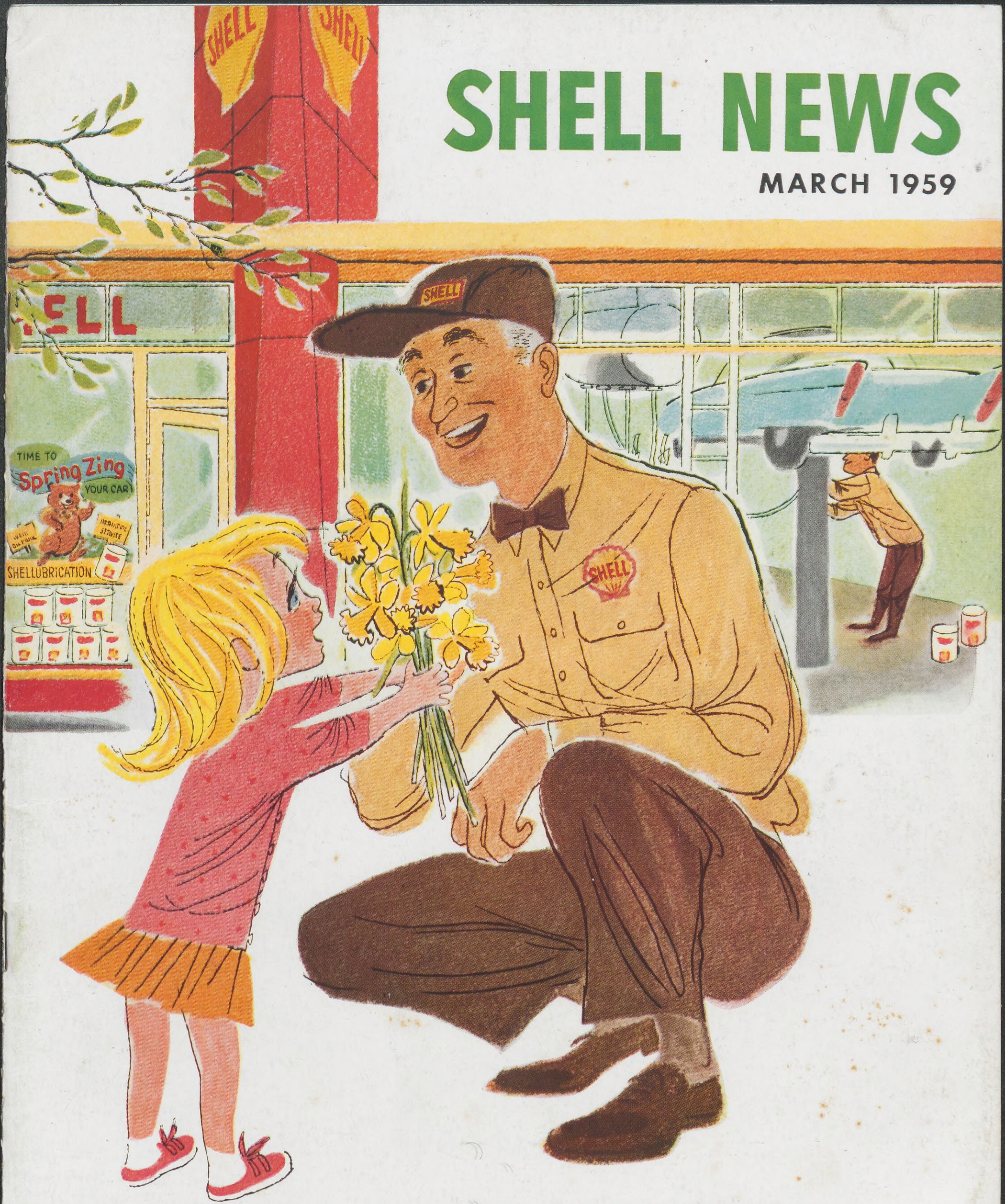
SHELL NEWS

MARCH 1959



SPRING SERVICES

AIRPORT TO THE WORLD

Idlewild's inspiring Terminal City is highlighted by the Fountains of Liberty, an 11-story control tower

New York's Idlewild meets the jet-age with a handsome new face.

THE Statue of Liberty for 73 years has been the symbol of welcome to travelers arriving in New York from overseas. In today's air age, a new symbol is rivaling the Statue—the 11-story control tower at New York International Airport (Idlewild), which now greets two out of every three persons from abroad.

The fact that more people now cross the Atlantic by plane than by ship is surprising to many people. Indeed, the make-shift look of Idlewild in 1956, when transatlantic air passage

ontrol tower (center), and the arched International Arrival Building (right).

SHELL NEWS

VOL. 27—No. 3 **MARCH, 1959**

Dedicated to the principle that the interests of employees and employer are mutual and inseparable

Employee Communications Department
New York, N. Y.

contents

Published by Shell Oil Company (H. S. M. Burns, President; C. C. Combs, Treasurer; J. A. Horner, Secretary) for its employees and those of Shell Chemical Corporation, Shell Development Company and Shell Pipe Line Corporation. Address communications to Employee Communications Department, Shell Oil Company, 50 W. 50th St., New York 20, N. Y.

ABOUT THE COVER

When daffodils start blooming, Spring can't be far behind. And Spring is the time to have your car conditioned for warmer weather. Most Shell stations offer motorists a Spring Change-Over service. To find out how important this service is to you—and your car—turn to page 10.

Control tower operators scan Idlewild's 4,900 acres as they direct aircraft traffic at the field. During 1958, controllers directed an airpla

first surpassed sea travel, may have given some visitors the impression that builders of Idlewild had been caught by surprise.

But anticipating aviation's rapid growth even then, the field's operator, the Port of New York Authority, was already constructing a new airport amidst the sprawling barracks-like buildings that once had given the field the reputation of being one of the less attractive international airports in the world. (The Port Authority is a self-supporting agency set up by the States of New York and New Jersey to finance and operate such transportation facilities as airports, marine terminals, bridges and tunnels.)

Today, the clean-lined control tower of steel and glass is being flanked by buildings whose design and scope are more in keeping with the needs and pride of the busiest international airport in the world.

In 1949, the year after Idlewild was opened on 4,900 acres at Jamaica Bay in Queens, N. Y., the airport handled 18,000 plane arrivals and departures. By last year, plane movements had leaped to 200,000. They carried about six million persons, about two million of them overseas travelers. When modernization is completed in 1965 at a cost of $400 million, Idlewild will have facilities for 12 million passengers a year.

At present, international passengers and those traveling inside the U. S. have conflicting views of the airport.

Idlewild's service facilities keep pa

Domestic travelers can admire Idlewild's new passenger facilities, but until the end of this year they will still use the old buildings. Most overseas passengers, however, now enjoy the new International Arrival Building and two adjoining Airline Wing Buildings completed last year.

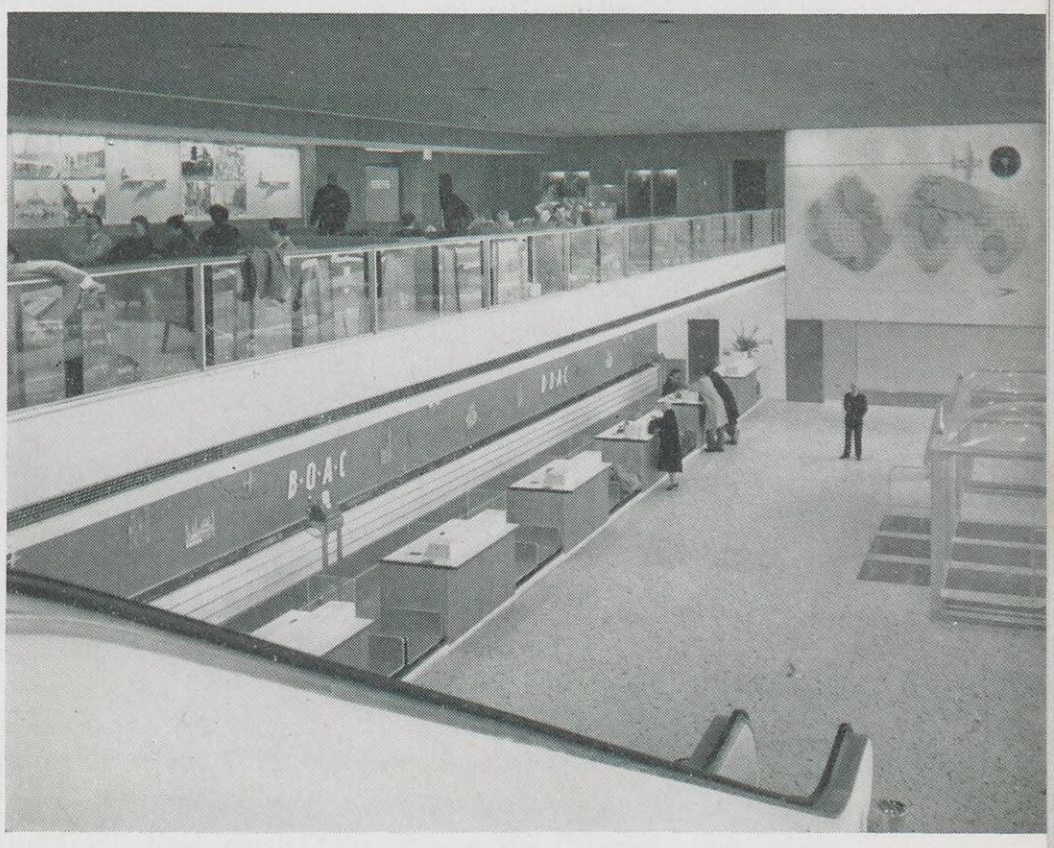
The International Arrival Building, topped by a stainless steel arch, dominates the scene. The lines formed by the arch and the adjoining control tower symbolize a world-linking air bridge. The building houses U. S. immigration, health and customs services. To speed customs inspection, there are 72 inspection desks similar to supermarket check-out counters.

Passengers leaving for overseas on foreign airlines use

Shell fuel is delivered to Idlewild by small tanker from Sewaren. The fuel, manufactured at Norco and Houston refineries, is shipped by tanker to Sewaren for temporary storage.

airplane taking off or landing every 2½ minutes

BOAC's departure center is one of 14 separate areas operated by foreign airlines in the two Airline Wing Buildings. Eight other foreign lines share facilities. Most airlines have individual waiting rooms and cocktail lounges decorated in modern motifs reflecting their countries' culture.



eep pace with its passenger luxuries

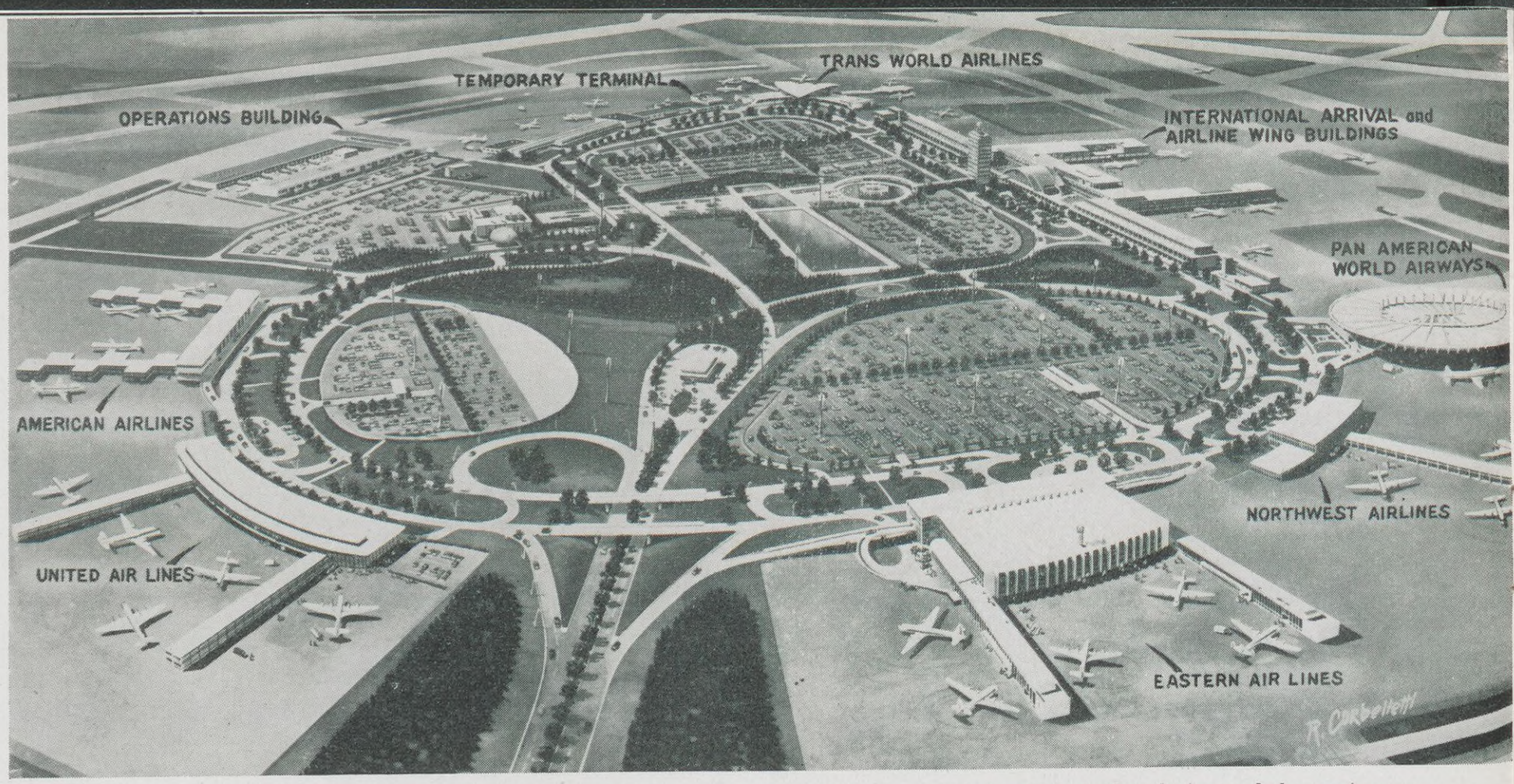
the Airline Wing Buildings where 22 lines have offices. Most of the foreign airlines have separate departure areas decorated in modernistic motifs of their countries. By the end of this year, customers of U. S. lines serving domestic and overseas points will also have luxurious surroundings. Separate terminal buildings being constructed now by six U. S. airlines will have many innovations in passenger facilities. For example, Pan American World Airways' oval building will have a roof extending over its planes to protect passengers from the weather; American Airlines will have weather-tight and soundproof loading bridges leading directly from its lounge into the airplanes.

Other airlines which will have separate terminals are Eastern, Trans World, Northwest and United. Northwest will share its facilities with Braniff International and Northeast Airlines. Others will continue using the temporary terminal. Eventually they may move into a new multi-tenant terminal now being considered.

All these facilities are on a 655-acre site called Terminal City, and will cost a total of $150 million. The hub of Terminal City is International Park which has as its centerpiece the striking Fountains of Liberty. In all, Terminal City has 10 miles of roadways and parking space for 6,000 automobiles — accommodations enough for travelers and the many sightseers who go there to watch airplanes and to eat in the airport's restaurants. Another attraction is

Idlewild's tank farm has a fuel capacity of seven million gallons. During an average month at the field, more than 20 million gallons of aviation gasoline and jet fuel are used.

A BOAC prop-jet Brittania is serviced with Shell jet fuel by a contract refueling truck at Idlewild. Shell is one of the airport's leading suppliers of jet fuel and aviation gasoline.



An artist's conception shows Terminal City as it will appear next year when construction is completed. Around the perimeter are the six terminals to be operated by U. S. airlines. Several other lines will continue for a time to use the temporary terminal.

AIRPORT TO THE WORLD continued

the new hotel at the airport's gate, where short-stay guests —many of whom rent rooms for only a few hours between planes—at times fill 320 rooms to 115 per cent of normal daily capacity.

To make it all run smoothly, there are 22,000 persons employed at the field, and by 1965 the number is expected to increase to about 32,000.

In Idlewild's regal setting, the passenger is king. But the king's modern royal carriage, the airplane, gets at least as careful attention as its passenger.

An aircraft heading for Idlewild is under constant surveillance by radar at the airport from the time it comes within 150 miles until it is parked. The first watcher is the Air Route Traffic Control Center run by the Federal Aviation Agency and housed in one of the airport's hangars. The Center is the traffic officer of one of the world's busiest air crossroads. On peak days it handles about 15,000 position reports from planes going to or coming from the four Metropolitan New York airports, or just passing over the region. It controls the routes and altitudes of these planes in the complex job of keeping the airways free of traffic jams.

When an Idlewild-bound aircraft comes within 20 miles of the field the F.A.A. men in the control tower take over. Last year they guided aircraft to landings or takeoffs at an average of one every 2½ minutes. Even the largest planes can use any of the four Idlewild runways, which average more than 9,000 feet in length. Another runway, to be completed this year, is to be used only for landings by instruments in bad weather. On the ground, an incoming airplane continues to receive careful treatment. The control tower has radar that can help in guiding a plane anywhere on the seven miles of aircraft taxiways.

When a plane has discharged its passengers, it has access to one of the most complete maintenance bases in the world. There, 13 hangars (with four more under construction), operated by the airlines, aircraft manufacturers and the Port Authority, house facilities for every type of aircraft maintenance.

Among the many complex functions required in servicing aircraft is fuel supply. During an average month, more than 20 million gallons of aviation gasoline for piston-driven aircraft, and jet (or turbine) fuel for pure jet and prop-jet airplanes, are used.

