

**THE
TEXACO STAR**

Building the "BEST"
in Motor Oil...

Winter 1953

**ENGINES FUELS
& LUBRICANTS**

**AUTOMOTIVE ROAD
EVALUATION LABORATORY**





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HOPE FOR THE DOUBLY TAXED STOCKHOLDER

The long-suffering stockholder—subject to a double tax on dividends which has reached alarming proportions—may have his day in court when the Congress, as is expected, overhauls the Federal tax laws in 1954.

Since the mid-1930's, when both personal and corporate Federal income taxes started moving radically higher, stockholders have borne a disproportionate share of the tax burden. The double tax on dividends, a serious discrimination against equity investors, has long been regarded by many experts as a major target of Federal income tax reform.

Before the mid-1930's, dividends were, to some extent, subject to a double tax, but neither the corporate nor the personal income tax was so high as to cause widespread dissatisfaction among stockholders. The rapid increase in recent years, in both the corporate and personal tax rates, has compounded the inequity of the double tax on dividends. The extra tax bite has been applied to stockholders at two levels—the corporate and the personal—and the sting therefore is doubly sharp.

This is so because an owner of a share of stock in a company is also a part owner of the company itself. He has an equity in the company's earnings in proportion to his stock ownership. The company's earnings—and hence the stockholder's earnings—are taxed at the corporate level. But that isn't all. Earnings paid out in dividends to stockholders are taxed again, at a rate depending upon the stockholder's individual income tax bracket. The lowest bracket provides for a tax of 22.2 per cent, and the tax can run up to a limit of 88 per cent of the dividends a stockholder receives.

Here's how the double tax works:

Suppose a stockholder's proportionate share of the earnings of a company is \$100, and that the company is in the 52-per-cent tax bracket. The Federal corporation income tax is \$52, leaving only \$48 as the stockholder's proportionate share of the net income. Then suppose the company pays out half of this \$48 in dividends.

CONTINUED ON PAGE 22

FINERY SEALED—Cap sealing is final step preparatory to marketing this 55-gallon-capacity metal drum of Texaco Aircraft Engine Oil. Annually, nearly 2,000,000 such metal drums are filled with Texaco products in Refining Department operations throughout the nation. This scene was photographed at the Los Angeles Package Terminal.

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WINTER 1953

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A PUBLICATION OF THE TEXAS COMPANY FOR STOCKHOLDERS AND EMPLOYEES

J. S. LEACH, Chairman of the Board of Directors; AUGUSTUS G. LONG, President; R. F. BAKER, Executive Vice President; C. B. BARRETT, G. R. BRYANT, E. R. FILLEY, J. W. FOLEY, M. HALPERN, A. N. LILLEY, L. H. LINDEMAN, A. M. OTTIGNON, JAMES H. PIPKIN, R. L. SAUNDERS, TORREY H. WEBB, and J. T. WOOD, JR., Vice Presidents; OSCAR JOHN DORWIN, Vice President and General Counsel; W. G. ELICKER, Secretary; ROBERT FISHER, Treasurer; E. C. BREEDING, Comptroller, 135 East 42nd Street, New York 17, New York. . . . Published by the Industrial and Public Relations Department; Kerry King, Director of Public Relations; Wilfred B. Talmay, Editor, Company Publications Division; Ellis Prudden, Associate Editor in charge of THE TEXACO STAR.

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THE COVER: Building the best in motor oil, as Texaco has done in creating Advanced Custom-Made Havoline (see Page 15), calls for careful evaluation of performance characteristics in actual road tests. One phase of the intensive road testing of Advanced Havoline was carried out last Summer in Texas. Walton Waddill, Texaco's field representative for this test, is pictured at the right in conference with a staff member of the independent research organization which conducted the road testing for Texaco.

Petroleum

RESEARCH IS PACING AVIATION'S RACE WITH SOUND

A double clap of thunder sounds over your head. Before you know it, the rhythmic rumble of a Diesel locomotive is bearing down on you. A shrill whistle rises over the roar. Thunder . . . rumble . . . whistle — all in split-seconds. By the time your head swings back, it is too late. Only lazy white clouds float in the sky. You see nothing, because the “thing” has zoomed far out of sight. You have just heard a jet plane break through the sonic barrier.

Almost every day since its birth, aviation has made history. Today, more than ever before, man is on the threshold of his greatest moment in the sky.

The petroleum industry has a big share in the jet's invasion of the supersonic spheres. The fuels that are developed in the industry's laboratories and produced in its refineries are as modern as a jet's sleek nose and swept-back wings.

When the aviation industry started 50 years ago, the petroleum industry was also only in the toddling stage. These two industries worked vigorously together over the years — climbing high, fast, and far.

The Wright brothers had to have an engine, fuel, lubricants, and courage to pilot their wobbly, motorized box kite into the air above the sand dunes of North Carolina on that December morning in 1903. Today, it takes these same elements to get the most revolutionary jet into the skies.

Fueling the Jet's Hot Breath

American aviation and the petroleum industry are soaring into a new era of search for better engines, fuels.

Pierces the

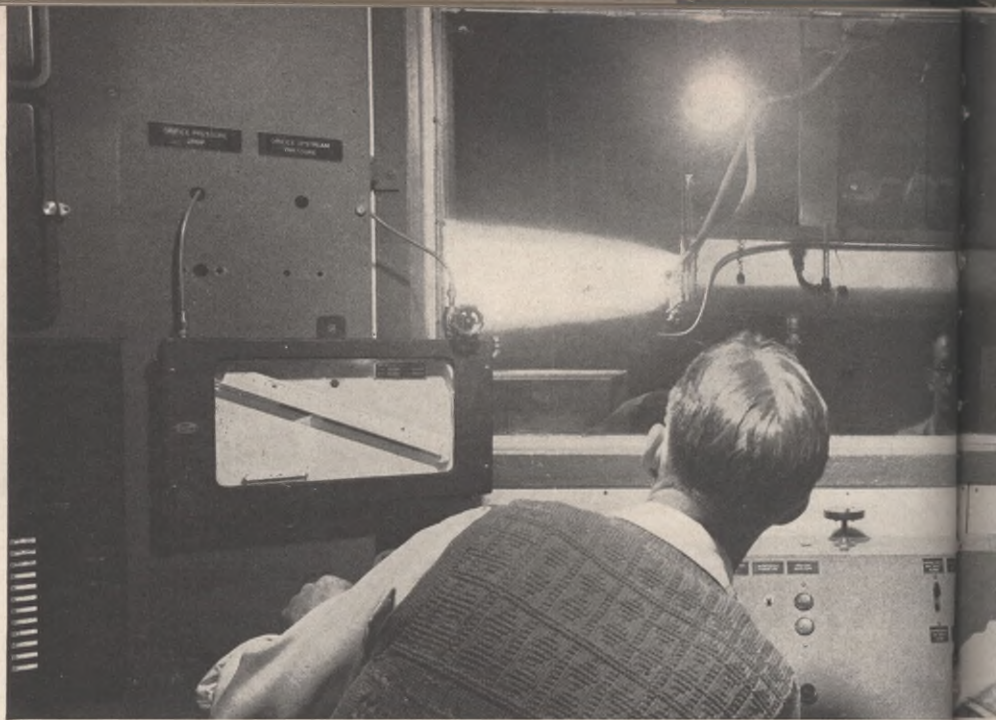


ALWAYS LOOKING AHEAD, TEXACO SCIENTISTS AND ENGINEERS

Sonic Barrier



REVELOPING JET FUELS AND LUBRICANTS TO SEND A SUCCESSOR TO THE XF-92A STREAKING INTO SPACE



IN JET "TEST CELL" AT BEACON LABS—WHICH REPRODUCES FLIGHT CONDITIONS—TECHNIC

and lubricants. In this search The Texas Company continues to be one of the strong and progressive leaders, as it has always been.

The development of jet propulsion was stimulated by World War II. In the earliest days, Texaco scientists worked closely with aircraft people on the fuel and lubrication specifications of the P-59A Bell Airacomet. This was the original American jet which first sliced the air over California deserts in 1943.

Texaco has developed fuels and lubricants for all existing jet engines, both American and British, and is now a major producer of jet fuels and lubricants. When the age of commercial jet travel gets fully under way

in the next few years, the airlines will find that Texaco and its affiliates have already stockpiled the necessary know-how to provide for their needs.

The Company has always taken a great interest in jet engines. In 1948, Texaco erected a jet engine testing laboratory, which was the first to be built with private capital. Altitude ranges from sea level to 60,000 feet can be simulated.

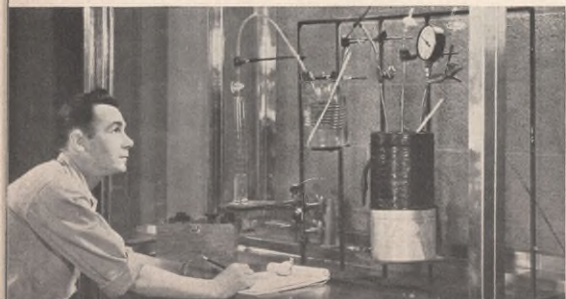
The jet engine has demonstrated that it is less exacting in its fuel requirements than piston engines and will burn fuels ranging from kerosine to gasoline, depending on engine design and adjustment.

What are the fuels that The Texas Company has helped to develop for jet planes?

The first JP (jet propulsion) fuel, known as JP-1, had a very narrow boiling range and was a sort of superior-grade kerosine. As the Korean war moved into high gear, however, it was soon evident that it would be impractical to supply such a special cut as JP-1 from crude oil in the quantities needed for the greatly expanded military operations.

Additional development work produced a fuel specifically designed to boost the quantity of jet fuel which could be made from each barrel of crude. Called JP-3, it contained gasoline, kerosine, and light Diesel fuel fractions. While actual engine operation with JP-3 was

TO DETERMINE ICING CHARACTERISTICS of jet fuels in sub-freezing flying weather, Beacon's engineering researchers conduct low-temperature filterability tests.





