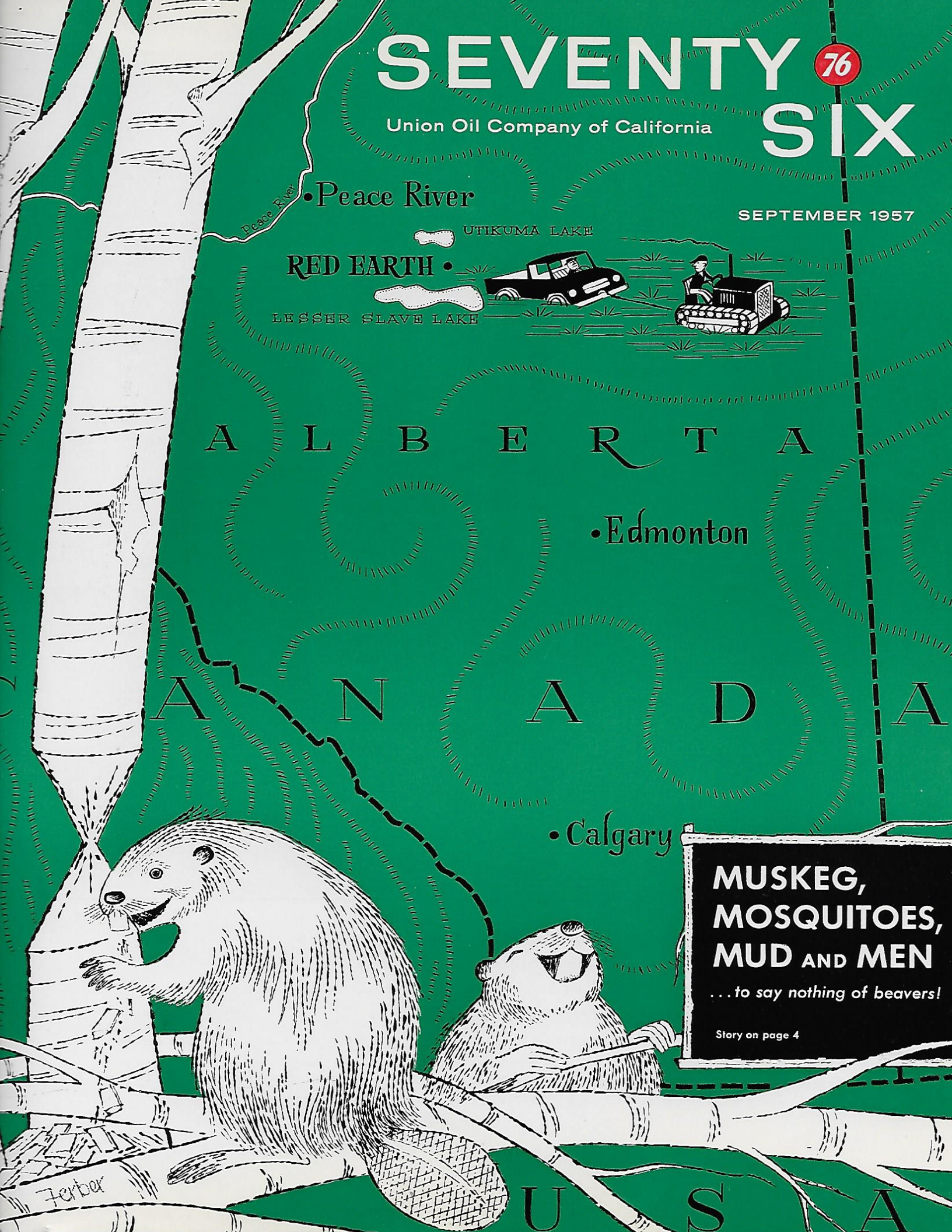
SEVENTY SIX

Union Oil Company of California

SEPTEMBER 1957



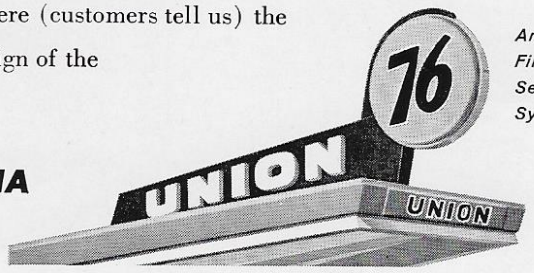
MUSKEG, MOSQUITOES, MUD AND MEN

. . . to say nothing of beavers!

Story on page 4

Doesn't new Royal 76 belong in your picture, too? It's the West's most powerful premium gasoline. It makes driving there almost as enjoyable as what you do after you arrive. You get it at your Union Oil station where (customers tell us) the Minute Man's service is as good as his gasoline. At the sign of the big 76 where — ***you know you always get the finest.***

UNION OIL COMPANY OF CALIFORNIA



America's Finest Service Station System

SEVENTY 76 SIX
Union Oil Company of California

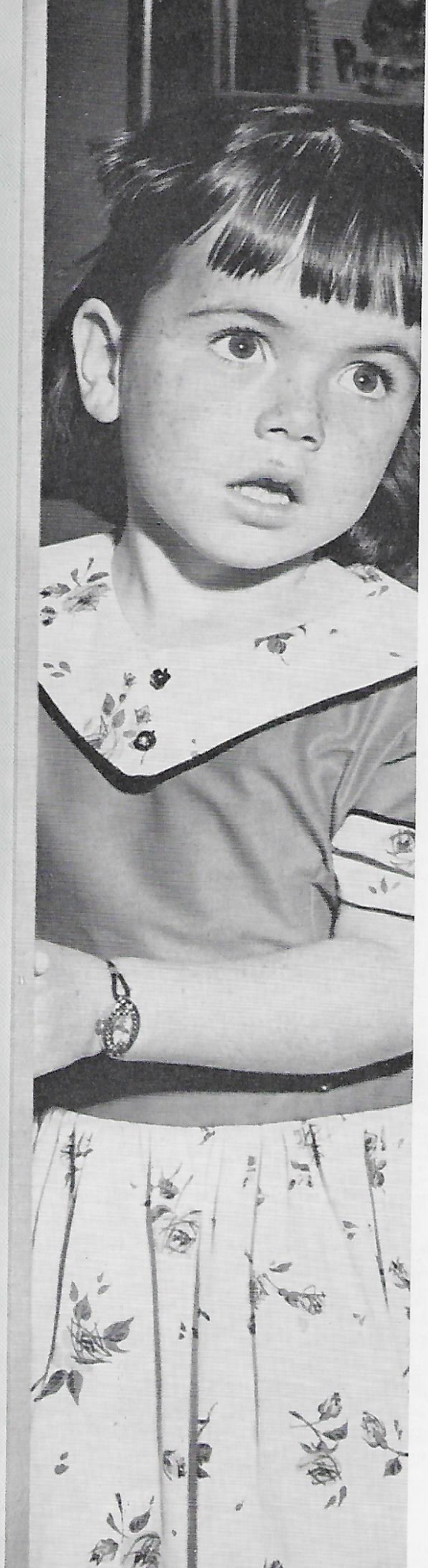
Volume 1, Number 4

SEPTEMBER 1957

THE COVER is Artist Alan Ferber's impression of how oil men are re-making the map of Alberta, Canada—despite the best-laid plans of muskeg-country beavers.

IN THIS ISSUE

76 UNION 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 Building, 617 West Seventh Street, Los Angeles 17, California.



"Hi, Sweetheart

"What's your name? . . . Won't you tell us who your mommy and daddy are? . . . No? . . . Cat's got your tongue? . . . Maybe you'll shake hands, then? . . . Or do a dance? . . . Or sing a song? . . . Or tell us why you're in this great big hospital? . . . No? . . . Well, don't be afraid, dear! Just listen. We want to tell you something:

"You're living in a wonderful land —America. Here we have the best homes in the world, the most food, the greatest machines, the finest hospitals, the best of everything.

"The folks who live and work here are of all kinds, colors and creeds. But one thing most of us have in common—a big heart. The American heart cries at the sight of human suffering. Better still, the strong hands of America's working people always reach out to help those in need. Some people say we're too sentimental; but don't you believe it.

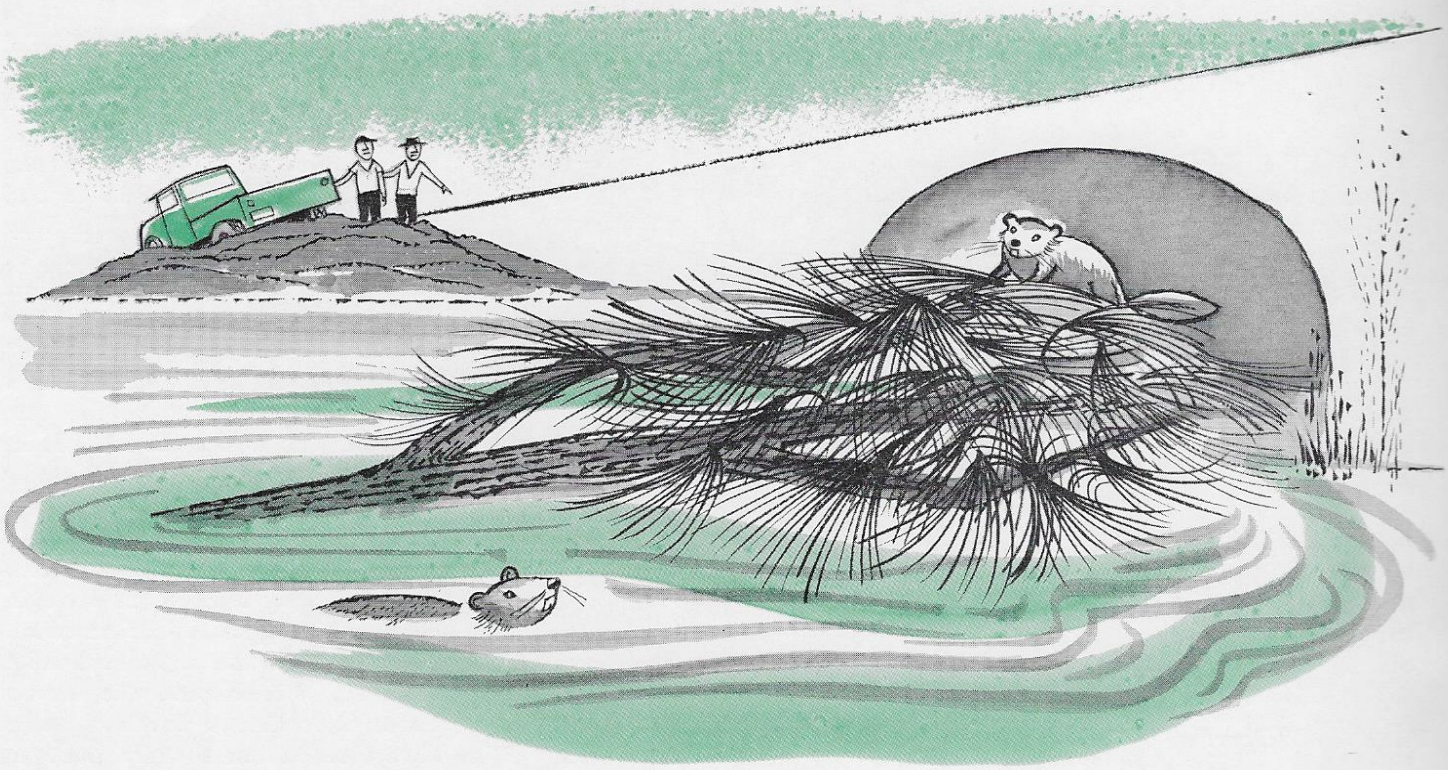
"In the company where we work, nearly 9,000 men and women are busy finding oil and making it available to countless thousands of other people. But one of the nicest things about these Union Oil people is that a large percentage of them give a few cents out of each day's earnings toward the welfare of children such as you.

"Union Oil people who send you their love and help never miss the money. It sort of tip-toes out of the paycheck each month along with insurance and taxes. And it leaves the giver with a warm, satisfied happiness known only to those who serve others.

"'Love thy neighbor as thyself,' was one of the great laws of happiness taught by Jesus nearly 2,000 years ago. Today, this is a happy land largely because so many Americans are living the great law.

"Hurry and get well, won't you? Soon you will leave the hospital, go to school, and become a pretty lady. Then it will be your turn to help some of us. That's the American way —helping one another."

/THE END



Muskeg, Mosquitoes, Mud and Men.....

.....to say nothing of beavers!

SIX HUNDRED miles north of the Canadian border, in the land of the Four Ms—Muskeg, Mosquitoes, Mud and Men—Union Oil Company is doing one of its toughest exploration jobs.

There, directly north of Lesser Slave and Utikuma lakes, in the province of Alberta, the Company is evaluating its Red Earth discovery of February, 1956, which set off the greatest leasing activity in Canadian history as others scrambled for land in the vicinity.

It is a land so vast you fly over it for hours without a sign a habitation. It is a land where, as Bush Pilot Hugh Watlington says, "You can hear the silence." It is a challenging land where the muskeg is treacherous, the mosquitoes voracious, the mud deep and the men ably tough.

Only when this vast expanse is frozen is travel practical over the deep, spongy, water-saturated moss known as muskeg. Because of this, exploration and drilling have been restricted to the mid-winter months. To overcome this weather handicap and permit drilling the year around so that evaluation work could be speeded, Union decided to build an all-weather road through some hundred miles of muskeg country.

Nine Red Earth wells had already been winter-drilled in the company's 2,000,000 acre holdings which cover 100 miles or so from north to south, and another 40 miles from east to west. Of the nine wells, four were producers flowing 38 gravity oil and five were dry. This was an excellent ratio considering that each of the wells in this primitive section was a virtual wildcat. Before the 10th well could be spudded in, the rig had to be moved out of the field ahead of the "ice breakup" early last spring.

The bulldozers and graders began pushing a road through the deep forests, skirting the more dangerous muskeg areas, winding hither and yon in search of any spot that might be even a foot higher. By July the road

was ready. A good dry weather road. But it was more nearly a wide dirt path, for not a shovelful of sand or gravel could be found anywhere.

On a bright sunshiny Sunday morning, 18 trucks with diesel engines, pipe, mast sections and other essential equipment for Union's tenth Red Earth well began moving over the road. At midafternoon a shower began. By nightfall it had become a downpour which was to last intermittently upwards of three weeks.

A few of the trucks managed to struggle through to the location campsite where drilling crews and their families had already been installed in trailers. The balance of the fleet, as it fought the ever-deepening mud, slid off into the engulfing muskeg, cracked four axles, wrecked three universal joints, ruined five transmissions, and had 20 flat tires caused by bits of grader blades churned up in the quagmire. After nearly 80 miles of this they could go no further—both men and machines were exhausted.

