## SHELL NEWS

**JUNE 1958** 



R. O. Severs, his wife Betty, and five-year-old daughter Karen, check their maps before starting their Maine vacation. Severs, Supervisor, Customer Service, New York Marketing Division, received his maps through his Shell dealer and the Shell Touring Service, which marked the best roads to take.



## Guides to

## BETTER VACATIONS

Your vacation trip can be made more enjoyable and restful through a little extra planning



If you plan to take a vacation trip by car this summer, you are in good company. Eighty-five per cent of the people who travel in the United States every year, according to the American Automobile Association, travel by car. Of this number, an estimated 30 million will hit the vacation trail via automobile during the summer vacation months.

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The vast majority of these vacationers will

#### SHELL NEWS

VOLUME 26-No. 6

JUNE, 1958

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

Employee Communications Department New York, N. Y.

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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.

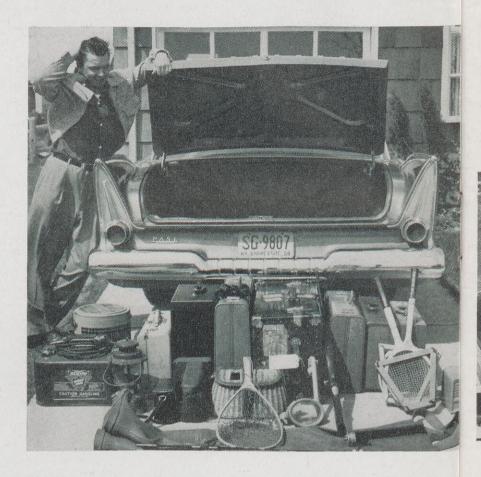
#### ABOUT THE COVER

This summer an estimated 30 million Americans will use their cars to travel on vacation. Some will visit relatives and friends, others will go to the mountains, beaches, national parks and historic places symbolized on our cover. Regardless of where you spend your vacation this summer, the article which starts on this page may offer useful travel tips.

be driving because they know from experience that the automobile offers the most economical, convenient and comfortable way for the family to travel. Even with motor trips, however, a little foresight and planning goes a long way toward making a vacation more relaxing.

For the thousands of Shell employees who will be enjoying their vacations this summer—and for the general motoring public as well—Shell offers two valuable, free services designed to help your vacation planning. One: Shell's Touring Service offers all the latest road maps, plus tailor-made vacation routes to suit your convenience and pocketbook. Two: Carol Lane, Shell's Women's Travel Director, provides expert advice on car travel—including tips on packing, budgeting and how to travel with children.

Shell's Touring Service, part of the Marketing Organization, has been a standby for motorists for 28 years. Here's how the Touring Service works. As a vacationing motorist, you may wish to know the most scenic route to follow on your trip. Or you may wish to take the most direct route on your way home. In either case, all you have to do is ask your neighborhood Shell dealer for help. Working through the Touring Service Bureau in his



Marketing Division, a Shell dealer can supply not only maps with desired routes plainly marked, but also travel folders describing main points of interest.

The Touring Service prints approximately 12 million maps each year, at an annual cost of \$550,000. Each map

#### CAROL LANE'S TIPS ON TRAVELING

- 1. Take only what you absolutely need. In most cases this means one large suitcase and one small overnight bag for each adult, plus a small suitcase for each child. It's less confusing to pack a small valise for each youngster, rather than combining the items in one large bag.
- 2. Before leaving home, check to make sure deliveries have been stopped on such items as newspapers and milk. Also arrange for the post office to hold or forward your mail.
- 3. For safety's sake and to avoid excessive fatigue, plan to drive only about 200 or 300 miles a day. This will allow ample opportunity for coffee breaks every two hours, plus time out for a leisurely lunch. It also will give you plenty of time to pick out a good place to stop overnight.
- 4. Pay attention to road signs and pavement markings. Although they may vary from one state to the next, road signs are extremely helpful. Generally speaking, an eight-sided sign means stop, a diamond shape warns of danger ahead, a round sign indicates an intersection and a crossbuck sign marks a railroad crossing. If you don't understand the signs in a state, it's advisable to find out what they mean from a service station dealer or a policeman. Your trip will be safer and easier.

- 5. Here's a simple, but effective, way to aircondition your car: Close all the windows, place a bucket of dry ice on the floor beneath the dashboard, near the air vent. Incoming air from the vent will pass over the ice, cool the inside of the car
- 6. Youngsters are fine on a trip, provided they don't distract the driver. Perhaps the best place for children is in the back seat, but remember that heavy, pointed toys may become dangerous in case of sudden stops.
- 7. To make children more comfortable during the trip, have the main meal after the day's driving is over. Eat lightly at breakfast and avoid rich foods. Stop frequently for a rest and a drink of water. If a child should begin to feel ill, stop the car and let him suck a lemon.
- 8. If you visit other states, find out about their traffic regulations and make sure you obey them. Motorists have no special privileges because they're tourists. As a rule, you can find out about traffic regulations from road maps, automobile clubs or simply by following local road signs.

(For further expert travel advice, write to: Carol Lane, Shell Oil Company, 50 West 50th Street, New York 20, New York or 1008 West Sixth Street, Los Angeles, Calif.)

only

llion map Packing vacation luggage into the trunk of a car can be a problem, unless you know the right formula. Roy, at left, scratches his head and wonders how he will fit all the family luggage into the trunk. Using tips from Carol Lane, however, Roy put his sports equipment in the back of the trunk and stood most of the luggage upright to save space. For packing convenience, the Severs put their clothing in small valises. The finished job is shown below.



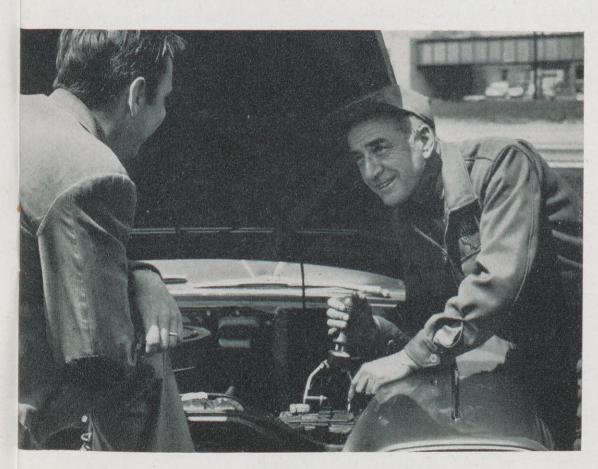
is brought up to date annually. A map of an industrial state such as Illinois, for example, may average 600 changes each year.

When it comes to securing expert advice on vacations, motorists can also turn to Carol Lane, author of "Traveling By Car," (Simon and Schuster, New York, 1954). As Shell's Women's Travel Director in the Public Relations Organization, she has discovered, and personally tested, hundreds of ways to make car travel more pleasant and less expensive. A selection of Miss Lane's travel suggestions—including tips for summer driving—appear in the box on page 2.

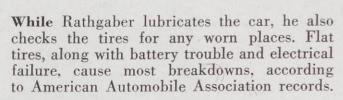
Your Shell credit card is another handy item to take along on any trip, vacation or otherwise. Motorists can use their credit cards not only for gasoline and oil but also for such expenditures as batteries and tires. If you want the convenience of a Shell credit card, ask your supervisor for an application.

Another way to help assure a pleasant vacation is to have your automobile completely checked and properly lubricated before the trip. Three of the most important items to have checked on your automobile are: (1) battery and electrical wiring, (2) tires and (3) ignition. These three items, reports the AAA, were the main causes of automobile breakdowns during 1957.

Automotive experts also recommend a safety check of the following items: headlights, muffler, brakes, horn, windshield wipers, directional and parking lights, and



A wise motorist, Severs had his automobile completely checked and serviced before starting his vacation. Shell dealer Ray Rathgaber checks the battery on Roy's automobile. Rathgaber also checked the radiator, wiring, spark plugs, fan belt, windshield wipers and brakes.







Two of the Severs' children, Karen, left, and Freddy, age 10, test out their "wiggle" platform while their parents finish packing the car. Carol Lane especially recommends the platform for children who like to snooze during a long trip. It's also suitable for reading, playing cards and putting together puzzles. Severs made this platform by placing a crib mattress on top of luggage.

#### GUIDES TO BETTER VACATIONS continued

steering wheel. The wise motorist also will have his car's radiator and fan belt checked and—if necessary—the motor tuned up before hitting the highways.

Safety checks on your automobile are important and will go a long way to insuring an accident-free vacation. But even the most thorough safety check isn't enough unless the motorist behind the wheel obeys traffic laws. The National Safety Council reminds us that excessive speed still is the major cause of most highway accidents and an estimated three out of four accidents take place in clear weather on dry roads.

Common causes of accidents include: following the car in front too closely, weaving in and out of traffic lanes, passing on hills and curves, failure to heed road signs and making improper signals for turns. National Safety Council statistics indicate that the number of highway accidents usually increases during the summer. Don't let careless driving mar your vacation.

Remember, having your automobile thoroughly checked and serviced is a good way to *start* your vacation preparations. Shell's Touring Service, Carol Lane's expert advice and a Shell credit card will help make these preparations complete. Drivers who take advantage of these free services are most likely to find their vacation both rewarding and relaxing



Before leaving his Long Island home, Severs makes a last-minute check of all the doors and windows. Taking a tip from Carol Lane, the Severs pulled their window shades only half-way down. Shades which are pulled all the way down may attract burglars who are looking for empty houses.

## news and views

#### THE GROUP IN 1957

Despite temporary setbacks, the oil industry must continue to make plans for the "increasing demand it will have to meet in the long-term future."

This was one of the conclusions of the Survey of Activities for 1957 of the Royal Dutch/Shell Group of companies, prepared for shareholders of The "Shell" Transport and Trading Company, Limited.

The report noted that 1957 marked the 50th anniversary of the Royal Dutch/Shell Group and that "in these 50 years the development of the world's oil resources and the technological revolution which oil has stimulated have helped to change the face of the 20th century."

"Seen in the perspective of these 50 years, 1957 was a year of continued, though temporarily slower, expansion for the oil industry. . . ."

Highlights of the report included:

Exploration and Production—In 1957, the Group's rate of production averaged 2,250,000 barrels daily, including amounts of crude oil received under special supply contracts, and was about 11 per cent higher than in 1956.

Manufacturing—The level of intake of the 40 Group refineries operating on crude oil in 21 countries reached nearly 2,200,000 barrels a day in 1957.

Transportation—The tanker fleet operated by the Group has grown to 8,500,000 deadweight tons, excluding vessels of less than 2,000 tons. Group companies participate in 18,400 miles of pipe line to move crude oil, oil products and natural gasoline.

Marketing—Taking sales of crude oil and oil products together, the over-all level of selling operations in 1957 was about four per cent higher than for 1956.

Chemicals—More than 70 main chemical products now are being manufactured at 20 locations in various parts of the world. Sales during 1957 amounted to nearly two million tons, which is about 10 times the quantity sold in 1937.

Research—There now are Group research centers in the United States, the United Kingdom and in the Netherlands, employing in all over 5,000 persons.

#### LONG-RANGE AIM



A. J. GALLOWAY

A. J. Galloway, Executive Vice President of Shell Oil Company, recently outlined Shell's long-range aims and problems in oil exploration and production for the Shell Management Course at Arden House, Harriman, N. Y., as follows:

"Our long-range aim is to maintain and if possible to increase our share

of the production of crude oil, condensate, natural gas liquids and natural gas. This means that we must also increase our reserves to back up the increased production.

"To give you an idea of the figures involved, domestic production of crude oil, condensate and plant liquids in the oil industry amounted to nearly three billion gross barrels in 1957 (the same as in 1956), of which our share was nearly 150 million gross barrels or five per cent.

"Industry demand has been increasing at an average of nearly four per cent per year, although in 1957 there was no increase, and it looks as though 1958 may even show a decrease. In spite of such interruptions of one or two years, to keep our share of the business calls for steadily increasing production and reserves each year.

"Just a word to tell you about how many barrels we do have to find. Last year we produced about 150 million barrels gross. And over the years our business seems to increase at the average rate of five per cent per annum. Add to these two figures the fact that our ratio of reserves to annual production is about 12 to one, and you can calculate that this year we will have to find 150 million barrels to replace what we took out last year, plus another 90 million barrels, making a total of 240 million barrels, just to maintain our reserves in a satisfactory position relative to our production.

"Not only this year, but every year, we have to find oil in volumes of this kind. When you consider that our share of such prominent discoveries as Elk City, Oklahoma, and the Four Corners area will each total perhaps 100 million barrels, you can see the size of the exploration job ahead of us."

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## news and views

#### SCHOLARS OF MERIT

Ten sons and daughters of Shell people have been honored as being among the top high school seniors in the United States.

All were among the 7,400 finalists, and three were scholarship winners in the National Merit Scholarship program in which 256,000 students from nearly 14,000 schools were entered as likely contenders. The scholarships provide funds according to need for four college years.

