WINTER 1980 WINTER 1980

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2 A room at the top

A peek at some interesting graffiti recorded on the walls of the upper reaches of Boynton's tower.

4 Sports

A look at WPI's football comeback, and other matters, as told by Mark Mandel.

6 WPI's new head man at ASME

Don Zwiep of our ME Department becomes a world traveler and national engineering spokesman.

A special Who's Who profile by Ruth Trask.

15 Justice delayed

The continuing saga of Howard Freeman's 20-year battle with Uncle Sam.

16 ARL coming up on 100

17 Your class and others

38 Completed careers

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The northwest corner of the tower room, with the stairs leading to the clock and roof, and the site of the grafitti.

A room at the top

YOU KNOW the clock tower on Boynton. You may remember the oval wooden stairway that used to wind its way from the basement to the third floor. But there's a fourth floor in the tower that not many WPI students have seen. Some certainly have, however, and we've got proof.

The flagpole atop the tower was taken down a few years ago, a victim of rust and old age, and with its removal ended a tradition of students who had the job of raising the flag. With the renovation of Boynton, we had occasion to wonder just what was up in that tower room, now reachable only by ladder from the third floor. So we climbed.

On the Hill

We found a bright, airy room with windows on three sides offering a fine view to the south and east of the WPI campus. We found an old doorway leading to a truly ancient stairway that went still further up into the dark upper recesses of the tower, leading to the clock mechanism, powered by a small electric motor driving four large shafts, one for each face. And beyond that, a series of steps that, frankly, I didn't care to try to climb. I'll leave that for the birds that were flying in from the outside.

Retreating to the bright room whose walls were being renewed, I noticed that one corner, near the upper stair door, hadn't been touched, and it contained an authentic record of some WPI history. For there, written in pencil and pen, were signatures and comments written by the generations of students who had climbed the tower to raise or lower the flag (or for other purposes, too).

Among other moments recorded on those walls were:

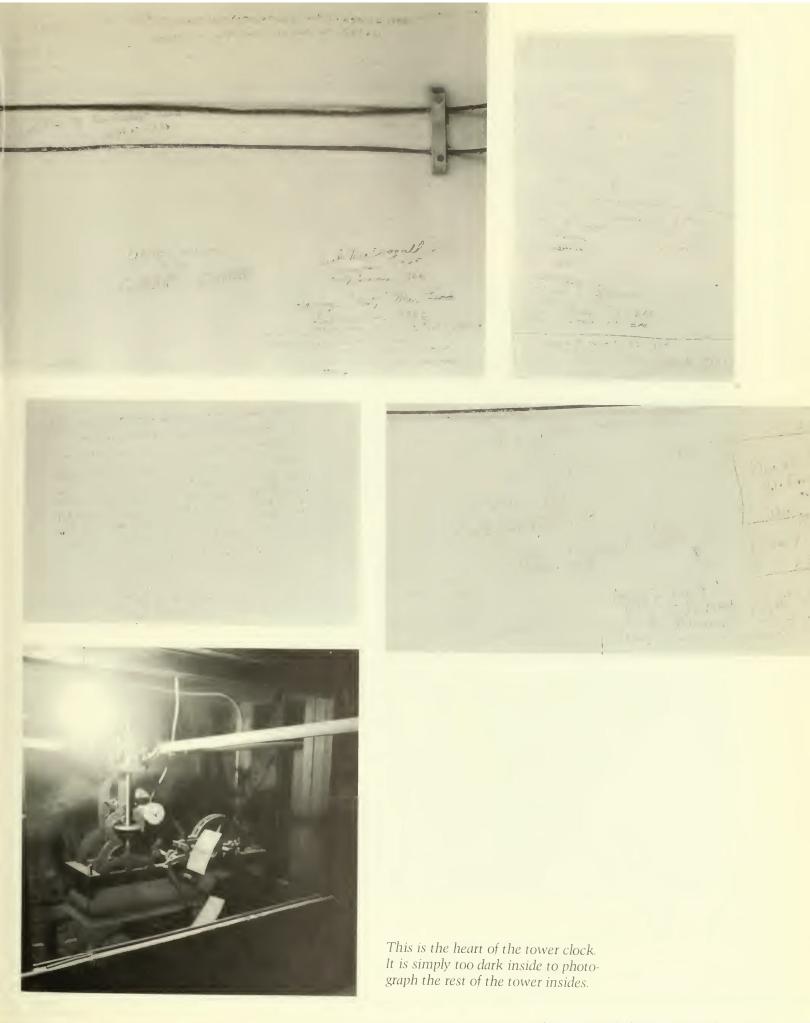
A November 8, 1957, overflight of the second soviet satellite, "Muttnik." The flag's being at half-mast for 30 days following the assassination of John Kennedy.

Another half-mast period, this for astronauts Grissom, White, and Chafee, who died in the Apollo fire in 1967. Numerous trips by students with guests (mostly female).

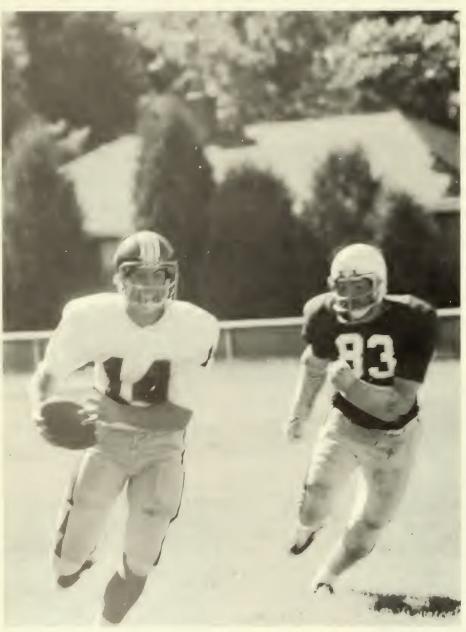
A visit by at least one current member of the Board of Trustees, Robert C. Stempel, '55.

And at least one "overnight," this by Joe Y. (?) and Gordon F. in 1960 (?).

2 / The WPI Journal / Winter 1980







Fall Sports

by Mark Mandel WPI Sports Information Director

The 1979 Fall sports season reflected the state of the art at WPI. Although still in a state of transition, WPI has been building an athletic reputation that is worthy of its academic standards. The achievements of this fall's teams have only enhanced that reputation.

By defeating Hamilton 21-6 in the last game of the season, WPI finished with its best football record (3-5) since 1972. And although a 3-5 year is not ordinarily something to rave about, a closer inspection of the season reveals a great promise for the years to come.

It was both a frustrating and a satisfying year for head coach Bob Weiss. The season's opening game roster included 51 freshmen out of a total of 84 players. It was clear from the start that WPI's chances were contingent on how fast the youthful team would mature. The aging process may have been excruciatingly slow for Weiss, as the team lost four straight, frustrating games that could easily have gone the other way with a break or two. Finally, late in the season, the Engineers began to show that they were learning what they needed. WPI won its last two games.

Especially encouraging was the play of quarterback Bob Montagna, who came on strong after a slow start and proved himself an effective runner, passer, and team leader. His performance in the season-ending victories earned him two ECAC Honor Roll selections. Only a sophomore, Montagna will be back next year, along with a fine supporting cast of players.



From the defense, which played well all season long, thirteen linemen, five linebackers, and all but one starter in the secondary are expected to return in 1980. The offensive team will have fourteen linemen returning, plus every backfield member except the talented Mike "Smokey" Robinson

"We are definitely on target," said Weiss after the season. "To think that we won more games than we have since 1972, and considering that we came close in four others, makes me believe that our returning team can set its goals higher in 1980. There's no question that we'll miss our senior leadership," he added. "Tri-captains Pete Kelleher (honorable mention All-New England), Jeff Rosen (Jewish All-American), and Bob Yule did an outstanding job for us this year. But I feel that they've laid a strong foundation for the younger players to build on."

The highlight of the fall season was the 9-3-1 performance by the Engineer soccer team. Although it was not exactly a rags-to-riches story, the team played far beyond the expectations of everyone, including head coach Alan King. The 1979 season was expected to be a "rebuilding" year for WPI, which had a 4-7-1 record in 1978. Instead, it became the year that the Engineers earned the highest ranking any WPI team ever achieved, an honorable mention in the Top Ten Division III teams nationwide.

It was also the year that the team would be rated as high as ninth in the New England soccer poll, and go on to earn a second seed in the NCAA Division III New England Tournament. WPI lost in the first round of that tourney, 2-1 in overtime to Brandeis, but the team was still selected as the Number I Division III team in New England by the New England Intercollegiate Soccer League. At the same time, Alan King was selected as the coach of the year.

"The selection as New England's best Division III team is justified," says King. "The team's performance throughout the year was outstanding. I'm thankful for the coach of the year award, but a coach is only as good as his players. You can't produce a winning team without the complete cooperation of the individuals."

First and foremost among those individuals was All-New England Leo Kaabi, who led the team both on and off the field. Kaabi scored 17 goals and had six assists to put him in third place among WPI's all-time single season scorers.

The 1979 cross-country season started out on an ominous note in the annual city meet with Assumption, Clark, and Worcester State. A sick captain John Turpin collapsed with just 400 yards to go after he had been leading the race. Turpin did not finish, and WPI settled for second place (by one point) to Assumption.

Things went downhill from there, as Turpin took longer than expected to return to top form. The Engineers chalked up seven losses in a row. Finally, though, with Turpin leading the pack, the harriers finished strong by beating their last seven opponents, including a season-ending victory over Bates, Tufts, MIT, and Bowdoin in a quad-meet. Head coach John Brandon's men finished the season with an 8-8 record.

The women's tennis team,

coached by Marcia Kennedy, was very successful in its first outing as a varsity team, chalking up a 7-2 season. The two losses came at the hands of Assumption and Brandeis, both of which had representatives in the finals of the AIAW (Association for Intercollegiate Athletics for Women) championships.

On the season, Lisa Longwell, a freshman, was a standout, posting a 6-3 reecord as a first singles competitor. Deborah Biederman, another freshman, was 7-2 as the second singles player.

The women's volleyball team,

also in its first year as a varsity sport, did not fare as well. Seniors Elaine O'Neill, Cathy McDermott, and Colleen O'Connor played well, but the Engineers could only post a 6-11 record.

WPI's new head man at ASME by Ruth Trask



HONOLULU. TOKYO. MANILA. Jakarta. Peking. Leisurely tourist stops on a Far Eastern pleasure tour? Not for Prof. Donald N. Zwiep, head of the WPI's Mechanical Engineering Department and current president of the American Society of Mechanical Engineers. For Don Zwiep, those exotic locales, plus a wide variety of U.S. cities, coast to coast, have been a part of the working itinerary and rigorous travel schedule he's followed since being installed as ASME president last June. For the past six months, he has represented the ASME in this country and abroad and served as a U.S. delegate and negotiator for a number of important international engineering agreements.

"I am finding my term in office most rewarding," Zwiep says. "In the Far East, for example, we were able to sign several agreements of cooperation that should prove beneficial to the Society and the profession in the future. The trip was especially enjoyable because my wife, Marcia, was able to go with me."

On Friday, November 2, Don and Marcia Zwiep and Dr. and Mrs. Rogers Finch (executive director of ASME) flew to Kauai, Hawaii, to attend the annual conference of the American Consulting Engineers Council, at which they were special invited guests. Zwiep addressed the group, emphasizing a reaffirmation of ASME's position of cooperation with ACEC and similar organizations. After an afternoon of sightseeing, the travelers attended the ACEC banquet at which they were entertained by a demonstration of the historical development of the island through fashion and the hula.

The next day, Don met with the Hawaii section of ASME in Honolulu, where he presented the 27-year-old group with the Centennial Charter and honored the immediate past chairman of the section. "Being involved with this meeting gave me a strong feeling of achievement. The ASME is doing some of its operations in just the right way."



On Monday, November 5, Zwiep and his party left for Tokyo. They especially wanted to meet with the ASME members in the Tokyo area to get their ideas on how the Society could better serve its members in foreign locations. One of the group's objectives was to negotiate an agreement of cooperation with the Japanese Society of Mechanical Engineers (JSME). This type of agreement provides for exchange of publications and other information, professional assistance to traveling engineers, and other types of cooperation that will benefit both the organizations involved and their members.

Don recalls his arrival in Tokyo: "I suppose each visitor to a foreign country has a series of special impressions thrust on him. My case was no different. Imagine my surprise when I stepped from the loading dock of the plane to see my name flashing on the bulletin board. I reported at the information desk and received a message that the assistant secretary of ISME had arranged our transportation to Tokyo and would meet us at the baggage area. We rode to Tokyo in one of the finest buses I've ever been on General Motors, beware!) in terms of seating comfort, vision, quietness, and cleanliness. Needless to say, I was favorably impressed. And while Tokyo seems overwhelmed with traffic, everyone seems patient, and the movement of the cars takes place in orderly fashion. But air pollution seems serious."

After eight business hours with the ISME, six hours of ceremonial activities concerning the signing of the agreement of cooperation took place at Happo-En, a Japanese garden restaurant complete with music, chopsticks, floor cushions, and traditional foods.

The next destination was Manila. Although the ASME representatives had been treated cordially wherever they had traveled, they were still not prepared for the welcome awaiting them in the Philippines. They were met at the airport by 25 cheering members of the Philippine Society of Mechanical Engineers (PSME), a large banner, flower leis and corsages, and a battery of TV cameras.

"At the Manila Hotel, a PSME tailor measured me for a 'barong tagalong' and Marcia for a long, embroidered gown," Don recalls. "He was to make the clothes overnight and deliver them at 5 p.m. the next day, because we were to wear them to a banquet that next evening. Not only did the outfits arrive on time — they fit!"

The following day involved a variety of activities, including a meeting with the commissioner of licensing for all professional, technical, and skills groups, ranging from barbers to doctors to engineers. They went sightseeing, then met with PSME to finalize the agreements. At the banquet, the agreements were signed, the speeches were appropriately flowery, and the spirit of cooperation was gratifying. During the festivities, the PSME presented Don with an elegant bronze and red velvet plaque.

After the Philippines, it was off to Singapore, the most comfortable flight of the entire trip (courtesy of Singapore Airlines). Singapore was a catch-your-breath stop, and the travelers stayed at the world-famous Raffles Hotel, a bit faded but still having a touch of its elegant, historic past. Then it was on to Jakarta, Indonesia, for the World Federation of Engineering Organizations (WFEO) Conference, with Zwiep serving as one of the ten U.S. delegates. He attended the WFEO seminar on engineering needs and one on technology transfer. On November 15, Indonesia's Vice President Malik officially opened the conference, whose theme was "Food, Transportation, and Energy" in relation to the less developed countries. During the proceedings, another agreement of cooperation was signed. The conference bore other fruit, too. Says Don, "During our meetings, I found enough IQP topics for WPI students to last the next ten vears!"

While in Jakarta, the Zwieps and the Finches stayed at the year-old Mandarin Hotel, which was "absolutely splendid" even though located in a hot, poor city. The old rickety buses and bicycle carts were in sharp contrast to those they had seen in Japan.

The Indonesian conference finished, the group returned to Japan, where the 100th anniversary celebration of the Japanesc Society of Engineers was in progress. "This was an important occasion, and a particularly relevant one," says Zwiep, because the ASME starts its own 100th anniversary celebration in 1980."

The Crown Prince and Princess of Japan were present during the anniversary activities. The royal pair greeted the Americans in English and capped their welcome with handshakes instead of the traditional bows with which they had greeted the Japanese guests present.

Once the formal festivities were completed in Japan, the travelers took to the air again (!). This time the destination was Peking. In China, the ASME representatives were to meet with the top officials of the Chinese Mechanical Engineering Society.

"We were rather worried, because our plane arrived in China ahead of schedule," Zwiep recalls. "We just didn't know what to expect." Early or not, the Chinese rolled out the red carpet for their American visitors. They provided an interesting itinerary and transportation to the Peking Hotel. Obviously their arrival had been preceded by a "letter of introduction" from a Chinese government agency. "The night before Thanksgiving, we were treated to dinner with five Chinese engineers and directors at the renowned Peking Duck Restaurant," Don reports. "It was really mcmorable. We were told that there are actually two Peking Duck restaurants in the city. One, located near a hospital, is called the 'sick duck' by the locals. They didn't take us to that one," Don says with a grin. The meal began with a covered cup of tea, then many courses of food delivered to the center of the table for all to help themselves with chopsticks. The meal ended with soup and fruit.



Accorded VIP treatment as first-time visitors to the Chinese Mechanical Engineering Society, the travelers were allowed to visit the fabled palace in Peking's Forbidden City without the customary red tape. They also toured the Machine Tool Research Institute, about 75 miles outside of Peking, a trip that required a special visa. Says Don, "there were no photo restrictions of any kind, and we saw a lot of the countryside. Inside the Institute, everything was quite up-to-date, except for the microprocessors and computers. The guides explained that the repressive 'Gang of Four,' since tumbled from power in China, was responsible for the shortcoming."

Meanwhile, Marcia and Mrs. Finch were invited to go on a kindergarten tour. Children from about two to seven attended the school, which was part of the Machine Tool Research Institute. The American visitors were met with a sign in English and Chinese. Their interpreter was a female mechanical engineer who had been educated in Russia about 30 years ago. A five-year-old boy sang "Do-Re-Mi" from "The Sound of Music." (Editor's note: This particular song seems to be the song which schoolchildren sing to American visitors in China. I wonder why!) Several children danced and sang, and little girls offered the guests candy. "They were utterly charming," comments Marcia, herself a former school teacher, "and obviously had rchearsed many hours for their show to us."

Both Marcia and Mrs. Finch were impressed with the teacher-student ratio at the kindergarten: 23 teachers for 100 students! The school rooms were divided up according to the age of the pupils, with each age group having its own room. "Every room had a picture of Mao on the wall, a table, chairs, a pump organ, cribs, and blankets," reports Marcia. "The children ate, played, and napped in their own areas. Everyone wore heavy, quilted jackets to ward off the cold inside the rooms."

"We were something of a novelty," Marcia confides.

"We were told that we were the first outsiders ever to visit the school. The children were cautiously friendly and extremely well behaved.

At Tsing Hua University, a technically oriented school like WPI or MIT, the visitors toured the mechanical engineering department. Again the computer deficiencies were evident, but the holograph and laser measurement techniques were not only good, they matched the best one could find anywhere. "There were several current engineering magazines about," says Don. "One, the ASEE Journal, had Dr. Finch's picture on the cover. And the staff had heard all about Norton Company." The university library had a noticcable lack of technological books, because there had been no purchases made during the Cultural Revolution from 1966 to 1976. The Chinese engineers are familiar with Marks' Mechanical Engineering Handbook and similar classics of the field. The Chinese professor who served as their guide, Prof. Zhang Guanghua, met them again at the ASME winter meeting two weeks later.



The VIP treatment continued. The guests ate 12-course lunches, saw a colorful, masked Chinese opera, and visited what is still surely one of the wonders of the world, the Great Wall of China. A Chinese government vacht was at their disposal for a trip around the Peking reservoir. They had an interpreter at all times.

"It is very cold in Peking in November," Don says. "The hotel was heated, but our meeting rooms were not." We had to keep on our overcoats, just like the people do in their homes. But I really enjoyed their custom of continuously serving hot tea at all of our meetings. The airport and the planes are unheated, too, until they cross the Chinese mainland."

Zwiep describes the city of Peking itself as much less colorful than its American counterparts, because there are no flashy neon lights or colorful dress. The people wear dull looking, regimental-type clothes of blue, green, or gray material. A child's jacket or a scarf provides an occasional splash of color. There are lots of bikes and semitrailer passenger buses, very efficient people carriers.

Oddly, for a nation seemingly committed to mass transit, China does pride itself on its manufacture of a few black limousines. "They look like a cross between an old Buick Roadmaster and a current Cadillac Fleetwood," says Don. Riding in or driving an automobile is a privilege reserved for the few. "If anyone is fortunate to own a small, personal car, he shines it at each and every opportunity."

There is virtually no unemployment, according to Zwiep. "China is fifty to one hundred years behind the rest of the world in agriculture production, although changes for the better, including some modern tractors, were in evidence. However, much of the work still has to be done by hand. That keeps everyone employed."

Before leaving Peking for Japan and the flight back home, Don helped work out arrangements for a representative from the Chinese Mechanical Engineering Society to attend the ASME Emerging Technologies Conference next August. The fundamentals of an agreement of cooperation were developed. The Chinese were to consider further, and they stated they were confident the agreement would be signed in a year or two.

In his meetings with top engineering officials of China, Don feels they want sophisticated technology such as computers, seismic gear for oil exploration, and satellites. "But they are geared to do their own development and production of this hardware, even if it takes a longer time. They want a fully self-sufficient country."



FOR THE MOST PART, the travelers' flying time had been pleasant if somewhat tiring. They encountered no particular problems until their return flight from Tokyo to New York. "Ten minutes from JFK we ran into a freak storm," Don recalls. "After a fourteen-hour flight from Japan, we had to circle Kennedy Airport before being sent on to Dulles (in Washington, D.C.) because we were getting low on fuel. When we finally landed, we'd spent about 32 hours time in the air and at airports."

Don Zwiep, however, was predictably unperturbed by his 32-hour flight experience. During World War II, he served in the U.S. Army Air Force as a pilot and crew commander of a B-24 bomber. He completed 59 combat missions and "Hump" flights while serving with the 492d Bomb Squad, 7th Bomb Group, in the China-Burma-India Theatre. A former member of the Air Force Reserve, Don retired with the rank of lieutenant colonel after 22 years of reserve duty. A little matter like extra air time should hardly faze him.

Zwiep reverts to Air Force vernacular when describing his duties as president of the American Society of Mechanical Engineers. "I stick to a strict flight plan," he declares. "Personally, I find there is a similarity between serving as a bomber commander and serving as president of ASME. In each case I'm involved with policy, and, following that, I try to carry out the designated plan of operations to the best of my ability."

Historically, ASME has been run by a consensus derived directly from the membership. Zwiep feels that he is a part of that consensus, but that as the temporary (oneyear president of ASME, his primary function is to implement and articulate the policies of the Society and to preserve its technical eminence. The directions he moves in are those that have generally been determined by the majority of the membership.

He does have a pet project that he likes to promote within ASME, though. "I feel strongly that one of the highest honors that an engineer can attain is recognition by his peers," comments Zwiep, who served as chairman of ASME's Honors and Awards Committee for three years. "For this purpose, ASME over the years has established a number of honors and awards — many underwritten by corporate or foundation sponsors — usually named after a prominent ASME member. The trouble is, during the last ten years the Society's membership has almost doubled. but the number of awards has not. Therefore, it seems to me that if we are going to provide more incentive to achieve within our membership, one of the priorities we should concentrate on is finding new sources of sponsorship to help us expand the system of honors and awards. As I continue in office, I shall focus many of my efforts in this area."

Expansion of the ASME achievement awards program has been only one of a long list of concerns Zwiep has dealt with during his presidency. "Until recently, Alaska had no regular ASME section," he says. "Now it has both a regular section and a student section." In September, Don was in Anchorage to present the ASME charter to the Alaska Section. All 50 states now have regular and student sections.

Currently, ASME has 95,000 members and a total of 200 sections. "In 1980, as we celebrate our 100th anniversary, a new Centennial Section will become part of the Society," Zwiep reports. "In the early 1980s, we are projecting an overall expanded membership of some 100,000."

Although President Zwiep enjoys helping build up membership in the ASME, he also deals with the South American and Central American engineering societies (UPADI) on a good-will basis. "We have met with their representatives to discuss the transfer of technology to less technically developed nations," he says. "We do not, however, plan to move the ASME into their territory." Other delicate negotiations are in progress between the ASME and the Canadian Mechanical Engineering Society.

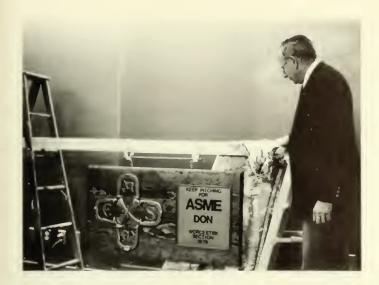
Don Zwiep, although besieged by a hectic time table, would be the first to admit that his schedule contains few dull moments. For example, one week he may be out West visiting the regular and student chapters of ASME ("a great learning ground for a president-elect"), and the next week he could be attending the dedication of a national historic mechanical engineering landmark, such as the Drake Oil Well in Titusville, Pa. At WPI he turns up in his dual role as head of the ME department and president of ASME to speak on "Perspectives in Mechanical Engineering" during the Carl Gunnard Johnson Memorial Colloquium series.

Then Zwiep may be traveling to a legislative forum in Washington, D.C., where he meets with Senator Byrd or the head of the National Science Foundation; to an ASME meeting in Salt Lake City; to a landmark ceremony for the EERBI reactor in Idaho; to an Applied Mechanics Conference in Niagara Falls, N.Y.; and on to another ASME meeting in Atlanta. After meeting with the American Society for Engineering Education in Baton Rouge, he attends a meeting of the Founders' Society of Presidents, followed by a trek to Des Moines for an Interim (regional) Conference of ASME. At last, he heads to his office in the ASME head-quarters in New York City to do battle with the Society's \$18 million budget.

In September, he confers with the Engineers' Joint Council, the Centennial Steering Committee, the New York Section of ASME, and the Finance Committee. On September 29th, he receives a "roasting" and a reception, including a two-inch thick pine plaque studded with four lucky horseshoes from the Worcester section of ASME. The plaque says, "Keep Pitching, Don." (Zwiep is an old hand at winning the WPI ASME student section horseshoe pitching contests.)

