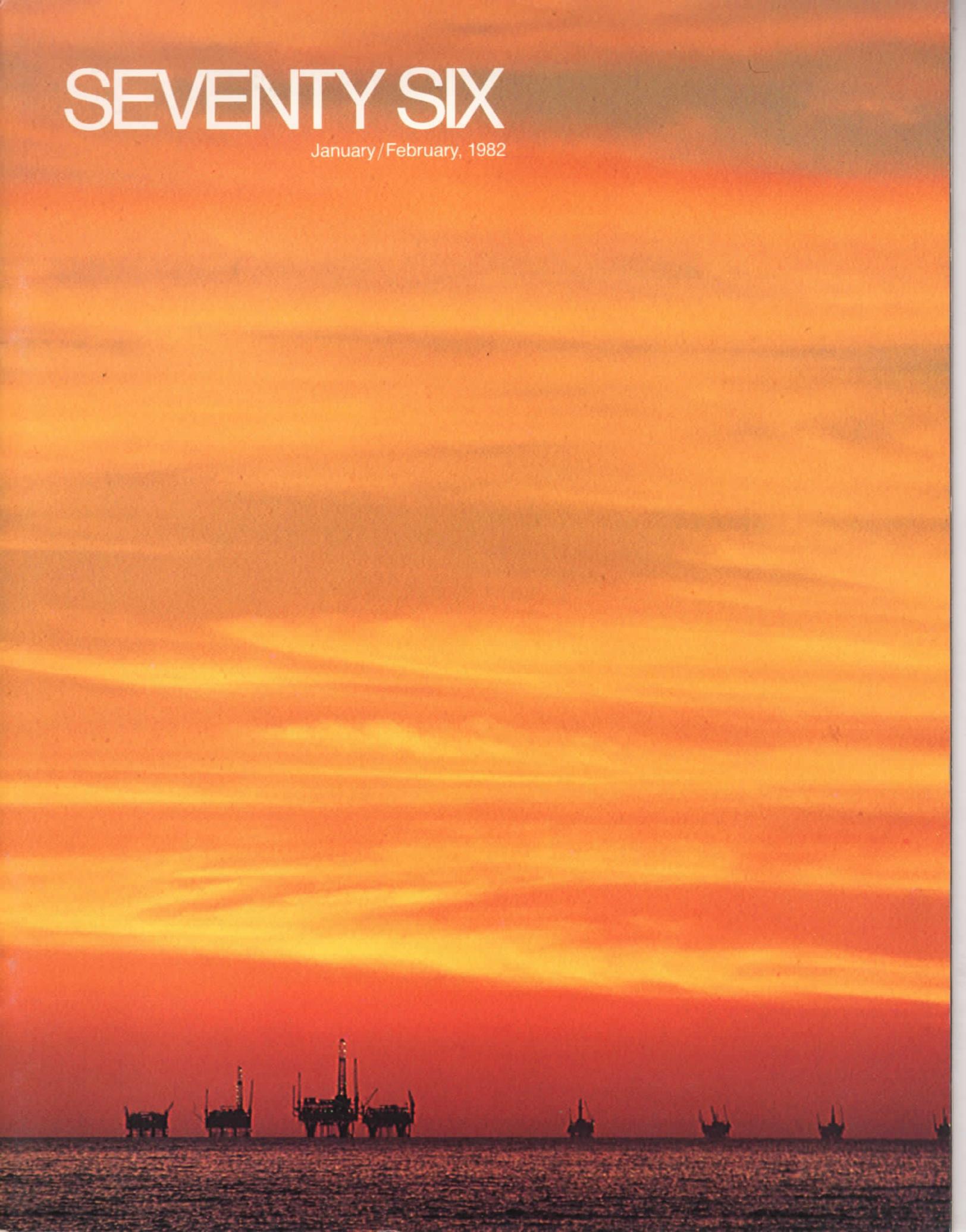


SEVENTY SIX

January/February, 1982





OFFSHORE DRILLING:

The sky's the limit

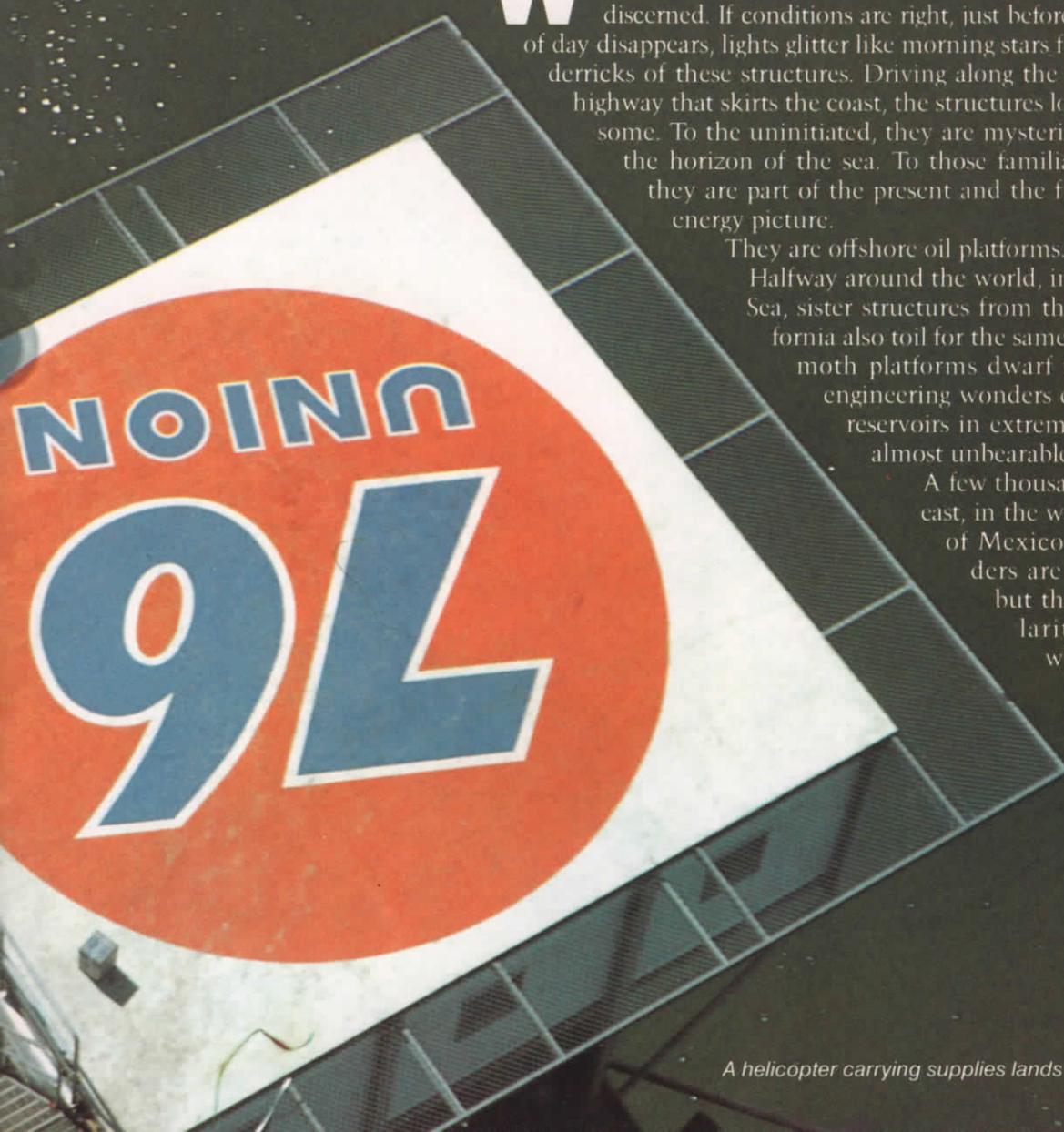
By Sergio Ortiz

WHEN THE WEATHER is clear, a series of structures sitting a few miles from the nearest land off the southern California coast can be discerned. If conditions are right, just before the last magenta light of day disappears, lights glitter like morning stars from the decks and the derricks of these structures. Driving along the picturesque stretch of highway that skirts the coast, the structures look futuristic and awesome. To the uninitiated, they are mysterious structures lying at the horizon of the sea. To those familiar with their purpose, they are part of the present and the future of the country's energy picture.

They are offshore oil platforms.

Halfway around the world, in the forbidding North Sea, sister structures from those in temperate California also toil for the same purpose. These mammoth platforms dwarf those in California—engineering wonders designed to tap energy reservoirs in extremely deep water and in almost unbearable weather conditions.

A few thousand miles to the southeast, in the warm waters of the Gulf of Mexico, these offshore wonders are extremely common, but there is where the similarity ends. For here is where the most active and ambitious projects in offshore



A helicopter carrying supplies lands on a platform in the Gulf.



Union's Heather platform in the North Sea off Scotland is a structure designed to withstand the rigors of bad weather.

technology are almost commonplace. Although the number of platforms here—offshore Louisiana and Texas—number in the hundreds, the difficult task of drilling in very deep waters is undertaken.

Consider Union Oil's mammoth structure called *Cerveza*, the largest single-jacket platform designed by man. This project is a landmark in offshore engineering and will tap petroleum reservoirs at depths of 10,500 feet beneath the ocean floor which is in itself 1,000 feet from where workers will work and live until the project begins production sometime in 1983.

In Alaska's Cook Inlet a single-leg platform known as the Monopod—a one-of-its kind in the industry—rests on a single leg over treacherous waters and accommodates 32 wells that tap the deposits under that body of water.

All these are examples of offshore oil activity—all found in areas of Union Oil operations. In the waters off Indonesia, Thailand, The Netherlands, Kenya and Brazil both exploration and production conducted by Union Oil workers from offshore platforms goes on uninterrupted.

Offshore drilling is not a new idea either on the part of Union Oil or the industry. Some wells were drilled from California piers as far back as the last century. The first producing well out of sight of land was drilled in

the waters of the Gulf of Mexico more than 30 years ago. But it is the offshore future, an almost unreachable dream in the not-too-distant past, that today appears so bright.

According to 1981 estimates by the U.S. Geological Survey (USGS), the offshore areas of the United States to the 8,000-foot water depth may contain as much as 43.5 billion barrels of undiscovered and recoverable crude oil and condensate. In addition, the USGS estimates that up to 230.6 trillion cubic feet of undiscovered and recoverable natural gas may lie underneath the bottom of the sea.

This potential of oil and gas—if found and processed—could go a long, long way in reducing the volume of imported oil brought to the United States from politically unstable and remote places. The long-term transition from conventional fuels (oil, gas, coal and nuclear) to alternative and renewable energy sources could be aided by the production of those offshore resources.

But the only way to determine if that potential energy

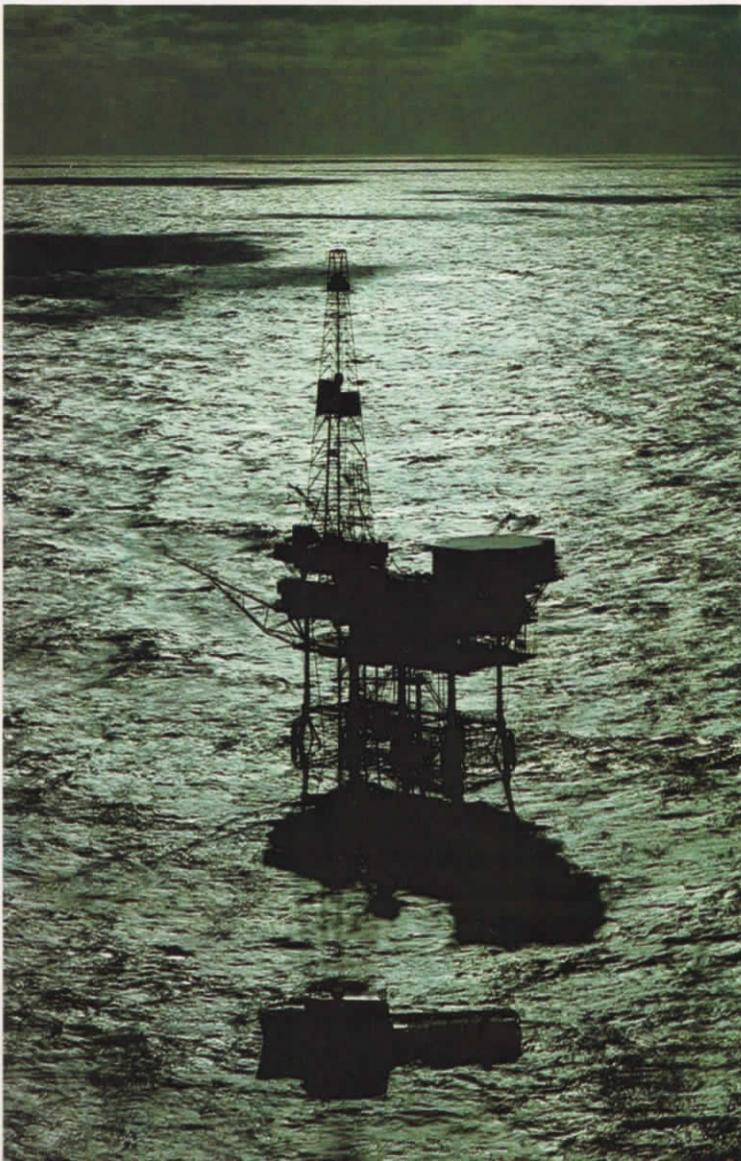
is out there is to drill for it—and that can only be done with timely and adequate government leasing policies and a determined effort by the petroleum industry.

Offshore platforms do not just get there overnight. They represent years of planning and analyses and millions upon millions of invested capital.

In virtually all cases years go by and millions are invested before the first drop of oil is ever extracted from an offshore platform.

But how do they get there?

Silhouetted against a glittering sea is a Union platform.



The acquisition of a lease is the first step. This is a complex process that is as complicated as the government itself. Whenever the federal government offers for bid a given number of tracts, companies and individuals are asked to submit bids to the Bureau of Land Management (BLM) office for the tracts in the particular area.

Company bids are based on careful analyses of all available geological and geophysical data, the best estimate of the potentials of each tract, information from nearby drilling operations and the availability of equipment and financing and the potential obligations included in the lease to be signed if a bidder is successful.

All in all, a successful offshore bid is a calculated risk and *only* drilling results will determine which companies “guess” right in submitting their offers for the right to drill in the respective tracts.

