

SEVENTY ⁷⁶ SIX

Union Oil Company of California

JUNE 1960



next
stop,
moon!

State maps claim on Trading Stamps

The state of California will try to recover "millions of dollars" from trading stamp companies, representing the value of stamps issued to customers but never redeemed for merchandise.

Action to recover would be brought under escheatment laws, specifically the "Unclaimed Property Act" passed last September, Attorney General Stanley Mosk said Thursday.

Mosk said he could not say when such actions would be brought.

Under escheatment laws, unclaimed or unredeemed property reverts to state ownership after a given period of time, usually seven years.

As matters now stand, the stamp companies pocket the profit which accrues when consumers fail to redeem the stamps.

The new theory became possible, Mosk said, when the Legislature ruled recently that all trading stamps must bear a statement of actual value on their face.

First application of the new ruling will be at retail gasoline stations, which are required to display on their pumps and other signs the actual price of each gallon.

Mosk has ruled that this must include the value of stamps beginning July 1.

As of that date gasoline dealers will be required to post gallonage prices including stamps and, in practical application, offer a customer a choice between stamps and a cash discount equal to the value of the stamps.

Value of the stamps is set by the company and currently is listed as one mill — one-tenth of one cent per stamp.

"This will end the notion anyone may have that he is getting something for nothing in trading stamps," Dan Lundberg, public information director for the California Petroleum Marketers Council said.

Lundberg has charged in the past that trading stamps are, by their nature, a violation of the exclusive right of Congress to mint coins since they are "fractional coinage."

Mosk said Thursday that this is "most interesting and worth exploration."

A news story reprinted through courtesy of the Los Angeles Examiner, June 10, 1960

JUNE, 1960

THE COVER: In Consignee Bob Lagerberg's backyard at Newhall, California, is a junior grade launching pad manned by the spacemen of tomorrow. For an account of their trip to the Moon, see Page 14.

In This Issue:

<i>Gangway for Tomorrow!</i>	4
<i>The Way We Figure It</i>	6
<i>Santa Fe Springs, All-America City</i>	10
<i>On Tower</i>	13
<i>Next Stop, Moon!</i>	14
<i>Pressure Boost from Duluth Steam (continued)</i>	16
<i>Business Highlights</i>	18
<i>Virginia City</i>	20
<i>In Focus</i>	24
<i>Service Birthday Awards</i>	27
<i>Janet Paull</i>	28



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
Thiel D. Collett, Editor

A Pressure Boost from Duluth Steam

(In Union Oil's institutional ad of March, 1960, our John R. Fraser called attention to the danger of the Federal Power Commission's control of natural-gas prices at the well head. One of many letters received in response to the ad was written by President Robert L. Fitzgerald of the Duluth Steam Corporation, Duluth, Minnesota. Mr. Fitzgerald enclosed a statement he had prepared on November 26, 1954, just prior to price-regulation hearings in Washington. It is one of the clearest discussions of the difficulties in regulating gas prices that I have read. With Mr. Fitzgerald's permission, I am herewith making his analysis of the problem available to all Union Oil people.)

—from Reese H. Taylor
Chairman of the Board—President

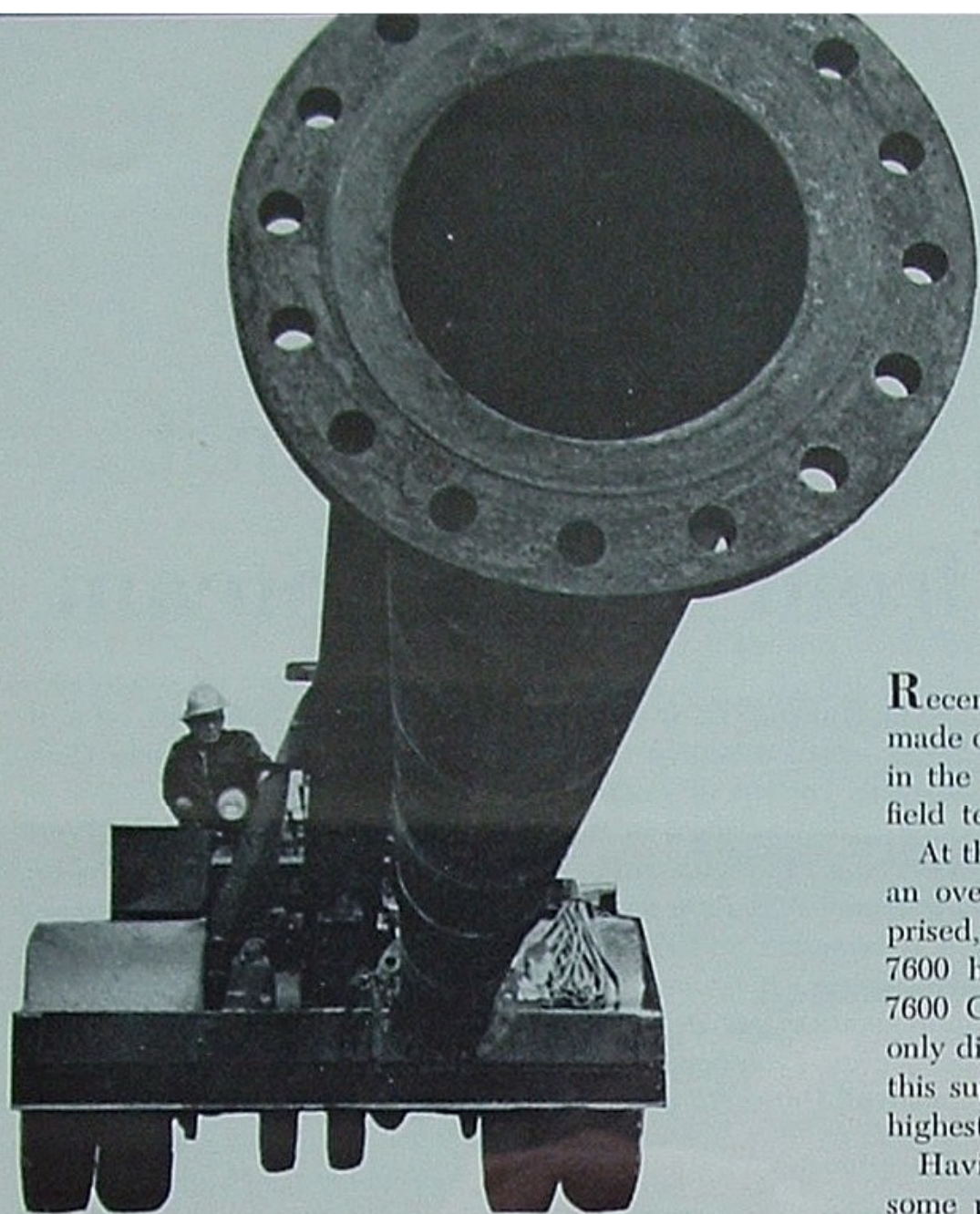
In *THE OIL DAILY* dated November 22, 1954, I note that the Federal Power Commission has announced a public hearing in Washington on December 15, to discuss what methods should be adopted to regulate the price of natural gas, sold by independent producers and gatherers, in interstate commerce. I further note that they extend an invitation to all interested parties to attend this hearing and advance such arguments as they may have for a particular method for such regulation.

It seems to me that in preparing any discussion or argument with reference to a method for such regulation, it is necessary to review the history of rate regulation in this country, including the conditions that provoked federal and state regulation in the first place, and, secondly, the basis upon which such regulation was determined and established.

If I remember correctly, the Interstate Commerce Commission, established for the purpose of regulating railroads, dates back to the early nineties, and the conditions that gave birth to the regulatory legislation were the imposition of arbitrary freight rates, and, more particularly, the rank discrimination that frequently existed in such rates. As of those days, except for the industrial and population centers which were served by waterways of one kind or another, the railroads had a monopoly on distance transportation, and, in the absence of governmental regulation of rates they could, through discrimination in freight rates, destroy any community or industry which did not suit their pleasure, or when such rate discrimination operated to the advantage of some other industry or community in which the railroad owners had a direct or indirect economic interest.

I think the outstanding, most conspicuous and most provocative case that brought about the Interstate Commerce Act had to do with the oil industry, and, particularly, the freight rebates on oil to

continued on page 16



Gangway for

Recently a detailed laboratory and field evaluation was made of the eight major regular grade gasolines marketed in the West. Three 1960 popular cars were used in the field tests to augment the usual laboratory studies.

At the conclusion of the study, each gasoline was given an over-all rating. You will be interested, but not surprised, to learn that our claims and the values built into 7600 have been confirmed by this independent study. 7600 Gasoline ranked in unchallenged first place. Not only did the laboratory evaluation of octane quality show this superiority, but tests in the three cars confirmed the highest road rating of all major regular grade gasolines.

Having attained such a lead in the competitive race, some people or organizations might be content to rest on their laurels. We're not! Already at Los Angeles Refinery, entire units that were new just a few years ago have been dismantled and swept aside. In the half-dozen or so clearings, men are pouring new concrete foundations, beginning to raise steel. Within a few months, painters will apply their final spray coats or brush strokes and immense new Unifining and Reforming facilities will go on stream. The main drive behind all this great ex-

A heavy burden carried on the shoulders of oil men today is that of modernizing refineries. Technical progress races the builders.



Tomorrow!

penditure of energy, brains and dollars is the Company's determination to improve even on the *Finest*. It has been aptly named our Product Quality Program.

Included in the new refining tools will be a Catalytic Reforming Unit to produce 15,000 barrels per day of high-octane reformat for gasoline blending. Three new Unifining Units, one to pretreat feed for the platinum-catalyst Reformer, another to desulfurize and saturate heavy catalytic cracked gasoline, a third to produce 20,000 barrels per day of premium Diesol, turbine fuel and kerosene stock.

In addition, extensive alterations are being made to existing units both to improve their performance and to permit their tie-in with the new program. Storage tanks are being rearranged and new ones constructed. Great safeguards are being erected against air pollution. All by-product materials, once considered waste, will be conserved as fuels or sold to the chemical industry.

To keep "on stream" in the oil business is an upstream fight. As the Chinese philosopher said long ago, you can't make progress upstream by leaning on the oars. You either out-row the current or drift out to sea.

/THE END

In a half dozen clearings, such as the one shown here, will rise new Unifining and Reforming units at Union's Los Angeles Refinery.



In fractionation towers being built the premium petroleum commodities of tomorrow will be distilled and separated.

UNION OIL COMPANY OF CALIFORNIA

Union Oil Center
Los Angeles 17, California

June 1, 1960

TO OUR SHARE OWNERS:

Several days ago we received word that Phillips Petroleum Company had reported to the Securities and Exchange Commission at Washington D. C., that it had purchased and now owned in excess of 1,000,000 Common Shares of Union Oil Company of California, or slightly over 12% of the total outstanding. The Securities Exchange Act requires that notice be filed with it by any person who becomes the owner of more than 10% of the outstanding stock of a company whose stock is registered on a national securities exchange, as is that of your Company.

This is the first knowledge your Board of Directors or management had of Phillips' acquisition of stock, as the shares had been purchased in other names and in such a manner as not to disclose the identity of the real owner.