The two Shell daughters and one Shell son among the 1,000 selected to receive Merit Scholarships are:

Nancy Kay Nagelkirk, daughter of K. J. Nagelkirk, Manager, Marketing Service, Detroit Marketing Division.

Richard B. Parker, son of T. S. Parker, Attorney, Head Office, Shell Oil Company.

Barbara Louise Sundlof, daughter of the late E. A. Sundlof, a former Shell pensioner who lived in San Francisco.

The seven finalists, who received Certificates of Merit,

Richard G. Burke, son of the late W. H. Burke, former Production Manager, Tulsa Exploration and Production Area.

Patricia Anne Curran, daughter of P. F. Curran, Manager, Purchasing-Stores Department, Wood River Refinery.

Linda Angela Day, daughter of W. H. Day, Manager, Industrial Products, Chicago Marketing Division.

Joan Alice Haefele, daughter of W. R. Haefele, Chemist, Shell Development Company, Emeryville.

Elsa Sloane Hilmer, daughter of F. B. Hilmer, Department Head, Product Development, Shell Development Company, Emeryville.

Mary Ruth Magruder, daughter of R. B. Magruder, Senior Analyst, Houston Exploration and Production Area.

Homer G. Sheffield, Jr., son of H. G. Sheffield, District Manager, Columbia, S. C., Atlanta Marketing Division.

The seven certificate winners have been recommended to various colleges as meriting scholarships.

The Merit Scholarships are provided by 75 different companies, foundations, and other groups in conjunction with the National Merit Scholarship Corporation, which conducts the annual competition. Miss Nagelkirk, Mr.

Parker and Miss Sundlof won scholarships provided by the National Merit Scholarship Corporation itself.

The Shell Companies Foundation, Incorporated, this year provided 25 Merit Scholarships through the National Merit Scholarship Corporation to qualifiers who intend to teach mathematics or science at the high school level. Each Merit Scholarship is named after its sponsors and, on the average represents a commitment of \$5,000 by the sponsor.

#### INDUSTRIAL RESEARCH



HAROLD GERSHINOWITZ

"In 1953, which is the latest year for which the data are readily available, over five billion dollars was spent in the United States on research and development. Of that total 18 per cent of the work was done in actual agencies of the Federal Government, 72 per cent in industrial organizations, nine per cent by colleges and

universities, and only one per cent by miscellaneous types of agencies, including foundations, health agencies and academies of sciences. Industrial research is thus by far the greatest part of our national research activity, and it is likely that since 1953 the percentage has increased." (From an article by Harold Gershinowitz, President, Shell Development Company, in the March, 1958, issue of AMERICAN SCIENTIST magazine.)

#### PETROLEUM ENGINEERS APPOINT



E. N. VAN DUZEE

E. N. Van Duzee, Production Manager of the Midland Exploration and Production Area, has been named a vice president of the Society of Petroleum Engineers. Van Duzee has been in Midland since 1955. He joined Shell Oil Company at Dallas, Tex., in 1926, after receiving a degree in mining engineering from the University of Minnesota.

#### CORROSION ENGINEERS

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R. S. TRESEDER



J. P. FRASER

Two members of the Materials Engineering and Corrosion Department of Shell Development Company's Emeryville Research Center have been elected to important posts in the National Association of Corrosion Engineers.

Development Supervisor R. S. Treseder is a national director and national chairman for Publications of NACE. Chemist J. P. Fraser is vice chairman of NACE's San Francisco Section and chairman of its national sub-committee on Sweet Crude and Sweet Condensate Stress Corrosion Cracking.

#### RESEARCH COUNCIL OFFICER



D. N. Harris, Special Engineer-Aviation, in Shell Oil Company's Head Office Products Application Department, has been appointed chairman of the Aviation Committee of the Coordinating Research Council, Incorporated. He will hold the office for one year.

D. N. HARRIS The Council, set up originally in 1919 by the automotive and oil industries, now represents also the aviation industry in its aim to direct cooperative research among these industries in developing the best combinations of fuels, lubricants and equipment. The Council also cooperates with the federal government on matters of national interest in such fields.

Besides the Aviation Committee, the Council has two other main technical committees—the Diesel and the Motor Committees.

#### AIR PATROL LEADER



W. D. TURNER

W. D. Turner, Aviation Manager, Baltimore Division, has been appointed a Wing Commander of the Civil Air Patrol with the rank of Colonel.

Turner, brother of the famed flyer Roscoe Turner, will be in charge of the CAP's activities and organization in Maryland. He will also be a mem-

ber of the CAP's National Board.

The CAP is a civilian auxiliary of the U. S. Air Force. It includes 52 wings, one in each state and in the District of Columbia, Hawaii, Alaska and Puerto Rico. Its three main activities are: search and rescue, communications, and aviation education through a cadet corps.

Turner, who served with the U. S. Marine Corps air force during World War II, also is vice president of the Baltimore Aero-Club.



# AFLOAT ON THE TEXAS PLAINS

Oil men get a sample of nautical life in not-so-dry West Texas



A Shell utility fleet truck is driven aboard a barge on Lake Thomas. The trailer truck will be ferried out to the well site—on one of the man-made islands—and loaded with the old tubing. For a view from the island, see the photograph below.

REPLACING tubing in a well usually is a routine job. But not when the well is located in the middle of a lake covering 12 square miles. Then the workover job takes on some aspects of an "offshore" operation.

This is exactly what happened recently in the Van Roeder field near Snyder, Tex., where Shell has five producing wells on man-made islands in Lake Thomas. When one of the wells needed larger tubing to improve the flow of oil, trucks and roustabouts

were ferried out to the well by boat.

Shell's wells were surrounded by water five years ago when a portion of the nearby Colorado River was dammed to create Lake Thomas. The lake is designed to build up badly-needed water supplies in that section of arid West Texas. Before the lake was flooded, massive dirt mounds, or small islands, were built to support the raised well head equipment. The oil wells, however, in no way affect the purity of the water reservoir •

The two-inch tubing removed from the well is loaded aboard a Shell utility truck parked on the island. In the foreground, helping in the loading operation, are, left to right: G. O. Thornhill, Vernon Schaeffer, and J. E. Bryant. In the background are C. O. Jones, left, and E. A. Brown. The new tubing is a half-inch larger and allows a bigger pump to be installed.



### SHELL PEOPLE in the news

SHELL OIL COMPANY MARKETING ORGANIZATION



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P. G. DREW

H. S. EUSTIS



C. L. TOWERS, JR.



J. C. KELBAUGH



A. T. BARTLETT



C. F. GIEG

P. G. DREW has been transferred on Special Assignment to the staff of the Vice President West Coast Marketing Divisions, effective July 1. Mr. Drew, who holds a Bachelor's degree in civil engineering from Oregon State College, joined Shell in 1928 as a Salesman at Junction City, Ore. He served in various sales and supervisory positions in the Pacific Northwest and California and in 1939 was appointed Sales Manager in the Portland Marketing Division. He was named to a similar position in the Boston Division in 1949. Mr. Drew was assigned to the Head Office Marketing Organization in 1955, and served in various positions assisting Senior Management. In 1957 he was appointed Special Assistant to the General Manager, Head Office Marketing Departments.

H. S. EUSTIS has been named Special Assistant to the General Manager, Head Office Marketing Departments, effective June 1, succeeding Mr. Drew. Mr. Eustis, who holds a Bachelor's degree in foreign trade from the University of Washington, joined Shell at Portland, Ore., in 1933. He served in various sales and supervisory positions in Oregon and Washington and in 1948 was named District Manager in the Detroit Marketing Division. In 1951 he became Long Island District Manager in the New York Division and later that year was named Sales Manager of the Albany Division. He was appointed Sales Manager of the Baltimore Division in 1954 and two years later became Assistant Sales Manager, East Coast, which title was later changed to Sales Assistant to Vice President, East Coast Marketing Divisions.

C. L. TOWERS, JR. has been appointed Sales Assistant to Vice President East Coast Marketing Divisions, effective June 1, succeeding Mr. Eustis. Mr. Towers, who received a Bachelor's degree in liberal arts from the University of Southern California, joined Shell in 1937 at the Wilmington Refinery. He became a Salesman in the Los Angeles Marketing Division the same year and subsequently held various sales positions of increasing responsibility. He was appointed Sales Manager of the Indianapolis Division in 1955 and became Operations Manager at Indianapolis last year.

J. C. KELBAUGH has been named Operations Manager at the Indianapolis Division, effective July 1, succeeding Mr. Towers. Mr. Kelbaugh, who received a Bachelor's degree in economics from Princeton University, joined Shell in 1939 at North Beach Airport, Long Island. After serving in various sales capacities, he became a District Manager in the New York Division in 1945, and was appointed to a similar position in the Baltimore Division in 1947. He became Personnel Manager at Baltimore in 1954. He was named Assistant Manager, Head Office, Wage and Salary Division, in 1956 and became Industrial Relations Representative, Head Office Industrial Relations Department, in 1957.

A. T. BARTLETT has been appointed Manager, Head Office Marketing Administrative Office, succeeding R. L. Geraghty, who became Assistant to General Manager, Head Office Marketing Departments in February, 1958. Mr. Bartlett, who holds a Master's degree in business administration from Stanford University, joined Shell in 1935 as an Auditor at St. Louis, Mo. After various assignments in Head Office, he was named Manager, Marketing Economics, in 1945. He became Operations Manager of the Chicago Division in 1950 and Sales Manager at Cleveland in 1953.

C. F. GIEG has been named Sales Manager of the Cleveland Division, succeeding Mr. Bartlett. Mr. Gieg, who received a Bachelor's degree in chemistry from Yale University, joined Shell in 1944 as a Technical Representative at Head Office. He served in various sales and supervisory positions in New York and Ohio and in 1951 was named District Manager in the Detroit Marketing Division. He was appointed District Manager in the Portland Division in 1954 and became Assistant Sales Manager of the Chicago Division in 1956.

#### SHELL PEOPLE in the news continued



E. J. COWING



R. L. PARKHURST



C. M. MOCKLER



R. W. CARR



C. R. JOHNSON

E. J. COWING has been appointed Sales Manager of the St. Louis Marketing Division, succeeding G. S. Maxson, who has resigned to go into business for himself. Mr. Cowing, who received a Bachelor's degree in business accounting from Stanford University, joined Shell in 1933 at Oakland, Calif. After serving in various operating and sales positions in California and Utah, he was appointed District Manager in the Los Angeles Division in 1948. He was named Retail Manager of the Seattle Division in 1951 and became Assistant Sales Manager of the New York Division in 1955. He was named Sales Manager of the Albany Division in 1956.

R. L. PARKHURST has been named Sales Manager of the Albany Marketing Division, succeeding Mr. Cowing. Mr. Parkhurst, who holds a Bachelor's degree in engineering from Park College, Parkville, Mo., joined Shell in 1941 at Hempstead, N. Y. He held various sales and supervisory positions in the New York area and in 1950 was named District Manager in the Albany Division. He became a District Manager in the Los Angeles Division in 1955 and Retail Manager of the Seattle Division in 1957.

C. M. MOCKLER has been appointed Manager, LP Gas Division in the Head Office Fuel Oil-LP Gas Department. Mr. Mockler joined Shell in 1929 as an Assistant Credit Manager at St. Louis, Mo. He became an Assistant Manager, Marketing-Fuel Oil, at St. Louis in 1937 and was named Assistant Manager, Marketing-Fuel Oil, Head Office, in 1943. He became Manager of the Fuel Oil Division, Fuel Oil-LP Gas Department in 1955.

R. W. CARR has been named Manager of the Fuel Oil Division, Fuel Oil-LP Gas Department, succeeding Mr. Mockler. Mr. Carr, who attended New York University, joined Shell in 1947 as a Service Representative at the Los Angeles Depot. He became a District Sales Supervisor in the San Francisco Marketing Division in 1950 and District Manager in the San Bernardino District, Los Angeles Division, in 1951. He was named Retail Manager in the Seattle Marketing Division in 1955. Since 1957 he has been on Special Assignment in the Fuel Oil-LP Gas Department, Head Office.

#### SHELL OIL COMPANY MANUFACTURING ORGANIZATION

The Products Application Department will establish a Chicago office around July 1, 1958, to better serve the Midwest Marketing Divisions. Services to the West Coast Marketing Divisions will continue to be handled from the San Francisco Products Application office. The Head Office Products Application Department, which coordinates PAD activities coast-to-coast, will continue to handle services to the East Coast Marketing Divisions.

C. R. JOHNSON has been appointed Manager of the newly-established Products Application office in Chicago. His staff will come from the PAD group at Wood River Refinery and other locations. He will report to H. R. Kemmerer, Manager, Head Office Products Application Department. Mr. Johnson, who holds a Bachelor's degree in mechanical engineering from the University of California, joined Shell in 1934 as an Inspector at the Martinez Refinery. He was named a Senior Engineer, Products Application Department, at San Francisco in 1946, and moved to Head Office PAD in 1949. In 1956 he received an assignment in London as a Special Engineer and returned to Head Office Products Application Department in March, 1958.



