



WHEREVER YOU GO ...

...wherever your pleasure takes you, new Royal 76 gasoline can make driving there part of the pleasure, too. Because it's the West's most powerful premium—"The Finest." You get it at the sign of the big 76 where, customers tell us, the Minute Man's service is as good as the gasoline.

UNION OIL COMPANY OF CALIFORNIA

America's finest service station system

SEVENTY® Union Oil Company of California SIX

IMITATION RABBIT STEW

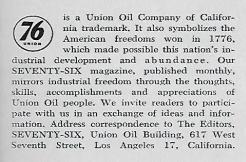
Volume 1, Number 6

NOVEMBER 1957

THE COVER, by Artist Tack Shigaki, depicts in faithful technical detail the CUSS method of exploring for oil along deeply submerged ocean bottoms. Union Oil's part in developing the technique is told beginning on Page 4.

IN THIS ISSUE

Imitation Rabbit Stew	3
A Floating Offshore Drilling Rig	4
67th Birthday Observance	8
Prophet of Lake Isabella	10
Business Highlights	14
Direct Sales Divisions	16
Dealer Sales Divisions	17
Our Philadelphia Story	18
Road-in-a-Room	22
Lubricant in White	24
In Focus	25
Service Birthday Awards	27
Bob Dalbeck	28



EDITORIAL BOARD:

 O rabbit stew tasted decisively horsy, countered that it actually was half-and-half, one horse to one rabbit.

Well, a similarly disproportionate recipe seems to be brewing in Washington, D. C.:

It was actually proposed during the last session of Congress that a graduated income tax be imposed upon corporations.

The graduated tax, as it is applied to individual incomes in the United States, has been labeled by a growing number of fair-minded Americans in all tax brackets as being *unjust* and even *confiscatory*. Starting at a 22% demand that would have horrified the Authors of Liberty, the tax rate climbs to a maximum of over 90%. As everyone's Income Tax Schedule attests, an American earning over \$300,000 in one year pays a Federal Income Tax alone of \$234,480 plus 91% of his earnings in excess of \$300,000.

The application of a similar graduated tax to corporation incomes would be grossly more *unjust* and *confiscatory*. As pointed out by B. Brewster Jennings in a recent Look Magazine article:

"Today's large corporation represents a pooling of the savings of many people—some of them wealthy, some of them in modest circumstances, and the vast majority of middle-income status. In many corporations, the number who participate in this teamwork through pooling of their capital far exceed the number who participate through pooling of their skills. Of the 25 largest U. S. industrial corporations, 19 have more shareholders than employees.

"The fact that one corporation is larger than another does not mean that its individual shareholders are wealthier. It usually means that there are more of them. Generally, the larger a company is in capital assets, the larger the number of people who have pooled their savings in it. I think anyone who sees this point clearly will reject the notion that progressively higher tax rates should apply to large corporations than to small ones. And I think every informed person will also reject the notion that, at a time when teamwork is our best hope, investors who join forces to do a big job should be penalized for it. It would be about as sensible as penalizing employees for working for a big company."

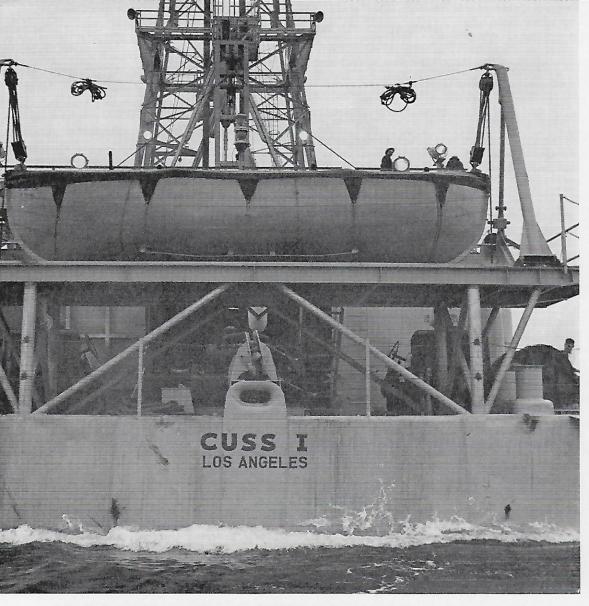
Article 1, Section 8 of The Constitution of the United States provides that "The Congress shall have power to lay and collect taxes, duties, imposts, and excises, to pay the debts and provide for the common defense and general welfare of the United States; but all duties, imposts, and excises shall be uniform throughout the United States;".

In keeping with the spirit of human freedom embodied in the Constitution, that word "uniform" deserves more than a mere geographical interpretation. Certainly Federal taxes should be applied uniformly in Maine and in Arizona, in New York City and in San Francisco. But didn't the men who framed the Constitution have in mind especially the fair and uniform taxation of all American citizens—groups as well as individuals?

Would it be uniform, for example, if a low-income citizen owning a few shares in a large corporation were taxed at a higher rate on his dividends than would be applied to a high-income citizen owning shares in a small company?

Like imitation rabbit stew, a graduated income tax on corporation profits tastes decisively horsy. Certainly it wouldn't be good for the *Constitution!*

/THE END



"Cuss" engineers
have overcome the
prohibitive costs
of deep-sea
petroleum exploration —
now,

a floating

Strange both in appearance and name, CUSS 1 puts to sea in one of the greatest maritime adventures—deep-water oil exploration.

Petroleum engineers have designed, built and successfully tested a floating drilling rig, capable of drilling an exploratory well under more than 1000 feet of restless ocean water.

The equipment, combining new inventions with established drilling techniques, is an answer to one of the oil industry's toughest and costliest problems:

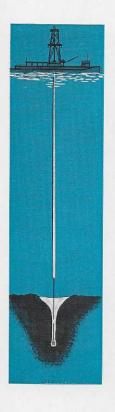
Conventional offshore drilling techniques now being used in shallow coastal waters depend upon a platform or other type of steel structure projecting above water from the ocean floor. The deeper the water, the larger and more costly the structure. After the platform is installed, drilling tools have to be barged offshore and assembled—dismantled when drilling is completed. It is an extremely slow and expensive method of searching for oil—so expensive in fact that even along the oil-rich Gulf Coast the oil industry as a whole has not yet realized a profit from its offshore investment.

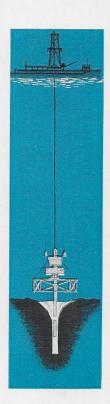
In California necessity has mothered a new invention. Faced early in 1953 with the possibility of drilling for oil

on state and government owned lands off the California coast, four oil companies—Continental, Union, Shell and Superior, collectively abbreviated as CUSS—found themselves on the beach and without a boat. All were old hands at drilling in relatively shallow—15 to 60 foot—waters like those of the Gulf Coast. But California's marine obstacles are greater. Here the ocean floor tilts steeply downward, presenting water, 300, 600, 1000, 1500 feet or deeper, with plenty of wind and current to keep it in motion. Possibly platforms or man-made islands can conquer the shallower of such depths. But the costs will be enormous.

