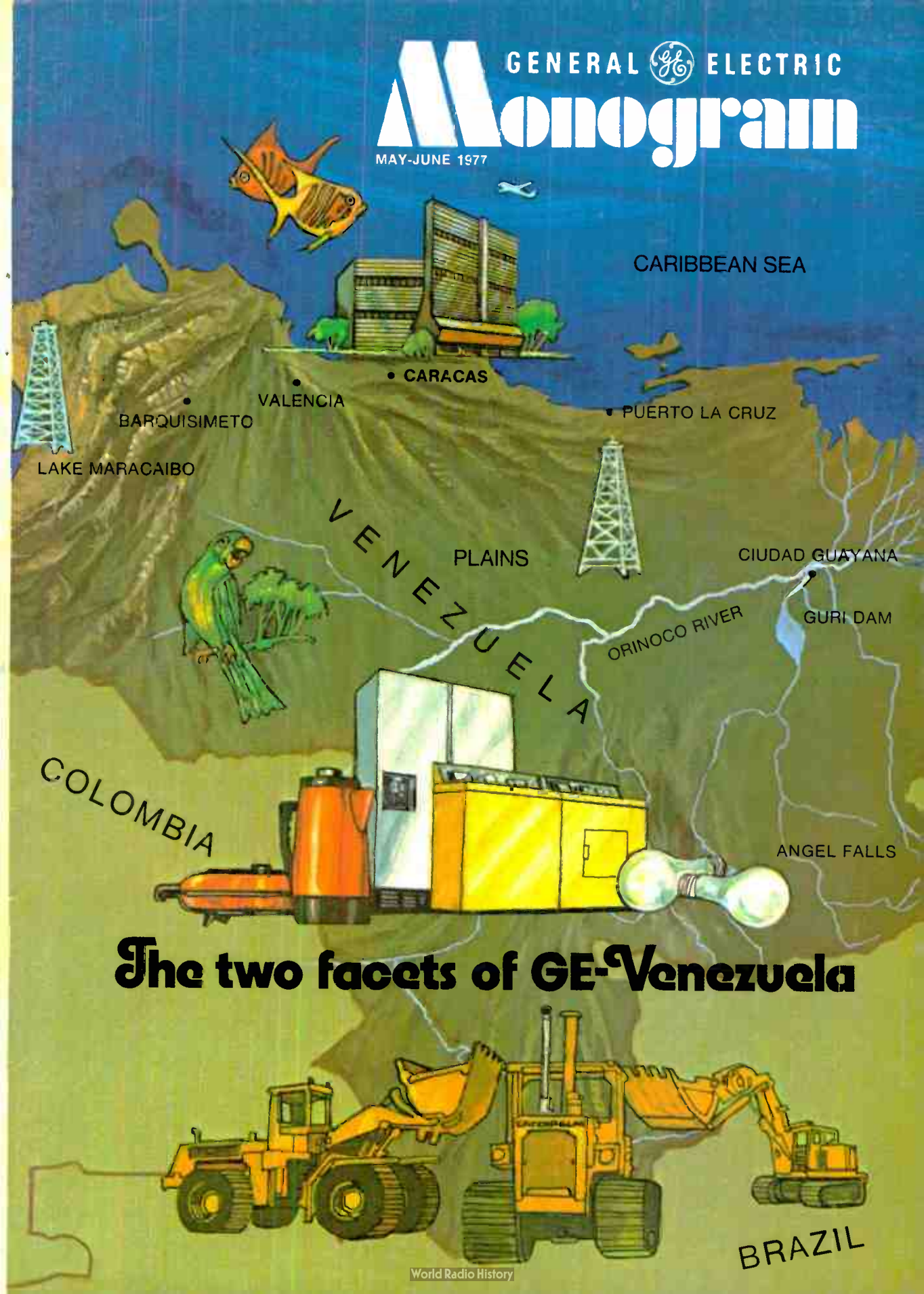
GENERAL ELECTRIC
Monogram
MAY-JUNE 1977



The two facets of GE-Venezuela

Covering the public issues spectrum

GE Chairman presents GE positions on a wide range of matters affecting the business environment.

For General Electric's Chairman Reginald H. Jones, recent weeks have been an intensively busy time. In quick sequence he responded to the Carter Administration's proposed new energy program, garnered two honorary degrees plus two business awards, and addressed ten different forums on public issues that affect the business environment—all without losing stride

GENERAL ELECTRIC Monogram

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Donna R. Carpenter, *Editorial Assistant;* Ron V. Taylor Associates, *Design*

On the cover: Yes, that's right. General Electric's Venezuelan affiliate not only produces electrical consumer goods for the Venezuelan market, but for fifty years it has also been the country's exclusive distributor of the products of Caterpillar Tractor Co. See GEVENSA on page 22. Cover illustration by Dolphe Lemoult.

Contents

The Monogram's purpose is to keep its readers informed on General Electric activities so that they may more effectively represent the Company in its relationships with the public. It is published bimonthly by Corporate Public Relations Operation—Douglas S. Moore, Vice President. Editorial supervision is by David W. Burke, Manager, Corporate Communications, and J. Hervie Haufler, Manager, Corporate Editorial Programs.

Candid exchanges at New Orleans' 1977 Statutory Meeting were part of Reg Jones' busy schedule in recent weeks, which has included speaking out on issues from inflation to women in business, and accepting honorary doctorate degrees this graduation season from Howard University and the University of Notre Dame.

in his handling of such corporate affairs as answering a tough series of questions at the 1977 Statutory Meeting of GE share owners, working on Company reorganization, cultivating GE friendships at a key customers' dinner in Philadelphia, and continuing his normally heavy round of regular corporate duties.

A recent interview with the editor of *Exchange*, the journal published by the Graduate School of Management at Brigham Young University, shed new light on the Chairman's reasons for accepting such a grueling schedule. Asked editor Mary Kay Stout: "Do you have a hard time deciding how much time to spend in Washington . . . as opposed to the day-to-day business of General Electric?" Chairman Jones' response has special relevance to GE people:

"I look at the chairmanship of the Board of Directors at the General Electric Company as, essentially, a job involving stewardship. I am a steward, in essence, for the funds that have been invested by our share owners. In a sense, I am also a steward for the economic lives of our employees. In addition, I am a steward for the confidence that our customers have put in our Company. Because of these responsibilities, you become a spokesman. I believe that many of the decisions that are made in Washington have more impact on the Company than many of the decisions that I might make sitting in the office."

Explaining that "we have tried to organize the Company in a way that leaves me some time to concern myself with more general matters—matters that have an impact on the total corporation," he added: "Government is more and more involved in the affairs of business; therefore, I think it is essential that our views be presented."

On 'the GE grain': Reg Jones returned to the concept of stewardship at the April 27 share owners' meeting in New Orleans. Replying to a share owner, he made it clear that General Electric has both negative and positive guidelines for its corporate actions. The restrictive guidelines, he said, derive from the Company's written policies and executive statements. As for the more positive determinants of ethical behavior, he said, "We have talked repeatedly to our management people about the fact that they must never lose a sense of stewardship. They're stewards for some of the most remarkable resources this world has ever known. And I speak here not just of physical but also human resources."

Jones told share owners that the sense of stewardship among employees was the underpinning of GE's high ethical standards. "We do have a culture, frankly, in the General Electric family, as the many employees in this room, I think, would tell you. We have a very definite grain. As in carpentering, you can work with that grain, but the minute you try to work across or against that grain you're in real trouble.

(continued next page)

Support for women achievers at the Catalyst dinner came from GE Board Member G. G. Michelson (left), Chairman Reg Jones, and U.S. Commerce Secretary Juanita M. Kreps.

And once you've been in this Company for a few years, you begin to understand its culture, its grain. And I have to say to you that I'm just so proud to be able to represent the employees of this Company, because they are an ethical, prideful, yet humble group of people of tremendous capabilities."

In other recent public statements and speaking engagements, GE's Chairman has presented the Company's position on a variety of issues. Some samples:

Energy policy—In response to the Carter drive for a national energy policy announced in late April, Jones singled out three areas in which the Company was especially equipped to help resolve U.S. energy problems--major appliances, coal and nuclear power. On appliances, Jones said: "General Electric has already made considerable progress in improving the efficiency of appliances--work which will go forward even though further reductions in energy consumption will be more difficult and costly to achieve."

The acquisition of the newest member of the GE family—Utah International—has given the Company a major stake in the coal business, and Jones agreed with the recommendation in the President's message for major use of coal, saying that "America's enormous coal reserves—enough for 500 years—certainly warrant their central role in meeting energy goals."