TECHNICIAN CHECKS ENGINE'S COMBUSTION EFFICIENCY

found adequate, research studies and flying experience revealed that high vapor pressure caused serious problems during rigorous operation of combat jets. When planes climbed rapidly, fuel "boiling" (turning to gases) resulted in loss through evaporation of much of the plane's fuel capacity.

A low vapor pressure fuel of wide boiling range was finally developed by "shaving" the light end of the distillation range and cutting out some of the gasoline. This fuel is known as JP-4. It is widely used today, because it overcomes the "boiling" of JP-3 and successfully meets all other jet engine requirements.

Another major problem that jet engine experts have had to overcome is the huge consumption of fuel. Compared to reciprocating engine propeller power plants, jet engines produce considerably more thrust per unit of engine weight. They also consume much more fuel per pound of thrust. As flying speeds increase, the propulsion efficiency of jet engines rises until a speed is reached at which the engine becomes more efficient than propeller power for carrying a given load for a given distance.

Engineers have gradually pushed down the amount of fuel consumption per pound of thrust in jets. In 1943, it took 1.05 pounds of fuel to get a pound of thrust. In 1945, it took only .87 pounds of fuel. Today, the figure

is as low as .7 pounds in some engines. It must be remembered that in the development of jet engine fuels almost every modification of the fuel had to be made hand-in-glove with a specific engine modification.

Texaco "Firsts"

Texaco has scored a number of noteworthy "firsts" in the development of aviation lubricants. With the early pioneering of arctic and high-altitude flying, a need for a grease to operate at a wide range of temperature became imperative. The Company solved this problem by developing Uni-Temp Grease, which was the first product of its kind.

As long-range stratospheric flying became more rigorous, an improved grease was needed. Texaco was again first when it brought out Low-Temp Grease. Performance range: -100° to $+250^{\circ}$ F.

Texaco was also the first company to produce lubricating oils specifically designed for jet engines.

In the piston engine field, Texaco was highly active in developing processes which created oils of greater stability for piston engines. These oils reduced wear and kept engines cleaner. A new solvent dewaxing process pioneered by The Texas Company created better finished oil than was formerly possible with the most careful selection of specific crudes which were found in isolated localities. Texaco's aircraft engine oils are still the standard for the industry.

New Fields to Conquer

The Texas Company is active in the development of jet engine lubricants from synthetic materials. The origin of many of these materials is largely petroleum gases. Due to the very high altitudes and extremely low temperatures in which jet planes operate, the engine oil must flow at starting temperatures as low as -100° F. in addition to lubricating satisfactorily at very high temperatures.

Texaco is also contributing to the evolution of new aircraft types. It is helping to design special fuels and lubricants for supersonic rockets and guided missiles.

"... The Ramparts We Watch"

The stark reality that the Russians have both the A- and H-bombs has brought a new awareness to America of the importance of research and development in aviation and in all of its allied sciences.

To build any sort of offense to counter the absolute weapon, the United States has gone "all out" in its hunt for aviation products. At the moment, the nation is faced with the tremendous task of making its defenses as strong as it is scientifically and humanly possible.

The Texas Company and the petroleum industry are working day and night to do their part in helping the United States to achieve this goal. **END**

Ambassadors to Aviation

TEXACO SPECIALISTS HELP TO KEEP AIRLINES FLYING HIGH, WIDE, AND HANDSOME

In his Los Angeles office, Frank Goad, an aviation engineer for The Texas Company, picked up his telephone. Less than a minute later, he was talking to Texaco's headquarters in New York City.

"Hello . . . this is Goad . . . West Coast."

"What's up, Frank?" came the answer.

"Something funny taking place in those big engines. . . . Deposits are on the increase."

In Manhattan, Frank Tobin, Assistant Manager (Engineering) of the Aviation Sales Division, made a quick decision.

"O.K., Frank. Better send in gasoline and used oil samples. While Beacon is checking them we'll make a survey of the field."

Within an hour the "word" was relayed to Texaco's three other aviation engineers who help to service the nation's airlines.

"... Rush inspections of engines . . . with stress on oil screen condition and parts wear. Forward crank pin sludge deposits to Beacon Laboratories. Reason: to track down cause of excessive engine deposits."

While chemists and engineers at Texaco's Beacon Laboratories examined samples of deposits, used oil, and fuel from airlines, Texaco's aviation engineers inspected engines in overhaul shops across the United States. The performance of all engine parts was closely watched and recorded.

While engine deposits are not a critical fault they can become a potential hazard. Out of control, they impair lubrication of critical parts. The result is an increase in parts replacements, frequency of overhauls, mechanical delays, and the like.

Texaco's "process of elimination" took several months. Beacon engineers actually ran several cylinder assemblies under simulated flight conditions for many hours. Every deposit, temperature, and mechanical factor was recorded under many tests.

The data went together like a jigsaw puzzle, and the "Case of the Engine Deposits" was solved. The guilty party was found through the combined detective work of the aviation engineers, the engine manufacturer, the airline technicians, Texaco's Technical and Research

Division and its laboratories at Beacon, New York. The verdict was pronounced: deposits are caused by insufficient oil in vital engine parts.

All the facts were assembled into a report and distributed to all airlines using this engine. It concluded with a recommendation to increase the rate of oil to cylinder rocker boxes.

When an airline made the necessary engine adjustments, the deposits were immediately reduced.

The "fix" was effective, and the airlines gave Texaco credit for a big assist.

This is an example of how the Company's aviation engineers help to keep the nation's aircraft flying at peak performance. It also illustrates the airlines' confidence in Texaco's engineering service. Because of this confidence, The Texas Company is able to help make flying safer and more efficient in the United States. Frank Tobin says, "Whenever and wherever trouble is on the rise, one of us is there to trouble-shoot."

Even if the airline is not a buyer of Texaco products, the aviation engineer offers his services. Not long ago, a well-known operator called in Engineer Walt Knies (headquarters: New York) on a tough problem. When the job was finished, Knies shook hands all around and said, "See you on my next trip." No attempt was made to sell the airline a single drum of oil or grease. But the good will that was fostered may reap a contract for Texaco in the future.

Another characteristic of the Aviation Sales Division's engineers is their ability to speak the same "language" as the maintenance men in the overhaul shops. "They should be able to do this," Tobin says. "Every man held responsible airline jobs before joining Texaco . . . right through the ranks, from mechanic to supervisor."

This past intimacy with airline operations gives the aviation engineers of The Texas Company an inside knowledge that is indispensable. When a shop foreman talks machine tools or welding engine clearances or assembly technique, the Texaco man knows exactly what the foreman is referring to. He knows, because he has had actual experience with each problem.

In San Francisco and New York—at overhaul bases in Dallas, Denver, Atlanta, and Miami—at the Western Air Lines shop in Los Angeles—at Northwest's base in St. Paul—or Trans-Canada's in Winnipeg—Texaco's aviation engineers serve North America's commercial air fleet.

Trained as airline mechanics and engineers, these men know an airplane in detail. No matter where the problem is located—in bearings, propeller, cylinder, landing gear, hydraulic system, or air frame—the aviation engineer tackles the job.

Frank Goad covers the West from San Diego to Missoula, Montana. Benjamin ("B. J.") Cumnock makes the rounds of overhaul bases in the 11 southern states. E. E. ("Jake") Jacobs operates in the central states, and Walt Knies gives technical service along the eastern seaboard.

The advice of Frank Tobin, Texaco's "elder statesman" of aviation engineering, guides the field quartet in many of their investigations. Tobin's pre-Texaco background included a three-year stint as a senior inspector for the Civil Aeronautics Administration. Before

the C.A.A., he worked for eight years as an engine overhaul foreman.

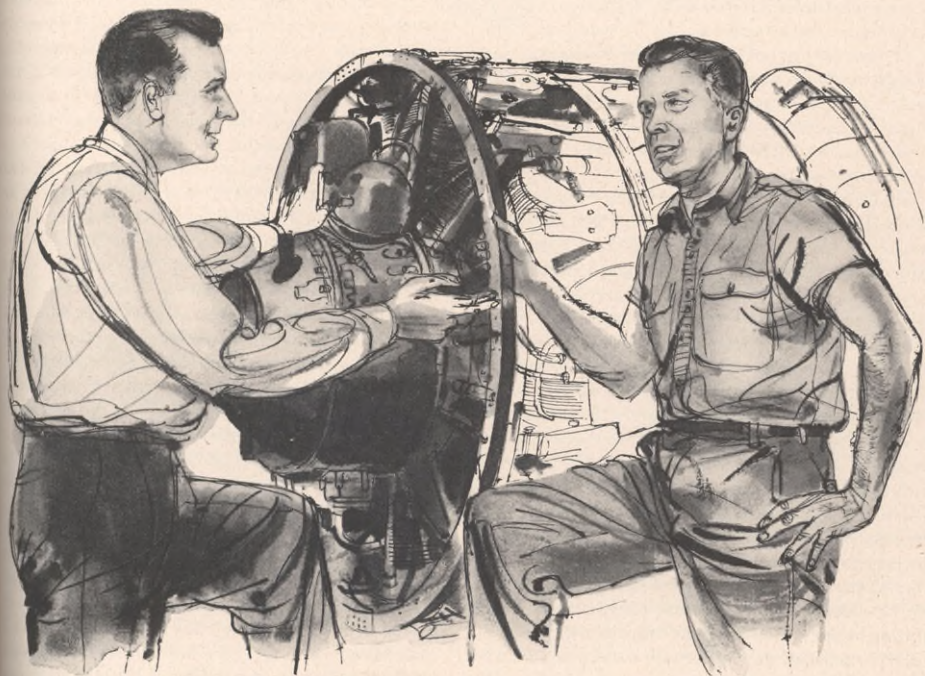
Teamwork All the Way

"Texaco's scientists and aviation engineers are interlocked," says Tobin. "One couldn't operate without the other."

This close collaboration is evident in all the engineering work of the Aviation Sales Division. Whenever a problem arises, Tobin confers with the Technical and Research specialists and, occasionally, with the engine designer. These conferences decide what to investigate, how to go about it, what samples to take, and other steps.

