

The WINGFOOT & CLAN

Goodgear Atomic Cornoration

Goodyear Tire & Rubber Company

Volume 24

Piketon, Ohio September 18, 1977

Number 9

Goodyear leaders agree

People key to GAT's progress

Twenty-five years ago, giant earthmovers rolled across a peaceful, secluded southern Ohio valley and began reshaping it into the sprawling industrial network we know today as Goodyear Atomic.

When the plant became fully operational in 1956, GAT employes were ready to go to work. They already were trained in the intricacies of an extremely complex industry. And they were skilled hands at following exacting safety standards.

Those things haven't changed. Employes today know their jobs well and perform them with skill. And they have maintained an exemplary safety record that is one of the best in industry.



Pilliod

Hurt

But some things have changed. GAT employes have found increasingly more efficient and economical ways to produce enriched Uranium-235. And they've made significant contributions to our nation's gaseous diffusion technology.

The end use of the product has changed too. Originally produced for national defense purposes, today's product is used for peaceful applications, primarily as nuclear reactor fuel.

More changes are on the way. The new \$4.5 billion add-on facility announced in July by President Carter will change the face of our present facility. And Goodyear looks forward to the challenge of operating all or part of the centrifuge plant.

Marking the silver anniversary of Goodyear Atomic would not be complete without thanking the various government agencies we've worked with: the Energy Research and Development Administration and the Ohio Valley Electric Corporation in particular. Their cooperation and support have been invaluable through the years.

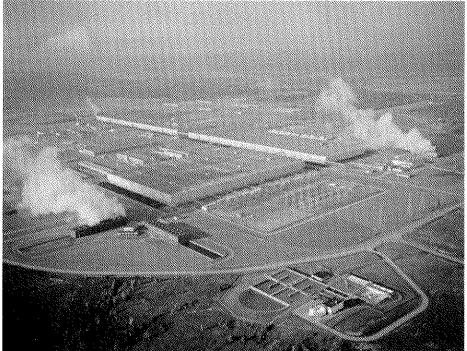
But our real strength — in the past, the present, and as we look optimistically into the future — lies with our people. It is their hard work, dedication, spirit and teamwork that have meant 25 progressive, rewarding years

Our sincere appreciation and congratulations to all who have played a part in making Goodyear's entry into atomic energy an outstanding venture spanning a quarter of a century.

Charles J. Pilliod, Jr.

Charles J. Pilliod, Jr. Chairman of the Board The Goodyear Tire & Rubber Co. The Hust

Nathan H. Hurt, Jr. General Manager Goodyear Atomic Corporation



We've come a long way from August, 1953 (upper left) to the present (above). For a closer look, turn to page 5.

Family open house to highlight silver anniversary observance

This Sunday, September 18, the company will officially mark its 25th anniversary with an employe open house on the plant site.

Highlight of the 1 to 6 p.m. event will be a company first — guided Greyhound bus tours of the plant complex for employes and members of their families.

A number of Goodyear corporate officials are expected to be on hand for the celebration along with executives from ERDA and Union Carbide and many distinguished GAT alumni. Among those special guests will be the man who answered the call from Washington announcing that Goodyear had been selected to operate the gaseous diffusion facility, retired Board Chairman Edwin J. Thomas.

The open house will be held outdoors, **rain or shine**, north of the main parking lot adjacent to the X-720 build-

ing.

"The 25th Anniversary Celebration Committee has put together a program that will interest both young and old alike," said General Manager Nate Hurt. "I hope all employes make an effort to bring their families to help us mark this special occasion."

A brief program to formally recognize the plant's silver anniversary will be held on the main stage at 2 p.m. Scientific exhibits and demonstrations will be conducted by the environmental control, health physics and safety departments.

GAT displays, including a sampling of uranium cylinders, will be available for viewing. A Goodyear corporate display area covering everything from racing tires to rubber railroad crossings and an ERDA display also will be on the grounds.

In addition, there will be several showings of "The Glorious Fourth," the story of A.J. Foyt's history-making victory in the 1977 Indianapolis 500. The film will be shown in a large tent at 30-minute intervals.

Drawings for some 80 prizes will be conducted intermittently throughout the day. All employes are eligible to win. The top two prizes are a set of four Goodyear American Eagle radials and a \$1,000 U.S. Savings Bond. Employes need not be present to claim their prizes, all of which will be on display at the open house.

A stage band will provide musical entertainment throughout the afternoon and there will be clowns handing out goodies for the youngsters. Hot dogs, potato chips and beverages also will be available.



In observance of the company's silver anniversary, every employe will receive a commemorative key chain medallion engraved with the slogan/design (above) adopted by the 25th Anniversary Committee.

First GAT employe on the scene, now Nate Hurt is general manager

On September 18, 1952, then Goodyear President Edwin J. Thomas announced in Akron that the company had been selected to operate a new gaseous diffusion plant for the Atomic Energy Commission.

Sitting in a crowded Goodyear Theater that day was a young Goodyear engineer who, in a few short months, would be the first employe on assignment at Goodyear Atomic. His name — Nathan H. Hurt, Jr.

In 25 years, Nate Hurt has come full

cycle.
"There were originally 28 of us designated to start up the plant," recalled the recently named general manager. "There were eight operating managers and 20 superintendents of various divisions under them."

Hurt was brought in as superintendent of plant engineering long before there was even a plant.

First office in Elks Club

"I established our first office in a borrowed Elks Club ballroom in Portsmouth," he said. "It was about a month before any other Goodyear families moved down here.'

