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# Seventy SIX

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July  
August 1983



# Union Oil's Growth Parallels Alaska's

Remarks delivered by  
Fred L. Hartley, Chairman  
and President of UNOCAL  
Corporation to the Anchorage  
Chamber of Commerce.

The natural beauty of Alaska and the frontier spirit of its people always make it a pleasure to return. But I also look forward to these trips because Union's 540 resident employees and \$755 million investment make Union an important part of the Alaska adventure.

Union Oil has been a company for all seasons here for many years. Its growth has paralleled Alaska's.

I'd like to recall some of that pioneering history with you. I will discuss Union's current operations and plans in Alaska and elsewhere. Finally, I will discuss the larger arena of U.S. energy markets and policy in which both Alaska and Union must function.

Our association with the state goes back to 1911 when one of our tankers, the *S.S. Lansing*, first brought Union products to Alaska. We built our first bulk terminal in Ketchikan in 1926 and have had a continuous marketing presence ever since.



*Beautiful scenery, such as these islets at sunset in southeastern Alaska, is typical of the natural charm of the country's northernmost state where Union Oil has been an active participant in the energy picture since the late 1920s.*

The sign of the 76 is as familiar a symbol here as in the Lower 48. Through 105 dealers, Union currently supplies more than 20 percent of the state's gasoline needs.

Tankship terminals in Anchorage and Ketchikan serve our commercial customers as well as these stations.

We are firm believers in Alaska's tremendous potential and have developed our retail and commercial marketing strategies accordingly.

Among the latest examples of this commitment is the PROTECH program we'll be introducing at our local service stations by early fall. PROTECH provides a company-backed guarantee on automotive repairs that will be honored at Union outlets throughout Alaska and also throughout the West Coast states of Washington, Oregon and California.

Marketing is only one aspect of Union's longtime involvement. Our geologists were conducting studies in this region as far back as the 1930s. As a result of these and later explorations in the Cook Inlet, we are the largest oil producer in southern Alaska and the largest natural gas producer throughout the state.

In 1957, the same year Union opened an exploration office here, we also participated in the first discovery of commercial quantities of Alaskan crude oil, the Swanson River field strike. In 1965, while drilling in the Inlet, we made or participated in three major oil discoveries—Trading Bay, McArthur River, and Granite Point.

Meanwhile, in 1959, Union also discovered Alaska's first commercial gas field, Kenai. As you know, this onshore field still furnishes most of the heating and cooking gas for your city.

Natural gas from Union's extensive reserves also supplies feedstock for our world-class nitrogen complex in Kenai. These plants produce over 1.1 million tons of ammonia and about 850,000 tons of urea annually, most of it marketed as agricultural products on the West Coast and exported to countries bordering the Pacific basin.

Besides nitrogen-bearing fertilizers, this ammonia also finds use in refrigeration, effluent treatment, wood pulping, ore processing, plastics, pho-

tocopying and detergents. Urea is an ingredient in the manufacture of resins and glues as well as a source of synthetic protein in cattle feed supplements.

We have continued major exploration or production work in all of your leading areas of oil and gas activity.

I have already spoken about the Cook Inlet. There we operate three platforms offshore—Grayling, the Monopod and Granite Point—in addition to our onshore gas production.

On the North Slope, Union has interests in productive leases over the Kuparuk Field and the Duck Island Unit. We have exploratory leases in the Beaufort Sea, the national petroleum reserve, the western Arctic, and the Prudhoe Bay uplands.

We also have interests in seven Norton Sound offshore lease blocks south of Nome and in another seven lease blocks in the St. George Basin.

In addition, Union is exploring and bringing in new production in many other regions of the country and the world.

In U.S. waters, for example, we have an important discovery in the highly promising Santa Maria basin (offshore California) and are continuing to explore for natural gas and oil in the Gulf of Mexico. Just two weeks ago, Union acquired an interest in 34 blocks in the federal lease sale offshore Louisiana.

Abroad, to cite just a few important ventures, we recently began the first commercial oil production in the Dutch sector of the North Sea and we are intensively developing several large natural gas fields offshore Thailand.

I believe, however, that our Alaskan projects remain among the best illustrations of Union's proven formula for steady growth—a formula that combines solid long range planning with a strong commitment to technological innovation.

For example, it seems only yesterday we were making farsighted plans and facing enormous challenges in the Cook Inlet.

Development there now seems old hat. But let me remind you that the oil industry had never previously coped

with such a hostile environment. The Inlet's high tides and winds, strong tidal currents, severe earthquakes, seasonal ice floes and abrasive glacial silt were a far cry from conditions offshore California and the Gulf states.

In response, Union's engineers improved conventional platform designs and also developed our unique Monopod platform, which exposes 50 percent less frontal area to ocean forces than the standard four-leg platform. We introduced new safety measures and equipment and developed new pipeline techniques.

Union prospered and so did you.

All of the Union energy projects I've mentioned so far involve conventional energy. But oil and gas supplies are finite and depleting. And most new reserves are becoming more difficult and expensive to find and develop. For this reason, and long before the oil "shocks" of the 70s, we at Union realized that alternative energy sources such as geothermal and oil shale are essential to our nation's growth and security. We planned for the long haul, invested heavily in research and accepted the risks.

Today we are the world's leading producer of geothermal energy. And a few months from now we will be launching the nation's first commercial shale oil project.

Let me tell you something about these efforts.

Geothermal energy is the natural heat of the earth captured in reservoirs of rock-trapped fluids at depths of thousands of feet. Steam produced from wells drilled into these formations is piped to nearby electrical generating plants where it is used to turn turbines.

Over the last 20 years, Union has led the way in developing the new technology needed to find, drill, control and produce this energy.

Our first project, dating back to 1967, was The Geysers in northern California, now the world's largest geothermal development. As principal operator of the field, Union supplies steam to power nearly one million kilowatts of generating capacity, more than enough to meet the electricity needs of a city the size of nearby San

**We have continued major exploration or production work in all of your leading areas of oil and gas activity.**

## Our nation's current situation is indeed better than it was in the wild and woolly 70s.

Francisco. When fully developed, The Geysers will double its present output.

Union extended its geothermal operations to the Philippines in the early 1970s, again with striking results. Steam from two fields south of Manila provides 550,000 kilowatts of electric power—25 percent of Luzon's requirements. This makes the Philippines the world's second largest producer of geothermal energy.

We recently drilled a successful exploratory geothermal well in Indonesia, and we are exploring Japan's northernmost island of Hokkaido.

Clearly, geothermal energy is important to the U.S. and many other nations. But the implications of Union's approaching breakthrough in developing the oil shale deposits of the western United States are greater by far. The recoverable oil locked up in these vast, secure tracts is equal to some 600 billion barrels—at least twice the known oil deposits of the entire turbulent Middle East.

Once again, this is a story of Union's long range planning, risk-taking and innovation.

We began acquiring oil shale properties in the Piceance Creek basin of northwestern Colorado in the 1920s. For nearly four decades, we pursued research and development work, including a demonstration retort in Colorado. We spent \$100 million to develop the new technology to make shale oil a commercial reality.

Three years ago, we made the decision to proceed with construction of the nation's first commercial shale oil project.

Union has committed more than \$600 million of its own funds to build the Parachute Creek project. Commissioning of the facilities will commence about August 1, and later in the year we should be producing 10,000 barrels per day of synthetic crude oil.

The complex consists of three main elements:

■ **First**, a 12,000 ton per day underground room-and-pillar mine, the third largest in the U.S. The mine includes a shale crushing and storage area, offices and maintenance shops,

and a conveyor belt for transporting crushed ore to the surface.

■ **Second**, our patented, upflow retort 100 feet high and 40 feet in diameter. The retort is located on a five-acre bench cut out of the mountain-side 1,000 feet above the valley floor. A rock pump pushes the ore through the retort while hot gases circulate from above, releasing raw shale oil. Union has already sold licenses for this unique technology to competitors.

■ **Finally**, an upgrading plant, eight miles away. The plant uses Union-developed processing techniques to remove impurities, add hydrogen and convert the raw shale oil into a pipeline quality synthetic crude superior to most natural crudes.

With this pioneering effort we are laying the technological and economic groundwork for a large oil shale development. We have already done the preliminary engineering for an 80,000 barrels per day addition and have applied to the Synfuels Corporation for assistance in building the first 20,000 barrels per day increment of this modular expansion.

Our shale oil project is another instance—as with our oil and gas technology and our geothermal development—where Union is working today to bring projects on stream that will have growing importance for decades to come.

Moving now from Union's operations and plans, I'd like to spend a few minutes on the larger issue of U.S. energy markets and policies.

Our nation's current situation is indeed better than it was in the wild and woolly 70s. Oil prices are down, encouraging economic recovery, and supplies are more than ample.

But we need to keep things in perspective. America's oil problems are far from over. And OPEC is far from finished. Today's oversupply is due to some relatively short-term swings in oil production and oil demand and a global business recession.

Any one of a number of new factors—from a resurgent world econ-

omy to wider Middle East wars or political upheavals—could quickly burst this bubble. We saw it happen twice in the last decade alone.

If these occur, real energy prices will spiral, and we Americans will again be at the mercy of foreign oil producers. To prevent that, our nation must take a number of steps.

The United States must continue a carefully planned synfuels program to encourage the most promising new alternative technologies as one vital element in a realistic national energy policy. But other steps must be taken as well. We must also:

- Continue our individual and national efforts to achieve greater energy conservation and to use what we have more efficiently;
- Encourage basic energy research and development to bring on new kinds of energy supplies;
- Maintain the strategic petroleum reserve program and thus reduce the dangers of supply disruptions; and
- Correct existing policies that work against the nation's energy and economic interests. We must seek, for example, to stimulate maximum domestic oil production through sensible state and federal tax and leasing decisions; and to free natural gas from the controls that distort the market and thus damage producers, consumers and the nation's economy.

In addition to energy problems that must be faced by the U.S. and the world, Alaska has its own energy concerns. Let me conclude with a few remarks closer to home.

The handful of oil firms that have maintained a strong, long-standing presence in Alaska have brought the state a great deal of income and investment. This is true even though Alaskan oil and gas have always been expensive due to the hostile environment, the limited operating season, and heavy transportation costs.

Further, development here is becoming more expensive all the time. A well in the Lower 48 may cost as lit-

tle as \$500,000. In the harsher offshore regions here, where engineering marvels such as ice or gravel islands must sometimes be constructed, the price tag for the site alone can range between \$25 and \$125 million.

The economics of the world oil market today have slowed exploration spending, not only by Union, but the industry in general. A recent story in the *Wall Street Journal* said exploration spending by ten major oil companies will be down this year by as much as 26 percent.

The cutback will be even more acute in Alaska where the higher cost of exploration, development and transportation make projects economically feasible only with higher oil prices or lower production costs.

I feel, though, that with the return to stable oil prices, we will see renewed interest in Alaska. And while our own drilling program may have slowed temporarily, Union has not lost sight of the long-term importance of Alaska in America's energy picture. Our 49th State, we believe, will provide a major portion of the United States' future oil and natural gas reserves. And Union Oil Company will be a major participant in the development of those reserves.

It is my view that Alaska can speed her own recovery if state leaders will examine energy policies in the broader context of U.S. and world energy markets. Alaska must take steps to lower the royalty and tax burden on producers. Further, the Alaskan government should simplify lease terms to end disincentives such as royalty or net profits bidding for both producers and explorers. Otherwise, future energy investment and development here will suffer even more.

Union has always been an aggressive operator in the North Country, and we want to continue. It takes a great deal of faith in future markets and price trends to commit company assets to such risky areas. We want to invest and innovate in Alaska, to spearhead alternative energy development elsewhere, and to make the greatest possible contribution to the energy security of our nation. It is in your interest, as well as ours, that we do so. (76)

