

SEVENTY ⁷⁶ SIX

Union Oil Company of California

JULY 1958





What's the West's most powerful premium doing here?

We've put it in the picture simply to remind you that, wherever your pleasure takes you, Royal 76 gasoline can make driving there part of the pleasure, too. It's "The Finest." You get it at the sign of the big 76 where—customers tell us—the Minute Man Service is as good as the gasoline.

THE UNION OIL COMPANY OF CALIFORNIA



TUNE IN: THE 76 SPORTS CLUB EVERY WEEK ON TV - ASK FOR: FREE SPORTS BOOKS AT YOUR NEIGHBORHOOD UNION STATION

JULY, 1958

THE COVER—Union Oil's Well No. 14 in Timbalier Bay, Louisiana, is believed to have set a new world's record for drilling speed—13,778 feet in 14 days. See Page 10 for a report by Ed Sands.

In This Issue

<i>From Longhorns to Herefords</i>	4
<i>Open Season on Sportscars</i>	8
<i>Drilled in World's Record Time</i>	10
<i>So There is a "Right to Work!"</i>	13
<i>You Talk at 186,000 Miles Per Second</i>	14
<i>Safe and Sound</i>	17
<i>Business Highlights</i>	20
<i>Think It Through</i>	22
<i>Your Magazine Takes a Bow</i>	22
<i>Fact or Fancy</i>	23
<i>In Focus</i>	24
<i>Service Birthday Awards</i>	27
<i>Bill Butler</i>	28

76 is a Union Oil Company of California trademark. It also symbolizes the American freedoms won in 1776, which made possible this nation's industrial development and abundance. Our SEVENTY-SIX magazine, published monthly, mirrors industrial freedom through the thoughts, skills, accomplishments and appreciations of Union Oil people. We invite readers to participate with us in an exchange of ideas and information. Address correspondence to The Editors, SEVENTY-SIX, Union Oil Center, Los Angeles 17, California.

EDITORIAL BOARD

C. Haines Finnell, Jerry Luboviski, Fritz Springmann and Earl M. Welty, Thiel D. Collett.....Editor
 Robert C. Hagen.....Assistant Editor

It Really Works

The ultimate solution of the problems of juvenile delinquency, as the Hearst Newspapers have emphasized in a three-year study of the subject, will be achieved at the level of the home, the family and the general area of community responsibility.

The distinguished men and women who have participated in the study have said almost in unison that it has been a collapse of adult discipline and authority, of inspiration and example, that has been the major fault in this tragic situation.

In other words, it is not the bad child that is the basic problem—it is the delinquent adult, the derelict parent, the complacent and indifferent neighborhood.

The correction of this trouble spot in our society is a matter of grass-roots organization, and the brightest side of the picture is that substantial steps are being taken by people in the best position to give youth proper spiritual leadership.

A current example, and a good one, is that of the wholesome "sports program" being conducted by the Union Oil Company. This program combines a television series with personal appearances by sports celebrities before civic groups, and it has already had a tremendous influence for good among thousands of youngsters in the 10 to 14 age groups.

The purpose of the project is to have outstanding personalities of the sports world give expert instruction in their particular fields, and the kids have really taken to it. One of the prime movers in the idea is Elroy (Crazy Legs) Hirsch, former professional football ace of the Los Angeles Rams, and he says it is already possible to measure the power of the program by the number of youngsters taking up active sports careers on the basis of the interest that has been aroused.

His own opinion, and it is one of high authority in the field, is that supervised sports programs will do more to blot out juvenile delinquency than any other one thing, and the chance that he is right is worth exploiting.

It is a case of getting responsible people, fathers and mothers, the clergy and the teacher and the policeman, in harmony and in active participation to keep kids out of trouble—and the wonderful thing about it is that it works.

an editorial comment by the Los Angeles Examiner

SAID JACK DEMPSEY, while being interviewed by Sports Commentator Al Warden in Ogden, Utah: "Before signing off, I would like to pay a tribute to Union Oil Com-

pany for establishing Union 76 Sports Clubs for young boys. This is a fine gesture and a good way to lick juvenile delinquency. Keep young men interested in sports and there won't be any delinquency in this fine country of ours." The famous heavyweight is seen at right with Union Oilers T. S. Argyle, left, and G. F. Herrman, Jr., right, at the beginning of a Utah all-star game seen by 6,000 people. All players on each team were given 76 Sports Club Achievement Awards.



from longhorns to herefords



Near Santa Maria, the Minetti family run Corralitos Ranch, a 17,000-acre cattle domain carved from the older Guadalupe grant. Around 1,700 head of fine beef cattle graze here.

IN 1769, seven years before the Declaration of Independence, 200 head of cattle were driven northward from Mexico into what is now the state of California. Many died of heat and thirst before they could reach the Pacific Coast's Franciscan missions. But enough survived to bring their herdsman, Fernando de Rivera, the distinction of founding one of the West's greatest industries.

Ever since 1769, cattle have been synonymous with the West. The mission herds multiplied so rapidly that in one area, in 1806, the governor ordered 20,000 head killed to save the pastures. Besides the Franciscan cattle there were other herds on Ranchos del Rey (ranches of the king). And the Spanish *dons*, who measured their private land holdings in square leagues, estimated their livestock wealth in thousands of head.

In those colorful days of the great ranchos, cattle bred and survived in a semi-wild existence, little removed from that of the buffalo. They sought their own pasture and water, lived and died at the mercy of the elements. During a terrible 22-month drought between

*The Western Livestock Industry
has been revolutionized,
but it hasn't changed the cattlemen*

1828 and 1830, California herds were nearly wiped out. Yet a few years later, cattle wealth of the missions alone was estimated at 424,000 head. Lush hills and valleys of the Pacific Coast were a wonderful grazing habitat despite the vagaries of western weather.

Equally as primitive as the ranchos' breeding and feeding methods were their slaughtering techniques. Ranch owners in need of meat or money sent out a troop of *caballeros* armed with long knives. Racing along with a running herd of cattle, the riders dispatched one animal after another with a thrust similar to that used in the bull ring. Other riders followed along to bleed the animals, remove their hides, and select the best cuts of meat for household use. Finally came Indian women to salvage the tallow. Coyotes of that era gorged themselves on generous remnants of each carcass.

Those were the days when hide buyers came round the horn in sailing ships from New England to California. Buying hides at the going price of about \$2 each and trading Atlantic Seaboard wares for 500-pound lots of tallow, these mariners pioneered Pacific Coast shipping. Their cargoes of hides usually brought a good price among the shoe and harness makers of Boston and other New England cities. The romance and hardship of the trade were preserved for all generations in the diary of Richard Henry Dana, whose "Two Years Before the Mast" describes one such hide-buying voyage.

Mexico's Secularization Law of 1834, intended as a means of distributing mission lands and livestock among



dependent Indians, again nearly erased the great cattle herds. Mexican soldiers of fortune, instead of Indians, seized the opportunity, slaughtering a hundred thousand head of cattle for their hides. The helpless friars had to join in the slaughter in order to prevent a total loss. By year's end the 21 missions had only 29,000 cattle left from herds that once numbered nearly half a million. Well-intentioned distribution of the wealth evolved into waste and poverty.

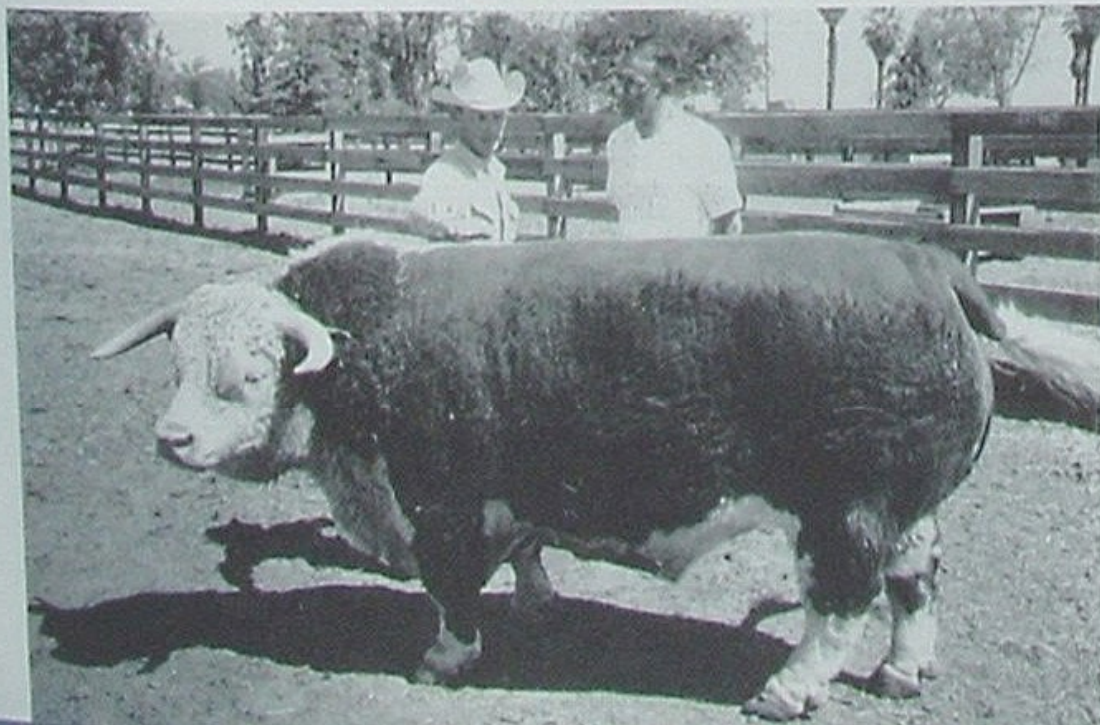
After 1848, following the war with Mexico, the missions and ranchos underwent swift change. The *dons*

were replaced by cattle kings—men who gained wealth, power and great influence during and immediately after the Gold Rush. But soon the immense land grants were divided, sold and fenced off. The coming of the railroads in 1870 brought a migration of people eager to settle on small farms. Land values increased, grazing lands were plowed under, and cattle ranching seemingly went into retirement.

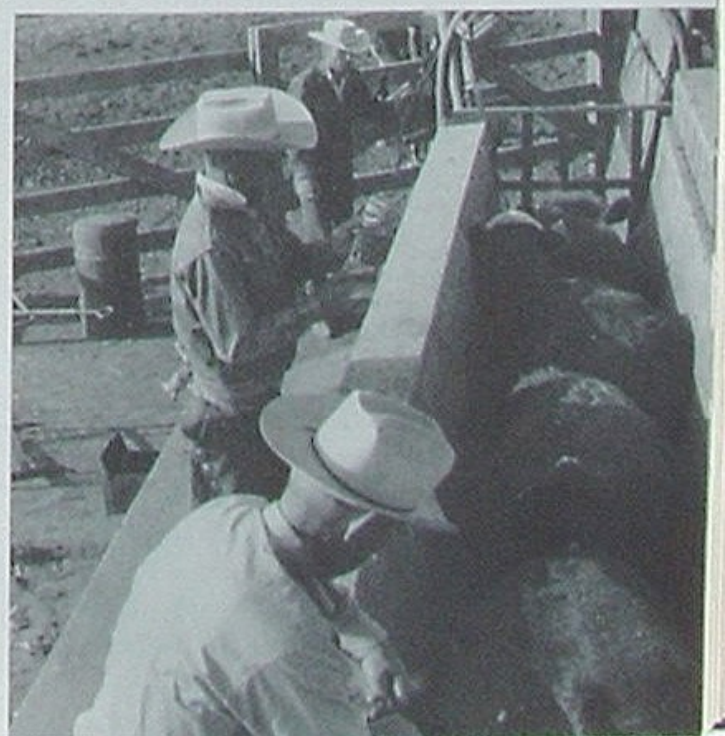
We said *seemingly*. Actually the railroads brought new opportunities and new thinking into the West's livestock business. Cattlemen were obliged to make more

continued

FLC Royal Mixer 49th, valued by the Parks Hereford Ranch near Bakersfield at \$200,000, is expected to be one of the greatest breeding bulls of all time.