His October diary notes a meeting with the ASME Council to recommend and discuss changes for Society structure in its second century; a bout with laryngitis in Atlanta; and a Zwiep talk about energy on TV in Charlotte, N.C. In Los Angeles, he is slated to give a paper at the Engineers Council for Professional Development dealing with the AAES, an engineers' "umbrella" society. Other stops are in Hot Springs, Virginia; Buffalo, where he

presents a paper, and back to New York City, where he presides at a banquet.



By now it is November, and Zwiep is off to headquarters for two days of meetings prior to his Far East trip. "For me, the Executive Committee meeting was of strategic importance," Don confides. "That group, on behalf of the ASME Council, approved a model document which later enabled Dr. Rogers Finch and me to negotiate agreements of cooperation with the mechanical engineering societies in the Philippines, Japan, and Indonesia." He looks out his window, thoughtfully. "Less than two years ago, I never imagined I'd be in a position to handle such an undertaking. Being president of ASME has some real rewards."

HAVING A DEPARTMENT HEAD serve as president of a national engineering society has also been rewarding for WPI. There is both high prestige and high visibility in the position, and it carries with it an intrinsic amount of good will that cannot help but rub off on WPI. In recognition of Zwiep's notable achievements and contributions, the WPI Alumni Association honored Don and his wife at a reception at the Hotel Statler in New York City during the ASME winter annual meeting on December 3. Among those on hand for the festivities were WPI President Edmund Cranch, Vice President Thomas Denney, and Association Secretary-Treasurer Stephen J. Hebert, '66. "The reception was most enjoyable," says Zwiep. "We saw a number of recent graduates whom we hadn't seen in some time, and we also met some new friends."

Although he was grateful at the response to his reception, Zwiep emphasizes that he is especially grateful to WPI for allowing him to adjust his schedule so that he could accept the post of president of ASME. "I also want to thank the members of the ME department, who generously adjusted their own schedules so that I could undertake my new duties," he says. "They have done a splendid job in my absence."

Did Zwiep campaign hard to become ASME president? "No," he replies with a smile. "I didn't campaign at all. When I was asked in April of 1978 if I would allow my name to be sent to the national nominating committee, I knew that I was probably in the running, along with six to ten other viable candidates. I was then asked to send a resume to the nominating committee, as well as a statement that I would serve if elected. My selection as president-nominee was a complete surprise, for the nominating committee is always sworn to total secrecy. I didn't learn that I had been selected until the final announcement was made at the summer annual meeting in Minneapolis in the middle of June, 1978."

The American Society of Mechanical Engineers, it would appear, subscribes to the old saying, "When there's an important job to be done, give it to the busiest person you know." Zwiep's whole life has been busy, filled with accomplishment and achievement.

DONALD N. ZWIEP began teaching mechanical engineering in 1951 at Colorado State University. Prior to joining the WPI staff, Zwiep worked full time as a landing gear design engineer on the B-50 and MX-839 aircraft for Boeing in Seattle. He served with the U.S. Army Corps of Engineers in Cheyenne, Wyoming, in the design and construction of the local municipal airport.

Zwiep received his MSME from Iowa State University. In 1957 he was named professor and head of the ME department at WPI. By 1965, his professional accomplishments had grown so much that WPI awarded him an honorary doctor of engineering degree. For several years, in addition, he was co-head or acting head of the management engineering department.

He became a member or chairman of numerous academic and administrative committees, including the Institutional Committee on Evaluation of Engineering Education (1953) and the WPI Presidential Selection Committee in 1968. In October 1978 he was in charge of inaugural proceedings for President Cranch.

Professor Zwiep was the driving force behind the acquisition of WPI's nuclear reactor, and he organized its staffing and educational use. Presently, he is involved with the administration of the nuclear reactor facility, and he has served as on the Alden Research Laboratory Advisory Board.

In the classroom, he has taught in almost every area of mechanical engineering, but with principal emphasis on kinematics and machine design, along with metallurgy and thermodynamics. "Even with my responsibilities at ASME, I continue to teach in the senior seminar course," he declares.

Still active in consulting work, Zwiep is also chairman of the Board of Trustees of the James F. Lincoln Arc Welding Foundation of Cleveland, and serves as director of their award programs. He is particularly pleased with the Foundation's Engineering Design Competition. "Hardly a year goes by," he reports proudly, "that a WPI student doesn't win an award."

In his spare time, Zwiep reviews books, appears as an expert court witness, serves as a member of National Science Foundation review panels, and as a state science fair judge. He has directed three NSF-URF research projects and done outside consulting.

One of his articles on engineering education has appeared in a publication in Puerto Rico, while some 28 short articles on popular mechanical engineering topics were published in the *Grolier Encyclopedia* and the *Encyclopedia Americana*. He has been published in the *Massachusetts Society of Professional Engineering Journal* and in the publication of the Providence Engineering Society. His papers have been presented at the ASEE annual conference and at a meeting of the Eastern College Placement Officers.

Professor Zwiep has received a wide variety of professional society, educational, and Air Force Reserve citations and awards. Throughout the country, on many occasions, he has been an invited speaker on engineering education topics. A registered professional engineer in Colorado and Massachusetts, he also belongs to Pi Tau Sigma, Sigma Tau (honorary), Omicron Delta Kappa, Sigma Xi, Tau Beta Pi, and Skull.

He is listed in *Who's Who in America, Who's Who in Education, American Men of Science, Engineers of Distinction,* and *Outstanding Educators of America.* Within the local community, he has served as secretary and president of Torch International and is a member of the Worcester Economic Club and the Worcester Engineering Society.

HE TALKS ABOUT his stint with ASME with the enthusiasm and confidence of one who has been an active member and officer since his student days. First, he is a Fellow of the Society, the membership grade of high distinction given only to those with significant engineering achievements. Second, he has served the Society in many capacities, including that of national vice president of the Policy Board, Education, from 1972 to 1974, and concurrently as a member of the Council, the Society's governing body. In 1973 he also served on the Council's Executive Committee. A leader in the organizational structure and development of ASME, he was chairman of the working party on the Society's educational goal, was a member of the long-range study group, and, since 1975, has been a member of the Committee on Planning and Organization. He is past chairman of the National Mechanical Engineering Department Heads Committee, and he has been chairman of the General Awards Committee.



Although recognition of members' accomplishments (an important personal concern of Zwiep's), is a vital part of ASME, it is far from the main thrust of the organization, as Zwiep is quick to point out. "The ASME, while still adhering to its original objective of the dissemination of technical information to industry for the public welfare, is now a multi-faceted organization," he explains. "It is concerned not only with member interests, but with professional and public interests; its codes and standards operation is a principal example."

He feels that ASME volunteers, who establish codes and world standards for mechanical devices, save the U.S. government millions of dollars that otherwise would have to be paid to government consultants. "In this way, ASME

works directly in the public interest."

ASME, now moving somewhat away from a strictly technical orientation, lobbies in Washington for laws to benefit the nation. For instance, an ASME Congressional Fellow is available to provide "white papers" covering such items as energy alternatives to various congressional committees working on specific legislation. (WPI Professor John Mayer was recently an ASME Congressional Fellow, and John Caola, '80, a student intern.) This type of assistance helps Congress make better-informed decisions on matters dealing with technology.

As president of the ASME, Zwiep encourages growth in membership by working closely with student organizations and industrial employers. At the opposite end of the scale, he also works to use the expertise and experience of the older members, many of whom have retired from active industrial employment. It is Zwiep's responsibility to see that the policies established by the all-volunteer membership are carried out by the paid 300-member professional staff at ASME headquarters in the United Engineering Center in New York. He must, of course, attend meetings of the ASME Council, its Executive Committee, the Committee on Planning and Organization, and various regional and technical committees, as well as the summer and winter annual meetings.

Prior to taking office last June, Zwiep visited nine of the eleven regions of ASME in the U.S. to review proposals for the summer annual meeting agenda. "Any member may propose any agenda item," he says. "It will be heard, receive a peer review and then additional reviews in the various sectional and regional meetings, and then a final disposition about inclusion in the national conference agenda." Some of the areas he visits on weekends in regard to these matters range from Boston to San Diego, Salt Lake City to Houston. Says Zwiep of his travels, "I serve as a spokesman for ASME, with or without portfolio."

His wife Marcia accompanies Don on many of his trips, for ASME encourages presidential wives to travel with their husbands. Some of the regions and sections the Zwieps visit have auxiliaries which annually give \$70,000 for scholarships and loans to mechanical engineering students. "I am personally very grateful to the Society for these travel arrangements," Don continues, "as well as to WPI for allowing me to set up my schedule so that I can serve as president of ASME. The Society plans to further recognize those industries and colleges that allow staff members time off to hold national posts in the organization."

NOW THAT HE HAS BEEN president for half his term, how has Don Zwiep been conducting the affairs of the society? "I'm not a virtuoso," he answers, "but I do know who is performing well and who is not. My role is more like that of a conductor trying to keep things harmoniously productive."

Under Don's guidance, the ASME has started 1980 off on a harmonious note. It entered its first-ever float in the annual Tournament of Roses Parade. "We entered the \$33,000 float to mark the centennial celebration of the Society. The West Coast section took care of the details, conducted the fund drive, and did a remarkable job!"

A major concern during the next few months will be the designing of a new governance system for the Society. "A lot of hard work is involved," he admits. "We plan to switch from a governing council plan to a board of governors system, and we must have some good answers for the members who ask, 'why change?"

Until his year in office is over in June, Zwiep expects to be doing many "one-night stands" nationwide in conjunction with the ASME centennial celebration. He will make presidential speeches and sanction centennial charters for new student and regular sections of ASME. It is a foregone conclusion that he will continue to conduct the affairs of the Society with the dignity and dedication that has always characterized his leadership roles, whether they be with WPI or with ASME.

Zwiep has brought to his presidential post a set of high principles and a deep sense of responsibility. He believes what Herbert Hoover once said about his profession:

"Engineering. It is a great profession.

There is the fascination of watching a figment of the imagination emerge through the aid of science to a plan on paper.

Then it brings jobs and homes to men, and adds to the comforts of life. That is the engineer's high privilege

"He cannot, like the politician, screen his shortcomings by blaming his opponents and hope the people will forget. The engineer simply cannot deny he did it. If his works do not work, he is damned

"But the engineer, himself, looks back at the unending stream of goodness which flows from his successes with satisfaction that few professions may know. And the verdict of his fellow professionals is all the accolade he wants."

The ASME has a special code it follows in naming its national officers: "Let the office seek the man, not the man the office." With the election of Don Zwiep as president of ASME, the merit of that code is plain for all to see.

Justice delayed

by Allan Sloan

If, as John Milton wrote, "they also serve who only stand and wait," HOWARD FREEMAN (WPI '40) and his company deserve a medal. They've been doing a lot of waiting since 1958, in fact. That's when the Navy began buying Freeman-designed ball valves that allowed its fleet of nuclear submarines to take to sea. Rather than giving Freeman a eitation—or, more to the point, giving his company some *money*—the Navy allowed its submarine suppliers to jump Freeman's patent. Hardly something to encourage eapitalism or patriotism.

After asking the Navy — politely to pay him, and being turned down in an administrative proceeding, Freeman and his company, Jamesbury Corp. of Worcester, Mass., sucd the government in the U.S. Court of Claims in July 1963. Jamesbury has won every round. Yet the company has not seen a penny. If it's lucky, it will get its money around 1981. Fortunately for Freeman, Jamesbury, a well-run valve producer, has made enough money — \$5.3 million (\$1.57 a share) in its 1979 fiscal year — to afford to slug it out with the feds. Legal bills have run about \$500,000.

Jamesbury's seemingly endless struggle to get paid is no small thing. There's the money, of course; the company would get about \$16 million (\$4.70 a share) pretax if its claim were granted in full today. But more important is what it shows about the legal system and about what's involved in suing the government for stealing a patent. Remember this: The Jamesbury case is relatively normal. The feds are not stalling. The suit Autogiro Co. of America brought against the government in 1951 for infringement of patents on its Autogiro (a precursor of the helicopter) lasted a record 27 years, and nobody

was stalling there either. Except for a four-year delay caused by extraneous factors, everyone has been trying to expedite Jamesbury's suit, now into its second generation of lawyers and judges. Imagine how long it would take if everyone were stalling.

Our talc begins in 1958, when Freeman, now 61, was a struggling inventor trying to make a living selling the world a better ball valve of his own design. It was just four years after he had left a good job with a Worcester company, taken \$60,000 of loeally raised seed money, and set up a small lab on top of a printshop. He was following his dream: a better ball valve. Ball valves have several advantages over globe valves, the kind found on most standard faucets. A ball valve operates by rotating a ball mechanism through a quarter turn, and will allow liquids or gases to flow in either direction. A globe valve generally takes several full turns to close, and is prone to squeaks, leaks, and faulty washers.

Enter the Navy, which couldn't find a globe valve to meet the requirements of its nuclear subs. Freeman, who'd invented the fog nozzle the Navy used on its fire extinguishers during World War II, had valve expertise and security clearances. He whipped up the necessary valves, lectured on the subject, and was properly thanked by a grateful Navy — until, of eourse, it came time to pay him.

That produced the 1963 lawsuit. In 1967 the judge ruled that Jamesbury's patent was valid and the Navy had infringed it. The government, naturally, appealed. Then came a bombshell: a Massaehusetts lawsuit by the company that had acquired Freeman's previous employer claiming that Freeman had invented the better ball valve while he was still an employee. It took four years to dispose of that; then the ease went back to Washington for a second trial. Jamcsbury won, the government appealed. In 1975 the Court of Claims finally ruled that the Jamesbury patent was valid and had been infringed.

Then it was time for an accounting trial, to determine how much the government owed Jamesbury. But there weren't any records of Navy

purchases of ball valves — after all, the Navy was buying submarines, not valves. Three years of tedious labor dctermined that, as best anyone could guess, the Navy had bought 100,412 infringing valves for \$87.3 million. Federal attorneys agreed to those figures and said Jamesbury deserved \$1.66 million plus interest. Jamesbury claimed \$8.73 million, plus interest. The trial was held in July 1978, final briefs were submitted last Junc, and there's hope a decision will come down from Trial Judge Joseph Colaianni sometime this year. After Colaianni rules, someone will doubtless appeal to the full patent court, and then probably to the U.S. Supreme Court. If the Supreme Court refuses to take the case, Jamesbury might get paid in late 1980 or early 1981. If the Supreme Court hears the case or a new trial is ordered, who knows? None of this has attracted wide attention. Says Robert Miller, the Washington patent attorney who has handled Jamesbury's suit for the last five years, "Perry Mason-type situations don't happen here."

To find out what the delay has donc to Jamesbury, Forbes dropped in recently to see Freeman in his Worcester headquarters. In spite of being shortchanged by the Navy, Jamesbury has done rather well. Its sales last year were \$77.7 million and its earnings \$5.3 million. Over a typical Jamesbury lunch — a salad from the employee cafeteria, scrved on paper plates with sugar wafers for dessert — Freeman indulged in a little proud reminiscence. "We were a twobit little company in 1957," he said, "but we held the key to the success of the Navy's nuclear fleet."

Getting money after more than 20 years is better than not getting it at all. But Jamesbury isn't even getting a good interest return — the government began accruing interest at 4.75 percent in 1958 and is now paying just 8 percent on principal, with no compounding. Freeman makes a point of not complaining about how long he's had to wait for his money. Still, the Jamesbury saga amplifies the old adage: Justice delayed, especially at 8 percent with no compounding, is certainly justice denied.

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In 15 years, Alden Research Laboratory, one of the most prominent hydraulic study centers in the United States, will celebrate its 100th birthday.

The centennial has generated student interest in collecting records and artifacts of ARL's history and putting them together into a commemorative scrapbook. So far, it has been difficult to obtain much information, especially about the earlier years of ARL.

If any alumni can help out on this project, it will be

greatly appreciated. If you have some interesting knowledge of events from ARL's earlier days, or perhaps some documents or records, would you please share them with the students?

Please write to Mark W. Scott, in care of The WPI Journal. All documents and photographs can be copied and returned if you wish them back. Thanks very much.

— Mark W. Scott, Christopher A. Hare, and John Gleftherakis



Secretary: Ellwood N Hennessy The Phoenix Companies 680 Mechanics Bank Tower Worcester, MA 01608

The invitation from Harry W. Tenney, Jr. '56 "Leadership Weekend Chairman" sent to me and 55 other class secretaries was accepted by this Class Secretary, "Bud" Hennessy, 1914. The workshop conducted by Steve Hebert and Russ Kay was most interesting to me, but when I looked around for the other 55 secretaries, to discover only about 15 or 20 present, I was greatly disappointed. There is something wrong with the situation as it concerns communication between alumni and their secretaries.

What surprised me most was that the College, under the name of the WPI Alumni Association went to the trouble and cost of printing up the blue Class Secretaries Handbook. I was truly pleased and amazed that someone has discovered that the college actually does want to hear from the secretaries of the older classes beyond the 50 year group. Yes, I believe that those old living members may still be of some use to WPI

Everyone in my class knows **Horace Cole**. What they may not know is that Horace lives throughout the year in so many different places. Part of the time he lives in his home in Sharon, Pennsylvania. Another part in the summer time in his home at Wellfleet on Cape Cod, and in the winter time he stays at his club in Florida. Since your Secretary has a summer home in Falmouth on Buzzards Bay, the two of us try to get together for a good old-fashioned talk.

This year my wife, Dorothy, and I met Horace and his son, Dr. Richard Cole, for lunch at the popular Yarmouthport Inn on Route 6A. The reservation was for 1:30 p.m. As we went in the door, the hostess said, "Sorry you are three minutes late for your reservation so I couldn't hold your table!" However, in about five minutes she gave us another table. What a nice time

we all had. Good food, interesting conversations and many interesting and delightful reminiscences.

I am sure that everyone who has been active in the Class of 1914 remembers the lovely home in Spencer, where our Class President, Mike Dufault, and his wife, Chris, entertained our group years ago. For a long period of years I have had business in Ware which kept me there twice a year for part of a day. On my way back to my office in Worcester, I would manage to arrive at Mike's home, just about in time for "Happy Hour." What enjoyable times we had in our talks with Mike and Chris and a sister of Chris, who was often there. Mike even kept my favorite brand of liquid in his kitchen for my entertainment.

But now Mike and Chris, because of poor health, have sold their home, and have gone to live with their widowed daughter in Wellesley. So I either correspond with him or spend \$10.00 talking with him on the phone. To talk with Mike, however, is worth ten or twenty dollars anyhow.

Back in 1960, Mike and Chris, and my wife and I happened to be in Hawaii together, he in an apartment for the winter, and we in hotels for a month. There again we had wonderful times together because Mike always knew where to go and what to see to have a good time.

In the Summer Journal for 1979, I note that Edward A. Hanff, '10 of Pittsburgh died on February 16, 1979. This announcement is a sad one for me to contemplate. When I first entered Tech, I lived in a room next to his in a private home on Fruit Street. As an upperclassman he was very good to me, a mere freshman, so that we became good friends. I remember being greatly impressed when he told me he had a job for the coming summer that would pay him as much as 45 cents an hour. Such a high pay in those days was excellent.

On Monday, October 29th, I had a most enjoyable talk over the telephone with AI and Tillie Crandon. They have a lovely home in Little Compton, Rhode Island. My wife, Dorothy and I have had interesting and enjoyable visits in each of our homes. For a couple of years we also enjoyed each other's company in the Coonamessett Inn in Falmouth.

— ''Bud'' Ellwood N. Hennessy, Secretary

After 23 years of retirement, Malcolm Campbell is teaching again. He has been conducting a class of 27 in life history writing at the Hawthorne retirement community in Leesburg, Fla. Formerly, he had taught for 38 years at Dorchester High School in Boston. Active in the New England Biological Association, he was named president, and in 1938 represented the NEBA in the formation of the National Association of Biology Teachers. He became president in 1939, and attended the annual convention at Ohio State in Columbus. "We offered a year's membership and monthly issues of The American Biology Teacher for one dollar a year — and still ended the first year with a \$300 balance!" In 1956, he was one of eight science teachers in New England to receive the Elizabeth Thompson Award for excellence in science teaching. Although he spent only a year at WPI, Mr. Campbell says it 'was a most valuable step in my education. Later, he continued his education at Massachusetts Agricultural College, and decided to plant MacIntosh apples at his Harvard farm.

1915

Maurice Steele, historian of the Rome (N.Y.) Rotary Club, is currently writing a history of the 60-year-old club. He is also arranging for the third yearly consecutive reunion of his 1910 Harford (Conn.) Public High School class.

1918

Secretary John F Kyes, Jr 40 Holden St. Holden, MA 01520

The Maurice Richardsons celebrated their 60th wedding anniversary on June 28, 1979. They were honored during the 60th annual Rotary installation dinner in Amsterdam, N.Y. Mr. Richardson was recognized by the club for his 37-year perfect attendance record. In 1961, he retired from Mohawk Carpet Mills (now Mohasco Industries), after serving 20 years as manager of engineering. He had been with the firm since 1923. Earlier, he had worked four years as a consulting engineer in New England. He is a Naval veteran of World War I. For 12 years he was executive director of the Amsterdam Community Chest (now United Fund). Four years ago, he retired completely. Last year he moved to a retirement apartment in Saratoga Springs.

1924

In September, Warren Fish received an Award of Merit in the nation's most prestigious competition for local history achievement from the American Association for State and Local History for his notable contributions to the cause of historical preservation. Nominations originate at the local level and are screened at the state and regional levels by a national network of judges. Only those nominees approved in the preliminary competitions are considered for national honors. Mr. Fish was one of 100 nominees. The American Association for State and Local History has given awards to local historians and historical agencies since 1944. It has a membership of over 6000.

After fifteen months, **Willard Gallotte** has completed a contract with Metro-Transit (Seattle) as a consultant coordinator between design and construction for a \$46 million trolley-bus project. He pushed contracts for 26 small substations serving 55 miles of trolley. "It sort of boosts one's ego when out of the blue, at the age of 76, I was hired to help out by a firm that I had never worked for." He "retired" again at a luncheon attended by division and department heads and other colleagues.

Secretary
William M. Rauha
4 Whiffletree Rd.
West Yarmouth, MA
02673

The Harold Eastmans celebrated their 50th wedding anniversary on Oct. 5, 1979. Mr. Eastman retired in 1968 after 19 years at Anchor Hocking and 22 years at Hartford-Empire-Emhart. "Forty-one years of business related to producing glass containers." The Eastmans now are "pleasantly situated" in Friendship Village, Columbus, Ohio.

1928

Secretaries. Gifford T. Cook Rte. 3 Box 294 Keyes Perry Acres Harpers Ferry, WV 25425 Theodore J. Englund 70 Eastwood Rd. Shrewsbury, MA 01546

Last March and April, Andrew Maston was at GE in Pittsfield, Mass., as an inspector for Alcoa on the repair of a large transformer which was needed for plant expansion. (He retired from Alcoa in 1971.) He writes of his GE stint, ''In 1928, I visited the same plant on a WPI student tour. I guess fifty-one years between visits isn't overstaying one's welcome!''

1930

Secretary
Carl W Backstrom
113 Winifred Ave.
Worcester, MA

Representative.

Carl W Backstrom

Dan O'Grady and Carl Backstrom have had a home and home golf match these last four years. One held at the Worcester Country Club and the other at Woods Hole Country Club at Falmouth, Mass., where Dan has just finished his term as president of the club. Carl continues as chairman of the Citations Committee at WPI, and attends all scheduled meetings as secretary of the class.

Roscoe Bowers writes that he has retired from the Weyerhaeuser Co., but is still called in on special assignments. So far he has moved 16 times for the company (Can anybody beat that?). He spends his summers in Vineland, N.J. and winters in Clearwater, Florida. Your secretary had a very nice round of golf with him last October in Marlton, N.J., and almost had another hole-in-one with him — only 4 inches away.

John Conley now retired, lives in San Diego, Calif. John has joined the Lions Club, and like so many retirees works as club treasurer, sight conservation chairman, hearing committee chairman, and budget chairman. This just leaves him a little time to play golf, and take care of his yard. He plans on being at the 50th reunion in June.

Ed Delano has to be the best letter writer of the class and is keeping us informed. He is still winning senior bike races, and is getting in shape for that 3 100 mile jaunt to our 50th. He is planning on leaving Davis, California on May 1st, averaging 100 miles per day. Since his bike was totalled in a truck collision last year, Ed has ordered a new custom-built model for time trials. "It's the talk of the area," he says. It should be. It weighs 19 pounds and cost \$1300!

Charlie Fay still works every day, but not eight hours any more. He now has three grandchildren: 2 boys and 1 girl. He is looking forward to the usual get-together at his house after the 50th in June.

Carm Greco writes that he did some traveling this past summer visiting Amsterdam, Brussels, Frankfort, and took a ride on the Rhine. Even though sundaes cost \$4.50 in Frankfort, living conditions in the U.S. surpass foreign countries, he says. He'll see us all at the 50th.

Robert Hollick reports from El Cerrito, Calif. that he retired in April of 1978 from the Federal Power Commission. The mandatory retirement age is 70. Inspired by Ed Delano, Bob has bought a bike, but uses it only for exercise, not transportation to our 50th. Bob has lined up several relatives that he will visit while here next June for the 50th.

Jim McLoughlin recently celebrated his "happy sixth anniversay retirement from North American Philips Controls Corp., Inc." His current activities include serving as a member of the board of directors of Fort Nathan Hale Restoration Projects, Inc.; treasurer of the Citizens Park Council; and library volunteer for the New Haven (Conn.) Colony Historical Society. As a hobby, he collects vials of sand from U.S. and island beaches. "We've visited 39 so far."