Under conventional bidding procedures, generally all bids must be accompanied by funds sufficient to cover at least 20 percent of the bid. The remaining 80 percent plus the first year’s rental fee for the tract are both due if the bid is accepted by the BLM.

And what do the companies who have successfully bid get? Nothing but the right to drill for a certain number of years. Regardless of the operation’s success, the bid assures the government of the bid money even if no oil is found in the tract.

The operator must comply with all existing laws and regulations issued by the USGS, the BLM, EPA, Department of Commerce and the Army Corps of Engineers. These regulations cover everything from platform design and safety to construction and operation rules; from the laying of pipelines to carry the platform’s production to shore to environmental safeguards; from drilling to production schedules.

During production and drilling operations, the USGS and the Coast Guard conduct on-site field inspections to assure compliance with operating orders and regulations.

What happens once the lease has been granted and the tract is ready to be explored?

In the case of many companies, a contractor that specializes in offshore drilling may be hired to conduct the operations. There are three basic types of equipment used in offshore work.

The first of these are “jack-up” rigs, movable structures that are towed to the drilling site and that are equipped with steel legs that are lowered to the sea floor.



The drilling platform is then jacked-up on the legs to a safe height. The second type of equipment are called "drillships"—self-propelled vessels that are moored to the seabed from where drilling can be conducted. The third are "semisubmersibles"—towed or self-propelled vessels with drilling rigs. The ships are located above the drill site and stabilized in the water by flooding the hollow pontoons and the "legs" of the craft.

These drilling facilities generally are self-contained units capable of providing working and living quarters for the crews while drilling is being conducted. Usually they are equipped with helicopter-landing pads and have complete sewage and waste treatment systems to maintain the purity of the ocean. In addition, all safety measures that insure a safe operation are kept up-to-date and fully operational during all drilling operations.

If exploratory drilling proves successful, offshore production structures are placed on the site.

These are what the structures seen in the horizon off the California coast, or in the foggy North Sea and in the sunny Gulf of Mexico are—offshore steel islands permanently implanted in the sea floor and extending to a safe distance above the water line. The platforms vary in size and as many as 90 or more wells may be drilled from a single large platform.

The wells from these platforms reach deep beneath the ocean floor. Some are drilled into the same geological formation but at different angles so that they may tap the formation at selected locations, often as much as two miles laterally from the platform site. Each structure is custom-designed to be used at specific and often treacherous locations.

Such is the case of Union's Monopod in Alaska's Cook Inlet—a cyclop of a structure that stands on one huge leg to minimize the tremendous push of the currents and ice floes in that body of water.

Union's *Cerveza* platform, launched last year, is a gigantic engineering marvel. Its jacket is the largest built and launched in one piece and weighs 26,000 tons. It is 935 feet tall and, if it stood on land, it would rank among the world's largest structures. *Cerveza* will accommodate 40 wells and another four years will elapse before the first oil and gas is produced from it. By then, *Cerveza* is expected to produce 25,000 barrels of oil and 96 million cubic feet of natural gas per day.

There is no definite "how-to" manual on building off-



Union's Monopod is a one-of-its kind structure in the waters of Alaska's Cook Inlet where production has gone on since 1966.

shore platforms. Every one has its own particular set of problems to overcome. Those in the Gulf of Mexico are designed to endure the most severe storm that is likely to occur in a 100-year cycle. Platforms now in place in the Santa Barbara Channel are built to withstand damage by severe earthquakes and those in Alaska's Cook Inlet are made to resist the cruel winters, swift currents and 30-foot tides.

As man continues on his search for available energy, the ocean is being scrutinized as never before. As the need to drill in deeper waters has arisen, petroleum technology has advanced to meet the challenge by devising engineering techniques thought impossible even a few years ago.

Even as recently as the 1950s, platforms were thought to have reached their capabilities when they were first placed at 100-foot depths in the Gulf of Mexico.

Exploratory wells reaching the seabed in 5,000 feet of water already have been drilled on certain locations and drilling units are available that are capable of operating in 6,000 feet.

But developing and producing oil and gas in deep water is extremely expensive. It requires wells that produce at high rates, large reserves, equitable tax treatment, market

pricing of oil and gas and a stable political climate.

These are conditions that remain foremost in any ambitious offshore project because drilling in those areas is, to say the least, a high-risk investment.

In 1979 alone there were 1,260 wells of all kinds—oil, gas and dry holes—drilled in U.S. waters to an average depth of 10,000 feet at an average cost for drilling and equipping in excess of \$2.5 million per well. That's almost 10 times the average cost of drilling a well onshore in the same year. The total cost of drilling and equipping those offshore wells in 1979 exceeded \$3.2 billion. Yet, more than one-third of the wells drilled turned out to be

dry holes.

And that is only the beginning.

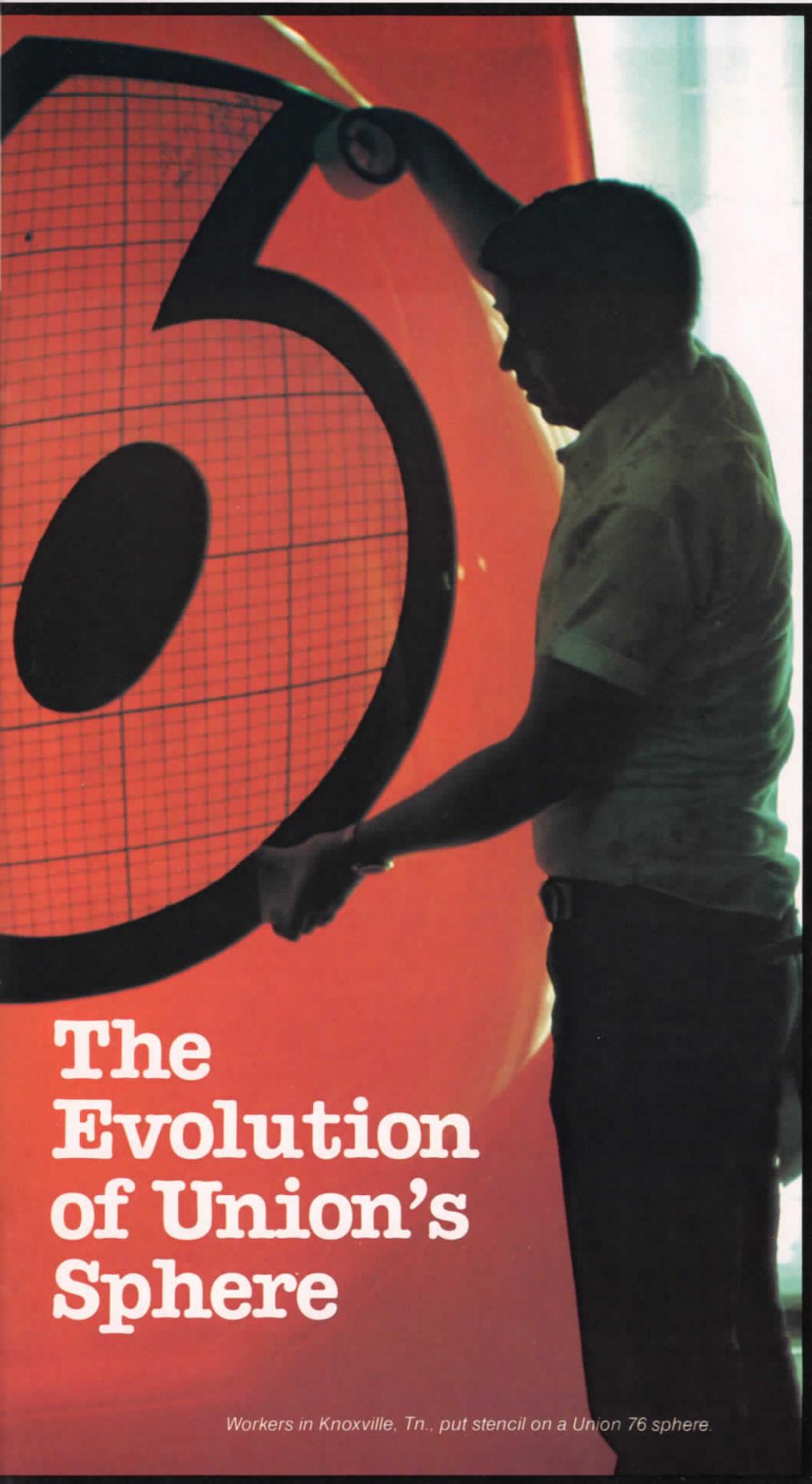
Once a location proves successful, the problem of transporting the oil and gas to shore must be resolved. This requires pipelines to be laid and separation plants to be built to treat the product before it is transported to refineries.

In the long run, the greatest untapped oil reserves probably rest below the sea awaiting technology still being developed—indeed a long way from the early days of the industry when an oil tunnel and primitive wells drilled from piers were the state-of-the art. 76

As the sun breaks through high clouds in the Gulf of Mexico, some of Union's platforms in the Vermilion Field are discerned.







The Evolution of Union's Sphere

Workers in Knoxville, Tn., put stencil on a Union 76 sphere.

"When the new '76' gasoline was introduced to Union's customers in 1932, the company applied for registration of the name at the United States Patent Office and at the capitals of six states: California, Oregon, Washington, Idaho, Nevada and Arizona. (The) six states agreed to register the new trademark, but the Patent Office rejected it on the grounds that '76' might be construed as the octane rating of the gasoline and hence could not be the exclusive property of Union Oil. Though Vic Kelly, director of sales, and Union's attorneys pointed out, first to the Patent Office and then to the United States Court of Customs and Patent Appeals, that the '76' referred to the famous spirit of '76 and not to the octane rating, they were turned down.

"(It was not until fifteen years later, on February 28, 1950, that Patent Office officials certified Union's trademark, the blue 76 on an orange background tied with the word "Union.") This was the origin of a famous trademark that has become one of Union's most valued, if intangible, assets..."

...Sign of the 76

SOME 50 YEARS AFTER its introduction, the orange with the blue 76 numeral—which at first identified only Union's gasoline—has undergone few changes. Today, it remains one of the most easily-identifiable corporate symbols in the country, evident everywhere where Union Oil has operations or marketing areas.

But it is the Union 76 rotating sphere, unique sign for the company's marketing operations, that is perhaps the most familiar to motorists and truckers who travel the length and breadth of the land. This year marks the 20th anniversary of





Spheres are molded into two halves made of polycarbonate and then joined.



A finished, seven and one-half foot sphere sits in the Knoxville shop.

the unveiling of the sphere amidst much fanfare and celebration during the 1962 World's Fair in Seattle. To this day the sphere has remained virtually the same.

Of course, the numeral "76" has been streamlined and modernized and the word "Union" beneath it has disappeared, but the contours of the logo and the unmistakable identity of the company it represents remain the same.

Twenty years ago, when the company's marketing department decided to sponsor what was known as "Sky-Ride Terminals" at Century 21 of Seattle's World's Fair, the concept of a futuristic emblem was agreed upon.

According to Bob Tompkins, employed in those days by the agency that handled Union Oil's advertising account, "The project was such an evolutionary process that no one really knows who designed it (the sphere). But we know that it was an instant success and quite an eye-pleasing object."

And indeed it was.

The advertising department had insisted that two eight-foot diameter plastic balls with the company's "76" trademark be installed atop the Sky-

Ride attraction. These were required to have interior illumination throughout the entire surface area and to rotate without any visible mechanism.

Lowell Morrill, manager, special projects, recalls that "In those days there was practically no information available on this type of sign construction. It (the building and installation of the spheres) was untried in commercial applications. A company in Seattle, however, was successful in constructing the spheres in two sections. Those first two had a fluorescent lighting core and inside rotating mechanism. But they were extremely attractive."

Jerry Luboviski, then manager of advertising and merchandising, and today vice president of corporate communications, began contemplating the adoption of the sphere as a company-wide marketing symbol.

"It was a good-looking symbol," Luboviski explains, "so I asked Lowell to find someone who could mass produce the spheres, make them economical enough for all of our service stations."

This was not as simple as it sounded since the idea broke all tra-

ditional rules of outdoor illuminated signing. A whole new concept for the ball's rotating motion had to be studied and weather-resistant material had to be found. Then there was the problem of obtaining the Underwriters Laboratory approval for the electrical sign.

According to Morrill, a series of tests were conducted by experts from the UL—the agency in charge of insuring the safety of all electrical appliances in the country.

"At some point," he explains, "they were concerned with the capability of the balls to withstand wind pressure. Normally, they would pile sandbags on top conventional, double-faced signs. But in this case they decided to test the wind-resistance capabilities by literally pulling the spheres with a net tied to a vehicle, thus determining the breaking point of the plexi-glass from which they were made."

The streamlined spheres passed with high scores.

Soon after, the agency approved the bright orange spheres for use and the first prototype was erected over a brand new marine station in southern California's Marina del Rey

near Los Angeles. The sign proved a great success and a second sphere went up over a Union Oil service station in Redondo Beach, a few miles to the south.

Today, the modern 76 spheres are over most Union 76 stations across the country. "The company has ordered them by the thousands," Luboviski explains. "The size of the spheres has changed to meet local conditions. While the Seattle prototypes were eight feet in diameter, today's range from five feet to seven feet six inches. In addition, a semi-sphere has been developed for those small service stations not requiring the ball."

According to Edward L. Schmidt, vice president, marketing, of Plasti-Line, Inc., the firm that manufactures the orbs in Knoxville, Tenn., the spheres have been made from polycarbonate the last few years. "This is a plastic material 30 times stronger than the acrylic used before. It is practically indestructible and is capable of resisting all types of weather without losing its luster."

The company now uses between 250 to 500 new and replacement balls each year. It takes anywhere from 12 to 14 weeks to finish the globes which soon after are seen revolving over Union Oil stations throughout the United States and Puerto Rico.

In fact, some of the spheres have become *objets d'art*. Once one of the globes was used to make a giant map of the earth. Another 76 sphere was turned into a round "canvas" for a South Dakota artist.

In the Chinatowns of San Francisco and Los Angeles some globes have the numbers done in Chinese, and in Hawaii, the Bhuddist Yin and Yang circle is painted on some spheres.

