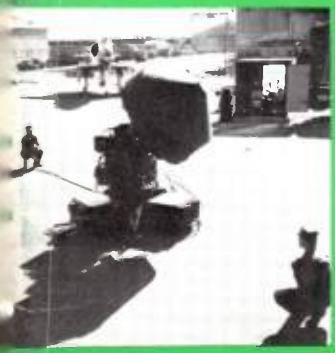
THE MONOGRAM

FEBRUARY 1967

HOCKEY LIGHTING



VIET NAM RADAR

DREAM KITCHENS

GEORGE T. BOGARD . . . NEW COMMUNITIES . . . p. 12

INSIDE: S&S Payout . . . Numerical Control
Slot Car Motors . . . Nuclear Sub

LETTERS

Tallying Tyler

EDITOR: I read your article, "Glowing Growth of Electric Living" in your December issue with great interest. I was very disappointed to find that the Tyler, Texas facility was not even mentioned in your article. Is the 60 percent expansion in Appliance Park related to central air conditioning manufacturing?

CARL J. APPELBERG
Apollo Support Department
Houston, Texas

Beg your pardon, but Tyler was mentioned in the story (page 13). Louisville is, nonetheless, headquarters for the Department. The 60 percent expansion is related to room air conditioners. —Ed.

Sinking Fast

EDITOR: The exploration and utilization of the sea by private enterprise seems to be "coming of age." Westinghouse, North American, Union Carbide and General Motors are actively engaged in undersea research and equipment—what is General Electric doing?

A. R. KEIHL
Vallecitos Nuclear Center
Pleasanton, California

General Electric also has several projects in development relating to the sea. See story on page 17 for one of them.—Ed.

Two Million Missing?

EDITOR: The article "Challenge of the City" in the January 1967 Monogram states, "There are some 80 million registered motor vehicles on the roads today...." In the same issue under "New Market on Wheels" it says, "There are currently some 78 million registered vehicles chugging over the country's highways...."

Does this 2 million difference between "registered" and "chugging" account for all of the vehicles left abandoned on the roads?

W. C. CADY
Re-Entry Systems Dept.
Philadelphia, Penna.

Current estimates of the number of automobiles are actually 1965 projections made on the basis of 1964 figures. These guesstimates vary (as you noted). The magazine Automobile Facts and Figures *projected a booming total of 90 million cars, trucks and buses in their 1966 edition.-Ed.*

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

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 Personnel and Industrial 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.

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GENERAL ELECTRIC

VOL. 16, NO. 2

THE GENERAL ELECTRIC
MONOGRAM

FEBRUARY, 1967

WEATHER

The Abominable Snowstorm

Wind-whipped snow and bitter cold slapped General Electric plants in Illinois, Indiana and Michigan late last month in a record-breaking storm that buried Chicago in 36 inches of snow within 11 days.

Plants closed, deliveries bogged down, and many employees rediscovered their pioneering spirit among the snow banks of a white wasteland.

In Bloomington, Ill., Wendell Maney and Bill Humphrey of the General Purpose Control Department headed for their homes 12 miles from the plant, but soon stuck in the snow. It was after midnight when a road grader pulled them out, but the roads were practically impassable. By 6:00 a.m. they found a farmhouse and sought shelter from the storm. They had plenty of company: 20 other marooned motorists. It took the men until noon Saturday—36 hours—to finally get home.

Cook-in: For other Company employees, there was literally no way out. The Commercial Equipment Department suspended operations on Friday, but the snow was so deep that 25 employees were unable to leave. They stayed most of the weekend.

Employee Relations Manager Herman Stern donned chef's hat and apron and headed for the plant cafeteria which was well furnished with General Electric food service equipment (Mr. Stern is shown at right in the photo with fellow "cooks" Blanche Steven, payroll clerk, and Dan Maroscia, manager of personnel accounting). Meals were served on schedule, and there was ample KP assistance from fellow employees.

Maintenance crews performed herculean snow removal jobs, keeping plant roads open and digging out hundreds of employee automobiles.

SNOW PILES UP OUTSIDE HOTPOINT AND VOLUNTEER COOKS STAR

Piles of snow tower over Hotpoint secretary Kathi Spoula.

The edge of the storm brought less snow, but another peril developed as sleet and rain turned to ice and utility lines started snapping.

At Decatur, the Audio Products Department experienced power failures. The plant stayed open, however, even as both local television stations were knocked off the air when their transmission towers collapsed under the weight of ice.

Trees and power lines also went down in Fort Wayne, Ind. and Mattoon, Ill. but operations at Company plants continued.

The East was having its own 13-inch snowfall early this month as *The Monogram* went to press.

BENEFITS

S&S Payout

For the 138,000 Company employees participating in General Electric savings plans, there's a hefty $117 million payout package on its way.

The huge payout includes General Electric stock, U.S. Savings Bonds and cash. It covers employees' savings under the Savings and Security Program during 1963 and under the Savings and Stock Bonus Plan during 1961—plus Company payments to both plans during the respective years.

The value of the savings plan payouts is based on the market value of GE stock as of the New York Stock Exchange closing bell on December 30, 1966—$88.50 per share—and the maturity value of the U.S. Savings Bonds in the package.

E. S. Willis, manager of the Company's Employee Benefits and Practices Service, said that the stock and bonds are being mailed to participating employees this month.

One for Two: Mr. Willis pointed out that the Savings and Security Program section of the payout package includes a 50 percent proportionate payment made by General Electric—or $1 for every $2 saved by employees. The Stock Bonus portion of the package includes a bonus of Company stock equal to 15 percent of the amount saved by each individual employee under that plan.

POWER TRANSFORMER

Tapping in on EHV

The Power Transformer Department, Pittsfield, will be a major supplier for the world's highest extra-high-voltage (EHV) system being built by the American Electric Power Service Corporation.

The Department received an initial order late last month for a 1500 megavolt-ampere bank of transformers and associated reactors for the firm's new 765-kilovolt system.

The $206-million American Electric Power project will establish a thousand-mile loop, tie together power plants in five states, and extend from Indiana on the West to West Virginia on the East.

Humming History: The new system will top the Hydro-Quebec 735-kv system in Canada, which went into service in 1965, establishing a new high mark among world-wide high voltage networks. Many of the Hydro-Quebec transformers were built by Canadian General Electric.

Pittsfield is right at home in EHV assignments. The Company built, and has successfully operated since 1960, an experimental four-and-a-half-mile power transmission system located southeast of Pittsfield. The $10-million project is used for EHV transmission research.

VIET NAM

Radar Does It Better

The war in Viet Nam continues to spur the development of highly sophisticated electronic equipment. Two of the more significant are being produced by the Heavy Military Electronics Department in Syracuse.

According to Tom Paganelli, Department general manager, "The General Electric radars in use in Viet Nam were designed to give the guy fighting this kind of war a capability and accuracy not previously available. Continued developments of tactical electronic equipment will help our fighting men be even more effective."

Mortar Locator: The first, developed after the Korean War, is a Mortar Locator. Mounted on two trailers; one a power supply, the other, radar computer equipment, the AN/MPQ-4A Mortar Locator can spot enemy mortar and other high angle, low velocity artillery fire positions, enabling allied units to launch immediate counter attacks.

The Locator uses a two-beam radar intercept principle to determine mortar fire origin on the first shell tracked. As the shell passes through the two beams, an operator plots the vertical and horizontal strobe lines of each blip. The elapsed time from one blip to the other is measured with an electric timer and fed into a computer which calculates the location of the enemy mortar in absolute readings of grid map coordinates.