Showing cold symptoms, animals in San Joaquin Valley are doctored for pneumonia.





Cowpunchers and their horses are still essential to the beef industry. Above, at Piute yards in Kern County, 20 men handle 30,000 head of cattle annually.



Though blind, Hereford breeder D. C. Parks, left, was named Rancher of Year by cattlemen.

From Longhorns to Herefords—*continued*

careful appraisals of their grazing lands and markets. Some recognized the advantage of purchasing stock in neighboring states and bringing the animals to the Pacific slope's rich winter pastures for fattening. Others found they could overcome the loss of natural grazing areas by cultivating hill and bottom lands, producing bounteous crops of hay and grain. So, in fact, only the big herds of semi-wild cattle vanished. Their place was taken by numerous small bands, apportioned by barbed wire into acreages that would sustain them. The periodic western droughts were no longer the depleting force they had once been to Franciscan friars.

There was a revolution too in breeds of cattle. The long-horned, lean, tough-textured Spanish stock were far from ideal either as meat or milk producers. Therefore, shrewd ranchers began casting about for animals that would yield more prime beef or milk per pound of feed consumed. Cattle were imported from nearly every corner of the earth—bred—and crossbred. In time some remarkable strains were developed. Herefords, Shorthorns, Angus and Brahmas, or mixtures of these breeds, attained favor among meat producers. Holsteins, Gurnseys and Jerseys began to dominate the milk trade.

Natural pasturage, so vital to the *dons* and friars, remained important to succeeding generations of ranchers. But to improve on it and guard against recurrent drought, the latter seeded much of the old range with new grasses, grains, alfalfa and Ladino clover, and built immense irrigation systems.

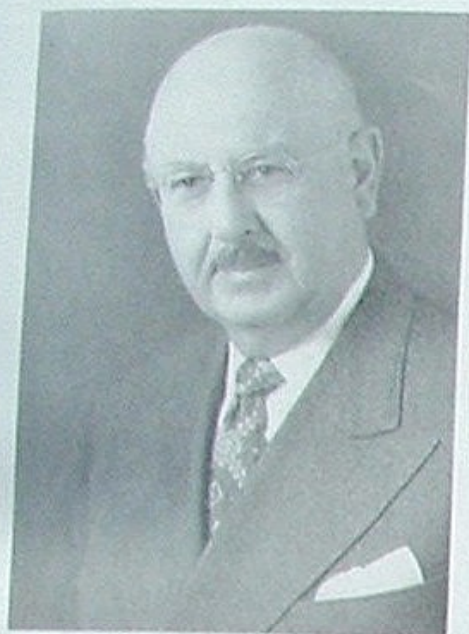
In old Franciscan mission records there is little eulogizing of choice T-bone steaks, filet mignon or prime rib roasts. Even the choicest cuts from wild, ill-fed range animals must have been tough and unsavory by modern

standards. Disease countermeasures were unknown.

In contrast, today's beef animals are literally reared for the skillet. Frequent dipping and inoculation protect them against the ravages of ticks and disease. They are brought to maturity on all the grass and hay they can consume. They are moved from one grazing area to another or to market by rail or truck. A few months before slaughtering, the animals are shipped to feedlots—immense corral systems generally adjacent to sugarbeet factories, cotton-seed mills or grain-producing areas. Here on an irresistible diet of such bovine delicacies as chopped alfalfa, grains, beet, cotton-seed and potato by-products they are scientifically fattened. The result is Western Beef—in prime and choice grades—acknowledged worldwide as being the finest beef produced anywhere.

The outdoor butchering scene of yesterday—with its crudeness, flies and waste—has given way to the greatest changes of all, modern meat packing. Today's packing plant is scientifically planned, skillfully operated, rigidly inspected. The most humane slaughtering methods are used. The skinning and dressing of carcasses are done with amazing deftness and speed. Halves of fresh-killed beef proceed on overhead conveyor systems into cooling and freezing rooms. Thence, in refrigerated cars or trucks, the meat is distributed to jobbers, stores, ships, restaurants. Military purchases of beef for use overseas usually proceed first to boning plants, where boneless meat is packaged and frozen in order to reduce shipping costs. To the modern cook or housewife is left only the chore of transferring any type of meat cut from store package to oven or barbecue.

It might seem that the West's cattle industry would



E. F. Forbes is president of Western States Meat Packers Ass'n.



Many of the nation's cattle are bought and sold through auction yards. Men who transact their business in this seemingly easy manner are shrewd, experienced and proudly independent.

decline in face of the Pacific Coast's continued spread of city limits. Oddly, the reverse has been true.

In California, for example, the beef-cattle census nearly doubled in 10 years, rising from 1,350,000 head in 1948 to an estimated 2,400,000 head in 1958. The state's dairy herd during this same period increased from 1,400,000 to about 1,500,000. Even this record production of livestock fails to satisfy domestic needs; nearly 2,000,000 head of cattle are shipped from neighboring states annually, making California the leading beef slaughtering state in the union.

Incidentally, while on the subject of statistics, Americans are among the world's largest meat consumers, averaging nearly 160 pounds per person annually. Despite a 16% rise in the costs of all foods since 1950, meat has risen in price less than 1%.

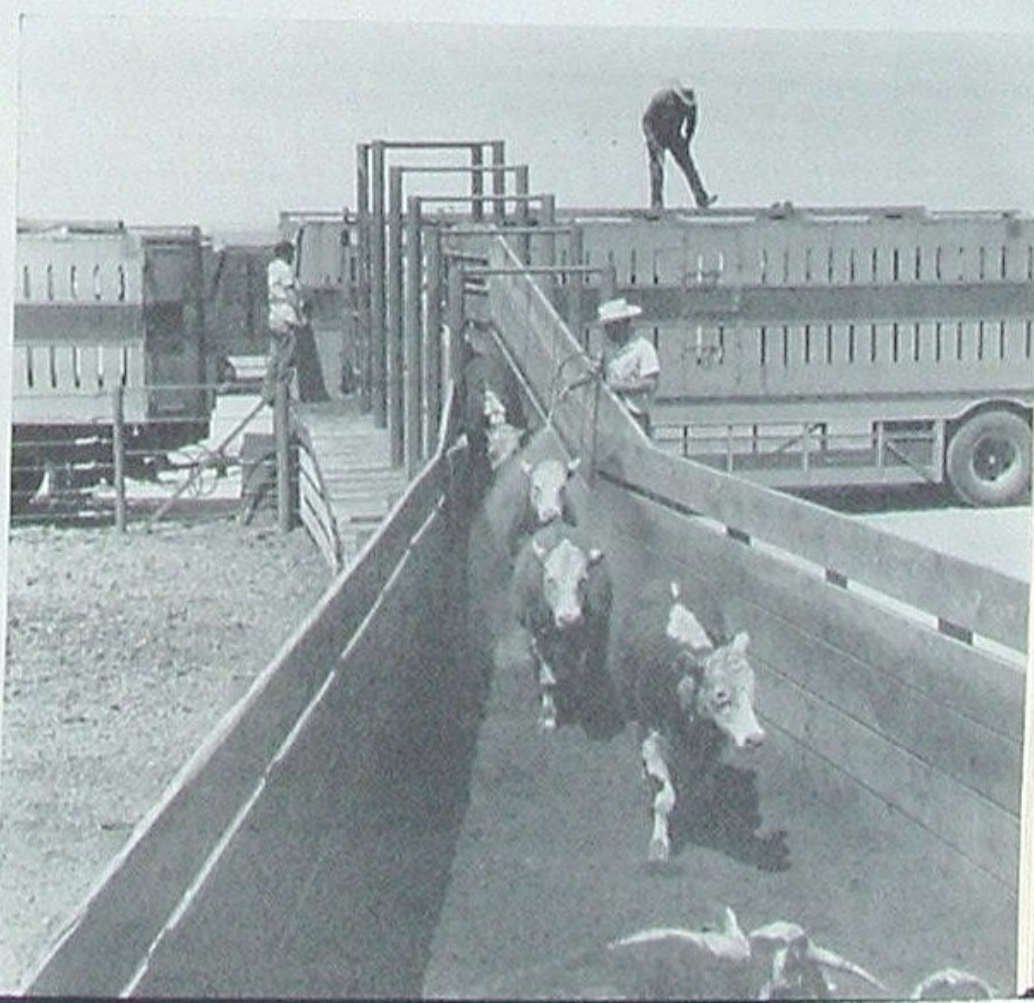
Traditionally, western ranchers are a hard-riding, hard-fighting, square-shooting breed of freedom-loving Americans. They are accustomed to fighting for their rights whether the issue is grass, water, brands, freight rates, government agents or barbed wire fences. They are men who have known drought and flood, high and low prices, riches and total losses. Still they have greater faith in the old laws of supply and demand than in the domination of their industry by outsiders.

Union Oil's stake in the western cattle enterprise is greater than you may suspect. Through contract with Western States Meat Packers Association, headquartered in San Francisco, we are starting our second five-year term of supplying petroleum products to their members. Hundreds of ranches, breeding farms, feed lots, livestock trucking concerns, packing plants, etc., are using "76" products in large quantity.

/THE END



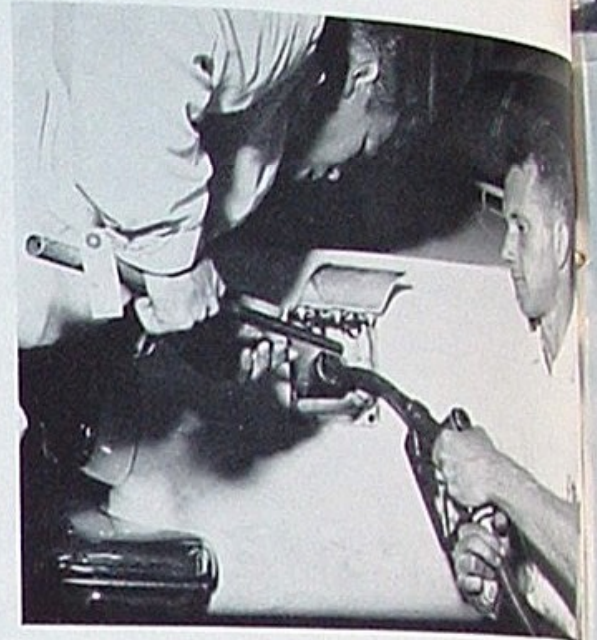
A refrigerated transport, above, and livestock truck, below, indicate how petroleum is aiding the meat packers and ranchers.



Open season on sportscars



Starting point for 75 T-Birds entered in this year's Thunderbird Club of America economy run was our dealer station on Ventura Boulevard—5 a.m.



Every drop of gasoline has to be accounted for when victory hangs on a thousandth mpg.



Probably only one sportscar driver in the world is dishonest, so tanks are sealed.



"76" decals were applied to each T-Bird in the race as a salute to Union dealers.



At the finish line, Monterey, T-bird drivers had coaxed as much as 30.2 miles per gallon of Royal 76 out of their cars, despite holiday traffic and their tortuous route over the coastal mountains of California's Highway One.

AT FIRST THOUGHT, only a dealer bent on business suicide would get up before breakfast to service a sportscar gasoline economy run.