The GE Chairman welcomed the President's expressed belief that increasing use of nuclear power is a necessity, but added this reminder: "Expanded use of the nuclear option will require fundamental reform of the regulatory/licensing process and resolution of the uncertainties in the fuel cycle. It is particularly gratifying to see that both these issues are being addressed in the President's plans."

In the breeder reactor area, he reiterated the GE position: "While we recognize that the breeder raises some difficult issues, we have stated our view to the Administration that breeder-technology development should be supported as a key energy option."

Jones did not comment on the controversial tax proposals included in the Administration's proposed energy program.

Inflation—Given an opportunity to capsulize the GE position before the National Association of Electrical Distributors, Jones said: "Every one knows how inflation has cut the purchasing power of the individual and his family, but it has been equally devastating, or even more so, for business. It has eaten away our capital and reduced the purchasing power of our customers. It has sharply reduced the businessman's real return on investment after taxes."

Assessing the Carter Administration's recently announced approach to the problem,

Jones and GE Board member Walter Wriston greet GE Schenectady's Nancy Fitzroy.

Jean Hopwood, left, VP Ces Semple and Bridgeport's Mary Hoffman see the Chairman.

Jones said, "President Carter has announced a broad and comprehensive program to reduce inflation by getting at the roots of the problem. He laid great stress on fiscal responsibility in government, the reduction of excessive regulation, and efforts to improve productivity. He specifically stated that he would not resort to direct economic controls, and asked instead for voluntary restraint and cooperation by business, labor, and all other elements of society."

Jones called these elements reassuring, but asked for continued participation by businessmen in the formation of anti-inflation policy.

Opportunities for women—As master of ceremonies at a dinner honoring five distinguished women who serve on leading Boards of Directors, including GE's own Gertrude G. Michelson, Jones enumerated and encouraged some of the trends toward the expanding of governing boards, including the addition of women. "Women were once a rarity on Boards of Directors," he said, "but that is no longer true. Two years ago, only 11% of the Boards had a woman Director. Today, there are women on 21% of the Boards, and I would venture to say that the proportion will continue to increase."

Jones' audience included the lion's share of American women on corporate boards, as well as a number of GE women professionals. The sponsoring organization for the awards dinner: Catalyst, a non-profit group dedicated to the advancement of women in business.

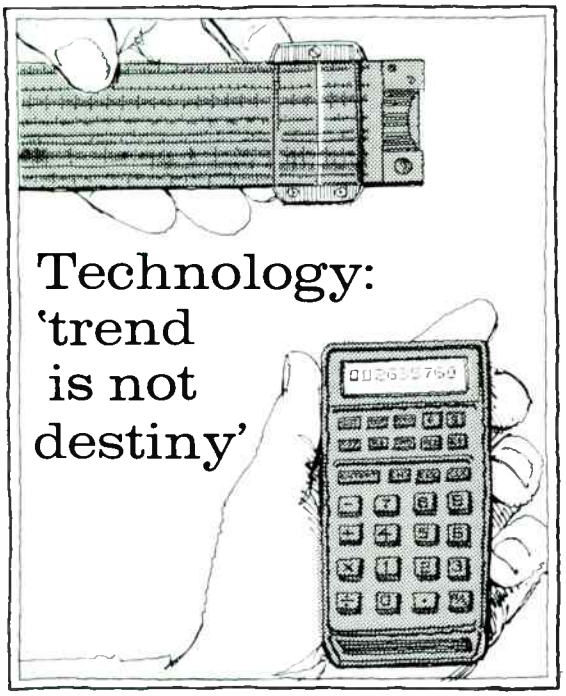
Corporate legitimacy—At an Indiana University Graduate School of Business Conference, Jones delivered an original analysis of the foundations for free enterprise in this country. Rejecting the proposal that corporations should be federally chartered, Jones said: "The critics contend that the legitimacy of the corporation rests on its charter of incorporation, and cite the historic precedent of the royal charters issued by the Tudor and Stuart kings of England. This says more about the critics than about business corporations. They still believe in the Divine Right of Kings, now transferred to the Federal Government."

Stating a clear preference for the uniquely American way, Jones continued: "Our Founding Fathers disagreed with the Divine Right of Kings or any other system of legitimacy that says people derive their rights from a government. They put it the other way around: all sovereignty rests with the people, and the people grant only certain necessary rights to the government, as defined in the Constitution."

His conclusion: "If we surrender our business freedoms, one by one, then all our other freedoms stand in jeopardy. We cannot say it often enough: freedom is indivisible."

Business statesmanship—Awarded the Business Statesman Award from the Harvard Business School Club of Greater New York, Jones reflected on the meaning of the term "business statesman." "The term itself is vague," he said, "but it suggests that something more than money-making ability is expected of business leadership today. There has to be a larger concern for society as a whole, and a willingness to engage openly and constructively in the affairs of the nation. More than that, there has to be some evidence that the business executive has a moral center; that he operates from principle rather than expediency.

"All this may seem somewhat idealistic for business managers who are, like most everyone else, pretty well absorbed by the daily business of making ends meet. And it is difficult to articulate in a society that looks with a healthy skepticism on declarations of moral rectitude. Yet I am convinced that it must be there—this sense of stewardship—underlying our decisions, and making itself felt if not heard by a public that judges us, in any case, not by what we say, but what we do."



What can be done to bring new vitality to General Electric's own technology and to reverse the unfavorable trends affecting U.S. technological leadership?

That was a primary focus for the 370 top GE technical managers attending the three-day Conference on Technical Management at Belleair, Florida in mid-April. The conference was chaired by Dr. Arthur M. Bueche, Vice President—Research and Development.

"Are we really satisfied with the state of technology in the General Electric Company?" asked Chairman Reg Jones in his candidly-worded address to the conference. Jones then traced a proud history. "Solving problems with technology is our birthright," he said. "And our continuing commitment to technology is our primary contribution to society—and our primary competitive advantage." But he also warned that "pride goeth before a fall, and none of us should have any illusions about the state of our technological birthright. We're running mighty fast, but there are more horses in the race and the track is getting muddy."

That led the Chairman to outline concrete action already under way to accelerate technical momentum—a Corporate Technology Study headed by Richard W. Roberts. The study's appointees from around the Company, said Jones, "have a very broad mandate to appraise our present technical position, anticipate future needs and opportunities, lay out strategic approaches, devise incentives for top performance and recommend whatever changes are needed in organization, communication, funding, manpower, measurements and any other policy area."

The study was described in detail by Charles E. Reed, Senior VP—Corporate Technology, who expects it to "determine the 'health' of technology in GE today, the outlook for the future and then make recommendations in the form of options." Outlining the determination of the entire Corporate Policy Committee to prevent the study from winding up on a shelf somewhere, Dr. Reed said: "We are not placing any initial constraints on the breadth of the study. But, so as not to fall into the same trap as many, with most work going into formulating problems and very little into providing answers, we expect that the Task Force will soon have to narrow its scope to issues with the greatest possible leverage."

One of the high leverage objectives most appreciated among Reed's audience was "the devising of innovative incentives that will help motivate personnel at all levels of the Company to fully exploit the potential of technology for assuring GE's continued business preeminence." Reed encouraged intensified use of GE brainpower by organizing afternoon technical brainstorming sessions at the conference and by collecting suggestions for the Technology Task Force from each conferee.

The focus on people as the most important technical resource in the battle to reverse unfavorable trends sharpened further as VP Leonard C. Maier of Corporate Employee Relations, Dr. Lindon E. Saline, manager—Professional Development Operation, and George H. Hupman, a consultant on Dr. Saline's staff, zeroed in on building technical momentum by achieving better relationships with technical people. Saline concentrated on the "early-years conversion process for turning new graduates into a well-functioning part of the GE team." Saline described the process as an 80-10-10 melding of work assignments, mentorship and education.

Concluded Hupman: "The individual engineer in today's GE is coping with a bewildering array of pushes and pulls from all directions—shoves from here, restraints from there. Our job as technical managers is to help him, not add to his problems."

After dinner at Belleair: Charlene Hosticka, Blair Fowler, Chairman Jones and VP Art Bueche chat.

Guest speaker William R. Hewlett, of Hewlett-Packard, talks with VPs Bueche and Vanderslice.

Informal technology talk on the porch of the Belleview Biltmore was an important part of the conference.

New light on technology's national importance was shed by Dr. Thomas A. Vanderslice, VP & Group Executive—Special Systems and Products Group, who offered fresh evidence to support his conviction that technology stimulation would "give the U.S. greater leverage on our problems, including unemployment, than many of the solutions now being proposed." A special study commissioned by SS&P Group found that low technology industries grew at a 2.3% compound annual rate from 1950 to 1974, versus 6.7% for high technology industries. Similarly, Vanderslice reported, the high technology industries surpassed the low by a ratio of almost 9 to 1 in terms of job formation.