G. L. STETSON



S. S. BRAUN

G. L. STETSON, presently Manager of Products Application at Wood River, will become Assistant to the Manager, Head Office Products Application Department. He will remain at Wood River to coordinate PAD activities with the Wood River Research Laboratory. Mr. Stetson, who received a Master's degree in mechanical engineering from the University of Wisconsin, joined Shell in 1933 as a Motor Tester at the Wood River Refinery. He became a Senior Field Engineer in Head Office Products Application Department in 1941 and was named a Senior Engineer in 1945. He was appointed Manager of Products Application at Wood River in 1950.

S. S. BRAUN has been named Assistant Chief Engineer at the Houston Refinery, succeeding R. T. Effinger, who died recently. Mr. Braun, who holds a Bachelor's degree in mechanical engineering from the Missouri School of Mines, joined Shell in 1946 as an Engineer at the Wood River Refinery. He became a Senior Engineer at Wood River in 1954 and was named a Senior Engineer in the Head Office Manufacturing-Engineering Department in 1956.

#### SHELL DEVELOPMENT COMPANY

Additional staff appointments have been announced for the new organization created by the consolidation of Shell Development Company's Exploration and Production Research Division and Shell Oil Company's Technical Services Division. (See SHELL NEWS, March, 1958.) The new organization will retain the name Exploration and Production Research Division and remain at Houston. (See Organization Chart, Page 17.) As announced previously, the Division will be under N. D. Smith, Jr., Vice President, Shell Development Company, and will include four sections: Basic Research, Exploration Research, Production Research and Administration and Services.

The following staff changes will be made, effective July 1:

NAME	NEW POSITION	FORMER POSITION
J. T. SMITH	Manager, Chemistry Department, Basic Research	Senior Chemist, E&P Research Division, Houston
C. H. FAY	Manager, Physics and Mechanics Department, Basic Research	Manager, Physical Department, E&P Research Division
GORDON RITTENHOUSE	Manager, Geology Department, Basic Research	Manager, Geological Department, E&P Research Division
R. H. NANZ, JR.	Manager, Geological Department, Exploration Research	Senior Geologist, E&P Research Division
F. A. VAN MELLE	Manager, Geophysical Department, Exploration Research	Chief Geophysicist, Exploration Technical Services Division, Shell Oil Company
G. E. ARCHIE	Manager, Exploitation Department, Production Research	Assistant Manager, Production Technical Services Division, Shell Oil Company
J. R. McENTEE	Manager, Mechanical Department, Production Research	Chief Development Engineer, Production Technical Services Division, Shell Oil Company
W. L. McKINNON	Assistant to the Manager, Administration and Services	Laboratory Manager, E&P Research Division
D. E. BROUSSARD	Manager, Service Engineering Department (Effective 5/1), Administration and Services	Senior Engineer, E&P Research Division
R. D. MILLER	Manager, Technical Information Department, Administration and Services	Area Geophysicist, Midland E&P Area, Shell Oil Company
S. L. PEASE	Manager, Training Department, Administration and Services	Senior Exploitation Engineer, Production Technical Services Division, Shell Oil Company

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A NEW CONCEPT

GASOLINE PROGRESS

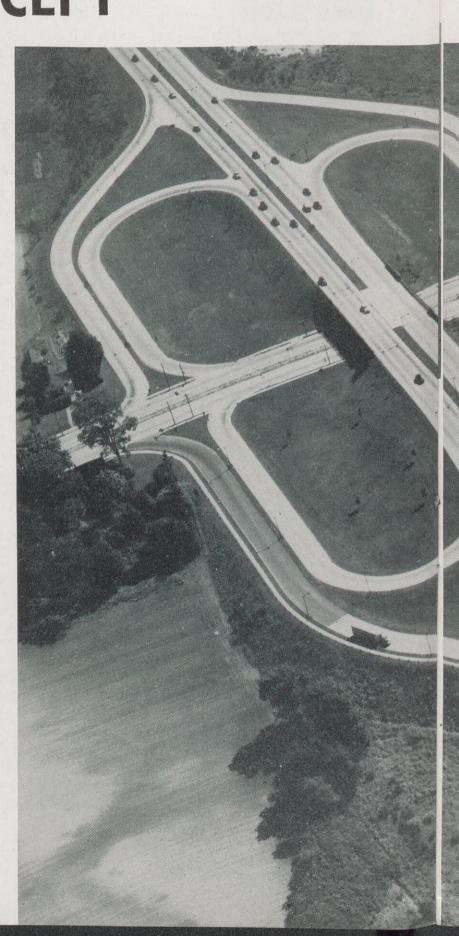
The ton-miles yardstick provides a realistic measurement of fuel performance

(From ETHYL NEWS, Ethyl Corporation)

DESPITE what the oil industry knows is tremendous progress in the quality and performance of all of its products, one of the industry's big problems is to explain in terms that are meaningful to the motorist the real value of modern gasoline.

The seriousness of the problem is pointed up by the findings of a recent survey. Over 50 per cent of the people interviewed in the survey stated that they were not aware that any improvements had been made in the quality of gasoline over the last five years. Even more startling was the observation by 74 per cent who felt that the price of gasoline had risen more in the last year or two than any other widely used item—except haircuts and hairdos.

Here is what happens. The average motorist buys a modern motor fuel, puts it in a modern car, and sometimes gets less mileage than he expected. The true value of



Ton-miles per gallon is

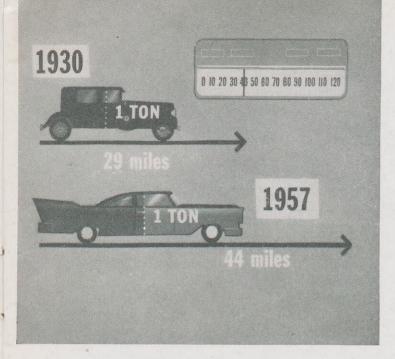
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ton of automobile

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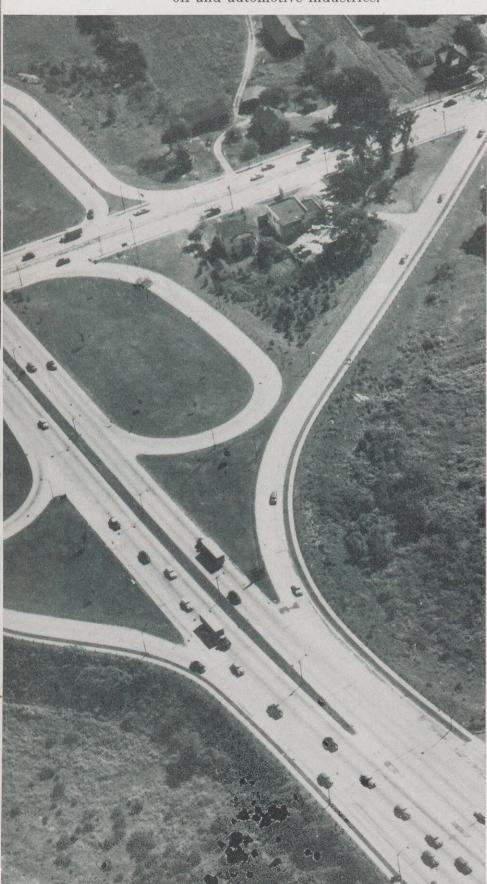
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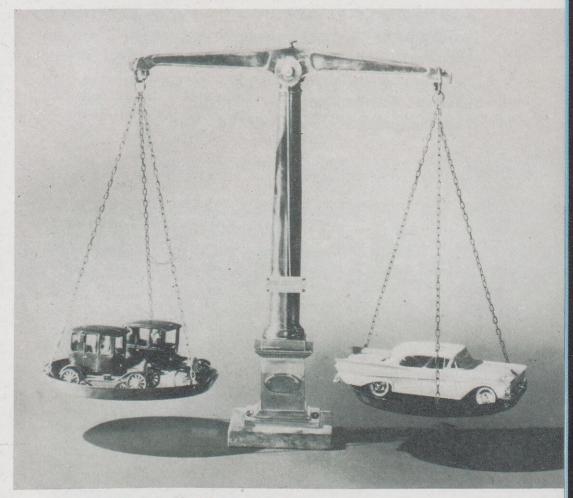
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The ton-mile performance of gasoline has risen sharply in 27 years.

The efficiency and comfort of the cars travelling these highways are a tribute to the oil and automotive industries.





The ton-miles yardstick makes allowances for increases in car weights over the years.

modern gasoline is not apparent under these circumstances.

For years the public has measured the performance of gasoline in miles per gallon. Only rarely is it measured accurately or with real meaning in relation to other cars.

Gasoline mileage in any car depends on the car's design, its maintenance and where or how it is operated. Driving at very high speeds or under poor road conditions can reduce mileage just as can driving in mountainous country or the stop-and-go conditions of suburban traffic.

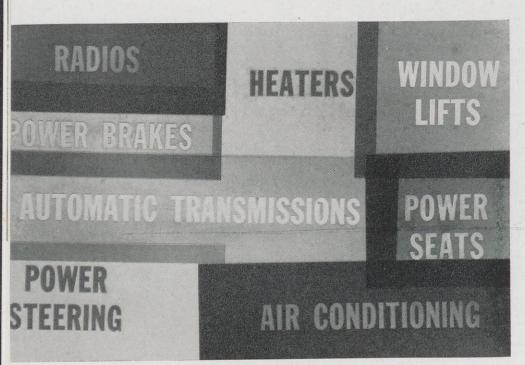
To measure fuel and engine progress fairly and present it to the motoring public in readily understandable terms, a realistic yardstick is needed. One such yardstick is "ton-miles per gallon."

"Ton-miles per gallon" is the distance—the number of miles—that one gallon of gasoline can move one ton of automobile.

#### A NEW CONCEPT OF GASOLINE PROGRESS continued

This yardstick makes allowances—as it should—for differences in weight between various contemporary automobiles, as well as allowances for the great increases in weight that have occurred over the years since the public has demanded heavier, more luxurious cars.

The Model T Ford, for example, weighed less than 1,700 pounds. Its 1958 counterpart weighs 3,400 pounds—twice as much. Even among current models, there are wide variations in weight. This is why a standard such as ton-miles per gallon is needed to compare fairly one car's mileage performance with another's, and to measure gasoline performance realistically.



Besides powering the car, gasoline now also provides energy for many accessories.

Each year since 1930, various automobiles of all makes have been tested and the average number of miles that one gallon of gasoline could move one ton of automobile has been determined accurately.

There are many periods over which progress could be measured, but 1930 was the first year for which complete mileage data were obtained for all cars.

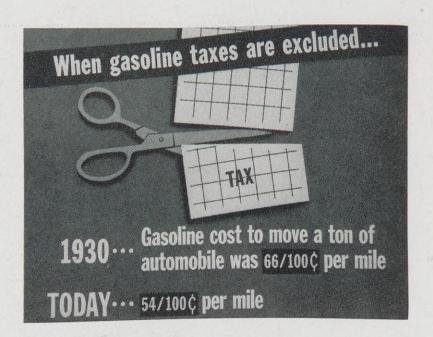
Back in 1930, one gallon of gasoline could move one ton of 1930 automobile an average of 29 miles at 40 m.p.h. By 1957, one gallon of gasoline could move one ton of automobile nearly 44 miles at the same speed. That is a 52-per-cent improvement—due largely to efficient high compression engines made possible by improvements in gasoline quality.

When the ton-mile principle is applied, not to new cars built in 1930 and 1957, but to the average car on the road during those years, the story becomes even more impressive. After all, gasoline consumption is determined by its use in all cars—not just the new models of any one year. It is estimated that the average car in use in 1930 provided about 25 ton-miles per gallon. Today, the average car on the road gets an average of 43 ton-miles per gallon—an improvement of 70 per cent!

Of course, no one drives at a constant speed of 40 m.p.h., and the ton-miles per gallon performance of an individual car in over-the-road driving is usually less than that at a constant speed of 40 m.p.h. However, the percentage improvement in over-the-road mileage since 1930 when adjusted for weight, correlates within one per cent with the 40 m.p.h. data. Therefore, no matter what mileage the individual driver now enjoys in his own car, it is proportionately better than it would be had this progress never occurred.

A 70-per-cent improvement is real progress and a great tribute to the oil and automotive industries.

It is particularly impressive when it is realized that the available horsepower of passenger cars has more than doubled just since 1952. This has given the American public a new level of safety for meeting the conditions of modern driving.



Besides, gasoline now provides energy for so many convenience accessories, such as automatic transmissions, power brakes, power steering, air conditioning and super generators. Some of these accessories were not even available 10 years ago. Yet every one of them operates indirectly from the gasoline tank.

Since 1930, the oil industry has had to earn or borrow tremendous sums of money for equipment to increase both the quality and quantity of gasoline. And in back of this progress is competition—more than 200 gasoline manufacturers striving for more business by trying to pro-

vide the best possible quality at the lowest possible price.

With 1930 as a starting point, it is revealing to look at the change in the quality of gasoline as indicated by its octane number.

