The WINGFOOT CLAN

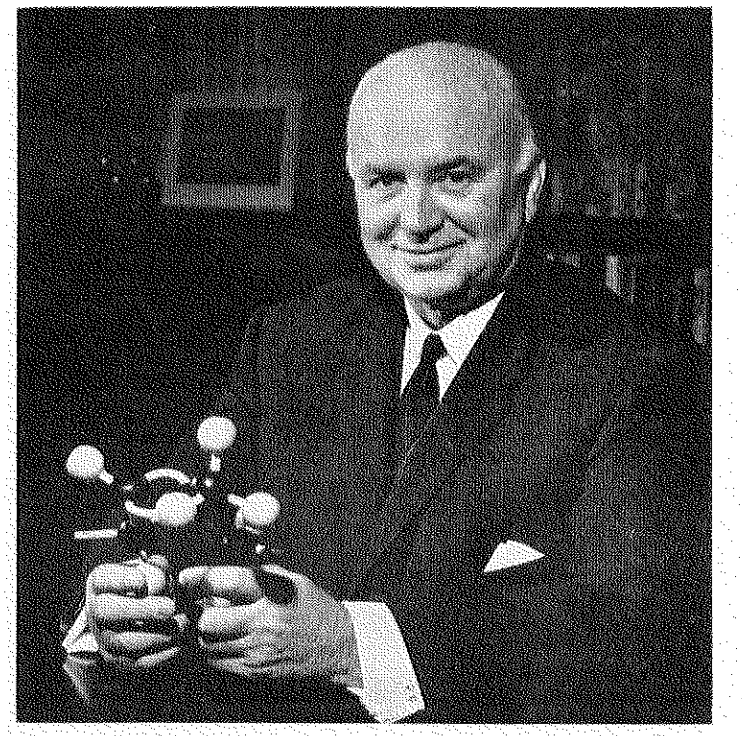
THE GOODYEAR TIRE & RUBBER COMPANY

1960 ANNUAL REPORT TO EMPLOYES

Akron, Ohio, Tuesday, February 14, 1961

SECOND BEST SALES YEAR TOPS $1½ BILLION IN '60; INCOME IS SECOND HIGHEST

World Leadership Maintained By Company Despite Lower Level Of Business Activity; Assets Are Now More Than $1 Billion



Chairman E. J. Thomas holds model of isoprene molecule, building block of Goodyear's synthetic-natural rubber, Natsyn, to be manufactured in new Beaumont, Texas plant.

GOODYEAR ENTERS '61 WITH PLANS FOR GROWTH IN WORLD MARKETS

BY E. J. THOMAS
Chairman, Board of Directors

Although the year 1960 was a very competitive one with a generally lower level of business activity, our sales and profits for the past 12 months were higher than for any previous period in our company's history, except 1959, when all-time records were established.

Our total income of $1,556,693,316 was made up of $1,550,940,519 in sales and the balance in other income. Earnings were $71,022,877.

Our company's sales volume exceeded the $1½ billion mark for the second successive year. In addition, total assets of our company passed $1 billion in 1960 — the first time this has ever been achieved in the rubber industry.

Tribute to Achievement

These achievements are a tribute to the teamwork, spirit and ability of Goodyear men and women throughout the world who faced up to the combined task of effecting economies, improving product, and developing an even more aggressive sales effort. It is also a tribute to the largest group of dealers and distributors in our industry, who met new and more vigorous forms of competition by selling the best in products and providing the finest service to our customers.

The 1960 economic adjustment reminded us that business does not proceed forever along a straight upward course and that occasional pauses in our economy are regrettable but inevitable. However, the American economy and our industry remain strong and dynamic, with great potential for future growth.

On the inside pages of this issue of The Clan, the highlights of our various operations during 1960 are covered. There are a few things, however, I would like to mention.

Important Steps Taken

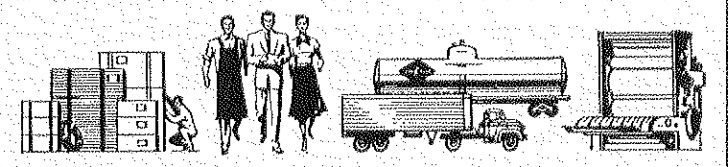
We took important steps during 1960 to meet competitive conditions, to take advantage of sales opportunities in our various product lines, and to plan for future growth in our markets both at home and abroad.

These included broadened and intensified research activities; introduction of new and improved products; continued modernization and expansion of production facilities to provide manufacturing economies and to serve growing markets; improved distribution facilities for better service to our customers; strengthened sales

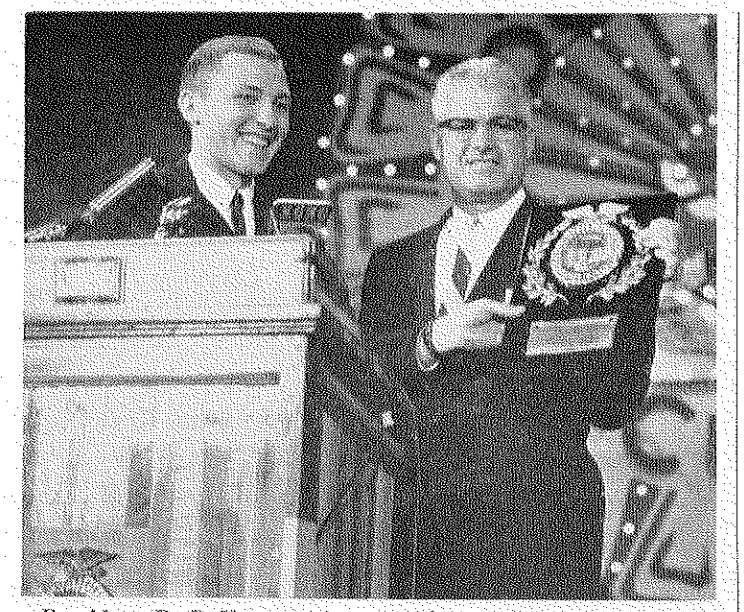
(See THOMAS on Page 2)

We Took In	$1,556,693,316
We Earned	$ 71,022,877

THIS IS **WHERE** IT WENT



	OUT OF EACH DOLLAR	TOTAL DOLLARS	
MATERIALS	45.9¢	$714,526,471	Paid out for **rubber, fabrics, chemicals, steel, compounds** and **other materials** purchased from suppliers.
EMPLOYES	30.2¢	$469,826,375	Paid out for **wages, salaries, social security taxes, pension plans** and **premiums** covering group life insurance, hospitalization (including surgical and weekly benefits), and **Supplemental Unemployment Benefits** for employes.
OPERATING	10.2¢	$159,686,146	This amount covered **other operating expenses** including **freight, rent, advertising, insurance** and **interest** on borrowed funds.
TAXES	5.9¢	$ 91,812,247	Paid to **Uncle Sam** and to **local, state** and **foreign governments** in **income** and **property taxes** (excluding social security and excise taxes).
DEPRECIATION	3.2¢	$ 49,819,200	This is the amount **reserved** for replacing machinery and equipment as it wears out or becomes obsolete.
PROFITS — RETAINED	2.7¢	$ 41,323,846	This amount was **retained** by the company to partially provide for continued growth and the ever-increasing cost of doing business.
PROFITS — DIVIDENDS	1.9¢	$ 29,699,031	This sum was paid as **dividends** to Goodyear's shareholders who provide the money to buy our many plants and equipment.



President R. DeYoung (r) received '60 award for running successful fund raising campaign for Future Farmers Of America from youth organization President James Thomas.

Company Invested Millions To Modernize And Expand Manufacturing Facilities

BY SAM DUPREE
Vice President of Production

Optimistic over the long range growth of the economy and our markets, Goodyear continued its program last year of investing in greater productive capacity and modernization.

Despite the decline in domestic plant production from the record levels of 1959, the company spent millions of dollars in 1960 for increased plant capacity and improved manufacturing techniques. The investment was for plant additions, modernization of existing facili es and for new equipment to replace the obsolete.

In Akron, airplane tire and industrial tire production facilities were expanded, and several hundred thousand dollars were spent to revamp the electric system on mill line controls at Plant 2, and to install a high tension belt tester.

Chemical Industry

One of the fastest-growing industries in America today is chemicals. To keep pace with this growth the company invested millions of dollars in new chemical plant facilities. The biggest commitment (more than $20 million) was for the synthetic rubber plant in Beaumont, Texas.

Other large sums were authorized to expand the Akron Chemigum plant and to install new equipment at Houston and Niagara Falls which will add to our capacities for synthetic rubber and vinyl resin production. We also made improvements in plants which produce industrial products and vinyl flooring.

Tire Demand

To be prepared for the increased tire demand anticipated in this decade, the company in 1960 took steps to expand tire manufacturing facilities in the domestic plants. Much of this expansion is still under way.

New Machines

New passenger tire building machines, similar to the ones scheduled for Plant 2, have been installed at Jackson, Gadsden and Topeka. These machines were designed by our engineering division. We consider them to be the finest of their kind on the market today.

Also at Jackson and Gadsden an extensive modernization program was undertaken last year to improve our truck tire operations. We are strengthening the Topeka plant's position as the world's largest manufacturer of earthmover tires by building an addition to the plant.