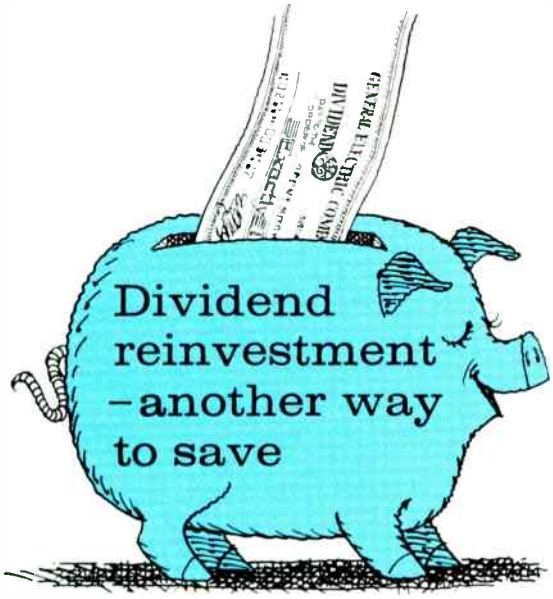
The Vanderslice conclusion: Even though current trends are unfavorable for maintaining U.S. technological momentum, "trend is not destiny."

The nitty-gritty of increasing technology momentum in the new General Electric involves integrating technology more fully into the strategic planning process. Conferees got an intensive short course on methods from VP for Corporate Strategic Planning Robert R. Frederick, and they heard specific successful examples from another triumvirate of speakers.

Vice President James F. Young, of Technical Resources, brought a change of pace—a nostalgic comparison of General Electric technology in 1937, the year he joined the Company, and today. In 1937, said Young, "the second age of light, the fluorescent lamp, was growing. The first hydrogen-cooled generator was shipped. Electronics Park was a gleam, and the key tool for a technologist was the slide rule. It was a long way, yet, to the electronic computer. . . ." The winds of change today have brought many new tools and opportunities for the technologist, but also problems that could lead to further loss of momentum. Young told an audience whose average age was 47. He sees the anti-technology activist as simply symptomatic of the problems.

But senior GE engineer Young assured his audience that the next 40 years would be equally as innovative as the 40 he had seen.

Conferees departed Belleair with notebooks full from hearing more than 30 speakers and with Reg Jones' final words ringing in their ears: "Tell your people we want them to show that the Company of Edison and Steinmetz and Whitney, one hundred years later, is still the most productive scientific and engineering enterprise in the world."



"The Dividend Reinvestment Plan that has been introduced for General Electric share owners offers the more than 200,000 employees who own GE shares a regular, relatively painless way to build an increasing stake in the Company."

The speaker is John L. Ingersoll, Manager - Corporate Institutional Relations—Corporate Public Relations Operation, who headed up the task force that developed the plan, now being readied for start-up with the forthcoming July dividend.

"Through our plan, those who are interested in increasing their GE holdings are given three main options," Ingersoll points out. "They can reinvest *all* of their dividends, a *portion* of these dividends, or *more than* their total dividends. Thus the GE plan offers great flexibility in meeting share owners' investment goals."

This flexibility enables the GE plan to fit in with the individual's financial situation, Ingersoll explains. "For instance, the share owner may wish to buy more GE stock but may also need some dividend income. So we offer the option of splitting dividends—designating a portion of the shares to reinvestment while continuing to receive cash payments from the remainder of the account."

Because of the additional costs of administering this provision of the plan, Ingersoll says, some limits have to be imposed: "It wouldn't be practical to split the dividends on small holdings. Consequently, we've put the minimum cutoff at 30 shares—no less a total than that may be designated to participate in dividend reinvestment under this provision. Aside from that, the share owner may divide up the dividends in the proportions that best accommodate his or her own financial needs and personal investment objectives."

There has been some confusion over this 30-share limitation, according to Ingersoll. "The limitation pertains *only* to the provision applying to those who wish to reinvest a *portion* of their dividends. Those who opt to reinvest all their dividends or to add cash payments may participate whether or not they own 30 shares."

The cash payment provision applies to those share owners who wish to acquire *more* than would be possible through straight dividend reinvestment. "Our plan enables the share owner to make, in addition to dividend reinvestments, an optional cash payment regularly each quarter, or occasionally, or just once. Again, we have to place some limits—a minimum of $50 to a maximum of $3,000 per quarter. Also, optional cash payments can begin only *after* the first dividend has been reinvested. So, if the share owner reinvested this coming July's dividend, a cash payment could be made in October."

One of the big benefits of the GE plan is, of course, that it provides a new means of systematic saving. But Ingersoll points out other benefits. "Participation in our Dividend Reinvestment Plan allows the share owner to acquire GE shares at low cost. Our service charge to cover administrative expenses is 3% of the total quarterly investment, with a maximum charge of $2.50 per investment. The 3% service charge, therefore, for any quarterly investment larger than $83.16 would be $2.50. In addition, the participant pays a proportionate part of the brokerage charges. We estimate that these charges will average less than 1% of each total quarterly investment—a good deal lower than the commission investors would normally pay in making the purchases on their own, because of the advantage of volume purchases. Serving as the share owners' agent, the First National Bank of Boston will acquire the GE stock and act as custodian for shares held under the plan."

When it comes to GE employee share owners, Ingersoll emphasizes that the basic savings opportunity for GE people "is still the Savings and Security Program, with its 50% Company matching payment. But for the employee who also wants to reinvest dividend payments, the Company's new plan offers a savings vehicle that is regular and flexible and that offers definite cost advantages."

Utah International's early days: not in natural resources at all

A few weeks ago a group of U.S. financial analysts traveled to Australia to gain a close-up look at the coking coal operations of Utah International Inc., the newest member of the GE family. What the analysts saw there was so completely different from Utah's beginnings that, in contrasting historic photos with the present, they might well have thought they were viewing two entirely different companies.

As shown in these samples from Utah's archives, the company started life in 1900 as The Utah Construction Company, when it was incorporated with six share owners and $24,000 in capital. The first jobs taken on by the new enterprise were in railroad construction. In 1906, Utah completed the Western Pacific Railroad from Salt Lake City to Oroville, Calif., via the famous 75-mile Feather River Gorge. Frequently working with only light hand tools and two-wheeled, mule-drawn dump wagons, the firm built more than 40 tunnels and numerous bridges and trestles.

From these beginnings, Utah moved into dam building. The firm's first major dam project was O'Shaughnessy Dam on California's Tuolumne River, completed in 1924. Thereafter, Utah participated in numerous dam projects, including Hoover (1936), the world's highest concrete arch-gravity dam; Bonneville (1940), the first dam across the Columbia River; and

(continued next page)

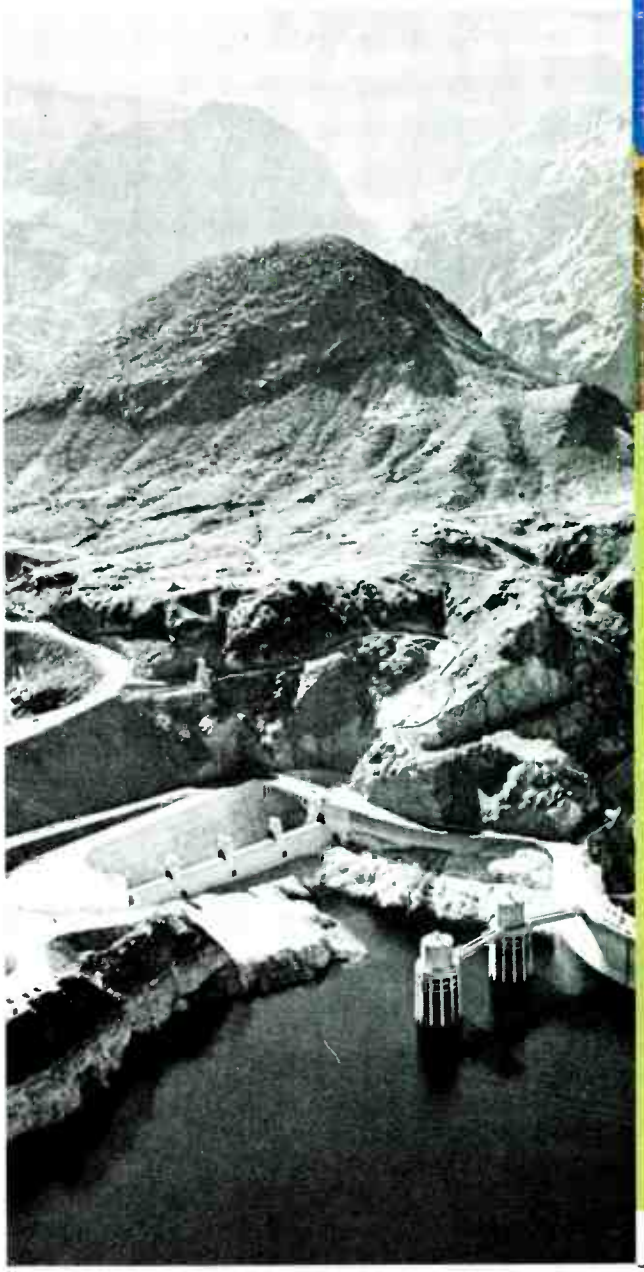
Grand Coulee (1942), the largest concrete structure ever built. Utah's introduction to Australia was via dam building: in 1955, it built Big Eildon, then the largest earth-and-rock-fill dam in Australia and the Southern Hemisphere.

