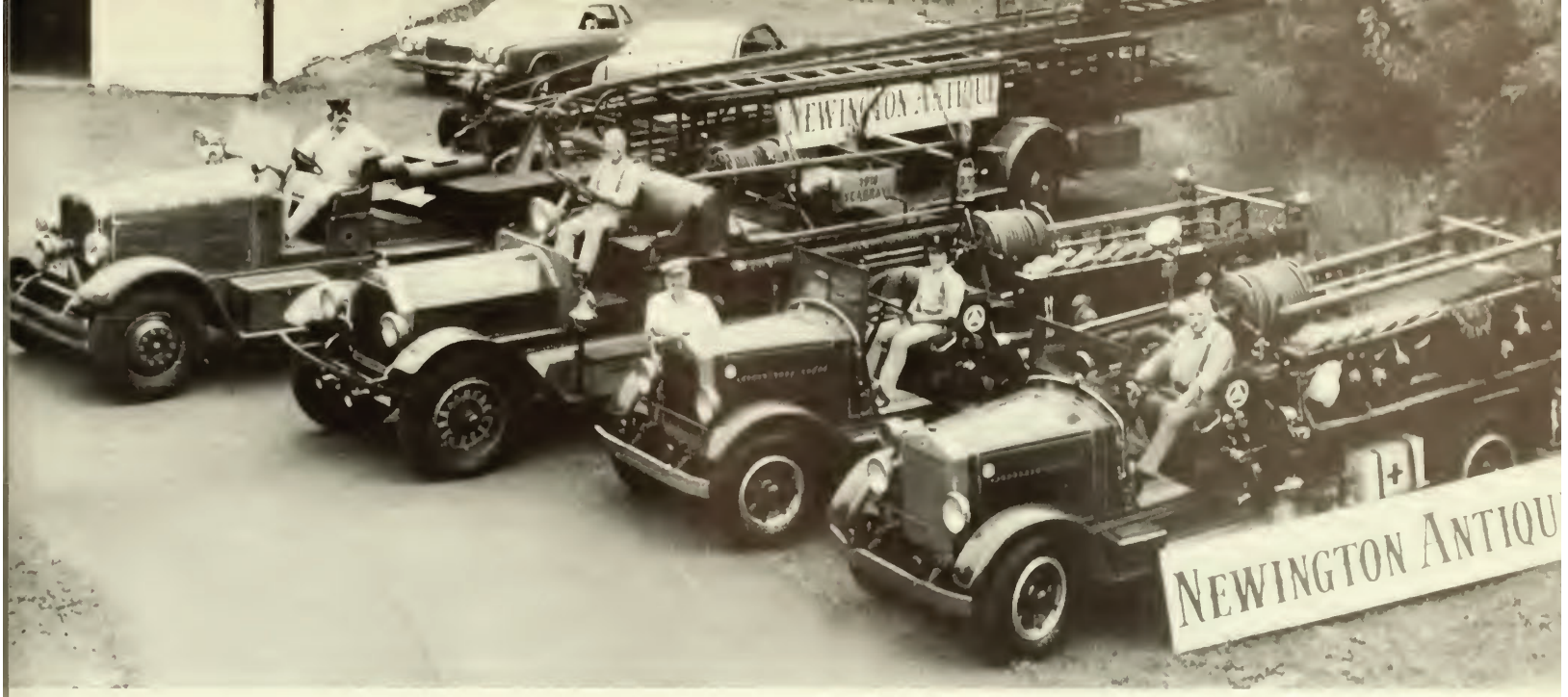
1962

►*Married:* **Ralph H. Griswold** to Miss Erenay J. Dickson in Wellesley, Massachusetts on September 24, 1977. Mrs. Griswold graduated from Penrhos College, Colwyn Bay, North Wales, United Kingdom; St. George's, Montreaux, Switzerland; and Whitehall Secretarial College, Eastbourne, Sussex, England. She is an administrative staff assistant at MIT. The bridegroom is with the Chemical Plastics Division of General Tire & Rubber Co., Lawrence, Mass.

Daniel Brosnahan, Jr. holds the post of manager of software services for the northeast region of Interdata, a division of Perkin-Elmer Corp. in Oceanport, N.J. . . . **Lawrence Compton** was recently elected a partner in Peat, Marwick and Mitchell Co., an accounting firm. He received his BS in business administration from Babson College. . . . **Giacomo Corvini** is employed as a supervisor of process design and technical service at Union Carbide Corp. in Tarrytown, N.Y.

William Krein has been reelected as treasurer of the United Cerebral Palsy Association of Schenectady, N.Y. He has served on the board of directors since 1974 and has been treasurer for the organization since 1975. Presently he is manager of the finance and division support operation in GE's Installation and Service Engineering Division. He is responsible for financial management within the division and also manages the division's projects engineering operation (power plant design) and support activities, including contract administration, marketing, communication, training, quality and safety assurance, and information systems. He has served as a coach for the Schenectady Youth Hockey Association since its inception in 1974.

Recently **Donald Mongeon** was promoted to metallurgical engineer for sheet and strip products in the metallurgical engineering section of the steel operations department at Bethlehem (Pa.) Steel Corporation. He joined the firm through its Loop management training program in 1962 and was assigned to the Lackawanna (NY) plant metallurgical department. He was promoted to metallurgical service engineer there in 1964 and in 1972 was named chief inspector in the metallurgical inspection section. He was promoted to assistant metallurgist, metallurgical inspection, in 1974. Most recently he was metallurgical supervisor in the hot strip mill and galvanize section. . . . **Stephen Phillips** is with the Hyde Park Paper Division of Diamond International in Hyde Park, Mass.



Curtis Ambler's fire trucks

E. Curtis Ambler, '42 tends "Buffalos," not the kind with four legs, but the kind with four wheels. Buffalo pumper fire trucks, to be exact—vintage 1929.