Shell is a leading supplier of jet fuel and aviation gasoline at Idlewild. All Shell fuel used at the field is manufactured at the Norco and Houston Refineries. It is shipped

Air cargo shipping is an important function at Idlewild. Last year, 160 million pounds of freight—17 times more than the field's first full year of operation in 1949—were processed through the new five-building Air Cargo Center.

from the Gulf in ocean-going tankers to the Sewaren (N. J.) Plant where it is stored until needed. From Sewaren, fuel is carried 38 miles by coastal tankers or barges through New York Harbor waterways to the Idlewild tank farm, where it is stored in tanks reserved for Shell. The entire farm now has 36 tanks with a total capacity of seven million gallons and later this year will have six more tanks to boost its capacity to 10 million gallons.

From the tank farm to the airplane, the fuel is handled by a contracting company which has its own refueling trucks. The trucks supplying Shell fuel, however, have small Shell name plates on their sides.

Looking to the future when even vaster quantities of fuel will be needed, Idlewild authorities are discussing plans for installing a hydrant system which would supply fuels from the tank farm through underground pipe lines to hydrants at the aircraft parking spaces.

In its planning, Idlewild has another growing factor to consider—air cargo. Besides Terminal City, there is an Air Cargo Center of five buildings completed in 1956 at a cost of $5 million. Last year, the Center processed 160 million pounds of freight, 60 million pounds of which was coming from or going overseas. Cargo traffic at the field has increased about 17 times since Idlewild opened. Part of the freight goes through an "Animalport" provided by the American Society for the Prevention of Cruelty to Animals. It is equipped to handle everything from baby chicks bound for Argentina to elephants from Africa—and often does.

Pampering passengers, planes, packages and even poultry—with ever greater care and in ever greater numbers—is a job Idlewild enjoys as the Airport to the World ●

EMERYVILLE ORGANIZATION CHANGES

Harold Gershinowitz, President of Shell Development Company, has announced that the Chemical section of the Oil and Chemical Research Division at Emeryville Research Center is being reorganized to better serve Shell Chemical Corporation's new divisional organization.

The section will consist of the following four departments:

Organic Chemistry

C. W. Smith—Department Head
P. H. Deming—Assistant Department Head

Plastics and Resins

T. F. Bradley—Department Head
T. F. Mika—Assistant Department Head

Synthetic Rubber

N. R. Legge—Department Head

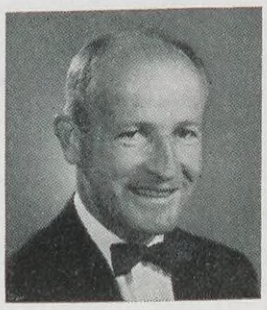
Thermoplastics

F. E. Condo—Acting Department Head

The Product Development Department is being discontinued as a separate entity. Its functions will be continued by the foregoing departments.

F. B. Hilmer, Department Head, Product Development, is being appointed Assistant to the Director, Chemical Research.


C. W. SMITH


P. H. DEMING


N. R. LEGGE


T. F. BRADLEY


T. F. MIKA


F. E. CONDO


F. B. HILMER

news and views

CORROSION AWARD

A. WACHTER

Aaron Wachter of Shell Development Company's Emeryville Research Center will receive the 1958 Frank Newman Speller Award of the National Association of Corrosion Engineers at the association's annual meeting in Chicago in March.

The award is made in recognition of achievements in the field of corrosion engineering by Wachter, Department Head, Materials Engineering and Corrosion.

First presented in 1947, the award has been won in the past by one other Shell scientist — O. C. Mudd, former Chief Corrosion Engineer, Shell Pipe Line Corporation, now retired, who received it in 1950.

Wachter served as president of the 6,000-member N.A.C.E. in 1954 and is author and co-author of several published technical papers on corrosion. He joined Shell in 1932 and was appointed head of his department in 1939.

TULSA EXPOSITION

About 30,000 oil men and government representatives, including about 1,000 visitors from foreign countries, are expected to attend the 1959 International Petroleum Exposition at Tulsa, May 14-23.

More than half a million people are expected to view the Exposition's 2,000 exhibits of equipment used in exploration, drilling, production, pipe line, refining and specialized services for the oil industry.

Equipment to be exhibited at the show, the 14th since it was founded in 1923, is valued at more than $500 million. The exhibits aim to summarize accomplishments of oil technologists and improvements in industry equipment and methods since the last Exposition in 1953.

Among highlights of the exhibits will be: a full-scale turbodrill in operation; a working model of the method of secondary recovery of oil by applying heat in the oil-producing formation and a working model of a remotely-controlled pump station.

The site of the show covers 30 acres and its permanent installations include six major exhibit buildings owned by the Exposition and more than 60 privately owned.

Ten Tulsa Area employees are on committees helping to organize the Exposition.

NEW SHELL PUMPS

New streamlined gasoline pumps and colored hoses are beginning to give a brighter look to Shell service stations.

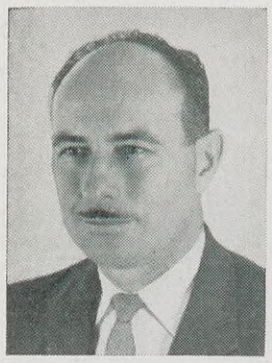
The new pumps are 48 inches high, compared to the 58- and 56-inch pumps that have been standard. The new hoses match the color of the pumps—white hoses are used for Super Shell and yellow for Shell Gasoline.

The so-called dwarf pumps will be installed in new and modernized stations and will replace existing units as they wear out. The result of a two-year study and test by the Marketing Engineering Department, the new pumps leave a clearer field of vision to salesroom windows, making displays more prominent.

New 48-inch oil can display cabinets will replace existing cabinets wherever the shorter pumps are used.

"Now we're getting somewhere, sir. If the letter isn't in this basket, that narrows the search down to the files."

SHELL PEOPLE in the news

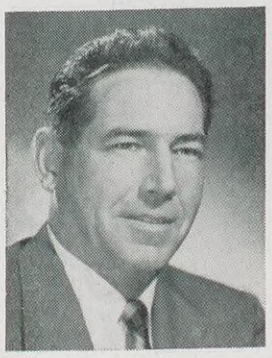


L. T. WILSON

L. T. WILSON has been appointed Manager of the Montreal Refinery of Shell Oil Company of Canada, Limited, effective May 1, following employment abroad as Director of Refining and Supplies for Compania Shell de Venezuela, Limited. He succeeds J. L. Miller who has returned to Shell Oil Company and who plans to retire June 1, 1959. Mr. Wilson who holds a Bachelor's degree in geology from Oregon State College, joined Shell Oil Company in 1933 as a Junior Inspector at the Wilmington-Dominguez Refinery. In 1935 he became Assistant Manager of the Manufacturing Laboratory there. Following a five-year Military Leave of Absence, he was assigned as a Senior Technologist at the Martinez Refinery in 1946. He was named Manager of the Catalytic Cracking Department at Wilmington-Dominguez in 1947, and two years later he became Assistant Superintendent at Martinez. He was appointed Superintendent of the Norco Refinery in 1954. In 1955 he became Manager of the Montreal Refinery and served in that capacity for about one year before accepting employment in Venezuela.

BRUNO STOLLEY

BRUNO STOLLEY has been named Director of Refining and Supplies for Compania Shell de Venezuela, Limited, succeeding L. T. Wilson. Mr. Stolley, who holds a Bachelor's degree in civil engineering from Tulane University, joined Shell Oil Company in 1930 as a Junior Engineer at the Norco Refinery. In 1934 he was transferred to the Houston Refinery as an Industrial Engineer, and two years later became an Assistant Chief Engineer at the Wood River Refinery. He was assigned to Head Office in 1946 as Assistant Manager of the Personnel Department. In 1949 he was named Manager of the Laboratories at Emeryville Research Center, and was assigned as Manager of the Martinez Refinery in 1955. In April, 1958, he accepted employment with BPM in The Hague.



E. F. McGEE

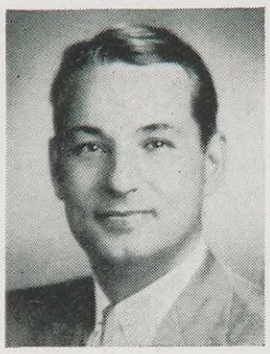
SHELL OIL COMPANY MARKETING ORGANIZATION

E. F. McGEE has been named Manager of the Sacramento Marketing Division, to succeed H. M. Bailey, who will retire June 30, 1959. Mr. McGee, who holds a Bachelor's degree in aeronautical engineering from Boston University, joined Shell Oil Company in 1946 as an Aviation Salesman in the Boston Division. He became a District Sales Supervisor in the Minneapolis Division in 1950 and was named Manager of the Connecticut District in the Boston Division in 1951. Two years later he was transferred to Head Office as Manager of the Plant Division of the Marketing Operations Department. He was named Operations Manager of the Albany Division in 1954, and Sales Manager of the Detroit Division in 1956.

J. S. HOPPOCK

J. S. HOPPOCK has been named Manager of the Minneapolis Division, to succeed R. T. Seidel, who will retire June 30, 1959. Mr. Hoppock, who holds a Bachelor's degree in industrial engineering from Lehigh University, joined Shell Oil Company in 1938 as a Salesman in the New York Division. Following various sales assignments in that Division and a four-year military leave of absence, he was appointed an Aviation Representative in Head Office in 1945. In 1949 he returned to the New York Division as a Sales Supervisor, and the following year was assigned to a similar position in the Los Angeles Division. In 1950 he became Manager of the Stockton District of the Sacramento Division. He was named Sales Manager of the Detroit Division in 1953 and Operations Manager of the St. Louis Division in 1956.

SHELL OIL COMPANY MARKETING ORGANIZATION **continued**



F. H. STAUB

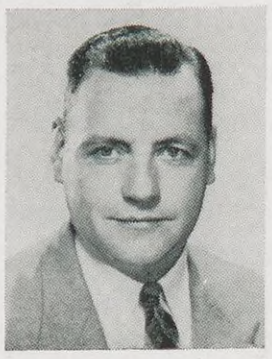
F. H. STAUB has been named Manager of the Chicago Division, to succeed H. J. Underwood, who will retire June 30, 1959. Mr. Staub joined Shell Oil Company in 1937 as a Salesman in the Albany Division. From 1943 through 1950 he served in turn as Manager of the Ithaca, Burlington and Rensselaer Districts in the Albany Division, and of the Akron District in the Cleveland Division. He was named Sales Manager of the Minneapolis Division in 1950, and in 1953 was assigned to a similar position in the St. Louis Division. In 1955 he was transferred to Head Office as Assistant Sales Manager of the East Coast Marketing Divisions, and the following year was named Special Assistant to General Manager, Head Office Marketing. He was named Sales Assistant to the Vice President, Midwest Marketing Divisions, in 1957.

C. W. McDOWELL

C. W. McDOWELL has been named Sales Assistant to the Vice President Midwest Marketing Divisions, succeeding F. H. Staub. Mr. McDowell, who attended Wabash College, Indiana, joined Shell Oil Company in 1932 as a Salesman in the Chicago Division. He was named Chicago District Retail Manager in 1939 and in 1942 became Manager of the Fort Wayne District in the Indianapolis Division. He was transferred to the Atlanta Division in 1946 as Retail Manager, and three years later became Sales Manager of the Albany Division. He was named Sales Manager of the Atlanta Division in 1951 and of the New Orleans Division in 1953.

R. W. BAKER

R. W. BAKER has been named Operations Manager of the St. Louis Division, succeeding J. S. Hoppock. Mr. Baker, who holds a Master's degree in biological science from New York University, joined Shell Oil Company in 1941 as a Clerk in the Head Office Marketing Organization. He was appointed Manager of the Marketing Research and Analysis Division in 1952 and, later that same year, was named a District Sales Supervisor in the New York Division. In 1953 he became Manager of the Dayton District of the Cleveland Division and in 1957, Manager of the Oakland District of the San Francisco Division.



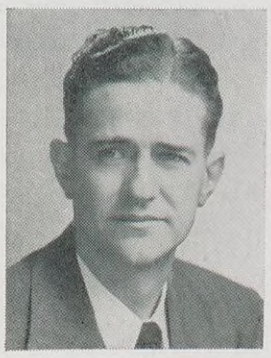
L. C. HULL, III

L. C. HULL, III, has been named Sales Manager of the Detroit Division, succeeding E. F. McGee. Mr. Hull, who holds a Bachelor's degree in English from Dartmouth College, joined Shell Oil Company in 1946 as a Salesman in the New York Division. He was transferred in 1950 to the Chicago Division as Personnel Manager. In 1952 he became a District Manager in the St. Louis Division, and in 1953 he was named a District Manager in the New York Division. He was transferred to Head Office in 1955 as Manager of the Special Projects Division in the Public Relations Department. In 1956 he became Assistant Sales Manager of the Los Angeles Division, and the following year was named Manager of the Wilmington District of that Division.

SHELL OIL COMPANY MARKETING ORGANIZATION continued

D. C. ROSS

D. C. ROSS has been named Sales Manager of the New Orleans Division, succeeding C. W. McDowell. Mr. Ross, who holds an A. B. degree in economics from the University of California and an M.B.A. degree from Stanford University, joined Shell Oil Company in 1939 as a Salesman in San Francisco, after a number of years experience working in Shell service stations while attending school. After a five-year military leave of absence, he became a District Wholesale Representative in the San Francisco Division in 1945 and a District Sales Supervisor in 1949. The following year he was named Akron District Manager in the Cleveland Division. In 1953 he returned to the San Francisco Division as Oakland District Manager. He was transferred to the Head Office Sales Promotion-Advertising Department in 1957 as Manager of the Sales Promotion Division and he was named Manager of the Advertising Division in 1958.



W. M. HARRIS

W. M. HARRIS has been named Treasury Manager of the Chicago Division, succeeding F. C. Reeve, who retired in February, 1959. Mr. Harris joined Shell Oil Company in 1929 as a Clerk in the San Francisco Division. He became a Chief Clerk in the Sacramento Division in 1936 and in 1938 was transferred to Head Office as an Auditor. In 1942 he was named an Assistant Treasury Manager in the Seattle Division, and became Treasury Manager in 1947.

H. C. DIXON

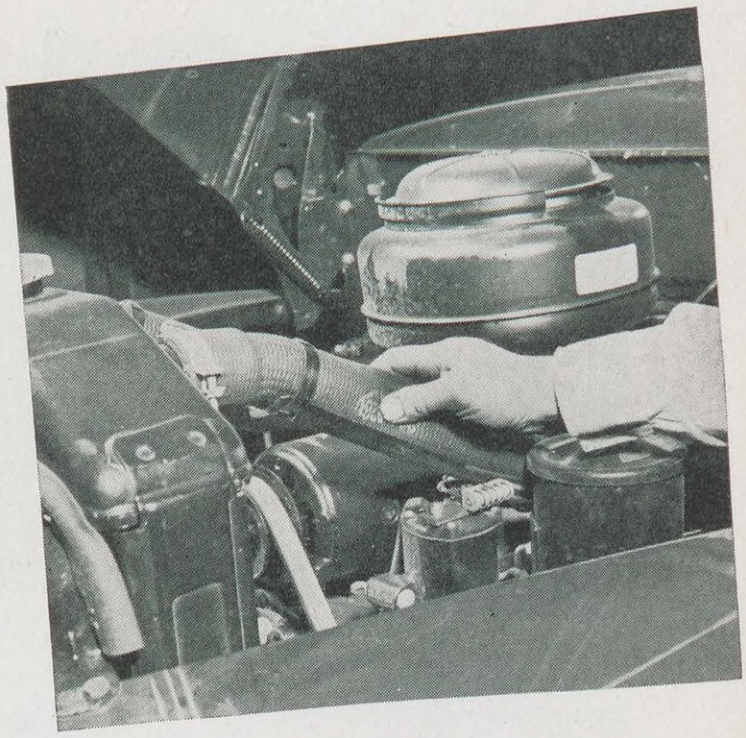
H. C. DIXON has been named Treasury Manager of the Seattle Division, succeeding W. M. Harris. Mr. Dixon joined Shell Oil Company in 1926 as a Salesman in the Portland Division. He became an Assistant Treasury Manager in the former Intermountain Division in 1935, an Analyst in San Francisco in 1940, and an Accountant there in 1944. From 1945 to 1952 he served as Treasury Manager in the Honolulu Division. In 1957 he was named Chief Accountant of the Sacramento Division.

SHELL OIL COMPANY LEGAL ORGANIZATION

O. L. STONE

O. L. STONE has been appointed a General Attorney for Shell Oil Company. He will continue to carry the primary responsibility for counselling with the Head Office Exploration and Production Organization and will also continue with other general legal assignments. Mr. Stone, who holds an LL.B degree from Louisiana State University, joined Shell in 1937 as an Attorney in the Legal Department of the Houston Exploration and Production Area. In 1947 he was transferred to the Legal Department of the New Orleans E&P Area and in 1950 he became an Attorney in the Head Office Legal Organization. He was appointed an Assistant Secretary of the Company in 1953.

In an average SHELLUBRICATION®
about 50 points are lubed or checked.
This is an important part of Change-Over service.



Leaking radiators and water hoses can cause trouble any time of the year. A Shell safety check will pinpoint defects.

As far as cars are concerned, "it might as well be Spring." So

TIME FOR

SPRING arrives officially March 21, so in most parts of the country it's only a few more wintry blasts away. As far as cars are concerned, however, it might as well be Spring right now.

Milder weather means more driving for most people. But many forget or are unaware of the beating a car takes during the Winter and that it may need a Spring "tonic" as well as a general check-up.