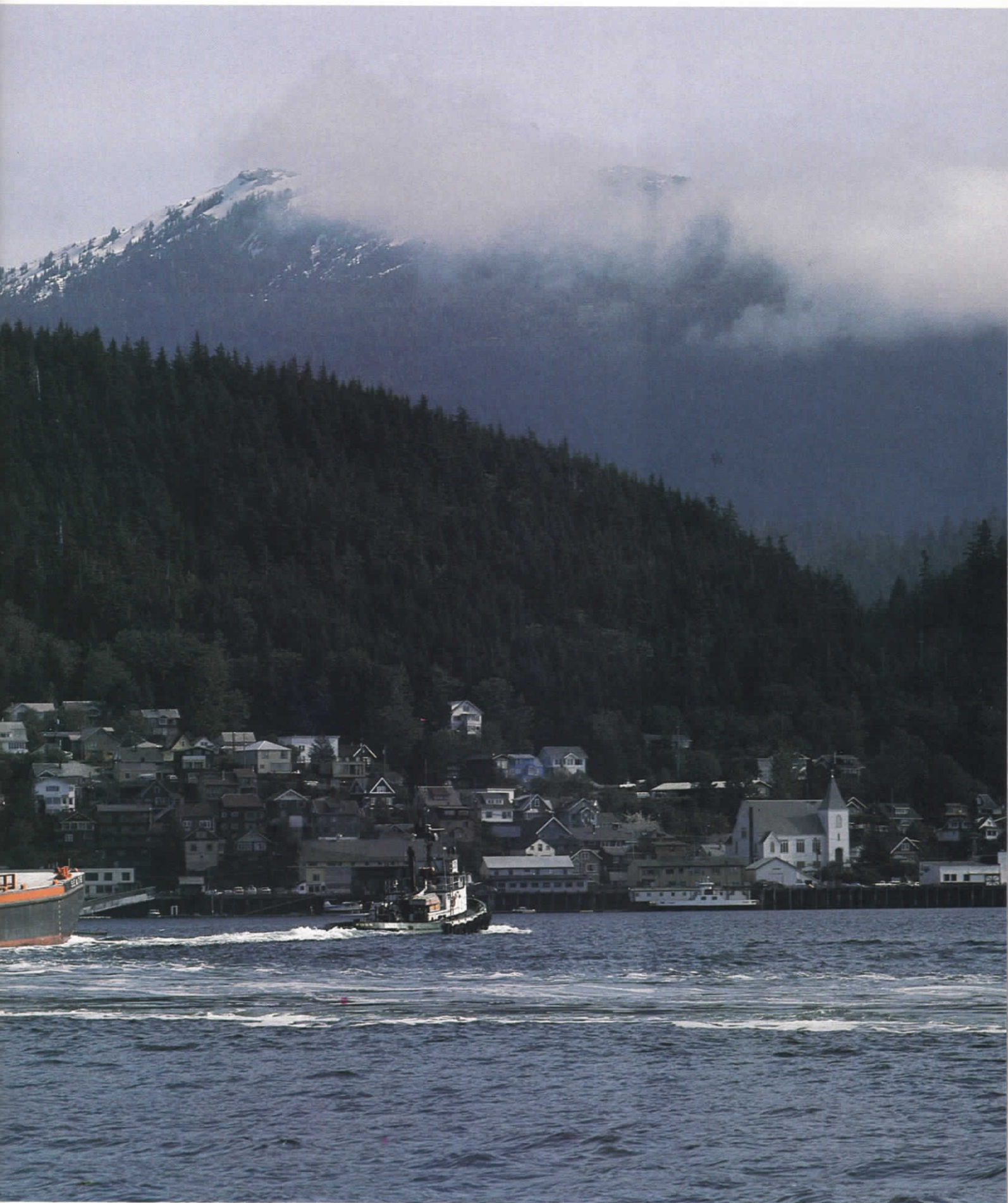
**I feel, though, that with the return to stable oil prices, we will see renewed interest in Alaska.**

# Remote Alaskan Outposts Fueled by Sea-Going Barge

by Linda Gleason

The native *Inupiat*—or the “Real People”—called it *Alayeskah*, meaning “Great Land.” This vast, scenic state, is more than twice the size of Texas, stretches from the southeastern Aleutian archipelago, through majestic snow-capped mountains and massive glaciers to a flat expanse of snow and ice called Point Barrow, a thousand miles north of the Arctic Circle.







After making delivery rounds to logging camps, canneries and southeastern Alaska's many small towns and villages, the Sea 76 replenishes its fuel supplies at the Union Oil terminal in Ketchikan (Left and Facing page). Deckhand Gustoff Peterson draws the lines that secure the barge in one of its many unloading stops (Below).



Yet only half a million people reside in the nation's largest state, half of them in the city of Anchorage.

Industrious, accustomed to the harsh ways of nature, Alaskans often go out of their way to preserve their isolation and privacy. And well they may, for transportation links between many of the state's tiny towns and villages are sharply limited—especially in the maze of southeastern islands.

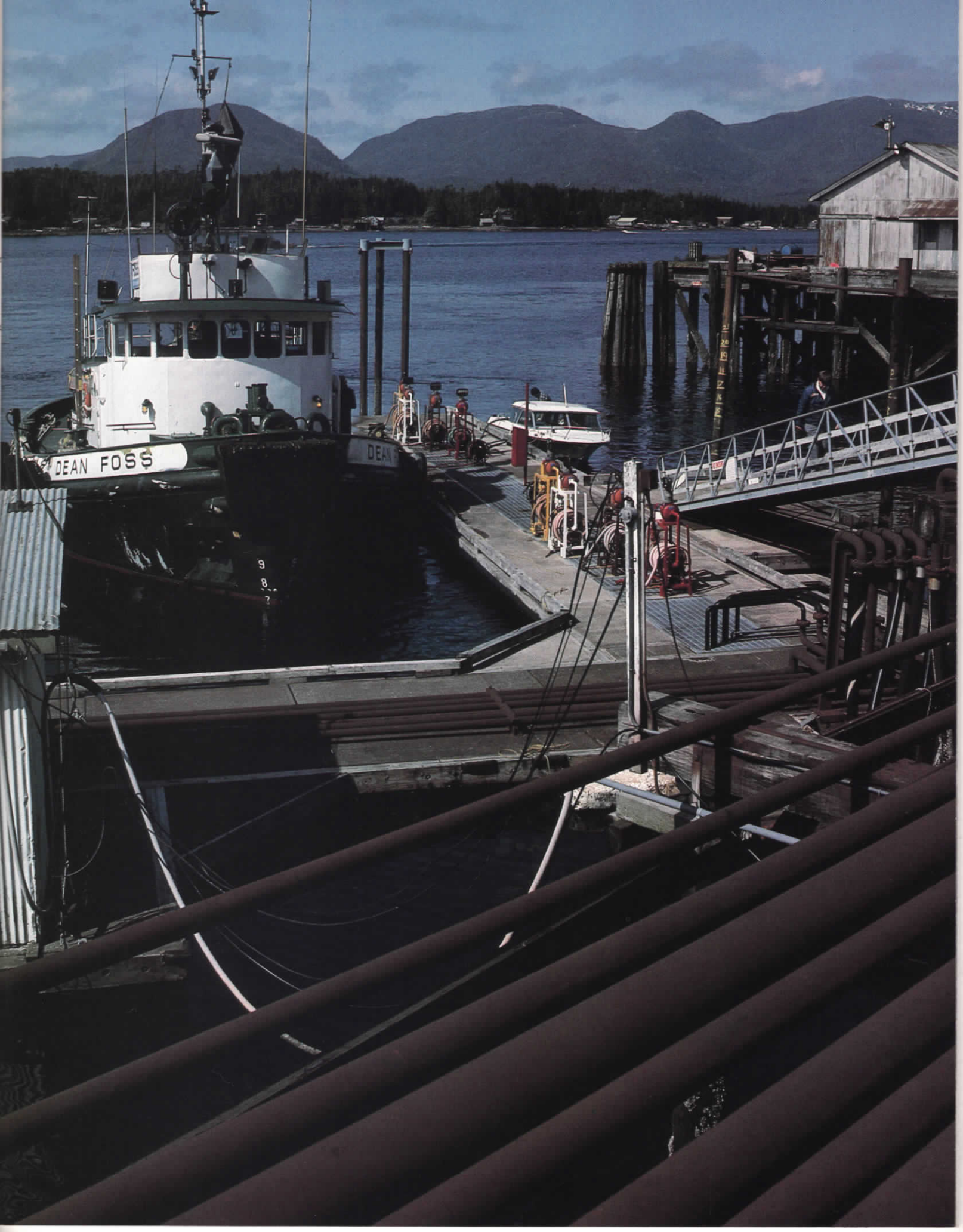
One particularly vital link is the team of a Union Oil barge, the *SEA* (South East Alaska) 76, and the tug *Dean Foss*. For 15 years they have been plying the Pacific waters, delivering fuel supplies to farflung southeastern communities, logging camps and canneries. The barge also delivers product from Ketchikan to Union Oil distributors in Juneau, Sitka, Petersburg and Wrangell and to jobbers in Haines, Tenakee and Metlakatla.

Although it's a long haul from any significant refining center to these far away places, two Union high sea tankers—the *Coast Range* and the *Sierra Madre*—replenish the tanks of the company's terminal in Ketchikan every five weeks. There the *SEA 76*'s four holds, with a total capacity of 11,000 barrels, are loaded for the trip to widely scattered customers, jobbers and distributors located in Alaska's remote areas.

In Ketchikan, John Pasma, terminal superintendent, sometimes receives orders for fuel by phone. More often he receives them via VHF radio from settlements far removed from the nearest telephone. Pasma then schedules the stops for the *SEA 76*.

Captain Henry Lund must navigate a winding, dangerous course to meet the scheduled route, passing hundreds of tiny islands and sometimes traveling more than 300 rugged miles to the north of Ketchikan, for a supply stop at Haines.

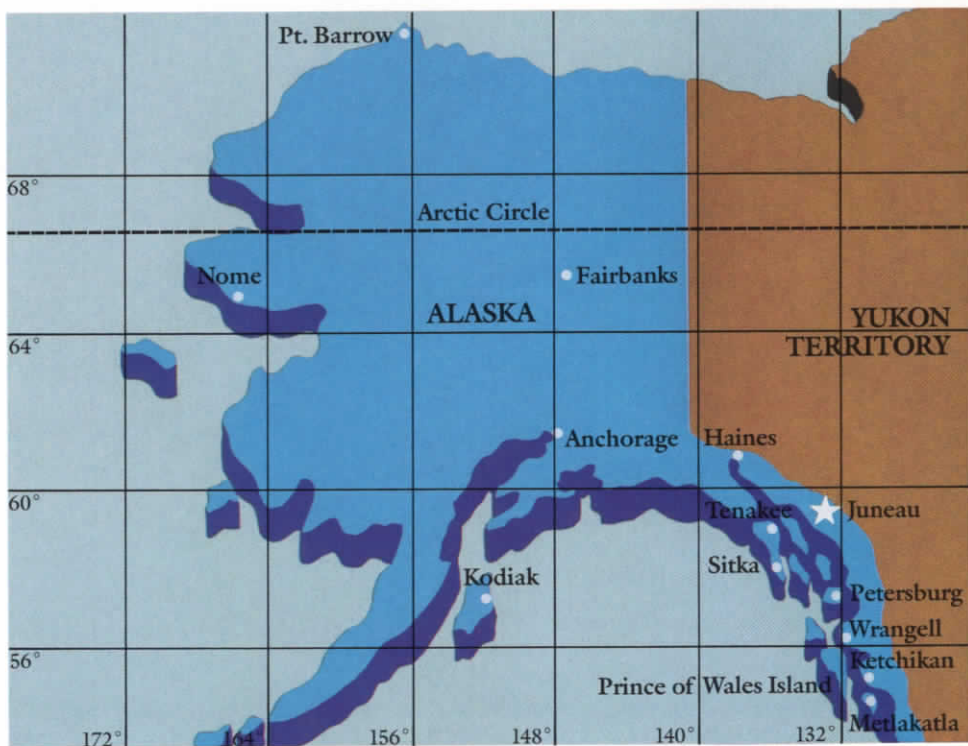






If the weather is mild enough, sometimes the barge can be navigated around the southernmost tip of Prince of Wales Island into the open sea. Rather than risk the trip in stormy winter seas, the tug is more frequently forced to retrace its original route to the north through the various protected sounds and straits. This trip is longer, but is much safer.

The *SEA 76* is a "peddler's barge" used to make a number of small deliveries. In 1982, Lund and his five-man crew were at sea for 292 days and made 52 voyages to deliver 22.5 million gallons of fuel, mostly diesel for generators and heating devices.



*Huge spruce and hemlock trees are harvested at the Kake Tribal Logging Camp (Left). The logs are tied in bundles and left floating in the water before being taken to a mill (Right). Home port for the SEA 76, the only Union Oil barge servicing southeastern Alaska, is Ketchikan (Below).*



"Probably 80 percent of our sales here are diesel," explains Bill Cochran, Alaska district sales manager. "Gasoline consumption, for obvious reasons such as the absence of highways, is low in these areas. The waterways are our highways. There aren't two communities connected by road in these parts.

"Union has been servicing southeastern Alaska since 1926 when the Ketchikan terminal was built," Cochran adds.

Lund, a former aviation engineer who openly confesses to a deep love for the sea, has been skipper of the *Dean Foss* for 13 years. Another old hand to the barge operation is Tankerman Dick Johnson, on board for 10 years.

Many years of experience have earned Capt. Lund a reputation as a safety-conscious skipper. He has guided the tug and barge through countless trips, through treacherous waters in harsh weather conditions.

The same ocean that teems with migrating sockeye salmon in the summer is likely to be dotted with treacherous icebergs in winter. Several years ago, winds gusting up to 100 miles per hour forced the barge to make a week-long delay during a voyage through Lynn Canal—"a real wind chute," according to the white-haired captain. The crew was confined to quarters until the winds died down before the trip could be safely continued.

Capt. Lund is careful to time the crossing through the Wrangell Narrows at high tide. There is a 25-foot drop between high and mean tides in this long and shallow waterway. Sailing here is tricky business, he points out, no game for landlubbers or weekend sailors. Although "The Narrows" usually seem calm and clear, submerged rocks are numerous.

There are delights as well as dangers on these voyages, however.

Wildlife flourishes along the craggy shores. Black and brown bears occasionally lumber down to the beaches to catch some sun. Moose can be seen leisurely munching on green spring grasses. An occasional eagle will make a sudden dive, rising with some small creature gripped in its talons.



*The Dean Foss tug has towed the Sea 76 on hundreds of voyages to deliver vital fuel supplies to Alaska's remote regions.*



Porpoises, whales and Steller's sea lions leap and frolic. The waters are rich with the crop that keeps the fish canneries thriving along the *SEA 76*'s delivery route.

The barge also makes regular supply stops at several summer camps like Waterfall, a cannery now converted into a resort for sports fishermen.

Just as spectacular as the flora and fauna is the breathtaking natural beauty. From between giant peaks, tremendous glaciers sweep majestically to the sea. The numerous, unnamed islets of the area are thick with spruce and hemlock, all ripe for logging.

The *SEA 76* also makes diesel fuel deliveries to six Federal Aviation Administration radar navigation and guidance system sites. Other, regular stops along the way include remote microwave transmitter stations. The stations use diesel fuel for generating electricity. During these stops, helicopters airlift expandable fuel storage bladders to and from the barge. Sometimes, more than 12 hours are needed to deliver just 4,000 gallons.