But our dealers who have tried it are not the despairing type. In fact they say gunning for sportscars is more fun than quail shooting. On certain early-morning occasions, the "T-Birds", as well as sportscars of any other feather, migrate in flocks. With proper stalking, dealers have been known to bag an entire covey.

What's more, sportscar economizers do the darnedest things. To coax more miles out of a gallon of gasoline they put 10-viscosity oil in the crankcase, crankcase oil in the differential, and the lightest possible lubricant in the wheel bearings. Then, at the finish of the "economy" run, they change to heavier lubricants for the trip back home. Dealers line 'em up behind the lube room hoist and, with a trusty grease-gun, pick 'em off one by one.

Seriously, Union Oil dealers in California were proud to be selected recently as official fueling stations by the Thunderbird Club of America and the Four Cylinder Club of America during their annual economy runs from Los Angeles to Monterey and Las Vegas respectively. Nearly 200 sportscars proved you can go farther with the finest.

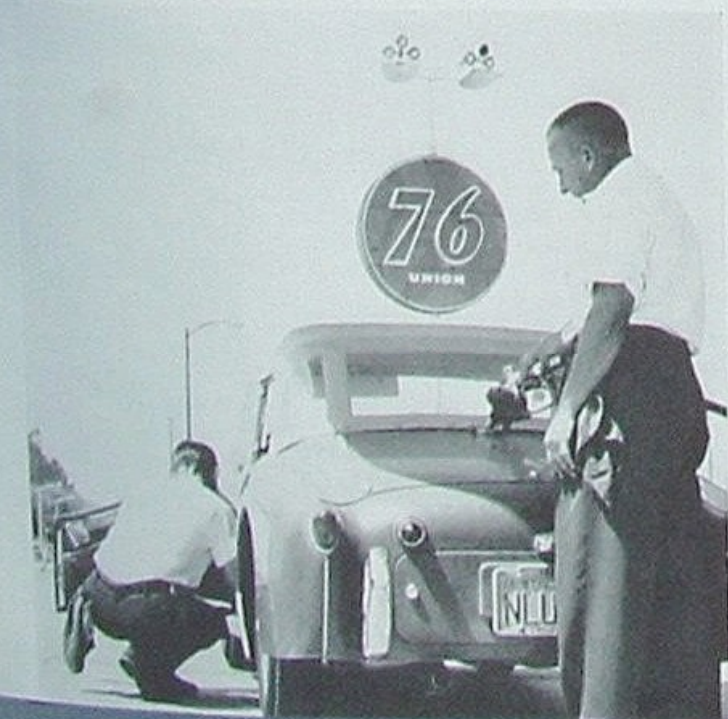
/THE END

An optional fueling stop at Barstow tempted only a few of the contestants. Winner did 67 miles per gallon!

At the finish line in Las Vegas, gasoline misers threw economy to the wind. They changed jets, oil, greenbacks—and saw the town.



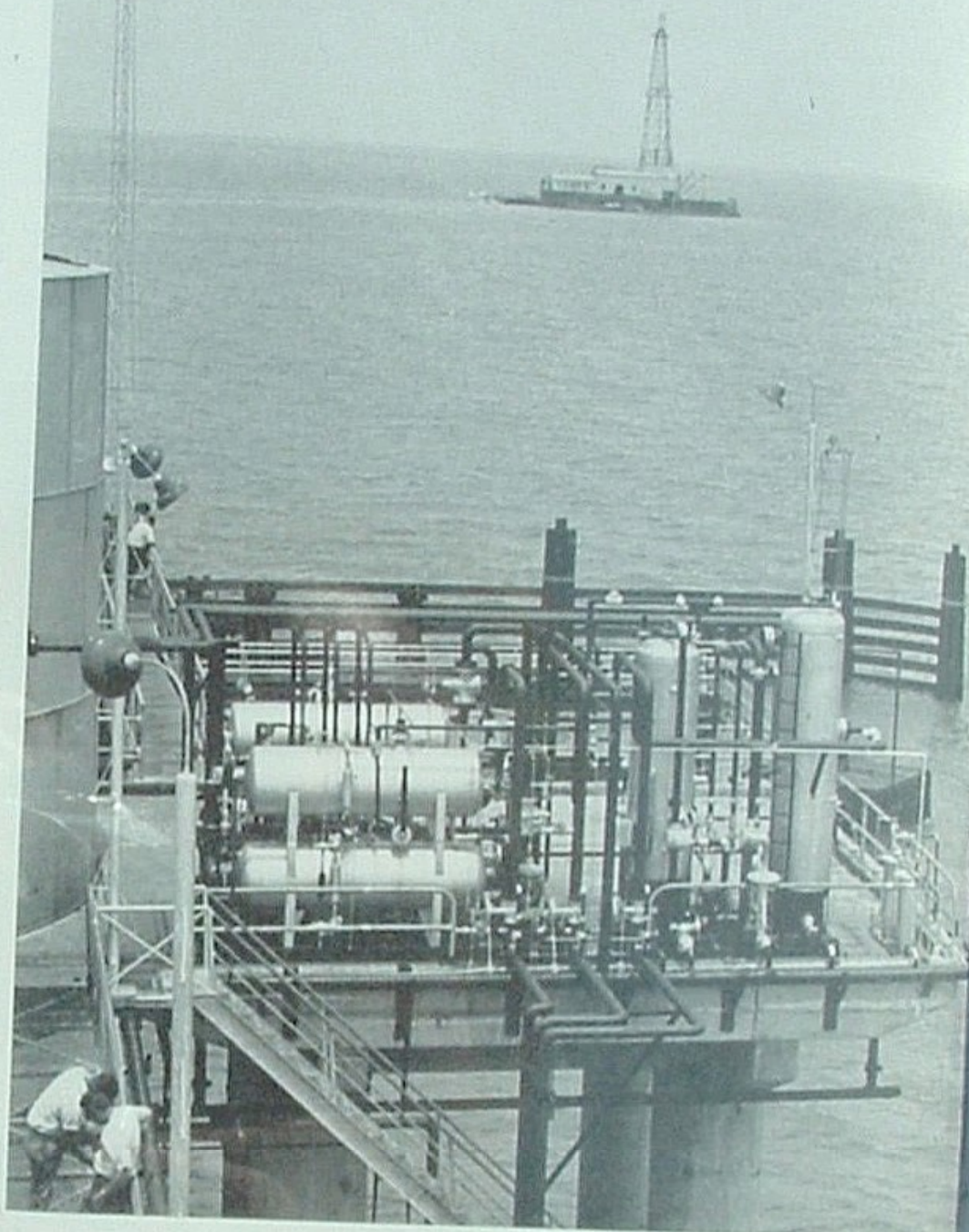
The Four Cylinder Club of America made a pre-dawn start at Glendale. Their economy contest was open to all makes of cars.



*Union's offshore
well in Louisiana*

Drilled in world's record time

By Ed Sands



A world's speed record in drilling was set June 4 by the Gracey-Hellums drilling barge, seen from Union's Caillou Island platform.



Toolpusher Marion Cook, center, tells Union Oil Engineers Bill Alexander, left, and Joe Prosser that the record achievement was partly due to a good run of luck.



About 60 miles southwest of New Orleans is Timbalier Bay, a 35-mile wide indentation in the Louisiana coast line. The bay is shallow, nowhere much more than 10 feet in depth. One of several islands located in the bay is called Caillou Island. In shallow water just east of the island is an important new oil field being developed by Union Oil Company, known as Caillou Island Field. More than a dozen wells so far drilled in this offshore domain are producing oil, and development work is being continued.

June 4, 1958, Well No. 14 in the Caillou Island Field was drilled to its projected depth of 13,778 feet. Geologists who sat in on the completion were reasonably sure they had another good oil well. However, petroleum engineers and drillers on the job began to wonder if there wasn't something more to the story than just oil. The well had been spudded at 2:30 p.m. on May 21. The depth of 10,500 feet was reached May 28 at 1 a.m., an elapsed time of six days, 10½ hours. Drilling was then continued to the projected depth of 13,778 feet. This goal was reached at 5:30 p.m. on June 4—an elapsed time of 14 days and three hours from the time the well was spudded.

The drillers began to search their memories. They could recall some pretty fast drilling performances in their day, but nothing to match this one. A thousand feet of hole per day rarely has been accomplished even in shallow tests; Well No. 14 averaged nearly a thousand feet a day all the way down to 13,778 feet. The engineers scanned records, compared notes, made inquiries. Nowhere could they find evidence of such a deep well being drilled in 14 days. To the best of our knowledge, Well No. 14 was drilled in world's record time!

A drilling speed record may seem unimportant. However, in this era of deeper and deeper exploration, it is imperative that the oil industry place greater emphasis on reducing the cost of drilling and completing wells.

Drilling speed is equivalent in most cases to economy, for the overall cost of a well is usually proportionate to the time required to complete it. This speed record may therefore also be a record low cost for drilling a deep well in the Timbalier area of operation.

Gracey-Hellums Corporation, who contracted to drill the well on State Lease 2826 for Union Oil and Louisiana Land & Exploration Company, were at no time aiming for a world's speed record. They merely wanted to win a continuity of work in the highly competitive drilling game by doing a good job—supplying their customer the most drilled hole in the least number of days. Their equipment, though excellent, was not the largest or most powerful available. The drilling crews, highly skilled and coordinated, were not specially picked. True, the formations where the record was established have a reputation among drilling men for "snowbank drilling"; nevertheless, no other well in the area had been drilled at comparable speed.

President Earle C. Hellums of Gracey-Hellums Corporation gives full credit to the crew. The *tool pusher* was Marion Cook, the relief *tool pusher* E. S. Banks. The drillers were R. Guillatte, E. C. Rogers and E. G. Gros. Union Oil Company petroleum engineers assigned to the project were Ty Brinker and Joseph R. Prosser, Jr.

In questioning Marion Cook relative to this extremely high rate of penetration, we were told that the record was largely "a good run of luck." The crew encountered no serious troubles to slow them down. They made good straight hole—no sloughing or tightness. They encountered no drill pipe or bit trouble. Everything proceeded without a hitch.

Anyone who has ever drilled an oil well, however, knows that "good luck" is usually just a modest synonym for skill and good management. A study of Well No. 14's drilling log tells the true story: Excellent drilling hydra-

continued

Our Caillou Island production platform on Timbalier Bay processes and ships oil from the new field where drilling record was made.



Each pipe rising from bay to manifold, explains Operator Curtis LeBeouf, comes from a producing well in the field.





Vice President E. J. Gracey, left, and President Earle C. Hellums have had long experience in contract-drilling the Gulf.

World's Record Time—*continued*

lies were maintained. Good use of the right mud aided fast penetration. High rotary speeds were used at shallow depths. Bit loading was fairly high for the Gulf Coast. Bits were pulled at the right time. Equipment was first rate. The drillers had long previous experience in this field. The crews were highly skilled, fast, careful, conscientious. They had to be good to be champions!

In case there are field men listening, here are some equipment and drilling statistics:

The rig used to drill this well is a large diesel-powered drilling barge. Its Unit Rig 12-20 draw works are driven by three Caterpillar 397 (520 hp each) engines with a separate GM 671 twin (260 hp) engine driving the rotary table. The pumps consist of one Emsco D-850, and one Emsco D-700, with one Oil Well 712-P mud mixing pump.

The casing program: 16-inch conductor pipe was driven to 54 feet; this pipe was pulled after the 10 $\frac{3}{4}$ -inch casing was cemented. A 15-inch hole was drilled to 2,425 feet and 10 $\frac{3}{4}$ -inch casing was cemented at 2,419 feet with 625 sacks of common cement. A 9 $\frac{7}{8}$ -inch hole was drilled from this depth to 13,778 feet, where 7-inch casing was cemented.