Antique fire truck tending came about naturally enough for Ambler. For thirty years he has served as a volunteer fireman in Newington, Connecticut, where he has seen his share of firefighting and resue work. Four years ago, he and another volunteer fireman, Dick Shailer, bought their own fire truck, a 1916 Seagrave pumper truck, considered a classic by fire buffs. Not long afterward they acquired a 1932 ladder truck.

"Dick and I not only liked the trucks as they were," Ambler says, "we also thought that they should be preserved to depict the history of firefighting."

Soon Ambler and Shailer discovered that they were not alone in their desire to further the fire truck preservation project. "A number of people wanted to help out," Ambler reports. "We were delighted, because we realized that we couldn't manage the job as well by ourselves."

The result of this outside interest was the formation of the Newington Antique Fire Apparatus Association (NAFA), an organization of some twenty men who are dedicated to the care and maintenance of old fire apparatus. One of the organization's first successes was the location of a more suitable garage for the two vehicles, which had been temporarily housed at Newington Volunteer Fire Department headquarters.

"There was only one problem with the new garage," Ambler says. "It was forty feet long and the ladder truck alone is fifty-five feet long. NAFA members helped to remedy the situation by building a forty-foot addition."

Now, even with the addition, the garage is a bit snug. A 1922 Model T delivery wagon, painted fire engine red and fitted up with auxiliary ladders and equipment, was recently acquired and is stored there. Also, last summer the town of Newington turned over two 1929 Buffalo pumper trucks to the care of NAFA. The Buffalos had been in service in Newington ever since the town's fire department was organized in 1929, and had recently been maintained by the Civil Defense Fire Division for emergency use. NAFA squeezed them into its garage and promised to keep them in operating condition so they could be on call should a disaster occur.

NAFA members pride themselves in their maintenance and repair of the antique vehicles. "Many replacement parts no longer exist," Ambler relates. "So we make our own whenever we can." Tires present one of the worst problems, but old firehose has been donated by the town fire department so that the trucks may be properly equipped.

In spite of obvious difficulties, NAFA has managed to keep all of the trucks in perfect working condition. The 1916 Seagrave, which was in use in Springfield, Mass. from 1916 to 1949 and later used as a standby water pump by the Springfield Water Department until the early 1960s, still pumps its 750 gpm rating. The 1932 ladder truck puts up its spring-raised ladder in six seconds. The red Model T delivery wagon runs well, and is often driven by Curt's daughter, Rosalind, in parades.

Ambler serves as chief of the Newington Antique Fire Apparatus Association. He is also manager of engineering in the Industrial Hardware Division of The Stanley Works, a Newington town councilman, and a member of the board of Newington Children's Hospital. His love of organ music led him to install a pipe organ in his home.

But NAFA is perhaps the closest to his heart. "NAFA is truly a family affair," he says. "The wives and families of association members go along with them on parade jaunts and fire brigade competitions all over New England. NAFA," he concludes, "is strictly for fun."

1963

Joseph DeBeaumont is employed as a senior associate engineer at IBM (SCD Division) in Kingston, N.Y. . . . Dr. **Robert Desmond,** head of the mechanical engineering department at Rochester Institute of Technology, has just completed an engineering textbook entitled *Engineering Heat Transfer.* Over thirty schools have already adopted it in its first year of availability. . . . **Robert Elwell** is a senior software engineer at Digital Equipment Corp. in Maynard, Mass. . . . **Lawrence Escott** has changed careers. He has left data processing and presently works as a security analyst for Fitch Investors Service. . . . **Richard Garvais** is director of materials at Wilson Sporting Goods in River Grove, Ill. He and his wife, Carol, have two children, Ricky, 11, and Susan, 8.

Dr. **Richard Kashnow** has been appointed as manager of the liaison operation at GE's Research and Development Center in Schenectady, N.Y. He will direct the activities of liaison scientists, who advise the center of the technical needs of GE's operating sectors and evaluate the programs for application to various company components. Since 1970 he has conducted research on liquid crystals which are now finding widespread application in electronic watches, advertising panels, and various instruments. He has received several patents, and has written some twenty technical publications. In 1975 he was named liaison scientist for the major appliance business group and in 1977 a staff member of the Corporate Technology Study. Dr. and Mrs. Kashnow have two sons.

John Pisinski, Jr. is now assistant general manager of the Bag Division's Plastics Group for Union Camp Corporation. He became affiliated with the firm in 1963 and was previously manager of the company's bag plant in Richmond, Va. In his new post he will be headquartered in Providence, R.I. . . . **Paul Ulcickas** has been promoted to engineer in charge of tubular high intensity discharge lamp development at Sylvania in Manchester, N.H.

1964

Major **Robert Najaka,** a flight commander with the U.S. Air Force, is currently stationed at Mather AFB in Sacramento, Calif. . . . **Michael Penti** is a project manager in the industrial division at Vappi Company in Cambridge, Mass. The Pentis have three sons, Patrick, Brian, and Paul. . . . **Bob Rounds, Jr.** is entering his third year as a manufacturers agent in Illinois, Iowa, and Wisconsin. His firm, Rounds Technical Sales, Wheaton, Illinois, sells hydraulic components to OEM's. . . . **Peter Tancredi** has been promoted to vice president of the environmental engineering division at Camp Dresser & McKee Inc., Denver, Colo. Formerly a company project manager, he has been responsible for the design of several sanitary intercepting sewers, storm sewers, and water mains, and for project scheduling, budget monitoring, specification writing, and personnel management. He is a professional engineer in Colorado and belongs to ASCE, the Water Pollution Control Federation, the Consulting Engineers Council of Colorado, and the Rocky Mountain Section of the Water Pollution Control Association. The Tancredis have three children, Karen, David, and Joseph. . . . **Thomas Zagryn,** personnel development supervisor at Pratt & Whitney Aircraft, recently served as a staff loaned executive for the United Way of Greater Hartford fund drive. He and eleven other "borrowed" executives from Hartford area organizations, helped to raise over $200,000 in the commercial sector of the campaign. From 1975 through 1977 he had served as department coordinator at Pratt & Whitney for the campaign. Presently he is financial secretary of the Bristol Polish American Citizens Club. He is past vice president and director of the Bristol Musicians Association.