Could an entirely new drilling technique be designed? Could the costly platforms be eliminated? Would it be possible to drill an exploratory and/or producing well from a boat floating on the turbulent ocean surface?

These were questions the CUSS Group resolved to answer. Each anted a big chunk of money into the joint venture and agreed upon an amphibious group of engineers, led by Union Oiler Bob Bauer, as the operators.







The three preparatory steps to drilling an exploratory well from a floating rig are, from left, (1) drilling a surface hole several hundred feet deep; (2) lowering casing with landing base attached into the hole; (3) attaching conductor casing to the landing base. Drilling then proceeds in nearly the same manner as on dry land.

Ocean-going roustabouts, here making fast to an anchored buoy, have added seamanship to the tricks of their trade.

offshore drilling rig!

Equal to many epic conquests of the sea—and in some instances outdoing fiction—were the exploits of this CUSS crew. They weathered storm, seasickness, failure, disappointment. For experimental purposes they converted hulks of World War II vintage into contraptions that unnerved old seamen. They stayed awake nights dreaming up new ideas, and spent their days fashioning dreams into floating steel.

The result is CUSS 1—a converted YFNB Navy freight barge—with a towering oil derrick for a mast—and a cofferdam-hole amidships, opening right down into the deep Pacific.

If you have an exploratory well location under navigable waters up to 1000 or more feet in depth, anywhere in the world, this is how the CUSS Group proceed to drill a well for you:

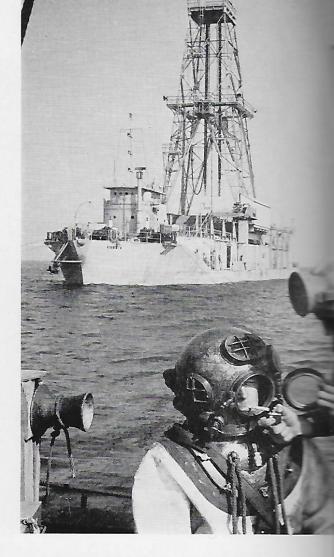
Locating the underwater site unerringly, they hold the floating derrick in position by means of six anchored buoys circling the drilling barge. Casing is then suspended downward from the derrick's rotary table to

continued

Broad of beam and with a drilling rig for a mast, CUSS 1 has led many an old seaman to scratch his head in disbelief. Though divers, foreground, were used in early tests, they rarely will be needed in exploratory drilling.

The derrick-barge is held in place over the drilling site by six anchored buoys, one of which is receiving a mooring line below. Thus secured, the drilling tools work efficiently despite currents and rough surface water.





Offshore Drilling Rig continued

within a few feet of the ocean bottom. The casing serves to conduct and guide the drill pipe while a *surface hole* is being drilled into the ocean floor.

In the barge, a joint of surface casing is then equipped at its upper end with a steel *landing base* designed to rest on the ocean bottom. Atop the base are installed conventional blowout-preventers and other standard well-head equipment. The complete assembly is lowered into place, the casing being cemented permanently in the surface hole by cement pumped down through the drill pipe.

Guide lines equipped with guide cones connect landing base with drilling barge, assuring the precise alignment of drilling tools with landing-base connections, and eliminating the need for divers.

The engineers have also developed closed-circuit underwater television apparatus for inspecting the oceanbottom well head—an invaluable aid at depths beyond a diver's reach.

Finally, a conductor string of casing is run from the landing base to the ocean surface, supported a few feet underwater by a *floatation* tank. The entire drilling hook-up is so arranged that, in an emergency, the drilling barge can be disconnected swiftly and moved away. The emergency past, the rig resumes drilling in jig time.

With the surface hole drilled and all foregoing equipment in place, drilling proceeds at sea in much the same manner as from a stationary platform or on land. A hole can be drilled to practically any desired depth. It can be cored, side-wall sampled, formation tested, etc. A second string of casing can be run when desired.

Completion of the first successful offshore producer in depths beyond diving reach will of course call for new remote-control connection techniques. However the CUSS Group are confident they can install a *Christmas tree* at great depths and, through ocean-bottom gathering lines, move oil or gas ashore or to a central offshore storage point. Nothing of the underwater oil field will remain to offend the view or obstruct shipping.

In several respects this ocean-going technique offers greater economies than if the drilling were being done on land. There are no expensive roads to build or drilling sites to prepare. No water supply has to be piped in. Supplies can be brought to "camp" via one of the cheapest means—marine transport. Requiring no dismantling the derrick-barge moves quickly from one well location to another. A crew would rarely want to leave the job to go fishing. At the very least, the CUSS Group know they can drill hole at sea as cheaply as they can drill a wildcat well on dry land.



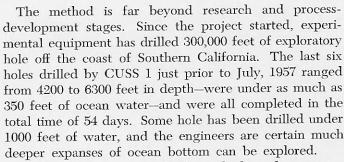
To assure safety and convenience, drill pipe is held secure on a deck rack rather than being stacked in the derrick. The pipe rack seen in detail below, operates automatically.





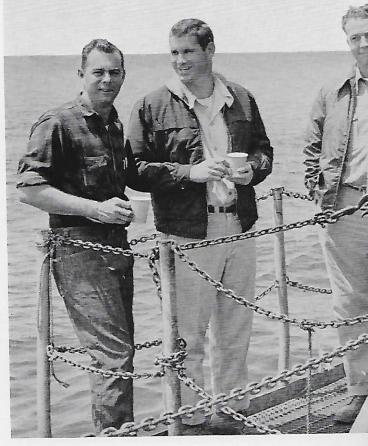
Like exploratory rigs everywhere, CUSS 1 knows no quitting time. In storage bin, foreground, is conductor-casing for guiding drill pipe.

Among CUSS Group leaders are Captain Tom Crawford, Drilling Supervisor Hal Stratton and Manager of Offshore Operations Bob Bauer.



Basic patents covering both methods and apparatus have been granted to the CUSS Group, and additional patents have been applied for. As with most other oil industry inventions, these are being given the broadest possible application through the industry-wide practice of licensing.

Thus, to a long list of *impossible* problems met and solved by oil men is being added successful deepwater drilling. The CUSS Group are foremost in the development of another important *first*—a portable sea-going drilling rig that greatly reduces offshore drilling costs, opens vast new underwater areas to oil exploration, and is ready to drill anywhere under navigable waters. CUSS 1 is an outstanding accomplishment. It may revolutionize offshore drilling.

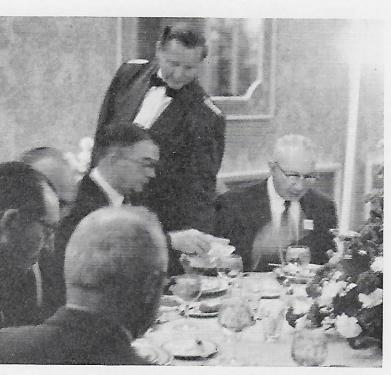


THE END



The "senior" employees honored on Union Oil's 67th birthday average 36.1 years of service each—or a total of 3,245 Company service years.