It is interesting to note that the well never deviated more than 1 $\frac{3}{4}$ degrees from vertical. Examination of the records will show that 12 drill collars were used down to a depth of 12,370 feet, at which depth the three 7 $\frac{3}{4}$ -inch drill collars were removed. No hole trouble was encountered in this well at any time. A successful electric survey was conducted to 13,778 feet, and no trouble was encountered in the running of the seven-inch casing to this depth.

Some luck perhaps, but a whale of a good drilling performance!

/THE END



Crews work "seven days on" at Caillou. Roustabout Don Hecker, above, proves there are few jobs in the world handier to good fishing. Excellent living quarters, right, are lashed to concrete piling as insurance against hurricanes. The speedy drilling achievement, below, called for strength, skill, fine teamwork.





SO THERE IS A "RIGHT TO WORK"!

BY DAVID LAWRENCE

UNIONS, WITH THEIR MONOPOLY POWER, have mistakenly come to be regarded even by some of their own members as having some of the absolute powers of government. The threat of expulsion hovers constantly over the non-conformist in union meetings. Under a federal statute, moreover, a worker today can be required to join a union in order to retain his job. Workers who have conscientious objections to union membership can lose their jobs when a plant is unionized. Efforts to correct this by state laws that would prohibit compulsory membership and would protect the "right to work" have been met with hostility by labor union leaders.

So it is refreshing to read the opinion handed down last week by the Supreme Court of the United States which upholds the principle that nobody can lawfully interfere with an individual's right to work.

The issue arose in a picketing case in 1951. Paul Russell, not himself a union member, sought to continue working at an Alabama factory during a strike. Justice Burton, speaking for the Court's majority, writes:

"Such pickets, on July 18, by force of numbers, threats of bodily harm to Russell and of damage to his property, prevented him from reaching the plant gates. At least one striker took hold of Russell's automobile. Some of the pickets stood or walked in front of his automobile in such a manner as to block the street and make it impossible for him, and others similarly situated to enter the plant."

This kind of "picketing" has happened hundreds of times in recent years in America without effective intervention by federal or State authorities. Hence the intimidation has been successful. In such cases, the proud boast of trade unionism that it rests on volition rather than coercion becomes an empty claim.

It is, therefore, commendable that six Justices of the Supreme Court—Burton, Whittaker, Brennan, Clark, Harlan and Frankfurter—all voted to uphold the right of a State court to impose damages. Russell was permitted not only to recover back pay but to collect punitive damages for the emotional harm done to him by the incident.

The dissenting members of the Court—Chief Justice Warren and Justice Douglas—argued that only federal law applied. This meant that only back pay would be obtainable and no redress would be possible for bodily harm or damage to one's automobile. In fact, the minority of the Court takes the political view that it would be bothersome to labor unions if they were subjected to

such suits in State courts. No similar solicitude seems to have been exhibited for the rights of the individual worker. Chief Justice Warren says:

"There is a very real prospect of staggering punitive damages accumulated through successive actions by parties injured by members who have succumbed to the emotion that frequently accompanies concerted activities during labor unrest."

How easy it is glibly to rationalize violence as just emotionalism!

Here is an example, too, of indifference to human suffering which will come as a surprise to those who have believed the so-called "liberals" in the high court are more concerned with humanitarianism than with absolute legalisms.

Fortunately, the majority of the Court did not hesitate to reaffirm the principle of State protection against physical interference with the right to work.

"The issue before us," says Justice Burton's majority opinion, "is whether a State court, in 1952, had jurisdiction to entertain an action by an employe, who worked in an industry affecting interstate commerce, against a union and its agent, for malicious interference with such employe's lawful occupation . . . we uphold the jurisdiction of the State courts in this case."

A lawful occupation, the Supreme Court says, in effect, must not be interfered with, and the warning is clear that, if the local police do not furnish protection to the citizen, he may sue the union whose pickets have forcibly prevented him from working at his job.

The Supreme Court majority last week also held that a worker unjustly expelled from a union could sue it for damages in State courts. The point was emphasized that expulsion of a member for ill-founded reasons is a breach of contract by the union.

The right to work, whether exercised by a member or nonmember of a union, is an inherent right of the individual. It is protected by the Federal Constitution, which says that nobody shall be "deprived of life, liberty, or property, without due process of law."

It is time for the so-called "liberals" and the labor-union leaders of the country to accept these basic principles of constitutionalism. A trade-union movement that is dependent for its progress on measures of coercion cannot survive. Only when the organizing methods are voluntary can the concerted activities of private individuals ever win lasting respect.

(Reprinted through courtesy of U. S. News & World Report)



You talk at 186,000

from Ed Messinger

BREAKING THE SOUND BARRIER—that is, exceeding 738 miles an hour, the speed of sound—has been accomplished by jet pilots flying the world's fastest airplanes.

However, your voice can now make the speed of sound seem like a snail's pace. Take for example a call you might dial over Union Oil's private telephone system to Operator Barbara Laybourne at Richmond Terminal on San Francisco Bay. You and she will be receiving each other's voice across 500 miles faster than if both of you were seated on opposite sides of a large room. You'll actually be talking at the rate of 186,300 miles per second, the speed of light—roughly a million times faster than the speed of sound.

Making such *fast talk* possible is one of the engineering marvels of our age—microwave. Far beyond transmitting the human voice at phenomenal speed, it provides a communication link for the remote gauging of

From an antenna atop the Union Oil Building in San Francisco microwave conversation is beamed toward Los Angeles at the speed of light.



Operator Barbara Laybourne at Richmond Terminal says "Hello!" even faster over phone.

Communications Engineer Ed Messinger and Pipeline Engineer Mike Shea check Patterson Pump Station, an unmanned unit controlled entirely by microwave.



0miles per second

tanks, turning of valves, operation of engines and pumps, data processing. In fact, within reach of microwave is any operation capable of being regulated through electrical signals—transmitted all at the same rate of 186,300 miles per second.

How microwave works can be explained, we hope, without venturing through a college course in electronics:

As you speak into the Company telephone at Los Angeles, the sound energy you create is first transformed by the telephone instrument into electrical signals, then by microwave equipment into radio signals in the order of 2,000 million cycles per second.

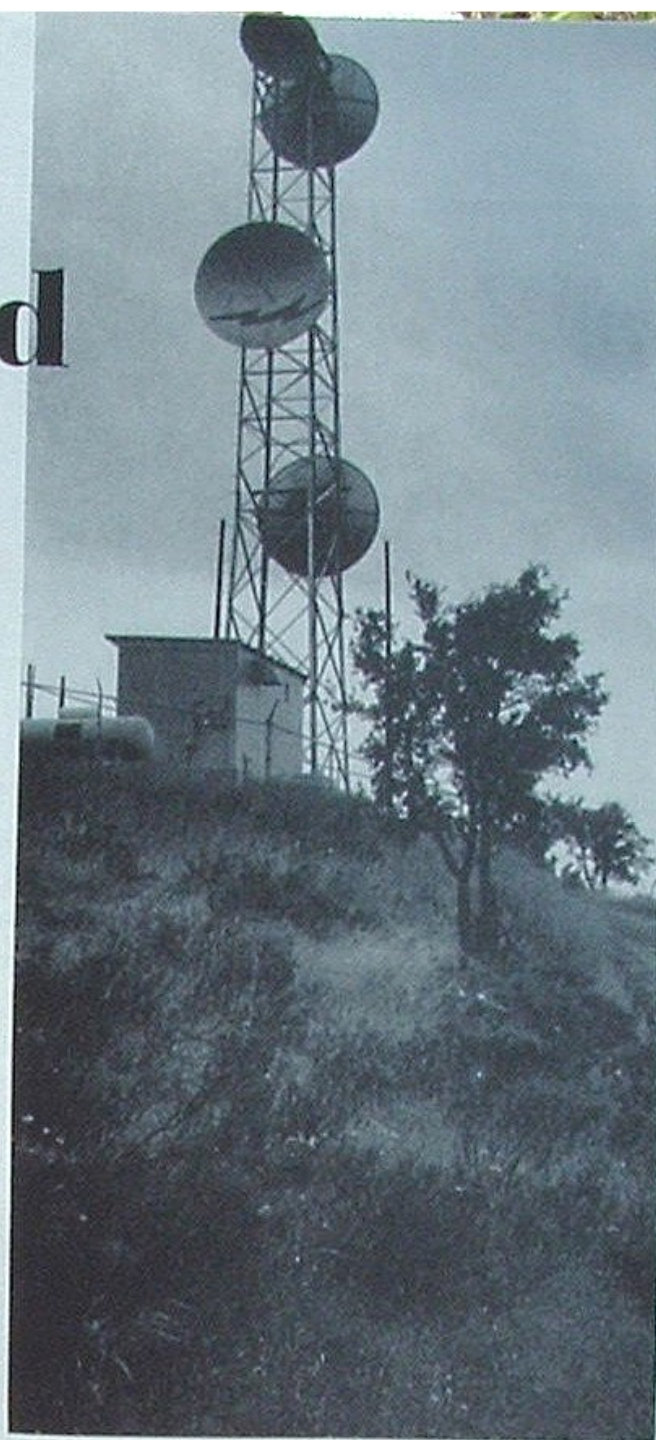
Unlike conventional broadcast signals, which radiate in all directions, microwave radio signals are beamed by the antenna along a narrow path in a straight line, much as a flashlight focuses and beams its light rays. Transmission of the microwave radio signals therefore requires a series of stations so located as to provide a continuous line-of-sight pathway from one to the next.

In Union Oil's system these stations, called repeaters, range from 20 to 80 miles apart. At each repeater the microwave signals received are amplified to offset their energy loss enroute and are then transmitted to the next station. At the terminal extremes of a call these signals are transformed to electrical signals by the microwave equipment, then back to sound waves by the telephone. Thus your conversation with Miss Laybourne is faithfully reproduced.

In areas where a line-of-sight pathway cannot be established economically between communicating points or repeaters, engineers have found a way to detour or "bounce" the microwave beam. Between Richmond Terminal and Oleum Refinery, for instance, a line-of-sight path could not be established without erecting an extremely high tower at prohibitive cost. So on a high point three miles from Richmond and 11 miles from Oleum, within line-of-sight of each, a "passive repeater" was used. Simply, it is a steel tower equipped with two microwave antennas—those saucer-like devices shown in the photographs. These are connected by cable. The microwave signal from Richmond is received by one antenna and re-radiated to Oleum from the other—in so doing changing its course 90 degrees.

Again, at our Patterson Pump Station on the western edge of San Joaquin Valley, it was impossible to establish a direct line-of-sight path from the plant to our repeater station at the summit of 3,000-foot Mt. Oso. So a 12 x 6-foot aluminum plate was installed at a point in the valley that is one mile from the plant, 14 miles from the mountain top, and visible from both. A microwave signal transmitted from Mt. Oso strikes the alumi-

continued



Equipment on Mt. Oso, near Patterson, receives, amplifies, bends and relays the speedy signals.

Company offices at Bakersfield now are within arm's-reach phone contact with nearly every person responsible for district work.





To Gauger Wayne Schaffer at Richmond, microwave brings finger-tip control of storage and line pumps.



John Reed is one of 16 repairmen who keep system in good order.



Operators Marjorie Monahan, left, and Verel Pelletier at San Francisco report a brisk increase in communications with Home Office, Los Angeles.

186,000 miles per second—*continued*

num plate and is reflected to Patterson—a change in direction of 180 degrees.

Microwave, besides being fast and fascinating, is in the early stages of proving its usefulness to industry and society.