Fred Peters: A very nice letter from Fred informs us that his last retirement was from Seton Hall University, where he taught management. He has just finished writing a book on book publishing which will be published in 1980. He was recently honored by Seton Hall, with the first edition of the University's "President's Medal" — Congratulations Fred!

He still lives in Springfield, N.J., but spends winters in Naples, Florida. He is also planning on being at the 50th.

Carl Backstrom: Secretary.

1931

Secretary Edward J Bayon 45 Pleasant St. Holyoke, MA 01040 Representative Oliver R. Underhill, Jr P O. Box 281 Franconia, NH 03580

Carl Sage, still in the motel business in Buellton, Calif., and Mike Sodano, who is retired and living in Scottsdale, Arizona, had a short "reunion" in July.

1932

Representative: Howard P. Lekberg RFD 115 Main St. East Douglas, MA 01516

Ted Barks has retired for the second time as director of operations for X-Rail Systems, Inc. He is now living in a new home in Amherst, Mass. Recently, Bill Reardon was elected chairman of the Ellis Hospital board of managers in Schenectady, N.Y. He was first appointed to the board in 1971. Until World War II, when he served as a lieutenant commander in the U.S. Naval Reserve, Reardon worked for the TVA. After the war, he joined GE in real estate and construction operations. From 1966 to 1973, when he retired, he was manager of engineering and was concerned with the management of new facilities for GE throughout the continental U.S. He is a registered, professional engineer, a fellow of the ASCE, past director of the Building Research Institute of the National Academy of Sciences, and chairman of the Senior Elfuns Society of GE. The Reardons have two children and four grandchildren.

1933

Secretary Sumner B Sweetser 100 Pine Grove Ave Summit, NJ 07901

Representative. Robert E. Ferguson 36 Lake Ave. Leicester, MA 01524

Presently, the Frank Eatons, Jr., reside in Port St. Lucie, Fla. . . . Albert Glenn of Millbury, Mass. writes that he is historian of the Bay Patriots Chapter PHSA (Pearl Harbor Survivor-Army), and has been connected with American Legion baseball, the New England Professional Golfers Association, and New England AAU track and field. He continues to hunt and snowshoe.

Harold F. Henrickson 1406 Fox Hill Dr Sun City Center, FL

Representative Walter G Dahlstrom 9 Jewett Terr Worcester, MA

till with du Pont, Carleton Borden is currently the director of textile fibers in Wilmington. . John Wyman has been promoted to resident manager of the Maine facility, a research laboratory of the Maine D.O.T. in Pittsfield. He says, "I'm doing traffic engineering studies using electronic data collection and reduction techniques. Expect never to retire. Work too much fun!'

1937

Richard J. Lyman 10 Hillcrest Rd Medfield, MA 02052

Representative Gordon F. Crowther 20 Bates St. Hartford, C1 06114

Recently, William Frawley celebrated forty years of service with Bell Labs in North Andover, Mass. In 1939, he joined the company and was responsible for submarine cable development and the development of a method for laying communication wire from airplanes. He was also involved with mechnical design of communication equipment for the Signal Corps and other armed forces communication development work. In 1958, he became responsible for mechanical design of carrier equipment. Currently a member of the technical staff, he now deals with the physical design of the D3-D4 dataport units and the MX2-L lightwave system in the Digital Systems Physical Design Department. He holds an MSEE from WPI.

Fran Harvey has been named by Gov. King to a six-year term as a member of the Massachusetts Building Code Commission. In November he received a Brotherhood Award from the Worcester Chapter of the National Conference of Christians and Jews as the representative of the Roman Catholic faith. His award was presented "for your consistent contributions, your worthy leadership, and your unique ability to unite forces to improve the quality of life." The award, in the form of a plaque, was presented at the second annual awards dinner at Pleasant Valley Country Club.

1938

Theodore Andreopoulos serves as a contract engineer at Boeing for C.D.I. Corp. He is located in Bellevue, Washington. . . . Ernest Gustafson presently resides in Sun City Center, Fla.

Dr. Arthur Martell of Texas A & M University is the 1980 winner of the American Chemical Society Award for distinguished service in the advancement of inorganic chemistry, sponsored by Mallinckrodt, Inc. Announcement of the \$2000 award was made at the Society's national meeting in September.

Prof. Martell, head of the Texas A & M Chemistry Department, is being recognized for his wide-ranging contributions to inorganic chemistry, as researcher, teacher, and author His major research interests include the physical and chemical properties, stabilities, and kinetics of metal chelate compounds in solution, and metal-catalyzed biochemical mechanisms. As a teacher, he has supervised some 40 PhD students, many of whom have in turn become academic researchers. Two of his books, Chemistry of the Metal Chelate Compounds and Inorganic Sequestering Agents, are classics, as is his co-written compilation of two massive volumes of selected and critical tables of stability constants. He has written or co-authored 300 scientific papers and articles on his research. He founded the Journal of Coordination Chemistry. and is editor of the monograph, "Coordination

Dr. Martell has a PhD from NYU. He served a year as an instructor at WPI. For many years he was a professor and chemistry department chairman at Clark University. From 1961 to 1966, he was at Illinois Institute of Technology as professor and chairman of the chemistry department. Since 1966, he has been at Texas A & M, where in 1973 he was named Distinguished Professor. Among his honors are an honorary doctorate from WPI, an honorary life membership in the New York Academy of Sciences, a fellowship in the American Academy of Arts and Sciences, a Guggenheim Fellowship at the University of Zurich, and the National Science Foundation Postdoctoral Fellowship at MIT. He belongs to Sigma Xi and Phi Lambda Upsilon.

Dr. Martell will receive the ACS Award for Distinguished Service in the advancement of inorganic chemistry at the Society's 179th national meeting in Houston next March.

1939

Secretary Charles H Amidon, Jr 636 Salisbury St Holden, MA

Representative John Lindegren, Jr 21 Prospect St Shrewsbury, MA

While Edward Dench was with Raytheon from 1947 to 1978, he did a lot of things, "some even technical." He has a career total of over 65 patents in fluorescent lighting, computers, color printing, microwave tubes and heating, solid state, and ultrasonics. He holds an MSEE from MIT, and at one time was at Interchemical Corp He was cited by the Office of Scientific Research and Development for technical contributions in World War II. During retirement, he enjoys the warmth of Florida and the Caribbean, fishing, boating, gardening, gourmet cooking, sightseeing, and swimming. He was a successful national chairman of United Way at Raytheon, and is on the board of a local company he helped to start. He has twin-daughter housewives, an attorney son, and ten grandchildren

Last year, Howard Duchacek retired as professor emeritus from the University of Vermont, following thirty years of service. Previously, he had received his MSAE from Georgia Tech, had served in the Navy, taught at Norwich, and worked for Perkins Gear in Springfield, Mass. Also, he had been at Ohio State, Colorado State, Oklahoma State, NASA, GE, and the Naval Research Laboratory. He has had the "wonderful experience" of teaching young people in the areas of thermal science, fluid mechanics, and aerodynamics. Research included transient thermal shock induced elastic-plastic stress analysis. The Duchaceks have three children: Lenora, a clothing buyer; Howard, a building contractor; and Janet, a bank administrator. Hobbies are sailing Lake Champlain, keeping up with the kids, and maple syrup processing

Although semi-retired, George Graham, Jr., is still active with his own business, Warwick Copy Products, Inc., which wholesales a line of copy papers. Earlier, he was with St. Regis Paper Oxford Paper, and Glidden Company. While with Johnson and Johnson, he did research in the field of paper and received seven patents. Formerly, he worked for Rohm and Haas, and served as a staff sergeant in the Army. He and Helen are the parents of Susan, who is married, with one son; George III, a physicist; Wendy, who is doing graduate work at Cornell; and Alan, who has a master's degree from Syracuse and is an associate programmer at IBM. Presently, Graham is secretary treasurer of the Warwick (N.Y.) Chamber of Commerce. His "claim to fame" is that he played bridge against John Crawford, when he was the world champion. Wife Helen is a legal secretary. She freezes or preserves all Graham grows in his garden.

Eugene Gravlin continues with Knapp Shoe Company, where he is vice president of the Safety Shoe Division in Industrial Sales. At Knapp since 1964, he had been employed by Kennedy Printing, Fuller Brush, Western Auto, and H. H. Brown. During World War II he was a major in the Army Corps of Engineers. Pat is 29; Paul, 27; and Eileen, 23. Ella has retired from Cardinal Cushing Hospital, where she was a night nursing supervisor. . . . Jacob Hagopian has been with IBM for 27 years. Before that, he worked for Northrop, Goodyear, Norton, MIT, and the U.S. Army. Along the way, he picked up over 20 patents in computer data storage and retrieval.

He has served as a church council member, school trustee, a fund raiser for "high causes," and a helper in election campaigns. The Hagopians have five grown children. Their grandson, Dana, 7, is the focus of their attention now.

Within a year after graduation, John Harvey, Jr. became a sales engineer in the Boston District Office of the Allen-Bradley Company of Milwaukee, a prominent manufacturer of electric motor controls and electronic components. The post turned into a 36-year career with retirement a couple of years ago. Currently, he is a consultant to the firm. "Along the line," he spent four years in the Navy, married, and had three daughters and two grandchildren. The Harveys are enjoying retirement living on the Cape with fresh air, sunshine, and boating.

Carl Hitchon tries to keep up in his study of French and German, and travels as much as possible. He is a director of a local savings bank. In 1959, he purchased a plant from Glen Woolen Mills, a former employer, and formed Glencairn Yarn Mills employing about fifty workers to make knitting yarn. Prior to being secretary and executive officer at Glen Woolen Mills, Hitchon worked for American Cyanamid Co. for several years. His daughter, Marilyn, is married and an interior decorator. His son, Carl, Jr., serves as a mathematician at Softtechon. The light of his life is his granddaughter, Tory, "who is very much

her grandmother's image."

Along with Wally Abel, Johnny Hollick, and Dave McEwan, Don Houser joined United Shoe Machinery (USM Corporation), now part of Emhart Corporation, following graduation. After serving in machine design and armament development, he switched in favor of the commercial side of the business. He helped USM expand into machinery ventures outside of the shoe industry, then he became affiliated with the International Division. For 20 years, he has been involved with USM's Bostik Chemical Group and living out of a suitcase. Presently, he is vice president of administration, dividing his time between Massachusetts and Switzerland. He and his wife, Ethel, a fine golfer, have two sons: Bob, a Boston lawyer and Scott, "a budding insurance underwriter." Ethel is busy with community projects and competitive tennis. The Housers like skiing and sailing near their summer cottage in New Hampshire

Harold Humphrey, Jr., writes that he is "now easing into retirement" via the Research Department at the Torrington Company. During his long career at Torrington, a subsidiary of Ingersoll-Rand, Humphrey has been a project engineer, chief tool designer, machine designer, assistant chief mechanical engineer, and chief mechanical engineer of the Needle Division. He has five daughters: Joyce, a world-travelled assistant lecturer; Judith, a teacher at York University, Toronto; Mary Lou, a graduate of Endicott Junior College and the mother of two daughters; Nancy, a free-lance writer and mother; and Kathryn, an LPN and ex-stewardess, who lives at home. All have attended various colleges. Humphrey has served in Harwinton, Conn. as chairman of the Zoning Commission, and is now chairman of the Board of Finance. He is chairman of the Central Connecticut Chapter of the Society of Manufacturing Engineers, a National Ski

Patrolman, and was the Connecticut State Champion Equipped Driver (sports car road rallyist) for two years. He is also a motorcyclist and Porsche enthusiast. . . . David Hunt, who was an aeromechanics elective at WPI, with great hopes of building machinery to travel through the air, has instead spent his entire career with machines to move air through pipes. "From pipe organ blowers to nuclear power plant emergency exhaust equipment," from engineering to management. Marge and he have enjoyed traveling, much of the time on WPI alumni trips.

Bowling, cards, boating, biking, and gardening are favorite pastimes of Roger Iffland. He likes music, especially performances of the Yale Glee Club, because daughter Julie is a member. Joan and Nancy graduated from Central Connecticut. David, a Bridgeport alumnus, is a machine tool programmer, while Peter is at Northeastern. For 39 years, Iffland has been with a hometown company, the Torrington (Conn.) Company. He has served as night supervisor, machine designer, machine shop superintendent, and chief design engineer to the chief of mechanical engineering. The Ifflands have nine grandchildren. . . . R. Adrien Jacques, now with Concord Machine Tool Co. (importers of Spanish-made equipment), spends a lot of time in Michigan, Illinois, Ohio, and metropolitan New York. Previously, he had been with Pelham Machinery, Pratt & Whitney, and had served as president of Bailey Tool and Supply, Inc., and as sales engineer at Greenfield Tap & Die. During World War II, he served in the Navy aboard the Carrier "Wasp" as aviation ordnance officer in major Pacific operations until V-J Day. He has three children and five grandchildren. Pete, a Holy Cross graduate, is with Abex Corp.; Ann and her brother, Tim, help run her husband's industrial painting business. Jacques' wife, Pat, is director of sales for Pharmaceutical Marketers Directory.

After a short stint at Draper Corporation, Gleason Jewett spent 22 years with Wyman-Gordon, and eventually moved into the sales department in Texas. In 1955, he was named southwest district sales manager. Currently, he is technical representative for Standard Mfg. Co. in Dallas. Although he has worked for Petersen Mfg. Co. in Nebraska, and Brantly-Hynes Helicopter, Inc., in Oklahoma, the Jewetts "always have returned to Texas." A flight instructor (CFI), until recently Jewett owned an airplane. Once he was president of Sky Haven, Inc., a flight school and Cessna dealership in Nebraska. He and Marge, one of the five top in the nation in her age group in the AAU Master's Swimming Program, have two sons and one daughter. Jack is a top life insurance salesman; Bob, a Delta Airlines pilot; and Martha, a surgical assistant. There are seven Jewett grandchildren.

Samuel Kaplan says he "got into ecology before it became fashionable." After working for Harrington Richardson Arms, Pratt & Whitney Aircraft, Boston Ordnance-Small Arms Branch, and a hitch in the Air Force, he became concerned with a Vermont logging project. Ecology became important to him when he went into water well drilling and did consulting on wells, water systems, and water treatment. He serves as a member of the American Arbitration Associ-

ation, and is called on as a professional engineer and state witness in that field. His "fun and games" is solar energy. He passed a course at Hartford Graduate Center, and he is involved in courses for geothermal heat pumps using well water ("52 degree temperature range constant") as a heat source. At his new dream house, he has a backup system for maintaining every system, including heat pumps. With his computer, he is compiling an underground water resource map from records he has kept for thirty years. Daughters Nancy and Laura are in the New York fashion world.

The Carl Keysers have "escaped" from Massachusetts and are now living in Rye Beach, N.H., where Carl continues with his writing. Over the years, he has written a number of textbooks, two of which were translated into Japanese and Spanish. "Both foreign language editions are easier to understand than the instructions for Form 1040," he declares. After mentioning Keyser's Spare None: The Federal Octopus in a broadcast, Harry Reasoner commented that the author didn't like any of our 20th century presidents. Says Carl, "He was wrong. Cal Coolidge was great!" In 1968, he retired as Commonwealth Professor Emeritus from the University of Massachusetts. . . . Following an eventful World War II with the Navy in the Midway, South Pacific, and Central Pacific campaigns, Ed Kiem returned to the U.S. and subsequent five command jobs. In 1963, he became Captain, USN (ret.), after which he joined North American Aviation for four years. In 1970, he earned his BA in math ("It took me 35 years!"). For several years, he taught math, until it began "interfering with my golf game." Once again retired, he enjoys travel and checking on

his family.

Phyllis and John Lancaster hope to retire on a Grand Banks diesel trawler in 1981, after John's duties as assistant director of the National Radio Astronomy Observatory and as manager of its \$78 million Very Large Array Radio Telescope Construction Program in New Mexico are concluded. They plan to cruise from the Virgin Islands to Canada. They have built a home on the fourth tee of the Socorro, N.M. Golf Course, where golf may be played year 'round. With their five daughters educated and married, they are currently enjoying a "near second honeymoon" in the beautiful west. Lancaster was the first nongovernment person to receive the National Science Foundation Medal for Meritorious Service. He has been listed in Who's Who in America. . . . For ten years, Leonard Landall has been with Thomas A. Buffum Associates of Boston as an executive search consultant. Earlier, he was with Frank C. Brown & Co., Draper Corp., Gamewell Co., Northeastern, and Raytheon. Son John, '71, built his own house in Grafton. Daughter Nancy is with an electronics firm, and Norma is in advertising. They are twins and graduates of URI. Leonard and Ruth have designed and built a home in Sandwich with a beautiful view of Cape Cod Bay. They live there 12 months a year.

Carl Lewin has worked for the Austin Company since 1940. He spent 12 years traveling the world coordinating international sales activities. The Lewins expect to retire in Maine in a few years. They have three sons: a professor; a commercial pilot; and a telecommunications expert. Daughter Joan is a homemaker and school board member. The Lewins, who have nine grandchildren, have previously been involved with scouting and fund raising. . . . At the end of World War II, Carl Lindegren, Jr., was discharged with the rank of Lt. Commander, USN. He then started a sales engineering business with his father, which involved selling hydraulic, pneumatic, and mechanical components in the New England area. "Have an inside and outside sales staff of 16 people, and enjoy the business immensely." There are four Lindegren girls (including twins), and a son, who is a student at WPI. The family has been active in ski racing, with Lindegren once serving as president of the local racing team. They also race sailboats, and Lindegren has been commodore of the Stage Harbor Yacht Club in Chatham, Mass. Their daughter, Debbie, was runner-up in the Women's National Sailing Championship in 1977. Lindegren is a current member of the WPI Alumni Board. He has served on the Shrewsbury Industrial Development Commission, and as chairman of the board at Fairlawn Hospital in Worcester

In 1977, Walter Longnecker semi-retired from Gould, Inc., as vice president-international. After a two-year stint as a consultant, he is now completely retired. He had joined Gould in 1969 when the company he was with merged with Gould and "saw an exciting growth record from sales of \$300 million to \$1.8 billion in ten years." Earlier he had been employed at Morgan Construction for two years and U.S. Steel for 26. Walter and his wife are living the "good life" in Hilton Head Island, S.C., and "now watch the enthusiastic development of eight grandchildren."... Currently, William Lyhne, Jr., is assistant director of Executive Compensation Services of American Management Associations, New York City. Previously, he was with Lone Star Industries, Handy and Harmon, and Bridgeport Brass Co., where he was employed for 25 years. He has nine daughters, three sons, and eleven grandchildren. Recently, he finished a term as president of the Board of Associates at the University of Bridgeport.

The Arthur Mallons of Alexandria, Va. live on 10,000 square feet of George Washington's former pig farm, and "Helen spends some of her time helping tourists spend money at the Mt. Vernon Gift Shop." A baseball fan, Mallon has been in nearly every big league city in 47 states. In mid-career, he spent 18 years teaching at Missouri School of Mines, Wentworth, Merrimack, and Tufts. Another third of his career was in private employment and engineering practice; and the remaining third has been in government employment, the last ten years being spent in the Construction Grants Program of the EPA. The Mallons have four girls, two boys, and five grandchildren "with two dozen degrees and professional registrations among

With Pratt & Whitney Aircraft since graduation, **Robert Martin** is presently with the firm in Belgium as head of engineering work with the European companies, who are coproducing the F-100 engine for the F-16 fighter. He is looking

forward to returning home and retirement. He has three children and four grandchildren. Before going to Brussels, he served two terms on the town council in North Palm Beach, Fla. He and his wife, "Mart," bowl. ("She does better than !!") He also plays some tennis... Continuing with Blake & Johnson Company, Dave Mc-Ewan is now headquartered in Beaufort, S.C.

Robert Mirick writes that he retired in 1972 and thinks "there is nothing to beat it." He had been president of Sanitary Farm Dairies, Inc. (milk and ice cream) in Minnesota and Iowa. Earlier, he was in the Naval Reserve, and had worked for the Pillsbury Company. He is a registered professional engineer in Minnesota and a master electrician. A former president of the North Central Milk and Ice Cream Association. Mirick has also served as a board member of the National Dairy Council, the Engineers' club of Minneapolis, the local Methodist Church, and the Audubon Society. He was chairman of the board of the Ramesy County Historical Society; treasurer of the Society of Mayflower Descendants (Minn.), and chairman of the board of governors of the Shriner Hospital for Crippled Children (Twin City unit). The Miricks have two sons and like to go motor home camping. Over the years, Robert Murphy has worked at Pratt & Whitney Aircraft in plant engineering and at Westinghouse, Murphy Air Engineering and Automatic Refrigerating Co. Though semiretired, he still works part time as a consultant and manufacturer of an air pollution control device for industry called the "Oil Mistress." He was widowed several years ago, and recently married Marilyn, a psychologist. They commute between Wayne, N.J. and Westerly, R.I., "half of the time." Murphy's hobbies are power boating and "criticizing the bureaucracy." He has two married children.

Also enjoying early retirement, is John Newton, who lives in Brunswick, Me. "These are the best years, with our home on the coast of Maine, children and grandchildren within visiting range, and our youngest daughter in high school." For years, he had worked for American Steel & Wire in Worcester. Both he and his wife Evelyn were "local actors," with Evelyn also working as an art teacher. Newton's earliest posts were at Stone & Webster, the Norfolk Navy Yard, and New England Power in Providence. . . . Most of Albert Nims' career has been associated with airborne Air Force radar systems at Westinghouse in Baltimore, Md. His wife, Betty, weaves, and he has designed and built several looms for her. They enjoy travel, have two daughters, and a "No. 3" daughter in Norway, who lived with them for a year through the American Field Service. They have visited "No. 3" in Norway. Their own daughters are nurses, one being a former Army captain, and the other a former Navy lieutenant. "The older one has provided us with two grandsons.'

Presently, Elmer Nutting serves as design engineer in Smith & Wesson's new sporting products division. He had served 25 years with Noble Mfg. Co., which he left as vice president. During World War II, he worked for Savage Arms. Wife Doris is director of Volunteer Services at Cooley Dickinson Hospital, Northampton, Mass. Son Radley owns a six-man foreign car repair shop,

and Susan co-owns vintage clothing shops in Colorado. The Nuttings have three grandchildren. They like traveling and tandem bike riding. A 21-year deacon of his church, Elmer has also been town moderator, a member of the water commission board, the finance committee, and the Industrial Development Financing Authority. The Newcomen Society is another interest.

After thirty years at Heald Machine, Worcester, Bradford Ordway retired in 1969. "Ain't done nothing" since. He and Dot have a son, Craig, an orthopedic surgeon and chief of trauma at Nassau County Medical Center on Long Island. They have a granddaughter and a grandson. For twenty years, Ordway was moderator and sometimes selectman in Holland, Mass., with Dot being chairman of the school board for ten years. Currently, the Ordways ski one third of the year, spend the second third at their Vermont house, and the last third, traveling. They have driven from Bangkok to Singapore, through the Australian outback, across the Yucatan Peninsula, and around Patagonia and the southern tip of South America.

John Peavey, although looking to a 1980 retirement, in Hendersonville, N.C., is now a chemical process engineer at American Cyanamid, where he has been since 1964. Earlier, he was with John H. Breck Company and A.G. Spaulding. In 1975, he retired as Lt. Colonel, Ordnance, after 23 years in the active Army Reserves. His wife, Ann, has been a member of the Westfield School Committee, and former co-manager of the Westfield State College Bookstore. Son William graduated from Colgate and Harvard and is in the industrialresidential carpet cleaning business. He is married and has a daughter. Michael, a Duke graduate, is a lawyer and also married. Louise graduated from Mount Holyoke and UMass, is a Latin and English teacher, and has a husband and a daughter. Charles graduated from Princeton and Stanford and is with McDonnell Douglas Aircraft. Peavey raises exotic house plants, makes Chinese furniture, and collects tools.

Still with Fraser Paper in Maine, Art Rand has, during his career at Fraser, worked in the paper mill laboratory and served as a technical sales service representative, and as head of the service group. He has also done research. Currently, he is director of environmental protection. Robert Steele, until his retirement in 1976, was employed by du Pont, primarily at the Niagara Falls plant. At retirement, he was engineering services superintendent. During his last five years, he was in the Employee Relations Division developing a simplified wage structure and handling employee relations problems. Since retiring, Steele has been a part-time consultant. He is a professional engineer in New York and Ohio. He has served as president of the Niagara County chapter and as director of the New York State Society of Professional Engineers; as director of the Engineering Society of Buffalo; and as president of the Technical Societies Council of Western New York. He has been a church trustee, Sunday School superintendent, and financial campaign chairman. He is a Mason. Editor's note: Steele's son, Bob, was a good friend of mine in high school.

Before retiring in 1966, Frans Strandberg concluded his career as a civilian engineer with the Navy, as director of construction of the Atlantic Underseas Test and Evaluation Center on Andros Island, Bahamas. He did a stint with the Army's Anti-Missile Program in the 1960's, serving on the team that selected the Sprint Missile for development. He spent four years at Thompson Wire, Worcester and in active duty in the Navy. Presently, Strandberg is an officer of the Dartmouth National Bank, Hanover, N.H. Since retirement, he's also been a church administrator, village engineer, and a condominium construction project manager. He is now elder of the local Lutheran Church in Enfield, N.H., and has served on the town hall renovation committee. Wife Elsie chairs the church Social Ministry Committee, sings in the choir, is secretary-treasurer of the area Ecumenical Council, and delivers Meals on Wheels

Ernest Sykes, who taught engineering drawing at WPI after serving in World War II, worked on the construction of two churches near campus. Later, he worked for General Electric Realty Corp., on construction management needs at Appliance Park, Louisville, Ky., and the Atomic Power Lab., in Pleasanton, Calif., among others. Since 1961, he's been in plant engineering at the Lawrence Radiation Lab. in Berkeley, Calif., the site of the original "atom smasher." He's been concerned with problems of stable foundations and earthquake-resistant restraints, so has become the "in-house" expert at "rebuilding the variety of landslides that plague us (on campus) each winter rainy season." In 1974, he and his wife served as Volunteers In Service to America in the economically depressed area of northern New Mexico. . . . For over thirty years, Gordon Thompson has been a design engineer at G.F. Wright Steel & Wire Co., designing extremely fast wire weaving looms and processes. Early in his career, he was with Eastern Bridge Co. and Fiske Carter Construction Co. The Thompsons, who live in Worcester, have two sons and two grandsons. "We are proud grandparents."