This was the gasoline market in 1930: About 88 per cent regular at 63 octane number and 12 per cent premium at 73 octane. Combined on a weighted basis they produced an "average" gasoline of 64 octane number.

Today the gasoline market consists of about 68 per cent regular gasoline at 91 octane number and about 32 per cent premium gasoline with an octane number of about 98. Combined, the resulting "average" gasoline is over 93 octane. This is an improvement of 29 octane numbers over the average gasoline of 1930, and octane number is only one of the ways gasoline has been improved.

Now consider gasoline prices in this same period. Back in 1930, regular grade gasoline sold for 16.2 cents a gallon. There was an average tax of 3.8 cents a gallon, resulting in a retail selling price of 20 cents a gallon. Premium gasoline averaged about three cents a gallon more.

Today, regular gasoline sells in a normal market at a nation-wide average price of about 22.2 cents a gallon, with premium estimated to average about two to four

Without the gasoline and engine improvements since 1930, motorists would require an average of 475 additional gallons of gasoline per year at a cost of about 5140.

cents more. However, gasoline taxes now add nearly nine cents a gallon.

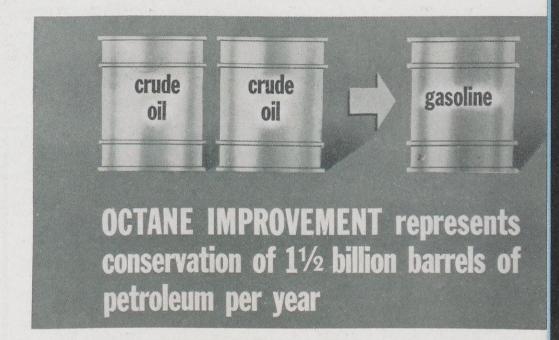
Performance-wise, modern gasoline in modern cars does at least 70 per cent more work than 1930 gasoline did in the average car on the road in 1930. So an allowance should be made for the increased efficiency of engines by expressing the cost of gasoline on a ton-mile basis.

When gasoline taxes are excluded, the cost for the gasoline to move a ton of automobile one mile in 1930 was about 66/100 of a cent. Today, the fuel cost for recent model cars averages about 54/100 per mile. There-

fore, gasoline is actually 18 per cent cheaper today than it was in 1930—in terms of the work it is doing.

Even when gasoline taxes are included, the cost per ton-mile is still less than it was in 1930–76/100 of a cent today in contrast to 81/100 of a cent in 1930, and this despite a 132-per-cent increase in gasoline taxes.

With today's high octane gasolines and high compression engines teaming up to provide a 70-per cent increase in ton-miles per gallon, they also are conserving gasoline. For without the improvements made since 1930, 25 billion more gallons of gasoline would be required to drive the nation's passenger cars the distance they now are traveling each year. Proportional savings in buses, trucks and gasoline powered tractors could bring the total to 30 or



35 billion gallons a year.

Since it takes about two barrels of crude oil to produce a barrel of gasoline, it can be said that engine and gasoline improvements annually account for the conservation of more than 1.5 billion barrels of petroleum—one of the nation's vital resources.

At the consumer level, the savings are equally impressive. Without the octane and engine improvements since 1930, the motorist would have to buy about 475 additional gallons of gasoline each year. At present gasoline prices, it would cost him at least \$140 a year more than at present. This is enough of a saving to provide free gasoline for a trip from Portland, Me., to Portland, Ore. and back again.

Here then, is the new concept of gasoline progress: The ability of gasoline to do 70 per cent more work at a saving of 18 per cent in cost for the American public •

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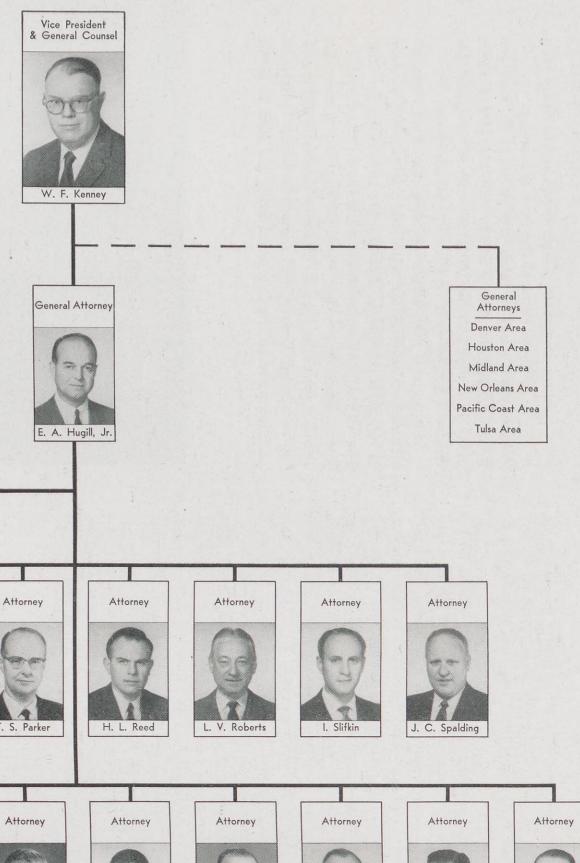
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## Legal Organization

Shell Oil Company

June-1958





Manager Legal San Francisco

A. J. Fabris





Attorney



Attorney

R. M. Hart













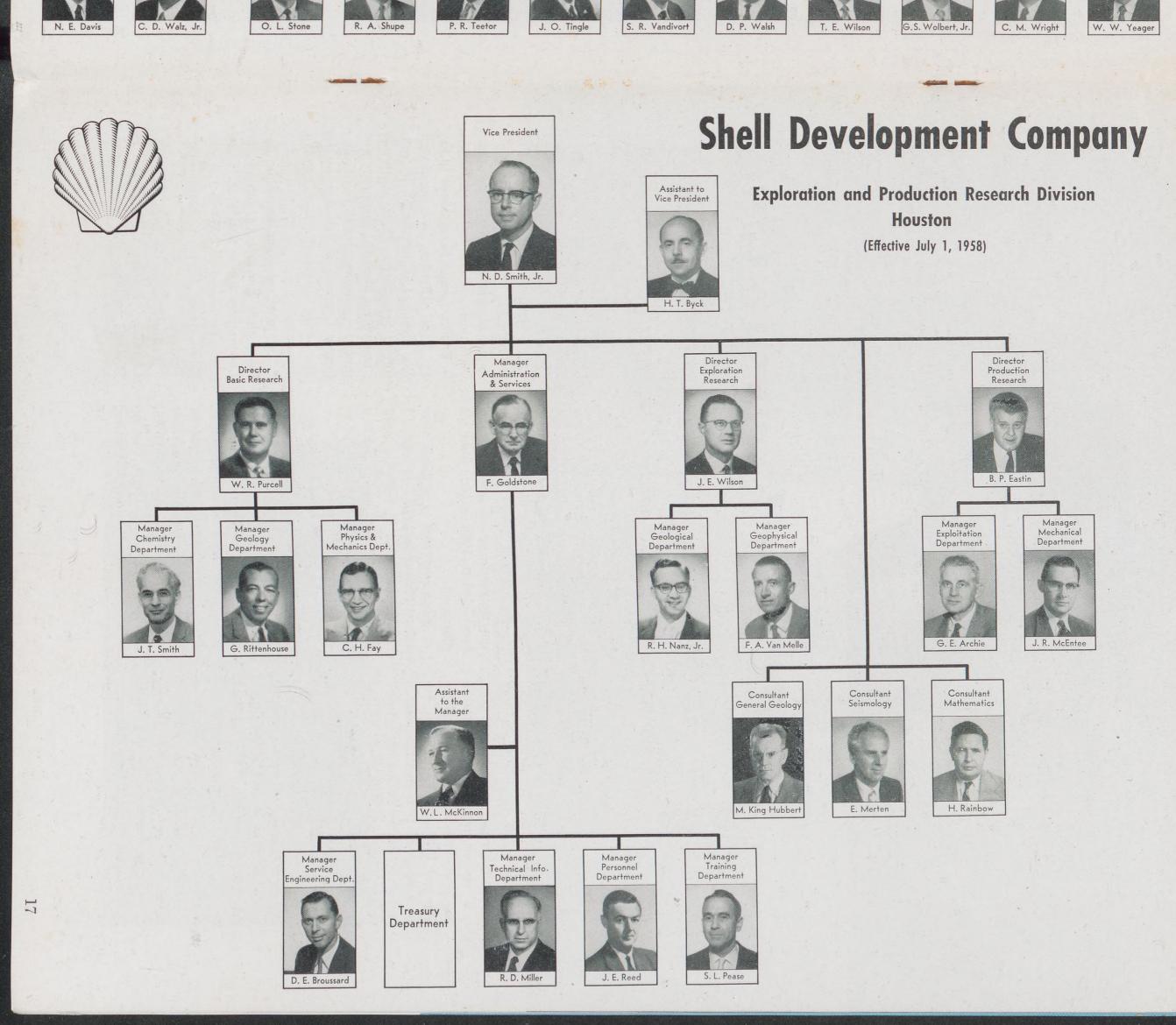


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Officers of the newest pensioners' club, the Retired Employees Club of the San Joaquin Division at Bakersfield, Calif., discuss club plans. They are, left to right, President C. B. Waters, Secretary J. D. Dukes, Treasurer G. G. Senftleben and Vice President C. D. Fairbanks.

## Shell's Most Exclusive Clubs

More than 300 retired Shell employees are members of pensioners' clubs at St. Louis and three California locations

THE party for W. W. Wentworth and his wife recently in Long Beach, Calif., celebrated two golden anniversaries—the Wentworths' 50th wedding anniversary and his 50th year with Shell.

Wentworth retired as a Production Foreman of the Pacific Coast Exploration and Production Area's Los Angeles Basin Division in 1943 after 35 years' service, but he has not stopped counting his years with Shell. Neither have the members of the group that gave the party—the Retired Shell Employees' Club of the Los Angeles Basin.

The Los Angeles Basin club is one of four formally organized groups of retired Shell employees, all set up by the members themselves. (Shell helped by providing information and encouragement.) Two of the other clubs also are in California—at Ventura and Bakersfield—and the oldest of the quartet is at St. Louis. The four clubs have a total of more than 300 mem-

bers from the more than 3,500 retired Shell employees in the U. S.

J. I. Wheeler, former Assistant Manager of Stores in the Head Office Purchasing and Stores Department, was the leader in organizing the St. Louis club in 1946, shortly after his retirement.

"When I returned to St. Louis after my retirement in 1946," he said, "I became interested in knowing Shell veterans in this area and I made a search to see if others would like to renew their former associations."

Thirty-five other retired Shell employees attended the first meeting of the Shell Retired Employees Club of Metropolitan St. Louis in December, 1946, and elected Wheeler to the first of his three terms as club president.

Today, the St. Louis club has almost 150 members, including Alexander Fraser, former President of Shell Oil Company, and C. E. Davis, who retired as Vice President, Refining, in 1956. They meet twice a year for informal dinners and hold other social functions during the year. At its last meeting, the club elected J. E. Goldschmidt, formerly of the St. Louis Marketing Division's Credit Department, as new president. Minnie B. Foulks, former Receptionist in the St. Louis Division, was re-elected vice president; Charlotte M. Rossen, former Secretary to H. S. M. Burns, President of Shell Oil Company, was re-elected secretary, and R. W. Sheehy, former Commercial Salesman in the St. Louis Division, was elected treasurer.

The principal organizer of the Retired Shell Employees' Club of the Los Angeles Basin was W. E. Feistner, who retired in 1954 as Los Angeles Basin Division Construction Foreman.

Feistner, with the help of E. A. Chandler, former Catheadman in Division Drilling, and James Given,



At a social gathering of the Shell Retired Employees' Club of Metropolitan St. Louis, these present and former officers got together. Left to right are J. E. Goldschmidt, newly-elected president; Minnie B. Foulks, re-elected vice president; Carl Barker, former president, and Charlotte Rossen, who was re-elected secretary of the group.

former District Production Foreman, sent letters of invitation to more than 220 pensioners in the region in early 1957 to attend an organizational meeting at Long Beach. Eighty charter members attended, and elected Feistner president; H. P. Smith, former Pumper in Division Production, was elected vice president; Given was elected secretary; and Chandler, treasurer.

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The group now has more than 130 members who meet regularly. The club aims to serve two major purposes: get members together for social purposes and give them a way to keep track of pensioners in the area.

The Retired Shell Employees Club of Ventura, Calif., elected these charter members as its officers. They are, left to right, Secretary O. E. Ford, Treasurer O. W. Cliver, President S. A. McClung, and Vice President A. J. Forbes. All four officers were elected at the club's first meeting two years ago.





These members of the Retired Shell Employees Club of the Los Angeles Basin all had over 35 years' Shell service. They are, left to right, W. W. Wentworth, W. C. Lyon, Cliff White, E. F. James, L. S. Gardiol, Andrew Mastright, A. P. Gentry and W. E. Feistner, the president of the club.