Substantial funds also were allocated to provide new facilities for increasing passenger tire production at Los Angeles.

Tire Fabric

To meet our growing need for high quality tire fabric we authorized installation of a $2.5 million fabric-treatment unit at the Cartersville fabric mill.

Changing requirements and specifications of our customers provided a constant challenge to our production organization in 1960. The challenge continues in 1961. We are confident that with renewed vitality we will not only meet the challenge but pave the way for new opportunities that will mean new markets.

Greater Emphasis On Quality, Plant 2 Pact—Important In '60

BY RUSSELL DE YOUNG
President

As we look back on 1960, a year marked by a substantial decline in overall business activity, there were two special areas of our operations that were especially noteworthy.

One was the situation at Plant 2, where we hope to make our production costs more competitive. The other was the increasing stress we have given to product quality.

Last October in a series of meetings, Plant 2 tire production employes were told of the company's necessity to reduce production costs and improve output at this plant. Management explained its desire to equip the plant with the most modern tire-building machinery and to modernize the plant if the new production level would be at least equal to that in other plants. We are pleased that representatives of the company and Local 2—United Rubber Workers were successful in reaching an agreement.

We believe that with the continued cooperation of our employes we will keep our costs in line as we proceed with the Plant 2 modernization program. This two-year program, started at year's end, will involve not only the streamlining of tire building operations but also improvements in other phases of tire manufacturing at the plant.

In 1960 our service adjustments were extremely low, permitting us to say—with complete assurance—that we maintained the highest quality product in the industry. This is a tribute to our research, development and production personnel, and there can be no let-up in this essential area if we are to keep our product competitive.

The initial or engineering phase of a Research Building expansion was completed in 1960 and we plan to move ahead with this project in 1961.

Monthly Meeting Program

We continued our program of holding monthly meetings with representatives of the service department and the development department and company officers, to study reports from our field service men and determine any action necessary to improve the product.

Technical servicemen and compounders in the various plants, working with the production organization, have strengthened our over-all position by improving the quality of tires and other products. We expect fine cooperation to continue among the various branches of the company—development, production, sales—in evaluating our product performance and acceptance by the buying public.

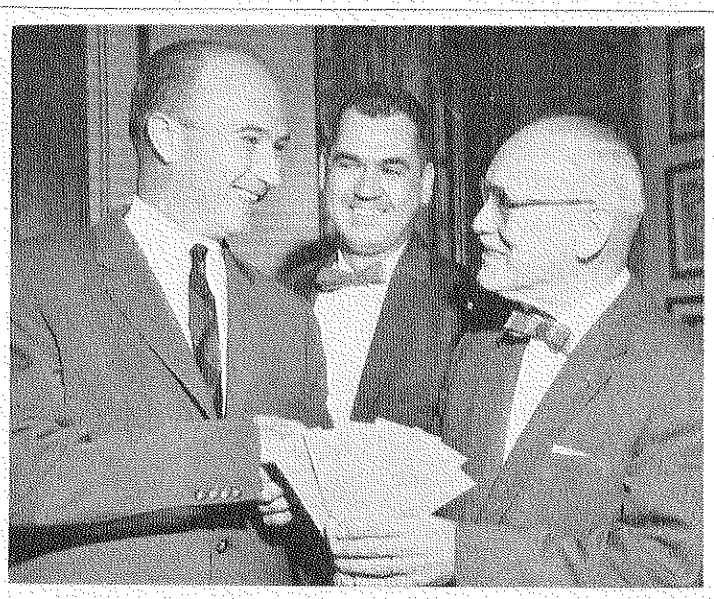
Elsewhere in these pages are reports on new products and new applications of products introduced in 1960. This is a continuing challenge because new products, new uses of products and materials and new approaches to manufacturing techniques increase our over-all business volume, improve our profits and reduce our costs without jeopardizing product quality.

Employe Benefits

During the past year, 802 hourly and salaried employes retired, bringing to 5,092 the number of retired employes now receiving benefits from the company.

In the area of employe recreational activities a milestone was reached with the 40th anniversary observance of Goodyear Hall as both a company and community activity center.

Increased emphasis was placed on improving our relations with the public during the year. All of us can share in the pride that comes in knowing the esteem in which the public holds our company. Special articles about Goodyear and its products appeared in many leading newspapers and magazines during the year, and on radio and television. The Goodyear name is our most valuable asset and we must protect and promote it in everything we do, if our company is to continue its leadership in our industry.



Vice President Sam DuPree (1) presented highest suggestion award of $5,000 to Tom Kolins as J. D. Petersen looked on.

(Thomas—Cont'd.)

programs and accelerated advertising and public relations activities.

Tire Leadership

For the ninth consecutive year, industry replacement tire sales in the United States were higher than in the previous year, reaching a total in 1960 of more than 80 million pneumatics of all types.

Goodyear is a supplier of tires to all automobile manufacturers in the United States, a unique position in our industry. And again during 1960, as it has been since 1916, more people rode on Goodyear tires than on any other kind.

In addition, our leading position in tires was strengthened by the introduction of new types and improved designs to give tire customers even greater value.

Research Break-Through

During the past year, Goodyear research contributed another major break-through in the important field of synthetic rubber through the practical commercial application of two new rubbers—Natsyn and Budene.

These new "stereo" rubbers will go into production in 1961 in the company's $20-million plant now under construction near Beaumont, Texas. Both will provide important economic advantages and will make possible quality improvements in tires and other products.

New Plants

Highlight of the international program was the opening of our new tire plant at Amiens, France, which started production just nine months after groundbreaking.

Our new tire plant at Medicine Hat, Alberta, began operations on June 15, 1960, establishing Goodyear production in the growing market of Western Canada.

The new tire plant near New Delhi, India, is scheduled for completion in mid-1961, thus putting our company in a better position to serve that nation's growing economy.

Serving the Government

During the year, our contract to operate the giant gaseous diffusion plant at Portsmouth, Ohio, for the Atomic Energy Commission was renewed. Uranium-235 from this plant, which we have operated for the AEC since 1953, has made vital contributions to the "Atoms for Peace" program, as well as to the atomic weapons systems so essential to our national defense.

Employe Relations

Harmonious labor relations built through the years were generally maintained, enabling our company to negotiate new wage contracts without loss of production. A major medical plan was put in effect to insure salaried employes against the more serious illnesses.

Interest was maintained at a high level in the company's various training programs for all our employes and dealers.

The Year Ahead

In 1961 it looks like there will be reduced shipments of tires and other products for original equipment purposes. The tire replacement market, however, should prove to be a little larger. The market for rubber products abroad should continue to be greater.

Competition, as always, will be keen.

We believe there are continued opportunities ahead in both the rubber and related industries, and our organization is ready and able to take advantage of these as they occur.

In fact, our momentum and enthusiasm for the task ahead have never been higher.

Victor Holt, Jr.

Company's Outstanding Sales Record In '60 Credited To Everyone In The Organization

BY VICTOR HOLT, JR.
Executive Vice President

Goodyear is still in a class by itself.

For the second year in a row we pushed our sales over the $1½ billion line that separates us from every other rubber company in the world.

With sales of $1,550,940,519 in 1960 we maintained not only our position of world leadership, but achieved the second greatest sales year in our history.

This was accomplished in the face of competitive conditions that can be adequately described only as "fiercer than fierce."

That the company achieved this outstanding record in the face of a nationwide slackening in business during 1960 is the greatest tribute that can be paid to our entire organization: production, finance, sales and all the allied staff departments.

For an idea of the amount of business our sales people wrote in 1960, consider the fact that it added up to more than the total sales of the company in its first 25 years of existence. That, in my book, took a lot of doing.

Renewal Sales

In one of the most important fields of our business—renewal tire sales—Goodyear maintained its leadership in the face of stepped-up activity by all of our competitors including the chain stores, oil companies, cooperatives, discount houses and department stores.

Our continuing leadership in renewal sales is due, in large part, to the finest dealer organization in the industry that sells under the Goodyear diamond from the Atlantic to the Pacific. As a group, our dealers, in their loyalty and devotion to the company, are unmatched by any of our competitors.

Original Equipment

In the other field of tire sales—original equipment—we can all be enormously proud of the fact that in 1960 Goodyear became the only company in the world to serve all the major automobile manufacturers.

And during 1960, with 1 million more cars produced than in the previous year, Goodyear registered a very substantial step-up in passenger car tire sales. And this increase far outweighed the slight decrease in the sale of farm tractor and truck tires.

What's more—Goodyear had more original equipment on such vehicles than any other company.

"More People Ride . . ."

As a result of this overall tire showing, we can still say with a great deal of pride that "More People Ride on Goodyear Tires Than on Any Other Kind."

Quality Never Higher

We are able to maintain this position year after year for many reasons. Due to the top-notch caliber of our technical research and development, because of the efficiency of our machines and production methods, the quality of our products has never been higher.

Advertising Tells the World

Throughout 1960, we hammered home to a turnpike-conscious motoring public the theme of our "Turnpike Proved" tires. To take advantage of the growing popularity of comedy on TV, we co-sponsored the new "Pete and Gladys" show. In this way we reach 10 million homes weekly with our sales story on Goodyear products.