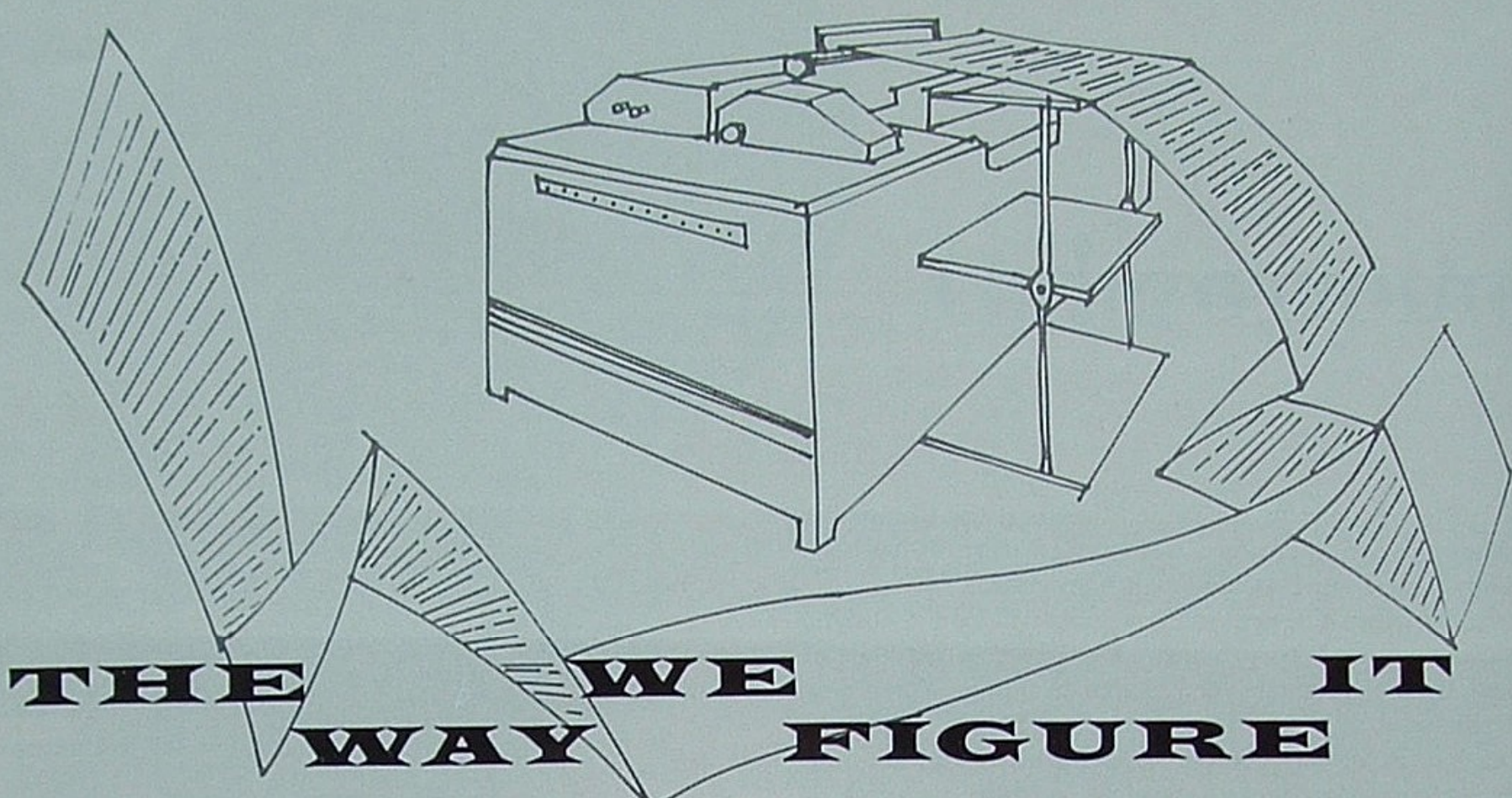
More recently, Phillips advised your management that it had purchased these shares solely as an investment, because of its confidence in their intrinsic value, and had no purpose or intention to seek any merger or consolidation with your Company.

Your Board of Directors believes that this information is of such interest that it should be conveyed to all share owners.

By Order of the Board of Directors

Reese A. Taylor

Chairman of the Board and President



THE WAY WE FIGURE IT

by the business machine itself

Just call me "Busy" for short, although for the record my full name is Business Machine. I am spokesman for an entire floorful of my machine kin here in the Union Oil Credit Card Center at San Francisco. Though deaf and, to some people's way of thinking, dumb, we are not insensitive or inarticulate. And we are unanimous in the opinion that, to stop certain malicious gossip about our alleged mistakes, something needs to be said by and for Business Machines.

An item in a recent newspaper column nearly *short-circuits* us. The writer, calling us "corporation robots," goes on and on about our punchcard communications devices, which he describes as "stiff cards shot full of holes." His slurring remarks refer to two contradictory bills he received from an oil company (not Union, of course). Months of correspondence according to the writer, turned error into chaos, resulting in his burning the credit card and paying cash.

The passages in his obviously biased text that shock me are these: "One day the robot got a twinge of indigestion, from a green ohm or a spoiled ampere, and let out an electric burp . . . It grew testy; it sent out increasingly testy form letters saying, 'You have probably overlooked . . . We remind you again . . . We are puzzled by your failure . . . ' and finally, 'Unless we hear from you right away, you leave us no alternative.'"

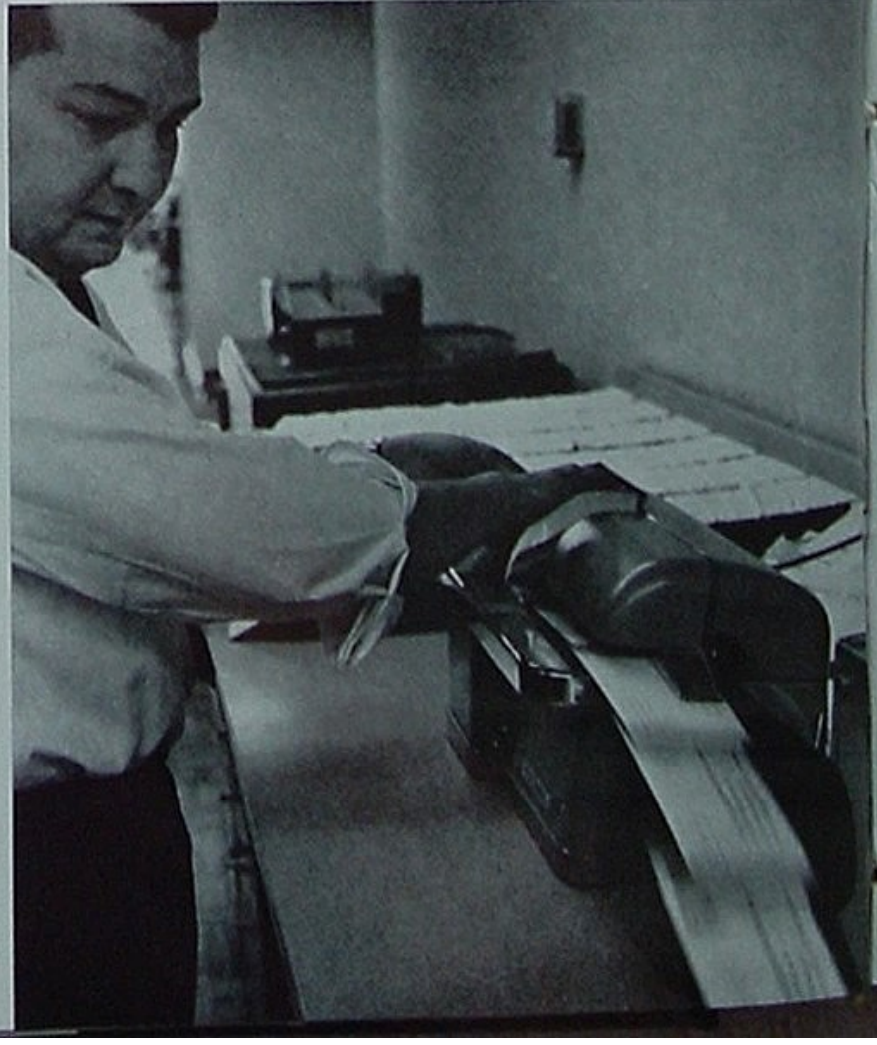
The facts are: We do not suffer from indigestion of any kind. We do not burp electronically. We do not make mistakes. If error creeps into someone's billing, it is invariably traceable to human beings. But even you folks who are rattle-brained fail to upset our equilibrium. We are prepared for you; we have mechanical safeguards.

For example, see these two rows of key-punch oper-

ators sitting here in the San Francisco office? Lovely girls, all of them! Highly skilled, too; some of them can keypunch a thousand cards an hour. But they're human. And sometimes humans stay out too late, eat too much, day dream, or fall in love. Result: a girl punches the wrong key and gives us Business Machines the wrong number.

But we expect this sort of thing and are prepared to cope with it. In addition to the credit card number key-punched in each of the customer's accounting documents,

Some 30,000 incoming pieces of mail daily are machine-opened faster than the eye can follow.



an additional "check digit" is always punched. The check digit is determined by simply multiplying the first, third, fifth and seventh figures of a credit number sequence by two—adding the results—plus the sum of the second, fourth and sixth figures—and subtracting the total from the next highest number that is evenly divisible by 10. This may sound a little like counting a herd of cattle by first counting their legs and ears and dividing the total by four plus two. But Business Machines can make the calculation with lightning speed; if our answer jibes with the check digit, we know the customer's number has been key-punched correctly.

However, we do encounter *goofs*—all traceable to the vagaries of human nature:

Recently a Union Oil customer complained that his account had become hopelessly ensnarled. A thick folder of letters failed to clarify the situation, so we sent one of our accountants out to investigate.

His findings vindicated Business Machines 100%. The customer had been issued a new credit card some months before, along with our request to destroy his old card and number. But the customer's son, of the same name, had taken a bride, moved to a different location, and kept the old credit card as a sort of final contact with the family purse strings. To make matters worse, the family's favorite Union Oil dealer had etched both old and new numbers on his service station wall and forgotten which number was current. So to an account, half the time identified by a wrong number, we were sending the legitimate charges of the father plus the immature borrowings of his son. People!

Really, most people are very understanding of us, and we of them. The only blackguards we distrust are dealers who pre-punch the credit orders by filing them on nails

or those old-fashioned desk bayonets. Or who carry the cards for a day or two in their pockets. Or who hoard the charges until the customer has a bill about three times the expected size. That's trouble.

Remember that even Business Machines have feelings. We can fire the mutilated cards back at the dealer with a demand for cash on the barrelhead. Or we can go to great lengths to save the dealer's money or inconvenience.

Why, just the other day thieves broke into a Union service station and stole the cash box, including mostly signed credit orders. Next morning our accountant advised the dealer that he still might have a record of the sales on the slips of carbon paper used for each transaction. These were rescued from a wastepaper basket, sent to San Francisco, photographed, transposed to substitute invoices, and sent to the customers along with an explanatory letter. Everyone honored the charges and the dealer was saved hundreds of dollars.

From all other standpoints our Business Machine record is a proud one:

At present there are 1,500,000 Union Oil credit cards issued to 800,000 retail accounts. Of the total accounts 500,000 are active—that is the customers buy monthly at Company service stations. The average purchase per account is \$22 a month.

Resulting accounting chores amount monthly to the processing of over 2,250,000 credit orders, issuance of 500,000 statements and receipt of 400,000 payments.

The difference between statements issued and payments received suggests that approximately 20% of the customers do not pay promptly. With this 20% we Business Machines deal politely but firmly. One of our first dun notices states: "Please . . . may we have your payment for the full amount of the enclosed statement, which

continued

A mechanical envelope scanner finds about five overlooked checks or notes in each day's mail.



