

STADIUM LIGHTING

THE MONOGRAM

NOVEMBER

1966



NEW CERAMIC



CLINTON DEDICATION



WHAT'S NEW FOR CHRISTMAS . . . p. 8

INSIDE: Snoopersonics...Spanish Space Meeting
Lamp Life...Planning for 21st Century

LETTERS

Sights on Gunboat 84

EDITOR: In the September issue of *The Monogram* on page 7 there is an article and picture describing Navy Gunboat 84. As an old Navy man my husband was interested in the article, but a bit puzzled about the 50-caliber single mount guns you refer to. Are you referring to the gun turret forward in the picture, which looks considerably more like a 5" mount, or are they really "automating" 50-caliber guns. It would seem a \$3-million craft would have considerably larger fire power than 50-caliber guns, or is there armament of another variety? Thank you for any clarification.

BARBARA ALLEN (MRS.) Avionic Controls Business Section Johnson City, N.Y.

Gunboat 84 will be equipped with three-inch, 50-caliber, single mount guns mounted forward as shown in the story's photograph. Its armament system will also include a twin 40mm gun and 50-caliber machine guns in addition to other weapons which are classified.—Ed.

More Clinton Comment

EDITOR: The letter from Mr. Fitch in the September issue of *The Monogram* disturbed me very much. He apparently has no comprehension of the job which GE has undertaken at Clinton, Iowa. Perhaps if he had interviewed girls for the Job Corps in their own homes, as I have, he would realize that the education of these trainees poses a very different problem from that of teaching company engineers or college students.

These girls come from homes which often provide little intellectual stimulus, which are apt to be broken or disturbed. They are the results of a social system which has discouraged their parents, perhaps by providing no alternative when their job skills have become obsolete. They lack confidence in themselves and in society. Job Corps candidates are products of school systems which may have been more concerned with the "haves" rather than the "have-nots." They probably have been taught by some teachers who have not been trained to teach the underprivileged. Therefore, the girls' approach to education and/or training is likely to be one of doubt as to its outcome. What really could be said of them

(Continued on inside back cover)

The object of *The Monogram* is to keep its readers informed on General Electric activities so they may contribute more effectively to General Electric progress on the job and better represent the Company in its relations with the public.

IN THIS ISSUE

Clinton Dedication	4
New Ceramic	5
Lamp Life	6
Madrid Space Meeting	11
Nuclear Orders	13
Maternity Benefits	15
Phillippe Speech	16

EDITORS Devere E. Logan Lester W. Miller

The Monogram is produced for office employees of the General Electric Company and its affiliates. It is published monthly at New York by the Employee Communication Operation of Management Development and Employee Relations Services and printed in the U.S.A. by the Maqua Company. Permission for reprinting articles should be obtained from the Editor, General Electric Company, 570 Lexington Avenue, New York, N.Y. 10022. Copyright, 1966, General Electric Company, Gerald L. Phillippe, Chairman of the Board; Fred J. Borch, President and Chief Executive Officer; Robert M. Estes, Secretary; John D. Lockton, Treasurer.

GENERAL @ ELECTRIC

NOVEMBER, 1966

THE GENERAL ELECTRIC MONOGRAM

OPERATING RESULTS

Our Third Quarter

A healthy 19 percent increase in sales was reported by the Company for the first nine months of this year, with a total of \$5,165,463,000 compared with \$4,330,651,000 for the comparable period in 1965.

Pay and benefits for Company employees also rose to a record \$2.1 billion, or 20 percent more than the first nine months of last year.

Earnings for the period were \$271,894,-000 or \$2.98 a share—up 14 percent over the \$238,237,000 recorded in 1965.

President Fred J. Borch said that the sales increase was shared by each of the Company's major products—heavy capital goods, consumer products, industrial components and materials, plus aerospace and defense products—reflecting the current high levels of business activity.

Earnings for the first nine months of the year were 5.3 cents per dollar of sales compared with 5.5 cents in the 1965 period. The decline reflected in part the continuing pressure of rising cost levels and increased expenditures in connection with expansion and modernization of the Company's facilities. Such expenditures, noted Mr. Borch, are essential in order to remain competitive and to meet the rising demand for both commercial and defense products.

Another record was set in the \$2.5 billion total for the purchase of materials, supplies and services from other companies.

The Company also made provision during this period for payment of more than \$313 million in direct taxes and renegotiation to federal, state and local governments in addition to indirect taxes included in prices paid to suppliers.

ORGANIZATION

Changing Assignments

Two changes among the Company's top operating executives were announced early this month by President Borch.

Effective immediately, Mr. Borch named Charles K. Rieger as vice president and group executive of the Company's Components and Construction Materials Group, and William H. Dennler as vice president and group executive of the Electric Utility Group.

Each previously held responsibility for the other group. Both men will continue

W. H. DENNLER

C. K. RIEGER







JAMES F. YOUNG A. EUGENE SCHUBERT

to report to Mr. Borch, who said the exchange of responsibilities is in line with the Company practice of helping to broaden top management capabilities and will make use of outstanding individual qualities of each executive.

Two additional changes were made this month. Board Chairman Gerald L. Phillippe announced that James F. Young, vice president and general manager of the Nuclear Energy Division had been assigned responsibility, effective November 1st, for Engineering Services with the title of Vice President—Engineering Services. Mr. Young will also serve as Consultant to the General Manager of the Nuclear Energy Division.

A. Eugene Schubert, general manager of the Power Transformer Department is appointed General Manager of the Nuclear Energy Division. He will also serve as Acting General Manager of the Power Transformer Department.

UNION RELATIONS

Signing Up

After some two months of negotiations, including the intervention of President Johnson, new contracts were signed by the Company and more than 90 unions

representing 91 percent of its organized employees.

Both the IUE and the UE signed new 36 and three-quarter-month agreements in mid-October, with most of the other unions reaching settlements shortly thereafter.

Settlement terms were substantially those proposed by the Company on September 22nd for a 38-month agreement and modified prior to the original October 3rd deadline.

The several contracts call for three annual pay increases totaling 10 percent, with a modified cost-of-living feature under which the Company and employees would share in absorbing cost-of-living rises up to a maximum of three and one-half percent. The Company had originally proposed two guaranteed cost-of-living features of three cents each.

Also included in the new agreements are provisions for a special skilled trade adjustment, pension improvements, better maternity benefits, two weeks vacation to hourly employees after two years of service, and an extra paid holiday effective in 1968.

Local Issues: Some plants were still negotiating local issues as *The Monogram* went to press. At Schenectady, about 12,500 members of IUE local 301 and other unions were out on strike over disagreements arising out of the "Make Schenectady Competitive" agreement.

At Evendale, about 6,000 striking IAM and UAW members were ordered back to work by a Taft-Hartly injunction issued on October 18th. Local negotiations were continuing.