Clearly, the delivery rounds for the *SEA 76* are a far cry from tank truck operations on the mainland. But while it may require extra effort, supplying fuel to this rugged region helps keep the "Great Land" that it is going strong.

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# NEW YORK: UNOCAL'S LINK TO INVESTMENT ANALYSTS

Photos by Roger Tully

New York City. The name conjures up a kaleidoscope of images and symbols.

The Statue of Liberty. Broadway. The Empire State Building.

And, of course, Wall Street, that area of lower Manhattan which symbolizes the fundamental economic tenets of our society—capitalism.

New York is the cornerstone of corporate finance in America. It is hometown for many of the nation's banks and financial institutions, and the New York Stock Exchange. While the steel mills of Pennsylvania and the oil fields of California represent limbs of the nation's economy, New York is the financial heart of the United States.

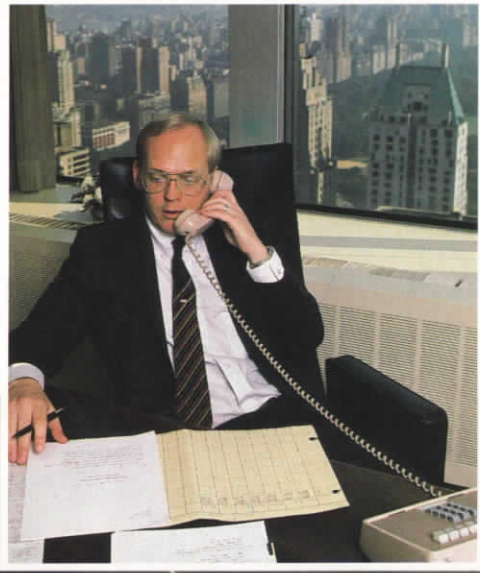
Unocal Corporation maintains a link to this financial center through a 44th-floor office in mid-town Manhattan, a 20-minute subway ride from Wall Street.

Here, Unocal Executive Representative Gary Sproule, assisted by secretary Gloria Alley, carries out an important part of the company's wide-ranging investor relations program.

"The New York office is a result of geography," Sproule says. "I spend most of my time communicating with EastCoast based analysts and portfolio managers whose clients and firms own Unocal stock. By the same token, Jim Courtney, assistant corporate secretary, works with the analysts on the West Coast and in the Midwest.

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*Gary Sproule, Unocal executive representative, is familiar with New York's Wall Street, the world famous financial center located a short distance from his 44-floor offices overlooking Central Park. There, one of his many duties include keeping in close contact with East Coast-based analysts and portfolio managers whose clients and firms own Unocal stock.*





DLR	+	42.1	59.1-59.8	19.8
UCL	+	20.2	91.7-92.2	2.2
Q	+	35.9	20.0-20.3	1.2
MMR	+	35.3-35.5	20.10	
PRN	-	23.1	35.2-35.9	1.1
UL	+	8.70	35.3-35.5	20.80
	+	16.50	8.8-7.0	5.2
	+		16.2-16.0	2.2
	+		16.2-16.2	1.1







"Many investment firms follow Unocal's progress. Between my work in New York, Boston and Baltimore, and Jim's efforts in the West, we keep them informed of the progress our company is making.

"In this way, analysts can make rational decisions about the company's future."

As Sproule maintains his contacts with the financial institutions in the east, he also provides important feedback to company headquarters on what "The Street" thinks about the company. "I try to keep abreast of activities in the market, and rumors or news items which may cause Unocal stock to go up or down," Sproule explains. "I also try to quickly identify any unusual trends in the trading of the company's stock."

The New York office has a stock market wire service which provides up-to-date trading information. In addition, Sproule maintains regular contact with the specialist firm which handles Unocal stock trades on the New York exchange.

"The bottom line is that we want to know who Unocal shareowners are, and who is buying and selling our stock," Sproule notes.

Robert O. Hedley, Unocal's corporate secretary, observes that Sproule's work with the investment community in New York is just one part of Unocal's overall shareholder relations program.

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*Gloria Alley, secretary, keeps track of the latest stock market movements in the office (Above) while Sproule takes part of his workday chores to the active floor of the New York Stock Exchange.*

"The New York office serves as a local contact for the institutions on Wall Street," Hedley says. "We supplement this ongoing effort with special presentations by Unocal's Chairman and President Fred L. Hartley, to analyst groups in New York and other financial centers across the country.

"In these presentations, the analysts hear first hand where our company is going."

Sproule points out that the investor relations program straddles between the "sell side" and "buy side" analysts (see sidebar, page 17). "The analysts are interested in anything that affects Unocal's earnings performance. Some focus on our domestic oil and gas production, while others want to discuss our leadership in alternative energy sources such as oil shale and geothermal.

"The job here is to communicate what is occurring in our business to these specialists. Investment analysts who follow the oil industry have a variety of backgrounds, so in order to communicate effectively we must tailor the presentation to match their orientation. In addition, the continual turnover among analysts following Unocal makes it necessary to constantly educate new analysts about how our industry works.

"Overall, we try to give the investment community a feeling for the enthusiasm and forward thinking that sets Unocal apart from other companies in our industry."

A good example was an analysts' tour last year at the Fred L. Hartley Research Center in Brea, California, where company officials outlined some of the technological advances being made by the company in the recovery of earth resources.

The New York office also serves as an extension of corporate headquarters. On occasion, Sproule is asked to represent the company at New York functions when scheduling conflicts prevent other company officials from attending.

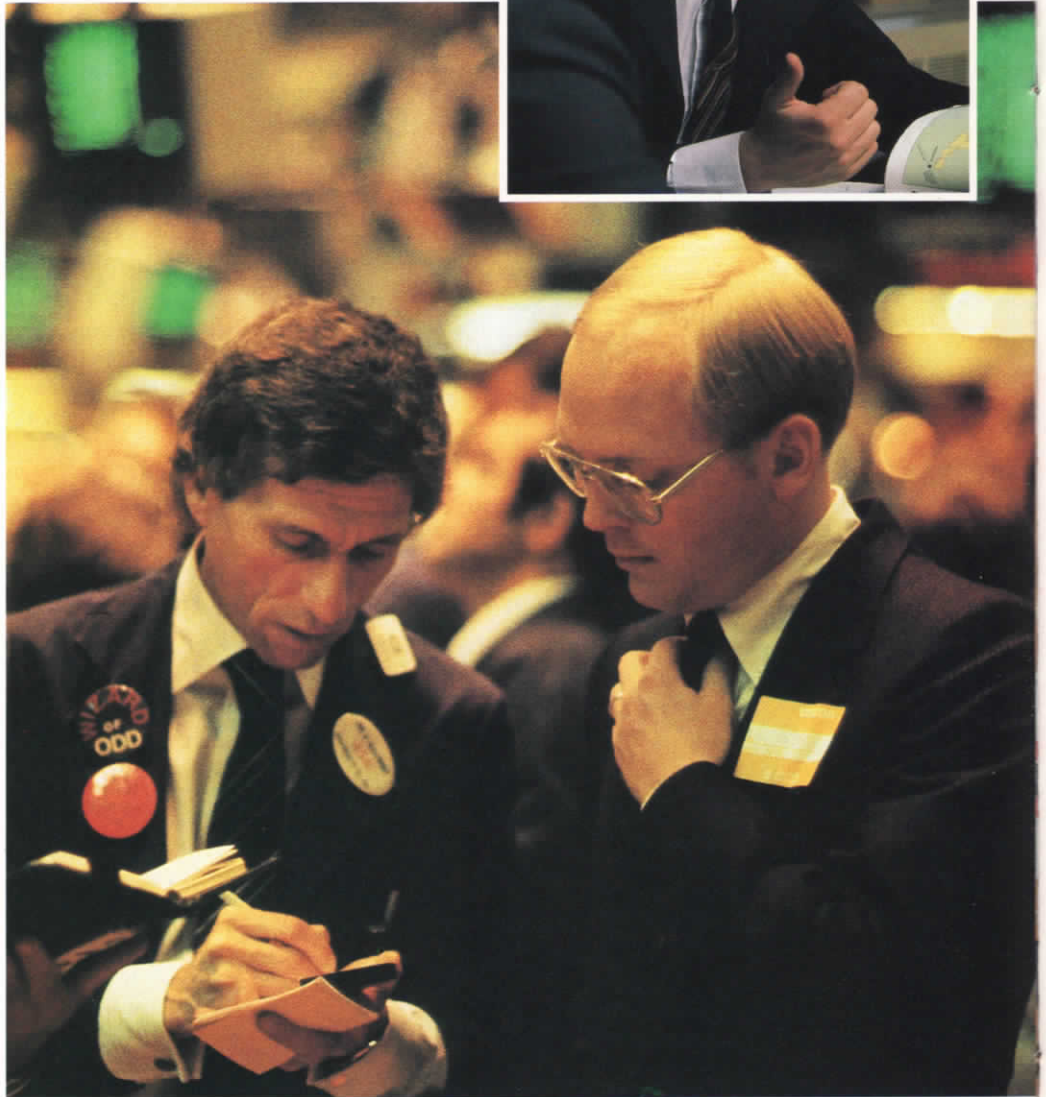
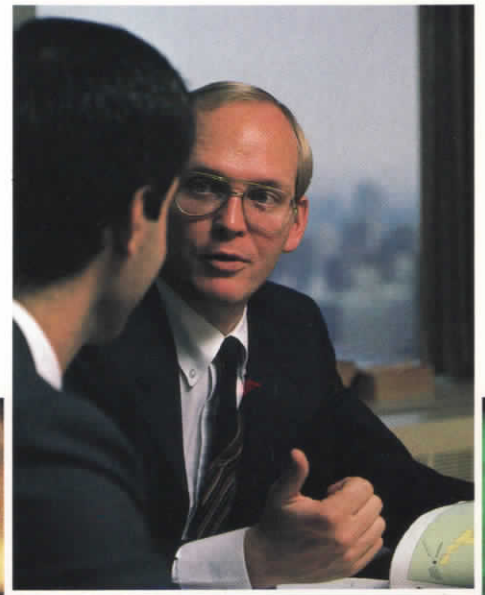
In addition, Sproule sometimes serves as a liaison between the Union International Oil Division and some of New York's foreign consulates.

"I keep management in Los Angeles apprised of any information which may prove useful in our international operations or affect our foreign investment plans," Sproule says.

The growth of Unocal as an international company has created broad interest with the investment community. Along with this increased interest has come expanded efforts by Hedley, Sproule and Courtney to keep these analysts informed about the growth of the company and its plans for the future.

Unocal's New York office is an important part of that effort.

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*Holding daily meetings with various people who deal closely with the hectic activity on Wall Street keeps Sproule informed of any market trend which may affect Unocal stock. Sproule's work, however, is just part of the company's overall shareholder relations program.*

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## Investment Analysts:

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### A Key Link In Economic Chain



A current television ad tries to persuade us that when a well-known brokerage house talks, people listen. But in reality, the ones we are listening to are the brokerage house's investment analysts.

The investment analyst is an integral link in the Wall Street-dominated process of buying and selling the stock of publicly-held companies. Decisions by investors of all types—whether institutions or individual shareowners—often rest on a few analysts' advice and opinions about a company's prospects.

Stock analysts operate from several different perspectives. "Sell side" analysts are associated with brokerage firms. They identify stocks that brokers should sell to all types of investors, both individuals and big institutions.

"Buy side" analysts are employed by financial institutions. These specialists consult with "sell-side" analysts and

make investment recommendations to those individuals who administer large portfolios for bank trust departments, pension funds, mutual funds or insurance companies. In both cases, though, the job of the analyst involves extensive research. Trade publications, Securities and Exchange Commission reports and interviews with company officials and investor relations contacts, give the analyst a picture of industry trends, corporate strategies and a company's long-term prospects. In the end, the analyst hopes to identify those stocks which will provide a good return to investors.

Analysts have a broad impact today. Newspaper business reporters use investment analysts as major sources of information about individual companies or industries. Some research staffs, or even individual analysts for that matter, are so revered that their recommendations can affect the entire stock market. The bullish economic projections of a Henry Kaufman have been known to push the market to new heights while the bearish predictions of a Joe Granville have sent it crashing down.

Stock analysts are a vital source of information and an important part of Unocal's investor relations program. They do talk and people do listen. (26)

# Detroit Grand Prix

At first sight, it seemed like an anachronism. Here, in the cradle of the American auto industry, powerful Ferraris, Brabham BMWs, and Tyrrells wove through the streets at dizzying speeds accompanied by the basso profundo of powerful engines.

Through the streets. Formula One cars. The hottest European and American shots in a mean, gear-busting race

not held in the confines of the customary, specially-designed racing course.

No. It wasn't Monte Carlo, or even the picture postcard perfect course in Long Beach, Ca.

This was unmistakably the American Midwest. The streets of Motown, no less, serving as a track for 26 entries in world racing competition mixing it up on the turf of Henry Ford, Stevie



*John Watson maintains a narrow lead over Bruno Giacomelli, driving car number 7.*

Photos and story by Sergio Ortiz

Wonder, the Tigers, Chevrolet and apple pie.

Although a far cry from the glamour of Monte Carlo, the Detroit Grand Prix II brought an air of festivity to the Motor City. Excitement prevailed and the atmosphere in the oft-maligned-downtown streets sometimes resembled the New Orleans Mardi Gras.

For a while, during the event-filled

last weekend of May, it looked as if nature had other plans for Detroit. Heavy rains, abetted by strong winds, whipped through Michigan.

Even so, an estimated 30,000 persons braved the elements on Friday to see the first time-qualifying laps.