Using the same techniques, the Mortar Locator can be used to find points of impact for direction of counterfire. Set-up time for the AN/MPQ-4A is about 15 minutes on virtually any site. Once set up, one man can operate the unit.

MORTAR LOCATOR

To help our men in Viet Nam be more effective.

Bombing With Radar: The other development, now being used by the Marine Corps in Viet Nam according to *Electronics* magazine, is the AN/TPQ10 ground based radar, also produced by the Heavy Military Electronics Department. Used to guide aircraft over enemy targets, even in zero visibility, this tool is one of the most perplexing and mystifying developments to the Viet Cong.

This system is so accurate it can guide a fighter or helicopter over a target in any weather and automatically drop its bombs. It can also guide a plane over a precise location for aerial photography, or it can drop supplies in exactly the right spot, day or night.

Data is fed into the radar's computer before the mission is flown. This information includes the target's coordinates, various aspects of the weather, ballistic characteristics of the bombs, and the altitude and intended velocity of the aircraft.

The system can be hooked up with the aircraft's autopilot and bomb release device so that the entire mission can be flown from the ground. If the aircraft carries a beacon transponder, the radar's range is about 40 miles; without it, its range is 25 miles.

CIRCUIT PROTECTIVE DEVICES

New Plant Down East

The town of Auburn, Maine rolled out its red carpet for General Electric last month as the Circuit Protective Devices Department announced that it was leasing a 52,000-square-foot building there and would soon be manufacturing parts for its switches and circuit breakers.

General Manager Charles P. Hayes said that the work scheduled for the new plant is currently being done at Plainville, Conn., and that the transfer of work to the Pine Tree State would make available space for further growth of Plainville products.

The Auburn plant is expected to begin manufacturing operations by June and employ about 100 people by the end of the year.

Meet the Governor: GE was welcomed to Maine by a group of local officials and the Governor of Maine, Kenneth M. Curtis, who said during a banquet: "I know that General Electric will be successful here because it will find our Maine people will give only the highest cooperation and productivity."

Regional Vice President John A. Spencer, in thanking Auburn for its warm welcome, said that General Electric had "derived much of its progress and growth from its investment in the Northeastern Region."

He pointed out that over 3,500 GE share owners live in Maine and that the Company purchased almost $20 million of materials and supplies from Maine companies.

While GE has sales and service offices elsewhere in Maine, Mr. Spencer said: "The Auburn plant becomes the Company's first substantial manufacturing facility in the state."

A MAINE WELCOME FOR GE
The mayor came on wheels.

Despite a fractured leg, Auburn Mayor Harry W. Woodward rolled in via wheelchair (see photo) to present his greetings and a gold key to the city. Other congratulations came in via telegrams from U.S. Senators Margaret Chase Smith and Edmund A. Muskie, plus Auburn Congressman William D. Hathaway.

Also shown in the photo are (left to right standing): Woodbury E. Brackett, Auburn city manager; John A. Spencer; C. R. Packard, GE Auburn plant manager; Charles P. Hayes, general manager of Circuit Protective Devices Department; Maine Governor Kenneth M. Curtis (seated right).

HOUSEWARES

A Helping Hand

Last month's disastrous fire at Chicago's McCormick Place, scene of the January, 1967 National Housewares Show, put a damper on hundreds of would-be exhibi-

tors. But not the Housewares Division—even though their $100,000 exhibit was ruined.

Division representatives got word of the fire early Monday morning, January 16th. They immediately decided to use previously reserved space in the Drake Hotel's Gold Coast Room. Sign painters were called and posters telling where and when the GE exhibit would be displayed were distributed to nearby hotel lobbies that same morning. The same message was sent to newspapers, radio and television stations. According to Ed Pease, Division product information specialist, more than 1,000 people came through the GE exhibit.

Vice President Willard H. Sahloff, due to arrive in Chicago that same afternoon, called from Bridgeport, Conn. and told his people, "We should offer exhibit space in our room to non-competing manufacturers."

And so, a quarter-page ad appeared in January 17th's papers inviting other manufacturers to share GE's space. The invitation was accepted by four firms which included: Allegretti & Co.; Empire Brushes, Inc.; Harville Rose Service, and Detecti Para Manufacturing Co. General Electric's Wiring Devices and Silicone Products Departments, along with Universal by General Electric also shared the Gold Coast Room space.

One of the most significant GE losses was a display of antique irons and fabrics representing the past six decades of appliance progress.

Early Adopters

The newest swinger to join the jet set is the early adopter. This is the person who is described by Vice President Willard H. Sahloff as an affluent, mature consumer with an annual income of $10,000 or more, residing in a metropolitan market. He or she is the first on the block to own a new anything and the first to appreciate the prestige and status that comes with being Number One.

Mr. Sahloff appreciates the early adopters because their strength and numbers are growing. The early adopter usually owns 20 electric housewares products as compared to nine by the average family.

Affluence appears to be the key characteristic of the early adopter. By 1971, 38 percent of the nation's families will have annual incomes of $10,000 or more. Mr. Sahloff says, "By 1976, we expect the number of families with annual incomes of $10,000 to jump to 29 million from 13.4 million in 1966, or an increase of 116 percent. This trend is extremely gratifying to us at General Electric. And, because of the increase in numbers of early adopters, the base for development of future markets and new products will be automatically enlarged. The entire electric housewares industry should profit accordingly."

A WELCOME FROM GE

Housewares Division's Bill Pfeif (right) and guest.

MAJOR APPLIANCE

GE's Dream Kitchens

Fifty years ago a pioneering young lady, Bernice Lowen, rattled over America's roads in a Model T truck carrying a model kitchen and a "new fangled" appliance called an electric range which she demonstrated to women everywhere.

Her efforts for the Hughes Electric Heating Company—later to become Hotpoint—marked the beginning of what is today the Hotpoint Home Economics Institute which celebrates its golden anniversary this year.

The present Institute at Chicago, managed by Rossie Ann Gibson, includes four home economists who work in four different "dream kitchens" equipped with a cross-section of Hotpoint ranges, refrigerators, disposals, and dishwashers.

At Appliance Park in Louisville, a similar Consumers Institute, managed by Helen Kirtland (below, left), is equipped with General Electric appliances and staffed by three home economists.

Woman's Touch: Being "first with the features women want most" is a reflection of how well the Institutes have done their jobs. They are, in effect, speaking for the American women who will eventually use General Electric or Hotpoint appliances. Institutes carry on a continuing dialogue with both the engineers who design new appliances and the women who are presently using current models.

For the predominantly male manufacturing and sales group, a soft word from the women of the Institute is vital.