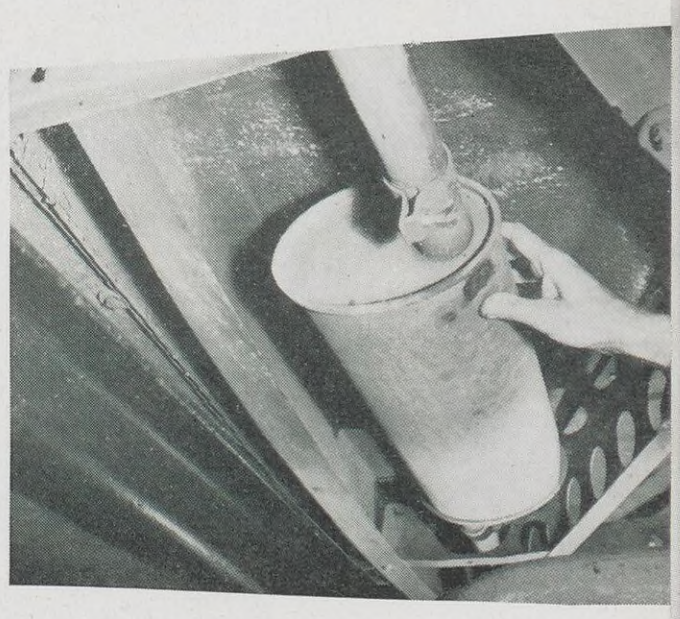
Cold weather, rain and snow put a heavy load on a car's engine, battery and tires. Batteries strain turning over cold engines and tires spin on slick pavement, often causing them to wear unevenly.

Also, as temperatures climb, most cars need to be serviced with heavier grades of lubricants. (Exceptions are engines lubricated with Shell X-100® Motor Oil Premium, which adjusts automatically to temperature changes.) In addition, cooling systems need attention: anti-freeze must be drained because it contains inhibitors which may cause radiator clogging and overheating as they wear out.

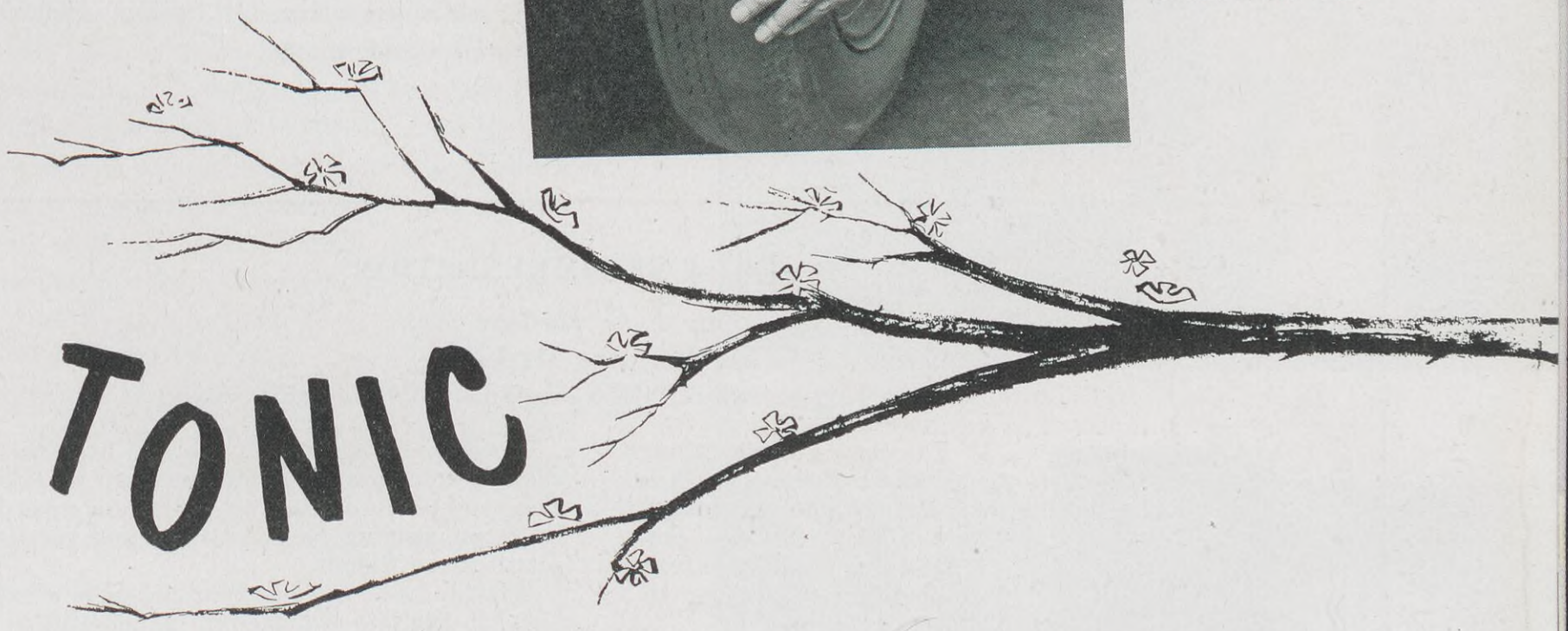
To ward off possible car troubles in the months ahead,

A leaking shock absorber, often not noticed until the car is on a lube rack, can make the car shimmy at high speed.

While a car is on the lube rack, faulty mufflers and exhaust pipes can be spotted and repairs made.



Winter is hard on tires, so it's wise to safety check for cuts, bruises and signs of abnormal wear.

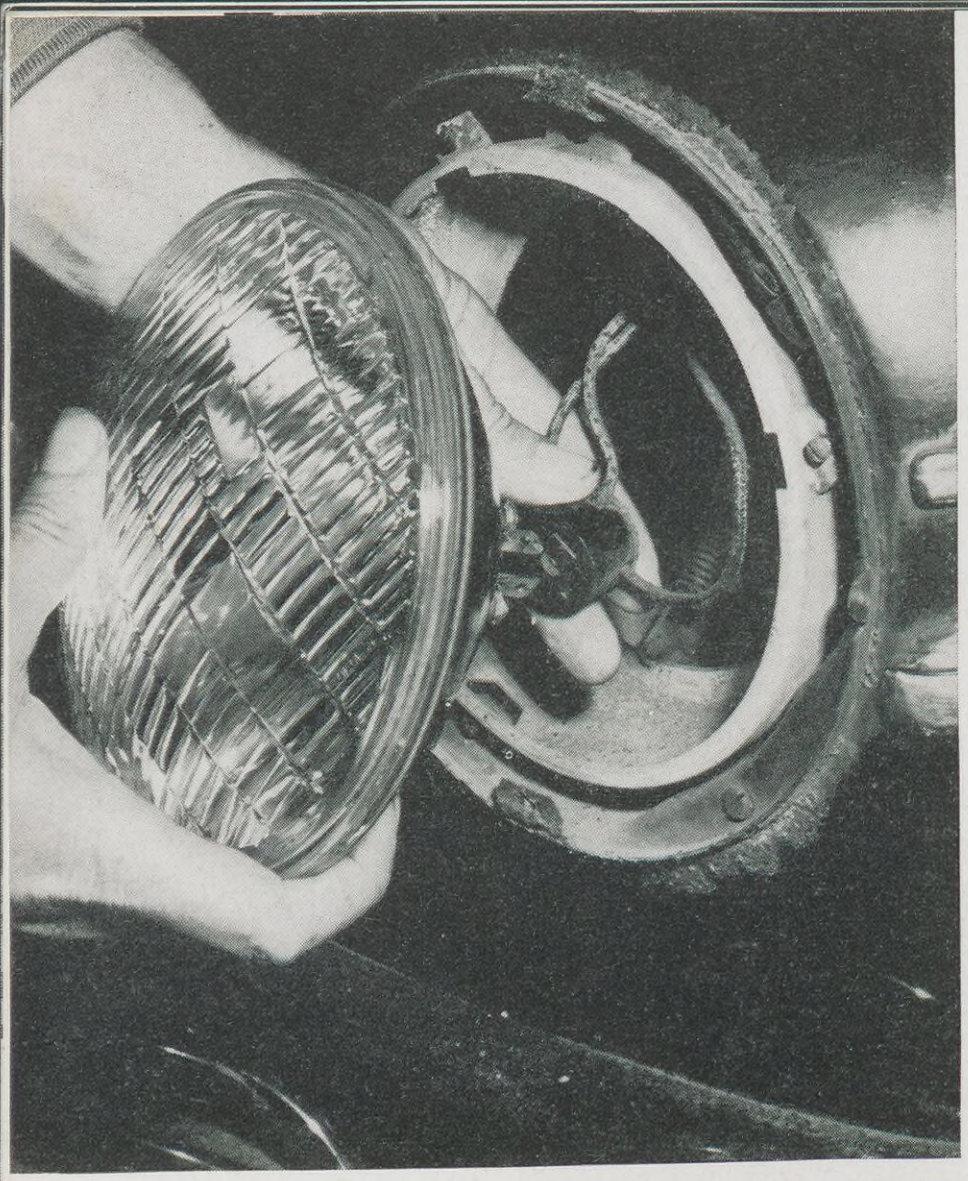


most Shell stations offer motorists trouble prevention by a Spring Change-Over service This is bumper-to-bumper conditioning designed to prepare cars for safe, dependable and economical operation during warmer weather.

Services included in a Spring Change-Over, as well as prices for them, are determined by Shell's independent dealers. Therefore, prices and services will vary somewhat from one station to another. There may also be some regional differences in Spring Change-Over because some parts of an automobile, like the cooling system, require special care in colder climates.

Normally, however, a Change-Over will include these basic services: SHELLUBRICATION,® safety check, battery check, radiator drain and flush with the addition of cooling system protector, and oil drain and re-fill.

SHELLUBRICATION is the trade name for Shell's complete automobile chassis and body lubrication, a dealer-guaranteed service available at all Shell stations. The safety check, as the name implies, is aimed at locating any worn, loose or broken parts which might lead to



Lights are inspected to help insure safe night driving. Over 50 per cent of fatal auto accidents in the U. S. occur at night.

TIME FOR A TONIC continued

mechanical breakdowns or traffic accidents. Shell dealers bring to customers' attention, and repair or replace on request, such things as: tire cuts and bruises, uneven tire wear, broken or loose mufflers and tail pipes, and leaking shock absorbers, brake fluid lines and radiators.

Some Shell dealers may offer packages including more services. For example, they may add to the basic Change-Over such services as cleaning and re-packing the front wheel bearings and checking brake linings for wear, cleaning and re-oiling the air cleaner, checking and tightening the fan belt, adjusting the brakes, draining and re-filling the transmission and differential, and rotating or cross-switching tires.

Services performed as part of a Spring Change-Over are available at all Shell service stations, either in a package or on an individual (buy what you need) basis. Not every car needs all the services Shell dealers offer. The cost of a Shell Spring Change-Over is a small price to pay, however, for safe and dependable operation of a car. It is a minor investment that usually saves major expenses later.

So while preparing for Spring, remember your car. It'll need a tonic too ●

"MAKING A RECOMMENDATION"

by J. G. Jordan
Vice President Marketing
Shell Oil Company

J. G. JORDAN

The Spring Change-Over described on these pages is typical of the top-quality and timely services provided by Shell dealers around the country at all times of the year.

Shell service station dealers are our main contacts with the public. In the vast majority of cases, they are independent business men who set their own prices and operate their own businesses just as other retail firms do.

Since the success of our dealers directly affects the success of our Company, the Marketing Organization helps them develop Spring Change-Over and other services, besides providing them with highest-quality products, thorough training, advertising, credit facilities and the like.

Of course, as employees, we also help Shell dealers succeed—and thus strengthen our own jobs—by buying Company products. And we can help a great deal more by recommending Shell products and services to our relatives and friends.

What just one new customer means to a Shell dealer —and to Shell—is indicated in the quantity of oil products that one steady customer uses in a year of driving. The average motorist buys 686 gallons of gasoline and about 34 quarts of oil in a year.

If recommendations by each of the nearly 40,000 of us, whose jobs depend on Shell's ability to compete successfully, resulted in five new customers, Shell dealers would be serving 200,000 more people who otherwise would be buying from competitors. And Shell would be making and selling to its dealers an additional 137,-200,000 gallons of gasoline and 6,800,000 quarts of oil!

What does this mean to each of us? Simply this: greater job security and more opportunities for advancement in an even stronger, more dynamic Company.

A Shell pensioner has found a satisfying retirement business among flowers

PLANTING FOR RETIREMENT

TO R. N. Madere, planning for retirement meant planting.

The former Gardener at the Norco Refinery started planning and planting 15 years ago with a small flower garden in his backyard at Hahnville, Louisiana. Since his retirement in 1957, after 29 years of Shell service, his garden has grown into a thriving nursery business. He is cashing in on the knowledge of horticulture he built up over the years as well as on his foresight and planning.

The major part of Madere's planning took the form of propagating his stock of flowers, shrubs and trees. This involved taking cuttings from the plants and tending them as they took root. By this method, he gradually built up a substantial stock of salable plants.

In addition to the purchase of some additional stock, he invested in the purchase of a small truck and the materials for conversion of his garage into a shop. Madere did the carpentry work himself.

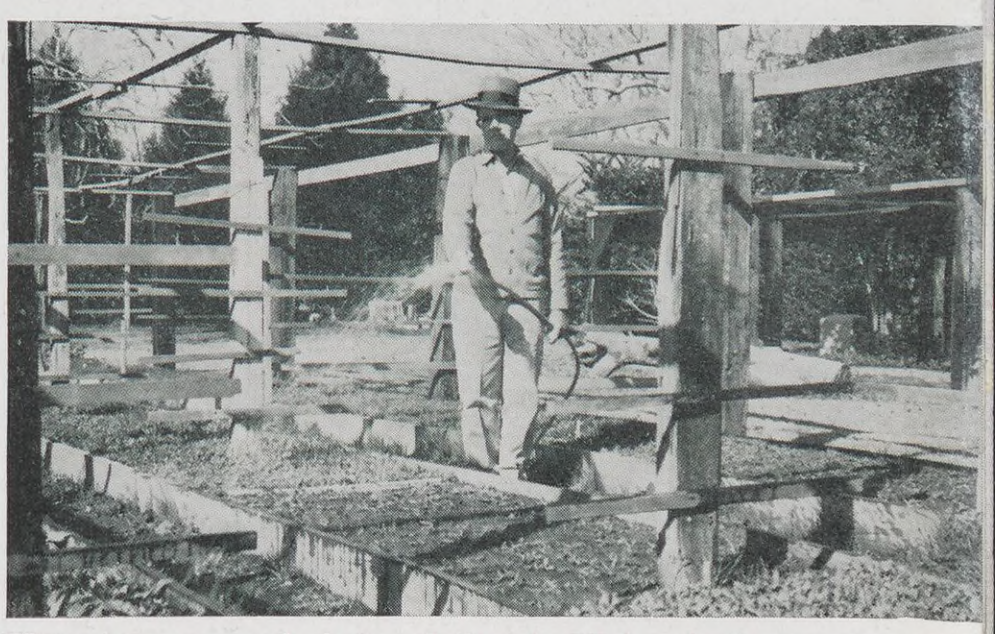
Madere's garden now has a wide variety of plants, including roses, azaleas, orchids, carnations, calandulas, snapdragons, junipers and boxwoods. Besides, he sells garden supplies such as fertilizers and peatmoss. He also does some landscaping, but keeps this phase of the business to a minimum because it takes too much time.

An indication of Madere's success in the nursery business came last December in his experience with Christmas trees. He expected to sell only a few of them but before the season was over he had disposed of about 100, a large number for his small community.

Madere continues to plan in retirement. His nursery is on one acre of land and he is ready to expand it another half acre—as his business of growing continues to grow ●

Arranging potted plants in the display window of his remodeled garage is R. N. Madere, former Gardener at the Norco Refinery. His nursery business is a thriving one.

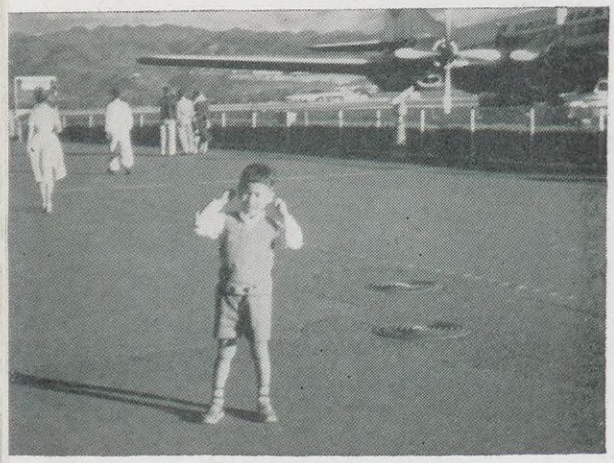
The display stand for plants in Madere's shop was built by him. He did all the carpentry in setting up the shop.



Watering nursery beds is a daily job. Madere built up his stock of plants with cuttings, before he retired.

California oranges are proudly displayed by Shell's Frances Hussey to Billy, the six-year-old orphan she escorted from Japan to his new home in California.

Young Billy took the flight from Japan in stride even though the plane that brought them had to circle San Francisco for five hours because fog covered the field.



ORPHAN ESCORT

Frances Hussey of Shell's Los Angeles Office has fun on vacations by escorting orphans to their new parents

On a visit at Billy's new home, Miss Hussey helped him empty a Christmas stocking. When he arrived he didn't speak any English.

WHEN the Japan Air Lines plane touched down at San Francisco's International Airport one day last fall, it marked the end of a vacation for Frances Hussey and the beginning of a new life for her traveling companion, six-year-old Billy.

Billy, a Japanese-American orphan, was enroute to the American couple who had adopted him. Miss Hussey, who escorted the boy from his Japanese grandparents to his new American parents, is a Secretary in the Los Angeles Office of the Pacific Coast Public Relations Department. The trip was part of her "own personal United Nations plan."

She puts her plan into action on vacations she spends overseas. Working through the International Social Service, she picks up one or more orphans adopted by American couples and escorts them from the ISS office to their new homes. She is not paid for her service. She pays her own full fare and the adopting parents pay the child's half fare.