Meanwhile, those deterred by the weather flocked to an indoor exposition, held in Cobo Hall where

Union Oil treated spectators to driver-simulation tests. The exams are designed to measure energy-saving driving techniques.

According to Otis Tobey, Union Oil manager of special projects, more than 2,000 persons took the driver simulation test.

Union was also involved outdoors, however. In fact, the Detroit Grand



*With Detroit's Renaissance Center in right background, winner Michele Alboreto, in car number 3, leads the pack early in the race.*

Prix II marked the second year of the company's otherwise rare Formula One racing involvement. Union gasoline, provided by Mid-States Petroleum, Inc., Union Oil's third largest jobber, powered every racing machine.

All concerned with the Detroit race were convinced that the world racing championship event would "add a touch of sophistication" to Detroit's

image. But for R. H. "Tod" Butler, Jr., president of Mid-States Petroleum, it was a chance to place his city, his firm and Union Oil, in the spotlight all in one stroke.

"This is the second year we have been involved in the Detroit Grand Prix," he explains. "The results and comments we received from last year's race were extraordinary. Although

Detroit is a relatively new member of the Grand Prix circuit, we are proving that successful races can be held in this city."

A "successful race" it was indeed, in part because race organizers had improved the race course.

The pre-race rains, slowed the pace, however, and drivers griped that much work remained to be done on the



*Despite the previous day's rain, the Grand Prix was run in record time. Germany's Manfred Winkelhock, in car number 9, (Above) finished 23rd in a McLaren. Niki Lauda, a modern racing champion, gets last minute instructions from his crew (Right) in the pits near the Renaissance Center, while winner Michele Alboreto (Facing page) takes time to pose for photos in the cockpit of his Tyrrell Formula One racer.*



course. "Sure," a mechanic in the pits acknowledged on Saturday, "the manhole covers that were hell last year have been repaired. But the course is still too bumpy."

This is a universal complaint among drivers and mechanics on the Formula One circuit, who claim that wear and tear of racing on heavily used streets, especially in a winter-torn city such as

Detroit, can cause havoc to their temperamental machines.

Putting a race car on the streets of downtown Detroit is like using a Stradivarius to play blue grass, grumbled one pit crew chief.

The festive atmosphere of the city remained undampened Saturday, despite continuing rain. It was not until late in the afternoon that the sun

peeked through the gray clouds just in time for the qualifying runs.

Sleek pavements slowed the cars considerably. But even at these lower speeds, the turbo-powered machines continued to dominate the conventional models, as everyone had predicted.

Rene Arnoux of France, driving a turbo-charged Ferrari, won the pole



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position, followed closely by Nelson Piquet of Brazil who sat in the cockpit of a turbo-charged Brabham.

That awesome Ferrari-Brabham combination seemed to sound a racing death knell for conventional engines such as the domestic Ford/Cosworths.

The morning of the race finally produced a glorious spring sun. Shorts and T-shirts replaced jackets.

When the race started at noon, even Monte Carlo couldn't have provided clearer skies.

Then, true to fashion in racing, unpredictable things began to happen. After 32 laps, Arnoux's Ferrari slowed to a snail's pace and then parked, dousing the hopes of many bettors with the harsh reality of a blown electrical system.

The second favorite, Nelson Piquet, took the lead, his Brabham purring like a milk-fed kitten.

But the race had just begun.

A few seconds behind Piquet, Michele Alboreto of Italy, driving a mint-green conventionally powered Tyrrell, fought for position with the winner of the first Detroit Grand Prix, John Watson, driving a McLaren.





Keke Rosberg, of Finland, in a Williams, trailed closely. And thus it went for 20 laps.

With only ten more to go, many fans were already awarding Piquet the victory. After all, Watson had started in the 21st pole position and Alboreto and Rosberg also had spots in the far back rows.

But with Brazilians practically pop-

ping their chilled champagne, Piquet's turbo charged car also rolled to a stop. A nail had pierced his left rear tire and he watched in helpless frustration as Alboreto, Rosberg and Watson, all driving racers with conventional engines, zipped past to finish in that order.

The Detroit Grand Prix II was history and turbos would have to wait for

yet another day to prove their much touted superiority.

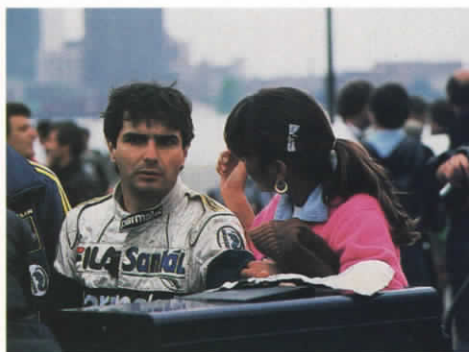
The revelry, however, did not stop there, as impromptu parties went on until the very late hours.

The next day, the rains came. As crews dismantled the barricades, a tilted sign in an abandoned stand near Cobo Hall reflected the mood of the city. "Free Beer," it said, "cups: \$3." 76



*The Union Oil driver simulation gasoline-saving exhibit during the Detroit Grand Prix was visited by more than 2,000 racing enthusiasts during the weekend of the race (Left). Racing machines roared through the Motor City's downtown area while winner Alboreto talks to a fan prior to the race where all cars used Union Oil racing gasoline in their engines.*

*France's Alain Prost, driving a Renault, (Facing page) zooms through the Detroit avenue directly in front of the city's Cobo Hall where thousands of spectators lined the circuit's route during the spring weekend.*



## New Motor Oil Continues a Motoring Tradition

There's more to engine lubricating oils than meets the dipstick. Yet, few of us give much thought to this essential substance. We routinely check the motor's oil level, add a quart or two if needed and let it go at that.

Today's lubricating oils are wondrous blends, however, and well worth a moment's attention. True, they still serve the basic function of reducing engine friction, just as they have for many generations. Car owners have always known that a smooth-running machine means a long-lasting machine.

But any similarity to old style motor oils stops there. Today's compact, high-revving, efficient automobile engines demand a lubricant as far removed from the oils of yesteryear as a Model T is from one of Detroit's latest models.

Meeting the highest scientific and production standards for motor oils has been Union Oil's pride ever since the company marketed its first such products, Motoreze and Aristo, in the 1910s.

In 1934, Union Oil *Bulletin* announced a new, and then revolutionary motor oil, Triton, with this statement: "The claims made for Triton are based on years of laboratory tests, the results of which have been checked hundreds of times and on



*Since not all oils—like the engines they lubricate—are alike, Union's new Super Motor Oil is the result of years of research and extensive studies that make a lubricating oil fit the latest developments of the internal combustion engine. The final product is the result of extensive coordination between the company's Marketing Division and its Science and Technology branch in Brea, Ca.*



more than 250,000 miles of roads and speedway tests.”

Not only Triton but every crankcase oil manufactured and marketed by the company since, has been the end result of careful formulation and testing to meet or exceed stringent requirements ensuring maximum engine performance.

In keeping that tradition and to meet the recent advances in automotive engine technology, Union has just introduced a new line of motor oils.

Union's popular Super 10W-40 Motor Oil has been made more fuel efficient and has been joined by a gas-saving 10W-30 Super. (A 5W-30, designed for starting at winter temperatures, is also available in cold climate areas.)

“These new, multi-grade products are the result of extensive coordination between Union's Marketing and Science and Technology Divisions,” says John Jost, manager of product research at the Fred L. Hartley Research Center in Brea, Ca. “Marketing decides what the performance targets should be and we then develop the particular product and conduct much of the test work to substantiate the claims they want to make for the product.”

In the case of the new crankcase product line, marketing foresaw the need for a full line of multi-viscosity, fuel efficient oils.

Research teams promptly went to work, spending several years experimenting with formulas and working with independent testing companies to develop the most promising compounds.

The new fuel efficient line evolved from Union Oil's Long Distance Purple Motor Oil (LDP), introduced in 1979.



"In the late 70s," explains Gerald Wessler, senior research associate at Brea, "the auto manufacturers were ordered by federal regulation to meet certain federal regulations Corporate Average Fuel Economy (C.A.F.E.) requirements for each model year. The requirements are scheduled to peak in 1985 at 27.5 miles per gallon. Improved crankcase oil is only one of the ways to increase car fuel mileage."

Says Chan Noerenberg, manager of lubricants, Western Region Marketing: "When LDP was introduced, there were no industry-wide standards to measure fuel efficiency in motor oils. We used available techniques to prove that the claims made for LDP were valid. Today, the picture has changed and standards for motor oils have been set. Union's Super Motor Oil line will be licensed by the American Petroleum Institute (API) through a new certification program that came into effect last January."

API works in conjunction with the Society of Automotive Engineers, which proposes requirements, and the American Society for Testing Materials (ASTM), which sets up testing procedures. Union Oil then has to verify, through ASTM-established testing procedures, that its products meet the qualifications set forth by the API or any other organization which certifies lubricants.

The new oils will be packaged in a variation of the familiar gold Super can with the viscosity grades prominently displayed. Labels will also carry the new API licensing symbol, certifying that the Union oils are fuel efficient. The inscription API Service SF will indicate that the oils also meet all car manufacturers' gasoline engine warranty requirements.

In order to ensure compliance, two

laboratories in San Antonio, Tx. have been conducting tests on Union's new oils to determine their fuel efficiency. An important part of these procedures is a standardized, five-car sequence test.

ASTM has selected five cars that come the closest to representing all current autos on the market. Explains researcher Wessler: "First, mileage is accumulated on the new cars. They are put through a very specific cycle representing urban and suburban driving conditions. Fuel consumption is then measured with a reference oil, then with the new oil being tested.

"The test oil has to show a certain percentage of improvement in fuel consumption in order for it to be classified as fuel conserving," Wessler says.

Observes Frank S. Liggett, supervisor of engine oils: "We can't pinpoint exactly how much improvement in fuel consumption there will be when a motorist uses a fuel efficient oil, since this figure varies from car to car. But automobiles that get poor mileage usually get the most benefit from using fuel efficient motor oils."

Laboratory and road tests have shown that friction modifying additives and the viscosity of crankcase oil affect fuel consumption. Which of the two is the most effective depends upon the design and running condition of the engine.

"Engines with poor mileage usually have larger than normal areas in what we call 'boundary lubrication', or direct contact between metal surfaces," Wessler says. "The high friction due to metal-to-metal contact causes the engine to spend more energy in moving its parts. Therefore, the better the lubrication the less energy is needed to run the engine."

*A time exposure of a busy highway illustrates the longevity and multi-purpose use of the Super Motor Oil recently introduced to the Union Oil marketing public. The oil enhances fuel efficiency and meets the latest specifications set forth by today's demanding automobile industry.*

In engines having very little metal-to-metal contact, mileage improvements can be gained by using an oil of lower viscosity. Union Super 10W-30 and 10W-40 are multi-viscosity products with polymers added to make the viscosity increase and decrease with the movement of engine parts.

Union's first multi-viscosity motor oils, Royal Triton 5W-20 and 10W-30, were introduced in 1954, only to be improved and—when auto manufacturing became more sophisticated—reintroduced as Super Royal Triton a decade later. These oils were advertised as "America's finest"—and indeed they were. The Triton line was extremely successful.

Union's newest Super Motor Oils further enhance fuel efficiency and meet the latest specifications set forth by today's more demanding automotive industry. Thanks to the combined efforts of both the Marketing and the Science and Technology Divisions, Union Oil is matching strides with the latest designs from Detroit, Tokyo, Stuttgart, London, Paris and Rome.

The vintage cars of the 30s—those marvelous hunks of chrome, leather and steel—have evolved into the smaller, sleek, efficient automobiles traveling today's expressways. And the Union oils in their engines, from Aristo and Motoreze to Triton and Super Motor Oil, have kept pace with this progress. <sup>76</sup>



# MICROWAVE COMMUNICATIONS NOT JUST A FAIR WEATHER FRIEND

Hurricane!

No one who has experienced one can ever forget it.

Modern technology can now pinpoint where and when a

hurricane will strike and how long it will last. But for those vulnerable areas, the late June to early October hurricane season is still a time of anguish and dread.

Few parts of the tropics are spared their fury. Technically a hurricane is any violent tropical western hemisphere storm with winds in excess of 73 miles per hour. In the Pacific, such storms are called typhoons from the Chinese *tai fung*, or "Great Wind."

These storms invariably start with torrential downpours. Then winds begin to blow, toppling trees, buildings, anything in their path. Roofs fly like sheets of paper in a breeze. House frames creak and shutter, fallen power lines explode in deadly showers of sparks.

Oil and gas workers and facilities in the hurricane belt face similar perils.

Memories of such famous hurricanes as Hilda in 1964, and Camille, in 1969, remind oilmen why it is essential to take utmost precautions for the safety of workers and the environment. Union does just that. For example, workers on offshore platforms in the Gulf of Mexico, where storms are common, are evacuated—or "brought to the beach," in the lingo of the region—long before a storm threatens. New high technology equipment also ensures the safety of men and installations.

In Lafayette, La., Jay Branch, regional superintendent of the communications department, Oil and Gas Division, manages a vast communications system that serves as a "life line" for Gulf Region personnel.

Essential during times of emergency, the system has also proven to be an indispensable tool for normal operations in Union Oil's Gulf Region.

"In many ways, this is not a new tool," Branch explains. "If we go back to our original communications set up this is about a fourth generation system."

One of the most advanced networks in the region, it is capable of maintaining communications with every company onshore and offshore structure in the Gulf Region, a geographical area that stretches from Texas to eastern Louisiana.