Before long, however, there were plenty of Goodyear families in the area. And many of them were local residents. Training started in the fall of 1953. And by December of that year, Hurt himself had an engineering department that numbered 120.

"In those first months, our employes were attending seminars and workshops and making trips to Oak Ridge and Paducah learning how to work with government agencies and with atomic energy principles," said Hurt. "It was 1954 before we started operations and 1956 before we were in full production. But prior to that there were a number of assignments for us on the plant site. We were charged with things such as devising a master lock system for the plant, purchasing spare parts for all equipment and providing detailed plans for construction of the training and office buildings.

How did Goodyear get involved in atomic energy in the first place?

How Goodyear got involved

"As I recall, the government contacted a number of companies they considered having exceptional management capabilities and asked them to submit proposals for operating an atomic energy plant," said Hurt. proposals were to cover everything from why the company was interested in operating a plant for the government, to who they would assign to top positions and how they would organize it differently. Obviously, our track record and desire to run the plant convinced the government to select Goodyear."

The company's interest became clear with the Thomas announcement.

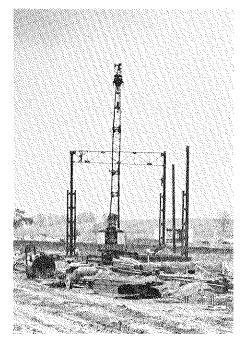
"He told us it wasn't so much the operating fee the company was interested in as it was our desire from a patriotic standpoint to operate a plant that was needed for national security," said Hurt. "Goodyear has always been strong in this area and that was true well before the atomic plant announcement. We'd already been involved in production of Corsair fighter planes, major components for the B-29 and building of airships for the Navy, just to name a few.

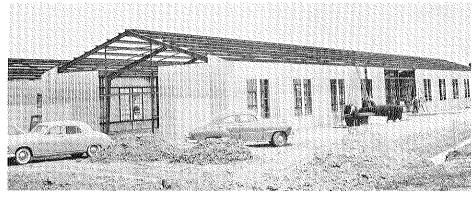
"... great training ground ... "

"Thomas keyed on a second reason for our involvement," added Hurt. "And that was to provide the company with another growth outlet for people with management potential."

Hurt rattled off several names of those among the original 28 employes. Many have gone on to top corporate







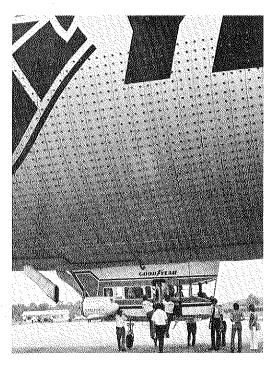
Shortly after Nate Hurt arrived on the scene in early 1953, contractors were blasting rock on the sewer line leading to the X-615 building (upper left), the first steel was being erected on the X-700 building (upper right) and training building plans his staff drew up were already being carried out (above).

assignments. The same can be said for other employes who spent time at GAT and are now in prominent positions with Goodyear.

"All you have to do is look through Goodyear to see that it has been a great training ground," said Hurt. "And it also has provided an opportunity for those who've earned their wings at other Goodyear locations to come in here to help manage a major corporate

Looking back on a decision made over 25 years ago, Hurt thinks it is one that has paid off handsomely for Goodyear.

"We've developed a good working relationship with ERDA and, for that matter, with the Union Carbide Nuclear Division too," said Hurt. "It's been profitable both from a financial and from a learning standpoint. Really, I think everyone involved has been well satisfied with the arrangement."





The Goodyear airship America helped celebrate GAT's silver anniversary with her August visit. Coming back down to earth after their maiden voyage were, left to right: David Boyd, measurements technology; Gordon Williams, computer systems & procedures; Don Mathews, a reporter for the Columbus Dispatch, and Burleigh Oiler, Mayor of Jackson, Ohio.

Page 2 — The Wingfoot Clan — September 18, 1977

Goodyear Atomic records 25 years of major events



Albert J. Gracia 1952-1956



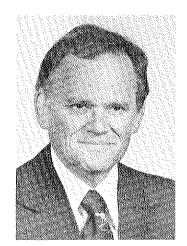
Donald H. Francis 1956-1960



George H. Reynolds 1960-1970



Charles D. Tabor 1970-1977



Nathan H. Hurt Jr. 1977

1952 — AEC announces The Goodyear Tire & Rubber Company will operate Portsmouth Area Gaseous Diffusion Plant ... A.J. Gracia, G.H. Reynolds, D.H. Francis, I.S. Gharky, W.A. Brown, H.H. Kenny, H.C. Hilliard and J.A. Merrill selected to head GAT organization ... GAT offices opened in Goodyear Hall, Akron ... Twenty-eight Goodyear employes named as original GAT start-up staff.

1953 — First GAT employes hired...First employe group (38) assigned to Oak Ridge and Paducah for training...GAT offices occupy newly completed training building ...First issue of Wingfoot Clan Atomic edition is published.

1954 — First production training class graduates...Prime contractor Peter Kiewit Sons' releases eight buildings to GAT... 5,000 attend first company picnic at Camden Park...First cascade unit placed in operation...First product withdrawal made...First GAT employes begin moving into X-100 administration building...Cafeteria and hospital open doors...Oil, Chemical and Atomic Workers Union to represent production and maintenance unit. hospital.

1955 — GAT sets gaseous diffusion plant safety record, operating 3,229,178 manhours without a lost time accident ... GAT employment reaches peak at 2,964 ... UPGWA selected to represent guard force; first agreement signed with that unit ... Oil, Chemical & Atomic Workers sign first contract.