Two men who worked together at the Wood River Refinery exchange remembrances at the St. Louis club social gathering. They are, left to right, W. H. Leindecker, Mrs. Leindecker, Mrs. Strayhorn and W. F. Strayhorn. Both men were Machinists at Wood River, and now they are members of the St. Louis club.

#### SHELL'S MOST EXCLUSIVE CLUBS continued

Earlier this year, the group reelected Feistner president and Given secretary. New officers include G. C. Stafford, former Los Angeles Basin Division Drilling Foreman, as first vice president and V. F. Stoop, former Division Treasury Clerk, as treasurer. (Stafford is the father of Jo Stafford, singing star of television and recordings.)

At Ventura, the Retired Shell Employees' Club has been organized since 1956, and has 17 members. Its officers, elected at the formation of the club, are S. A. McClung, former Rig Repairman in Coastal Division Drilling, president; A. J. Forbes, former Coastal Division Treasury Office Manager, vice president; O. W. Cliver, former Rotary Driller in the Coastal Division, treasurer; and O. E. Ford, formerly in the Coastal Division Treasury Department, secretary.

Feistner helped organize the newest pensioners' club, at Bakersfield, last March. The 14 charter members of the Retired Employees Club of the San Joaquin Division elected C. B. Waters, formerly of Division Production, president; C. D. Fairbanks, formerly of Division Purchasing-Stores, vice president; G. G. Senftle-



President W. E. Feistner, standing, calls the meeting of the Los Angeles Basin club to order. Those seated are, left to right, E. A. Chandler, former treasurer; James Given, secretary, and H. P. Smith, vice president. All were club charter members.

ben, formerly of Division Exploration, as treasurer; and J. D. Dukes, formerly of Division Production, as secretary.

Feistner and other club officers hope to form the three Los Angeles region groups into one area-wide club with sections in each division. All three would have the same by-laws and interchangeable memberships, and all would carry membership cards such as those Feistner introduced for the Long Beach group.

The cards include not only the member's name, but also whom to

notify in case of accident and a blank for the member's blood type. Feistner recalls there was a lot of kidding from club members when he proposed putting the pensioner's blood type on the membership card. Not long after, however, one member was in an automobile accident and a blood transfusion saved his life. Hospital officials said if they had been forced to take the time to test for his blood type, the transfusion might have been too late. For at least one man, being a member of a Shell pensioners' club gave him a new lease on life



THEY PRACTICE

L. J. Derr discusses a mathematical problem with Mrs. Marjorie Bean, one of his students in University College of Tulane University. Derr is a Data Processing Analyst in the New Orleans Exploration and Production Area Office.

## WHAT THEY TEACH

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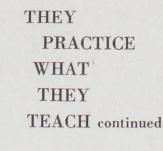
## Shell's spare-time teachers introduce their professional know-how into the classroom

MORE than 50 Shell employees in eight states are helping relieve the current teacher shortage—especially in the field of science—by teaching classes in their spare time, usually one evening a week. Shell men

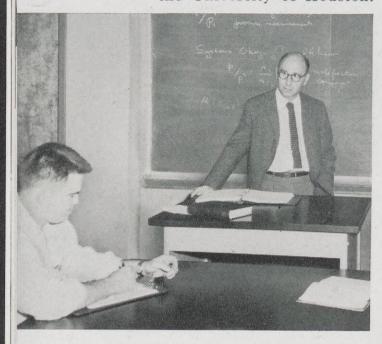
and women are teaching Extension Courses in 12 universities and colleges, as well as adult and other courses at high schools and vocational schools.

Many of the Shell employees teaching class in their spare time are doing

Chemist M. H. Waxman, of Shell Development Company's Exploration and Production Research Division, Houston, teaches chemistry on both freshman and senior levels at the University of Houston.



Iris Harmon, Senior Clerk in the Treasury Department at the Houston Refinery, is the only woman accounting teacher on the University of Houston faculty. All of the courses which she teaches are closely related to her present work at Shell.



so at the specific request of university and college officials eager to get the benefit of their scientific knowledge and professional background. This applies not only to scientific subjects but also to courses such as Law, Business Report Writing and others.

Harold R. Walt, Assistant Director of the Extension Division of the University of California, calls the industrial community an "invaluable source" of teachers.

"These 'non-academic' teachers with years of experience in the field and practical know-how, bring new vigor, insight and up-to-the-minute technical information to their classes," Walt says.

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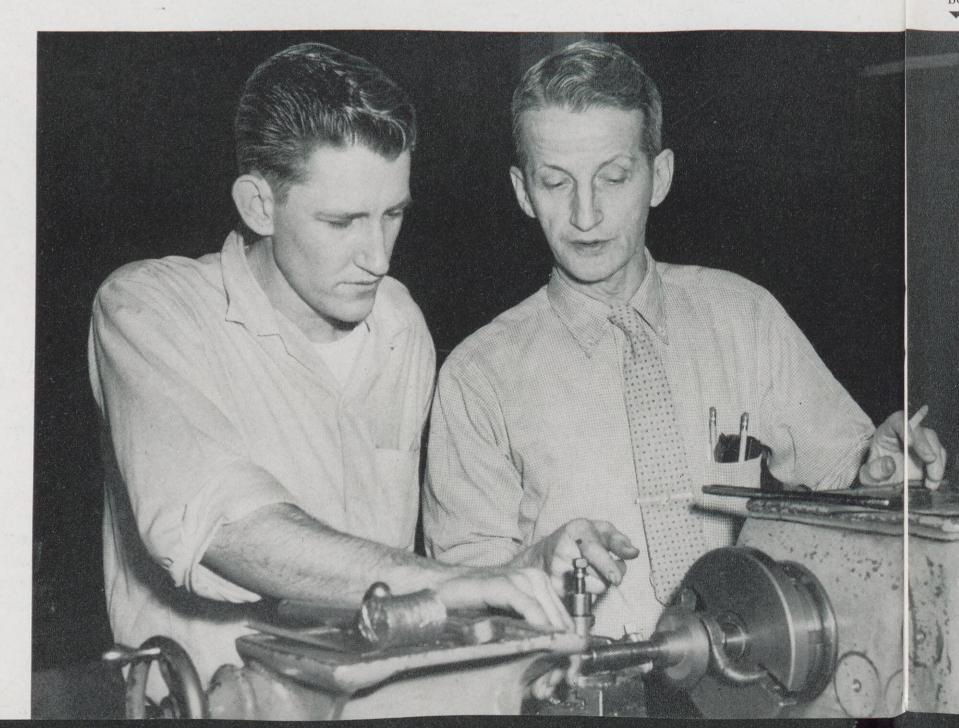
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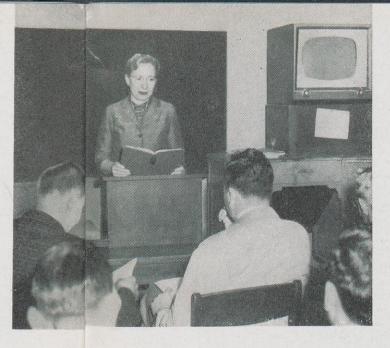
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F. M. Miller, Dean of Engineering at the University of Houston, adds (continued on page 24)





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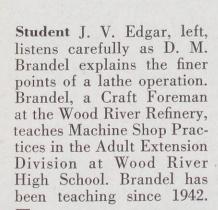
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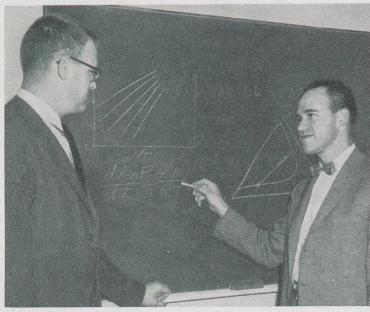
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dds 24) Engineer E. D. Oliver, right, Emeryville Research Center, teaches Chemical Engineering at the University of California Extension Division. Here he discusses a problem with one of his students, Patent Attorney T. R. Anderson, Emeryville. Attorney J. W. Morris, Tulsa Exploration and Production Area, teaches a course in Law at the University of Tulsa. Two Shell employees in his class are Bill Roberts, center, and Jim Groves, right, both of the Tulsa Land Department.











When St. Charles Borromeo High School, Destrehan, La., needed a new physics teacher, Chemist R. J. Lambert, Norco Refinery, volunteered his services. Spare-time teachers such as Lambert help encourage scientific careers among the nation's high school students.

#### THEY PRACTICE WHAT THEY TEACH

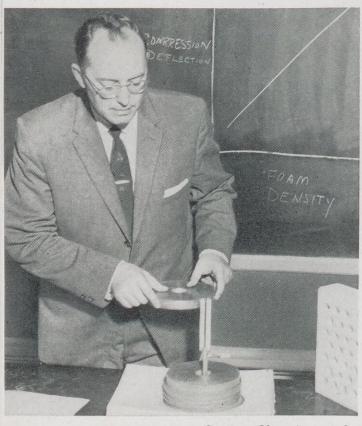
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that Shell engineers are rendering a "particularly valuable contribution during the current teaching shortage."

In addition to helping train future scientists and engineers, and in some cases other Shell employees, Shell's spare-time schoolteachers are adding to their own knowledge-which can help them in their jobs.

"The teacher learns as much as the students," says D. R. Nauratil, Engineer at the Martinez Refinery, who teaches at East Contra Costa Junior College in California. "I've learned a lot because I'm required to dig out details to explain to the students."

All of which contradicts the old saw which claimed, "Those who can, do; and those who can't, teach." In fact, there could be a new saying, about spare-time teachers particularly: "They practice what they teach"



J. B. Larkin, Senior Chemist at the Torrance Technical Service Laboratory, uses metal weights to show how much of a load a foam rubber cushion can carry. Larkin teaches a rubber technology extension course at the University of Southern California.

#### SHELL SPARE-TIME TEACHERS SHELL OIL COMPANY

#### Tulsa E&P Area

University of Tulsa

J. W. Morris, Attorney—Law. Oklahoma City University

M. R. Turley, Geologist — Structural

Midwestern University, Wichita Falls,

M. B. Long, Geologist - Subsurface

#### Geology. Denver E&P Area

University of Denver

M. A. Priest, Office Service Supervisor-Accounting.

#### New Orleans E&P Area

Tulane University

L. J. Derr, Data Processing Analyst-Basic Calculus.

#### Pacific Coast E&P Area

Long Beach (Calif.) City College

P. D. See, Geologist—Basic Geology. Bakersfield (Calif.) College

F. W. Bergen, Jr., Paleontologist-General Paleontology.

#### Houston E&P Area

University of Houston

L. L. Drury, Analyst — Supervisory Management.

C. L. Cater, Jr., Tax Accountant-Principles of Economics.

Martinez Refinery

University of California

R. B. McAulay, Engineer-Automatic Control for Industrial Processes.

East Contra Costa Junior College, Pleasant Hill, Calif.

D. R. Nauratil, Engineer—Industrial Instrumentation.

E. G. Martini, Lead Craft Foreman-Industrial Wiring.

C. E. Carper, Electrician—Motors.

#### Wood River Refinery

Wood River High School, Adult Division D. C. Lehwalder, Assistant Manager, Lubricating Department—Refining.

D. M. Brandel, Craft Foreman-Machine Shop Practices.

G. R. Adams, Zone Foreman-Industrial Instrumentation.

W. L. Howell, Craft Foreman-Industrial Instrumentation.

E. R. Hale, Technologist-Industrial Instrumentation.

Olin Vocational School, Alton, Ill.

K. D. Matthews, Instrument Man First Class-Electronics.

#### Southern Illinois University

J. W. Ogg, Engineer-Cost Control.

#### **Norco Refinery**

St. Charles High School, Destrehan, La.

R. J. Lambert, Chemist-Physics.

R. D. St. Ament, Chemist-Chemistry.

#### **Anacortes Refinery**

Skagit Valley Junior College, Mount Vernon, Wash.

E. D. Morris, Engineer - Blueprint Drawing.

E. D. Neumann, Technologist-Refining.

#### **Houston Refinery**

University of Houston

F. H. Greenwood, Technologist-Elementary Mathematics.

Iris F. Harmon, Senior Clerk - Accounting.

F. D. Macy, Senior Engineer-Maintenance Engineering.

A. F. Rosenberg, Research Chemist— Physical Chemistry.

R. E. Griffith, Research Engineer-

Civil Engineering. Vocational Evening School, Pasadena, Tex.

L. J. Sternat, Engineer — Blueprint Reading.

J. C. Merritt, Senior Engineer-Process Instrumentation.

Peter Lanchak, Technologist—Refining. Lillian E. Long, Stenographer—Typing.

#### St. Louis Marketing Division

Washington University, St. Louis, Mo.

J. L. Wehrle, Salesman-Industrial Products-Sales Management.

#### SHELL CHEMICAL CORPORATION

#### Norco Chemical Plant

Lutcher High School Adult Division, Lutcher, La.