Trucks were abandoned where they were. After a few hours' rest, truckers piled into a 4-wheel drive "power-wagon" and began retracing their route. Many times the men towed their vehicle by chains and sheer manpower, using small tree trunks as "collars," as the Volga boatmen did. They later estimated they were forced to winch out their car 40 times. On the fourth day of their struggle one trucker developed mumps. Halfway back they ran short of food, but a mile further on found the cooktrailer mired down. On the sixth day, with supplies running short, food was dropped to them from a Halliburton plane. The pilot's aim was too good. A big sack of bread made a direct hit on the shack, crashed through the roof and let in the downpour. On the evening of the 10th day after starting their back-breaking trek the truckers reached the end of the "bush," having traversed a route which ordinarily would have required about 8 hours.

"I've been working up here for 16 years and this was the toughest thing we've ever encountered," says rugged Gordon Papp, trucking contractor.

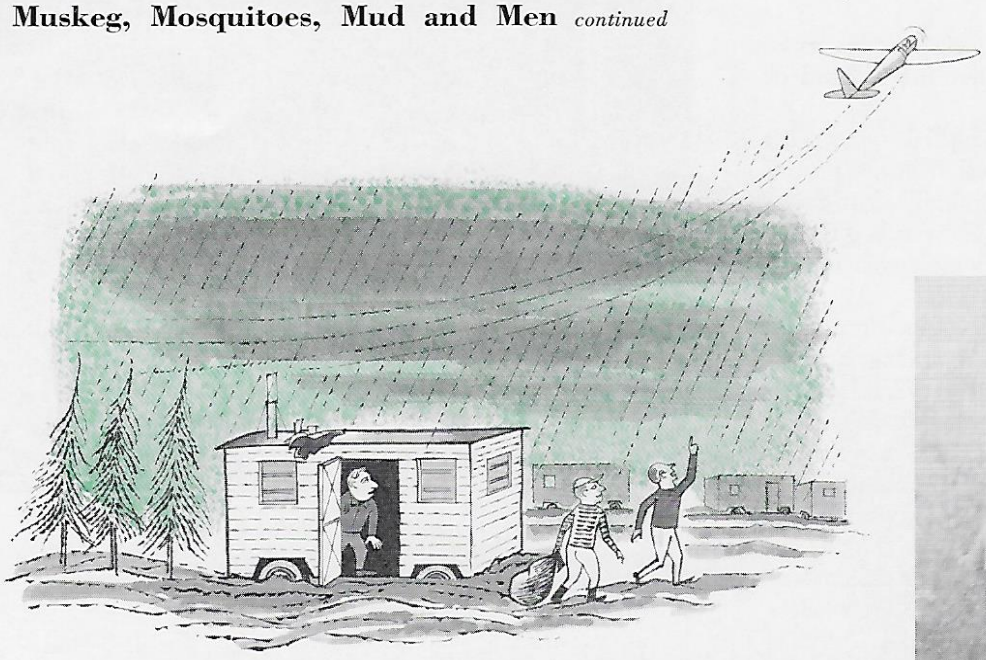
Most powerful diesels could not move through mud

But in the camp at the far end of the road the drillers and their families were still marooned.

"At the end of two weeks we began to get tense," says Cecil Shenton, a driller. "The mosquitoes and tiny gnats were driving some of us nuts. Trying to get word to the outside I burned out the only radio transmitter. We could only receive faint unintelligible messages from Union's station at Peace River. My wife was pregnant, another woman was ill. Finally I heard a faint message asking us to clear an old air strip. Working around the clock, we did it with about the last gallon of gas we had. Don Hamilton of Pacific Western Airways landed a small plane and took out the women and my kids, Casey, 3, and Jimmy, 1."

At this point some of the men started to walk out but

continued



Winch! Dig! Push! Winch! Dig! Push! Four hours to cover six miles as this truck attempted to carry fuel to stranded fleet. Left to right: Lyle Kirkpatrick of Canada Green reconnoiters deepening quagmire ahead; Bob Roethke of Union Oil carries out winch line to find firm anchor; Grant Vouri of Union Oil tries to balance vehicle when winch line is made taut.

Truck abandoned for three weeks on edge of muskeg

after 12 hours and only a few miles, had to turn back when it began to hail.

"Even the frogs climbed into our sleeping bags to get out of the mud," insists Driller Al Bunn.

A couple of days later 6 men and the woman cook who had refused to fly out piled into a small powerwagon and started for the "outside." One driller tried to follow with his sedan. After winching him out 26 times in 30 miles his car was abandoned. Five days later they reached a hard surface road.

Such road conditons are not new. Here's what a pioneer said about them a half century ago:

"Here many realize for the first time how puny is the strength of a man and two oxen when pitted against the sucking mud of a muskeg. A few feet was all that was needed for the wagon to go in over axles and the oxen to flounder in mud up to their bellies. Oxen were used much on this trail, because they endured the heart-break of mud-holes better than horses.

"When they got stuck this way, nothing could be done but unload and carry the goods piece by piece to the other side of the muskeg. This meant an endless number of trips, up to the knees in mud every step. Then, with the wagon empty, it was all the oxen could do to pull it out. It was hard work and heart-breaking enough without the hot sun which poured down and the mosquitoes and bulldog flies. If, instead, it was raining, and it rained much of the time, it was even more depressing."

To add to all the troubles, hundreds of beavers went on a building rampage. Electric fences used to keep them from damming up culverts and small bridges became useless when dead batteries could not be reached for replacement. As the beavers dammed up the culverts and bridges, water rose higher and higher until the road was inundated for miles.

"Papa Beaver would swim down and test the electric fence," says Lyle Kirkpatrick of Canada-Green, road contractors. "If he didn't get his nose singed he swam back upstream and alerted his gang. Soon he would come down guiding a washed out tree trunk. He had carefully trimmed the roots an exact size to slip into the culvert so the branches would catch as the roots got inside. Once this initial plug was in, all his family would appear from nowhere with branches to fit over the opening. Overnight they would have a leakproof dam.

"Where Papa Beaver couldn't find an uprooted tree, he would gnaw one down, float it sharp-end first, and just before reaching the culvert would plunge to the bottom and poke the sharp end into the mud. Using this as a base, the rest of his family would quickly cover it with a thick mat of branches. Beavers are the world's best engineers.

"Beavers and rain made this the worst mess I've been in in over 30 years of earthmoving in Alaska and around the world. We tried to get bulldozers over the road to pull out the trucks. They got stuck and ran out of fuel. We couldn't reach them with more fuel so there they stayed."

And the rains continued. How much? "We never measured it—it was just too damned much," says Papp.

About three weeks after the truck fleet had first entered the bush country Papp sent his crews and towed them out with heavy caterpillar tractors. Equipment for Red Earth 10 was safe. At the location only a watchman remained, plentifully supplied with food from the camp kitchen originally stocked for two score persons for a full month.

"But give us a week or two without rain," says Kirkpatrick, "and we'll fix the road so Papp's trucks can get the drilling equipment into camp."

"We're far from being licked," insists Bob Roethke, Union's superintendent in charge of drilling at Edmonton "We'll get back in there this summer and have Number 10 making hole and, we hope, finding oil long before snow flies."

But Number 10 is no longer called simply by number anymore up in the muskeg country. It is known through the Peace River area as "that damned well of Union's."

/THE END

The Managers listen! Sales Manager Bob Rath (left) and Southwest Territory Manager Ted Rathbone concentrate as Hollywood District Dealers talk. Facing camera: Ray Vencill, Fred Wiley.

We're

Dealer conferences are helping solve Company sales problems

"No two retail dealers have exactly the same problems or the same ideas about Company programs. The man with a highway station has little in common with the neighborhood dealer. A fellow who owns his own place takes a different view than a lessee.

"So when you want to find out what your dealers are thinking, it's no good talking to a few of them or to representative groups. We tried that. The only way you can really find out is to talk with all of them."

This is how Sales Manager (Dealer Sales) Bob Rath explains the reason behind a series of meetings that are taking him and his territory and district managers into nearly every city and town in the West. By the time you read this, Rath himself will have talked with—and listened to—nearly 800 of the men who sell "76" products.

The emphasis is on listening. "We're not trying to sell anybody anything," Rath says. "We're there so the Company's management can hear what the dealers have to say. We want to know what they think about our programs. We're trying to find out what the problems are. If we can do something about the problem, we do it. If we can't, we say so."

There's quite a list of suggestions "We've been able to do something about." For instance:

Recommended retail motor oil prices were raised at the time of a wholesale price change, as a result of dealer requests.

The Special Credit Authorization maximum was increased from $150 to $200.

Training schools for dealers and their employees were established at San Francisco, Seattle and Los Angeles.

A simplified Every Week System (to remind customers of their cars' lubrication needs) is due to be announced.

Gasoline temperature corrections have been re-established.

Dealers listen—while Rath explains Company attitude toward price wars. Left to right: Barry Hudson, John Edwards, Eddie Clark, Walt Proctor, Ivan Deach, Bob Brundage, Jack Matheney.

Listening

New materials for uniforms are being developed.

A major television show is being planned.

A survey of service prices in the West was made, and a new recommended price schedule was printed.

Rath's comment on service charges during the Hollywood, California meeting where the accompanying pictures were taken: "Your expenses are going up. You're paying higher wages, for example. If wages nudge up, why not add the equivalent to the price of jobs, rather than wait until the work becomes unprofitable?"

Then, there were the things the Company could do nothing about, among them—price wars, dealer stock purchase plans, incentive plans. Said Rath at the Hollywood meeting:

"Regarding price wars, we don't like them any better than you do. They cost you money; they cost us money. We've all gone through more than two years of a disturbed price market. And we see no immediate end to it.

"About incentive plans: By law, we can participate in these only with employees. And there's a reason for employee incentive plans. A Union Oiler who makes a big sale or reduces Company expenses reaps no immediate benefit. But through the long-term incentive plan, he gets a reward for increasing Company profits. On the other hand, if a dealer sells an extra set of tires, or works out some economies, he immediately gets the return."

Aside from dealer-Company relationships, the men usually discuss topics dealing with the oil industry in general, such as the possible introduction of third structure gasolines here in the West.

Rath: "We feel that we'll stay with two brands. We did think some companies might break with three. Some still might. But so far, everyone's been upgrading his present brands instead of going to a third one."

The meetings have been so popular with dealers that the program will be continued indefinitely. At the rate the meetings are being held—at least one each week—every dealer will have two opportunities a year to voice his opinions to Union Oil's marketing people. To quote Rath again: "It will help us make decisions if we have the dealers point of view in mind."

/THE END

"Up-hill" from Portland on a

Columbia River oil tow

Tug-boat Captains Joe Sabuco, left, and Ace Williams are skilled masters of the Columbia.

COLUMBIA RIVER tug-boat captains are a devoted breed of men—talkative about the river and their boats—tight-lipped about their own role in an adventuresome transportation drama.

You spend half the night talking with Captain Joe Sabuco in the pilot house of Tidewater-Shaver Barge Lines' tug, "The Invader." As the husky little vessel pushes two barges, laden with a half-million gallons of "76" products, up-river from Portland, the six-foot-four captain describes his 17 years of tug-boating. But his narrative is strangely impersonal—mainly the story of a doughty boat fighting mile after mile against a tireless adversary, the Columbia.

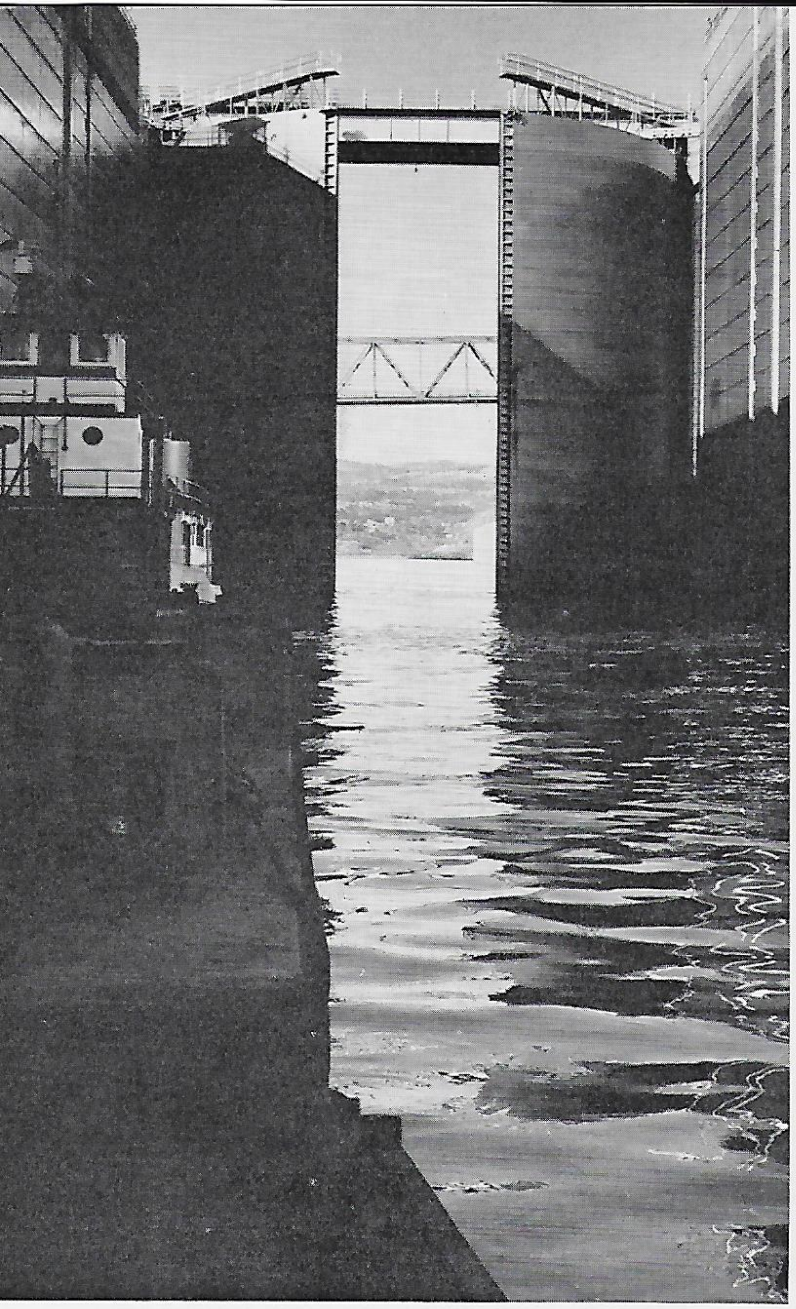
Not until next afternoon—when you and the barges are relayed to a more powerful tug, the "Leland James"—do you learn anything about Joe Sabuco. Your informant is Captain Ace Williams. Similarly impersonal about his own quarter-century on the river, he relates how Joe, when a school boy, fell in love with "The Invader" and found no peace of mind until he had signed on as a deckhand. Absorbing every mechanical detail of the vessel, the youth became its engineer and, after mastering the river, its captain. Newer and more powerful tugs came to the Columbia begging for experienced hands. But to Joe there's no greater ship afloat than "The Invader."