1956 — A.J. Gracia promoted to Akron; D.H. Francis named new general manager ... GAT sets new safety record with 3,678,843 man-hours... Kiewit releases last unit to GAT; plant in full operation several months ahead of schedule... Atomic Employes Credit Union office opens... National Safety Council recognizes GAT for safety record... GAT Educational Assistance Program adopted.

1957 — AEC extends GAT's contract for four more years...Union strikes May 10 but returns under a Taft-Hartley injunction ... First shipment of uranium for peaceful purposes.

1958 — GAT Foreman's Club established ... Accident stops safety record at

4,607,800 man-hours.

1959 — Technical Division recognized for 4,126,000 man-hours without a disabling injury... New test loop in X-770 building completed; new nitrogen generator placed in service, \$5 million sprinkler system nears completion... GAT to supply one half of

achieved over 3,000,000 man-hours without an employe injury; then sets new Goodyear worldwide safety record by exceeding 5,000,000 man-hours...AEC announces shipments from GAT for peacetime use totalled 108,247 pounds.

1962 — GAT employes win Goodyear

1967...Employment reaches lowest level at 1.139.

1965 — GAT's shipment of enriched uranium in 1964 exceeds \$100 million... 1965 uranium shipments for peacetime uses total \$88.3 million.

1966 — AEC extends GAT contract through June 30, 1970...Record amount of enriched uranium for peacetime use shipped, \$109.2 million.

1967 — Report to AEC of cost reduction actions during last half of 1966 shows savings of more than \$810,000...Payroll count exceeds 1,200 for first time since 1964...Draftsman Apprentice Program begins ...New \$500,000 uranium conversion facility completed...Product shipments totalled \$117,965,000, a new record...Cascade power reduction to 580 MW saves \$3.5 million.

1968 — New half-million dollar oxide conversion facility completed . . . GAT winner of Goodyear Worldwide Safety Contest for second time . . . Cost reduction "I"dea Program inaugurated . . . Capacity Expansion Program receives first funding for engineering and construction . . . Cascade Improvement Program (CIP) and Cascade Uprating Program (CUP), costing a combined total of \$257 million, expected to increase plant capacity by 63 per cent.

1969 — Local 3-689 members go on 20-day strike, then agree to submit areas of disagreement to Atomic Energy Labor-Management Relations Panel; members vote to accept panel's recommendation and three-year contract is signed... Finance Division's safety record broken — 5,985 days without a disabling injury... AEC extends GAT's contract through June 30, 1973... Twenty-six employes start first Pre-Supervisory Training Program.

1970 — First Apprentice Program underway with 25 apprentices...Complete renovation planned for cafeteria...C.D. Tabor succeeds deceased G.H. Reynolds as general manager...Safety record broken at 3,061,000 man-hours; sixth time in GAT's history employes have exceeded three million man-hour level.

(Continued on page 4)

From the Governor

'Tribute to close cooperation'

The Goodyear Atomic Corporation is to be congratulated for its twenty-five years of operation of the gaseous diffusion plant in Pike County.

The plant is an important part of the national and international energy supply, and one of the key industries which is increasingly assisting the economic stability of the area. In addition, many employes of the Goodyear Atomic Corporation play an active role in the local affairs of their respective communities of residence, thus making a significant contribution toward the overall betterment of the area.

The long standing existence of the plant in Southeastern Ohio and its planned expansion, is an outstanding tribute to the close cooperation between the Goodyear Atomic Corporation, the Goodyear Tire & Rubber Company and the U.S. Energy Research and Development Administration.

I send to the Goodyear Atomic Corporation officials and employes my best wishes for continued success as we work together for Ohio's future.

> James A. Rhodes Governor

fuel for nuclear ship Savannah.

1960 — Electronics department personnel develop Analog Computer to solve differential equations... New service award emblem program now in effect... 594 cylinders of enriched uranium, valued at more than \$16.6 million, shipped in Atoms for Peace Program... GAT's contract extended to 1965 by AEC... D.H. Francis returns to GT&R; G.H. Reynolds named general manager.

1961 — GAT to supply all uranium requirements for Yankee Atomic Reactor...GAT receives AEC Award of Honor for having

Worldwide Slusser Safety Contest as safest Goodyear plant... Two female employes become members of the Tech Squad Training Program... New radiation alarm system in operation... Safety record broken at 7,968,967 man-hours (2 years, 2 months, 16 days)... GAT has shipped \$86 million of enriched U-235 for peacetime use.

1963 — Employes in 100,400 and 500 divisions honored for having worked 10 years without a disabling injury... Largest single order (\$8.7 million) shipped to Selni Reactor in Italy.

1964 — AEC extends contract to June 30,

Backed by unique approach. employes earn top safety awards

Goodyear Atomic has earned numerous Goodyear and ERDA safety awards. And in 1976 — on the eye of its 25th year — the company compiled an outstanding and impressive safety

The plant earned the Research and General Product Development Division's Most Improved Safety Award with a 120 per cent improvement over 1975 safety performance. That combined with the division's lowest injury frequency rate earned GAT its fourth Goodyear Worldwide Safety Award. The plant previously earned the top corporate safety award in 1962, 1968 and 1973.

In addition, GAT earned the Award of Excellence from ERDA in Washington, D.C. for reducing the incidence of OSHA recordable lost workday cases by at least 25 per cent of the plant's base average experience. Of the well over 100 government owned contract operators and licensees, only four other ERDA facilities were so honored last year. The plant also earned a similar Award of Excellence from ERDA's Oak Ridge Operations.