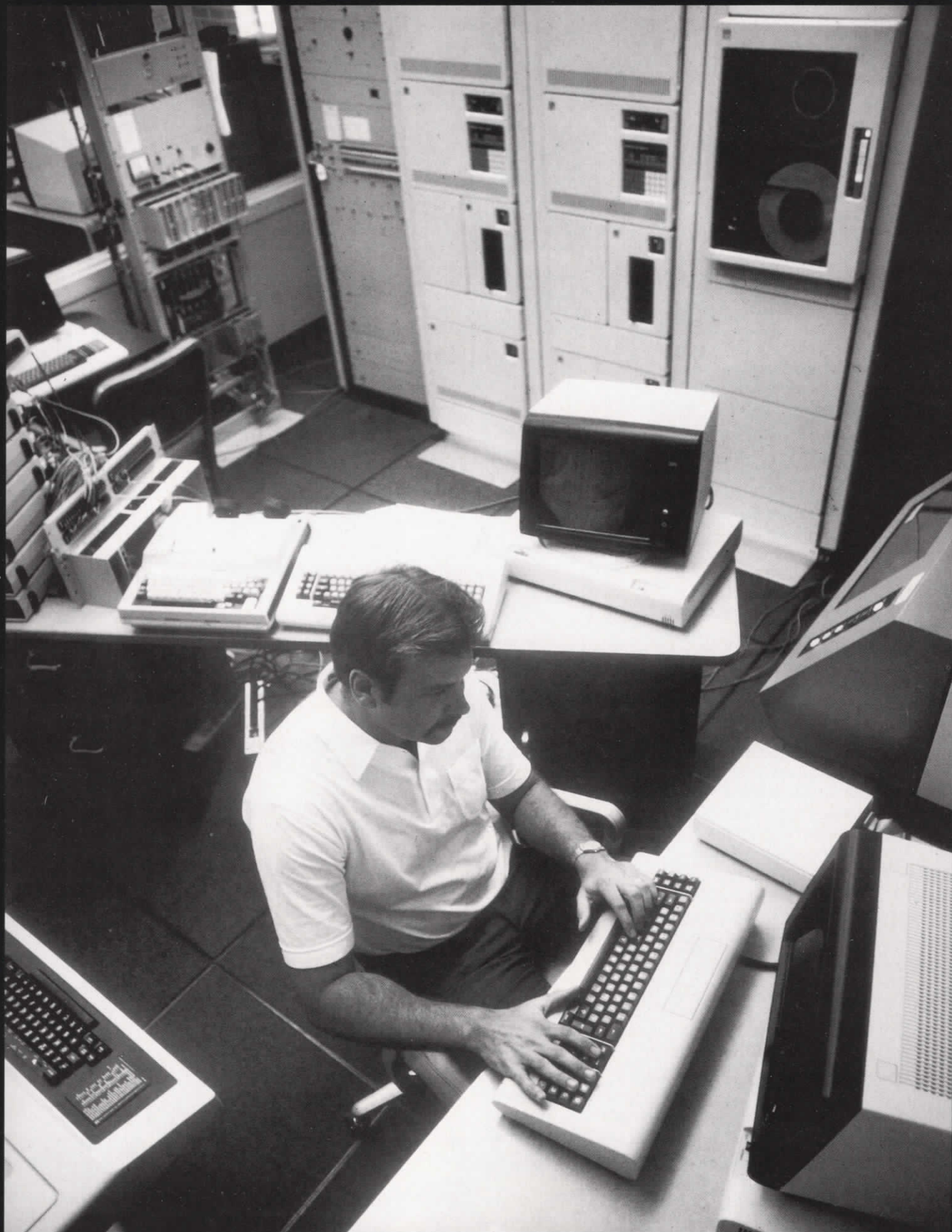
As Berne A. Life, an electrical engineer in Lafayette, points out, the area is so large that it has been divided into districts in order to simplify the links between structures and shore.

On the wall of Life's office, a huge map shows a spider-web design covering most of the Gulf of Mexico area. Multi-colored lines join structures eventually winding up in Lafayette.

"In order to simplify the communications system, we have divided the area to be covered into 'scans,'" Branch says. "A 'scan' is one circuit in the system and each scan runs simultaneously. We have scans for Houston District, Southwest Louisiana Offshore District, Southwest Louisiana Onshore and Southeast Louisiana District."

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*Surrounded by software in the company's Lafayette, La., offices, Berne A. Life, electrical engineer in Union Oil's Gulf Region, signals the computers for data relevant to the Region's operations.*





*Assisted by Mary Dodge, communications clerk, Life is part of a team that relies on sophisticated equipment capable of keeping track of oil and gas production operations in the Gulf of Mexico. Not only are the computers programmed to give out the latest data, but they afford technicians the luxury of keeping wells on stream during hurricanes and other emergencies.*





It is these scans that are responsible for gathering all relevant information regarding production operations. The Union Oil system is currently monitoring 77 total locations through the Gulf Region, 49 offshore and 28 onshore from "Lafayette,—where the western part of the Gulf of Mexico is tied to the rest of the world."

Branch explains: "The system—a combination of microwave and radio links—is so sophisticated that it allows us to get information from any point of interest. This is only possible because of the great advances made in electronics during the last ten years.

"For example, if you are sitting in any Union Oil location and want a specific type of information, I can get it for you in a matter of seconds. This capability is desirable for our operations at all times. But it comes in particularly handy when a natural disaster, such as a hurricane, strikes the area."

In the old days, when a crew was evacuated from a platform all the wells were shut down. The expensive effects included lost production, painstaking work required to bring wells back on stream and problems associated with interrupted production.

In some older fields, the pressure necessary for efficient production was never recovered after a shut down, and the field became useless. Thanks to the microwave and radio communications link, that no longer happens.

To demonstrate the system's capabilities, Life and Branch begin to punch information into a computer's keyboard. A few seconds later, a teletype machine begins to spew out data. Every platform supplies up to the moment information regarding oil and gas production and the status of its production facilities.

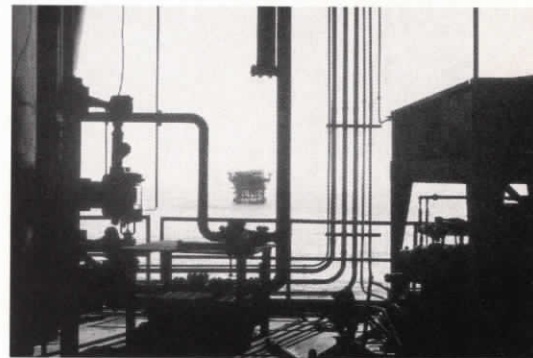
"Now you can see," Branch continues, "how we are able to keep up production even when a platform is unmanned. For a critical situation, we not only monitor the production facilities on each structure but we can shut it off if the situation gets out of hand. In addition, we are able to keep people in the field informed about what is going on in other areas of operations."

When platforms are unmanned, as are some of the smaller structures in the Gulf, a microwave link keeps production data flowing to a larger platform in the field. From there it is transmitted to Lafayette for processing, and then relayed to Houston, or any other point that needs the relevant data.

That is a communications accomplishment in itself. But the microwave system is also tied, by radio links, to more remote locations. In total, according to Branch, the Region microwave system covers a 900 mile path stretching from Houston to New Orleans and from central Louisiana to about 200 miles offshore.

"It's quite a system," Branch says proudly. "Every eight minutes we monitor the entire operation. Everything that takes place is automatically recorded on tape. And even though emergencies are only one aspect of its application, the system paid for itself after only two evacuations." (76)

*Offshore structures such as these are part of an intricate communications web that spans the entire area of operation in Union Oil's Gulf Region. This microwave communications link keeps tabs of the latest production figures emanating from the Gulf and enables onshore workers to monitor the wells' production during a hurricane.*





**UNION'S SUPER  
FACILITY CONCEPT  
REVOLUTIONIZES  
THE MARKETPLACE**



*Unlike the small service stations that once catered to neighborhoods, Union Oil's new Super facilities are a high-tech, carefully planned concept of modern marketing techniques aptly suited for today's demanding motoring public.*

**S**uper stations aren't able to leap tall buildings in a single bound or stop speeding locomotives in their tracks. But even though they don't employ Clark Kent, these are unique facilities. The outgrowth of a new, Union 76 marketing concept now being introduced in the company's Western Region, Super stations are designed to better meet the existing and future needs of the consumer while complementing the company's full-service commitment to the motoring public.

Union currently has ten Super facility service stations in operation (an additional six are in the planning stage) and intends to add about ten more a year during the next decade in major markets throughout the west.

The new units feature three pump islands, containing 16 computer-controlled dispensers, and from four to six service bays. Each station is geared to handle high volume gasoline sales and to conduct a wide range of automotive repairs in clean business-like settings.

"In today's highly competitive gasoline marketing environment, marginal service stations with low monthly gasoline volumes and offering few or no automotive repairs have a difficult time making ends meet. They are a thing of the past," explains Clay R. Warnock, vice president of marketing 76 Western Region. "A Super service station, however, is capable of dispensing between 150,000 and 200,000 gallons a month, averaging \$50,000 in the back room (service bays), and employing 20-25 people."



**S**ounds like a Super station can do the job of three stations, right?

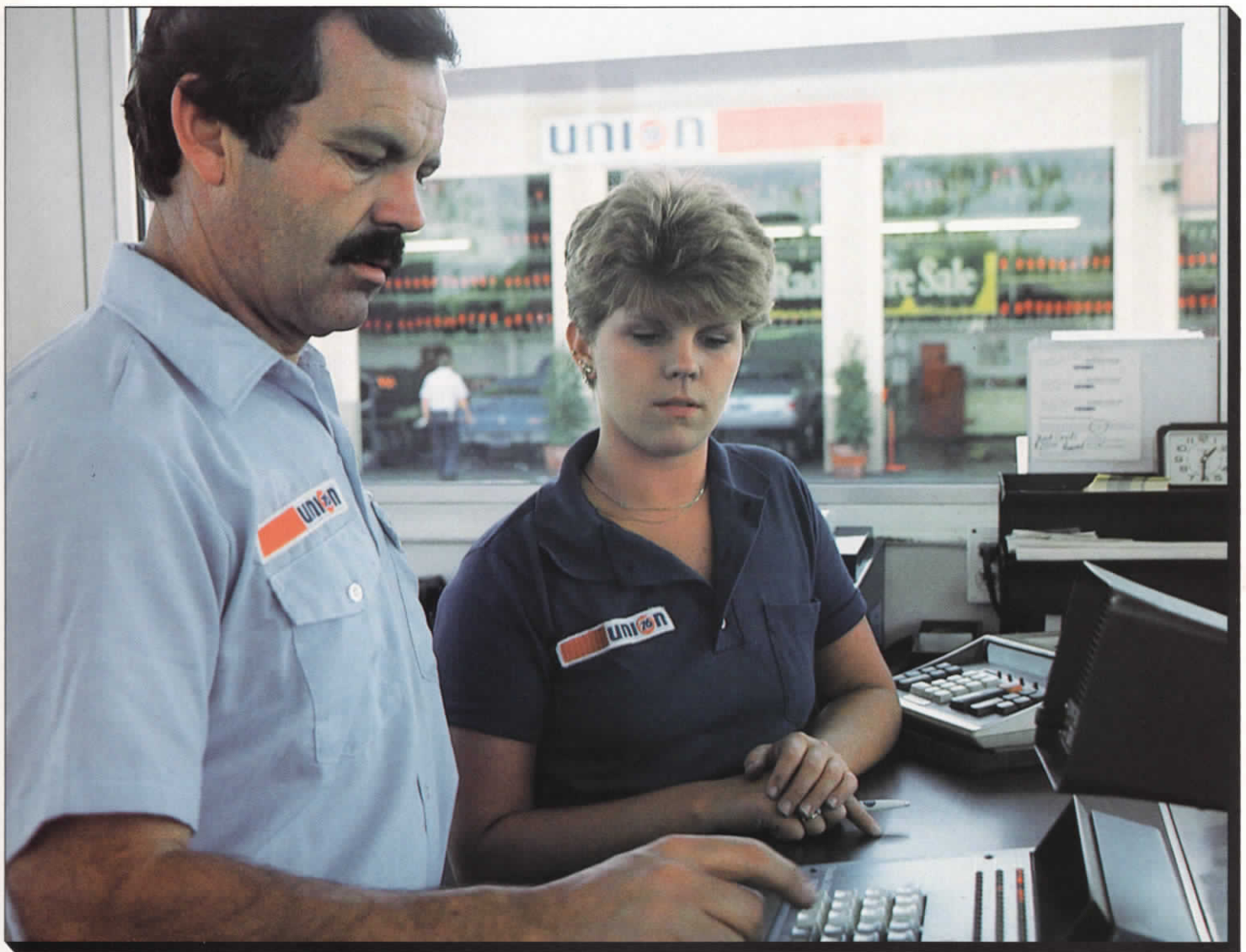
It does—and Warnock foresees this development as enabling the company to conduct more business through fewer locations in a much more professional and efficient manner.

“The old-fashioned marketing concept of having a station on every corner is no longer economically viable,” he notes, adding that 100 Super facilities could replace up to 300 stations in the Union 76 system.

According to Warnock, “Professionalism is one key to the success of the Super station concept. Because of their high income potential, Super stations attract top quality operators both from inside and outside Union’s dealer organization.”

These top dealers, in turn, are provided with a facility designed to handle heavy traffic and are given the necessary training, follow-up and support to assure their success.

“Professionalism involves not only the equipment, but the operator as well,” Warnock continues. “When you’re out driving and want to stop for lunch, you’ll pass up a dingy looking cafe for a more attractive place. Motorists, too, tend to patronize a clean, efficient service station. That’s the way we want drivers to perceive Union’s new Super facilities.”