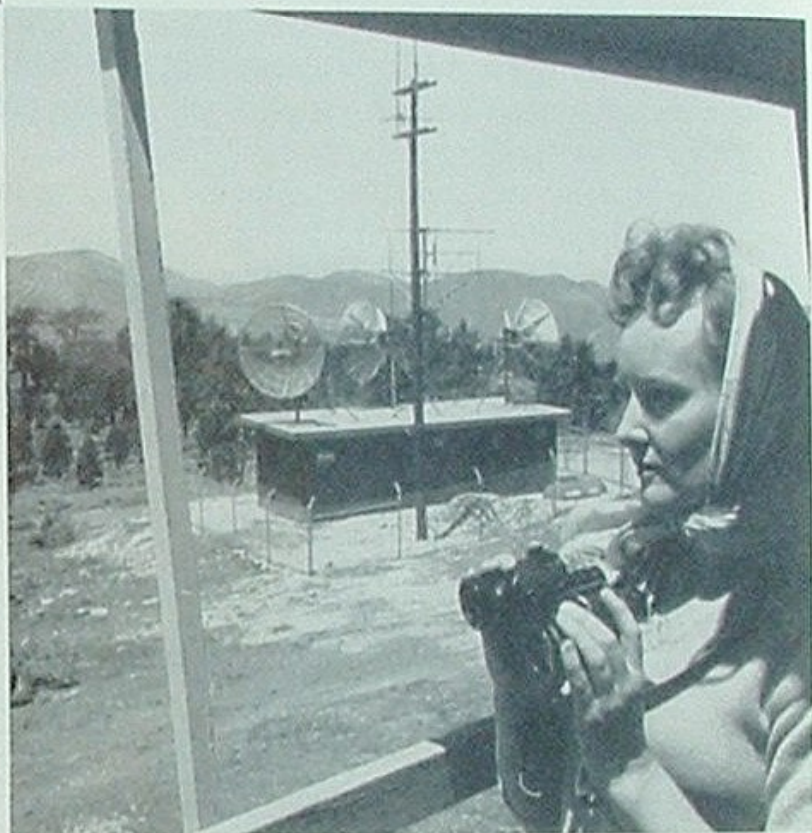
Union Oil Company now has approximately 11,000 miles of circuits working over our microwave system. Telephone and telegraph communications, as well as IBM data transmission, remote pipeline pump station control, telemetering of operating information and similar functions, are all transmitted with more reliability and accuracy than is obtainable on long-haul wire line circuits.

You are wondering perhaps why Union should have a *private* microwave system.

It's primarily because of the nature of our business. Very few industries are faced with the problem of constant 24-hour-per-day flow of raw materials from sources and through processing into the various finished products we market. It requires precision timing and coordination of the highest order to keep all of the operations in balance. Now, with the advent of automatic operations, communications is an integral part of the transportation and manufacturing plants themselves. By maintaining our own facilities we can more readily satisfy the communications needs of all integrated departments.

The ruling factor, of course, is the element of cost. In the keenly competitive oil industry, every operation, including communications, is under constant economic scrutiny. Our ability to produce a better product at lower cost will always be the crux of our corporate success. Microwave is an important advance in the field of communications, and our private system is justifying itself by saving the Company money.

/THE END



Antennas on 8,000-foot Mt. Frazier are of mesh construction in order not to obstruct the view of U. S. Forest Service fire spotters—Billie Hartley, for pretty example.

Morton Davis, using an IBM transceiver in Los Angeles, is taking punched-card data from Oleum Refinery for processing through Home Office machines—at 880 digits a minute.



SAFE DRIVING during 1957 prompted this Los Angeles Terminal group photo of, from left, W. V. Criddle, H. M. Schafer, J. T. King, J. W. Sheppard, H. A. Pierce, O. K. Fisher, F. C. McCullough, K. W. Kuehl, C. B. Berdrow, O. W. Reynolds, A. A. Tavernelli, W. J. Cozad, F. M. Hennessy, J. R. Rogers, S. R. Sabella, M. R. Dungan, G. R. Wilder, J. A. Howe, R. G. McMurray, T. Sheehan, R. A. Nevens. Their driving tips are illustrated on the accompanying pages.



1,688 Union Oil drivers complete another year

Safe and sound

from John T. King

Millions of miles are driven annually by Union Oil employees on Company business. Some of the drivers we call *Pros*—men who cover thousands of miles daily in our transports and trucks. Others are salesmen, engineers, accountants, managers, etc. whose duties call for many hours on the public highways—usually in cars prominently identified with the 76 “bug.”

The manner in which these and all other Union Oil people drive is as important to the Company's well-being as it is to each driver's personal welfare. Enmity and lawsuits stirred up because of a traffic mishap frequently extend beyond the erring motorist to the company he works for. Safe-driving and courtesy, on the other hand, by a Union Oiler may be powerful factors in winning new friends and customers.

Thus for reasons of safety, economy and good public relations, the Company's Safe Driver Award Plan was instituted just 10 years ago. Eligible for an Annual Award is any employee who drives 3,000 miles or more on Company business—without chargeable accident—during the calendar year. To win several such awards is a noteworthy accomplishment, and to have driven safely during the 10 years since the plan began is a mark of exceptional driving skill.

Here are the results for 1957:

There were 2,225 Company employees eligible to work for Safe Driver Awards during the year. Of this number, 1,688 completed the year without chargeable traffic accident and were awarded wallet-size certificates in recognition of their skill.

To 410 drivers out of this large group has gone the Company's highest commendation and gratitude; they have completed 10 consecutive years of accident-free driving.

Of course some of the greatest driving performances were recorded by our *Pros*. Among approximately 1,000 men who daily pilot commercial “76” vehicles through the West's busy thoroughfares, 598 completed 1957 without chargeable accident. Recipients of winged gold pins, symbolic of the *finest* driving achievements throughout the full 10 years of the plan, were 180 *Pro* drivers.

An honor list of all employees who received Safe Driver Awards for their 1957 accomplishments is included with this issue of SEVENTY-SIX. Their example is worth emulating.

Also we have asked some of the *Pros* to illustrate this report with several photographic tips on good driving. Give them a thought and a try. Join our Safe Driving parade and make the list longer in 1958. Be safe and sound. It's good business!

continued



PASSING slower vehicles on freeways, professional drivers are extra careful about spacing and changing lanes. Once ahead of the slow vehicle, they move quickly to the extreme right lane designated for heavy trucks. Their courtesy pays big public relations dividends.

TURNING, say our transport drivers, calls for anticipating the mistakes of others. When making a right turn, never leave passing room on right.

*Here are
a few
driving tips
from the Pros*





STOP, LOOK, LISTEN when emerging from an alley or driveway. Pedestrians and children sometimes seem to appear from nowhere. Be safe, not sorry.

YIELD THE RIGHT OF WAY even if the other guy seems to have no business carrying a driver's license. Courtesy pays good emotional dividends.

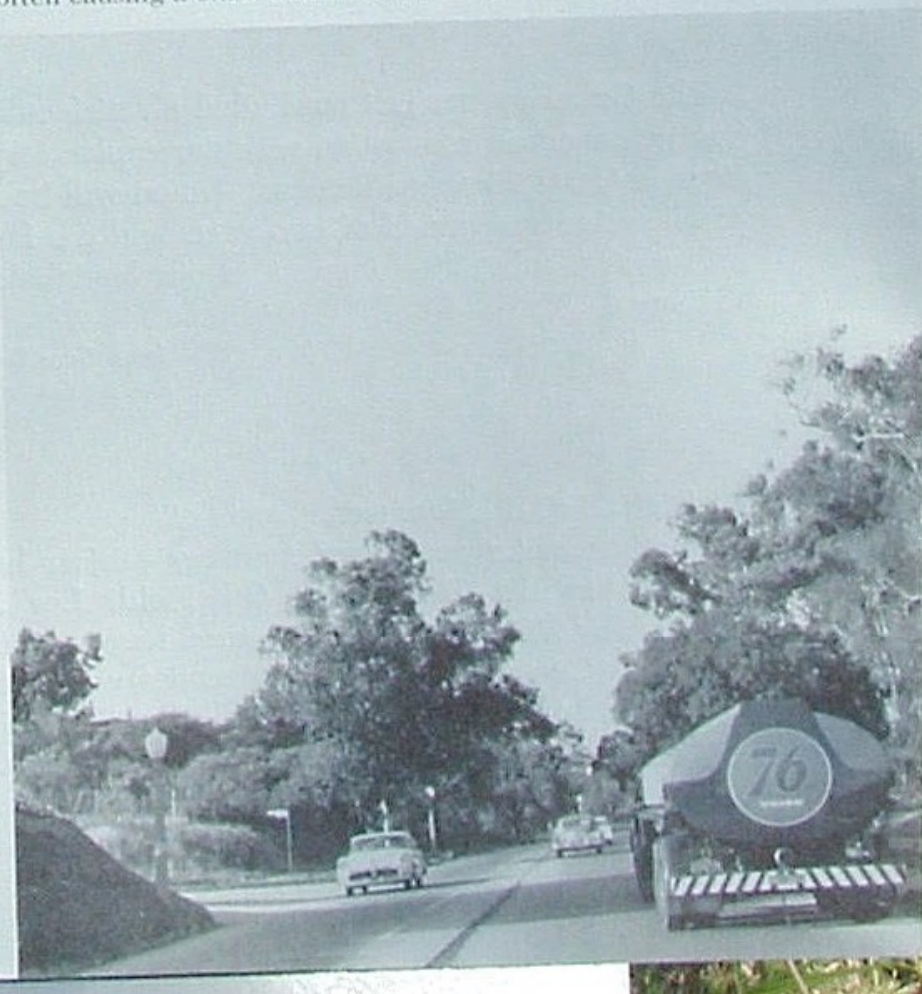
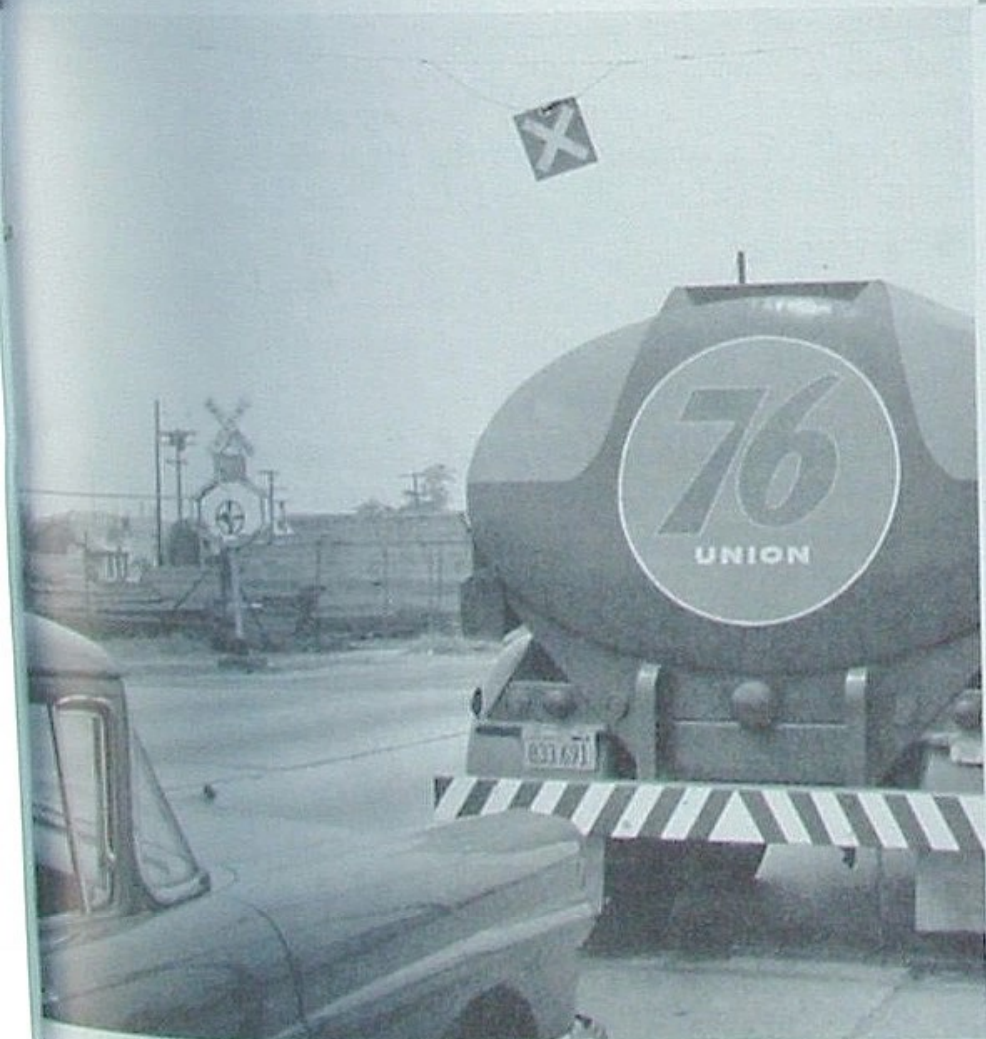
STOPPING AT RAILWAY CROSSINGS is required by law for many vehicles. All drivers should be alert for stopped trucks as well as trains.



