

# SEVENTY <sup>76</sup> SIX

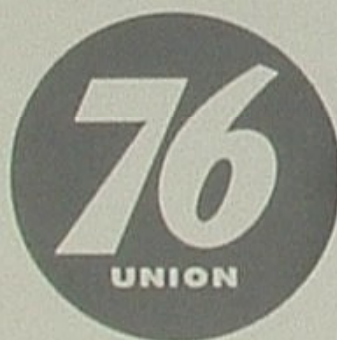
Union Oil Company of California

November - December 1962





Lee Perry examining injectors and plunger.



**"Plunger still perfect...injector holes still open...after 225,000 miles on 76 Unifuel"**

Mr. Lee Perry, Owner, Lee Perry Trucking, Sebastopol, California

"This plunger from a Cummins 220 has 225,000 miles on it and could probably go another couple of hundred thousand miles.

"And the injector tip from the same engine can still deliver a good spray pattern. It's not corroded and the holes are open.

"We consider this outstanding performance and 76 Unifuel gets the credit. In the past, we never got more than 150,000 miles on injectors.

"But that's not all. Since we started using 76 Unifuel we've stopped using lubrication additives that were increasing our fuel costs about one cent a gallon.

"And we're saving money on fuel filters, too. A filter that used to last about two months now goes four or five times that long.

"I've been in and around the trucking business 26 years... and frankly, I'm amazed at this performance."

76 Unifuel is the amazing blond diesel fuel introduced last year by Union Oil. Its extremely low sulfur content reduces engine wear. It produces greater horsepower with less smoke. And it has high cetane and full lubrication body for trouble-free operation.

Call your nearby Union Oil representative for full details on this amazing blond diesel fuel.

**UNION OIL COMPANY OF CALIFORNIA** 

UNION OIL CENTER, LOS ANGELES 17, CALIFORNIA



# SEVENTY<sup>76</sup> SIX

Union Oil Company of California

Volume 6, Number 11

November-December, 1962

**THE COVER** — Our artist's, Wes Parlee's impression of the Plaza in San Francisco 100 years ago calls attention to "The Continuing Saga of Portsmouth Square" beginning on Page 2. A wreath on the lamppost emphasizes that we wish all Union Oilers a very Merry Christmas.

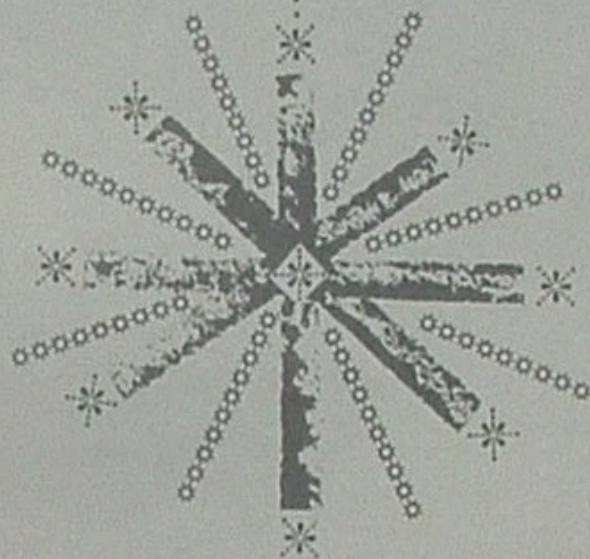
#### In this issue:

The Continuing Saga of Portsmouth Square	2
On the Loop	5
Unowax	8
The Finest in Soaring	10
Dogsmanship	13
Vandenberg Village	14
From an Ill Wind, Pure Sulfur	16
Business Highlights	18
A comment on "The Living Constitution"	23

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 Editor, SEVENTY-SIX, Union Oil Center, Los Angeles 17, California.

Published by  
PUBLIC RELATIONS DEPARTMENT  
Earl M. Welty, Director  
F. L. Springmann, Assistant Director  
Thiel D. Collett, Editor  
Lori Arakaki, Production Assistant



## Season's Greetings!

*During this Holiday Season of 1962,  
may we all be sincerely thankful  
for the efforts  
and cooperation  
of those who have contributed so well  
to our Company's successful year.*

*In the tradition of Christmas,  
may you and your families  
participate in its services and festivities,  
enjoying the holiday to the fullest.*

*And in the tradition of Good Will,  
may you enjoy health and happiness  
throughout the New Year.*

President





# THE CONTINUING SAGA OF PORTSMOUTH



Our two pictures, taken more than a hundred years apart, of San Francisco's Portsmouth Square reveal little change except in the surrounding buildings. In both exposures new paving and fresh plantings of grass and shrubs mark the city oasis as being brand new.

This is the explanation:

San Franciscans are unforgettably proud of their city's history, diligent in preserving the old landmarks. When it was proposed that historic Portsmouth Square be transformed into a parking facility to relieve Chinatown and environs of a bad traffic situation, there was an immediate outcry.

Portsmouth Square, mind you, is no less than the birthplace of San Francisco. First a potato patch, then in 1844 a greensward in front of the Governor's Custom House, the plot of ground became known as the Plaza. When the Custom House burned in 1851, the Plaza's flagpole remained to symbolize a place of authority.

It was in 1846, during the Mexican War, that Captain Montgomery of the warship Portsmouth entered San

Francisco Bay to take possession of northern California. With 70 sailors and marines he marched up Clay Street. All resistance had fled. They hauled down the Mexican colors from the Plaza flagstaff and hoisted the Stars and Stripes. From the bay, Montgomery's sloop-of-war fired a 21-gun salute. Since that day this hallowed ground has adopted the ship's name—Portsmouth.

Many another of the West's dramatic events took place here: Sam Brannan and his colony of Mormons arrived by ship 'round the Horn, also in 1846, to found the adjoining community of Yerba Buena. A school house erected west of the Square in 1847 served during odd hours as town hall, court house, church and social center.

Although saloons and gambling dens began to dominate the area during 1849's Gold Rush, responsible citizens placed stern limits on the encroachment. The Square became a sort of sanctuary. Sailors and miners entered it to repent of their squandered wages and drunken follies. Ministers climbed up on soap boxes to preach the Word of God. City fathers strode forth to proclaim resolutions and declarations of rights. Portsmouth became the scene of San Francisco's first town meetings and elections.

Here under a magnificent 111-foot flagpole, presented by the citizens of Portland, Oregon, Independence Day was celebrated in 1850. And a short time later, on October 29, two Portsmouth Square cannons boomed out first word of California's admission into the Union.

So hallowed became the old potato patch that in 1851, when a thief was sentenced to hang from the tall flagpole, the Vigilantes refused him such honor. Instead they strung him up from the gable beams of the Custom House.

Small wonder the present generation of San Franciscans frowned at the thought of losing a monument and gaining a garage.

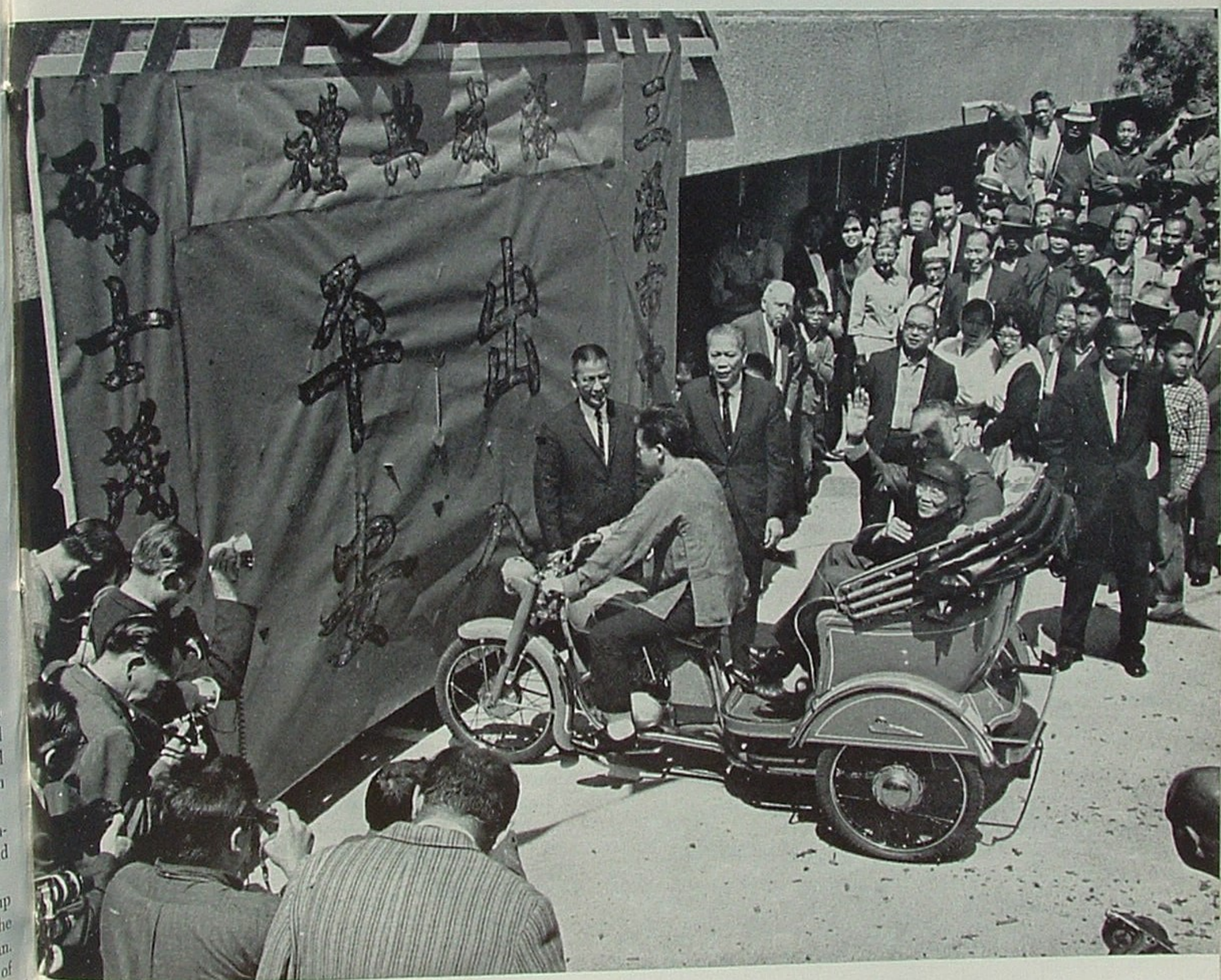
But present Mayor George Christopher and his group of city administrators gradually solaced most fears. The garage, they explained, would be entirely subterranean. When finished, its roof would be a pleasant expanse of

*Continued*



# SQUARE

Officially the first vehicle to enter new Portsmouth Square Garage in San Francisco was a motorized ricksha bearing Mayor George Christopher and 91-year-old Mrs. Chinn Lee Shee Wing. All Chinatown and scores of news photographers witnessed the traditional Chinese entrance through a paper door.





Proprietors of Portsmouth Square Garage are, from left, Manager Harry M. Roosa, S. E. Onorato and Sam A. Waters. The latter two are former Company employees.



Miss Republic of China came all the way from her native land, Long Beach, to lend the opening ceremonies a touch of beauty.

Beneath the historic old Plaza, our *Finest* oil services enhance a famous tradition.



### The Saga of Portsmouth Square—Continued

grass, shrubs, benches and tables—hardly distinguishable from the original Plaza.

Official opening of Portsmouth Square Garage on August 24, 1962, was therefore a civic ceremony—perhaps outdoing in excitement Captain Montgomery's flag raising:

The Mayor and his city officials were on hand with broad smiles and short speeches. Prominent citizens filled seats of honor on the speaker's stand. All of Chinatown—thousands in number—crowded the Square or shared the ceremony from surrounding windows and balconies. Several bands played stirring music. And a military detachment about the size of Montgomery's raised the Stars and Stripes.