Lots of Good Things

While tires have always been—and will for a long time continue to be—the Number One Goodyear product, the diversification of the company's products lines has reached staggering proportions. Right now it takes a tightly printed 36-page catalog to list all of them.

In order to bring all these more vividly under the Goodyear reputation for quality—to stamp on the public mind indelibly the fact that all our products are Goodyear Quality Products—we launched in 1960 a major new advertising campaign with the theme that "Lots Of Good Things Come From Goodyear." We pushed the theme throughout the year in major popular and prestige magazines, on TV, and in promotions through dealers and stores.

Industrial Products

1960 was a year of outstanding progress for our Industrial Products division.

Expansion of the product line through the development of new products with high potentials, an efficient operation, coupled with a growing automotive business, all played their part in the 1960 growth.

The division continued its leadership in the important fields it serves.

Chemical Division

The Chemical division expanded its production capacity and introduced many new products during the year.

With the base of the chemical industry in the United States becoming broader every day, and the uses of chemical products constantly increasing, the potential growth factor in this field is very great.

Chemical Products, already a major supplier to many of the nation's most important industries, has geared itself for the future.

Metal Products

Truck, farm implement and earthmover manufacturers again recognized Goodyear's superior design and quality, with the result that the division maintained its position of leadership in production and sale of rims to the heavy transportation industry.

Films and Flooring

Goodyear's versatile Film Products broadened established markets and invaded new fields in 1960. An increasing number of food items are wrapped in protective Pliofilm and Vitafilm. Videne is being supplied to manufacturers as a superior finish on plywood. It can also be used as a surfacing material for metals, plastics and paper board. Goodyear contributed another "first" in the flooring industry with the introduction of all-vinyl compounded flooring in full six-foot widths.

Foam Products

This division adjusted to swift-moving changes in the cushioning field by providing a full line of materials for all cushioning needs for furniture and automobile manufacturers. Goodyear continues to be the world's largest producer of safety padding for automobile panels.

Shoe Products

Goodyear Shoe Products continued as strong favorites in 1960 with footwear manufacturers and shoe repairmen. Neolite soles and heels, Super Cushion and Wingfoot heels, Neothane toplifts, Jetlite plastic heels and other Goodyear shoe items continue as preferred products with shoe repairmen.

Aviation Products

During 1960, Aviation Products worked in two areas, outer space and the sky immediately overhead. With a great array of products for the conventional aviation we all have known, the division also kept its eyes on greater distances with the development and improvement of such products as rubber insulation rocket liners as a basic goal. Throughout the year, new markets were sought and seized for Iceguards, Terra-Tires and Rolli-Tankers.

The Future

Our plans are big; our hopes high; and the quality of our products is unsurpassed. Competition will be more severe, presenting even greater challenges.

I think Emerson put his finger on the crux of the situation when he said—"These times, like all others, are good ones if we but know what to do with them." And while I am quite sure Mr. Emerson was not thinking of us at the time, I feel certain he was describing the way Goodyear people will respond to the challenges of 1961.

Working Capital At New Peak Assets Are Over $1 Billion

BY H. L. HYDE
Executive Vice President

In the light of intensified competition and some pause in our country's economic growth, Goodyear's financial results for 1960 were gratifying.

Our consolidated net sales of $1,550,940,519 and consolidated net income of $71,022,877 were the second highest in our history, second only to the record year of 1959.

We were quite optimistic as we moved into 1960, and in the first few months it appeared that our optimism was well-founded. Our volume was up and profit margins were reasonably satisfactory. Then, in the early spring and summer, the economy began gradually to lose momentum.

Economies Necessary

Faced with some decline in sales volume and increases in employment and certain other costs, management had to effect economies by adjusting budgets and instituting even tighter controls on our expense of doing business. As a result of these measures and some reduction in the latter part of the year in the prices we were paying for natural rubber, nylon, rayon and certain other materials, the company attained a somewhat improved final quarter.

This final quarter, coupled with the good showing in the early part of the year and the steady increase in both sales volume and profits in our international operations, produced twelve-month results that are quite creditable. Everyone in the organization can be proud of this achievement in the face of adverse conditions because everyone shared in it.

Other Gains

Besides the second best sales and profit record, the company made other gains which should be noted.

Our total assets passed $1 billion in 1960. This is the first time for such an accomplishment in the rubber industry. Assets, which are what we *own* as a company, include properties such as plants and equipment, warehouses and stores, inventories of raw materials and finished products, accounts receivable and securities and cash.

Our expenditures for the maintenance and modernization of our properties and the expansion of our business increased over the previous year. In 1960 these totaled $74,553,746 compared with $55,640,633 in 1959.

Working Capital At Peak

Our domestic funded debt was reduced $4,700,000 during the year and the company has no domestic bank loans. At the same time we increased our working capital to its all-time peak of $521,520,071, a further indication of the company's financial stability. This working capital is used to buy materials, to meet the payroll and other expenses and to carry the accounts of our customers, pending payment.

For Expansion—$80 Million

Management holds great faith in the growth of Goodyear. The fact that we have announced plans to spend $80 million in 1961 for expansion and modernization is significant evidence of this faith. With a probable reduction in the production of new automobiles of 1,000,000, we recognize that 1961 could be a difficult year, especially during the first six months.

However, with the continued support and enthusiasm of the entire organization, coupled with anticipated improvement in business conditions during the last six months, we believe that another good job can be done in 1961.

H. L. Hyde, executive vice president (r) last year received the Order of Adolphe of Nassau, one of the highest honors awarded by the Grand Duchy of Luxembourg. The handsome gold and white enamel cross on a broad blue ribbon was presented by Luxembourg's ambassador to the United States Georges Heisbourg on behalf of the Grand Duchess Charlotte.

Adjust GAC To Meet Defense Department's Requirement Changes

During 1960, a year considered critical for the aerospace industry, Goodyear Aircraft Corporation adjusted its facilities and capabilities to meet the rapidly changing requirements of the Defense Department.

Company efforts were concentrated on missile systems, undersea warfare, electronics, astronautics, radar structures, ground support equipment, optical and structural plastics and expandable fabrics.

Production and engineering research continued for nearly all agencies and branches of the Department of Defense.

Subroc

In the undersea warfare and missile system areas, the company, as prime contractor for the Subroc anti-submarine missile system, successfully designed, built and tested several components of the Navy's underwater-to-air-to-underwater missile, moving it several steps closer to operational readiness.

Supporting other missile systems, GAC continued to produce huge transport trailers, erection booms and allied equipment for the Atlas missile, built intricate shipping cases for the Polaris missile, and supplied ground support equipment and Atran guidance for the TM76A Mace missile, now operational in Europe.

Electronics

In electronics, work was begun on trainers for the Navy A2F and W2F advanced aircraft in an expanded simulator department. A universal checkout console, containing all the modules necessary for evaluation of almost any electronic device, was offered to the industry in mid-year.

Major advances were also made in development of airborne high resolution radar, radar data processors, high-speed electronic communicators and a computer and display system designed to eliminate human error in navigation at sea.

Nike Zeus

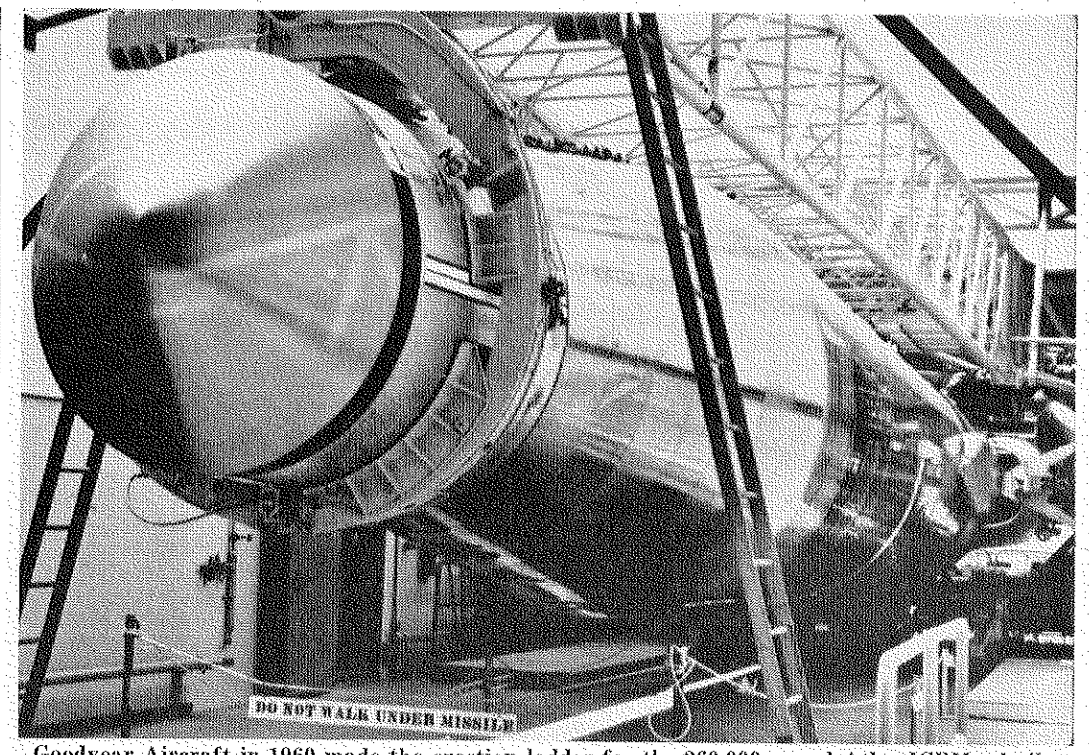
GAC continued during 1960 as a major supplier for the Air Force BMEWS and Army Nike Zeus systems. Fabrication began on 140-foot diameter radomes and tracking antennas for BMEWS installations at Thule, Greenland, and Fylingsdale Moor, England. For Nike Zeus, GAC is fabricating 110-foot radomes, Luneberg Lens receiving antennas, transmitting antennas and an antenna mount for the system's discrimination radar. Work also started on the development and installation of equipment necessary to mass-produce components for the anti-missile system.