DOUBLE-CHECK BEFORE BACKING. Rear-view mirrors show distant objects — seldom the trouble you're backing into.



KEEP TO THE RIGHT on narrow streets except when passing. Faster drivers grow impatient at being delayed, often causing a crash that involves you.



Business Highlights of the Month

EXPLORATION *Making hay while the sun shines!*

During the current summer season in North America, geological reconnaissance parties and seismic crews are handling assignments in areas where field exploratory work can be done most favorably only at this time of the year. Our program calls for both geological and geophysical reconnaissance of joint-held leases on the Kenai Peninsula and in the Soldatna Area of Alaska, the Great Basin Province of Nevada, the Pacific Northwest, as well as the Four Corners Area of Colorado, Utah, Arizona and Nevada.

The Company has just concluded a satisfactory farm-out agreement in connection with our exploratory operations in Costa Rica and Panama. Union will be relieved of all costs for a period of two years and the farmouttee will earn a substantial interest in our land holdings in this area.

from Sam Grinsfelder

PRODUCTION *More water, more oil!*

Another major secondary recovery project has been initiated in the Dominguez Oil Field, Los Angeles County, by Union Oil. This venture, known as the Second East Central waterflood, got under way last month with the drilling of Hellman Well No. 76, which will become a producer in an irregular five-spot pattern de-

signed to recover additional oil from the area's depleted oil sands.

In addition to construction of a plant for processing the water to be injected, the project will involve the drilling of several new wells and the reconditioning of some old wells for either injection or production service. When in full operation, the project will have a total of 16 water injection wells and 13 producers in this fault block.

The plan of operation duplicates that used successfully in the First East Central waterflood, which is in the zone immediately overlying this Second Zone waterflood. The irregular five-spot pattern should insure a rapid response to water injection. Production stimulation similar to that experienced in the earlier project is anticipated.

from Dudley Tower

MANUFACTURING *New lab at Oleum.*

May 9 was a red-letter day for the staff of Oleum Refinery; on that day they transferred their operations to brand new quarters. The old laboratory building had served Oleum for more than 40 years. While some improvements were made throughout this time, it became increasingly difficult to meet the laboratory demands of a modern refinery with yesterday's facilities.

Manufacturing has made an agreement with Hancock Oil Company whereby Union Oil will process about 10,000 barrels per day of Hancock crude oil at the Los Angeles Refinery. Union will supply Hancock with premium and motor gasolines, stove oil, diesel fuel and fuel oil. These products will be made available from our refineries and main terminals. This agreement is in part the result of a serious fire at the Hancock Refinery in Long Beach, which damaged their crude processing equipment.

from J. W. Towler

TRANSPORTATION & SUPPLY *Cars retire at 65 too!*

The Automotive Department has ordered for motor transport service three new diesel tractors to replace similar units that have operated more than 500,000 miles each. By comparison, most Company automobiles are candidates for retirement after operating 65,000 miles. The semi-trailers provided for the original tractors will continue in service and are expected to exceed 1,000,000 road miles each before being replaced.

With transfer, effective July 1, 1958, of the Distribution Department's operating expense and investment accounting to Production and Transportation accounts, accounting for all departments within the Transportation and

Supply group will now be accomplished under unified direction by the Comptroller's Department.

from E. L. Hiatt

TREASURY *New Phoenix credit office.*

Effective June 1, a credit office was established in Phoenix in order to provide better customer service and to be of all possible assistance to our Marketing Department. A. A. Brisson, former credit manager in Panama, is in charge of this new office, which serves the entire state of Arizona.

from R. D. Roberts

COMPTROLLER'S *Speedup for red tape.*

The production of crude oil from a well and its delivery to pipeline sets in motion a chain of requirements involving several departments of the Company. Information obtained from the "run ticket," the primary source of crude oil data, is required by the Field, Transportation and Supply, Comptroller's, and Tax Departments for various purposes. Field needs the data for its efficient control of production from the reservoir, the calculation of reserves, and the rendering of required reports to the California Division of Oil and Gas. Transportation and Supply requires the data in accounting for movement of the crude through the pipeline system, the forecast of inventories and availability of crude to the refineries. Comptroller's must account to owners of the crude, whether they be working interest or royalty, and issue payment thereto as required. The Tax Department requires the data in the rendition of ad valorem, pipeline and income taxes.

A major portion of the Company's crude oil data requirements has now been integrated into a machine application utilizing the Type 650—Magnetic Drum Data Processing Machine, wherein the various departmental reports are rendered earlier than heretofore and, due to a one-time processing of basic source data, at a significantly reduced cost. These new procedures are resulting from joint efforts of operating, accounting and systems personnel.

from Max Lorimore

RESEARCH *Oil in them thar dunes?*

A number of deposits of bituminous sand are located in the vicinity of Union Oil's Santa Maria Refinery. These sands are near the surface and contain substantial quantities of heavy hydrocarbons which, if they could be extracted economically, would provide raw material for the refinery.

The Research Department has tested, on a laboratory scale, a process that appears to have promise of efficiently recovering these heavy hydrocarbons from the sand. A 200-ton-per-day pilot plant, designed to permit further research directed toward the full development of this process, is currently under construction at the Sisquoc

deposit near Santa Maria. This plant is expected to start shakedown operations sometime during July. It will be manned by the Production Department and technical personnel from Research. The experimental program will enable us to evaluate the commercial potential of the process.

If the process works as indicated, it is expected that the pilot plant will extract about 150 barrels of oil per day.

from Fred L. Hartley

PURCHASING *Let's negotiate!*

The unsettled price situation on many purchased requirements makes price negotiation one of the most effective means of reducing costs of construction. When requirements are known sufficiently far in advance to secure adequate bids, we find vendors willing to offer price concessions. While tubular goods, chemicals, paper products, containers and many other items are available practically "off the shelf," rush orders may prove costly. The more advance information that can be given to our purchasing agents, the more opportunities there are to reduce Company costs.

from C. S. Perkins

MARKETING *Sales are looking up!*

Military Petroleum Supply Agency has awarded the Company contracts covering 17,304,000 gallons of aviation gasoline, 2,772,000 gallons of automotive combat gasoline and 400,000 barrels of Navy Special fuel oil for delivery during the last half of 1958 from West Coast ports.

All Seattle Division dealers will offer their stations as information headquarters for the 1958 Seattle Seafair. Working in conjunction with Greater Seattle, Inc., they will advise people seeking information on the hundreds of events taking place. This annual Seafair attracts hundreds of thousands of people to Seattle. Its climax is the Gold Cup Race.

Pacific Power & Light Company has purchased from us the initial fill of turbine and governor oil for their Cougar, Washington, Swift Hydroelectric Project being built in conjunction with Cowlitz County Public Utilities District. A total of 9,500 gallons of Red Line Turbine Oil 300 (equivalent to about 3 boxcar loads) will be used to insure the smooth performance of the mighty turbines. The project will provide a new source of electric power for southwest Washington communities.

Direct Sales representatives have been focusing attention on the larger potential customers. Concentrated effort and creative selling have produced results. Thirty-

Business Highlights—continued

two Direct Sales employees now wear the Key Account award. Nine of these have repeated their early Key Account success, thereby earning the addition of a ruby to their lapel key. Three have two rubies each, and one salesman's selling ability is attested to by a key jeweled with two rubies and a diamond.

A sales stimulation program known as the Golden Sweepstakes has been in effect among our wholesale consignees since January 1, 1958. To provide equal opportunity, consignee marketing stations have been divided into four groups according to volume. Winners for the first quarter of the 12-month program have been recog-

nized with suitably engraved plaques.

To assist Western Air Lines in announcing resumption of their operations, the Company has made poster space available at strategically located service stations and is including an announcement in statements to active credit card customers.

President A. C. Rubel and F. K. Cadwell, manager of Foreign and Refinery Sales, contacted numerous customers and distributors in the Far East during May. Their trip included stopovers at Honolulu, Tokyo, Osaka, Hong Kong, Bangkok, Manila and Wake Island.

from Roy Linden

think it through

By E. F. Hutton, news commentator
Release of June 13, 1958

One Million \$'s for Nothing

Some people think that the 27½% depletion allowance given oil producers is a Government favor. Like heck it is! Take a slant at this:

The Magnolia Petroleum Company recently drilled a wildcat well to a depth of over 20,000 feet—almost four miles—cost 1,054,500 \$'s. What came out of it? Nothing! It was a dry hole—a total loss.

Put this in your chapeau, Mister. It's going to take Magnolia's "percentage depletion" from about 658 aver-

age producing wells for an entire year to cover the loss from this one dry hole. Only about one wildcat well in nine is even moderately successful.

Oil is becoming harder and more costly to find. In order to keep pace with demand it's necessary to find oil and gas at a faster clip than ever before. Within the next 10 years the oil boys expect to drill more than 600,000 wells in the good old U. S. A., and all of this money is risk capital.

The boys will spend 60 to 70 million bucks to develop new oil reserves. Finding oil is costly and what a risk! Oil enterprisers must take the chance of a profit or loss. One million \$'s for nothing!

As I said, the depletion allowance amounts to insurance against an oil shortage. That could prove a bust-up for this country—and for the entire world.



Your Magazine Takes a Bow

Annually your Company magazines have been entered in an Awards Program sponsored by the International Council of Industrial Editors. By so doing we obtain an expert analysis of our printed product and many useful suggestions to guide us along the endless road of improvement.

The recent 1957 Awards Program, limited to industrial publications of last year and including "On Tour," the title under which SEVENTY-SIX was formerly published, attracted 916 publications from the United States and abroad. Of these, 240 survived final judging by a board of experienced editors from the U. S. and Canada. Meeting in Akron, Ohio, the judges then selected the final award winners.

Your Union Oil magazine was accorded one of the top recognitions—an Award of Excellence. In addition, it was given a Special Citation for "Outstanding work in the field of interpreting business economics." Earlier this year your magazine received the Over-All Excellence Award in a similar competition limited to Pacific Coast publications.

(This is the second in our series of FACT OR FANCY statements. For the FACTS we have consulted the Union Research Department.)

How about OIL CHANGES?