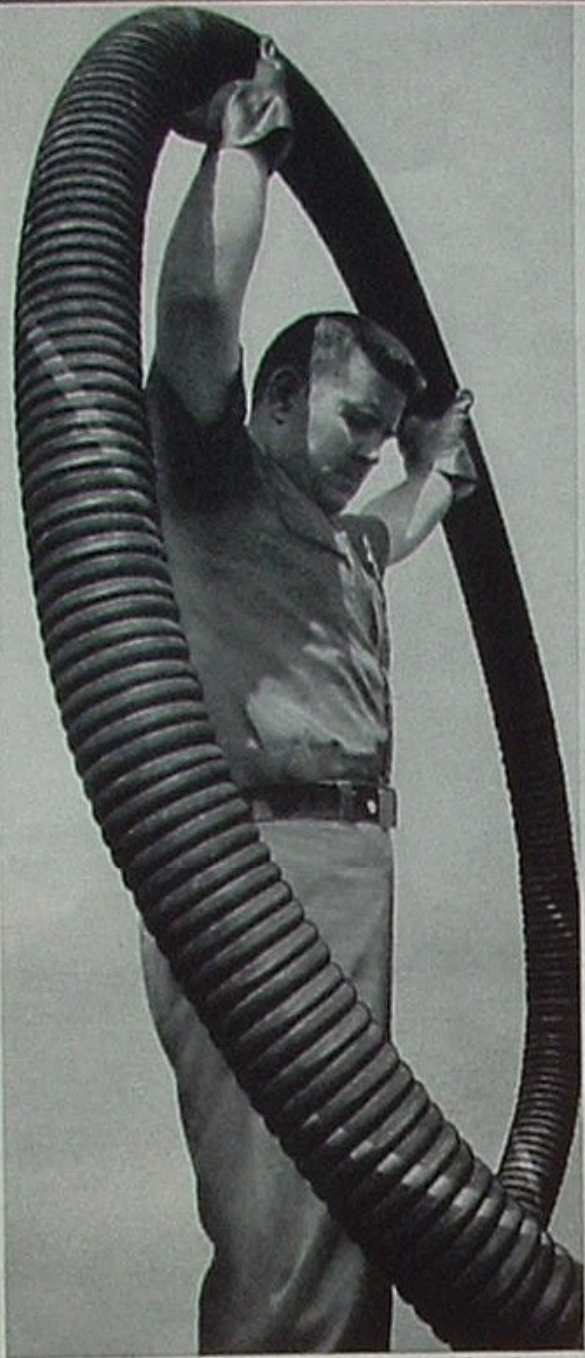
The scene had not changed since 1860; neither had the patriotic human heart.

Leave it to the Chinese, though, to give a garage the proper opening. Program Chairman H. K. Wong had arranged everything. Miss Republic of China was there, fairest of all the flowers. An ear-splitting cannonade of firecrackers drove off evil, unprofitable spirits. A young Chinese drum and bugle corps played "Open the Big Door." Then through a massive red paper barrier, inscribed with good-luck Chinese characters, burst the facility's first customer—a rickshaw bearing Mayor Christopher and Mrs. Chinn Lee Shee Wing. She is a 91-year-old-great, great grandmother. With such wonderful omens, how could the enterprise fail?

Of course everybody followed the Mayor and Mrs. Wing into Chinatown's *Finest* garage. They found the 800 parking stalls and Union Oil pump islands lighted as bright as day. Many crowded into the flower-decked underground office to extend best wishes to operator Sol Onorato and his managing associate Sam Waters, both former Union Oil employees.

Most of the opening day guests departed via new elevators, which during the next hundred years are bound to lift a host of visitors to the largest and handsomest Chinese community in America. Outside they took another smiling look around as if to say "A fine garage in the basement, but on top it's still old Portsmouth Square!"





Transport Driver John Dolan's biggest feat of strength was to deliver 27,000 gallons of gasoline across a 300-mile route called "The Loop" in 10 hours.

## On "the loop"

*The Company's new truck-and-trailer unit breaks all delivery records*

At first glance, there was nothing excitingly new about the 9,000-gallon truck-and-trailer we stopped to inspect at Union Oil's Los Angeles Terminal. Obviously it was powerful and brand new. But its record cargo capacity — some 1500 gallons higher than such units formerly carried — was hardly noticeable in the two big tanks. The style of these petroleum work-horses has changed very little over the past 25 years.

In reply to our questions about the extra carrying capacity, Transport Foreman R. G. McMurray was ready with all the answers:

"California," he explained, "like most other states, has strict rules governing the weight of vehicles using public highways. For a T-and-T with five axles, the maximum load limit is 76,800 pounds. The state's weighing stations are usually tolerant of a 3% overload, but that is the absolute weight limit.

"In order to keep hauling costs as low as possible, petroleum carriers have for many years designed trucks to haul exactly as much cargo as the law will allow. Since the law is just about inflexible, our only hope of increasing cargo capacity was to decrease the weight of the truck.

"Now Union Oil has come up with this 9,000-gallon job. The secret of its much larger carrying capacity is lighter metal — aluminum. The tanks and piping — even the 18 wheels of this T-and-T — are made of an aluminum alloy, stronger and much lighter than steel.

"Another thing, several people in the Company began

to wonder about the meters we have used on transports all these years. Meters greatly retard the unloading rate. Why meter out full compartments of gasoline when we know exactly how much the compartment contains? As a result, this new unit eliminates all meters except one on the trailer. Even the one meter can be bypassed.

"Both improvements — lighter metal and removal of the meters — reduced the unit's weight some 9,000 pounds. That gave us our chance to add about 1,500 gallons of gasoline carrying capacity to each load."

While the foreman was explaining T-and-T economics, Transport Driver John Dolan reported to work — promptly at noon. His orders from the dispatcher were to deliver 9,000 gallons of "moderate-climate" gasoline to our Ontario marketing station — pick up 9,000 gallons of "summer-grade" gasoline at Colton Terminal and deliver it to Lancaster.

"If you'd like to see some other advantages of this new outfit," McMurray invited, "get up in the cab with John. He's working what our drivers call 'The Loop.' About 250 miles of nice summer driving. He'll have you back soon after dark."

"The Loop" proved to be a revelation:

As soon as the diesel motor had warmed up to its task, Driver Dolan began shifting gears. The big Peter-Bilt has two gear boxes — a main and an auxiliary. For each of five forward shifts through the main gear box, there are three shifts through the auxiliary. In all,

*Continued*





John's 9,000-gallon truck-and-trailer owes its increased carrying capacity to light metals and removal of meters.

### On "The Loop" —Continued

Dolan skipped only three of the 15 shifts to reach his high-gear cruising speed of about 54 miles an hour. By that time we were in the thick of traffic on Harbor Freeway — keeping to the right-hand lane — and maintaining the fastest pace of the big trucks.

Pumping off of the full load into Consignee Dave MacAlpine's above-ground storage tanks at Ontario suggested another good reason for such new-type trucks — and for underground storage. Older units, pumping through meters and their smaller discharge lines, require nearly two hours here to unload 7,500 gallons. Dolan's unloading time for 9,000 gallons, through four-inch connections and without meters, was 30 minutes.

He commented: "You haven't seen anything yet. Wait 'til we drop a load into the underground tanks at Lancaster."

A few miles further out on San Bernardino Freeway, we pulled into the Company's fine Colton Terminal. Here are stored several grades of gasoline and diesel fuel, including our "summer-grade" for automotive use in the hot desert country. All of these bulk fuels are shipped to Colton from Los Angeles Refinery via pipeline.

Dolan helped himself to 9,000 gallons of the "summer-grade" in 20 minutes — checked out at the Colton office — and swung into the cab for his longest drive of the day.

The steep mountain grade from San Bernardino to

A dozen changes of scenery on "The Loop" includes a long, straight run through Mojave's Joshua trees, hardy lilies of the desert.





At a California weighing station, each set of wheels is weighed as truck rolls. The weigh-master approves with "Okay Union!"



the summit of Cajon Pass called for the lower gears to keep more than 38 tons moving. As we approached a state weighing station in the canyon, John looked at his passenger's 200 pounds and grinned, "Maybe you'll have to get out and walk around the scales."

But the officer in charge was tolerant. Weighing each of the five axles as our truck rolled slowly by, he arrived swiftly at the total weight and, through a remote speaker, announced, "Okay, Union Oil." Fifteen minutes later, the driver pulled in at a roadside restaurant for our late afternoon lunch.

Beyond Cajon Summit, the terrain flattens out into an interesting tableland of Joshua trees, actually members of the lily family. The July air was hot, dry, not uncomfortable. Loneliness of the road was relieved here and there by a service station, desert cottage, or some brave soul's nearly fruitless attempt at farming.

Sixty miles of this and the desert changed abruptly to green alfalfa fields, air-conditioned homes, and the neon signs of Lancaster's business district lighting up to relieve the sun.

Now Dolan had his first opportunity of the day to demonstrate really fast unloading. The Company's new marketing station at Lancaster has underground storage. Hooking four-inch hoses to these tanks, the driver opened wide the valves on both truck and trailer. I looked at my watch. In exactly 10 minutes the 9,000 gallon delivery of "summer-grade" was completed.

Enroute back to Los Angeles, via San Fernando Valley, in a blaze of mountain-desert sunset, the driver commented matter-of-fact like: "Looks like I'll have just about enough time for a short-haul delivery in the city before my shift ends at 10 o'clock."

To anyone who drove trucks back in 1937, — or even 1957— just imagine *wheeling* a T-and-T nearly 300 miles — through city, mountains and desert — delivering 27,000 gallons of gasoline in a 10-hour shift.

What's next in this marvelous age of transportation — daily being improved by the best minds and great incentives of industrial competition?

At our Colton Terminal, John reloaded with summer-grade gasoline for the desert area.





*A new family of Union Oil products that will help fill shoppers' carts is a good example of how people benefit from competition*



A trio of departments in Union Oil have been putting their brains together during the past few years for the benefit of the ladies like the one whose hands are pushing the grocery cart in the picture at right.

As you can see, she's walking around a supermarket picking up such tasty things as fresh frozen peas, creamery butter, sweet milk, crisp French bread, and a tender frying chicken. Aside from the fact they taste good, the foods in her basket have something else in common: all are protected by wax treated or plastic wrappings.

And that's where the three departments—Marketing, Research, and Refining—get involved with the lady shopper. Supplying material to treat those paper cartons and bags is big business. Without the wrappings to seal in flavor, seal out moisture, and keep foods first-day-fresh on the shelves, her basket would be practically empty.

What's been happening in the packaging business lately has had, as we said, the departments putting their brains together. The result is a pretty good example of what goes on inside Union Oil when competition threatens us in the profit-and-loss statement; and of how people, including ladies in supermarkets, benefit from competitive hassles.

For more than 25 years, we have made a high quality line of paraffin waxes we call Aristowax. We sell

# UNOWAX GOES TO MARKET





Unlike wax alone, new Unowax blends are flexible.

the waxes to people who make milk cartons and wax paper, and treat various kinds of packages and cardboard. The sale of wax is a relatively small but profitable part of our output.

Lately, however, plastics have begun to move into our wax markets. Plastics have some advantages over wax: they are tougher, more pliable, won't rub off, and they can be produced in transparent sheets such as the cake wrapper in the basket. They have one major disadvantage: cost. A laminating machine to make plastic milk cartons can cost well over a million dollars.

Looking to the future, we could kiss good-bye to much of our wax business unless something were done to counter the aggressive plastics marketers. We did something, and the "we" is Marketing, Research and Refining.

Recent research had created plastic materials that could be blended with wax. Our own Research people experimented with various combinations and developed an entirely new product: Unowax.

Refining found that, with a relatively small investment, it could convert some of its equipment to the manufacture of the wax-plastic blends.

Meanwhile, Marketing, eager to get its hands on such a product, was making its estimates of possible sales, contacting prospective customers, preparing to introduce the new product to the "paper converting" industry, and to train its sales people.