To see why GAT has earned so many safety honors, all you have to do is look at disabling injury frequency rates. For example, according to the National Safety Council's 1976 edition of "Accident Facts," the frequency rate for chemical plants was 3.99 disabling injuries for every one million manhours worked. For all industries combined, it was 13.10. Goodyear Atomic's was only 0.69.

ERDA's goal is to stay under the 1.0 level. And at this time in 1977, GAT is under that.

"We consider anything over 2.0 a bad year for Goodyear Atomic," said safety supervisor Jim Spriggs.

What is behind this exemplary safety

"I think one of the keys is that we take a systems engineering approach to our safety problems," added Spriggs. "We don't just put out brush fires. We don't look at unsafe acts and conditions as causes. They are the symptoms. So we look for the true cause in our management system. And often we find we've neglected to recommend or control a failure in our system.'

Another key ingredient is the plant's Bio-Assay Program. Through it, the Industrial Hygiene and Health Physics Department administers a urinary bioassay program to monitor employes for possible ingestion of soluble toxic materials. Employes covered in the program include those working on any job or in any area where exposure to toxic materials is possible. Frequency of sampling is based on probability of exposure and samples can be analyzed for uranium, radioactivity, fluoride, mercury or nickel. About one-third of all employes are participating in the

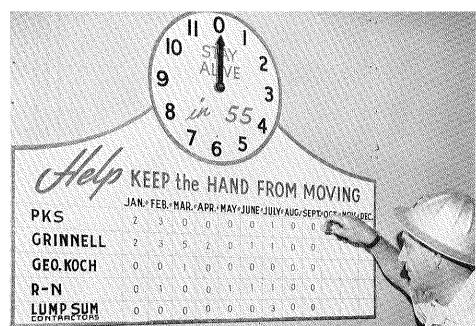
Another 1,000 employes per year are checked for exposure to insoluble radioactive materials as part of the Bio-Assay Program.

"These efforts aid our overall attempts to control not only industrial accidents, but chemical spills, exposure and lackadaisical work habits that could lead to future problems," said Spriggs.

GAT doesn't adhere strictly to the old safety adage of the three E's, "engineering, education and enforcement.'

"While we certainly believe in engineering changes to improve safety, and we've been doing that since 1972, our philosophy is better incorporated in, 'Recognition, Evaluation and Con-

trol," said Spriggs.
For a quarter of a century, that philosophy has paid off.



Employes have compiled outstanding safety records since the early '50s when contractors shared space on the plant site.

Affirmative Action Plans

Fair plant employment practices a tradition at Goodyear Atomic

"Opportunities afforded at Goodyear Atomic for employment, advancement and dignity of work are equally available to all. An employe or prospective employe is evaluated on the basis of performance, attitude, skill, experience, ambition, energy and aptitude not on his or her race, color, sex, religion, age or national origin.'

So said former General Manager George H. Reynolds regarding the employment policies during his tenure, 1960-1970. That policy has continued and as GAT enters into its 26th year, it has progressed.

By the end of 1974, GAT's total minority employment was 6.4 per cent and female employment was 9.3 per cent. By July 31, 1977, minority employment was up to 6.9 per cent and female employment had jumped to 11.7 per cent of the work force. The

total increase in the number of minorities from December 31, 1974 to July 31, 1977 was 75.2 per cent and for females was 104 per cent.

'Goodyear Atomic has backed up its belief in the fair and non-discriminating treatment of every applicant and employe," said General Manager Nate Hurt. "And in addition to our efforts to hire minorities and females, we've historically employed and advanced handicapped persons. The Affirmative Action Plan for the Handicapped will strengthen our efforts in this critical area.'

In addition, GAT has joined with the parent company in establishing an Affirmative Action program for disabled veterans and veterans of the Vietnam era as required by the Veterans Rehabilitation Act of 1974 and recently reinforced by President Carter's HIRE (Help through Industry Retraining and Employment) Program. The company is obliged to list job openings which are to be filled from the outside with the Ohio Employment Services and is to seek out qualified veterans to fill these positions.

"There is far more to our commitment than the mere compliance to government rules and regulations," said Hurt. "Equal opportunity requires positive attitudes on the part of all employes from the time a candidate inquires about employment, to placement on the job, whether it be hourly or salaried, to progression or job change. It means that every employe must recognize the rights and privileges of his fellow workers. And it means assuring fellow employes that they are regarded as equal members of the team. That's the only way we can work together to achieve our common goals."

)s saw expansions, safety a

(Continued from page 3)

1971 — Smokeless incinerator installed . . . GAT's annual report to AEC of Cost Reduction Activity lists 279 actions taken with an estimated savings of \$1,590,325...GED high school equivalency program started on plant site...Fourteen employes finish Trainee "A" Program; get first class ratings in maintenance classifications.

1972 — Third cost reduction year savings over \$80,000 ... OCAW and UPGWA sign three-year contracts...N.H. Hurt, Jr., assumes responsibility for coordination of all capacity expansion activities ... Announcement of X-700 building single story addition to house stabilization furnace stand and control room...Over \$500,000 to date spent to upgrade, develop and expand pollution control facilities.

1973 — Goodyear Aerospace gets nod to

equipment ... AEC extends GAT contract for five years...Dr. Dixy Lee Ray designated new chairman of the AEC ... GAT takes steps to meet energy crisis...Spirit Awards Program announced...GAT wins third Goodyear Worldwide Safety Award.