*Employing anywhere from 20 to 25 people, the Super facilities are the company's answer to a modern consumer who likes to patronize a clean, efficient car-care center where his auto receives the utmost in service.*

**W**hen the driver pulls into one of the new stations, attendants are prepared to offer Union's full-service at the pump island and in the service bays. Most—and soon all—Super stations will feature PROTECH guaranteed automotive service, the leading oil company-backed automotive repair program in the West. (See *Seventy Six* Magazine January/February, 1983.)

In the new Super stations, service is performed in a spacious fully-equipped service bay area. This building also includes a customer waiting room, offices, a storage room and restrooms. The 14 to 17 foot high service bay doors are easily able to accommodate recreational vehicles and even motor homes.

The gasoline islands of the stations are controlled and monitored from an electronic console in a cashier's booth and the facilities can be geared to full-service, split island, or 100 percent self-service on either a pre-pay or a post-pay system.

"We really don't need many of these Super facilities in an area to generate a positive Union 76 image," Warnock adds. "We're not playing a numbers game. We're extremely selective about their locations."

The stations are not just an overnight idea.



*The stations are not just an overnight idea that took root. Extensive marketing studies were conducted before the first one was built. Here, well-stocked service bays, capable of handling even motor homes, are an ideal place for autos to receive the needed maintenance from highly trained mechanics.*

**U**nion Oil's Marketing Division made extensive demographic studies several years ago to identify the best potential sites. Factors such as traffic patterns, population density, income, and existing automotive service centers in the area were carefully analyzed. These, in turn, were confirmed through a newly-developed marketing computer study.

As a result, every existing Super station is a complete success. "Today, the small four-bay Super facility is our standard service station for both new and remodeling projects," Warnock says. "We won't build anything smaller."

The Super station is just the latest example of Union's marketing inventiveness. The company's full service approach—credit cards, automotive repairs, tires, batteries, and accessories—continues to gain acceptance. The public has come to realize that "Go with the spirit" means going with confidence.

76

# UNION 76

## CORPORATE

### July 1983

- 45 YEARS **George B. Snyder**, Union Oil Center
- 35 YEARS **Richard M. Scamman**, Union Oil Center
- 15 YEARS **Adelina L. Ayala**, Union Oil Center  
**Dena L. Bond**, Union Oil Center  
**Mary K. Willett**, Union Oil Center
- 10 YEARS **Joann L. Squeo**, Schaumburg, Il.
- 5 YEARS **Hylajeane Barnett**, Union Oil Center  
**Bernard V. Hildebrand, Jr.**, San Francisco, Ca.  
**Kenneth D. Longley**, Union Oil Center

### August 1983

- 35 YEARS **Roy M. Barnes**, Union Oil Center  
**Palmer C. Bucholtz**, Schaumburg, Il.  
**Frederick H. Forester**, Union Oil Center
- 30 YEARS **John W. Barrett**, Seattle, Wa.  
**Thomas F. Theobald**, Union Oil Center
- 15 YEARS **Joseph P. Johnson**, Union Oil Center
- 10 YEARS **Edmund W. Bluth**, Union Oil Center  
**Thomas L. Funk**, Union Oil Center  
**Lawrence A. Marzullo, Jr.**, Union Oil Center  
**Scott W. Moulton**, Union Oil Center
- 5 YEARS **Christina G. Cardoza**, Union Oil Center  
**Daniel A. French**, San Luis Obispo, Ca.  
**James L. Johnson**, Union Oil Center  
**Deborah L. Morrow**, Schaumburg, Il.  
**David G. Whitehurst**, Union Oil Center

## UNION SCIENCE AND TECHNOLOGY DIVISION

### July 1983

- 35 YEARS **Frank C. Riddick, Jr.**, Brea, Ca.
- 15 YEARS **Donald B. Ackelson**, Brea, Ca.  
**Dennis L. Saunders**, Brea, Ca.
- 10 YEARS **Pem C. Palacol**, Brea, Ca.
- 5 YEARS **David A. Lindsay**, Brea, Ca.

### August 1983

- 15 YEARS **Alan L. Allmendinger**, Brea, Ca.  
**Harry H. Dobashi**, Brea, Ca.
- 10 YEARS **Larry S. Warfield**, Brea, Ca.
- 5 YEARS **Paul R. Jones, III**, Brea, Ca.

## UNION 76 DIVISION

### July 1983

- 40 YEARS **William C. Griffiths**, Schaumburg, Il.  
**Donald L. Johnson**, Chicago Refinery  
**Edward B. Mudron**, Chicago Refinery
- 35 YEARS **John T. Dowden**, Beaumont Refinery  
**Asher B. Furby, Jr.**, Beaumont Refinery  
**Virgil D. Garrett, Jr.**, Collins, Ms.  
**Gene H. Hawkins**, Beaumont Refinery  
**Walter B. Hebert**, Beaumont Refinery  
**James H. Hollimon**, Atlanta, Ga.  
**Carlos M. Hopper**, Chicago Refinery  
**John M. Jones**, Beaumont Refinery  
**Arthur G. Likar**, Chicago Refinery  
**Richard E. Nadeau**, Jacksonville, Fl.  
**Alban C. Scheuber**, Chicago Refinery  
**Carroll N. Scott**, Atlanta, Ga.  
**Nolan C. Sharp**, Beaumont Refinery  
**Leonard J. Sperling**, Cleveland, Oh.  
**Lewis E. Wallace**, Beaumont Refinery  
**Edwin L. Wilkes**, Beaumont Refinery  
**William M. Wilson, Jr.**, Beaumont Refinery  
**Arthur W. Woodall**, Beaumont Refinery  
**Albert R. Workman**, Los Angeles Refinery
- 30 YEARS **Donna J. Anderson**, Columbus, Oh.  
**Earl L. Ehresman**, Chicago Refinery  
**Donald C. Eichten**, Schaumburg, Il.  
**George C. Jones**, Tallmadge, Oh.  
**Bert D. Moore**, Beaumont Refinery  
**William H. Phillips**, Schaumburg, Il.  
**James W. Sikes**, Beaumont Refinery  
**Jimmie E. Smith**, Beaumont Refinery  
**Vera A. Smith**, Atlanta, Ga.  
**Charles E. Wells**, Columbus, Oh.  
**Wendall L. White**, Beaumont Refinery
- 25 YEARS **William R. Heinrich**, Schaumburg, Il.  
**William W. Selby, Jr.**, Columbus, Oh.
- 20 YEARS **Patricia R. Adams**, Cincinnati, Oh.  
**Harry D. Connor**, Beaumont Refinery  
**Melvin L. Dubois**, Beaumont Refinery  
**John C. Lackie**, Bakersfield Terminal  
**Evell G. Savage**, Birmingham, Al.  
**Edward J. Shay**, Chicago Refinery  
**Walter S. Tazelaar**, Southfield, Mi.  
**Ronald E. Thompson**, Beaumont Refinery

- 15 YEARS **Darryl F. Allen**, Los Angeles Refinery  
**George A. Bobo**, Los Angeles Refinery  
**Francis R. Enbysk**, Edmonds Terminal  
**Donaldo P. Gonzalez**, Richmond Terminal  
**Ernest R. Herrera**, Los Angeles Refinery  
**Barbara B. Huffine**, Schaumburg, Il.  
**Allen K. Kepaa**, Honolulu Terminal  
**Stephanie T. Kowalczyk**, Schaumburg, Il.  
**Benjamin J. Luther**, San Luis Obispo, Ca.  
**Jerome E. Mason**, Seattle, Wa.  
**Howard S. McKinney**, Miami, Fl.  
**Floyd R. McMurray**, Cincinnati, Oh.  
**John H. Merriweather**, San Francisco Refinery  
**Charles J. Mooney**, Los Angeles Terminal  
**Joanne M. Peters**, Schaumburg, Il.  
**Keith S. Powell**, San Jose Terminal  
**Linwood Scott**, Los Angeles Refinery  
**Roman Serda**, San Francisco Refinery  
**Lloyd K. Smith**, Los Angeles Refinery  
**Henry M. Thatcher**, Richmond Terminal  
**Edwin G. Themig**, Pure Transportation Co., Petoka, Il.
- 10 YEARS **Elizabeth Bajorek**, Schaumburg, Il.  
**Suzanne D. Baumbach**, Schaumburg, Il.  
**Kathleen P. Burke**, South Holland, Il.  
**Robert L. Cheary**, San Francisco Refinery  
**Diane A. Diel**, Schaumburg, Il.  
**Beatrice J. Fisher**, San Diego, Ca.  
**Frances M. Golec**, Schaumburg, Il.  
**Annie R. Henry**, San Francisco, Ca.  
**Jerry H. Johnson**, Schaumburg, Il.  
**Kenneth G. Kammer**, South Holland, Il.  
**David J. Maier**, Los Angeles Refinery  
**Earl M. Moser**, Schaumburg, Il.  
**Donn A. Setterquist**, Los Angeles Refinery  
**Ethel M. Schrader**, Schaumburg, Il.  
**Emma L. Simmons**, Richmond Terminal  
**Loismae M. Strachan**, Schaumburg, Il.  
**Tyrone J. Vickers**, Bakersfield Terminal  
**Thomas Walsh**, Schaumburg, Il.  
**Belus Youkhanneh**, Schaumburg, Il.  
**Jessie Zaleski**, South Holland, Il.

5 YEARS **James J. Bachmann**, South Holland, Il.  
**Gerald A. Bergen**, Chicago Refinery  
**Roosevelt Bowie**, Los Angeles Refinery  
**Paul A. Bruno**, Schaumburg, Il.  
**Frank M. Chang**, Los Angeles Refinery  
**Cheng-H Chen**, Chicago Refinery  
**Dean S. Craft**, San Francisco Refinery  
**Louise M. Davis**, San Francisco Refinery  
**Percy Dawson**, Nederland, Tx.  
**Suzanne Deja**, South Holland, Il.  
**Patrick J. Forsythe**, Chicago Refinery  
**Martha Gascon**, Schaumburg, Il.  
**Marvin D. Goad**, Chicago Refinery  
**Dan R. Hendrix**, Los Angeles Terminal  
**Larry J. Hunt**, Chicago Refinery  
**Bobby G. Jelley**, Chicago Refinery  
**Oscar Kimble**, Wildwood, Fl.  
**Douglas G. Lawrence**, Pittsburgh, Pa.  
**James A. Lesniewski**, Chicago Refinery  
**Paul M. Marsh**, Chicago Refinery  
**Andrew C. Matusak**, Chicago Refinery  
**Dorothea M. Moore**, Nederland, Tx.  
**Mark N. Morikawa**, San Luis Obispo, Ca.  
**Susan L. Nowak**, Schaumburg, Il.  
**William A. Parkinson**, Beaumont Refinery  
**Richard C. Rice**, Chicago Refinery  
**Martin Salaiz**, Santa Maria Refinery  
**Steven G. Steach**, Los Angeles Refinery  
**Philip C. Stern**, Santa Maria Refinery  
**Irene P. Warren**, Schaumburg, Il.  
**Bruce C. Werner**, Eugene, Or.  
**Kenneth H. White, Jr.**, Chicago Refinery

#### August 1983

40 YEARS **Joseph M. Billecci**, San Francisco Refinery  
**William G. King**, Pensacola, Fl.

35 YEARS **Walter D. Bizot, Jr.**, Beaumont Refinery  
**Earl E. Browning**, Beaumont Refinery  
**Jerry Cline**, Los Angeles Refinery  
**Richard A. Hall**, San Francisco Refinery  
**Everett C. Hammons**, Birmingham, Al.  
**John K. Huffman**, Beaumont Refinery  
**George W. Meadows**, Birmingham, Al.  
**William H. Poag, Jr.**, Memphis, Tn.  
**Harlan H. Richardson**, Charlotte, N.C.  
**Jasper S. Snyder**, Beaumont Refinery

30 YEARS **Morris E. Buckle**, Richmond, Va.  
**Robert W. Brandes**, Beaumont Refinery  
**Julius W. Lamkin**, Beaumont Refinery  
**Esther C. Perez**, San Francisco, Ca.

25 YEARS **Yoshiro Soma**, Hilo, Hi.

20 YEARS **Donald E. Bartels**, Beaumont Refinery  
**Arthur L. Felderman**, San Francisco Refinery  
**Donald H. Hermanson**, Jackson, Ms.  
**Vernon J. Hipwell**, Schaumburg, Il.  
**Mary E. Mannion**, Schaumburg, Il.