In Unowax, Marketing has something to sell!

Unowax is really a whole family of blends of our Aristowaxes and various plastic materials. Unowax, for most purposes, combines the advantages of both plastics and waxes.

Like wax, it seals in flavor and seals out moisture. Unlike wax, the new product will not flake or rub off on shelves or packaging machinery. Like plastic coatings, and unlike wax, Unowax can be creased or folded and still keep out moisture, an important characteristic when you're packaging frozen foods, for example.

Unowax is also an adhesive, important if you're making self-sealing packages or putting labels on them. It can even be molded into disposable cups and cartons.

With all its qualities, Unowax costs less than plastic materials alone. It can be applied with the same machinery that paper and packaging firms already use for applying our Aristowax; a manufacturer isn't faced with making a heavy capital investment when he makes the switch from wax to new Unowax, as he would be with a switch to plastics.

The happy aspect of our new product is that everyone benefits.

With Unowax, Union Oil expects to increase our

total wax sales, in spite of competition from plastics.

The plastics manufacturers themselves get a bonus: our Unowax blends open a new outlet for their wares.

Our customers receive an improved and more versatile product. *Their* competitive position is enhanced: they are able to enter new fields and to regain business they may have lost—and with no new, heavy investment.

The lady with the grocery cart is, of course, the person everybody's been working for. She gets the final benefit of lower cost protection, more attractive packages to catch her eye, and of course, a greater variety of fresher tasting foods.

No question: the drive for profits under the free competitive enterprise system does make people think—and think the kinds of thoughts that bring progress.

Here with her grocery cart full of flavor-protected food is Angela Scott, one of the buyers who benefit from wax research.







*California's Mojave  
Desert is host to*

## The Finest in Soaring

At nine in the morning one Summer day, soaring pilots and their crews assembled at El Mirage Field in California's Mojave Desert. All were dog-tired. It was the seventh day of the National Soaring Championships.

When Competition Director Oats Schwarzenburger, whom the pilots familiarly address as "Mother" Oats, uttered "Free Distance," the hanger emitted a choral groan. "Free Distance" meant the pilots would take off at the first opportunity and fly as far away as possible — in machines whose builders entirely overlooked engines.

One of those who groaned was John Ryan of Scottsdale, Arizona:

Eight days previously, he amazed 2,000 spectators at El Mirage by making a practice soar around a 105-mile triangle at an average speed of 75 miles per hour. (The world's record at this distance in competition is 67 mph.)

Next day Ryan led all entrants in the first competitive *task* by flying a 236-mile triangle and then continuing on a final-leg to Kingman, Arizona. Over Kingman he reported being lifted by an air current at 500 feet a minute, under a big cloud, with good prospects of "reaching the Mississippi." But darkness forced him down — just 446.8 miles from the starting point.

Ryan's ground crew, equipped with two-way radio, located the sailplane and pilot easily enough near Kingman, but almost despaired of their success. They had to dismantle the plane, load it on a trailer, drive some 500 miles back to El Mirage, reassemble the craft, and get Ryan to pilots' meeting in time for the second task. This one — a 195-mile speed run to Baker and return — found Ryan running out of altitude 51 miles from his return goal and cost him a drop from first to fifth in the championship standing. Again the crew had to go out and haul him in.

The third day, in a longer 383-mile speed *task* to

Parker, Arizona, and return, none of the pilots succeeded in returning to El Mirage. Ryan covered 267 miles for the second best flight behind Richard Johnson's 272-miler. But 33 ground crews were scattered over a lot of desert most of the night — finding, dismantling, hauling and assembling sailplanes — and being as considerate as possible of the weary pilots. Ryan was now fourth in total points.

Despite placing first in a 167-mile triangle flight on one day and sixth the following day on a tough 400-mile *task* to Bishop and return, Ryan had climbed only to second place. He was still 100 points behind Johnson, holder of the world's 535-mile distance soaring record.

So the choral groan at El Mirage Field was real and justified.

Nevertheless, 27 of the world's best sailplane pilots assembled at the starting line. Their crews helped them squeeze into tiny cockpits — check out radios and oxygen equipment — and close the canopies. Then with six tow-planes pulling them off the landing strip at two-minute intervals, all soon were airborne. Finding a dependable air current over a hill near the field, they circled upward — out of sight except through binoculars. "Free Distance" gave them their liberty to start off from any altitude and in any direction each desired.

Soaring, despite its beauty and adventure, is nerve-racking. Imagine being towed off the ground behind a powered airplane — cutting loose at 3,000 feet — and finding your heavier-than-air machine entirely surrounded by atmosphere.

Then comes the endless search for *thermals* or other types of air currents, the pilot's only means of staying aloft. To find these invisible, upward-moving currents requires the knowledge of the meteorologist, the eye of the eagle, and a generous share of good luck.

But a soaring pilot accomplishes the incredible. From



National Soaring Champion John Ryan is hitched to the cockpit by his ground crew. Moments later his sailplane is towed, left, to start 444-mile flight.



A fleet-footed wife is invaluable to keep wing tips level at takeoff. Below, one of the contestants displays ingenuity in making minor repairs.



The National Soaring Championships were launched by the Company's 1000-gallon donation of Union Aviation Gasoline to power tow planes.

the 12,000-foot top of a *thermal*, such as those that prevail at El Mirage around midday, he may glide 25 miles slowly downward looking for "dust devils." These miniature whirlwinds are footprints of other *thermals*, sources of that all-important altitude. If a cumulus cloud appears over the desert, the sailplane will glide in a beeline to get under it, for here are moisture-laden vapors rising oftentimes at several hundred feet a minute to form the cloud. Later the pilot may be riding high-velocity winds on the leeward side of a mountain range, or following an airstream above lenticular clouds. And if other sailplanes

*Continued*







Richard Johnson holds 535-mile world's distance record.

### The Finest in Soaring—Continued

are around, he watches them to see what they have found. These man-hawks are never happy unless they're moving up.

Before noon on the seventh day, John Aldrich, on loan from the U. S. Meteorology Service in Los Angeles, had predicated *marginal* (lower margin, that is) air conditions near El Mirage but improving with distance. The pilots found this to mean a maximum 12,000 feet of lift.

To the fact that most contestants located air currents and stayed aloft until nighfall, is added the miracle of how far they flew:

Richard Schreder of Texas, who holds several national and international speed records in soaring, turned in the day's outstanding performance. He flew from El Mirage, California, across southern Nevada, to the town of Spring City in central Utah, a straight-line distance of 469 miles. Richard Johnson, the world-record holder, and Ryan both landed at Gunnison, Utah, after covering 444 miles. Seven other pilots, scattered over California, Nevada, Arizona and Utah, recorded distances in excess of 300 miles.

Typical of a sailplane pilot's fortunes, Ryan spotted what appeared to be a Utah field of grain stubble in which to land. It turned out that the field hadn't yet been harvested. So when his ground crew caught up with him, he was busy forking out \$60 to the farmer for crop damages. Not all was lost: the pilot retained second place in points, behind Johnson, and hurried back through the night to two final days of competition.

Placing twelfth and ninth in the two remaining triangle events, while Johnson slipped to twentieth in one and bounced back to first in the final race, Ryan was declared champion of the 29th U. S. National Soaring Championships. He thereby qualified as one of the U. S. pilots eligible for international competition next year.

Soaring, though classed as a sport, is linked closely with the science of aviation:

Undoubtedly the first creatures on earth, after observing birds in flight, thought what a pity that man was so poorly equipped to fly.

History suggests that Leonardo da Vinci might have been the first to do something about it. He is supposed

"string attached"



Sailplane enthusiasts recognize the Mojave Desert as one of the world's foremost soaring areas due to its thermal air currents.







"about 12,000 feet"

"it'll be warm at first"



to have invented some kind of winged machine capable of being gotten off the ground by the muscular force of a manservant. How fast and how far it flew is a good question.

Then, nearly 500 years later, several Europeans and Americans began experimenting with glider models and venturing on short flights. In Europe, Le Bris, Lilenthal and Pilcher spent years unraveling the mysteries of flight; the latter two sacrificed their lives.

In America, between 1883 and 1894, John J. Montgomery founded the science of aerodynamics. He launched his hand-made glider from a California hill in the 1880's and made the first "Free Distance" record — 600 feet. His subsequent years of aerodynamic study and experiment led to the sports-science of soaring.

Another famous glider builder was Octave Chanute, whose biplane weighed 23 pounds empty, 178 pounds with Chanute installed. Beginning in 1896, he made some 2,000 flights in America without accident.

Even the famous Wright brothers built several glider models and made nearly 1,000 flights before venturing off the ground in aviation's first successful power plane.

Prominent today among thousands fascinated by the challenges of soaring are airplane builders, aeronautical engineers, meteorologists, and many professional pilots. Soaring, they find, is still one of the best sources of new knowledge about the weather, the atmosphere, and man's continuing struggle to win his wings.

As for the part petroleum plays in encouraging these gasoline-less planes to new records, this may surprise you:

To fuel the tow-planes in this national soaring meet required around 1,000 gallons of Union Aviation Gasoline. And so grateful were the pilots for Union Oil support that ground crews always looked for "Signs of the 76" in their cross-country pursuit of sailplanes. It must have taken several thousand gallons of the *Finest* to bring Ryan and Company back from their motorless flights into the pale blue yonder.

# Dogsmanship

from Jim Boland

Dealer Ralph Storey of Broderick, California, grew a trifle weary of too frequently coming to work and finding his service station burglarized. So he thought of a good idea: installing a night watchman — a shaggy dog that would scare the devil out of any future intruders.

The dog — his name is Rex — liked the idea too. He worshiped Ralph. He caught the true spirit of Minute Man service and struck up a tail-wagging friendship with customers. And when closing time arrived, he obligingly took up sentry duty behind the station's iron gates.

Not long after Rex had taken the job, his master arrived at the station to discover evidence of another burglary. The place had been forcibly entered. Quite a few items of value were missing. Even the dogged dog was gone.

"Oh, well," the owner must have thought, "it's getting so you can't even trust a dog these days."

Maybe he was underestimating Rex. Late that afternoon the dog — tired, shaggier than ever, and walking with an apologetic tail — came back and rested his chin on Ralph's knee. Anybody else would have been full of alibis: "I mistook 'em for customers. They slugged me. I chased 'em out of the state."

Not Rex. His honest eyes simply said: "I like people. I even like burglars. But I like my master best of all."

"What a mutt!" Ralph replied.

*photo courtesy of Sacramento Bee*

Rex and Ralph Storey







Yesterday: Mission La Purisima, "Housing development" of 175 years ago, is a few miles from newer development on Union Oil land: Vandenberg Village.

## Land at work:



Today: The Village Country Club at Vandenberg Village is part of "one of the largest master-planned communities in U. S."



# Vandenberg Village

The low adobe and tile buildings of the La Purisima mission are shielded from the west wind by a brush covered ridge. An old hand-made plow is waiting in the fields. There are grain and hides in the store room; a sheepskin choir book of Gregorian chants is open on a rough table beside an unlit candle.

About six miles away in distance but 175 years in time is Vandenberg Air Force Base, where the only chant is a countdown for a missile or for a satellite headed into Polar orbit.

Around the two are thousands of acres of Union Oil land: the Rancho La Purisima Concepcion. And between them a town is being built on lands that until recently were almost as primitive as when the padres walked them.

It's called Vandenberg Village. Today, nearly 1,000 homes are occupied or under construction; a Minute Man Station, a shopping center, a golf course, and a magnificent motel have been built. Ultimately, about 10,000 homes will be spread over land where cattle, manzanita, scrub oak, and oil wells were once the principal "crops."

Vandenberg Village and the change in the Rancho La Purisima are one example of how Union Oil is making profitable use of the more than 58,000 acres of land — exclusive of marketing properties — it owns in California. The Properties Administration Department is custodian of the lands, charged with converting those acres into productive assets.