The aviation engineers in the field send in deposit samples or engine parts to Beacon for analysis by chemical and mechanical engineers. After the tests, Beacon reports the results back to other T & R men who review the analyses, draw a conclusion, and make a recommendation to Tobin. This is passed along to the aviation engineers who interpret the recommendation for the airline.

If the situation demands, the Technical and Research



A TEXACO ENGINEER SOLVES PROBLEM WITH FOREMAN IN AN AIRLINE'S OVERHAUL BASE

Division assigns a man to pay a customer call with an aviation engineer.

The aviation engineers make up only part of the Aviation Sales Division. The division's Manager is Aubrey Keif, an ex-Royal Air Force pilot who came to the Company more than 20 years ago.

Says husky, blue-eyed Keif: "Team play is the key to this division. Our aviation representative contacts the customer for a sale and signs him up. The aviation engineer gives the technical service and keeps the account sold on Texaco."

Keif and Ralph Hall, who is the Assistant Manager of the division, circulate among the major airlines (via one of the Company's single-engine Spartans or Navions), where they are known to everyone on a "first name" basis. Keif and Hall are in the top echelon of Texaco's ambassadors to aviation.

The team play Keif directs is responsible for the successful sales record of the Aviation Sales Division. The scores: 1) Texaco supplies more than 50 per cent of the aircraft engine oil used by the nation's trunk and feeder (local service) airlines; 2) more commercial airline miles are flown in the United States with Texaco Aircraft Engine Oil than with any other brand.

Emergency Measures

When anyone in Aviation Sales hears about an airline problem (or a rumor of one), he sends an S.O.S. to the nearest aviation engineer. The emergency may demand advice on overhaul techniques, or guidance on better use of petroleum products, or suggestions on conditions which will assure the best product performance. It may pose something as simple as what to do about high engine operating temperatures.

The latter difficulty recently summoned Frank Tobin to a small Connecticut airport. After Tobin personally overhauled the carburetor and made other engine adjustments, engine temperature dropped to normal. The same problem has often beckoned other Texaco aviation engineers to bases across the country.

At the other end of the engineering yardstick from the Connecticut airport project is the three-year study of a major foreign airline. One day, the airline phoned Tobin and asked him to "make a survey of our engines." It was a big order. In the airline's overhaul shop, he examined records, repair procedures, and conferred with dozens of shopmen and executives.

The T & R Division helped to set up a long-range program for improving engine efficiency. A recommendation was made to adjust the engines to fit a Texaco oil with a new additive. This required taking an entire engine to Beacon where its behavior, under a wide range of temperatures, was observed. This, along with deposit analysis and photomicrographs of worn parts, brought the cause of the trouble into sharp focus.

Like a sleuth on a hot trail, Frank Tobin flew to

England to discuss the engine's design with the manufacturer. The result: basic changes in the engine design and the engine oil.

Today, this airline is flying at a higher performance rate and at a lower maintenance cost than ever before.

All Questions Answered

The versatility of the aviation engineers is often tapped by the big and little airlines. "B.J." Cumnock, a Texan who travels among the South's seven airlines, often answers questions on a plane's weight and balance, structure, electrical system, and air frame problems.

Pacific Coast's Frank Goad gives frequent tips on streamlining maintenance shops. His advice ranges from improvements of assembly lines to better industrial relations.

Each field man responsible for customer-service sends in regular reports on engine and equipment performance of the nation's airlines. These are circulated among the other aviation engineers, giving each a clear picture of every airline.

This exchange of performance data is essential to the solution of many problems the engineer is trying to solve. The information on other airlines gives him more tools to work with. Often, an engineer who is handed a tough mechanical problem will query his colleagues: "How did you lick this in *your* territory?" By return mail, he gets a pool of proven and tested experience.

"B.J." Cumnock relates how this "round robin" correspondence gave him the right answers to a power loss problem. A particular airline was having difficulty getting its engines out of the "test cell," which is the pre-flight testing on the ground. The engines were not developing the necessary rated power for actual flight. From reading the reports on other airlines, "B.J." knew that many had been experiencing the same problem. The reports also gave him the solution, which "B.J." passed along to the airline in his territory.

The aviation engineer often asks his counterpart, the industrial engineer, to make a lubricant survey of all the machinery, equipment, and trucks in overhaul centers. Recent surveys of ground equipment in these shops have aided sales of Texaco cutting oils, automotive lubricants, and rust preventatives.

Among the variety of questions thrown at the Texaco technicians are many from large corporations. Some companies, for instance, have asked for information on setting up aircraft fleets. The queries range from "How to hire a pilot?" to "How often should we overhaul our engines?" to "When should we drain our oil?"

A notable contribution to aviation takes place at Texaco's "Airline Clinics," which are jointly arranged by Aviation Sales and the T & R Division. These aeronautical powwows are held periodically at Beacon Laboratories. Here the men who direct the maintenance



THE ENGINEER CAN, AND DOES, TALK "SHOP" WITH ANYONE—FROM MECHANIC TO EXECUTIVE

of the nation's airlines assemble to solve the problems which are common and current in the flying world. Every component affecting flying performance is tossed into the Beacon arena—spark plugs, valves, cylinders, pistons, synthetic lubricants, crank pins, carburetors, and many others. Many a question on fuels and lubricants is asked, and many a demonstration is made at Beacon during these three-day sessions.

Always the Diplomat

Diplomacy is an essential attribute of every Texaco aviation engineer. Because he is dealing with both human and mechanical factors, a Texaco technical adviser must also be able to get along with all kinds of people.

In his daily rounds, he deals with mechanics, engineers, vice presidents, and up. When he suggests any modification to an engine part, he must tactfully justify the change.

When an airline runs an oil evaluation test, the aviation engineer must remember that an airline mechanic and an airline engineer will judge an oil with different

yardsticks. The mechanic wants to know the oil's effect on engine parts while the engineer looks for cleanliness and absence of oil deposits. The airline's "brass" is interested in the final result: safer and more efficient performance in the air at lower costs.

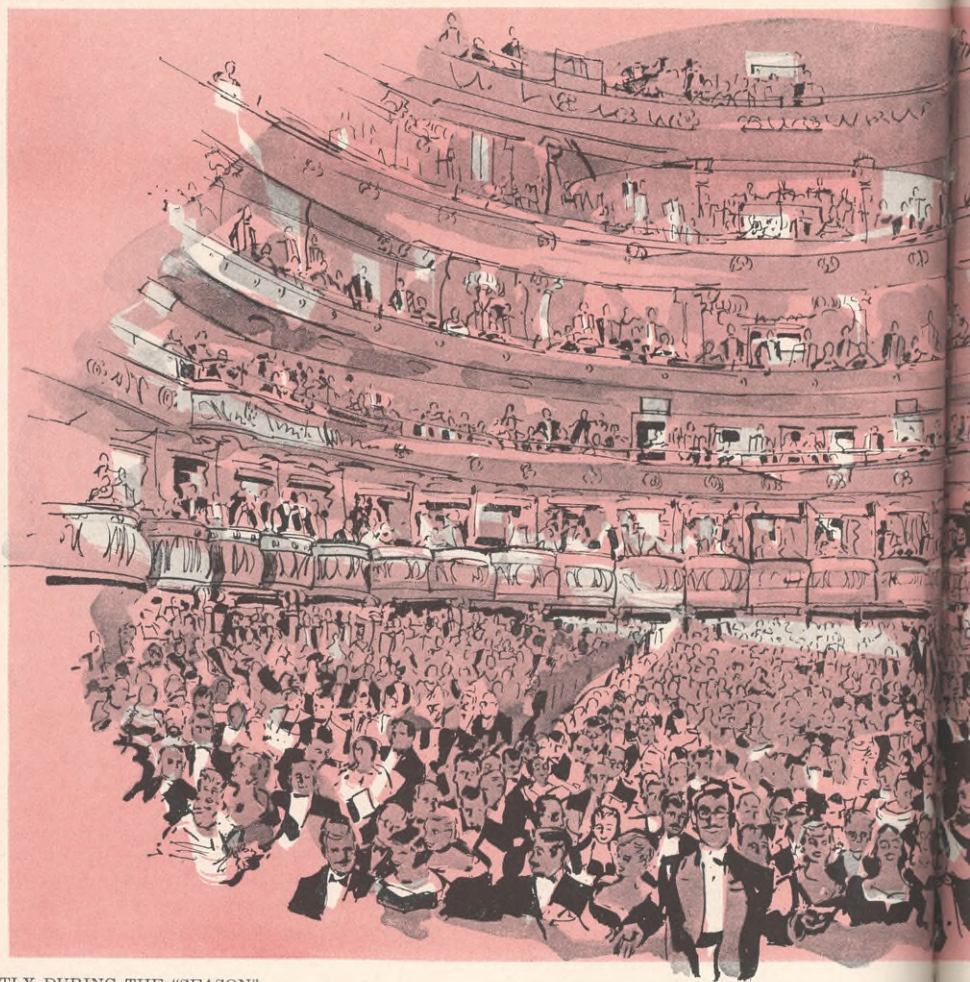
The aviation engineer is called "Walt" or "B.J." or "Jake" by every man in the overhaul shop and by many in the front office of an airline. This is just one indication of how Texaco's aviation engineers, through years of successful trouble-shooting, have been accepted by those in charge of aircraft maintenance.

These men are ambassadors to aviation. Their skill and adaptability have won many loyal friends and customers for The Texas Company.

United Air Lines recently summed up Texaco's service in this way:

"Whenever technical assistance is requested, it is given. At times, the aviation engineers have even taken the initiative in supplying valuable aid to us."

The Texas Company is proud of its part in keeping America's fleet of commercial aircraft flying at top performance. **END**



NIGHTLY DURING THE "SEASON" nearly 4,000 opera lovers sit amidst the gold-and-red splendor of the Metropolitan's décor.

QUIZMASTER ROBERT LAWRENCE (*left*) grills his panel of noted guests at the *Opera Quiz* during the Metropolitan's second-act intermission. Thousands of Quiz questions are mailed by listeners every season.