Soon, William Wadsworth expects to retire from WPI to his 1300 acres of forest land in New Hampshire, where he plans to continue his research and consulting in acoustics and finish up some of his writing. He received his MS from WPI in 1941, and then joined the electrical engineering department. "Have been at WPI ever since." In 1957, he became a full professor. Since 1953, he has directed the WPI Acoustics Laboratory, along with teaching. The lab developed hearing protectors and communications systems for use in high level noise fields produced by jet aircraft. These developments led to five U.S. patents, the royalties of which helped support the laboratory. Wadsworth served on the National Research Council committee on helmets, and he belongs to IEEE, the Acoustical Society of America, Audio Engineering Society, and Sigma Xi. Besides being listed in Who's Who, he has been honored with the Worcester Engineering Society Award for Scientific Achievement. For "diversion" he coached the WPI tennis team for ten years.

Fred Webster, who spent 24 years teaching mechanical engineering at WPI, is enjoying retirement in Princeton, Mass. He and his wife, Ruth, travel to New Hampshire summers and to Wyoming and Vermont to see their grandchildren. Sometimes they go abroad. Fred has several hobbies. Ruth paints, weaves, and serves as a library trustee. During part of their thirty years in Princeton, Fred has had a term on the school committee and three terms on the advisory board.... Presently, Robert West is manager of product research at Stanley Tools, where he previously was director of product engineering. He has been at Stanley for 22 years. Earlier he was with Thayer Scale Co., Towle Mfg. Co., the Navy, and Heald Machine, among others. He holds 38 patents on hand tools such as tape rules, hammers, and levels. One of his most important is the basic patent for the Powerlock rule line, the biggest-selling rules in the world. Daughter Karen is married and the mother of Jennifer, 3. Son Lee is a civil engineer. West has been active in church work and scouting. His wife continues as a part-time nurse. Activities include woodworking, hiking, and travel.

Harold White, now back in the U.S. with Norton, recently returned from a seven-year stint for the firm in England. He has been at Norton for 33 years. He had worked for GE and the Factory Insurance Association earlier. "I was once too long in India and China with the U.S. Air Force.'' (Captain) Hobbies include antiques, woodworking tools, and American clock collecting. He likes to repair clocks and travel. "We have been throughout Europe, Asia Minor and Africa, but our favorite spot is Cape Porpoise, Me., for family gatherings." The Whites have three children: Patricia, a project manager at Ginn & Co.; David, a physiotherapist; and Catherine, a sales administrator; plus four grandchildren. Last summer the Whites attended the Queen's Lawn Party at Buckingham

George Yule, who owns the family business, Leominster (Mass.) Granite & Marble, and has run it since 1946, previously had worked for du Pont and Worcester Gas. The Yules have four married daughters and four grandchildren. Two of the daughters have nursing degrees and two have degrees in education. Their son Robert is a WPI senior, and was captain of the football team for two years. (Also, he's on the varsity heavyweight eight in crew.) Yule is a Past Master of the Masonic Lodge, and a Past Exalted Ruler of the Leominster Lodge of Elks.

After 20 years in aerospace, Dick Wilson continues in facilities engineering and administration for the Long Beach (Calif.) Schools, a post he enjoys and has held for over seven years. He is president of the local Rotary Club. He and Mae attended the Rotary International Convention in Rome in June. Also, he is serving on the Regional Policy Board and on a national committee of the ASME. He has been active in neighborhood associations, and has served as a school board trustee, scoutmaster, United Fund chairman, City Master Plan committeeman, and church treasurer. He founded San Clemente Canyon Park in San Diego. The Wilsons' daughter, Kathy, graduated from Berkeley and is an artist. Keith is an ME and project engineer, who has three daughters; Shelley is married and living in Norway; Ken, a former Rotary Youth Ambassador to England, is at Brigham Young University. Wilson hobbies are jogging, back packing, swimming, and conservation.

1940

Secretary Robert E. Dunklee, Jr. Rocky Hill Rd. North Scituate, RI 02857 Representative: Russell A. Lovell, Jr Jonathan Lane Sandwich, MA 02563

Everett Smith, who is retired from U.S. Steel Corp., Electrical Cable Division, spends much of the year in Fort Myers, Fla. . . . Since last Jan. 2, Dr. Michael Wales has been senior research scientist at ABCOR, Inc., in Wilmington, Mass. He retired from Shell Development Co., Houston, Texas, in December of 1978.

1941

Secretary Russell W Parks 7250 Brill Rd Cincinnati, OH 45243

In October, William Simmons, chairman of the Sino American Cooperative Organization (SACO), led a group of 100 former U.S. Naval Group China World War II veterans and their wives on a two-week visit to Free China in Taiwan. The group, as guests of the government of Free China, visited in the Republic of China and observed progress of the ten great projects being implemented to modernize and industrialize the Republic. Meetings with top government officials and industrial leaders were part of the agenda. SACO is an organization devoted to friendship and continued contact with the Chinese Ministry of National Defense in the Republic of China. (Simmons is president of W. P. Simmons Company, Inc., in San Rafael, Calif.)

Representative Norman A Wilson 17 Cranbrook Dr. Holden, MA 01520

Donald Packard has joined Jahn Foundry in Springfield, Mass.

1943

Representative: Robert S Schedin RFD #1 Brookfield, MA 01506

Dr. **Arthur Lindroos**, still with Penick Corporation, is now associate manager of engineering in Lyndhurst, N.J.

1944

Secretary John G. Underhill 6706 Barkworth Dr Dallas, TX 75248 Representative: John A Bjork 11 Tylee Ave. Worcester, MA 01605

Recently, **Alan Gault** returned from a two-year stay in Jordan, where he supervised the construction of a new airfield for the Jordanian government.

1945

Representative: Robert E. Scott Allendale Mutual Insurance Co. P. O. Box 7500 Johnstown, RI 02919

Robert Chaplick says, "After thirty years with the federal government, I have retired." He had been an aerospace technologist at NASA's Goddard Space Flight Center, Greenbelt, Md. . . . Howard Gerring has become affiliated with Winslow-Smith Associates in Westport, Conn., where he is a senior associate. The firm handles professional placements. Gerring's area includes manufacturing and manufacturing support professionals, as well as engineering and technical support. He is chiefly concerned with placements in Connecticut, Westchester County, and New York City.

1946

Secretaries
M. Daniel Lacedonia
106 Ridge Rd
East Longmeadow, MA
01028
George H Conley, Jr
213 Stevens Dr
Pittsburgh, PA

15236

Nestor Brown has been named manager of engineering evaluation services for Carrier's Machinery and Systems Division. He is a former manager of air systems engineering services, and has had extensive experience in the design and development of HVAC equipment. Since 1962, he has been a member of ASHRAE. . . . John Osborn has been named superintendent of inspection at the Bay City (Mich.) Chevrolet plant. He joined General Motors in 1953, and prior to his most recent promotion, was superintendent of inspection at Chevrolet Grey Iron, a post he had held since 1971.

1947

Representative Allan Glazer 20 Monadnock Dr Shrewsbury, MA 01545

Norman Feldman, vice president of corporate manufacturing service at Honeywell, Inc., has forwarded the information that former WPI President (and Admiral) Wat Tyler Cluverius was aboard the U.S.S. Maine when it was sinking in Havana Harbor, Cuba, in 1898. He came across the information in a review in the Naval Institute "Proceedings" on a book by Admiral Rickover titled How the Battleship Maine was Destroyed. At the time of the sinking, Admiral Cluverius was a naval cadet. Later, in court, his testimony was used because "his observations were amazingly perceptive." Page 117 states, "Thus, the observations made by Cadet Cluverius appear to describe the sounds and motions to be expected from an internal burst.

1948

Secretary: Paul E Evans 69 Clairmont St Longmeadow, MA Representative. John J. Concordia 16 Summer St Shrewsbury, MA 01545

Paul Holden continues with Westinghouse and is manager of the engineering department for Gas Turbines at the South Philadelphia plant. Paul's son, Carl, graduated with high distinction in architecture from Penn State last year. Not long ago, Carl spent a semester abroad studying European architecture.

1949

Secretary:
Howard I Green
1 Kenilworth Rd.
Worcester, MA
01602

Representative Sidney Madwed 215 Crest Terrace Fairfield, CT 06432

In May, Thomas Bamford was appointed corporate vice president of research and development at FMC Corp., Chicago, Ill. For the past five years, he has been president of Bamford Associates, Boston, a technology consulting firm he formed following over twenty years with Arthur D. Little, Inc. . . . Fred Brennan, the ITT Aerospace-Optical Division director of business development, has been elected vice president. He is responsible for planning, directing and coordinating all business development activities for the division, including marketing, advanced programs, advertising, and business planning. Earlier, he was director of marketing at ITT Gilfillan, Van Nuys, Calif., and had fifteen years of marketing experience with Singer-Kearfott.

Currently, Feecon Corp. Westboro, Mass., owned and operated by Jim O'Regan and John Gagliardo, '46, is the major supplier of equipment for airport crash fire trucks for the U.S. Air Force and the Navy. In 1975, the company became part of the Philadelphia Suburban Group. From 1949 to 1968, O'Regan was with Rockwood Sprinkler (and successors) until it moved to Maine. The O'Regans have a married son and daughter, and a son and daughter in college. Mary and he enjoy golf, and their grandsons.

Estelle and James Peepas have four daughters: Valerie Ann, who is married and is a graduate of the Cincinnati Conservatory of Music; Chrisanne, a graduate of Westminster College and an employee of Clark Equipment in the management training program; Diane, an acting major at Bennington College; and Stephanie, a marketing major at the University of Bridgeport. Peepas is president of Selecto-Flash, Inc., West Orange, N.J., with manufacturing facilities and warehouses throughout the world. Estelle loves to golf and Peepas has taken up fishing "in my old age." ... Hugh Robinson is cautious around his 750 BMW motorcycle these days. Last fall, he spent forty days in traction and weeks more in a leg cast following an accident that broke his knee. He and Doris travel in their mini-motorhome and square dance. Their son Glenn is married and lives in Truckee, Calif. Rachel is at California Polytechnic State University. They have a grandchild. For 16 years, Robinson has been with Raychem in Sunnyvale, Calif. He is western region sales manager responsible for half the U.S. for the Chemelex Division. He is involved with corrosion prevention products for underground and underwater pipelines.

Joe Skidmore is still a sales engineer for Armco Steel. His wife is a pediatric nurse (RN). His son is a school teacher in Seattle and his daughter is a student at Central Washington University. The family backpacks, golfs, and plays tennis. Joe likes photography.... Robert Smith has his own consulting practice in Eugene, Oregon after nearly 24 years with Westinghouse. He is doing largely industrial work, with "as little commercial design as possible." Amy is a student at the University of Oregon right at "the bottom of the hill." Carol and he are enjoying peace and quiet around the house and their yard and garden.

Alfred Strogoff continues as president and chief executive officer of International Foodservice Corp. in California. Previously, he had been with Sun Chemical Company, as vice president and managed Standard Kollsman, a Sun subsidiary. He also had been president of a Litton education group. For 21 years, he was with Adler Electronics, where he rose to executive vice president. "My WPI background helped prepare me well for my career changes." The Strogoffs have five children: Jody, a reporter; Nancy, an editor; Michael, a graduate student in architecture; and Lauren and Jimmy, college students... Most recently, Wallace Thompson has been involved with technology transfer and licensing at du Pont in Wilmington, Del., where he's been since 1950. Now that his three sons have their bachelor's degrees and have left home, his wife is planning "grand additions and improvements to our house, despite its proven adequacy. They like tennis and golf, and belong to some community organizations.

Since graduation, **Robert Wallace** has been a telephone engineer with Bell systems, IT&T, COMSAT and F.C.C. for the last ten years. The Wallaces live on three acres in Northern Virginia, where they have a six-stall barn and kennel and breed prize golden retrievers. Bob and Joy are very active in the Vienna Baptist Church. He is a deacon and she is director of the child care program. They sing in the choir, which toured Europe over a year ago. Summer finds them in Georgetown, Me. They have five children and two grandchildren.

1950

Secretary
Lester J. Reynolds, Jr.
15 Cherry Lane
Basking Ridge, NJ
07920

Representative: Henry S. Coe, Jr. 3 Harwick Rd. Wakefield, MA 01880

John Adams is currently general agent for Occidental Life Insurance Co. of California. He is located in Indianapolis. . . . Formerly with Heald Machine and the Alden Hydraulic Laboratory, Richard Amidon has now been named senior vice president of New Hampshire Ball Bearings, Inc., Peterborough, N.H. . . . Francis Fay continues as principal engineer at Raytheon Co., Wayland, Mass.

Dr. Herman Nied has joined the GE Research and Development Center, Schenectady, N.Y. With GE since 1960, Dr. Nied has served as a research engineer in GE's Re-entry and Environmental Systems Division, Philadelphia; an analytical mechanics engineer at Knolls Atomic Power Lab., Schenectady; and as manager of advanced mechanics in the Gas Turbine Division. He has a PhD from the University of Pennsylvania and belongs to the ASME, the Society for Experimental Stress Analysis, and the American Academy of Mechanics. He is a professional engineer in New York and New Jersey.

Les Reynolds is still at the American Cyanamid Company in Bound Brook, N.J. Presently, he holds the position of assistant marketing manager of Textile Chemicals. He attended the National Technical Conference of the AATCC in October at which Joe Gibson, '44 received the highest award in the textile dyeing industry, the Olney Award. . . . Robert Stewart has resigned as president and chief operating officer of Arlen Realty & Development Corp. to take over the new post of senior vice president of corporate planning development at IC Industries, Inc., Chicago. IC is a diversified railroad, real estate and food products company. Stewart will primarily be in charge of strategic and operational planning, acquisitions and divestitures. His first assignment will cover a possible major transaction involving Illinois Central Gulf Railroad, a subsidiary that IC sought earlier to sell to Southern Railway. Stewart has been nominated by the WPI Alumni Association to a five-year term on the WPI board of trustees beginning in 1980.

1951

Secretary: Stanley L. Miller 11 Ashwood Rd. Paxton, MA 01612 Representative. John L. Reid 31 Spring Garden Dr. Madison, NJ 07940

Frank MacPherson has retired from politics after serving four years as a Westfield (N.J.) councilman and council chairman of the Public Works Dept. While in office, he was concerned with instituting extensive storm water controls, including a large retention basin project. He says, "Jack Malloy, '54, was my 'boss', as he has served as town administrator for many years." Last year, MacPherson Control Products, Inc. celebrated its 20th anniversary. The older MacPherson daughters graduated from UVM. Carol is in Suffield Academy.

1952

Secretary Edward G. Samolis 580 Roberts Ave. Syracuse, NY 13207

Richard Boutiette, DPW director in Wakefield, Mass. since 1961, has been reappointed for a three-year period by a unanimous vote of the board of Public Works. In 1977, Boutiette was named "Man of the Year" by the New England Chapter of the American Public Works Association, which he had previously served as president. He is a past president of Norfolk Bristol Middlesex Highway Association and a member of the New England Waterworks Association. He was chairman of the Technical Advisory Committee for Solid Waste Disposal for the MAPC. He has been employed by the Massachusetts DPW, Edward and Kelcey, and the Town of Reading, Mass., as town engineer. In 1966, he gained national recognition for his unique snow-plowing school. He is a registered professional engineer, and he belongs to the ASCE, and the Massachusetts Municipal Engineers Association. . . . Earl Klaubert's son Brian is studying mechanical engineering at WPI.

1953

Secretary
Dr. David S. Jenney
109 Wilbrook Rd.
Stratford, CT
06497

Ernest Demar writes: "Now that my son Danny has decided to attend WPI, I am no longer a 'missing person.' "For 17 years Demar has been working abroad. Currently, he is a resident construction manager for Pullman Kellogg Limited, assigned to a large refinery expansion for Mobil Oil outside of London, England. Demar's oldest son is a sophomore at Tufts.... Dave Elovitz has resigned as chief executive officer of Medical Area Service Corporation in Boston to devote full time to his private practice as a consulting management engineer concentrating on energy systems. He has an office in Natick. He started MASCO in 1972 and built it to an annual volume of over \$12 million. His private practice will build on his national reputation in the energy conservation field.

Secretary Roger R. Osell 18 Eliot Rd Lexington, MA 02173 Representative Roger R. Osell

David Bisson is president of Trend Transit, Inc., Burlingame, Calif. . . . Sahl Kabbani's elevenyear-old firm, New Products Industries in Saudi Arabia, manufactures PVC pipes. "It was the first of its kind in the country in 1968." Formerly, he worked as general manager of the Arabian Cement Company. Two daughters are married and son Khairy is studying in Michigan. A few years ago, Kabbani had a "great" reunion with Abdul Kazi who had 2,000 men under him, and who was responsible for the American and Russian aid to Afghanistan in the field of construction. "After the revolution, I lost contact with him." The Kabbanis have traveled often to Brazil and Europe and twice around the world.

After working as an engineer for seven years, Thomas Kee switched professions for a career in the investment business with Merrill Lynch, Pierce, Fenner & Smith, Inc. He is now an assistant vice president. Son Kenneth, a former high school All-Stater in tennis, is at MIT. Kim, at Brown, was also an All-Stater in tennis and won a varsity letter in girl's track. Kara is in grade school and also likes tennis, golf, and gymnastics. In the summer, the Kees play golf and tennis, turning to platform tennis in the winter. Kee is an "avid backgammon player," and enjoys philately. He sometimes runs into Dick Lindquist at stamp shows. Currently on the board of the Rhode Island Association for the Blind, Kee has also served as PTA president and church treasurer.

Jerome Kilburne has spent 25 years with New England Telephone & Telegraph, except for three years with AT & Tin New York. In 1975, he started a woodworking business featuring selected furniture accessories, clocks, and stained glass items. The Kilburnes have three children: Debbie, who is at Rhode Island School of Design; Bruce, who is a landscaper; and Donna, a high school senior. They reside in Westwood, Mass. . . . King Killin writes that his goals are to "once get an assignment that is not somebody else's disaster, and to catch a 14 pound largemouth bass." As for his career, or anyone else's, "you must be in the right place at the right time to insure success." Since 1974, he has held the post of vice president of engineering at American Can (U.S. Reduction). Previously, he was with Kaiser Engineers, Bridgeport Rolling Mills, and U.S. Steel. The Killins have two sons and a daughter.

Joseph King of Randolph, Vermont, says that his favorite hobby is sailing his 35-foot sloop, "Sea Fever" along the coast of Maine. He likes photography and other outdoor activities, too. His biggest interest now is constructing energy efficient buildings that can be partially heated with alternative energy sources. Presently, he is president of the King Company, Inc., doing general contracting. He owns a small commercial development which has a completed office building and others are being planned. Earlier, he

formed an engineering consulting firm, Dubois & King, which provides environmental engineering services to northern New England and which continues to expand. In 1970, be became senior vice president. He resigned a few years ago to start another firm. Formerly, he worked for Metcalf & Eddy in Boston and the New England Division of the Corps of Engineers. He and his wife have four children, the oldest having recently graduated from the University of Vermont. . . . Richard Kirk works as staff engineer in high-speed printer development at IBM in Boca Raton, Fla. Formerly, he was with IBM in Huntsville, Ala., and with Hamilton Standard in Windsor Locks, Conn. He has two sons and a daughter. Over the years, he has seen service with the Jaycees as secretary and president in Suffield, Conn., and as an officer and committeeman for churches in Suffield and Huntsville. Alabama. . . . Says Haralambos Kritikos, "After obtaining my BS and MS at WPI and being full of good memories, I went to the University of Pennsylvania in Philadelphia, where I continued my studies and obtained my PhD in electrical engineering. I then went to California Institute of Technology as a research fellow for a year, then back to the University of Pennsylvania as a member of the faculty. I am now professor of electrical engineering at the University of Pennsylvania, where I teach and do research in the area of electromagnetic waves.

Robert Labonte's group's activities have focused on NASA, principally in the planning, design, development, testing and integration of improved command and control systems needed to support both the Space Shuttle and the many 'exciting space programs planned for the late 1980's." Earlier, he led special studies activities on the airborne warning and control system; and served as the U.S. consultant on overall communications planning on the U.S. NATO delegation in Paris. In previous years at Westinghouse Air Arm, he worked on the development of the radar for the Bomarc missile. For a time, he was on the staff of MIT's Lincoln Laboratory. The Laborites' only child, Robert, spent two years at Columbia, and is now completing his education nearer home. Wife Dolores is the current president of the Shrewsbury Woman's Club. Harold Lake wrote an article that appeared in the Proceedings of the Electronic Components Conference and a chapter, "Design for Shock and Vibration," which was published in the Handbook of Electronic Packaging, McGraw-Hill. He serves as supervisor of electro-mechanical packaging process control systems at the Foxboro Company. Other associations were with Computer Signal Processors, Inc., Sylvania, and Sperry Gyroscope. He has an MS from Adelphi University. His daughter, Debra, graduated from BU; Sheryl, from Bryant College; and Beth is in high school, while Rhonda is in junior high Lake's wife, Harriet, a dental hygienist, graduated from the University of Bridgeport.

Paul London runs a business fixing vacuum pumps, but spends all the time he can sailing. Former posts were as refrigeration contractor and as a builder of environmental rooms for oil companies. He spent two years at White Sands, N.M., "trying to get some ball bearings to orbit the earth." He has one child at Ithaca College, one at Lewis & Clark, and one riding a bike around England. His second wife, Sharon, graduated this year with a degree in accounting. The Londons live in San Francisco. . . . Russell Lussier says that among his "special awards" are seven speeding tickets, two tax audits, and a condemnation notice from Planned Parenthood. Inc. (The Lussiers have five sons.) He has his own agency in Warren, Ohio, where he is a manufacturers' representative. Earlier, he was seven years in sales with Horsburgh & Scott Co., Cleveland, and nine years with the Torrington

Except for a stint in the Army, Douglas Mac-Laren has been with the Torrington Co. since graduation. Presently, he is in sales management in South Bend, Ind. Previously, he had been district engineer and southwestern district manager, with the bulk of his experience being associated with the oil and aircraft industries. He has served on engineering committees for the American Petroleum Institute. One of his sons is pursuing an accounting career, and another, engineering, at Texas A&M. The youngest is eight and keeps Dad's interest in soccer and Little League alive. . . . Victor Matonis continues with Monsanto in Springfield, Mass., where he is technology group leader, R&D. He has written some 20 technical papers, and holds an MS and PhD in applied mechanics from UConn. Says he plays "lousy golf, not too bad bridge," and that he and his wife have covered most of the world traveling. Both children are at UMass. Matonis is past chairman of his section of the ASME. Malcolm McLeod is a senior development engineer at UCLA. He holds both an MS in engineering and a PhD in planetary and space physics from UCLA.

Milton Meckler delivered a paper, "Integrating Solar Powered Heat-Recovery-Cogeneration Chillers with Building and Thermal Storage Characteristics," before the International Conference on Energy Use Management held in October in Los Angeles. The paper described some of the newer concepts being developed by the Meckler Energy Group and Meckler Engineers Group in Encino, Calif. . . . For two years, Harry Mirick has been business manager-controller for external resources (International Purchasing) at Digital Equipment Corp., Maynard, Mass., and has traveled extensively in the Far East and in Europe. He had been with HMW Industries, Lancaster, Pa., as vice president of operations at Time Computer, Inc., producer of Pulsar digital watches. He was also with IBM and the U.S. Army Signal Corps. His wife, Jean, is a nurse at Worcester's Memorial Hospital. Son Robert is at the Naval Academy; and a daughter, Suzanne, at Grove City (Pa.) College. Mirick likes to sail, garden and hike. He is active with the Methodist Church, the Massachusetts Council of Churches, and the IEEE....

Howard Nelson, long associated with the WPI Fund Board, received his master's degree from WPI this year. For the past two years, he has been at Jamesbury in Worcester. Since graduation, he has worked for four companies in the engineering departments, and found the associations "most pleasant." The Nelsons have two sons and reside in Grafton. . . . The youngest of David Nickerson's three daughters is in her senior year in college. After 15 years in engineering, David and two other people went into business. "The venture has kept me quite busy and satisfied." The Nickerons live in Wilbraham, Mass.

Bob Niro holds the post of manager of field communications for the Technical OEM Group at Digital Equipment Corp., Maynard, Mass. Since he joined the firm 13 years ago, he has spent most of his time in marketing positions and promoting the very successful PDP-8 minicomputer. Earlier, he spent five years at LFE/Tracerlab in Waltham, Mass. traveling the U.S. and Canada as a project engineer. He and his wife Jackie, who likes to ski, have two daughters, Leslie and Christina. . . . Robert Pickford is the manager of systems and procedures for the Pharmaceutical Group of Warner Lambert in Mendham, N.J. His group is comprised of six drug companies, such as Parke-Davis, Warner Chilcott, Texas Pharmacal, and Lactona. He has also been at American Optical, Mass. Mutual Life Insurance Co., and American International College, where he received his MBA and established a data processing program. For a time, he worked for the Counter Intelligence Corps in Panama. Pickford and his wife Betty are the parents of Linda, a Gettysburg College student, and Stephen, 17.... During Fabian Pinkham's career, he has worked on numerous nationwide projects in the U.S. Dept. of Agriculture, and made the first installation of an integrated data processing system within the USDA. He served on the National Inventory Task Force of the USDA; was a member of USDA's National Transportation Management Task Force; worked on problem areas, such as packaging and protective services; and developed and instituted mathematical models for obtaining optimum solutions for competitive bids involving a multiplicity of limitations, i.e., origin points (sources of supply), processing plants, and destination points for finished products in all fifty states. His efforts proved successful, and he was presented with the highest award for an employee suggestion ever granted in the National Processed Commodity Office.