UE local 205 at Ashland, Mass., has been striking the Housewares Division plant there since October 3rd. The issues include terms under which the local can come under the national UE contract.

AT DEADLINE

Fantasy Hour: Rudolph, The Red-Nosed Reindeer will star in a one-hour color

telecast Sunday, December 4th at 5:30 p.m. EST sponsored by the Housewares Division. Burl Ives is narrator of the story of Rudolph, and an "Animagic" technique is used to bring motion to the puppets that appear in the Christmas story.

College Computer: A GE-625 computer system has been shipped to Dartmouth College, Hanover, N. H. The system will use special time-sharing software to serve some 200 people simultaneously at scattered locations on the Dartmouth campus and elsewhere. Operation will begin late this year. The GE-625 is an advanced computer with memory speeds of two-millionths of a second and is capable of adding 300,000 numbers a second. The new system replaces the Dartmouth GE-265 time-sharing system installed in 1964.

Name Change: The Company's Vallecitos Atomic Laboratory near Pleasanton, Calif., will be called the Vallecitos Nuclear Center in the future. The change is being made because of confusion existing between the site and the Vallecitos Atomic Laboratory section, both of which carried the same name. The Nuclear Energy Division also announced that it is moving its Advanced Products Operation to new quarters in Sunnyvale, Calif. from its present location at San Jose. The move is necessitated by the rapid expansion of the Division and the need for more space to accommodate its operations.

Warehouse Fire: Several thousand television receivers stored in a Syracuse warehouse by the Television Receiver Department were destroyed by fire. The loss was estimated at between six and seven million dollars in retail value. The Department had been storing the sets in the warehouse in order to free manufacturing space at Electronics Park for expansion of large screen color production. The loss was insured.

Feeling Ten Feet Tall

"To all of you, welcome, and we wish you a pleasant day. To you, the people of Clinton, we say thank you for making us feel ten feet tall."

The words were those of 20-year-old Donna Walton of Salt Lake City, president of the Clinton Job Corps student government, as she greeted visitors attending the Center's formal dedication last month.

The day was brisk but sunny as 2,000 persons accepted the invitation to visit the Center and some of the 550 young women from 40 states who are presently enrolled there.

Guest Book: Among the Clinton guests were General Learning Corporation Board Chairman Francis Keppel, who participated in the dedication program.

"We have here in Clinton," he said, "concrete evidence that something is being done to give some of our people, wherever they come from, a real second chance to get an education and training in a basic skill that will make it possible for them to take advantage of the opportunities that

are going to lead to becoming healthy, useful, constructive citizens in the society."

Mr. Keppel, former U.S. commissioner of education, also said that at the Job Corps Center in Clinton, "We are doing something here which I think we probably should have done long ago in trying to merge the talents of industry and education and make it possible for the girls here to take a part in society."

Historic First: Dr. Bennetta B. Washington, associate director of the Job Corps, said that Clinton was part of an historic program.

"Never before has a nation-wide residential 24-hour-a-day, seven day a week program been geared to vocational training for disadvantaged women," she said.

"The future lives of our disadvantaged young women will be determining factors in the lives of their young, and in patterns for succeeding generations," said Dr. Washington.

Center Director W. A. Lewis joined a

CLINTON SCENES: In photo at left below, Wilford A. Lewis briefs a visiting group including Dr. George L. Haller, Francis Keppel, Dr. Louis T. Rader and Corpswoman Stella Redstone. In photo at right below, a group of Clinton Corpswomen learn culinary arts with emphasis on salads.







DENTAL TRAINING AT CLINTON "An opportunity to be somebody."

group of interested guests that included Richard L. Shetler, president of General Learning Corporation which now operates the Center for the Office of Economic Opportunity (*The Monogram*, Oct. '66); the Board of Directors of General Learning; and GE Board Chairman Gerald L. Phillippe.

During the afternoon, visitors from Clinton entered the gates of the 80-acre Center to see Job Corps training in action (see photos). Five areas of instruction are included at Clinton: health occupations, business and clerical, cosmetology, distributive education (merchandising and retailing), and culinary arts.

Commented one Clinton housewife after a day at the Center: "Your only critics are those who don't know you."

Summed up Mr. Lewis: "One year ago these buildings were empty and cold. Now, for hundreds of young women from across our land, this is home—this is a new way of life—an opportunity to be somebody—somebody who has the pride and satisfaction that comes from independence."

RESEARCH

Y is for Yttralox

Scientists at the Research and Development Center have come up with a new ceramic material as transparent as glass but that can withstand temperatures over twice as high.

The new ceramic is called "Yttralox,*" after the rare earth element yttrium which it contains. Yttralox is made from a red-hot recipe in which yttrium and thorium oxides are heat-treated at about 4.000°F.

The space-age ceramic was revealed at a recent meeting of the American Ceramic Society by Drs. Richard C. Anderson and Paul J. Jorgensen of the Research and Development Center.

While yttrium is, by definition, a rare earth element, it is well known at the Television Receiver Department. GE Porta-Color* sets include picture tubes which use a form of yttrium for the phosphor that produces the color red.

In experiments at the Research and Development Center, Yttralox ceramic has shown an exceptional transparency to visible and infrared light.

Dr. Arthur M. Bueche, vice president in charge of the Center, said that, "No other known material offers the spectrum of properties found in Yttralox ceramic."

Among the possible applications for Yttralox: an infrared "window" for heat-seeking rockets and high-temperature furnaces or as lenses for microscopes to study molten samples.

*Trademark of General Electric Co.

Lamp Life Design

Last month the United States House of Representatives' Government Activities Subcommittee issued a study on the subject of how long a light bulb should last. The study, according to the chairman of the subcommittee, Representative Jack Brooks (D-Tex.), will be used by the Subcommittee for further evaluation of the subject.

The Report says that the life of lower wattage lamps could be substantially increased, that this increase in lamp life would result in a net savings to household consumers, and that the design life of 60, 75, and 100 watt lamps could be doubled at little additional cost "in the case of most consumers."

Commenting on the Report, Lamp Division Vice President Donald D. Scarff said, "It has long been our objective to offer the householder lamps that provide the lowest cost of light consistent with an acceptable level of convenience.

"We are continually reviewing the complex engineering and economic questions that affect lamp design and will, of course, factor the Subcommittee's study into our programs."

8100 Million Power Bill: The Lamp Division estimates that adoption of the approach suggested by the Report would increase the country's total residential power bill by approximately \$100 million annually. To maintain the light output of a lamp, while increasing its life, would require lengthening and increasing the diameter of the lamp's filament. This change, however, would require more electricity to the lamp, increasing the customer's light bill.

1933 Reductions: Mr. Scarff noted that the Report referred to the 1933 reductions in the design life of standard household lamps.

It is true, Mr. Scarff stated, that in 1933 lamp manufacturers did reduce the design life of their 75 and 100 watt lamps from 1.000 hours to 750 hours. Two years later, the same reduction was made with respect to the 150 watt lamp.