67th Birthday Observance



At a birthday dinner in the Beverly-Hilton Hotel, President A. C. Rubel, left, paid high tribute to Union Oiler loyalty.

We meet again tonight to celebrate the 67th birth-day of our Company and to do honor to those of its senior employees who have served 35 and 40 years.

"The 67 years have seen the Union Oil Company grow from a small enterprise in California to a great Company with nation-wide and international interests.

"No small part of this progress is due to the hard work and loyal support of those who are here tonight, and to the many other men and women honored on previous occasions.

"It is with sincere pride and deep appreciation on behalf of all of the people of the Company that we extend to you our thanks and congratulations for a job well done, and wish you many happy returns."

In those words President A. C. Rubel addressed more than 100 Union Oil diners at the Beverly-Hilton Hotel on October 17th. Honored guests of the occasion were 67 employees who this year completed their 35th year of continuous service, and 16 forty-year men. Five additional 35-year and three 40-year men were invited but could not attend. Joining these honored guests at the birthday dinner were some 20 other participants, principally officers and department heads.

Among "many happy returns" of the day were the tours and feasting recorded here by our camera:



To please the photographer, Bob Fowler showed how an old field man can handle two of anything.

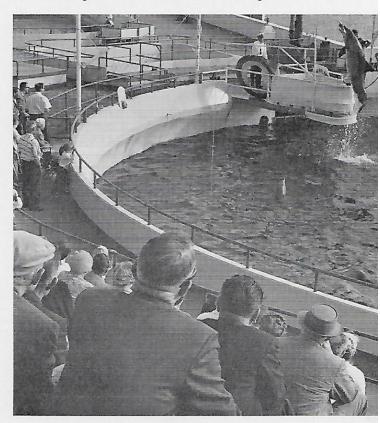
The main dinner course was "Whole Filet of Blue-Ribbon Beef—Three Musketeers Flambe Armagnac!"





An inspection tour of Union Oil Center brought from one old-timer: "Guess we did better than I thought."

"Good material there for an offshore roustabout," commented a veteran cabletools driller after observing the matinee performance of Marineland's dolphins.





THE PROPHET OF LAKE ISABELLA

Oscar Green and the first water
behind Isabella Dam arrived at the same
time. He cast his bread upon the waters...

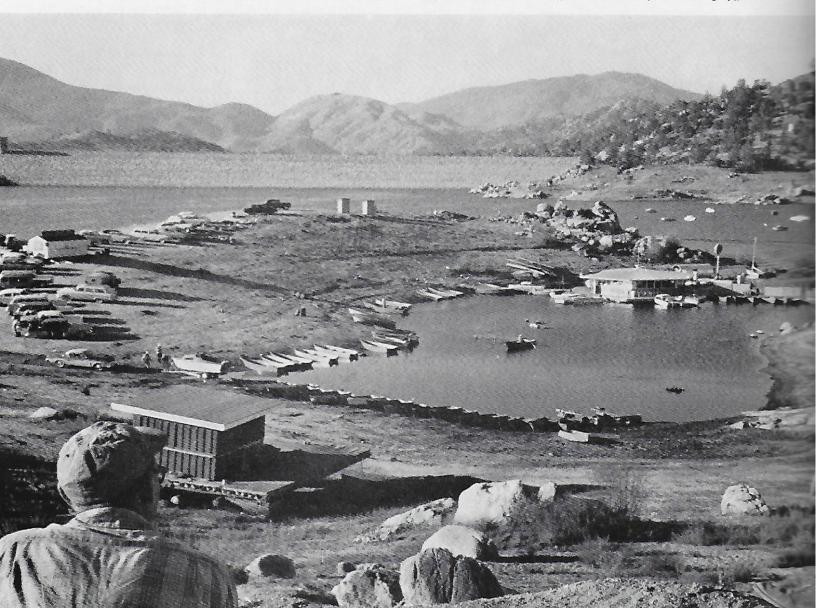
When the Army Corps of Engineers formed Lake Isabella by damming California's Kern River, they thought they were controlling floods and conserving water. But they hadn't met Oscar Green.

To Green, a lake meant two things: fish and people. The people would come to fish; so they'd need places to stay, food to eat, a dock for their boats, gasoline, and oil. They'd need an opportunity to have fun and to spend money. Green aimed to provide them with both.

And he has. Oscar is a big man with a big smile and big plans. He is the promoter, the publicist, and the prophet of Lake Isabella.

"Within five years, this will be one of the leading recreation areas in Southern California," he says. "There's all-year fishing in the lake, water skiing, boating; we're 15 minutes from winter sports at Shirley Meadows; three hours from Los Angeles; and 50 miles from Bakersfield.

Green sits on a hill overlooking his Isabella Marina, an unusual, hexagonal floating dock for pleasure boats. Lake Isabella was formed three years ago as a flood control and water conservation project. Green has helped turn it into year 'round playground.



"Why, we could sit on our hands and this place would catch on by word-of-mouth alone! But that isn't fast enough. After all, we have to meet the mortgage payments every month."

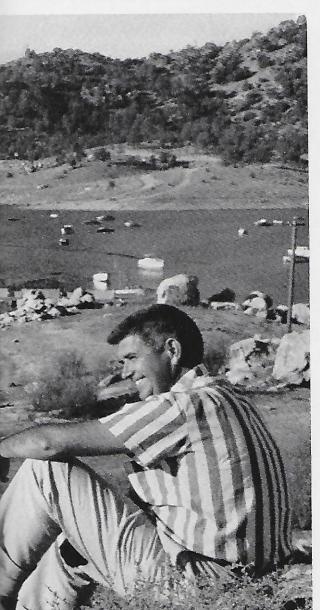
Green has never sat on his hands. He advertises in Bakersfield papers, has hired a publicity agent to help sing the praises of Lake Isabella. He and his wife—"she's a mountain girl, born up here"—took a booth at the Sportsman's Show in Los Angeles, and talked Isabella and fishing to 300,000 visitors.

Each week, he sends fishing reports to 150 newspapers, sporting goods stores, radio and TV stations. "We're honest," he claims. "If the fishing's bad, we say so. But the fishing is seldom *all* bad. If the trout aren't biting, the bass, the catfish, or the bluegill are."

Green and the first water to back up behind the dam arrived at about the same time, in 1954. That year Oscar opened his Dam Korner Store—"that's what my wife called it while we were building"—at Isabella, on the east side of the lake.

continued

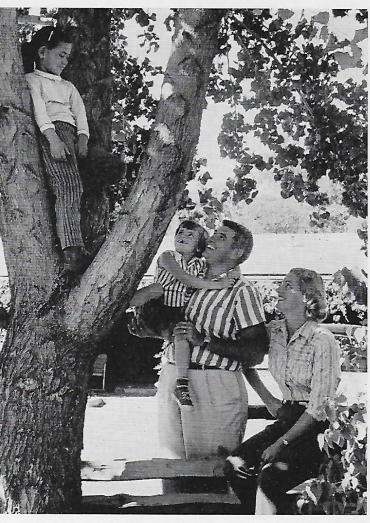
Green gathers information about fishing conditions from anglers at the dock, relays it to 150 newspapers, TV and radio stations.