Like the Purisima, much of the Company's property was bought years ago as oil and gas land — we acquired the Purisima itself in 1903. (The mission was deeded to the County of Santa Barbara in 1933. It is now a state historical monument.) Santa Maria to the north and Lompoc on the southern edge of the Rancho are the nearest large towns. Both, back in 1903, were quiet agricultural communities.

Santa Maria and Lompoc are still agricultural and oil

centers; but the great immigration that has made California the most populous state in the nation has affected them, too. Specifically, people have poured in to work at Vandenberg Air Base, or to serve those who do.

The Utah Mining and Construction Company saw the possibilities for a planned city on the Purisima, only a few miles from Vandenberg. Working with Properties Administration, their idea has become reality in what the Home Builders Journal calls, "one of the largest master-planned communities in the United States": Vandenberg Village.

When completed the Village will include — in addition to the homes, the shopping center, and motel — a high school, six elementary schools, apartments, a research center, and a medical center.

Farther south, in Orange County (a few miles east of Los Angeles), Properties Administration is taking another approach to enhancing the value of Company lands.

Union Oil owns 4,000 acres in Orange County, the fastest growing section of burgeoning Southern California. Those acres are right in the path of the population growth. Several years ago, Properties Administration commissioned a consultant to prepare a proposed "master land-use plan" for the area.

The consultant's recommendations envision converting the acres into a well-balanced community with industrial, commercial, residential, and recreational areas. The plan, now under study by county officials, considers the use of the land today, tomorrow, and even 15 to 25 years hence.

The fortunate part about such land development programs as these is that we can eat our cake and have it too. Over the years, we've learned to drill for oil and to produce it so inconspicuously that we can continue to take crude oil and gas from under the ground while people live, work, and play on top.

Edwin Sperber's station in the Village is right across the street from the new shopping center; motel is to the right, just outside photo. Station gets Village trade plus traffic along highway to air force base.





## **FROM AN ILL WIND, PURE SULFUR!**



The construction at Oleum Refinery in 1955 of a combination Unifining-Reforming Unit solved an important problem—and created one.

Faced with a growing demand for high-quality gasoline, the Company's refining experts decided upon *reforming* as the best means of making a finer gasoline from each barrel of crude. The Reformer they chose uses an expensive platinum catalyst in the process of upgrading low quality gasoline stocks. However, the platinum catalyst is quickly poisoned, made useless, by the presence of sulfur in the feed stock. Therefore, Union Oil's own Unifining process, which effectively removes sulfur and nitrogen from refining stocks, was installed as an essential prior processing step to Reforming.

The new problem created was this: a by-product of Unifining, and of other processes as well, is a sulfur-laden gas. It can be and often is used as a refinery fuel. But in Oleum's case, such an economical disposal method suggested future trouble.

Because of the proximity of our neighbors in Rodeo, a small community a mile from the refinery, and other communities in the nearby area of San Pablo Bay, Oleum's people wanted no objectionable waste products to be emitted to the atmosphere. They preferred to merit the reputation of being good neighbors.

The result was another new facility — the Sulfur Plant. It was designed to remove the sulfur from gases produced by Unifining as well as the sulfur from other

sources throughout the refinery. (We have similar installations at Los Angeles and Santa Maria Refineries.)

After the sulfur extraction process step, refinery fuel gases are burned without smoke or offensive odor. The sulfur, isolated in its molten state at a temperature of 280°F, is sold and shipped as a liquid to nearby chemical manufacturers.

At the outset, Oleum's Sulfur Plant was not expected to be a profitable operation. Its purpose was to keep the refinery atmosphere clean and its good-neighbor reputation spotless.

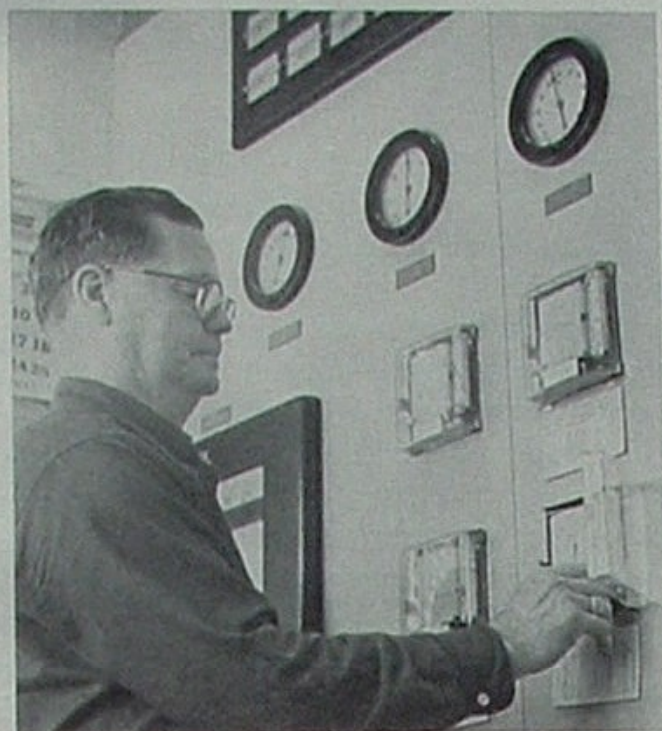
As is true of most operations in the competitive refining game, good heads and hands remained alert toward economies. Reductions in maintenance costs, improvements in operating efficiency, and increased thruputs have reduced unit operating costs. As of today, 1962, sulfur recovery is a breakeven operation or perhaps slightly on the profit side of the ledger.

An important factor in this accomplishment is the quality of sulfur produced here. Today sulfur is in demand at chemical plants at prices ranging from about \$12 to \$25 a ton, depending on the product's purity. The Oleum product, averaging about 50 tons per day and rated as 99.9% pure sulfur, attracts one of the highest market prices.

In summary, our refinery people have converted a potential atmospheric liability into a useful product and an asset—the *Finest* sulfur.



Two of the men making sulfur to insure pure air at Oleum Refinery are Operator Lloyd Dudgeon, left, and Foreman N. A. Richaud. Their interest here is centered on sulfur awaiting shipment.

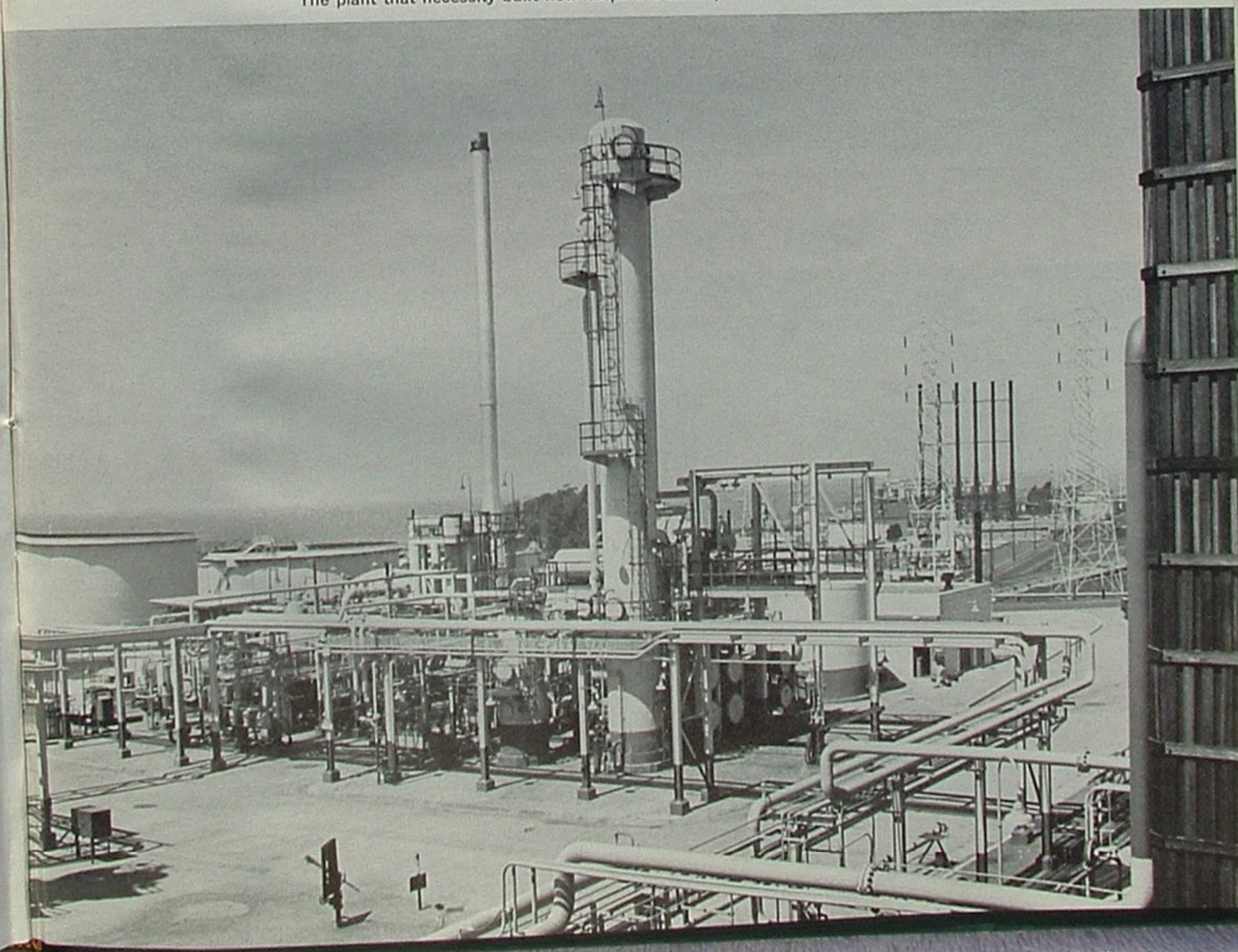


With the help of instrumentation, Operator Dudgeon staffs the plant for eight hours.



The high-quality product is moved to market via insulated truck @ 280° F.

The plant that necessity built now keeps the atmosphere clean while making 50 tons daily of sulfur.





# BUSINESS HIGHLIGHTS

## CATS HAVE NINE LIVES; OIL FIELDS CAN HAVE AT LEAST TWO

Here, in California, where new large oil fields now come few and far between, a great deal of attention is being paid to "secondary recovery." Cats have nine lives; secondary recovery methods give oil fields at least two.

The idea behind secondary recovery is this:

It takes energy to push oil out of an underground reservoir into a well and up to the top of the ground. (Often, a reservoir has only enough energy to move the oil into the well bore. When this happens, the oil is pumped to the top.) Sometimes that energy is provided by expanding gas in the reservoir; sometimes the energy comes from the driving force of water.

The amount of oil a reservoir's own energy will produce is called "primary recovery."

Secondary recovery is the *additional* oil you get if somehow or

other you can either add new energy to a reservoir or slow down the rate at which it loses its own natural push.

Good secondary recovery practices can double the amount of oil we recover from some reservoirs—just like finding an entire new oil field.

Today, engineers start their reservoir studies right from the time a field is first developed.

To give you a feeling for the degree of our interest in secondary recovery:

The Company participates in sixty-six active secondary recovery projects, where we are supplementing natural reservoir energy by injecting gas or water. Thirty-three of these projects are Company operated.

During 1962, four new projects were started. Eighteen projects are in active planning and completion stages. Work will be started on six more in the near future.

We are engaged in a review of

existing waterfloods in the Pacific Coast Division, in an effort to improve performance.

It is expected that improved techniques will result in substantial production increases.