The "Met" Is for Everybody

12,000,000 GO
TO THE OPERA
ON SATURDAYS

by Donald W. Stewart

Manager, Advertising Division, The Texas Company

Since its beginning in 1902, The Texas Company has used mixing and blending techniques in its manufacturing operations to aid in creating the finest petroleum products that money can buy.

In 1940, with the same aim of presenting the finest, Texaco undertook to blend opera and oil when it sponsored the Metropolitan Opera on the Air.

At that time, W. S. S. Rodgers, who was then President of The Texas Company, told the press: "There is nothing new about the principle upon which we acted in merging oil and opera. American business has long acted on the principle of success through service to the greatest number. In the long run, the success of any business enterprise can be measured by its contribution to a better life for all the people."

Opera, "the highest form of musical art," makes that contribution, and The Texas Company has found it a sound investment from a business as well as a cultural point of view.

As a yardstick of success and as proof of Texaco's pride in the presentation, perhaps the most impressive single fact is that the Company is currently sponsoring the much-awarded program for the 14th consecutive season.

However, that fact alone would not begin to indicate the success of the venture. There are other gauges, milestones, and incidents that are similarly impressive, and

IN BOX "B" ON THE GRAND TIER, Milton Cross says "Good afternoon, everyone . . ." and opera goes out of the "Met" to the nation.





CELEBRATED ARTISTS from the music world talk operatic "shop" on *Opera News* with Boris Goldovsky (at piano), famous opera and music expert.

they are the reasons why The Texas Company has continued its sponsorship these many years.

Since the Metropolitan Opera House opened its doors to opera lovers in 1883, it has been the most important cultural institution of its kind in the United States and one of the most important in the world.

From its famous Diamond Horseshoe, those whose proximity to New York enabled them to attend were privileged to hear the great voices of the day in a repertory of operatic masterworks. Nowhere was opera better represented than on the stage of the fabulous "Met."

Unfortunately, America's finest repertory was enjoyed only by New Yorkers, nearby residents, and visitors to the metropolis. The Met was for the few.

Today, through the courtesy of The Texas Company, the Met is for everybody.

Longest Regular Broadcast

On a Saturday afternoon during most of the Metropolitan's season, when *La Bohème*, *Faust*, *Tristan und Isolde*, or another of the world's great operas is being performed at Broadway and 40th Street, music lovers all over America and in many parts of Canada are listening simultaneously.

While Risë Stevens, Robert Merrill, Licia Albanese, Dorothy Kirsten, or any of the celebrated artists of the Met are appearing before the nearly 4,000 patrons in the opera house on Saturday afternoon, they are singing to more than 12,000,000 other devoted listeners in living rooms, automobiles, kitchens, hospitals, music schools, and armchairs from coast to coast.

Skilled technicians, concealed microphones, and intricate apparatus of the American Broadcasting Company

bring the performance *direct* from the stage of the Metropolitan.

For three hours and frequently longer, on more than 350 radio stations here and across the Canadian border, the program belongs to its listeners for the simple turning of a dial. Presented by The Texas Company in the United States and by its subsidiary, McColl-Frontenac Oil Company Limited, in Canada, the Metropolitan Opera on the Air is the longest regular program to be broadcast.

The unqualified leader in its field, it is also recorded for special broadcasts to the armed forces overseas.

On some occasions, but rarely, other industrial companies presented operas on radio, and still others offered excerpts or condensations. Some companies still present programs of this type, but The Texas Company is the only company to sponsor, on a continuing basis, a regular season of complete grand operas.

As a result — and you can ask almost anyone who is interested in good music to verify it — practically everybody who has ever listened to the program knows that The Texas Company sponsors it, despite the fact that it has been a policy to avoid all selling commercials on the broadcast.

Faithful Listeners

In still another sense is the Met for everybody. For too long it has been a common fallacy that opera is for highbrows and longhairs. To the contrary, people from all walks of life appreciate opera. At the Met itself, one certainly sees women in expensive evening gowns and diamonds and their escorts in full dress, but one sees as well women in more conventional dress and their husbands in business-clothes. The listening public, of course, wears no special attire. A mechanic may listen in the overalls in which he works, a butcher in the apron of his trade, a nurse in her uniform, John Doe in the casual comfort of sweater and slacks.

Within the past 10 years there has been a vast increase in the sale of operatic and classical music, and it is more than likely that Texaco's presentation of the opera had a lot to do with it.

Publicity is not unusual for the program. From the beginning, the press has frequently complimented The Texas Company for its presentation of the series. In fact, the good will that the broadcasts have gained for the Company is substantial.

Prominent groups, among them the National Federation of Women's Clubs, the National Music League, the National Federation of Music Clubs, Parent-Teacher Associations, and various fraternal and religious organizations, have both commended and supported the program.

It is believed that no show on the airways has as many faithful listeners, or receives as many plaudits for its contribution to culture. The truth about opera lovers

is that they never tire of opera, and the more they listen to it, the more they derive from it. The truth, also, is that as a result of the Texaco broadcasts "thousands more join the ranks of the charmed every week."

The *Metropolitan Opera News of the Air* has, as well, been the recipient of some of radio's most coveted awards. For example, it has won the Peabody Award, the highest honor in radio, and has received a top award from *Musical America* magazine through its Annual Music Critics Poll.

Opera News and the other frequently honored intermission feature, the *Opera Quiz*, are produced for The Texas Company by The Souvaine Company and consistently maintain the same high level.

Two-Way Benefits

The Metropolitan Opera broadcasts are produced independently and "sold" as a "package" to Texaco. That is, The Texas Company pays for the exclusive rights to broadcast the Saturday afternoon performances. This means, of course, that the Company benefits from the services of the world's finest singers, opera

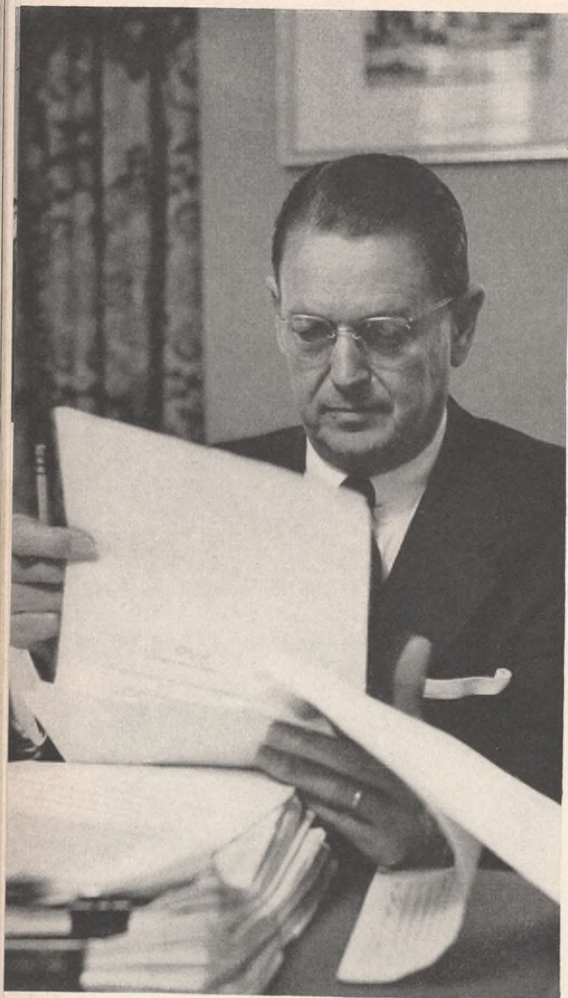
producers, directors, conductors, musicians, and the entire staff that assembles the production. To maintain the repertory season, the Metropolitan employs about 750 people. Of these, over 100 take part on the stage in an average performance and about 90 compose the orchestra. The staging of the performances amounts to a 24-hour job seven days a week during the season. All this and the Met's 70 years of experience are behind each broadcast.

Since turnabout is only fair play, the Metropolitan also benefits from the association. Texaco helps support the opera by sponsoring the broadcasts and has contributed air-time to the Met's fund-raising drives, which have brought more than \$3,000,000 from radio listeners. Not only have the broadcasts made the Metropolitan an American rather than a New York cultural center, but they have removed from opera some of the more formal, stodgy aspects which frightened away potential patrons.

Just as the Met is for everybody, so does everybody benefit from the Met: The Texas Company, the Metropolitan itself, and the vast American public. **END**

FULL CAST ASSEMBLES ON STAGE FOR CLIMAX OF "TRIUMPHAL" SCENE IN SECOND ACT OF "AIDA"





C. B. BARRETT HEADS DOMESTIC SALES

On September 4, 1953, Texaco's Board of Directors elected a new Vice President—Claud Brown Barrett, who is pictured at the left.

Formerly Sales Manager of The Texas Company's 11-state Southern Territory, this six-foot Texan-by-way-of-Georgia succeeds Richard L. Saunders as head of the Domestic Sales Department.

Mr. Barrett is a native of Georgia who has lived in Texas for the past 20 years. He was born in the village of Cumming, Georgia (pop. 1,264), but spent most of his early years in the larger community of Gainesville. A 1918 graduate of the University of Georgia, where he received an LL.B. degree, Claud Barrett served in the Infantry during World War I and then entered the automobile business.

In 1927, he joined The Texas Company as a salesman in Atlanta and rapidly rose to Sales Manager of the Dallas Division (1933) and Houston Division (1935). He was promoted to Assistant Manager and, soon afterwards, to Manager of the Southern Territory in 1938.

Mr. Barrett was active in civic and church affairs in Houston. His grandchildren, Dawson George, age seven, and Claudia George, age four, are his principal hobbies, although when time permitted he enjoyed some hunting, fishing, and horseback riding. His farm and ranch, 60 miles from Houston, afforded week-end diversions.

Mr. Saunders, one of the present-day members of the Texaco family who started with the Company as early as 1909, continues as a Vice President and Director as well as a director of McColl-Frontenac Oil Company Limited, Texaco's Canadian manufacturing and marketing subsidiary.