Simultaneously, substantial price decreases and improvements in lamp efficiency were made which gave the public an estimated annual bonus of more than \$10 million in added light. For example, the efficiency of the 100 watt lamp was increased six and one-half percent and its price was reduced from 35 cents to 25 cents. This was a price decrease of 29 percent—compared to a life reduction of 25 percent.

Thus, while the public enjoyed a bonus in increased light worth more than \$10 million per year, the same customers paid lamp manufacturers less for lamps over a given period of time.

DEFENSE ELECTRONICS

Snoopersonics

A carefully-concealed enemy can sometimes escape visual detection by U.S. foot patrols and thus gain a chilling advantage in a deadly version of hide-and-seek.

But Ordnance Department is helping the GI by making a personnel detector that can spot the camouflaged enemy and snap out a beeper warning even though there's no one visible to the eye.

Such a device—dubbed the manpack personnel detector—was unveiled last month by the U.S. Army Limited War Laboratory during the annual meeting of the Association of the U.S. Army.



DETECTING A HIDDEN ENEMYManpack and detector clipped to rifle.

James K. Chapman, program manager, chemical and biological detection, said the Ordnance Department was under contract to produce the detectors for the U.S. Army. He said that the device is essentially a lightweight unit that alerts a foot patrol to the presence of concealed personnel by detecting submicroscopic agents or particles given off by humans.

The manpack personnel detector is based upon atmospheric measurement equipment developed over several years at the Company's Research and Development Center.

BROADCASTING

Our Man in Viet Nam

When TV newsman Ernie Tetrault of General Electric Broadcasting Company's WRGB in Schenectady reports on the news from Viet Nam, his voice has a ring of experience.

Mr. Tetrault and his partner, news

cameraman Bob Schneider, spent a month in Viet Nam recently, learning about the role being played by servicemen from the Schenectady area, as well as the area served by the Company's Nashville, Tenn. station, WSIX-TV.

Among those interviewed was a former employee of the Small AC Motor Department, Specialist Third Class Salvatore Costanzo of Schenectady whose mother works for the Maqua Company.

Six Miles of Film: They shot more than six miles of color motion picture footage and nearly 1000 stills to document the Viet Nam action. In addition to daily film reports, an hour-long documentary of their trip was broadcast over WRGB earlier this month. They also did special reports on Saigon's blackmarket rings and the traffic situation.

Mr. Tetrault said that according to audience letters and comments, people have had a deeper feeling and understanding for the situation in Viet Nam after watching the series of special reports.

The servicemen on the front lines had questions of their own. Most often asked: "Is inflation back home as bad as we hear it is?" And, "What's this Batman like?"

MR. TETRAULT IN SAIGON Is inflation back home as bad as we hear?





Consumer Products Promise Smiles For '66 Santas

SMART SANTAS will undoubtedly gurgle with delight this year at the most extensive variety of consumer products ever offered to gift givers.

Over \$5 billion in retail sales is expected to be recorded in December according to the Commerce Department, including the sale of 823 million tree lights, 1.6 billion yards of gift wrap, and 16 million holiday turkeys.

A Monogram survey of the Company's consumer product departments showed that industry sales could run as much as 15 percent over last year. The variety of products and price tags is expected to provide consumers with plenty of gift ideas, including those for the person "who has everything."

Holiday at Housewares: Probably no other component in the Company is as busily engaged in helping the harried gift shopper as the Housewares Division. This has been a banner year for the Division, and the coming holiday season should continue the trend as many new products make their vule debut.

"At the last housewares show we introduced 53 new products or models for Fall and Christmas selling," points out Willard H. Sahloff, vice president and general manager of the Housewares Division, "and each of them would make an ideal Christmas gift for someone."

Among the new products introduced since last year are the GE automatic food cooker at \$29.98 (unless noted, all prices are manufacturer's suggested retail prices), rechargeable flashlight (\$14.98), automatic clothes brush (\$14.98), vacuum sweeper with power-driven brush (\$29.95) and a "Smokey Bear" children's clock (\$9.98).

"This year we entered the Christmas tree business," (see cover) notes Mr. Sahloff, "by marketing two trees—one traditional, the other classic—both with hand crafted Bavarian ornaments made exclusively for General Electric."







The trees (suggested retail price \$150) include four sets of GE lights and a musical rotator stand that is also sold separately at \$39.98.

Some new twists have been added to old favorites, such as new automatic coffee makers (\$29.98) that can be completely immersed in water for easy cleaning and equipped with Mini-Brew baskets to make two or three cups of coffee. A Heat 'n Serve baby dish feeding and training set (\$14.98) includes training cup, accessory tray, and feeding spoons.

According to Mr. Sahloff, 1966 has been a good year for the Division—particularly in such major product lines as coffee makers, toasters and irons—and the outlook for 1967 appears even better.

"New products, new models, and new businesses which are in an advanced development stage will help assure increased employment in our plants, continuing profit contributions to shareowners, and exciting conveniences for consumers."

Lighting the Tree: Nela Park is continuing its role of putting the twinkle on the nation's Christmas trees, starting with the National Tree at Washington, D.C.

This season should be "The merriest yet," according to Robert V. Corning, general manager of the Miniature Lamp Department. The star of GE's miniature Christmas line will be the 'lighted ice' set



LIGHTED ICE FROM NELA PARK Twinkles in millions of happy faces.

in a sleek new package (shown with pretty Kay Pearson of the Department's marketing section), and sold for about three dollars.

Mr. Corning sees record sales approaching this year, and predicts that by Christmas Eve. "Americans will have purchased more than 823 million Christmas lights, many of them General Electric's."

The Large Lamp Department is offering new sunlamp and heatlamp kits priced from \$9.95 to \$16.95 that should thaw out frosty snowmen and spread fine tans as well. There's even a ray of light from the Wiring Devices Department, which is suggesting a pocket-book-stretching Colonial night light (\$1.25).

Consumer Electronies: A spectacular 12-page, four-color advertisement being placed in the Saturday Evening Post by the Division reflects its "all out" enthusiasm for the coming season. This major



TRANS-PORTABLE TELEVISION

promotional effort may result from one of the grandest arrays of products ever to delight by sight and sound.

In television, the "in" thing this Christmas is the GE Trans-Portable according to Charles Nott, sales manager for the personal portable television operation. The new transistorized line, introduced just in time for the holidays, offers "the true portability people have been looking for for years," says Mr. Nott.

The new black and white sets operate from battery or standard house current and come in 12 or 16-inch models with prices starting under \$100. For those who prefer color, the GE Porta-Color* set is \$269.95.

Radio Receiver is expecting the "biggest ever" season from the "smallest ever" circuitry of the new miniature clock radio (\$39.95). Tape recorders also offer plenty of value from a small package, such as the book-size portable M8020 at \$24.95.