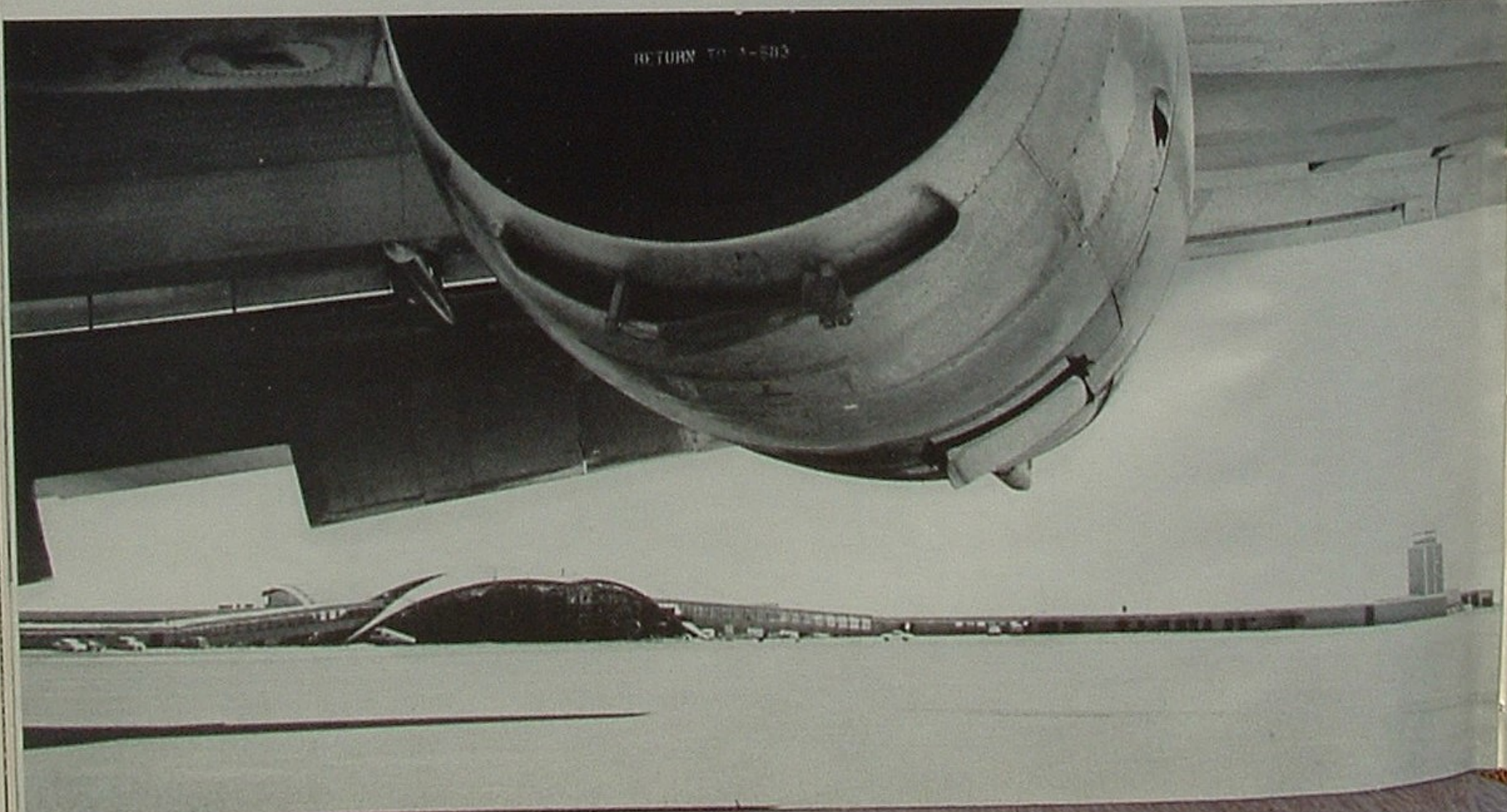
The Central Division's waterflood project in the South Caprock Queen Field, Chaves County, New Mexico, is responding; eleven wells have been stimulated and production is increasing rapidly. The production rate is about 400 barrels per day more than the predicted primary recovery rate.

The Glacier Division's Cut Bank Field will be under secondary recovery next year, and is expected to net out an additional 7,500,000 barrels of oil.

## WE'RE A MAJOR ASPHALT PRODUCER

Union Oil is one of the major asphalt producers of the West Coast. We produce asphalt at our Los Angeles, Orcutt, Oleum, and Edmonds refineries giving us ex-

Modernized McCarran Field at Las Vegas is surfaced with Union Asphalt.





tensive coverage in California, Oregon, Washington, and Arizona. Thousands of tons of asphalt are produced and shipped from these refineries each month for road, parking lot and airfield paving and for roofing.

While it is true that all asphalt looks black, many different grades are needed to meet the requirements in paving and roofing applications. Our refineries currently supply a total of 27 different grades of asphalt as regular products. Many additional grades are produced as special products to meet specific demands.

With so many different asphalt

grades, production scheduling and product quality control are major considerations. By careful operation, however, we have established an excellent reputation for consistently meeting customer requirements with high quality products.

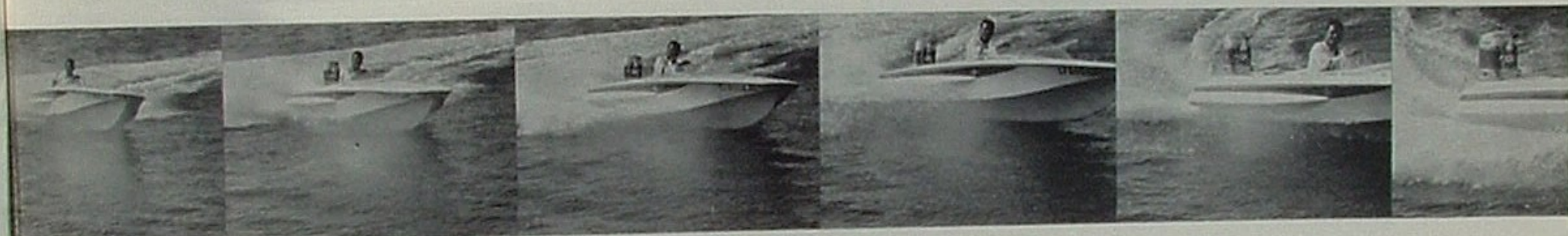
#### REFINERY MEN ARE PROBLEM-SOLVERS

The people at Santa Maria Refinery have been annoyed by the formation of small hard granular coke commonly referred to as "buckshot" coke. This coke is not as marketable as the normal "sponge" coke. It requires more energy to pulverize before it can be

further processed by our customers.

With the cooperation of the Pipeline Department in blending the crude oils and other feed stocks to the Santa Maria Refinery it has been possible to minimize the production of the "buckshot" coke, and at the same time increase the flexibility of the coking plant with respect to its ability to handle a varied slate of raw materials.

Test runs which led to these good results were planned in such a way that the benefits of the runs were almost immediately realized in allowing a more flexible utilization of raw materials.



#### MANUFACTURERS OF OUTBOARD ENGINES OKAY OUR FUEL AND OIL

Special test engines churned the waters of Newport Bay for over a year during the development of new, improved Union Outboard Motor Oil and 76 Outboard Fuel. Peak performance plus added engine protection provided by these products will enhance their already established reputation for keeping pace with customers' needs.

And those needs have grown! In fact, growth of pleasure boating has been phenomenal. Nationwide, the number of outboards in use has more than doubled during the last ten years—from less than 3 million to more than 6 million — with a large proportion of this increased market centered in our Western recreational areas.

Engines have grown up, too. Ten

years ago the average horsepower of outboards was less than 7; today the average is close to 30 hp, with many engines rated at 100 hp. The result has been a continuous demand for better fuels and lubricants.

Engine manufacturers, as well as the boating public, recognize our products as "The Finest" in meeting this demand. Based on the results of rugged performance tests, McCulloch Corporation, makers of the widely known Scott engine, have endorsed new Union Outboard Motor Oil; and 76 Outboard Fuel is the first and only pre-mixed fuel on the West Coast to receive Kiekhaefer Corporation's approval for use in its Mercury engines.

Union Outboard Motor Oil and 76 Outboard fuel are today helping to insure our continued, profitable participation in the "boating boom."

#### DEFENSE CONTRACTS: JET FUEL BY THE MILLIONS OF GALLONS

The Company was awarded several major contracts for JP-4 and JP-5 jet fuel by the Defense Petroleum Supply Center for the six months ending March 31, 1963.

(JP-4 is the "work horse" fuel used by most land based planes. JP-5 is known as a "safety fuel" because of its higher flash point. Generally, it is used by carrier-based planes.)

The contracts cover 17,052,000 gallons of Jet Fuel JP-5 for delivery from Los Angeles Refinery; 57,330 gallons of Jet Fuel JP-4 for delivery from Oleum Refinery; 882,000 gallons of Jet Fuel JP-4 for delivery from Cutbank; and 825,000 barrels of bunker fuel oil for delivery from Los Angeles and Oleum.

*Continued*





DISCUSSING PLANS for Union Oil sponsorship of University of Washington football games broadcasts are (left to right) T. R. McGilliard, sales manager retail for western Washington; Jim Owens, director of athletics at the University; T. S. Argyle, merchandising manager; and Earl Reilly, manager of radio station KING.

### COMPUTER SHOWS HOW TO GET IT THERE AT LOWEST COST

The Marketing Department has called on one of the "black boxes" to help them cut the delivery costs of refined products from refineries to terminals and marketing stations.

Freight rates from shipping point to destination for tanker, barge, pipeline, tank car and truck are placed in the computer's memory, together with costs for wharfage, loading and unloading, terminaling, and many other items of operations. The machine compares one transportation route with another until the lowest cost route is found, thus providing accurate answers quickly.

Like any other machine, the "black box" can't think, so the knowledgeable people in Marketing Transportation do the thinking and make sure the machine comes up with the right answers.

### ADVERTISING PLANS . . .

Several fall advertising programs, geared to local areas, are scheduled for this year and others are in development.

In Seattle, the Company is sponsoring over radio all football and basketball games of the University of Washington. Throughout Oregon, the Company is sponsoring similar sports events of Oregon State University. In San Diego, for the first time, we are a sponsor of the San Diego Chargers professional football team throughout its 18-game season. In the Bay area and in Los Angeles, the Company is again the sole television sponsor of the San Francisco Seals and the Los Angeles Blades hockey teams.

### A FEW OF OUR NEW, LARGER ACCOUNTS . . .

For the year starting August 1, we have been awarded the diesel requirements of the Alaska Railroad amounting to approximately 4,000,000 gallons. On this very close Military Procurement Supply Agency bid, we also gained an additional 2,200,000 gallons of petroleum products which will be delivered to numerous locations throughout the State.

We were also successful in our bid covering the gasoline business for the City and County of Honolulu and State of Hawaii for the islands of Oahu and Maui. The period covered is the fiscal year starting July 1, 1962, and award covers a total of 2,215,000 gallons.

The City of Los Angeles Department of Water and Power has awarded us a 1,000,000 barrel order for fuel oil to be delivered to its Harbor and Scattergood steam plants during the balance of 1962 and the first four months of 1963.

This quantity of fuel oil would provide a city the size of Pasadena, California, with sufficient energy to develop its average electric power requirements for a period of about one year and five months!

### ECHOES OF THE SEATTLE WORLD'S FAIR: CHEVRON DEALERS, YET, 2,000,000TH 76 SKYRIDER

A few days before the Seattle World's Fair closed its doors, Sales Manager Ted McGilliard welcomed

The 2,000,000th 76 Sky rider, Darrell Scott Fletcher and his parents, Mr. and Mrs. Bert Fletcher of Port Angeles, Washington.



BECAUSE OF ITS COLOR, we call our new 76 Uniflame Heating Oil the "amazing BLONDE heating oil." Taking the description literally, Consignee R. L. (Bob) Franklin, Jr. of Caldwell, Idaho, hired two lovely blonde models to hand out a 76 Uniflame pamphlet in the downtown section of Caldwell. Blondes or blonde oil, someone made a sale; and here with heating oil customer D. E. Anders (center) are Bob and his models.

the 2,000,000th visitor to take a trip on the 76 Skyride.

A youngster, Darrell Scott Fletcher had ticket No. 2,000,000—and created a small problem for papa, Bert Fletcher. Among the gifts the Fletchers received was a \$20 book of 76 Autoscript—and Bert is a Chevron dealer in Port Angeles.