A feature of the dock is this floating marine station. Both the main dock and the fuel dock can rise and fall with the level of the lake, be moved as the water recedes. The near pump in the picture automatically mixes lube oil and 7600 for outboard motors.





Cathy (in tree), Christie, Oscar, and Mrs. Green "relish every day up here in the mountains." The background is another Green enterprise: the Pala Motel in Kernville.

Mrs. Green has started taking flying lessons, plans to ferry Oscar about on his travels: Last year he covered 20,000 miles, visiting other resort lakes and looking for ideas that might help his operation at Lake Isabella.



(Isabella is a new town. It replaced one of two historic old places, Isabella and Kernville, which were inundated by the waters. Similarly, a New Kernville has been built on the northwest side of the lake.)

"We had \$3,000 in inventory, \$100 in the register, and not a dime in the bank," he told us. "We did more business last Labor Day than we did the first six months the store was open."

Over that same Labor Day week-end, the Isabella Marina (Oscar Green, president) pumped 7,000 gallons—a lot of gasoline, boat by boat. The gasoline was 7600, provided by Green's Kern River (Union Oil) Distributors. Pack trains were carrying hunters into the mountains from Road's End Lodge (managed by Mrs. Green); fishermen were sleeping at the Pala Motel (managed by Secretary Oscar Green of the Pala Ranches Corp., owners).

As New Kernville's first Chamber of Commerce President, Green was instrumental in getting a ruling which assures Isabella's future as a resort: a guaranteed minimum level for the lake. Unlike most flood control and irrigation reservoirs, this lake cannot be drained below a level where it can be used for recreation.

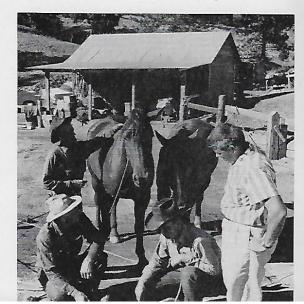
Green's big plans have a habit of becoming reality. In the future he sees a floating swimming pool adjoining the Marina, and an amusement center for the whole family, at Kernville. "That's one trouble with a fishing resort," he says. "Pop goes fishing all day, but there's not much for the wife and the children to do.

"We'll change that. Like any new business, we're limited by capital. We move slow and plow back. But we're making progress. I tell you, within a few years Lake Isabella will be the best known, most popular resort..."

And he will tell you. Funny thing is, he's probably right.

/THE END

There's plenty of the old West in the Kern River Valley! Green's father-in-law, Earl Pascoe (left, kneeling) and brother-in-law, Ray, run pack trains into the high country, practically guarantee deer.





Night falls, but lights from the Marina and from the big 76 still glitter over the water, brilliant advertisements for Green's playspot. Green—who likes to see people have fun day and night—plans a recreation center where the whole family can enjoy evenings.

Business Highlights of the Month

PRODUCTION Water injection is succeeding

Water injection operations recently started in the Richfield and Guadalupe oil fields have increased the number of Union Oil Company waterfloods in California to a total of 13. We are also participating in waterfloods in Montana, Wyoming and West Texas.

About 3000 barrels a day of additional oil production are being produced from 10 of the California waterfloods, while the other three are of such recent origin that stimulation has not yet been demonstrated.

Waterflooding activities will be increased in the Dominguez-Rosecrans area so that maximum economic recovery of oil from these fields can be accomplished in the minimum time. Three new projects are almost ready to start at Dominguez, while engineering analyses and economic appraisals are being made on three other pools at Dominguez and one at Rosecrans.

Other areas of particular interest are at Richfield, Orcutt and Oakridge. At Richfield, waterflooding operations were expanded recently to include the Upper Chapman Zone underlying the entire Chapman property, and plans are being completed to join with other operators to flood the remainder of the West Richfield oil field. Final arrangements are being made to join with another oil company in a unitized waterflood of the Third Zone at Orcutt. The entire Oakridge pool underlies fee property of Union Oil Company, and the present pilot waterflood will be expanded to include the entire field as soon as an adequate water source can be developed.

Emphasis is also being placed on waterflooding in several areas outside California.

These developments are part of the Company's constant effort to produce oil fields efficiently and to recover the maximum economic quantity of oil from these pools.

from Dudley Tower

COMPTROLLER'S A million credit cards issued

The total replacement of quarterly and annual credit

cards with the new embossed imprinter-type was completed on schedule by mid-July, 1957. Initial coverage involving 600,000 customers, required the manufacture of over one million credit cards, including the multiple card needs of individuals and firms. To meet production deadlines, 56 miles of plastic card stock was processed through 14 automatic embossing machines operating on a 24-hour schedule.

Customer and dealer acceptance of the mechanized credit card operation is favorably represented by the following comparisons:

Since 1953, last year of the manual operation, the number of authorized credit card customers has increased 60%.

Delivery ticket volume has increased 70%. Currently, in excess of two million tickets are processed each month through the central credit card system in San Francisco.

The gross dollar value of the average customer's monthly purchases has increased 45%—from \$18 to \$26.

Indicated increases in sales volume have been absorbed with only a 4.3% increase in operating expense. The processing of these tremendous volumes presents a constant challenge to improve our methods. At present, studies of electronic scanning and punching equipment are being made to more fully utilize the possibilities of imprinter-type plastic credit cards.

from Stanley Biehn

MANUFACTURING Maltha Refinery retires

On October 1, 1957, the production of asphaltic products was discontinued at Maltha Refinery, terminating a refining operation that has served the West steadily and faithfully since 1901. Although the plant's processing units have been rebuilt and improved over the years, they are obsolete by today's standards. The cost of replacing them is very high and cannot be justified economically. Employees who operated the refinery over its 56-year span of life have made a valuable contribution to the Company's growth.

On October 1, the manufacturing operation of Edmonds Refinery was transferred to the Manufacturing Department. This refinery, near Seattle, produces asphalt and road oil only and was formerly under jurisdiction of the Marketing Department.

from J. W. Towler

RESEARCH Over 900 Union Oil patents

A basic objective of the Research Department is to carry on applied and related fundamental research in fields of Company interest for the discovery and development of new products, new processes and new techniques, primarily for use in Company operations. A pivotal phase of the task of translating research results into profits is the acquisition of patents protecting the knowledge we have gained. At the present time over 900 domestic and foreign patents are held. The licensing of these patents provides a significant source of Company income.

from Fred L. Hartley

PURCHASING The Sports Club recipe

Take 114,000 pounds of steel, plus 17,000 pounds of plywood, nuts and bolts—cover with 750 gallons of paint—pour into 10,600 pounds of cartons—all in the short space of three weeks—and you have the recipe for the new baked enamel "76 Sports Club" signs currently appearing at Union Oil service stations.