1965

Nils Ericksen is now the general manager of Okemo Mountain ski area in Ludlow, Vt. He helped form the Mountain Division of Dufresne-Henry Engineering Corp. of Springfield (Vt.) and has been involved in the development of a number of ski areas, snow-making operations (including Okemo's) and real estate and industrial projects. He is a technical editor of *Ski Area Management Magazine,* a licensed tramway inspector in Massachusetts, and holds engineering licenses in Vermont, Colorado, and Virginia. He and his wife, Pam, have a daughter. . . . **Benjamin Surowiecki** holds the post of plant manager for Loctite in Puerto Rico. He resides in Mayaguez. . . . **Robert Cahill** has been appointed vice president of sales and marketing of SGL Homalite, a division of SGL Industries, Wilmington, Delaware. He had been sales manager since 1975. Earlier he was with the Navy as a lieutenant and in the Seabees. In Vietnam he was wounded in action and received the Navy Commendation Medal. He received his MBA degree in marketing from the Wharton School of Finance, University of Pennsylvania, in 1971, and joined Hilti Fastening Systems where he rose to the position of product manager. In 1975 he joined Homalite as sales manager. The Cahills have a daughter, Emma, 2, and a son, Robert, six months old.

1966

Stanley Livingston works for Watkins Johnson in Palo Alto, Calif. . . . Currently **Leonard Weckel** is a chemical engineer at Spotts, Stevens & McCoy in Wyomissing, Pa.

1967

▶*Married:* **Frank T. Jodaitis** to Miss Carol A. Gass on November 26, 1977 in Kingston, Pennsylvania. Mrs. Jodaitis received her BA from Wilkes College and her MEd from Boston College. Her husband is an administrator for the town of Manchester (Conn.) Water and Sewer Department.

▶*Born:* to Mr. and Mrs. **John L. Stumpp** a daughter Suzanne Beth on December 29, 1977. John is an electronic engineer with the Department of Defense in Fort Meade, Maryland.

Charles Foskett has been promoted from vice president and general manager to president of Digilab, Inc. in Cambridge, Mass. He originally joined Block Engineering, parent company of Digilab. When Digilab was formed in 1969, he became involved in the development of software systems for the new company. In 1970 he was named vice president and director of manufacturing and engineering. In 1975 he became general manager. . . . **William Pratt** serves as an outside plant associate at New England Telephone in Portland, Maine.

1968

Donald Bergstrom works as a project engineer at Westvaco Corp. in Wickliffe, Ky. . . . **Robert Gemmer** is a research chemist at American Cyanamid in Stamford, Conn. . . . **William Hawkins** holds the position of project engineer at the Naval Underwater Systems Center in New London, Conn. He is also government in-plant representative at Honeywell of West Covina, Calif. Last year he received his MS in ocean engineering from the University of Rhode Island. . . . **Tom Marmen,** MNS, serves as engineering manager at Digital Equipment Corp., Worcester. . . . **David Morris** is employed as a technical specialist at Betz Laboratories in West Springfield, Mass. . . . **Mario Zampieri** is a project engineer for Brown & Root, Inc., Oak Brook, Illinois.

1969

▶*Married:* **Donald B. Esson** and Beverly J. Nash on October 15, 1977 in Lancaster, New Hampshire. The bride graduated from Bates College and the University of Rhode Island. She was employed by Weegar-Pride Book Co. Her husband is with Pratt & Whitney Aircraft, East Hartford, Conn. where he is a senior materials engineer. In 1972 he received his MS in materials science from WPI. . . . **Douglas J. George** and Miss Linda J. Cavanaugh in Norwood, Massachusetts on December 10, 1977. Mrs. George, who is employed at Massachusetts Financial Services, Boston, graduated from the Chandler School for Women and the Academie Moderne. The bridegroom earned his MBA at Babson College. He is with George Associates in Needham.

►*Born:* to Mr. and Mrs. **Barry Shiffrin** a daughter Erica Leigh on August 4, 1977.

Normand Bachand holds the post of staff psychologist at the Clinton County Mental Health Clinic in Plattsburgh, N.Y. He was slated to receive his PhD in clinical psychology from Wayne State University in December. . . . **John Thompson** serves as vice president and controller of Stowe Woodward Co. in Newton, Mass.

1970

►*Married:* **J. Randall Huber** and Miss Dorothy B. LaMarca on October 30, 1977 in Melrose, Massachusetts. The bride graduated from Wilfred Academy and attended Berklee School of Music. She is a co-owner of Mam'selle Hair Design and the Chop Shop in Melrose. Her husband is with Bayside Engineering in Boston.

John Cattel has been promoted to district service manager at Riley Stoker Corp. in Worcester. . . . **Paul Dresser** has completed his initial training at Delta Air Lines training school at the Hartsfield Atlanta International Airport and is now assigned to the airline's Boston pilot base as a second officer. The Dressers have a son, Douglas Paul. . . . **James Ford** works as an assistant actuary at State Mutual Life Assurance Co., Worcester. . . . **Francis Vernile** was recently named vice president of Fraioli-Blum-Yesselman of New England, a Hartford (Conn.) structural engineering firm. Frank, a registered professional engineer in Connecticut, has been affiliated with the firm since 1972. He has a master's degree from the University of Connecticut. . . . **Alan Zabarsky** has been appointed to the new position of resource manager, antenna systems, at Motorola Corp. in Rolling Meadows, Ill. Last year he joined Motorola as quality assurance manager. Previously he was with Bell Labs., Holmdel, N.J. He has a master's degree from Columbia University.