This year's "son of Show 'n Tell*" could well be the radio walkie-talkie base station (\$34.95) with built-in AM radio and ability to double as home intercom.

Audio Products Department makes a play for the pickin' and singin' crowd with

an electric guitar-stereo phonograph combination that allows folkswingers the option of strumming along with records or doing a solo. The Guitarmate, at \$149.95, is entered in a booming market that jumped 41 percent last year on sales of 1.5 million units—over half to teenagers.

Major Appliances: For big gift giving, a portable dishwasher or compact refrigerator is suggested by the Major Appliance and Hotpoint Division. Among the top sellers in December, dishwashers start at under \$100, with the top-of-the-line Hotpoint DB70 convertible offering a 17 table setting capacity, self-cleaning filtering system and powerful wash action (\$250).

The General Electric TA2S two-cubicfoot portable refrigerator (see photo) is now available nationally, in white or walnut. With a stand, the units become a home refreshment center. Fair trade price is \$99.95.

*Trademark of General Electric Co.

NEW PORTABLE REFRIGERATOR



AEROSPACE

Ole's in Madrid

In ancient Madrid, long noted for its daring torreros, excellent wines, and "senoritas with dark and flashing eyes," 1200 of the world's top talent in the aerospace field from 27 countries met last month to discuss the latest developments in astronautical technology.

The occasion was the 17th Congress of the International Astronautical Federation. Heralded by many as the world's finest showcase for aerospace accomplishments, the Congress is one of the highlights of the Missile and Space Division's annual calendar of events.

The Division this year presented more than a dozen papers to the Congress, including one by Vice President Hilliard W. Paige on the Gravity Gradient Test Satellite (*The Monogram*, July-August '66).

Tiny Thruster: A new 1.5 pound rocket system called SPET—standing for Solid Propellant Electric Thruster—was one of the key developments presented to the Congress. Designed for attitude and orbit control functions, the two and one-half inch-long SPET can deliver one-tenthousandths of a pound of thrust continuously for two years or more, using only an ounce of fuel. The tiny thruster's inventor, Valley Forge's Dr. Aldo V. La Rocca, said the rocket's ruggedness and simplicity make it ideal for long-life space-craft performance applications.

Commenting on the Company's participation in the \$147 million European space market, Mr. Paige said, "There is little question that Europe has the resources to undertake significant space research efforts. Their progress to date is appreciable, and as they continue in their

growth, the opportunities for the joint pursuit of both commercial and pure research activities will grow as well. It is the intent of the Missile and Space Division to cooperate to the fullest extent possible with overseas industries and governments in these new space opportunities."

EST: An excellent example of General Electric's involvement in the European space effort is the Division's role as consultant to the new European Satellite Team (*The Monogram*, July-August '66), a group of five European industrial companies. The Division will provide technical and management assistance and will review the team's designs and assist in systems integration of the TD-1 and TD-2 scientific satellite proposals.

The Russians Aren't Coming? The Soviet Union created a flurry of excitement when it was noted that several Soviet papers dealing with meteorological investigations on manned spacecraft flights—together with their authors—had suddenly, with no explanation, been withdrawn.

DR. LA ROCCA'S SPET
Two years' thrust per ounce.



Old Meters Never Die

If the electric watthour meter outside your home is pre-1939, chances are one out of three you're playing electrified roulette with an electric utility.

Old watthour meters never die, they just fade away. In fact, of the 65 million meters in service in the U.S., 23 million, or one out of three should be retired. According to the Meter Department in Somersworth, N.H., a unit installed in 1925 may be costing the electric utility as much as \$6.66 per year just because it no longer functions accurately.

The Meter Department recently decided to go after a greater share of this substantial retirement market. To prove to customers that pre-1939 meters should be retired and replaced with GE's CERTI-SEAL* 1-60 line, the Department asked utility metermen to take an introspective look into their own current retirement programs.

Meter Reading: If meters don't die, what's to be done with the antiquated units? The Somersworth Department asked metermen: "What are old meters good for... where are old meters located ... who has the oldest meter in service?"

More that 800 replies were received from metermen around the country. Old meters are good for everything but metering. They can be used for feeding dishes for pets, charm bracelets, bookends, and even as a golfer's score caddy (see photo).

Where are they located? One was found in the top of a hotel elevator shaft. Others were in upstairs closets, over coal bins, under the now-enclosed porch, and over the bathroom mirror. One meter had been installed in the base of a fast-growing

tree. It now presents a lofty problem.

Oldest Meter: One utility reported it had a 1905 GE meter still in service. Its oldest meter, built in 1899, is in the utility's museum. Another utility's response delighted the Department: they've all been replaced.

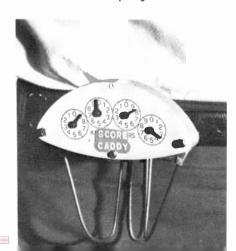
"Never before were old meters so thoroughly analyzed, taken apart, and put back together again," says William S. Smith, the Meter Department's marketing manager. "Our survey accomplished what it was designed to do," Smith said. "We've helped hasten the demise of old meters which have served their purpose well and have earned retirement."

Dividends: Two meter sales engineers recently attributed a bonus \$105,000 in extra business directly to the campaign. The utility's metermen thought so much of it, they sold the program to their own management.

And, the Direct Mail Advertising Association this month heralded the campaign as the top direct mail program in its category for 1966.

*Trademark of General Electric Co.

METER SCORE CADDY
Good for anything but...



NUCLEAR POWER

No. 2 for Niagara Mohawk

Niagara Mohawk Power Corporation last month announced plans to build its second nuclear power station. San Jose's Atomic Power Equipment Department will supply the nuclear system for the 750,000 kilowatt power station. The Large Steam Turbine-Generator Department will provide the turbine-generator equipment. The company's share of the \$100 million project exceeds \$50 million.

Although no site for Niagara Mohawk's second GE/Boiling Water Reactor-powered station was announced by the New York utility, the Associated Press reported that it might be located on the Hudson River, north of Troy, N. Y. The plant is scheduled to be in commercial operation in late 1971 or early 1972.

This is the tenth nuclear power station award received by the Company this year. The ten plants represent 9.3 million kilowatts of generating capacity.

> NINE MILE VESSEL 2100 miles to Oswego.



Pressure Vessel Shipments: The pressure vessel for Niagara Mohawk's 600.000-kilowatt Nine Mile Point nuclear power station has arrived at its Oswego, N. Y. destination as did the pressure vessel for Jersey Central Power and Light's 640.000-kilowatt Oyster Creek plant near Lacey Township, N. J. The two units, which weigh 657 tons and 652 tons respectively, each towers five stories high and weighs as much as 400 average automobiles

The 67-foot-long Nine Mile Point unit travelled 2100 miles during its month-long journey via six rivers and four of the Great Lakes. At Lockport, Ill., 35 miles downriver from Chicago, the vessel-carrying barge was partially "sunk" with water ballast to clear bridges crossing the Sanitary and Ship Canal in the heart of Chicago.