In 1978, Ed Power was elected vice president for planning and market development of Windspan, Inc., a new General Foods subsidiary formed to develop a dinner house restaurant chain. Previously, he had been employed by General Foods at its headquarters in White Plains, N.Y., for ten years working on corporate development programs. The Powers have three children: Jane, Maura, and Ned. Power is a captain in the Naval Reserve. He is inspector general for a Reserve Readiness Command near Schenectady, which is responsible for thousands of reservists. . . . With the Magnetics Division of Spang Industries for ten years, George Ramig is now regional sales manager over eight salesmen

covering the eastern part of the U.S. Company products include cores for transformers and magnetic steels. Ramig has taken up tennis, which he says his son, Keith, plays better than he. Daughter Jeanne is at Indiana University. Ramig's wife, Virginia, is a musician, while Ramig is active in musical groups and enjoys nature photography. . . . For two years, Walt Reibling has been plant manager of the Louisville (Ky.) Corning Glass Works plant known as Corhart Refractories. The plant makes fused cast refractories for the glass industry. Reibling has been at Corning for 15 years. He has three children: a college graduate daughter living at home; Kurt, a married mechanical engineer working at IBM; and a daughter at UConn.

Donald Ross is vice president and general manager at MPB Corporation in New Hampshire. He has been involved in sales, marketing, and specialized business serving the aircraft and aerospace industries. Presently, he is responsible for three divisions in New England. The older Ross daughter graduated from Dartmouth, and the younger is 19. Their son is 14. Ross and his wife Prue are involved with a bank directorship and volunteer school work, respectively. Hobbies include baseball and antique auto restoration

Laurence Sanborn's oldest boy is a student at WPI. At home, his hobby is "keeping two older cars out of the grave." His true career love is microelectronic assembly, primarily in the areas of thick film hybrids. Last May, he became senior manufacturing engineer planner at Hamilton Standard, Electronics Division. Among earlier employers were GE and Raytheon. . . . Dexter Sanford serves as a staff engineer for Northeast Utilities Service Company in Berlin, Conn. His responsibilities include the design and application of protective relay systems for the affiliated companies of Northeast Utilities. During his career, he has worked for Connecticut Power Co., served in the Army at the White Sands Proving Ground in New Mexico, and at Hartford Electric. . . . After a number of years with GE, Fairchild, and Sperry Flight Systems, William Schoenemann joined Microform Data Systems as manufacturing manager. Eight years later, the company had grown from two people in manufacturing and zero sales, to 250 people and \$36 million in sales. Schoenemann rose to vice president of operations at Microform, then joined Telecommunications Technology, Inc., in California, recently, where he is continuing his pattern as a "workaholic." He's played racquetball three times a week for five years.

Richard Scott holds the post of senior estimator in the Providence office of Gilbane Building Co., a firm he joined following graduation. He worked on various road, bridge, and building jobs for the company, then in 1966, he became town engineer for his home town of Cumberland. In 1971 he returned to Gilbane. He is a professional engineer. The Scotts' four sons all like sports, and Dad has served as Little League coach. Scott has also been associated with the local youth hockey group, and the Cumberland Public Skating Association for the past ten years.

... William Seubert, a licensed professional engineer, is a senior engineer at C.F. Braun & Co., Murray Hill, N.J. He and his wife Diana have four children and live in Belle Mead.

Continuing at the Naval Underwater System Center in Newport, R.I., Edwin Shivell is concerned with A&W ranger and fleet systems T&E. He has been Massachusetts state president of the Jaycees. He also was involved with Masonry and the United Fund. Among his hobbies are tennis and sailboat racing. . . . Making antique imitations, woodworking, and cabinetry are favorite pastimes of Charles Simonich. He supervises engineering design, construction and maintenance of aerial, underground, buried and submarine structures and cable facilities for telephone communication needs of the Springfield (Mass.) district of New England Telephone Co. Son Charles attends Fairfield University; David is a high school student; and John is in junior high.

.. The Halvor Skjellaugs love to travel and spend many vacations in the Canary Islands. Skjellaug works for Norsk Hydro-Rjukan Fabrikker in Norway. The company produces ammonia, ammonium nitrate for forest fertilizers and explosives, and concentrated nitric acid, as well as heavy water and a variety of rare gases. The family, which includes a son and daughter, likes skiing, fishing, and gardening. . . . After twenty-five years with du Pont, Walter Stewart of Marietta, Ohio, is presently a senior process engineer in the fluoropolymers division manufacturing Teflon and providing liaison with the engineering department. In the past, he has been involved with the production of the plastic inner layer for windshields, and had been assigned to Parkersburg, W. Va., and Aiken, S.C. Dave is at the University of Cincinnati Medical School. Doug is at the University of Colorado, and Cindy is in high school. All are competitive swimmers. Stewart has coached the local YMCA

Seventeen years ago, McKinsey & Company invited Henry Strage to go to London for a "short" assignment. Today he is still there, serving as a director of the firm. He, his wife, and four children love London. "It is probably the most civilized city in the world." His most satisfying professional assignments involved the complete restructuring of the government of Tanzania and the reorganization of the United Kingdom National Health Service, which employs a million people. He's been associated with the U.N., the British Cabinet think-tank, and the Bank of England. He is now on assignment with the multinational chemical and oil companies. He is a governor of the Hebrew University Jerusalem Institute of Management. He writes management articles for magazines, speaks at seminars, and sometimes teaches at Harvard Business School. The Strages are well traveled, like to ski, and are involved with the National Association for Gifted Children. . . . Wilfred Taylor is the principal member of TEC Associates in Windham, Me. (consulting civil and sanitary engineers). Other associations have been with Dale E. Caruthers Co., Crowell & Taylor, Barnstable, Mass. (town engineer), Corse & Tibbetts, and Columbia Gas Co. Taylor is a professional engineer and enjoys building houses. He has been busy in civic associations, scouting, sailing, and farming. "Raise most of our own food." He hopes to develop water and wind power as well as solar energy alternatives. Currently, he has a tree farm and heats with wood. He has two sons (one a former WPI student) and four daughters.

Otto Wahlrab continues as the owner of John P. Slade Insurance in Fall River, Mass., having purchased the company in 1975 from Bill Worthley, '37. He was with Firemen's Mutual Insurance Co., the Navy, and New England Telephone Co. The Wahlrabs live in Rehoboth, where Otto is on the planning board. He is a former chairman of the Republican party in Massachusetts, a trustee of the Congregational Church, president of Family Planning of Fall River, and a director of the local Chamber of Commerce. He is involved with Rotary, scouting, squash, and golf. The Wahlrabs have three daughters, two being in college. . . . Steinerfilm, Inc., Williamstown, Mass., where Gordon "Bucky" Walters is president-treasurer, is being expanded by 30,000 square feet. (Son Glenn, 76, is plant manager.) Walters started the firm in 1972. He was a former employee of Sprague Electric, du Pont, and was with the Army. He holds two patents and has been published in a national magazine. His concerns include church work, prison visitations, Bible studies, camping, swimming, sailing and fishing. Recently, he was in Brazil. He is associated with American Field Service, scouting, the PTA, Little League, and is a director of First Aggie National Bank and Jiminy Peak. He holds 45 percent of the stock in TEPCO. The five Walters children and their parents enjoy their waterfront home on Lake George. Walters is a member of the Presidents Advisory Council at WPI

R. Kingman Webster holds the post of manager of a regional manufacturer and distributor of feeds for poultry and livestock, and he is located in Andover, Mass. He is a member and officer of several Masonic, YMCA, Red Cross, and United Fund associations. Hobbies include puttering around the house and yard, skiing, and tennis. The Websters have three daughters. In the past year and a half, Wesley Wheeler has had eight career-oriented trips around the world. He heads his own firm of International Maritime Consultants Wesley D. Wheeler Associates, Ltd. in New York City. Among his projects have been the coordinating of four containership new buildings for ITEL Corp./ Seatrain Charter, numerous ship surveys, and legal cases. He is also the U.S. representative for Astilleros, Espanoles, S.A. Earlier he was with American Bulk Carriers, Inc; Wheeler Yacht Co.; M. Rosenblatt and Son, Inc.; John J. McMullen Associates, Inc.; and J. J. Henry Co., Inc. For seven years he lived in Spain, Malta, and the Netherlands. He has an MS in engineering (Naval Architecture and Marine Engineering) from the University of Michigan. . . . For twelve years, "Howie" Whittle has served as treasurer of Hollingsworth and Vose Co., which manufactures and sells \$53 million worth of specialty paper and non-woven products worldwide. Located in South Acton, Mass., the Whittles have

three daughters, "who have grown up on a little farm with lots of horses around." They summer on Cape Cod and do some Sunfish racing. They winter at Mad River Glen, Vt., on skis. Their oldest daughter graduated from RIT, and is married; their second is a student at UMass, as is their youngest. Wife Bebe is "quite a horsewoman.

1955

Kenneth L Wakeen 344 Waterville Rd 06001

Representative Edouard S. P. Bouvier 123 Beechwoods Dr Madison, CT 06443

Robert Holden now teaches engineering subjects at Cuyamaca College in San Diego, Calif The school is an "offshoot" of Grossmont College, where he has taught for years. Last summer he ran in two marathons (26 miles, 385 yards), and clocked 3 hrs., 48 mins., at the San Francisco marathon, and 3 hrs., 54 mins. in San Diego. He was track manager at WPI in 1955. . . . Charles Walters, manager of the Wallingford (Conn.) Electric Division, has been reelected treasurer of the Northeast Public Power Association (NEPPA). Employed in the utility industry for over 20 years, he also has an MBA from the University of New Haven. NEPPA is a Wellesley (Mass.) based association representing the 81 consumer-owned electric utilities in New England.

1956

Rev. Paul D. Schoonmaker 325 North Lewis Rd. Royersford, PA 19468

Representative John M. McHugh 431 Beacon Hill Dr. Cheshire, CT 06410

Alan Adamson, formerly supervisor of Generation Planning, has been appointed planning manager of the New York Power Pool. He is responsible for the Pool's eight member electric power systems, which supply the major portion of the electric energy consumed in New York State. He manages the planning staff, and directs studies regarding the need for different types of generating and high voltage transmission facilities in the state. After graduation, he joined Long Island Lighting, and before joining the Pool in 1971, served as supervisor of generation and interconnection planning. With the Pool, he was responsible for supervising, performing, scheduling, and coordination of generation planning studies in his capacity as supervisor of generation planning. He belongs to the IEEE and serves on the Application of Probability Methods Subcommittee. He and his wife, Carol, have three children and reside in Guilderland, N.Y.

Still with United Technologies, Ernest Bernstein is now engineering manager in Farmington, Conn. . . . Donald Lathrop has been promoted from associate professor to professor in the humanities division at Berkshire Community College in Pittsfield, Mass. He started teaching in the sciences and engineering department in 1961, and presently teaches philosophy. He has two master's degrees: one in natural science from RPI and another in religion from USC.

Dr Robert A. Yates 11 Oak Ridge Dr. Bethany, CT 06525

Representative Alfred E. Barry 1 Algonaum Rd Worcester, MA

John Daly has been elected president of seven Columbia Gas System distribution companies with headquarters in Columbus, Ohio. Columbia Gas Companies included are those in Kentucky, Ohio, Maryland, New York, Pennsylvania, Virginia, and West Virginia. Since 1976, Daly has been general counsel and secretary of Columbia Transmission Corp. in Charleston, W. Va., a unit of Columbia Gas System. He has been with Columbia since 1957, and holds a law degree from Seton Hall. In 1961, he was named an assistant supervisory engineer in New York, then corporate headquarters. In 1971, he was promoted to senior attorney. He became a member of the law department of Columbia Transmission in 1973. In 1976, he was named general counsel of the firm. Daly and his wife, Jane, have three sons and a daughter. . . . Bob Lemay is working for IBM in Hopewell Junction, N.Y.... Presently, Richard Moore serves as supervisor of application engineering at SKF Industries, Inc., in King of Prussia, Pa. . . . Robert Propper continues as a visual information officer at the U.S. Dept. of Transportation in Washington, D.C.

Donald Rising holds the post of manager of medical products development at Millipore Corp. in Bedford, Mass. . . . Richard Stevens is a sales engineer at Sprague Electric Co. in Inglewood, Calif. . . . David Stuart, who serves the Baha'i faith as an assistant auxiliary board member in Massachusetts and New York, was guest speaker at a Baha'i fireside discussion in Schenectady, N.Y. last September. He is an assistant director of the New England Power Exchange.

Secretary: Harry R. Rydstrom 132 Sugartown Rd Devon, PA 19333

Neil Carignan holds the post of chief design engineer in the Jacksonville (Fla.) office of M. Rosenblatt & Son. He is primarily concerned with Navy marine design. . . . Norman Taupeka is currently attending the Industrial College of the Armed Forces in Washington, D.C., his studies there concluding at the end of June. ICAF provides senior level courses of study and associated research in the management of resources in support of national security for selected military officers and career civilian officials in the federal government. For three years, Taupeka has served as chief of the Systems Engineering Division at the Center for Tactical Computer Systems, U.S. Army Communications Research and Development Command, Fort Monmouth, N.J. He has held increasingly responsible positions at Fort Monmouth since graduation. The Taupekas and their daughter, Mary Ann, reside in Alexandria. Va.

1959

Secretary Dr. Frederick H. Lutze, Jr. 110 Camelot Court NW Blacksburg, VA 24060 Representative: Dr. Joseph D. Bronzino Trinity College Summit St. Hartford, CT 06106

After many years of teaching and administrative work, Oscar Hawley has just assumed the headmastership of the Harvard School in Chicago. The Hawleys have a son, Peter, and a daughter, Mary Elisabeth. "We try to return to New England every summer for some play at the shore in Rockport, Mass." . . . Philip Holden is currently computer systems supervisor at the Brevard (N.C.) film plant of du Pont. His daughter, Cathi, made the dean's list at the University of North Carolina, and is working toward a degree in veterinary medicine. Sister Lori was voted "Citizen of the Year" at her high school, where she was named official photographer of the senior class. Cathi has traveled to Europe and Lori to Venezuela on school trips. The girls also visited an exchange student friend in Japan. . Leo Price continues with the U.S. Army Corps of Engineers. He is presently serving as a geotechnic engineer in Tel Aviv, Israel. He is concerned with the construction of air bases under the U.S.-Israel agreement. He specializes in horizontal construction and foundations.

1960

Secretary: Paul W. Bayliss 170 Wyngate Dr Barrington, IL 60010 Representative. John W. Biddle 78 Highland St. Holden, MA 01520

Cdr. Kevin Burke is teaching management at the U.S. Naval Post Graduate School in Monterey, Calif. Last year, he was evacuated from Tehran, Iran, where he was serving as an advisor to the Iranian joint staff. . . . Recently, Thomas Houston purchased an ornamental iron works business in Eugene, Oregon. He had been employed by Hughes Aircraft in Fullerton, Calif., for 19 years. . . . David Mudgett works at the United Technologies Research Center in West Palm Beach, Fla.

John Reisinger has been named division staff manager of residence services for Southern New England Telephone in a newly created post. He is responsible for staff functions, including business office and phone center store methods and commercial budgets, results, and training. Earlier, he was division manager in materials management. He joined SNET as assistant engineer in 1960. In 1967, he was named installation and maintenance supervisor. After serving as district equipment superintendent and northern area staff manager, he was promoted to division manager in 1976. He has an MBA from the University of Hartford, is a team captain for the United Way of Greater New Haven, and a member of the University Club of Hartford. . Frank Siegel holds the post of senior engineer at Raytheon in Bedford, Mass. He is in the hybrid microcircuit advanced development group.

1961

Secretary: John J. Gabarro 8 Monadnock Rd. Arlington, MA 02174

Henry Allessio, vice president of Hayes/Hill, Inc., a management consulting firm, was recently quoted in The Wall Street Journal as saying that demand for auto parts was projected to rise a slim 1.45 percent in 1979 compared with a growth of 3.9% and 5.5% in 1978 and 1977 respectively. People buy fewer auto parts when they drive less, as the slowdown in the growth of auto parts sales proves. . . . Richard Andrews continues as program manager for ERT, Inc., in Concord, Mass. . . . Dr. Norman Bolyea is now president of Bolyea Associates in Rye Beach, N.H.... David Chesmel has been appointed manager of marketing for the seal and packing division of Chemplast, Inc., Wayne, N.J., a processor of high performance plastics. He is responsible for marketing in the new division, as well as for sales and product development programs. He holds a master's degree from Wayne State University.

Nino DiPilato has transferred to a new IBM location in Charlotte, N.C. He is presently working on the system design and architecture of Retail Banking Systems as an advisory engineer. He, his wife, and two sons are living in Mathews, a suburb of Charlotte. "We are all adjusting well to the beautiful North Carolina weather."... Ralph Guertin has moved to Denver, Colo., and is now a geophysical consultant with McAdams, Roux, O'Connor Associates, Inc., an oil and gas exploration firm. He is responsible for geophysical research and for development of new mathematical methods to process seismic data.

... Brad Hosmer has been elected corporate vice president of Group Services for AMF Incorporated. Brad joined AMF in 1978, following a series of marketing, operations and engineering management assignments with three companies, including the management consulting firm of Booz Allen Hamilton. At Branson Sonic Power Co., he rose to vice president of special products marketing. AMF Incorporated, his present firm, is a worldwide producer of leisure time and industrial products.

James Kachadorian, owner and founder of Green Mountain Homes, Royalton, Vt., spoke about his manufactured solar homes as part of a session on emerging architecture in Kansas City in October at the Fourth National Passive Solar Conference. Since 1976, Jim's designs have received national recognition by such organizations as the National Passive Solar Institute, the American Section of the International Solar Energy Society, Inc., the National Woodwork Manufacturers Association, Solar Engineering Magazine, and House and Garden. Sandia Laboratories, Los Alamos, N.M., selected Kachadorian's design as one of fifteen passive solar homes studied for a special report last July. The houses were considered to be the best passive solar-heated buildings of the year. Already studied by Dartmouth's Thayer School of Engineering, Jim's homes will soon be studied by

Brookhaven Laboratories of New York.
Green Mountain passive solar homes are individually designed for homeowners, manufactured in Royalton, and shipped throughout the eastern U.S. from Virginia and Kansas to the Canadian border. Presently, the Kachadorians are building their own solar home, the first such home in Woodstock, Vermont.

Normand Noel is the new director of Gilbane Building Company's regional office in Houston. Since starting at Gilbane in 1970, Noel has served as district manager of business development in the Providence and Washington, D.C. regional offices. He has an MBA from UConn. A Marine for 20 years, he continues as a lieutenant colonel in the Marine Corps Reserve.

Secretary
Harry T. Rapelje
1313 Parma Hilton Rd.
Hilton, NY
14468

Representative. Richard J. DiBuono 44 Lambert Circle Marlboro, MA 01752

Charles Belanger, M.D., has moved from the associate staff to the active medical staff at Hahnemann Hospital in Worcester. He has been associated with the hospital since 1975. After graduating from WPI, he did graduate work in physics at the University of Wisconsin and studied at Dartmouth Medical School. He received his M.D. from the University of Vermont, and was an intern and resident at Children's Hospital, Buffalo, N.Y. As a member of the U.S. Army Medical Corps, he was assigned to Martin Army Hospital, Fort Benning, Ga. . . . M. Philip DeCaprio has been promoted to manager of engineering and operations program control and reporting at Northeast Utilities in Hartford, Conn. . . . Recently, Clifford Engstrom, manager of the Middleboro (Mass.) Gas and Electric Department, was reelected to the board of directors of the Northeast Public Power Association (NEPPA). He has been manager at Marlboro since 1975 and an employee of the municipal since 1970. He, his wife, Jane, and three sons reside in Lakeville. NEPPA represents 81 consumer-owned electric utilities in New England.

After nearly five years in England, George Forsberg has returned to the U.S. and is currently a manager of HMD process technology for Monsanto in Pensacola, Fla. . . . Martin Gross has been named product line manager responsible for the direction and management of the modular analog and converter and modular instrument product lines of the Instruments and Systems Group at Analog Devices, Norwood, Mass. Since 1968, he has held a number of sales management positions, the most recent being that of manager of special sales development. He has an MSEE and MS in engineering management from Northeastern. He is married, has two children, and coaches youth soccer and Little League in Sudbury, Mass. Analog Devices is a leading supplier of electronic data acquisition products. . . . Verne Viele is with Harris Corp., Web Printing Press Division, Pawcatuck, Conn. He and his wife, Sheila, have seven children. . . Presently, Stephen Wells holds the position of director of operations at Lever Bros. in New York

1963

Secretary Robert E. Maynard, Jr 8 Institute Rd North Grafton, MA 01536 Representative: Joseph J. Mielinski, Jr 34 Pioneer Rd Holden, MA 01520

Alan Elias is a systems programmer-analyst at Sikorsky Aircraft in Stratford, Conn. . . . Robert Maynard, Jr., is the newly-elected vice president of finance at R. H. White Construction Company, Inc., Auburn, Mass. He is in charge of finance and administration for the company and its subsidiaries. He holds an MBA from Dartmouth's Amos Tuck School of Business Administration. . . . Recently, Roger McGee was promoted to crude oil trading coordinator for Standard Oil Company of California in San Francisco. He finds that with unsettled crude supply at the present time, his is a very busy and interesting assignment. Previously, he was involved with operations planning for Chevron USA, Standard's domestic subsidiary. liam Newhall continues with the family company, Harwood Engineering, in Walpole, Mass. The firm makes equipment used as the national standard for pressure gauges by several countries around the world. Harwood models are used in the U.S. Bureau of Standards in Washington, D.C. Copies of Harwood gauge calibrators are on display in Moscow and Tokoyo. . . . A. Stephen Otis serves as vice president of Merrill Lynch, in Los Angeles. . . . A. Edward Scherer has received his MBA from the RPI Hartford Graduate Center. . . . Bill Zinno continues at Dresser Clark, Olean, N.Y., where he is materials manager.

1964

Secretary Dr David T Signori, Jr 6613 Denny Pl. McLean, VA 22101

J. Michael Anderson is now with Continental Can Company in Wayne, N.J. . . . Benjamin Brunell holds the post of manager of manufacturing applications at Waters Associates in Milford, Mass. . . . Dr. James Kaput, associate professor of mathematics at Southeastern Massachusetts University, has been named a Danforth associate. The Danforth Foundation Associate Program recognizes and encourages effective teaching and fosters activities which humanize teaching and learning for members of campus communities. Kaput joined the SMU faculty in 1968. He teaches algebra, the philosophy of mathematics, and mathematics education. He has an MA and a PhD from Clark. . . . Still with Pratt & Whitney Aircraft, John Macko is presently manager of government liaison for the government products division in West Palm Beach, Fla. . . . William Phillips has been promoted to manufacturing manager of Norton Company's Diamond Tool Division. After eight

years in Holden, he has relocated to North Carolina.

John Schmidt is an audio-video systems engineer for the American Broadcasting Company in New York. . . . Wilbur Waters, Jr., serves as a senior field engineer-programmer for Westinghouse in Baltimore.

1965

Representative: Patrick T. Moran 100 Chester Rd Boxboro, MA 01719

Continuing with Polaroid, Phil Baker is presently project manager for industrial products engineering in Cambridge. Recently, he spent two months in Japan developing a new camera. Twice a year, he teaches an optics course during Polaroid's management seminar series. The Bakers and their two children reside in Peabody. . . . Ronald Chand, president of ARSEE Corp. Worcester, reports that his growing company has moved to Oread St. in part of a building that once housed General Screw Machine Products Co. His manufacturing space has increased from 2000 to 6000 square feet. ARSEE is the only carbide manufacturing company in New England. It sells carbide to fabricators. Last year, the firm did about \$250,000 worth of business.

Paul Schuster has been appointed head of the processor design department at Bell Labs in Naperville, III. He is responsible for the design of general purpose computers for use in the Bell System. Starting at Bell in 1967, Schuster was initially involved in the design of special-purpose hardware for the Navy. In 1971, he was promoted to supervisor in the Ocean Systems Division, where he was most recently responsible for specialized computer design for the Navy. He has an MSEE from WPI, and holds a patent on programmable digital filter realization. . . . Dennis Simanaitis is an editor with Road & Track magazine in California. . . . Robert Stow holds the post of engineering manager at Singer-Kearfott, Wayne, N.J. . . . Robert Waite is a member of the technical staff at the Mitre Corporation in Bedford, Mass. He serves as president of the New England Computer Society.

1966

Secretary: Gary Dyckman 29 Skilton Lane Burlington, MA 01803

Representative: Dr. Donald H. Foley Indianfield Rd. Clinton, NY 13323

► Married: John W. Benson II to Ingrid M. Laurell on July 7, 1979 in Chatham, Massachusetts. Mrs. Benson graduated from the School of Art Education at Virginia's Commonwealth University in Richmond. A former teacher, she now owns and operates The Swedish Butik in Chatham. Her husband is with Burton Industries in Pawtucket.