"I'm not a hard driver. I use my car to go to work, to a show, to visit friends, trips like that. So I don't have to change my oil very often . . ."

That statement's pure fancy. Fact is, the "typical" motorist—the short trip driver—gives his oil more abuse than does the hell-for-leather highway driver.

If you're typical, 95 percent of the time you don't drive at all. Your car sits in the garage, in parking lots, beside the curb. When you do drive, your average trip is about six miles.

These are facts, too. The Research Department gathered them during the development of new Royal Triton 10-30. And they're unpleasant facts for your oil. Here's why:

Today's engines loaf when they carry you around town. They need only 20 of their hundreds of horsepower to skim along at 50 miles an hour.

Yet, they're designed for hard work. They have enough cooling capacity to absorb the heat generated when you drive them wide open on a desert highway.

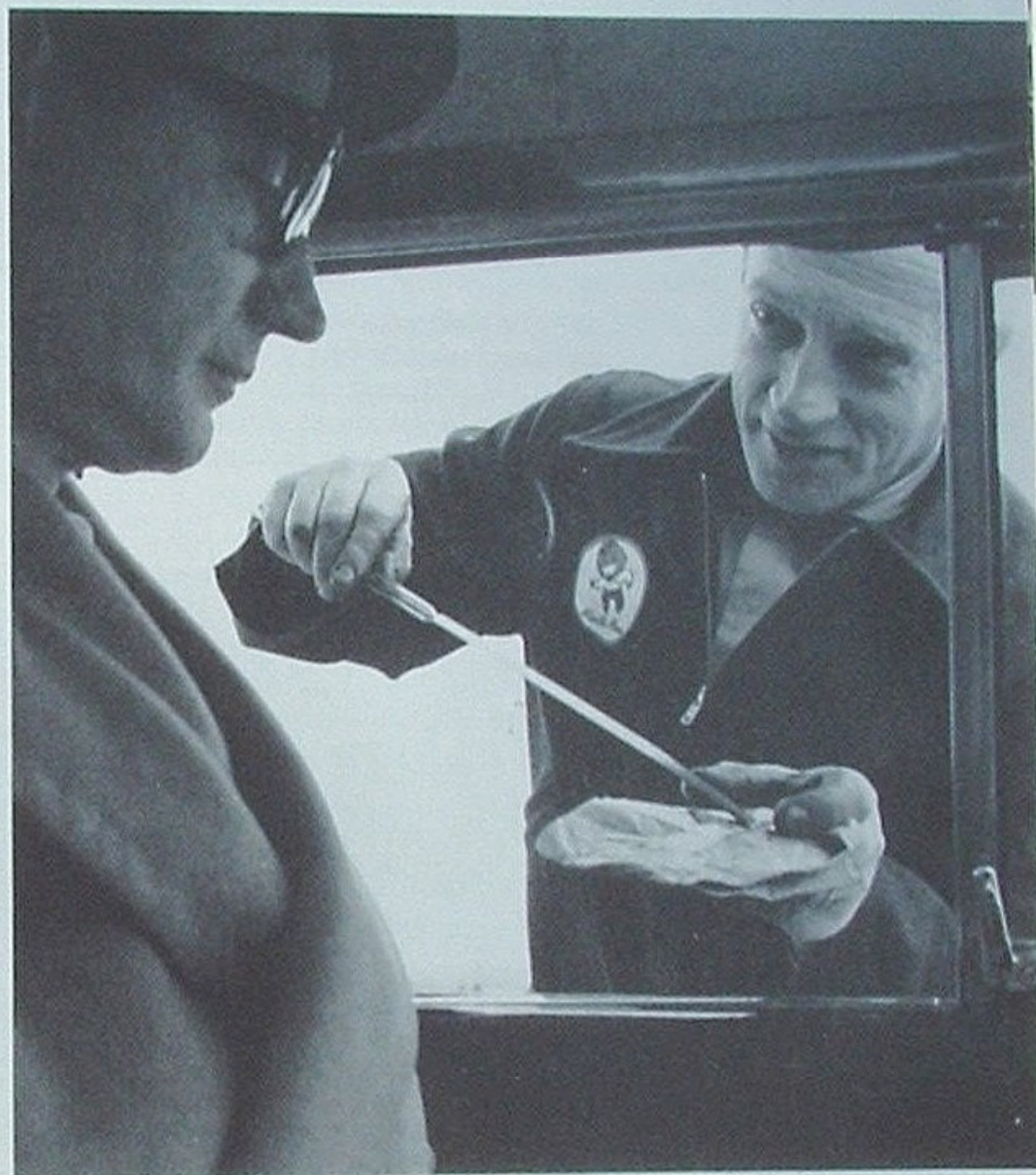
Unfortunately, the road from work to home to friend's house isn't a desert highway. The oil in your engine doesn't get hot until you've driven 10 to 20 miles and, usually, you've shut it off long before that. When you have a powerful engine that runs cool most of the time, you also have troubles.

Water and the corrosive acid gases that blow by cold piston rings stay in the oil—only heat will drive them off. Sludge forms. Deposits plug piston rings, oil screens, and the maze of lines that feed bearings and cam followers. Your engine suffers from oil starvation.

Most newer cars have hydraulic valve lifters. These are the most critical parts in an engine. A shadow-thin wisp of lacquer will cause them to stick. And lacquer forms at low temperatures.

So what should you do about oil and oil drains?

First, put your car on a diet of Royal Triton 10-30. The Research Department spent, literally, years developing this oil. Their aim was to cure those problems caused by the typically powerful, cool-running passenger car engine. As a result, Royal Triton 10-30 is the most effective of all motor oils.



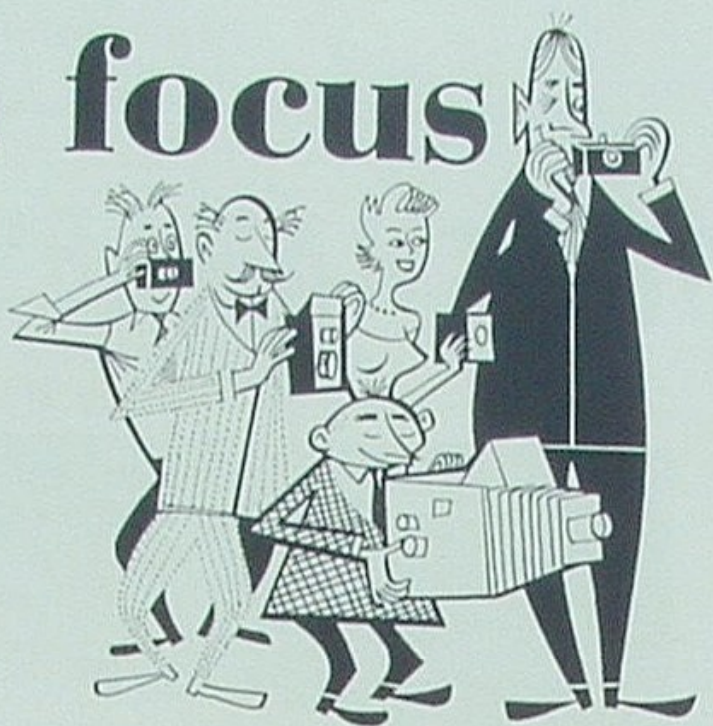
(Incidentally, it makes no difference to this great oil *how* you drive your car—hot or cold. Royal Triton 10-30 passed the qualifying tests for Army Ordnance heavy duty oils.)

Then drain your oil at regular intervals: every thousand miles is a safe recommendation.

If drained at sensible intervals, Royal Triton 10-30 will give your engine greater protection than any other oil you can buy. But like the additives in all compounded oils, the additives in Royal Triton 10-30 can wear out. Eventually—if run too long—they lose their power to protect. Sludge and lacquer deposits will begin to form.

So remember the facts: If you're the average driver, you're hard on your oil. A long drain interval—longer than every 1000 miles—is mighty poor economy!

in focus



"JO" HAYMES of the Credit Department, San Francisco, was selected by a panel of Union Oil customers as their candidate in the annual competition for Harbor Queen. A gay round of festivities always precedes the three-day Maritime Festival over which the Queen is chosen to reign.

from Pat Clark



UNIJAC, short for Union Junior Achievement Company, was organized at the request of Honolulu city officials as a means of assisting the youngsters of Hawaii. Union Oilers (back row, from left) Tex Widener, Jim Cassingham and Joe Kelley responded by devoting many off-job hours to the Achievement project — that of designing, manufacturing and selling an attractive telephone book holder called a "telephone caddy." UNIJAC won the top sales award, also the Junior Achievement "A" award, and Union Oil won a city's gratitude.

from James H. McGee



DENNIS WHITE, son of Manager of Operations J. W. White, Seattle, became the first Eagle Scout of Troop 123 during June. He also holds the God and Country Award.

from G. S. Smith

L. C. FRANKS, resident manager at Ketchikan, Alaska, has been elected president of that city's Junior Chamber of Commerce for the 1958-59 term.

from J. W. White



SALESMAN W. SCHOELLKOPF, left, of Los Angeles Direct Sales is seen receiving from Chairman Jim Nicolai of the Los Angeles Junior Chamber of Commerce top honors for the second successive time in the organization's annual "Speak-Up" contest. He represented District 7 in the state finals at Santa Cruz. This Union Oiler also won the Manager's Trophy for being top salesman in the Los Angeles Division for the first quarter of 1958.

from T. W. Proudfoot





JOANNE ANDERSON, daughter of Researcher Ben Anderson, has duplicated the 1954 performance of her sister Nancy by having her lamb judged Grand Champion of the recent Orange County Fair. Joanne, an 8th grader at Wilshire School in Fullerton, is in her 3rd year of 4-H Club activity.



INLAND NAVIGATION COMPANY, good customers of Union Oil at Portland, lent a friendly hand and their boat "Frances" on June 14th, when Union Oil people served as hosts to the graduating class of Elizabeth Hayhurst School. Five hours of boating and feasting gave the youngsters a thrilling day on the Columbia and Willamette Rivers, great waterways of the Northwest.

from W. M. Tufts



DEALER PHILLIP HUNT (poor fellow!) had to work July 4th and 5th while some of us other patriots were enjoying such fun as Lake Elsinore Valley's Diamond Jubilee, 75th anniversary of the town's incorporation. Phil's pump-island procedure seemed to capture the special interest of water skiers.

from C. E. Rathbone



THEO. H. DAVIES & CO., FAR EAST LTD., distributors of Union Oil products in the Philippine Islands since 1948, were visited by President A. C. Rubel during his recent tour of the Orient. While in Manila, Mr. Rubel (front row, 2nd from left) presented Manager Eric L. Westley (2nd from right) of the distributing firm a 10-year service plaque. Seven others present at the informal ceremony are Manila salesmen of 76 products.

from W. L. Theisen

NANCY, KAREN AND JULIE, daughters respectively of the Philip N. Fawcetts, William H. Pages and Orville L. Pollys — Union Oilers all — were the exclusive 9th grade recipients of Blue and Gold honor awards at Washington Junior High School, Long Beach. The awards represent "unusual commendation for outstanding achievement in service, citizenship and scholarship." Messrs. Fawcett and Page work at Los Angeles Refinery; Dr. Polly is in the Union Research Department.

from S. D. Reiner





AT PHOENIX, ARIZONA, a 76 Sports Club clinic is going *great guns* every Saturday morning under the direction of High School Coach Ken Wise, right. Lending top-flight "pro" assistance at the baseball sessions is Cy Young, kneeling, namesake and great-nephew of baseball's Hall of Fame Cy Young. Approximately 200 boys regularly attend this very successful clinic.

from T. S. Argyle



DEALER J. E. JULLIEN, 3rd from left, was recently presented a Dealer Service Plaque, representing 40 years of Company affiliation at Orcutt, California. Jack is one of Santa Maria Valley's most prominent citizens, having served as a Justice of the Peace for 12 years and contributed in many other ways to civic betterment. His present new Type



FIRST KEY MAN AWARD in the Portland Division went to Industrial Sales Engineer D. J. Warren, right, for obtaining a large lumber account. Bestowing the gold key are W. L. Spencer, left, and Division Manager Direct Sales L. C. Burkland.

from W. M. Tufts

KEY MAN AWARDS are being presented by W. L. Spencer, left, to Salesman John Tripp, Resident Manager George Alexander and Salesman Del Fogelquist, all of Seattle, as Division Manager Direct Sales G. S. Smith looks on approvingly. The recipients obtained important new wholesale accounts to merit the recognition.

from J. W. White

MALCOM K. CARTER, JR., whose father is our industrial sales engineer, Los Angeles Division, graduated from Claremont Men's College in June and was promptly selected by the Coro Foundation for a nine months' research and education program in public affairs.