Status-maker Stator: A 552,000-pound generator stator, part of the largest capacity nuclear turbine-generator ever built, was delivered to Jersey Central's Oyster Creek last month. The generator is rated at 687,500 kilovolt amperes.

OYSTER CREEK STATOR
Enough power for Syracuse.



Busch League

Football fans cheering the winning ways of the St. Louis Cardinals this season could also be proud of the team's sparkling new home field, the St. Louis Civic Center's Busch Memorial Stadium.

The 50,000-seat structure, home for both the St. Louis football and baseball Cardinals, ranks in the big leagues with the Houston Astro-Dome, Miami's Orange Bowl, Atlanta Stadium and the Bi-County Stadium of Dallas-Ft. Worth (*The Monogram*, July-Aug. '65).

General Electric could share the city's pride in the new St. Louis landmark since at least eight of the Company's departments had a hand in developing its modern electrical system and unique football-baseball lighting plan.

The baseball Cardinals, who played a majority of their games under the lights, could look back on their first Busch Stadium season with the satisfaction that

> KOUFAX IN THE LIMELIGHT Night lighting that's big business.



attendance figures had jumped from 1.2 million in 1965 to 1.7 million in 1966. (The photo shows Sandy Koufax on the mound in a nippy late-season game.)

Shortly after the team had opened their season in the new stadium, National League President Warren Giles remarked: "I've seen all the new ones, and this is among the finest. The lighting is tremendous."

The Ball Bounces: The football Cardinals showed off their stadium lighting to good advantage on October 31st by playing the Chicago Bears in a nationally-televised night game (in color) on CBS-TV. Cardinal star Jackie Smith (on cover with GE's mid-states regional vice president John R. Casey) joined in the action as the Cardinals dumped the Bears 24 to 17 before a television audience of about 12 million homes.

Score Card: General Electric's experience in stadium lighting extends back to 1935, when the Company equipped the first major league park for night baseball, Crosley Field in Cincinnati. Since that time, night games have played a greater role in the financial success of many teams, so the demands made upon electrical suppliers have grown in importance.

GE departments equipping Busch Stadium included Outdoor Lighting, General Purpose Control, Switchgear, Medium Transformer, Specialty Transformer, Large Lamp, Distribution Assemblies, and Circuit Protective Devices.

Handling the coordination of the GE participation was Paul L. Korklan, St. Louis-based sales engineer for the Industrial Sales Division. Mr. Korklan worked with Graybar Electric, the distributor, and Sachs Electric Co., the contractor.

Inventory: The stadium lighting is accomplished via 1,680 L-69A heavy duty

floodlights, and another 1.520 GE 400watt Lucalox* lamps are used for street lighting surrounding the stadium.

Also installed are 195 starters, 138 safety switches plus 48 outdoor load center floodlighting panels, 11 high voltage indoor circuit switchgear units, 14 integral distribution centers, 40 "QHT" specialty transformers ranging from nine to 500 kva, 106 lighting and distribution panel-boards and three sectional distribution centers.

Perhaps the crowning touch occurs in the 20,000 red, green, orange and clear GE 15-watt sign lamps that go into the million-dollar scoreboard.

*Trademark of General Electric Co.

BENEFITS

The Pink and Blue

At 12:07 a.m. on October 3rd, Mrs. Richard Conway of Schenectady gave birth to a six-pound, four-ounce daughter, Colleen, and thus may have become the first to benefit from improved maternity coverage of the GE Insurance Plan.

"We're very happy," smiled Mrs. Conway, whose husband is a chemical technician in the Small AC Motor and Generator Department (see photo).

Mr. Conway said the expanded coverage means higher benefits than before. Under the old plan, he would have paid \$215, but now the cost to him is only \$32.

"I saved \$163 thanks to these new maternity benefits," he said, adding: "Of course, some of the credit has got to go to Janet (Mrs. Conway) for her perfect timing."

New Formula: Under the old plan, with a total hospital and obstetrical fee of \$400, an employee could have \$150 or a flat 50 percent of the first \$400. This would mean a maximum of \$200 in benefits. With the new arrangement, assuming the deductible is already paid, the employee would receive the first \$225 in full (Type A Benefit) plus 85 percent of the remainder — \$148.75. Total benefit would be \$373.75

For several employees who had expected births before the new benefits went into effect on October 3rd, the additional maternity coverage seemed worth the wait.

"We really lucked out." observed Paul Smith, a technical recruiter for the Atomic Power Equipment Department in San Jose, "My buddies in the office have been accusing me of some devious advance planning." The Smiths new daughter, Mary Elizabeth, was due September 20th.

Mrs. Conway could also claim the lightest of the new "benefit babies" recorded in the Company (six pounds, four ounces), while honors for the heaviest go to nine-pound, six-ounce Michael, son of apprentice John Huber of General Purpose Control Department, Bloomington, Ill.

THE CONWAYS OF SCHENECTADY Better benefits for baby.



PLANNING FOR CHALLENGES OF THE 21ST CENTURY



Board Chairman Gerald L. Phillippe spoke last month to the Illinois State Chamber of Commerce about the need for business to start thinking about the impact of the 21st century in real terms. In the selected remarks below, he comments on current problems and looks ahead to challenges of the next decade and beyond.

Fast Pace to 2000

"It is about time that industry begins to think about the impact of the 21st Century in real terms. We should be developing managerial candidates who someday are going to have to plan, in an operative sense, for this new century that is beginning to exert its influence on us. It is not so far away — only 8,300 working days — about the same length of time as my own working career with the General Electric Company.

"I really mean 'only' too, because everything in our lives, including time, seems to be accelerating now at a rate that we can barely keep up with. The doubling of world knowledge once took many centuries to accomplish; now, scientists tell us, it takes only ten years. It has taken a million years to reach a world population of 3 billion; it will take only 33 years more to reach 6 billion.

"This accelerated rate of change in all our endeavors has put the job of managing a business enterprise in a new light. Namely this: of all the considerations atfecting the future success of business, leadership is now the most critical factor, and it might turn out to be the only critical factor."

The Economy

"Despite a natural uneasiness about the current state of our national economy after six years of uninterrupted growth, authoritative forecasters still are saying that growth will continue to be the dominant theme. Perhaps not as fast a growth as some of the gains of the past few years, but good, solid, healthy increases, nevertheless, Despite some pressures to the contrary, the majority of economic experts are finding more reasons to be optimistic about both our short-term and long-range projects.

"Consumer and business demands are continuing to be strong. Consumer purchases of appliances, for instance, are rising at an annual rate of seven per cent—about twice the rate of the 1950's. Business investment plans and appropriations call for increased plant and equipment ex-

penditures over a year ago, and there is a rising trend in orders."