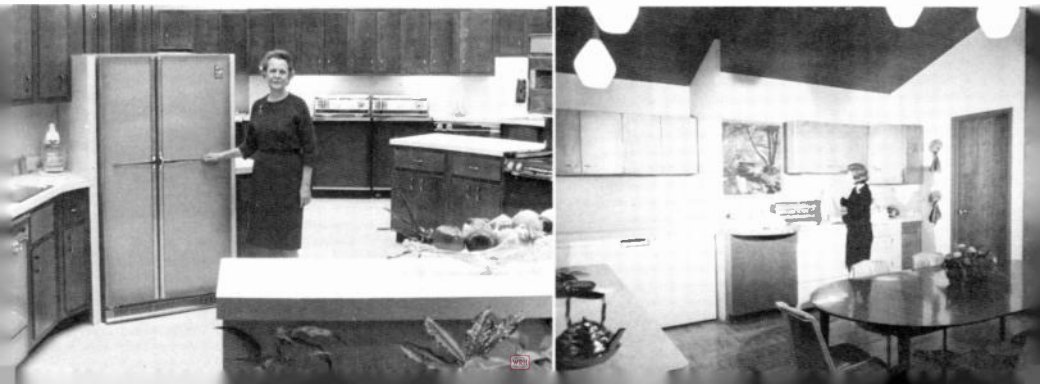
"We try to interpret what we learn in the field," says Helen Kirtland. "We sell products women use, and must maintain contact with them to insure a continuation of features they want and an understanding of how they should be used." Hotpoint's instruction booklets, for example, are written by Institute home economists.

Dream Kitchens: Headquarters for the Institutes are modern test kitchens equipped with a cross-section of ranges, refrigerators, disposal units, dishwashers, and laundry appliances. Hotpoint, for example, maintains four kitchens: a large, square, provincial-style; U-shaped kitchen with laundry; a corridor type typical of hi-rise apartments; an auditorium kitchen.

The appliances are tested by Company home economists just as the models would be used in the home.

Washers swish with loads of dirty laundry from home; ranges bubble happily with stews, vegetables, and soups; ovens bake layer cakes and sugar cookies;

GE'S DREAM KITCHENS AT APPLIANCE PARK (LEFT) AND HOTPOINT



AT HOTPOINT: Meeting of home economists (from left) Mary Stewart, Norma Whaley, Rossie Ann Gibson and Marilyn Valentine.

disposals munch up leftover scraps; and freezers become stocked with successful test recipes.

The significant difference between this contented kitchen and one at home is that each appliance is being rated as carefully as the results it produces.

Cook Books: Surprisingly, no exotic recipes are used to test the Company's products. Says Miss Gibson: "We use the type of recipe women would normally use, such as sugar cookies, layer cakes, or baking powder biscuits. If a cake turns out consistently well, we assume the gourmet dishes will also."

There are, however, special recipes that develop as ideal for demonstrating certain features.

To show the GE Sensi-Temp® automatic surface unit, Louisville home economists created "Jiffy Pizza 'Burgers," which Helen Kirtland describes as "a pizza filling cooked in a meat crust that is whipped up in about ten minutes."

Guests for Lunch: Institutes are also scenes of in-depth demonstration workshops for educators, home economists and editors. While sampling the results of kitchen tests, visitors get helpful homemaking hints relating to appliances and later a plant tour (impressed with 400 dishwashers hooked up on test) and a chance to drool over model kitchens in several display centers.

A recent visitor to Appliance Park was a university household economics professor who, impressed with the Company's design, testing, and manufacturing of appliances, later wrote: "I came away with greater appreciation for the appliance industry."

Institute economists don't spend all their time puttering in the kitchen. A number of various demonstrations and training schools are held throughout the country for distributors, dealers, electric utilities, servicemen and builders. To handle these meetings, Louisville assigns one of its regional home economists: Rose Franklin, Ember Day or Louise Meek.

Dear GE: And, there is the mail. Appliance Park received 217,000 letters last year with questions, questions, and more questions: Can I freeze tomatoes? Can I rinse diapers in cold water? What do I do for a stain? What goes on in my dishwasher? How cold should I set my refrigerator?

Each letter is answered with as personal a touch as possible.

Some questions are undoubtedly answered before they are asked by mail because of the frequent newsletters and bulletins prepared by Company home economists. Some 15,000 copies of regular bulletins on major appliances are distributed to those unable to be reached in person.

Both Institutes have contributed to a hearty sales recipe accepted by women who perhaps find that the Company's appliances help them create a dream kitchen all their own.

INFORMATION SYSTEMS

Assist for AMEX

Two GE-415 computers have been installed at the American Stock Exchange, and are being groomed to drive the Exchange's sales and quotation tickers and monitor trade data for accuracy before it appears on the tape.

The new units were installed last month, and their first assignment will be to conduct a compared clearance in the Exchange's Clearing Corporation. In this application, the computer will match reports of both the buying and selling brokerage houses involved in a transaction.

Initially, the system is designed to handle 70,000 trades daily—a volume about equal to an eight million-share day on the trading floor. In 1966, when trading reached a record 690 million shares, volume averaged 2.7 million shares a day, and in April, topped six million shares daily on three occasions.

The American Stock Exchange is leasing the equipment from General Electric at an annual cost of $420,000. The twin GE-415 computers installed in the Clearing Corporation will replace three computers and their related equipment currently used to perform the clearing operation.

Handling the AMEX project for the Company was New York district salesman Stanley Karbowski of the Information Systems Marketing operation.

X-RAY

New Base in Belgium

Milwaukee-made products of the X-Ray Department will receive wider distribution throughout Western Europe as a result of the Company's recent purchase of a substantial interest in General Medical Balteau.

The new effort will result in broadening of General Electric's x-ray product line to include specialized medical products manufactured by GMB to meet specific needs of the European Economic Community.

The Belgian-based corporation, with headquarters in Liege, has markets in France, Germany, the Netherlands, Luxemburg, Italy and Belgium.

GE-415 COMPUTERS GO TO WORK FOR THE AMERICAN STOCK EXCHANGE

EDUCATION

Program in Degrees

Company employees enrolled in the 38-week Manufacturing Problems Analysis course can now earn 12 college credit hours toward the Master's degree.

The unique plan was completed last month by the Company's Pittsfield plant and Union College, Schenectady, N.Y. Company enrollees in the MPA course at all other GE plants will have the same opportunity as those in Pittsfield.

A student will earn 60 percent of the credits toward a Master's degree by taking the MPA course and completing a six-credit thesis covering the second year of the MPA course. A participating employee could, for example, earn 18 of the 30 hours required for a Master of Science degree in industrial administration at Union College.

Logical Course: The Manufacturing Problems Analysis program is for selected employees with manufacturing experience. Its aim is to increase logic and analytical skills, provide awareness of modern methods and approaches and a working knowledge of the most significant mathematical techniques.

Students in the program spend six hours a week in classes at the plant, plus at least 12 hours of weekly homework. The course is coordinated at Pittsfield through manufacturing managers in various Company departments.

A. Frank Campbell, who is director of the program at Pittsfield, says that one of the main purposes in having such a program is "to attract and keep at Pittsfield GE men and women interested in self-development and growth, both professionally and intellectually."

The lack of convenient educational facilities for advanced education has been an obstacle in attracting some people to Pittsfield GE from metropolitan areas.

CREDIT

Credito para Puerto Rico

General Electric Credit Corporation opened its second off-shore operation with the announcement early last month that a wholly-owned sales financing subsidiary was being established in Puerto Rico.

The new organization is called Corporacion Credito General Electric de Puerto Rico, with headquarters in San Juan. Other GECC-PR offices will be in Ponce, Mayaguez, and Arecibo.

First business of the subsidiary will be from sales financing for General Electric and Hotpoint dealers. It later will expand to a complete sales financing service as provided by GECC in the U.S.

Frank J. Gleason, Chief Executive of the new company, pointed out that the new operation will be "a blend of Latin-American know-how as developed by IGE, and the experience GECC has had since its inception in the States."

Luis Machicote, formerly with IGE Puerto Rico, is President and chief administrative officer of the new company.