But no matter what its adaptations, it is the famous "76" numeral that is more readily identified with them. And considering that the "76" was the suggestion of Robert D. Matthews, who was elected to Union's executive committee at the age of 26, in 1931, the company symbol has gone—like the company it represents—a long way. 76



ABOVE: The sphere was unveiled at the 1962 World's Fair by (L-R) the late W. I. Martin, then Northwest Division sales manager; C. E. Rathbone, who was vice president, marketing; Fred L. Hartley, then senior vice president Refining and Marketing and Jerry Luboviski, in those days manager, Advertising and Merchandising for Union Oil.

BELOW: Finished spheres sit by the manufacturing plant awaiting shipping.



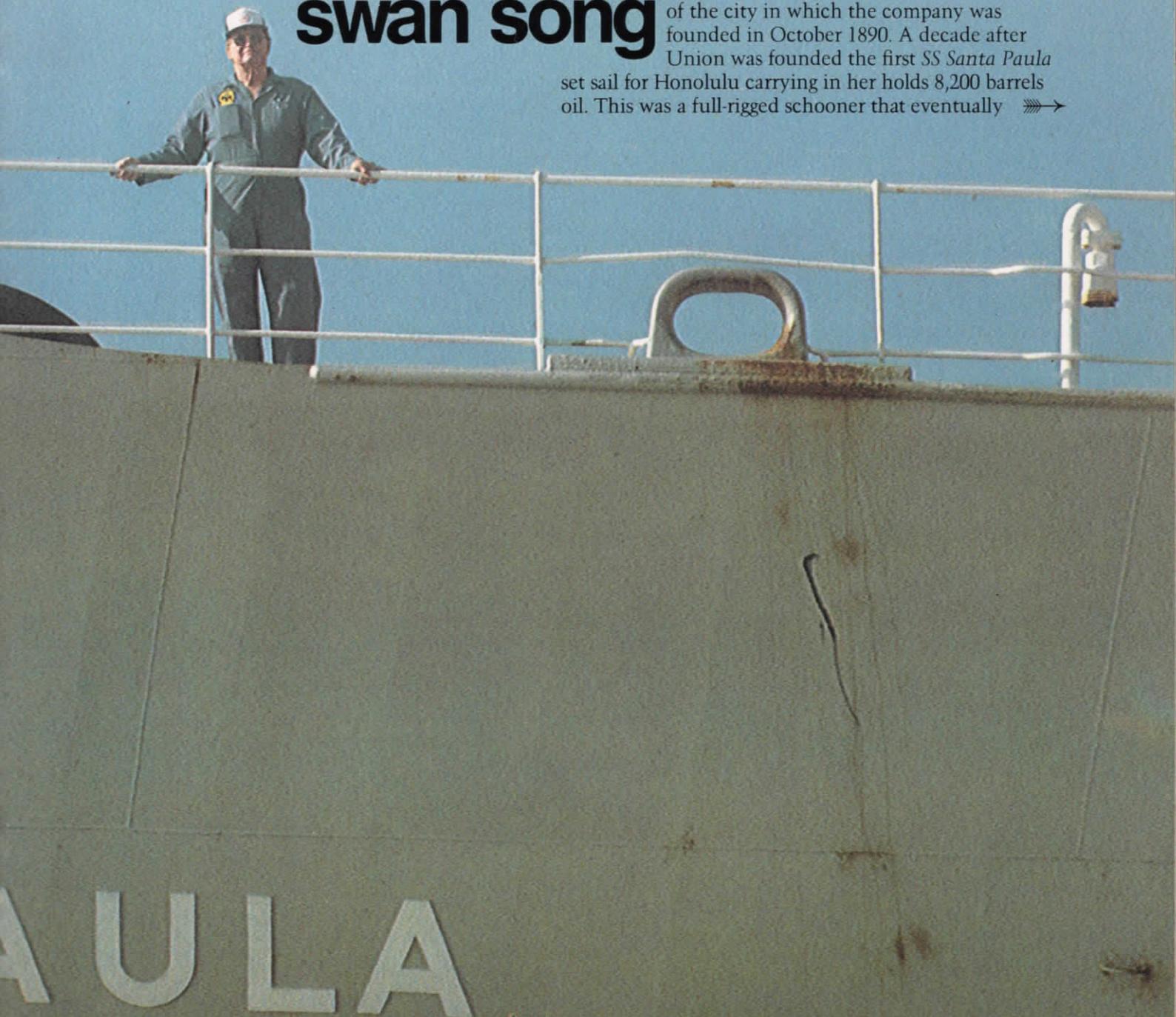
SANTA

PA

A great ship's swan song

SINCE 1971 she has been a familiar sight on the waters of the Pacific Ocean—a workhorse in the truest sense of the word. Before then she was known as the *Hans Isbrandtsen*, but the Nordic inflections of that name have been replaced by the Spanish *Santa Paula*, a name rich in Union Oil lore.

Although antiquated somewhat by today's modern marine standards, the *SS Santa Paula* is the last of a long line of company tankers bearing the name of the city in which the company was founded in October 1890. A decade after Union was founded the first *SS Santa Paula* set sail for Honolulu carrying in her holds 8,200 barrels of oil. This was a full-rigged schooner that eventually →



Capt. Steven Tilghman, *Santa Paula* skipper, oversees loading at Los Angeles Harbor.

became a barge, but not before gaining a place in Union Oil history as the first vessel in which the company completed the first offshore delivery in its own vessel.

On an overcast day in Los Angeles Harbor, the great-granddaughter of that schooner is taking on board 250,000 barrels of product as her crew readies for a trip to the Drift River terminal on the west side of Alaska's Cook Inlet. In the galley where the pumping engines make a dull sound that reverberates from steel bulkheads, the *Santa Paula's* captain, Steven Tilghman, sits writing letters to friends on shore. His wife only recently left the ship after reporting to him the shape of the orange grove the couple own in Orange County in southern California.

Capt. Tilghman, a man who has lived aboard ships most of his adult life, is banking on his citrus venture to keep him occupied during his upcoming retirement, but the lure of the sea is never far from his mind.

"This will be a two-fold retirement," he says, "since my ship is leaving service at about the same time I intend to."

The *Santa Paula* is one of three tankers that the company intends to retire this year to be replaced by three, brand new, state-of-the-art vessels.

The ship due to replace the *Santa Paula* later this year is the *Sierra Madre*, delivered last December. The *Sierra Madre*, like the *Santa Paula*, will ply the waters of the western coastal states carrying product to Union Oil terminals in California, Washington, Oregon, Alaska and Hawaii. Her sister ship, the *Blue Ridge*, is currently sailing from Union's Beaumont refinery in southern Texas, to terminals on the Gulf and Atlantic coasts. The third vessel, the *Coast Range*, will also sail through Pacific waters.

All three ships are petroleum carriers and, to insure environmental protection, have double bottoms and clean, segregated ballast systems. In addition, each of the new tankers has been constructed with on-board sewage treatment plants. The modern safety equipment



Capt. Tilghman writes in ship's log during loading operations.

featured in each new ship includes an inert gas system to prevent a buildup of explosive vapors in the cargo compartments. They also have a modern collision-avoidance radar system and a backup steering system for use in the event the main system is inoperative.

Each step of their construction and design has been geared toward maximum safety and environmental protection as well as operating efficiency.

So advanced are these three new vessels that it is expected they will replace six smaller Union Oil product tankers, the *Santa Paula* among them.

The *Santa Paula* will be a tough act to follow in marine circles, however.

Capt. Tilghman, supervising the loading operations through a porthole this pewter-gray southern California morning, beams at the mention of his ship's safety record. "There's a mirthful saying along the Portland waterfront that says that if a ship isn't breaking something it isn't doing its work," he beams. "Well, that doesn't cut it with my vessel because we have made over 300 trips to Portland and we've never had anything happen. We have never broken a piling and we've never had even a drop of a spill. Now, that's some kind of record."

According to Capt. Tilghman—he is affectionately called "Tex" by his sailor friends—in the ten years his ship has sailed the Columbia River, she has carried about 40 millions barrels of product—"and that's a conservative estimate," he booms.

The Columbia River Pilot's Association agrees as it recently mentioned the *Santa Paula* as the ship that holds the record for so many trips into the riverfront city in the fewest years.

The 660-foot *Santa Paula*, although registered out of Los Angeles, is considered by many of her hands to have Portland as her home port. In fact, there are very few pilots in the Columbia River who have not piloted the tanker from Astoria to Portland during her years of service.

River pilots have the responsibility of insuring a safe passage from the ocean to Portland and they invariably board vessels in Astoria before making the trip upriver. Captain Tilghman considers the Columbia River to be "one of the most difficult piloting jobs in the country and the *Santa Paula* has always been one of the pilots' best customers."

For Capt. Tilghman the *Santa Paula* is more like a home than a place of work. When West Coast Shipping Company, operators of the vessels and a Union Oil subsidiary, acquired the tanker in 1971, the captain was assigned to travel to Japan and take command of the *Santa Paula* after she was outfitted in that country.

He has been aboard the vessel ever since.

"I remember every single trip I've made aboard the *Santa Paula*," he says. "There is no such thing as a single, most memorable trip. But this, in effect, will be my last trip with the ship. It's been ten years of smooth sailing aboard the old gal."

Considering that Capt. Tilghman estimates the *Santa Paula* has carried over 100 million barrels of product during the decade since the ship was transformed in Sasebo, Japan, it is a very impressive career of "smooth sailing."

Like the ship, Capt. Tilghman seems to be more at ease at sea, than on dry land. He has spent over 47 years at sea since he first shipped out at the tender age of 17 when he joined the Navy. But by that time he already had a bit of seagoing experience since he had served as a deckhand aboard a yacht.

He proudly points to visitors his captain's license framed in a simple manner and hanging from one of the bulkheads near the bridge. "I have the eighth issue of a maritime license," he says. "It was issued in 1945 and shows all the bodies of water where I am qualified to pilot."

Capt. Tilghman's first command was a Liberty Ship at the end of World War II and he took the vessel to Japan and the Philippines. Since then, his has been a long, constant fascination with the sea.

"I have always enjoyed sailing and I feel sorry for people who have spent all their life on shore," he adds. "I have no complaint in the world. Ever since I was a sailor I have felt like I am facing a tremendous challenge every time I step on board a ship."

Although the future of the *Santa Paula* is uncertain (the ship has been sold to Santa Margarita Tankers, Inc.), Tilghman does not face an uncertain future. He knows that he would like to get a pilot's license for the





The captain walks to the bow of the ship before setting sail.

aircraft he is contemplating buying.

Then again the lure of growing oranges on his 17 acres in Fallbrook also promise for him an uncharted adventure. But his years at sea have left him with an extremely optimistic view of life in general.

"If there is anything I have learned it is to get along with others," he says. "By golly, if you don't get along with a mate it's going to wind up with a terrible voyage and no one wants that at sea. We have always had extremely good working relations aboard the *Santa*

Paula and our record reflects that. I consider the vessel to be the best ship on the West Coast in the past eight or ten years."

Next to the vessel's safety record, Tilghman considers the tanker's excellent reputation for sailing and arriving on schedule to be the best.

"If you look at the logs of our departure and arrival times at our ports o' call, you'd see that the *Santa Paula* has a very good reputation," he says. "Our records in both safety and schedule are very hard to beat. If we were playing football, we'd be the Dallas Cowboys."

That's quite a compliment from a sailor to a ship where he has spent a good part of his life, and Capt. Tilghman claims to consider himself among the luckiest persons alive.

"A few years back I used to envy, in a half-baked way, some of my friends who piloted 747's," he recalls. "Then I realized that if I had been a jet pilot, I would have been forced into retirement four years ago. But look at me. I am still sailing and loving every minute of it."

But there is a certain note of sadness when, a few hours later, Capt. Tilghman is giving a visitor a bag of oranges grown in his Fallbrook grove and the old captain is looking at his ship taking one of the last loads of product at the Union Oil loading dock.

"How do you feel about seeing the *Santa Paula* go?" someone asked.

The captain looks at the ship with a faraway look in his eyes, as if remembering a thousand and one adventures on the high seas and begins quoting Robert W. Service's *The Ballad of Dan McGrew*:

*"Then all of a sudden the music changed
so low that you scarce could hear, and you felt
your life had been looted clean of all
that you once held dear. That someone
had stolen the woman you loved,
that her love was a devil's lie. That your guts
were gone and it's best for you to crawl
away and die. 'Twas
the crowning cry of a life's despair, but it thrilled you
through and through. 'I guess
we'll make it a spread misery,' said dangerous
Dan McGrew."*

76



Capt. Tilghman poses at the helm of the Santa Paula, a helm he plans to take with him to his farm in Fallbrook after retiring.



It took more than 500-man hours for decorators to complete Union's float.

Union's 53 years of roses

"FRIENDS AND NEIGHBORS" is the theme that inspired all of the moveable blooming displays of the 93rd Pasadena Tournament of Roses Parade, and to the 170 teenagers decorating Union Oil's float the theme was a well-suited sentiment. Their chore was indeed a generous act of friendship.

The money earned by the youth group from the St. John Fisher parish in Rancho Palos Verdes, Ca., for their more than 500 man-hours of sometimes tedious labor in decorating Union Oil's award-winning float was donated to the La Gloria Orphanage, 20 miles south of Tijuana, Mexico.

The final six days the youths spent decorating the float for the pageant, however, was only the culmination of nearly a year's work for Fiesta Floats, a firm specializing in building the lovely creations.

The process begins in January—soon after one Tournament of Roses has ended—as float designer Raul Rodriguez begins envisioning various graphic interpretations for the next year's parade theme. Color renderings of tentative designs are submitted to Union Oil where, a design is approved thus continuing a Union tradition of parade participation that began in 1929.

For this year's parade, Rodriguez, recognizing the good relationship between Mexico and Union Oil as an appropriate basis for the company's entry, created an international interpretation of the theme.

The result was a striking Mexican design headed by a huge model of the Aztec feathered serpent god, Quetzalcoatl, and trailed by an ornate pyramid design. The float was entitled "Land of the Ancient Gods."

"The Union Oil floats have had some unique designs from year to year and this one is no exception," says Don Anderson, who was a mental health administrator in Massachusetts and took over the float making business upon his father's death. "The thing that is the most difficult to execute on a float is a gigantic human figure. If it's done well, it can be very dramatic; otherwise it looks like a cartoon. What's most striking about Union's float is the boldness of the design brought out by its angularity and geometric nature. The Mexican design is also very versatile because it lends itself so well to color."