Another promotion within the Domestic Sales Department during September raised S. C. Bartlett from Assistant General Manager to General Manager, in which position he succeeds Walter Hochuli who, for some time, has been in ill health. Mr. Hochuli has served the Company for 30 years and, health permitting, will continue to do so in an advisory capacity. Mr. Bartlett also joined the Company 30 years ago following his graduation from Texas A. & M. College.

Succeeding Claud Barrett as Sales Manager of the Southern Territory is C. N. Brooks, who went to work for The Texas Company in 1928 as a service station attendant. **END**

THIS IS THE STORY OF
HOW WE ARE . . .

Building the



“BEST”

in Motor Oil

You might wonder why a company such as Texaco should spend a fortune in dollars and a lifetime of man-hours in research to put on the market an improved version of such an already well-received product as Custom-Made Havoline Motor Oil.

Introduced in the Fall of 1953, Advanced Custom-Made Havoline is The Texas Company's answer to two great automotive demands.

The first of these was for a new motor oil that would be more effective than ever before in the operation of today's high-compression engines, which are being made with considerably smaller clearances than ever between their moving parts. An extra heavy-duty motor oil was called for, one that could take a more severe beating and curb the wear of these high-speed giants.

The other great demand was for a motor oil that could provide the greatest possible protection under "heavy-duty" driving conditions as now understood.

Most people thought heavy-duty driving meant pulling a heavy house trailer over a mountain pass or roaring 70 miles an hour for a whole day across a desert. Now automotive engineers say — and Texaco road tests bear them out — that the hardest heavy-duty driving we put our cars through is something else entirely.

The toughest treatment you can give a modern engine is stop-and-go, cold-engine driving. When your wife buzzes you down to the station, when you toss the golf bags into the back seat and hop over to the country club, or when you "catch every red light" on a short trip across town — in other words, when your engine

never gets a chance to warm up to its efficient operating temperature — that's "heavy-duty driving." It's becoming more and more characteristic of modern, fast-paced American living. A national survey turned up some startling statistics recently: 80 per cent of all auto trips these days are under 14 miles, and 60 per cent are under six miles. That's neighborhood driving in earnest.

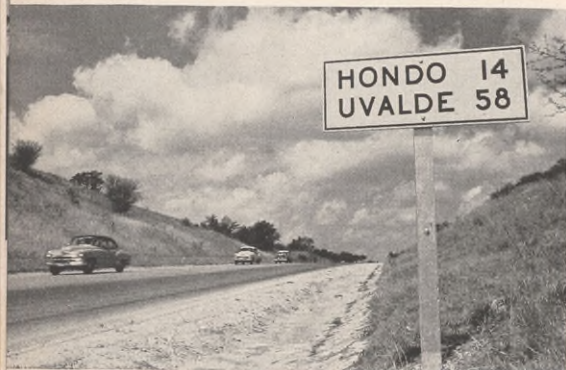
What does it mean to a modern engine? Wear and tear and oil contamination as you would never believe possible "just hopping around town."

Cold engines are inefficient—they don't burn gasoline completely, and most of the partially burned gasoline residues are hard on an engine. When you run your car cold, part of the unburned fuel remains as carbon or soot, which is deposited on various parts of the engine. When you run your engine at part-throttle before it is thoroughly warmed up, more carbon continues forming in greater quantities than it ever would if all of the motor was up to efficient running temperature — about 160 degrees. It takes a lot of driving in even moderate weather to get it up to temperature, which is long after the water temperature gauge registers normal.

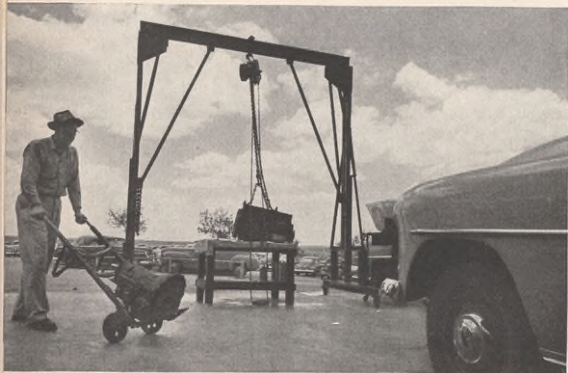
A cold engine and cool weather stop-and-go driving can do great damage to an engine which is not protected against rusting. Wherever droplets of water (from normal condensation in an idle, cooling engine) cling to walls or parts of the engine, a perfect set-up occurs for the three factors — ferrous metal, oxygen, water — which create the typical pitting or flaking of particles

THE BALANCE OF ADDITIVES IMPROVED

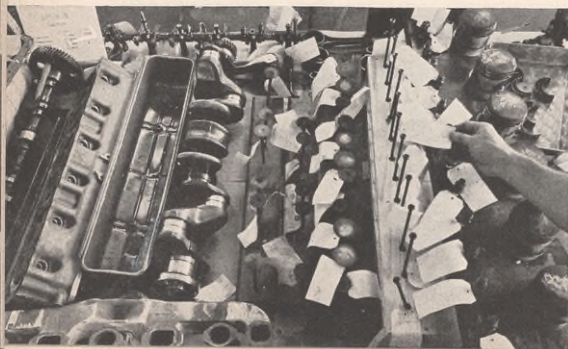
ON A TEXAS HIGHWAY, cars were driven at 70 miles an hour to determine Advanced Havoline's increased cleanliness and greater protection against engine wear.



AFTER THE GRUELING ROAD TEST, which ran for 20,000 miles during the hottest days of last July, engines were dismantled for close laboratory inspection.



READED FOR INSPECTION, the disassembled engines are tagged. The findings: engines using Advanced Havoline were free from corrosion, wear, and sludge.



of metal we know as rusting. The process is especially active on cylinder walls because these get washed with gasoline in the normal process of combustion and, with ordinary motor oils, may have little if any protective coating against the rust-forming invasion of condensing water vapor. When rusting does take place in an engine, its horsepower is reduced because the lost particles of metal increase the spaces (or "close tolerances") between snugly fitting parts, which results in less powerful operation — to say nothing of increased oil consumption. Advanced Custom-Made Havoline solves the problem of engine rusting, according to recent road tests, via an improved rust inhibitor in its Balanced-Additive formula which coats all internal engine surfaces with a protective film that keeps water away and stops rust.

When a car used mostly for neighborhood driving has its oil drained, the first thing that comes out is not oil but water. But even water is not the only contaminant you will find. The crankcase drainage from that car will also contain unburned gasoline, fuel varnish, various acids, carbon, lead ash, dirt and grit, and metal particles. These contaminants are all so thoroughly mixed into the oil that many hours of complicated chemistry would be required to separate them.

The chart on Page 19 shows the "dirty work" these contaminants (most of which are the result of cold-engine, stop-and-go driving) produce in an engine. With ordinary, non-heavy-duty motor oil, these contaminants attack with deadly effect, causing wear and, ultimately, the need for costly repairs and replacement parts.

For years Custom-Made Havoline has maintained market leadership, meeting the problem of engine wear by exceeding heavy-duty requirements of each new type of engine that came off the assembly lines. When the newest engines' more exacting requirements created a problem, The Texas Company decided that it would upgrade the components of Havoline in every way possible to make good and sure Havoline's slogan, "The best motor oil your money can buy," would continue to mean just that.

No Easy Task

Improving on Custom-Made Havoline, however, was no easy task because the oil was already so excellent that, in some instances, the usual testing methods were incapable of registering higher quality.

If Havoline could be bettered at all, a new, superior motor oil had to be built literally from the ground up. Using carefully selected crude oils, and then wholly distilling the crude and refining the oil by improved

PERFORMANCE

methods to obtain the highest quality base stocks, was just the beginning. Texaco technology aided nature in improving her product by removing as many impurities as possible, but the result might still be considered nature's product. At this point, the new heavy-duty motor oil Texaco was striving for had merely been "born."

To build a top-flight heavy-duty motor oil from these carefully distilled and refined base oils, a special new and exclusive combination of additives had to be devised. The Balanced-Additive formula finally selected for Advanced Custom-Made Havoline gives a modern engine protection against all wear factors such as no oil alone can give.

Perfect Orchestration

A truly balanced formula of additives is like a perfect orchestration in which the drums do not overpower the French horns, nor the trumpets drown out the clarinets. Achieving a balanced formula demands extensive technical knowledge and practical test work to choose those additives that are exactly suited to Texaco's fine Havoline base oil and to determine the best amount of each.

The choice of additives is complicated not only by differences in potency, but an improper one may counteract another. The best additives work together as a team and even increase each other's potencies. A good additive may do two or three different jobs that would normally require two or three ordinary additives. Even a balanced formula of additives is no simple conglomeration of ingredients. It may contain one or more detergents, one or more acid corrosion inhibitors, one or more oxidation inhibitors, oiliness agents to give added film strength, and other materials such as rust and foam inhibitors, pour depressants, and viscosity index improvers.

One of the important benefits of Advanced Custom-Made Havoline's Balanced-Additive formula is the effect it has on the new oil's greatly increased ability to protect against engine wear. To see how it gets this added "film strength," you have to understand why oil is used in your engine in the first place, in preference to any other material.

To cut down engine wear, oil is used to keep moving parts slippery — and *slipping*, not sticking or wearing away against each other.

If you put two moving parts together with a film of oil between them and start applying pressure, the oil will be squeezed out eventually when the pressure gets high enough. The result is just what you are trying to avoid when you use oil: metal-to-metal "scuffing" or wear. In today's engines, where closer tolerances and



WAYNE E. KUHN, Manager of the Technical and Research Division of the Refining Department, guided the scientific work which created Advanced Havoline Motor Oil.

greater pressures between moving parts have become the vital aspects of engine construction which produce greater horsepower, even slight engine wear becomes a problem in which the petroleum engineer can help.

But why does oil stay in place as long as it does between moving parts, even under pressure? The answer, in greatly simplified terms, is that oil and metal have a natural affinity. And in addition, interestingly, oil itself "wets" metal (much the way you make your hands wetter by using soap and water than by just using water alone). That's why oil, instead of some other substance, is used between the moving parts of an engine to cut down wear. It has what the petroleum engineers call "film strength."