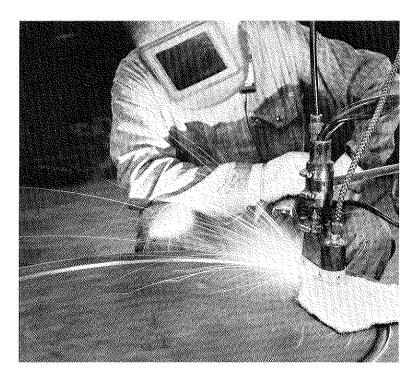
1974 — Extensive CIP program moves ahead to meet energy needs... The Oil, Chemical and Atomic Workers engage in a 14-week strike...Quality assurance seminars presented to all employes...Payroll climbs to 1,885 at year's end.

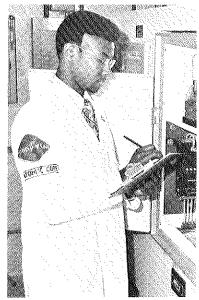
1975 — Cost Reduction Award luncheon honors over 100 "I"deators...UPGWA celebrates 20th anniversary . . . GAT earns safety award for lowest injury frequency rate in Chemical Division.

1976 — For second straight year GAT receives citation for outstanding contributions suddenly and is succeeded by N.H. Hurt, Jr.

develop uranium enrichment program to the nation's uranium enrichment and national security programs...OCAW strikes without notice and engages in longest work stoppage in GAT history, 106 days: strike ends on December 11... X-616 liquid effluent control facilities completed at a cost of \$2 million ... Three new positions (assistant general managers) and two new divi sions (maintenance and engineering) created...New \$4.4 billion gaseous diffusion add-on project announced for GAT. GAT wins fourth Goodyear Worldwide Safety Award.

> 1977 — GAT processes fuel for new Ohio nuclear power station near Cincinnati... President Carter cancels gaseous diffusion add-on project; then announces all four units of the new centrifuge enrichment plant to be located on Pike County plant site...General Manager C.D. Tabor dies







Atomic activity

When news of the Goodyear Atomic plant splashed across the front page of the Portsmouth Times 25 years ago, it signaled the emergence of new jobs, new friends and new experiences for thousands of area residents. Featured on this page are some of the scenes—both old and new—that have become familiar to those who have been a part of the Goodyear family.



The Portsmouth Times

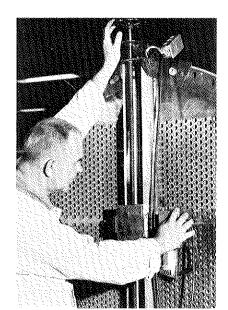
Home Fabilie

A-PLANT COMES HERE

New 'Portsmouth Project' Put In Piketon Vicinity

Huge New Project May Double Local Population AEC Sets Up
Sessions With
Local Officials

BUSE Locateurine, Surkers ther in 11 Feel 14 Building LISS To Let Frenzencus Joh

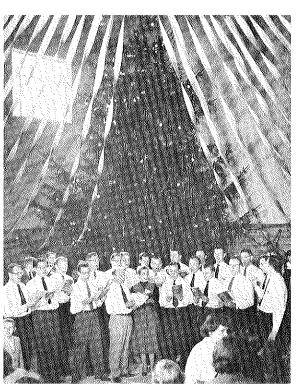














Employes respond to the challenge — R. J. Hart



Robert J. Hart

Congratulations to Goodyear Atomic Corporation employes and management on the achievement of a quarter of a century of operations in the nuclear energy field. These operations not only have helped this country to maintain a strong national defense, but also to develop fuel for the increasingly important source of energy — nuclear electric power.

Goodyear employes responded to the challenge in the 1950s when the United States expanded its enriched uranium production capability by building the Portsmouth gaseous diffusion plant. It assured a supply of enriched uranium for defense applications.

Goodyear employes responded to

the challenge in the 1960s when an increasing portion of the plant's production stream was directed toward sustaining the early years of the nation's infant nuclear power program.

Goodyear employes responded to the challenge in the early 1970s when nuclear power matured from infancy to vigorous adolescence, necessitating the initiation of our \$1.5 billion Cascade Improvement and Cascade Uprating Programs to increase the production capacity of all three gaseous diffusion plants.

And Goodyear employes will respond, I am confident, to the challenge of an exciting future as the new multibillion dollar centrifuge enrichment plant rises along side its sister plant to assure America's continuing leadership in supplying the uranium enriching needs of the free world.

The newer and more promising centrifuge technology offers the great attraction of reduced power requirements, which is important in an energyconscious age. I want to assure you, however, that the three gaseous diffusion plants, with their proven efficiency and reliability, will continue for decades as the backbone of this country's uranium enrichment capability.

The country requires the added enrichment capacity of the new centrifuge plant to offset our dwindling supplies of gas and oil. Despite differences of opinion as to available reserves, it is not a question of if we will run out of oil and gas, but only a question of when.

Conservation, coal, and alternate

sources of energy, such as solar and geothermal, can take up much of the slack created by diminishing supplies of oil and gas. The country, however, will have to rely on nuclear power to satisfy a considerable portion of the growing demand for electrical energy.