▶ Born: to Mr. and Mrs. Peter Gray IV their first child, Peter Gray V.... to Mr. and Mrs. Jay Segal a son, Scott, in August. Daughter Pamela is 2½. Jay is an attorney in New York City and resides in New Rochelle.

Gordon Eaton teaches in Ludlow, Mass. . . . Dr. Paul Glodis is a researcher in the physics department at U.C.L.A. . . . Stephen Kaiser of Kaiser Sales Corporation, represents the Singer Company. The firm has offices in Los Angeles and Whittier, Calif. . . . Roberto Huyke-Luigi is employed in the department of civil engineering at Recinto Universitario de Mayaguez in Puerto Rico. . . . Errold Moody, Jr., who has an LLB from Lasalle and an MBA and PhD in real estate and urban economics from the University of Beverly Hills, is a real estate analyst and consultant in Irvine, Calif. . . . Donald Petersen, Jr., has transferred to Miami with IBM, where he is a systems engineer on the Eastern Airlines team installing a distributed computer network at all the airports which Eastern services. . . . Michael Portanova is a corporate economist at DEC in Marlboro, Mass.

1967

Secretary John L. Kilguss 5 Summershade Circle Piscataway, NJ 08854

► Married: Neil M. Shea and Judith A. Thiele on June 16, 1979 in Troy, New York. The bride received her bachelor's and master's degrees in zoology at the University of Cincinnati. She is a faculty member at Hudson Valley Community College. The groom teaches at North Shore Community College, Beverly, Mass. He has a master's degree and doctorate in physics from RPI

Eugene Baldrate, who is a staff manager in facilities planning at SNETCO, is in his second year at the University of Bridgeport School of Law. The Baldrates and their children, Kelly and Brian, have moved to Guilford, Conn. . . . Peter Bondy works for Xerox Corporation in Rochester, N.Y. . . . Francis Dacri continues as senior research engineer at du Pont in Old Hickory, Tenn. . . . Eduardo Mendez holds the post of project manager at Pavarini Construction Co. in Santurce, Puerto Rico. He and Anita have three children. . . . John Rogozenski, Jr., is employed as manager of development at Dunkin' Donuts in Braintree, Mass. . . . Still with Carrier Corp., Raymond Seguin presently holds the post of manufacturing manager at a Carrier division, BDP Company, in Indianapolis. . . . John Stumpp continues to serve as an electronic engineer at the National Security Agency, Ft. Meade, Md.

1968

Secretary: Charles A. Griffin 2901 Municipal Pier Rd Shreveport, LA 71119 Representative: William J. Rasku 33 Mark Bradford Dr. Holden, MA 01520

► Married: Terrence P. Sullivan and Holly H. Hurd in Annisquam, Massachusetts on July 28, 1979. Mrs. Sullivan graduated from Colby-Sawyer College, New London, N.H. She is a registered trader for the municipal bond department at Tucker Anthony & R.L. Day in Boston. Her husband is president of Boston Bay Capital, Inc., which he founded. Sullivan has a master's degree from UMass. His firm is a tax shelter planning company placing investments in oil and gas, real estate, and equipment leasing. ... Frank S. Yazwinski III and Emily Groves in South Deerfield, Massachusetts on July 21.

South Deerfield, Massachusetts on July 21, 1979. The bride graduated from Hampshire College.

Michael Annon has a new post as a senior engineer at Proto-Power Management Corporation in Groton, Conn. . . . Dr. Charles Konopka, a mathematics teacher at Longmeadow (Mass.) High School, recently assumed the duties of assistant principal at the school. He has worked with the Connecticut State Department of Education, was an administrative assistant-teacher with the East Windsor Board of Education, and served as a graduate research technician at UConn., where he received his PhD. Before going to Longmeadow in 1977, he was special assistant to the Connecticut commissioner of education. . . . David Morris is a technical specialist at Betz Labs, Trevose, Pa. . . . Joseph Paquette holds the post of general manager for Wiley Manufacturing of Port Deposit, Md. Wiley is a unit of AMCA International, a wholly-owned subsidiary of Dominion-AMCA of Hanover, N.H. . . . Dr. Richard Snay continues as a geodesist at the National Oceanic & Atmospheric Administration in Rockville, Md. . . Richard Vaughn is the regional sales manager at Harding Co. in Boston. He and his wife, Ann, have three children and reside in Fitchburg.

1969

Secretary: James P. Atkinson 41 Naples Rd. Brookline, MA 02146 Representative Michael W Noga West Bare Hill Rd Harvard, MA 01451

▶Born: to Mr. and Mrs. Daniel C. Pond their first child, a daughter, Jennifer Katherine, on August 9, 1979. Dan is a senior engineer at Martin Marietta Aerospace, Denver Division, and enjoys very much the casual Colorado life style. . . to Dr. and Mrs. Joseph A. Senecal their third child, Brian Albert, on August 8, 1979. Their other children are Emily, 5 and Eric, 2. Joe is a senior engineer with Polaroid's Chemical Development Laboratories in Cambridge, Mass.

James Atkinson, who is attending the New England School of Law in Boston, also holds the post of assistant contract document coordinator at Massachusetts Bay Transportation Authority in Boston. . . . Normand Bachand continues as a staff psychologist at Clinton County Mental Health Clinic in Plattsburgh, N.Y. He enjoys jogging and reading. He and Carol have two children. . . . Tony Bergantino, Jr., remains with Polaroid, and is now the technical support manager. He manages the pilot coating facility for Polaroid's Applied Technology Division. Kenneth Berube, who belongs to the Central Mass. Conference of Football Officials, also serves as purchasing manager at Boston Insulated Wire in Dorchester. The Berubes live in Oxford and are the parents of Alan and Carla.... William Boyan works as an estimator of construction costs at Circle Industries Corp., Bronx. N.Y. He and his wife, Karen, live in Tenafly, N.J. . . . Michael Cohen holds the post of marketing representative at STSC, Inc., an international computer services company in Boston. . . . Joel Cehn is a health physicist at Teknekron Research, Inc., McLean, Va. His work involves evaluating all the various sources of radioactive air pollutants for the EPA. In his spare time, he sails, roller skates and makes furniture. Charles Doe has been promoted to associate actuary within the actuarial organization at State Mutual Life Assurance Company of America in Worcester. He joined State Mutual as an actuarial assistant in 1969. He served as an actuarial associate and senior actuarial associate prior to being promoted to assistant actuary in the company's group term and health organization. He has a master's in actuarial science from Northeastern. In 1977, he became a fellow of the

In August, Warren Follet joined Advanced Micro Devices, Inc. of Sunnyvale, Calif. He is a field applications engineer based in the Boston area. Rick, his wife, and two children live in Westford, Mass. . . . Richard Gurske continues in Denver, where he is senior environmental engineer at Northern Coal Company. . . . Gordon Mears has accepted the post of purchasing manager at American Tourister in Warren, R.I. . . James Hills has started a new business, Custom Valves & Control Corp., in Worcester. The company engineers, designs, and fabricates specialty valves and control packages for the process control market. For eleven years he was engineering manager for Worcester Controls before going into business for himself. . . . Still with Jones Enterprises, Inc., East Hartford, Conn., Ronald Jones presently holds the post of

vice president and general manager.

Last fall, **Donald Robinson** was named assistant manager of Massachusetts Electric Com-

Society of Actuaries.

pany's Hopedale district. Formerly, he was an energy systems consultant for Mass. Electric's parent company, New England Electric. In that post, he coordinated the firm's solar water heating test project, recognized as a national model for solar application in a freezing climate. In his new position, he has coordinated five energy fairs (including one at WPI) sponsored by Mass. Electric and its affiliates. He joined the company

in 1972 as a consumer services representative.

He served in Vietnam with the 101st Airborne as an artillery officer. The Robinsons reside in Shrewsbury.... Frederick Spreter is employed as regional sales manager at Gould, Inc., Atlanta, Ga.... Paul Wolf has been appointed comanager of the TSM Planning Group at the Northeast Ohio Areawide Coordinating Agency. His duties include responsibility for all highway-related transportation systems management planning with five counties surrounding Cleveland. In the past year, Paul has developed an improved version of the Transyt/6 computer program for optimization of traffic signal timing patterns.

1970

Secretary: F. David Ploss III 208 St. Nicholas Ave Worcester, MA 01606 Representative: Garrett G. Graham 150 Brookside Rd. Needham, MA 02194

► Married: Richard G. Drolet to Gloria R. Breault in Cumberland, Rhode Island on August 17, 1979. Mrs. Drolet is attending Bryant College. The bridegroom works for Valley Gas Co. in Cumberland. He has a degree from URI.

▶Born: to Mr. and Mrs. John J. Gale twin sons, Michael and David, on October 2, 1979. The family, which now includes three sons, is spending the winter in Florida. Gale is the golf pro at Rochester (N.H.) Country Club. . . . to Mr. and Mrs. Frank Vernile, their first child, a daughter, Sarah Marie, on September 13, 1979.

Philip Bartlett, Jr., has been appointed sales manager for the southwest district of Cyanamid's paper chemicals department and is moving to Mobile, Alabama. Formerly, he was a technical sales representative for water treating and mining chemicals for the firm. In 1977, he was named assistant to the marketing manager, paper chemicals. He belongs to the ACS, AICE, the Technical Association of the Pulp and Paper Industry, and has an MBA from the University of Southern California. . . . Bernard Dodge is now a research associate at Development & Evaluation Associates in Syracuse, N.Y. He is also a consultant to XIMED Research, Inc. . . . Jonathan Leavitt continues as chief test engineer at Combustion Engineering-KSB Pump Co., Inc., Portsmouth, N.H. He and Frances have two children and reside in Exeter. . . . John Redmon, who holds an MSEE from WPI, is still an education administrator at Pennsylvania Power & Light Co., Allentown, Pa.

1971

Secretary: Vincent T. Pace 4707 Apple Lane West Deptford, NJ 08066

▶Born: to Mr. and Mrs. Daniel J. Dunleavy a son, John, on February 28, 1979.... to Mr. and Mrs. Leo R. Gillis, Jr., a son, Kevin Michael, on July 27, 1979. Leo has accepted a position in the transmission department of Northeast Utilities in Berlin, Conn... to Dr. and Mrs. Richard San Antonio a daughter, Marianne Camille, on March 29, 1979. Richard is a resident in internal medicine at Walter Reed Army Medical Center in Washington. D.C.

Paul Cooper, Jr., recently received a service award from the New England Division, U.S. Army Corps of Engineers. He was cited for his willingness to assume new and challenging responsibilities. He and his wife, Maureen, reside in Malden, Mass. . . . Carlton Cruff has changed jobs and is now working as a project engineer for Homogeneous Metals, Inc., where he is in charge of a new plant expansion. The firm produces powdered metal for the jet engine companies. . . . Dr. Claude Mancel, who has been associated since 1973 with the R&D European Division of Procter & Gamble, was recently promoted to associate director. He lives in Brussels, Belgium, with his wife and three children. John Plonsky works as a contract administrator at Sikorsky Aircraft in Stratford, Conn.

1972

Secretary: John A. Woodward 101 Putnam St. Orange, MA 01364 Representative. Lesley E. Small Zorabedian 16 Parkview Rd Reading, MA 01867

► Married: Ralph A. Blackmer and Stacey A. Wagner on September 29, 1979 in Orange, Massachusetts. The bride, a medical technologist, graduated from Framingham State College. The groom has an MS in management science and engineering from WPI. He is manager of sterile operations at Smith, Kline & French Corp., Philadelphia. . . . Mark A. Fritz and Margaret McDermott. Mrs. Fritz is a typesetter at Wang Laboratories, where her husband, who has an MBA from New Hampshire College works as a systems analyst trainer. . . . Joseph V. Gotta and Eileen C. Boisjolie in Easthampton, Massachusetts on September 1, 1979. The bride graduated from St. Francis School of Nursing, Hartford, and is a registered nurse at Providence Hospital, Holyoke. The bridegroom has an MBA from Western New England College. He is coordinator of product development at Ludlow Packaging, Holyoke, Mass. . . . William D. Singleton, Jr., and Lee A. Rademacher in Falmouth, Massachusetts on June 9, 1979. Mrs. Singleton graduated from Michigan State University. She is a sales representative-editorial

assistant at Goodyear Publishing Co. Her husband is a marketing consultant in the Boston area.

▶Born: to Mr. and Mrs. Walter L. Ballard, a daughter, Heather Ann, on Mother's Day, May 13, 1979. . . . to Mr. and Mrs. Henry Greene, a son, on December 26, 1978. Greene now works as a mathematics instructor at Salisbury State College in Maryland. . . . to Mr. and Mrs. Robert Shawver their first child, Matthew Arthur, on July 16, 1979. Shawver is a flow monitoring service unit supervisor for the Washington Suburban Sanitary Commission. He and his family live in Bowie, Md.

Al Heaney has moved to Clearwater, Fla. He recently joined Sperry Microwave Electronics as an engineering staff consultant. . . . Jeff and Mary Bollino Petry, '74 and children, Jeff, Jr., 5, Tony, 4, and Laura, 2, have moved to Detroit, Michigan. Jeff, still with Torrington Co., has taken over Hydromatic for the firm. Mary keeps busy with the children. . . . Robert Pascucci has graduated from St. John's University School of Law, where he received a Juris Doctor degree. He has accepted a position with the law firm of Max E. Greenberg, Trayman, Cantor, Reiss & Blasky in New York City. The Pascuccis have a year-old son, Brian. . . . Wesley Pierson is a clinical research associate at Riker Laboratories, 3M, in St. Paul, Minn. . . . Alain Roux is associated with ELF, a French petroleum company.

1973

Secretary
Jay J. Schnitzer
322 St. Paul St.
Apt. #3
Brookline, MA
02146

► Married: Joyce L. Caplovich to Randy A. Wilson on October 6, 1979 in Cromwell, Connecticut. Mrs. Caplovich is a data processing consultant at Comtech, Inc. in East Hartford. Her husband graduated from Thiel College, and is a data processing consultant at Michrotech, Inc., Simsbury, Conn. . . . Raymond F. Cherenzia and Rhonda C. Zanella on August 11, 1979 in Misquamicut, Rhode Island. The bride graduated from Mount St. Joseph College. She teaches in the Westerly school system. The groom holds the post of town engineer for the Westerly Department of Public Works. Recently, he received his professional engineering license from the State of Rhode Island. . . .

►Married: John J. Luikey, Jr., to Lynn S. Knight in Knox, Pennsylvania on August 3, 1979. Mrs. Luikey, a registered nurse, graduated from Clarion (Pa.) State College. The groom is a project engineer at Quabaug Rubber Co., North Brookfield, Mass. . . . Richard C. Peck and Mary E. Kowalski on September 8, 1979 in Meriden, Connecticut. The bride graduated from Central Connecticut State College. . . . Gary N. Shapiro to Pamela J. Ciardelli on June 24, 1979 in Milford, New Hampshire. Mrs. Shapiro graduated from Wilton Lyndeboro Cooperative

High School and plans to attend the University of Lowell as a chemical engineering major. The bridegroom is a mathematics teacher in the Andover school system. He has an M.Ed. from Boston University.... Ralph J. Veenema, Jr., and Janet B. Biancur on September 1, 1979 in Orange, Connecticut. The bride has a BS degree in art education and an MS in early childhood education from Southern Connecticut State College. Her husband holds an MSME from UMass, Amherst

▶Born: to Mr. and Mrs. Charles Kavanagh, a son, "C.J.," on April 18, 1979. Kavanagh is projects manager of three sites in northern Nigeria, where he has lived for two years. . . . to Mr. and Mrs. Stuart Wallack, a daughter, Rachel, on July 10, 1979. Wallack has been transferred by Torrington Co. to Brighton,

Steven Brennan, a general engineer at Naval Ordnance Station, Indian Head, Md., is working on the Navy surface-to-air missile programs. . Currently, Alan Champagne is located in Shippingport, Pa. with Stone & Webster. . . . Still with GE, John Gizienski is now a manager of manufacturing engineering for the company in Ponce, Puerto Rico. ... Wallace McKenzie, Jr., has been appointed a consultant to the Planning Services Division of Management Decision Systems, Inc. of Waltham, Mass. MDS is a privately-held, national leader in the development and use of problem-solving models and computer software for business analysis and planning. In his new post, McKenzie will help major companies build models to help their businesses. Prior to joining MDS, he was senior operations research analyst for the Converse Division of Eltra Corp. and research associate at WPI. He has an MBA from RPI. He belongs to the Operations Research Society of America, the American Institute of Industrial Engineers, and the Saugus (Mass.) Finance Committee. He has served as area chairman for special gifts of the American Cancer Society. . . . Scott Blackney is with Raytheon Co., Wayland, Mass.

Garry Boynton is now a senior chemist in the New York State Department of Agriculture and Markets in Albany, N.Y.... Dan Eide was recently transferred from Hammond Plastics in Owensboro, Ky., to Carl Gordon Industries, Inc. in Worcester, where he is vice president of manufacturing and engineering. The Eides have two children and reside in West Boylston, Mass. Claude Lemoi works as manager of shop operations at GE in Lynn, Mass....John Manzo is employed as manager of Raytheon Company in Moorestown, N.J.... Ragunath Mhapsekar has been named as an estimator at the Schnip Building Company of Norwich, Conn. He will provide the company with estimating expertise in the design-build concept of facilities expansion. . . . William Nutter is field service engineer at General Electric Ordnance, Cape Canaveral, Fla. He is a member of the Trident backfit installation and test team. He also serves as resident magnetic disk file expert. . . . Dr. Philippe Peltre holds the post of branch manager for the French subsidiary of Procter & Gamble.

Beth Poulin is a consulting engineer for Foster-Miller Associates in Waltham, Mass. She works on alternative energy projects as a project engineer.... Daniel Robbins is studying for his master of fine arts degree at Ohio University in Athens. . . . Dr. John Ward has accepted a position as a meteorologist with the development division of the National Meteorological Center in Washington, D.C.

Secretary: James F. Rubino 18 Landings Way Avon Lake, OH

Representative: David G. Lapre P.O. Box 384 Tunkhannock, PA 18657

► Married: David A. Gerth to Miss Angela A. Ralli in Norwood, Massachusetts. The bride holds BS and MS degrees from Bridgewater State College. She is a special needs teacher in Bellingham, Mass. The groom, who has an MBA from Amos Tuck School at Dartmouth, is a CPA employed as a management consultant in the administrative services division of Arthur Anderson Co. in Boston. . . . Alfred J. Swierad, Jr., and Colleen A. Maroney in Canton, New York on June 16, 1979. The bride, a graduate of Alfred State College, is a senior technical assistant at Bell Laboratories, Holmdel, N.J., where her husband is a member of the technical staff. He has a degree from Texas A&M University. . . . Mark J. Whitney and Carolyn L. Noel on July 14, 1979 in Connecticut. Mrs. Whitney has a BA in English and theater arts from Notre Dame Academy and College of White Plains, N.Y. The bridegroom works as a cost engineer at Northeast Utilities

▶Born: to Mr. and Mrs. John Martin, a second son, David Michael, on July 25, 1979. Martin recently received his Massachusetts professional engineering license. He works as a project engineer in the plant engineering department of Monsanto's Bircham Bend Plant in Springfield, Mass. . . . to Mr. and Mrs. Glenn Yee, a son, Nicholas, in Hong Kong on March 21, 1979.

Alan Anderson works as a statistician for the U.S. Bureau of the Census. Also, he is continuing work on a dissertation for his PhD in biostatistics from the University of North Carolina at Chapel Hill.... Dean Anderson is a project engineer for Perini Corp., Framingham, Mass.... In the Sept. 27th issue of Engineering News Record, Garry Balboni, a project engineer for Perini Corp., Framingham, was quoted in the article, "Permanent Slurry Trench Walls Cut Subway Cost and Disruption.".... Currently, Jonathan Barnett serves as assistant director of the Center for Fire Safety Studies at WPI. He is also a part-time instructor of mechanical engineering and a doctoral candidate in fire protection engineering... Michel Benoit serves as superintendent of lime and limestone at Pfizer, Inc., Canaan, Conn. . . .

Continuing with Gould, Inc., Bill Delphos is now director of international in the Fluid Power Group, Rolling Meadows, Ill....Jim Ingraham is employed as supervisor of the silver emulsion

production group at Polaroid Corporation's New Bedford (Mass.) negative manufacturing plant.

Alan Judd is now senior manufacturing engineer at Cleaver Brooks Co. in Pennsylvania, a division of Aqua Chem, Inc., which is a whollyowned subsidiary of Coca Cola Co. . . . Capt. Thomas Kielick, U.S. Army Signal Corps, Ft. Devens, Mass., presently serves as company commander of Signal Company, supporting the 10th Special Forces Group (Airborne) known as the Green Berets.... Roland Lariviere continues with Combustion Engineering. He is a senior quality assurance engineer for the firm in Windsor, Conn. . . . Bob Lindberg has been assigned by the Naval Research Laboratory to Columbia University, where he will be pursuing research in large satellite control theories. He is also working on his doctorate in mechanical engineering.

William Lisk works as a broadcast engineer at Taft Broadcasting, Buffalo, N.Y.... Richard Loomis, who has an MS from Berkeley, is with Loomis & Loomis, Inc., in Windsor, Conn. . . Larry Martiniano, still with Stone & Webster, is presently a construction coordinator in Cherry Hill, N.J.... Suresh Masand now works as marketing manager at Digital Equipment Corp.,

Nashua, N.H.

John Mason III has taken a job as an applications engineer designing heat exchangers at Lytron, Inc., in Woburn, Mass. The Masons have moved into their new house in Chelmsford. . Formerly a consultant with Booz Allen Hamilton, Steve McGrath is currently manager of strategic planning for special projects at American Optical in Southbridge, Mass.... David Packard has joined the production department of the Public Service Company of New Hampshire, the state's largest electric utility. Previously, he was a service engineer with Combustion Engineering in Houston, Texas. The Packards live in Goffstown, N.H.... Hercules Paskali holds the post of technical sales representative at U.S. Steel in Baton Rouge, La. . . . Jim Rubino, former district manager for Torrington Co. in Cleveland, is presently with the firm in Indianapolis. . Douglas Schmidt is a student at Palmer Chiropractic College. The Schmidts and their two children live in Davenport, Iowa. . . . Geary Schwartz has accepted the post of varsity head football coach at Stafford Springs, Conn. It is the first football program at the school. Geary graduated from the University of Bridgeport, and has taught math at Weaver High School in Hartford. He has also coached football at the University of Bridgeport, Southern Connecticut College, and UConn. He was assistant broadcaster on the radio for Bridgeport's home games.

Recently discharged from the Army, David Scott is now attending Western New England College School of Law in Springfield, Mass. . . . Kenneth Shankle works as a facilities engineer for the U.S. Navy at the Naval Regional Medical Center at Camp Lejeune, N.C. He and his wife, June, have two children. . . . William Stafford is branch manager of Walker Laboratories' new office in Charlotte, N.C. The company is concerned with soils, concrete, and steel testing....

Dean Stratouly holds the post of manager of Gordon Systems Division of Carl Gordon Industries, Inc., in Worcester.... Andrew Wemple has been promoted to assistant actuary within the actuarial organization at State Mutual in Worcester. In 1974, he started work at the firm, and was promoted to actuarial associate in 1976. In 1978, he was advanced to senior actuarial associate within the individual health actuarial organization. Later that year, he transferred to the group actuarial. He is a fellow of the Society of Actuaries.

1975

Secretary. James D. Aceto, Jr 70 Sunnyview Dr. Vernon, CT 06066 Representative: Frederick J. Cordella 24 Imperial Rd Worcester, MA 01604

► Married: Mark R. Cosenza and Laura-Kay Racicot in Shrewsbury, Massachusetts on August 19, 1979. Mrs. Cosenza, head teacher at Happy Hours Nursery School in Marlboro, Mass., graduated from Worcester State, and is currently working for her master's degree. The bridegroom serves as technical superintendent at Polaroid Corp., Waltham, Mass. . . . Frederick P. Greulich and Maureen R. Dillon in Worcester on May 27, 1979. Mrs. Greulich has a BA from Holy Cross and an MA from Brown. She teaches Latin at the Spence School in New York City. Her husband is a manufacturing manager for Procter & Gamble Mfg. Co., Port Ivory, Staten Island, N.Y. . . . Walter H. Hoskins to Peggy R. Hebert on May 26, 1979 in Worcester. The bride, a graduate of Doherty Memorial High School, is employed by Mass. Materials Research, Inc., West Boylston. The groom works as an actuarial associate at State Mutual.

Patricia Pfeiffer and Salvatore L. Salamone on July 1, 1979 in Tewksbury, Massachusetts. The bride and groom are graduate students in the physics department at Boston College. . Jeffrey A. Webber to Jayne A. DiNicola on September 7, 1979 in Pittsfield, Massachusetts. Mrs. Webber is physical activities director of the Girls Club. She has degrees from Berkshire Community College and Lyndon (Vt.) State College. Her husband has done graduate work at RPI. He is a data technician at GE Ordnance Systems. . . . Todd E. Whitaker and Patricia J. Massaro in New London, Connecticut on October 7, 1979. The bride, a teacher in East Lyme, graduated from Central Connecticut State College and Southern Connecticut State College. The groom is with the Naval Underwater Systems Center in New London.

►Born: to John and Virginia Giordano
FitzPatrick, their first child, a daughter, Cara
Ann, on September 20, 1979. John is with Exxon
Research & Engineering in Florham Park, N.J....
to Mr. and Mrs. William C. Rutter, their first
child, a son, Andrew William, on March 26,
1979.