1971

►*Married:* **Alan H. Shapiro** and Miss Deborah T. Hall on September 10, 1977 in New York. The bride graduated from Skidmore College and RIT. The couple is residing in Santa Fe, New Mexico.

Dick Arena has become associated with Martin Marietta Aluminum as an account executive. His responsibilities include sales of forging and extrusions to aerospace ordnance and commercial manufacturers in the territory bounded by Michigan and Indiana on the west, Virginia, West Virginia, and Kentucky on the south, and by Quebec and Ontario Provinces to the north.

Presently **Barry Belanger** serves as a systems design engineer for GE Medical Systems in Milwaukee. . . . **Gary Berlin** has joined Norton Co., Worcester, as a quality control engineer in the industrial ceramics division. Formerly he was a development engineer at United Nuclear Corp. of Uncasville, Conn. . . . **Nathaniel Ericson** holds the post of supervisor of systems at Continental Can, Merrimack, N.H. . . . **Thomas Kaminski** is a teaching assistant at the University of Wisconsin, where he is a PhD candidate. . . . **Ben Katcoff** has been named corporate benefits manager at Polaroid Corp. in Cambridge, Mass. With Polaroid for nearly seven years, he has charge of disability programs, workers compensation, retirement benefits, profit sharing, and pensions. He also handles medical benefits, dental insurance, Blue Cross plans, life insurance, and travel accident insurance.

Dr. **James Kaufman** has been appointed an associate professor of chemistry at Curry College in Milton, Mass., where he will also serve as head coach of the men's and women's soccer teams. For the past four years he conducted a vigorous research program in the areas of hydrocarbon oxidation, dehydrohalogenation, and thermal and photolytic halogenations at Dow Chemical in Wayland, Mass. Earlier he had taught at Westfield State College and WPI, where he was a postdoctoral fellow. He is a former Clark University varsity soccer coach and WPI junior varsity coach. A member of Sigma Xi, he also was a Petroleum Research Fund Fellow, and a member of Phi Lambda Upsilon. For the past six years, he has played for Worcester Scans Soccer Club. Previously he was a soccer-style kicker for the Nashua Colts in the New England Professional Football League. . . . **Myles Kleper,** program manager for Walden Research, a division of Abcor located in Wilmington, Mass., is currently an MBA candidate at Northeastern University. His wife, Judith Izen Kleper, is a graduate student at Harvard School of Public Health.

Schwieger Award to Nicholas Moffa

On January 24, WPI and the School of Industrial Management presented Nicholas S. Moffa, president of Bay State Abrasives, with the Albert J. Schwieger Award for outstanding achievement as a businessman and a concerned citizen.

The citation called Moffa "a modern day Horatio Alger who has successfully combined business talents and a concern for people." It further stated that "your contributions to the success of Bay State Abrasives have come in a multitude of ways during many years of superior service, both domestically and internationally. Your dedication and quiet but firm leadership, coupled with an ability and desire to explore new methods, ideas and management skills, have been an inspiration to your co-workers and a source of pride to all who know you."

Ralph Reddick, a candidate for a master's degree in music composition at New York's Eastman School of Music, presently performs in the Erhard-Reddick Double Bass Duo. Recently he and Erhard spent two days giving string bass clinics for music students at Thomaston (Conn.) High School. Reddick, who received his bachelor of music degree in composition from the University of Connecticut last year, is now studying bass with James B. VanDemark. He has written works for voice with chamber ensembles, piano, small ensembles, and solo percussion, and has composed larger orchestral and choral works. He taught theory, studied, and performed in Siena, Italy at special summer music programs held in 1974 and 1976.

Stanley Sotek is a manufacturing engineer at Anderson Power Products, Inc., in Boston. . . . **Albert Stromquist** serves as a staff geologist at Amerada Hess Corp. in New York City. He is involved with international petroleum exploration. He and his wife Elaine, a graduate of NYU and UMass, reside in New York.

1972

▶*Married:* **Thomas W. Staehr** and Miss Jean H. Keller in Scottsboro, Alabama on November 5, 1977. The groom is with Townsend and Bottum of Ann Arbor, Michigan.

Andrew Glazier is presently a graduate student at the University of New Hampshire in Durham. . . . **Bruce Hall** is an electrical engineering contract administrator (civil service) for the Navy at Portsmouth (N.H.) Naval Shipyard. . . . **Henry Greene** teaches mathematics at Salisbury (Md.) State College. . . . **Walter McIlveen** is now a project engineer at Smith, Hinchman & Grylls in Detroit, Michigan. . . . **Steven Packard,** who received his diploma in Christian studies from Regent College, Vancouver, B.C. last May, currently serves as a process engineer at Owens/Corning Fiberglas in Huntingdon, Pa.

Gary Rand works as an electrical design engineer for Compugraphic Corporation, Wilmington, Mass.

1973

▶*Married:* **Thomas Bileski** to Miss Pamela C. Bess on October 29, 1977 in Fenton, Missouri. Mrs. Bileski attended Washington University. The groom is a field and sales engineer with Texas Instruments of Dallas. . . . **Gary F. Selden** and Linda B. Freeman on October 8, 1977 in Schenectady, New York. The bride graduated from Mohawk Valley Community College and serves as a legal secretary at GE Research and Development Center in Schenectady. Her husband, who is working for his PhD in materials science at RPI, is a composite materials engineer for GE at the Center.

Theodore Covert, SIM, of Norton Company has been named manager of the Industrial Ceramics Division's new igniter plant in Milford, N.H. He joined the division in 1960 and served most recently as chief project engineer. In his new post he will be concerned with the firm's electro-ceramic igniter, which is used as an energy-saving replacement for standing pilot lights in gas appliances.

Dr. **David Hubbell** is a resident in obstetrics and gynecology at the Naval Regional Medical Center in San Diego, Calif.