The complete 76 Sports Club program requires 25 million booklets on various phases of sports. Vendors were allowed only five weeks, including two weeks' layout and design time, to produce and ship the first million. Proper display of this literature was not overlooked by the Advertising Department, and by joint effort we secured and shipped to some 5,000 retail outlets a very attractive display rack. Many Union Oil people play important supporting roles in this outstanding new advertising program.

from C. S. Perkins

TRANSPORTATION AND SUPPLY

Effective October 1, 1957, the Transportation and Supply Department was given direct responsibility for distribution activities throughout the Company's domestic marketing area. Regional distribution managers will now report to H. M. Schafer, manager of Supply and Distribution.

from E. L. Hiatt

EXPLORATION Out of the mud-hole in Canada

Exploratory drilling operations have been resumed in the Western Canada Division after a suspension of approximately six months occasioned by an unusually severe and prolonged rainy season. During the interim it was impossible to transport drilling equipment and supplies to exploratory well locations because of impassable road conditions and bans imposed by governmental authorities.

With the resumption of drilling activity, a wildcat well on the East Acheson Prospect, just west of Edmonton in Alberta, is an indicated oil discovery. Another well is drilling on the Red Earth acreage block, also in Alberta, northwest of our original discovery well. Roads are being graded for a well two miles south of a gas discovery made by Union last year in eastern British Columbia, near the Alberta Provincial boundary, and also for another gas play northwest of the Buick Creek gas field in the same general area. Production from this gas area will be tied into the West Coast Transmission line in the near future.

from Sam Grinsfelder

MARKETING Drive for sales

In order to further strengthen its drive for sales, the Company has realigned its marketing organization. Basically the changes shorten the "line of command"; make it possible for people with greater authority to have more contact with our customers; and relieve the field forces of their staff duties, so that they can put greater emphasis on selling.

Before the change, the Company had four West Coast marketing Territories: Northwest, Central, Southwest and Rocky Mountain. These Territories have been made into 22 Divisions—11 Dealer Sales and 11 Direct Sales—each headed by a Division Manager.

General Sales Managers, responsible for three district marketing operations, will be: R. H. Rath, Dealer Sales; W. L. Spencer, Direct Sales; and F. K. Cadwell, Foreign and Refinery Sales.

Management responsibility in the 22 new Divisions has been delegated as follows:

DEALER SALES

Headquarters	Division Manager	Merchandising Mgr.
Seattle	W. I. Martin	H. D. McMillan
Portland	J. T. Raabe	W. R. Wolsiffer
Spokane	R. C. Glass	O. D. Dorsett
San Francisco	E. Kendall, Jr.	J. E. McCaffrey
Sacramento	W. M. McClure	R. E. Robbins
Fresno	W. S. Christopher	A. E. Mealiffe
Salt Lake City	G. F. Herrman, Jr.	T. S. Argyle
Pasadena	C. E. Rathbone	R. H. Rockwell
Los Angeles	T. R. McGilliard	J. S. Cowie
Long Beach	D. R. Hepburn	W. M. Sopher
Honolulu	J. H. McGee	

DIRECT SALES

Headquarters	Division Manager	Manager of Operations
Seattle	G. S. Smith	J. W. White
Portland	L. C. Burkland	W. M. Tufts
Spokane	M. E. Nichols	D. C. Craig
San Francisco	J. J. Grunewald	J. W. Chapman
Oakland	J. H. Fisher	D. Kimmell
Sacramento	W. L. Stewart III	W. S. Martin
Los Angeles	E. R. McCloud	T. W. Proudfoot
Pasadena	H. W. Bragg	T. E. Luke
San Diego	F. A. Culling	J. S. Foster
Phoenix	R. Brenchley	S. A. Browne
Salt Lake City	R. D. Davis	H. E. Hooker

Distribution activities in the various Divisions will become the direct responsibility of the Transportation and Supply Department, direct supervision of the personnel staffs will become the responsibility of the Industrial Relations Department, while credit activities and functions will now be under the direct supervision of Home Office Credit Department. (On the following two pages are maps indicating the geographical scope of the various Divisions.)

from Roy Linden



DIRECT SALES DIVISIONS October 1957



DEALER SALES DIVISIONS October 1957

Our Philadelphia Story



Noon caught up to us at Valley Forge. While sitting on the carriage of an old artillery piece, Paul mused: "Just goes to show a man can't sit down cozy and hope to get the job done. What say you and I cross the Delaware for that load of lube oil?"



Paul pointed to the Betsy Ross home: "Seems pretty small, doesn't it? They say people back in those days were small of stature. Nothing small about their minds though!"

On completing his delivery, he smiled: "Every time I come out here the load gets bigger. Our salesmen and distributors are really putting Union Oil lubricants on the eastern map. Or maybe it's partly the opposite —maybe the oil's putting us on the map. Anyway, business is good and the boss says we'll come very close to getting out of the red this month—making a profit for the first time since Union Oil came East. How do you like that—a western oil making good right in the heart of Pennsylvania?"

Noon caught up to us at Valley Forge. An officer winkingly legalized an illegal parking place for the big truck near Washington's winter headquarters. And while lunching on Paul's sandwiches in warm sunshine, we tried to imagine the hunger and cold of that Revolutionary War winter in 1776.

Sitting on the carriage of an old artillery piece, Paul mused: "I used to have the idea the British were afraid to cross the Delaware and tackle Washington's army in winter weather. Did you read Churchill's slant in 'Life' recently? He said the British could have come over and ended the war a dozen times. But their commander chose to sit around a warm fire and let the rebels freeze to death. Finally Washington crossed the Delaware himself and eventually crossed up the whole British army. Just goes to show that a man can't sit down cozy and hope to get the job done. What say you and I cross the Delaware for that load of lube oil in Paulsboro?"

Enroute to Paulsboro, we ventured a block or two off the truck route for a close glimpse of Independence Hall. Workmen carrying a scaffolding through the entrance prompted Paul to explain: "They're scraping a hundred coats of paint off inside to see what kind of wood and stain were used when the place was new. Liberty Bell sits just inside the main door. A million people come every year to see it. No matter how many times they're told the bell was cracked while tolling for a

66 First time in Philadelphia? Climb in, then; I'll show you where this country was born!"

Truck-salesman Paul Deal, just starting out with "Another Load of Royal Triton" for delivery in Delaware Valley, hardly expected us to accept the invitation. But we did; and for eight fleeting hours rolled through an area hallowed by nearly 300 years of American history.

Paul's assignment for the day was a morning delivery of packaged lubricants to Union Oil's Philadelphia distributor, and an afternoon pickup of bulk lubricating oil across the Delaware River at Paulsboro, New Jersey.