The company also produced other types of radar antennas, including those for airport traffic control, and continued work on horns for transmission of microwave signals and TV.

Forward Projects

The company's forward projects group continues work on expandable fabrics for space vehicles. One device evoking considerable scientific interest is a wrinkle-free solar collector with aluminized bowl to concentrate sun rays for space power stations. A high altitude recovery system, called Ballute, using a fabric balloon to slow re-entry vehicles for recovery, was successfully tested for the Air Force. In their study of space requirements, GAC research engineers have found many applications for expandable structures.

In addition, production of laminated fiberglass radomes, radar reflectors and antenna covers continued for military as did manufacture of pilot enclosures, aircraft windshields and windows.



Goodyear Aircraft in 1960 made the erection ladder for the 260,000-pound Atlas ICBM missile, as well as the weapon's nose clamp, alignment rails, base supports and overland "cradle" trailer.

Higher Goals Are Set By Aviation Products As Gap Between Plane And Missile Narrows

The Aviation Products division involved itself more vitally with the challenges of the Space Age during 1960 while it drove straight ahead meeting the demands of conventional aviation.

The Fuel Tank and Fabric Products department offered a prime example of how the division successfully straddled the gap between the plane and the missile.

Never diminishing its efforts to produce a superior line of fuel tanks for planes, the department, at the same time, faced realistically the cold business fact that government procurement emphasis is shifting rapidly from manned aircraft to rockets and missiles.

Rocket Liners

As a result, development and improvement of rubber insulation rocket liners became a prime goal in 1960.

Meanwhile, the department also raised hypalon-coated nylon fabric radomes at major airports across the country to protect Airport Surface Detection Equipment, a radar system designed to eliminate airport traffic jams.

Among the more novel products of the Aviation Products division in 1960 was the inflatable bunk. The Navy ordered both "temporary" and "permanent" type bunks for the shakedown cruise of a new, nuclear powered submarine.

The world's largest "pillow" tank served its first mission last August, providing refueling support for 100 C-119's during a massive mock war in South Carolina. The tank holds 50,000 gallons.

Also in South Carolina, at Myrtle Beach Air Force Base, nine jet fighters refueled in less than 30 minutes to demonstrate the operational capabilities of a new portable gas station composed of five 10,000-gallon tanks and equipment for pumping and delivery.

Special Products

In Special Products, the sales force continued aggressively to seek new markets for three major products, all of whose sales potential still is relatively untried—Iceguards, Terra-Tires and Rolli-Tankers.

At year end, an imposing new customer, the private plane owner, appeared to be the leading new sales target for Iceguards.

New applications for the chubby, "soft touch" Terra-Tires were created regularly. The tires were used on machines for cleaning beaches and racetracks, maintaining cemeteries, and harvesting crops. They were seen on golf cars at more and more courses.

Rolli-Tankers

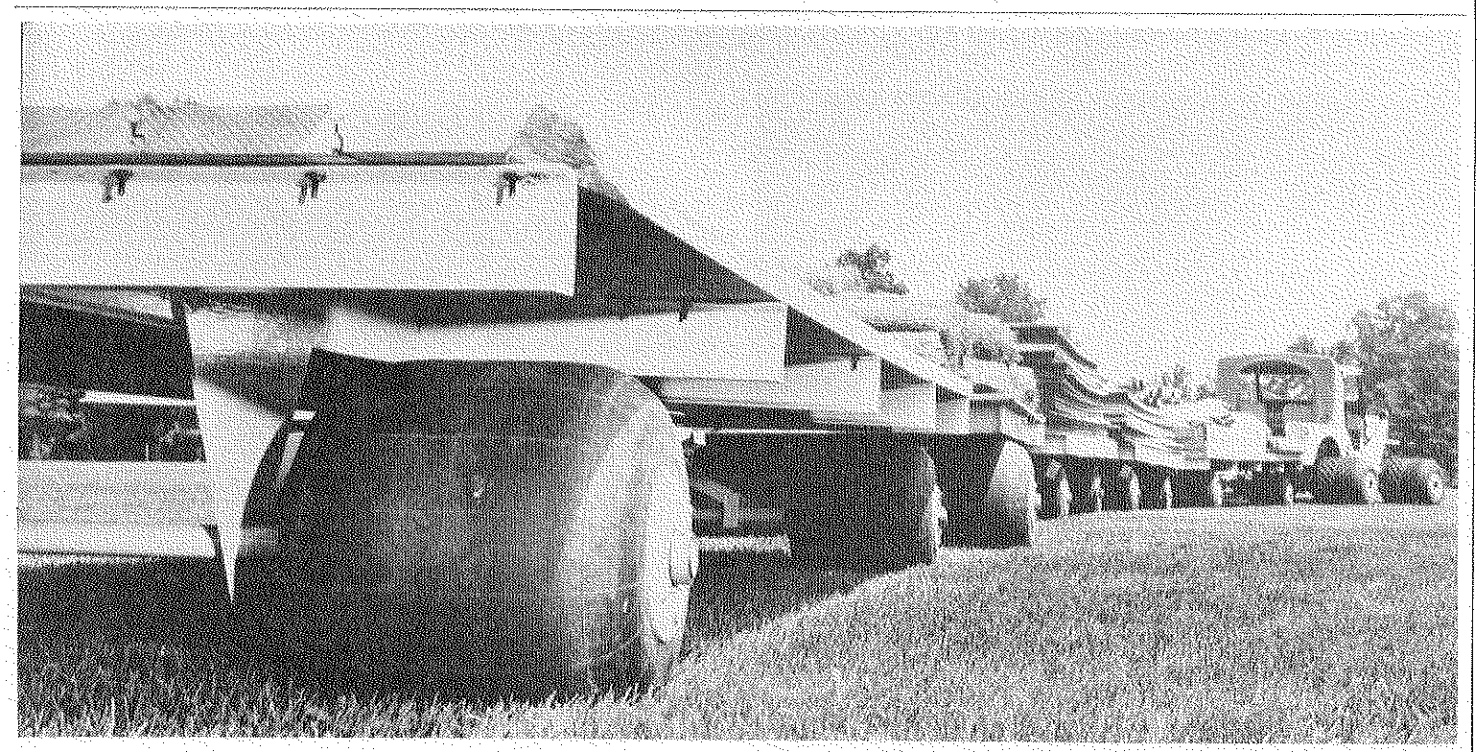
Rolli-Tankers, meanwhile, joined the army in field operations in the United States, Europe and the Pacific.

Sales people in Tires, Wheels & Brakes produced a fistful of impressive orders during the year. Goodyear tires, wheels and brakes were installed on military aircraft including the T39, F105D, B58B and the YHC1B helicopter. Anti-skid systems were installed or became operational on the F100, F104G, F105D, B58B and the JetStar.

Sidewall inflatable tubeless tires were introduced as original equipment on Beech and Cessna Aircraft and the Vertol Helicopter Model 107.

Goodyear Disc Brakes were installed on the Titan and Atlas missile launching platform transporter.

An important new product of 1960 was the Spot Ring Type Brake, which offers improved performance as well as a lower initial cost. It will appear on 1961 commercial small and executive type aircraft.



Softest touch in tires — Goodyear's Terra-Tires — left this lush cemetery lawn unmarked despite great weight of load.

Tire Of Tomorrow Here Today; Safety Nylons In Low-Cost Field; Fastest Car On Goodyear Tires

Tires — covering every phase of development, from beauty to speed — made news for Goodyear in 1960.

The unveiling of Goodyear's colorful Neothane tires late last year gave the American public its first look at what may be the "tire of tomorrow." The translucent tire can be lighted from within, giving forth a warm and colorful glow.

Walter Lee, director of tire research and development, pointed out the tire was still in the development state, but had already been test driven at speeds up to 65 mph.

It contains no fabric or lamination, and is simply constructed with a specially compounded synthetic rubber and a dash of dye, which is poured into a mold and cured. When removed the tire is ready for service.

Fastest Car On Goodyears

In the high-speed field Goodyear tubeless, smooth racing tires carried the automobile that Mickey Thompson piloted at 406.6 mph on the Utah Salt Flats to become the fastest automotive driver in history. In three weeks of intense activity Thompson used just six tires, and all his runs in that period were at more than 200 mph.