Advanced Custom-Made Havoline, via its Balanced-Additive formula, has been given added affinity for metal and actually "wets" metal better than oil alone. The result, of course, is less engine wear because, under pressure between fast-moving parts in a modern engine, Advanced Havoline is less easily squeezed out. The greater film strength it has been given makes it "more oily than oil."

Around 1951, when new engines were beginning to use hydraulic valve lifters more extensively, the problem

HIGH- AND LOW-TEMPERATURE TESTS

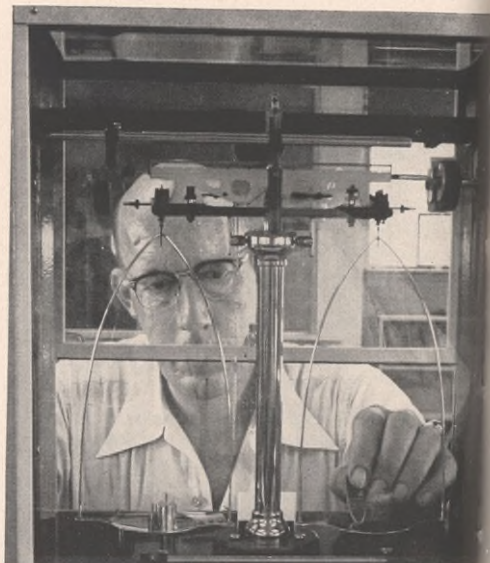
of sticking valve lifters, resulting from heavy-duty driving, cropped up. A high-pitched, knocking noise resulting from the eccentric portions of the cam shaft slapping the bottom ends of sticky or stuck valve lifters revealed the condition in an engine. Prolonged slapping dug deep pits or "soup bowls" in the ends of the stuck valve lifters.

Problem Has Been Licked

Designed to operate with tolerances about 1/15th the thickness of a human hair, these little plungers and barrels, one within the other, must operate freely with a clearance so slight as to leave absolutely no room for contaminants. Thus, an almost invisible deposit of fuel varnish or rust, formed as a ring around the plunger, can make the lifter stick, the engine cylinder it serves to become useless, the engine to lose power, and eventually the car itself to be laid up for costly repairs. In Advanced Custom-Made Havoline Motor Oil the problem has been licked, according to exhaustive road tests during 1953, by balancing the additive formula of the oil to increase its detergency and rust inhibitive characteristics, both of which are designed to eliminate the formation or deposit of harmful rust, sludge, and varnish.

How does a motor oil detergent work? Much the same as a dishpan detergent does, except that in a dishpan the detergent takes deposits off the dishes and holds them in suspension, whereas in your motor oil it keeps contaminating foreign bodies in suspension in the oil so that they never have a chance to form on your engine.

When The Texas Company decided to improve Custom-Made Havoline, no one went to the Company's



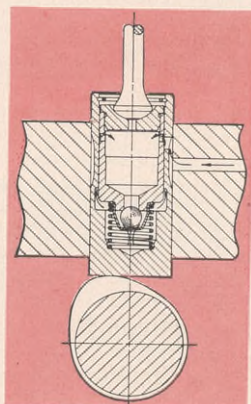
A LAB TECHNOLOGIST weighs a bearing part in analysis of engine from test car to determine degree of wear resulting from the punishing road run in Texas.

petroleum researchers and said, "Give us a formula for Advanced Custom-Made Havoline." Rather, certain performance characteristics were outlined which the Company wanted the new oil to contain. The primary ones were an improvement in low-temperature performance, with special emphasis on the problem of sticking hydraulic valve lifters in some of the new automobile engines, and an improvement in over-all engine cleanliness. And these objectives, of course, had to be met without in any way degrading the excellent qualities which already existed in Custom-Made Havoline.

The project leader of the research group working on Advanced Custom-Made Havoline Motor Oil and other heavy-duty engine lubricants at Texaco's Beacon Laboratories had this to say:

"When we started on this development, we thought it would be difficult to improve on Custom-Made Havoline, but after a very intensive program, involving many engine tests of various kinds, we were able to develop a new product which retained all of the fine properties of Custom-Made Havoline and at the same time had acquired improved characteristics which cope

NEARLY A MILLION hammer blows strike an automobile engine's hydraulic valve lifters every 60 minutes at 40 m.p.h. Advanced Havoline prevents eccentric portion of cam shaft from digging a "soup bowl" into the bottom of the valve lifter (right).



TESTS PROVE HAVOLINE'S MERITS

with problems that have arisen as more modern automobile engines appeared."

With the objectives before them, the researchers tackled a task that required extensive testing not alone in Texaco laboratories but, finally, in new cars out on the road under actual driving conditions.

A road test of Advanced Custom-Made Havoline was conducted with 15 new cars in Texas during the hottest days of last Summer. This was a severe, high-temperature, high-speed test with cars driven a total of 20,000 miles at 70 miles an hour for long continuous periods. Before and after these tests, the engine parts were carefully measured and weighed to find out exactly how much wear had occurred. Inspection of the engines after the test was completed showed that the engines were equally and satisfactorily clean.

During this test, two engines were run on a top-quality, competitive motor oil which caused harmful varnish and sludge. Superior wear characteristics of Advanced Custom-Made Havoline Motor Oil were strikingly evident.

But the severest test was conducted at low temperature, using 11 new 1953 model cars, in the Colorado mountains, which were selected as the most suitable locale. The cars were started cold and driven uphill about 10 miles. At the summit, the motors were shut off and the cars parked for two hours. When thor-

oughly cool, they were coasted downhill with the ignition on, using the engine only as a brake, and then driven on level road at moderate speeds for 16 miles. The cars were allowed a two-and-one-half-hour cool-down before starting up the mountains for the next trip. This went on for 100 days.

The test was purposely calculated to simulate cold-engine, stop-and-go driving carried to its logical extreme, loading the engines with contaminants—water, unburned fuel, carbon, and the others. Conditions were ideal for making hydraulic valve lifters stick and rust in particular, and for ruining engines in general.

Some of the valve lifters in engines run on other high-grade oils stuck fast. But when Texaco researchers took the engines run on Advanced Custom-Made Havoline apart, and found no valve lifter sticking, no rust, no carbon deposits, and a minimum of wear, they knew they had truly made "the best motor oil your money can buy," and had learned how to *keep* it the best.

When the tests were over, Dr. R. F. McCleary, Supervisor (Lubricants Research) at Beacon Laboratories, said: "With the development of Advanced Custom-Made Havoline, we are again setting a new level of performance for motor oils, and we are proud of the fact that through Texaco research the best motor oil on the market will be available." **END**

Motor Oil Contaminants and What to Do About Them

	Damage permitted by an ordinary oil	Does Advanced Custom-Made Havoline afford protection?
Water	Corrosion or rusting (corrosive wear); contributes to formation of sludge	YES
Fuel varnish	Sticks piston rings and valve lifters; serves as a binder for sludge	YES
Various acids	Corrosion	YES
Carbon	Forms sludge, which blocks screens and plugs piston rings	YES
Lead ash (gasoline)	Relatively harmless—forms part of sludge	YES
Unburned gasoline	Thins out oil—may cause wear	(see note below)
Dirt and grit	Rapid wear—removes metal	(see note below)
Metal particles	Contribute to wear	Partially—if corrosion or friction are responsible

Note: Unburned gasoline will dilute any oil, and no oil can get rid of abrasives which get past the air cleaner and oil filter. For these reasons, it is recommended that, for maximum engine protection, the crankcases of cars used for cold-engine, stop-and-go, short-haul, and dusty driving be drained and refilled with Advanced Custom-Made Havoline Motor Oil more frequently than when driving under normal conditions.

TEXACO PROFILES

First of a Series

In 1910, "Lou" Lindeman, an ambitious stenographer in a Manhattan law firm, read this advertisement in the *New York Law Journal*: "Wanted—a young man with knowledge of law." A few days later, he went to work for The Texas Company.

More observant than the average 20-year-old boy, Lou already knew a great deal about human behavior (from taking down the testimony of witnesses). Soon he was doing a crackajack job of collecting money owed to Texaco. Today, white-haired Louis Henry Lindeman recalls with a smile: "I did everything but argue the Company's case in court."

In those days of the "horseless carriage," Lou was a close friend and associate of Bob Fisher, an office boy. Over the years they have continued to work together, climbing the Texaco ladder to the two top positions in the activities that come under the heading of "Finance and Economics" in the Company.

While Louis Lindeman, as Vice President, heads "Finance and Economics," he spends the bulk of his time looking after Texaco's economic problems and foreign financial operations. This leaves the field of domestic finances largely to Treasurer Robert Fisher.

Louis Lindeman's rigorous training as a Texaco apprentice developed two great assets in him: an ability to dig out all the facts in any case and a talent for unerring accuracy. Today, the Vice President and his staff search out every fact before taking any action—whether it is arranging a loan or determining the best time to undertake other corporate financing.

Any overseas "money" problem eventually gets to the desk of Lou Lindeman. A man with a quick smile, warm gray eyes, and a trigger-sharp brain, he knows how to get prompt action from his financial team. Texaco will never run short of financial experts, because "L. H." is constantly training young men for the big job of making the right decisions on Company finances.

If war breaks out anywhere, the Texaco team moves the Company's liquid assets out of the "hot spot" in a hurry. If a foreign currency is expected to be devalued, Texaco's economic analysts do a thorough research job to determine the Company's prospective dollar position. (Such a forecast may save the Company a huge sum of money.)

Each month the Economics Department issues a "Bulletin" to Company executives. It puts management abreast of "the impact of current economic and petroleum developments on the industry." This sound



LOUIS HENRY LINDEMAN

Vice President, Finance and Economics

They care for

and thorough research helps management to take the right turn in either a domestic or foreign field of action.

Texaco economists must keep up on the exact number and fraction of any foreign currency that will exchange for one United States dollar. Will The Texas Company be able to convert foreign currency into dollars after an overseas sale? Always a vital question, Lou Lindeman's analysts try to answer it with accuracy.

