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OUTLOOK FOR OIL: THE PROBLEMS AND THE PROMISE

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Good afternoon, gentlemen.....

I am honored by your invitation to address this distinguished meeting, especially since it gives me an excuse to visit this great producing region once again.

San Francisco and Los Angeles and Chicago and New York are wonderful cities and excellent places to conduct business. But to see the oil business in true perspective you have to return to the San Joaquin Valley or the Permian Basin, or one of the other places where the blood and bone of the industry is formed.

Sometimes I think oil men are like the legendary Greek wrestler, Anteus. He was unbeatable as long as he stayed in contact with the earth---in other words, as long as he kept his feet on the ground. It wasn't until he allowed himself to be lifted into the air that his opponent, Hercules, was able to do him in.

In the same way, the oil fields---where the real work of finding and producing oil is done---are the industry's source of strength. Only by understanding what happens here can the oil business keep its feet on the ground, and be ready for all challenges.

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Certainly the industry has seldom had greater need for strength and clarity of vision. Since the first of the year it seems that we can't open a paper or turn on the TV without finding some new commentary on the way we conduct our business. There are probably few in this room who can remember a time when petroleum was beset with more or greater problems or uncertainties.

On the West Coast we are accused of irresponsibility in offshore efforts, and further development of offshore resources is threatened. In the East, they say oil is too expensive, and talk of a free trade zone and a special-quota refinery as an answer.

In Washington, the import policy ball is being tossed back and forth, and the industry is labeled as the villain. In District 5 there is concern that Alaskan discoveries may bring in too much oil all at once.

While some decry shut-in production, others lament a decline in exploratory drilling and a falling-off of reserves. Meanwhile, spiraling labor and equipment costs make exploration difficult, and FPC price controls continue to limit natural gas discoveries.

Congressmen and Senators tell us to import more foreign oil; at the same time, executive agencies urge us to reduce foreign expenditures in order to achieve a balance of payments.

And behind the entire assault is the perennial charge that the industry receives preferential tax treatment---especially in the case of the percentage depletion allowance.

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Although later in my remarks I will comment specifically on some of these allegations, I did not come here today as an apologist for oil. I don't think we need defense or apology, because none of the attacks launched against us is really new.

The wording and the sources may be different, but the issues have been with us for a long time.

If they seem new, it is only because they are communicated more quickly and widely than ever, and charged with a great deal more emotion.

I suspect, however, that a cooler part of the day is coming. Until then, we must not be too quick to do battle, or take offense. Instead, we should continue the dialogue, adhering rigidly to the facts. In that way it will soon become clear once again, I'm sure, that petroleum progress and the economic welfare of society are inescapably connected.

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It is almost axiomatic in American industry that great problems usually mean even greater opportunities. That is certainly the case with the oil industry at the moment. If we can work our way through the thorns and brambles, the petroleum industry--- U.S. and world-wide---will grow and prosper during the next decade as it never has before.

Today I would like to review these opportunities with you, and talk about some of the ways this bright future may develop.

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A hint of what's coming can be seen in last year's world-wide energy consumption, which increased 5.3 per cent for a total of more than 90 million barrels a day oil equivalent. Even more remarkable, the U.S. used 29.3 million barrels a day oil equivalent---the highest energy use ever recorded for one country and one-third of the world total.

By the end of the coming decade, U.S. energy demand will leap forward 60 per cent, to more than 46 million barrels a day. And about 70 per cent of that energy will come from oil and natural gas.

In 1968, Free World petroleum consumption advanced strongly with an overall growth of nearly 8 per cent---6 per cent in the U.S. and more than 9 per cent in Free Foreign areas.

A brief five years from now, Free World oil consumption will be 45 million barrels a day---11 million more than at present. By the end of the decade, today's rate will double, reaching 65 million barrels daily.

Here in the U.S. by 1980, meanwhile, we'll be using more than 18 million barrels of oil daily, and between now and then we'll consume a total of 72 billion barrels---almost as much as we've used in the last century. So you can see that we have an almost limitless market for our products.

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Over the next few years Free Foreign demand will sprint ahead by an average of 8 per cent yearly. The continuing industrialization of Southern Europe, the stunning economic success of Japan, and the industrial emergence of many nations of the Far East will help maintain this level.

Meanwhile, in every corner of the world today highway systems are being constructed as fast and furiously as railroads were built in the 19th century. These roads will ultimately tie the 21st century together, and bring products, education, and progress to the remotest parts of the earth.