The Money Market

"The current tightness in the money supply is a reflection of great strength and great demand in our economy. Despite some of these current short-term difficulties, economists foresee no real long-term problem in this regard. The Federal Reserve Board has repeatedly emphasized that it will make money available to support orderly economic expansion. Even though capital investment on the part of. or on behalf of, private industry in Europe and America could very well exceed a trillion dollars in the next decade. I do not think the toughest problem will be generating the funds - even in this vast amount."

Future Manpower Needs

"General Electric's sales have been doubling, by and large, every ten years since 1892. If it took \$2.6 billion or so in investment to bring General Electric to its present size — over \$6 billion in sales, then it will take at least that much more — more likely \$3 billion or \$3½ billion in investment to achieve sales of twice that amount in the next ten years.

"In effect, we would be putting another General Electric Company alongside what we have now. And when I think of our present efforts and contemplate what we shall have to do in the next ten years to develop the new products and markets that are growing out of our new technology, and muster the financial resources to do these things, I realize that we have a few problems — or opportunities.

"But the biggest opportunity of all is in this question I ask myself: Where do we get the men to manage twice what we are managing now, in a tremendously more complex environment?' This is the real challenge. I believe, to American business in the remainder of this decade and in the 1970's."

Manpower Development

"We need better manpower development programs that will help a man first see the path of his career, and then show him a way to get there. We must take dead aim with these manpower development programs on really pay-off targets:

- Spotting the 'comers' early in their careers.
- Giving them challenging 'growth' assignments.
- Providing the coaching that will enable them to rise to successive levels of responsibility as fast as their talents permit.

"Age and relative inexperience should not be over-riding considerations in whether a man is ready to move up. We ought to have as much confidence in a young man, for instance, as the U.S. Air Force. Have you ever considered that 22-. 23-, and 24-year-old men are being entrusted right now in Vietnam with great. and in some cases, ultimate responsibilities? They are piloting bombers and leading raids in which they are responsible not only for their own lives, but the lives of their crews. When it comes to confidence in the ability of young men, does the business community have anything that can touch this?

"Shouldn't we have this kind of confidence? Aren't these the kind of people we are looking for to assume the responsibilities of our society of the future? Neither machines nor money are going to be enough to solve the business problems of the future. Men are going to do it."

The Action in Bridgeport

Any student in Bridgeport who thinks business isn't "where the action is" will soon be invited by the Housewares Division to come in and see for himself.

"Apparently, we've been so busy with the action, we've neglected to tell him about it," observes Willard H. Sahloff, vice president and general manager of the Division.

Speaking to a group of Bridgeport physicians and dentists, he termed education a "corporate challenge" for the Company and industry, and announced "a new and dynamic program designed to help the high school and college students in the Bridgeport area attain a better knowledge of the really challenging job opportunities within industry."

Mr. Sahloff. in outlining the program, said it would lend all possible assistance to guidance personnel at area high schools and colleges, and that Housewares Division would also outline important study areas for gaining academic competence. "which is a prerequisite for success in any business endeavor."

He said that the Company's existence and growth depend upon new developments, and new processes, and that "We cannot get the job accomplished successfully without educated people."

The Problem Solvers

Our educational system is beset with problems of rising costs, growing student loads, teacher shortages and loss of efficiency that could be solved in a few years through the use of electronics in classroom teaching.



FIFTH GRADERS AND COMPUTER

It's never bored or impatient.

That's the opinion of Dr. Louis T. Rader, vice president and general manager of the Industrial Process Control Division. However, Dr. Rader also warns that advanced equipment which industry can now produce cannot do the job alone.

In addressing the National Electronics Conference last month, Dr. Rader said that learning machines, electronic teaching aids and computer-assisted learning equipment—no matter how ingenious are worthless without adequate software.

"Educators — not engineers and brochure writers—should take the lead in the application of electronic aids to teaching and in developing course content," he said.

Three for Effort: It will take the coordinated effort of education, government, and industry to develop the means for freeing teachers of the drudgery of rote education and allowing students to learn at their own speed with the aid of electronic equipment that Dr. Rader says "never tires or loses patience, is never bored and is producible in any quantity."

Dr. Rader sees the government's role as providing funds for educational research and reform and giving industry the impetus to make its own research contributions. Industry, in introducing educational aids into teaching, should see to it that they enhance the status of the teacher, according to Dr. Radar, allowing him to be more productive while improving the quality of education.

"If we can do these things," he says, "we will have restored the best of the past and kept the best of the present."

ADVERTISING

Pop-up Payoff

An Outdoor Lighting Department ad used pop-up art to win honors as the highest scoring ad ever run by the Company.

Prepared by the Advertising and Sales Promotion Department's Southern Accounts Operation in Winston-Salem, N.C., the four-page, four-color ad insert had diecut and moveable illustrations both to introduce and demonstrate the features of the Department's new street and roadway lighting luminaire line using the Lucalox* lamp.

Top Honors: Awards were heaped on the ad by three of the top industrial publications in the nation. The ad ran first in all three books for measured issues. Electrical Construction and Maintenance heralded the winning ad as, "All-time best read ad of all studied." Electric Light and Power said, "One of the very rare ads to score first in the book and top in every category." "Out of more than 12,000 ads studied, this is one of the top three," cheered Electrical World.

POWER DISTRIBUTION

New Lab in Pittsfield

The burgeoning research activity in the fields of power transmission and distribution is reflected in the changing skyline of Pittsfield, where a new 90,000-square-foot laboratory is rapidly taking shape.

The three-story, \$4-million structure will house increased and more sophisticated research work that ultimately may be incorporated in transmission and distribution apparatus and products of 21 other departments in the Company.

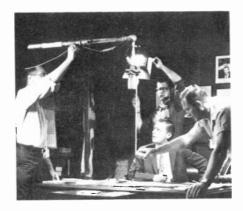
Construction is on schedule according to Max I. Alimansky, manager of business and technical planning for the Power Distribution Division (shown at left below with Vice President Robert L. Gibson). Mr. Alimansky expects the building to be ready for occupancy by next April.

The new facility will house a staff of about 80 scientists and technicians.

PITTSFIELD PLANNERS Keeping research competitive, too.



^{*}Trademark of General Electric Co.



ON CAMERA

BONNEVILLE'S BUSHING: Pittsfield's Bushing Products section unveiled a prototype of a cannon-size, 6000-pound bushing specially designed for the Pacific HVDC Intertie Project. The 26-foot-long bushing will be mounted at a tendegree angle through the wall of the terminal building. The prototype, now being tested, is rated 1,300-kv BIL, 1800 amperes.