A new sports car competition tire, introduced last year, was on the winning cars in many U. S. sports car events. The nation's top name drivers tabbed the tire, the Sports Car Special, a "tremendous success."

Custom Super Cushion

The year 1960 saw the introduction of a new original equipment tire, the Custom Super Cushion. It utilizes a unique zig-zag tread pattern with L-shaped bars to prevent tire squirming, a major cause of noise, wear and loss of traction. The tire can deliver 15 per cent more treadwear than the best 1960 new-car tires.

Development again answered the call from Detroit with a narrow white sidewall tire for compact cars, complementing the styling of the smaller cars.

Low-Cost Nylons

Goodyear became the first major rubber company to put the safety and high speed performance of nylon tires into the low-cost replacement field with its introduction of the 3-T Nylon All Weather early last year.

The U. S. Army Transportation Corps called on Off-the-Road development personnel for a batch of the world's largest tires, specially tailored to afford maximum high flotation for use in Arctic regions.

Farm Tires

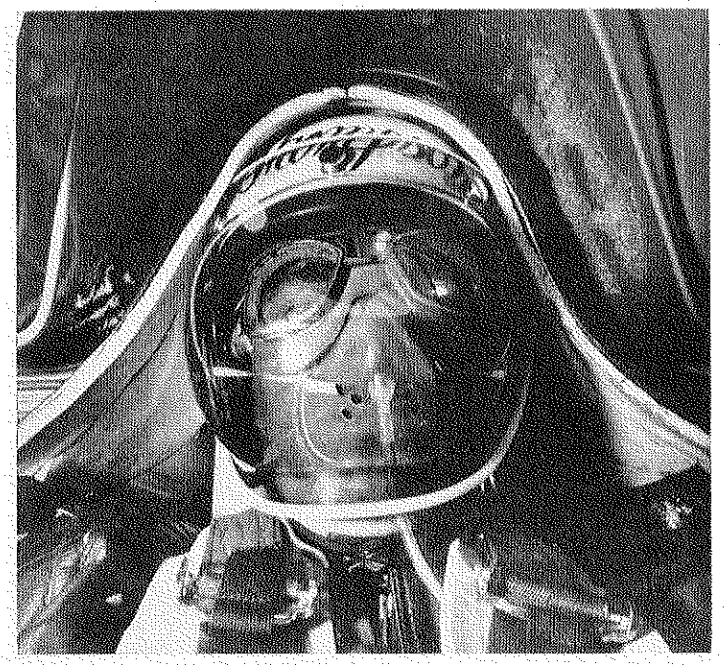
The company's position in the farm tire field was strengthened with the addition of a 16-in. rim size to its popular 15-in. Farm Service tire. 3-T nylon was introduced into the Triple Rib front tractor line.

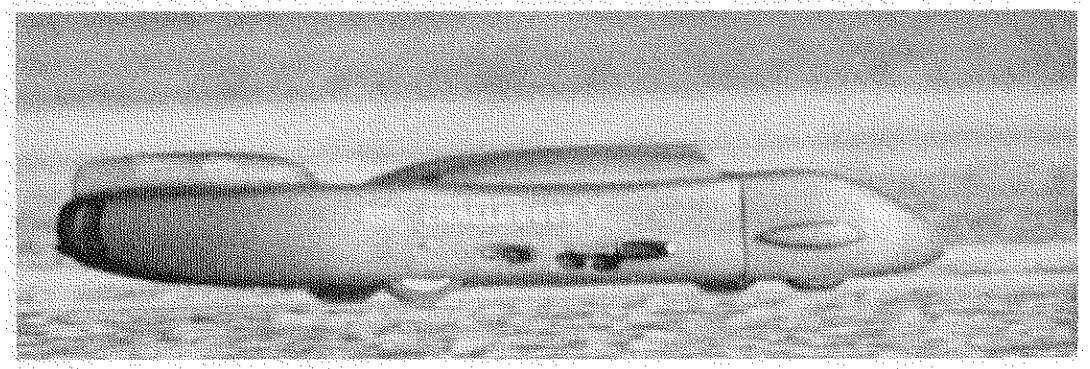
Progress was made in rubber compounding and fabric development in terms of improved quality and performance enjoyed by users of Goodyear tires. The new compounds provide new high levels of achievement in treadwear and weather resistance.

Fabric and Adhesives

The Fabric and Adhesives development staff saw its efforts result in the development of new types of nylon with exceptionally high heat resistance. These fabrics were developed for Goodyear nylon tires worldwide.

A basically new "third order" nylon fabric was developed in 1960. It shows a 25 per cent improvement in fatigue resistance and adhesion. Limited quantities of this new nylon were produced last year in the United States with full production planned for 1961.





Speed demon Mickey Thompson in his Challenger II burned the Utah Salt Flats at 406.6 mph—fastest mile ever turned—on Goodyear tires. Photo shows car at 400 mph, nearing peak of record.

Industrial Products Sales At Peak; Rise In Auto Business And Expansion Of Product Lines Account For Record

Paced by a sharp rise in automotive business and continued product expansion, sales of Goodyear Industrial Products division rose to a record volume in 1960.

Automotive sales leaders included rubber floor mats, radiator hose, fan belts, as well as a host of molded and extruded goods, such as weather stripping and motor mounts.

In conveyor belting, the division increased its market potential with two new lines.

Uniflo

Uniflo, a woven carcass rubber belt developed originally for underground mining service, was redesigned and offered for general industrial application during the year.

Also placed on the market was Curve-Flo, a new concept in belt construction and method of guidance for conveyor systems where cargo flow involves movement around corners.

Sale of passenger conveyor systems, a travel concept pioneered by Goodyear, continued to progress. Of 57 moving sidewalks now in existence in the U.S.A., Canada and Switzerland, 46 use Goodyear belting.

V-Belts

V-belt lines also were broadened substantially with marketing of new Variable Speed, Positive Drive and Hy-T Wedge belts.

Big news in hose was development of a new line for tank farm systems. Designed to give the military forces mobile bulk fuel storage, over 60 miles of this new hose was manufactured during 1960, including 35 miles as part of a $2 million contract for assembly of 93 tank farms for the Army Quartermaster Corps.

Pillow Tank Sales Boom

Commercial sales of pillow tanks, basic component in military tank farms, boomed last year with the rubberized fabric containers being used extensively by electric utility companies for storage and hauling of oil.

Also showing gains were commercial application of dunnage bags and Van-Tanks, the newly developed flexible container for shipment of dry and liquid bulk commodities.

Dock Fenders

The market for rubber dock fenders grew in marine circles with the U. S. Navy still the No. 1 customer.

Rubber railroad crossings, another Goodyear innovation, gained wider acceptance. Deck pads adapted from this product were installed on several navy carriers during the year.

Films & Flooring Reports Higher Sales For Various Products; Markets Widening

New products, production, and new markets set a progressive pace for the Films & Flooring division in 1960.

In film packaging, sales increased in the foods field where three new Goodyear products made their initial appearances. Vitafilm F-10, a new cheese wrap, and Vitafilm PW for produce packaging were introduced in early Spring. A special non-fogging Vitafilm WNF-1, developed for sliced bacon, was launched in the Fall.

Pliofilm

Pliofilm sales continued to grow especially in applications for self service meats and coffee bag liners.

In Plastic Film and Sheeting, Vinylfilm broadened its base with new products and new markets. New colors in insulation facing were announced late in the year, and excellent sales gains were made in film for industrial and agricultural applications, in miscellaneous notions, in Vinylfilm baby pants and in pressure sensitive products.

Videne

Videne, Goodyear's unique polyester laminating film, showed steady progress, with applications on paneling, kitchen cabinets and furniture expected to be on the market in the Spring. Under the trade name Weldwood - Permaguard, U. S. Plywood will offer Videne laminated pre-finished wood panels early in 1961.

In Canada, Dominion Plywoods will supply a similar Videne surfaced product under the Southdene trade mark.

Loewy Retained

In placing new emphasis on fashion, the famous Raymond Loewy organization has been retained to design and color Goodyear's flooring and counter topping, including color selection for the new presentations in NoScrub DeLuxe Evergleam introduced at the January Chicago and New York markets.

Carveyor, elevated conveyor belt for passengers (artist's conception), was developed by Goodyear and Stephens-Adamson Mfg. Co., as a means of relieving problems of downtown traffic.

International Hits Sales Record; Company Exports Exceed '59; Competition Abroad Intense

BY F. T. MAGENNIS
President, Goodyear International Corporation

Goodyear International Corporation established a new record high in net sales volume in 1960, the sixth successive year in which our sales abroad surpassed the previous annual volume.

This was accomplished despite intense competition in practically every overseas market in which we do business.

Sales did not come solely from goods produced in overseas plants; our exports from the U.S.A. in 1960 substantially exceeded 1959's.