GECC announced the formation of its first foreign operation, General Electric Kredit GmbH, last July (*The Monogram*, July-August '66).

SELLING

TNT for Salesmen

The GE electronic component salesman, who spends up to 40 percent of his business life on the road, is now filling that time with TNT.

A new "Travel 'N Training" system recently launched by the Electronic Components Sales operation is supplying salesmen with pre-recorded selling information that can be digested while on the road and between calls.

ECSO points out that this is the first program of its kind to be undertaken by a GE pooled sales group, and may be a new trend in business communications.

Plugged In: Some 140 ESCO salesmen and managers operating in some 40 offices across the country have been supplied with new General Electric battery-powered cartridge tape recorders (model M8300) from the Radio Receiver Department's Tape Products business section in Utica. The cartridge design allows instant loading with one hand without tape threading or reel winding.

The small, lightweight (four pounds) solid-state unit can be carried by the ECSO salesman and used anywhere: in his car, or more extensively in motel, office or home.

Recording the kickoff message to his field force, William D. Lee, general manager of ECSO, reminded his salesmen that: "Your most precious commodity is time, and by these recorded messages we will offer you another way of conserving your time. We must continue to develop opportunities to assist you in improving your efficiency and sales effectiveness."

His first tape message included two product information discussions plus a series of capsules illustrating practical solutions to sales problems that had developed.

"Normally," he said, "staying abreast of product developments and competitive information requires a lot of reading. Here is a way—through a short, well-prepared personal message—you can absorb such knowledge in moments when, for one reason or another, it is inconvenient or even impossible to have reading time."

The recorded messages can last up to 15 minutes. Future subjects will run the gamut from standard business news, policy changes and promotion programs to news and technical data on transistors, tubes, and other electronic components.

John S. Chamberlin, manager of the

LEE AND TNT: Using the new GE M8300 cartridge tape recorder, ECSO General Manager William D. Lee demonstrates how his salesmen can use time between calls for hearing news from Owensboro or recording notes from a call.

Tape Products business section, says that ECSO's application of the new units is the first in what the section expects to be "a rapidly growing number of business communication programs in General Electric that will use this extremely convenient, compact, and versatile recorder."

SPECIALTY CONTROL

By the Numbers

The largest numerical control unit ever built by the Company was shipped recently from the Specialty Control Department in Waynesboro, Virginia. Its final destination will be Babcock and Wilcox's Mount Vernon, Indiana works.

The five-axis Mark Century* contouring control will be "married" to a machining center manufactured by the Farrel Corporation. The completed machining center will be used in the manufacture of nuclear reactor pressure vessels and other types of heavy well pressure containment.

The numerical control unit by itself is 17-feet long and seven feet high. Inside its cabinetry are 850 circuit boards and an estimated 17 miles of wire. On a separate operator's control console, there are 150 buttons, switches, and status lights.

A one-million pound gantry will be directed by the GE system. The gantry will tower four stories high and will have a 35-foot long work table. The machining center, under command from the Mark Century system, will be able to automatically turn, tap, bore, drill, trepan, and index bolt holes on nuclear pressure vessels measuring up to 35 feet wide, 75 feet high and weighing two million pounds.

Time Saver: This particular Mark Century system is not the most sophisticated, merely the biggest. However, the Department undertook a six-month computer study to determine how the customer's requirements could best be met by a numerical control system.

The most significant characteristic of the completed machining center lies in its contribution to time savings for the customer. For example, Babcock and Wilcox will be able to slash nuclear reactor pressure vessel manufacturing time from the present 36 months to 18 months. In addition, they now will be able to produce vessels ten feet larger in diameter.

Growing Business: Donald O. Dice, Specialty Control's marketing manager, feels the numerical control business will grow in two ways. "First, there is a rapid growth in the overall use of numerical control as part of machine tool systems. In 1965, for example, 14 percent of the dollar value of all metal cutting machine tools sold was in numerical control equipment. Last year, this figure was about 20 percent and by 1971, we expect it to soar to about 35 percent," Mr. Dice says.

The second impetus for growth, says Mr. Dice, will be greater use of numerical control outside of traditional metal cutting machine tool applications. Mr. Dice named such applications as flame cutting, electron beam welding, inspection, and material handling as typical of numerical control's broadening usage.

"General Electric is the major contributor in the numerical control business and intends to stay that way no matter what the application," Mr. Dice states.

Mr. Dice said the Department's 1965 numerical control sales surpassed 1964 by more than 40 percent. "In 1966," Mr. Dice said, "the dollar value of shipments surpassed 1965 by 70 percent. Our forecasts for 1967 show a 45 percent increase in dollar value over 1966."

** Trademark of General Electric Co.*

GEORGE T. BOGARD

COMMUNITY SYSTEMS

New City, U.S.A.

Solving the problems of contemporary urban living, like the weather, invokes more theory than action. By combining both, the Company's new Community Systems Development Division hopes to ameliorate the problems of urban living by building new cities on a planned, systems oriented basis.

This proposition is not new. Washington, D.C., designed by L'Enfant in the late 1790's, started out as a planned city. People have dreamed of Shangri-La for years.

Even now we see an emergence of "planned communities" dotting the countryside. Among these are Reston in Virginia, Columbia in Maryland and Irvine Ranch near Los Angeles.

New Concept: The Community Systems Development Division's concept goes far beyond the "planned community" concept. As the lead-off speaker at a forum on urban development in Boca Raton, Fla., this month, George T. Bogard, Division general manager (see photo) said, "The kind of planned, multi-functional community on a city scale that is envisioned means more than physical planning, mechanics and aesthetics . . . it must incorporate economic and social planning to make it a viable, self-defined, self-sufficient city. Thus far, most of the so-called planned communities are a collection of physically planned neighborhoods or villages. Most lack economic planning with provision for primary employment and hardly any are very sophisticated in their approach to human or social planning.

"This is an area in which builder-developers and industry have the least knowledge and expertise. We must look to the experienced planners, sociologists, anthropologists and psychologists for guidance," Mr. Bogard said. Of all the existing planned communities, Reston, Virginia appears to best fit Mr. Bogard's description of "New City."

"Our goal," he said, "is to develop prototype communities that will offer more human values, greater living satisfaction, at less investment cost and lower per capita operating costs than existing cities presently afford."

New Need: Mr. Bogard identified the building industry as the "only major industry failing to participate in the greatest economic boom the world has ever known." He cited several reasons why industry progress and innovation have been slowed: inflexible planning and zoning regulations; archaic building codes and regulations; a highly fragmented industry, and a shortage of available financing to sup-

port creative builders and developers.

"Thus, housing's share of consumer spendable income continues to lose out to more attractive goods and services."

Urban Centers—GE Style: Mr. Bogard says the Company will not attempt to build the town of tomorrow. "We expect improvements to come by evolution rather than revolution."

Each of GE's new communities will be located within commuting distance of a major metropolitan area with easy access to major air, rail, water, and highway transportation facilities. It will contain its own industrial community, business establishments, educational and recreational facilities, and a wide variety of housing forms, ranging from single unit dwellings to several apartment concepts.

The new community will have a job base to generate a self-sustaining community. Residents will be able to work where they live.

Company Role: Measuring the Company's financial stake in new communities is difficult. The Company will buy undeveloped land in large parcels of perhaps 10,000 acres or more.