"THE FINE ART OF FRAUD," a 20 minute color film produced by the Advertising and Sales Promotion Department for the New York State Department of Law won praise from State Attorney General Louis J. Lefkowitz, Mr. Lefkowitz said in a letter to John E. Duncan of the Department's Audio Visual Communications section, "1 think that you and the members of your staff can take great pride in this project which represents the true spirit of community participation by industry." The film, currently being distributed throughout the state, uses three typical fraud techniques to demonstrate the wisdom of the old adage, "Look before you leap." Director Robert Boggs (seated at desk) sets up a scene in Mr. Lefkowitz's office with soundmen Milt Robinson and Charles King and cameraman John Goerg.





FLIGHT LIGHT: General Electric's Lady of Light, Kothy Burns, displays the Company's new quartz aircraft landing lamp. The new lamp's 100 hour life is four times greater than that of the one it replaces, and it maintains its original brightness throughout most of its life. This is the first such use for a quartz lamp, says Gomer F. Davis, marketing manager of the Miniature Lamp Department.

AROUND THE COMPANY

Service Sealed the Sale: Super service from the Gas Turbine and Installation and Service Engineering Departments convinced the Iowa Power and Light Company to purchase a second 62,000-kilowatt, four-unit gas turbine power block last month. Earlier this year the Iowa utility purchased its first unit to meet peak load demands during summer heat waves.

The two Company Departments beat the heat by delivering and installing the gas turbine equipment in one-half normal time. The extra margin of peaking power was called on for the first time in mid-July when temperatures skyrocketed to 102 degrees in the Des Moines area. The area's added air conditioning requirements stretched Iowa Power and Light's peak load 13 percent higher than 1965's high point.

Mr. L. E. Slade, executive vice-president of lowa Power said, "General Electric's capability of engineering, furnishing, delivering, and installing the varied equipment required for this project—plus their ability to manage the entire project from start to finish—were what we wanted."

Future Cooks of America: For the third year in a row, The Pacific Power & Light Company in Casper, Wyoming, is using three carloads of General Electric appliances to help young Americans learn how to "Live Better Electrically." Each year the utility donates the appliances to 32 schools in the Casper area for use in home economics classes. This year 85 self-cleaning ranges. 60 refrigerators, 25 washers, 25 dryers, and 25 portable dishwashers were donated.

Patent Pride: Each year the Company applies for 1200 to 1300 patents and is



PATENT PARADE 20,000 active patents.

issued approximately 1000. The Company currently holds more than 20,000 active patents. GE was one of 18 companies cooperating with the U.S. Patent Office during the Department of Commerce's "Progress of Industry through Patents" exhibition in Washington, D.C. last month.

The Company's exhibit, which featured the Lamp Division's Lucalox* and MARC-300 lamps, Chemical and Metallurgical Division's PPO* (polyphenylene oxide), and a new lubricant for aluminum developed at the Research and Development Center, was visited by Secretary of Commerce John T. Connor, and Commissioner of Patents, Edward J. Brenner, On hand to greet Mr. Connor and Mr. Brenner were (left to right) Joseph T. Cohen, Patent Counsel, R&D Center, Mr. Brenner, Dudlev E. Chambers, Manager Engineering Services Research, F. Gerald Toye, Washington Counsel, Mr. Connor, Harry R. Mayers, the Company's General Patent Counsel, and Frank L. Neuhauser, manager-Washington Patent Operation.

Orders: The Tube Department in Owensboro recently received a \$1.8 million order *Trademark of General Electric Co.

for more than 1,000,000 Five Star miniature electron tubes from the Government's Defense Electronics Center in Dayton, Ohio, General Electric is the agency's second largest supplier. The Tube Department supplies half of the Company material.... The Large Steam Turbine-Generator Department recently made two sales breakthroughs. They received their first order from Public Service of Oklahoma in 28 years. The Oklahoma utility ordered a 440,000 kilowatt steam turbinegenerator.... Duquesne Light Company. which has never purchased a turbine-generator from the Company, did so for the first time when they ordered a 525,000 kilowatt steam turbine-generator in September.

Live and in Color: Post-Newsweek Stations have placed a \$1 million order with the Visual Communications Products Department for twelve PE-250-B live color cameras, a PE-240-B film camera, and associated equipment for their stations in Washington, D.C., and Jacksonville, Fla. The cameras will be used for studio shows and remote pickups, including the 1967 Washington Senators baseball telecasts.

Service Shop Surge: For the sixth time in its 80-year Chicago history, the Windy City's Apparatus Service Shop is moving to new quarters. The latest move will be into a \$5 million facility in Chicago's southwest area. When complete in June 1967, the electrical apparatus repair facility will be the largest in the Midwest and the most modern in the country. Capable of repairing any device from tiny electronic measuring instruments to complete locomotives and huge steel mill drive motors, the new facility will have a specialized production line for the repair and rebuilding of traction motors used on Chicago commuter trains.

PRODUCTS

Dealer Delight: The Radio Receiver Department delighted distributors and dealers with two new product services. Under the "Over-the-Counter" exchange program, a dealer may replace a defective unit from stock within 30 days from the date of purchase. Distributors are authorized to supply dealers new radios for defective models they turn in.

Under the new Initial Failure plan, which covers all products of the Department, including radios, monaural and stereo tape recorders, transceivers, portable intercoms, Show 'N Tell* phonoviewers, and Youth phonographs, a dealer can replace a product for a customer if the product failed to operate when it was first turned on.

Dentist's Helper: Six new Show 'N Tell* programs for assisting the dental profession in oral health education have been introduced by the dental health section of the Company's Housewares Division. The three-and-one-half minute programs range from discussions on Child Caries. Preventing Gingivitis, to the Importance of Fluoride. The new records and film-strips are available for \$6 per set of six programs.

Draw-out — **Swing-open:** The latest innovation in Industry Control Department's Limitamp* control system, the tried and true veteran of motor controllers is a maintenance-man's dream. The new controller can be stacked one to three units high, and features a swing-open, draw-out contactor for easy access. On the space side, the new Limitamp can reduce floor space requirements by as much as 50 percent.

*Trademark of the General Electric Co.

TALKING POINTS

Sky-high Sequel

At Burlington, Iowa, the Switchgear Department came up with a sequel to Radio Receiver's four-story-high unloading operation. (*The Monogram*, October '66).

The Department used a helicopter to fly in 46 heater and air exchange units, each weighing from 2200 to 3500 pounds, for installation on the roof of a new plant addition.

Reports James G. Kehias, manager of employee and community relations: "Normally this is a three to four week job for conventional hoisting methods which would also entail reinforcing the roof for a crane and hoist.

"With the aid of a helicopter with a twoton lifting capacity, the contractor was able to complete the job in five hours."

AIRDROP AT SWITCHGEAR Everything's chipper with a chopper.







MR. SCHNELL AND BATMASK
No Joker, it's serious business.

Selling With Batman

Holy Batmask! The Television Receiver Department, alert to the trends of the times, has invited America's youth to visit their neighborhood GE TV dealer and pick up a free Batman mask (bringing with them a convenient mother, father, brother, uncle, or other relative of course).