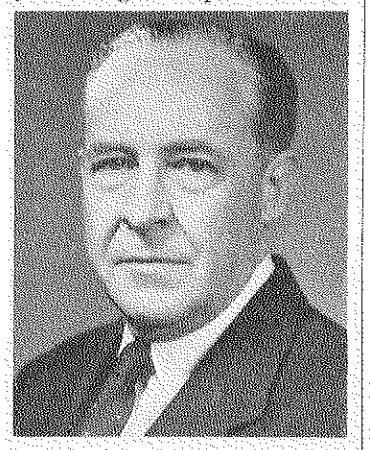
Expanded production capacities of Goodyear overseas plants, provided in earlier years and in 1960, were virtually absorbed as soon as they became available, except in a few areas where political and economic disturbances interfered with normal commercial activity.

Add Plant Capacities

We added to plant capacities last year in Argentina, Brazil, Colombia, England, France, Peru, Mexico, Sweden, Luxembourg and the Philippines.

Production is now well under way in our new plant in France, formally opened in 1960.

Actual production of Goodyear tires was started in Chile. A new Goodyear factory went under construction in India; it is expected to begin making tires this year.



F. T. Magennis

Distribution and sale in Italy of locally manufactured Goodyear tires and tubes commenced early in 1960 and is showing satisfactory progress.

Further improvements and expansions in many of our wholesale and retail distribution facilities continued during the year. Additional activity in this direction is scheduled for 1961.

In England we began the manufacture of antioxidants for the rubber industry in our Wolverhampton plant.

In 1960, we lost the factory in Cuba by intervention of the Castro regime.

Today, Goodyear tires and related products are manufactured in 24 countries outside the United States.

Economies Improve

During the past several years, the major countries of the free world have maintained steady improvement in their economies and the standards of living of the peoples of most free areas have risen.

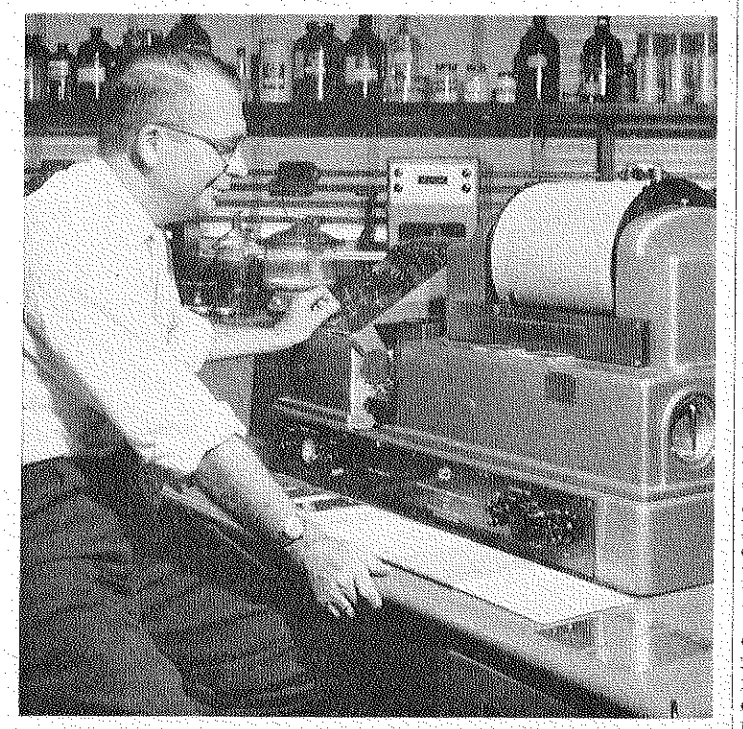
These basic factors contribute to constantly rising demands and increased potential opportunities for the sale of Goodyear products around the world.

To grasp these opportunities, Goodyear must constantly work to improve distribution and sales outlets, to enlarge existing production facilities or undertake new projects in areas of potential growth. Only in this way can Goodyear International share in the continued expansion of overseas business.

At opening of the company's French tire plant in Amiens last fall, Henri Larrieu, Prefect de la Somme (l), was greeted by R. V. Thomas, vice president, Goodyear International Corporation, as E. J. Thomas, company chairman (third from right), and W. T. Clayton, plant manager, looked on.

Chemical Division Reports Successful '60; New Products, Expansion Mark The Year

New products and the necessary plant expansions to produce them highlighted activities of the Chemical division during 1960. Each of the division's five sales departments, Rubber, Coatings, Plastics, Adhesives, and Polyester, introduced new products. This, together with an outstanding performance by the International Chemical division, added up to another successful but highly competitive year.



New method to determine chemical changes in paint outdoors, 1960 Goodyear development, uses infrared spectrophotometer, will lead scientists to improved paint compounds.

The key to progress in the chemical industry is new products and in 1960 approximately 75 per cent of the division's sales were from materials not in the line 10 years ago. Among those added were new Plioflex rubbers and a new plastic-rubber combination, Chemivic.

Resins

Vitel resins for solution coatings, extrusion laminations and a new, black polyester resin for textiles also were introduced. Pliolite AC resins for paint, Pliovic vinyl resins for heavy gauge sheeting, Pliogrip sealing and calking compounds, new industrial Pliobond adhesives and several new synthetic rubber latices completed the parade of new products.

The Houston synthetic rubber plant, the world's largest, was expanded and work was begun on installation of an electronic computer system which will control the manufacturing process. At Niagara Falls, the capacity of the vinyl resins plant was doubled. In Akron, $1,250,000 was invested to provide additional facilities for production of Chemigum latices and Pliolite resins to meet increasing demands for the textile and paint industries.

International

The international Chemical organization, in only its third full year of operation, accounted for more than 20 per cent of the division's total sales. With expanded overseas operations and emphasis on new product development, the future of the Chemical division continues bright.

New Methods, Products Developed By Research

The most efficient process for making isoprene, a revolutionary pourable tire, rubber compounds for outer space, rubber rocket liners, even artificial heart valves—that's Goodyear tomorrow, fresh out of test tubes today.

Reflecting the diversity of Goodyear's interests, Research division developments in 1960 ranged widely, pointing the way to myriad new products, materials and improved manufacturing methods.

After successful laboratory, bench scale and pilot plant activities culminated in the decision to manufacture the new NATSYN and BUDENE replacements for natural rubber, only a method of making NATSYN's building block, isoprene, remained as a stumbling block.

Isoprene Process

Then, last year, Goodyear researchers perfected a special process for making high-purity isoprene, removing that obstacle.

As a result, the first batch of NATSYN made at the company's petrochemical plant now under construction at Beaumont, Tex., will be able to compete effectively in this new field.

On other projects, Goodyear scientists and engineers have worked hand-in-glove with medical institutions in perfecting synthetic rubber valves for the human heart, lending specialized know-how to a field of medicine which seeks to overcome heart disease, America's number one killer.

Intensive investigation has been launched on rubber compounds to insulate the fuel cases of rockets from the lava-like heat of burning rocket fuel.

Other Developments

The development of rubber and plastic formulations capable of withstanding extremes of temperature, vacuum and ultraviolet radiation endured by space vehicles and structures has resulted from yet other research efforts.

In the field of plastics, new polyester resins have been developed which may find their way into tire cord and other industrial fabrics; others have been developed for use as hot melt adhesives, a new and growing application of resins.

Natural rubber was promised new versatility by the development of a "custom tailoring" process. The molecular structure of rubber latex can be changed at will by exposing it to varying doses of radiation, under the process worked out by a team of research scientists.

Translucent Tire

Pourable, colored, translucent tires made of specially compounded Neothane were created by Goodyear researchers who are finding other applications, such as tank linings, industrial rollers, oil seal rings, gaskets and gears of this remarkable rubber which combines the approach of steel with the resilience of rubber.

New Rubarite

A nationwide system of safe, long-lasting roads marched a step closer with the development of two new Rubarite compounds, Rubarite S-1-40 Q.D. and Rubarite S-1-60 C.C.

For the motorists, for the highways, for medical aid, for defense-ready rockets, for the quiet world of outer space, new Research division accomplishments have gone to work. And, as the division's motto states, "The best is yet to come."

Accidents At New Low, Plant 2 A Winner; Slusser Award Goes To South Africa

Fewer accidents were recorded in Goodyear worldwide in 1960 than ever before. The company's accident frequency rate was a record low of 2.08.

The frequency rate, based on the number of accidents per million man-hours worked, represents a decrease from the 1959 figure of 2.17—itself a record. The accident severity mark, however, was up to 305 from the 1959 record low of 215. This figure is based on days lost per million man-hours of work as a result of injuries.

In other words, worldwide, Goodyear employes recorded fewer accidents in 1960 but these resulted in more lost working days.

Competition in the Slusser Worldwide Safety Contest was remarkable because the first five plants in the race were accident free in 1960.

South Africa Wins

Goodyear's South African plant was named the Slusser winner, however, on its 2,420,000 man-hours worked. This was the highest total of the five top plants.

The last accident recorded in the South African plant was in August 1959, and the plant's accident-free skein has thus stretched to 3,420,000 man-hours.

The other plants without a mishap to mar their 1960 records —and their order of finish in the worldwide competition— were the facilities in the Philippines, Brazil (Textile), Niagara Falls and Muncie, Ind.

Niagara Falls Leads in U. S.

Niagara Falls' fourth place finish in worldwide competition marked it as the leader among domestic plants.