I am certain that Goodyear employes, along with fellow Energy Research and Development Administration (ERDA) employes, look forward to working with the new Department of Energy (DOE). As you know, DOE will absorb the functions of ERDA, along with the programs of a number of other energy-related

A natural question for those of us in the family of Oak Ridge Operations to ask is, what role is being assigned nuclear power by the new Department of Energy? I believe the question can be answered by examining the National Energy Plan which will serve as charter for DOE. The plan states that the U.S. . . . must continue to count on nuclear power to meet a share of its energy deficit." The plan cites reliance on conventional, lightwater power plants and for that reason speaks of the necessity for having assured supplies of enriched uranium to fuel not only our own domestic reactors but those abroad in countries sharing our non-proliferation objectives.

In a related move, James R. Schlesinger, the newly confirmed Secretary of the Department of Energy, said, at the conclusion of his Senate confirmation hearings in early August, that the administration will propose legislation which, if approved by Congress, could greatly streamline the nuclear power plant licensing and building processes, paving the way for acceleration of the use of nuclear power for production of

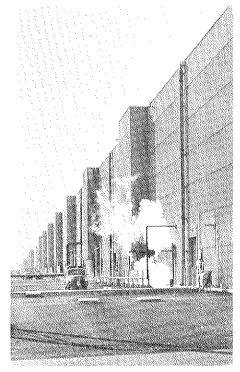
The Atomic Credit Union is among

many organizations passing along its

congratulations to the company this

My fellow employes in Oak Ridge Operations join me in congratulating Goodyear Atomic employes for their excellent performance record over the past 25 years. We look forward with you to an exciting future as we do our part in strengthening the national energy posture.

R. J. Hart Manager ERDA Oak Ridge Operations



Despite the centrifuge's reduced power requirements, ERDA's R.J. Hart says the gaseous diffusion system used in GAT's three half mile long process buildings will remain the backbone of U.S. enrichment capability.

Future bright for credit union;

assets now over \$5 million

Two down, one to go for anniversary committee

For months, a group of 15 GAT employes has been hard at work going from one meeting to another, checking plant layouts, reviewing artwork, renting tents, drafting letters, drawing bus routes and surveying plant property.

That group is the 25th Anniversary Celebration Committee and since June they've been putting their heads together to provide their fellow GAT employes with a 25-year anniversary worth remembering. With the successful company picnic at Camden Park and an eventful blimp visit behind them, all that remains of their "part-time" duties is the open house this Sunday. Then they can go back to their regular assignments

Chaired by W. Dee Hughes, staff to the industrial relations division manager, other members of the committee are:

John Gedeon, coordinator, public communication Jim Hamilton, recreation

Joe Carver, payroll supervisor

Pam White, steno, purchasing

Gordon Williams, superintendent, computer systems & programs John Thompson, engineer, general engineering

Art Clary, staff to assistant general manager, operations

Vince DeVito, superintendent, nuclear materials control Joe Eyre, superintendent, process maintenance

Don Rockhold, supervisor, maintenance division Harry Gowdy, general foreman, maintenance division

Bob Zeek, staff, production division Linda Ortman, secretary, engineering

Jim Spriggs, safety supervisor

year. And although not yet marking its 25th anniversary, it is celebrating too. For, as credit union manager Les Oyler says, "The outlook for the credit union follows the same path as the outlook for Goodyear Atomic. And the future has never been brighter for Goodyear

Atomic than it is right now.' Chartered in December, 1955 and

opened for business in February, 1956, the credit union reached its first million dollars in assets in 1966. It subsequently reached \$2 million in 1971; \$3 million in 1973; \$4 million in 1975, and exceeded \$5 million early this year.

Those early organizers wouldn't have dreamed that the small credit union they were starting would grow to well over \$51/2 million in assets in less than 25 years," added Oyler. "That's where we stand today. And the possibility is good that we'll pass the \$6 million mark yet this year.'

While the credit union has enjoyed phenomenal growth, Oyler says it can only continue that pace if members and potential members use its services.

"As members make deposits in share accounts and use available money for credit requirements, the credit union will continue to grow," he said. "And as we grow, we'll be able to offer other services.

Oyler adds that if members want to suggest any additional services, they should contact their representative on the credit union board of directors or stop by the credit union office and discuss it with an employe there.

The credit union is a unique organization in that its members are actually the owners," added Oyler. "And we encourage our members to take an active role in the credit union."

Expansion brings optimism; major construction in '79

"If necessary, Ohio will declare war on Tennessee" — Ohio Governor Rhodes.

"A definite commitment was made to the community and it is expected to be carried out" — Ohio House Speaker Vernal Riffe.

"The indecision on relocation of the expansion caused concern, suspicion and distrust" — U.S. Senator John Glenn.

"I am going to wage my own campaign to make it untenable for the President to take our project away from us" — U.S. Representative William Harsha.

That's what about 1,000 area residents heard in the packed Portsmouth American Legion Hall on April 23. They were attending a lengthy, spirited rally calling for location of the new \$4.5 billion uranium enrichment facility in Pike County.

One of those on hand that spring afternoon was Robert Fri, acting administrator of ERDA. He also had something to say.

"I was sent here to get a message and take it back," said Fri. "I think I got the message. I can guarantee I'll take it back."

He did.

And on July 11, he had something else to say — that President Carter had approved Portsmouth as the site for the new centrifuge uranium enrichment facility.

All that is history now. But what about the future? To say the least, it looks quite good.

ERDA projects that 4,000 people will be employed in the centrifuge construction effort. And there will be at least 2,000 permanent jobs within 10 years. That is good news for Pike, Scioto, Jackson and Ross counties, where unemployment has generally ranged from 12 to 18 per cent — more than twice the state average.