Following World War II, Utah began looking for fresh fields to enter, and found a new opportunity close at hand. Its earth-moving skills could be applied to mining—first with contract surface coal mining in Pennsylvania and then in its own iron ore mine near Cedar City, Utah.

During Utah's early years, colorful pageantry marked completion of the Oregon Shortline Railroad.

Utah's railroad construction included trestles, tunnels, bridges, grading, ballasting and track-laying.

Steam-powered shovels, mechanical marvels of the early 1900s, replaced the pickaxe and hand shovel.



In 1953, Utah together with Cyprus Mines Corporation formed the Marcona Mining Company and opened a major open-pit iron ore mine in Peru. From then on, Utah devoted its energies more and more to natural resources—so much so that in 1969 it sold almost all of its heavy construction equipment. In 1971, the company officially changed its name to Utah International Inc.

In short, Utah's story is a classic case history of a firm that has had the foresight and ability to adjust its operations to society's changing needs.

Hoover Dam aerial view (left) shows magnitude of an operation which required 5,000 workers and more than $54.8 million. Over 50 tunnels and shafts were required in building this Colorado River dam.

To transport Australia's large coking coal deposits, Utah helped finance many miles of railroad lines.

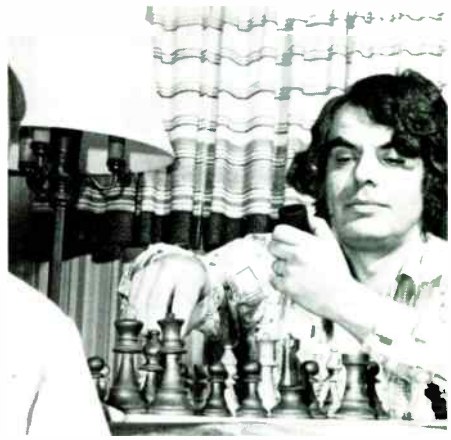
After World War II, Utah's earth-moving skills were applied in this Cedar City, Utah iron ore mine.

Monographs

World chess champ. Not since 1066 had Hastings, England witnessed a battle comparable to a recent world chess championship held there. When hostilities ceased, Lamp Business Group's Milan Vukcevich, a research scientist, emerged as one of the world's top players.

For Vukcevich, being an acknowledged Grand Master is nothing new. He captured his native Yugoslavia's junior championship at 18; became a Life Master at 21; was a bronze medalist at the Olympics in 1960; won the U.S. Open in 1969; and placed third in the U.S. Invitational in 1975.

"Physical fitness is extremely important in chess," explains Vukcevich. "I lose 10 pounds during a tournament. One has to be in top physical condition to play chess seven hours a day for 15 consecutive days. If you ever go to one of the tournaments, you'll think you are at a conference for pro football players!"



Midnight to dawn. If the two gentlemen flanking comedian Dick Martin look a little bleary-eyed, it's no wonder. They recently stayed up one night after Schenectady's GE WRGB-TV station had signed off to film Dick "live" on GE's new VIR "broadcast-controlled" color television during an actual test broadcast.

In taping their 60-second Corporate commercial on GE TV technology, Television Business Department's Michael J. Palladino (l) and Corporate Advertising's H. M. (Bart) Snider (r) worked into the wee hours to help Dick prove just how "colorful" his character really is in "live" GE color—instead of resorting to a "simulated" closed-circuit TV.

Dick's comment: "Is it possible someone has actually improved my image?"

Terrific Teen. Every father thinks of his daughter as a princess, but Jonesboro, Arkansas' Endre M. Moller, a manufacturing engineer at Specialty Motor Products Department, has no trouble convincing others. On May 9, daughter Christy was crowned America's Junior Miss at the 1977 pageant in Mobile, Alabama.

Christy, who will graduate near the top of her high school class in June, plans to attend Arkansas State University with her $15,000 scholarship money. She particularly impressed the judges in the talent competition, where she choreographed and performed a modern ballet number. For her father, who immigrated to the United States from Hungary in 1956, Christy's winning represented a modern American dream come true.

Joe "brought the house down." When Ohio's GE Edison Park machinist Joseph Kurpan bought a 462-pipe theatre organ once played in a silent-movie house, no one—including Joe himself—knew where he was going to put it. His solution? Rebuild his house around it.

"First we asked the kids which they preferred—separate bedrooms or the organ," explains Joe's wife Lanette. "They voted for the organ." The behemoth console now occupies most of the living room; an adjoining bedroom wall and ceiling have been knocked out; and many pipes extend to the roofline. Crammed into the attic and former bedroom are such wired-in accessories as snare and bass drums, a glockenspiel, xylophone, bells, triangle and cymbals—all designed to make the old silent movies anything but *silent*. The organ also features such sound effects as a doorbell, train whistle and horses' hoofs.

"Nobody's called the cops yet," laughs Lanette. "We're lucky. Our neighbors like music."

Honors: For inventing during the 1950s the first reproducible process for making diamond, the American Physical Society's 1977 International Prize has been awarded to four Research and Development Center scientists—Drs. Francis P. Bundy, H. Tracy Hall, Herbert M. Strong and Robert H. Wentorf, Jr. The award includes a $5,000 stipend which the recipients will share.

- The Nuclear Energy Systems Division's Dr. Roy H. Beaton, VP and General Manager, and Dr. Karl P. Cohen, Chief Scientist, were recently elected Fellows of the American Association for the Advancement of Science—as was Roy E. Anderson, an R&D Center consulting engineer.
- The National Academy of Engineering has elected four GE men to membership in its organization for their pioneering contributions to engineering theory and practice. The four are: VP Roy H. Beaton, Nuclear Energy Systems Division; Dr. Robert N. Hall, R&D Center; Dr. Richard W. Roberts, Corporate Technology Studies; and VP Edward Woll, Aircraft Engine Business Group Advanced Engineering Division.
- Aerospace Electronic Systems Products Department's Dr. Howard E. Butler has received NASA's Public Service Medal for his outstanding contributions to the Viking space project. The award was presented recently at the Jet Propulsion Laboratory in Pasadena, Calif.
- The GE Foundation's interest in improving the quality of career education and guidance was recognized recently at the Dallas convention of the American Personnel and Guidance Association. E. James Clark, Manager—Corporate Educational Communications Programs, accepted the APGA's certificate of appreciation awarded to GE.
- Lester W. Dettman, VP-East Central Regional Relations, has been elected to a two-year term as president of the Ohio Chamber of Commerce. Dettman has been a director of the state Chamber since 1971.
- As a tribute to the late former GE President and Board Chairman Gerald L. Phillippe, his widow, Jean Reese Van Wert, has established an endowment fellowship with the University of Nebraska, her late husband's alma mater.

Appliance "dean." As the newly-appointed manager of the General Electric and Hotpoint Consumers Institute, Louisville's Jean Hopwood insists that "the more consumers know about household products—the better." Jean's now charged to sow the seeds of "higher learning" regarding appliances with media, schools, consumer groups, business organizations and government agencies.

A graduate of Drexel University with a home economics degree, Jean has served the Institute four years as its Northeastern regional director, and three years as a home economist. She notes: "Two-way communication between consumers and the Major Appliance Business Group is our main objective."

GE is world's leading supplier of jet-engine-derived marine turbines.

Sea-going jets

A surprise hurricane with 110-knot gales and 90-foot swells will strike the harbor within two hours. What will happen to the Navy ships riding at anchor, their engines cold?