The Company will not only buy the land and install the necessary utilities, but will also control its use via a master plan and by maintaining architectural and design supervision. GE's new community will not be a "company" or "big brother" town, even though new plant expansion could possibly be located there to seed the employment base.

Builders and individual owners will be invited to purchase improved land from the Company for construction.

As a marketplace for GE products and services, the new community will present new opportunities for the Company, even though builders will be able to specify the products of other manufacturers as they desire, not necessarily General Electric. A typical all-electric home can have as much as $2600 worth of General Electric-type products included. The additional requirements for electric utility services would open up still another market to the Company, particularly in power generation, transmission, and distribution equipment.

Only Natural: Mr. Bogard says it is only natural for General Electric to take an active part in building new cities. Mr. Bogard told the Boca Raton meeting, "A diversified enterprise like General Electric is equipped by financial, technical, manufacturing, and marketing capabilities to meet this king size challenge."

Mr. Bogard further defined these capabilities as: the necessary financial staying power to undertake a 15 to 20-year development program of a city of more than 100,000 people; a wide diversity of technologies and engineering capabilities which can be brought to bear on design and construction problems; experience and facilities for broad-scale research and planning, and long practice with systems analysis; a product and manufacturing scope which covers almost the complete spectrum of community services; experienced management trained to cope with

RESTON, VIRGINIA

Planning for greater values.

large and complicated projects, and finally, acknowledged responsibility, integrity, and public confidence.

As yet no site selection has been made for GE's first new city. According to Mr. Bogard, about 40 counties in the U.S. qualify from the geographic-economics point of view, and only half of these have land available without improvements in the size of tracks needed. But the search is on.

COLLECTIVE BARGAINING

The Supreme Court and 10(j)

In a unanimous decision, the U.S. Supreme Court declined to decide whether the District Court should have granted the NLRB the injunction which forced General Electric to bargain with the IUE coalition committee in 1966.

The Court agreed with the Company that the negotiation of the new IUE contract was a significant intervening circumstance.

While the Court did not support the Company's position that the case should rest with the Circuit Court of Appeals decision which had barred an injunction under section 10(j) of the Taft-Hartley Act, the Court said the District Court should decide whether any injunction is appropriate now that negotiations have been concluded.

The Supreme Court, in effect, puts the previous lower court decisions aside, and as a result, the focus falls on the basic coalition bargaining case now going through the regular NLRB process (*The Monogram*, July-August '66).

Hearings before NLRB Trial Examiner David L. London ended Dec. 20th, but the final Board ruling may be a year away.

POWER CIRCUIT BREAKER

Record Breaker

A $4 million order for thirteen 500-Kv circuit breakers has been placed with the Power Circuit Breaker Department in Philadelphia by the Bonneville Power Administration.

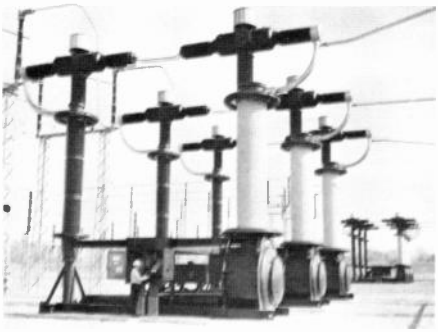
This represents the largest 500-Kv circuit breaker award on the basis of the total dollar value of the contract and the number of units ordered at one time.

Equally significant is the Department's victory over strong international competition in winning the contract. R. E. Bednarek, Department marketing manager said, "We received the order on the basis of rigorous technological and operating economics analysis. We were competing against some of the best manufacturers in the world-wide market place."

Ship in 1967: Delivery of the 13 breakers to Bonneville's 2800-mile extra-high voltage system is scheduled to begin in December, 1967 and will continue through the end of 1968. The breakers will be installed in six new substations in Washington and Oregon.

500-KV CIRCUIT BREAKERS

By dollars and numbers—the largest order.



Planning by Computer

The computer is taking on a new role in community planning and development. The Missile and Space Division in Valley Forge, Pa. has been given a $78,000 grant to determine just how a computer can be most effectively applied to local government planning and development.

In a seven-and-one-half-month study program, one of the first of its kind in the nation, the Division will act as a consultant to the Lehigh, North-Hampton Joint Planning Commission in developing new techniques for applying computer and data processing technology to housing, urban renewal planning and other government activities.

Information gathered by the Joint Planning Commission will be sent to the Division's Valley Forge headquarters by telephone where it will be processed by computer. After being analyzed, the information will be categorized and returned to the Commission.

The Joint Planning Commission presently has computer systems for school census, land use, and other elements of community development programs. The Commission hopes to use the Lehigh, North-Hampton region study as a statewide model. They say the results will have broad applicability to governmental units of all sizes.

Project Indianapolis

The Division's Information Systems and Computer Center is currently conducting a pilot study in Indianapolis, Indiana, to design a computerized job placement system for the city's chronically unemployed.

Called *Project Indianapolis,* the program is being conducted under the auspices of the National Association of Manufacturer's STEP Program. STEP, Solution to Employment Problems, is a nation-wide program designed to help private industry solve the growing labor shortage problems in the U.S.

Marvin F. Steier, *Project Indianapolis* manager, says the fully operational system will use time-sharing computers to match the abilities of the chronically unemployed with the requirements of specific job opportunities. Mr Steier says there are about six to nine thousand unemployed in Indianapolis and about five thousand job openings.

The new system will not follow traditional placement techniques in that previous employment history will not be a significant factor in placement. Instead, the system will use the everyday activities of a person as an indication of what jobs he is able to perform.

Employers in the Indianapolis area are being interviewed to obtain lists of activities and characteristics that typify job profiles. Matching applicants with job openings will be a simple matter of matching up profiles.

The system will allow profiles of unemployed to be stored in the computer system after the applicants have been interviewed and tested. An employer, looking for workers, will send the profile of his job opening to the computer, which will match applicant profiles with job profiles and return the names of those capable of doing the work.

Mr. Steier predicts, "The unemployed will benefit from the new system beyond just getting a good job. *Project Indianapolis* will mean there is less chance of dissatisfaction with work, better performance, and less unemployment."

A LEXAN SLOT CAR CRACK-UP
Fun at 30,000 rpm and 60 miles per hour.

APPLIANCE CONTROL

Selling at the Track

The neighborhood slot car parlor—agog with excited youngsters and whizzing cars—is also a bustling marketplace for makers of slot car motors and bodies.

Two Company departments are off and running in the market: Appliance Control Department, Morrison, Ill., which is introducing a new miniature motor, and the Chemical Materials Department, Pittsfield, which supplies LEXAN® polycarbonate film for car bodies.

Slot car fever has been rampant in recent years. Last year, for example, Americans spent $155 million for slot cars and accessories according to the magazine *Craft, Model and Hobby Industry*. This is roughly one quarter of the $620 million shelled out for all model hobbies.

Mini-Motors: Although Appliance Control has made motors for GE toothbrushes over the past two-and-a-half years, it was the development of long-life rechargable small batteries that sparked a new generation of battery-powered, hand-held housewares and the motors to run them.

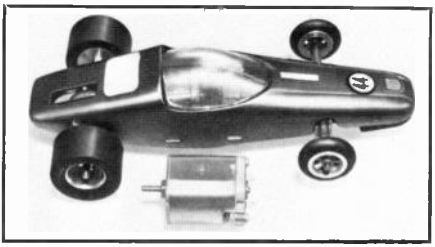
Morrison's new motor—the 3ADM4—weighs only one-and-a-half ounces, is slightly over an inch long, runs on 1.2 to 18 volts and supplies 30,000 rpm on a 12-volt track. Its high speed and rapid braking are qualities sought by slot car buffs, and, therefore, by manufacturers as well.