There was little time for sightseeing or conversation. Yet our camera captured an unique through-the-windshield concept of "where this country was born." And Paul, while maneuvering the truck along new expressways and through crowded city streets, provided a helpful commentary:

continued



From left, Greg Kelly, Frank McCarthy, Morton Lipson, Dean Kerr and Paul Deal are among our marketing representatives of the Philadelphia or Middle Atlantic region. They have succeeded in steadily increasing Union's sale of lubricants to eastern buyers.

continued

Our Philadelphia Story

funeral in 1835, they keep on thinking it cracked in 1776. Wonder which will win, truth or human emotion?"

Crossing a bridge to Paulsboro, the driver exclaimed: "This Delaware River is about the busiest waterway in the United States. It exceeds New York in import tonnage and is a very close second in exports. Five million people live in Delaware Valley and about one-third of the nation depends on the steel, oil and other products manufactured here. Guess that's one reason why Union Oil set up sales headquarters near Philadelphia."

Re-crossing the river, we proceeded along narrow, brick-paved streets past Christ Church, organized in 1695, built beginning in 1727, and in whose premises are buried seven signers of the Declaration of Independence, among them Benjamin Franklin.

Within sight of Franklin's grave, Paul pointed to the

Betsy Ross home: "School kids and their teachers and parents come here from all over the land to see where the American flag originated. The house seems pretty small, doesn't it? The rooms and stairs inside are cramped too. They say people back in those days were small of stature compared with our generation. Nothing small about their minds though. This country could still use a lot of the intelligence buried in that churchyard."

The big tank truck soon rolled past City Hall, with its crowning statue of William Penn, and on through Penn Center, one of the newest, largest and handsomest building developments in America. Explaining that Penn Center offered every comfort, commodity, convenience and service a man could wish for—even underground access to bus lines and railways—Paul reflected:

"Wonder what William Penn thinks about having this center named after him? You know, when he was granted Pennsylvania by the British crown for colonization he wanted it called Sylvania. But the British tacked on the name Penn against his wishes and refused to change it. Maybe he doesn't like the name Penn Center either. Wonder why he objected?"

"By the way," we interrupted, "do you know the name of the British port where Penn first set sail for America in 1682?"

"Not Liverpool, I guess?"

"No, it was the Port of Deal."

"No kiddin'?" laughed Paul Deal.

"No kiddin'!"

So begins our Phildelphia story.

While moving through city streets, our camera captured an unique through-the-windshield view of Freedom's birthplace.



Back at the plant, the driver plans his afternoon with Foreman Frank Rodden and Supt. M. C. Segal.



A glimpse of Independence Hall (with spire) recalled the momentous historical events that occurred here around 1776.



Paul's morning assignment was the delivery of "Another load of Royal Triton" to the warehouse of a Philadelphia distributor.



Just leaving their Eastern Continental Territory offices were Territory Manager J. C. Garvey and Manager of Sales Services J. S. Kenney, Jr.



Beyond City Hall (with Penn statue) was Penn Center, Philadelphia's newest monument to Freedom's continuing blessings.



Road-in-a-room



The car in the photo thinks it's being driven nearly 60 miles an hour—and it is, for test purposes, on a research dynamometer. Driving are Howard Emerson and Don Hollowell, while Dr. Hal Huffman, Jimmy Warren and C. C. Moore mastermind the panel.

Research engineers prove that people are smarter than automobiles

The Cadillac in the photograph above is accelerating smoothly past the 58 mile-an-hour mark. The engine is pouring out horsepower, wind is singing through the radiator, the rear tires are fighting for a grip. As far as the car knows, there's asphalt pavement under its wheels and it's beating its brains out in a drag race.

Yet, driver Don Hollowell sits there with his hands in his lap and his eyes on the speedometer—in perfect safety.

And safety is the reason for Research's newest gadget: a road-in-a-room, a complex chassis dynamometer.

Part of the work of the Product Evaluation group at the Research Center is testing the knock-ratings of gasolines. The men find out how the fuels act in cars on the road. Royal 76 and 7600 are road-rated, as are gasolines made by our competitors. The researchers take another tack, too: they check cars—especially new models—to



A "fifth wheel" fastened to rear of car on road sends signal to recorder, which draws car's acceleration curve. Howard Emerson is attaching wheel to dynamometer—with no concern for speed limits.



The road-in-a-room is safer too—the hydraulic jacks being raised by "Dinty" Moore slip up under rear axle to catch car in case rear tire blows out during test.

determine how high an octane-number gasoline their engines demand for quiet power. Finally, they develop specifications for *future* gasolines, for the fuels we'll sell several years from now.

When a research engineer road-rates gasoline, he listens for knock during acceleration. The driver loafs along at 10 miles an hour, then guns the car to a peak speed, drops back to 10, and up again. In that driving pattern lies a growing hazard.

Where yesterday's cars had a critical knock point between 20 and 25 miles an hour, today's big V-8s have a similar point between 40 and 70. Race along the highway running up and down a speed scale with a 70 milean-hour top, and you flirt with either the obituary column or the jailhouse.

Hence, the road-in-a-room, this elaborate, one-of-its-kind dynamometer.

Garden variety dynamometers are common. Many motor tune-up shops have them. A mechanic drives your car onto a set of rollers. The rollers are "loaded"—in order to turn them your engine must work. The mechanic

sets the load to equal, for example, 50 miles an hour at full throttle, starts the car, and reads the horsepower output on a dial. Then he tinkers with your engine until it delivers its maximum horsepower.

The research dynamometer measures horsepower; but that's grammar school stuff. Its rollers can be loaded not only for one speed, but for a continuous *change* in speed. At every instant, from a wheel-squealing start to the nearly loadless cruising range, they resist the tire's efforts just as pavement would. A big blower with a vent in front of the grille sends out a whispering breeze or a gale, depending on the car's speed.

Further, the adjustments are made automatically, by means of electronic controls, once the machine is adjusted to match a car's normal rate of acceleration.

And all the while, Hollowell sits there with his hands in his lap, working push-button switches. *He* knows where he is: safe in a sound-proofed room where the traffic can't get at him. But that foolish car—lots of muscle, no brain—is convinced it's whooping down the highway like a bullet.

/THE END



Alba Grease, our new lubricant for food-processing machinery, interests Waldo Schneider and Connie Bender of Sacramento plant.

Lubricant in White

We need a better grease—a lubricant that not only reduces wear and friction between moving parts but has a higher resistance to steam, water, rust, oxidation. It will have to be immune to corrosion—even to the chemically destructive tendencies of salt, vinegar and a wide variety of corrosive fruit and vegetable juices. It must not impart any odor or flavor to canned foods. It must be non-toxic. And can you supply it in white?"

The food-processing industry issued quite an order when they asked petroleum to incorporate all of these qualities in a single lubricant. But our Research Department didn't ignore the challenge. Many months ago, they set out in search of the necessary ingredients—the finest lubricating oils, chemical additives that would fortify the lubricant against moisture and acids, and a soap base into which the oils and additives could be stably compounded. All other factors being equal, water-white or light colored ingredients interested them most.