Using the approved color rendering as a guide, crews begin the nuts and bolts of basic construction during the spring and early summer.

Most floats take from six to ten weeks for basic construction, with crews working on two or three floats at a time. Welded I-beam steel is used to form frames around



The teenagers carefully prepare flowers for gluing.



One by one the delicate flowers are brushed with glue and painstakingly placed.

truck chassis refurbished for use year after year. On top of the frames, welders attach heavy angle iron and steel pipe to make a sturdy support for the tons of material the float will have to carry for the five and one-half mile parade.

At the same time, another crew of welders, who by design are also artists, sculpt the figures that ride on the frames—anything from the enormous Quetzalcoatl whose trailing feather headdress is constructed from yards and yards of bent and welded steel rods, to the smallest of details, such as the hundreds of circles, squares and squiggles that make the intricate mosaic pattern on the pyramid.

The figures are then covered with chicken wire or

screen, then with cloth and, finally, with plastic webbing onto which flowers are glued. The deck and the other large surfaces of the float also are covered with chicken wire and cloth and sprayed with a two- to four-inch layer of polyurethane foam, making a styrofoam-like surface into which thousands of tiny water-filled plastic vials containing flowers can be speared.

While construction is proceeding Jim Hynd, floral director for Fiesta Floats, scrutinizes each float inch by inch, working closely with Rodriguez to decide the type and amount of flowers needed to reproduce the specific colors and textures in the design. Hynd then orders the millions of flowers, thus allowing ample time for growers to cultivate some of the more special and unusual types





Spotlights show off the floats as judges scrutinize them the day before the parade.



of blossoms.

Up to this point, all the work has been done by 15 permanent employees of Fiesta Floats. For the final stage of construction, where the float is painted in as much detail as possible in order to guide actual flower decoration, extra employees are needed. Last October the group of teenagers from St. John Fisher began to help in this final phase.

Union's larger-than-life float, 50 feet long, 16 feet high and 18 feet wide, was decorated with more than 80 varieties of fresh flowers and dried materials, including pounds of ground English walnut shells to produce the life-like flesh tones of the huge Aztec figure.

Anderson directs his year-round efforts toward preparing for that final week when the floats are decorated. All of the flowers must be placed during the critical period between December 26 and 31 to prevent the delicate blossoms from withering. Anderson sometimes considers as many as 75 organizations for that job, but only 20 groups are selected to spend the grueling 16-hour decorating shifts underneath one canvas circus tent where

the floats are built.

The youth group from St. John Fisher parish enthusiastically accepted the demanding work of decorating the Union Oil float in order to raise funds for the orphanage which they made their personal charity in 1979. While the money they earn decorating will help to keep the orphans clothed, fed and sheltered, their gifts are not always only monetary. The teenagers regularly visit the children with whom they share no common language except that of touching and hugging.

The St. John Fisher teens' first two or three days of work are devoted to pinning evergreens and ferns to the decks of the floats and gluing dry material such as the onion seed used for detailing the feathers of the Aztec headdress and the hundreds of beans carefully placed one at a time to make the center vein of each feather—a grueling task which took hours to complete.

Others from the group fill vials with water to keep the perishable flowers, like delicate orchids on the base of the float, beautiful and fresh looking.

During the latter part of decorating week, other flow-



"Land of the Ancient Gods" was awarded the Mayor's trophy for the best display of creativity.

ers, such as thousands of bright yellow pompoms used throughout the float, are removed from their stems and glued in place. The petals are removed from larger flowers and glued, petal by petal, onto the surface of the float. The brilliant reds on Union's entry came from the petals of hundreds of poinsettias.

In the early morning the day before the parade Union's float-decorating team put away their scissors and glue just in time for the formal judging.

With the costumed riders in place, including Rodriguez who posed as Cortez, the Spanish conqueror of the Aztecs, the teenagers anxiously watched as special lighting and music were used to highlight "Land of the Ancient Gods" to the three Tournament of Roses judges.

The judges, who already have viewed the floats on an informal basis during the last two days of decoration, give awards to commercial and non-commercial entries and laud such characteristics as "most beautiful," "funniest," "best display of originality," "best use of roses," "best craftsmanship," etc.

The floats are then towed to the parade formation

site in Pasadena late on New Year's eve when the judges conduct another informal inspection. There they remain until the early morning pageant when satellites will flash their image to a television audience of millions throughout the world.

Heavy rain threatened this year's parade as thousands of spectators camped out for days to keep a good viewing position along the parade route. The sky continued pouring until the last minute when, as if on schedule, the rain ceased just before the parade was to begin.

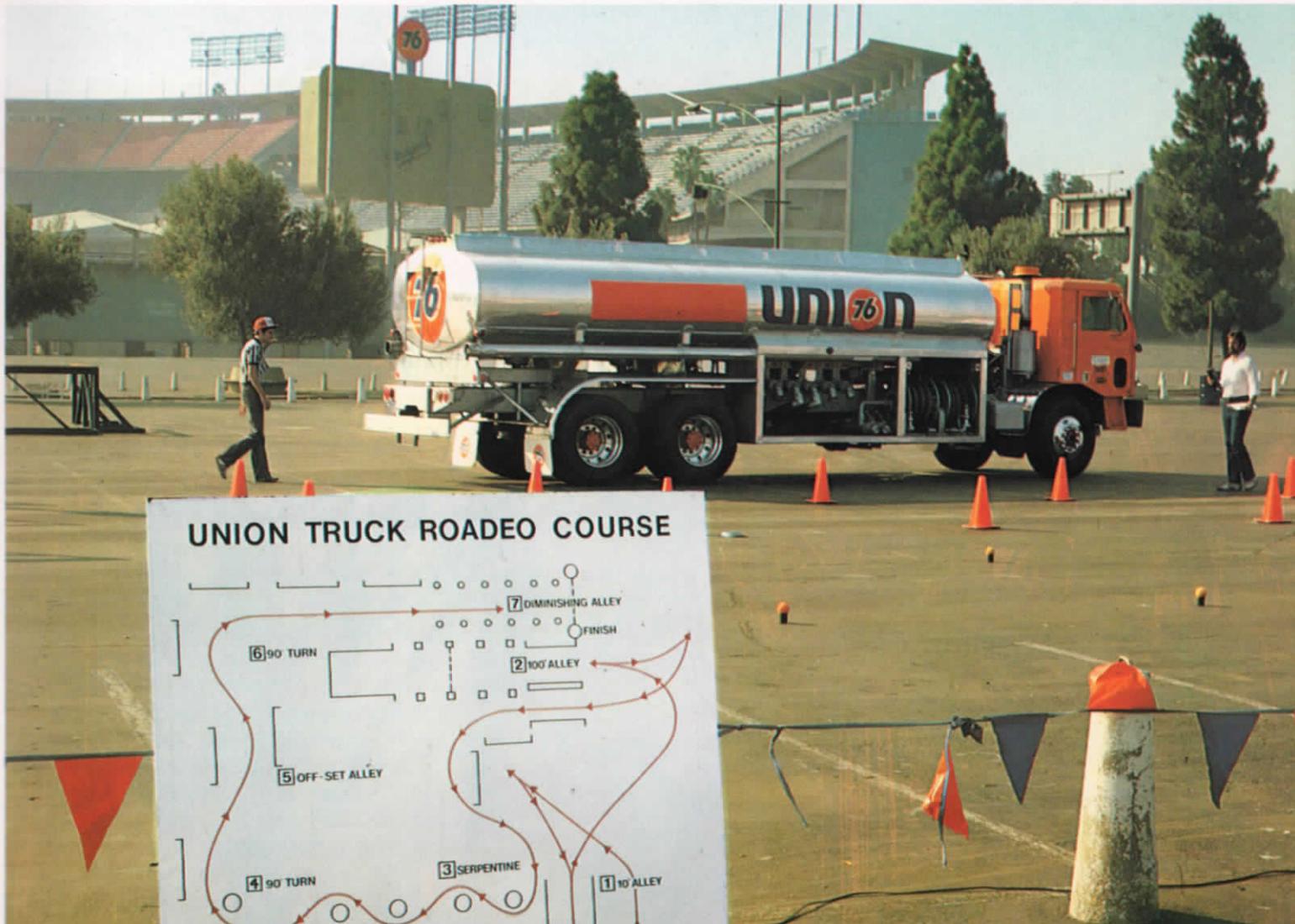
Undaunted by the threatening weather, a crowd of over a million gathered to hear the spirited marching bands and to view the 61 fabulous creations, among them Union's float which was preceded by a banner proclaiming it winner of the Mayor's trophy for the best display of originality.

It's a pleasant beginning for the new year for Union Oil but the biggest winners of all are the children at La Gloria Orphanage, for they have captured the love and support of those a bit more fortunate from St. John Fisher parish.



Judges watch closely as drivers inch the big trucks through the tough obstacle course.

On the Road(eo) again



An empty parking lot at Dodger Stadium provides a perfect location for holding the fourth Union Truck Rodeo.

FOR TRUCKERS AND their families the Union Oil Western Region Truck Rodeo finals held each December are a festive occasion. Even the children get into the competitive spirit with a scaled down version of a *roadeo*, guiding remote-control toy trucks over a winding path. But underlying the fun and excitement tied into this competition is the far more serious objective of improving safety awareness.

For those who put in a 40-hour

week on the road behind the wheel of the stout trucks, safety is the foremost consideration. In the four years that Union has held the rodeo, the number of trucking accidents involving Union's drivers has dropped 65 percent, says Frank Simons, supervisor of marketing fire and safety.

The 28 competitors in this year's *roadeo* held in Los Angeles are all top-notch drivers who must have maintained accident-free records for the year prior to the event. All driv-

ers have won first place honors from *roadeos* held by the Los Angeles, Mid-California, Continental, Northern California and Northwest divisions and—for the first year—the Alaska and Hawaii districts, thus making them eligible to compete in the Western Region finals.

Before the drivers can even climb into the cabs they must conduct a pre-inspection, "and this often is the deciding factor in the contest," says Simons.

"It's the Department of Transpor-



Kevin Zimarik competes in the pint-sized version of the Truck Rodeo.

tation and Union Oil's policy that drivers make a pre-inspection of their vehicles part of their daily work routine. This has been made an integral detail of the contest," Simons explains. "The trucks have been purposely altered with defects. For example, a flat inside tire, a horn that doesn't operate or a light that's out. It's up to the driver to spot

these things," says Simons.

The vast parking lot of Dodger Stadium was the site of the obstacle course which proved to be challenging even to these expert drivers.

It takes an average of 12 minutes for each contestant to guide a shiny rig through the course that starts out with a 10-foot alley into which the trucks must back and stop

within six inches of the back barrier. The drivers are penalized for each inch over the limit or for even brushing the barrier.

The course then proceeds into a 100-foot alley where again, drivers must stop within six inches of a barrier. The trucks maneuver through a serpentine course, into a 90 degree turn and then squeeze through an off-set alley.

The final test is to pull through an alley without knocking down tennis balls resting on posts an inch or two above the ground. At the start of the alley the trucks have a three-inch clearance on either side and at the end that meager space has been shaved down to a mere inch and one-half clearance on each side.

"The course would be challenging to trucks of any size, so it's really impressive to see how accurately these drivers can maneuver these big trucks through it. It's a test of precision driving," says Simons, who was instrumental in starting Union's *rodeo*.

In 1977, some of Union's truck drivers showed interest in participating in the California Trucking Association (CTA) Rodeo. "That would have excluded all of Union's drivers outside of California," explains Simons, who as a result organized the first Union Oil Western Region Truck Rodeo in 1978 in which 17 drivers vied for trophies.

The course is set up and judged by Documented Vehicle/Driver Systems Inc. (DVD), a company that develops safety maintenance programs—which include truck rodeos—for trucking companies throughout the United States.

"Our approach is positive. We base our program on driver motivation. The *rodeo* ties right in to that," explains Bob Roode, executive vice president of DVD. "These drivers work hard all year long to keep a clean driving record and they look forward to competing in the *rodeo*. It also shows the drivers how much the company stresses safety and that a safe record is appreciated," he adds.

The *rodeo* course is set up in



The rigorous obstacle course leads drivers through passages with only inches of leeway on either side of their rigs.

accordance with CTA and American Trucking Association *roadeo* guidelines but it is modified specifically to fit Union's needs. Roode and six judges from DVD watch as the drivers put all their highway expertise in practice while maneuvering through the obstacles. The judges note not only the obvious violations such as trucks brushing the barriers, but such minute details as a driver sticking his head out the window or turning the wheels without moving the truck.

"There are a lot of things that have to be watched on a constant basis and we make sure everyone is scored equally," Roode says.

Five kinds of trucks, representative of those in Union Oil's transportation fleet, are used in the competition. All use the same course, modified to the different vehicle sizes and all are judged by the same standards.

Lee Horton, from Los Angeles Terminal, participating in the *roadeo* for the fourth straight year, took first place in the package truck category. Phil Barnes, from the Continental Division at Tucson, took second place in that same class.

Don Knabe, from the Mid-California Division in Colton, won first place honors driving a tank wagon, commonly used for local gasoline deliveries. Knabe, a three year veteran of piloting Union Oil rigs held the highest score in the contest, netting him the first place best all-around driver of the year award. Second in the tank wagon competition was Dennis Caston of Anchorage, the first driver from the Alaska District to compete in the *roadeo*. Heber Broderick of the Continental Division from Tucson, took third place.

Competition was held for two sizes of vans used to transport acces-

sories and lubricating oils. In the 27-foot van class, Wes Heinrich, of the Northern California Division at Richmond, won first place. Dave Allen of the Northwest Division from Portland came in second place.

Tim O'Brien from the Los Angeles Terminal won first place in the 45-foot van class and also the second place all-around driver of the year award. The youngest driver at the *roadeo*, 22-year old Mike Neagle from San Diego's Continental Division, won second place in the 45-foot van class.

"The truck-trailers, used to deliver gasoline, always provide for exciting competition," says Simons. First place in that class was taken by Bill Baldwin of the Northwest Division in Portland. Second was won by Tony Schlipp of the Continental Division in San Diego and third by Fred Casey from the Los Angeles Terminal.



Bill Conklin attributes the success of Kansas City-East to the hospitality shown by employees.