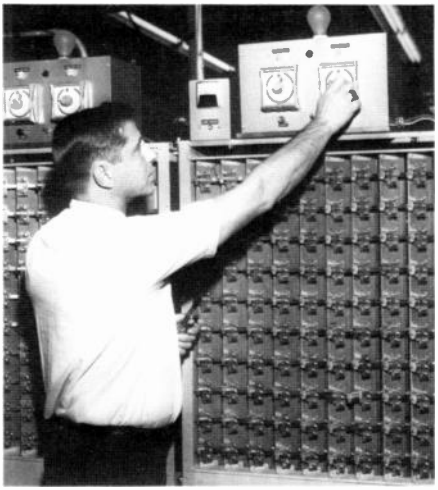
The first manufacturer to install the GE motor in its slot cars was the Dynamic Model division of the AMT Corporation. The motor kit is being sold by AMT for about $6.95.

Inside Out: Marketing manager Stanley A. Gorski points out that "GE's method of constructing from the inside out guarantees concentric bearing, magnet, and brush holder mounting surfaces, resulting in a close and consistent air gap with aligned bearings—a truly superior motor."

Morrison is giving every motor a 100 percent "run in" to set the brushes and stabilize performance (in photo, design engineer Stanley Zagorski applies the high voltage). Motors also receive thorough testing and inspection to maintain high-quality motor standards.

SLOT CAR AND 3ADM4 MOTOR





CHECKING MOTORS AT MORRISON
Know-how to produce a truly superior motor.

Appliance Control is quick to emphasize that their motor, while making its debut in slot cars, is versatile enough to power shavers, manicure sets, hair clippers, tape recorders, auto windshield wipers, and other devices being planned for the future.

Japanese manufacturers have dominated the mini-motor market until now, but Morrison's marketing men are confident that this new motor will change the picture.

No Fender Benders: Slot cars whipping madly around a track are, like most race cars, prime candidates for collisions. Chemical Materials Department says that one reason why LEXAN is being used for slot car bodies is that it can withstand 60 mile per hour crack-ups with nary a scratch.

LEXAN has replaced other plastics, says the Department, because of its high strength, transparency, dimensional stability, and a certain something called "high deflection temperature."

Among the list of firms using LEXAN film for slot car bodies: Model Products Corporation, Squires Enterprises, and Estrela, S.A. of Sao Paulo, Brazil.

NUCLEAR POWER

Deep Seapower

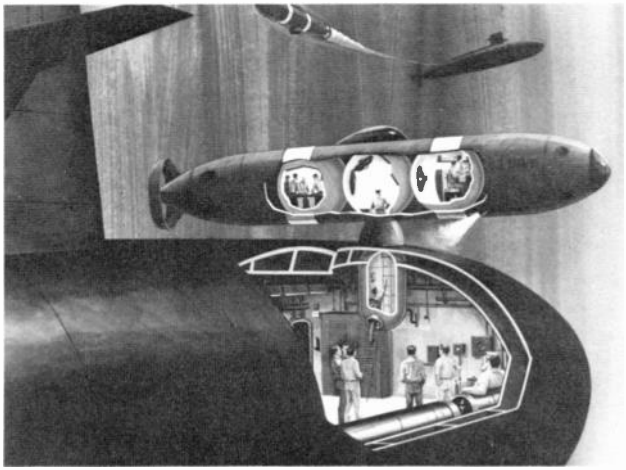
Most of the 140 million square miles of the ocean floor remain a mystery to man, and for the most part, uncharted.

The lack of U. S. capability for deep sea exploration and deep ocean rescue was painfully apparent in 1963 when the USS Thresher sank in more than 8,000 feet of water. The incident triggered the Navy's Deep Submergence Systems Review Group and set the stage for a comprehensive effort by the Navy in the deep ocean.

Among the projects of the Group is development of a nuclear powered deep submergence research and ocean engineering vehicle, the NR-1. The NR-1 project was outlined in an article by Dr. John P. Craven in a recent edition of *Defense Industry Bulletin.*

The job of designing and developing the reactor for NR-1 has been assigned to the Knolls Atomic Power Laboratory, Schenectady, which is operated by General Electric for the Atomic Energy Commission.

Sub-specs: The NR-1 will have a capability greater than any other similar type manned vehicle developed or planned. This is largely due to the vastly increased endurance made possible by nuclear power. The technology gained by its development will provide the basis for development of future nuclear-powered oceanographic research vehicles of greater versatility and depth capability.



RESCUE VEHICLE: This small submarine vehicle is being developed by the Deep Submergence Systems Project to help give the Navy a 24-hour response time to any submarine distress call. Up to 24 survivors can be shuttled from sunken submarines per trip.

The submarine will be able to move at top speed for periods limited only by the amount of supplies it can carry. A crew of five plus two scientists will be able to perform detailed studies, and check temperature or currents of the ocean bottom for military, commercial or scientific uses.

Cutting Loose: Powering the NR-1 with a nuclear propulsion plant results in great independence from surface support ships and essentially unlimited endurance of propulsion and auxiliary power.

The submarine will be equipped with viewing ports and a remote grapple to permit collection of marine samples. Its depth capability will allow exploration of the continental shelf, an area which appears to contain the most accessible wealth in mineral and food resources in the seas.

A ship with its depth capability would be capable of exploring an area several times that of the United States.

First for '67

The first nuclear power station award of 1967 went to the Atomic Power Equipment Department. Northern Indiana Public Service Company last month placed an $80 million order with the Company for an 800-Mw nuclear power system, turbine generator set, and other components. The station is scheduled to open in 1972.

Dean H. Mitchell, chief executive officer of Northern Indiana, said the decision to build a nuclear unit was based on economic factors, engineering criteria, and environmental suitability.

"The atom holds real promise for cleaner air and cleaner water," Mr. Mitchell noted. "These modern, attractive plants feature the latest methods for purifying the water they use in the steam process and actually return it to its source in a more pure form.

"They are also, due to the intrinsic cleanliness of the fission process, able to operate with very little effect on the atmospheric conditions when compared with other types of combustion," he said.

Mr. Mitchell's comment on nuclear power and clean air follows closely GE Board Chairman Phillippe's testimony to the U.S. Senate Subcommittee on Executive Reorganization (*The Monogram*, Jan. '67).

Hockey Highlights

It's a bright hockey season at two eastern colleges enjoying new lighting installations using General Electric lamps.

Middlebury (Vt.) College, which has a reputation for championship hockey teams, can also claim the first artificial ice rink in the country to be lighted with GE's revolutionary Lucalox* lamp and newly-developed GE Econoglow power-pack luminaire.

And, as Providence, R.I. fans exercise their eyes following the flashing blades of the Brown University hockey team, they'll be enjoying the lighting benefits afforded by a new lighting system using General Electric lamps.

Lighter Rink: Since 1963, Middlebury had been looking for a way to increase lighting of its hockey rink. With the development of the Lucalox lamp, and its much higher efficiency and acceptable color rendition, the way was found.

The new system, installed late last year, increased light levels three times (from 30 foot candles to about 85), and did it without the need for completely rewiring the facility or adding more luminaires or electrical outlets.