The "Sell With Batman" promotion is being drummed up with advertising scheduled for the Batman television program plus pages in TV Guide and Life magazines.

The program is designed to build store traffic, and has been extremely successful according to Norman H. Schnell, manager of merchandising for the Television Receiver Department (shown smiling from behind his personal Batmask).

There's a Bathonus, too. The masks are reversible—flip one over and Powie, there's Robin.

PEOPLE

U.N.'s New Fellow: Samuel H. Howard, former financial analyst for the Atomic Power Equipment Department and first GE White House Fellow, is going to the United Nations.

Mr. Howard will serve a one year assignment with Ambassador Arthur Goldberg in the United States delegation to the U.N. (see photo).

Mr. Howard, a graduate of the Company's Business Training Course, is one of the 18 White House Fellows now assigned to work with members of the cabinet and other top-level officials of the executive branch of government. (*The Monogram*, April '66). Mr. Howard, who is 26, was picked from among 600 qualified candidates for the Fellowship.

MEETING THE AMBASSADOR For Mr. Howard, an interesting assignment.



Fifty Year Club: John W. Anderson, a service engineer in the Transportation Systems Division at Erie, recently retired after 50 years of GE service. Mr. Anderson hails from a family of Company boosters: his brother Alfred retired last October with 49 years of service, brother Carl has a "mere" 44 years, and a son, Dave, works for the Apollo Support Department. Said Mr. Anderson of his 50 years of GE service: "All have been happy and rewarding."

Marine First Aid: Gas Turbine engineer Bob Schulz was returning from Vietnam aboard the S.S. Old Westbury after a voluntary year's tour with the Merchant Marine when the ship faltered to one-quarter speed. The problem was failure of a motor main field coil. Mr. Schulz, calling upon 25 years of marine motor experience, checked the motor numbers, wired his former boss in Schenectady (Jim Schwartz, manager of Marine & Defense Facilities sales operation), and found that he could substitute another coil from one of the ship's motors. The ship was soon up to full speed, and Mr. Schulz shortly traded his sea legs for a ticket to Schenectady.

Foul Weather Friend: The Kansas Power and Light Company has some good words to say about Bob L. Williams, a sales engineer in the Electric Utility Sales central states region. When a tornado belted Topeka and Manhattan, Kansas. Mr. Williams didn't wait for a call, but hustled into the emergency area and set up his own hot line to help the utility get back into service. Balfour S. Jeffrey, President of Kansas Power said "the General Electric organization has full right to be proud of him. . . . It was good to have such a dedicated and effective ally in the middle of our ranks."

LETTERS

(Continued from inside front cover)

is that they are products of the neglect of citizens whose understanding and comprehension of the problem is inadequate.

Lest your readers think I am an "angry young man". I am not. I am a middle-aged mother, wife of a GE engineer. I was educated in private colleges as a mathematician and engineer. I live in suburbia. But I have come to the conclusion that more valuable than any paycheck I might receive for using these talents at the present time is the chance to help break the cycle of poverty and despair as a volunteer. From my childhood I have been admonished to love my neighbor as myself. I consider my neighbor the girl in the Job Corps.

ALBERTA S. RICHARDS Scotia, N.Y.

Kilowatts to Kilograms

EDITOR: We in the Missile and Space Division are becoming increasingly concerned with nuclear reactors as a power source for future space vehicles. Perhaps it is for this reason that we are interested in the activities of our earth-bound brothers, as described on Page 6 of the October Monogram. In reading the article on fuel recovery, however, I wonder whether the unit of measurement of used fuel was indeed related to power, as indicated by your statement of "6.000 kilowatts of nuclear fuel," or whether this should be "kilograms."

Parenthetically, as a regular reader of both The Monogram and Fortune magazine for

General Electric College Bowl

(NBC, Sundays, 5:30 p.m., EST)

Participants: Dec. 4—GE Fantasy Hour, "Rudolf the Red-Nosed Reindeer" (5:30-6:30 p.m., EST); Dec. 11—Pre-emption; Dec. 18—Smith College (No. Hampton, Mass.); Dec. 25—University of Puget Sound (Tacoma, Wash.).

many years, I would like to say that your standards of accuracy and excellence easily equal those of Fortune. In my book, that is a pretty remarkable achievement for an employee publication in industry.

HERBERT POPPER Re-entry Systems Department Philadelphia, Pa.

The unit of measurement normally associated with nuclear fuel for large central station power reactors is metric tons. Because the actual recovery capacity of the planned facility is proprietary, we decided to use the power generation equivalent. The 6,000 kilowatts is a typographical error. It should be 6 million kilowatts.—Ed.

ORGANIZATION

Electric Utility

Robert R. Schuldt is appointed Consultant—Manpower Planning and Development for the Electric Utility Group and the Consumer Products Group.

General Electric Supply

Richard E. Turner is appointed Manager
—Western Zone.

Major Appliance and Hotpoint

Arthur E. Andres is appointed General Manager of the Home Laundry Department.

A. Melcher Anderson is appointed General Manager of the Range Department.

A. M. ANDERSON

A. E. ANDRES





EDITORIAL

The Road to 2000

Reflecting upon those "good old days," when operating a business was far less complicated than it is to-day can conjure up some golden memories, but it can hardly suffice as a substitute for vigorous, realistic planning for the challenging days ahead.

Like it or not, business life is growing more complex with each tick of the clock. Add to this an accelerating rate of change and we can anticipate what is to come.

Now is the time to start planning for the impact of coming decades and the 21st century points out Board Chairman Phillippe (see page 16).

"General Electric's sales have been doubling, by and large, every ten years since 1892." observes Mr. Phillippe. "If it took \$2.6 billion or so in investment to bring General Electric to its present size—over \$6 billion in sales—then it will take at least that much more—more likely \$3 billion or \$3.5 billion in investment—to achieve sales of twice that amount in the next decade."

This would mean, in effect, that we would be putting another General Electric Company alongside what we have now.

"When I think of our present efforts." adds Mr. Phillippe, "and contemplate what we shall have to do in the next ten years to develop the new products and markets that are growing out of our new technology, and muster the financial resources to do these things. I realize that we have a few problems—or opportunities."

One of the problems of long-range business planning for the things Mr. Phillippe mentions is that it can't be done "under glass." There are many extra-corporate influences, not the least of which is competition. While we're moving faster, so are our competitors. The pressure builds daily from those who are aggressively pursuing the same manpower, materials, ideas, customers and profits.

There is no golden road map to success in this or the year 2000. But one lesson learned back in those "good old days" still holds true: satisfying today's customer is a good way to have him around tomorrow.

Doing a good job, day by day, can sustain our momentum. Before we know it, the year 2000 will be here and both the Company and its customers will be around to enjoy it.