The Columbia, you may have forgotten since geography days, is one of the world's mightiest rivers. Starting in the Rocky Mountain ice fields of British Columbia, it flows south and west about 1,400 miles, picking up Clark Fork, the Snake, Spokane, Okanogan, Wenatchee, Yakima, Walla Walla, Umatilla, John Day, Deschutes, Willamette and scores of lesser rivers. Its precipitous fall through mountainous country makes it an unexcelled source of hydro-electric energy and water for irrigation. Immense concrete dams—the Bonneville, Grand Coulee, McNary, The Dalles, Rock Island, Cabinet Gorge, Chief Joseph, Hungry Horse, Albeni Falls—are harnessing Columbia River waters to the domestic needs of a swiftly expanding population. The river's discharge flow into the ocean is approximately ten times that of the Colorado, twice that of the Nile.

continued

Ready for another 30-hour "up-hill' voyage, the "Invader" reports for duty at Portland.

Next day, below, the tug struggles through rapids with a half-million gallons of oil.



Massive gates of The Dalles Dam lock close behind the oil tow

During the first two or three hours of climbing "uphill" from Portland, you memorize the blue-green scenic poetry of Washington and Oregon on opposite banks, each stanza punctuated by exclamatory Mt. Hood. Then there's dinner, hearty and delicious, on which the tug's woman chef obviously has spent a lifetime of preparation. Finally, at Captain Joe's invitation, you climb to the pilot house to watch the sun set on July 3rd.

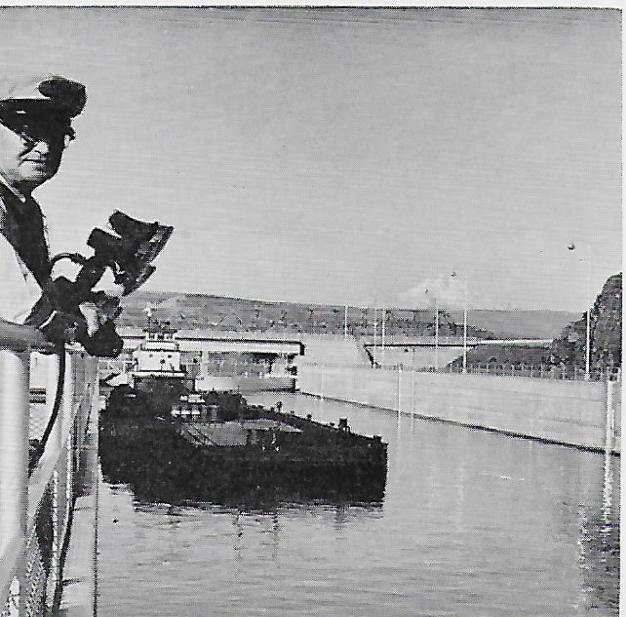
The pilot's job is no simple matter of steering a middle course up a mile-wide channel. Rather, the barge tow points first toward one shore, then another; now hugs a sheer cliff forming the south bank, now skirts the north side of a mid-channel island. "That's to avoid swift water," Joe explains, "or to follow the navigable channel. The *tow* always keeps its nose pointed toward one of those white markers ashore. Otherwise, you lose a barge on the rocks or a few days on a sandbar."

You begin wondering how pilots pick out the shore markers on moonless nights, when Joe suddenly reaches for a handle controlling one of two pilot-house searchlights. The powerful beam picks up a red object floating dead ahead of the lead barge. Swinging back and forth, the beam next locates a dotted line of white objects connecting the red one with a small boat near shore. "Salmon fisherman," Joe complains, as he turns the tow sharply to miss the dotted line. "Some of those guys take some pretty long chances with their nets. We don't very often hit 'em, but when we do, the fisherman gets kinda sore. Five hundred feet of net at $9 a foot—understand?"

A few score salmon nets later, Joe points ahead to a lighted barrier obstructing the entire Columbia: "Bonneville Dam! It's only a mile away, but we'll be an hour getting there. Swift water—the Garrison Rapids! It'll take two extra *notches* of power for 'The Invader' to push this *tow* into Bonneville lock."

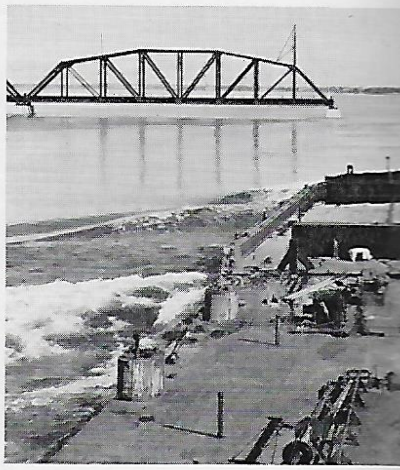
Your landlubber question as to why river men apply the term *tow* to barges being pushed draws no satisfactory explanation from the captain. And he's six-feet-four, you observe again.

. . . the lock fills, lifting the barges 87 feet . . .



forward gates open and the tow moves on.

A railroad bridge yields the channel.



Getting through Bonneville Dam, as through other dams on the Columbia, is a maneuver to delight the thrifty cockles of your heart. It's a free lift. The tow simply enters a long concrete corridor, closed at its upstream end by towering concrete gates. Then similar gates close at the downstream end—valves are opened—and the lock fills to the level of the upstream reservoir. Forward gates swing open and the barge tow, having gained up to 90 feet in altitude, pushes on across many miles of slackwater sailing. Similarly, tows moving downstream use the lock-controlled power of the river to go "down-hill" in several easy steps. A lock can be filled or emptied in 15 or 20 minutes.

Four or five hours of sleep is about maximum above the diesel-powered engines of a tug. You're up at dawn to see "The Invader" take another 87-foot step "up-hill" with the aid of The Dalles Dam lock, newest of the massive Columbia River structures. The reservoir just beyond this dam erases Celilo Falls, centuries-old Indian salmon fishing site, and until 1957 the river's greatest obstruction to navigation.

Above The Dalles reservoir, the Columbia becomes noticeably more primitive. Jagged walls of bare rock comprise much of the shoreline or bob up midstream in quest of a *fat* barge. The mountains are denuded of timber and the rich green carpet you eulogized last evening has turned to a less enchanting brown.

Even Captain Joe has changed. No longer relaxed, he keeps a firm grip on the sensitive electric-hydraulic steering lever, a distrustful eye on the river. You can account for his anxiety and constant change of course when a rock or rapid or other omen of danger looms uncomfortably close to the steel barges.

By early afternoon, "The Invader" seems to be plowing upstream as fast as ever. But a study of objects ashore spoils the illusion; the tow actually is making little headway. Captain Joe angles toward a rocky nook on the Oregon side, ties the barge tow to a tree, and radios his location to the "Leland James." Rock Creek rapids, dead ahead, are too much for 1800-horsepower.

In an hour the "Leland James," pushing an empty oil barge and a grain barge loaded with wheat, races down through the rapids, does an *about face*, and ties up alongside. The two tugs swap barges and passenger. There's also a short exchange of river and fishing data. Then, as Joe and "The Invader" turn back toward Portland, you continue upstream with the oil and Captain Williams.

The "Leland James" with its 3800-horsepower thrust outraces Rock Creek rapids, Canoe Embankment rapids and the Devil's Bend current with knots to spare. Before dark, the McNary Dam lock is entered and departed. It's while crossing the 61-mile pool behind McNary's concrete gates that you pry into the life of Captain Williams. There's no "I" in his vocabulary either.

The normal crew of a river tug consists of six men and a woman cook. The men work six hours on, six hours off, round the clock—20 days and nights at a stretch—with 10 days of vacation every month. While three men—a pilot, engineer and deckhand—are on duty, the other three eat and sleep. Some men find the river monotonous and soon move on to other scenes. To others, like Joe and Ace, no two voyages have ever been the same.

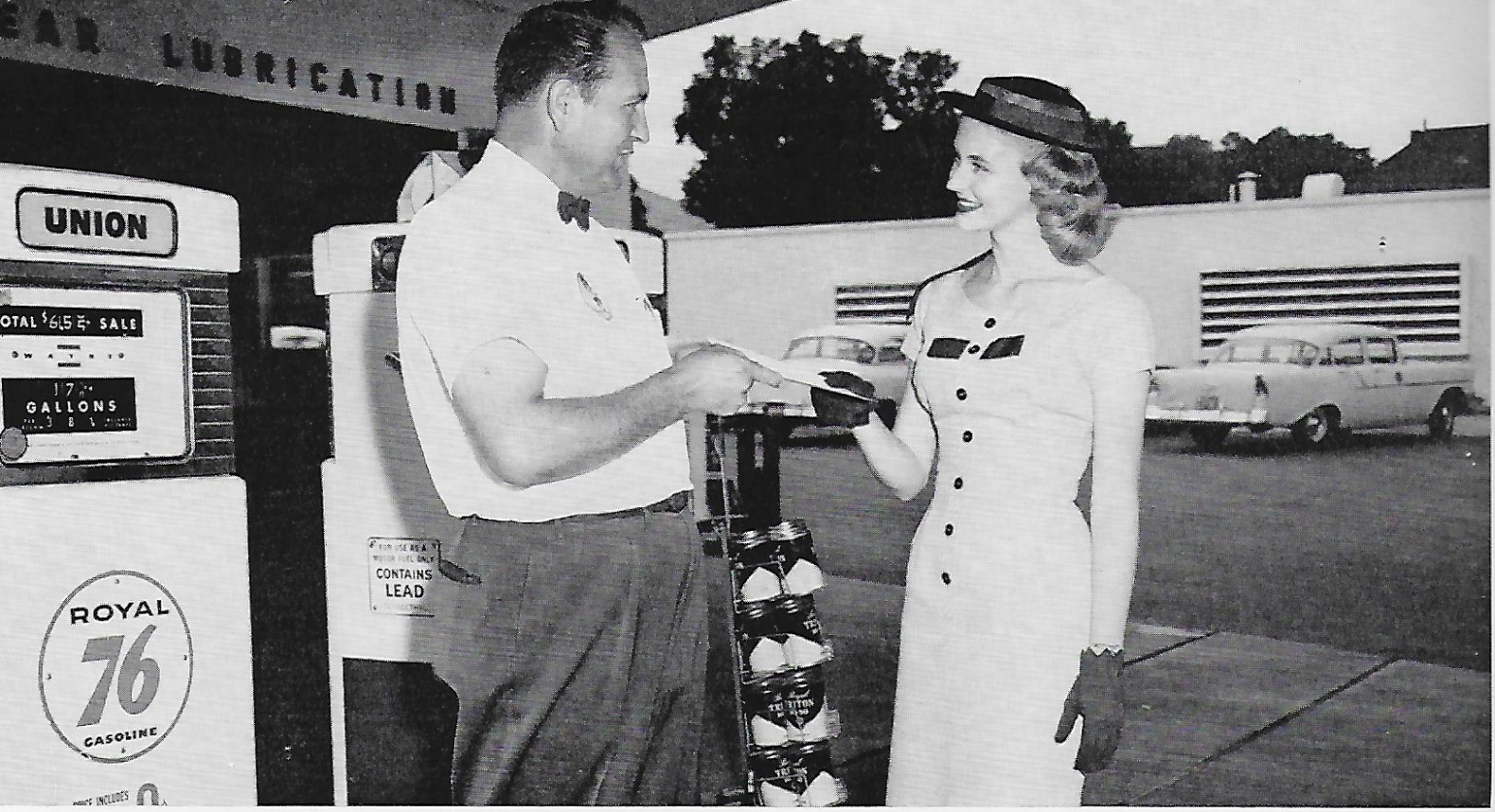
About 30 hours and 230 miles out of Portland, the journey ends. The tow makes a right-hand turn out of the Columbia into the equally broad Snake River. A mile up the latter is Tidewater Terminal Company's tankfarm at Pasco, Washington. Union Oil is among a dozen or so companies who lease storage here for the distribution of petroleum products throughout one of the West's richest areas of potential development.

Lewis and Clark camped near the tankfarm site during their historic 1804-06 expedition to the Pacific, finding the Columbia a severe test for their boats. Sabuco and Williams now explore the same waters every day of the week—"up-hill" with a half-million gallons of petroleum, "down-hill" with some 1400 tons of wheat.

/THE END

Violet Adams, world's best cook!

Journey's end, the Snake River tankfarm at Pasco.



Dealer Royal Fisher of Salt Lake City was among the first to applaud Charolette Sheffield as Miss Utah—now reigning Miss U. S. A.

We picked a WINNER!

Don't misunderstand—we hardly claim the credit for Miss U. S. A. of 1958. But there were plenty of Union Oil people applauding her right from the start of this year's Miss Universe Pageant.

Voted Miss Utah after a series of beauty contests in her home state, Charlotte Sheffield did something quite typical of her charming self. In a gesture of friendly goodbye before leaving for the Long Beach contest, she paid a personal visit to many of her friends, among them Union Oil Dealer Royal Fisher of Salt Lake City. He and other Utah Union Oilers responded, as gentlemen should, with red roses and the offer of special "76" service during a wardrobe shopping tour.

At Long Beach, it happened that Union Oil sponsored one of the sailor-powered floats used to transport Miss Universe contestants on parade. And whom should we draw for our float but Miss Utah!

Miss Sheffield, as everyone knows, went on to be named Miss United States of America. Through no fault of her own, all U. S. A. contestants were ruled ineligible for the Miss Universe title. Miss Utah met both success and disappointment with unwavering charm—a real proof of queenliness. We join the world in saluting Miss U.S.A.

/THE END

At the Pageant in Long Beach, Miss Sheffield is crowned Miss U. S. A. by Carol Morris, Miss Universe of 1957.

Business Highlights of the Month

INDUSTRIAL RELATIONS *Manicure surgery next?*

Recent surveys indicate sharply rising costs for medical care across the nation. Hospital rates alone have risen 39% in the last five years (compared with a 6% cost-of-living advance) and are expected to continue rising about 5% a year. Physicians' fees during the same period climbed 19%. At present, the American people are spending $16 billion a year for medical and dental care. An average family spends $5 out of each $100 of income for medical bills, or a total of $280 a year. Twenty years ago, this same family, in terms of dollars adjusted to take out cost-of-living advances, was spending $4 out of each $100 of income, or a total of $123 a year, on medical items.

These ascending costs are reflected in the increasingly greater outlays for care occurring under the Employees Medical Plan and the Insured Medical Plan. People today demand the best that medicine can offer. They go to hospitals for ailments that not long ago were treated at home. Vast sums are spent on drugs, vitamins and antibiotics. More than ever before, people consult specialists. Considering these factors, it appears that adequate medical coverage is going to be an expensive item for a long time to come.

from W. C. Stevenson

PURCHASING *Best by test*

A second edition of the Test Reference File was distributed in July to all Company operating locations. The file, whose index is broken down into some 200 subjects, lists the results of 456 tests. To name only a few of the classifications covered, tests have been conducted on chemical cleaners, containers, engines, furniture, hose, lamps, paints, pipe fittings, pumps, rope, signs, valves, weed killers. The tests conducted by operating personnel under normal operating conditions, are reported impartially. Complete details of specific test results are available to interested Company personnel. Contact Purchasing.

from C. S. Perkins

MANUFACTURING *On Tap at Richmond Terminal*

Aviation Gasoline, Union Kerosene and S-76 Solvent, which are produced only at our Los Angeles Refinery, are now available through the Company's new Richmond Terminal on San Francisco Bay. Oleum Refinery has discontinued the availability at Oleum of these products, and will supply the terminal with gasolines, stove oil and Diesol via a new pipeline. Located about 14 miles southwest of Oleum, Richmond Terminal will relieve this refinery of many services that are only indirectly allied with refining of crude oil.