Over this vast web of asphalt and concrete, great trucks will carry the steel and machinery and timber and concrete and petroleum. And a new and more mobile population will take both to the roads and the air for their personal and business travel. As a result, Free Foreign demand will show steady, high growth.

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In our own country, where industrialization is at an advanced stage, growth in oil demand is forecast at a more modest 3 per cent annually. Spearheading U.S. performance will be the exploding transportation market---sparked by the boom in mass air transit and a younger, more affluent population.

In fact, a full 86 per cent of oil's domestic growth to 1980 will be in transportation fuels, primarily motor gasoline, diesel oil, and jet fuel.

Since our nation is highly motorized already, sudden, large spurts in motor gasoline sales are improbable. Instead, we can expect a steady increase as the population swells and becomes younger and more mobile, as two and three-car families and longer vacations become the norm.

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Some of these vacations, of course, will involve boarding a jumbo jet like Boeing's new 747, and being whisked to one's destination along with 489 other passengers. In order to carry this huge load, the 747 will have to burn 5,000 gallons an hour of fuel---twice as much as today's jetliners.

The 747 is already a reality. The first one flew its flawless maiden flight at Seattle in February, and 95 more will be manufactured by the end of 1970.

Shortly after that, its sleeker, faster cousin---the supersonic transport---will begin hurtling across continents and oceans. The SST's will use twice as much fuel---about 10,000 gallons an hour.

Meanwhile jet air cargo, in giant ships such as the huge Lockheed L-500, will become an important factor in international trade. And most significantly, more people will have the leisure, the money, and the attitude it takes to get on a plane and go somewhere.

World jet fuel demand soared from zero in 1950 to more than a million barrels a day last year, and developments such as these promise to push it to about 2.5 million barrels by 1980.

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Underlying the attractive prospect for transportation fuels is a shift in our population profile, a shift toward youth. By 1980, we'll add 34 million citizens in the U.S., and about half of these will be in the 20 to 35 age group. These, of course, are the spenders, the ones who buy the cars and take the plane trips. They also have the babies, buy the houses, heat the houses, buy the petrochemical products---in short, consume at an unprecedented rate.

Partly because of this, per capita energy consumption in the U.S. will grow from 53 barrels a year oil equivalent to 72 barrels by the end of the coming decade.

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America's burgeoning requirements for oil naturally raise the question of where it's all going to come from. We have a partial answer, of course, here in the Permian Basin and in other established areas of the Southwest and the West. And just last Spring we found further reassurance in one of the least accessible spots on the globe---the frozen tundra of Alaska's Arctic Slope.

Since then, speculation on the size of the North Slope find has been a favorite pastime. Although geologists suspect it's very, very big indeed, we won't have any firm answers for at least another year.

Even the most modest estimates, however, suggest that there is a great deal of oil up there; and many experts---in geology, in drilling, in production---think that the high guesses in the range of 10 to 20 billion barrels are closest to the mark.

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At this size, of course, the North Slope reserves would have major supply ramifications for the U.S., and possibly the world.

Already, there is speculation in District 5 about the effects of this new crude on Western markets. There are rumblings in Canada about the impact of Alaska on Canadian crude sales in the U.S., and this is undoubtedly of great concern to Venezuela.

Actually, of course, all these sources of crude and more will ultimately be needed in the Western Hemisphere. The task is to use and distribute them wisely and economically.

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One other thought on the North Slope should, I believe, give us pause. Among the present attacks on oil, there is the theory that oil import controls are too costly to the consumer, and should be abolished. This theory goes on to say that national security is not a sufficient reason for seeking new domestic reserves, and accepting the higher price of U.S. oil.

Well, let's suppose import regulations had been taken off several years ago. Under such circumstances, would we ever have found the national strength and wealth that is represented by North Slope oil. Would we have had the incentive to send drilling teams into 50-degree below zero weather, at three or four times the cost of normal exploration? I don't think so.

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It is also noteworthy that just a few years ago Arctic oil wouldn't have done us much good. Even if we had found it, we would have had to let it sit there, because we didn't have the capabilities to move it out. As it is, the Alaskan boom comes at a time when the science of moving oil around the world in large quantities is undergoing phenomenal change.

This has given us some fascinating new options for transporting North Slope oil to the Lower Forty-Eight and elsewhere. Let's examine some of them:

First, construction of a pipeline to a warm port has already been announced. From there, crude could be shipped to California. Or it could go by tanker through the Panama Canal to the East. Or, it could move by tanker to the Pacific Northwest, and from there to Eastern markets by pipeline.