Chambers of commerce throughout

Southern Ohio are predicting strong economic spinoff effects from the plant, said to be the largest federal installation at a single location. The boon should reach into Kentucky and West Virginia and draw workers from as far as Cincinnati and Columbus.

"It will have tremendous impact on a wide area," said Douglas Blankenship, business manager for the Tri-State (Ohio, Kentucky, West Virginia) Construction Trades Council. "Unemployment has reached as high as 40 to 50 per cent among skilled tradesmen in this area."

That will change rapidly, according to Will Walker, deputy manager of ERDA's Portsmouth Area Office.

"ERDA will definitely make every effort to do all it can to hire local people," said Walker. "And because of the high unemployment in this area, there should be an accessible, on-board and available labor pool."

Walker added that work is already moving along on the new facility.

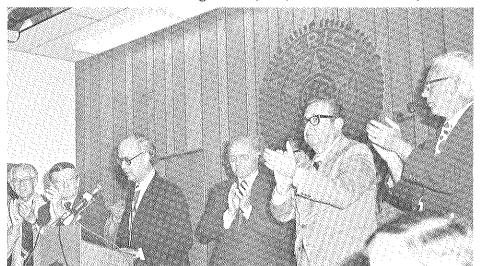
"We'll start construction of a new ERDA Portsmouth Area Administration Building this fall," he said. "And later this year work on items such as construction warehouses and garages will get underway."

Major construction start-up will take place in 1979.

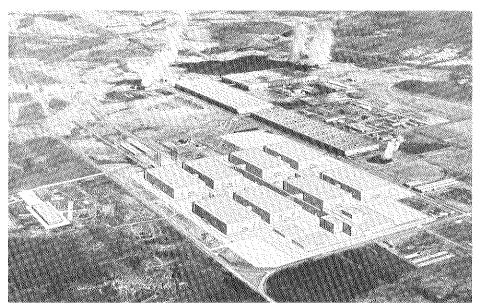
"Initial production will begin in 1986 with full production scheduled for 1988," added Walker. "We expect our peak construction employment period to be between 1983 and 1988, when some 4,000 workers will be on board. And by 1988 we should hit the peak plant employment level of about 2,300."

Those employment peaks, however, should not have the negative impact on area communities that the boom and bust days of the 50s had when the original Portsmouth facility was built.

"That plant was constructed very quickly in a Cold War atmosphere and



At an April rally, ERDA's Robert Fri (at lectern) "got the message" from local residents. Successfully pushing prospects for locating the centrifuge plant here were, left to right: U.S. Senator Metzenbaum, Ohio House Speaker Riffe, U.S. Senator Glenn, Ohio Governor Rhodes and U.S. Representative Harsha.



A glimpse into the future is provided by an architectural rendering depicting the new centrifuge plant. It will be built in the southwest corner of the present site.

22,000 construction workers were here over a short period of time," said Jack Smith, a staff member of the Ohio Valley Regional Development Commission and staff director of the Expansion Impact Committee. "This time we'll have a more gradual, workable schedule. And even with construction and operations at their peaks we'll only have about one-fourth the number of people that were here in the early '50s."

Smith's committee also is pre-identifying expansion problems and making

plans to correct them so that communities aren't faced with the same schooling and housing problems encountered in the 50s. And Smith adds that with the high area unemployment rate, a massive influx of skilled labor won't be needed to the extent it was 25 years ago.

"I'm optimistic that we can enjoy the many benefits of new jobs in our area without damaging the communities in which these people live," Smith added.

How centrifuge process works

The centrifuge process upon which the plant will be based has been under development for 15 years. In this process, uranium gas is whirled in high-speed centrifuges to separate U-235, the fissionable form of uranium and the source of nuclear fuel, from U-238. The separation takes place because of the difference in isotopic mass between the two forms of uranium.

The new facility will consist of four production units that will be housed in eight process buildings. Each process building will be about 425 feet wide by 650 feet long, covering some six acres. Located in the southwest corner of the present plant site, the new facility will encompass about 350 acres.

ERDA reports the expansion will "re-establish international credibility for the U.S. as a supplier of enrichment services, thereby assisting the country's international objectives."

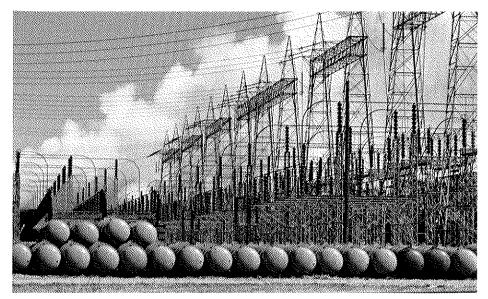
Availability of the new centrifuge capacity, combined with improvements now being made at the three gaseous diffusion plants, will more than double U.S. enrichment capacity. And the add-on plant alone will increase U.S. capacity to process nuclear fuel by almost one-third.

While the centrifuge requires higher capital expenditure, overall it is quite competitive with the gaseous diffusion process.

One advantage of the new process is that the separation factor for a single centrifuge is many times greater than that which can be achieved in a single diffusion stage. Only a relatively few centrifuges are needed to enrich uranium to nuclear power reactor fuel concentration level. However, a centrifuge cannot achieve more than a very small fraction of the total material throughput of a diffusion stage. As a result, a great number of centrifuges must be connected in parallel for a plant to generate a commercially significant amount of product. The number of centrifuges required for any large capacity enrichment plant is therefore quite substantial.

Another advantage of the centrifuge is that the new plant will require only about 10 per cent of the power needed to operate a gaseous diffusion plant of equivalent capacity. And that should result in lower costs to uranium enrichment customers.