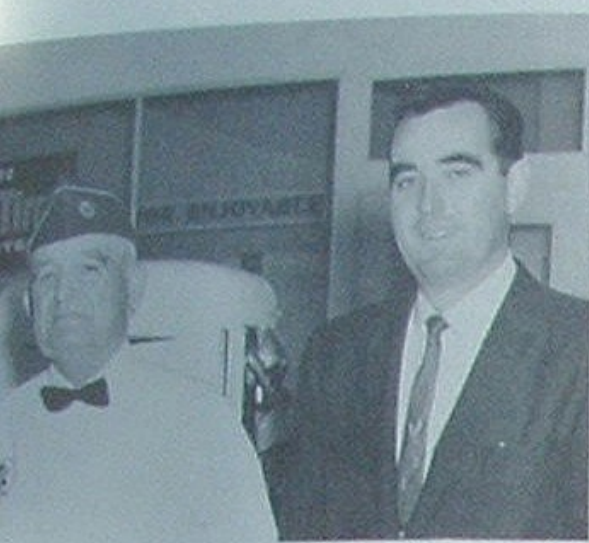
from T. W. Proudfoot



CURLING CHAMPS of our Canadian Division are, from left, Gizella Kis, "Skip" Duncan Robinson, Dave Keffer and Cleo Dumett. They can retain their small individual trophies but will have to do some fancy work on the ice next year to keep possession of the big one.

from R. H. Clark





140 service station is a far cry from the original tire shop where Union gas pumps were installed by popular request in 1918. Present at the 40th anniversary presentation were, from left, Fresno Division Manager W. S. Christopher, Assistant Manager B. Knight, and Retail Rep. E. J. Brusher.

from G. E. Newton

RETIREMENTS

July 1, 1958	Service Date
WILLIAM P. AHERN Oleum Refinery	June 8, 1920
EDWARD H. IRWIN Los Angeles Refinery	June 5, 1922
PHILIP McCUTCHAN Research Department	August 1, 1928
ALBIN MICOLI Oleum Refinery	June 15, 1932
GILBERT C. MUNROE So. Division Field	April 15, 1934
ROY V. RUDE Dist. Cent. Region	January 27, 1938

IN MEMORIAM

Retiree:	Service Date
HUGH A. MATIER Sales Services	June 5, 1958

DEALERS MORAN AND ROYAL, left and right, are the sponsors of Richard Hutsell, center, and his midget racing car. The powerful 140-cubic-inch racer is expected to win a lot of prizes on Gardena, Riverside and Phoenix tracks. It will always be among the leaders advertisingwise.

from C. E. Rathbone

BIRTHDAY

SERVICE AWARDS

July, 1958

EMPLOYEES

40 YEARS

WILLIAM M. CONLEY.....No. Division Pipeline

35 YEARS

EDWARD H. CHRISTOPHER.....Coast Division Field
LLOYD J. ROGERS.....Comptroller's—Cent. Region
LESLIE A. SMITH.....Manufacturing—Home Office
THEODORE R. WILSON.....Los Angeles Refinery

30 YEARS

STANLEY BIEHN.....Comptroller's—Cent. Region
RUSSELL S. BOND.....Dealer Sales—Seattle
SYLVIA L. CASTOR.....Comptroller's—Home Office
ORIN L. DYER.....Los Angeles Refinery
ARTHUR ERICKSON.....Purchasing—Seattle
CARL A. HAASE.....Los Angeles Refinery
OTIS JOHNSON.....So. Division Field
HUGH E. LILLQUIST.....Distribution—No. Region
DAVID C. McEWEN.....Distribution—So. Region
HAROLD PEDERSEN.....Oleum Refinery
WILLIAM W. PHILIPS.....Comptroller's—Home Office
ERNEST B. STRICKER.....Los Angeles Refinery
DANIEL B. TROUT.....No. Division Pipeline

25 YEARS

LAWRENCE W. BRUCE.....Dealer Sales—Sacramento
WALTER J. DILL, JR.....Supply Dept.—Home Office
GEORGE A. FISH.....Direct Sales—Oakland
WILLIAM H. GERMAIN.....Dealer Sales—Los Angeles
DOROTHY V. HARKNESS.....Exploration—Home Office
NORRIS V. HARTSELL.....Los Angeles Refinery
RAYMOND L. HAYNES.....No. Division Pipeline
LADDY W. JANES.....Direct Sales—Los Angeles
GEORGE R. LAKE.....Research Dept.
MICHAEL S. McNAMARA.....Oleum Refinery
TOKUZO ONO.....Dealer Sales—Honolulu
SIBBALD A. SLY.....Direct Sales—Los Angeles
GEORGE S. SMITH.....Direct Sales—Seattle
FREDERIC L. SPRINGMANN.....Pub. Rel. & Adv.—Home Office
LEON M. YOUNG.....Oleum Refinery

20 YEARS

HAROLD T. MORIYAMA.....Direct Sales—Honolulu
JOHN T. PATRICK.....Oleum Refinery
JAMES W. REID.....Oleum Refinery
GEORGE B. SNYDER.....Los Angeles Refinery
GROVER C. STARK, JR.....Dealer Sales—Pasadena

15 YEARS

CLOYCE E. BECK.....Los Angeles Refinery
ANA IRENE CARNAL.....Secretarial—Home Office
IRA J. DYSON.....Gulf Div.—Louisiana
EVELYN I. FITZPATRICK.....Secretarial—Home Office
LOERN A. HALVERSON.....Los Angeles Refinery
STANLEY A. HOWES.....Direct Sales—San Francisco
GEORGE W. HUNT.....Coast Division Field
WILLIAM L. KENT.....Research Dept.
ROBERT LEMAIRE, JR.....Gulf Division Field
HAROLD D. MAGNES.....Direct Sales—San Diego
RAYMOND W. MATTSOHN.....Research Dept.
WILLIAM D. MHOON.....Los Angeles Refinery
EARL O. MOFFITT.....So. Division Field
LOREN L. NEFF.....Research Dept.
HELEN NICKLESON.....Comptroller's—Home Office

GRACE E. SCHAUMBURG.....Gulf Division Field
GEORGE E. VANHOFF.....Dealer Sales—Seattle
WILLIAM G. WAGNER.....Los Angeles Refinery
MARIE M. WARREN.....Los Angeles Ref. Cafe
ARVIN L. WEST.....Coast Division Field

10 YEARS

CLYDE L. CALDWELL.....Oleum Refinery
RUTH COSTANZA.....Comptroller's—Home Office
MARGARET I. GARVEY.....Comptroller's—Home Office
ROBERT C. HAGEN.....Pub. Rel. & Adv.—Home Office
ALDEN B. MORGAN.....So. Division Field
STANLEY H. NIELSEN.....Distribution—Cent. Region
FRANK C. RIDDICK, JR.....Research Dept.
ALBERT W. SANBORN.....Economics & Planning—Home Office
RICHARD M. SCAMMAN.....Comptroller's—Home Office
DOROTHY E. SMITH.....Los Angeles Refinery
CLIFFORD M. STUBBE.....Comptroller's—Home Office
HOWARD W. THOMAS.....Distribution—No. Region
HAROLD E. TRUSCOTT.....Distribution—Cent. Region
ERNEST K. WALKER, SR.....Exploration—Whittier

DEALERS

40 YEARS

FRANK FUHRER.....Sacramento, California

30 YEARS

C. D. EDWARDS.....San Francisco, California

25 YEARS

GEORGE AND TSUNEO KIMURA.....Honolulu, Hawaii
O. W. MARTIN.....San Marino, California
L. C. AND G. R. WADE.....Clear Lake, Washington

20 YEARS

W. F. LEWIS, Jr.....Monrovia, California

10 YEARS

BARSOTTI AND TIMM.....Spanaway, Washington
HARRY D. BECK.....Greenacres, Washington
R. S. AND H. C. BLANKENSHIP.....Goleta, California
MANUAL J. DUARTE.....Sunnyvale, California
PHILLIP JUSTUS.....Bonners Ferry, Idaho
KATSUYOSHI KUROKAWA.....Hanapepe, Kauai
HENRY R. STANKEY.....Salkum, Washington
YASUHARU AND TARO TAKUSHI.....Kaneohe, Oahu
A. M. WALKER.....Los Angeles, California

5 YEARS

ERNEST A. BOND.....Choteau, Montana
COSBY AND PARCHMAN.....Parker, Arizona
FOUR CORNERS SERVICE.....Poulsbo, Washington
DONALD W. GABBERT.....Pleasant Hills, California
J. DAVID GILLELAND.....Everett, Washington
ALBERT P. GIMINEZ.....Los Angeles, California
BUD GRIFFIN.....Romoland, California
BARRY HUDSON.....Los Angeles, California
HARUO H. INN.....Fresno, California
F. J. KAHLER AND E. B. HELGELEIN.....Tacoma, Washington
JOE LAVORNIA.....Los Angeles, California
HUBERT LEW.....San Francisco, California
PAUL C. MORSE.....San Francisco, California
RALPH NAKASUJI.....Los Angeles, California
GLENN R. REINHARDT.....Fresno, California

Bill Butler

...who thinks you are
the real secret weapon

"We're paying a great deal of attention lately to our atomic and outer-space race with Russia.

"I hope you and I don't make the mistake of thinking this is strictly a scientists' show, and leave it all to them.

"Because the individual citizen and his personal effort are still going to decide whether the world will be free or slave. We're the real secret weapon in the battle for world power and peace.

"Sometimes, though, I'm afraid we forget this.

"We forget it when we tax profit so excessively we discourage a man from risking his savings to found new businesses or expand existing ones.

"We forget it when we confiscate as taxes so much of what a man earns we destroy his incentive to produce and contribute more.

"We forget it when we demand and get higher wages and shorter working hours, with no thought of producing more.

"We forget it when we fail to share the profits of a business with the productive people who help us make it.

"We forget it when we take our freedom and way of life smugly for granted and fail to work to preserve both.

"Our scientists can create new weapons and new tools for our survival. But these are only the start.

"It still takes the best you and I have to give."

* * * *


Bill Butler is Manager of our field operations. His point, we think, is timely.

For today 4 Americans can produce as much as 10 Russians. But how long we maintain this superiority depends on how well each of us does his part.

Eternal vigilance is *still* the price of liberty.

YOUR COMMENTS ARE INVITED. Write: The Chairman of the Board, Union Oil Co., Union Oil Center, Los Angeles 17, California.



Union Oil Company OF CALIFORNIA 

MANUFACTURERS OF ROYAL TRITON, THE AMAZING PURPLE MOTOR OIL