Billy was the fifth Japanese-American orphan she has flown with since she first heard about the adoption service more than two years ago. (Miss Hussey does not confine her interest in orphans to traveling with them. As an adopting parent by proxy, she helps support a 13-month-old Korean boy living in Japan.)

Miss Hussey became interested in orphan travellers when she heard an appeal by Pan American Airways over a Los Angeles radio station for someone to take care of a newly-arrived orphan for a weekend. The child's new parents had been delayed and were not able to meet him at the airport. Miss Hussey wrote Pan American volunteering for such assignments in the future, and mentioned she planned a trip to the Orient later in the year.

With her permission, the airline forwarded her letter to the Japanese-American Joint Committee for the Adoption of Japanese Orphans, which later became part of I.S.S. (I.S.S. has consultative status with the Economic and Social Council of the United Nations.) By the time she left for her vacation in Japan a few weeks later she had agreed to escort an orphan back to the U. S.

Miss Hussey's background makes her an ideal choice for such assignments. Born in Johannesburg, South Africa, she left Africa with her family for the Orient when she was seven and lived at different periods in India, China, Japan and the Hawaiian Islands.

Her childhood experiences did not take the edge off her urge to travel. In 1943 she joined the Red Cross Hospital Service, and served first in North Africa, then later in southern France, the Philippine Islands and Japan. When she came home in 1946, she was able to speak fluent French and "basic" Italian, Spanish and Japanese.

She has added to her global travels since then by going abroad during her vacations—usually in alternate years.

Last fall, Miss Hussey went to the Orient on vacation, and again made the return trip with a Japanese-American orphan—Billy.

Billy had not visited a western-type home before his trip, knew no English and had never eaten American food. But armed with comic books and a newly-acquired taste for ice cream, he made the flight of two nights and one day without much difficulty.

"The worst time came when we reached San Francisco and fog kept us from landing for five hours," Miss Hussey said. "I think Billy was wondering why we couldn't find America. But I got him a pad and a pen and showed him how to make numbers from one to 10, and he spent the whole time writing numbers over and over."

A few days after Billy arrived at his California home, Miss Hussey heard from his new parents that at first "Billy was a lonesome, homesick little boy.

"Just imagine, he couldn't speak a word of English and they didn't know any Japanese," she said. "But I knew Billy was intelligent and would learn fast. Now he goes to an American school five days a week and a Japanese school on Saturdays and his parents say he's doing fine."

Speaking of the reasons for her work with orphans, Miss Hussey says: "I do it to stimulate international good will by helping children. Bringing them back to their new parents is a gratifying experience."

Next year Miss Hussey, who will then have 20 years of Shell service, hopes to spend her four weeks' vacation in Europe. And on her return flight she hopes to escort one or more European orphans to their new American parents ●

SAFETY
IS NO ACCIDENT

SHELL'S safety record is no accident. It is the result of such factors as built-in safety features in machinery and operating units, elimination of potentially dangerous conditions, extensive safety training and careful supervision of work.

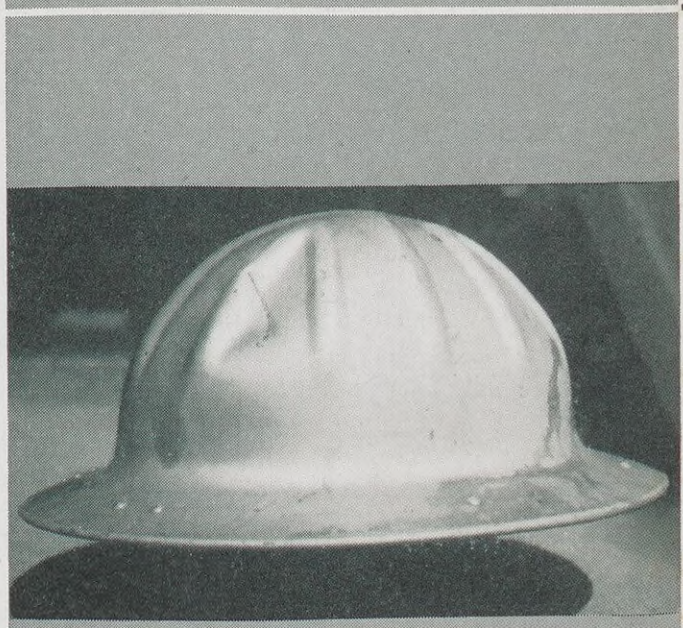
All these are important in maintaining a good safety record. But a record stands or falls largely as a result of the safety consciousness and safe working habits of individual employees.

Wearing prescribed safety equipment is a necessary part of safe working habits—as the ripped shoe, dented helmet and broken glasses pictured at the right show so clearly. The men who wore them received at most only minor bruises or cuts in accidents that otherwise would have been serious. Other types of safety equipment that help protect Shell employees include: face shields, air masks, protective suits and automobile safety belts.

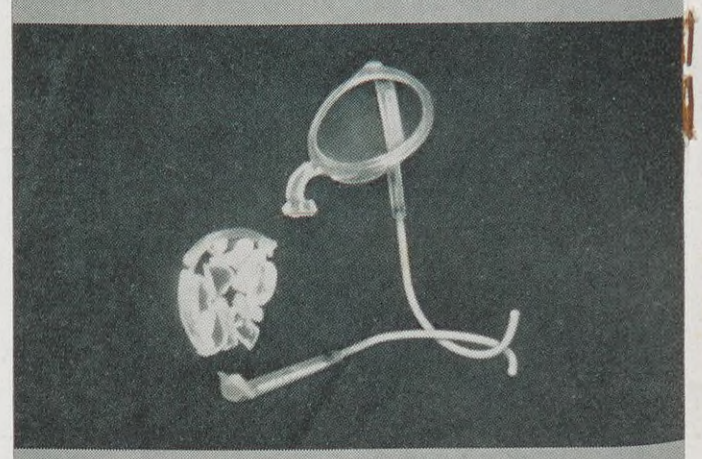
The nine pictures shown on the opposite page were selected from a total of 14 published by Shell employee newspapers in 1958 to show the effectiveness of safety equipment.

Though even the best safety measures can't stop all accidents, the men pictured here know they can protect themselves. They know safety is no accident.

"They're toe-savers. I know."



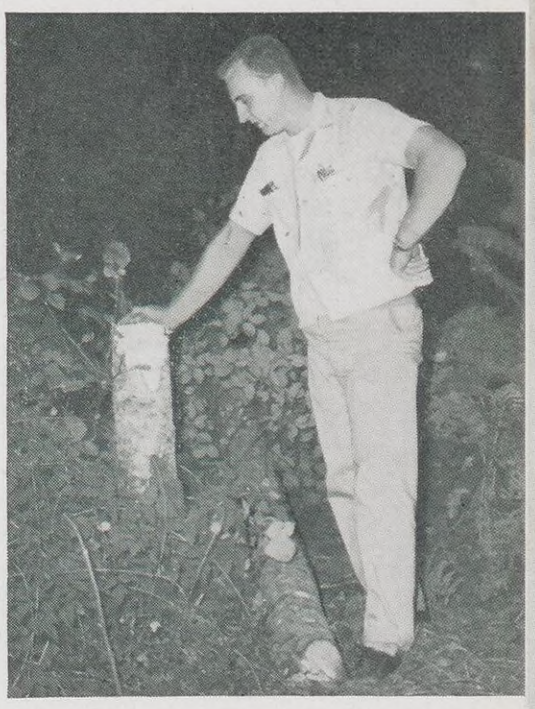
"I'm sure it saved my life."



"I could have been blinded."

A 450-pound drum fell on D. A. McGary's foot at the Dominguez Chemical Plant. His steel-toed safety shoe saved his toes.

His foot-saving boot is held by General Helper J. H. Massingill next to the pump element that hit it at the Houston Refinery.



A falling tree could have injured Instrumentman H. M. Hofstad, Anacortes Refinery, on an off-the-job project, but his safety shoes saved him.

Happy and unhurt, Pipefitter D. L. Emard, Wilmington-Dominguez Refinery, holds the rod that fell five floors, hitting his helmet.

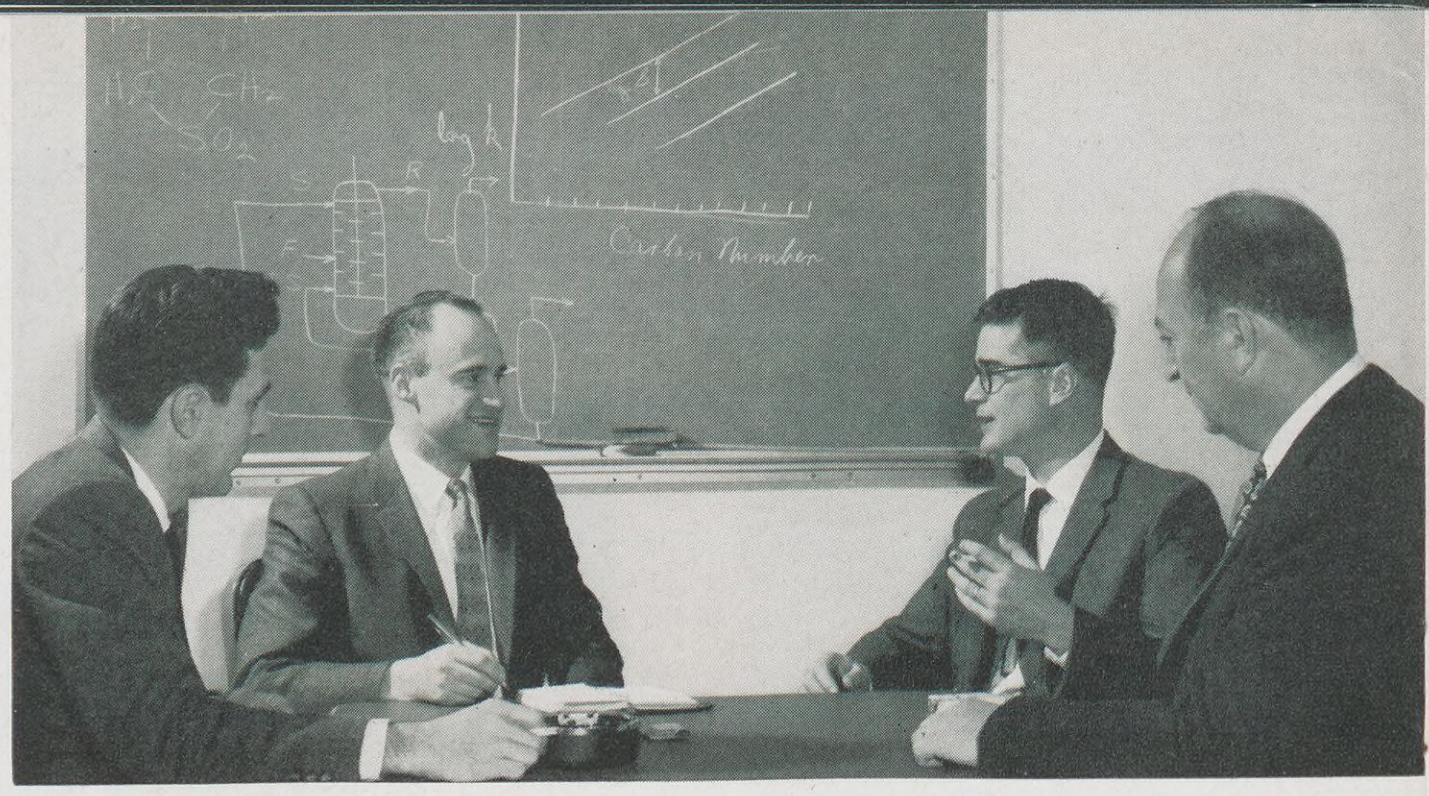
Struck by a falling transformer, General Helper N. E. Kinler, Norco Refinery, examines his helmet, which absorbed the impact of the blow.

An exploding turbine case threw a 38-pound fragment at Pipefitter E. W. Bryant's head at the Wood River Refinery. He suffered a slight cut.

Shatterproof glasses saved the sight of the right eye of Rotary Driller E. A. Lancon, New Orleans Area, when a chain hit him.

Safety goggles stopped a fragment from hitting W. D. Bullock's eye while he was breaking concrete. He is a Mechanic's Helper at Norco.

A wire fragment was stopped by his safety goggles while Pipeliner J. C. Shumate, Shell Pipe Line Corporation, was buffing a pipe.



Discussing their technical paper are, from left: C. H. Deal, Supervisor Development, Physical Chemistry Department; E. D. Oliver, Engineer (now on an assignment at the Martinez Refinery); M. N. Papadopoulous, Chemist, Physical Chemistry Department; and H. D. Evans*, Supervisor Development, Oil Process Engineering Department; all Shell Development Company, Emeryville. Their paper is "Extraction of Aromatics with Sulfolane" (Oil Processes and Refining). This paper presents basic data and the results of experimental work and process comparisons with alternative solvent systems; e.g., diethylene-glycol.

INTERNATIONAL OIL MEETING

THIRTEEN technical papers by Shell employees in the United States have been accepted for publication and discussion at the Fifth World Petroleum Congress, an international gathering of oil scientists and technologists which meets in New York late this Spring.

About 6,000 oilmen from 50 countries are expected to attend the Congress in New York City's Coliseum from May 30-June 5. They will discuss scientific problems of world-wide significance to the oil industry. (A detailed account of plans for the Congress appeared in the December, 1958 issue of SHELL NEWS.)

A total of 285 papers covering all phases of the industry's operations will be presented. The papers will be divided into 10 sections and discussed in 100 sessions of the Congress. The sections are: 1) Geology and Geophysics; 2) Drilling and Production; 3) Oil Processes and Refining; 4) Chemicals from Petroleum and Natural Gas; 5) Composition, Analysis and Testing; 6) Utilization of Petroleum Products; 7) Engineering, Equipment and Materials; 8) Transportation and Distribution; 9) Operations Research, Statistics and Education; and 10) Applications of Atomic Energy to the Petroleum Industry.

Shell will contribute papers in each of the sections. Thirty-five employees of Shell Oil Company, Shell Development Company and Shell Chemical Corporation are authors of the 13 Shell papers. On this and following pages are photographs of the authors and brief abstracts of their papers. (Fourteen papers have been accepted from other Royal Dutch/Shell Group companies.)

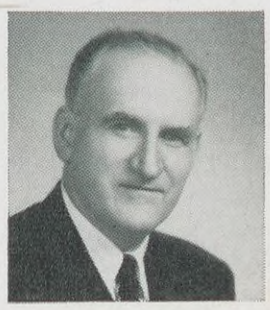
J. A. PETERSON

"Petroleum Geology of the Four Corners Area" (Geology and Geophysics) by J. A. Peterson*, Division Stratigrapher, Shell Oil Company, Pacific Coast E & P Area.

This paper describes the geological formations and types of rocks encountered in exploring for and developing oil and gas accumulations in the Four Corners region.

"Present and Future Economics of Offshore Petroleum Developments" (Drilling and Production) by B. Dykstra, Vice President, Shell Oil Company, New Orleans E & P Area.

This paper reviews the technical, legal and economic problems which must be resolved in order for the industry to proceed with the finding and development of vast reserves of oil and gas believed to exist in the offshore areas of the U. S.



B. DYKSTRA

* Will present paper at Congress.

C. A. REHBEIN

W. V. MEDLIN

W. A. MITCHELL

R. A. WILSON

"Studies on a Commercial Two-Stage Catalytic Cracking Plant" (Oil Processes and Refining) by C. A. Rehbein*, Assistant to Manager, Manufacturing Technological Department, Shell Oil Company, Head Office; W. V. Medlin, Supervisor Development, Oil Process Engineering Department, Shell Development Company, Emeryville; and W. A. Mitchell, Manager Zone B, and R. A. Wilson, Assistant Manager Zone B, both of the Anacortes Refinery.

This paper presents a description of the two-stage catalytic cracking plant at the Anacortes Refinery, commercial experience with several types of feed stocks, the results of engineering studies of certain features of the unit and a summary of an economic analysis of the process.

"Hydrogen Peroxide—New Techniques for its Utilization" (Chemicals from Petroleum and Natural Gas) by G. B. Payne*, Chemist, Organic Chemistry Department, Shell Development Company, Emeryville.

The recent greater availability of hydrogen peroxide has created increased interest in its uses. This paper describes some of the new chemical reactions using hydrogen peroxide and how they lead to important chemicals.

G. B. PAYNE

R. J. MOORE

"Analytical Application of Near Infrared Spectroscopy" (Composition, Analysis and Testing) by R. J. Moore, Group Leader; R. J. Gordon*, Senior Technologist; and R. C. Eiffert, Technologist, all of the Research Laboratory at the Martinez Refinery.

One of the most powerful analytical procedures is absorption spectroscopy — measuring the type and amount of radiation absorbed by a sample of material placed in a beam of light. Recent advances reported in this paper concern analytical techniques using new equipment which employ the "near-infrared" region of the spectra—that range of frequencies just beyond the red region of visible light. Such useful information as the amount of various hydrocarbon types in gasolines can be developed.

R. J. GORDON

R. C. EIFFERT

"Oxidation Inhibitors for Modern Fuels" (Utilization of Oil Products) by A. C. Nixon, Supervisor Research, Plastics and Resins Department; T. R. Lusebrink* and B. M. Steckler, Chemists, Fuels and Engine Lubricants Department; and H. B. Minor, Chemist, Chemical Reaction Process Department, all of Shell Development Company, Emeryville.

Trends in the design of diesel, automotive, turbine and rocket engines have increased the demands on the stability of fuels. This paper discusses the role of inhibitors (which delay oxidation), in meeting these demands.