The Navy's new Spruance-class destroyers offer a new answer. With each destroyer powered by four General Electric LM2500 marine gas turbines, they can go from "cold steel to full speed ahead" in a brief span—an unprecedented 30 minutes. By the time the hurricane strikes, the GE-powered destroyers will be out to sea to ride out the storm.

Such an incident, hypothetical yet entirely realistic, points up just one of the advantages of the new LM2500 turbine developed by Evendale's Marine and Industrial Projects Department. In the seven years since M&IPD received its $130 million Spruance contract from Litton Industries, the department has become the world leader in marine gas turbines. Litton's original order—for power plant packages for 30 ships and spare engines—has since been parlayed into many other navy propulsion businesses.

Some examples: In 1976, the first of a number of fast frigates for the Italian, Peruvian and Venezuelan navies was launched in Italy, and the first of up to 50 FFG-7 class guided-missile frigates for the U.S. and Australian navies was launched in Bath, Maine. The LM2500 also has been selected for the new Danish Navy KV-72 corvette program and the Indonesian and Saudi Arabian navies' patrol ships. In addition, Iran has ordered Spruance-type destroyers.

M&IPD General Manager O. R. (Bud) Bonner states: "The LM2500 is the most efficient and compact gas turbine offered in the free world. The engine is 25 per cent more fuel-efficient than any first-generation gas turbine. We've already received some 400 orders—for military as well as industrial uses."

The LM2500-equipped Spruance-class destroyer can achieve better than 30 knots with its four aircraft-engine-derived turbines, each producing more than 20,000 horsepower. The LM2500 is based on the GE TF39 military and CF6 commercial jet engines—found on such aircraft as the military C-5, the McDonnell Douglas DC-10, the Airbus Industrie A300 and the Boeing 747.

GE began its marine work with jet engines 17 years ago with its J79 and T58 turbines. In conjunction with the Navy, both engines have been used on military hydrofoil ships and other seacraft. Two years ago, Boeing Aerospace Company launched the Navy's LM2500-powered Patrol Hydrofoil Missileship (PHM). Christened "Pegasus" at launching ceremonies, the PHM is designed to serve as a strike, patrol and surveillance ship, and this "guerrilla" vessel can achieve speeds of 50 knots and more.

LM2500 marine applications will doubtless outweigh industrial applications for the foreseeable future, M&IPD's Bonner emphasizes, but he adds that industrial uses are growing: "The LM2500 industrial gas generator is ideal for pumping and transporting natural gas. Offshore platform power generation is another example."

But marine applications will still represent the largest market for some time to come. Notes Bonner: "We're not lying back idle in the marine area. We recently launched the LM5000, a new gas turbine which should be ready for market in 1979. It will develop more than twice the horsepower of LM2500, and be ten per cent more efficient besides." The LM5000 is under consideration by Rohr Industries for the Navy's Surface Effect Ship (SES), an air-cushion vessel now being built and designed for 80-knot speeds.

Observes Bonner: "M&IPD is doing well. The department is one of the Company's fastest-growing businesses, and last year's sales equaled the department's cumulative sales for its first 15 years! With our market diversifying, we plan to be around for a long, long time."

Able to go from "cold steel to full speed ahead" within 30 minutes, the Navy's new Spruance-class destroyers—shown above under construction at Pascagoula, Miss. —are each powered by four GE LM2500 marine turbines. Five destroyers already have entered service, and another 25 on order will be afloat by mid-1978.

The LM2500—based on GE jet engines found on the military C-5, McDonnell Douglas DC-10, Airbus Industrie A300 and Boeing 747—has shown exceptional reliability. Left: the LM2500's first application in 1969, aboard the GTS Admiral William M. Callaghan, a roll on/roll off high-speed cargo ship.

SILENT SOARI

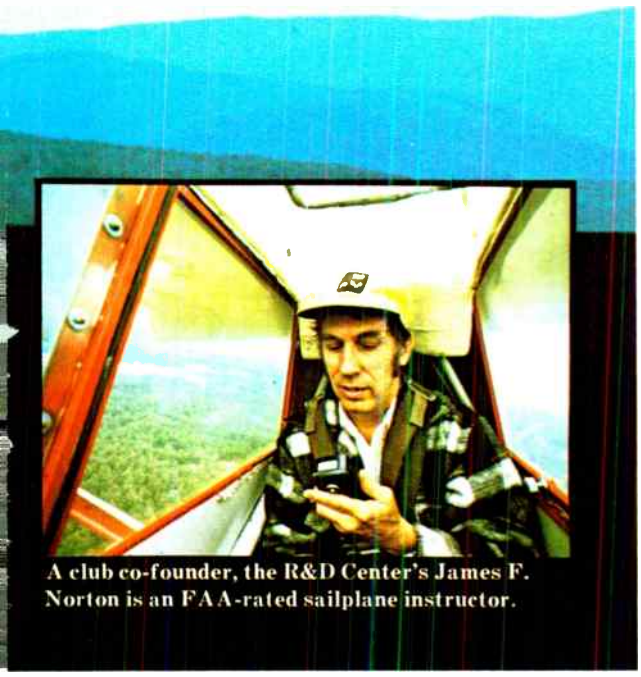
Sailplaner Sue Scace waves to her dad from atop the Berkshires' Mt. Greylock, a favorite locale for Schenectady's Mohawk Soaring Club. Father Richard C. Scace works in Pittsfield's Ordnance Systems Products Department.

Club members check out a sailplane's controls prior to flight from North Adams, Mass. municipal airport.

Take-off for club sailplanes is accomplished either with a light power plane or motor-driven winch.

NG

Schenectady's sailplaners have been at it for 25 years.



A club co-founder, the R&D Center's James F. Norton is an FAA-rated sailplane instructor.

Is the Mohawk Soaring Club the first with GE participants to get itself organized? Its members think so. It was 25 years ago that two Research and Development Center scientists, Drs. Francis P. Bundy and James F. Norton, helped establish the club.

Today they're still active members among the club's enrollment of 70—22 being GE employees. Large Steam Turbine-Generator Department's Poul D. Pedersen is this year's president, succeeding LSTGD's William G. Brinkman.

The secret to gliding is knowing where to find proper air currents. One looks for freshly plowed fields, parking lots and other dark patches, because the sun heats these areas quicker and causes updrafts or thermals. Sailplaners adept at "thermal sniffing" have soared nearly 50,000 feet, traveled more than 1,000 miles out and back, and flown nearly 800 miles cross-country to predesignated airstrips. Observes Pedersen: "Glider pilots don't go after endurance records anymore, because several fell asleep and crashed."

Schenectady's soaring club flies out of municipal airports at both Saratoga Springs, N.Y. and North Adams, Mass. Six Federal Aviation Administration-rated club instructors teach beginners on two of five club sailplanes. "Soaring is one of the safest sports around," comments LSTGD's Brinkman. "The FAA allows 14-year-olds to solo, whereas they can't get a driving permit for a car in most states till they're 16."

The R&D Center's Drs. Bundy and Robert H. Wentorf, Jr.—both club members and two of the 1954 co-inventors of GE Man-Made industrial diamond—are triple-diamond holders in the Fédération Aeronautique Internationale (FAI), soaring's world governing body. Triple-diamond badges represent the greatest soaring achievement possible. Among the 360 such U.S. holders, Wentorf has the distinction of being the only one who has made his own badge diamonds!

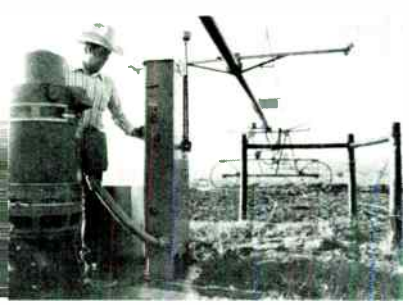
Schenectady's sailplaners are a heterogeneous group in love with their sport. They speak almost reverently of "creative flying" and the magnificent silence of flight. But theirs is a humorous sport, too. Remarks Brinkman: "Every sailplaner has at least one story to tell. I once made a routine cross-country landing in a New England field and the state patrol rushed in to ask how many bodies there were. But that was nothing. One glider pilot got socked in above some clouds over Mt. Washington in New Hampshire, and when he flew through them he was miles out over the Atlantic. Luckily, he made it back to shore."

Down on the farm

Lacie, the Raindrops Council, waste-heat cucumbers, Geniponics® — they're part of GE's growing stake in 'agribusiness' spinoffs.

To the airborne traveler used to seeing the rectangular patchwork of U.S. farming, there's a new shape on the map. Resembling giant phonograph records, the concentric circles of Washington State's Mid-Columbia River Basin (opposite) are actually fertile fields of sugar beets and potatoes, made to grow on arid wasteland by center-pivot irrigation equipment rotating in half-mile-diameter circles.