Dave and Ellen **Moomaw** have taken up hang gliding. They spent part of November just three miles south of Kitty Hawk, which because of the high dunes, proved to be a fantastic site for their early flights. Dave earned his Hang II and Ellen got her Hang I. Dave has developed a new urethane prosthetic hoof-like foot for his leg that does not require a shoe. It was designed for walking the dunes during the hang gliding lessons, but has proved to be so comfortable that he continues to wear it full time. The Moomaws are incorporated as Enginique Creations. Dave is president and chief engineer and Ellen is business manager and chief "gopher."

Richard Page is a project engineer at Schneider, Inc., Pittsburgh, Pa. The Pages have a daughter, a year and a half old. . . . **John Stasaitis, Jr.** works for United Engineers & Constructors, Inc., Boston, Mass.

1974

▶*Married:* **George Ranney** and Elizabeth C. Venable of Charleston, West Virginia on August 6, 1977. **James Edwards** participated in the wedding service. Mrs. Ranney attended Fairmont State College and is a secretary for the West Virginia Department of Highways. The bridegroom is with DuPont at the firm's biochemicals plant in Belle, W.Va., where he works in environmental control. . . . **William G. Gunther** and Miss Maureen A. Corcoran on January 7, 1978 in Branford, Connecticut. The bride received a BS degree in horticulture from the University of Rhode Island at Kingston. Her husband is a plant manager with George Schmitt & Co. in Branford. . . .

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NORTON

Suzanne Haughey Carroll, MNS, has been named as the state representative to the West Brookfield (Mass.) Housing Authority. . . . **Charlie Dodd** presently serves as a manufacturing engineer at Hitchiner Manufacturing in Milford, N.H. His wife **Annie McPartland Dodd,** '75, is a project engineer for Anheuser Busch in Merrimack, N.H. . . . **Joseph Downey, Jr.** works as a technical services representative for HNU Systems, Inc. in Newton, Mass. . . . **Joseph Gaffen,** a controls engineer for UOP/Air Correction Division, Darien, Conn., is now active as a start-up engineer for UOP SO_2 Scrubbing System at Petersburg Generating Station, Indiana. . . . Brother **James Morabito,** MNS, serves as a deacon at St. Leo's Parish in Columbus, Ohio. . . . Continuing with Veeder-Root Co., **Craig Tyler** is now service manager for the petroleum division. He resides in Rocky Hill, Conn. . . . **David Washburn** is a sanitary engineer for the U.S. Fish and Wildlife Service in Newton Corner, Mass.

1975

▶*Married:* **Stephen A. Caggiano** to Deborah A. Cyr in Norwood, Massachusetts on October 22, 1977. The bride graduated from the University of Massachusetts in Amherst and is a development technician at Corning Medical, Medfield, Mass. Her husband is with AFI, Inc. in Newtonville. . . . **Glen D. Richardson** and Miss Cynthia Specht in Watertown, Massachusetts recently. Mrs. Richardson, a graduate of Ohio Wesleyan University, works for the Children's Hospital Medical Center in Boston. The groom is employed by Richardson Electric Co., Inc. of Waltham. . . . **Alexander V. Vogt** to Miss Colette L. Farland recently in Manchester, New Hampshire. The bride graduated from the University of New Hampshire with a degree in interpersonal communications. She had been employed by Amoskeag Savings Bank. Her husband is with Stone & Webster.

Karen Arbige was appointed vice president of Casher Associates, Inc. of Brookline, Mass. on October 1st. The company is concerned with data processing and management consulting. . . . Presently **Peter Arcoma** serves as a resident engineer for Stauffer Chemical Co. of Dobbs Ferry, N.Y. . . . **Robert Bradley** holds the post of product support specialist at Digital Equipment Corp., Maynard, Mass. . . . **Christopher Danker** is with Electronized Chemical in Burlington, Mass. . . . Continuing with Monsanto Co., **Mario DiGiovanni** is now taking a four-month leave of absence from his home office, while on temporary assignment at the firm's Avon plant in Martinez, Calif. He is a process engineer in the technical services department of Monsanto's Wm. G. Krummrich plant in Sauget, Ill., across the Mississippi River from St. Louis, Mo. Also, he is attending Washington University Graduate School, part time, where he is working for his MS in chemical-materials engineering.

Michael Duda is doing graduate work at Colorado State University in Fort Collins. . . . **John Greenstreet** is an engineering field representative for GE in Syracuse, N.Y. . . . **Frederick Greulich** holds the post of manufacturing manager at Procter & Gamble in Quincy, Mass. . . . **Richard Jackson** works as a community planner for CUPPAD in Escanaba, Michigan. . . . **James Reynolds,** SIM, has been appointed treasurer of Jamesbury Corp., Worcester. He joined the manufacturer of ball and butterfly valves in 1965 and has held several administrative positions including, most recently, that of assistant treasurer. He belongs to the National Association of Accountants. . . . **Todd Whitaker** is with the Naval Underwater Systems Center in New London, Conn.

David Salomaki works as a development engineer at Hewlett Packard in Cupertino, California. . . . **David Schwartz** serves as an area engineer at Daniel Int. Corp. in Fulton, Missouri.

1976

▶*Married:* **David P. Keenan** and Miss **Ruth E. Levy** on August 20, 1977 in Norwell, Massachusetts. Mrs. Keenan is a scientist with Science Applications, Inc. Her husband is stationed as a Coast Guard officer with the Bureau of Transportation in Washington, D.C. . . . **Thomas J. McAloon** and Miss Kathleen A. Coyle on January 7, 1978 in Providence, Rhode Island. Mrs. McAloon attended North Adams (Mass.) State College. The groom received his master's degree in environmental engineering from the University of Massachusetts. The McAloons are residing in the Philippines where they are serving in the Peace Corps.