Los Angeles Refinery is now producing paving asphalts from crude oils other than Santa Maria crude oil. It is economically desirable to eliminate the tanker shipments of Santa Maria crude oil from San Luis Obispo and, although a small amount of Santa Maria crude oil is still required to produce special coating asphalts, it is expected that a satisfactory substitute crude will be found.

Site preparation for eight new product tanks at Los Angeles Refinery is essentially completed. As in all construction, the need for good foundation applies to storage tanks, especially when the earth foundation must support a total weight of about 30,000 tons. Company-owned land selected for the additional tank farm contained undesirable base material, which had to be removed and replaced by fill of the required bearing strength. About 500,000 cubic yards of earth was replaced. This problem, though little known, is an important part of all storage tank construction.

from J. W. Towler

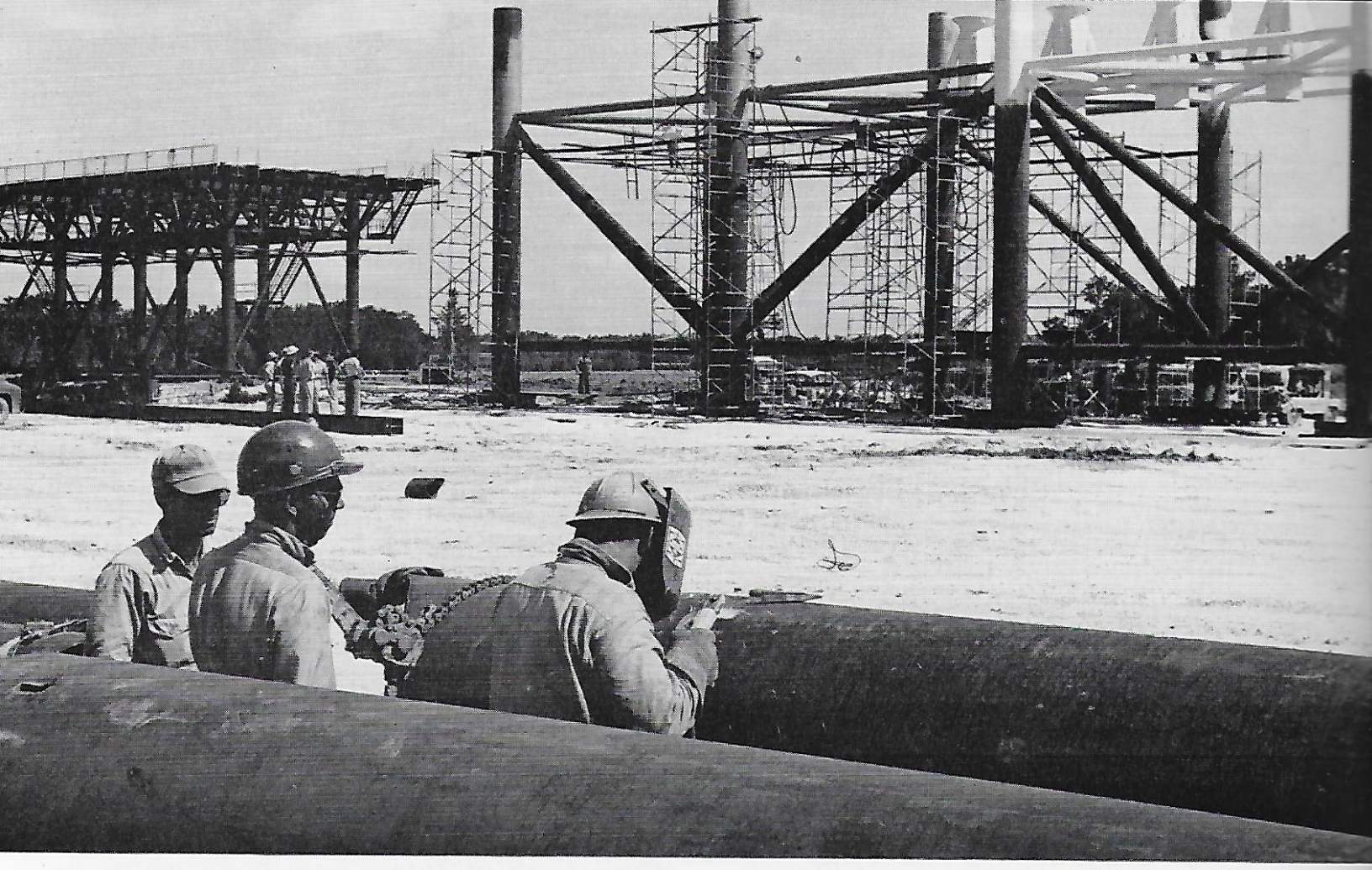
EXPLORATION *Still growing*

Increased exploratory activity in the Louisiana Gulf Coast area has prompted the transfer of our Southwestern Louisiana District Office from New Orleans to the town of Lafayette, about 125 miles to the west. Lafayette, with some 50,000 inhabitants, is the hub of the oil industry in that area and is also centrally located with respect to much of our current and proposed exploratory activity in surrounding parishes. At present, the office personnel consists of 14 employees.

The Southeast Louisiana District Office, embracing that portion of the state, still remains in New Orleans. Both districts, together with our Corpus Christi District Office and the Houston District Office, report to the Gulf Division headquarters in Houston, Texas.

At the extreme northwesterly end of our exploration operations in the Western Hemisphere, we have established temporary headquarters in Anchorage, Alaska to expedite a joint program with the Ohio Oil Company. This exploratory program has been initiated as a development in the drilling of Richfield's Swanson Unit No. 1 on Kenai Peninsula, in which we, jointly with Ohio Oil Company, have a 10.5% interest.

from Sam Grinsfelder



At Morgan City, Louisiana, this steel island was recently completed for Union Oil's use in further exploring the Gulf of Mexico. The structure at right, called a *template,* is first anchored to the ocean floor; then the platform, left, is lowered into and welded to the legs of the template. The unit is now installed some 16 miles from land and supports an important operation.

RESEARCH *Oil's where you find it*

After intensive laboratory experimentation, the process definition has been completed of a 200-ton-per-day pilot plant to process material from the Sisquoc bituminous sand deposits near Santa Maria, California. Detailed engineering and construction are to be handled by the Field Department. The program is another step in our efforts to develop major economic sources of petroleum from what have been considered "marginal" native hydrocarbons.

In appreciation of the fine reception we have received in Colorado, a visitor's picnic area has been created near the Shale Demonstration Plant at Parachute Creek, 12 miles north of Grand Valley. The creek is running well and was recently stocked with 2,000 fish by the Colorado State Department of Game and Fish. Tours of the Demonstration Plant are conducted at 1:30 p.m. each Tuesday. Union Oil people and their families and other interested persons are cordially invited to join these tours.

from Fred L. Hartley

TRANSPORTATION & SUPPLY *Supertankers!*

Steel fabrication and sub-assembly work has been started on the first of three 60,000 dead-weight-ton supertankers being constructed for Union Oil service. The keel will be laid on October 7 and the scheduled date of delivery is August, 1958. The other two vessels will be delivered at intervals of approximately four months thereafter. Newport News Shipbuilding and Dry Dock Company are the builders.

The six-inch products pipeline from Oleum Refinery to the Company's new Richmond Distribution Terminal has been placed in service for the shipment of gasolines, stove oil and Diesol. Truck deliveries now being made from the terminal replace shipments formerly made from both Oleum and our Emeryville plant. Nearing completion at Richmond Terminal is a new automotive garage, which will replace the present garage at Emeryville.

As of August 1, employees of our Northern Division Garage, headquartered at Portland, completed 100 consecutive months, or 200,000 manhours, without a single

disabling injury. Exceptionally good safety performances in the Central and Southern Division garages have brought those employees a combined total of over 800,000 manhours without a disabling injury.

The new crude oil line from San Joaquin Valley to Oleum Refinery is now operating on a five-stream basis, delivering approximately 43,000 barrels per day. The five streams include three segregated grades of crude oil and two unfinished commodity streams from Santa Maria Refinery. With the completion of two additional pump stations early in September, line throughput will be increased to more than 70,000 barrels per day.

from E. L. Hiatt

PRODUCTION *Consolidation of plants*

Some of our California gas operations are currently being consolidated to increase gasoline extraction efficiencies and to offset declining gas volumes.

The Orcutt Absorption Plant is being shut down, and its gas supply will be diverted to the Battles Absorption Plant at Santa Maria for processing. The Orcutt plant, completed in 1921, was one of Union's first oil absorption units.

Another historic facility, Richfield Absorption Plant in the Los Angeles Basin, is being shut down after 35 years of operation. Gas volume has declined to the extent that it can be processed more economically at the nearby Stearns Absorption Plant.

Two other plants of more recent vintage will be shut down soon in the Ventura Division—the Crude Oil Absorption Plant at Bardsdale and the Gasoline Refrigeration Plant at West Mountain. Gas streams from both plants will be processed more efficiently in the Del Valle Absorption Plant at Castaic.

from Dudley Tower

MARKETING *Door jamb, mint flavor!*

Adding interest to the current Stop-Wear lubrication merchandising program is a Phantom Contest: One of the best ways to determine a car's lubrication needs is to check the door-jamb mileage sticker with the speedometer reading. Driving in and out of our service stations today are more than 100 Phantoms—customers whose door-jamb stickers indicate their cars have need of lubrication. Service station salesmen who check the stickers and call the Phantom's attention to the lubrication need score a "hit" and receive rewards of $2.50, $5 or $10. The Phantoms, all customers who drive extensively, are enthusiastic about the program and enjoy their role.

Alba Grease, specifically developed as a lubricant for food-processing machinery, has been introduced and adopted as a regular Company product. Two years of service testing have illustrated the outstanding rust and oxidation resistance of this lubricant, even in the presence of exceedingly corrosive citrus and tomato products. Alba Grease, white in color and buttery in texture, is meeting with widespread acceptance by cannery operators.

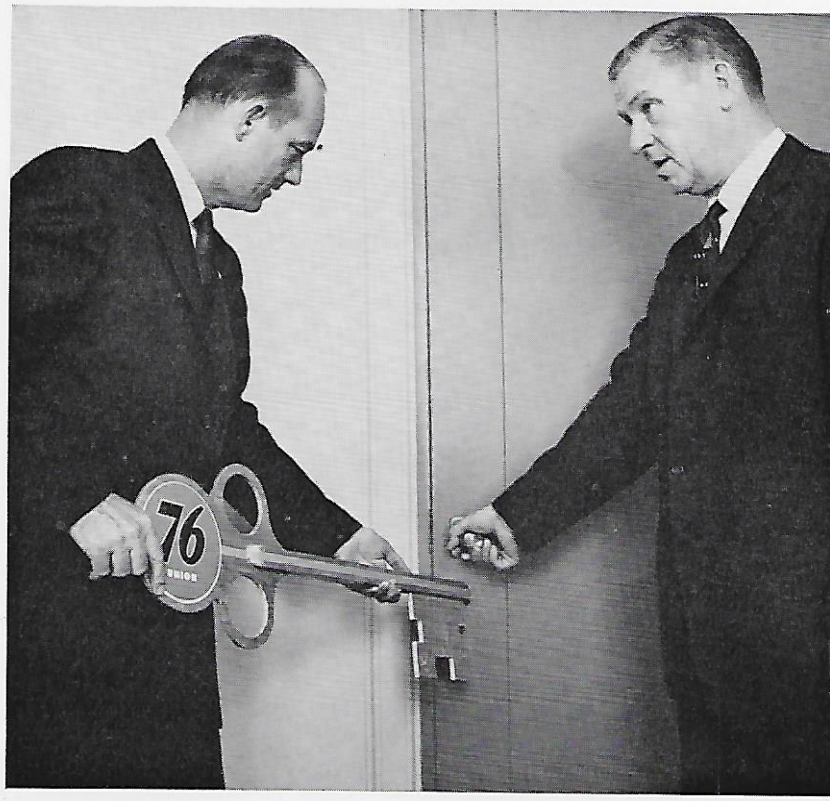
The realignment of districts in Southwest Territory has eliminated the Los Angeles Terminal District. In the San Diego District, Frank Culling has been appointed district sales manager direct sales, while O. D. Dorsett is the new district manager dealer sales.

To better serve Northwest Territory trade, new marketing stations were opened during July in East Stanwood and Othello, Washington.

Sensitivity and balance of motor fuel are two important factors in satisfying the fuel requirements of today's high-compression motors. Ethyl Corporation representatives are making a four-months' tour of our domestic marketing territories with their Dynaprover gasoline demonstration unit, which graphically displays these features of our gasoline. Demonstrations at selected service stations are being viewed by dealers, consignees, wholesale accounts and Company employees.

from Roy Linden

Symbolically unlocking the door to expand gasoline and Diesol sales are, l-r, W. L. Spencer and F. K. Cadwell. Effective September 1, a Key Account Sales Program was started throughout three West Coast territories. It is open to personnel of the Direct Sales line organization. "Key Man" awards will be made to sales representatives and their managers who excel in sales achievements for periods of six and twelve months.



The Magnificent Moron

Union Oil's giant brain, an Electronic Data Computer, gives people time to think, and a future to think about

When it comes to figures, there's one small difference between a cute blonde who counts on her fingers and an electronic "Brain:" The Brain can count above 10 very rapidly without taking off its shoes.

Because of this ability to do simple arithmetic with astounding speed, Electronic Computers—formal name for a Brain—have made a reputation as lurking monsters, waiting for the right time to take over the world.

Actually, the Brain is a magnificent moron.

Jackie Clark, admiring Union Oil's computer in the picture at right, can out-think it on any subject. What's more, she can *think up* things to think about—what woman can't? Which gives her a big lead in the intelligence department. The Brain thinks only what it is *told* to think.

But once it has its instructions, the Brain is a whiz.

It rips off strings of additions at the rate of 30,000 a minute, compared to 60 for a desk calculator.

While a man solves a typical research problem, the machine will solve 12,000.

It absorbs 1,500 instructions when it figures Union Oil's payroll. Then it computes the paychecks—including income tax, Social Security, Retirement Plan, and other deductions—at the rate of 600 an hour. Furthermore, it finds time to provide facts for 14 different types of payroll reports.

On another job, providing data to schedule tankships into terminals, it performs 170,000 arithmetical operations in an hour!

Because it can't think for itself, the machine makes no errors, provided the information it receives is correct. But if the basic information is wrong, in most instances the machine cheerfully, ignorantly, louses up everything.

For instance, most of an oil company's credit card customers in a major Pacific Coast city received delinquent notices one bad month when an automatic machine got the wrong signal. Another company is still trying to explain the extra zero printed on every customer's bill: $10 became $100, and so on.

Those were *people* errors. If the machine is instructed properly, it will go into a bell-ringing, light-flashing nervous breakdown before it will make a mistake.