Months of laboratory search, compounding and testing were followed by all-important field tests. With some of the best and largest California canneries lending their cooperation, our Research and Marketing people began applying the new product to the widest possible variety of food-processing machines and conditions. It satisfied every requirement the canners had specified. It was almost snow-white. And in one important test, it exceeded expectations:

In a tomato-byproducts canning operation, it had been necessary to replace the bearings in seamer (lid sealing) rolls every two or three weeks. Application of the new grease extended the life of these bearings to two or three months. In one seven-week test, only five bearings were replaced, whereas the normal expected replacement was 200 bearings. Similar efficiency and economy were demonstrated in countless other applications.

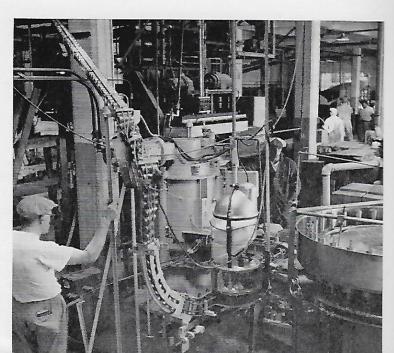
The name of the Union Oil product is Alba Grease. In the container it looks just about as palatable as vanilla ice cream. And if someday a tiny molecule of it accidentally tumbles into your dish, don't worry—it's white, non-toxic, perhaps even nutritious!

THE END



Union Oiler D. A. Russell, left, and Thomas H. Richards, Sr., of Bercut-Richards Packing Company, Sacramento, have put the product through the gamut of packing-plant tests.

Food-processing machinery demands many extra specs from a lubricant; it must be non-toxic, resistant to salt, vinegar, water, steam and fruit acids.

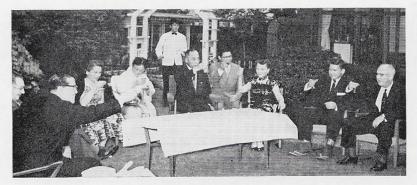






THE MISS CONTRA COSTA COUNTY title has been won by daughters of Oleum Refinery employees during two out of the past three years. Arlyta Grove, right, daughter of Foreman Clark Grove, won in 1955 and has been acclaimed in Bay Area beauty events ever since. The current 1957 queen is Diane Armstrong, left, daughter of Engineering Analyst Daryl Armstrong. SEVENTY-SIX can furnish measurements on request, but not telephone numbers.

from D. G. Probst



IN JAPAN RECENTLY, clockwise from left, S. Sugimo, W. E. Thompson, Mrs. W. L. Theisen, Mrs. K. Wada, Y. Miyamoto, unidentified guest, Mrs. W. E. Thompson, W. L. Theisen and H. W. Sanders toasted the cordial business relationships that continue between Maruzen and Union oil companies.

from Frank Ott

Reprinted from Los Angeles Times Oct. 5, 1957

OPINIONS OF OTHER NEWSPAPERS

THE NATURAL ADDITION TO THE COFFEE BREAK The Cleveland Plain Dealer

Note to the Boss: Sir—That feeling of lassitude we have noted after eating is not necessarily the effect of old age, as we had supposed, or a subconscious desire to soldier on the job, but a perfectly normal thing, which brings us to the case in point.

A British physician has come out in favor of an hour's sleep after lunch. In a letter to the British Medical Journal, Dr. M. Curwen said:

"It has occurred to me to wonder why our social habits in this country refuse to take account of bodily functions in this respect—and how it came about that we insist on trying to carry on work as usual at times when it was obviously intended by nature that we should go to sleep instead."

May we be permitted to say that we agree wholeheartedly with Dr. Curwen, who is obviously a man of rare wisdom.

and to suggest that such a program probably would meet with universal endorsement by most workers.

To be sure, it shouldn't be permitted to interfere with coffee breaks, but if the timing could be worked out properly it could be sandwiched in BETWEEN coffee breaks!

One of our associates' offices is plenty large enough for a cot — indeed, after having paced it off, we surmise it would probably hold three cots. This would still leave one of the lads on his feet to answer telephones and preserve the illusion that everyone was alert—and thinking every moment!

We have the sickening feeling that this suggestion will fall on deaf ears—that some heartless upper-brass man will contend that a fellow who gets paid for a day's work ought to do at least a little something to earn his pay. But it's too bad, for with sleeping breaks added to coffee breaks, this could well be the ideal





DEALER RUDY KAUL fills 'er up in Garden Grove, California, for an airborne credit card customer. The customer, from Las Vegas, ran out of gas over Rudy's station, used an adjoining parking lot for a landing strip, taxied to the pumps, signed for the delivery, and took off through the overcast for "fun in the sun."

from The Daily News, Garden Grove



RALPH ROPER, laboratory inspector at our Edmonds Refinery, has set a hot pace among sports car drivers during his first year of racing in the Northwest. He finished among the leaders in five major racing events. His Corvette, using Royal 76 and Royal Triton, has been clocked at 135 miles an hour.

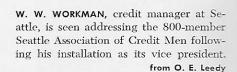
from J. W. White





OPEN FOR BUSINESS just two blocks from the governor's palace in Mexicali is one of the finest service stations to be found either north or south of the Mexican border. From left, Distributors Rodolfo Nelson and Alfredo Gruel share with Division Manager F. A. Culling their pleasure in attracting an opening-day volume of over 5,000 gallons. "76" means the same in Spanish!

from T. W. Proudfoot

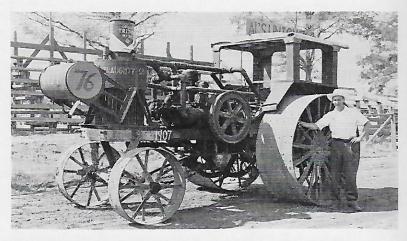






RAILS FOR THE "SHORT LINE" were salvaged from a Union Oil spur track at Woodburn, Oregon, to accommodate an old Southern Pacific steam locomotive recently donated to the city. In the volunteer "section crew" were, from right, Joe Serres, Union Oil Consignee Gail Wengenroth and Union Oil Retail Representative Lyle Sanderson.

from Woodburn Independent



DEALER AL MOWAN of Hermiston, Oregon, is keeping this 1907 Avery tractor on display at his service station as proof that "They'll run forever on the *finest*." The tractor, with Al in the driver's seat, led Hermiston's 50th anniversary parade.

from R. G. Chandler



76 SPORTS CLUB is off to a great pre-season start! Even before the big program goes to bat, we learn that Dealer Jack Rinehart's Pee-Wee baseball team, left, from The Dalles won the Eastern Oregon Invitational Tournament and placed six "men" on the all-star team. Meanwhile in Blythe, California, another Pee-Wee team, right, sponsored by Dealers Phil Palermo and Veryl Bommer and Consignee John Dickman, romped off with the Lions League championship.