David Chabot is a systems programmer at Periphonics Corp. in Bohemia, N.Y. . . . **Norman Gariepy** recently earned his master's degree in accounting from Northeastern University's Graduate School of Professional Accounting, Boston. As part of the program, he worked for the firm of Touche Ross & Co., where he is now a staff accountant. . . . **Bill Johnson** continues as a field secretary for Phi Gamma Delta Fraternity. Headquarters are located in Lexington, Ky. . . . **Paul Kalenian** is president of the G & S Mill, Inc., a new company in Northboro, Mass., which has developed a line of unique, high-efficiency wood-burning furnaces for commercial and industrial use. Created by Kalenian over the past year and a half, the heavy-duty furnaces are designed to produce from 200,000 to 1,500,000 BTU's per hour burning four foot lengths of unsplit, dried, or green wood. The furnaces have to be stoked only once every 12 hours, are thermostatically controlled, and operate at a cost reduction of 75% compared to current oil-heat rates.

Zeses Karoutas and his wife, Stephanie, have received their master's degrees from Virginia Polytechnic Institute and State University. Mrs. Karoutas is a Greek language bilingual teacher in Hartford, Conn. Her husband, who received his master's degree in nuclear engineering, is a nuclear reactor design engineer for Combustion Engineering Co., Windsor, Conn. . . . **Thomas May** is a district engineer in training at the Torrington Co. in South Bend, Ind. . . . **James Nolan** is an associate engineer at Raytheon Corporation's equipment development labs in Sudbury, Mass. . . . **Raymond Robey** works as a research engineer at Arthur D. Little, Inc., in Cambridge, Mass.

1977

▶*Married:* **Scott M. Sieburth** to Miss Colleen M. Doyle on December 17, 1977 in Cold Spring, New York. The bride attended Becker and graduated from Worcester State College. The groom is a graduate student at Harvard University.

2/Lt. **Timothy Ascani** recently completed an infantry officer basic course in the U.S. Army Infantry School in Fort Benning, Ga. . . . **Paul Avakian** has accepted a post in the manufacturing engineering department at Data General Corp. in Southboro where he is a test engineer. . . . **David Bolin** is a graduate student in the PhD chemistry program at MIT. . . . **Andrew Clancy** works for Western Electric in North Andover, Mass. . . . Currently **William Cloutier, Jr.** serves as an assistant engineer for Ebasco Services, Inc. in New York City. . . . **Asta Dabrila** is a loss prevention consultant at Factory Mutual Engineering in Norwood, Mass. . . . **Kenneth Fox** is employed as an associate systems proposal specialist at the Foxboro (Mass.) Company. . . . **Thomas Grautski** is a production supervisor for Estee Lauder in Melville, N.Y.

Jon Hammarstrom works for Polaroid in Norwood, Mass. . . . **Terry Heinold** holds the post of vice president and part owner of New England Recycling in Leominster, Mass. He serves as commissioner of the Sterling Softball League, manager of Greenmeadow Recreation Field, and superintendent of Pratt's Pond Watershed. . . . **Gary Kuba** is a computer consultant and analyst for Interactive Systems, Inc., in Boston. . . . **Gary Loeb** is presently a supervisory trainee for Niagara Mohawk Power Corp. at the Albany (N.Y.) generation plant. He holds the office of marshal at Washington Lodge No. 85, F. & A.M. in Albany. . . . **Kathy Molony** is a project engineer at Clairol, Inc., in Stamford, Conn. . . . **Richard Wheeler** holds the position of product sales representative for the Firestone Plastics Company, a division of the Firestone Fire & Rubber Company located in Pottstown, Pa. His market responsibility makes it necessary for him to travel in nearly every state east of the Mississippi River. The company is involved with polyvinyl chloride film and sheeting.

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James B. Lowell, '07, founder, president and treasurer of the former J. B. Lowell, Inc., builders and engineers, died December 16, 1977 in Oakdale, Massachusetts. He was 92.

He was born on Aug. 23, 1885 in Worcester. After studying chemistry at WPI, he went to Colorado School of Mines, graduating as a metallurgical engineer in 1908. During his career he was with George A. Fuller Co., Mills Woven Cartridge Belt Co., New England Foundation Co., and Lowell-Whipple Co. From 1939 to 1959 he owned and operated J. B. Lowell, Inc. Later he served the firm as a consultant.

Mr. Lowell belonged to Phi Gamma Delta, Tau Beta Pi, ASCE (life member), the Boston Society of Civil Engineers, and the Masons. He was a past vestryman of All Saints Episcopal Church and served on the Council of the Episcopal Diocese of Western Massachusetts. An honorary director of the Worcester Fresh Air Fund, Inc., and honorary trustee of Worcester County Institution for Savings, he also was a former board member of the Worcester Science Museum, Goddard House, and the Worcester Girl Scout Council.

He was a corporator of the Worcester Boys' Club, served on the members council of the Worcester Art Museum, and had belonged to the Worcester Club, Midas Club, University Club, and Tatnuck Country Club. An author, he had written for several technical publications on engineering. He was the father-in-law of **William P. Densmore,** '45.

William T. Donath, '11, of Pawtucket, Rhode Island passed away on September 30, 1977. He graduated from WPI as a mechanical engineer. For many years he was a night superintendent at Coats & Clark, Inc., Pawtucket. He belonged to Sigma Phi Epsilon.

Harry C. Thompson, '15, died in Hanover, New Hampshire on August 29, 1977 following a long illness.

He was born in Ludlow, Vt. on March 31, 1893. He received his general science degree from WPI in 1915. For a number of years he was in the research department at General Electric in Schenectady, N.Y.

Mrs. Jean Gras writes that her father, **Donald D. Simonds, '08,** died in Burlington, Vermont at the age of 92 on January 29, 1978. "He prepared his obituary in 1972 for future use," she says. "At the time he was still typing on his 1912 typewriter. I would also like you to know that he requested that memorial donations be made to the WPI Scholarship Fund," she continues. "WPI meant a great deal to him. If all alumni felt as strongly as Dad did, your worries would be over. I have been interested in reading the *Journal* recently. It sounds as though the college is a vibrant institution."