Small AC Motor Department's San Jose Motor Plant supplies many vertical motors that drive pumps to deliver water to these systems from the nearby Columbia River and underground wells, and Ft. Wayne's General Purpose Motor Department provides many of the motors driving the long robot sprinklers or "walking towers." Bloomington's General Purpose Control Department furnishes many of the controls.



Many Western deserts are turning into rich breadbaskets, thanks to GE-powered center-pivot irrigation equipment. GE motors drive pumps that deliver the water, and other motors move huge robot sprinklers around the fields. GE electrical controls operate many such systems.

GE's agribusiness market is booming. Company products—from motors and controls to lamps and luminaires, nuclear steam supply systems and space satellites—are finding numerous agricultural spinoffs.

Motors from the various GE motor departments, for example, are powering silo unloaders, crop dryers, grain augers, poultry feeders, egg incubators and hatchers, milking machines, ventilating fans and bunk feeders. Observes General Purpose Motor's Bev P. Miracle, Senior Marketing Specialist: "Today's farmer simply can't do his job manually anymore—even if he wanted to. A farmer with 100 steers couldn't shovel enough silage in a day to keep them from starving to death."

The huge "wheels of fortune" greening Western deserts with the equivalent of 60 inches of annual rainfall represent a massive electric systems deployment. GE's Raindrops Council—organized eight years ago to identify and develop the necessary electrical products for center-pivot irrigation manufacturers—includes field sales engineers of various GE equipment and sales divisions. Thanks a great deal to this Council, GE is now a leading U.S. supplier of motors, electrical controls, power delivery and protective devices, transformers and circuit breakers for the farm irrigation market.

"The center-pivot market is expanding at the phenomenal rate of 40 per cent a year," declares GPM's Miracle. "GE field sales people are helping turn tumbleweed and scrapgrass into rich breadbaskets, and are capturing some of the largest farm orders in the process."

There are other intriguing GE agriculture spinoffs:

Crop-predicting satellites. Remarkably accurate estimates of the 1976 winter wheat crop compiled by the two GE-built Landsat satellites are making it easier to plan for grain shortages and overproduction, and may eventually end much of the tumultuous speculation that afflicts world grain markets.

The satellite experiment, known as the Large Area Crop Inventory Experiment, or Lacie, is being conducted by

(continued next page)

NASA and the Agriculture and Commerce Departments. Lacie is designed to find out if viewing croplands from as high as 560 miles can provide accurate inventories of major farm crops.

The system's keystones are the GE Landsat-1 and Landsat-2 satellites, launched in 1972 and 1975, respectively. Among other feats, the satellites gather visible and infrared ground patterns, which are analyzed by special ground-based computers to see if the land has been plowed, if new plants are emerging or old plants maturing, and if they have been afflicted by plant disease, drought, floods, freeze, hail or tornadoes.

Remarks Lee L. Farnham, General Manager—Space Systems Department: "Landsat-1 was designed for a one-year mission, but today is approaching its fifth anniversary in operation. It's a spectacular success. The two Landsat satellites were more than 90 per cent accurate in estimating last spring's winter wheat crop in the Lacie Test Area in the Great Plains—three to four weeks before harvest."

Proposals for an operational satellite crop-reporting system are now in the offing, and meanwhile a third GE Landsat satellite with a new temperature-sensitive detector added to its scanner is scheduled for launch in September.

Controlled-environment plants. Crop production rates 10 to 20 times greater than greenhouse yields, and 20 to 50 times greater than the best field crops, continue to be demonstrated using the Geniponics® system, the Electronic Systems Products Division's expanding spin-off business. Plants are grown in a nutrient solution using GE high intensity discharge (HID) lighting systems, air conditioners and power distribution equipment.

Notes ESPD's Lewis W. Fogg, Manager—Controlled Environment Agricultural Operation: "The Geniponics method uses system-analysis techniques to determine the optimum control of all factors vital to good plant growth."

For its HID lighting, the system uses Lighting Systems Business Department's Duraglow® and Filterglow® luminaires, which include Lamp Business Group's Lucalox® and Multi-Vapor® lamps.

ESPD is in the final stage of negotiating contracts for several different types of Geniponics system applications. Meanwhile, the Division is renovating 18,000 square feet of a leased building in Syracuse for a commercial venture to test-market Geniponics produce. Remarks Fogg: "GE has already tested the system in two experimental facilities—at GE's own Syracuse plant and, together with the Kenai Indians, at a facility in Alaska. We're finding that the ability to locate a Geniponics installation anywhere, the elimination of crop-failure risks, and the predictability of higher yields make the Geniponics system an attractive 'agribusiness'."

Nuclear-heated greenhouses. By next spring, a one-half-acre waste-heat greenhouse at TVA's Browns Ferry nuclear plant site in Northern Alabama will be in operation, producing a variety of high-quality European cucumbers that grow from 12 to 14 inches in length. By diverting a small portion of the warm discharge water from the three GE-supplied nuclear units nearby, the prototype greenhouse will use the waste energy to grow cucumbers and some day possibly other crops such as tomatoes, lettuce and ornamentals.

GE lamps and luminaires (top) light a Cimarron, Kan. feed lot, and (r) help seedlings grow in Jefferson, Ore.

To produce fertilizer for crops, General Electric steam turbines power this Alaskan anhydrous ammonia plant.

According to TVA's Dr. Porter Russ, "The TVA Muscle Shoals waste-heat research greenhouse in Alabama has already shown the feasibility of using waste heat to grow vegetables. At Browns Ferry, we'll simply apply what we've learned on a much larger scale." In 1973, the Energy Research and Development Administration, through the Oak Ridge National Laboratory, assisted TVA in designing the Muscle Shoals greenhouse.

Vermont Yankee Nuclear Power Corporation, another utility with a GE nuclear reactor, is also exploring horticulture applications, in a 14-month, $20,000 study funded by the Environmental Protection Agency.

The utility believes that hothouse food production could again be economical in New England if low-cost space heating is provided. Initial analyses suggest that products might include cucumbers, tomatoes, mushrooms, pharmaceutical fungi, leaf lettuce and ornamentals.

The Vermont Yankee study is unique, in that it specifically addresses New England's weather environment and marketing conditions.

Cattle ranchers are using GE two-way FM mobile radios daily to keep in touch with their sprawling operations.

For gourmets *and* novices—

A quality food processor that's reasonably priced

Whether preparing *pâté de foie gras truffé* or just a simple casserole to get out of the kitchen fast, homemakers will find that General Electric's new Food Processor maximizes cooking's creative fun—while minimizing the chore. Suggested retail price of GE's newest food preparation product is $89.98—a good value for a versatile work-saver.

In less than 60 seconds, the Food Processor can:

—shred a two-pound head of cabbage, or

—chop a pound of raw beef cubes, or

—mix the pastry dough for two 9" pie crusts.

It has a stainless-steel knife blade for grinding, grating, chopping, crumbing and blending—and a two-in-one disc reverses from a slicing to a shredding side. Both the disc and knife blade are dishwasher-safe and can be stored inside the unit's unbreakable Lexan® plastic bowl to eliminate "counter clutter."

The Food Processor offers both on-off and pulse-on controls, includes a 40-ounce bowl and extra-tall 5-inch food chute, and has an interlock system which helps insure that the cover is in place before operation.

Information regarding Housewares and Audio Business Division's Food Processor is now available at all GE employee stores. Oh yes—the unit even makes peanut butter!

GEVENSA

That's the word today for GE's Venezuelan operations that, for fifty years, have also included Caterpillar products.

Early in 1927 a firm with the un-Latin name of Wesselhoeft and Poor had reached a crossroads. It served as the Venezuelan distributor for two strong product lines—General Electric and Caterpillar Tractor—but the firm's aging principals wanted out. GE International obliged by purchasing the distributorship. Thus, fifty years ago, did the forerunner of Gevensa—General Electric de Venezuela, S.A.—come into being.

And, since Caterpillar management was willing to continue the relationship, the GE affiliate that is one of the brightest performers in VP Willis E. Forsyth's Latin America Business Division also became the exclusive Venezuelan distributor for Caterpillar equipment, parts and service.

The GE visitor to this affluent South American neighbor half a century later finds Gevensa still conducting both businesses. Gevensa people are as fully devoted to sales and service of the big yellow machines of Caterpillar as they are to the more expected lines of electrical consumer goods that this wholly-owned GE affiliate produces and markets in Venezuela.