Sometimes international currency exchange takes on the appearance of impenetrable confusion. During 1952, a Norwegian affiliate drew up contracts for several oil tankers to be built in Germany. These tankers were partly paid for in Dutch guilders by a Texaco affiliate in Holland, exchanged for kroner in Norway, and finally turned into Deutsche marks.

Lou Lindeman's job is as hour-consuming as it is important. That is why he gets up each morning long before the average New Yorker. After a brisk two-mile walk down Fifth Avenue, the six-foot-plus Vice President arrives at the Chrysler Building. In his green-walled office, which looks out on the United Nations Secretariat, Lou Lindeman starts a day that is always packed with problems and decisions. It is his love of work that has sent Lou Lindeman to a top rung at Texaco. When recently asked what got him there, he replied: "Common sense and stick-to-itiveness."

But his associates know that "L. H.'s" modesty and regard for the other fellow also go into his success at Texaco. He has never been heard to "run down" anyone, and his office door is never closed. "I'm never so busy," says Louis Lindeman, "that I can't help someone solve a problem."



ROBERT FISHER

Treasurer

Texaco's money

More Texaco money has passed through the hands of Robert Fisher than he or anyone else can estimate.

Starting as an office boy in 1910 (three months after the arrival of "Lou" Lindeman, his Texaco teammate), 16-year-old "Bob" was soon drawing bagfuls of money out of the bank for ships' payrolls. He handed this money over to the Company's grizzled tanker captains who unloaded their cargoes of petroleum products at Texaco's Bayonne (New Jersey) Terminal, across the harbor from the Whitehall Building, at that time the Texaco headquarters in New York City.

A happy, smiling lad of Canadian-American descent, brown-eyed Bob got along with everyone. "I guess I just naturally liked people," he says. (And people just naturally liked him.) Today, Bob Fisher's talent for handling people and money has carried this big six-footer to the place where he is responsible for handling more than \$200,000,000 in cash and securities.

The job of Treasurer at The Texas Company covers a great many complex duties. Under the heading of "Banking," Bob Fisher and his staff must keep track of Texaco's 1,500 bank accounts which are scattered over the United States. They direct the steady in-and-out flow of some \$60,000,000 in the Company's "General Accounts." Bob Fisher also watches over the many millions of Company dollars that are invested in United States Government securities.

To illustrate graphically Texaco's growth during Bob Fisher's 43-years of service, the Company's bank deposits alone average \$5,400,000 a day, which is twice the total cash on hand in 1910.

Another one of the more important jobs assigned

to the Treasurer is controlling the extension of credit to Texaco's customers, dealers, distributors, and so on. While this is handled through an Assistant Treasurer and a General Credit Manager, Bob Fisher must closely follow the volume of credit outstanding and the condition of accounts receivable. Since the expansion or contraction of credit depends upon national economic conditions, he and his staff must be "up" on conditions affecting business in order that proper credit policy may be worked out with the Sales Department. Texaco's average Sales Department credit losses are 25 cents per thousand dollars, an excellent rating for any company.

The operations of the Stock Transfer Division are also under the jurisdiction of Bob Fisher. This is a tremendous volume job requiring the correct handling of more than 120,000 stockholders' accounts involving many thousands of transfers of certificates, as well as the preparation and mailing of dividends four times a year.

During the past year, the Stock Transfer Division sent nearly 500,000 dividend checks to stockholders. Persistent as well as diplomatic, Bob Fisher says, "We have always considered it a duty to try and track down a 'missing' stockholder—even if it takes a ream of letters and a solid year of ferreting." Once he sent out a general "S.O.S." bulletin to all Texaco stockholders in search of three unlocated ones. Says Treasurer Fisher: "We were eminently successful."

The toughest and most mammoth job in recent

CONTINUED ON PAGE 22

THE "TEAM" DISCUSSES A MONETARY MATTER



years was the issuance of more than 2,215,000 shares of new stock in 1947. Recalls Bob Fisher, who is used to dealing with problems of high finance: "It took a lot of extra help and sweat to get nearly \$100,000,000 worth of Texaco stock certificates to the right persons in the right amount at the right time . . . a real brain-cracking job!" (Example: 372,000 pieces of mail were sent to stockholders.)

In 1951, the Treasurer and his department successfully handled another tough assignment—the two-for-one split of 13,797,624 shares of stock. This took weeks of preparing, recording, verifying, and mailing more than 200,000 new certificates to all Company stockholders. But all of this work and responsibility hasn't turned a single hair gray on Bob Fisher's head.

There is another duty that falls to the Texaco Treasurer that is less taxing but equally challenging. Bob Fisher personally welcomes the many bank officers who pay "courtesy" calls on him at his 18th floor office in the Chrysler Building. This promotes valuable good will between The Texas Company and the hundreds of banks with which it does business.

On week ends Bob Fisher takes a vacation from checks and certificates by putting around the garden of his home in Tappan, New York, a quiet town on the west bank of the Hudson River, about an hour's commuting from Manhattan. With two daughters, a son, and five grandchildren living close enough for frequent visits to Grandma and Grandpa's house, financial man Fisher never lacks for companionship and "plenty of excitement." **END**

HOPE FOR THE DOUBLY TAXED STOCKHOLDER

CONTINUED FROM PAGE 1

dends, retaining the other half for reinvestment in the business. If the stockholder is in the lowest bracket, he would pay a tax of 22.2 per cent (\$5.33) on the \$24 received in dividends. If the stockholder is in the highest income tax bracket, he would have only \$2.88 of his \$24 left after paying his tax of 88 per cent. This second, or double, tax seems like adding insult to injury, since the stockholder's proportionate share of the company's earnings has already been taxed at the corporate tax rate.

It is not surprising, therefore, that tax and financial experts as well as stockholders generally feel that relief from this double tax burden is justified.

The difference in the tax treatment of dividend in-

come and income from the individual business proprietorship — highlighting the discriminatory nature of the former — is brought out in a recent study of taxes and equity capital made by the New York Stock Exchange. The study compares the tax treatment of an investor who makes an investment in real estate with an investor who makes a stock purchase in a real estate corporation. "In the first case," the study points out, "the full earnings are available to the owner and are taxed only once — at the owner's individual income tax rate. In the second case, the earnings available to him are only those left after the corporation has paid Federal income taxes up to 52 per cent, or more, and the investor is still obligated to pay personal income taxes on that portion of the earnings which he receives as dividends."

Another example of discrimination is seen in a comparison of the treatment of dividend income with the tax treatment of interest on corporate bonds. Bond interest is charged off as an expense before the corporate tax is applied. For this reason, there is no double tax on interest. The Stock Exchange study refers to corporate bonds as "protected" funds.

Besides being discriminatory, the double tax on dividends is also a serious deterrent to the flow of equity funds into private American enterprise.

"Since equity capital," the study says, "provides the vitality and drive needed for economic growth, and since the relationship between the volume of equity and 'protected' funds has tipped substantially in recent years towards the latter, there is every reason why our national tax policy should be modified to encourage rather than discourage those who risk their funds as equity investors. To the extent that shareowners' profits from corporate enterprises are taxed twice, the incentive to assume the risks involved in equity investment is reduced."

The double tax on dividends is only one of several features of our tax laws, adversely affecting stockholders, discussed in the Stock Exchange study. In recommending a comprehensive revision of Federal tax laws, the Exchange study says that many tax provisions were adopted under pressure for increasing revenue without "opportunity for adequate study of their long-range effects on the economy. Stimulation of the flow of capital funds into equity investments, and an increased use of equity funds in the financial structure of American business, are among the important matters requiring attention."

Many organizations and financial and tax experts are recommending that Congress provide some relief from the double tax on dividends. The Exchange suggests that individuals generally be allowed to deduct 10 per cent of the dividends received on stock from their tax bill.

The problem of the double tax in Canada was tackled in this way. In 1949, the Canadian government allowed

a credit against individual income taxes equal to 10 per cent of dividends received. The New York Stock Exchange study quotes Douglas C. Abbott, Canadian Minister of Finance, as follows when he recommended the credit provision: "It seems to me that in a system of private enterprise which depends for its existence on a steady flow of investment capital, we cannot afford to neglect the implications of this defect [double taxation of corporate dividends] in our tax system, which has been accentuated by the increase in both corporate and personal income tax rates."

In 1953, the Canadian government increased its tax credit from 10 to 20 per cent.

A number of proposals to provide different degrees of relief from the double tax have been submitted to Congress, but each proposal involves loss of Federal revenue, an important consideration in any tax measure. One bill, H. R. 3686, which Representative Hale Boggs, Democrat of Louisiana, is sponsoring, provides for a credit against tax of 10 per cent of dividends received from domestic corporations. This proposal is the same as the relief provided by the Canadian government in

1949. It is estimated that it would result in an annual revenue loss to the Federal treasury of about \$740,000,000. Representative Richard M. Simpson, Republican of Pennsylvania, in H. R. 3099, proposes to eliminate the first \$200 of dividends received from *income* subject to tax. This proposal would reduce Government revenue by about \$575,000,000 annually. Several other proposals under which the Government would lose less revenue have been submitted to the Joint Congressional Tax Committee for study.

A decision on whether to reduce the double tax on dividends may well depend upon what progress the Congress makes in balancing the Federal budget. Even a small reduction in taxes on dividends would be welcomed by stockholders as a first step in the right direction.

A real overhauling of our Federal tax laws has been tried without success a number of times. It is believed, however, that there is some chance for success during the 1954 session of Congress. Certainly, relief to stockholders from the double tax on dividends should be high on the list of meritorious reforms. **END**



Texaco Sidelights

PRIZE WINNER

On broad, famous Canal Street in New Orleans, a sleek, new 17-story building breaks the skyline. This glass and aluminum structure is a new regional headquarters for Texaco Sales, Producing, and Legal personnel.

In October, the air-conditioned building won special recognition for

its handsomeness. At the annual "Office of the Year" luncheon held in Manhattan, *Office Management* magazine presented an Award of Merit to Texaco "for outstanding office design



and layout." E. R. Filley (right), Vice President in charge of the Domestic Producing Department, accepted the bronze plaque from the magazine's vice president and general manager, Donald McAllister.