A. C. NIXON

T. R. LUSEBRINK

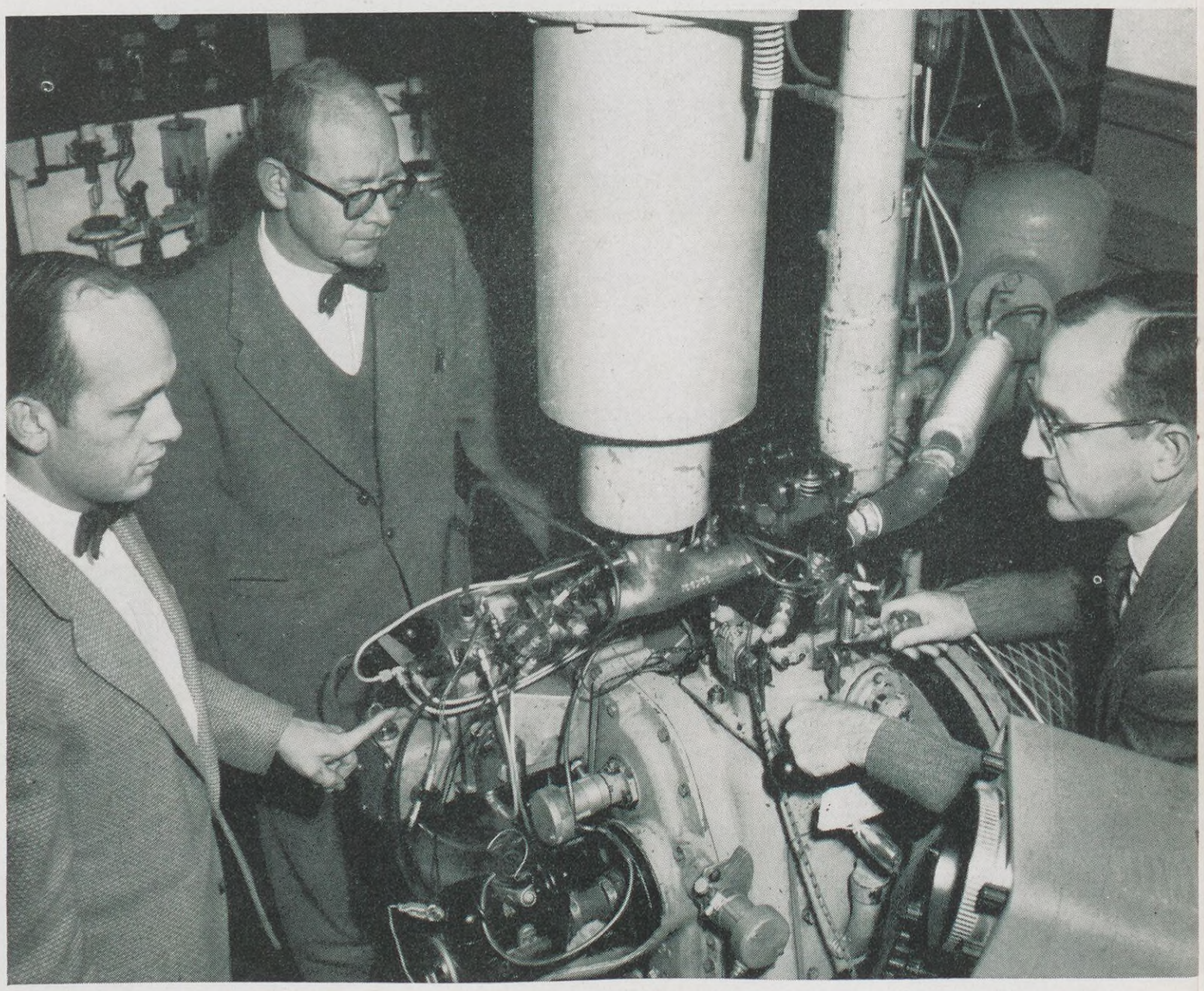
H. B. MINOR

B. M. STECKLER

* Will present paper at Congress.

INTERNATIONAL OIL MEETING

continued



Examining a single cylinder test engine used in research for their paper, are from left to right: J. L. Bame, Group Leader; L. S. Echols*, Chief Research Engineer; and V. E. Yust, Manager Research Services, all of the Research Laboratory at the Wood River Refinery. The title of their paper is "A Review of Research on Abnormal Combustion Phenomena in Internal Combustion Engines" (Utilization of Oil Products). This technical paper unifies and interprets knowledge of engine knocks, preignition and pounding phenomena in terms of a general theory of combustion.

H. W. HOWARD

F. T. RADECKE

J. R. SCHEIBLI

"Refinery Experience with Epoxy Resin Coatings" (Engineering Equipment and Materials) by H. W. Howard*, Senior Specialist — Resins, Plastics and Resins Division, Shell Chemical Corporation, New York; F. T. Radecke, Senior Engineer, Manufacturing Engineering Department, Shell Oil Company, Head Office; and J. R. Scheibli, Chemist, Plastics and Resins Department, Shell Development Company, Emeryville.

This paper outlines the satisfactory five-year experience and economics in using epoxy resin coatings for refinery-wide protection. Data on the types of epoxies used, their durability, chemical resistance, surface preparation, application and coating system are included.

* Will present paper at Congress.

D. N. HARRIS

G. T. COKER

"Experience in Turbine Fuel Quality Control* (Transportation, Distribution, Marketing) by D. N. Harris*, Special Engineer, and G. T. Coker, Technologist, both of Products Application Department, Shell Oil Company, Head Office.

As the result of observed deficiencies in jet fuel filter separator equipment, the AEROSHELL® Fuel Equipment Laboratory was established. Here, new techniques were developed which permit accurate evaluation of full-scale filter/separator equipment. Tests indicate that commercial filter/separator equipment still needs to be improved. Cleanliness levels of jet fuel are discussed and data presented for a field survey involving two airlines. Recommendation is made that refiners control the weak-acid content of jet fuel in order to prevent insoluble matter from developing.

"Multiple Rates of Return" (Operations Research, Statistics and Education) by R. B. Harbottle, Assistant Controller, Shell Oil Company, Head Office; H. C. Lefkovits*, Physicist, E&P Research Division, Shell Development Company, Houston; and H. D. Kanner, University of Chicago faculty (formerly a Physicist with Shell Development Company, Houston).

The rate of return on investment may have more than one value for certain projects which require capital investments at different times or which are for the purpose of accelerating incomes. Introduction of a new concept, "internal rate of return," provides a unique evaluation of such investment projects.

R. B. HARBOTTLE

H. C. LEFKOVITS

"Recoil Tagging of Petroleum Hydrocarbons" (Applications of Atomic Energy to the Petroleum Industry) by F. F. Farley*, Chief Research Chemist, and B. E. Gordon, Group Leader, both of the Research Laboratory at the Martinez Refinery.

Further studies of the mechanisms of recoil tagging of hydrocarbons with carbon-14 and tritium are presented in this paper. When a petroleum hydrocarbon, such as toluene, is tagged with carbon-14 its path through a passenger car engine or through a refinery process unit can be followed more readily. Research studies using such tagged hydrocarbons are of great value to the petroleum industry.

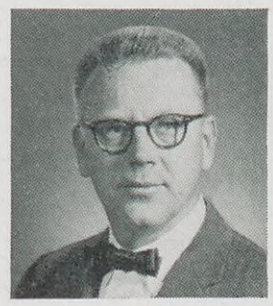
F. F. FARLEY

B. E. GORDON

E. R. BARNUM

C. L. MAHONEY

W. S. SAARI



K. J. SAX

W. W. KERLIN

"Effect of Radiation in Stability of Synthetic Lubricants" (Applications of Atomic Energy to the Petroleum Industry) by E. R. Barnum, Supervisor Research; C. L. Mahoney*, Chemist; W. S. Saari, Chemist; W. W. Kerlin, Chemist; all of Lubricants Department; and K. J. Sax, Chemist, Organic Chemistry Department; all of Shell Development Company, Emeryville.

This paper covers the effect of radiation on the thermal and oxidative stability of synthetic lubricants, both hydrocarbon and ester types ●

* Will present paper at Congress.

BIRTHPLACE

Tomorrow's leaders are born in today's high schools, Monroe E. Spaght, Executive Vice President of Shell Oil Company, pointed out in a speech last month before a meeting of 5,000 members of the National Association of Secondary School Principals in Philadelphia, Pa. SHELL NEWS presents the following excerpts from his speech, entitled "The High School—Birthplace of America's Leaders," as a contribution to the current national discussion on education.

". . . You have before you an industrialist discussing your profession. I am not an educator. The credentials I would submit to you are simply that I am an American vitally interested in the production of highly educated people and that because I come from an area of activity which is a very large consumer of your ultimate product—the trained mind—my observations may conceivably be of some interest to you . . .

"Some recent figures tell us that American industry employs more than five million graduates of American universities and colleges. My own industry, oil, employs 165,000 people who have college degrees. The Shell companies in North America employ more than 10,000 of these, and among them are 3,000 engineers.

"I would like to make some observations on the quality of today's young engineer. A few weeks ago, I asked some of the senior technical people in my Company to evaluate today's engineering graduates in terms of how they compare with their predecessors. Our new, young engineers come from all parts of the nation, from many different schools, from many different backgrounds. The people in our Company who know engineers best agree, to a man, that the young engineer coming to us today is better educated than his counterpart of a generation ago. He seems to have a better understanding of the scientific method. He is more at home with theory, more original in approaching new problems. These people are, in short, a generation of promise.

"And my friends in other companies of the oil and chemical industry tell me, too, that they agree. Nor would I limit this comment to engineers only. As to what the young graduate in any profession seems to know—the total of what we will call his education—I cannot escape the view that he is superior to his earlier counterpart. I think too, that he is, over-all, a saner individual and able, therefore, to do a better job as a professional man and as a thinking citizen.

"May I recall that a very large fraction of the work that resulted in the new science and applications of nuclear physics has been done here in the United States in the past 15 years. In the past 10 years, 21 Nobel Prizes have been awarded to native-born Americans, and four more to people born abroad but educated in America. These, incidentally, were not all in the field of science. Three were in literature and two received the Peace Prize. And, in recent years, other Americans have given us polio vaccine, aureomycin, terramycin, new techniques of heart and brain surgery, major advances in radar and television, the Palomar telescope, the cyclotron and the klystron, the New York Philharmonic and 'Tales of the South Pacific,' the Grand Coulee Dam, and nylon—and a thousand new products you use every day.

"These are as American as apple pie, and many are from the brains of young people. These highly trained, talented people didn't just crawl up out of the woodwork. They came from American education. I cite these things

C OF AMERICA'S LEADERS

to support one's lack of patience when he hears our school system summarily criticized. It seems quite obvious that it can't all be bad. Indeed, somebody in education must be doing a whale of a job.

"I cannot miss this opportunity, either, to take on the critic who makes the profound observation that Willie can't read or spell. Just how good was Willie's grandfather in these regards? What became of the kids in his class who bogged down in McGuffey's Reader? You know what happened; they were sloughed off the body academic and allowed to go back to the farm and live out their days as farmhands. They were unwept, unnoticed and undiagnosed. Then diagnostic methods were developed. There was a tremendous advance in our understanding of the basic problems and methods of education. Then, suddenly, the people who had acquired this new understanding were being blamed for the problems they had helped define. The educators were in the same predicament as Pinocchio—he found the robbers and pointed them out to the police and was promptly tossed into jail . . .

"I don't subscribe to the proposition that all secondary education is going downhill like a cow's tail. For instance, colleges were offering patch-up courses in English when I was a freshman in 1924 and they were as unhappy about it then as we are now.

"However, lest I have overstated the position, let me hasten to say that I think someone has been doing less than a perfect job in this area. Weakness in English on the part of a man who has spent 12 or 16 years in school is an indictment of everybody who tried to teach him anything. It is not that learning the mother tongue is difficult, to be mastered only by the high I.Q. It is that we, and by 'we' I mean parents and teachers from kindergarten through graduate school, have simply not demanded better.

"When Willie comes to school with no enthusiasm—no interest in working at something difficult, could it possibly have anything to do with the fact that his parents let him sit for hours before the TV the night before? If he doesn't apply himself, and shows no ambition, could it be because in his home he sees a low level of mental activity and no respect for intellectualism?

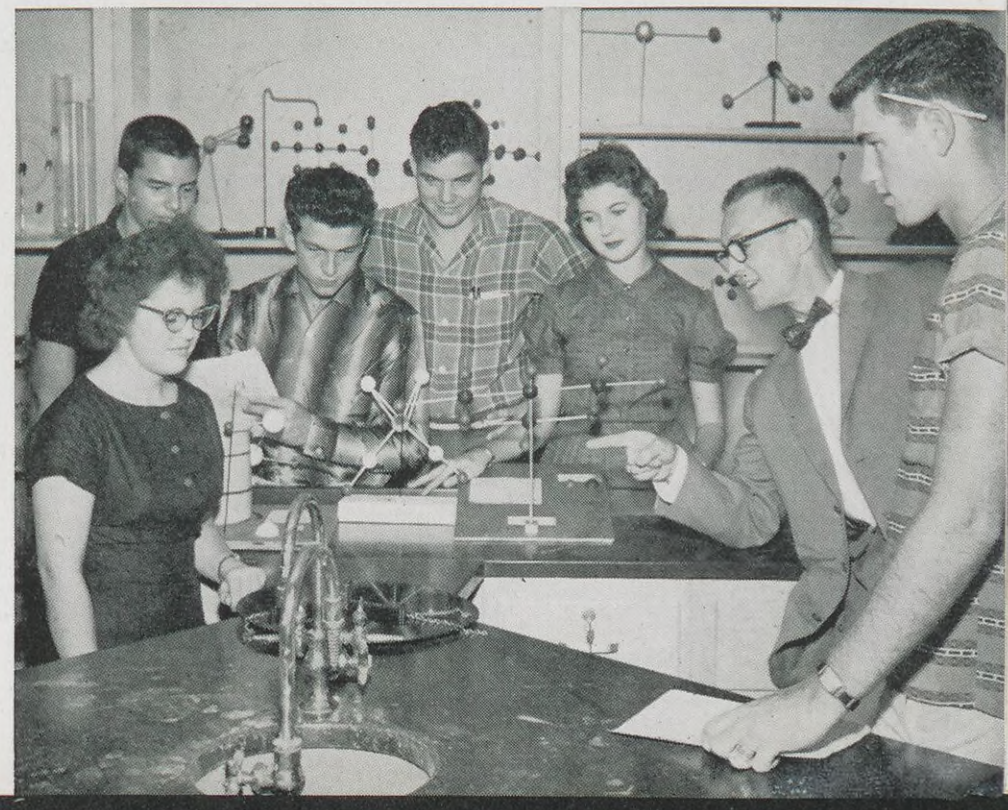
"You may remember the quotation from James Barrie in his address upon becoming rector at St. Andrew's:

> 'Mighty are the universities of Scotland, and they will prevail. But even in your highest exaltations never forget that they are not four, but five. The greatest of them is the poor, proud homes you come out of, which said so long ago "there shall be education in this land".'

"The rediscovery by your critics of such things as Willie's poor spelling leads to charges that there is progressive deterioration in the quality of teaching, or, as someone has charged, 'a pernicious softening of the cur-

". . . Almost without exception, the outstanding scientist became seriously interested in science during his high school years . . . by an exposure to the 'language of science'."

Group Leader D. W. Miller of the Houston Refinery (pointing below) does his part in helping kindle this interest in science by conducting demonstrations for a high school physics class which includes a Shell daughter and three Shell sons. They are: Betty Barnes (left), daughter of Operator R. L. Barnes of the Houston Chemical Plant; Sonny Ables (behind Betty), son of Operator E. C. Ables of the Refinery; David Howard (plaid shirt), son of D. E. Howard of the Refinery's Engineering Department; and Tom Church (right), son of Senior Technologist D. M. Church of the Chemical Plant.



"Like it or not, you (teachers) control the valve that regulates the supply of the trained people who can keep America great."

To provide inspiration and encouragement to teachers who are the key to a student's decision to embark on a career in science, Shell Companies Foundation, Inc., sponsors seminars at Cornell and Stanford Universities for 100 outstanding science and mathematics teachers each year. Dr. Philip Johnson, left, coordinator of the Cornell seminar, shows three teachers an electron-measuring apparatus designed for high school laboratories.

BIRTHPLACE OF AMERICA'S LEADERS continued

riculum.' I am not prepared to pass judgment on these charges. I just don't know. But there is one specific aspect of the current hue and cry to which I should like to address myself. May I be so immodest as to suggest that I have a right to a view on this subject. It concerns the quantity of supply—the number—of educated people in America. If I talk specifically about engineers and scientists, please understand that to be indicative rather than exclusive. Their situation perhaps best points out the whole problem.

"You and I read daily about the 'cold war,' and we see ourselves engaged in an arms race. We presume, reasonably, that the conflict is only in the military area and that we will maintain our place in the sun so long as we maintain some sort of military equality. It seems to me that this is not so. Something more basic has occurred in Soviet Russia which is of tremendous long-term importance but not yet widely appreciated. It is that Russia has discovered the value of organized scientific research and engineering application. Also, the Soviets seem to see now that these tools are as useful for economic domination as for military domination. As they succeed in improving their own standard of living and gaining stature in the world markets, they may very well take the accent off the military race and plan 'to bury us' by economic means. This is certainly the lesser of two evils and may be the best long-term hope for peace.

"My point is that the recognition by the Soviets of the potentialities of science and technology may be the most important fact of our times. And, suppose the Chinese come to the same realization? Where then will America and Western Europe stand? Whether it is to fight for our physical lives in military combat or for our economic position in a struggle for production, the role of science and engineering is critically important. The necessity for America to produce the greatest number of highly-trained scientists and engineers is obvious. . . .

"An investigation into the causes of creativity was undertaken a very few years ago, involving interviews with hundreds of outstanding scientists in Europe and in the United States. It disclosed that almost without exception the outstanding scientist became seriously interested in science during his early teens, meaning, in our case, during his high school years. This interest did not spring spontaneously from within the boy. It seems to have had little to do with his native intelligence, his family background, or the kind or location of his school. It was kindled by an exposure to the 'language of science.'