> from J. W. White and T. W. Proudfoot



RETIREMENTS

October 1, 1957

Service Date

MARTIN P. HALISSY
Oleum Refinery October 30, 1934

November 1, 1957

ADALINE ASBURY
Personnel Department May 6, 1931

DANIEL D. CLEM
Marketing Department March 1, 1926

FRANCES C. FARLEY
Comptroller's December 24, 1933

HENRY L. GARDNER
Field Department July 1, 1949

HADEN L. GLENN
Pipeline Department January 13, 1927

HAROLD A. HALL
Oleum Refinery May 9, 1922

JOSEPH LIVELY Los Angeles Refinery October 26, 1942

RAYMOND W. LUDDEN
Oleum Refinery July 17, 1929

MAKOTO MURAKAMI
Marketing Department July 1, 1927

GEORGE OTTO

Marketing Department
February 2, 1930

KENNETH PATTISON

Marketing Department July 2, 1932

FRANK A. REYNOLDS Marketing Department September 4, 1922

JOSEPH F. SANTOS
Oleum Refinery September 7, 1927

HARLAND R. SIGLER
Marketing Department
September 16, 1926

GEORGE M. VINCENT
Oleum Refinery May 20, 1920

HARRY C. VOLLBORN
Los Angeles Refinery July 20, 1944

WILLIAM S. WILLIS

January 6, 1923

IN MEMORIAM

Field Department

Employees:

BURYL A. SCHLAGENHAUFF
Brea Chem. Plant September 14, 1957

MICHAEL PENTZ Santa Maria Refinery September 21, 1957

Retirees:

JOE MONTEZ

Coast Div. Field September 11, 1957

ROBERT B. POWERS
So. Div. Field September 18, 1957

HOMER E. STANFIELD

Automotive September 20, 1957

CECIL V. HARDMAN So. Div. Field September 24, 1957 SERVICE

Birthday

AWARDS



November 1957

EMPLOYEES

40 YEARS

RALPH HILTON......So. Div. Field

35 YEARS

HENRY F. BARNES. Valley Div. Field
LEROY E. JONES So. Div. Field
WALTER C. LASHLEY. So. Div. Field
HUBERT H. LEESON So. Div. Field
WILLIAM E. PINDER So. Div. Pipeline
MARYIN S. PUTNAM Comptroller's
ARTHUR F. REAS So. Div. Field
CLARENCE F. THOMAS No. Div. Pipeline
TRUMAN R. TINKER So. Div. Field

30 YEARS

25 YEARS

WILLIAM E. ADAMSOleum Refinery NORMA E. CARMICHAEL ...Marketing Department FRANK H. HOWELLLos Angeles Refinery GEORGE S. LEESo. Div. Field ERNEST M. PARKINLos Angeles Refinery

20 YEARS

15 YEARS

10 YEARS

PHILIP D. ADCOCK......Los Angeles Refinery PAUL D. ANDERSON.....Los Angeles Refinery

GERALD L. BEARDEN......Comptrolle JAMES B. BUNN..... Marketing Departme WILLIAM D. CANNING....Marketing Departme IRVING S. CAULKINS.....los Angeles Refine LEONARD E. COFFMAN.....Los Angeles Refine ALDEN V. DONATONI ..., Marketing Departme JAMES W. EDDY......Comptrolle NORMA F. GAVETTE.....Oleum Refine JACK N. GEORGE..... West Texas Div. Fie UNA M. HERTEL......Comptrolle ABRAHAM P. IONA..... Marketing Departme GLEN J. KNOLLS......Oleum Refine HAROLD R. KUHNAU......Comptrolle JAMES D. McQUILLIN.....Los Angeles Refine CHARLES E. MORROW.....los Angeles Refine MARJORIE I. REAGAN......Comptrolle JOHN P. REEDCoast Div. Fie CLARENCE K. RICHARDSON. . Los Angeles Refine CHAMEL E. ROBERTSON....Los Angeles Refine THOMAS G. ROSCOE......Los Angeles Refine MAX B. SOUTHWICK......los Angeles Refine HUGH J. STAPLES.....Los Angeles Refine JOE E. TROWELL.....Los Angeles Refine RAOUL P. VAELL Research Departme

DEALERS

25 YEARS

W. C. BURGHARDT......Oregon City, Oregon F. H. KNIGHT......Bellingham, Washington, R. MURPHY......Pasadena, Californ

20 YEARS

MRS. GLENN STRADLEY.......Colburn,Idal

15 YEARS

ALOHA LUMBER COMPANY....Aloha, Washington PATRICK NARDONI........Pasadena, Californ

10 YEARS

5 YEARS

Bob Dalbeck

Where do you get the extra \$100,000?

"Some critics of business still maintain that profits are too high.

"I wonder if they have any idea of how much more it costs to do business today than it used to? Union Oil is a typical example.

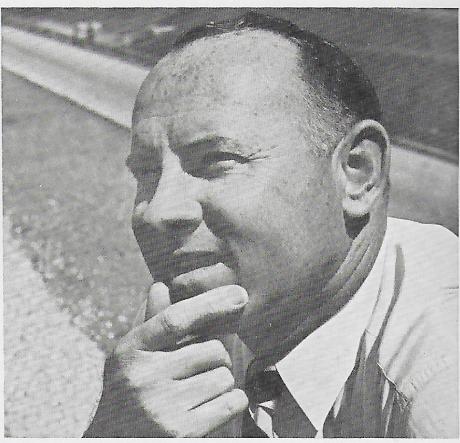


"In 1927, the company bought an 80,000 barrel storage tank for \$25,000. Under Federal Income Tax laws, we were permitted to recover our investment over 30 years, the life of the tank.

"By 1957, when it's time to replace the tank, the company has set aside \$25,000. But what has happened? Due mainly to inflation, higher wages and material costs, the tank now costs \$125,000.

"Where do you get the extra \$100,000? Union Oil gets it out of profits, and by increasing indebtedness from time to time. Out of profit? The fact is, we have to sell \$1,250,000 worth of products to earn \$100,000 after taxes.

"Put another way, the company's entire profit for one day, the total earnings that day on \$400,000,000 invested by share owners, and the efforts of over



BOB DALBECK: "WITHOUT PROFITS, YOU AND I WOULDN'T HAVE A JOB."

8,000 people—all went to replace one 80,000 barrel tank, of which we now have over 150.

"Without profits, Union Oil couldn't afford to replace that tank. And without the new tanks and other equipment we

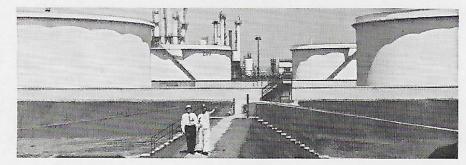
have to replace to stay in business, there'd be no jobs for any of us!"

Bob Dalbeck is something of an authority on profits. He is an Assistant Comptroller for the company.

He estimates that only about 19 minutes in the average company's 8-hour working day go to earn a profit. The rest is spent paying for the cost of doing business.

And less than half of those 19 minutes result in dividends to share holders. The other 9½ minutes are reinvested in the business to keep it up to date and competitive.

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