P. M. LeBlanc, Operations Analyst-Advanced Accounting.

#### **Torrance Technical Service Laboratory**

University of Southern California

J. B. Larkin, Senior Chemist—Rubber Laboratory Course.

#### **Houston Chemical Plant**

University of Houston

K. R. Shellene, Engineer—Mathematics. V. F. Anderson, Engineer—Thermodynamics.

R. L. Coppage, Engineer-Materials Handling.

Vocational Evening School, Pasadena, Tex.

C. D. Thomas, Clerk—Bookkeeping.

#### SHELL DEVELOPMENT COMPANY

#### **Emeryville Research Center** University of California

E. D. Oliver, Engineer—Chemical En-

gineering.

D. O. Schissler, Chemist - Chemical Mass Spectrometry.

J. C. Ornea, Engineer — Petroleum Refining.

I. J. O. Korchinski, Engineer - Petroleum Refining.

#### Houston E&P Research Division

University of Houston

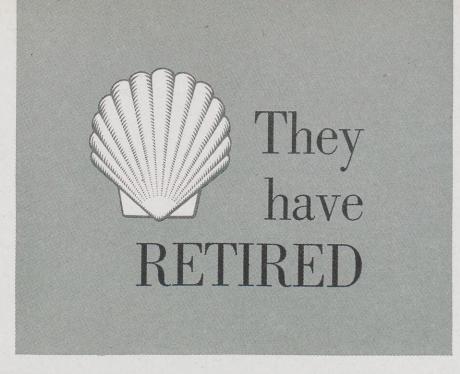
P. K. Weyl, Physicist—Electricity and Magnetism.

W. O. Lease, Chemist—Quantitative Analysis.

Hugo Steinfink, Chemist-X-ray Dif-

fraction. Emanuel Baskir, Physicist—Electronics.

Ellis Strick, Physicist—Electricity and Magnetism. Mary Smith, Secretary—Business Letters.





C. E. BARBER Pipe Line Department Lost Hills, California



W. K. BELL Wood River Refinery Engineering



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R. I. BERRY Houston Area Production



C. O. BLACKBURN Wilmington Refinery Refinery Laboratory



J. O. BROWN Houston Area Production



L. A. BROWN Wood River Refinery Railroad Section



L. A. BUFFINGTON Los Angeles Division Marketing Service



C. F. BUTCHER Shell Pipe Line Corp. West Texas Area



E. A. CAMERON Albany Division Operations



ALVA M. CLARK Martinez Refinery Refinery Laboratory



D. F. COOLEDGE Shell Pipe Line Corp. West Texas Area



A. M. CORMANY Wilmington Refinery Refinery Laboratory



J. S. DAVILLA Martinez Refinery Compounding



R. A. ELLIS
Pacific Coast Area
Production



F. D. FRILOUX Norco Refinery Engineering



C. A. GRAHAM San Francisco Office Financial



J. J. HUGHES Pipe Line Department Waltham, Mass.



G. B. ISRAEL
Pacific Coast Area
Gas



M. J. KELLER Norco Refinery Engineering



I. L. LACEY Tulsa Area Production



L. K. MOWER Houston Area Exploration



B. PAYNE Shell Pipe Line Corp. West Texas Area



R. V. ROBERTS Wood River Refinery Engineering



R. K. ROGERS Pacific Coast Area Gas



W. J. SAMPAY New Orleans Area Production



V. C. SCARANO Pipe Line Department Indianapolis, Ind.



C. O. SCHLIEPER Wood River Refinery Engineering



P. M. SCHMIDT New York Division Operations



W A. STONE Wood River Refinery Compounding



B. H. VAN MATER Boston Division Sales



S. N. WIK Shell Development Co. Emeryville



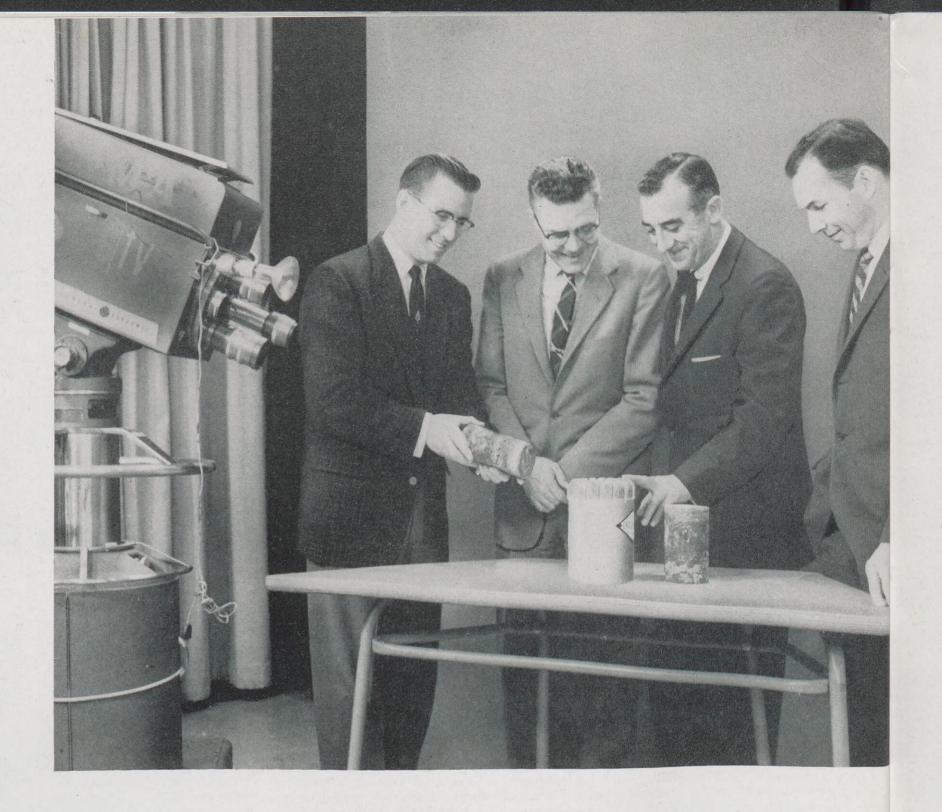
R. N. WITHERS Tulsa Area Production



W. H. WITHOELTER St. Louis Division Operations



H. F. ZIEGLER Shell Pipe Line Corp. Head Office



## SHELL Coast to Coast



#### CAREER CONFERENCE

J. R. LeRoy, Senior Technologist at Shell Chemical Corporation's Denver Plant, presents a talk on careers in science to a Denver high school chemistry class. He was one of five Shell Chemical employees who substituted for half a day for teachers who attended a National Science Teachers convention. Others were P. R. Bolenbaker, Operations Department Manager; Engineer K. O. Brueggeman; Chief Technologist B. Z. Hettich and Chief Chemist W. G. Hall.

#### 'TARGET FUTURE'

The quartet of Shell men at left recently helped produce four television programs about the oil industry for a Denver, Colo., station.

The four, all of the Denver Exploration and Production Area, are (left to right) Geologist R. G. Waring, Exploitation Engineer A. H. Wieder, Mechanical Engineer W. E. Spear and Stratigrapher Joseph Omelchuck. They are shown explaining a diamond bit and some core samples.

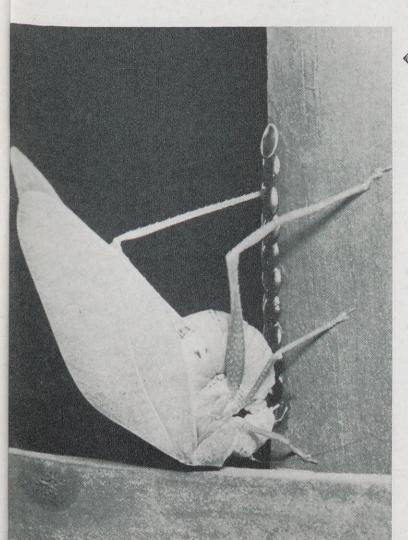
The four television programs they helped prepare were part of a series entitled "Target Future." The programs were designed to interest high school students in science and engineering careers. The oil shows included explanations of exploration, drilling, production and research.

Omelchuck was chairman of the exploration committee, and Waring was a member. Wieder and Spear were co-chairmen of the drilling committee.



#### SKY SCANNERS

Four Martinez Refinery employees recently teamed up to make a 5½-foot telescope to use in their mutual hobby of astronomy. They are, left to right, F. L. Freitas, J. C. Hillsman, H. G. Carpenter and C. G. Topping. Each man spent about 30 hours grinding and polishing a lens, then silvering them to reflect light. The telescope is capable of a relatively high magnification of a small field of view of the sky.



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#### 'KATY DID'

H. T. Byck, Technical Assistant to the President of Shell Development Company in Head Office, won a medal from the Rochester (N. Y.) International Salon of Photography for this photograph of a katydid laying eggs. It was named one of the three best nature prints of the 273 in the exhibition.

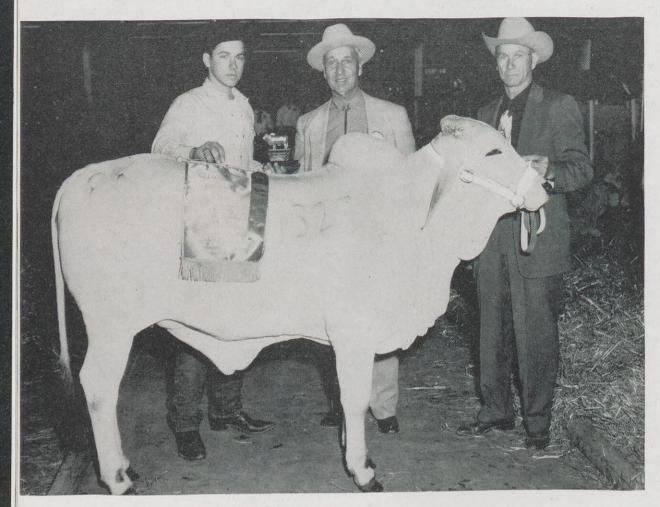
#### WALNUT RIBBONS

Eva Schlender, Secretary to the Manager of the Tulsa Area's Gas Department, won both first and second prizes at Oklahoma State University's horticultural show with her "island-grown" walnuts. She is half-owner of a private island in Grand Lake near Tulsa, where three walnut trees produced the show's prize-winning walnuts.



#### SHELL Coast to Coast

continued



#### CHAMPION CALF

Barney Gardner, left, of Humble, Tex., Manager Glenn Purcell of the Houston Chemical Plant, and Barney's father, Sterling Gardner, show the awards won by Barney's Brahman heifer, "Miss Paddock," at the 1958 Houston Fat Stock Show and Rodeo. The heifer won two prizes at the show. Barney bought the calf last year with the \$125 prize awarded by the Houston Chemical Plant to a 4-H Club boy. Barney refused bids to buy the heifer, and plans to enter it in next year's Fat Stock Show

#### COURT CHAMPS

The Seattle Marketing Division employees' basketball team won the City Commercial League championship this season. The Shell team first won the South Commercial League crown, then defeated the North Commercial League champion for the city title. Members of the team are, kneeling, J. J. Pinyan, G. J. Gelderman, manager; front row, left to right, A. S. Cameron, P. A. Krig, J. W. Knutsen, and V. C. Schacht; back row, L. A. Kidd, C. W. Patrick and O. H. Edler. Not shown in the photograph are L. L. Mangin and R. A. Carlson.