"The late renowned Charles F. Kettering once said, 'When a man's life has been a great and wondrous adventure, he often looks back in search of the turning point—that single moment which opened the door to his great adventure. For me that moment came more than 60 years ago, in a small Ohio school house, when an enthusiastic country high school teacher awoke in me a burning interest in the fascinating world of science.'

"On the basis of much moving evidence, I have become convinced that the title of this talk is justified; that the high school is the birthplace of America's leaders. You, the high school teaching profession, have, therefore, a responsibility of tremendous significance—particularly in America, a free economy living under democratic government, where no one orders young people to become scientists or teachers or engineers or doctors nor tells them how long to study nor where to work after their formal training is finished. Like it or not, you control the valve that regulates the supply of the trained people who can keep America great. . . .

"As a member of industry, I promise you that we will continue and increase our efforts to respect and support good education; to pound home the facts that teachers are inadequately paid, inadequately recognized, inadequately supplied with the facilities they need for the job we expect them to do. . . .

"Interested laymen and conscientious parents—and there are many of them—are indeed tremendously concerned about the preparation of young people for a future compounded of so much promise and so much danger. If, at times, we seem critical, please remember that we express ourselves as sincerely interested friends—not as foes. Whatever we may lack in detailed information, we have no trouble in understanding that there is no function in contemporary life more important than the one you fill. . . ."

They have RETIRED

H. R. ATEN
Pacific Coast Area
Production

T. P. BERTIER
Wood River Refinery
Engineering

T. S. BILYEU
Wood River Refinery
Engineering

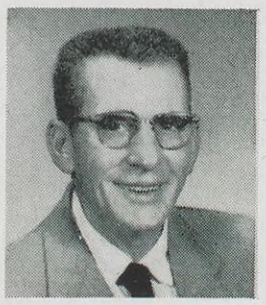
H. J. BORGSTEDT
St. Louis Division
Operations

F. L. BRADLEY
Pacific Coast Area
Production

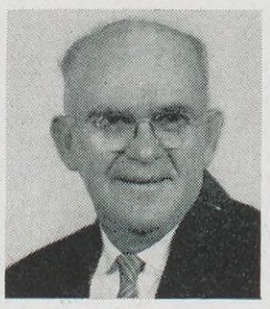
T. V. BROWNLEE
Shell Pipe Line Corp.
West Texas Division

H. L. BRYANT
Tulsa Area
Production

R. O. BUIE
Shell Pipe Line Corp.
Texas-Gulf Division

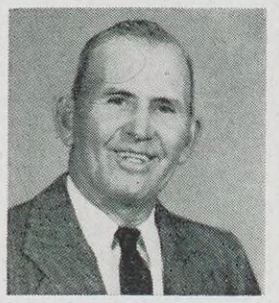


J. F. BURKS
Indianapolis Division
Operations



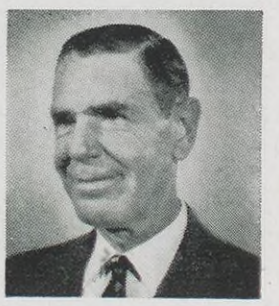
G. M. BUTTERFIELD
Detroit Division
Operations

L. E. CALDWELL
Shell Chemical Corp.
Dominguez Plant

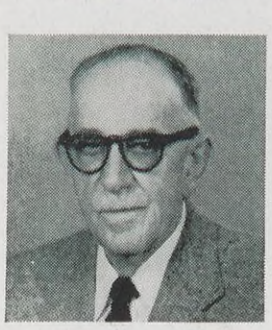


W. B. CARPENTER
Shell Pipe Line Corp.
Mid-Continent Division

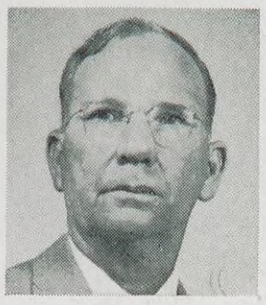
J. D. CLARK
Pacific Coast Area
Production



R. H. COOMBS
Houston Refinery
Treasury



R. H. COSBY
Houston Area
Gas



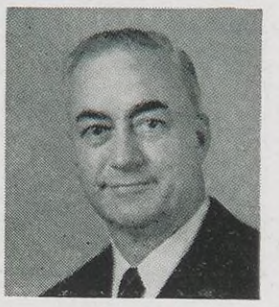
R. D. COUNCIL
Shell Pipe Line Corp.
Texas-Gulf Division

J. F. CREWS
Wood River Refinery
Utilities

J. S. CUNNINGHAM
Wood River Refinery
Engineering

C. E. DEY
Wood River Refinery
Distilling

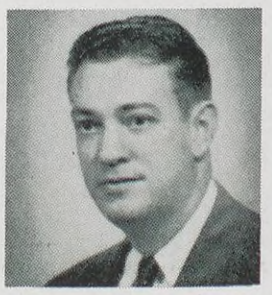
M. J. DOUGLAS
Shell Chemical Corp.
Shell Point Plant



M. B. DOWD
San Francisco Division
Sales

C. H. ESSIG
Martinez Refinery
Engineering

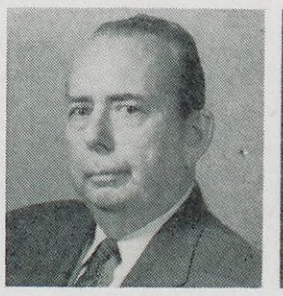
G. J. ESTAY
New Orleans Area
Production



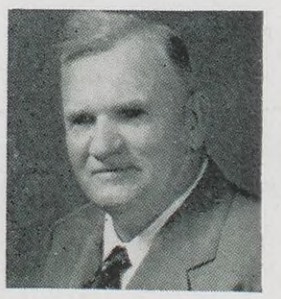
F. Q. GAROFALO
New York Division
Sales

O. C. GENT
Wood River Refinery
Catalytic Cracking

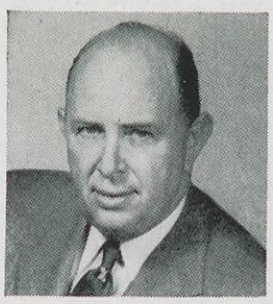
W. E. GIBSON
Shell Chemical Corp.
Torrance Plant



J. D. GILBOE
Pacific Coast Area
Production



R. A. GOFF
Tulsa Area
Production



W. V. GOODWIN
San Francisco Division
Treasury

H. R. GRIFFING
Shell Pipe Line Corp.
Head Office

R. E. GROW
Shell Chemical Corp.
Torrance Plant

E. S. HARPER
Wilmington Refinery
Engineering

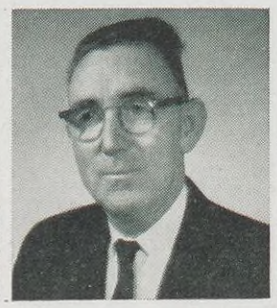
A. HELD
Wilmington Refinery
Engineering

R. E. HICKMAN
Shell Pipe Line Corp.
Texas-Gulf Division

They Have Retired continued

A. S. HICKS
Wood River Refinery
Catalytic Cracking

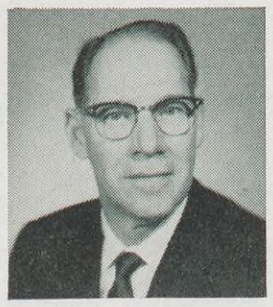
C. H. HUMRICH
Wilmington Refinery
Effl. Cont. & Utilities



H. F. IRETON
Houston Refinery
Engineering

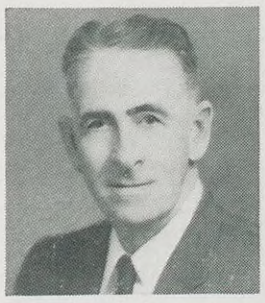
P. F. ISAACSON
Minneapolis Division
Operations

A. L. JOHNSON
Shell Pipe Line Corp.
Texas-Gulf Division

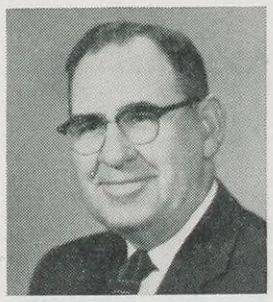


F. A. KEMP
Martinez Refinery
Engineering

U. J. LAURENT
Norco Refinery
Thermal Cracking

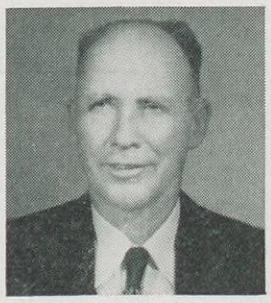


H. H. MAXFIELD
Wood River Refinery
Products Application

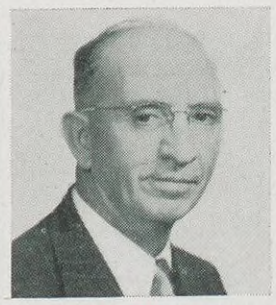


I. C. MURPHY
Shell Pipe Line Corp.
Mid-Continent Division

S. MURRAY
Boston Division
Operations

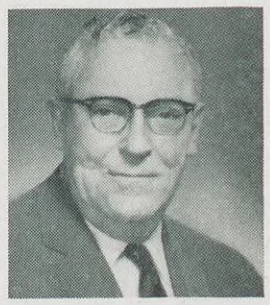


M. S. NEWMAN
Houston Refinery
Engineering



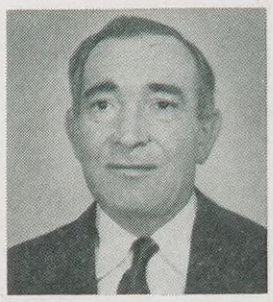
E. M. O'DANIEL
Shell Pipe Line Corp.
Mid-Continent Division

V. W. PARKER
Wood River Refinery
Administration



R. T. PATTON
Pacific Coast Area
Legal

L. W. PIPPENGER
Shell Pipe Line Corp.
Mid-Continent Division

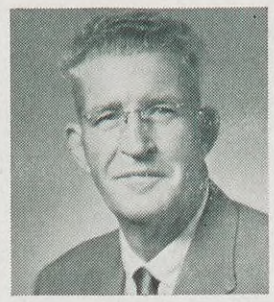


B. E. PIVA
Shell Chemical Corp.
Shell Point Plant

F. C. REEVE
Chicago Division
Treasury

P. W. REINHART
Denver Area
Exploration

W. V. RHOADS
Wood River Refinery
Engineering

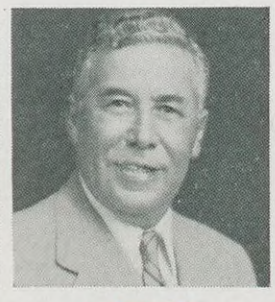


H. W. RICE
Tulsa Area
Production

J. R. SANDERS
Shell Chemical Corp.
Houston Plant

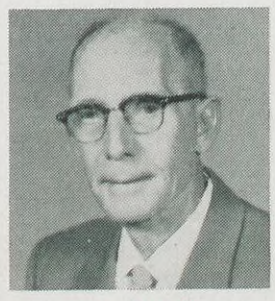
A. E. SMITH
Pacific Coast Area
Production

L. H. STAHLHUT
Wood River Refinery
Engineering

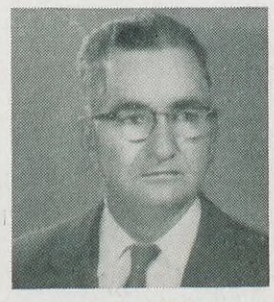


A. THAILER
New York Division
Operations

G. D. THOMAS
New Orleans Area
Exploration



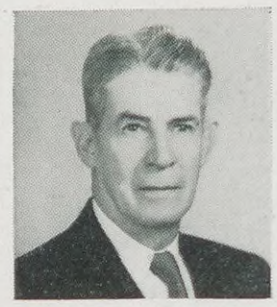
J. L. TIPPIN
Shell Pipe Line Corp.
Mid-Continent Division



A. N. TISE
Houston Area
Production

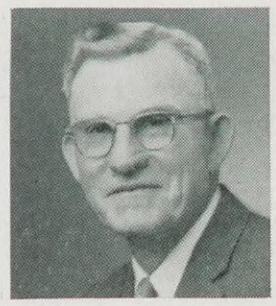
G. C. VARNDELL
Shell Pipe Line Corp.
Mid-Continent Division

L. L. VEST
Shell Pipe Line Corp.
Mid-Continent Division

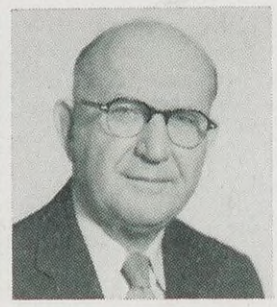


H. M. WALKER
Shell Pipe Line Corp.
Mid-Continent Division

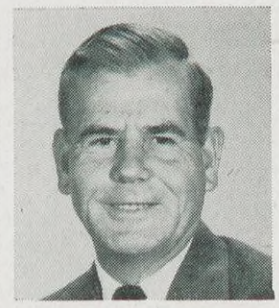
R. L. WERNER
Albany Division
Treasury



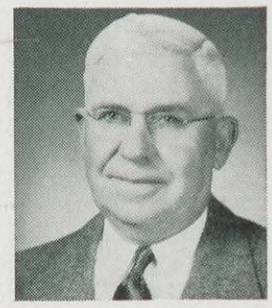
L. H. WILLE
Wood River Refinery
Engineering



T. B. WINNINGHAM
New Orleans Area
Gas



H. L. WOODWARD
Wilmington Refinery
Distilling

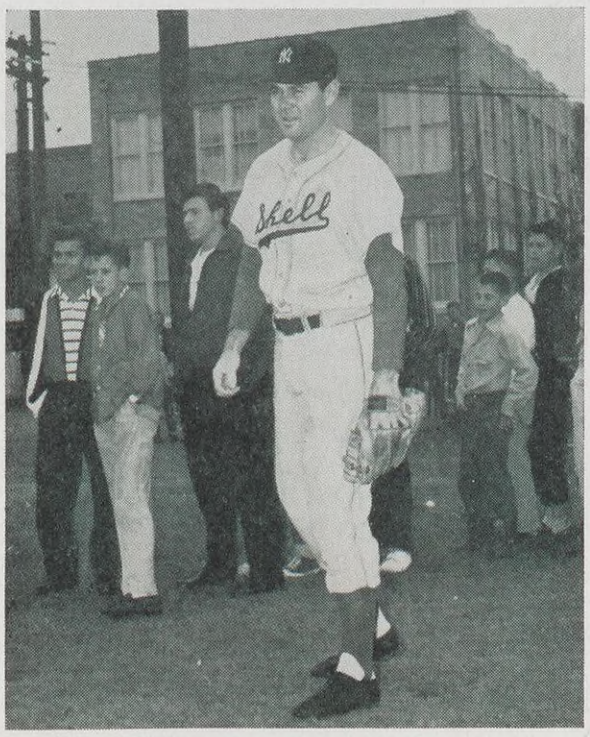


J. R. YORK
Shell Pipe Line Corp.
Rocky Mountain Division

SHELL Coast to Coast

BASEBALL CLINIC

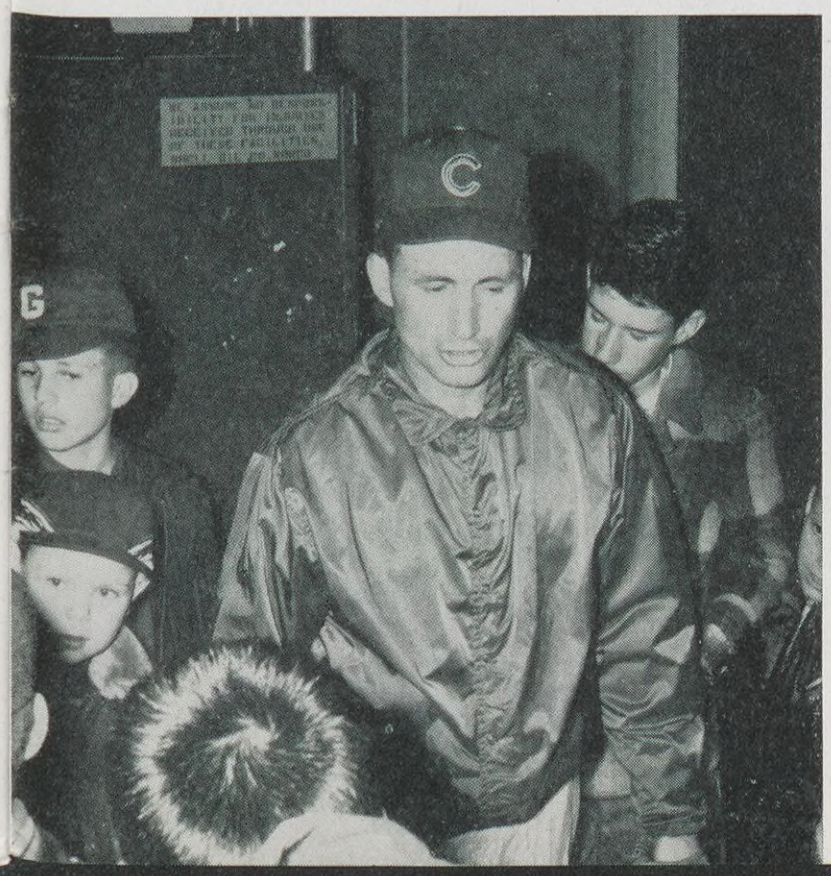
Last month more than 750 youngsters attended the Second Annual Baseball Clinic sponsored by the Shell Employees Club at the Norco Refinery. At the end of the one-day clinic, the participating baseball stars obliged the youngsters by signing an estimated 25,000 autographs. Four of the stars are pictured below with their students.