A ROLLS ROYCE OF TRUCKSTOPS

IF TRUCK DRIVERS CONSIDER Union Oil Truckstops to be the Cadillacs of truckstops, as Bill Conklin, operator of Kansas City-East Union 76 Auto/Truckstop says they do, then they must consider Conklin's establishment the Rolls Royce of truckstops. Long-haul drivers have voted Kansas City-East in Oak Grove, Missouri, their Number One Favorite Truckstop in America for the second year in a row and have ranked it among the top 10 since the contest was started four years ago.

Nearly 30,000 votes were cast by drivers for the contest run by the Union Oil-sponsored trucker quarterly magazine, *Road King*. Drivers singled out Kansas City-East as their favorite with such comments as "it's super-clean, the staff is courteous and

prices are reasonable," "fast, friendly service, prompt attention, caring people," "best service in the west," and "clean, nice people to deal with, well supplied."

Explains Conklin: "It's an honor to us because being number one with Union means being number one in the country, but what really makes it important is that our customers placed us there."

Half of the votes cast favoring Kansas City-East were in praise of the good service, and a quarter of the votes commended the good food. Friendly employees and cleanliness also ranked high with the drivers.

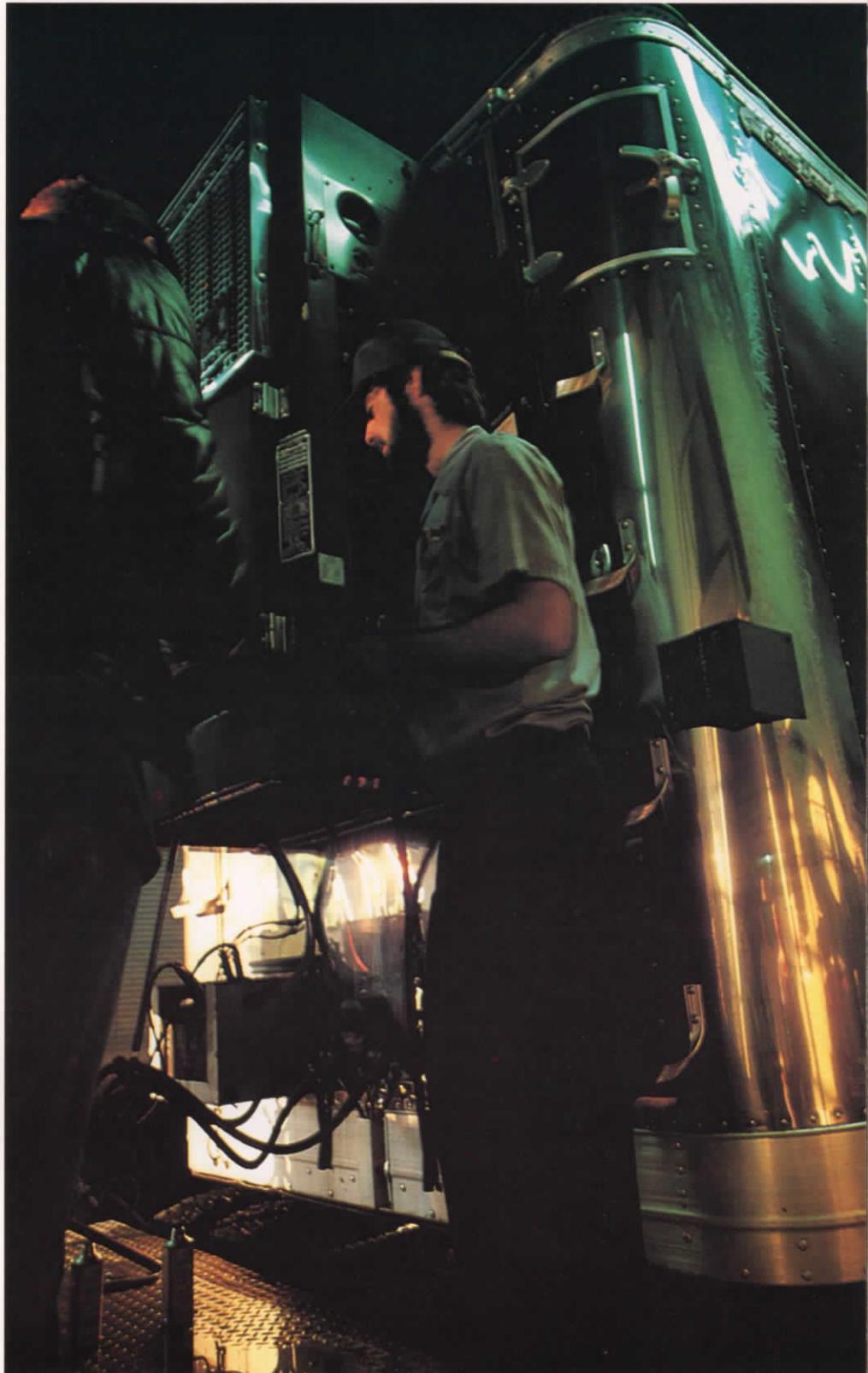
Conklin attributes the success of the full-service truckstop to the employees, noting that there is only a marginal difference between the 140 Union truckstops and the service they offer. "The difference has to be in the people," he says, emphasizing hospitality as one of the biggest needs of his special clientele.

"Drivers may have been on the road for 300 miles since their last stop. In the winter they fight the ice and snow, in the summer it's the heavy tourist traffic. They need a cheerful face and someone to joke with," says Conklin.

With a friendly smile in the midst of a hospitable atmosphere the trucker, as well as the everyday traveler, is offered a multitude of services at this family operated facility.

A driver's first concern when pulling into a Union Truckstop is to fuel his rig. At Kansas City-East the trucker is likely to be greeted by Joe Scalf, first place winner of the top fueler contest.

"Joe is probably one of the most aggressive and self-motivated individuals we have," says Conklin's son, Brian, who serves as general manager of the truckstop. "The fueler is the person who usually makes the first contact with the driver. Joe gives



Mechanic Joe McGee works with a driver to get a rig rolling smoothly again.



Restaurant manager Dick Whaley keeps the buffet and salad bar full of fresh and hearty food to fill hungry drivers.

Joe Scalf begins his fueling routine by placing an order.



him confidence that the truck will be handled properly and everything goes smoothly from that point on. This is important because he's taking care of a \$65,000 piece of transportation equipment."

Scalf, a high school student, is a shift supervisor and trains other fuelers in Kansas City-East's special fueling routine. All fuelers are formally trained, tested and certified there. Along with taking fuel and oil orders he washes all of the glass, including headlights and reflectors and also conducts a safety inspection, carefully checking for such things as low tires, loose lug nuts, mud flaps and even leaky air lines.

Drivers are given certificates assuring them that their trucks have passed this safety inspection. "If the driver reaches any state or federal inspection scales and he's fined for something he might hold us responsible," says the younger Conklin, "so we make it a point to be careful in our inspections."

Larry Watson manages the truckstop garage where mechanics are also certified in their various specializations.

A hearty meal and a good cup of coffee always rates well with a trucker and that's exactly what the Kansas City-East restaurant offers. Dick Whaley, restaurant manager, makes sure the all-you-can-eat buffet table and salad bar are brimming with tasty food and the sumptuous aroma of freshly baked pastries and breads emanates from his busy kitchen.

The truckstop serves as a home away from home to the person who spends extended periods of time on the highways, so the travel store—run by Conklin's wife Beverly—carries a wide variety of merchandise to meet just about any need, from toiletries and clothing to a special gift for a loved one at the end of the road.

At the end of a long day in the

cab of an 18 wheeler the Kansas City-East truckstop provides a cozy television room where drivers can relax, kick up their feet and watch a favorite show on the six-foot projection screen. There are even 15 pinball machines in the game room.

A tired driver may also get a restful night of shut-eye in one of the 12 comfortable hotel rooms and freshen up in one of the sparkling clean private showers.

All of these things and more comprise an award-winning truckstop. For instance, these establishments must be open 24 hours a day, every day of the year. "I don't know if we could find the keys to lock this place up, even if we wanted," says Conklin.

Kansas City-East was one of the first truckstops in the nation to install ladies' shower facilities. The Conklins also have installed computers which provide itemized billings for their customers and keep constant track of inventory.

But operator Conklin still insists that it all boils down to one thing: attitude. "That means developing an empathy for the trucker and really caring. We are very careful to select employees who feel that way," he says.

Running his own business has been a lifelong goal for Conklin who began leasing the truckstop in 1971 after leaving his position as advertising manager at Union Oil's Eastern Region in Schaumburg, Ill.

"I had been involved in the promotion and development of truckstops for a number of years. I really believed all the things I had been promoting. I put everything I owned on the line but this is really what I've wanted to do all of my life," he explains. "Now I know how much a commitment it takes to live up to all of the things we promise our customers but it also proves that what we promised is what the customers want."



Friendly and helpful cashiers drew many votes for Kansas City-East.

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A helping hand a



across the seas

This article and accompanying photographs were submitted to SEVENTY SIX Magazine by Tricia Melosh, wife of geologist Glenn E. Melosh, who works for Philippine Geothermal, Inc., a Union Oil Company Geothermal Division subsidiary.

WALK DOWN A PATH into one of the poorer sections of Manila. The day is bright and hot, as usual, and no breeze cools the narrow alleys that exemplify the Orient-like pages of a Joseph Conrad novel. Corrugated tin and wood-planked houses squat close together, leaning on each other for support and bearing on their fragile roofs the entire weight of both the terrible monsoons and the steam-bath heat of Southeast Asia. Some are built on stilts that raise the houses over ponds and frail footbridge keeps pedestrians from sinking into the swamp water.

The vibrant masses of people that are so typical of the Orient are everywhere as children peek and smile from windows.

Walking among the community one can see men combing the feathers of sleek fighting cocks while young mothers fill water buckets from a faucet in the area. A group of women gather by the laundry area, but they all stop and smile at the foreigners passing by.

Then there are the ubiquitous children—happy children, innocent children, and very thin children. They dart about, laughing and looking up wide-eyed; but some stand back, gazing listlessly from within their crowded squatter homes. Others are bold enough to hold out hands and ask the common phrase, "Where are you going?"

"To the nutrition center," is the reply.

"We go with you," they say.

More children are found inside the community center, a simple one-room structure that houses a kitchen and a dining area with



Smiles and well-being are common place at the Union Oil nutrition center in Manila.



Rosita Mercado, supervisor of the nutrition center, (right) prepares a careful meal using local foods that make up a good diet.

three long tables where enough food to feed 50 children is served daily.

This is a nutrition center in the outskirts of Manila where parents work together in order to learn, with a little assistance, a better life for their children. The sponsor of the center is the Union Oil Company Geothermal Division's subsidiary, Philippine Geothermal, Inc.

Some of the childrens' mothers are busy and they only pause briefly in their work to greet newcomers. Brightly colored posters depicting the basic essentials of nutrition and health adorn the walls.

By the stove, stirring the soup and overseeing the day's meal production, is the nutritionist, Rosita Mercado, who supervises the center. She

has planned a careful diet of meals using local foods to make up a complete nutrition. Her spark, sustenance and knowledge have helped bring the neighborhood together at the nutrition center. Right now she is supervising volunteers bent over chopping boards, slicing, dicing and preparing the next meal.

The main function of the center

is to feed underweight children and provide them with an improved pre-school nutritionally balanced diet that will give them the energy and vitality to go forward in the world. The mothers of children at the center are also taught the elements and benefits of a complete diet and the rudiments of nutrition that will promote good health.

Children are fed twice a day, Monday through Friday, and the diet consists of a protein-rich blend of soya, corn, rice, milk and, occasionally, meat. Multivitamins augment the nutritional value of the native fruits and vegetables.

The diet contrasts with the typical Filipino diet of predominantly white rice and bits of dried fish that seems astonishingly barren.

The children selected to enter the program are six years old or younger. Periodic measurements record the rapid upswing in weight gain brought about by the improved diet.

The children's average weight has increased significantly and more subtle improvements, such as disease resistance and increased stamina, can be noted among most of the center's children.

Now it seems long ago that the neighborhood children—most of them skinny and haggard—were first lined up behind the weighing scale one year ago.

Every Saturday, Mercado lectures the mothers on subjects such as meal planning, sanitation improvements and birth control.

The goal of these classes is to impart that extra bit of knowledge that will help the mothers prepare better meals while maintaining improved living conditions at home.



The main function of the Union-sponsored center is to feed underweight children.



Twice each day, children partake of the meals served at the Filipino care center.



The progress of children who have graduated from the center will depend on what their mothers learn and practice after leaving.

Nutrition, however, is not the sole concern of the center. An immunization program against tuberculosis and polio—two endemic diseases of the Philippines—has been launched. Volunteer doctors visit the center on selected days to examine the children. If necessary, they refer them to a Philippine government-sponsored clinic which offers low-cost pediatric care.

The center even has a vegetable garden, a recent addition, which was dug by the children's fathers and will eventually produce the center's vegetables. Other self-help projects teach the mothers sewing and manicuring trades.

An uncommonly strong community spirit exists in this poor section of Manila. Parents work together knowing that they, with a little assistance, can offer a better start for their children.

The support and action of Chet Budd and Ron Veaudry, two Union Oil engineers, helped launch the program at the beginning of 1981. Tricia Melosh, wife of a Union Oil geologist, initiated and supervises the center's activities and finances. Other wives and members of the Philippine Geothermal staff volunteer in various capacities.

Working together to give poor Manila families the opportunity to improve their lives, the Union Oil personnel and the Filipinos have aided their self-motivation. By offering a head start for the children, this neighborhood knows that people care.



The Energy of Dancers—Cuzco, Peru

Sergio Ortiz

Second annual photography contest

ENERGY and its thousand and one uses

YOU CAN'T GET THERE FROM HERE.

The old adage never seemed more true if one considers that energy—be it the kick motion of a leg, the spinning wheel of a vehicle on the go, the propeller of an airplane, the full bloom of a main sheet running with the wind—is used in every instance of motion or movement.

Energy and its uses is the theme of SEVENTY SIX Magazine's second annual photography contest in which the budding Henri Cartier-Bressons and the would-be W. Eugene Smiths that live deep inside every one of us who has marveled at the wonders of photography are urged to enter.

Last year, when we first held a photo contest, we were overwhelmed at the number of entries which depicted the theme of Energy Efficiency.