Simonds was born in Westminster, Mass. on October 20, 1885. In 1908 he graduated with his BSME from WPI. Following graduation, he went with Reed & Prince Mfg. Co. in Worcester, where he was machine shop foreman for four years. He then became superintendent of the fibre case division for Bird & Son in East Walpole, Mass.

In 1916 he helped form the Reed Small Tool Works in Worcester, a firm which manufactured micrometers. He served the company as secretary and manager. During the depression he withdrew from Reed and joined the George C. Whitney Co. as assistant to the president. In 1942 he returned to his old business which had merged with the Reed Rolled Thread Die Co. He retired in 1962 after having served a total of thirty-three years with the company.

Mr. Simonds belonged to Theta Chi, and for four years was a national officer of the fraternity. In 1917 he was instrumental in acquiring a home for WPI's Epsilon Chapter. In 1964 he was chairman of the fund-raising campaign to expand the facilities of the chapter house. He was a York Rite Mason and a member of the Shrine. For six years he served as superintendent of the Sunday School and for eight years as a clerk of the church for the First Baptist Church in Worcester. He was a past president of the Worcester County Chapter of the Alumni Association and a former president of the Tech Old-Timers.

During the past few years, Mr. Simonds had made his home with his daughter, Mrs. Alfred Gras, in South Hero, Vt.

George C. Graham, '13, an inventor who held over 50 patents, died in Paramus, New Jersey on October 27, 1977. He was 86.

Among his earliest inventions was a washing machine, which was produced by the Acca Corp. of Milwaukee. He also designed an electric ice box and became a pioneer in installing home refrigeration in this country. In 1959 he put a special fuel-injection system into a 1957 Chevrolet and later designed an air compressor that was sold to the Scovill Manufacturing Co. of Waterbury, Conn. His last patent (1972) was for a fuel pump for automobile engines.

Prior to the depression, Mr. Graham owned and operated Beaudette & Graham Co. of Boston, one of the largest appliance businesses in New England. After the depression he became national sales manager of W. S. Libby Co. of Lewiston, Me., from which he retired in 1956. He then turned to full-time inventing.

Mr. Graham was born on Oct. 30, 1890 in Pueblo, Colo. In 1913 he received his BSEE from WPI. He belonged to Tau Beta Pi, Sigma Xi, and was a 32nd degree Mason. He was the father of **George C. Graham, Jr.** of the class of 1939.

Frederick E. Wood, '18, died in Hingham, Massachusetts on November 21, 1977 at the age of 85.

A native of Springfield, Mass., he was born on July 10, 1892. He attended WPI and was a World War I Army Air Force veteran. Prior to his retirement in 1958, he had been employed as a mechanical engineer at National Blank Book Co. of Holyoke for thirty years. He belonged to SAE, the Masons, and the Golden Age Club.

Paul D. Woodbury, '21, of Richmond, Virginia died of cardiac arrest on September 27, 1977.

He was born on July 1, 1899 in Charlton, Mass., and received his BSEE from WPI in 1921. During his career he was associated with New England Telephone & Telegraph Co., Westinghouse, Copperweld Steel Co., Birmingham Galvanizing Co., McGraw Hill, Metro Products Co., and Buildings Equipment & Supply Corp. He was a Scottish Rite Mason, a Shriner, and an Army veteran of World War II.

Judson M. Goodnow, '23, retired president of Huntington, Goodnow, Connors, Inc. of Wellesley (insurance brokers), died in Holden, Massachusetts on December 8, 1977. He was 76.

Before entering the insurance business in 1945, he was an engineer in the New England office of the Improved Risk Mutuals Co. of Boston. He was born on August 27, 1901 in Northbridge, Mass. and later became a student at WPI.
WPI.

He was a member of Phi Sigma Kappa, the First Congregational Church of Princeton, the Princeton Historical Society, the Princeton School Committee, Organic Garden Club, the New England Mutual Agents Association, and the Independent Agents and Brokers Association of Massachusetts. A trustee of the Princeton Library, he also served as chairman of the Republican Town Committee, of Scout Troop I, and the Heart Fund. He was a 32nd degree Mason, a member of the Scottish Rite, and the Worcester County Shrine Club.

Forrest E. Wilcox, '24, died in Strong Memorial Hospital in Rochester, New York on June 20, 1977.

He was born on June 10, 1903 in Harvard, Mass. and graduated with his BS in chemistry from WPI in 1924. For many years he was with the Carborundum Co., where he served as manager of manufacturing in the Electro Minerals Division in Niagara Falls, N.Y. He also was an income tax consultant for H & R Block Co. in Rochester.

Mr. Wilcox belonged to the Society of Industrial Engineers, Sigma Xi, the Niagara Frontier Council (Silver Beaver) BSA, and the Masons. He was a past treasurer of the American Baptist Men of New York State.

Raymond C. Connolly, '26, died in Portland, Maine on December 14, 1977 at the age of 73.

He retired from the New England Telephone Co. in 1966 following forty years of service as plant manager for the state of Maine. He graduated from WPI in 1926 as an electrical engineer.

Mr. Connolly belonged to the Masons, the Shrine, the First Congregational Church, Theta Chi, and Tau Beta Pi. He had been active with church work, the Boy Scouts, the Pioneers, and the Portland Rotary. He was born on July 3, 1904 in Tilton, N.H.

Kenneth M. Finlayson, '27, former engineer for the Worcester County Engineering Department, passed away on December 16, 1977. He was 73.

He retired from the Worcester County Engineering Department three years ago after forty-seven years of service. A registered professional engineer and land surveyor, he also belonged to the Massachusetts Highway Association and the County Engineers Association. He was a director of the Association of County Engineering Personnel.

Mr. Finlayson was born on Dec. 14, 1904 in Worcester. In 1927 he graduated from WPI as an electrical engineer.