In competition among Akron plants, Plant 2 tires and reclaim repeated its victory of last year. Just one injury, resulting in 20 lost days, marred its record, and this performance merited the Akron plant a seventh place in worldwide competition. Plant 2 had a frequency rating of 0.43 and a severity mark of nine.

Overall Akron plant figures were below the world average in frequency with a mark of 1.63 accidents per million man-hours but above the world figure in severity with 409.

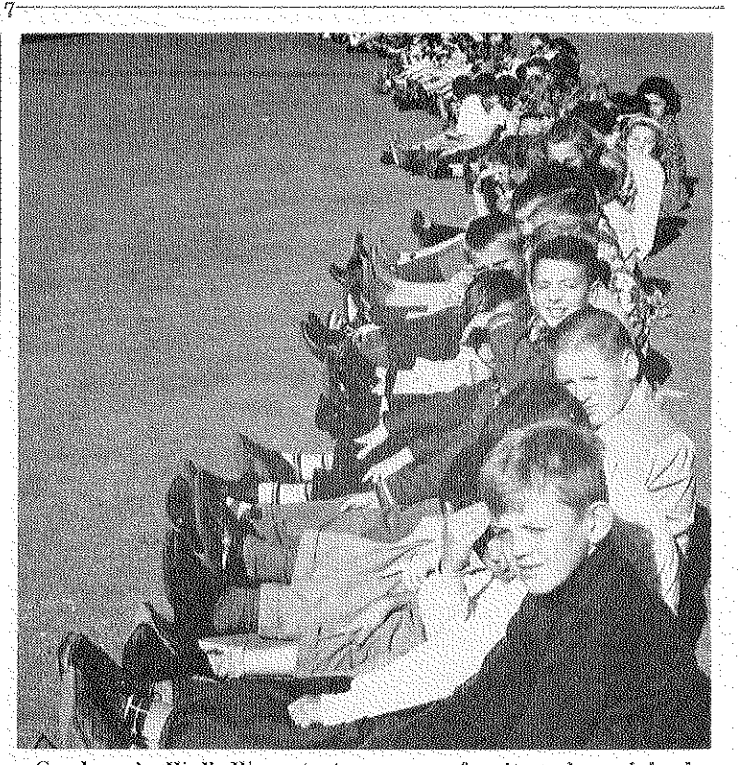
Domestically, Goodyear's frequency mark was 2.13 compared to 2.21 recorded by production facilities outside the U. S. The foreign severity rate, 308, however, was lower than the U. S. figure of 322.

Record Below U. S. Average

Both frequency and severity marks of Goodyear's worldwide production employes were well below the latest National Safety Council rubber industry figures of 2.49 and 337.

All told, Goodyear employes totaled 142 million man-hours worked.

With lighted bulbs inside, translucent tires — Goodyear's Tire Of Tomorrow — carried four cars in a circle for a time exposure. Of various colors, tires are in experimental stage.



Goodyear's Walk-Wear test program for its sole and heel products enlists the school children of Windsor, Vt. For 25 years, company has supplied shoes, kept scientific watch on evidence of wear. Purpose: a better product.

Metal Products Sets Record, Celebrated 40th Anniversary

An industry milestone and a change in division command highlighted activities of the Metal Products division in 1960.

Late in the year, the division set a new record in the heavy transportation industry with the production and sale of its 60,000,000th rim, and saw R. J. Burns step up as general manager, succeeding H. J. Lafaye who retired.

Significantly, the milestone unit came in the division's 40th anniversary year and was a universal Job Master truck rim whose development was pioneered by Lafaye.

Industry Leader

Despite a general decline of business activity in heavy transportation, major outlet for Goodyear metal products, the division continued as the industry leader in the manufacture of precision-built rims and allied products.

During the year, the division manufactured approximately 400 individual items, ranging in size from a 4.3-pound side flange to the world's largest rim—45 inches in diameter and weighing 2,200 pounds.

Production items included complete rim lines and accessories for all trucks, buses, earthmovers and farm equipment, as well as wheel assemblies for mobile homes and other special highway, industrial and agricultural applications.

Wide Range Of Shoe Products Introduced, Scores With Trade, Customer Acceptance

A fast stepping year was chalked up by Goodyear's Shoe Products division as it added significant new products and improvements during 1960.

Two new products, spanning the field from infants' to men's and women's footwear, were introduced to shoe manufacturers. "Customized" Neolite-Flex provided new finishing advantages and increased the popularity of this product for use on leading brands of men's and women's shoes. Infa-Flex, a soft, light and pliable soling for infants' and babies' shoes made its official appearance late in 1960. It now replaces leather on many lines in this field.

Crown Neolite

In shoes for growing boys and girls the sturdy, hard wearing properties of Crown Neolite soling consistently underscored its acceptance as an ideal product.

Neolite Soles and Heels

Shoe repair shops all over the country continued to be a major outlet for Goodyear shoe products. Neolite soles and heels gained as trade and customer favorites, and virtually every repair shop stocked Super Cushion and Wingfoot heels, Neothane toplifts, Jetlite plastic heels, Chemigum Oil Proof soles, Hi-Miler soles, Neolite cement and other Goodyear products.

In the search for lighter, longer wearing, more flexible products for "tomorrow's shoe," research and development people at Windsor, Vt., constantly worked during 1960 with new materials, many in the plastics field.

Foam Products Realigns Its Operation Demand For Airfoam Grows

For the Foam Products division 1960 was a critical year, reflecting all the major problems besetting the entire foam industry. In the face of increasingly stiff competition it was necessary to reorganize and realign the operation to meet current conditions and establish a sound basis for new growth.

At year's end the division emerged with plans for new products, improved manufacturing efficiencies, and better marketing techniques to meet the steadily growing market for foam cushioning.

In shoe cushioning, Airfoot and Super Airfoot continue to enjoy a leading position in the industry, especially in high quality footwear.

In the automotive field the success of Goodyear's full volume sculptured cushioning as launched in the Thunderbird, spread to the Lincoln Continental for 1961. Very nearly 100 per cent of these models will be equipped with luxury Air Foam.

Padded instrument panels continued to show a steady increase in demand, and new methods of production permitted lower costs. Goodyear continues to be the exclusive supplier to Cadillac, Lincoln and Thunderbird.

Wood panelling finished by the Weldwood Permaguard process is protected by Goodyear's laminated Videne film.

GAT Reviews Progress and Highlights Of 1960

By G. H. REYNOLDS
General Manager

Goodyear Atomic Corporation's contract was extended to 1965, it was announced by the Atomic Energy Commission last year when the plant's output of Uranium-235 for Atoms For Peace was nearly 200 times its production for the same purpose in 1958, first year of the program.

Under it, GAT's more significant contributions were to: the Nuclear Ship SAVANNAH; Rowe, Massachusetts reactor; Elk River reactor; Dresden Nuclear Power station; and Humboldt Bay reactor.

G. H. Reynolds

Meanwhile, important physical changes were made in the plant. Work was completed on the $5 million sprinkler system during 1960 while a $1 million addition to the radiation system was started. This will be completed during the year.

The X-100 Building was air conditioned, and the relocation of AEC personnel and Finance Division employes made it possible to locate the majority of the administrative offices in this building.

The consolidation of several activities resulted in the elimination of "D" Portal and the closing of the X-103 and X-746 buildings.

Safety

Goodyear Atomic Corporation completed 1960 with only one disabling injury chargeable under the ASA Code. The frequency rate of 0.24 and the severity rate of 9 are record lows for the eight years of GAT operation.

In comparison, the other AEC gaseous diffusion plants had recorded frequency rates of 1.15 and 2.00 through November 30. During the same period, the All-Oak Ridge AEC Operations frequency rate was 1.15.

Union Contract

Members of the Oil, Chemical, and Atomic Workers International Union, AFL-CIO and its affiliated local, 10-689, ratified a new three year contract with the company on May 10, 1960.

J. K. Stevenson was elected president of the local.

On May 24, 1960, the United Plant Guard Workers of America, Local 66, unanimously ratified a three year agreement with the company.

Sixty-eight grievances were recorded at step two during 1960; 34 were settled at step two and a like number at step three. There were two arbitration cases throughout the year.

All-In-One Campaign

The joint labor-management, All-In-One campaign for the support of the four Community Chests in the area was a success, with 93 per cent of the employes contributing to the campaign.

Many GAT employes participated in the work of numerous organizations. They made not only a worthwhile personal contribution, but also made it well known that GAT is interested in the areas surrounding the plant site.

Employe Activities

An example of the high employe participation in such groups is found in the Boy Scouts where more than five per cent of the employes serve as adult leaders. The Goodyear Women's Clubs contributed greatly to the hospital, sight-saving, and retarded children's programs. The GAT Foremen's Club cooperated with other industries in the area to help organize the Second Annual Management conference at which nationally known speakers addressed 500 employes from the ten sponsoring industries.

Blood Bank

The GAT Blood Bank was unusually active during 1960. Requests for 199 pints of blood were received from 80 employes. A total of 406 pints of blood were donated by GAT employes during bloodmobile visits during the year.