Incidentally, the "Chevron Dealer wins Union Oil awards" angle brought the story a wonderful play in the papers, and all four Seattle TV channels covered the event not once, but twice!







**UNION BUILDS FIRST ALL-PLYWOOD STATION:** The handsome Type 300 station in the picture above is operated by John Woltz in Libby, Montana. Libby is the heart of the state's lumbering industry; so instead of the usual steel building, Woltz's station is built of plywood — the first time we've used the material in a major station. (That's John at the rear of the car). Woltz reports that sales are good; and that the 76 Outboard Fuel sign is particularly important to him: lumbermen buy the fuel for their chain saws.

#### NEW CARDBOARD "CANS" ARE STRONGER, COST LESS

Noticed anything different about our motor oil cans lately? Well, our oil now comes packaged in fibre instead of metal. Yes, our Company is one of the first in the industry to make this change—and for some very good reasons.

First of all, it's a stronger can, proved by both impact and drop tests. This is due to the construction of the can which consists of

overlapping layers of paper backed aluminum foil and paperboard stock, spiral wound from continuous rolls.

Secondly, the ruggedness of the fibre can has greatly reduced the number of "leakers" reported by our terminals, marketing stations and service stations. In addition, the "filling" operations have been running smoother than ever. Logically enough, the noise level when "running" the cans is down appreciably, with an attendant reduction in personnel fatigue.

If the above reasons aren't enough, the reduced cost really puts the frosting on the cake! Seven mills per can doesn't sound like much money, but when you are talking about buying twenty million cans per year, it quickly adds up to annual savings of \$140,000.00.

Next time your Minute Man "adds a quart," ask him to show you the can. The beautiful appearance is still there, but if you look closely you will probably be able to see that your oil came from a fibre can—and for some very good reasons.

#### A BOUQUET FOR PAUL BENEFIELD OF WINSLOW, ARIZONA

The morning's mail brought this letter. There's nothing we could

add to the story it tells, so we pass it along to you just as it was written by Mrs. R. E. Land of Sulphur, Louisiana.

"This is just a word of appreciation and commendation for your station attendant at Paul's (Paul E. Benefield's) Union Station, 300 E. Second Street, Winslow, Arizona.

"On July 3 we stopped at the station for gasoline and a car check; a woman companion and I were making a tour through the West. The attendant in charge, whose name I do not know, informed me that I had two tires leaking.

"I must admit that, inasmuch as I had just overheard him make almost the same statement to some other tourists, I was a bit skeptical and was inclined to think that maybe they were just a bit low. He insisted, however, on testing the tires, saying that he would not like to see two women out on the desert alone with a flat tire in the heat and that, besides, we might have an accident. When he checked the two tires he found that, indeed, they were going flat; we had picked up some glass at the Grand Canyon.

"This attendant worked through his lunch hour in order to put us back on the road as quickly as possible. Had it not been for his insistence on doing a good job, we might have had a serious accident."

*Continued*



**IT WAS GOLD WATCH DAY:** Experience was honored at Los Angeles Refinery recently when 25, 30, 35, and 40 years employees were guests at a luncheon. Above are the host, a few guests, and the 30-year men who received their anniversary watches. Left to right: Ray Cook, President; A. C. Rubel, Ray Hill, Roy Muncy, Senior Vice President; Fred L. Hartley, Max Parkin, Vice President; John Towler, Guy Taylor, Wilbur Crane, Refinery Manager John Hopkins.





Jack Bateman

#### NOTICE: EASY MONEY FOR DEALERS AND COMPANY STATION EMPLOYEES WHO PICK UP "WANTED" CARDS

Jack Bateman of the Company operated station in Saugus, California, earned himself a worthwhile bonus for one month recently by picking up two credit cards that were on the "wanted" list for the month.

In case you've forgotten, the Company awards \$20 to any dealer, dealer's employee, or company-operated station employee who turns in a credit card that appears on the current pickup list.

Bateman picked up two cards—and two \$20 checks—in one month, then turned around and picked up another card and another check the next month. That's \$60 he earned in six weeks.

Anyone for easy money?

#### GASOLINE CONTEST WINNER

Each month, the California South Coastal Division, runs a contest to see which employee-operated station can show the highest gallonage gain over its goal for the month. There's a monthly trophy *and* a perpetual trophy that goes to the station which shows the



**THREE THOUSAND-DOLLAR-A-MONTH SALESMEN:** The two young men in the center of this group — John Larson (in white shirt) and Robert Locke — are holding trophies for outstanding salesmanship, and they were earned! In a single month, Larson sold \$3,325.46 worth of merchandise while Locke sold \$3,036.72. The men who made the presentation are, at left, Division Sales Manager Ned Kendall and, right, Area Sales Manager Jack Cowie. As a sidelight: for awhile Larson and Locke were both working at the same station; but Cowie decided to give the boys a little more potential to work with — and reduce the direct competition — by assigning them to separate units,

greatest gain six months running.

Manager Dick Lucas and his boys at the station in Saugus, California, seem to have a corner on the perpetual trophy. They won it for the first half of 1962, averaging about 7,000 gallons a month over goal. Just to prove it wasn't an accident, they're now averaging 12,500 a month over goal; and it looks as though they'll add another cup to their collection when the last six months' figures are in.

The "how" behind their gains, according to Lucas, is nothing but hard work and smart operation. As the important items, he listed "enthusiasm, attitude, fast pump island procedure; free services such as emptying ash trays and washing the inside of windows; special free road service; keeping the station clean; and merchandising methods."

#### FRASER WINS TOURNAMENT

John Fraser, whose job it is to see we get lots of oil and gas out



John Fraser



Ken Davidson

of the ground, and Ken Davidson, whose job it is to drum up sales of the stuff through service stations, took the top honors at the Company's 36th annual golf tournament. Fraser shot a gross 73 to win the 1962 championship; (Earl Lash of Marketing, last year's champion, was runner-up with a 74.) Davidson came in with an 89-24-65 to take the Triton Trophy for low net.

Other winners: Century Handicap for closest to par: Phil Cook, Production, with a net 72. The Bull Thrower's Trophy, which has nothing to do with golfing ability, was awarded to Ed Sands of the Gulf Coast Division.

The gasoline sales champs of Saugus, California. (Left to right): Retail Sales Supervisor Bob Burnham, Manager Dick Lucas, Dave Henniger, Jack Bateman, Fred Davidson, John Miller and Ron Thompson.





For the past few months—since we published an institutional advertisement telling about our experience with "The Living Constitution" album—we have received a great deal of mail from people who seemed honestly concerned about their American heritage.

One of the letters came from Frank Iszak, a man who has seen the other side of the coin: what happens when the individual has no personal rights, when "people live in fear, without belief in moral and spiritual values."

Iszak, a chemical engineer, lives in San Francisco. His is a sobering letter. It was addressed to the President, Union Oil Company of California.

## A comment on "The Living Constitution" from a man who is qualified to speak

I read your company's full page advertisement regarding the U. S. Constitution in the TIME magazine. I have to congratulate you from the depth of my heart.

You are doing a great and tremendous public service; maybe far greater than you realize,

What makes me to feel so "qualified" to say so?

I escaped from Hungary in July 1956, by hi-jacking an airliner with six other Hungarians. (Incidentally this escape "made" the TIME, in its July 16, 1956 issue).

Within a few weeks—from today I hope—I will receive a great honor: I will become a citizen of the United States of America.

I will be a citizen of the country which gave me everything, what I could only dream of before:

Freedom instead of oppression

Opportunity and not phony "security"

Liberty and not forceful regimentation

Belief in moral and spiritual values instead of the fear.

Because this country does, what no country on earth ever achieved yet: it DIGNIFIES the man.

And why is this country that way?

Because our forefathers wrote the Constitution, what I believe to be the greatest milestone in human history.

And no matter how modern we get, no matter how complex our society becomes, no matter how deeply we penetrate the space and the micro-world of atoms, no matter that some politicians, so-called "authorities" call it outdated; we can only maintain the dignity of human being, and survive as people living in freedom as long as we do believe in the Constitution, cherish it, practice it.

These days, when our very existence is so seriously threatened—Sir, believe me, I know from experience and it is terrifying—when a deadly IDEOLOGICAL WAR is waged to destroy the very principles of the American way of life, then your service contributes more to our survival, than dozens of Nike Zeus missiles or H-bombs (which are also necessary, though).

God bless your work.

\* \* \* \* \*



FRANK IZAK



## EMPLOYEES

### September, 1962

**20 YEARS**  
FERDINAND VILLIEN.....Expl. & Prod.—Gulf Coast

**10 YEARS**  
JOHN I. SORENSEN.....Expl. & Prod.—Pac. Coast

### October, 1962

**45 YEARS**  
LUTHER M. CARIKER.....Field—Pac. Coast, So.

**40 YEARS**  
HAROLD M. COLE.....Pipeline—So. Div.  
CLARENCE PEDERSEN.....Oleum Refinery

**35 YEARS**  
CLYDE S. BERNHARDT.....L. A. Refinery  
JOHN V. DAHLGREN.....Oleum Refinery  
LESLIE J. SILVA.....Oleum Refinery  
JOHN TAYLOR.....L. A. Refinery  
CALVIN C. WISE.....Oleum Refinery

**30 YEARS**  
CLAUDE FIDDLER.....Mktg., Calif. So. Cstal.  
RAYMOND F. LABORY.....Mktg., Distribution-Trnsp.  
JAMES I. ROBINSON.....Mktg., Calif. No. Cstal.  
EDWIN P. WOOTTEN, JR.....Mktg., Calif. So. Cstal.

**25 YEARS**  
ESTHER L. AUSTIN.....Refining and Mktg. Accts.  
LEONARD E. DAVIS.....Legal—Tax Div.  
EDWIN R. HARDY.....Compt., Auditing Fld. & Trnsp.  
THOMAS R. JONES, JR.....Compt., Data Processing

**20 YEARS**  
ADOLPH B. BERTELSON.....Cut Bank Refinery  
EARL T. BOWES.....Oleum Refinery  
MARGARET M. CARGO.....Oleum Refinery  
LUCILLE S. CORBETTA.....Oleum Refinery  
LOUIS T. CRIVELLI.....L. A. Refinery  
LUCILE E. DICKASON.....Pipeline—H. O.  
JESSE A. MIMMS.....Mktg., Calif. No. Cstal.  
JOHN P. ST. CLAIR.....Oleum Refinery  
IVAN M. SEAL.....Santa Maria Refinery  
GEORGE W. SELLMAN.....Mktg., Calif. Central  
DAVIS A. SKINNER.....Research  
JOHN C. SKYKO.....L. A. Refinery

**15 YEARS**  
LESTER A. BURDICK.....Field—Pac. Coast, No.  
RALPH W. CHAPIN.....L. A. Refinery  
ROY HARRIS DELAY.....L. A. Refinery  
JOHN C. GIBBS, JR.....Oleum Refinery  
JAMES B. KELLY.....L. A. Refinery  
MARTIN C. KNUTSON.....L. A. Refinery  
RONALD B. McDONALD.....L. A. Refinery  
GEORGE PENNY.....Field—Pac. Coast, No.  
H. SCHLOTTHAUER.....E & P, Pac. Cst., Geol.  
VERNON E. WELTZ.....Mktg., Calif. No. Cstal.  
ROBERT A. WILLIAMS.....L. A. Refinery  
WALTER C. WORON.....L. A. Refinery

**10 YEARS**  
GRANT L. ADKINS, JR.....Central Div., Land  
JOSEPH BLUM.....Mktg., Calif. So. Cstal.  
R. L. BRADFIELD.....L. A. Refinery  
GRACE M. BRUBAKER.....Mktg., H. O.  
RUSSELL D. CHAMPLIN.....Field—Pac. Coast, No.  
WM. E. CHRISTENSEN.....Field—Pac. Coast, So.  
EARL DAWSON, JR.....L. A. Refinery  
FRANK F. DUFFY.....L. A. Refinery  
LOUISE F. ENGLISH.....E & P, Pac. Coast, Land  
ROBERT FARMER.....Mktg., Calif. No. Cstal.  
GENEVA L. FLETCHER.....Credit Card Accounts  
JOHN FLYNN.....Compt., Data Processing  
GEORGE J. GORDON.....L. A. Refinery  
STANLEY L. ISLE.....Field—Pac. Coast, No.  
STEPHEN T. KOSTECKE.....Mktg., Distribution—Trnsp.  
LEONARD L. LEWIS.....Oleum Refinery  
H. H. LIEWALD.....Mktg., Calif. No. Cstal.  
PEARL PACE.....Refining & Marketing Accts.  
N. I. PFISTERER.....Credit Card Accounts  
GORDON B. POUCHER.....Research  
JAMES E. RAMSEY.....Mktg., Calif. No. Cstal.  
E. R. RASMUSSEN.....Oleum Refinery  
LOUIS M. RITCHIE.....L. A. Refinery  
HAROLD W. RODGES.....E & P, Pac. Coast, Land  
PAUL F. SCHWAB, JR.....Mktg., S. W. Mtn. Div.