Nearly every department in Union Oil is looking for ways to use the Brain and its fantastic speed. Some problems being given it are routine. Others may affect the future of every employee and dealer.

The Brain spends monotonous hours churning away on those routine tasks (such as payroll). A company as large as Union Oil eventually gets to a place where it is nearly stifled by its own statistics. It becomes physically impossible to analyze all of them: sales figures, refinery runs, costs, variations in the production from 60 oil fields. But figures in the mass are grist for this mill. It grinds them up with electronic speed and pours them out as yards of neat, accurate reports.

When it does, it frees people such as Jackie for the job it *cannot* do: thinking.

(Surprisingly, in spite of the Brain and other automatic aids, Union Oil has a higher percentage of clerks today than it had three years ago! And about one of every five people in the Company does clerical work.)

The Brain is a marvel at relieving people of tiresome humdrum chores. But its real value may be as an exciting tool for probing into the future.

It has already given Union Oil dealers a tremendous competitive advantage in oil sales.

During a research program, facts about the average person's driving habits, collected over years of patient road-test work, were fed into the machine. Out of it came a formula for a laboratory engine test that compressed a year's driving into 350 hours. By means of that test, research people were able to write the recipe for new Royal Triton 10-30—and to get the oil into stations two years ahead of schedule.

New Royal Triton 10-30 has been on the market eight months. So far, no other company has been able to duplicate its unusual qualities.

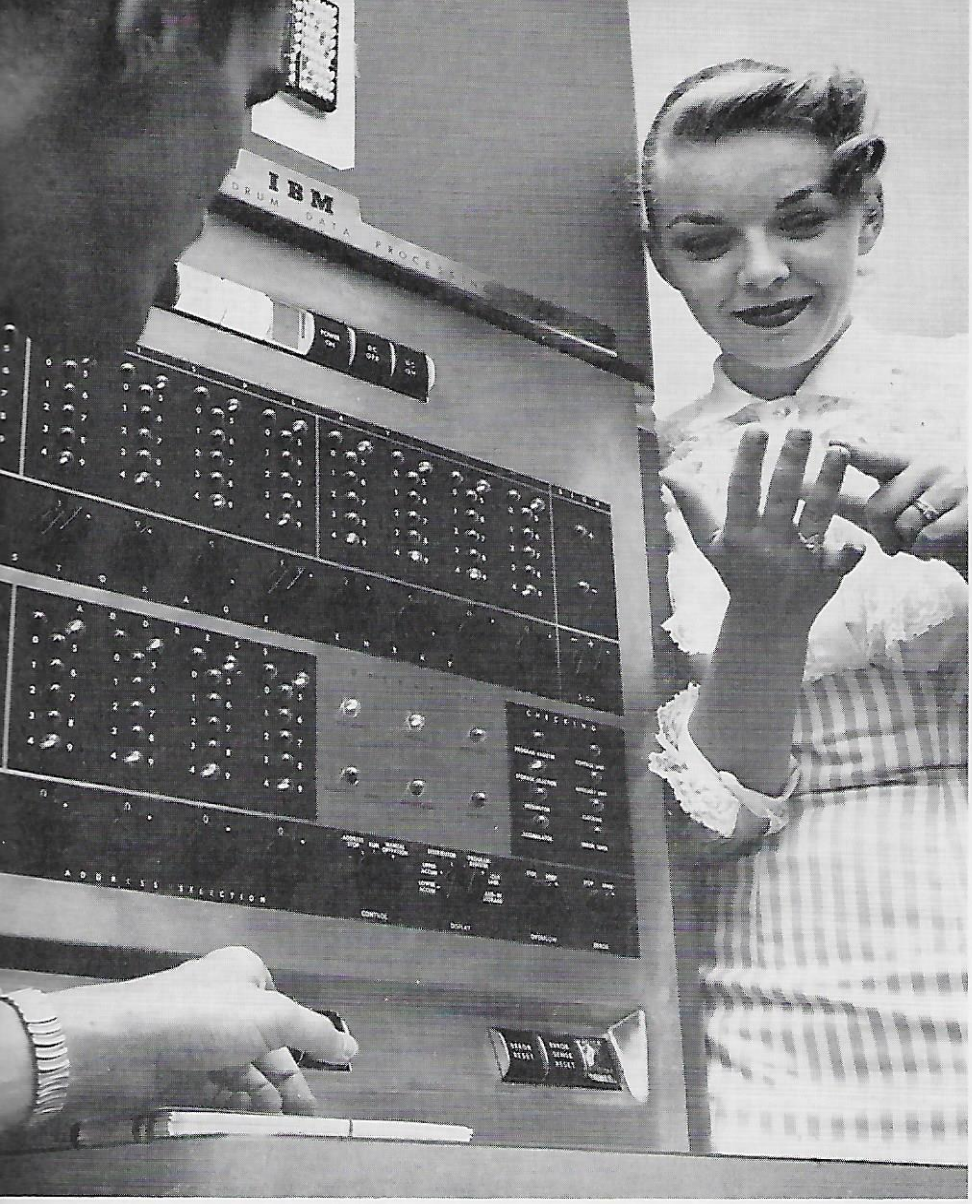
Oil fields are becoming more productive, thanks to the Brain.

Even the canniest scientist can only guess what goes on down in the oil sands when a well is drilled. The men know *how* to compute the behavior of oil reservoirs; but the computations are impossibly complex. Human beings—and oil fields—don't live long enough to solve some of the problems.

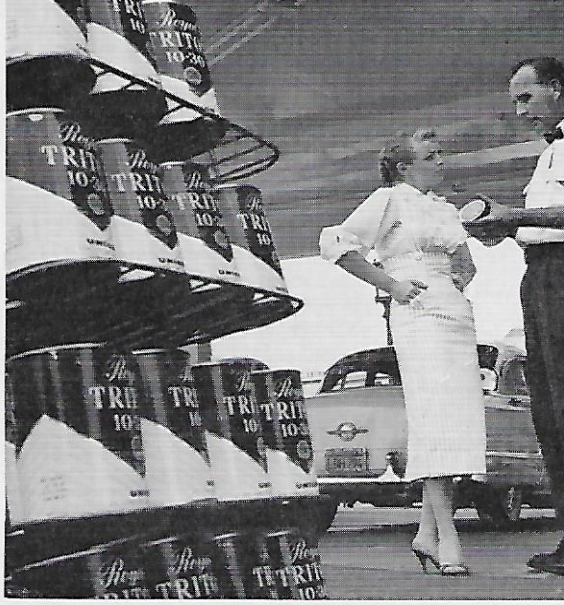
But the Brain is inhuman, with inhuman speed. Union Oil's Brain is already solving problems that will lead to better production methods, to more oil, and to longer-lived fields.

Usually, the computer not only solves a single problem, it even solves alternate problems, giving the scientists two or three lines of attack.

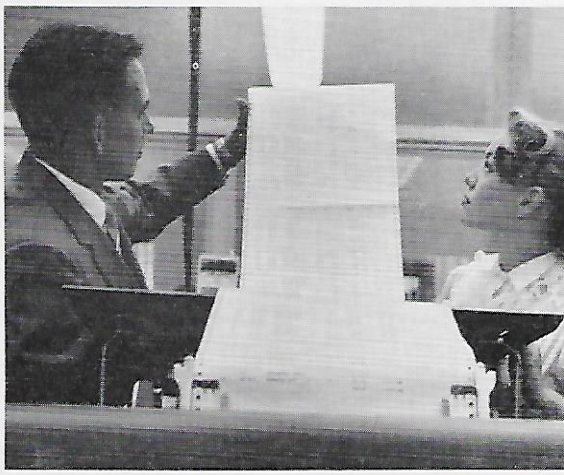
For example: Oil fields are often rejuvenated by forcing either water or gas into them to help drive out oil. The Brain can indicate whether or not a field CAN be rejuvenated and also choose the best method of doing it. Then it will tell you how fast to push the water or gas into the field and how fast to withdraw the oil.



Jackie Clark makes a noble try, but she can't count fast enough to compete with Union Oil's Electronic Computer. The machine rips off thousands of computations a minute, is an exciting tool for probing the future. Operator is Morton Davis.



The new Royal Triton 10-30, which Dave Samuelson is explaining, was made possible by the computations of the brain.



R. L. James shows how automatic machines produce statistics by the yard—analyzed and ready for Company wide departmental use.

By permitting scientists to make choices between processes, the Brain is snipping years off Research projects (as it did in the case of Royal Triton 10-30). Its latest accomplishment was to point the finger at one of three possible methods of improving gasoline. The other two, it indicated, were blind alleys.

All gasoline improvements aren't in the future, either. On the morning you read this, men at the refineries will have telephoned a list of their gasoline blending stocks to Los Angeles. Before you eat lunch, the Brain will have decided the exact percentage of each needed to give Royal 76 and 7600 the highest possible octane road rating. That's quality control!

The Brain is helping field men choose the best way to extract natural gasoline from the gas that comes from wells.

It is narrowing the search for possible oil fields.

With its assistance, refinery engineers are learning for the first time exactly what goes on in their tricky high-octane refining units. From this knowledge will come closer controls and better products.

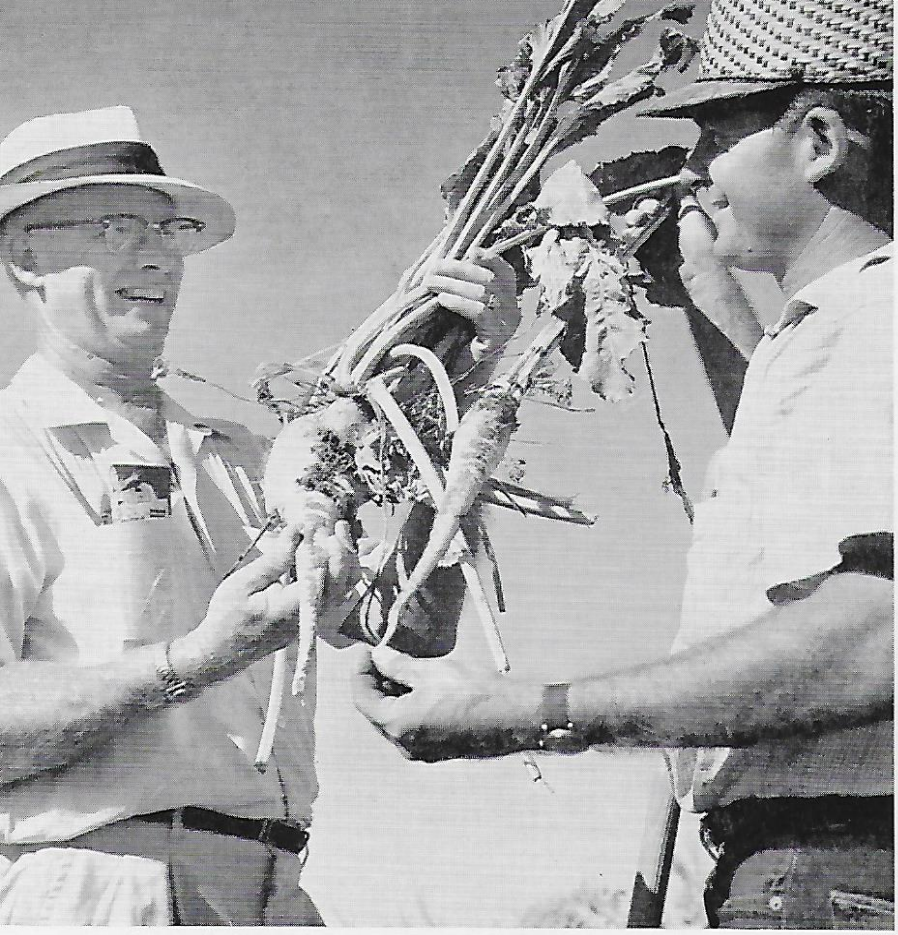
Economists can now take a crude oil sample and predict the precise value of the oil and of the products that will be made from it.

Tomorrow's Union Oil service station will be even more profitable (provided the right dealer operates it) because of the Brain. Selecting service station locations on the basis of potential customers, income level, buying habits and the like is on its agenda.

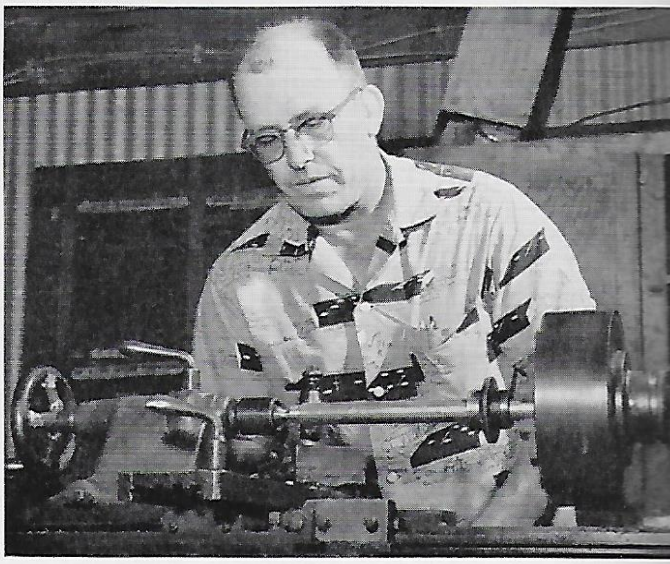
But valuable as it is, the Brain is no smarter than the men and women who operate it, because *they* must tell it what to do. This magnificent moron can never replace people. It has no charm, no allure, no talents—except its ferocious speed and its accuracy.

/THE END

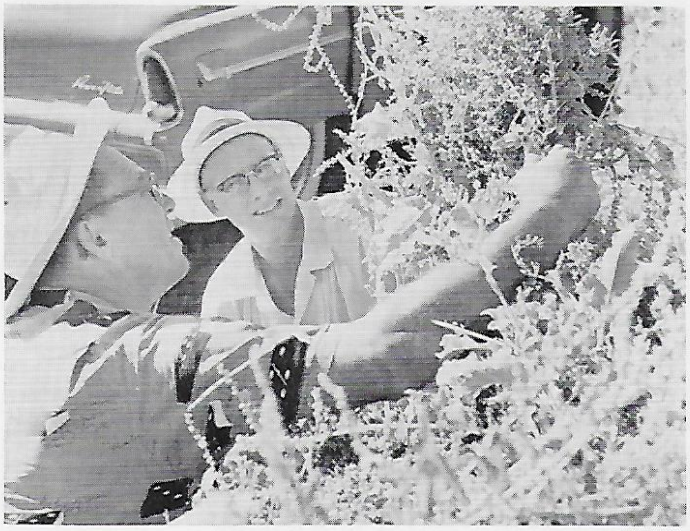
Beeler Brothers Beet Business



Manager Arnold Mast, left, of Western Seed Production Corporation and R. J. Meier, a sugar beet farmer, are vitally interested in seed harvest.



George Beeler turned from school teaching to a lathe.



In Arizona's sunshine, the biennial sugar plants blossom in 12 months and form a jungle-dense growth. Machinery, below, developed by George Beeler harvests the seed mechanically.