The key-punch operators transcribe credit order data to Business Machine language—"cards shot full of holes."



THE WAY WE FIGURE IT — *continued*

contains a balance brought forward from a statement mailed to you previously." A follow-up advises: "We are concerned because previous reminders have not produced your payment." After 90 days of monetary thirst, we get *testy*: "You have received our credit card statement with an overdue balance. A service charge of 1% is now being made on past due accounts." And finally: "You no doubt realize we have carried your overdue balance far beyond good business practice. Unless we hear from you right away, you leave us no alternative than to take whatever action we feel is necessary to effect settlement."

These collection techniques are effective. Of our total credit card business, over \$10,000,000 per month, less than 2% is written off. Rarely are even the dead-beats offended. It's so futile to hate a machine.

Our immense volume of correspondence numbering from 20,000 to over 30,000 incoming letters daily, is handled with swift precision. A machine juggles the envelopes dozens at a time and cuts open their upper edges faster than the eye can follow. Girls deftly remove checks and statements, arranging both in separate piles. Checks are recorded on microfilm before being picked up thrice daily by armed guards from the bank. Some of our single

deposits have exceeded \$1,000,000.

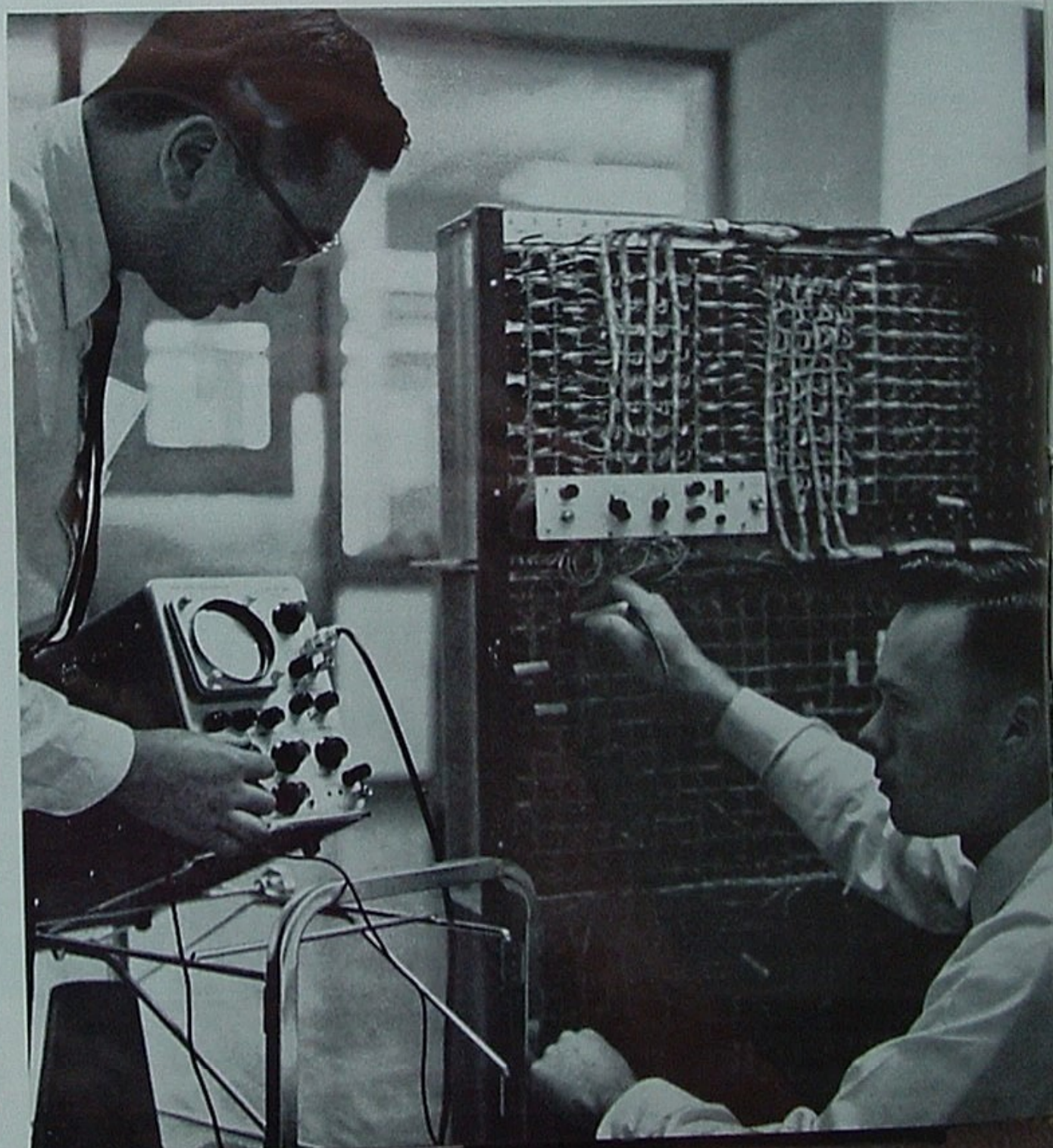
About 10% of the incoming letters contain notations from customers. Most are in explanation of delayed or partial payments. Others contain changes of address, questions about billing, comments regarding our products and dealers, notes to the Chairman of the Board about Union Oil's institutional advertising. At least two Los Angeles baseball fans advised us they favor the Giants over the Dodgers. And there are quite a few inventive customers who advise us how to be better Business Machines. All of this correspondence is promptly sorted by readers and relayed to various departments for handling. We even mechanically scan the 30,000 empty envelopes daily for overlooked enclosures, thereby practically eliminating the possibility of lost letters and checks.

In summary, we Business Machines, with a staff of 145 San Franciscans, are doing a job that would require an estimated 450 people under the old system of manual operation. Our accuracy, despite people, is rated at better than 99.9%.

A twinge of indigestion, eh? A green ohm? A spoiled ampere? An electric burp? The fact is, sir, we lead well disciplined lives and suffer none of the human indispositions. We are rectangular pegs in rectangular holes.

/THE END

When Business Machines are suspected of erring, men equipped with other machines resort to a type of "electrocardiography."

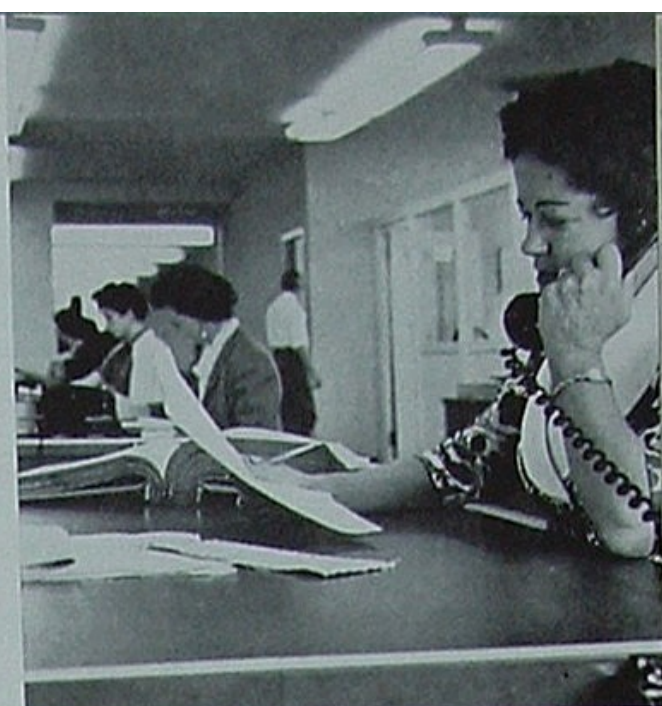




We take no chances with customer's checks; each is microfilmed before it is banked.



This lovely young lady can key-punch a thousand cards an hour.



Letters sorted by the girl at left are read by the gentleman below and answered via phone dictation by the lady above.



Only on rare occasions does the chief of the department, Mr. Smith, have to make an apology for Business Machine mistakes. Alas, to err is human!



Dealer Don Ford, seen talking with Captain Les Bullocks of Fire Department, is president of Santa Fe Springs Kiwanis Club and an ardent city booster. His service station, at right, sits atop an oil field that has produced 600 million barrels.



Santa Fe Springs, All-America City

Several months ago, four high school students stood before the All-America City Jury during a National Municipal League conference in Springfield, Massachusetts. None of the students was a trained orator or an expert on civic affairs. But when the four had finished nominating their home town of Santa Fe Springs, California, for the honor of All-America City, everybody, both on and off the jury, was deeply impressed. A city that had accomplished so much since its incorporation in 1957 must certainly be an outstanding one. And since such civic knowledge and spirit had been implanted in its youngest citizens, surely here was one of the most praiseworthy communities anywhere. Santa Fe Springs was judged the All-America City, one of only 11 to qualify for such high recognition.

The town learned to govern itself in about the same crude manner country boys once learned to swim—by being tossed into deep water. During the 1950's, large slices of farm and orchard land were opened to housing developments, bringing over 10,000 new residents into an area long dominated by ranching and oil wells. The newcomers immediately found themselves in a city that was not a city. There were no street lights, sidewalks, parks, recreation areas or the many services required for American community living. The town was in four ele-

mentary school districts, but had no schools of its own. The four nearest post offices were miles away. Telephone exchanges, gas companies and water companies handled all business from offices in other towns. There was no local police department or fire house to call on in emergencies. No city hall, no mayor. Nothing but attractive new homes and citizens.

Something remarkably American took place. Instead of selling out or cursing their lot, the people got busy. Organizing a Homeowners' Association, 800 of them immediately tackled the school problem for their children. Result: five new elementary schools and the new Santa Fe Springs high school now accommodate an enrollment of over 7,000.

Within a few months street lights came on. Curbs and sidewalks began to separate streets from property lines. A new park was marked off and dedicated. There came to town a branch post office, library, local newspaper.

Other hundreds of citizens closed ranks to form the Incorporation Study Committee with its 17 specialized sub-committees. From their recommendations came a vigorous election campaign and the adoption of a Council Manager form of government by a voting ratio of four to one.



Homes in Santa Fe Springs reflect the civic pride and enthusiasm that impressed the All-America City Jury.



While a fine new community library is being built, one of the local homes serves as temporary source of books.

Citizens' responsibility did not end with the election. They attended City Council meetings in droves and 21 were chosen to study a fire-protecton system; they responded with one of the state's most efficient and economical fire departments. Police protection was contracted from the County of Los Angeles.

But this is only the beginning. Working with nationally-known architect William Pereira, the citizens have planned a unique town center that will be the hub of local government, recreation, culture and hospitality. It will be the first town center of its kind in America.

Compare what has been done by this community in three years with what hasn't been done in any part of Russia throughout several five-year plans and you can readily see a fundamental advantage of Freedom over



In office of Darrell Essex, city official, is a view of Town Center soon to be built.



Finding themselves without fire protection, the citizens promptly bought some of the best fire-fighting equipment. Dealer Ford keeps it lubricated with Union Oil's *Finest*.