This year we will select from the entries the best efforts that depict the uses of energy—any type of energy.

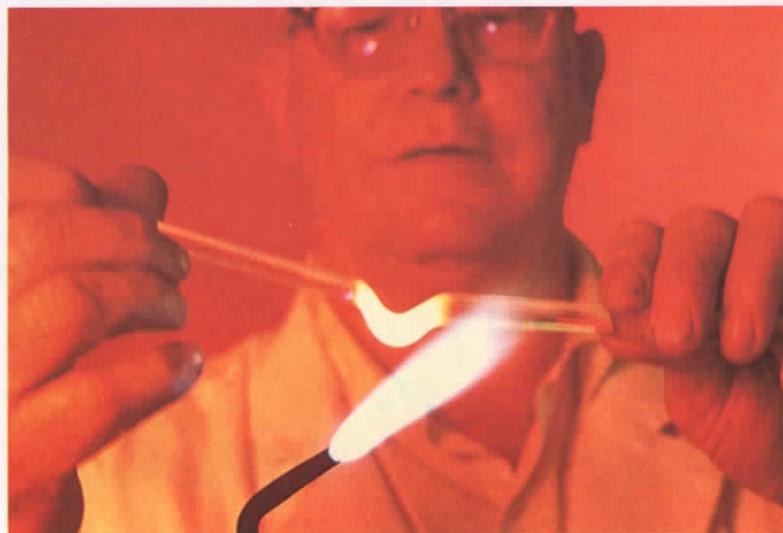
Employees, retirees of Union Oil (its subsidiaries and divisions), their spouses and children are all eligible to win the grand prize of \$400. There will be two categories and a total of seven prizes, but a participant can win only one prize per category.

The seven highest award-winning photographs will be announced and published in the May/June issue of SEVENTY SIX.



Oar Power—Hong Kong

Sergio Ortiz



HOW TO ENTER:

Number of entries. There will be two categories—color and black-and-white. You may submit up to three entries in each category. For example, one color transparency and two color prints add up to three color entries—the total allowed for the category.

Mounting and labeling.

Full 8 x 10 prints can be submitted unmounted, 5 x 7 prints must be attached to 8 x 10 single-weight mounting boards. No framed prints will be accepted. For your protection, slides should be mailed in the boxes that come with developed film, glassine envelopes or plastic mounts. Fill out the entry form then tape it to the back of each print. Do not write on the back of prints. Write your name and title of the entry on each slide mount. Each entry must be accompanied by a completed entry form or a facsimile of the form.

Mailing. Mail entries in Manila clasp envelopes, including your return address and entry forms. Include any cardboard necessary to protect photographs.

Liability. All entries are to be submitted with the understanding that neither Union Oil Company nor any of its employees will be responsible or liable for loss or damage. Entries may be held beyond the

publication date of the contest, but we will attempt to return all entries.

Right to publish. Union Oil retains the right to publish or republish any photograph submitted in the contest. Entrants waive any claims for royalty payments or copyright infringement.

Model release. Contestants must be able to furnish a written "consent to use" statement upon request for recognizable people appearing in the photographs.

Judging. Three professional photographers from outside the company will judge the contest. Their decisions will be final.

Deadline. All entries must be mailed by March 1, 1982.

Awards.

Grand Prize \$400

Color

1st place \$200

2nd place \$100

3rd place \$ 50

Black-and-White

1st place \$200

2nd place \$100

3rd place \$ 50

Entry Form

Send to: Editor, M-17
Union Oil Center
Los Angeles, CA 90051

Name: _____

Job Title/relationship to employee: _____

Division/Subsidiary: _____

Office Location: _____

Home Address: _____ Zip code: _____

Phone: _____ (Network) _____

Title of Entry: _____ Print Slide

I have read and agree to the official rules of the contest.

Signed: _____ Date: _____

If under 18, signature of parent or guardian: _____

Deadline: _____

Service Emblem Awards

CORPORATE

JANUARY 1982

30 Years

CLARENCE L. MORRILL Union Oil Center

15 Years

MARY COOK Union Oil Center
LOUIS F. JELINEK Union Oil Center
BILL A. OWENS Union Oil Center

10 Years

HENRY JAMES BAYLISS Union Oil Center
ANTHONY G. MELAS Union Oil Center

5 Years

JAMES M. KEATING Union Oil Center
GEORGE W. MELLINGER San Francisco, Ca.

FEBRUARY 1982

40 Years

HENRY C. MEINERS Union Oil Center

35 Years

HARRY A. MILLER Union Oil Center

30 Years

CARLETON B. SCOTT Union Oil Center

25 Years

VAUGHN G. DEAL Schaumburg, Il.
JOY P. McNICHOLS Union Oil Center

15 Years

JACK CARRINGTON Union Oil Center

10 Years

NORMA G. LITTON Union Oil Center
MATTHEW D. NORCIA Union Oil Center
CAROL B. OWENS Union Oil Center
KENDALL B. SMITH Union Oil Center

5 Years

FRANK BELLO Union Oil Center
LIBERTY L. GARCIA Union Oil Center
GLORIA M. GONZALEZ Union Oil Center
M. KIM KAATZ Schaumburg, Il.

UNION REAL ESTATE DIVISION

FEBRUARY 1982

15 Years

RANDALL B. GIBSON Union Oil Center

UNION SCIENCE AND TECHNOLOGY DIVISION

JANUARY 1982

30 Years

RAYMOND L. FOGG Brea, Ca.

25 Years

GLENN E. IRISH Brea, Ca.
H. DONALD OUTMANS Brea, Ca.

20 Years

DONALD M. FENTON Brea, Ca.

15 Years

JAMES A. AUSTIN Brea, Ca.
MILTON J. GORHAM Brea, Ca.

10 Years

RONALD J. LUKASIEWICZ Brea, Ca.

5 Years

JAMES A. GREEN Brea, Ca.
RICHARD E. GUTMAN Brea, Ca.
JEFFREY W. KOEPKE Brea, Ca.

FEBRUARY 1982

40 Years

GEORGE P. FOX Brea, Ca.

30 Years

EDWIN WALKER, Jr. Brea, Ca.

25 Years

GEORGE D. CHEADLE Brea, Ca.
BERNARD KOUZEL Brea, Ca.

10 Years

JAMES A. BAUR Brea, Ca.
CARL J. CRON Brea, Ca.
JoANN ODESKI Brea, Ca.

5 Years

BRYCE M. BAHNER Brea, Ca.
STEVEN R. ROSS Brea, Ca.
JOHN A. TARASCIO Brea, Ca.

UNION 76 DIVISION

JANUARY 1982

40 Years

ROBERT G. McLANE Los Angeles, Ca.
FRANK VAN ACKER Los Angeles, Ca.
PAUL R. SYBRANT Phoenix, Az.

35 Years

ALBERT R. ALLEN Los Angeles Refinery
NICHOLAS B. BELLISSIMO Miami, Fl.
JAMES E. CULPEPPER Schaumburg, Il.
JOSEPH L. FOOS Columbus, Oh.
CLIFFORD C. GRACEY, Jr. Miami, Fl.
ARTHUR J. HOLMES Beaumont Refinery
MARTIN MITRIUS Des Plaines, Il.
RICHARD D. PETERSON Coos Bay Terminal
JOHN E. SIROTIK Minneapolis, Mn.
ILEE G. SPENCER Chicago Refinery
MALCOLM E. WIMPRESS San Francisco Refinery
LEONARD J. WOJTECKI Schaumburg, Il.

30 Years

HULAN F. BUTLER Los Angeles Refinery
ROBERT M. CARLSON Chicago Refinery
EDWARD S. DASTYCH Chicago Refinery
JESSI J. FISHER Spartanburg, S.C.
DOUGLAS C. HAYS Los Angeles, Ca.
PATRICK B. KELLY, Jr. Greensboro, N.C.
VANCE R. KESLER Richmond, Va.
JOHN C. MATEJCAK Chicago Refinery
MELVIN B. MILLER San Francisco Refinery
MERLE L. OSGOOD San Francisco Refinery
FRANK H. THOMAS Atlanta, Ga.
LIONEL E. K. THOMAS Los Angeles, Ca.

25 Years

L. A. ANDERSON San Francisco, Ca.
RONALD G. GRADY Cincinnati, Oh.
ELINOR J. HOFFMAN Tallmadge, Oh.
DARYL R. HOWARD Los Angeles, Ca.
JAMES F. LACEY Birmingham, Al.
ANN L. PITTARD Atlanta, Ga.
MARY A. SEERY Schaumburg, Il.
BARBARA J. SHEVCHIK Southfield, Mi.
RANOLD W. TOLLE Los Angeles Refinery

20 Years

C. J. ABRAMS, Jr. Chicago Refinery
ALLEN E. HARMON Jacksonville, Fl.
Y. MATSUYOSHI Honolulu Terminal
ROBERTA J. REDMOND Schaumburg, Il.
RICHARD M. SULLIVAN Fresno, Ca.
EINAR M. WESTLY Boise, Id.

15 Years

JOHNNY BORJA Pasadena, Ca.
RUTH K. DORE Beaumont Refinery
ROBERT W. FISHER Eugene, Or.
JOHN C. HORIGAN Los Angeles, Ca.
WILLIAM R. KINSEY Beaumont Refinery
ALBERT SCHIOPPI San Fernando, Ca.
JEAN C. WOJTYLA Schaumburg, Il.

10 Years

FRED C. ACUESTA Los Angeles Refinery
BEN D. BASHAM Chicago Refinery
PETER CANTU San Francisco Refinery
WALTER G. CLARK, III Memphis, Tn.
MARY S. CLUTE Schaumburg, Il.
HELN G. DAVIS Bakersfield, Ca.
PATRICK J. DAVIS Pure Transportation Co. Patoka, Il.
ROGER J. DEHORN Minneapolis, Mn.
PHILIP T. DRAKE San Diego, Ca.
WALTER GEDDIS Schaumburg, Il.
BILLY G. GOLD Pure Transportation Co. Houma, La.
OSCAR N. GOZAR San Francisco Refinery
JOHN N. JONES Brisbane, Ca.
RICHARD C. KREIN Seattle, Wa.
FRANK LOPEZ Los Angeles Refinery
BILLY J. LEACH Schaumburg, Il.
LAWRENCE L. McLAUGHLIN San Francisco Refinery
CAROL L. NEFF Schaumburg, Il.
EZEKIEL PATTEN Van Nuys, Ca.
DAVID B. POGROSZEWSKI Los Angeles Terminal
LARRY J. REMBOLDT Edmonds Terminal
PETE C. SERRANO San Francisco Refinery
JOHN L. SMITH San Francisco Refinery
MARTHA L. SVITAK Pasadena, Ca.
JAMES M. TYSON Oakland, Ca.
JEFFREY WONG San Francisco Refinery
W. DUANE WYRICK Van Nuys, Ca.

5 Years

MICHAEL P. FARNS South Holland, Il.
 FRANK E. FOREMAN Torrance, Ca.
 HELEN C. HOOVER Schaumburg, Il.
 ERICA C. JENSEN Richmond Terminal
 LILY U. KANESHIRO Honolulu Terminal
 DONALD E. LEHMAN Portland, Or.
 ROBERT P. McALLISTER Edmonds Terminal
 ROBERT W. McLAUGHLIN Pittsburgh, Pa.
 BARBARA C. PUCKETT San Francisco, Ca.
 GREGORY J. SCHAEFFER Los Angeles Terminal
 ANTON N. SCHILPP San Diego Terminal
 SANDRA K. STANLEY Schaumburg, Il.
 ALFONSO VALDEZ Los Angeles Refinery
 G. CAROLYN WHITMAN Los Angeles, Ca.
 MICHAEL A. WHITMORE Los Angeles Terminal

FEBRUARY 1982**35 Years**

FRANK W. BLAESING Chicago Refinery
 REECE G. DAVIS, Jr. Beaumont Refinery
 CHARLES L. DICKES Atlanta, Ga.
 LOYD K. HAMEL Torrance, Ca.
 THOMAS F. HOLT Greensboro, N.C.
 JACQUE W. McVEY Pensacola, Fl.
 FLOYD L. MITCHELL, Jr. Beaumont Refinery
 PAUL F. MITRIUS Schaumburg, Il.
 JOSEPH C. PERRY

Pure Transportation Co. Houma, La.
 JAMES B. PITCHER Beaumont Refinery
 RICHARD E. SORG Chicago Refinery
 HENRY R. WILKERSON, Jr. Beaumont Refinery
 WILLIAM E. YOUNG Beaumont Refinery

30 Years

GLEN R. BAKER Los Angeles, Ca.
 MARY S. BROWNFIELD Columbus, Oh.
 JACK E. COLER Los Angeles Refinery
 FRANCIS A. CURRAN Schaumburg, Il.
 RALPH E. GLEASON Chicago Refinery
 EVELYN L. MAURER Schaumburg, Il.
 DONALD J. METZGER Chicago Refinery
 WILLIAM H. NELSON Taft, Ca.
 WILLIAM D. RODEGHERO Chicago Refinery
 ERNEST L. WILLIAMS Los Angeles Refinery

25 Years

BEULAH E. DIVER
 Pure Transportation Co. Olney, Il.
 CURTIS C. GREGG Schaumburg, Il.
 GARY C. O'CONNELL North Hollywood, Ca.
 PETER RUIZ Los Angeles Refinery
 WILLARD C. STONE Columbus, Oh.

20 Years

JOHN B. CRAIG, Jr. Los Angeles Terminal
 JERRY N. DAVIS Birmingham, Al.
 LORRAINE L. FLENTGE Schaumburg, Il.
 CHRISTINE A. HODGE San Francisco, Ca.
 DOYLE L. MOSELEY
 Pure Transportation Co. Van, Tx.
 NICK SMERNES San Jose, Ca.