ON 1,850 sun-baked acres in the Phoenix area, George Beeler and some of his fellow Arizona farmers have just completed a harvest which will help provide U. S. consumers with about two and a half *billion* pounds of sugar.

The crop involved is sugar beet seed, and in addition to its monumental contribution to the nation's sweet tooth, it has other distinctions. For one, it is a stimulating example of agricultural progress. And historically, it was a key factor in stabilizing a domestic industry which guarantees us ample supplies of the world's finest sugar at bargain prices. Today that industry embraces 69 factories which process sugar beets grown by farmers in 22 western states.

With yields running to about 3,000 pounds to the acre, Arizona farmers this year will supply about 60 per cent of the seed needed by all those farmers. Behind such production are new techniques of pest control, improved fertilizers, more efficient farming methods and a great deal of hard work and ingenuity.

Consider, for example, the self-propelled cutting ma-

To expedite the harvest, Beeler machines are often fueled and lubricated in the field. They account for approximately three-

fourths of Arizona's sugar beet seed production. The half-million pounds of seed grown here produce 2½ billion lbs. of sugar.

chine developed by Beeler, a school teacher turned farmer who introduced himself to machine-making by setting up a lathe in the garage of his home. To appreciate the job done by Beeler's cutter it is necessary to know that as harvest time approaches, the beet seed field becomes a twisted jungle of branches and stalks forming an almost impenetrable conglomeration eight or ten feet high.

Not so many years ago a 40-man crew did well to chop down ten acres of this forbidding mass a day. Beeler's cutter, operated by one man, roars through four times that acreage, leaving the stalks piled up in neat rows. Then a couple of weeks later a threshing machine also developed by Beeler, who now contracts to harvest about three-fourths of the entire Phoenix crop, comes along to complete the job . . . at a cost to the grower, incidentally, of about one-fifth the former harvesting method.

The crop just harvested by Beeler and his fellow farmers was planted 12 months ago.

That simple statement involves an astonishing fact, and it is the basic reason Arizona has become such an important source of sugar beet seed. For the sugar beet is a biennial . . . that is, left to its own devices it will blossom not in 12 months but in two years.

Growers in Europe, where the beet sugar industry started, traditionally produced seed by removing a mature "mother" beet from the earth, storing it in a silo during the winter and then replanting it the next year. This was not only a time-consuming proposition but involved so much hand labor that it was by American standards prohibitively expensive, so Europe had a virtual monopoly on sugar beet seed production.

Thirty years ago, however, some American scientists experimenting with sugar beet culture discovered that a strange thing happened to beets planted in climates such as those found in Arizona. Apparently befuddled by the weather, the sugar beets lost track of the seasons and began to "bolt" (put up seed stalks) in only eight months. Before the end of the year they had produced a fine crop of seeds. Not only was the time element cut in half but these plants didn't need to be removed from the ground.

The crop just harvested in Arizona included 24 different varieties of seed. That these varieties are different poses something of a problem, for among its other characteristics the sugar beet has a roving eye. Great care must therefore be taken to prevent one variety from cross-pollinating another and thereby diminishing the quality for which each seed was bred, and so the individual fields are always separated by a least a mile.

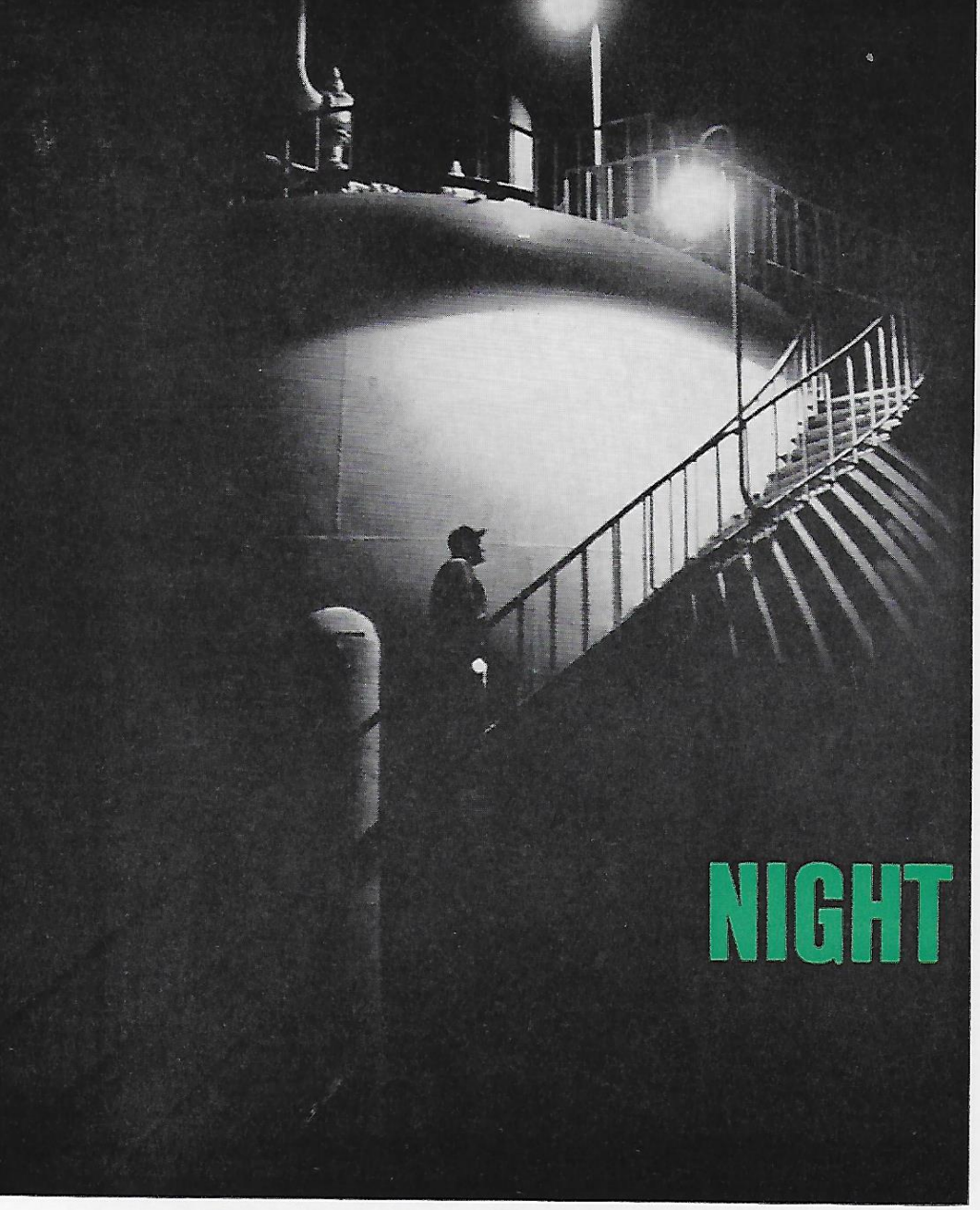
Similarly, only one variety at a time is put through the intense cleaning and sorting operation at the Phoenix plant of the Western Seed Production Corp., the company which contracts for Arizona-grown seed.

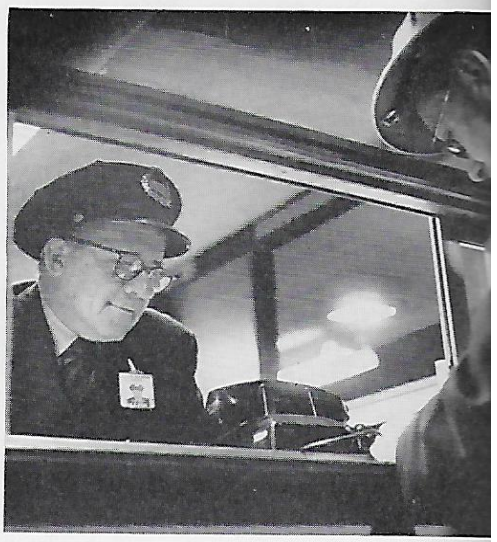
Arnold Mast, Western Seed's manager, estimates this year's production at 5,500,000 pounds. An additional 3,500,000 pounds will be produced at St. George, Utah; Salem, Oregon, and at Hemet and Tehachapi in California. From these locations the carefully identified bags of seed will be sent to various beet sugar companies—Amalgamated, American Crystal, Franklin County, Great Western, Holly, Layton, Spreckels, Union and Utah-Idaho—which in turn will distribute the appropriate varieties to the growers.

The sugar beet is about 24 inches long. It is a silvery-white color and weighs two or three pounds. On the average each beet yields 14 teaspoonfuls of sugar, and thus it ranks with sugar cane as a most prolific source of sugar. Whether from sugar cane or sugar beet, the resulting product is, according to the U. S. Department of Agriculture, identical in every respect.

This year farmers in the 22 western states are expected to harvest enough of these large white beets to produce about two million tons of sugar, more than a fifth of the nation's total consumption. Arizona farmers are capable of accounting for 60 per cent of that total with seed grown on less than 2,000 acres.

/THE END

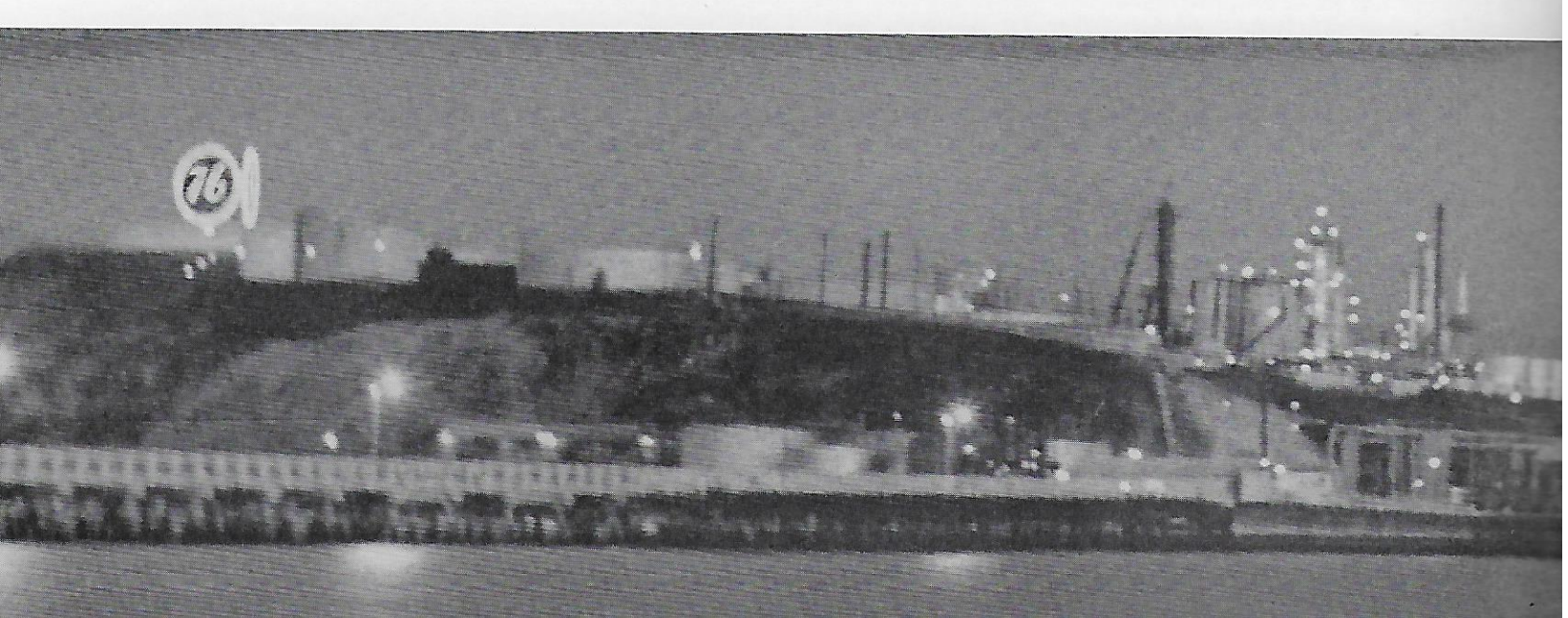


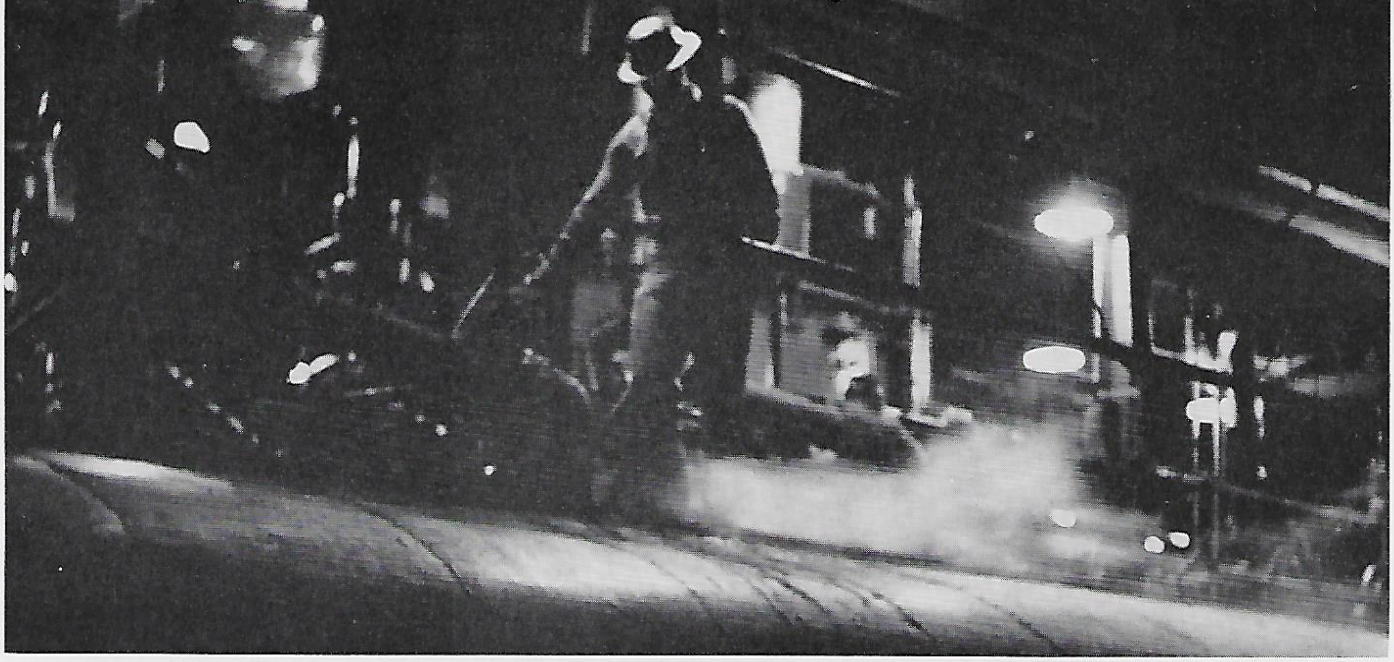


Guard E. F. Rode watches intently as a visitor checks in at the refinery gate. Working personnel and visitors alike get a careful check as they enter working areas of the Oleum plant, now bisected by U. S. Highway 40.