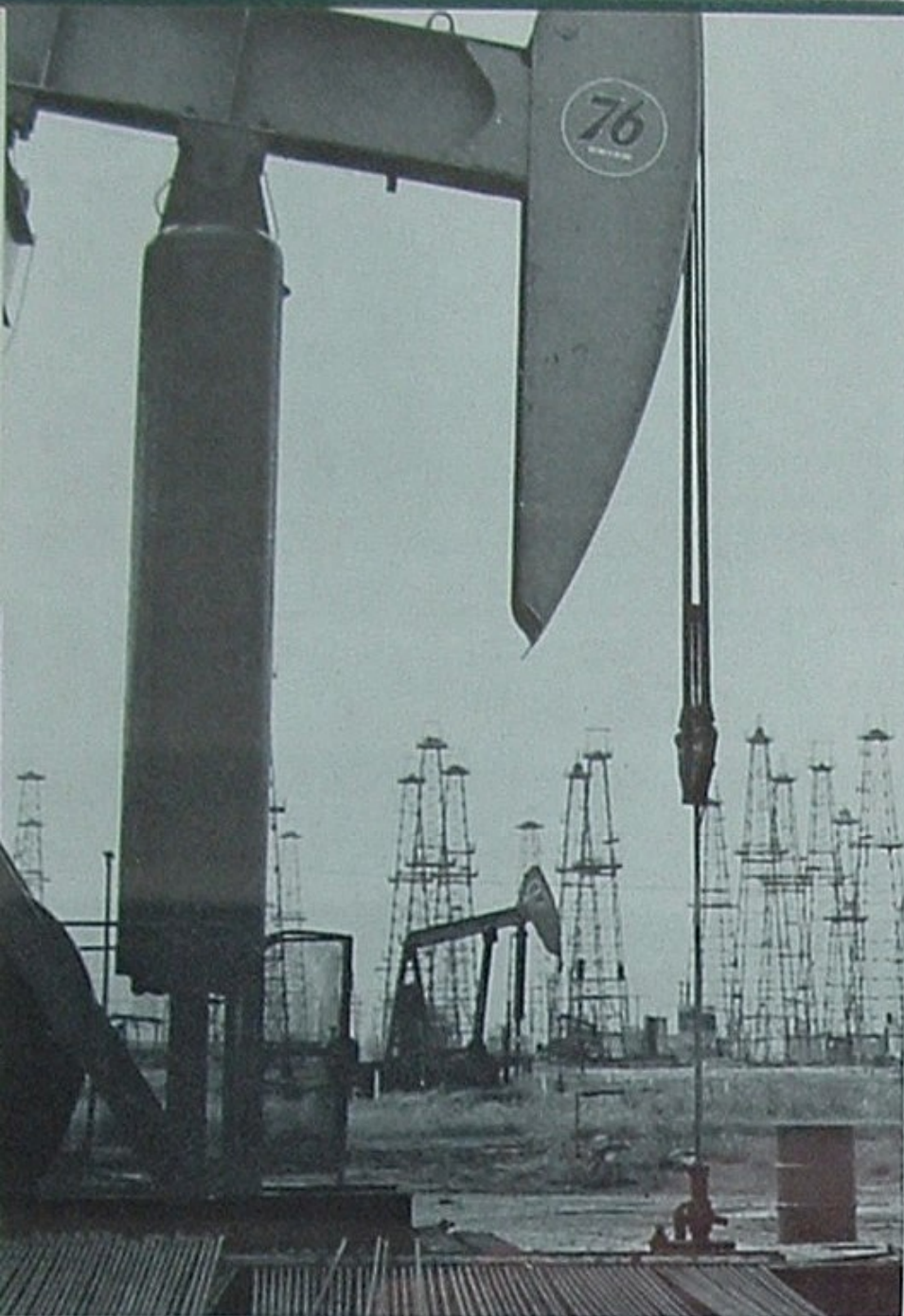
Communism. *If you want a job done well, do it yourself.*

In the early annals of western history, Santa Fe Springs was part of a vast rancho owned by Pio Pico, last Mexican governor of California. Later the sulfur-laden springs, which gave the area its name, gained popularity as a health resort. But during the first two decades of the 1900's the land was noted only for being a good orange and cabbage patch 15 miles southeast of Los Angeles.

Then suddenly came fame. In 1919 Union Oil drilled three wildeat oil wells on the Meyer ranch at Santa Fe Springs and, from Meyer No. 3, obtained about 100 barrels a day of crude carrying a high percentage of gasoline. Though interest was mild, drilling continued. In 1921, on the adjoining Bell ranch, Union drillers uncorked a really good discovery; our Bell No. 1 test-flowed 4,400 barrels of oil a day.

The race was on. Land value skyrocketed. A forest of oil derricks sprouted over the cabbage patch. And there mushroomed into prominence one of America's greatest oil fields. Santa Fe Springs, with a cumulative production of close to 600 million barrels, ranks among the 10 leading U.S. oil fields of all time.

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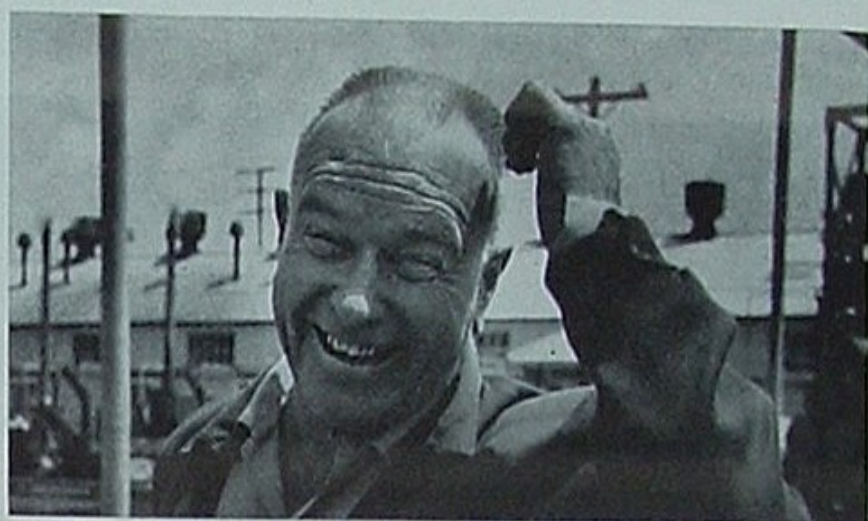
Though oil production in Santa Fe Springs Field has greatly declined, our pumping units compete with neighboring wells fully to exploit the great reservoir.

SANTA FE SPRINGS — *continued*

By reason of discovering Santa Fe Springs Field and obtaining early leasing advantages, Union Oil is looked upon as the area's industrial pioneer. For more than 40 years now we have been local *dean* of the drillers, producers, plant operators and pipeliners. One of our finest division headquarters is located within city limits. Hundreds of Union Oilers are numbered among the city's working force, residents and business men.

So we take special pride in congratulating Santa Fe Springs for its All-America achievement. It happened in one of the *Finest* oil fields and to some of the *Finest* of American people.

/THE END



When asked to point out the location of Union Oil's discovery well in this field, District Foreman Howard Johnson, who was a member of the drilling crew, laughed, "I'm standing on it!"

Company employees working from a division headquarters, below, share the responsibilities and honors of being All-Americans.



On Tower

No editor could resist the foregoing title of this short sketch. Because *on tour*, pronounced on tower by oil field workers, means on the job. It was once the title of this magazine. And it applies appropriately to the new executive vice president of Union Oil Company, whose name happens to be Dudley Tower.

Many Union Oilers remember Tower when he first came to work as a pipeline roustabout at Long Beach in 1935. Behind him were a boyhood spent in his home town of Los Angeles, some valuable geological training at the state universities in Los Angeles and Berkeley, a reputation as a ball player, and two years of mining experience with Capital Gold Dredging Company. Ahead of him?

Well, the young pipeline roustabout must have impressed quite a few foremen and superintendents. He moved up to pumper and apprentice engineer in the Southern Division, then in 1938 was sent to Bakersfield as assistant engineer in the Field Department.

It was at Bakersfield that some of us in other departments were introduced to his competitive drive. In a Union Oil bowling league there, he rolled with one of the Field teams. We remember him as a dedicated pin buster who loved to win, sometimes lost; but never quit trying. He has always had a worried forehead, a mischievous glance, a perpetual half-smile, and a resolute chin. In fact, on Tower's countenance you can read any expression you're looking for and probably miss the inner man a country mile.

After Bakersfield, his path and ours crossed many times—on offshore platforms and in the Louisiana marshes, where he started as petroleum engineer in 1939 and became district superintendent in 1943—in plush Houston offices, where he was appointed manager in 1946 and vice president in charge of Gulf Division opera-



tions in 1953. *On tour*, as in bowling, every time he threw the ball he aimed to make a strike.

But probably our most revealing impression of the man was gained one cold February day in 1956, the year he was elected a director. We were snowbound at the Company's Red Earth Field, deep in the muskeg wilderness of northern Canada. Because of the Northern Lights, we couldn't make radio contact with civilization at Peace River. And because of a snow storm, the bush planes couldn't come to Red Earth and fly us out. It was a matter of either waiting out the storm or chancing a long auto ride over the camp's wilderness supply route. Tower had work to do the next day in Calgary, and on the day following that in Los Angeles. So we bucked the storm in a Chevrolet sedan.

There were only two vehicles on the 150-mile stretch of narrow, snow-banked road that day—ours and a supply truck bound for Red Earth. But sure enough both vehicles met on a sharp curve obstructed by bushes and nearly came to serious grief. Our sedan headed for the ditch but couldn't quite clear the road. So the truck had no alternative except to take off into unexplored muskeg; it stopped in deep snow some 100 feet off the road.

Before the snow-dust had hardly settled, we observed Tower calmly surveying the situation as if it were a bowling-alley *split*. Presently he picked up a shovel and waded out to the truck. He and his crew—another vice president, a geophysicist, a truck driver and an editor—didn't stop until the truck was back on the road and moving toward Red Earth with its load of tools.

Dudley Tower seems to have the fine knack of making the right decision at the right time. His record manifests the idea that no goal is unattainable to the man *on tour*. We believe the executive vice presidency is in good hands.

/THE END

Next stop, Moon!

by Ty Lagerberg, owner and 2nd stage engineer

LOG OF THE INTERPLANETARY ROCKET 76

Saturday, May 7, 1960, 7:30 a.m.—Final tests of our space ship 76 showed everything okay. We posed for the press pitcher takers (see Cover), then manned our stations. Captain Jim Calzia was at the first-stage controls. I handled oxygen, exotic fuel and navigashun in the second stage. Marilee Morton came along as cook and machine gunner. Gary Calzia and Bill Norton were grounded for throwing rocks at the nose cone. Their punishment is to be the Marsmen we kill when we land on the Moon.

7:45 a.m.—My father, Bob Lagerberg (Editor's note:—J. T. Salmond and Lagerberg are Union Oil consignees at Newhall, California), scratched his chin the way he does when our grass needs cutting, but he got in his car and drove to the plant without sayin' nothing.

7:50 a.m.—We took off. Firing was normel. Inishul thrust was a little wobbly. She headed off course two degrees but I brought her back with a boost from the side-jet stabeleyeser.

7:51 a.m.—We hit our Moon orbit on the nose and circled at 300 miles lookin' for a landing. Captain Jim saw a plato between two craters. I put her in reverse orbit and we floted down to a 4-point fin landing.

7:55 a.m.—Two Marsmen came at us the funny way they run and tryin' to scratch us with their long claus. Marilee gave 'em a burst with the machine gun but Captain Jim got in her line of fire and was wounded. He played dead with his claus up like a Marsmen so as to fool 'em. The Marsmen kep comin'. Just then Mother called us to breakfast.