15 Years

ARRY L. DOBLER Colton Terminal
 WILLIAM R. EMERICK Richmond Terminal
 WANDA K. JURSZEWICZ Los Angeles Terminal
 EUGENE A. KOT Chicago Refinery
 BRIGITTE F. KUESTER Schaumburg, Il.
 LESLIE R. LANNOM Columbus, Oh.
 GEORGE J. MARKAN, Jr. Los Angeles Terminal
 JUDITH M. McINTOSH Chicago Refinery
 WILLIAM E. McKINNON San Francisco, Ca.
 HERBERT L. PEROZZI, Sr. Chicago Refinery
 KENNETH R. SAMUELSON Schaumburg, Il.
 WILFRED TAKABAYASHI Honolulu Terminal
 JULIET VOSKANIAN Los Angeles, Ca.
 WILLIAM D. WALKER Los Angeles Terminal

10 Years

BERNARD M. ARRINGTON Schaumburg, Il.
 BRITTA L. BAKER San Francisco, Ca.
 JOHN V. BERNICKAS Chicago Refinery
 J. C. BLACKMON Los Angeles Refinery
 MELVIN BLUE Los Angeles Refinery
 AVELINA G. CONDE San Francisco, Ca.
 JEAN CHISNELL Los Angeles Terminal
 BRAD W. HENKE Schaumburg, Il.
 ANNIÉ KHACHATOORIAN Los Angeles, Ca.
 TERRY J. LEOEUF
 Pure Transportation Co. Houma, La.

MARVIN W. NICHOLSON Coos Bay Terminal
 DALE P. PERRY Mercer Island, Wa.
 JAMES E. SHAW Chicago Refinery
 JAMES E. VEST, Jr. Houston, Tx.
 ROBERT E. WEBB Tampa, Fl.
 JOEL J. WITTE Los Angeles Terminal
 JOSEPH R. WROBEL Chicago Refinery

5 Years

JOHN R. BARRON Richmond Terminal
 THOMAS J. BERRIDGE San Francisco Refinery
 ROBERT L. CLARK Richmond Terminal
 DAVID E. HORNER Los Angeles Refinery
 THOMAS J. MILLER San Francisco Refinery
 BARBARA J. MISE San Francisco, Ca.
 DAVID F. PESSIN Los Angeles Refinery
 GLEN A. PERICOLI San Francisco Refinery
 JAMES R. PLUM Los Angeles Refinery
 ARLAN J. POTTER San Francisco Refinery
 JOHN D. PRENDERGAST South Holland, Il.
 JOSEPH A. SEQUEIRA Los Angeles Refinery
 MARTIN L. TABBS San Francisco Refinery
 RAYMOND WILKINS Los Angeles Terminal
 LARRY B. ZUMBRO Los Angeles Refinery

UNION OIL AND GAS DIVISION**JANUARY 1982****30 Years**

FRANCIS H. HOLLIER Van, Tx.
 BARBARA F. HUGGINS Midland, Tx.
 BUFORD E. PARRISH Midland, Tx.
 GEORGE B. PICHEL Union Oil Center
 WILLIAM C. RAYMER Houston, Tx.

25 Years

CHARLES L. BROUSSARD Lafayette, La.
 C. RICHARD HARD Oklahoma City, Ok.
 HAROLD A. LeBLANC Houma, La.
 EUGENE M. MYERS Lafayette, La.
 ROBERT F. WATSON Van, Tx.

20 Years

DANIEL J. DETRAZ Lafayette, La.

15 Years

DONALD M. ALLIS Orcutt, Ca.
 MARY D. ALTONEN Houma, La.
 ANTONE M. CABRAL Coalinga, Ca.
 FRED L. CARVALHO Coalinga, Ca.
 ANITA JO CONNELL Midland, Tx.
 GLENN L. HAGEMANN Santa Fe Springs, Ca.
 MARY D. PADRON Los Angeles, Ca.
 CHARLES G. PERRYMAN Ventura, Ca.
 OTTIS L. SINOR Orcutt, Ca.
 CLIFFORD M. TIPPINS Coalinga, Ca.

10 Years

RONALD DEAN HOOVER Bakersfield, Ca.
 BARBARA J. LYLE Union Oil Center
 F. HARRY TAYLOR Mobile, Al.

5 Years

LAUNA C. ARMSTRONG Van, Tx.
 HATTIE M. AUBREY Los Angeles, Ca.
 ANTHONY J. BRAJKOVICH Los Angeles, Ca.
 MICHAEL R. CORNYN Lafayette, La.
 THOMAS S. FRAZIER Lafayette, La.
 ERNEST A. HENDERSON Anchorage, Ak.
 LYNWOOD HILL Ventura, Ca.
 ROBERT L. JENKINS, Jr. Lafayette, La.
 JIMMY D. MASON Andrews, Tx.
 STEVE A. NEUMAN Clay City, Il.
 JAMES R. STRICKLER Houston, Tx.
 AMOS WAY Santa Fe Springs, Ca.

FEBRUARY 1982**35 Years**

HUNTER H. EWING Los Angeles, Ca.
 LESTER D. PROCTOR Ventura, Ca.
 JAY B. STANTON Coalinga, Ca.

30 Years

CARL N. BIDINGER Coalinga, Ca.
 ALINE M. BROUSSARD Lafayette, La.
 MARION R. HENSLEY, Jr. Houston, Tx.
 DOROTHY J. JACKSON Midland, Tx.
 PERCY J. LeBLANC Lafayette, La.
 KENNETH E. MARTIN Woodward, Ok.
 ALTON J. MENARD Lafayette, La.
 WILBUR G. RISHEL Worland, Wy.
 WARREN R. SHEPHERD Union Oil Center

25 Years

FRANCIS C. BREAUX Houma, La.
 WILLIAM T. ELLIOTT Houma, La.
 RAYMOND G. HALE Midland, Tx.
 WILLIAM H. JOHNSON Lafayette, La.
 JAMES W. MANN Midland, Tx.
 ROBERT MARQUEZ Houston, Tx.
 IRVIN E. SETTOON, Sr. Houma, La.
 DAVID K. SPRADLIN Lovington, N.M.

20 Years

JAMES R. Le MAIRE Houma, La.
 JAMES L. SMITH Andrews, Tx.

15 Years

BOBBY G. BRYAN Oklahoma City, Ok.
 ANITA K. BURLING Union Oil Center
 JOHN R. EISENBARTH Orcutt, Ca.
 GORDON L. FERGUSON Woodward, Ok.
 RALPH P. RICHOUX Lafayette, La.
 BOBBY L. SEARCY Midland, Tx.

10 Years

CALVIN JAMES AZARE Lafayette, La.
 JERRY L. HATTEN Anchorage, Ak.
 JOHN T. RUSSELL Lafayette, La.

5 Years

WALTER T. AAKRE Worland, Wy.
 ALBERT J. ALLEMAND Houma, La.
 JEFFERY S. ATTEBERY Ventura, Ca.
 RICHARD L. BETZ Olney, Il.
 RODNEY J. BOUDREAU Houma, La.
 BELINDA D. EDWARDS Anchorage, Ak.
 WALTER C. HOLLADA, Jr. Brea, Ca.
 JERRY L. KING Oklahoma City, Ok.
 CHRISTOPHER R. LANDECK Ganado, Tx.
 LEANDER J. LAVERGNE, Jr. Lafayette, La.
 BURL K. McKEEL Midland, Tx.
 MARTIN T. MORELL Mobile, Al.
 ALVIN P. RICHARD Lafayette, La.

UNION CHEMICALS DIVISION**JANUARY 1982****30 Years**

FRANK W. NADOLSKI Carteret, N.J.

15 Years

JOSEPH L. CALIBANI Dallas, Tx.
 DONALD W. HALL Providence, R.I.
 ARLINE F. HANSEN Clark, N.J.
 OTTO MAUTHE Union Oil Center
 HOWELL WILLIAMS Brea, Ca.

10 Years

PAUL F. BUCHIK Clark, N.J.
 DONALD DAY Kenai, Ak.
 JOHN JACKSON Kenai, Ak.
 KENNETH MAY Kenai, Ak.
 DOUGLAS OLSON Kenai, Ak.
 CLAUDE E. REEDER Summit, Il.
 HARRY W. SIBERT Carteret, N.J.
 GERARD G. SWAYZE Carteret, N.J.

5 Years

RICHARD BOYCE Kenai, Ak.
 EDWIN L. BURCHAM Kenai, Ak.
 LOWELL EBERT Brea, Ca.
 GARY POINDEXTER Kenai, Ak.
 LAROY SEVERSON Kenai, Ak.
 DAVID SIPLE Kenai, Ak.
 MONTE SMITH Kenai, Ak.
 RICHARD TAURIANIN Kenai, Ak.
 STEPHEN TOLLIVER Kenai, Ak.
 DANIEL WOOD Kenai, Ak.

FEBRUARY 1982**35 Years**

VIRGIL COMSIA Oakland, Ca.

30 Years

JULIAN H. MITCHELL Bridgeview, Il.
 DAVID J. PYPER La Mirada, Ca.

20 Years

JAMES GRAVES Kenai, Ak.
 RUSSELL REINKING Brea, Ca.



Service Emblem Awards

15 Years

CAROL E. GILLIAM Union Oil Center
 CALLIE A. BENTLEY Charlotte, N.C.
 PAUL D. LUNDBLAD La Mirada, Ca.
 DUANNE H. GROM Clark, N.J.
 LARRY R. PITTMAN Wilmington, N.C.
 KEN R. ROSE Charlotte, N.C.

10 Years

ROBERT G. BOUGHTON Rolling Meadows, Ill.
 ROSEMARY BURBRIDGE Clark, N.J.
 WILLIAM M. KENDALL Tampa, Fl.
 WILLIAM KENNEDY Kenai, Ak.
 FREDERICK E. SAEGER Clark, N.J.

5 Years

CHRISTOPHER ARCINIEGA Brea, Ca.
 TERRY L. BROWN Wichita, Ks.
 ERNEST CARRICK Brea, Ca.
 SEVERINA G. DIVINAGRACIA Newark, Ca.
 LAWRENCE LINDERMAN Kenai, Ak.
 JAMES M. MCGHEE Memphis, Tn.
 JOHN C. NORDER St. Clair Shores, Mi.
 STEVEN RECTOR Portland, Or.
 JOHN SILKS Brea, Ca.
 ANTHONY SOARES Arroyo Grande, Ca.
 EDWARD L. TREMBLEY Charlotte, N.C.
 ARTHUR VALENCIA Brea, Ca.

POCO GRAPHITE

FEBRUARY 1982

5 Years

JOE HILL Decatur, Tx.

UNION ENERGY MINING DIVISION

NOVEMBER 1981

15 Years

CORDELIA M. JULIAN Casper, Wy.

5 Years

CHRISTOPHER Z. HILL Rawlins, Wy.

JANUARY 1982

5 Years

JOHN A. ABRAMO Casper, Wy.
 RICHARD D. ANDREWS, Jr. Casper, Wy.
 LAWRENCE G. DYKERS Casper, Wy.
 PAUL E. MARTIN Casper, Wy.

FEBRUARY 1982

5 Years

KENT D. AVESON Grand Junction, Co.
 GARY W. PARKS Rawlins, Wv.

UNION GEOTHERMAL DIVISION

JANUARY 1982

10 Years

LARRY R. CADD Big Geysers, Ca.

5 Years

BENJAMIN J. BARKER Santa Rosa, Ca.
 JOSEPH P. BOWEN, Jr. Rio Rancho, N.M.
 VIVIENNE L. ROCHIOLI Santa Rosa, Ca.
 CARLISLE A. SAGON Big Geysers, Ca.
 LOUIS VAS Big Geysers, Ca.

FEBRUARY 1982

10 Years

C. FRANK CORBIN, Jr. Tokyo, Japan
 CLOIS H. DUNHAM Manila, Philippines
 LYLE E. SHAFFER Big Geysers, Ca.

5 Years

BARBARA L. STAGG Santa Rosa, Ca.

JOBBER AND DISTRIBUTORS

JANUARY 1982

55 Years

LEWISBURG SERVICE STATIONS INC. ... Lewisburg, W.V.

40 Years

JACK RUSSELL OIL CO. Clearwater, Fl.

35 Years

J. D. HINKLE & SON Columbus, Oh.

30 Years

RAY E. PASSWATERS Harrington, De.

25 Years

COUCH OIL CO. Durham, N.C.
 MINNESOTA LAKE CO-OP Minnesota Lake, Mn.

20 Years

C & K OIL CO. INC. Beckley, W.V.
 D & R DISTRIBUTORS INC. Grandville, W.V.
 FULCHER & MARTIN INC. Cape Charles, Va.
 NEB KING INC. Roxboro, N.C.
 RICHARDS OIL CO. INC. Louisburg, N.C.

15 Years

BILL BURNETT OIL CO. Cartersville, Ga.
 R. C. HART Riverdale, Ca.

10 Years

MICHEL'S OIL CO. Pennsboro, W.V.
 SOVEREIGN OIL & FERTILIZER CO. INC. Goshen, In.

5 Years

PINEVILLE DISTRIBUTING CO. INC. Pineville, W.V.
 SWATEK SALES CORP. Lake Geneva, Wi.

FEBRUARY 1982

50 Years

BLANCHESTER OIL CO. INC. Blanchester, Oh.
 HOME OIL CO. McMinnville, Tn.

45 Years

MINTER OIL CO. Danville, Va.

30 Years

NORRIS OIL CO. INC. New Philadelphia, Oh.

15 Years

CARLISLE OIL CO. Fulltondale, Al.
 M. L. GRAY Heppner, Or.

10 Years

HOLDEN OIL CO. INC. Henderson, N.C.
 JOHN E. GRAVELLY Osburn, Wa.
 PINE BELT OIL CO. INC. Hattiesburg, Ms.

5 Years

SUTTON OIL CO. INC. Pageland, S.C.

MOLYCORP

DECEMBER 1981

5 Years

L. A. PADILLA Louviers, Co.

JANUARY 1982

30 Years

ALICE SMITH Union Oil Center

15 Years

JOSEPH APODACA Questa, N.M.
 JOSE ARCHULETA Questa, N.M.
 ADONIAS MONTANO Questa, N.M.
 OCTAVIANO MONTOYA Questa, N.M.
 CORNELIO SANCHEZ Questa, N.M.

FEBRUARY 1982

30 Years

JOHN MILLER York, Pa.

20 Years

SHERMAN ELDER Washington, Pa.

15 Years

L. MILLER ARNOLD Louviers, Co.
 SIMON PERALTA Questa, N.M.

10 Years

PETER JOHNSON Denver, Co.

5 Years

CLOVIS G. GUTIERREZ Questa, N.M.