The new illumination is supplied by 54 General Electric 400-watt Lucalox lamps from Nela Park in GE Econoglow luminaries from Outdoor Lighting Department, Hendersonville.

Behind the Middlebury project were Large Lamp Department's New England district engineer Lawrence S. Cooke, salesman Fred A. Young, Outdoor Lighting's Robert A. Miles, district industrial sales manager, A&D sales, Boston, and John C. Boyter, manager of A&D sales, Hendersonville. Mr. Boyter scored a goal of sorts by expediting production to meet the opening of the hockey season.

BROWN PLAYER UNDER GE LIGHTS
Lighting a bright face-off.

Ivy League Lighting: At Brown University, another hockey team is enjoying a new GE lighting system several times brighter than the previous installations.

The Providence school uses a combination of GE 400-watt De Luxe White Mercury lamps and 300-watt incandescent lamps to supply an average lighting level of 70 footcandles.

The Brown University installation demonstrates the practicability of using the De Luxe White Mercury lamp for interior lighting in many industrial, commercial and school areas that weren't previously adaptable to high-intensity mercury types.

Albert C. Kirchart, Large Lamp Department salesman in Providence, worked with Brown University and Jason Cohen of Providence Electric Supply to put the order on ice.

**Trademark of General Electric Co.*

THE CANCELLED AD

No Chippewas on Madison Avenue.

TALKING POINTS

Don't Shoot Indians

An advertisement placed by the Photo Lamp Department (see above) recently made heap big trouble for Nela Park and put the Minnesota Red Lake Band of Chippewa Indians on the war path.

The suggestion that when "you decide to shoot wild Indians you can't afford to miss" (even with GE flashcubes) was met with displeasure and considered derogatory by the Chippewas.

A telegram quickly reached Nela Park bearing some strong words of displeasure from Tribal Chairman Roger Jourdain.

So, the Department dispatched publicist Lawrence Muehling North to smoke the peace pipe, and sent letters to the Chippewas from marketing manager James C. Forbes.

"The phrase 'wild Indian' is so much a part of common everyday language that its possible offensive interpretation by anyone never occurred," wrote Mr. Forbes.

The term, pointed out Mr. Forbes, has "always been an endearing one, and I have often referred to my own four children using this term, especially when they acted in a spirited manner."

"We certainly had no intention of being derogatory, but since the advertisement has offended the Red Lake Band of Chippewa Indians, we have cancelled future use of it," he announced.

A substitute ad reads: "When you decide to shoot your in-laws . . ."

Sweetstakes

Youngsters munching happily on Kellogg's presweetened cereals these mornings are also savoring what appears on the packages heralding a national "Sweet Eatin' Sweepstakes" featuring 3,000 General Electric prizes.

The contest is designed to promote six Kellogg presweetened cereals, but Utica will also enjoy corresponding exposure of their Youth Electronics products via 45 million cereal packages, plus magazine ads and television announcements on such programs as Batman, Yogi Bear, Captain Kangaroo and others.

Prizes include GE tape recorders, phonographs, walkie-talkies, and transistor radios.

The promotion is expected to produce about 1.1 billion impressions.

General Electric employees are welcome to enter.

Just Couldn't Wait

Little Rock, Ark. television station KATV ordered a GE PE-250 color studio camera, but didn't wait for shipment by commercial carrier. The station owners, Griffin-Leake TV, Inc. flew their company plane to Syracuse to pick up the new camera.

The custom air service worked so well the firm circled back later to pick up five more cameras destined for stations KTUL-TV in Tulsa, and KWTV Oklahoma City.

No Window Pains

School windows broken by vandals have been costing taxpayers $140.000 in Boston and $30,000 annually in Hartford, Connecticut, but that was before LEXAN® polycarbonate.

Test installations at schools showed that after weekend vandalism, the only material left unbroken was LEXAN. Now, additional windows are being glazed with LEXAN and breakage is on the decline.

Curious about its performance, WRGB-TV, Schenectady, sent newsman Dick Beach with Ken Comstock to film a report. The graphic demonstration of LEXAN's ruggedness included an attack with a 16-pound sledge hammer (see photo) by Jim Filiault of Chemical Materials Department. The one-eighth-inch panel held up well, and reporter Beach stepped out smiling and convinced.

ROUGH RAP FOR LEXAN

It's frustrating vandals, not taxpayers.

SOOTHING THE SHEIK

Award for the cinematic sell.

The Sheik's Ransom

A five-minute color motion picture introducing features of the General Electric Fashionette air conditioners called "The Sheik's Ransom" has been awarded a first prize by the International Film and TV Festival.

The melodramatic spoof of silent films weaves selling points into a drama of how a captured Englishman is saved from a sheik's sword by the timely gift of a GE Fashionette air conditioner. The hero wins favor with the sheik, his daughter and a much cooler palace.

The film was produced by Jack M. Winemiller, specialist, advertising and sales promotion programs for the Air Conditioning Department, Louisville.

AROUND THE COMPANY

Brand of the Year: For the second consecutive year, the Housewares Division has received the 1966 Gold Award as the "Brand Name Manufacturer of the Year." Presented by *Department Store Economist*, the award is in recognition of the Company's "outstanding reputation for maintaining high quality standards, for sustaining an excellent brand name image, and for significant merchandising contributions to retailers in the department store market." William J. Pfeif, manager of the Housewares Division's marketing and distribution operation, accepted the award.

SNAP-27 Delivered: The Missile and Space Division last month delivered the first SNAP-27 prototype nuclear-powered generator to the Atomic Energy Commission. The generator will be used by the National Aeronautics and Space Administration in the Apollo Lunar Surface Experimental Package. In a vacuum chamber at the Valley Forge Space Technology Center, the generator exceeded design requirements by producing in excess of 70-watts of electrical power under tests simulating the most severe operating conditions on the lunar surface.

Shocking: The Research and Development Center, one of the Company's most plenteous groups, has developed an electrohydraulic metal stripping technique for removing metallic deposits from metal refinery cathodes. The stripping is done in a tank of water. Electrical energy, which is discharged in an arc under the water, causes the intense shock waves which separate the metallic deposits from the cathode.

Judged the Best: The Distribution Transformer Department won praise from one of the nation's largest electric utility systems, American Electric Power, for keeping delivery promises and high product quality. In a letter to Distribution Transformer General Manager, Harland P. Sisk, AEP's manager of purchasing and stores, R. M. Mills, said AEP's directors of purchases felt that the Department's service and product quality "was the best among our transformer suppliers. The decision was unanimous and enthusiastic."

Phillippine Power: The Company's IGE Export Division last month announced receipt of a $7 million contract to supply a 150,000 kilowatt steam turbine-generator and associated electrical equipment to Manila Electric Company's new Gardner power station. The turbine-generator will be the largest in the utility's system. In all, six product departments will participate in the order, including the Medium Steam Turbine, Generator & Gear, Power Transformer, Medium Transformer, Switchgear, Power Circuit Breaker, and Large Generator and Motor Departments.

Time Well Spent: A group of Erie plant trainees, members of the Association of Program Members, used the recent Christmas holiday to good advantage. They sponsored a "College Night" for 44 students home during the holidays. Their theme for the occasion was "Industry—Where the Action Is." The meeting was part of a project started by P. A. Templeton, president of the trainee group, assigned to the Locomotive and Parts Department. The Association is in an excellent position, Mr. Templeton said, to convince college students of the many opportunities and satisfaction open to young people in industry since most of them are recent college graduates themselves.