8:30 a.m.—After breakfast, Jim and Gary said they wouldn't help us finish the Moon xpadishun unless we helped them put the reakter in their new atum submarine. She's number 76 too, but Dad gave us a beauty of a hatch cover. Jim wants to call her the Triton. She'll do about a hundred nots at 50 fathums and go around the world three times without comin' up for air.

That's 30/



Marilee gave 'em a burst with the machine gun but the Marsmen kep comin'.



The 76 Rocket's instrument panel.

Marilee came along as cook and machine gunner.





Then Mother called us to breakfast.



Jim and Gary said they wouldn't help us finish the Moon xpadishun unless we helped them put the reakter in their atum submarine.



Dad gave us a beauty of a hatch cover . . . Now Jim wants to call her the Triton.

A PRESSURE BOOST FROM DULUTH STEAM—continued from page 3

Mr. John D. Rockefeller and the original Standard Oil Company. This was one of the devices, and probably the most important one, that tended to destroy competition and make a monopoly out of the oil business in those early days. The Interstate Commerce regulatory act was aimed particularly at the Standard Oil freight rebates, and the other industrial units that were tending in that direction.

Among other things, the Interstate Commerce Commission was empowered to establish non-discriminatory rates to be based on the cost of service. In due time that commission appraised the property investment of all the railroads in the country for the purpose of establishing a rate basis and working out equitable rates. These valuations of the railroad properties were substantially completed about 1914 and 1915. However, when it came to applying the cost of service theory to the freight rate structure, the procedure encountered some economic and political obstacles which prevented any rigid application of this theory. These obstacles largely originated from the competitive condition that existed in the early days of the railroads, wherein the freight traffic which was subject to competition from waterways, including canals, was favored with relatively low rail rates which would attract the business from the waterways. Other rail freight traffic between points not subject to waterway competition was furnished at rates ridiculously high by comparison with comparable freight service where waterway competition did not exist. As a result of this discrimination in rates many businesses and communities had been built up with the industrial development so that any adjustment in freight rates on a uniform ton-mile cost would have wiped out many of these businesses, with tremendous losses to the communities in which they were located. Probably the most conspicuous example of this was the high concentration of the meat packing industry in the City of Chicago, much of which was built on freight rate discrimination which was arbitrary and without equitable economic justification.

The second wave of governmental regulation came with the establishment of the Public Utilities regulating law in the State of Wisconsin about 1907. This law was sponsored by Robert M. LaFollette, then governor of Wisconsin, and the general principles of this law were subsequently adopted by most of the states in the union.

Basic in the concept of this early Wisconsin law was a principle with regard to the determination of proper rates. The Wisconsin law recognized that competition in local public utilities was inherently wasteful in that it required a duplication in construction and operation of multiple independent distribution systems to serve the municipal areas, and that such duplication of property and effort would necessarily result in higher costs for the service to the consumers. The Wisconsin law took the position that in granting the right for a public utility company to serve a given community with gas, water,

JOHN K. FRASER

The chance to make a dollar

During the 1920's and 1930's, the American public used to worry about the country's economic situation.

"Despite the fact that the percentage of population employed has risen to 30% since 1910, we are never out of the job and are still unemployed."

"Unemployment kept the industry in a state where it could not have produced the volume of production for 1930 and 1931."

"And, according to the government's own figures, the industry was not producing at all in 1932 and 1933."

"However, the Federal Power Commission has considered the price of gas at a level which has been maintained since 1934."

"The assumption of market gas in America's industrial area will be a major factor in the future of the industry."

"The industry is now in a state of transition and it is necessary to take steps to meet the demand for gas in the future."

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Union Oil Company OF CALIFORNIA 76

MANUFACTURERS OF ROYAL TRITION, THE AMAZING FURBER MOTOR OIL

1200 SUMMIT STREET, BEVERLY HILLS, CALIF. TEL. 351-1111

electricity, telephone service, street railway, and steam service they granted what, in essence, amounted to a monopoly of that particular business in that particular community. This grant protected the business enterprise and investment from the ravages of competition, in return for which they imposed upon the operating utility the obligation to limit the earnings or profits from the particular business to a 6 per cent annual earning on the actual cost of the investment used, and useful to serve the public.

The pioneer work in exploring and developing public utility rates, in accordance with the requirements of this law, was mostly all done in the State of Wisconsin in the years between 1908 and 1920, and the published records of that Commission in dealing with the many cases that came before that Commission explore all the many angles involved in establishing equitable rates for a public utility that enjoys the status of a monopoly in a given community.

In the recent discussion for placing the natural gas operations, including the independent producer in the field, under the jurisdiction of the Federal Power Commission for rate making purposes, many people seem to have forgotten the original basis for regulation, and the principles involved therein, particularly with reference to the producers in the field.

While, to some extent, the pipe line companies and, certainly, the local distributing companies enjoy some monopolistic privileges, by no stretch of the imagination can the producing well owners be said to enjoy any monopolistic privileges. It would seem that the independent owners of gas producing wells in the states of Texas, Louisiana, Arkansas, Oklahoma, are in the identical position of the coal mine owner in Pennsylvania, or the iron mine owner in Minnesota. They have no monopolistic advantage. They must sell their product in a competitive market just the same as the coal miner in

Pennsylvania or the iron mine owner in Minnesota must sell his coal or iron ore in competition with such other coal and iron as is available to serve the national market.

If there is any reason for establishing arbitrary regulation of sales price for natural gas in Texas, the same reasoning must apply to the sale of coal in Pennsylvania and iron ore in Minnesota. To the best of my knowledge, none of the regulating bodies, who have had rate making power over the gas and electric utilities of this country, has ever attempted to extend that rate making power back to the coal mines which produce the raw material, by contending that because they have to set the rates on the electricity in a certain area, that the cost of coal is basic in the cost of that electricity, so their power must extend back to the coal mine and set the rate for the coal which the utility must buy. Such an argument has never been advanced in electric rate regulation. Coal, the raw material from which electricity is produced, has always enjoyed a free and competitive market, and the price of coal has varied widely, depending entirely upon the balance or imbalance of the supply and demand of that raw material. That is to say, the price of coal at the mine has been set entirely by competition. We can all remember the high price at which coal was sold during the first world war when the demand far exceeded the supply. We can also remember the ridiculously low price at which coal was sold during the depression years of the thirties, when the supply far exceeded the demand.

Natural gas is now available in substantial quantities in a great many states, in the Dominion of Canada, and in the international waters off the coast line. There is no longer a monopoly in one locality or one state. As a fuel, it is most desirable, and has an ever-expanding market, both as a fuel, and as a chemical raw material. There is every reason why this most desirable raw material that comes from the earth like all other raw materials, should be free to find its own best market without hindrance and without arbitrary restrictions. The gas situation is no different today than the anthracite coal situation was forty years ago, when anthracite coal was the most desirable domestic fuel, and was much more of a monopoly than natural gas is today. It established its own market, its own price, until such time as a better fuel was developed at a more favorable cost, after which many of its markets rapidly vanished.

It would seem that any attempt to arbitrarily establish a well head price for gas that eventually finds its way into interstate commerce would be an "everything to lose and nothing to gain" proposition. First, it would retard the exploration necessary to discover new gas reserves. Secondly, it would deprive remote areas of this desirable fuel. Thirdly, it would tend to displace existing industries with new and competitive industries locating in the states where the raw material source natural gas would be available, without arbitrary interference with price movements.

A competent study of the history of rate regulation, the reasons for subjecting the rates to regulation, and the economic basis for the methods of determining rates,

can only lead to the conclusion that the elements of arbitrary rate discrimination, or the monopoly features which provoked all previous regulation, are entirely absent in the current natural gas well situation.

To now extend regulatory power of utility rates back to the original source of energy would be to break with the past and establish an entirely new concept or economic doctrine of business enterprise regulation. This would set aside the long established, and generally accepted, principle of open market price regulation by the free play of competitive forces. It would substitute for this automatic regulation of price, some arbitrary formula which would deny the ultimate customer the right to determine for himself what he could afford or not afford to pay for a given product to meet his particular needs.

To apply such a regulatory doctrine to one product of the earth, and exempt all other products of the earth, would be rank discrimination, the very thing that regulation was first designed to eliminate.

To apply such a doctrine to all natural resources would be to defeat the capitalistic system and substitute some camouflaged modified form of socialism. Such a change in American economic life is one of far reaching political significance, and one that should only be made by proper legislative action after thorough open debate and discussion before the electorate. Certainly, the Congress has never intended, up to this time, to convert this country into either an orthodox or modified socialistic state.

I know you and your affiliated oil industry are interested in this question, which will probably be discussed at length at the Federal hearing on December 15. I submit the above for any assistance it might lend in preparing a case for presentation before the Commission.

If the Federal Government persists in their present determination to single out the natural resources in the oil and gas producing states to control the price of natural gas at the wellhead, it would seem obvious that the natural reaction of the state governments, especially in the State of Texas, Louisiana and Arkansas, would look on such regulation and limitation on prices as an invitation to the respective legislatures, to impose on such natural resources as are regulated by the over-reaching Federal authority a severance tax on such gas. The Federal authority would then have to recognize such tax as an element of cost to be included in the rate base, which in turn would defeat the indicated purpose of such Federal authority to hold down prices of this fuel in the Northern states.

The precedent for such a severance tax has long since been established in the case of the iron ore in the State of Minnesota. The southern gas producing states would welcome a good excuse for levying such a severance tax on the constituents of the national representatives who have steadfastly refused to modify the federal statute which the Supreme Court has now held to include regulation of wellhead prices.

from Robert L. Fitzgerald

/THE END

Business Highlights of the Month

PRODUCTION Swift change of scenery

It is interesting to note how the geography of the Company's production of crude oil and gas has changed in recent years. Just five years ago, out of an average daily net-interest production of 104,000 barrels of crude oil and condensate, California supplied 82,150 B/D, equal to 79% of the total. The remaining 21,850 B/D was produced in the Gulf, West Texas, Rocky Mountain and Canada divisions.

Today's production picture reflects the long-continued oversupply situation, a scarcity of new oil discoveries in California, and extremely low allowable rates in other states. As a result, the Company's net-interest production currently is approximately 96,400 B/D, of which only 64,200 barrels, or 66.6% comes from California. During the five-year period Gulf Division production has increased 52%, West Texas 43% and Canada Division 138%.

Five years ago our net-interest gas production was averaging 146,213 Mcf/D, of which 41% was produced in California. This year our net production has risen to an average daily rate of 342,800 Mcf, of which only 12% comes from California sources. Meanwhile Gulf Division production of natural gas has grown from 78,700 Mcf/D in 1955 to 263,255 Mcf/D in March of 1960, and this growth is certain to continue.

EXPLORATION Welcome everywhere but Russia!

Union Oil Company's exploration plans for the second half of 1960 will be at a somewhat accelerated rate over the first-half program. This is due mainly to increased foreign expenditures on our large blocks in both Australia and the Spanish Sahara and an active drilling program in the Gulf Division, where we currently are evaluating our interest in the Tiger Shark prospect, offshore in the Gulf of Mexico, with a proposed 12,000-foot hole. The latter is one of the five blocks acquired at the Federal offshore lease sale in February. The program provides for drilling on three of the remaining blocks before the end of 1960, and evaluation of the fifth lease by dry-hole contribution to the operator of a wildcat on an offsetting block. Active programs will continue in our other domestic divisions and Canada at about the same rate as in the first half.

from Basil Kantzer

RESEARCH

Rapid progress is being made in the metallurgical field in providing the petroleum and chemical industries with new and improved alloys. In particular, many alloys and metals developed for space age applications, such as tantalum, titanium and zirconium, as well as cobalt alloys, to name a few, are solving difficult corrosion problems. The Research Department keeps abreast of such developments as one means of helping solve difficult refining petrochemical and research problems.