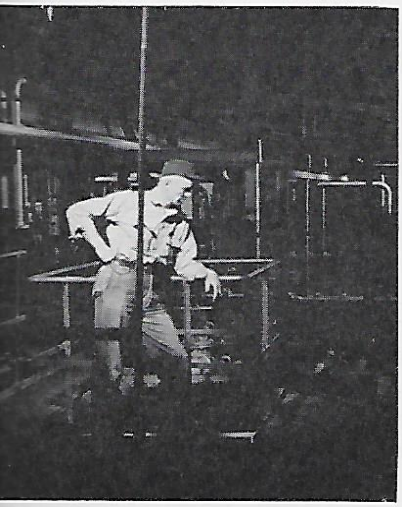
NIGHT SHIFT AT OLEUM

Ghostly light bathes a Hortonsphere and gauger John Westwood as he climbs the winding steps of the tank to make a routine check. The vast reaches of the refinery make a gauger's lot a lonely one, particularly on the night shift where darkness is a constant.

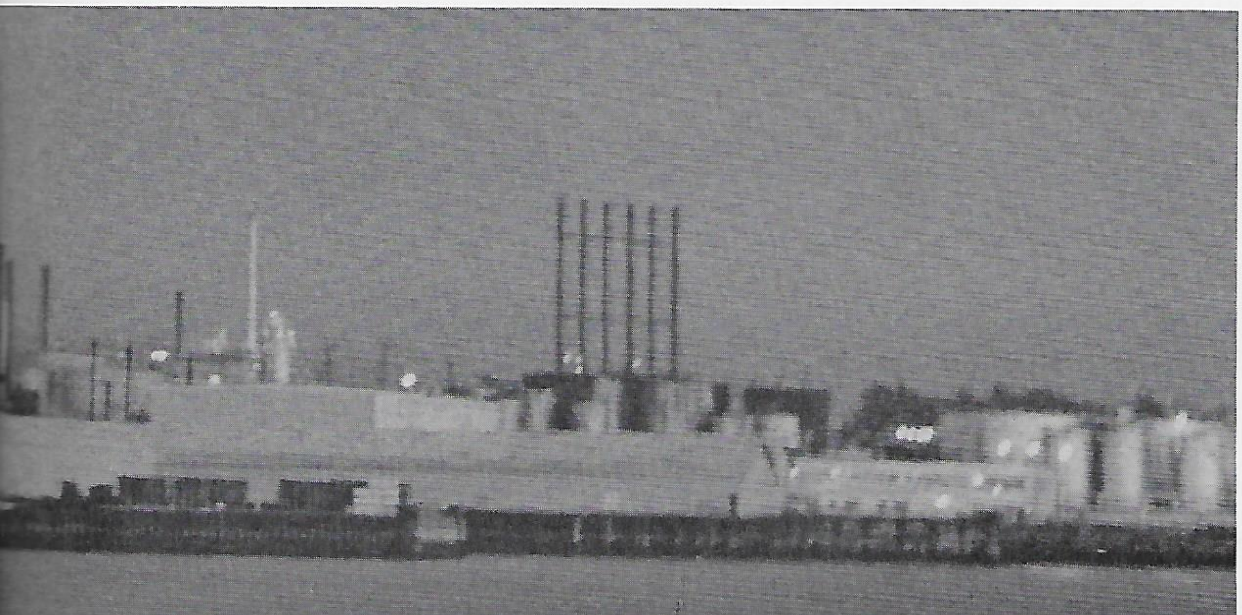




Floyd Cratty directs the pouring nozzle into the belly of the waiting asphalt truck as he directs loading operations in the eerie gloom. While darkness seems to pervade the entire refinery at night, working areas are brightly lit as a safety measure.

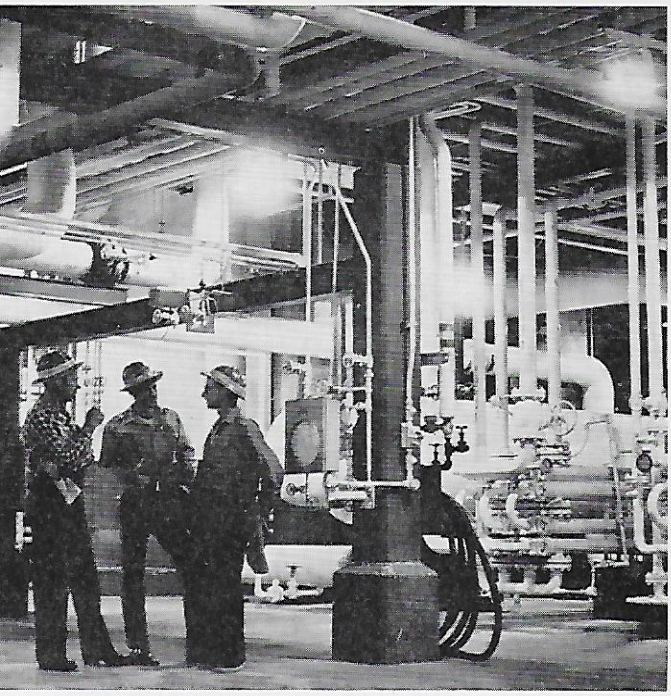


Pumper James Anderson, bathed in a working light, checks gauges that reflect the throbbing flow of oil through the maze of pipelines. In the laboratory, where hours of day and night become meaningless, J. K. Hendryx (center), studies Engler distillation tests used to determine gasoline boiling ranges, while a window frames Don Parker (right) as he conducts asphalt penetration tests.

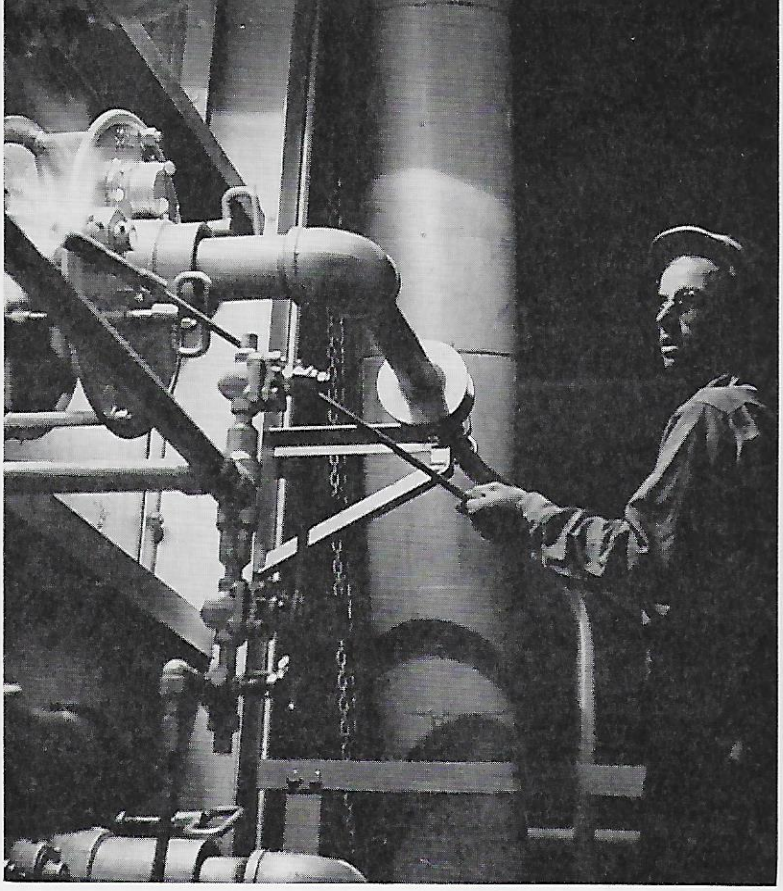


A gull's eye view of the Oleum refinery, looking shoreward from the wharf. Dusk traces the sprawling plant in an outline of lights, dominated by the famed 76 trademark at left.

NIGHT SHIFT AT OLEUM *continued*

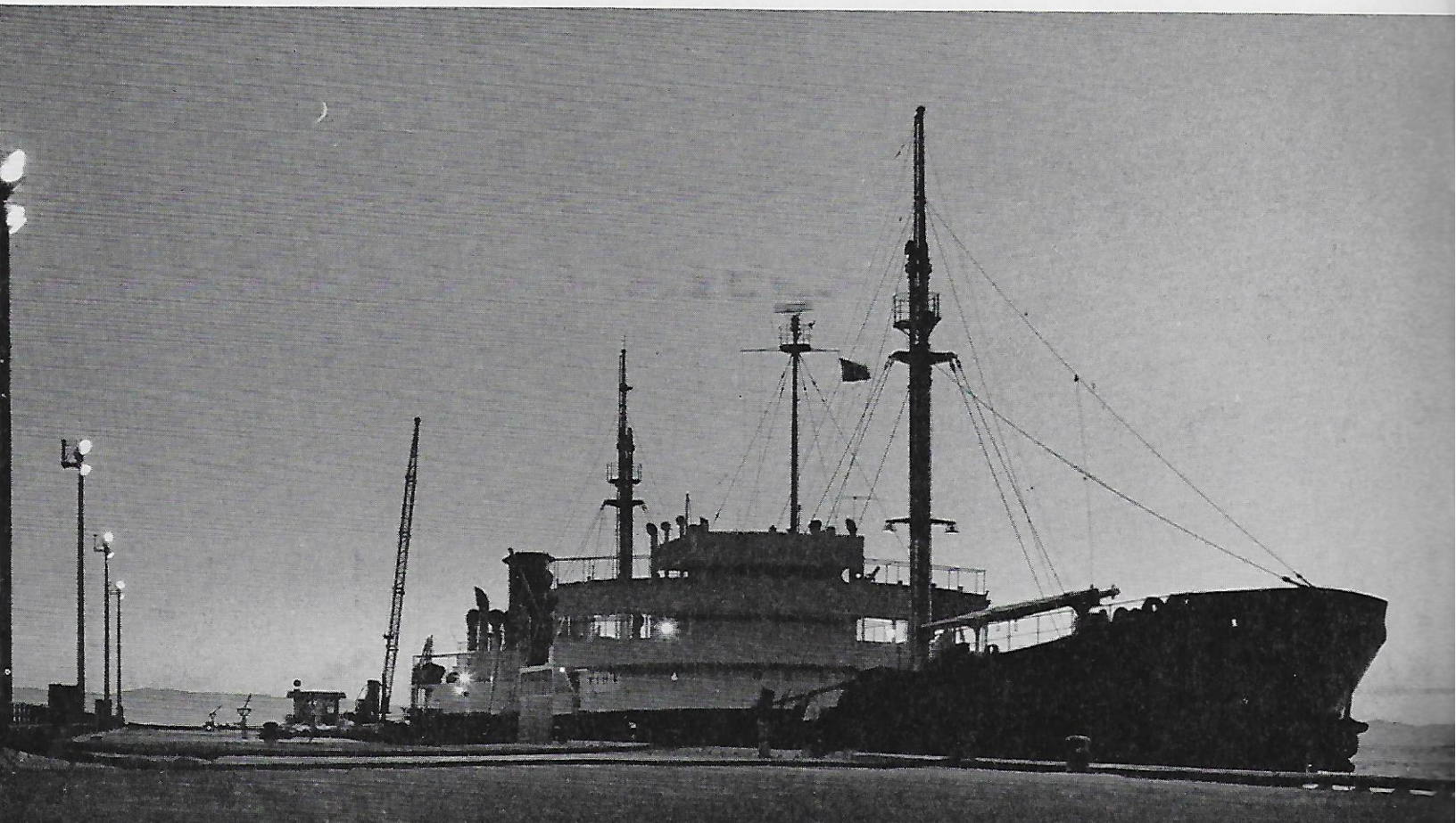


Under the criss-crossing shelter of layers of pipelines in the brightly-lit area of the new Unifiner-Platformer, Operator Joe North, Ernest McCrary and Frank Pink pause for a quick confab.



Frank Pink takes the torch to a heater in an operating procedure that goes on around-the-clock at Oleum or the Los Angeles Refinery. Day and night mean nothing to refinery crews who keep the crude oil coming in and products flowing out in a continuous 24-hours-a-day effort.

A fingernail moon feebly comes to the aid of the dockside lights as dusk catches up with the loading of a giant tanker, moored alongside the still-new Oleum wharf. The tanker rides heavy in the water as loading nears its finish and she makes ready to take to the sea. Loading of tankers and barges is handled automatically and blinking colored lights in the control room are the chief signs of activity.



in focus

MARION EBERHARDT, a stenographer at Los Angeles Refinery, was the first woman to enroll in the petroleum processing course taught at Harbor Junior College. She completed the two-semester course with a grade of "A" and became one of 267 Union Oilers who have graduated since the program started in 1952. In the photo, Miss Eberhardt demonstrates some of her schooling to Foreman Bill Golay.

from H. F. Zirnite

DON AND MANSON ROGERS, left to right, have formed a father-and-son dealer partnership at our newest retail unit in Kenmore, Washington. Don, a Korean War vet, has been making impressive sales gains since taking over his first 76 station in 1954. Manson, his father, has been a successful Union Oil dealer since 1931. Despite this long experience, Manson was eager to "freshen up" at our Dealer Training School.