PEOPLE

Weaponless Warrior: Gordon Sargent is going to fight a battle in Viet Nam using action and deeds, not rifles or mortars. An engineer at the Atomic Power Equipment Department, he will take a two year leave of absence to serve as an assistant provincial representative for the U.S. Operations Mission in Saigon. His role there will be to promote desirable political, social, and psychological development programs among the Vietnamese. Mr. Sargent speaks French fluently. As a Captain in the Army Reserves, he trained last year with the 12th Special Forces unit, a reserve wing of the fabled Green Berets. Says Mr. Sargent, "I consider this a rare opportunity to serve my country in some small way."

The Ladies—Bless 'Em: The new president of the Mississippi Test Facility's Quarter Century Club is Alice Sackett, a veteran of 37 years with the Company. Miss Sackett, who may well be the first distaff QCC president, is a specialist in program appraisals for the MTF's Management Systems section . . . Mrs. Lillian Jackson, a sales engineer assistant in the Los Angeles office, was honored recently by the California Portland Cement Company for over 20 years of outstanding service to that organization. She was one of ten people to receive the award.

Honors: Dr. Arthur M. Bueche, Research and Development Center vice president, has been appointed to serve for a three-year term as a member of the Panel Advisory to the Institute for Materials Research, National Bureau of Standards . . . Laurance H. McEwen, general manager of the Company's Irradiation Processing Operation, near Pleasanton, Calif., has been appointed to a two-year term on the Governor's Advisory Council on Atomic Energy Development and Radiation Protection . . . Dr. Harold Chestnut of the Research and Development Center in Schenectady, has been elected a Director of the Institute of Electrical and Electronic Engineers.

Joint Account: Question is—Can two young Financial Management Program accountants keep a balanced budget and still find happiness in wedded bliss? Or will Mike overrule Mary Lou's moratorium on first quarter capital expenditures?

The possibilities of two accountants joining in marriage is enough to boggle the imagination. Mary Lou Fasolino and Mike McGurkin will wed on April Fool's Day (that's incidental). Mike says, "My budget has been accepted. She will account to me." Mary Lou, who holds a B.A. in economics from Regis College, has yet to commit herself along these lines. Can you imagine picking up pocket money in this group?

MARY LOU AND MIKE

Who's got the pocketbook?

APPLYING SILICONE RUBBER
Maintenance free like a roof should be.

PRODUCTS

Rubber Roof: A new liquid Silicone Rubber Roof Coating that can be applied like paint has been announced by the Silicone Products Department. The new product dries to form a continuous elastic membrane that also "breathes" to let moisture escape from inside buildings without blistering. A 22 mil coating will provide virtually maintenance-free service for up to 30 years due to the high weather resistant nature of silicone rubber. The material comes in several colors (colonial green, aqua, brick red, etc.) and costs about 55 cents per square foot.

Audio Aristocrat: Radio Receiver Department has introduced a new solid-state 10-band portable radio that it claims will become the "Rolls Royce of radio receivers." The new P2900 "World Monitor-10" covers the FM broadcast band, long wave, marine, standard broadcast, and six short wave bands. The radios operate from standard house current or batteries. Suggested retail price is $150.

The Department has also introduced five new solid-state AM/FM table and clock radios with suggested retail prices from $34.95 to $69.95. Six new portable radios have also been added, including four miniatures and two multi-bands.

New Lightweight: A complete new line of light-weight, single-phase transformers rated 501-5000 kva, 69 kv and below is being offered by the Medium Transformer Department, Rome, Ga. The new units can help reduce substation costs and can be installed with less difficulty according to General Manager D. B. Lawton. The transformer's height has been reduced as much as 26 percent in some ratings, with weight reduced up to 31 percent.

Housewares: Two new irons with "permanent press" touch up settings have been introduced by the Housewares Division. Both feature double non-stick coating, and function as spray, steam or dry irons. Model F-54WT carries a suggested retail price of $12.98, and model F-91 is $20.98. Two new decorator cordless clocks have been introduced: the "Tropicana" (price about $30.00), and the cuckoo-style "Bavaria" model.

THE ROLLS ROYCE OF RADIO
At home or away, plugged into the world.

CHARLES W. GEORGE

FRED O. MAC FEE

MARTIN HEMSWORTH

FRED W. GARRY

ORGANIZATION

Defense Electronics

Charles W. George is appointed General Manager of the Defense Electronics Division.

IGE Export

The Legal Operation of the IGE Export Division is discontinued and legal and patent components in the IGE Export Division are established.

Major Appliance and Hotpoint

Stanley C. Gault has been appointed General Manager of the Household Refrigerator Department.

William B. Clemmens is appointed General Manager-Room Air Conditioner Department.

ROBERT L. MILES

RALPH MEDROS

Flight Propulsion

Fred O. MacFee, Jr. is appointed General Manager-Operations, Flight Propulsion Division.

A Special Products Department within the Operations component is established and Robert L. Miles is appointed General Manager.

Fred W. Garry is appointed General Manager — Engineering, Flight Propulsion Division.

A new purchasing organization, the Materials Operation, is established, and Ralph Medros is appointed Manager.

Martin C. Hemsworth is appointed Manager of Engineering-Production Engines.

Edward E. Hood, Jr., formerly Project Director, SST Project, is appointed General Manager-SST Project.

E. Van Claxton is appointed Manager-Division Administration.

General Electric College Bowl

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

Participants: March 5—University of Pennsylvania; March 12 — Capital Univ. (Columbus, Ohio); March 19 — Boston College (Chestnut Hill, Mass.); March 26 — University of Minnesota (Minneapolis, Minn.).

EDITORIAL

It will take time

IT HAS TAKEN either 5500 or 100 years to create the problems which threaten today's urban areas. The city began in the "Fertile Crescent" near Mesopotamia around 3500 B.C. Full-scale urbanization, more familiar to us, probably began 100 years ago. Urban problems have been compounded at an alarming, and ever-multiplying rate in the past 50 years.

There is no panacea or miracle drug for urban problems. We can not abandon our present cities and start totally anew. We must rebuild and restructure today's cities and at the same time build new communities to effectively absorb our spiralling population growth. The question is who will do it? And equally important, why?

Neither the government nor private industry can do it alone. Private industry, and in particular General Electric, has demonstrated a responsive attitude. There are many reasons for this.

By bettering the lot of man, the Company betters itself. The building of totally new communities presents new marketing opportunities for Company products and services. And, as Board Chairman Gerald L. Phillippe told the Ribicoff Subcommittee on Executive Reorganization in December, "General Electric is not an eleemosynary institution. It is in business to make profit for its shareholders."

The Company has a real stake in the city from the employee point of view. General Electric has more than 163 plants in some 140 cities around the nation. Because nearly all of the Company's employees live in these cities, it must be responsive to their needs, if it is to survive.

The task that George T. Bogard, General Manager of the Community Systems Development Division, has set out to do stirs the imagination. And, perhaps only in a company like General Electric can this goal be achieved. For, as Mr. Bogard put it, "Only a large, diversified, financially strong enterprise, with broad interests running throughout the entire fabric of a city, might contribute importantly to the development of new prototype communities which offers more human values, greater living satisfaction."

But it will take time and energy. It will mean a willingness to invest heavily in the future. It will mean using all of our technical, financial, management and marketing resources to achieve the Company's goal.

But . . . we think it's worth it!