15 YEARS **Dan L. Bovian**, San Francisco Refinery  
**Christine J. Gonzalez**, San Francisco, Ca.  
**Don Ellis Jones**, Los Angeles Refinery  
**David A. Kielma**, Chicago Refinery  
**James P. McClendon, Jr.**, Atlanta, Ga.  
**Frank Miranda**, Azusa, Ca.  
**Dolores T. Nordsell**, Schaumburg, Il.  
**Jesus Padron**, Torrance, Ca.  
**Stanley A. Rabineau**, Tulsa, Ok.  
**Billy R. Russell**, Knoxville, Tn.  
**Buddy W. Smallwood**, Bakersfield Terminal  
**Larry J. Wells**, Schaumburg, Il.  
**Philip L. Wolfe**, Portland Terminal

10 YEARS **Geraldine P. Borawski**, Schaumburg, Il.  
**Patrick F. Carroll**, Lookout Mountain, Ga.  
**Jan D. Charlson**, San Francisco Refinery  
**Rivers Dalton**, Wildwood, Fl.  
**Robert C. Fraser**, Nederland, Tx.  
**Darol S. Gasaway**, San Diego, Ca.  
**Virginia R. Gipson**, Schaumburg, Il.  
**Willie L. Graham**, San Francisco Refinery  
**Virginia Hale**, San Francisco, Ca.  
**Edgar Jackson**, Nederland, Tx.  
**Thomas W. Jatis**, Schaumburg, Il.  
**Arthur J. Jones**, San Francisco Refinery  
**Gary N. Komure**, Spokane, Wa.  
**William W. Kwong**, San Francisco, Ca.  
**Deborah L. Larsen**, Schaumburg, Il.  
**Elizabeth Liu**, San Francisco, Ca.  
**Anthony V. Maruri**, San Francisco, Ca.  
**Adrienne M. McDole**, Colton Terminal  
**Joanne L. Menard**, Schaumburg, Il.  
**Estrellita C. Menor**, Los Angeles Refinery  
**Harold S. Singer**, Visalia, Ca.  
**Charles C. Wallace**, Sacramento, Ca.  
**Emma R. Weatherby**, Richmond, Ca.  
**Donald J. Young**, San Francisco Refinery

5 YEARS **Richard S. Alvarez**, Torrance Terminal  
**Carol Bills**, Los Angeles, Ca.  
**Albert E. Burkhardt**, Los Angeles Refinery  
**Gary F. Daley**, Los Angeles Refinery  
**Nancy C. Galer**, Schaumburg, Il.  
**William F. Geeraerts**, Schaumburg, Il.  
**Denise K. Gianni**, San Francisco, Ca.  
**David L. Hauck**, Edmonds Terminal  
**Joseph K. Headley**, Bakersfield Terminal  
**Timothy C. Hendrix**, Pure Transportation Co., Schaumburg, Il.

**Fred L. Hutton**, Los Angeles Refinery  
**Ronald Jackson**, Cincinnati, Oh.  
**Donald R. Knabe**, Colton Terminal  
**Joan Lafon**, Los Angeles, Ca.  
**David R. Lang**, Schaumburg, Il.  
**David B. Main**, Wheeling, W.V.  
**Robert G. Martin**, Los Angeles Refinery  
**John W. Martsolf**, Richmond Terminal  
**Cindy Mazzucchelli**, Schaumburg, Il.  
**Jackie D. McClure**, Richmond Terminal  
**James L. McKnight**, Pure Transportation Co., Olney, Il.  
**Wayne Picou**, Los Angeles, Ca.  
**Scott B. Shiotsu**, North Hollywood, Ca.  
**Michael L. Watson**, Miami, Fl.  
**Norman K. Wongchong**, Hilo, Hi.  
**Edward G. Zizmont**, Beaumont Refinery

### UNION OIL AND GAS DIVISION

#### July 1983

30 YEARS **Leroy A. Medeiros**, Coalinga, Ca.  
**Wendell F. Ramage**, Coalinga, Ca.

25 YEARS **Martha H. Anders**, Houston, Tx.

20 YEARS **Gerald B. Carr**, Worland, Wy.  
**Edgar E. Keller**, Santa Fe Springs, Ca.  
**Archibald M. Laurie**, Ventura, Ca.

15 YEARS **Carbett J. Duhon, Jr.**, Houston, Tx.  
**Nola L. Fox**, Midland, Tx.  
**Huey C. Green**, Houston, Tx.  
**David J. Kinzelman**, Houston, Tx.  
**Oneil McGilbery**, Houston, Tx.

10 YEARS **Timothy L. Barnes**, Brea, Ca.  
**Kenneth R. Ellett**, Snyder, Tx.  
**Christopher D. Pettis**, Santa Fe Springs, Ca.  
**Arthur C. Theriot**, Houma, La.  
**Maurene T. Thurman**, Midland, Tx.

5 YEARS **Gerald C. Arceneaux**, Lafayette, La.  
**Dale H. Augsburg**, Houston, Tx.  
**Della D. Black**, Houston, Tx.  
**Deborah L. Bruce**, Houma, La.  
**Lynn D. Gray**, Ventura, Ca.  
**Stanley Y. Hanaoka**, Pasadena, Ca.  
**Cathy A. Harlan**, Union Oil Center  
**Alexander Johnson, Jr.**, Houma, La.  
**Randy J. Koliba**, Lafayette, La.  
**Rodney D. Manz**, Union Oil Center  
**Donna R. Melton**, Anchorage, Ak.  
**Karla Metzger**, Houston, Tx.  
**Magdalena Morales**, Pasadena, Ca.  
**Darrell L. Smith**, Hominy, Ok.  
**George Stadnick**, Anchorage, Ak.  
**Stephen C. Sterling**, Lafayette, La.  
**Linda L. Thomas**, Santa Fe Springs, Ca.

#### August 1983

40 YEARS **Howard L. Clark**, Santa Fe Springs, Ca.  
**Blanche E. Terrell**, Midland, Tx.





August 1983

20 YEARS Jim L. Kuhn, Imperial Valley, Ca.

5 YEARS Raymond P. Allbritton,  
Big Geysers, Ca.  
Robert T. Gamble, Big Geysers, Ca.  
Frederick E. Lauenroth, Jr.,  
Big Geysers, Ca.  
Alexander Schriener, Jr.,  
Santa Rosa, Ca.  
David Sperling, Big Geysers, Ca.

UNION CHEMICALS DIVISION

July 1983

35 YEARS Richard L. Penninger,  
Charlotte, N.C.  
Robert Royce, Rodeo, Ca.

30 YEARS Mary L. Deuchler, Schaumburg, Il.

25 YEARS Harry F. Macrae, Charlotte, N.C.  
Oscar J. Newman, Tucker, Ga.

20 YEARS John C. Maher, Schaumburg, Il.  
T. R. Rutledge, Brea, Ca.  
Donald R. Spencer, La Mirada, Ca.  
Jerry L. Williams, Nashville, Tn.

15 YEARS Bruce G. Elliott, Charlotte, N.C.  
James Harman, Kenai, Ak.  
James Hendershot, Portland, Or.  
Clifford Heus, Jr., Kenai, Ak.  
Ray Hokett, Kenai, Ak.  
Paul Morrison, Kenia, Ak.  
William Switzer, Brea, Ca.

10 YEARS Felix Adams, Jr., Chicago, Il.  
Jack L. Kosmicki, Baltimore, Md.

5 YEARS Danny Brown, Kennewick, Wa.  
David C. McNeal, Lemont, Il.  
Everett D. Mullins, Lemont, Il.  
Jerry Thompson, Kenai, Ak.  
Don Turner, Kenai, Ak.

August 1983

35 YEARS Robert S. Klause, Conshohocken, Pa.

30 YEARS George Ford, Kenai, Ak.

25 YEARS David C. Fitton, Providence, R.I.  
Richard Shook, Brea, Ca.

15 YEARS Larry Christian, Memphis, Tn.  
Leroy Heinrich, Kenai, Ak.  
Joseph Hickel, Kenai, Ak.  
William House, Brea, Ca.  
Gordon L. Johnson, Charlotte, N.C.  
Merle Meisinger, Kenai, Ak.  
George Shaw, Kenai, Ak.

10 YEARS Joseph Foglia, Kenai, Ak.  
George Fox, Kenai, Ak.  
Christine L. Kaluzny,  
Schaumburg, Il.  
Dhirajlal C. Patel, Charlotte, N.C.  
David L. Prentice, Bridgeview, Il.

5 YEARS Elizabeth Allen, Kenai, Ak.  
Bruce Clark, Sacramento, Ca.  
Barrett Clark, Kenai, Ak.  
Michael Cunningham, Kenai, Ak.  
Robert Flippen, Sacramento, Ca.  
James M. Gardner, Schaumburg, Il.  
William Gauthier, Kenai, Ak.  
Alice Rendon, Union Oil Center  
Susan D. Thompson, Nashville, Tn.  
Ted L. Ward, Kansas City, Mo.

UNION INTERNATIONAL OIL DIVISION

March 1983

15 YEARS Joe Tallman, Los Angeles, Ca.

May 1983

5 YEARS Danny West, Bangkok, Thailand

July 1983

30 YEARS Anthony L. Petty, Los Angeles, Ca.  
Robert E. Mortimer,  
Los Angeles, Ca.

August 1983

25 YEARS Joe W. Shiner, Los Angeles, Ca.

15 YEARS Iris K. Agar, Los Angeles, Ca.

5 YEARS John M. Prutzman, Jr., Sandnes,  
Norway  
Kenneth Shepherd, Aberdeen,  
Scotland

UNION OIL CO. OF CANADA LTD.

March 1983

15 YEARS Nelson Barker, Calgary, Alberta

10 YEARS Lois Fraser, Calgary, Alberta

5 YEARS Cheryl Lidfors, Calgary, Alberta  
Barry Smith, Fort St. John, B.C.

April 1983

15 YEARS Theodore Dageforde,  
Fort St. John, B.C.

July 1983

30 YEARS Ed Hughes, Calgary, Alberta

25 YEARS Peter Pecharsky, Calgary, Alberta

15 YEARS Walter Brietzke, Calgary, Alberta

10 YEARS Judy Shaw, Calgary, Alberta

5 YEARS Darrell Hicke, Calgary, Alberta

August 1983

5 YEARS Michele Carr, Calgary, Alberta  
Jim Good, Calgary, Alberta

UNION OIL CO. OF GREAT BRITAIN

July 1983

10 YEARS J. Mitchell, London, England

5 YEARS T. Lloyd, London, England

UNION OIL CO. OF INDONESIA

July 1983

10 YEARS Harsoyo  
Idih  
Sunarjo Kusuma  
Mohamad Asyikin Noor  
Parkesit  
Soekarno  
Sumitro  
Suprijadi  
Suroso

35 YEARS Edgar K. Borglin, Ventura, Ca.  
Bernard G. Curtis, Coalinga, Ca.  
Darnell Falterman, Houma, La.  
William L. Geissert, Union Oil  
Center  
Anthony Vinterella, Houma, La.

30 YEARS William T. Peregrin, Pasadena, Ca.

25 YEARS Marvin P. Dupuy, Snyder, Tx.

20 YEARS Thomas E. Bloom, Jr., Olney, Il.  
Gary M. Green, Sr., Orcutt, Ca.  
Hugh H. Herndon, Bakersfield, Ca.  
William N. Mitchel, W. Liberty, Il.  
Thomas D. Nichols, Olney, Il.  
Thurston Wilson, Van, Tx.

15 YEARS Thomas R. Brunet, Midland, Tx.  
David S. Seibold, Ardmore, Ok.  
Doris M. Young, Ganado, Tx.

10 YEARS Douglas W. Blaskowsky,  
Lafayette, La.  
Edward L. Collier, Lafayette, La.  
Sherry J. Duhon, Lafayette, La.  
Albert Estrada, Brea, Ca.  
Joseph W. Grundon, W. Liberty, Il.  
Robert H. Haggard, Ardmore, Ok.  
Janet Green, Orcutt, Ca.  
Daniel B. Hughes, Jr., Lafayette, La.  
Amador A. Olea, Brea, Ca.  
Pilar M. Rubio, Worland, Wy.  
Reese A. Summerlin, Midland, Tx.

5 YEARS Luis E. Castro, Houston, Tx.  
Randy L. Cooper, W. Liberty, Il.  
Barbara H. Cruitt, Mobile, Al.  
John R. Donnelly, Ventura, Ca.  
Jarrell L. Franks, Midland, Tx.  
Deborah K. Morgan, Houston, Tx.  
Robert D. Ross, III, Midland, Tx.  
Robert M. Todor, Coalinga, Ca.

UNION GEOTHERMAL DIVISION

February 1983

5 YEARS Mark D. Mosby, Jakarta, Indonesia

July 1983

5 YEARS Thomas S. Powell, Philippines  
Robert Wynhamer, Big Geysers, Ca.

## UNION ENERGY MINING DIVISION

### July 1983

10 YEARS Philip C. Carlos, Parachute, Co.  
Kenneth A. Smith, Parachute, Co.

### August 1983

5 YEARS William G. Volk, Parachute, Co.

## MOLYCORP, INC.

### July 1983

35 YEARS Benson Lusher, Washington, Pa.

20 YEARS William McGregor, Pittsburg, Pa.

15 YEARS Erik Thede, Union Oil Center

5 YEARS Christopher Lyle,  
Mountain Pass, Ca.

### August 1983

20 YEARS Delfino Gonzales, Jr., Questa, N.M.  
E. J. Mascarenas, Questa, N.M.  
Edwardo Quintana, Questa, N.M.

5 YEARS Bernard Almeter, Louviers, Co.  
Ray Brown, Mountain Pass, Ca.  
J. D. Pelletier, Questa, N.M.  
Joel Warner, Louviers, Co.

## POCO GRAPHITE, INC.

### July 1983

5 YEARS Leslie Hale, Decatur, Tx.

### August 1983

15 YEARS Walter Jennings, Decatur, Tx.

5 YEARS Harry Brinkly, Decatur, Tx.  
William Brixius, Decatur, Tx.  
Daniel Gragg, Decatur, Tx.  
Franklin Jackson, Decatur, Tx.  
William Newton, Decatur, Tx.  
Charles Nielsen, Decatur, Tx.  
Sharon West, Decatur, Tx.