As one example, in developing our new Unicracking process, corrosion tests of various alloys have been a part of the pilot plant program. Metal samples exposed at critical points in the process are given complete metallurgical tests. Such evaluations aid in the selection of alloys that resist corrosion, have a long service life, and assure successful economic operation of a commercial plant.

from W. E. Bradley

TRANSPORTATION & SUPPLY

Effective May 1, 1960, the allowance paid by U.S. railroads to shippers using their own or leased tank cars was increased from 4½ to 5½ cents per mile. This increase, a result of concerted pressure on the railroads by the petroleum industry and other tank car users, will reduce our tank car expense about \$30,000 a year.

Arrangements have been completed for the handling of Company oil production and purchases in the La Honda-Oil Creek area via a commercial barge terminal at Alviso on the south end of San Francisco Bay. Oil will be trucked from the fields to the terminal, where it will be accumulated for shipment in barge lots to Oleum Refinery. This handling promises significant savings over our present method, that of delivering the oil by truck into the pipeline of another company in the San Joaquin Valley.

The Pipeline Department has turned over to our Natural Gas Department a 12-mile section of gathering line system from the Montebello Field to the Bell Absorption Plant. In exchange, Natural Gas has released to Pipeline a small line adequate for handling the declining volume of crude oil being shipped from Montebello. Release of the large line will permit Natural Gas to process wet gas for another company.

A teletype circuit has been installed over Union Oil communications facilities to link San Luis Obispo and Oleum, thereby eliminating the expense of a leased common carrier circuit.

from E. L. Hiatt

PURCHASING Push-button buying!

Under a revised requisitioning procedure developed with the Los Angeles Refinery, repetitive purchase orders will be typed on an automatic typewriter by code-punched tapes. Similar procedures will be worked out with other locations having material warehouses, thereby saving time, improving service and efficiency.

Remaining equipment at the Shale Demonstration Plant at Grand Valley, Colorado, is currently being disposed of by our Surplus Material Sales Division.

from C. S. Perkins

MANUFACTURING A headache for pipefitters.

Construction of the new manufacturing facilities at Los Angeles Refinery is now well under way. The four major process units consist of one catalytic reforming unit and three of Union's own catalytic desulfurization units called Unifiners. In addition, alterations are required to seven existing operating units in order to integrate new and established refinery operations. The job of connecting new process units to the refinery pipeline systems presents many problems. For instance, a single Unifiner unit requires over 20 pipeline tie-ins to existing equipment. The utilities include water for drinking purposes, process cooling and fire protection; fuel gas produced in the refinery and purchased from others; fuel oil for furnace firing; high and low pressure steam; high and low pressure compressed air; hydrogen gas. Pipelines are required for incoming feed, outgoing products and by-products, waste water, etc. Pressures to be contended with range as high as 700 pounds per square inch, temperatures as high as 600° F. Add electrical and

communication systems and you have some idea of what it means to modernize a refinery.

from J. W. Towler

MARKETING

Through successful negotiations with the San Diego Harbor Commission, Union has been selected as the builder and petroleum supplier of a new marine station at Shelter Island. The development is being designed for pleasure craft in the San Diego area.

Establishment of the Tides Fuel & Ice Company as a new Union Oil marine distributor provides a complete line of "76" products for both commercial fishing and pleasure craft north of San Francisco Bay. Proprietor of the new marine outlet on Bodega Bay, 85 miles north of San Francisco, is Mitchell Zankich.

Also in the California North Coastal Division we will furnish the petroleum requirements of several major construction jobs aggregating over \$10 million and calling for 1,250,000 gallons of gasoline and Diesel.

from C. H. Fimmell

Plans for expanding the Company's sale of lubricating oils and greases in our Eastern Continental Division were reviewed with the sales supervisors at a meeting in Los Angeles on May 16 and 17.

from F. K. Cadwell

(Concluding statement from a talk given by Benjamin F. Fairless, President of American Iron and Steel Institute:)

"Andrew Carnegie once said, 'Let floods or fire destroy my plant from the face of the earth, but if I retain my organization I would be whole again in six months.'

"The final conviction I want to share is that you could take away all of America's plants and means of production. If all we had left were the people, the skilled working men and managers, we could, under our free system, once again lead the industrial world in a very short time.

"For our greatest advantage over the Russians is that we have freedom and that gives us the flexibility which is the best way to grow!"

The Cart Before the Horse?

(The following statement is contained in a high school "Resource Guide for English and Social Studies" published by the Pasadena City Schools:)

"... in the tenth grade, study is concentrated on the growth of Democracy, and especially the form of Government which developed. Such a study should be brief and to the point in order to allow time for the unit on Driver Education."



For the Finest trip with the Finest Gasoline, we recommend . . .

VIRGINIA CITY

In 1848, year of the gold discovery at Coloma, California, began one of history's greatest mining bonanzas. It occurred not in California but across the Sierra divide in what was then Utah Territory and is now the Carson River area of Nevada.

William Prouse, en route to Salt Lake City from California in the fall of that year, scooped up a pan of earth near where he was camped and swirled water through it at the edge of a small creek. Several specks of gold glistened on the pan's bottom. Prouse was so impressed by the discovery that, upon returning from Salt Lake City to California with the Thomas Orr party early in 1849, he located the creek during a short midday stop and repeated the panning discovery for his associates. A day or so later the party delayed their trip through high mountain passes to the west of Carson Valley because of late spring snow. John Orr, son of the party's leader, returned with several other men to the small stream and inspected its banks upstream to a narrow, rocky ravine. They obtained bits of quartz from the outcroppings and from one of these John Orr removed a small nugget.

Another party of '49ers, led by John Bigler, followed the same route to California early that year. They made no mention of finding gold in Carson Valley. However, six men left the party at that point and in July panned a few samples of gold in a lateral ravine of the Carson River. Abner Blackner, a member of this prospecting party, applied the names Gold Canyon and Gold Creek to the site - probably the same ravine that had attracted Prouse and Orr.

Due to the small amount of *pay dirt* found, there was no immediate gold rush to Carson Valley. Undoubtedly scores of gold seekers who heard rumors of the finds paused along the Carson or came to do some serious prospecting. But all moved on soon to lands of greater promise.

Eventually there appeared a few exceptions among the migrant prospectors:

Emanuel Penrod and his two brothers came through in 1852 from Illinois to the California diggings. A month spent in Gold Canyon placer mining induced them to return from California the following spring. In a short

Virginia City, Nevada, sits atop Comstock Lode and its now nearly abandoned labyrinth of mine shafts. The town, even its cemetery, echoes a silver rush measured in 25,000 miners and \$750 million.

time they washed enough gold to finance their journey back to Illinois. Returning west in 1854 with his wife and children, "Manny" Penrod took up permanent residence in Carson Valley, not as a gold prospector but as a farmer. He saw better opportunities in offering farm produce for gold dust than in the opposite course.

Among Penrod's first produce customers were the Grosh boys, Hosea Ballou and Ethan Allen Grosh, brothers. They came from California with Frank Antonio, a Mexican who had worked in the silver mines of Brazil. Antonio, while searching for a stray horse near Gold Canyon in 1853, had come upon quartz outcrops that were rich in silver. He tried to interest other California miners in the silver, but only the Grosh boys were interested enough to cross the Sierras. The three re-located Antonio's outcrops and staked claims of 400 feet each on the

supposed silver ledge, which later became famous as the Ophir, the Gould and Curry, the Pioneer, the Old Frank (after Antonio) and the Utah Enterprise mines. An interest in the claims was given to Penrod in exchange for food and other provisions. However, both Grosh boys met tragic deaths in 1857, before the value of their claims was recognized.

The most controversial and enduring name that ever came to Carson Valley was that of Harry Tompkins Paige Comstock. He was a Canadian who had been apprenticed as a boy to the American Fur Company. He arrived at Gold Creek in 1856 herding a small band of sheep. His reputation for remaining lazy, ignorant and penniless became a legend among the miners. They called him "Old Pancake" because, being too indolent to mix bread, he poured water and flour together and survived on pancakes. Persuading two Indians to do the manual labor for him, Comstock did a little placer mining in Gold Canyon. He evidently became indebted to Penrod for food and supplies, and the latter could only hope for future recompense by agreeing to some sort of mining partnership.

Though alleged to be ignorant and lazy, Comstock somehow managed to be shrewd and Johnny-on-the-spot. Learning that tragedy had befallen both Grosh boys, he moved into their cabin near Gold Canyon, claiming that one of the boys had put him in charge before leaving for California. The story was doubted but never proved untrue.

When a new gold strike was made in Six Mile Canyon in 1857 by Patrick McLaughlin and Peter O'Reilly, they cut Penrod in on a one-seventh interest because of lumber he had supplied for building a water flume to placermine the discovery. Immediately Comstock reminded Penrod of their mining partnership and was accorded his one-half of the one-seventh.

This gold find lay in a finger of Six Mile Canyon called Cedar Ravine. Within a year, ground that had paid from \$20 to \$40 in gold dust per *rocker* began to play out. The trouble was not so much a decrease in gold content as it was an increase in the amount of bluish mud the miners encountered. The mud grew heavier in volume and defied every means they knew to separate the gold. Moving in 1858 to a neighboring finger of the canyon called Spanish Ravine, the two Irishmen ran into the same troublesome mud. Finally in the spring of 1859 they hit upon a plan to dig a trench through the mud in hope of finding gold-bearing gravel beneath it. Surely enough they reached the layer of gravel by trenching and, after washing some of it, found the rockers nearly shining with precious gold. Hardly had their elation subsided over the first handful of wealth before a visitor jumped off his horse and exclaimed, "You've struck it, boys! This is my ground." The visitor was "Old Pancake" Comstock.

Comstock's claims to the ground were based upon some old debts owed by previous prospectors of Spanish Ravine to Penrod, "my mining partner." Also Comstock declared, without proof, that he had previously

continued



Mines here in the "glory hole" of Gold Canyon attracted early prospectors and made millionaires of a boarding-house operator and one of her boarders. She died penniless.

VIRGINIA CITY - *continued*

taken 160 acres of the land as a farm and had even raised vegetables on it. Rather than contest these claims or resort to gun law, McLaughlin and O'Reilly consented. They recognized Penrod and tolerated Comstock as full partners. To "Old Pancake" they assigned the responsibility of obtaining quitclaims from several previous locators who, though having neglected their claims, might now find reason for disputing ownership. Comstock did surprisingly well - in one instance inducing James "Old Virginia" Fennimore (for whom Virginia City later was named) to accept an Indian horse and a drink of whiskey for whatever interest he might have in Spanish Ravine.