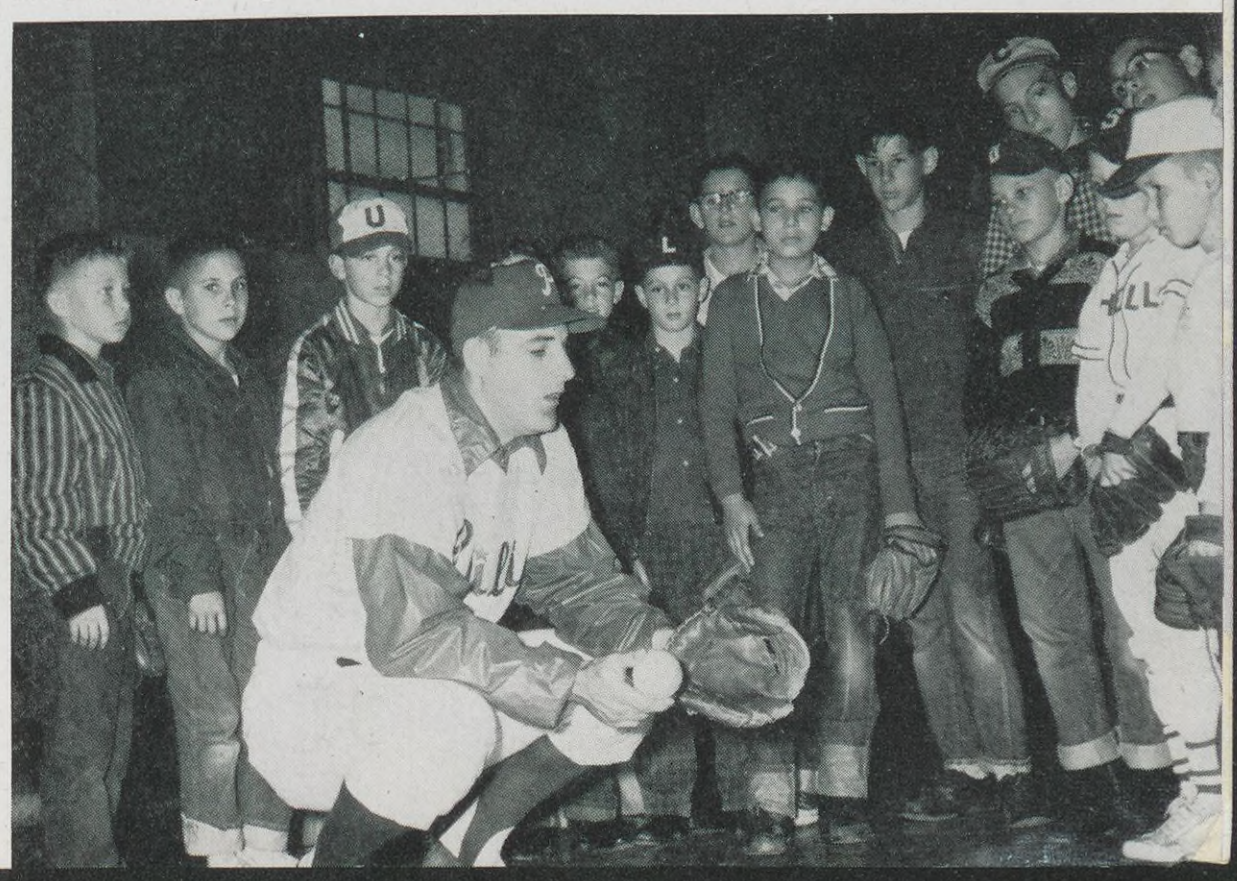
Pitcher Tom Sturdivant of the 1958 world-champion New York Yankees watches one of the pitching sessions held during clinic.

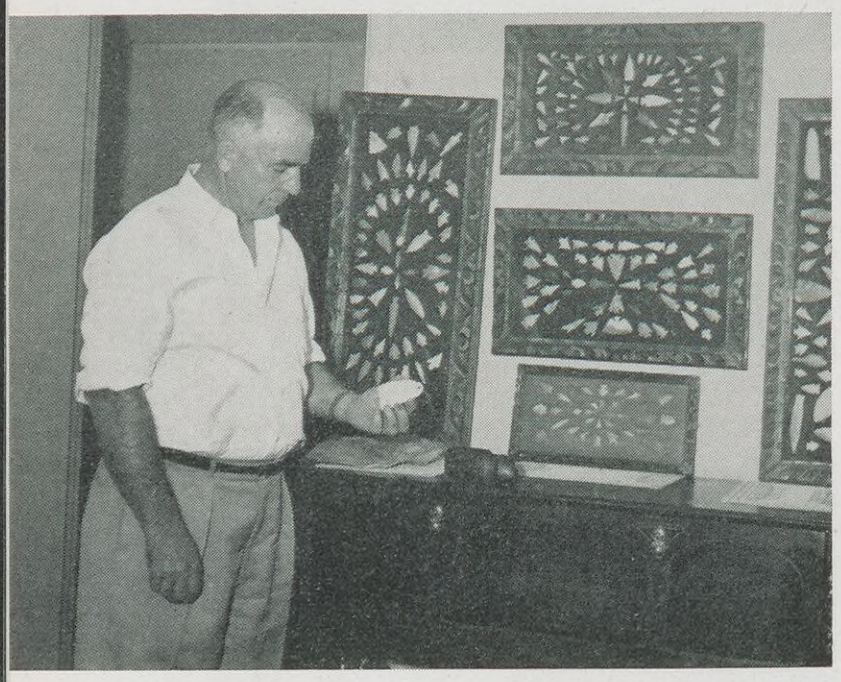
During one of the clinic's classes, First Baseman Norm Zauchin of the Washington Senators demonstrated the "stretch," a play frequently used by first basemen, to a group of admiring fans — mostly sons of Shell employees.

Third Baseman Alvin Dark of the Chicago Cubs gives the boys a pep talk at one of the classes.



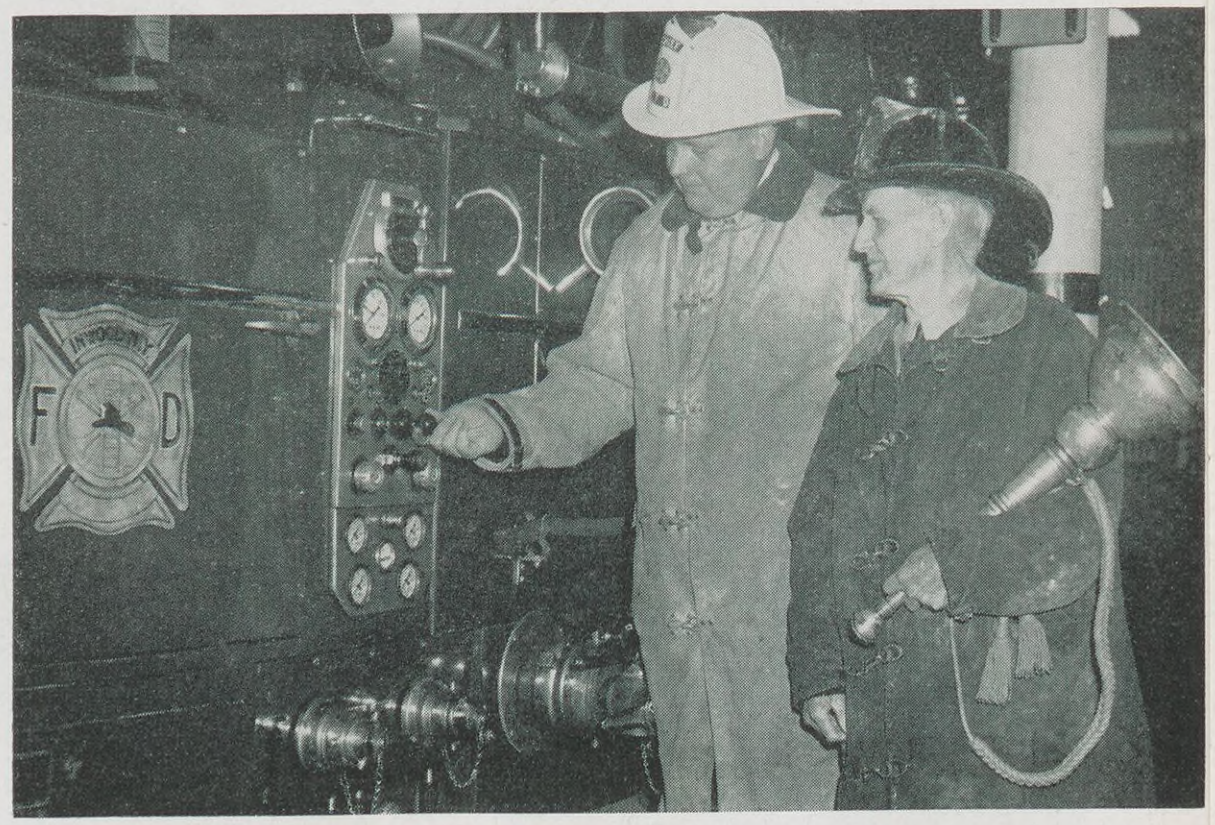
Infielder Gene Freese of the Philadelphia Phillies gets down to the level of the youngsters in his class to show them how to trap a ball.





INDIAN RELICS

Archeologists from all over the United States visit Division Production Manager F. R. Lovering, of the Midland Exploration and Production Area, to inspect his large collection of Indian relics. Standing in front of framed arrow heads, above, Lovering looks at a piece of ivory of an unexplained origin.



VOLUNTEER FIRE CHIEF

C. H. Kittel, left, Senior Clerk in the New York Marketing Division, is serving his community as Chief of the Inwood, L. I., Volunteer Fire Department. For eight years, Kittel has volunteered his spare time to the Department. He qualified to become Chief by serving as Second and First Deputy. In the photo above, he shows one of the firemen new equipment on the fire truck.

SMALL WORLD

Three Shell men on separate post-retirement vacations met a few months ago in Spain. They are, left to right, S. N. Wik, former Chemist at the Emeryville Research Center; H. R. Luck, former Manager of the Photographic and Duplicating Department at Emeryville; and H. D. Dale, former Manager, Wood River Refinery.

PROFITABLE HOBBY

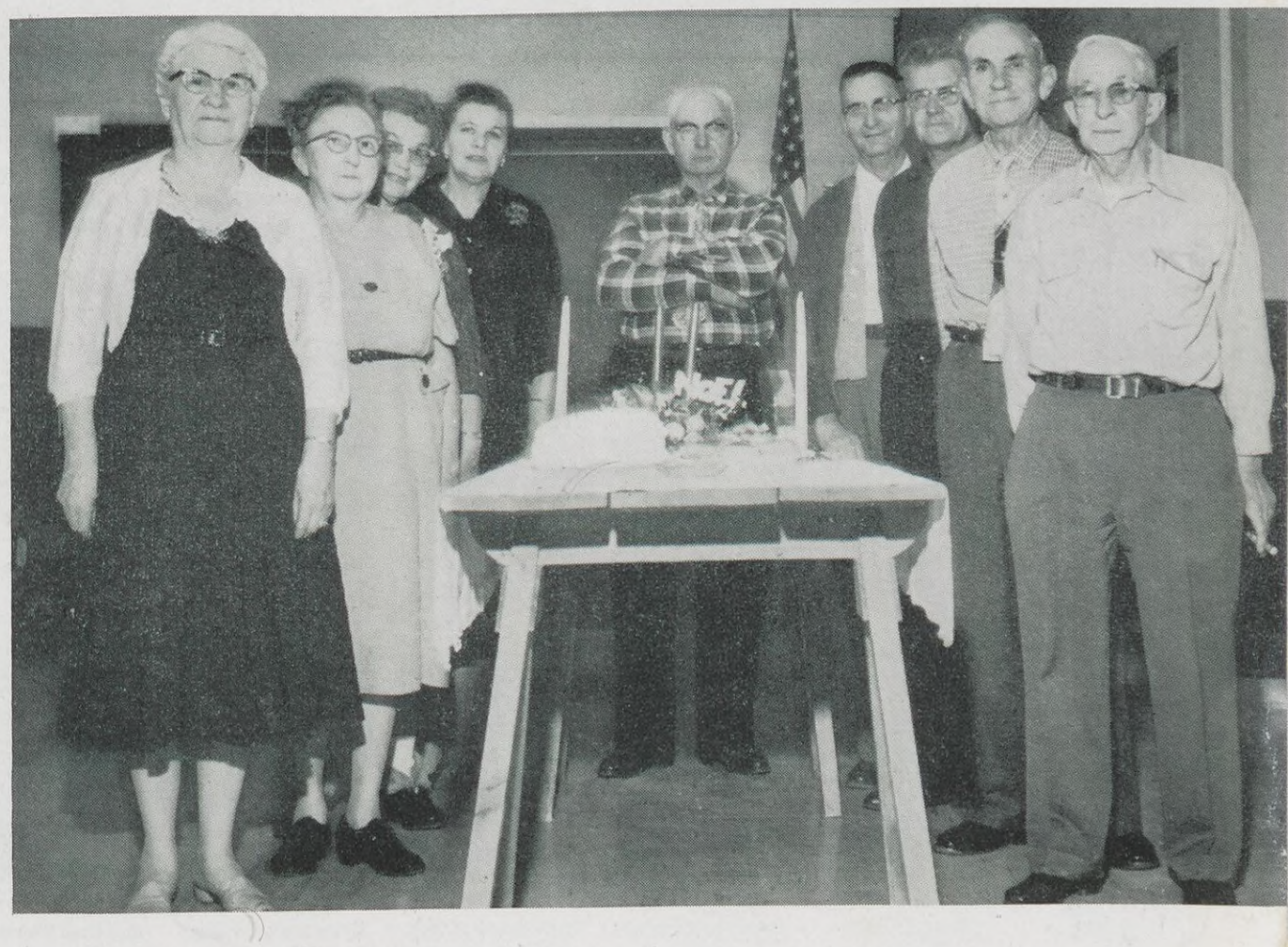
Surveyor H. C. Roberts of the Tulsa Exploration and Production has paid off well during the last year. They entered about 40 almost $4,000 in prizes, including two transistor radios, a portable prizes and a convertible automobile. Mrs. and Mrs. Roberts are shown

SHOTGUN SHARPSHOOTER

Shop Machinist A. W. Scobbie of the Wood River Refinery won the Illinois State live bird championship contest held recently at Casey, Ill. Scobbie has won 60 trophies since he started entering shooting contests in 1937. His more recent victories include the Missouri State live bird championship and three state trap-shooting events—Arizona doubles, Illinois doubles and Missouri singles. In his 22-year career with a shotgun, he estimates that he has fired more than 100,000 shots.

NEW SHELL PENSIONER CLUB

Six retired employees of the East Chicago Terminal of Shell Oil Company's Pipe Line Department and their wives have organized a Shell Pensioners' Club. Five of the couples are shown below, beginning at the front of the table, Mr. and Mrs. Jesse Hull, Mr. and Mrs. David Ervin, Mr. and Mrs. Guy McLaughlin, Mr. and Mrs. Harold Mackey. Oscar Hines is standing at the far end of the table. (His wife took the picture.) Members not pictured are Mr. and Mrs. Ray Parker. McLaughlin was elected president of the organization and Mrs. Hines was elected secretary. About 300 retired Shell employees are members of Pensioners' Clubs at St. Louis and three locations in California—Los Angeles, Bakersfield and Ventura.



Area and his family have a hobby that product endorsement contests and won television set, record albums, four cash below in their new car with their son, Gene.