## SERVICE



BRYCE H. SCRIVNER.....L. A. Refinery  
DONALD SOLBERG.....Compt., Pyrl & Ben. Pl. Accts.  
LAWRENCE F. SPRAGUE.....Field—Pac. Coast, No.  
WALTER J. STERN.....L. A. Refinery  
JOHNNY TASOS.....L. A. Refinery  
LLOYD F. THOMPSON.....Field—Pac. Coast, No.  
ALEXANDER J. WILSON.....Oleum Refinery  
DELMAR L. WOODWORTH.....L. A. Refinery  
A. L. WOOLVERTON.....L. A. Refinery  
NICK M. ZANKIE.....L. A. Refinery

### November, 1962

**40 YEARS**  
HENRY F. BARNES.....Expl. & Prod.—Pac. Coast  
HUBERT H. LEESON.....Expl. & Prod.—Pac. Coast  
MARVIN PUTNAM.....Refining & Mktg.—H.O.

**35 YEARS**  
JOHN A. PETERSON.....Pipeline—So. Division  
HARRY D. SANDERS.....Pipeline—No. Division

**30 YEARS**  
WILLIAM E. ADAMS.....Oleum Refinery  
NORMA E. CARMICHAEL.....Mktg.—Calif. So. Cstal.  
GEORGE S. LEE.....Expl. & Prod.—Pac. Coast  
ERNEST M. PARKIN.....L. A. Refinery

**25 YEARS**  
CHARLES J. FLANAGAN.....Mktg.—Northwest Div.  
GORDON F. OTTEWELL.....Mktg.—Calif. No. Cstal.  
CECIL H. TURNER.....Mktg.—Oregon Div.

**20 YEARS**  
SHERMAN DITCH.....Expl. & Prod.—Gulf Coast  
PEARL K. ESTRADA.....Oleum Refinery  
THOMAS K. HARGRAVE.....L. A. Refinery  
DELBERT E. LINCOLN.....Oleum Refinery  
WALTER J. McADAM.....Expl. & Prod.—Glacier Div.  
HELEN M. NORTHUP.....L. A. Refinery

**15 YEARS**  
PAUL D. ANDERSON.....L. A. Refinery  
GERALD BEARDEN.....Refining & Mktg.—H.O.  
JAMES BUNN.....Refining & Mktg.—H.O.  
LEONARD E. COFFMAN.....L. A. Refinery  
ALDEN V. DONATONI.....Mktg.—Northwest Div.  
JAMES W. EDDY.....Expl. & Prod.—H.O.  
NORMA F. GAVETTE.....Oleum Refinery  
JACK N. GEORGE.....Expl. & Prod.—Central  
ABRAHAM P. IONA.....Mktg.—Hawaii Div.  
DONALD A. JORDAN.....Expl. & Prod.—H.O.  
GLEN J. KNOLLS.....Oleum Refinery  
JAMES D. McQUILLIN.....L. A. Refinery  
MARJORIE REAGAN.....Refining & Mktg.—H.O.  
C. KIP RICHARDSON.....L. A. Refinery  
CHAMEL E. ROBERTSON.....L. A. Refinery  
THOMAS G. ROSCOE.....L. A. Refinery  
MAX B. SOUTHWICK.....L. A. Refinery  
JOE E. TROWELL.....L. A. Refinery  
RAOUL P. VAELL.....Research

**10 YEARS**  
ROBERT L. BRENNAN.....Pipeline—No. Div.  
AUDREY T. BROUSSARD.....Expl. & Prod.—Gulf Coast  
ROBERT J. CEBALLOS.....Oleum Refinery

HERBERT GARFIN.....L. A. Refinery  
DAVID N. GEIGER.....L. A. Refinery  
GEORGE W. GOBLE.....Mktg.—Oregon Div.  
WESLEY B. HAGUE.....Oleum Refinery  
JOHN D. KENNON.....Mktg.—Calif. So. Cstal.  
JAY D. KRIENS.....Expl. & Prod.—Pac. Coast  
JOE LOVITTO.....L. A. Refinery  
EDWARD J. MAHER.....L. A. Refinery  
DONALD D. MARTIN.....Expl. & Prod.—Pac. Coast  
ROBERT J. MORTON.....Expl. & Prod.—Gulf Coast  
R. C. NICODEMUS.....L. A. Refinery  
EDWARD OSTER.....Pipeline—No. Div.  
OREN V. OWEN.....Comptroller's—H.O.  
EARL R. SANSON.....L. A. Refinery  
CHARLES F. SMITH.....L. A. Refinery  
OLIVER J. STEPP.....L. A. Refinery  
GEORGE J. TATE.....Expl. & Prod.—Pac. Coast  
FLOYD T. THURMAN.....L. A. Refinery  
PETE A. TOLMASOFF.....L. A. Refinery  
J. E. VANDEMOORTEL.....L. A. Refinery  
IVA K. WARMAN.....Mktg.—Calif. So. Cstal.  
IRVING D. WEBB.....Research  
E. M. WILLIAMSON.....L. A. Refinery  
DANIEL E. WOODCOCK.....L. A. Refinery  
HOWARD N. YOUNG.....Expl. & Prod.—Pac. Coast

### December, 1962

**40 YEARS**  
ROBERT FOWLER.....Expl. & Prod.—Pac. Coast  
THOMAS O. M. JONES.....L. A. Refinery  
LESLIE B. SLAUTER.....Expl. & Prod.—Pac. Coast

**35 YEARS**  
IGNACIO H. GARNER.....Pipeline—No. Div.  
ARTHUR A. MARCOS.....Oleum Refinery  
ELISE VAN NESS.....Comptroller's—H.O.

**25 YEARS**  
RUSSELL D. HANES.....Expl. & Prod.—H.O.  
HARRY A. SMITH.....Oleum Refinery  
R. O. SNODGRASS.....Mktg.—Northwest Div.

**20 YEARS**  
WILLIAM P. FLOYD.....Mktg.—Calif. No. Cstal.  
JOYCE A. GORDON.....Expl. & Prod.—Pac. Coast  
DAVID W. SALMON.....Expl. & Prod.—Pac. Coast  
EMIL M. SCHMIDT.....Expl. & Prod.—Pac. Coast  
ANTONE SOUZA.....Oleum Refinery

**15 YEARS**  
RAYMOND BARTLETT.....Comp.—Pay. & Ben. Plans  
JAMES F. BOLAND.....Mktg.—Calif. Central Div.  
VAUGHN E. CONNOLLY.....Mktg.—Calif. So. Cstal.  
BETTY COX.....Executive  
MARION DRAKE.....Medical—H.O.  
MILTON E. EPPERSON.....Expl. & Prod.—Pac. Coast  
WILLIAM P. FIELD.....L. A. Refinery  
WARREN FOREMAN.....Refining & Mktg.—H.O.  
CARL ERIK HEDBERG.....Research  
ELWOOD L. HISEY.....Expl. & Prod.—Central Div.  
MERRILL M. HUNTOON.....Expl. & Prod.—Pac. Coast

ARTHUR D. KUTZ, JR.....Expl. & Prod.—Gulf Coast  
WALTER R. LOSIER.....L. A. Refinery  
JACK LUTHER.....Expl. & Prod.—Aud. Div.  
ANN L. MORGAN.....Mktg.—Calif. No. Cstal.  
HELEN M. NICHOLS.....Expl. & Prod.—Central Div.  
LLOYD N. SLUYTER.....L. A. Refinery  
ORA A. WILLET.....Expl. & Prod.—Foreign Div.

**10 YEARS**  
RICHARD CAMERON.....Mktg.—Calif. So. Cstal.  
EARL DANIELS.....Mktg.—Calif. So. Cstal.  
FRANK I. DAVIES.....Mktg.—Calif. So. Cstal.  
ROBERT E. ELLIOTT.....Research  
BENJAMIN M. ELMS.....Expl. & Prod.—Gulf Coast  
OSCAR C. EUBANK.....Research  
JAMES L. HARGER.....L. A. Refinery  
MELVIN HURST.....Expl. & Prod.—H.O.  
LOUIS R. JACQUES.....Oleum Refinery  
R. L. LAUENSTEIN, JR.....Expl. & Prod.—Pac. Coast  
CLYDE E. LEACH.....Expl. & Prod.—Pac. Coast  
GERALD E. MARRALL.....Expl. & Prod.—Foreign Div.  
RUDOLPH F. PRINZ.....Eng. & Const.—H.O.  
ERNEST J. SCHMIDT.....Mktg.—Calif. So. Cstal.  
RUSSELL K. SEARLES.....L. A. Refinery  
STANLEY SUTTON.....L. A. Refinery  
DELBERT E. WALRATH.....Pipeline—No. Div.



## DEALERS

### October, 1962

**40 YEARS**  
CHESTER HEATH.....Pasadena, California

**25 YEARS**  
DAVE GUSTAFSON.....North Hollywood, California  
HIGHWAY GARAGE, LTD.....Pearl City, Hawaii  
JOHN A. WISE.....East Nicolaus, California

**20 YEARS**  
WALTER LEAKE.....Long Beach, California  
JOHN A. PETROUS.....Honolulu, Hawaii

**15 YEARS**  
JOHN BALCH.....Los Angeles, California  
M. B. HICKCOX, JR.....Solano Beach, California  
FRANK HUSICK.....Clarksburg, California  
FRANK JONES.....Selma, California  
JAMES K. KIRK &  
FRANCES R. KIRK.....Halsey, Oregon  
MIDWAY SERVICE CENTER.....Yuba City, California  
PASSALAUQUA & GANDO.....Benicia, California

**10 YEARS**  
P. M. BERNHARDT.....Bijou, California  
BLEDSOE-MAUZY MOTORS.....Bisbee, Arizona  
W. K. BROOKS.....Coupeville, Washington  
ASA GODDARD.....Brothers, Oregon  
HARLO MOTOR COMPANY.....Harlowton, Montana  
ED HUNTER.....Santa Ana, California  
C. LaFLEUR.....Los Angeles, California  
ANTHONY L. RICHTER.....Phoenix, Arizona  
ROY E. WINTERS.....Eugene, Oregon

**5 YEARS**  
OTIS ABBOTT.....San Diego, California  
JACK BETTS.....Palmer, Alaska  
FLORENCE HOTEL CORP.....Missoula, Montana  
RAY FRANKLIN.....Lynden, Washington  
GEORGE E. FRASER.....LaPine, Oregon  
V. W. & QUIDA HOKE.....Happy Jack, Arizona  
W. T. MIDKIFF.....Phoenix, Oregon  
MASAICHI MATSUSHIGE.....Honolulu, Hawaii  
ATELEE MIGLIORI dba SUPERIOR  
SERVICE UNION 76.....Price, Utah  
GEORGE PAVLOVICH.....Fresno, California  
FRANK TOSCANINI.....Daly City, California  
DONALD W. WRIGHT.....Sonora, California