HELEN L. EBELAGE Wood River Refinery Treasury



Distilling



S. A. GIRARD Martinez Refinery



H. F. HARRIS Wilmington Refinery Distilling

Wilmingt

San Fran

C. F. G

Wood Riv



E. C. SPENCER Tulsa Area Production



C. TARWATER Martinez Refinery Engineering



H. J. WALKER Norco Refinery Thermal Cracking



O. A. FORTNER Shell Pipe Line Corp. Texas-Gulf Area



W. R. FOWLER Shell Chemical Corp. Torrance Plant



J. J. FURLONG Chicago Division Operations



H. C. PACKARD Head Office Transp. & Supp.



T. A. REES Pacific Coast Area



W. V. RHOADES Wood River Refinery Engineering



C. A. ZUMWALT Wood River Refinery Engineering

Twenty-Five Years

Shell Pipe

Shell Pipe Mid-Cont



F. HARRIS ington Refinery Distilling



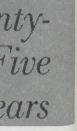
J. WALKER rco Refinery rmal Cracking



J. FURLONG cago Division Operations



V. RHOADES River Refinery ingineering



Thirty-Five Years



R. R. BAKER Tulsa Area Gas



W. H. BRATCHES General Manager **Purchasing-Stores** 



C. F. CURTIN **Head Office** Financial



A. E. DAVIES Wilmington Refinery Engineering



A. J. De La FONTAINE Martinez Refinery Treasury



J. T. DIXON Wilmington Refinery Administration



A. M. EATON **Houston Refinery** Stores



H. R. INLOW Wilmington Refinery Distilling



R. A. KLEFBECK Pipe Line Dept. Los Angeles, Calif.



W. J. MEYER Wood River Refinery Engineering



F. V. MOLONEY Shell Pipe Line Corp. Head Office



H. M. MONTGOMERY Tulsa Area Transport



R. A. PRAY Pipe Line Dept. Tracy, California



W. F. RIEKE Head Office **Purchasing-Stores** 



C. ROBINSON Martinez Refinery Dispatching



C. M. ROGERS Los Angeles Division Treasury



A. L. WIEST San Francisco Office Marketing



W. J. YATES **Head Office** Manufacturing



A. T. BENNETT Shell Pipe Line Corp. Mid-Continent Area



J. A. BRODERICK Wood River Refinery Treasury



E. J. CHILDERS Wood River Refinery Catalytic Cracking



DOROTHY U. CHURCH St. Louis Division Treasury



L. H. FITZGERALD Shell Pipe Line Corp. West Texas Area



C. F. GERHARDT Wood River Refinery Purchasing-Stores



B. S. GRAY Martinez Refinery Lubricating Oils



A. M. HAYS, JR. **New Orleans Division** Personnel



J. H. HARMON Shell Pipe Line Corp. Mid-Continent Area



E. C. HYLAND **Cleveland Division** Operations



C. M. JOHNSON Pacific Coast Area Production



C. J. KOHLHAAS Pacific Coast Area Production



J. M. MacQUARRIE E&P Tech. Serv. Div. Houston



R. F. OSBORN Pipe Line Dept. Blue Mound, III.



G. D. ROBERTSON Shell Pipe Line Corp. Texas-Gulf Area



H. W. SCHULTE Wood River Refinery Engineering



W. VOLMA Wood River Refinery Treasury



D. B. WARD Wood River Refinery Aromatics



C. A. WHEELER Wilmington Refinery Catalytic Cracking



E. C. WILLIAMS Wood River Refinery Lubricating Oils



J. B. WYMAN **Anacortes Refinery** Administration



J. A. YOUNG Tulsa Area Production



R. E. ZIMMERMAN Pipe Line Dept. Indianapolis, Ind.



C. C. AUSTIN Shell Pipe Line Corp. Mid-Continent Area



W. L. BIENEMANN Wood River Refinery Engineering



C. F. BOHLKE Sewaren Plant Compounding



K. BORAH Head Office Manufacturing



H. G. BRAILLARD **Boston Division** Marketing Service



E. F. BRIDGEWATER San Francisco Division Sales



L. BYERS, JR. Tulsa Area Production



F. H. CAUDEL Martinez Refinery



O. C. COEN Shell Pipe Line Corp. Research Laboratory Rocky Mountain Division

#### Twenty-Five Years continued



J. W. COLE Tulsa Area Production



R. M. COLE Emeryville



J. R. COOK Shell Development Co. Shell Development Co. Emeryville



R. L. COOK Shell Pipe Line Corp. Texas-Gulf Area



G. O. DEUBNER Shell Chemical Corp. Shell Point Plant



V. H. DeWERFF Wood River Refinery Engineering



O. M. DILLETT Shell Pipe Line Corp. Mid-Continent Area



J. W. DIVELEY Wood River Refinery Engineering



J. V. DOVER Shell Pipe Line Corp. Mid-Continent Area



F. DUNSING Wood River Refinery Engineering



W. W. ELLIS Pacific Coast Area Production



G. H. EMBRY Houston Area Production



A. G. FELTON Wood River Refinery Pers. & Ind. Rel.



B. FOGLEMAN **Houston Refinery** Catalytic Cracking



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J. H R.

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W R.

N. J. FOLTZ Pipe Line Department Argo, III.



L. GARN Indianapolis Division Operations



E. H. GLISSON **Baltimore Division** Marketing Service



J. W. GREATHOUSE Wood River Refinery Engineering



F. W. HAKETHAL Wood River Refinery Engineering



O. E. HANKS Wood River Refinery Engineering



J. T. HENDERSON Shell Pipe Line Corp. Mid-Continent Area



D. E. HENDRICKS Head Office Marketing



H. E. HULL Wood River Refinery Compounding



K. D. HULL Wood River Refinery Lubricating Oils



H. J. HUTSON Houston Area Production



A. C. JONES Head Office Marketing



H. F. KLEY San Francisco Office Manufacturing



S. KURUCZ Sewaren Plant Terminal



R. V. LAHR Shell Pipe Line Corp. Head Office



C. L. LICHTENBERG **Detroit Division** Sales



E. P. LIESMANN Wood River Refinery Engineering



J. P. LONG Shell Chemical Corp. San Francisco



J. R. LUTON Shell Pipe Line Corp. West Texas Area



C. T. MAGIN Anacortes Refinery Refinery Laboratory



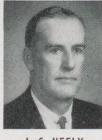
D. W. McCRAE Wilmington Refinery Thermal Cracking



W. T. McGOWAN New York Division Operations



T. F. MURTAGH Head Office **Purchasing-Stores** 



J. C. NEELY E&P Tech. Serv. Div.



W. C. NIDEVER Pipe Line Dept. Los Angeles, California



JOHN O'DEA Head Office Marketing



E. L. OLSEN Sewaren Plant Terminal



R. O. PETERS Shell Pipe Line Corp. Mid-Continent Area



W. S. ROBERTS Shell Chemical Corp. Head Office



A. J. SCHULER, JR. Sewaren Plant Compounding



J. SCHLEGERIS San Francisco Division Treasury



G. J. SISK **Boston Division** Operations



W. T. SMITH Sewaren Plant Depot



MARY M. SNIDER Wood River Refinery Pers. & Ind. Rel.



E. J. STEIN St. Louis Division Sales



A. TERRY Wood River Refinery Engineering



J. G. WILSON Head Office Manufacturing

Head Office	J. T. TownsendGas	J. W. MizenkoEngineering
	L. H. Van Dyke Exploration	J. O. MushinskiThermal Cracking
S. E. BarberFinancial	S. L. Williams	W. G. VannEngineering
H. M. KarrManufacturing	0. L. 1700amara	R. D. Ables
A. E. PerelessTransp. & Supp. W. P. Raarup, JrManufacturing	NEW ORLEANS AREA	H. P. Addison Engineering
J. D. Savage Expl. & Prod.	20 Years	B. Anderson, Jr
15 Years	H. R. BurkhartTransport & Materials	W. H. AnthonyEngineering W. L. Balliew, IIITreating
S. C. Eastman	W. K. AlkireProduction	L. C. Berger Engineering
10 Years	E. H. Anderson Exploration	B. Batts Engineering
S. G. Blankinship, JrMarketing	L. W. Anderson, JrProduction	J. E. Bills Engineering B. O. Bishop Engineering
R. H. Hahn	C. C. Bell	O. H. BoggsTreating
A. R. HorsburghManufacturing P. G. JamesonMarketing	L. B. Case, Jr	R. G. Boyd Dispatching
J. G. KrakoraFinancial	R. H. Cowie Exploration	D. B. BradyEngineering J. BrownEngineering
C. E. RoeFinancial	L. J. Duplantis, JrProduction	E. ClarkAromatics
J. E. Schaal	L. J. Fendlason Exploration R. L. Gates Land	W. C. Cowey
R. C. WittFinancial	J. S. Hasson Exploration	M. L. Eason Engineering E. M. Farmer, Jr Distilling
	L. H. Hendricks	L. A. FarrisEngineering
Houston Office	G. S. Kukuchek	R. B. Flynn
J. W. McManusTransp. & Supp.	W. K. Palmer Production	T. F. Funderburk, Jr Refinery Laboratory J. E. Green
J. W. McManusTransp. & Supp.	J. E. RyanExploration	W. P. Grisham, Jr Research Laboratory
Sam Farmaiana Office	A. L. Sennette Exploration	H. GuilleryEngineering
San Francisco Office	L. Sistrunk Production J. H. Williams Production	W. B. Gunn
T D V C: 15 Years	J. W. Speer Production	H. C. HolcombEngineering
T. B McGinnis, JrTransp. & Supp.	DACIFIC COAST AREA	W. L. Hull Dispatching
Exploration and Production	PACIFIC COAST AREA	R. B. Humphreys Engineering E. Jarmon Engineering
	Marion E. Bell	W. Jenkins Engineering
TECHNICAL SERVICES DIVISIONS	E. C. Freeland Production	R. J. Kennerty, JrEngineering
(HOUSTON)	C. N. Jarman Exploration	N. M. King, JrThermal Cracking B. N. LauterEngineering
20 Years	L. J. McLean Production R. B. Stancliff	F. F. Lewis Engineering
J. P. CartwrightAdministration		H. J. Lewis Utilities
10 Years	D. P. Cockrill	M. P. Lewis Engineering
N. B. Newman	J. E. Dozier, Jr	W. M. Liggin Refinery Laboratory M. J. Love Engineering
O. J. ShirleyProduction	R. E. Gribble Treasury	M. L. MooreRefinery Laboratory
E. W. WallaceEngineering	L. E. Heaton Exploration	J. E. Mulcare
DENVER AREA	G. H. Holliday	M. M. MuscarelloEngineering B. Z. O'BriantEngineering
20 Years	G. E. PfenningProduction	L. C. O'Connor Catalytic Cracking
M. J. DeuthExploration	TIU CA AREA	C. L. Parrish
A. A. McLeodPers. & Ind. Rel. W. P. VersteegAdministration	TULSA AREA	G. F. Rogers Refinery Laboratory M. Scott Engineering
J. E. Wilson Exploration	J. D. LeffingwellProduction	J. F. SittaThermal Cracking
	A. M. Springer Exploration	R. G. Sturrock
J. J. PickellProduction	L. H. Wyatt Production	J. L. Swinney Engineering R. Q. Twitty
H. J. RosenbergerAdministration	10 Years	D. R. Weitzel Refinery Laboratory
R. V. RuttleTreasury	E. L. Bearden Production	L. M. Wiederhold, Jr Engineering
HOUSTON AREA	L. J. Hays, Jr	J. D. WolchikEngineering J. P. WolfEngineering
F. E. PoseyTransport	R. P. Leiker Production	E. L. Wright Refinery Laboratory
F. E. Posey Transport	J. W. Morris Legal	
H. T. Austin Exploration	E. L. Parks Pers. & Ind. Rel. J. H. Thompson Exploration	MARTINEZ REFINERY
H. T. Austin Exploration	S. G. Weeks Production	20 Years E. Ballman
C. E. Bell	C. A. Wood Exploration	E. Ballman Administration
J. R. Grant		W. E. Lloyd Distilling W. J. Weitzel Engineering
J. A. Gruen Production	Manufacturing	
R. H. KloppenburgProduction J. K. NelsonExploration	ANACORTES REFINERY	D. W. Newman
G. L. Scheirman	IE Voors	A. Pistochini
	R. A. WilsonZone B	Margaret Townsend Refinery Laboratory
MIDLAND AREA	10 Years	M. E. StromsmoeLubricating Oils C. N. WhitleyEngineering
R. D. Miller Exploration	T   Malean Refinery laboratory	
	K. E. Rudert Technological	E. BuchananEngineering
B. NevillProduction	HOUSTON REFINERY	W. E. Compton Research Laboratory
		E. D. PasleyLubricating Oils
R. L. Clemens Production	E. C. Reeves Engineering	NODGO DEFINITORY
E. L. GardnerLand	D. M. Scanlan Engineering	NORCO REFINERY
R. E. GoffPers. & Ind. Rel.	15 Years	15 Years
N. W. Harrison Production	M. Godfrey Engineering H. Granberry Engineering	M. J. BrignacEngineering D. J. DupuyRefinery Laboratory
V. J. Kennedy Exploration E. M. McQuattersTreasury	H. Granberry Engineering O. G. Green Refinery Laboratory	A. GrayEngineering
I. M. NicholsLegal	E. E. Heyen	N. A. Richard Engineering
W. R. ShookGas	R. L. Junell Engineering	V. B. Thomas Engineering
R. H. Torrance	K. W. KnoxTreasury	W. WilsonEngineering

FOLTZ Department o, III.