Service BIRTHDAYS

Forty Years

L. P. FAUCHEUX
Norco Refinery
Distilling

C. J. TROXLER
Norco Refinery
Dispatching

Thirty-Five Years

E. E. BROWN
San Francisco Office
Transp. & Supp.

A. COOPER
Martinez Refinery
Refinery Laboratory

K. H. FARRAH
Tulsa Area
Production

C. C. FISHER
San Francisco Division
Treasury

C. F. HICKEY
Sacramento Division
Sales

G. W. HICKS
Seattle Division
Sales

R. P. HOYLE
Pacific Coast Area
Treasury

J. B. LEISER
Tulsa Area
Exploration

N. R. LEITHEAD
Pacific Coast Area
Production

J. O. LINDSEY
Tulsa Area
Purchasing-Stores

C. S. MUMFORD
Tulsa Area
Exploration

L. A. ROBINSON
Tulsa Area
Production

A. G. SCHEI
Vice President
Finance

J. SHEA
Martinez Refinery
Dispatching

L. T. SKINNER
Tulsa Area
Production

M. C. SNOOK
Portland Division
Marketing Service

D. SPEIGHT
Pacific Coast Area
Production

H. F. STANLEY
San Francisco Office
Purchasing-Stores

R. S. SULLIVAN
Wood River Refinery
Experimental Laboratory

R. TATE
Pacific Coast Area
Transport

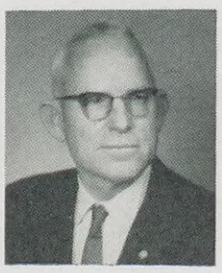
H. E. WALLACE
San Francisco Division
Sales

E. W. WEISS
St. Louis Division
Operations

Thirty Years

R. P. ALLAN
Head Office
Marketing

W. K. ANDERSON
Wood River Refinery
Dispatching



A. A. BAKER
St. Louis Division
Sales

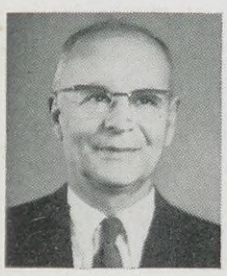
R. W. BALDWIN
Head Office
Marketing

H. W. BECKMAN
Anacortes Refinery
Treasury

W. C. BEVIL
Shell Chemical Corp.
Torrance Plant

R. M. BIRD
Sacramento Division
Treasury

R. L. BISSONETT
Albany Division
Operations



T. C. BONNER
Tulsa Area
Gas

J. A. BOURGEOIS
Norco Refinery
Treasury

W. C. BRADEN
Sacramento Division
Sales

E. H. BROWNING
Shell Chemical Corp.
Houston Plant

R. L. BUCKLES
Minneapolis Division
Sales

E. J. BURNS
New York Division
Operations

U. P. CHAMPAGNE
Norco Refinery
Engineering

R. M. CONLON
Indianapolis Division
Treasury

C. T. CREWELL
Pacific Coast Area
Land

Thirty Years *continued*

A. W. CRONAN
Wood River Refinery
Engineering

W. E. DEPENDAHL
Wood River Refinery
Gas

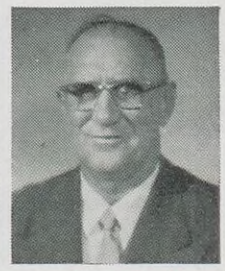
L. DILLOW
Wood River Refinery
Engineering

T. DOWDY
Houston Refinery
Dispatching

C. DULLUM
Martinez Refinery
Engineering

O. K. FACKLER
St. Louis Division
Sales

Z. P. HAGER
Houston Refinery
Dispatching



C. A. HANSEN
Houston Refinery
Engineering

F. G. HARKNESS
Shell Pipe Line Corp.
Mid-Continent Division

O. W. HATFIELD
Midland Area
Land

F. G. HAWK
Head Office
Purchasing-Stores

G. A. HENSLEY
Houston Refinery
Engineering

M. S. HOUSNER
San Francisco Office
Transp. & Supp.

R. J. HOWELL
St. Louis Division
Sales

E. W. JONES
Houston Office
Transp. & Supp.

R. R. KLECHKA
Houston Refinery
Engineering

K. O. KLUMP
Wood River Refinery
Catalytic Cracking

O. H. KOLLOCK
New York Division
Sales

L. N. LANKFORD
Houston Office
Transp. & Supp.

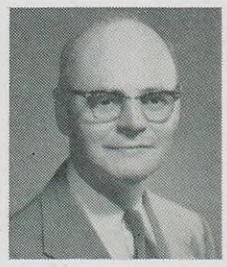
C. R. LATOWSKY
Head Office
Marketing

D. R. LILLEY
Houston Refinery
Engineering

G. H. LYMAN
Head Office
Marketing

G. E. MANNING
Tulsa Area
Production

G. Y. MASON
Houston Refinery
Engineering



L. J. MENARD
Sewaren Plant
Terminal

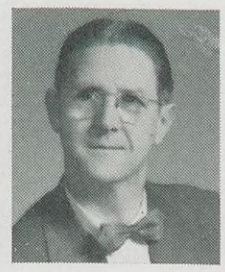
R. S. MENZIES
Portland Division
Treasury

W. A. MOORE
Portland Division
Treasury

J. W. MOYER
San Francisco Division
Treasury

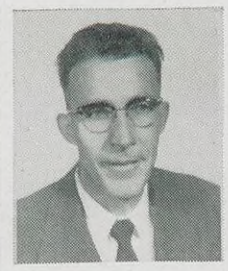
B. A. MULLEY
San Francisco Division
Operations

W. NICKERSON
Boston Division
Operations

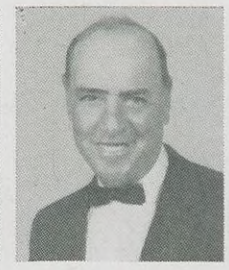


T. N. NUGENT
Boston Division
Operations

J. H. PAULINY
Wilmington Refinery
Alkylation



D. O. PHILLIPS
Shell Pipe Line Corp.
Mid-Continent Division



L. A. POCHE
Norco Refinery
Effl. Cont., Fire & Safety

W. A. POLLEY
Tulsa Area
Production

R. B. POLLOCK, SR.
Sacramento Division
Treasury

J. H. RADFORD
Calgary*
Expl. & Prod.

W. M. ROBERTS
Sewaren Plant
Compound

J. G. ROBISON
Shell Pipe Line Corp.
Mid-Continent Division

C. A. ROGERS
Seattle Division
Marketing Service

J. J. ROSS
Shell Pipe Line Corp.
Texas-Gulf Division

E. J. ROTH
Norco Refinery
Dispatching

A. E. SANDBACH
Wood River Refinery
Engineering

F. P. SANTORA
New York Divis
Operation

E. M. SHELTON
Cleveland Division
Sales

A. E. SLAYTER
Shell Pipe Line Corp.
Texas-Gulf Division

K. L. STELLE
Atlanta Division
Administration

M. F. SULLIVAN
Boston Division
Operations

M. W. TAMELE
Shell Development Co.
Emeryville

F. A. WATSON
Shell Pipe Line Corp.
West Texas Division

J. L. WATSON
Martinez Refinery
Refinery Laboratory

R. J. WILKERSON
Pacific Coast Area
Production

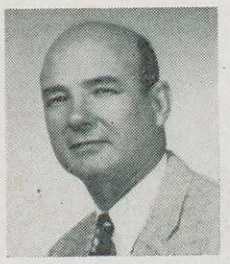
O. L. WILSON
Sacramento Division
Sales

*on loan to Shell Oil Company of Canada, Limited

Twenty-Five Years

L. C. ALCORN
Midland Area
Production

MARY S. ARNOLD
Martinez Refinery
Treasury



A. H. BAKER
Houston Refinery
Lubricating Oils

R. M. BAKER
Minneapolis Division
Sales

V. L. BENNETT
Shell Pipe Line Corp.
West Texas Division

R. BERGSTROM
Martinez Refinery
Research Laboratory

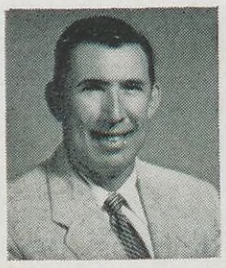
H. O. BROWN
Detroit Division
Sales

S. C. BURNET
Head Office
Marketing

C. F. FABER
Boston Division
Sales

J. E. FAIRWEATHER
Shell Pipe Line Corp.
West Texas Division

W. S. GAGE
Pacific Coast Area
Pers. & Ind. Rel.



P. S. GRAVES
Houston Refinery
Dispatching

J. A. GROVER
Wood River Refinery
Engineering

L. P. GUGLIELMO
Norco Refinery
Aromatics

A. J. HAAS
Wood River Refinery
Engineering

M. HADLEY
Shell Pipe Line Corp.
West Texas Division

C. V. HAND
Shell Chemical Corp.
Houston Plant

V. A. HARRELL
Indianapolis Division
Operations

W. F. HARRISON
Baltimore Division
Operations

J. H. JONES
Midland Area
Production

W. J. JUDD
Albany Division
Operations

J. J. LAZZARINI
Martinez Refinery
Engineering

J. H. LEACH
Houston Refinery
Aromatics

J. N. LYNCH
Houston Area
Production

L. N. MANCUSO
Houston Refinery
Fire & Safety

A. J. MARNETT
Boston Division
Operations

L. L. MIDDLETON
Wood River Refinery
Engineering

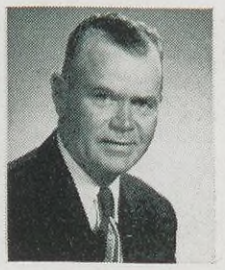
C. B. MOORE
Seattle Division
Sales

F. C. MOTTERT
Shell Pipe Line Corp.
Mid-Continent Division

C. E. MUSGRAVE
Wood River Refinery
Engineering

H. J. NIEMANN
Wood River Refinery
Purchasing-Stores

E. F. OBERT
Wood River Refinery
Engineering



D. L. PATTON
Wood River Refinery
Engineering

F. V. PAYNE
Pacific Coast Area
Production

J. C. QUILTY
Head Office
Pers. & Ind. Rel.

QUITTNER
ez Refinery
ineering

S. RASINSKI
Baltimore Division
Operations

E. E. SCANLAN
San Francisco Division
Sales

H. M. SEERDEN
Midland Area
Exploration

M. B. SHOVE
Los Angeles Division
Sales

D. R. SMITH
Shell Pipe Line Corp.
West Texas Division

R. F. STOVER
Minneapolis Division
Operations

S. J. THEALL
New Orleans Area
Production

DORTHIA P. TOBLER
Tulsa Area
Treasury

R. L. TRAPP
Tulsa Area
Production

E. VARGA
New York Division
Sales

R. L. WEBB
Houston Refinery
Aromatics

C. WEBER
Wood River Refinery
Engineering

F. A. WELSH
Tulsa Area
Production

J. G. WHITEHURST, JR.
Shell Development Co.
Houston

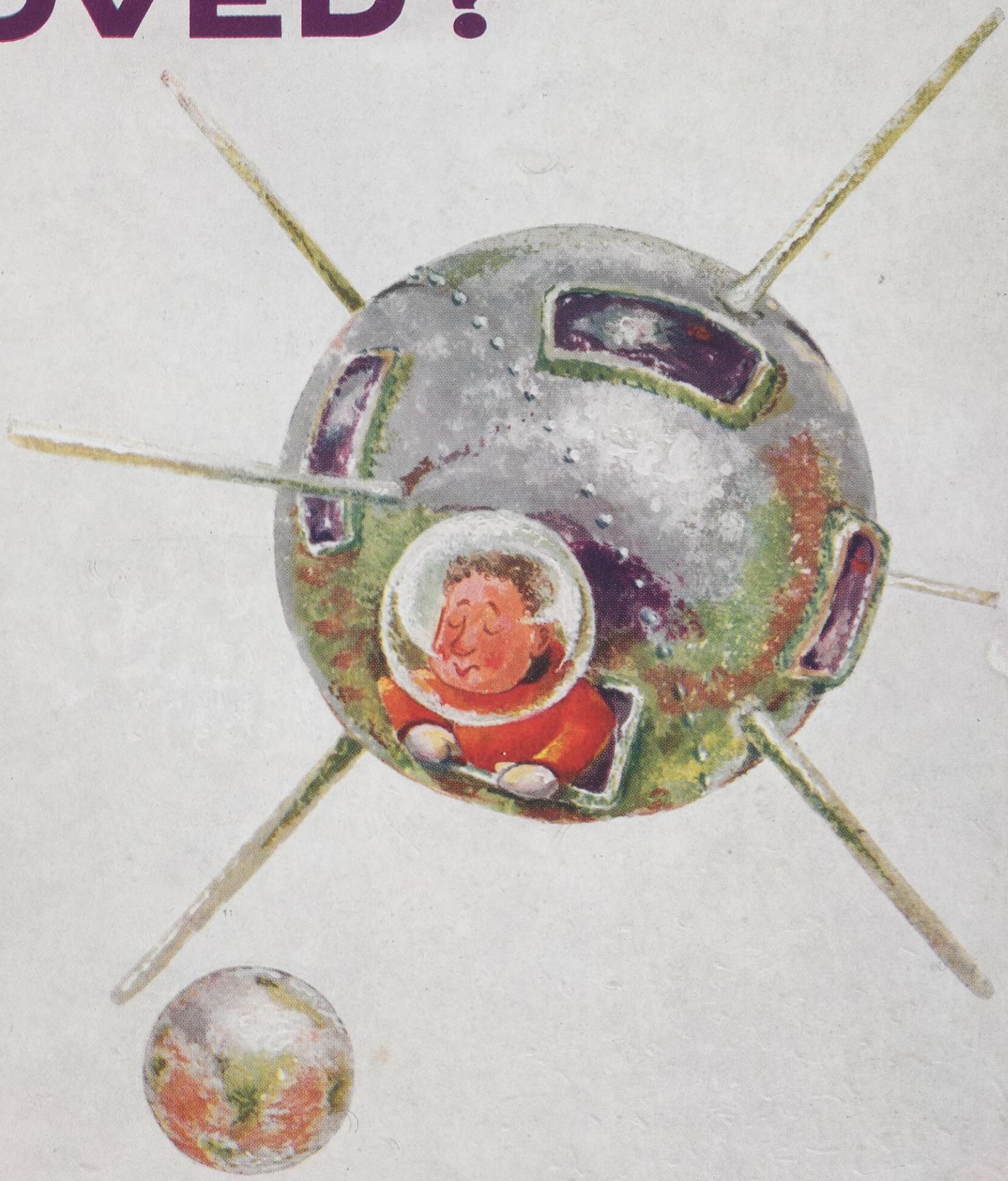
R. WITHERSPOON
Indianapolis Division
Treasury

C. A. WORKMAN
Cleveland Division
Sales

L. C. ZIMMERMAN
Wood River Refinery
Engineering

Every month about 1,000 Shell employees move to a new address. If you change your place of residence, be sure to tell your supervisor so you will continue to get Company mail and employee publications promptly.

MOVED?



SHELL OIL COMPANY
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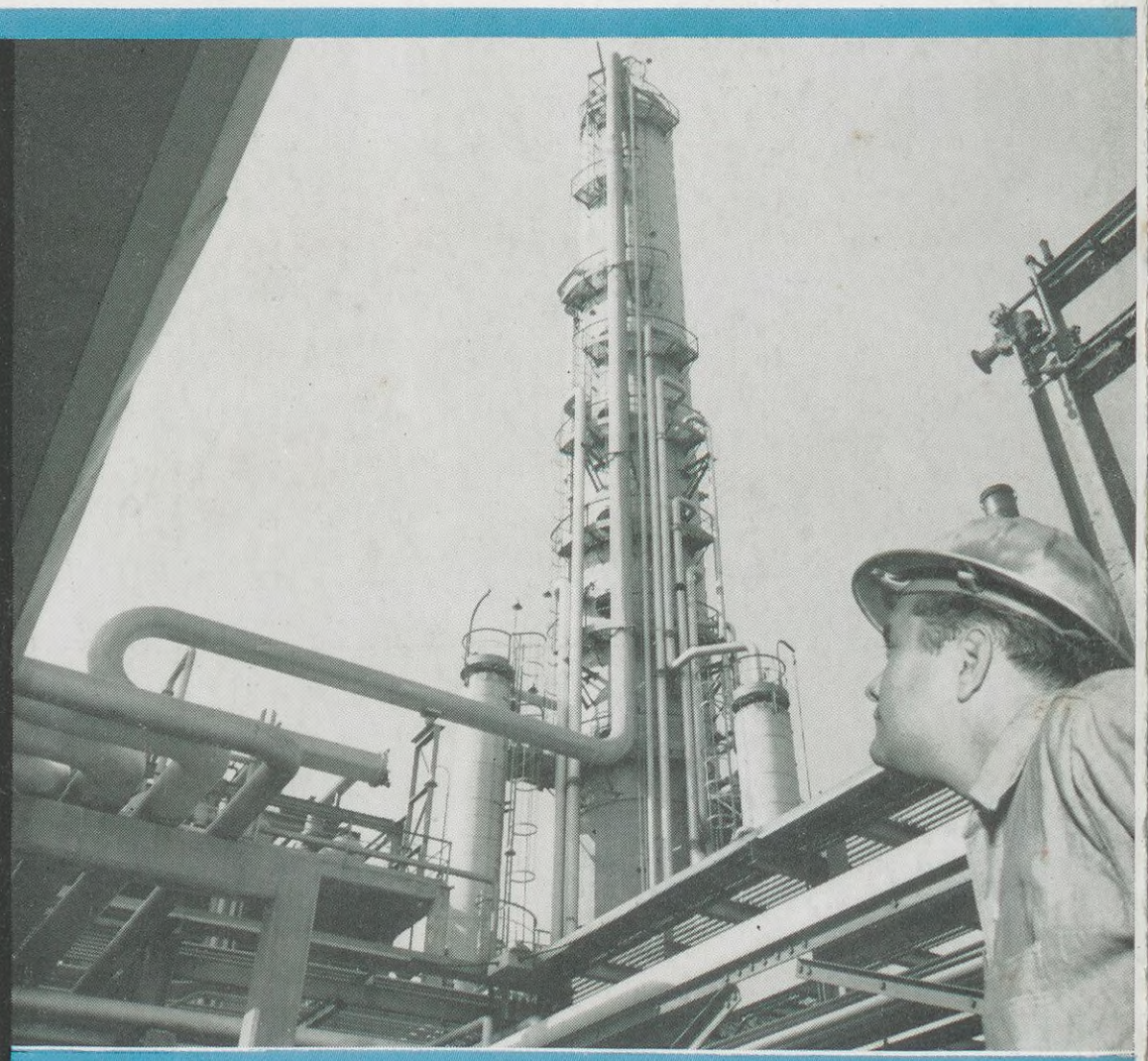
NEW YORK 20, N. Y.
RETURN POSTAGE GUARANTEED

J. B. Bradshaw
10231 Edystone Dr.
Houston 24, Texas

SPL

LANDMARKS OF PROGRESS

The Wilmington-Dominguez Refinery



The Wilmington-Dominguez Refinery was born in the days of rapid expansion of gasoline markets and bonanza oil discoveries in Southern California.

The market expansion, combined with Shell's success in finding and producing crude oil from the famed Signal Hill field, led Shell in 1923 to acquire 235 acres at nearby Wilmington for a new refinery site. Within nine months, a new Shell refinery was in operation, processing 36,000 barrels of crude oil daily. Shell's increasing markets and oil production in California led to construction of another major refining installation three miles away at Dominguez in 1927. (An interconnecting pipe line system allows the Wilmington and the Dominguez facilities to be operated as one refinery.)

Today, the Wilmington-Dominguez Refinery covers 744 acres and includes a Marine Terminal at the Los Angeles Harbor. The Refinery can process 85,000 barrels of crude oil and natural gasoline daily. More than 1,300 employees help turn out the petroleum products that play a significant role in the continued growth of Southern California's economy.