Previous *Office Management* winners have included the United Nations Secretariat in New York. ★

EXPANSION

A program of expansion and modernization is now in progress at six Texaco refineries. These projects will greatly improve the plants' capacities for the manufacture of high-quality motor gasoline and will also increase the over-all liquid recovery.

At El Paso and Amarillo, Texas, crude oil distilling capacity will be doubled by new and larger refining units. The plants will be further modernized and expanded by the installation of fluid catalytic cracking units, catalytic reformers, delayed cokers, and catalytic polymerization units.

Catalytic reforming units are also being installed at the Port Arthur (Texas) Works, Eagle Point (New Jersey) Works, and Lawrenceville (Illinois) Works.

At Eagle Point, Amarillo, and Lawrenceville new sulphuric acid alkylation units will permit manufacture of high-quality aviation fuel as part of Texaco's contribution to the national defense drive.

At Sunburst, Montana, catalytic polymerization facilities are being added to the refinery. This expansion will enable Sunburst to manufacture high-octane blending stock. ★



TIMELY THOUGHTS

In a speech to independent oilmen at Houston on October 7, J. S. Leach, Texaco's Board Chairman, dealt with three vital petroleum issues.

He voiced a strong statement on the necessity for keeping the 27½ per cent depletion tax allowance. To the members of the Texas Mid-Continent Oil and Gas Association, Mr. Leach said that repeal or reduction of the depletion allowance on the gross income from producing property would be "suicidal" as it would "abolish incentive to hunt for new oil sources at a time when such sources are so urgently required."

Mr. Leach declared that new attempts would probably be made in the next Congress to abolish the allowance. He warned that the consequences of any repeal would be a diminished domestic oil supply. There would not only be less new exploration and drilling, he pointed out, but stockholders and employees would have to accept lower returns so that development of present oil sources could continue.

The Board Chairman also commented on price increases, stating that petroleum products had risen less than five per cent since 1948 as compared with an 11-per-cent rise of other commodities.

Turning to oil imports, Mr. Leach observed that, in the face of a yearly consumption increase of one-half million additional barrels a day and the Government's request for a national security cushion of potential production of crude oil, imports are needed to keep the petroleum industry away from the "dangerous borderline between supply and demand." ★

TO THE EDITOR . . .

The Summer issue of THE STAR ran an editorial entitled "Going Out of Our Way," which dealt with the loyalty of stockholders and employees to the Company. After reading it, one stockholder sent in a tribute on another loyalty—the loyalty that exists between many Texaco customers and dealers.

"For nearly a quarter of a century,"

writes Charles A. Tonsor, principal of Grover Cleveland High School, Brooklyn, New York, "I have gone one to two miles out of my way just to get Texaco 'gas' from my dealer. His kindness, consideration, and courtesy typified Texaco."

Mr. Tonsor goes on to say that his Texaco dealer is now undergoing treatment in a Long Island hospital for a bad heart. "I miss him," he concludes, "... as a symbol of Texaco."

It is this deep bond between customer and dealer that has greatly helped The Texas Company to grow over the years. ★

THE FLEET'S OUT

Two more high-speed tankers built for The Texas Company were recently launched on the ways of the Newport News Shipbuilding and Dry Dock Company. These launchings were the last in a series of four.

On September 11, Mrs. Olive M.



Dorwin (*about to strike ship's bow*), wife of Vice President and General Counsel O. J. Dorwin, christened the S.S. *Connecticut*.

On December 18, exactly one year after the launching of the first of the new tank ships, the S.S. *California* was launched by Mrs. Josephine W. Wood, the wife of J. T. Wood, Jr., Vice President, Foreign Operations—Western Hemisphere.

The *Connecticut* and the *California* are vessels of 19,000 deadweight tons each and have a service speed of 19 knots. ★

NEW LINES

Crossing flooded rice fields and 14 rivers, canals, and bayous, the recently completed Evangeline Pipe Line System is probably the "wettest" stretch of line in the world.

Constructed and operated by The Texas Pipe Line Company, a wholly owned subsidiary, this 191 miles of line began to "flow" on September 24. It is owned by The Texas Pipe Line Company, Gulf Refining Company, and the Sinclair Pipe Line Company. The 16-inch carrier transports petroleum products from refineries in the Port Arthur area to Baton Rouge, where deliveries are made to sales terminals. From Baton Rouge, the bulk of the products continue eastward to North Carolina via the Plantation Pipe Line System.

After leaving Texas the Evangeline line soon plunges into the marshes and rivers of Louisiana. It bores three to five feet below the bottoms of romantic-sounding Chiouppique Bayou, Calcasieu River, Cortabean Bayou, and Atchafalaya River, in addition to the Mississippi and other waterways.

An outstanding safety feature of the line is the electrical system running between Port Arthur and Baton Rouge. If the pressure goes beyond the safety range at Baton Rouge, the delivery end, a switch instantly shuts off the entire system.

In December, another products carrier, the 16-inch Wolverine Pipe Line, started to flow. Partly owned by The Texas Company, it transports products 300 miles from East Chicago, Indiana, to Detroit and Toledo.

By Spring of 1954, the 16-inch Harbor Products System, now in construction, will be ready to carry products along the 80-mile stretch from Texaco's Eagle Point Works at Westville, New Jersey, to terminals at Linden and Bayonne, New Jersey. It will also connect with another pipe line for deliveries into Central New York and eastern Pennsylvania. ★

WHEN TANKER UNLOADING IS COMPLETED, arteries that join ship and shore are disconnected. (Right) Texaco men at Los Angeles Terminal remove a hose line used to unload a tanker that brought crude oil to Los Angeles Works for processing.

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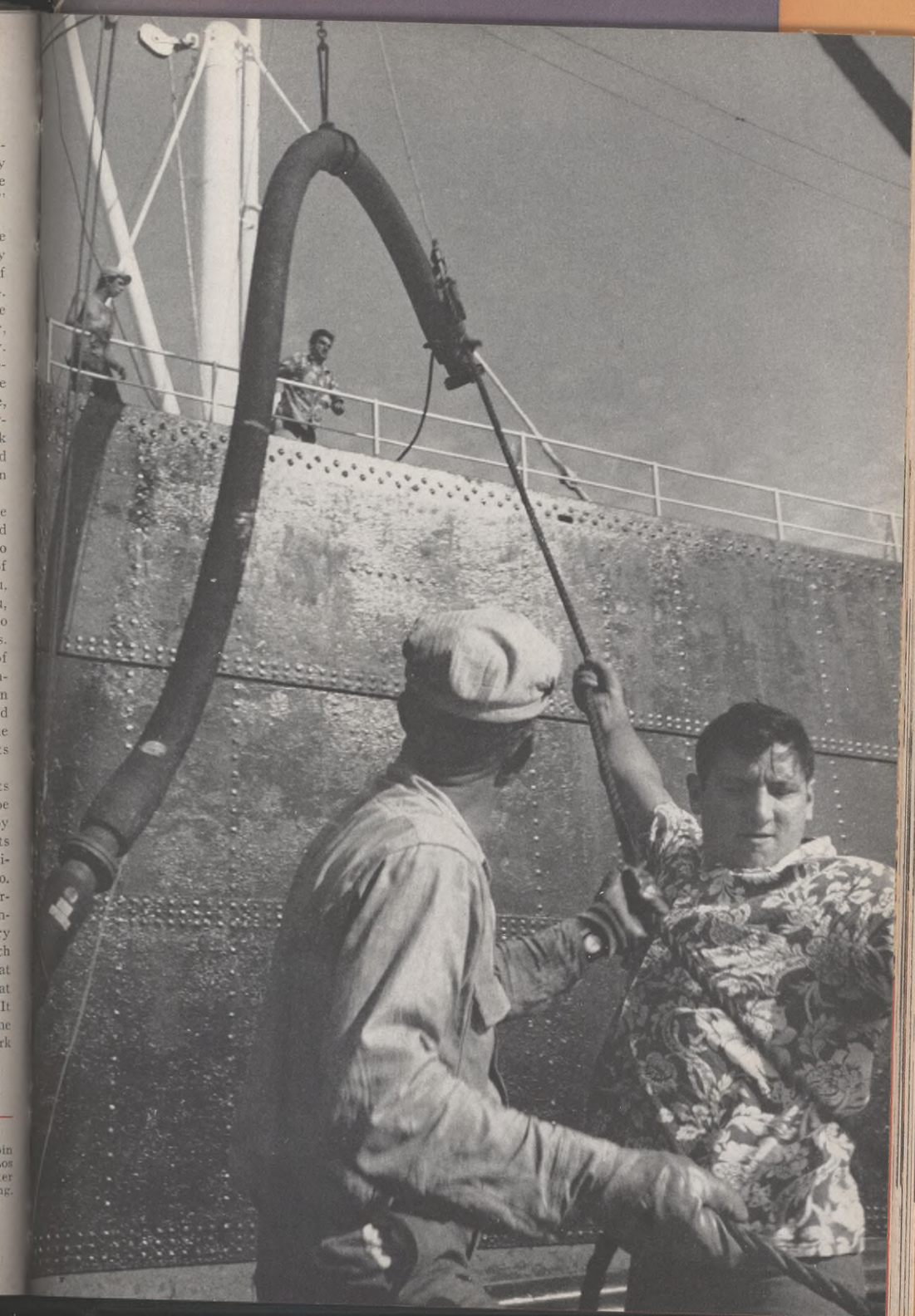
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Strong are the Roots

Less than two hours from the heart of Manhattan stands this elm—a symbol of quiet strength. Towering high over a quadrangle of buildings at our Beacon Laboratories, the elm's age is unknown. For over 20 years, since the opening of this research center, it has been cared for by Texaco's Beacon family who live and work in the beautiful Hudson River Valley. The strong roots of the elm are like the roots of The Texas Company—growing toward a greater future. Texaco's roots are the research and development which constantly go on in the Company's many laboratories. Research gives The Texas Company the ability to serve the public with petroleum products that are always improving.

THE TEXAS COMPANY