er Refinery ting Oils

LUTON Line Corp. exas Area

PETERS Line Corp. inent Area

WILSON Office acturing

IO Yours	In Years	N. W. Grau
R. C. Cameron	C. F. WarrinerBaltimore, Operations	C. L. Holt
T. G. Martin	P. E. BiseseBaltimore, Operations	J. Jackson Houston
	W. B. HimesChicago, Sales	F. A. JaneckaHouston
WILMINGTON REFINERY	R. D. TaggardChicago, Operations	J. I. Jones
	R. J. PfahlerCleveland, Operations	B. G. Lewis
20 Years	Dorothy J. FryCleveland, Treasury	F. J. Lewis
H. B. Lodge Effl. Cont. & Utilities	A. G. Brewer Cleveland, Sales	J. M. McLelland Houston
15 Years	H. G. Smith, Jr Cleveland, Operations R. L. Berg Cleveland, Sales	T. A. Mielke Houston
H. W. ArndtEffl. Cont. & Utilities	R. L. Bush Cleveland, Sales	W. E. MillerHouston
C. S. BennettThermal Cracking	M. J. W. Campbell, Jr Detroit, Treasury	G. D. Mills
E. A. BlevensEngineering	W. T. Cavanah Indianapolis, Operations	E. J. MorganHouston
B. V. Lonegan Effl. Cont. & Utilities	E. B. BundyMinneapolis, Marketing Service	G. W. Overturf
C. S. StoddardEngineering	R. E. McCormick New Orleans, Treasury	A. L. PayneHouston
R. L. TiptonStores	F. T. Duffy New York, Treasury	D. H. Randt
WOOD DIVED DEFINIEDY	W. B. HimesNew York, Sales	W. Reader Houston C. K. Roberts Houston
WOOD RIVER REFINERY	E. F. L'HommedieuNew York, Sales	M. B. Roberts
20 Years	R. J. RabbittNew York, Sales	B. B. RossHouston
M. W. Deist	J. E. Morgan	J. N. Russell Houston
R. E. Dippold	E. M. Hall	R. E. Smith
W. C. Drda Engineering	M. P. Scott St. Louis, Operations	T. Stewart
M. F. Dugan Engineering G. F. Hendrickson Effl. Cont. & Utilities		A. Summerfield
G. F. Mendrickson Emi. Cont. & Utilities	SEWAREN PLANT	G. A. SummerlinHouston
E. A. HowardLight Oil Treating M. C. JordanRefinery Laboratory	C. W. Antosiewicz	H. D. Thompson Houston
W. T. Kubicek Engineering	C. W. AntosiewiczCompound	F. H. Trathen Houston
W. G. Reitemeier Engineering	J. M. Keenan	M. H. Waldrip Houston C. E. Walker Houston
C. F. Stanley Engineering	W. Lopazanski	L. E. Wallace Houston
F. B. Stufflebeam Engineering	A. J. MalyszkoLaboratory	V. Watson Houston
15 Years	S. J. SzalvaCompound	P. A. West Houston
H. Beyer, JrEngineering		A. M. Wigginton
C. T. Burris Engineering	W. J. Dobos	D. M. Wilcher
W. W. Clardy Engineering	J. W. NehilaEngrg. & Maint.	H. V. Willis Houston
H. C. GillEngineering	Pine Line Department	K. Z. WrightHouston
W. HixEngineering	Pipe Line Department	W. C. Young Houston M. T. Chamblee Martinez
E. W. HopkinsEngineering	20 Years	L. C. Eklund Martinez
A. T. Kocis	H. M. LuttrellLima, Ohio	D. S. Harris Martinez
R. V. KratschmerPers. & Ind. Rel.	R. J. Maher West Boylston, Mass.	J. T. Robson
G. P. Pilz	J. M. Olive, JrLos Angeles, Calif. W. ParisZionsville, Ind.	B. B. FrenchShell Point
W. D. Riley Engineering W. D. Rustin Engineering	M. F. SchneidermeyerVandalia, Ill.	E. E. De LongTorrance
		H. L. NashVentura
V W Schuette Dispatching	J. G. Tait Indianapolis, Ind.	The La Mash
V. W. Schuette Dispatching L. A. Winterrowd Refinery Laboratory	J. G. Tait	
L. A. WinterrowdRefinery Laboratory	M. C. WalkerMuncie, Ind.	SHELL DEVELOPMENT COMPANY
L. A. WinterrowdRefinery Laboratory	M. C. WalkerMuncie, Ind.	SHELL DEVELOPMENT COMPANY
L. A. Winterrowd Refinery Laboratory  10 Years  J. Akers Engineering	M. C. Walker	SHELL DEVELOPMENT COMPANY  20 Years 1. L. Blake Emeryville
L. A. Winterrowd Refinery Laboratory  10 Years  J. Akers Engineering  J. H. Allison Engineering	M. C. Walker	SHELL DEVELOPMENT COMPANY  20 Years  1. L. Blake Emeryville F. B. Rolfson Emeryville
L. A. Winterrowd Refinery Laboratory  10 Years  J. Akers Engineering J. H. Allison Engineering V. L. Buckles Light Oil Treating	M. C. Walker	SHELL DEVELOPMENT COMPANY  20 Years  1. L. Blake Emeryville F. B. Rolfson Emeryville H. H. Voge Emeryville
L. A. Winterrowd Refinery Laboratory  10 Years  J. Akers Engineering  J. H. Allison Engineering  V. L. Buckles Light Oil Treating  W. J. Deissinger Engineering	M. C. Walker	SHELL DEVELOPMENT COMPANY  20 Years  I. L. Blake Emeryville F. B. Rolfson Emeryville H. H. Voge Emeryville H. Van Olphen Houston
L. A. Winterrowd Refinery Laboratory  10 Years  J. Akers Engineering J. H. Allison Engineering V. L. Buckles Light Oil Treating	M. C. Walker	SHELL DEVELOPMENT COMPANY  20 Years  1. L. Blake Emeryville F. B. Rolfson Emeryville H. H. Voge Emeryville H. Van Olphen Houston
L. A. Winterrowd Refinery Laboratory  10 Years  J. Akers Engineering J. H. Allison Engineering V. L. Buckles Light Oil Treating W. J. Deissinger Engineering R. W. Dickinson Engineering G. C. Egmon Gas R. C. Hamilton Engineering	M. C. Walker	SHELL DEVELOPMENT COMPANY  20 Years  1. L. Blake Emeryville F. B. Rolfson Emeryville H. H. Voge Emeryville H. Van Olphen Houston  15 Years L. T. Atkins Emeryville
L. A. Winterrowd Refinery Laboratory  10 Years  J. Akers Engineering J. H. Allison Engineering V. L. Buckles Light Oil Treating W. J. Deissinger Engineering R. W. Dickinson Engineering G. C. Egmon Gas R. C. Hamilton Engineering J. E. Hodapp Alkylation	M. C. Walker	SHELL DEVELOPMENT COMPANY  20 Years  1. L. Blake Emeryville F. B. Rolfson Emeryville H. H. Voge Emeryville H. Van Olphen Houston  15 Years L. T. Atkins Emeryville S. J. Beaubien Emeryville
L. A. Winterrowd Refinery Laboratory  10 Years  J. Akers Engineering J. H. Allison Engineering V. L. Buckles Light Oil Treating W. J. Deissinger Engineering R. W. Dickinson Engineering G. C. Egmon Gas R. C. Hamilton Engineering J. E. Hodapp Alkylation H. Horton, Jr Engineering	M. C. Walker	SHELL DEVELOPMENT COMPANY  20 Years  1. L. Blake Emeryville F. B. Rolfson Emeryville H. H. Voge Emeryville H. Van Olphen Houston  15 Years  L. T. Atkins Emeryville S. J. Beaubien Emeryville F. C. Davis Emeryville Emeryville Emeryville
L. A. Winterrowd Refinery Laboratory  10 Years  J. Akers Engineering J. H. Allison Engineering V. L. Buckles Light Oil Treating W. J. Deissinger Engineering R. W. Dickinson Engineering G. C. Egmon Gas R. C. Hamilton Engineering J. E. Hodapp Alkylation H. Horton, Jr Engineering R. E. Klie Aromatics	M. C. Walker	SHELL DEVELOPMENT COMPANY  20 Years  1. L. Blake Emeryville F. B. Rolfson Emeryville H. H. Voge Emeryville H. Van Olphen Houston  15 Years  L. T. Atkins Emeryville S. J. Beaubien Emeryville F. C. Davis Emeryville P. G. Granas Emeryville Emeryville
L. A. Winterrowd Refinery Laboratory  10 Years  J. Akers Engineering J. H. Allison Engineering V. L. Buckles Light Oil Treating W. J. Deissinger Engineering R. W. Dickinson Engineering G. C. Egmon Gas R. C. Hamilton Engineering J. E. Hodapp Alkylation H. Horton, Jr. Engineering R. E. Klie Aromatics E. C. Lewis Purchasing-Stores	M. C. Walker	SHELL DEVELOPMENT COMPANY  20 Years  I. L. Blake Emeryville F. B. Rolfson Emeryville H. H. Voge Emeryville H. Van Olphen Houston  15 Years  L. T. Atkins Emeryville S. J. Beaubien Emeryville F. C. Davis Emeryville F. G. Granas Emeryville J. M. Monger Emeryville
L. A. Winterrowd Refinery Laboratory  10 Years  J. Akers Engineering J. H. Allison Engineering V. L. Buckles Light Oil Treating W. J. Deissinger Engineering R. W. Dickinson Engineering G. C. Egmon Gas R. C. Hamilton Engineering J. E. Hodapp Alkylation H. Horton, Jr. Engineering R. E. Klie Aromatics E. C. Lewis Purchasing-Stores H. Linders Dispatching	M. C. Walker	SHELL DEVELOPMENT COMPANY  20 Years  1. L. Blake Emeryville F. B. Rolfson Emeryville H. H. Voge Emeryville H. Van Olphen Houston  15 Years  L. T. Atkins Emeryville S. J. Beaubien Emeryville F. C. Davis Emeryville P. G. Granas Emeryville Emeryville
L. A. Winterrowd Refinery Laboratory  10 Years  J. Akers Engineering J. H. Allison Engineering V. L. Buckles Light Oil Treating W. J. Deissinger Engineering R. W. Dickinson Engineering G. C. Egmon Gas R. C. Hamilton Engineering J. E. Hodapp Alkylation H. Horton, Jr. Engineering R. E. Klie Aromatics E. C. Lewis Purchasing-Stores H. Linders Dispatching C. W. Meredith Thermal Cracking J. J. Molloy Engineering	M. C. Walker	SHELL DEVELOPMENT COMPANY  20 Years  I. L. Blake Emeryville F. B. Rolfson Emeryville H. H. Voge Emeryville H. Van Olphen Houston  15 Years  L. T. Atkins Emeryville S. J. Beaubien Emeryville F. C. Davis Emeryville F. G. Granas Emeryville P. G. Granas Emeryville J. M. Monger Emeryville C. Z. Morgan Emeryville W. F. Ross Emeryville S. E. Steinle Emeryville Emeryville
L. A. Winterrowd	M. C. Walker	SHELL DEVELOPMENT COMPANY  20 Years  I. L. Blake Emeryville F. B. Rolfson Emeryville H. H. Voge Emeryville H. Van Olphen Houston  15 Years  L. T. Atkins Emeryville F. C. Davis Emeryville F. C. Davis Emeryville F. G. Granas Emeryville P. G. Granas Emeryville C. Z. Morgan Emeryville W. F. Ross Emeryville S. E. Steinle Emeryville E. G. Brydon Houston
L. A. Winterrowd Refinery Laboratory  10 Years  J. Akers Engineering J. H. Allison Engineering V. L. Buckles Light Oil Treating W. J. Deissinger Engineering R. W. Dickinson Engineering G. C. Egmon Gas R. C. Hamilton Engineering J. E. Hodapp Alkylation H. Horton, Jr. Engineering R. E. Klie Aromatics E. C. Lewis Purchasing-Stores H. Linders Dispatching C. W. Meredith Thermal Cracking J. J. Molloy Engineering R. B. Roark Purchasing-Stores H. V. Short Thermal Cracking	M. C. Walker	SHELL DEVELOPMENT COMPANY  20 Years  I. L. Blake Emeryville F. B. Rolfson Emeryville H. H. Voge Emeryville H. Van Olphen Houston  15 Years  L. T. Atkins Emeryville S. J. Beaubien Emeryville F. C. Davis Emeryville F. C. Davis Emeryville F. G. Granas Emeryville F. G. Granas Emeryville J. M. Monger Emeryville J. M. Monger Emeryville S. E. Steinle Emeryville S. E. Steinle Emeryville E. G. Brydon Houston J. Rae, Jr. Houston
L. A. Winterrowd Refinery Laboratory  10 Years  J. Akers Engineering J. H. Allison Engineering V. L. Buckles Light Oil Treating W. J. Deissinger Engineering R. W. Dickinson Engineering G. C. Egmon Gas R. C. Hamilton Engineering J. E. Hodapp Alkylation H. Horton, Jr. Engineering R. E. Klie Aromatics E. C. Lewis Purchasing-Stores H. Linders Dispatching C. W. Meredith Thermal Cracking J. J. Molloy Engineering R. B. Roark Purchasing-Stores	M. C. Walker	SHELL DEVELOPMENT COMPANY  20 Years  I. L. Blake Emeryville F. B. Rolfson Emeryville H. H. Voge Emeryville H. Van Olphen Houston  15 Years  L. T. Atkins Emeryville S. J. Beaubien Emeryville F. C. Davis Emeryville F. C. Davis Emeryville F. G. Granas Emeryville P. G. Granas Emeryville J. M. Monger Emeryville C. Z. Morgan Emeryville W. F. Ross Emeryville S. E. Steinle Emeryville E. G. Brydon Houston J. Rae, Jr. Houston
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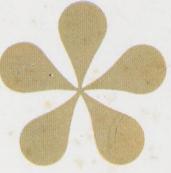
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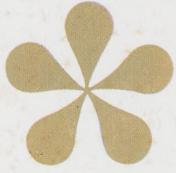
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