While it uses less energy, the centrifuge process will require more labor. "It takes fewer people to build the plant," says Robert Fri, acting administrator of ERDA, "but in the 30-year operating life, it means 1,500 more permanent workers to run a centrifuge plant than it would a diffusion plant."



Cylinders containing \$274 million worth of enriched uranium — a new record — were shipped in the Toll Enrichment Program during 1976, easily eclipsing the \$4 million mark established in the program's first year, 1969.

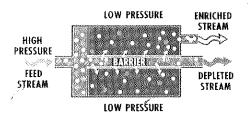
Technical expertise required in gaseous diffusion process

Over the past two and one-half decades, Goodyear Atomic has played a major role in the production of uranium enriched in the U-235 isotope through the gaseous diffusion process.

Basically, gaseous diffusion works like this: UF₆ is introduced as a gas and made to flow along the inside of a barrier tube. About one-half the gas diffuses through the barrier (which contains pores less than two-millionths of an inch in diameter) and is fed to the

With an electric bill of \$15 million a month, GAT consumes twice as much electricity as the Columbus and Southern Ohio Electric Company produces to serve 22 area counties. Yet the uranium enriched in the plant will yield 30 times the amount of power it consumes.

next higher stage; the remaining undiffused portion is recycled to the next lower stage. The diffused portions of the gas are slightly enriched with respect to U-235, and the undiffused stream is depleted to the same degree. This is achieved due to the difference in mass of the molecules inherent in the isotope.



GASEOUS DIFFUSION STAGE

In order to accomplish a significant amount of separation between the two isotopes, several thousand stages of equipment are joined together to form a cascade. UF6 gas, which has a concentrating 0.7 weight per cent of U-235, is introduced into the cascade at a feed point usually located near the lower end of the plant system. Here the UF6 gas is compressed and then diffused through a porous membrane of barrier. The gas stream enriched in U-235 is pumped into the next upstream stage while the undiffused stream depleted in U-235 is pumped to the next lower stage. Groups of stages are coupled in this manner to create operating units and such groups in turn, make up the cascade.

Proper gas flow rates through the acres of barrier surface must be maintained. This requirement — coupled with the use of special compounds and metals, leak-tight and spotless system requirements and other complex plant design criteria — underscore the remarkable technological and engineering expertise required in the gaseous diffusion process.

More than just tires

Search for new products, markets cornerstone of Goodyear growth

When the first bicycle tire rolled out of an old converted strawboard factory in Akron, Ohio in 1898, The Goodyear Tire & Rubber Company began pedaling its way toward becoming the world's largest rubber company — a title it has held since 1926.

And principally tires — for wheels of all kinds — have cushioned that 79-year trip from an "unknown" to Goodyear's status today as the nation's 23rd largest industrial corporation.

Pursuing from the outset a business philosophy of continually searching for new markets and new product applications, Goodyear by 1916 had become the world's largest tire company. It then adopted the slogan, "More People Ride on Goodyear Tires Than on Any Other Kind." The slogan still is true today.

Although tires continue to be Goodyear's biggest single sales factor, the company has become a highly diversified corporate enterprise.

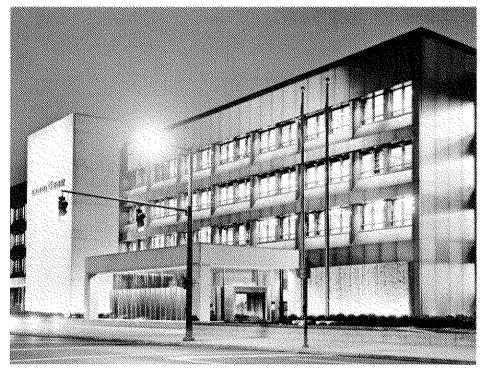
As a result, the company's product line has blossomed from the original bicycle tires, carriage tires, horseshoe pads and poker chips to more than 3,500 sizes and types of tires, synthetic rubber, shoe soles and heels, flooring and counter tops, foam cushioning, wheels, brakes, rims, automotive fan belts and hose, power transmission belts, huge conveyor belts, adhesives, chemicals and space-age plastics, packaging films, plastic film and sheeting, graphic arts supplies, aerospace and defense products and atomic energy.

The company has extensive rubber plantations in the Philippines, Indonesia, South America and Central America. And Goodyear even operates a luxury resort and 13,000-acre farm in Arizona, serving as a proving ground to test farm tires and agricultural equipment and as a laboratory for sound conservation practices.

These and many other quality products are produced by some 150,000 Goodyear employes at 138 production facilities that circle the globe. And complementing those manufacturing facilities, about half in the U.S., half overseas, are sales and distribution operations that cover virtually all areas of the free world.

Incorporated with a capital stock of \$100,000 and 13 employes in 1898, it took Goodyear 53 years to reach that first billion-dollar sales milestone. From that record performance in 1951, the trend picked up — \$2 billion in sales in 1964, \$3 billion in 1969, \$4 billion in 1972 and \$5 billion in 1974. Last year's sales of \$5.791 billion established yet another record.

Those figures point out the obvious—that Goodyear has enjoyed phenomenal growth in employes, products and sales in its 79-year history. And with the continuing growth of the rubber industry, the exciting space age, the development of new products through research and continuing capital expansion at home and abroad, the company will continue to grow, to change, to innovate.



Goodyear's Akron headquarters — home office of a company that has grown to 138 production facilities, 150,000 employes and a standing as the nation's 23rd largest corporation.