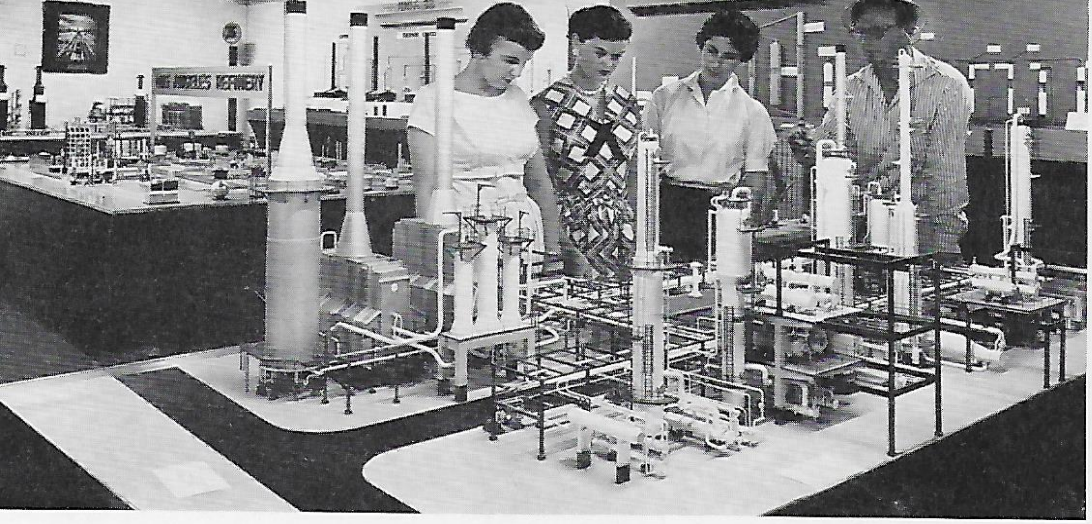
from J. W. White

DEALER DICK DEHNING of Colville, Washington, found that sponsoring Judy Naff as a candidate in the local rodeo queen contest was first rate—even though Judy had to be satisfied with third place. The two knocked on every door in town, won a host of friends and a number of loyal customers.

from Oliver Leedy

CHAMPIONS of Yuma, Arizona, Businessmen's Bowling League in 1957 are, front low l-r, Bill McCay, 76 Dealer John Sellers, Lt. Tony D'Angelo; standing, T/Sgt. Ervin Stein, Captain Robert J. Bain, Team Captain T/Sgt. William S. Curtis and M/Sgt. Merness L. Holmes. In recruiting the finest for his 76 team, Dealer Sellers exhibited outstanding generalship.

from T. W. Proudfoot



A MODEL ROOM, containing miniature refining units, attracts many of the 20,000 visitors who tour Los Angeles Refinery annually. Attractive too are, from left, Nancy Martin, Linda Chambers and Jean Shaffer, seen with Forrest Watts inspecting a recently added model of the refinery's new Unifiner-Platformer units.

from H. F. Zirnite

IN MEMORIAM

Employees:

JAMES L. TAYLOR
Southern Division Pipeline *July 25, 1957*

LOUIS C. KENNY
Oleum Refinery *July 26, 1957*

Retirees:

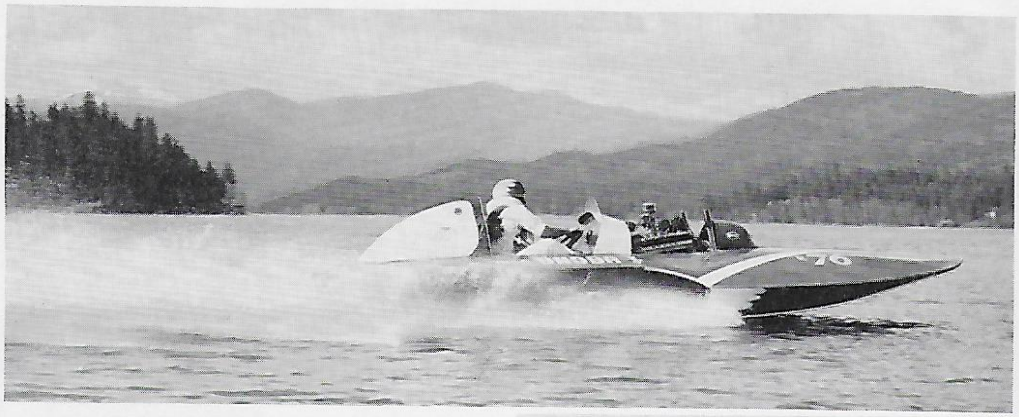
CLAUDIUS L. SMITH
Southern Division Field *July 10, 1957*

JULES A. McCAULEY
Oleum Refinery *July 13, 1957*

ISACC K. O'HAVER
Central Territory *August 4, 1957*

JOSHUA FULLER
Coast Division Field *August 6, 1957*

JOHN POTTS TAYLOR
Northwest Territory *August 6, 1957*

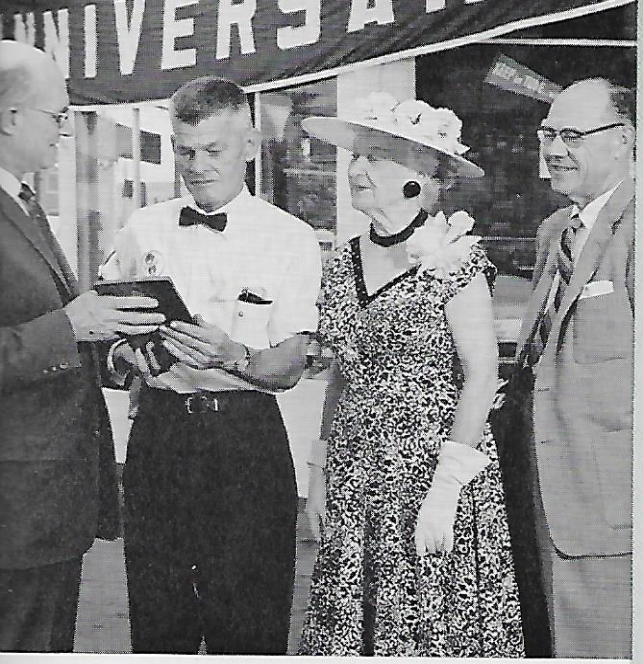


KEN KIMBROUGH, JR., tank truck salesman in Spokane Valley, has the makings of the *finest* hydroplane afloat. His Miss Unoba 1, with the racing number E76, is already giving some of the unlimited hydroplanes a race despite its stock power plant. Next winter he plans to engineer some mechanical improvements and go after those world's records. His wife, Joanne, is the crew; she "swims" the boat while Ken gets it moving.

from M. E. Nichols

ART PARKER, standing extreme right, combines his job of tank-truck salesman with a coaching assignment on one of Portland's hottest Little League baseball teams. Art "retired" to the oil business from a professional baseball career with the Chicago Cubs. His son Artie, seated second from left, plays 3rd base for the Little Leaguers. Manager of the team is Val Fisher, extreme left. Note the mascot, a lad not too big for his pants.

from W. I. Havland



CLAUDE THORNTON, 76 dealer in Glendale, California, was a trifle overwhelmed on receipt of his plaque "honoring 26 years of association with Union Oil Company." On hand to make the presentation in late July were, from left, Territory Manager C. E. Rathbone, Mayor Zelma Bogue of Glendale and DSM R. H. Rockwell.

RETIREMENTS

September 1, 1957

	Service Date
THOMAS E. BUSKIRK *Southern Division Pipeline*	*April 16, 1926*
IRVIN W. CARNER *Southern Division Field*	*July 7, 1919*
RONALD R. DRAKE *Northwest Territory*	*January 7, 1920*
RAYMOND E. EDWARDS *Southern Division Field*	*June 14, 1922*
ALMA S. KIPPER *Comptroller's*	*July 28, 1921*
HORACE A. LAPHAM *Comptroller's*	*September 1, 1921*
CLARENCE I. LeFEBVRE *Oleum Refinery*	*August 16, 1929*
DONALD L. LOUGHERY *Southwest Territory*	*September 13, 1921*
ORA D. MATHENY *Valley Division Field*	*March 1, 1950*
LESTER J. THOMSON *Los Angeles Refinery*	*May 25, 1930*
HUGO S. WALTER *Los Angeles Refinery*	*May 9, 1944*

SERVICE Birthday AWARDS

September 1957

EMPLOYEES

40 YEARS

ASHLEY V. DOSS.....So. Division Pipeline

35 YEARS

WILLIAM H. ORENS.....So. Division Pipeline
CECIL H. REYNOLDS.....Central Territory
FRANK A. REYNOLDS.....Central Territory

30 YEARS

LEE W. AMLINGER.....Los Angeles Refinery
EDWARD R. ATWILL.....West Texas Division
GERALD C. CHAPPELL.....Southwest Territory
W. ALLEN ELY.....Tax Division
PAUL E. ETHRIDGE.....Central Territory
CLARK D. GROVE.....Oleum Refinery
RICHARD E. HALL.....Research
HERBERT F. JOHNSTEN.....Los Angeles Refinery
JOSEPH F. SANTOS.....Oleum Refinery
JAMES C. WARREN.....Research
OSCAR WILLEMETZ.....Oleum Refinery

25 YEARS

GEORGE F. HIGGINS.....Cut Bank, Montana

20 YEARS

CHARLES N. COMBS.....Central Territory
GERALD M. GIBBONS.....Sales Services
HOWARD J. GUNDY.....Southwest Territory
EDWARD KENDALL, JR.....Central Territory
JOHN B. KRIEGER.....Oleum Refinery
MYRL A. REAUGH.....Manufacturing
GEORGE O. SMITH, JR.....Southwest Territory

15 YEARS

ARYLE E. ARMSTRONG.....Central Territory
RAYMOND V. BLANCHARD.....So. Div. Automotive
EARL W. CAIRNS.....Secretarial
LEO F. COLLISTER.....Los Angeles Refinery
JOHN B. COLLARD.....Los Angeles Refinery
JOSEPH H. CORMIER.....Rocky Mountain Division
DONALD C. CRAIG.....Northwest Territory
FREDERICK DUNN.....Los Angeles Refinery
PHYLLIS M. GARCIA.....Comptroller's
JOHN E. KEIDETH.....Northwest Territory
HARRY A. MILLER.....Los Angeles Refinery
HERMAN R. NEWMAN.....Oleum Refinery
ROLLIE B. PLAUGHER.....Coast Division Field
EPHRAIM G. STARKEY.....Coast Division Field
FERDINAND O. VILLIEN.....Gulf Division

10 YEARS

JOSEPH A. AVILEZ.....Oleum Refinery
LLOYD H. ANDERSON.....Los Angeles Refinery
EDMOND P. COONY.....Tax Division
DONALD E. CRAGGS.....Valley Division Field
JOHN D. DYESS.....West Texas Division
JAMES E. EKE.....Exploration, Orcutt
ALMERON J. FIELD.....Field, Offshore
ERIC I. FREDHOLM.....So. Division Pipeline
LEON H GARNEY.....Gulf Division
MURRAY HAMILTON.....Los Angeles Refinery
MURPHY G. HAYES.....Central America
HENRY L. HOLDREN.....Santa Maria Refinery
J. B. JORDAN.....West Texas Division
ANDREW LEMISH.....Oleum Refinery
ROLANDO A. MARTINEZ.....Central America
RICHARD C. NEUMAN.....Comptroller's
ROY G. PERRY.....Los Angeles Refinery
FRANK W. ROBINSON.....Comptroller's
LOREN E. RUSSELL.....Central Territory
WOODROW W. SEARCY.....Oleum Refinery
MAYNARD STRADER, JR.....Los Angeles Refinery
DOYLE R. THOMPSON.....Valley Division Field
ERIC H. WILANDER.....Comptroller's

DEALERS

25 YEARS

J. E. GUZMAN.....Los Angeles, California

20 YEARS

GEORGE A. SILVA.....Concord, California

15 YEARS

G. N. BRODERSEN.....Gilroy, California
H. L. DAVIDSON.....Spokane, Washington
J. C. HILL.....Los Angeles, California
GORDON C. ROHR.....Daly City, California

10 YEARS

T. D. BAGLEY.....Gales Creek, Oregon
HELEN BROOKS.....Hollister, California
CLARK-BEAMER CO.....Sacramento, California
IRVING GORDON.....San Fernando, California
DAN HOLBROOK.....Lewiston, Idaho
HOWARD C. LONG.....Madera, California
LEE SHEPPARD.....Nelscott, Oregon

5 YEARS

WAYNE COMPTON.....Phoenix, Arizona
CREST LODGE.....Soda Springs, California
KEITH DAMRON.....Mossyrock, Washington
FORT RICHARDSON POST EXCHANGE.....Anchorage, Alaska
W. F. GARRISON.....Pasadena, California
THOMAS H. HURL.....Riverside, California
CHARLES JOHNSTON.....South Gate, California
L. C. LANGDALE.....Port Angeles, Washington
E. D. LEEDOM.....Crawfordsville, Oregon
JAMES W. LOGAN & BOB TOKAYAMA.....Redwood City, California
J. M. McCARTHY, JR.....San Diego, California
THOMAS R. MEALEY.....Concord, California
J. P. MENDEZ.....Crescent City, California
WILLARD MILDFELT.....Yakima, Washington
CONRAD MILES.....Pasadena, California
O'NEIL BROTHERS.....Sacramento, California
A. H. PEIK.....San Diego, California
JOHNNIE PYEATT.....Dixon, California
FRANK ROSE.....San Francisco, California
J. W. SMITH.....Traver, California
R. W. STRATTON, JR.....Spenard, Alaska
WILLIAM E. VIRGIL.....San Francisco, California

Chedo Chuckovich

He's one of the few who got a second chance

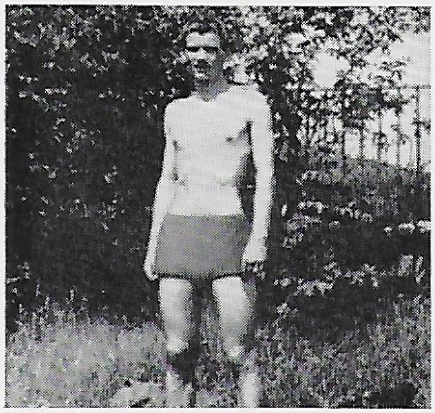
"I'm Chedo Chuckovich, lucky to live in America.

"For I have also been Chedo Chuckovich, man without a country.

"I was born in Belgrade, Yugoslavia. My father was co-owner of the Serbian-American National Bank. I had been educated in schools in France and Switzerland, and planned on a career in diplomacy.

"When I was 17, the Germans invaded my country. I fled with my family into the hills, and joined the guerillas. My father was killed. My brother was killed. I was wounded and taken prisoner, and starved for five years in a Nazi concentration camp.

"Two weeks before the war's end, the Canadians freed me. My family was dead or scattered. Our property had been



CHEDO, AFTER CONCENTRATION CAMPS

confiscated. The Communists had taken over Yugoslavia. I was a man without a country.

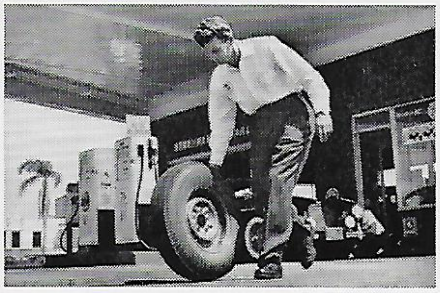
"But I was one of the lucky displaced persons. Unlike so many of the others, I got to America, and a new start.

"Today I am in business for myself, a Union Oil dealer in Pacific Palisades, California. I have money in the bank, a home, a car. I have the respect of my neighbors. I have friends and a future again. I will soon be an American citizen.

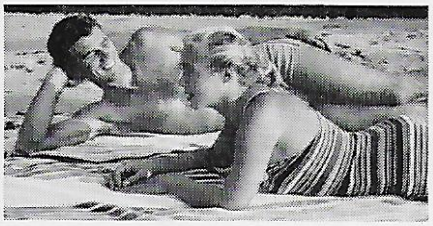
"I will work at my citizenship because I learned the hard way you can't take it for granted. You have to earn it.

"I know, because I'm one of the few who got a second chance at freedom."

CHEDO CHUCKOVICH: "YOU CAN'T TAKE YOUR FREEDOM FOR GRANTED."



Chedo's life underlines a basic truth, we believe: Wherever men would remain free, they must remain alert.



For any concentration of power in the hands of a few—whether they be business men, financiers, industrialists, government officials or labor leaders—is, inevitably, at the expense of the majority.

YOUR COMMENTS ARE INVITED. *Write: The Chairman of the Board, Union Oil Co., Union Oil Bldg., Los Angeles 17, Calif.*

Union Oil Company OF CALIFORNIA

MANUFACTURERS OF ROYAL TRITON, THE AMAZING PURPLE MOTOR OIL