Raymond Acciardi holds the post of supervising civil engineer at the U.S. Bureau of Reclamation in Denver, Colo. He and his wife, Jeannette, live in Lakewood. . . . Jon Anderson of Wilmington, Del., is beginning his second year as a law clerk for U.S. District Court Judge Caleb Wright. During his clerkship, the Judge has been working to decide patents upon crystalline polypropylene and a man-made rubber. Recently, Anderson published in the Columbia Journal of Environmental Law an article critiquing from legal and technical viewpoints, Secretary of Transportation Coleman's decision permitting the Concorde to land in the U.S. The article was titled: "Decision Analysis in Environmental Decisionmaking: Improving the Concorde Balance." Anderson holds a Juris Doctor degree from Yale. . . . Alan Bergstrom, who received his MS in biochemistry from UMass a year ago, is now an associate in research in the Department of Dermatology at Yale University School of Medicine in New Haven, Conn. . Patricia Graham has been nominated as one of the "Outstanding Young Women of America" for 1979. The honor recognizes young women throughout the nation for professional achievement and community service. Nominated by Central New England College of Technology, Pat is a teacher at Assabet Valley Regional Technical High School and at Central New England College

Bill Gregory continues as a manufacturing engineer at Boston Insulated Wire & Cable in Plymouth, Mass. The Gregorys have two sons. Still with GE, John Greenstreet is now an analyst in computer applications. He and his wife Barbara reside in Baldwinsville, N.Y. . . . Spencer Liberty works as a chemist in Newton, Mass. . . Paul Loomis has taken a new job at Olin Corporation in New Haven, Conn. He is with the chemicals group in technical service. . . . Robert Martin, who has an MSEE from MIT, serves as field applications engineer at Intel Corp., Chelmsford, Mass. . . . Charles May has transferred from Charlotte, N.C. to Tampa, Fla., where he is a sales engineer with Dana Corp. . . Stephen Mealy was recently appointed to a three-year term on the town finance committee in Bourne, Mass. He works for Benthos Co. of North Falmouth. . . . Martin Meyers serves as a member of the technical staff at Bell Labs in North Andover, Mass. He has a PhD in electrical engineering from UMass. He is married to Cathy Seymour, '77. . . . Kevin Mischler has received his master of public administration degree from the Austin Dunham Barney School of Business and Public Administration at the University of Hartford. . . . Frank Moitoza is presently a weapons system management trainee for the Naval Sea Systems Command in Keyport, Washington. The management development program consists of rotational assignments in many naval activities around the country. . . .

1976

Secretary
Paula E. Stratouly
318 Thornberry Court
Pittsburgh, PA
15237

Representative Richard P Predella, Jr 40 Hawthorn Rd. Braintree, MA 02184

► Married: David F. Andel and Paula J. Culver in Stratford, Connecticut on June 16, 1979. The bride graduated from Albertus College and is a program performance measurement coordinator at Avco Lycoming, Stratford, Conn. Her husband is with Wilson Instruments, a division of ACCO Industries in Bridgeport, where he is a machine designer. . . . Paul J. Carabello to Charlotte A. Nelligan in Belmont, Massachusetts. Mrs. Carabello is a registered nurse. She studied at St. Elizabeth's Hospital School of Nursing. The bridegroom works for MPB Corporation, Keene. . . . Wayne F. Dyer to Joan S Mitchell in Wellesley, Massachusetts on July 21, 1979. The bride is a Wellesley graduate, and is a procedures auditor for the Northeast Division of the American Mutual Insurance Companies. Her husband is a computer programmer for American Mutual Insurance Co., Wakefield, Mass. Previously, he had taught science at Hollis (N.H.) High School and at Minuteman Regional Vocational High School in Lexington, Mass.

► Married: Roger G. Leighton and Susan E. Barrett last summer in New York. Mrs. Leighton graduated from Moody Bible Institute, Chicago. The bridegroom works for Eastman Kodak Co. as a tool engineer. . . . Michael G. Menesale to Ellen A. Brill on January 6, 1979. The bride graduated from Anna Maria with a BA in social work. Her husband is an estimator with U.S. Steel Supply Division, Structural Wire Products Group, in Fairless Hills, Pa. He is enrolled in the MBA program at the University of New Haven.

... Charles F. Moulter and Marylouise Giordano on August 25, 1979 in North Haven, Connecticut. The groom is a development engineer for Firestone Tire and Rubber Co., Akron, Ohio.

► Married: John C. Mangiagli, Jr., and Terry L. Putnam on June 23, 1979 in Gloversville, New York. Mrs. Mangiagli graduated from Gloversville High School. Her husband is a test engineer at Texaco, Inc. in Beacon. . . . Paul F. Proulx to Janet M. Seppanen on June 15, 1979 in East Longmeadow, Massachusetts. The bride has a BSE degree in special education from Westfield State College. She is a teacher in the education department at Monson State Hospital. The bridegroom is a project engineer in the R&D department of the Milton Bradley Co. in East Longmeadow. He attends Western New England College. . . . Steven H. Schoen and Victoria C. Powell in Natick, Massachusetts on September 1, 1979. Mrs. Schoen graduated from Natick High School and works as a secretary for Sun Life of Canada in Wellesley Hills, where her husband holds the post of actuarial assistant. . . . Peter Tordo and Debbie Noble in Guilford, Connecticut on September 1, 1979. The bride graduated from Temple University. The groom is a loss prevention representative for Liberty Mutual Insurance in North Haven, Conn.

Joseph Betro has received his MSEE from the University of Wisconsin. . . . Still with GE, John **Bucci** is now production supervisor of the task force at GE in Waynesboro, Va. . . . Albert Cooley holds the position of administrator of market planning for microprocessor systems at RCA Solid State, Somerville, N.J. He has an MBA from the University of Michigan. . . . Sidney Formal is with the U.S. Army Corps of Engineers in Philadelphia.

Recently, Leonard Goldberg was named regional and international sales manager for Software House of Cambridge, Mass. He is responsible for the firm's sales west of the Mississippi, the deep South, western Canada, and several international areas. Previously, he was system programmer at Johnson & Johnson, Inc. in New Jersey. Professionally, he is symposia coordinator for the Digital Equipment Corporation Users Society, and a member of the Association of Computing Machinery. He is past president of the Mid-Atlantic DECsystem-10/20 Users Group. Software House is a leading producer of data base software for large Digital Equipment Corporation computers.

Boeing Company, 747 Division, has hired Richard Isaacs as an associate engineer at the Boeing plant in Seattle, Washington. Isaacs and his wife, Cynthia, reside in Marysville. . . . Brian Plummer is with Intel in Aloha, Oregon. . . Jaime Rodriguez is associated with Rodriguez & Del Valle, Inc., Old San Juan, Puerto Rico. . . Steve Tuckerman, who recently received his master's in regional planning from UMass, is presently the town planner in East Hampton,

Conn. . . .

Kathleen Molony 6 Aiken St

Representative. Christopher D. Baker P O Box 35 Page, AZ 86040

► Married: Larry B. French to Betty P. Stockman in Oxford, Massachusetts on September 15, 1979. Mrs. French graduated from Worcester State, and is a senior systems analyst at Paul Revere Life Insurance Company in Worcester. The groom is a computer programmer with New England Power Service Company in Westboro. Domenico Grasso and Patricia A. Prue in Shrewsbury, Massachusetts on July 7, 1979. The bride, a graduate of Smith College, plans to attend Emory University School of Medicine in Atlanta, Ga. Her husband serves as an environmental engineer for the U.S. Army Environmental Hygiene Agency in Atlanta. He has an MSCE from Purdue. . . . Robert J. Hyland and Julia K. Wetzel on August 18, 1979 in South Miami, Florida. Mrs. Hyland is a senior at Johns Hopkins University, Baltimore. The bridegroom, a lab technician at the Good Samaritan Hospital in Baltimore, received his MA in biophysics from Johns Hopkins. . . . Marc N. Richard and Lisa A. Publicover in Medway, Massachusetts. The

bride attends Wellesley College. The groom, an MIT graduate, is with the U.S. Army Signal Corps in Korea. . . . James M. Rucci, Jr., and Nancy A. Caouette in Greenfield, Massachusetts on June 30, 1979. Mrs. Rucci graduated from the Fashion Institute of Technology. Her husband serves as a fire protection engineer at Industrial Risk Insurers, Charlotte, N.C.... William S. Taber to Margaret R. McHugh in Weymouth, Massachusetts on June 17, 1979. The bride graduated from Weymouth North High School. She is an assistant secretary to an orthodontist. The bridegroom works for Hammond Plastics.

. . . Edward E. White, Jr., and Rosann Zizzari on September 23, 1979 in Johnston, Rhode Island. Mrs. White graduated from Rhode Island Junior College. Her husband and she both are employed at Allendale Insurance Company.

Fred Baker has moved from Massachusetts to Beaverton, Oregon. He is a CRT manufacturing process engineer with Tektronix, Inc. "Still a couple short of my goal of seeing all 50 states." Richard Blauvelt is employed as a service supervisor at Bridgeport (Conn.) Machines. . . Lawrence Coel has an MBA from the University of Hartford. . . . David Edgerton serves as a quality assurance engineer at Data General, Westboro, Mass.... Jeffrey Firestone has transferred from Rocketdyne to the Military Aircraft Division of Rockwell International. Currently, he is working on an industry-assist contract to Boeing Co. in Everett, Washington, where he is doing design work on the 747. Paul Hajec is a highway safety research engineer employed by the Virginia Highway and Transportation Research Council. . . . Ron Howard holds the post of president of Datability Software Systems in New York City. . . . William **Hubbard** is director of materials at Data Point

Corp. in Sunnyvale, Calif.

"Chuck" Johnson is studying for his MBA at Cornell. . . . Brian Kisiel is employed by Betz Laboratories of Trevose, Pa., but is located in Wilton, N.H. He writes: "My area manager is **Bill** Messer, '67, who is a part-time farmer on his 170 acres in Canterbury, N.H." . . . Fred Koury serves as manager for Colony Farms, Worcester. He has a BS in mathematics from Framingham State.... John Kuklewicz is a design engineer at Collins-Rockwell Int'I., Cedar Rapids, Iowa. In August, Lt. William Lee took command of HQ Battery, 108th Air Defense Artillery Group, U.S. Army. . . . Michael Oakes works for Raytheon Co., Sudbury, Mass. . . Ron O'Connor is enrolled in the School of Public Health at the University of Michigan.... Michael O'Leary is a sales engineer at Blake Equipment Co., Bloomfield, Conn.

Greg Ruthven has joined Perkin-Elmer Corp., Optical-Technology Division, in Danbury, Conn. He is a structural analyst, and was formerly employed at General Dynamics in San Diego, Calif. . . . Gregory Scott serves as a systems support specialist at Energy Enterprises of Denver, Colo. . . . Cathy Seymour is a third-year PhD candidate in organic chemistry at MIT. She is married to Marty Meyers, '75. . . . Currently a free-lance electrical engineer for a Connecticut company, Dan Sullivan lives in Newton, Mass. Prior to taking his present job, he worked for an electronics firm in Watertown. He played in different bands in California earlier. . . . Nicolette Stultz has joined Sunworks in Sommerville, N.J., where she is a product development engineer. . . . Presently, Jeff Tingle serves as an assistant computer scientist in the Cancer Radiation Therapy Department at Rhode Island Hospital. . . . J. Gilbert Wilson III is a structural design engineer at Varco-Pruden in Evansville, Wisconsin. . . . Formerly general manager of the First Madison Corp., John Zimmerman is now a research associate at Yale Medical School, New Haven, Conn.

Secretary: 303 Wolcott St. Waterbury, CT

►Married: James M. Fowler to Kathleen L. Ahern on July 14, 1979 in Melrose, Massachusetts. Mrs. Fowler, a Smith graduate, has taught in Camden, Me. for two years, and has accepted a post as a kindergarten teacher at the Langley School in McLean, Va. Her husband is with the Department of the Navy. . . . Herbert W. Holmes to Tana M. Laudicina on May 26, 1979 in Sudbury, Massachusetts. The bride, who graduated from UMass, is a substitute teacher in Sarasota, Florida. The groom is with the U.S. Highway Department. . . . Gary S. Knox and Louise M. Asselin in Lincoln, New Hampshire, recently. Mrs. Knox graduated from Emmanuel College. Her husband serves as a manufacturing engineer at Nixdorf Computer Co., Burlington,

►Married: Sergej K. Ochrimenko and Patricia E. Riley in Slatersville, Rhode Island on September 22, 1979. The groom works for Spencer White & Prentis in Hackensack, N.J. . . . Peter J. Rowden and Laurie J. Burnett on June 2, 1979 in Halifax, Nova Scotia. The bride graduated from Mount St. Vincent University. She is a legal secretary for Burwick & Burwick in Worcester. The bridegroom works in the production control department at Data General Corporation. Edmund J. Sprogis and Debbie Youngblood on August 25, 1979. Mrs. Sprogis is studying for her nursing degree at the University of Vermont. Her husband is employed as an associate level engineer at IBM in Essex Junction, Vt. The couple resides in their own duplex in Burlington....

Dean C. Wilcox to Sandra A. Meyer in Warwick, Rhode Island on October 6, 1979. Mrs. Wilcox graduated from the University of Vermont and is a physical therapist. The groom is a supervisor at General Dynamics-Electric Boat in Groton, Conn.

▶Born: to Leonard and Elizabeth Papandrea Lariviere, '76, a daughter, Christina Marie, on June 5, 1979. Len is a structural engineer with Allen-Sherman-Hoff, a company of Ecolaire in Malvern, Pa. Liz is a market analyst on leave from Westinghouse Electric Corp. Power Systems Generation Division in Lester, Pa. The Larivieres reside in Coatesville. Pa.

Shane Chalke continues at State Mutual in Worcester. . . . John Contestabile has been promoted to highway engineer II at the Maryland Department of Transportation, State Highway Administration (SHA). He coaches 8- to 15-year-olds on the Parkville (Md.) Recreation Council Wrestling Team. "Challenging and rewarding!" He rooms with Rick Mazmanian, '77, who works in the SHA Bureau of Bridge Design. "There are eight of us here now, including: Sid Afonso, '79; Carl Blomberg, '79; Paul Gudelski, '78; Bill Malone, '78; Steve Buckley, '77, and Chuck Rheault. '77.

Andrew Corman is with Turner Construction Co., and is located in Columbus, Ohio. . . . Lt. William Diederich is at F. E. Warren AFB in Cheyenne, Wyoming. . . . Mary Donovan is with the Army Corps of Engineers in Waltham, Mass. . . . Anne Dyer serves as a structural engineer at David Taylor Research Center in Bethesda, Md.

... Anthony Fernandes works for Malcolm Pirnie, Inc., Philadelphia.... John Kuchachik serves as a fire protection engineer at Kemper Insurance in North Quincy, Mass.

Ethan Luce is an associate engineer at the Barden Corp., Danbury, Conn. . . . Wayne Martin has been named nuclear plant engineer in operations for the Knolls Atomic Power Laboratory.... Murray Matzmer holds the post of service adviser at Foreign Motors of Boston. . . In March, Theresa Murphy left Torrington Co. In May, she became a management trainee at New England Telephone, Boston. . . . Rory O'Connor wrote "Campus Computer Center Built in Converted Chapel," which appeared in the Sept. 17th issue of Computerworld. . . . Currently, Michael O'Hara is associate project manager at Firepro Inc., Wellesley Hills, Mass. . . . Stephen Pace is employed as field manager of Yukon Construction in Santa Clara, Calif. . . . John Petze is a production engineer with Hydroblaster, Inc., Sparks, Nevada. . . . Anthony Raymond works as a systems engineer at Electronics for Medicine in Sudbury, Mass. . . . Bruce Rutsch is with Prime Computer, Newton Lower Falls, Mass. . . . Phil Scarrell is at du Pont in South Francisco, Calif. . . . David Tate serves as a software engineer at Sanders Associates, Inc., South Nashua, N.H. . . . Brian Timura is a first-year student at Tufts University School of Medicine. Previously, he was employed by St. Elizabeth's Hospital in Brighton, Mass. . . . Charles Winters works as an electronics service engineer at Brown & Sharpe, North Kingston, R.I.

1979

Representative
Donald O. Patten, Jr.

► Married: Glenn R. Baylis and Lisa D. Newborg in Essex, Massachusetts. Mrs. Baylis is a senior at UMass, Amherst. The bridegroom is employed by Polaroid in Waltham, Mass., where he is a production engineer. . . . Maryellen Doherty and Hospitalman 3/c Michael Munzert, on June 3, 1979 in Worcester. The bride is an assistant programmer in the Federal Systems Division at IBM, Middletown, R.I. Her husband serves as a psychiatric technician at the U.S. Naval Regional Medical Center in Newport. . . . Kenneth A. Gamache to Diane L. Storm on September 22 1979 in Rutland, Massachusetts, Mrs. Gamache. a graduate of Mount Wachusett Community College, Gardner, is a secretary at Wright Line in Worcester. The bridegroom is a manufacturing engineer at Digital Equipment Corp., Westfield, Mass.

►Married: William R. Herman and Andrea L. Trivieri on August 11, 1979 in Utica, New York. Mrs. Herman, a Becker graduate, is employed by Brooks Fashions, Hartford. Her husband works for Arthur Anderson, Inc. . . . Dale Hobbs and Bonnie J. Derosier on June 16, 1979 in Lunenburg, Massachusetts. The bride, a senior at WPI, is a chemical engineering major. The groom is with Boeing Aircraft, Seattle, Washington. . . . Daniel F. Hurst and Cheryl A. Payeur in Springfield, Massachusetts on July 21, 1979. Mrs. Hurst holds an associate's degree in accounting from Springfield Technical Community College. She was a control clerk with Springfield Institution For Savings. Her husband is involved with research and development of photo technology at Eastman Kodak in Rochester, N.Y.

James D. Kelleher and Rosemary Shea in Worcester on October 6, 1979. The bride graduated from Holy Cross. Her husband is with IBM, Newport, R.I. . . . Kenneth Kimball and Susan Wright. The groom works for GE-Knolls Atomic Labs. . . . Peter Madnick and Beth J. Pomstein in Framingham, Massachusetts on August 5, 1979. Mrs. Madnick is a senior in civil engineering at the University of Lowell. Her husband is president and national sales manager for Dennesen Electrostatic, Inc., Beverly, Mass. Christopher G. Mather and Mary L. Skillen on October 6, 1979 in Oswego, New York. The bride graduated from SUNY, Oswego, and is employed by Eye Consultants of Syracuse. The groom is with Hewelett-Packard. . . . Anne L. Pattee and Stephen R. Picardo in Beverly, Massachusetts. Mrs. Picardo, who also graduated from Salem State College, is a high school teacher in the Dover-Sherborn Regional Schools. The bridegroom attends Boston State College and graduated from Lowell University. He works for Sharp Air Freight Company.

► Married: Thomas D. Rockwood to Susan E. Kingsley on September 22, 1979 in North Andover, Massachusetts. The groom is with Procter & Gamble, Mehoopany, Pa., where he is team manager of Luvs in the paper products division. Robert C. Rosenlof and Mary A. Avery on July 21, 1979 in Hartford, Connecticut. The bride is employed by Travelers Insurance Co. Her husband is with Electric Boat in Groton, Conn. Jeffrey G. Stickles and Jane L. Martinelli in Granby, Connecticut on September 8, 1979 Mrs. Stickles was formerly a secretary at Kenney, Webber & Lowell, Inc. The groom works at GE in Erie, Pa. . . . Richard R. Tardiff and Debra A Hebert in Saco, Maine on September 8, 1979. The bride graduated from Biddeford High School. She is employed by Union Mutual Life in Portland. Her husband is at the Portsmouth Naval Shipyard in Kittery. . . . Paul A. Tessier and Jane E. Gresh on September 1, 1979 in Avon, Connecticut. The bridegroom is a development engineer at Hewlett-Packard in Waltham, Mass. John F. Wheeler to Anne S. Malaney in Johnstown, New York on July 21, 1979. Mrs. Wheeler has a paralegal degree from Becker Junior College. Her husband works for Turner Construction Company of Boston.... Thomas J. White and Linda J. Hein in Paxton, Massachusetts on August 11, 1979. Mrs. White attended UMass. She is administration manager at K2 Corp., Wilmington. The groom serves as a wine salesman for Chas. Gilman & Sons, Medford.... Robert A. Wood to Robin A. Wrobel on June 16, 1979 in Warren, Massachusetts. Mrs. Wood attended Becker. Her husband is employed by GE in Utica, N.Y.

Donald Abells is an associate engineer at Raytheon in Sudbury, Mass. He is a design engineer on the laser gyro program. . . . Sidney Afonso works as a highway engineer I for the State Highway Administration in Baltimore, Md. .. Leona Arsenault serves as a graduate research assistant in the ME department at WPI. Robert Avarbock has joined Digital Equipment Corp., Tewksbury, Mass., where he is a systems programmer. . . . Kent Backe holds the post of staff engineer at CNR, Inc., Needham, Mass. . . . Stephen Blanchette is employed as a software engineer at Digital in Maynard, Mass. Hewlett-Packard Co., Lexington, Mass., has hired Dean Bogues as a logic analysisdevelopment specialist. . . . Roland Brooks attends Fairwood Bible Institute in Dublin, N.H... James Campbell serves as an associate engineer at Honeywell in Billerica, Mass. . . . Ian Cannon has been named a member of the technical staff II at the Rocketdyne Division of Rockwell in Canoga Park, Calif. He is a systems analyst and programmer in aerospace engineering.

Stephen Caputo holds the post of sales assistant in the technical marketing program at GE in Bloomington, Illinois. . . . Charles Carter is a field engineer at Schlumberger Well Services in Pharr, Texas. . . . Hosur Chikkalingaiah serves as a sanitary engineer at Whitman & Howard, Inc., in Wellesley, Mass. . . . Stephen Clark has been named design and development engineer at Raytheon in Sudbury, Mass. . . . Cynthia Connor is an associate engineer at Westinghouse-Bettis

Atomic Power Lab. in West Mifflin, Pa. . . . James Cunniff holds the position of administrative technical support manager at Jamesbury Corp. in Worcester, Mass. . . . Edward Curtis has joined Pratt & Whitney Aircraft, East Hartford, Conn. George Dainis is in the chemical engineering graduate program at MIT. Gail D'Amico is studying for a PhD in pharmacology at Mt. Sinai Medical School in New York City.

Andrew Davidson works as a salesman for the John Hancock Mutual Life Insurance Company in Worcester.... John Davidson is a CDP engineer at GE In Lynn, Mass.... Beth Raymond Davis has been named a structural engineer II at Allen-Sherman-Hoff in Malvern, Pa... Paul Delvy is employed as a project engineer at Wang Laboratories in Lowell, Mass.... William Donoghue is a design engineer at Hamilton Standard, Windsor Locks, Conn.... Chester Drake has joined United Engineers & Constructors, Boston.... Ron Drewiany serves as an associate engineer in the Electric Boat Division of General Dynamics in Groton, Conn.... Richard Durand, Jr., is pursuing a PhD in chemistry at Cal Tech

Stephen Falls has joined the Spencer Turbine Co. in Windsor, Conn... Eugenia Fernandez is a technical representative for Kemper Insurance, Southfield, Mich... Alwyn Fitzgerald works as a biological assistant at Connecticut Valley Biological Supply, Co., Inc., Southampton, Mass.

... Eileen Foley serves as a mechanical engineer at the U.S. Army Armament Research and Development Company, Picatinny Arsenal, Dover, N.J.... Athanasios Foutsitzis is a research assistant and graduate student at WPI.... James Gaffney has been named a chemical engineer at the Kendall Co., Walpole, Mass.... Tom Girotti is a project engineer at Virginia Electric & Power Co. in Richmond, Va.... John Grimwade works as a field service engineer at Babcock & Wilcox Co., Barberton, Ohio... Mark Groves has joined GE in Utica, N.Y.... William Guerin is employed at Idealab, Inc., Franklin, Mass.

International Harvester Company has awarded a graduate dissertation fellowship to James Gustafson, currently a candidate for his MSME at WPI. He was one of 174 graduate students, representing 88 colleges, who entered the competition for the six fellowships offered by IH for the first time this year. Aimed at providing assistance to students, benefitting the colleges, and advancing industrial technology, the fellowships offer maximum funding of \$25 thousand each. They cover up to a two-year period, provide funds for a cash stipend, tuition, and support of research costs. Gustafson's winning proposal title was: "Strain Measurement by Hologram Interferometry." His research will be aimed at advancing present knowledge for holographic strain analysis by experimenting with new procedures that will relate directly to surface strains of three-dimensional objects. The study will develop technology particularly adaptable in designing and testing critical components in the automotive, aerospace, and electronics industries and in medical laboratories. Gustafson belongs to the ASME. During the past summer, he has been employed as a project engineer by Ambac Industries of Springfield,

Kevin Halloran holds the post of president of Advanced Hybrid Systems in Newton Centre, Mass. . . . Dorothy Hamilton is doing work in inorganic chemistry at the Graduate School of the University of Illinois in Urbana. . . . Scott Hansen has joined Monsanto Textiles, Decatur, Alabama. . . . John Haporik serves as an associate environmental engineer at B.F. Goodrich Chemical Co., Calvert City, Ky. . . . Henry Hazebrouck has been named a research engineer at Ampex Corp. in Redwood City, Calif. . . . Mark Hecker is employed as a design engineer at Data General, Westboro, Mass. . . . Raytheon Company in Wayland, Mass. has tapped Paul Henderson as an associate engineer. . . . Daniel Hennessy graduated magna cum laude from Boston College, and is studying for his MBA at the University of Michigan.... John Hopkins, Jr., works as a sales engineer at Alger Corp., Abington, Mass. . . . Arthur Hughes is employed as a field engineer at Dresser Industries in Texas. . Stephen Hull, Jr., who holds an MS from WPI, is working on his PhD at Michigan State, East Lansing. His wife, Kathy, is a resident at St. Joseph's Hospital in Flint preparing for family

Craig Jacobson works as a gear product design engineer at GE in Lynn, Mass. . . . Bruce Jenket, an officer candidate in the Navy OCS in Newport, R.I., will be moving to Orlando, Fla. for six months, then on to Idaho. . . . Turner Construction Co., Columbus, Ohio, has hired Richard Jenkins II as a cost engineer. . . . Brian Johansson is with Motorola in Plantation, Fla. . . . David Johnson and his wife Joan are now residing in London. Johnson is with Film Cooling Towers, Ltd. in Richmond, Surrey, U.K., as well as with Johnson International, Ltd. in Bridgewater, Conn. . . . Kilmer Joyce has been named associate engineer in the Combustion Turbine Division of Westinghouse, Concordville, Pa. . . . Stephen Kapurch is with the Dept. of the Navy Fleet Analysis Center in Corona, Calif. . . . Ronald Knapp, who has an MSEE from WPI, holds the post of design engineer at Analog Devices, Wakefield, Mass. . . . Richard Kozicz has joined Data General, Southboro, Mass., where he is a systems test engineer.