A new badging program was instituted in 1960. The new security, health-physics badge combined personnel identification with monitoring devices. These new badges provide more complete information in the event of exposure.

Medical Plan

A major Medical Plan went into effect late in the year, supplementing the then existing hospitalization program.

The Recreation Department enjoyed one of its best years, with more than 12,900 participants active in the department's various programs.

Retirees and Service Awards

Dr. R. M. Andre, O. E. Anderson and E. Eckhart retired in 1960.

Service pins for from 10 to 35 years were earned by L. D. Hochberg, Henry Watts, L. L. Wise, W. F. Culp, H. D. Baumgardner, R. M. Clibourn, F. J. Wood, and C. J. Wondra. Two hundred forty-five service pins were awarded for 5 years' service in 1960. A total of 88 per cent of the employes have five years or more service with GAT.

Educational Activities

In 1960, 364 employes benefited from the Educational Assistance program. Of this number, 231 enrolled in Ohio University plant site and off-plant site courses. The remaining 133 employes were enrolled in courses on secretarial procedures and transistor applications.

Approximately 16,700 manhours of training were completed by GAT employes during 1960. Courses taught included: Creative Thinking; Communication; Supervisory Training; Orientation, and Safety.

Manpower Turnover

Manpower turnover at GAT was only five per cent annually, the lowest turnover among gaseous diffusion plants and about one-half the turnover of AEC contractors across the nation.

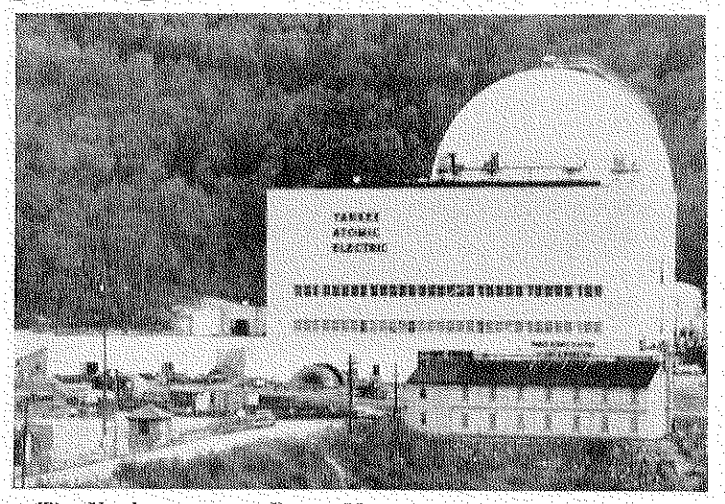
Promotions

During 1960, Deputy General Manager G. H. Reynolds was named General Manager. This and the promotions of Dr. C. R. Milone to Deputy General Manager, R. M. Rutherford to Manager, Production division, and H. E. Kelley to Superintendent, Power and Utilities division occurred when D. H. Francis was chosen to take charge of the parent company's Chemical Production division.

The local AEC also had a change in its top echelon when, upon R. H. McCulloh's retirement, R. H. Thalgott was appointed Manager, Portsmouth Area.

With J. K. Boughton's transfer to Beaumont, Texas, other promotions, including M. W. Hartle, C. W. Robertson, Jr., and Q. England were announced. Joseph H. Homan was transferred to Milan, Italy, with Goodyear International, and D. R. Markley became supervisor of Internal Audit. C. I. Crawford and A. F. Wilson were appointed supervisor and general foreman, respectively, and Dr. H. B. Lehman was promoted to the post of medical director. R. M. Clibourn was transferred to Beaumont as manager, Quality Control.

A number of employes were appointed to state and national committees or elevated in rank in the military. Included in this group were: Karl Beu, Apparatus and Standards Committee, American Crystallographic Association. He also is Chairman of the Powder Deffraction subcommittee of ACA. H. N. Stone was appointed to the Advisory Committee on Atomic Energy for the State of Ohio. Dr. Paul Bliss was appointed a Consultant to the same committee. Alec J. Blair was elected Department Commander, American Legion of Ohio; and Carl B. Massie and Robert M. Zeek were promoted to the rank of colonel in the U. S. Army Reserve.



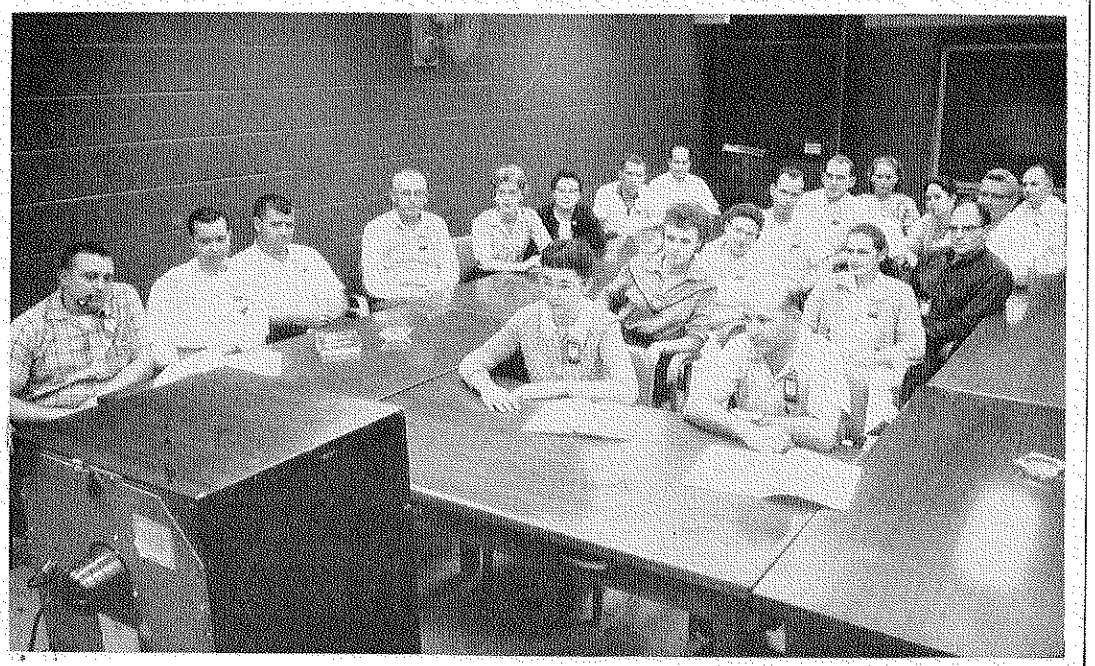
The Yankee reactor, Rowe, Mass., was one of four in 1960 supplied with fuel by the Goodyear Atomic Corporation.

Successful Developments

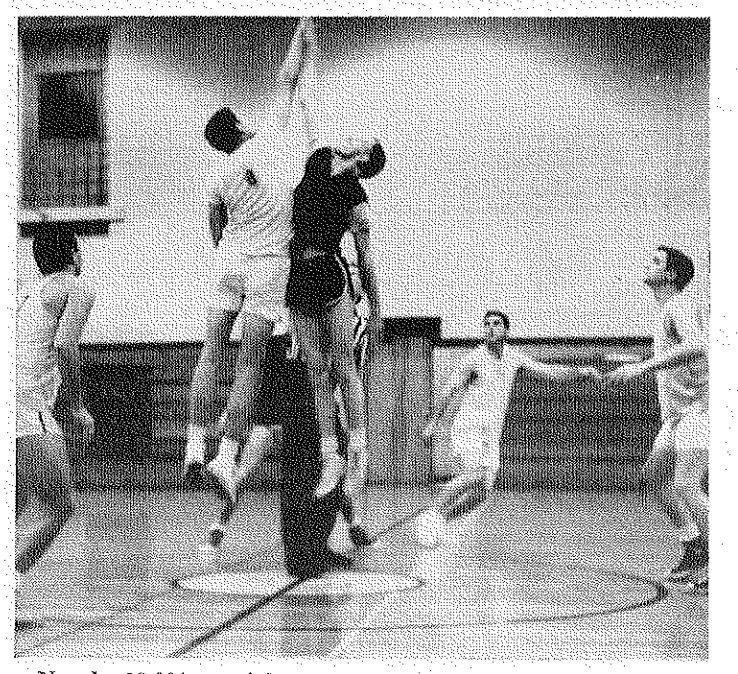
The Production, Technical, and Maintenance divisions participated in a successful effort to reduce the loss of freon. Approximately $3,500,000 worth of freon is used in the system. As a result of an improvement program the loss was cut to about one-tenth of the previous loss.

The Electronic Department developed a controller for keeping an ion beam of a particular mass exactly aligned on the collector of a mass spectrometer. The controller, when attached to a comparatively inexpensive machine, will do the work of the most expensive machine.

The Instrumentation Development Department developed an Incremental Power Demand Computor. The IPDC is probably the most accurate device ever developed for measuring, computing, and printing the total plant demand for large blocks of power. The equipment and procedures can control the total plant load to maintain a factor of 99.9 per cent.



Study of Russian language via TV by this group on own time typifies interest of 364 GAT employes who advanced their educations in 1960 under the Educational Assistance Program.



Nearly 13,000 participants were active in 1960 recreation program with basketball one of the popular sports.