A talk with Gevensa President and General Manager Rodger E. Farrell in the General Electric building in Caracas quickly swings to the fact that both businesses are, today, experiencing very strong growth rates. "With both GE and Caterpillar operations contributing, Gevensa sales quadrupled in the 1971-76 period," he notes, "and earnings kept pace. We expect 1977 results again to set records."

It's a similar story in terms of facilities: "We're bursting at the seams. A 50% increase in production capacity at our Valencia plant in 1973 was supposed to suffice until 1980, but we're already pushed to the limits of capacity there, both for electrical products and for Caterpillar sales and service."

Farrell and his associates are developing a five-year plan for facilities expansion that includes new sales, warehouse and service facilities for Caterpillar, new production capacity for electrical products, and an enlargement and refurbishing of the Caracas office building. "We expect to be able to finance these ambitious plans out of Gevensa earnings," Farrell notes with pride, "while maintaining our dividend payments to General Electric."

The force behind Gevensa's expansion is the exuberant economic growth that has given the country the highest per-capita income in South America. Says Farrell: "Venezuela is enjoying the benefits of twenty years of democratic government. Today, the administration of President Carlos Andrés Pérez is making a conscientious effort to channel Venezuela's vast oil income into restructuring the economy. The nation's objective is a mirror image of U.S. goals: instead of trying to become independent of oil *imports*, Venezuela's goal is to become independent of oil *exports*."

Estimates are that Venezuela's oil reserves

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A land of big projects

Discovered by Columbus in 1498, named "Little Venice" because its Indian huts were mounted on stilts in Lake Maracaibo, Venezuela prides itself on the fact that Latin America's great Liberator, Símon Bolívar, was born in Caracas. Today its government is using its oil income for such ambitious projects as housing developments and a subway for its capital city, Caracas—and for doubling the output of its major hydroelectric installation, Guri Dam, for which Venezuela has ordered five new hydro generators from Canadian GE.

Gevensa's two facets

Acquiring the distributorship for both GE and Caterpillar Tractor equipment fifty years ago, GE's Venezuelan affiliate continues to conduct both businesses. Sign in front of Gevensa's Valencia plant (near right) includes both the GE and Caterpillar symbols.

Inside, production resembles a mini-Appliance Park, with manufacturing now including automatic dryers.

The audio products line (far right) is under the supervision of Venezuelan engineer Marianela Pérez.

Second major facet of Gevensa today is sales and service of Caterpillar equipment, including (near right) Valencia course to train mechanics. At busy port of La Guaira, Caterpillar equipment is unloaded to help with major earth-moving projects such as (far right) expansion of the Guri Dam in eastern Venezuela.

will last until the first decades of the 21st century—and new discoveries combining with huge reserves of tar sands in the Orinoco belt seem likely to extend that timetable. Even so, the oil reserves are finite. "Recognizing this, President Pérez' government has taken two main steps," Farrell says. "It has cut back its oil shipments to increase the time span for oil income, and it has mounted a massive program to build other industries."

GE experts count at least 36 major development projects that are committed or actually under way—everything from planting 160 million pine trees as the base for a future paper industry to tremendous investments in building the iron and aluminum industries and electric power generation. Transportation projects include a new 500-mile railway, expansion of docks and airports, and a 25-mile subway system in Caracas. At the same time, Venezuela is implementing social programs such as new clinics and hospitals, ambitious education projects, irrigation and flood control to aid agriculture, housing programs, communications systems and aqueducts.

These intensive national plans set the framework for Gevensa's own goals. "The scope of the country's development projects," Farrell observes, "gives us the opportunity to achieve profitable growth for Gevensa in ways that are important and materially helpful to Venezuela's national programs."

A tour of Gevensa's activities proves his point. Of the affiliate's production of electrical consumer goods in Valencia, Robert D. Reoch, Manager of Manufacturing and Engineering Operation for Gevensa, says: "Our local production of appliances, housewares, audio equipment, TVs and room air conditioners fits right in with the national goal of holding down imports. Because Venezuela's population is only 12 million, our production runs are small and, inescapably, we must import many components as well as whole products from GE in Louisville and elsewhere. But we integrate to the degree possible and so satisfy national objectives."

It's the same with lamp operations. Lamp Operations Manager R. Phillip Woolery points out that until recently GE was the only local producer of incandescent lamps. "We're now thinking of entering a joint venture for a glass factory. And we provide the door by which Venezuela can avail itself of the full market basket of GE lamps, including Lucalox® for some of its big lighting projects."

Caterpillar has a big part to play in the nation's growth plans. Says Acacio Lobo, Manager of the Machinery Marketing Operation: "Some of those 36 national projects involve the greatest earth-moving efforts ever attempted. The expansion of the Guri Dam, aiming at making it the world's largest hydroelectric installation by 1980, calls for moving a record of over 100 million cubic yards of earth, while the new railroad

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Gevensa's Managers

A mix of backgrounds is represented in Gevensa management. Left, top to bottom: Gevensa President and General Manager Rodger Farrell, Business Training Course alumnus who has been on six international assignments since 1959; Phil Woolery, Lamp Operations Manager; and Portuguese-born Acacio Lobo, Manager of Machinery Marketing Operation.

Right, top to bottom: Pat Jansak, Manager of Electrical Products Marketing Operation; Bob Reoch, Manager of Manufacturing and Engineering; and Bill Luper, Manager of Financial and Administrative Services Operation.

project will involve a similar amount. We intend to make Caterpillar equipment a key factor in all such projects."

One of the most direct ways in which Gevensa contributes is by conducting training programs. Says Emile R. "Pat" Jansak, Manager of Electrical Products Marketing Operation: "The biggest limitation on Venezuelan growth is the shortage of skilled people. We're responding by steadily enlarging our training programs. Last year over a quarter of Gevensa's 2300-plus employees participated in the 129 training courses offered. Our 1977 objective is to increase these totals by 25 per cent."

With all the opportunities offered, what risks are there in investing in Venezuela? Financial and Administrative Services Operation Manager William M. Luper minimizes concern on this front: "Both major political parties today espouse the philosophy of a mixed economy: state ownership of some basic industries and public services, with reliance on a U.S.-style, dynamic, free enterprise system in the manufacturing, distribution, financial and communications sectors. We're projecting a solid 8% annual growth rate for the next decade. It's a good climate in which to invest and grow."

Rodger Farrell sums up: "Gevensa's fifty-year record gives us the base for sharing in Venezuela's drive to be Latin America's standout nation. Being a part of this tremendous national effort is a fascinating experience."

'You're Never Too Old'

More GE components are helping future pensioners master 'the art of retirement'.

Michelangelo completed one of his celebrated Sistine Chapel paintings at 67; Benjamin Franklin invented bifocals at 78; Verdi composed his opera *Othello* at 73 and *Falstaff* at 80.

Not all of us may be geniuses after 65, but growing numbers of General Electric employee counselors think soon-to-be retirees should become "experts" on achieving a productive retirement. Case in point: Valley Forge's Space Division and Philadelphia's Re-entry and Environmental Systems Products Division, where GE instructors, starting last year, have conducted nine- and ten-week retirement courses after-hours on such topics as legal affairs, financial planning, housing, health, and attitude and role adjustments.

Notes Space Division recruiting manager William E. Sarno: "We're helping attendees by giving them a chance to explore alternatives with their peers and to obtain advice from experts—lawyers, bankers, psychiatrists, land developers, and insurance and travel agents. There's a lot of group discussion, we show filmstrips, and the groups have even tried role-playing."

Sarno recruits most of his speakers locally, and obtains his materials from the Washington-based AIM (Action for Independent Maturity)—a non-profit organization for pre-retirees aged 50 to 65. Re-entry's motivation program specialist Robert L. Debes conducts similar classes, and both he and Sarno attended a one-week AIM training school in Pittsburgh to become qualified instructors.

Notes Debes: "We naturally focused instruction on our oldest employees first, and have since begun working back to our 50-year-olds. Many spouses also are attending our weekly two-hour sessions." Sessions geared specifically to the various GE benefits are added to the AIM class schedule.

To be sure, these pre-retirement programs are not the first such GE programs to be inaugurated. One example: Lynn's annual Pre-Retirement Conferences, begun in 1968 for Industrial and Marine Steam Turbine Operations, and later expanded to include the Aircraft Engine Business Group and other nearby GE operations.

Comments Lynn Relations Operation's Shirley M. Brown, Manager-Employee Benefits and Services: "Each year we invite pre-retirees and their spouses to an eight-hour conference where we provide experts from the Internal Revenue Service, Social Security Administration, Massachusetts Division of Employment Security, Blue Cross/Blue Shield and GE. The speakers advise employees on various tax rules, the Medicare and Medex plans, and Social Security and GE benefits."