Wilbur H. Perry, '28, a retired research technician in the physics department at the John Hopkins University, died on January 4, 1978 in the Greater Baltimore (MD) Medical Center after a long illness. He was 72.

In 1973 he retired from the university after more than forty years as an expert in spectroscopy. He was honored for his work by the Optical Society of America and by the Smithsonian Institution.

Mr. Perry was a former member of the administrative board of the Towson United Methodist Church, a past president of the Methodist Men, and a former treasurer of the Washington Chapter of the Alumni Association. He belonged to the Optical Society of America and Sigma Phi Epsilon. He was born in Woodstock, Vt. on July 9, 1905 and later studied at WPI.

Milton A. Swanson, '28, of Nutley, New Jersey passed away on September 26, 1977.

He was born on June 19, 1906 in Brockton, Mass. and graduated as an electrical engineer in 1928. For forty years he was with the Public Service Electric and Gas Co. of Newark, N.J., from which he retired four years ago as a senior engineer. He belonged to Theta Chi, the American Gas Association, and served as a former president of the Northern New Jersey Chapter of the Alumni Association.

William W. Jasper, Jr., '30, retired general manager of Wickwire-Spencer Steel Co., Clinton Division of Colorado Fuel and Iron, died December 28, 1977 in Worcester. He was 71.

A Worcester native, he was born on September 8, 1906. He earned his BSME in 1930. Prior to joining Wickwire, from which he retired six years ago following eighteen years of service, he was with Athena Steel Co. He had been chairman of the Zoning Appeals Board in Lancaster, Mass.

Theodore L. Fish, '31, a retired engineer for Columbia Bicycle Manufacturing Co., passed away at his home in Chester, Massachusetts on November 20, 1977 at the age of 72.

Born in West Springfield, Mass., on April 1, 1905, he later graduated as a mechanical engineer from WPI. During his career he was with Rising Paper Co., Champion Paper & Fibre Co., Bird & Sons Co., and Brightwater Paper Co. He was chief power engineer for Columbia Mfg. Co. in Westfield, Mass.

Mr. Fish, a registered professional engineer, belonged to the National Association of Power Engineers and the Engineering Society of Western Massachusetts. He was a library trustee in Chester and a director of the Westfield River Watershed Association. He was a member of the Gateway Regional School Committee and the Western Hampden Historical Society Museum Committee, and had served as auditor of the Blandford Historical Society.

John U. Tillan, '32, of Mayfield Village, Ohio died on August 20, 1977 after a lingering illness.

He was born June 18, 1911 in Fitchburg. In 1932 he graduated as a civil engineer from WPI. During his career he was with Fuller Construction Co., Whitman, Requardt and Smith, A. G. McKee Co., and H. K. Ferguson Co. His specialty was with oil refineries, which led to varied travel assignments.

Lloyd C. Crane, '33' retired educator, died in Northfield, Vermont on December 30, 1977 at the age of 67.

He was born in Worcester on October 17, 1910 and attended WPI. He graduated from Clark University, where he also received his master's degree. In 1938 he taught and was named principal at Waitsfield (Vt.) High School. From 1942 to 1949 he was principal and a teacher at Swanton High School, and from 1949 to 1956 he held the same posts at Northfield High School. From 1956 until his retirement in 1965, he was associated with the psychology and education departments at Norwich University.

Mr. Crane was a village trustee for fifteen years, a former member of the Northfield Conversational Club, the Rotary Club, and the Vermont Headmasters' Association. He had been town moderator in Swanton.

Francis L. Collins, Jr., '36, of Somerset, Massachusetts, treasurer of F. L. Collins & Sons, Inc., died on November 14, 1977.

He was born August 14, 1912 in Fall River, Mass. and later was a student at WPI. In 1933 he joined his father in the construction business. In 1937, when the firm was incorporated as F. L. Collins & Sons, Inc., he became treasurer and a co-owner. The company has constructed many schools and churches, as well as the B.M.C. Durfee Trust Bank building in Fall River and the Sheraton-Islander in Newport.

During World War II he was a warrant officer with a Seabee unit of the Navy and participated in the invasions of Salerno, North Africa, and Normandy.

He was a past president of the Rotary Club and vice president and a director of the Lafayette Cooperative Bank.

Philip D. Bartlett, '40, a senior management engineer for Polaroid Corp., died November 28, 1977 in Massachusetts General Hospital, Boston, Massachusetts. He was 60 years old.

He had worked for Polaroid for twenty-eight years. Earlier he had been with the Torrington Co., Machine Design Associates, Wilson Engineering, Norton Co., and McGowan Engineering.

Mr. Bartlett, who was born on October 6, 1917 in Greenwich, Mass., received his BSME from WPI in 1940. He also received master's degrees from MIT and Babson Institute. He belonged to Phi Sigma Kappa, Tau Beta Pi, and Sigma Xi.

Dr. Yazbeck T. Sarkees, '47, associate professor of electrical engineering at the University of Buffalo, died on October 15, 1977 in Buffalo, New York at the age of 56.

On the university faculty since 1954, Prof. Sarkees was a member of the American Institute of Electrical and Electronic Engineers and the New York State Society of Professional Engineers.

He was born on August 26, 1921 in Niagara Falls, N.Y. and graduated as an electrical engineer from WPI. He served in the U.S. Navy. In Buffalo, the Yazbeck T. Sarkees Cub Scout Memorial Campership Fund has been established in his memory.

Dr. **Norman W. Cook, '68,** president of Cook Builder's Supply, died in West Springfield, Massachusetts on November 12, 1977 at the age of 34.

He was born on December 27, 1942 in Springfield, Mass. He received his BA degree from Middlebury College, and then earned his master's and PhD at WPI.

Dr. Cook was a former president of West Springfield Rotary Club and a member of the Chamber of Commerce. He belonged to Sigma Xi.

REUNION

JUNE 8-11, 1978

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