RETIREMENTS

NOVEMBER 1981

CAMERON C. BATES, Union 76 Division
 Long Beach, Ca. August 16, 1954
 WILLIAM R. CARTER, Corporate
 Cloverdale, Ca. August 1, 1967
 BILLY E. COLE, Union 76 Division
 San Pablo, Ca. September 21, 1945
 RALPH C. HURLBERT, Union 76 Division
 Great Falls, Mt. April 1, 1949
 EDWARD J. MATCHUS, Oil and Gas
 Midland, Tx. July 5, 1949
 ROBERT A. O'DELL, Union 76 Division
 Lake Panasoffkee, Fl. March 10, 1966
 MANUEL TAYLOR, Union 76 Division
 Macon, Ga. April 20, 1945
 BENJAMIN L. WHEELER, Union 76 Division
 Stone Mountain, Ga. January 22, 1935

DECEMBER 1981

MILDRED M. BAYNES, Union Chemicals Roselle, N.J.	November 1, 1970
ELMER H. BEATTY, Union 76 Division Brea, Ca.	July 10, 1941
JOSEPH G. BENDA, Union 76 Division Lemont, Il.	July 14, 1948
DELMAR D. BRADBURY, Union 76 Division Joliet, Il.	March 19, 1951
ANNA BUKSHPAN, Corporate Los Angeles, Ca.	February 8, 1955
HENRY W. DANERI, Union 76 Division El Cerrito, Ca.	March 12, 1941
BEULAH E. DIVER, Union 76 Division Olney, Il.	February 2, 1957
PATRICK D. DRISCOLL, Union 76 Division Lemont, Il.	August 27, 1951
VIVIAN N. HERMANN Schamburg, Il.	September 7, 1960
REYNOLD A. JACOBSON, Union 76 Division Lemont, Il.	March 26, 1951
VERNON W. KELLER, Union 76 Division Vallejo, Ca.	June 25, 1941
EMIL G. LOPAC, Union 76 Division Minneapolis, Mn.	August 19, 1947
FRANK L. PERKINS, Union 76 Division Fountain Valley, Ca.	November 13, 1945
PHILLIP A. PEW, Union 76 Division Anaheim, Ca.	January 26, 1946
GEORGE W. ROBERTSON, Corporate Chatsworth, Ca.	September 14, 1948
LEWEL E. ROBISON, Oil and Gas Midland, Tx.	September 17, 1958
PAUL R. SCHOOLING, Corporate Glendale, Ca.	August 7, 1968
FARRELL W. SHAVER, Union 76 Division Superior, Wi.	November 16, 1953
THOMAS W. SMITH, Corporate Santa Paula, Ca.	September 19, 1946
WALTER S. SMITH, Union 76 Division Savannah, Ga.	March 19, 1948
ALVIN H. STEIN, Union 76 Division Lemont, Il.	January 17, 1944
HERBERT A. WOODS, Union 76 Division Lockport, Il.	August 17, 1948
ETHEL R. ZIESMER, Union 76 Division Joliet, Il.	August 1, 1954

JANUARY 1982

WILFORD C. ALLEN, Union 76 Division Nederland, Tx.	March 29, 1948
PETER S. BACKLUND, Science and Technology Anaheim, Ca.	June 28, 1940
RAYMOND K. BAIRD, Union 76 Division Gordon Grove, Ca.	June 25, 1951
JOHN V. BELL, Union 76 Division Columbus, Oh.	December 4, 1946
FRANK W. BLAESING, Union 76 Division Joliet, Il.	February 27, 1947
WILSON CATES, Union 76 Division Groves, Tx.	July 14, 1952
LOUIS C. CHURCHILL, Union 76 Division Chiloquin, Or.	July 3, 1951
THOMAS H. CLARK, Union 76 Division Port Arthur, Tx.	January 12, 1949
CLARENCE H. CLINEFELTER, Union 76 Division Kountze, Tx.	February 18, 1949
BERNARD B. COLLINS, Molycorp Denver, Co.	August 24, 1966
JAMES L. COLLINS, Union 76 Division Nederland, Tx.	July 6, 1948
GEORGE C. CRAMER, Union 76 Division Toledo, Oh.	November 18, 1940
CHARLES L. DAVENPORT, Union 76 Division Chickamauga, Ga.	November 1, 1949
MARVIN S. DAVENPORT, Jr., Union 76 Division Nederland, Tx.	June 23, 1948
KING K. DuBOSE, Union 76 Division Lumberton, Tx.	November 1, 1950
EDWARD F. DUNN, Union 76 Division Lockport, Il.	May 11, 1939
VINCENT EGIDI, Union 76 Division Beaumont, Tx.	August 7, 1946
ALBERT H. EMFINGER, Union 76 Division Vidor, Tx.	February 17, 1949
MAX M. ETTER, Union 76 Division Lockport, Il.	March 12, 1951

DAVID FERRANTE, Union 76 Division Palos Verdes, Ca.	August 4, 1943
BENTON H. FIEDLER, Union 76 Division Palatine, Il.	April 16, 1951
ROLAND D. FINK, Union 76 Division Ocala, Fl.	June 13, 1961
ERNEST M. GRAY, Oil and Gas Nipomo, Ca.	October 30, 1945
HOWARD M. GRIBNAU, Union 76 Division Nederland, Tx.	February 12, 1946
BOBBIE M. GRIFFIN, Union 76 Division Nederland, Tx.	December 21, 1966
JOHNNIE H. HALE, Union 76 Division Port Neches, Tx.	March 24, 1949
WARREN G. HAWKINS, Union 76 Division Nederland, Tx.	August 7, 1946
CELANA M. HULBIRT, Union 76 Division Joliet, Il.	December 11, 1945
EDWARD S. JAMES Avenal, Ca.	June 4, 1957
DONALD J. JOHNSON, Union 76 Division Lockport, Il.	January 2, 1951
RICHARD M. JORDAN, Union 76 Division Nederland, Tx.	September 27, 1950
EDGAR W. KLAUER, Union 76 Division Sidney, Oh.	August 27, 1946
ROBERT W. KNOLL, Union 76 Division Seattle, Wa.	December 26, 1944
VERNON T. LAMBERTH, Union 76 Division Beaumont, Tx.	December 10, 1948
CAROL L. LeBLANC, Union 76 Division Groves, Tx.	March 15, 1954
MAURICE E. McINNIS, Union 76 Division Nederland, Tx.	October 23, 1947
JOSEPH C. McKUSICK, Union 76 Division Santa Margarita, Ca.	July 1, 1946
ELMER V. McMINN, Union 76 Division Nederland, Tx.	April 27, 1948
CLAUDE A. MILLER, Union 76 Division Palatine, Il.	June 27, 1966
JOEL H. MINER, Corporate Whittier, Ca.	June 21, 1939
JAMES L. MYERS, Sr., Union 76 Division Port Neches, Tx.	September 12, 1946
ELMER NICHOL, Molycorp Washington, Pa.	September 13, 1955
JESSE O'QUIN, Jr., Union 76 Division Groves, Tx.	November 29, 1948
GEORGE H. ORR, Union 76 Division Palm Desert, Ca.	July 8, 1942
ELWYN E. PALMER, Union 76 Division Tampa, Fl.	August 1, 1951
JOE S. PARKER, Union 76 Division Nederland, Tx.	April 15, 1948
VERNON F. PILZ, Union 76 Division Valdosta, Ga.	August 1, 1954
JOHN T. PRESHAW, Union 76 Division Beaumont, Tx.	December 30, 1941
JAMES W. REECE, Union 76 Division Eustis, Fl.	May 18, 1942
WALTER F. ROTH, Science and Technology Placentia, Ca.	February 8, 1950
EDWARD E. SCHULTZ, Sr., Union 76 Division Lemont, Il.	July 15, 1948
ROBERT A. SCHULTZ, Union 76 Division Beaumont, Tx.	May 10, 1948
FRANKIE SEARS, Union 76 Division Rex, Ga.	December 10, 1945
SERGE LEWICKI, Union 76 Division Joliet, Il.	June 24, 1968
GEORGE H. SMITH, Union 76 Division Groves, Tx.	August 24, 1948
WINFRED R. SMITH, Union 76 Division Beaumont, Tx.	May 26, 1949
JAMES O. STACY, Union 76 Division Port Neches, Tx.	August 11, 1952
SILVEN L. STALLARD, Union 76 Division Noble, Il.	December 12, 1941
ROBERT E. STERLING, Union 76 Division Beaumont, Tx.	October 29, 1946
JOHN H. THERIOT, Union 76 Division Port Neches, Tx.	February 13, 1951
OTIS W. THOMAS, Union 76 Division Nederland, Tx.	March 7, 1946
WILLIE F. THORPE, Union 76 Division Vidor, Tx.	November 17, 1947
CHARLES L. THURMAN, Union 76 Division Coalinga, Ca.	November 2, 1945
CARL W. WATERS, Union 76 Division Nederland, Tx.	May 7, 1941
HOWARD S. WATSON, Jr., Union 76 Division Beaumont, Tx.	November 23, 1949
WALTER F. WHITTENBERGER, Union 76 Division Creston, Oh.	June 13, 1962
SAM WINGTON, Jr., Union 76 Division Beaumont, Tx.	November 23, 1948
WILLIAM E. YOUNG, Union 76 Division Nederland, Tx.	February 17, 1947

IN MEMORIAM

EMPLOYEES

LEE C. DEES, Union 76 Division Beaumont, Tx.	October 19, 1981
JAMES J. DOVALINA, Union 76 Division Port Arthur, Tx.	November 22, 1981
DOUGLAS TURNBULL, Union 76 Division Spanaway, Wa.	September 28, 1981

RETIREES

JOHN W. ABEL, Union 76 Division Memphis, Tn.	October 25, 1981
EDITH E. BAKER, Union 76 Division Walla Walla, Wa.	October 29, 1981
CARL E. BARTLETT, Union 76 Division El Sobrante, Ca.	November 19, 1981
DANIEL R. BERGIN, Union 76 Division Columbus, Oh.	October 14, 1981
JOSEPH J. BOURRET, Jr., Oil and Gas Houston, Tx.	November 2, 1981
OSCAR S. CHAPLIN, Union 76 Division Paso Robles, Ca.	October 13, 1981
MARGUERITE A. COLWELL, Union 76 Division Fostoria, Oh.	September 15, 1981
JOHN B. DEMARETS, Oil and Gas Lake Charles, La.	November 5, 1981
HORTON H. DIEVENDORFF, Oil and Gas El Toro, Ca.	October 24, 1981
JAMES M. FITZPATRICK, Union 76 Division New Lebanon, Oh.	October 24, 1981
MONDO A. GEMIGNANI, Union 76 Division Crockett, Ca.	November 17, 1981
MYRTLE E. GOOLSBY, Union 76 Division Atlanta, Ga.	October 9, 1981
LOUIE HANSEN, Union 76 Division Sun City, Az.	September 30, 1981
FRANK L. HENNESSEY, Union 76 Division Tacoma, Wa.	October 17, 1981
MERRILL S. IMES, Union 76 Division San Rafael, Ca.	November 28, 1981
KENNETH LEA, Union 76 Division Ketchikan, Ak.	November 15, 1981
HERBERT LOOSE, Union 76 Division Chicago, Il.	November 29, 1981
WAYNE S. LOUDERBACK, Corporate Long Beach, Ca.	October 13, 1981
DOUGLAS MATHEWSON, Union 76 Division Ojai, Ca.	November 9, 1981
EDWARD MIGAVA, Union 76 Division St. Petersburg, Fl.	October 13, 1981
JAMES L. MURPHY, Union 76 Division San Luis Obispo, Ca.	September 17, 1981
WILBUR S. NAYLOR, Union 76 Division Oklahoma City, Ok.	October 31, 1981
CARL J. NEELY, Oil and Gas Santa Maria, Ca.	October 8, 1981
JOHN E. OBERFIELD, Union 76 Division Phoenix, Az.	November 4, 1981
GUSTAF B. OLSON, Union 76 Division Duluth, Mn.	November 18, 1981
JOHN PERKERSON Jr., Union 76 Division Cary, N.C.	October 20, 1981
ARCHIBALD L. PLASKETT, Oil and Gas Bakersfield, Ca.	October 21, 1981
CLARENCE V. ROBERTS, Union 76 Division Antioch, Ca.	October 18, 1981
HOWARD F. SCOBLE, Union 76 Division Troy, Mi.	November 4, 1981
GEORGE T. STEEN, Oil and Gas Hominy, Ok.	October 5, 1981
WILLIAM A. SUMMERS, Oil and Gas Banning, Ca.	November 28, 1981
JOHN E. VANEK, Union 76 Division Chagrin Falls, Oh.	October 25, 1981
NORRIS WAIT, Union 76 Division Long Beach, Ca.	November 18, 1981
WILLIAM JENNINGS WALKER, Union 76 Division Los Angeles, Ca.	October 25, 1981
WALTER F. WALTHALL, Union 76 Division Americus, Ca.	October 19, 1981
EARL P. WATSON, Union 76 Division Silsbee, Tx.	October 30, 1981
VESTER WHEELER, Oil and Gas Anaheim, Ca.	September 21, 1981
GLENN F. ZARTMAN, Union 76 Division Sarasota, Fl.	September 18, 1981



UNION OIL COMPANY OF CALIFORNIA
 P.O. Box 7600
 Los Angeles, California 90051

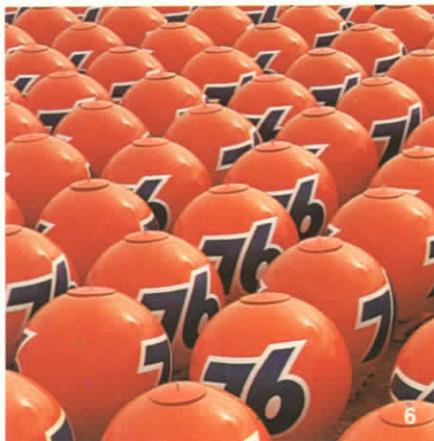
BULK RATE
 U.S. POSTAGE

PAID

Los Angeles, CA
 Permit No. 62

R GARY L FOY
 16823 LIGGETT STREET
 SEPULVEDA CA 91343

Employee changes processed automatically
 All others include label with change of address



SEVENTY SIX

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COVER: A series of offshore platforms break the sea's horizon at twilight. But work goes on 24 hours each day in an effort to tap vast energy resources beneath the ocean floor. Photo by Sergio Ortiz. Story on page 1.

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