She concludes: "People 65 and over constitute one of the fastest-growing segments of our population—a net increase of 1,000 per day. We're trying to help GE retirees make the transition as smoothly as possible."

Possible attitude and role adjustment problems facing retirees are discussed with psychiatrist at recent Space Division class.

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Judging from the following energetic group of pensioners, the first rule for productive retirement seems to be, "You're never too old to enjoy life."

Kirk M. Reid wins tennis trophies at 79

Back in 1923, North Madison, Ohio's Kirk Reid and a friend once beat Bill Tilden and another pro in a Cincinnati exhibition match. Tilden at the time was considered the world's greatest tennis player.

Reid, who retired in 1963 as lighting education manager of Cleveland's Lighting Institute, has won more than 100 tennis championships in his lifetime, including three nationally in the over-45 class. "I came back to tournament tennis this year after 15 years away because of a back problem," says Kirk. He's since gone on a nationwide tour, and the U.S. Tennis Association now ranks him No. 4 nationally in doubles and No. 10 in singles in the Super-Senior class, age 75-and-over.

"For my circulation and coordination, several brisk sets of tennis are just the ticket," remarks net-rusher Reid. "I'm using a new oversized aluminum racket to shore up my backhand, and am looking forward next year to being one of the youngest members in the new 80-and-over class."

H. O. McKenzie: advancing radiation therapy

As a full-time, volunteer radiation consultant to various U.S. hospitals since retiring, Dallas' Mac McKenzie has played a crucial role in developing no less than six community radiation therapy centers. McKenzie also has guided the development of Houston's nationally recognized x-ray departments at the University of Texas System Cancer Center and the UT Medical School's Teaching Hospital. Since March 1976, he's donated his services to Tyler's East Texas Chest Hospital—to help that staff improve their cancer-management facilities.

"I feel as young today as the day I retired," exclaims Mac, who retired in 1970 as the Dallas district manager of Milwaukee's Medical Systems Business Division. As a consultant to the American College of Radiology, he also makes numerous site visits to improve other hospitals' cancer patient care. "I'm not so busy that I can't travel abroad once or twice a year. The trouble is—I always end up visiting foreign hospitals!"

All funds earned by Mac's consulting activities go to the Radiation and Research Foundation of the Southwest, where they are used for educational seminars in cancer management.

William P. Burt works his will in wood

"Everyone should do some kind of hand work," maintains Bill Burt, as he explains what prompted him at age 40 to begin sculpting in wood. "I needed something to relax me after work, and one night I carved a small Scottie dog from a piece of balsa wood. From then on, I was hooked."

Burt, who retired in 1973 as an engineering unit manager with Philadelphia's Switchgear Business Department, eschews the label "artist" and calls what he does woodcarving. Everywhere one looks throughout his Havertown, Pa. home, examples of Bill's work are on display—bas reliefs on the walls, a mantle peopled by athletes and a bust of the late President Kennedy, a nude woman on a window sill, a mobile on the sunporch ceiling.

"I work when the spirit moves me, and keep four or five projects going at once to avoid impatience." Burt also has published a small primer, *Wood Carving: How to Start* ($2). The book's preamble? Everyone is creative in varying degrees, and many of the best creations are derived from very simple concepts.

Arnold M. Files: delving into other civilizations

Rio Rancho, N.M.'s Arnold Files loves to explore Southwest ghost towns and Indian ruins. He's also an accomplished lapidary of turquoise and petrified wood; has reached the conversational Spanish stage in two years of study; and is now president of the Siglo de Oro (Golden Age) recreational vehicle club, which he founded. "Mary and I are planning to leave for South America this fall with our car and trailer, after our May trip to the Mideast."

Until his retirement in 1973, Arnold was a manufacturing engineer with Utica's Aircraft Equipment Products Division. Among the Files' more unusual travels? "Just after retiring, we signed aboard a merchant freighter bound for Israel, and then the Yom Kippur War started, and the U.S. Sixth Fleet ordered our captain into Piraeus, Greece. We had a great time anyway!"

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W. Ray Cunningham: making a name in politics

It was a challenge Ray Cunningham couldn't refuse. When friends convinced him in 1971 that New Hampshire's District 12 state House seat was going begging, he successfully tossed his hat into the ring. Since then, Rep. Cunningham has been re-elected three times, and is now chairman of the Committee on Regulated Revenue.

"My committee regulates the state-operated liquor stores, dogtracks, horsetracks and the sweepstakes commission," explains the former manufacturing operation foreman for Somersworth's Meter and Instrument Business Department. "We recently opposed introducing casino gambling. Most citizens don't want it."

Cunningham, who retired in 1969 to his Hampton Beach, N.H. home, views government service as both a gratifying and frustrating job. "Our state constitution requires us to enact all bills within 90 legislative working days, and it's hard to become an instant expert." But step down? "Not on your life—I like the decision-making process too much."

Around the world with Harold H. Spengler

In 1962, Cleveland's Harold Spengler retired as a glass technology manager in the Lamp Glass Products Department and set out to circumnavigate the globe. Since then, he and his wife Emma have photographed snake charmers in India, loafed on the beaches of Tahiti, and gone on safari in East Africa.

"Born free—but certainly not rich!" laughs Harold. "For a time it looked like Emma and I weren't going to save a thing. Then, when I was 55, I suddenly found the kids were grown and I was making more money than ever before. These are the years when you save the most money—just before retirement."

The Spenglers have vivid travel memories: "Nine of us were loaded into this bush plane in New Guinea, and even without luggage we weighed too much for take-off. So they unloaded some of the fuel, and then we hit a bad storm in the mountains and the door wouldn't close. Luckily, we got down safely."

Helen Kirtland: helping out in Louisville

"Frankly, I was too busy to plan for retirement, but when it came, many other interesting projects fell into my lap," remarks Helen Kirtland, who retired in 1972 as head of the GE and Hotpoint Consumers Institute in Louisville. She's now an admitting-room volunteer at

Louisville's Norton-Children's Hospitals, and also does volunteer work for the Kentucky Opera Assn., her church and the J. B. Speed Museum: "We've just received Rembrandt's 'Portrait of a Woman.' It's a spectacular addition!"

Helen is also studying French and Spanish—"I've reached the conversational level in both"—and has traveled to Europe and Central America since retiring. "At the Sheraton in Istanbul, I heard pounding and rescued a French-speaking Turkish lady from a bathroom stall using my language ability. It turned out her son was living in Buffalo, N.Y.—my home town. It was a highlight of my trip!"

Organization Changes

CONSUMER PRODUCTS AND SERVICES SECTOR

Paul W. Van Orden, elected a Vice President

Donald M. Hull, General Manager—Housewares Marketing Department

AEROSPACE BUSINESS GROUP

Richard J. Farrelly, General Manager—Re-entry & Environmental Systems Research and Engineering Department

John D. Stewart, General Manager—Advanced Re-entry System Program Department

COMPONENTS AND MATERIALS GROUP

James L. Rine, General Manager—Tube Products Department

Francis J. Schilling, General Manager—Medical Systems Manufacturing Department

George P. Ward, Program General Manager—Special Health Products

Joseph N. Williams, General Manager—Diagnostic Imaging Programs Department

INTERNATIONAL AND CANADIAN GROUP

Alton S. Cartwright, Chairman of the Board and Chief Executive Officer—Canadian General Electric Company Limited

LAMP BUSINESS GROUP

Robert V. Corning, VP and Group Executive—newly established Lamp Business Group

James A. Baker, General Manager—newly established Lamp Products Division

Ralph D. Ketchum, General Manager—newly established Lamp Components Division

POWER GENERATION BUSINESS GROUP

John H. Reynolds, General Manager—newly established Installation and Service Engineering International Department

SPECIAL SYSTEMS AND PRODUCTS GROUP

Allan L. Rayfield, General Manager—Transportation Equipment Products Department

Marion S. Richardson, General Manager—newly established Locomotive Operations

A STRIKE FOR GE PLASTICS. What's being hailed as the greatest advancement in bowling since automatic pin setters—General Electric's new Perma-Lane® surfacing material—is shown in the Planet Bowl in Midwest City, Okla.

Laminated & Insulating Materials Business Department's new plastic laminate lasts longer than conventional wood lanes, does not require annual refinishing, and is easy to install and clean. Wear patterns—such as the groove developed by right-handers on wood surfaces—are also significantly reduced.

Planet Bowl proprietor Luther Holman says: "Our bowler acceptance of Perma-Lane surfacing has been phenomenal. Since the week of March 14 when we installed it, I've received numerous calls as well as personal visits from other proprietors requesting a look for themselves."