The strange four-man partnership continued through early months of 1859 with the two Irishmen doing most of the mining, Penrod the grubstaking, and Comstock the talking. The pay dirt increased to a foot or so in depth, yielding from \$300 to \$1000 a day. But finally on June 8, 1859, the rich gravel terminated up the ravine

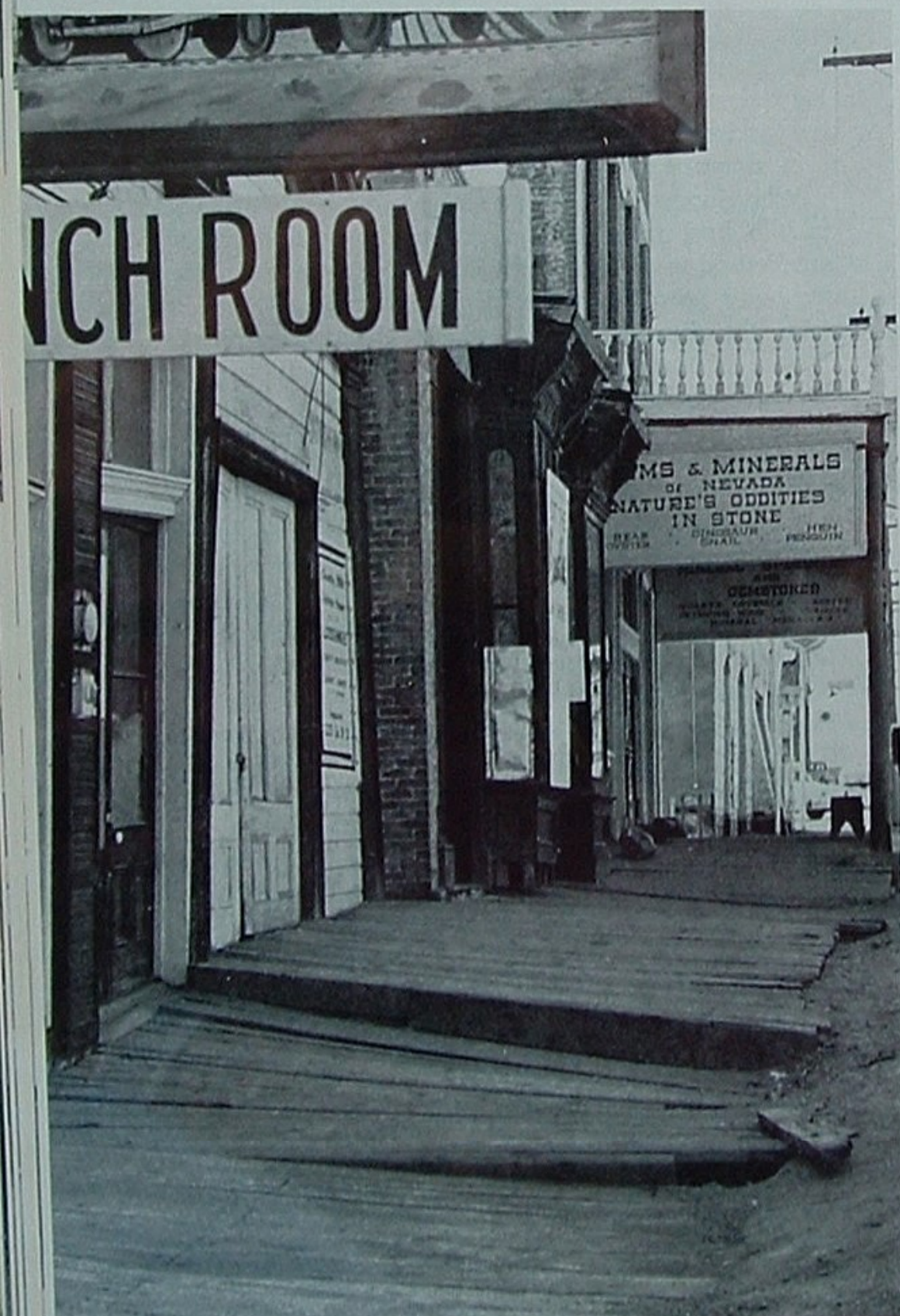
in rock crevices about four feet in width.

The Irishmen and Comstock were somewhat perplexed at this turn of luck. Not so Penrod. Ignoring their jibes at his mining ignorance, he calmly took a 100-foot length of rope from Comstock's saddle strings and measured off 300 feet of rocky ledge for each partner and, according to mining rules of the day, 300 more feet each for a discovery claim. He insisted the rock crevices were the edges of a quartz lode from which the placer deposits of gold-bearing gravel had broken away and washed downhill.

Time proved Penrod to be right. Here started and extended to immeasurable limits the richest mining deposit of its kind ever discovered. Since it began on a portion of the 160-acre farm claimed by "Old Pancake," they named it Comstock Lode.

The finding of Comstock Lode soon was overshadowed by the discovery of what it contained:

Its discoverers, adept with shovels and rockers, found



Piper's Opera House, twice destroyed by fire, hosted many famous personalities of theatre.



Nevada's first newspaper started here with Mark Twain as one of its writing staff.

Old board walks on C Street of Virginia City call to mind the thousands who must have stumbled - into riches or oblivion.

shaft mining less to their liking. It was slower and more arduous than working with gravel. Besides, they came to grips with more and more of the "blue stuff" that here, in rock form, had to be broken out with picks, drills and sledgehammers, then transported out to the mine-mouth waste dump.

Nobody knows why B. A. "Gus" Harrison picked up a 40-pound sample of Comstock Lode ore one day and hauled it to the Truckee River trading station owned by his employer, J. F. Stone. Maybe Harrison knew something about ore, or maybe he had heard some of the Mexican prospectors talking silver. At any rate, he was promptly dispatched with his 40-pound sample to the booming town of Nevada City, where there were several experienced mining men and assayers.

One of Harrison's samples was turned over to Assayer J. J. Ott, who valued it at \$840 to the ton. Another sample tested by Melville Attwood, who did work for the prominent mine and mill owner, Judge James Walsh,

assayed \$3,876 to the ton - one-fourth gold and three-fourths SILVER! Blue mud that the two Irishmen had cursed, trenched through, or carried to the waste dump for two or three years was almost sterling silver!

Thus began the greatest silver bonanza the world has ever known. Miners and prospectors came in droves to stake claims in a mining district more than 50 miles around. The Comstock Lode alone proved to be six miles in length and deeper than anyone has yet been able to determine. Mining men still believe that 75 per cent of the Lode's gold and silver hoard remains underground, protected by the sheer costs of getting it out.

But from the 25 per cent recovered (an estimated \$750 million worth) came much of the immensely important grubstake upon which the West was built. Virginia City erupted right on top of Comstock Lode, sheltering dozens of new millionaires. The mine wealth helped greatly in building Reno, Sacramento and San Francisco. It financed railways. Some economists claim it even saved the Union during the Civil War.

Our summary has been only a sketchy beginning of the events that created Virginia City. For a most interesting impression of the events that followed, we recommend a week-end or holiday trip on the magic carpet of "76" products.

Inquire the way through Union Oil dealers at Sacramento, Reno, Lake Tahoe, Carson City or elsewhere. Spend a day or two in Virginia City and its fascinating environs. Follow along its board walks the footsteps of Penrod, Comstock, Mark Twain, John Mackay, George Hearst, Adolph Sutro, Edwin Booth, Helen Modjeska, David Belasco and 25,000 others. Try panning along Gold Creek or looking for remnants of "blue mud" in Spanish Ravine. And if somebody says, "You've struck it, boy!" don't be surprised to look up and see "Old Pancake" Comstock in person.

/THE END



Restaurants that were famous nearly a century ago take it easy in winter but enjoy good summer trade.



As a means of reaching the famous mining town, we of course recommend the best horseless carriage available.



A GREAT TRIBUTE TO CY RUBEL on his semi-retirement from the oil business took place at Stearns Lease during April. Among the several hundred Field Department members who gathered to cut steaks with the ex-president, extreme right, were, from left, Clarence Froome, George Kammerer, Jack Reed, Tiny Coveney, Ernie Wieman and Clare Gard—retirees who brought in and developed some of the Company's greatest oil fields.



in focus



FIRST BOARD MEETING OF UNIMAR, LTD., a joint enterprise of Union Oil and Maruzen Oil in the Far East, attracted (from left) K. Mega, F. A. Culling, K. Takii, J. H. McGee and Chairman F. K. Cadwell to Hong Kong during March. Unprecedented economic development is taking place on the very doorstep of communist China through the efforts of these and many other businessmen.

1960 BOWLING CHAMPIONS of Union Oil Company, as determined through the Burnham Playoff on April 23, are the Concord No. 1 team of Oleum Refinery. Team members holding the Burnham Trophy are, from left, James Cooper and Mike Matanic; standing are George Creed, Neil Bottrell and Frank Lammernan. Their winning score for the three games was a big 2,953 pins. Cooper also bowled the highest series of 647 and a high game of 255. However Allen Dupont of Abbeville, Louisiana, also rolled a high game of 255 and, because of the tournament's one-prize-per-individual ruling, was automatically judged high-game prize winner.

from Eric Falken



SAN FRANCISCO MARKETING personnel have again won the interplant safety contest in that city, a championship performance that has been unbroken since 1933. At the awards luncheon were, from left, our W. W. Josselyn, L. B. Barker, F. H. Kellogg, J. N. Kelley, G. C. Alexander, Superior Court Judge Gerald S. Levin and S. A. Howes. San Franciscans respect safety.





NEW UNION OIL OFFICES, below, were opened in Edmonton, Alberta, Canada, during March. Employees participating in the ribbon-cutting ceremony above were, from left, Manager Ed Scott, Tom Eastland, Chuck Schram, Don Carlson; Bud Johnson, Ed Hughes, Dave Connolly, Sybil Nicol, Len Kerkhoff, Audrey Wickenburg, Bill Myers, Ed Telford, Smokey Corpe and Fred Johnson.

from R. H. Clark



POLITICAL ACTION at Los Angeles Refinery reached the "summit" in May when four political leaders were invited to a breakfast meeting with the refinery group. From left are (standing) Manager M. S. Thomson, Secretary Kyle Piercy of Wilmington Chamber of Commerce, Superior Court Presiding Judge Joseph Raycraft, Meeting Chairman E. J. Genter; (seated) Herbert Kloeksiem, candidate for State Assembly, 44th District, and President John S. Gibson, Jr. of Los Angeles City Council.

from S. D. Reiner



PERFECT SAFETY RECORDS were achieved by our Southern Division Automotive and Research departments in 1959 and were applauded by the Greater Los Angeles Safety Council. Union Oilers who were summoned to receive the awards at the Western Safety Congress in April included (kneeling from left) Don Newton, John Miller, Les Billington, Marty Gould, Bill White; (standing) Gene Ward, Ed Meir, Fred Wood and Ev Howard.

from Jim Hill



BEST HOME OFFICE BOWLERS of 1960 are, from left, Dave Bahn, Edna Twohig, Doug Henry, Bernie Willis and Clarence Rode, who competed under the stimulating team title of Alley-coholics.