### November, 1962

**35 YEARS**  
RICHARD COUGHLIN.....Montrose, California

**25 YEARS**  
MRS. GLENN STRADLEY.....Colburn, Idaho

**15 YEARS**  
W. R. ABRAHAM.....Nixon, Nevada  
RIKIO ASATO.....Pearl City, Hawaii  
GEORGE BERG.....Coos Bay, Oregon  
FIRESTONE STORE.....San Pablo Avenue  
Emeryville, California  
NINA WILLIS.....Saugus, California

**10 YEARS**  
OTTO BRENNECKE.....Post Falls, Idaho  
ALBERT DAY.....Van Nuys, California  
JOHN HILL.....Los Angeles, California  
FRED LAWRENCE.....Los Angeles, California  
RAY W. RIPLEY.....Battle Mt., Nevada

**5 YEARS**  
GEORGE ALLEN and J. L. ALLEN  
Canyonville, Oregon  
MARON ANDROSHACK.....Monrovia, California  
ANTONE MOTORS.....Larkspur, California  
HENRY FELKINS.....Sponaway, Washington  
RAY E. HUFFAKER.....Ogden, Utah  
ERVIN G. KAUL.....Townsend, Montana  
TED McMASTERS.....Huntington Beach, California  
ALBERT E. MICHEL.....St. Helena, California  
C. L. RICKARD.....Nevada City, California  
MARIO VIGIL.....San Francisco, California  
CLARENCE ZINE.....Elverta, California

### December, 1962

**20 YEARS**  
GEORGE E. SIMPSON.....Whiteriver, Arizona

### 15 YEARS

C. R. BRAITHWAITE.....Santa Cruz, California  
GEORGE P. HORAN.....San Francisco, California  
THOMAS NEILL  
dba NEILL MOTORS.....Pullman, Washington  
HARRY M. OKA.....Ewa, Hawaii

### 10 YEARS

ARNOLD BETSINGER.....Gig Harbor, Washington  
J. A. CONNOLLY.....Pomona, California  
DONALD F. DARROW.....Oakland, California  
THOMAS HOLMES.....Ocean Park, Washington  
H. E. JACOBS.....Suisun City, California  
ROY LANKFORD.....Spokane, Washington  
EVELYN CARLSON MAST.....Coquille, Oregon

### 5 YEARS

DON & IRENE ANDERSON  
dba SUN RIVER GROCERY.....Sun River, Montana  
FRANK BOUMA.....Artesia, California  
JESS DE LA TORRE.....National City, California  
S. N. DE MASTERS.....Madera, California  
CHARLES J. FRAGUERO.....Fairfax, California  
LAWRENCE E. HAMM, JR.....Salem, Oregon  
PETERSEN MOTOR COMPANY.....Ogden, Utah  
MYRON SORENSON.....Duarte, California

## CONSIGNEES - DISTRIBUTORS

### October, 1962

**40 YEARS**  
B. C. LEWIS.....Chowchilla, California

**30 YEARS**  
S. R. SILVERSTONE.....Watsonville, California

**20 YEARS**  
RAY BURGETT.....Pateros, Washington

**15 YEARS**  
R. T. CARRINGTON.....Santa Maria, California  
JOHN C. PACK.....Red Bluff, California

**5 YEARS**  
NORMAN R. FREEMAN.....Coolidge, Arizona

### November, 1962

**25 YEARS**  
D. E. CHANTLER.....Lakeport, California

**5 YEARS**  
BURTON SIMONS.....Havre, Montana

### December, 1962

**30 YEARS**  
LES ROBERTS.....Auburn, Washington  
WILLIAM THOMPSON.....Everett, Washington

**15 YEARS**  
R. H. INMAN.....Vancouver, Washington

## RETIREMENTS

### September 1, 1962

HENRY C. BOEDE  
Oleum Refinery August 9, 1923

ERROLL E. EMERSON  
Oleum Refinery April 22, 1924

ETHEL E. GARLAND  
Executive-Comptr. Feb. 18, 1946

WILLIAM C. HAMMOND  
Mktg.-N.W. Sept. 22, 1921

FAY E. JONES  
Southern Pipeline April 4, 1935

MARTHA I. KNOETIG  
Comptr. H. O. July 11, 1936

WILLIAM J. McDONALD  
Mktg.-No. Coastal June 17, 1918

KENNETH E. NEWMAN  
Los Angeles Refinery May 21, 1928

MARJORIE E. RUTLEDGE  
Industrial Relations May 19, 1926

LESLIE B. SLAUTER  
Southern Field Dec. 29, 1922

DONALD J. SPRAGG  
Southern Field March 16, 1925

JOSEPH F. STREEPER  
Oleum Refinery Nov. 16, 1944

CARL C. WESTMAN  
Oleum Refinery May 23, 1928

ROBERT T. WILLIS  
Oleum Refinery August 9, 1926

ELLIOTT F. WINDSOR  
Mktg.-No. Coastal April 11, 1926

**October 1, 1962**  
Service Date

HAROLD M. COLE  
Southern Pipeline Oct. 17, 1922

STANLEY E. HALLANDER  
Oleum Refinery Oct. 1, 1925

GEORGE H. HODGSKINS  
Oleum Refinery April 24, 1922

OTIS JOHNSON  
Southern Field July 11, 1928

EUGENE MAYO  
California No. Coastal Div. Jan. 8, 1936

HARRY MESSENHEIMER  
Comptroller's April 1, 1943

THOMAS J. PENALUNA  
Los Angeles Refinery July 23, 1925

LAURA A. PLUMMER  
Mktg.-Calif. So. Coastal Nov. 19, 1943

ROBERT D. RUSSELL  
Southern Field Oct. 21, 1921

DAVID W. SANDERSON  
Oleum Refinery Sept. 16, 1945

HAROLD J. UPCHURCH  
Northern Pipeline May 20, 1932

**November 1, 1962**  
Service Date

STANLEY R. AUSTIN  
Oleum Refinery April 16, 1931

WILLIAM C. BRANDT, SR.  
Northern Field June 9, 1946

AMBROSE S. COX  
Exploration & Production April 17, 1929

FRANK G. FARIA  
Oleum Refinery June 7, 1917

CHARLES M. FULLER  
Oleum Refinery Feb. 20, 1935

L. C. GLENDENNING  
Tax Dept.-H.O. Feb. 26, 1926

LEO D. LAVERING  
Mktg.-Calif. No. Cstl. May 16, 1939

AUDIE PARKER  
Los Angeles Refinery Oct. 21, 1943

GRACE T. PHILLIPS  
Oleum Refinery Jan. 5, 1943

HUGH N. SHUCK  
Southern Field March 5, 1934

WALTON WHITAKER  
Southern Field Aug. 2, 1933

## IN MEMORIAM

### Employees:

GEORGE N. CARMAN  
Marketing-Calif. No. Coastal Sept. 2, 1962

EARLE G. CARRON  
Marketing-Calif. So. Coastal Aug. 6, 1962

ROBERT R. ENNES  
Los Angeles Refinery Aug. 12, 1962

CHARLES M. FULLER  
Oleum Refinery Oct. 4, 1962

### Retirees:

ALFRED V. AMOS  
Marketing-Distribution August 11, 1962

HORACE BLACKFORD  
Oleum Refinery Sept. 29, 1962

HAROLD O. BOWEN  
Secretary's Department August 29, 1962

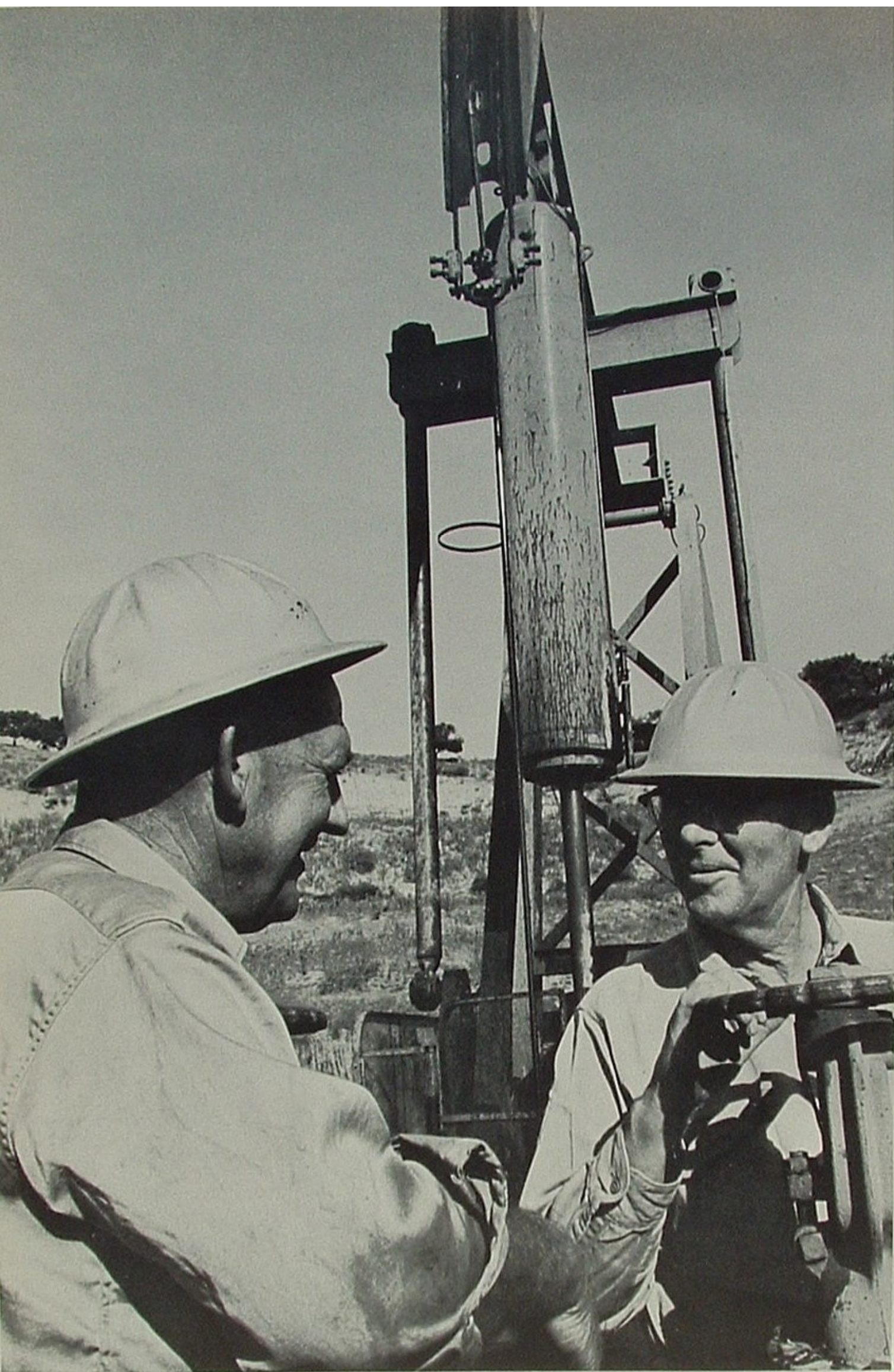
RHUBEN N. BROWN  
Exploration & Production August 29, 1962

CASPER HANSEN  
Northern Sales-Seattle August 29, 1962

EARL E. PENDLETON  
Southern Div. Pipeline August 1, 1962

JOSEPH ROGERS  
Oleum Refinery Oct. 26, 1962





## Where We Work...

Clinton Ike (left) and Howard Brickey are two of the men who keep the deep wells pumping in Union Oil's Number One oil producing state, California. Here, they're working on a pumping unit in the Coast Area's Cat Canyon Field. Millions of barrels of oil have already been taken out of Cat Canyon and the other coastal fields. Now, those same fields promise to yield additional millions through secondary recovery.