Claire La Chance is with GE in Philadelphia.... Norman Lacourse has been named a chemist at National Starch & Chemical Corp., Bridgewater, N.J. . . . Ken Laliberte serves as a manufacturing engineer at Norton Co., Worcester. . . . Ray Lambert is employed as a project engineer at Monsanto in Springfield, Mass. . . . Presently, Brien Laufer is studying for his MSEE at Ohio State University.... Stephen Lawry is a graduate student in the physics department at WPI. . . John Lennhoff holds the post of development engineer at Kodak, Rochester, N.Y.... Stephen Lesniewski is a student at Jagiellonski University in Krakow, Poland.... Ronald Lucier serves as an associate engineer at Yankee Atomic Electric Co. in Westboro, Mass.

Frank Maldari works for Itek Corp.,
Lexington, Mass. . . . Frank Martin is a solar
engineer at Environmental Alternatives, Inc.,
Dover, N.H. He is designing a home which he,
Kevin Doherty, and John "Sid" Fitzgerald may
be building next spring for the owner. . . .
Timothy McAlice has joined Pratt & Whitney
Aircraft Group in West Palm Beach, Fla. . . .
Kathleen McKeon is a teaching assistant in the
math department at Michigan State University in
East Lansing. . . James Miller is studying for his
MS at Stanford University, where he is a teaching assistant in the EE department. . . . Donald
Mitchell serves as an assistant engineer for
Public Service of New Hampshire in Manchester.

... Lisa Mitchell is employed as a field liaison engineer at Westinghouse Elevator Co., Randolph, N.J.... Jack Morrison has joined Pratt & Whitney, East Hartford, Conn., as an experimental engineer.... Tom Murray is a process engineer at Texas Instruments in Dallas.

Prime Computer, Inc., Framingham, Mass., has employed Peter Pappas as a software engineer. . . . Stephen Parent is at Brown University, Providence, R.I. . . . Gary Pearson is employed as a product design engineer at Raytheon-Data Systems, Norwood, Mass. . . . Heidi Pivnick has been hired as operations supervisor at AT & T Long Lines, Hartford, Conn. . William Potter is with Motorola in Ft. Lauderdale, Fla. . . . Joyce Poulton is a mathematician at Vitro Laboratories in Newport, R.I.... Stephen Prawdzik has been working as an assistant sales engineer at GE in Nashville, Tenn. . . . Presently, **Robert Reed** is a product engineer for Wyman-Gordon in North Grafton, Mass. . . . Rene Richard has accepted a post at Kodak in Rochester, N.Y.... Glenn Robertson serves as a product engineer at Texas Instruments in Houston. He is responsible for a memory device. . . . Ali Rostami is a graduate student at Stanford University. . . . Honeywell, Inc., Lexington, Mass., has named Ron Roth an associate project engineer. . . . Carl Rutigliano works as a mechanical design engineer at GE in Fitchburg. . . . Scott Ryder has joined New England Power Service Co., Westboro, Mass.

David Scheffler serves as a test engineer at Raytheon Data Systems in Norwood, Mass. . . . Richard Schneider is a manufacturing process engineer at Texas Instruments, Mansfield, Mass. ... Monique Schobert is employed as a member of the research staff at Western Electric in Princeton, N.J. . . . David Sheridan, a 2/Lt. in the U.S. Army Ordnance Corps, is currently attending Explosive Ordnance Disposal School. . . . Alan Smelewicz is a teaching assistant at WPI.... David Smith is working for his MBA full time at Babson College, Needham, Mass. . . . Alfred Spada is a graduate student at MIT, where he is studying for his PhD. . . . Andrew Sumberg has joined Thermo Electron in Waltham, Mass. . . . Edward Tidman III holds the post of group insurance underwriter at State Mutual in Worcester. . . . Bob Tosi serves as a design engineer at Digital Equipment Corp., Maynard, Mass. . . . John Tracy is an MBA student at Northeastern in Boston. . . . Bradley Traver works as a surveying technician for the U.S. government in the National Park Service. He writes, "Constantly travelling!" . . . Tom Van Ness is with Kodak, Rochester, N.Y.

David Wardell is at GE in Schenectady, N.Y. . Vincent Wasnewsky is a teaching assistant at WPI, where he is studying for his MSEE. General Dynamics-Electric Boat, Groton, Conn., has employed George Wespi as an associate engineer. . . . David West works for Conrail in Pittsburgh. . . . David Willey is an associate engineer at Lockheed-Georgia in Marietta, Ga. . . . Chris Wilmot serves as a chemical engineer at Naval Ordnance Station, Indian Head, Md. . . . William Winters is at Cornell in Ithaca, N.Y. . . . Vincent Wolff has accepted a position as an associate member of the research staff at Ampex Corp., Redwood City, Calif. . . . Lawrence Woodward, who has his MSEE from WPI, is a teaching associate at UMass in Amherst.... Paul Wrabel is an engineer assistant at Babcock & Wilcox in Barberton, Ohio. . . . Priscilla Young is employed as an engineering trainee at Mobil Oil Corp., Scarsdale, N.Y.... Robert Zunner has joined Raytheon in Wayland, Mass.

SCHOOL OF INDUSTRIAL MANAGEMENT

Harold White, '55, now back with Norton in Worcester following a seven-year stint for the firm in England, says that his hobbies include collecting antiques, woodworking tools, and American clocks. He enjoys clock repairing and travel. "We have been in Europe, Asia Minor, and Africa, but Cape Porpoise, Me. is a favorite spot for family gatherings." Last summer, the Whites attended the Queen's Lawn Party at Buckingham Palace.

George Durnin, Jr., '61, continues at Franklin County Public Hospital, Greenfield, Mass., where he serves as vice president of employee services.

William Lechman, '64, has been named operations manager for the Chain and Components Division of Rexnord, Inc. in Milwaukee. He is responsible for all manufacturing and related areas for the division. Previously, he was general manager of Ruberg & Renner, Germany. He joined Rexnord in 1956 as a student trainee. He graduated from the University of Connecticut with a degree in industrial engineering.

Edward Bilzerian, '66, was recently appointed vice president and controller of Bay State Abrasives Division of Dresser Industries, Inc., in Westboro, Mass. With the firm since 1955, Bilzerian has held managerial posts in pricing, cost accounting, and general accounting. He is a graduate of Clark University.

Edwin Larson, '77, has been named business manager of industrial production products at Norton Company's coated abrasive division, Troy, N.Y. Since 1956, he has held various posts in field sales, marketing, and product management for both grinding wheels and coated abrasives. In 1978, he moved to the Albany-Troy area as product manager of cloth backed products.

John Hickey, Jr., '78, is listed in the 1979 edition of Who's Who in Finance & Industry. Last August, he was appointed controller of New England High Carbon Wire Corp., Millbury, Mass.

Robert Eves, '79, is now the technical manager of Norton Company's new proppants plant in Fort Smith, Arkansas. He has held increasingly responsible posts in manufacturing control and process engineering since joining the firm in 1946. A registered professional engineer, he holds an ME degree from Tri-State University in Angola, Indiana.

William Monigle, '79, is president of Video Base, Inc., Merrimack, N.H. The firm produces custom video taped training and communications programs. Monigle graduated from the University of Massachusetts.

Natural Science Program

John Sakala, '66, has been named principal of Princeton (N.J.) High School. He was selected from nearly 100 applicants. Previously, he was principal of Rockport (Mass.) High School, and of Homebase School in Watertown, Mass. He had taught mathematics and physics in Watertown, where he was also a coordinator of science for the school district. He has a certificate of advanced graduate studies from Northeastern, as well as a BA from Brandeis. Applicants for the principal's post were thoroughly screened by the Board of Education, the high school staff, and members of the community. Sakala was picked from among four finalists.

Sr. Pauline Kalagher (S.S.J.), '78, is a science teacher at Milford (Mass.) High School.

P. Martin Conway, '79, teaches at Granby (Mass.) Senior High School.... Timothy Hoar, '79, is employed by the school department in Franklin, Mass., where his is an educator at the junior high school. He and his wife, Susan, have two children. They live in Mendon.... Robert Raymond, '79, teaches chemistry at Mahar Regional School in Orange, Mass.



L. Herbert Carter, '07, died in a convalescent hospital in San Jose, California on October 3, 1979.

A Worcester native, he was born on Jan. 31, 1885. After studying electrical engineering at WPI, he worked several years for New York Telephone. Other employers included Reed & Prince, and Worcester Pressed Steel, from which he retired in 1950 as plant engineer. From 1950 to 1961, he was a consulting engineer in Worcester, under the business name of the Carter Engineering Service. He was a registered, professional engineer.

Mr. Carter, who moved to California in 1962, was active in the Little House Senior Citizens Center in Menlo Park. He had previously belonged to the Tech Old Timers, the Elks, and had been active in scouting.

Richard B. Davidson, '17, a retired associate engineer at the Sacandaga Reservoir in New York, died in Glens Falls on September 13, 1979. He was 83.

He received his BSCE from WPI in 1917. Following graduation, he was an ensign in the U.S. Naval Reserve until 1921. He attended Officer Material School at Harvard, and later worked for the Power Construction Company of Worcester. While at Worcester, he was involved with hydroelectric and dam construction on the Connecticut and Deerfield Rivers.

In 1925 he joined the Hudson River, Black River Regulating District of Albany, N.Y. as assistant engineer. Upon completing his duties on the Conklingville Dam and Sacandaga Reservoir flood control project, he was named associate engineer on the maintenance of the Reservoir. In 1966, he retired after serving the Hudson River-Black River Regulating District for 41 years. He served as district consultant for two years after retirement.

Mr. Davidson was born in 1895 in Sterling, Mass. He belonged to Sigma Phi Epsilon, the Eastern Snow Conference, and the American Legion. A fellow of the ASCE, he was also a registered professional engineer in New York.

Retired Army Major General Kirke B. Lawton, '17, who coordinated photographic coverage of all U.S. ground troops on the Western Front during World War II, died in Athol, Massachusetts on October 20, 1979. He was 84 years old

General Lawton's 37-year career in the Army touched on two world wars, the German surrender signing, the Big Three Potsdam Conference, and the Army-McCarthy hearings. At the apex of his career, he served as commander of Fort Monmouth, N.J. and its Signal Corps Center. The two-star general had served as head of the Army Pictorial Service, for which he earned the Legion of Merit, as chief of American ground combat photographers in Europe in World War II, and as an eyewitness to top-level end of war and postwar meetings.

His various Army positions took him to Hollywood, where he assisted in the making of patriotic movies for the home front, to the atomic bomb test in Nevada in the 1950's, and to a number of White House receptions. From 1940 to 1944, Gen. Lawton served in Washington, D.C. He was promoted to Colonel and named chief of the Army Pictorial Services. In 1944, he was assigned to Supreme Headquarters of Allied Forces in Europe. Starting 12 days after D-Day, he followed the American Army across northern France with a cameraman, a jeep, a chauffeur, and a pup tent. He filmed and conferred with Eisenhower, Patton, Bradley, British Field Marshall Montgomery, and French General DeGaulle. On May 7, 1945 he "freelanced" his way into a school at Rheims, France at 2 A.M. and took the only color photos made of the German surrender ceremony. Two months later he "crashed" the Potsdam Conference. "I sneaked in," he was to confess later.

His prized Potsdam photo, widely published in periodicals and textbooks, was shot on a balcony over Churchill's broad frame and showed men of history around a huge round table including. Truman, Byrnes, Admiral Leahy, Churchill, Atlee, Anthony Eden, Stalin, Molotov, and Gromyko.

In 1954, while in command of Fort Monmouth and the Signal Corps Center with its radar-sensitive laboratories, Gen. Lawton was put into the national spotlight during the heavily televised Army-McCarthy hearings. The general was praised by Senator McCarthy in regard to the civilian loyalty-security check system he had instituted at Fort Monmouth. He could not testify at the hearings, however, because of a "gag" order issued by President Eisenhower. At the time, Gen. Lawton let it be known that following the job suspensions he ordered at Fort Monmouth, there was no longer a threat of a spy ring at the installation.

Among the general's many awards are the U.S. Legion of Merit, three battle service stars, the victory medal, and Czechoslovakia's Medal of Merit, First Class. He received an honorary doctor of science degree from WPI in 1950. A past president of the Boston chapter of the Alumni Association, he had also served on the Executive Committee.

Gen. Lawton was born on Nov. 3, 1894 in Athol, Mass. In 1917 he graduated as a mechanical engineer. He belonged to ATO.

Leslie H. Spofford, '17, chief engineer at Wachusett Engineering & Combustion for many years, died in Holden, Massachusetts on April 21, 1979.

He was born on Nov. 30, 1893 in Turners Falls, Mass. In 1917 he received his BSEE, then joined Hartford Electric Light Co. He worked for James McKinney & Sons, Eastern Bridge & Structural Co., and for 27 years the Worcester County Engineering Department, where he was a civil engineer. In 1959, he started work at Wachusett Engineering & Construction Co., Holden, where he held the post of chief engineer.

Mr. Spofford, a Mason, was a registered professional engineer and land surveyor in Massachusetts. He was also registered in New York. He was the father of Winslow Spofford, '56.

Charles C. Alvord, '18, a retired mechanical engineer and consultant for Norton Co., died on August 28, 1979 in Hyannis, Massachusetts at the age of 82.

He retired from Norton's machine division operation in Worcester in 1961, and then served as a consultant for Norton-Asquith, its Shrewsbury, England, branch, for twenty months. While with Norton, he invented several machines for the company.

Before joining Norton in 1936, Alvord was associated with his father, Clinton Alvord, '86 (deceased) in the former Worcester Loom Works. During his early years, Alvord built and operated wireless sets, when they were still a great novelty. He was proud of Indian relics and Civil War documents handed down through the family by his uncle, Maj. Henry E. Alvord, who, after the Civil War, was so successful dealing with Indians in Kansas, Oklahoma, and Texas.

Alvord, who trained in aerial photography at Cornell in World War I, was born in Worcester on Dec. 19, 1896. He was a professional engineer and had a BSME from WPI.

Cornelius A. Callahan, '21, a retired consultant, died at his home in South Yarmouth, Massachusetts on June 8, 1979.

Following his graduation as a chemist, Mr. Callahan worked for four years at Hamilton Woolen Co. He held subsequent posts at Pacific Mills, Charlton Woolen, and at Haywood-Schuster Woolen Mills. At Goodall Sanford, Inc., he was a vice president and at Stroock & Co., works manager. In later life, he ran Callahan Realty, Newburgh, N.Y., and was a real estate appraiser and consultant.

Mr. Callahan belonged to Lambda Chi Alpha, Tau Beta Pi, Sigma Xi, and Skull. He was born on Sept. 30, 1899 in Winchendon, Mass.

Harold C. Johnston, '23, a retired representative for Hobart Co., died at his home in Rumford, Rhode Island on September 9, 1979 at the age of 79.

He was born on Nov. 12, 1900 in North Easton, Mass., and was a member of the Class of 1923. During his career, he was with Worthing Pump & Machine Corp., Lupton Co., and Toledo Scale Co. In 1969, he retired from Hobart Co., Providence, after thirty years of service.

A member of ATO, Johnston had also belonged to the National Association of Cost Accountants, the Sales Manager Club, the Chamber of Commerce, the Masons, and the Shrine. He was a member of the Episcopal Church and the Wannamoisett Country Club.

Wolcott S. Bissell, '25, died on September 10, 1979 in Hartford, Connecticut. He was 75 years old.

In 1965 he retired as assistant training coordinator for the Connecticut State Highway Department after 29 years of service. He was responsible for formulating and teaching courses in algebra, trigonometry, and drafting. He had been a member of the Division of Design before transferring to the Training Division. Earlier, he was with Buck & Sheldon, Hartford.

Mr. Bissell was a life member of the Connecticut Society of Civil Engineers. A 50-year Mason, he had served as grand secretary in Connecticut for the Royal Arch Masons, and had held many other Masonic posts. He belonged to SAE and the Connecticut State Employees Association.

A graduate ME from WPI, Bissell also had a BSCE from MIT. He was born on March 17, 1904 in Hartford, Conn.

Raymond H. Amsden, '26, passed away at his home in Reading, Massachusetts on August 27, 1979 at the age of 75.

He retired in 1969 following 38 years as a fire protection engineer for the Factory Insurance Association of Hartford. He traveled the New England States, and was then a special agent in the Boston office.

A native of Arlington, N.J., he was born on Jan. 25, 1904. He belonged to the Pioneer Club of the Factory Insurance Association, and was a member of the class of 1926.

Peter C. Gaskill, '27, a retired clinical psychologist with the Veteran's Administration, died on December 16, 1978 following a brief illness

After studying at WPI, Mr. Gaskill received his AB from Ohio University and his MA from Washington University. For many years he was a clinical psychologist with the Veterans Administration in Manchester, N.H.

He was a member and elder of the Presbyterian Church, belonged to the Masons, the Eastern Star, and the American Legion. A charter member of the Londonderry (NH) Chamber of Commerce, he was voted citizen of the year in

Mr. Gaskill was in World War II, and continued as a lieutenant colonel in the Army Reserve. He served three terms in the New Hampshire legislature. He was a member of Lambda Chi Alpha. A native of Worcester, he was born on Dec. 8, 1903.

Ernest T. Parsons, '27, died in Manchester, New Hampshire on September 3, 1979 at the age of

He was born on Jan. 28, 1905 in Easthampton, Mass. In 1927 he received his BSEE from WPI. He worked 33 years as district transformer specialist, sales engineer, and manager of the Manchester office of the General Electric Company. He joined the Public Service Company of New Hampshire in 1959, serving as commercialindustrial sales supervisor until his retirement in 1969. After retirement, he engaged in consulting engineering work.

Mr. Parsons belonged to Phi Sigma Kappa, Skull, IEEE, the Rotary Club, and the Masons. He was past president of the Tri-County Electric Associates, past chairman of the board of trustees at Camp Foster, and he was a registered professional engineer in New Hampshire.

Frank R. Roeder, '27, a retired civil engineer, passed away on August 20, 1979 in Sarasota, Florida

He was born on Nov. 20, 1902 in Turners Falls, Mass. After graduating as a civil engineer, he joined the Metropolitan District Commission, Boston, where he was employed until his retirement. He had served the MDC in various capacities including that of draftsman in the Water Supply Commission and a senior civil engineer in the Construction Division.

Frank R. Joslin, '29, a retired system vice president of the New England Electric System, died on August 24, 1979 in University Hospital in Boston. He was 71.

As system vice president, he was responsible for the labor department and various operating functions. He had started work at New England Power Co. in Worcester in 1928. Since that time, he had held increasingly responsible posts throughout his 45 years with the company. He retired in 1973.

Mr. Joslin was born on May 1, 1908 in Oxford, Mass. He was a member of the Class of 1929 and belonged to Phi Sigma Kappa. In 1948 he graduated from the advanced management program at Harvard Business School.

His career with New England Electric was interrupted three times. From 1933 to 1937 he was a general superintendent for two CCC construction camps. He helped develop Myles Standish State Forest in Plymouth and Assonet State Forest. In 1938 and 1939 with the PWA, he helped in the reconstruction of Derby Wharf, Central Wharf, Salem Customs House, and John Derby House. Later he worked for the federal government on the National Research Defense Committee of the Office of Scientific Research and Development.

In 1946, he rejoined New England Electric, and was soon named a vice president of New England Power Co. In 1959, he became chief spokesman of the company's negotiating committee which bargained with unions of all system companies. He became vice president of New England Power Service Co. in 1962 and system vice president five years later.

While a resident of Bedford, he served on a number of local committees, including the school building committee, the library board of trustees, and as chairman of the school committee. He was named director of the Nashua River Watershed Association. He and his wife completely restored the Fitch Tavern, which is now in the National Historic Register.

After retiring, Joslin was named executive coordinator of the New England Construction Users Council. He belonged to the Rotary Club.

George J. Tsatsis, '29, of Massapequa, New York passed away recently.

For many years he was with Consolidated Edison, which he served as division engineer and executive staff assistant. He was born on January 6, 1906. He was a member of the Class of 1929.

John T. Tomkins, '30, of Newport News, Virginia, died last August after a long illness. He was

He retired from the machinery design department at Newport News Shipbuilding in 1974 after 44 years. He belonged to ATO, the Society of Naval Architects and Marine Engineers, the Propeller Club, the James River Country Club, and the Newport Lions Club, of which he was a past president.

He was born on Sept. 17, 1908 in Philadelphia. In 1930 he received his BSCE from WPI.

William E. Grubert, '35, the retired manager of the chemical hazards department of the Royal-Globe Insurance Company, died on August 15, 1979 after a long illness. He was 67

Mr. Grubert designed the first motor vehicle directional signal as a class project. He also designed Underwood's first noiseless portable typewriter.

During his career he was with Underwood, Elliot and Fisher, F.D.A. Insurance Co., and the Army Air Corps in World War II. After leaving the service, Grubert was employed by Royal-Globe Insurance, New York as senior vice president and manager of commercial lines and chemical hazards department. He retired in 1972

Mr. Grubert was a cofounder of the New York chapter of the Society of Fire Protection Engineers, of which he was a charter member and a past president. An outstanding fire protection engineer, he was very active in the Conference of Special Risk Underwriters and the National Fire Protection Association. He belonged to SAE and the Drug & Chemical Club. In 1935 he graduated as a mechanical engineer. He was born April 19, 1912 in Westfield, Mass. It is being suggested that if any wish to remember Bill Grubert, that a contribution be made to The Center For Fire Safety Studies, Worcester Polytechnic Institute, Worcester, Massachusetts 01609, in Memory of William E. Grubert. This is a new program which has been set up to award Master of Science Degrees in Fire Protection Engineering and is the first such program in this

Albert L. Delude, Jr., '38, a chief engineer at the Providence Granite Co. for 25 years, died on August 21, 1979 in Providence, Rhode Island.

He was born on Jan. 21, 1917 in Worcester. In 1938, he received his BSCE, and was employed by the Metropolitan District Water Supply System Commission, Boston. He was involved with construction at Quonset, R.I. Naval Air Station, Richmond (Fla.) Naval Air Station, and the Marine barracks at Camp Lejeune, N.C. Briefly, he was employed at Prestressed Concrete and Smith Concrete Products, Kinston, N.C. before joining Providence Granite.

Mr. Delude, WPI Alumni Council representative of the Class of 1938, belonged to ASCE. He was a registered, professional engineer.

Sidney F. Perkins, '38, of Athol, Massachusetts died in Worcester on July 29, 1979.

He was a district manager for the Massachusetts Electric Co. for the past 40 years, including the last 11 years in Gardner. He had also been a commander in the U.S. Navy during World War II and in the Korean conflict. Prior to serving as Gardner manager, he was stationed at Massachusetts Electric in Worcester, and at Narragansett Electric in Providence.

Perkins belonged to Theta Chi, the Methodist Church, the Masons, and the Shrine. He was a graduate of WPI's School of Industrial Management and a registered professional engineer in Rhode Island. He was born on June 13, 1915 in Millbury. In 1938 he graduated as an electrical engineer.

William L. Kay, '39, of Point Pleasant, New Jersey, passed away on August 9, 1979.

He was born on Aug. 9, 1916 in Scotia, N.Y. For many years, until his retirement, he was a research chemist at du Pont in Wilmington and Newport, Delaware. He had a PhD from New York University.

Dr. Kay belonged to Lambda Chi Alpha, Sigma Xi, and the American Chemical Society. He graduated as a chemist from WPI.

Malcolm N. Pilsworth, Jr., '47, a physicist at the U.S. Army Natick Labs., Natick, Massachusetts, died on August 11, 1979 in Framingham Union Hospital.

He was born on Sept. 10, 1918 in Worcester, and graduated as an electrical engineer in 1947. During his lifetime he was with the Naval Ordnance Lab., Washington, D.C., Landers, Frary & Clark, and Tracerlab in Waltham, Mass. He held a BA from Colgate, a master's degree from Cornell. He belonged to Sigma Xi and Phi Beta Kappa.

Mr. Pilsworth served in the Navy in World War II. He was active in scouting and with the Masons.

Raymond B. Phaneuf, '49, of Lynnfield Center, Massachusetts died on July 15, 1979 in Boston.

A native of Woonsocket, R.I., he was born on January 29, 1923. During his career, he worked for Worcester Pressed Steel, Clevite Transistor, Itek Corp. and Bar Industries. For the past six years, he owned and operated National Radio Corp., Melrose. He served in the Air Force in World War II, and belonged to Theta Chi. In 1949 he received his BSME from WPI.