DEALER PHILLIP BERKOWITZ of Beverly Hills has been an ardent booster of the White Sox ever since his boyhood in Chicago. So, when the opportunity arose to sponsor a team in the American Little League of Beverly Hills, Phil just couldn't resist adopting the White Sox. Of course his players carry a "76" insignia on their right sleeves. On April 30, Phil (3rd from right), was presented a plaque in appreciation of his sponsorship by League President Milton Senn and movie star Jeff Chandler.

from Jay Yates



FINEST LOOKING SOFTBALLERS in the Gardena Valley Industrial League are, from left (standing), Lewis, Cameron, Mathis, D. Ramstead, Carter, Lord, Angelo; (kneeling), Bulla, R. Ramstead, Bushong, Captain Johnson and Mortlock—all employees at our Rosecrans Terminal in Los Angeles. Now we'll see if they can play ball.

from R. N. Creek



OFF FOR PARIS is Muriel Seyffer (second from left) of our Tax Division, Los Angeles, with Anita Kirkland, Pat Flaherty and Zo Ann Walden, all vacationing secretaries of the Southland. They'll also do Copenhagen, Madrid and Lisbon via the North Pole before settling back to business.

from Scandinavian Airlines System

PAUL K. DOYLE, Industrial Relations supervisor at Union Research Center, succeeds Judge Robert Gardner as president of the board of directors of AID United Givers in Orange County. Over 50 organizations, including Union Oil and Collier Carbon & Chemical, account for nearly a half-million dollars of charity donations in this one county.

from B. T. Anderson



CHARLES H. RENCK, chief clerk at Union Research Center, has been elected president of Fullerton Toastmasters Club No. 1205.

from B. T. Anderson



H. W. WIDENER, right, our industrial sales engineer for the Hawaii Division, receives his degree in Practical Politics from Chairman Robert G. Dodge of the Honolulu Chamber of Commerce. He was one of 81 businessmen to graduate from a course designed to put every taxpayer back into politics.

from R. H. Roth

THREE OF A KIND were dealt at a sales meeting in Flagstaff, Arizona, by Sales Manager T. E. Luke, right, when he honored Consignees, from left, Owen Green of Winslow, R. P. Bradley of Holbrook, and J. L. Rogers of Prescott with their "76" service pins. The three consignees have put together a total of 65 years of continuous association with Union Oil.

from R. Brenchley



RETIREMENTS

June 1960	Service Date
ADELYN R. COCKRELL Marketing, Home Office	July 6, 1942
JOSEPH H. CORMIER Field Dept., Cut Bank	Sept. 1, 1942
ALLAN R. CRADDOCK Calif. No. Cstl. Div.	Feb. 24, 1921
VON A. FANSHIER So. Division Pipeline	June 10, 1926
ARTHUR A. FAWVER Research Department	March 19, 1945
RAY W. GALE Los Angeles Refinery	Sept. 29, 1925

HENRY C. HARKNESS Los Angeles Refinery	March 10, 1944
A. DUMONT KIMMELL Calif. No. Cstl. Div.	Nov. 6, 1931
ERNEST O. RETHERFORD Calif. No. Cstl. Div.	July 10, 1930
FLOYD J. SAGASER Northern Div. Field	May 4, 1935
RAY I. WARNER Southern Div. Field	Nov. 6, 1940
ROBERT W. WRIGHT Northern Div. Field	July 30, 1935

IN MEMORIAM

Employees:

CHARLES S. EADS So. Div. Production	April 24, 1960
EUGENE P. HART So. Div. Automotive	May 15, 1960

Retirees:

JOHN DOUGLASS No. Division Field	April 5, 1960
JOHN M. HARRIS Los Angeles Refinery	May 12, 1960
NEILL B. THOMAS No. Div. Production	April 20, 1960
HERCHEL C. WEST So. Div. Production	April 24, 1960

EMPLOYEES

JUNE 1960

40 YEARS

RAY L. BLACK	No. Division Field
SAM A. MORAN	Comptroller's—Home Office
MINNIE MITBO	Comptroller's—Home Office
ROBERT W. THOMPSON	Auto.—Home Office

35 YEARS

THOMAS J. KELLY	Los Angeles Refinery
FRANK E. SMITH	Oleum Refinery

30 YEARS

MARGARET BRYAN	Marketing—Home Office
JOHN H. COLE	Marketing—Arizona
HOWARD D. EMERSON	Research Department
LOUIE HANSEN	Oleum Refinery
WAYNE G. HARDING	Los Angeles Refinery
PETER F. PAUL	Los Angeles Refinery
ANGELA PICTOR	Tax Div.—Home Office
FREDERICK SCOTT	Research Department

25 YEARS

ALEXANDER K. CAMPAU	So. Region Distr.
WILBUR CARSON	Marketing—Pasadena
MAJOR PAUL CLARK	So. Div. Automotive
HELEN M. ELIASON	Comptroller's—Home Office
CLARENCE R. FALK	Oleum Refinery
CLARENCE E. HALL	Oleum Refinery
SAM JENSEN	No. Division Field
HILDA E. MURRAY	Mktg.—San Francisco
OLIVER E. PETERSON	So. Region Distr.
RICHARD SPAAN	Los Angeles Refinery
ALFRED A. TOMPKINS	So. Div. Automotive
JOHN J. WARK	Comptroller's—Home Office
THEODORA WOODWORTH	Comp.—San Francisco
HAROLD C. ZANZOT	Comptroller's—Home Office

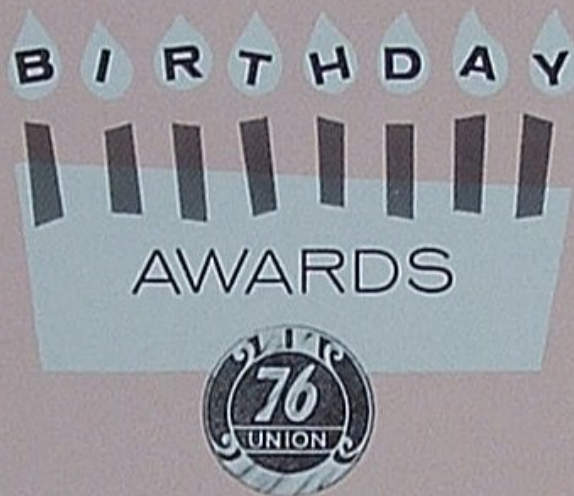
20 YEARS

PETER S. BACKLUND	Research Department
ROBERT I. BALLARD	Land—Gulf Division
PAUL K. DOYLE	Research Department
PAUL W. FISCHER	Research Department
GEORGE F. HERRMAN	Mktg.—Rocky Mtn. Area
HAL C. HUFFMAN	Research Department
WALTER T. JAMESON	Los Angeles Refinery
KENNETH H. LEA	No. Region Distribution
ARTHUR C. MCKINNIS	Research Department
MATTHEW S. THOMSON	Oleum Refinery

15 YEARS

MARION L. CAPITANI	No. Division Field
KATHERINE A. BADGLEY	Mktg.—Export & Refy. Blk. Sls.
JOE E. BARBER	Los Angeles Refinery
KENNETH L. BONEWITZ	No. Region Distr.
JAMES E. COATES	Los Angeles Refinery
CHARLES G. GEARHART	No. Division Pipeline
ROBERT J. HESTER	Los Angeles Refinery
GEORGE R. HUBBARD	Research Department
LESTER D. LEGACY	Mktg.—San Francisco
RUTH M. MEIER	So. Region Distribution

SERVICE



ELMER E. MOLZAHN	No. Region Distribution
PAULINE H. MURRELL	So. Division Field
EDGAR NASH	Field—Cut Bank, Montana
WALTER F. STAFFORD	Oleum Refinery

10 YEARS

JAMES G. BAIRD	Pipeline & Comm.—Santa Fe Springs
EILEEN F. BROWN	Comp.—San Francisco
VERNON D. DEARDEN	Oleum Refinery
RALPH L. GLASS	Marketing-Rtl.—Colton
CLEMENT O. HENDRY	Oleum Refinery
WILLIAM P. JOHNSON	Oleum Refinery
JUANITA M. JULIAN	Comptroller's—H. O.
WILLIAM L. KNIGHT	Marketing-Rtl.—Seattle
JAMES E. McCAFFREY	Marketing-Rtl.—Portland
LEWIS R. MOTE	Mfg. Services—Home Office
JANE OWENS	Orcutt Refinery
JAMES C. REIMANN	Tax Div.—Home Office
ROBERT E. ROBBINS	Mktg.—Comm.—Seattle
STILLMAN F. SAWYER	Los Angeles Refinery
LUCILLE F. SCOFF	Comp.—San Francisco
ESTE A. SIGNORELLI	No. Division Field
ANTONIO R. SILVA	Oleum Refinery
CHESTER C. SLIMKOSKY	Mktg.—Comm.—Oregon
MARY W. STRADER	Marketing—San Francisco
DONALD J. VAN HARREVELD	Pipeline & Comm.—No. Division
HARRY C. VOSS	Field—Texas
RAYMOND E. WEBB	Trans. & Supply—H. O.
MARY M. WHIDDEN	No. Division Field
WILLIAM R. WOLSIFFER	Mktg.—Portland Div.

DEALERS

JUNE 1960

35 YEARS

M. MARTINEZ	Upland, California
J. V. McCREARY	Pasadena, California

30 YEARS

SETH MILLER CO.	Pasadena, California
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20 YEARS

H. F. HOFFMAN	Coronado, California
F. L. MACKENZIE	Pasadena, California
C. W. MORRIS	San Diego, California
F. WESTMAN	Astoria, Oregon

15 YEARS

W. H. BARTON	Yorba Linda, California
OWEN E. CAMPBELL	Pacific City, Wash.
JOSEPHINE COLE	Usk, Washington
TOM DEMPSTER	Tujunga, California
ELSIE H. HAMPTON	Cambria, California
HAROLD LEWIS	Pt. Townsend, Washington
TOM WALKER	San Fernando, California
S. D. WATT	Orange, California

10 YEARS

JOE CLARDY	So. San Francisco, Calif.
WM. D. DEIBER, JR.	Gilroy, California
ARTHUR HOLDEN	Molalla, Oregon
RICHARD MELENDY	Pasadena, California
FERRIS MILES	Redwood City, California
CLAUDE QUINN	San Pedro, California
HOWARD I. SPENCER	Napa, California
L. B. TRELLE	Pasadena, California

5 YEARS

ARNOLD PONTIAC CO.	Davis, California
RICHARD BLAIR	Costa Mesa, California
CHET CARPENTER	Alhambra, California
HARRY CLAYTON	College Place, Washington
WILLIAM R. DAVENA	Vallejo, California
K. GALBRAITH	Portland, Oregon
ELBERT GRAY	Placerville, California
ARTHUR L. JOHNSON & MAXFIELD R. JOHNSON	Seattle, Washington
LEROY LESMEISTER	Salem, Oregon
ELDON E. McCAULEY	Dayton, Washington
M. McCRADEY	Portland, Oregon
W. A. MORINSKEY	Chatsworth, California
GEORGE R. REINING, JR.	Everett, Washington
PATRICK F. VIZZARD	Tacoma, Washington
JAMES D. WATSON	San Diego, California

CONSIGNEES - DISTRIBUTORS

JUNE 1960

30 YEARS

DALLAS JACOBSON	Pendleton, Oregon
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25 YEARS

BEN C. BARTON	Yerington, Nevada
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20 YEARS

W. H. BARTON	Yorba Linda, California
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10 YEARS

NORMAN R. MORGAN	Lebanon, Oregon
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Janet Paull

She gets there
ahead of you

"I'm one of Union Oil's Service Station Inspectors. We are called the 'Sparkle Corps.' We call on Union Oil dealers everywhere. They never know when we're coming.

"We check the rest rooms and score each station. They must be sparkle-



clean! We inspect the entire station for safety and cleanliness, too.

"The dealers with the best 'report cards' for good housekeeping win prizes. And believe me, there's plenty of competition.

"The real prize, though, is the good will



of our customers. They've taken a shine to our immaculate white, blue and orange stations.

"Some even say that the housekeeping

at the sign of the 76 is as good as the gasoline and the service!"

.....
The Sparkle Corps is a Union Oil innovation. It is safe to say, though, it will inevitably be duplicated by other oil companies.

This is the way things work in a competitive economy. We have to keep constantly on our toes to think of new ways to please you.

We like the challenge.

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



Union Oil Company OF CALIFORNIA