## JOBBERS AND DISTRIBUTORS

### April 1983

25 YEARS Jack Coghill, Nenana Fuel Company

### July 1983

25 YEARS A. C. Lawrence, St. Helens, Or.

20 YEARS B & W Oil Co., Arcadia, Fl.  
Union Distr. Co., Inc., Everett, Wa.

15 YEARS Appalachian Oil Co, Somerset, Ky.  
Taucher & Hutchings, Inc.,  
Roseburg, Or.

### August 1983

30 YEARS Dunn Oil Company, Lube Oil  
Jobber, Salt Lake City, Ut.

20 YEARS Benson Oil Co., Columbia, S.C.

15 YEARS K. W. Baxley Inc., Ocala, Fl.  
Horn Oil Co., Mocksville, N.C.

10 YEARS Ronald Guthrie, Metlakatla, Ak.

5 YEARS South Central Oil Co.,  
Albemarle, N.C.

## RETIREMENTS

### April 1983

Reginaldo Archuleta, Molycorp, Cerro, N.M.  
December 23, 1968

### May 1983

Harry E. Anderson, Union 76 Division,  
Western Region, Seattle, Wa. April 24, 1949  
Marjorie D. Baker, Union 76 Division, Western  
Region, St. George, Ut. December 23, 1951  
Rudolph R. Beyersdorf, Union 76 Division,  
Western Region, Seattle, Wa. April 26, 1939  
John W. Cramer, International Division,  
Santa Maria, Ca. March 22, 1951  
Charles J. Flanagan, Union 76 Division, Western  
Region, Seattle, Wa. November 15, 1937  
Delfino J. Gonzales, Sr., Molycorp,  
Questa, N.M. August 13, 1963  
Joseph J. Hylek, Union 76 Division, Eastern  
Region, Crest Hill, Il. September 5, 1950  
Bernice F. Johnson, Union 76 Division, Eastern  
Region, Palatine, Il. September 20, 1966  
C. F. Lewis, Union 76 Division, Eastern Region,  
Palatine, Il. December 10, 1945  
Vernon E. Rutherford, Oil and Gas Division,  
Santa Maria, Ca. April 9, 1951  
Arthur G. Schneider, Union 76 Division,  
Eastern Region, Joliet, Il. February 12, 1946  
Artie L. Scott, Science and Technology,  
Orange, Ca. May 4, 1951  
Ralph C. Smith, Molycorp, Washington, Pa.  
April 21, 1941  
George Zimmerman, Union 76 Division,  
Western Region, Sun Lakes, Az. July 5, 1955

### June 1983

Laura N. Abbott, Union 76 Division, Western  
Region, Los Angeles, Ca. April 5, 1943  
Robert C. Bearden, Union 76 Division, Eastern  
Region, Carrollton, Ga. March 19, 1941  
Clifton J. Berryman, Union 76 Division,  
Western Region, Lakewood, Ca. May 14, 1956  
Ruth M. Brackmann, Union 76 Division, Eastern  
Region, Schaumburg, Il. September 12, 1960  
Jesse H. Carter, Union 76 Division, Eastern  
Region, Antioch, Tn. April 11, 1949  
Patrick F. Cochran, Oil and Gas Division,  
Houston, Tx. February 1, 1950  
Wilma W. Davis, Union 76 Division, Eastern  
Region, Burnsville, Mn. December 11, 1961  
Raymond E. Duke, Union 76 Division, Eastern  
Region, Nederland, Tx. August 6, 1946  
Phyllis M. Garcia, Union 76 Division, Western  
Region, Alameda, Ca. September 8, 1942  
Douglas H. Garret, Union 76 Division, Eastern  
Region, Port Neches, Tx. November 12, 1947  
Jack R. Hamilton, Union 76 Division, Western  
Region, San Luis Obispo, Ca. May 24, 1943  
James J. Kemp, Union 76 Division, Eastern  
Region, Burr Ridge, Il. January 25, 1971  
Dennis Kidder, Oil and Gas Division,  
Pawhuska, Ok. May 7, 1946  
Paul J. Komp, Union 76 Division, Eastern  
Region, Joliet, Il. October 5, 1938  
William J. Kron, Union 76 Division, Eastern  
Region, Leesburg, Fl. November 12, 1940

5 YEARS Yusuf Abdullah  
Arief  
Ruslie Baktiar  
Usman Bakri  
Anang Imansyah  
Tiro Kanto  
Jabier Latief  
Muslimin A. Maning  
Simon Payung  
Achmad Ramli  
Rusmin  
Markus Sampe  
Sinang  
Sumilan Setiawan  
Soehartuti Soenardi  
Agus Suhadi  
Sumardi  
Arifien Tahir

### August 1983

10 YEARS Maulana Arief  
Djamil  
Iriansjah  
Teddy Sajoto Kurdi  
Fransiscus Leo Murbanun  
Soemadi  
Soewandijatmi  
Herry Sudarto  
B. I. Suradi  
C. M. Lndang Widyaningsih  
Eddie Kees Wontas

### August 1983

5 YEARS Sonda Baddu  
Abraham Bara  
Joni Baso  
Kansa  
Satriano T. Migang  
Achmad Munir  
Eddy K. S. Purwanto  
Fonger Simamora  
Sudjono

## UNION OIL CO. OF THAILAND

### May 1983

5 YEARS Danny West, Bangkok, Thailand

### August 1983

30 YEARS Donald C. Gullickson, Bangkok,  
Thailand

**Sidney LeBleu**, Oil and Gas Division, Lafayette, La. November 30, 1939  
**Howard W. Lewis**, Union 76 Division, Eastern Region, Nederland, Tx. December 30, 1946  
**Anne M. Malcolm**, Union 76 Division, Eastern Region, Hoffman Estates, Il. August 19, 1963  
**Victoria M. Stach**, Union 76 Division, Eastern Region, Arlington Hts, Il. December 16, 1960  
**John C. Stallard**, Oil and Gas Division, Hominy, Ok. June 3, 1946  
**Charles R. Stelling**, Union 76 Division, Eastern Region, Lockport, Il. March 31, 1949  
**Robert L. Sunday**, Molycorp, York, Pa. November 6, 1950  
**Robert L. Switzer**, Science and Technology, Long Beach, Ca. May 26, 1941  
**Anthony Trivisonno**, Union 76 Division, Eastern Region, S. Euclid, Oh. May 6, 1946  
**William F. Waller**, Union 76 Division, Eastern Region, Commerce, Ga. August 2, 1954  
**Edward E. Walton**, Union 76 Division, Western Region, Seattle, Wa. September 6, 1945

#### July 1983

**Carrell J. Baker, Jr.**, Pure Transportation Co., Madill, Ok. June 6, 1940  
**George W. Barker**, Union 76 Division, Western Region, Grover City, Ca. June 18, 1947  
**Nicholas B. Bellissimo**, Union 76 Division, Eastern Region, Ft. Lauderdale, Fl. January 1, 1947  
**Richard E. Black**, Oil and Gas Division, Andrews, Tx. June 16, 1969  
**Margaret M. Cargo**, Union 76 Division, Western Region, Rodeo, Ca. October 19, 1942  
**Irene L. Cole**, Union 76 Division, Eastern Region, Superior, Wi. December 10, 1957  
**Samuel L. Collett**, Union 76 Division, Eastern Region, Hudson, Fl. July 1, 1957  
**Charles F. Cooper**, Union 76 Division, Eastern Region, Nederland, Tx. March 7, 1946  
**Charles L. Dickes**, Union 76 Division, Eastern Region, Lilburn, Ga. February 25, 1947  
**Robert E. Dimmick**, Union 76 Division, Eastern Region, Joliet, Il. April 5, 1949  
**Milton J. Guidroz**, Union 76 Division, Eastern Region, Port Neches, Tx. October 30, 1947  
**Paul V. Hightower**, Pure Transportation Co., Van, Tx. June 18, 1951  
**Mary A. Hinely**, Union 76 Division, Eastern Region, Charleston, S.C. April 14, 1969  
**Carl L. Johnson**, Union 76 Division, Eastern Region, Lockport, Il. April 7, 1949  
**Howard W. Moore**, Union 76 Division, Eastern Region, Arlington Hghts., Il. July 29, 1935  
**Wilburn B. Peoples**, Union 76 Division, Eastern Region, Beaumont, Tx. November 14, 1947  
**Lester D. Proctor**, Oil and Gas Division, Camarillo, Ca. February 24, 1947  
**Raymond T. Sato**, Union 76 Division, Western Region, Honolulu, Hi. June 26, 1951  
**James L. Stevenson**, Union 76 Division, Eastern Region, Beaumont, Tx. September 2, 1948  
**Hulda L. Stromdahl**, Union 76 Division, Eastern Region, Barrington, Il. June 4, 1973  
**Walter Tober**, Molycorp, Mt. Pass, Ca. April 6, 1965  
**Harold L. Weeks**, Union 76 Division, Eastern Region, Cincinnati, Oh. September 18, 1951  
**Kenneth N. Wilson**, Union Chemicals, Placentia, Ca. June 12, 1953

#### IN MEMORIAM

##### Employees

**Joseph Green**, Oil and Gas Division, Los Angeles, Ca. April 16, 1983  
**Charlotte A. Pitner**, Oil and Gas Division, Midland, Tx. April 9, 1983

##### Retirees

**John V. Bailey**, Oil and Gas Division, Madill, Ok. May 25, 1983  
**Norman L. Bakke**, Union 76 Division, Western Region, Vallejo, Ca. May 21, 1983  
**Amos C. Beavers**, Union 76 Division, Eastern Region, Lockport, Il. May 26, 1983  
**Paul J. Bond**, Union 76 Division, Eastern Region, McHenry, Il. March 30, 1983  
**Eileen Brown**, Union 76 Division, Western Region, San Francisco, Ca. April 24, 1983  
**Richard H. Brumley**, Oil and Gas Division, Nowata, Ok. May 16, 1983  
**Harold V. Byrer**, Union 76 Division, Eastern Region, Oviedo, Fl. May 23, 1983  
**Nathan R. Carouthers**, Union 76 Division, Eastern Region, Sour Lake, Tx. May 29, 1983  
**Oscar Comeaux**, Union 76 Division, Eastern Region, Beaumont, Tx. April 15, 1983  
**Johnnie Crawford**, Union 76 Division, Eastern Region, Northpoint, Al. May 19, 1983  
**Joseph P. Davies**, Union 76 Division, Eastern Region, Clearwater, Fl. April 8, 1983  
**Carl J. Erickson**, Union 76 Division, Eastern Region, Lemont, Il. April 9, 1983  
**James Edmonds, Jr.**, Union 76 Division, Eastern Region, Charlotte, N.C. March 5, 1983  
**John Harmon**, Union 76 Division, Western Region, Vallejo, Ca. May 1, 1983  
**Frank C. Hansen**, Corporate, Laguna Hills, Ca. April 7, 1983  
**Glenn Hattox**, Union 76 Division, Eastern Region, Beaumont, Tx. March 31, 1983  
**Earl J. Hill**, Oil and Gas Division, Grand Saline, Tx. April 3, 1983  
**Howard C. Hughes**, Oil and Gas Division, Coalinga, Ca. March 24, 1983  
**John H. Jones**, Union 76 Division, Eastern Region, St. Petersburg, Fl. May 26, 1983  
**Clarence R. Kanuckel**, Union 76 Division, Eastern Region, Warsaw, Oh. April 20, 1983  
**Hugh D. Kemp, Sr.**, Union 76 Division, Eastern Region, Mobile, Al. May 16, 1983  
**Stephen C. Kowalski**, Union 76 Division, Eastern Region, Citrus Springs, Fl. March 30, 1983  
**Albert R. Landers**, Union 76 Division, Eastern Region, Carthage, Mo. April 15, 1983  
**Edmund T. McCann**, Union 76 Division, Eastern Region, Chicago, Il. July 19, 1982  
**James R. McQueen**, Union 76 Division, Eastern Region, Clarendon Hills, Il. May 12, 1983  
**Harold Meier**, Union 76 Division, Eastern Region, Oregon, Oh. April 15, 1983  
**Albin Micoli**, Union 76 Division, Western Region, Richmond, Ca. April 12, 1983  
**George D. Moseley**, Oil and Gas Division, Clay City, Il. April 21, 1983  
**William R. Nadel**, Union 76 Division, Eastern Region, Mt. Prospect, Il. April 13, 1983  
**Donald E. Neff**, Union 76 Division, Eastern Region, Dover, Oh. April 11, 1983  
**Harold Nilson**, Union 76 Division, Eastern Region, Northfield, Il. April 30, 1983

**Joan M. Nette**, Union 76 Division, Eastern Region, N. Fort Myers, Fl. March 30, 1983  
**Raymond Nordstrom**, Union 76 Division, Eastern Region, Joliet, Il. April 29, 1983  
**Michael D. Pasko**, Union 76 Division, Eastern Region, Minneapolis, Mn. March 3, 1983  
**Harley F. Patterson**, Oil and Gas, Olney, Il. April 13, 1983  
**Robert P. Rees**, Union 76 Division, Eastern Region, Port Neches, Tx. May 22, 1983  
**Howard Schmelzer**, Union 76 Division, Western Region, Rodeo, Ca. May 16, 1983  
**Creel C. Smith**, Oil and Gas Division, Olney, Il. May 15, 1983  
**Charles O. Stetson**, Molycorp, Washington, Pa. April 12, 1983  
**Golden J. Taylor**, Union 76 Division, Eastern Region, Port Neches, Tx. May 29, 1983  
**Vernon H. Taylor**, Union 76 Division, Western Region, Auburn, Ca. April 16, 1983  
**R. E. Thompson**, Corporate, Indian Wells, Ca. April 12, 1983  
**Harvey W. Wallace**, Union 76 Division, Eastern Region, Warrington, Fl. April 30, 1983  
**William F. Wisdom**, Oil and Gas Division, San Antonio, Tx. May 15, 1983  
**Carl M. Wiget**, Union 76 Division, Eastern Region, Flushing, Mi. April 25, 1983



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UNION OIL COMPANY OF CALIFORNIA

# seventy SIX

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**COVER:** The barge *Sea 76* and the tug *Dean Foss* ply Alaskan waters delivering essential energy products to far-removed communities in southeastern Alaska. **Story on page 4.**

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