Many think that the expected volume from the new fields will make it economically necessary to build a pipeline through Canada to the Great Lakes. Canada, of course, would understandably have great interest in this, and such a move would play an important role in any emerging Continental oil policy.

But certainly the most imaginative of all is the plan to send a 115,000-ton tanker, with an "ice-plough" on its reinforced bow, through the 15-foot polar ice of the Arctic Ocean. Not since 1905, when Roald Amundsen made his famous voyages and located the magnetic pole, has so much interest focused on the Northwest Passage.

The ice-plough concept is scheduled for test this summer. If it works, it will revolutionize the logistics of oil transportation in all Arctic regions.

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This unique use of a tanker is perhaps a symbol of the whole new range of supply options being created by new petroleum transportation techniques.

Our greatest flexibility and economy, of course, has resulted from the introduction during the last few years of the mammoth supertankers---behemoths of the 200,000-ton size or more, with drafts 20 feet greater than the present depth of the Suez Canal.

Some idea of their usefulness is seen in the fact that they can carry crude from the Persian Gulf around the Cape of Good Hope to Europe for about 30 per cent less than it costs a smaller ship to go through the Suez and the Mediterranean.

There are now several vessels afloat in the 300,000 ton-plus class, and larger ones are in construction and planning. Tokyo Tankers, an affiliate of my company, is currently building a vessel of 367,000 deadweight tons, and the same shipbuilder has already considered tankers in the 420,000 to 450,000-ton range.

Since some 60 per cent of Free World oil now moves by water before it is used, you can imagine the value of these fleets to the future of our business.

The same economies of scale naturally apply to pipe line construction, and in this country we can certainly look for more lines of the "big inch" variety. Already advancing pipeline technology has been of great advantage to Permian Basin Oil.

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From these few examples, I think we can conclude that the outlook for oil has never been more exciting, never more promising. It will continue that way if we provide creative solutions in certain fundamental areas of responsibility.

Naturally, these solutions will also have great bearing on the problems that seem to encircle us at present.

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First of all, in this country, our basic task is to find the oil. We must do something rapidly to reverse our declining domestic discovery rate.

Despite our excess capacity in Texas and Louisiana and our potential excess in Alaska, our reserve-to-production ratio is shrinking, and at the present rate, would dip to five years by 1980.

The reason for this decline, of course, is less exploratory drilling, caused by limited economic incentives.

We must find a way to make U.S. exploration worthwhile again.

Although foreign supplies have historically been a valuable supplement to domestic oil, too much reliance on imports could be ruinous to our national security and our balance of payments position.

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In order to find the oil, we first have to find the money. We must have sufficient economic incentives to justify the enormous capital and exploratory outlays the future will demand:

In view of these pressing financial needs, the agitation to increase the tax burden on the oil industry must result from failure to comprehend the economic facts as they exist.

Depletion, as always, is a prime target. Even though the depletion allowance has helped guarantee this nation's oil supply for 40 years, there are still those in government who say this incentive is not needed by the industry.

Depletion allowance had its early origins in 1913, when income tax became a fact of life. The lawmakers were seeking a just method of taxing income without taxing capital.

For depreciating capital equipment, the formula was, and still is, easy. You simply deduct yearly depreciation over the equipment's useful life. When it's worn out, enough tax free money will have come in to buy a replacement.

But for depleting assets, such as oil and other minerals, the problem was tougher. Finally, after long study and some trial and error, percentage depletion was evolved in 1926. What it does is allow the producer to retain---free of tax---a certain amount of funds. These funds can in turn be applied to the monumental expense of seeking new oil reserves.

The plentiful, low-cost petroleum energy that has been available to the American consumer since then is one excellent proof that the policy works.

And---despite rumors---depletion has not produced inordinate profits for the industry: from 1925 to 1966 the after-tax earnings of the petroleum industry averaged 10 per cent---but the average earnings figure for all manufacturing was 10.7 per cent.

Depletion doesn't give petroleum any unfair advantage. All it does is counterbalance the extreme financial risks involved in the search for hydrocarbon reserves.

In fact, if our critics studied our declining discovery and reserve situation, they might realize that, if anything, present incentives for the industry are indeed thin.

To meet the challenges and reap the benefits, the entire range of incentives---including a fair market price---must be strengthened.

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Another necessity for the industry is to continue its scientific advance on all fronts---in exploration, production, refining, and distribution.

There is little doubt that we have the know-how and the motivation to accomplish this---developments such as our new tankers, hydrocracking, advanced catalysts and other product improvements, are vivid testimony to the industry's talents. But we must not let up pressure in this area; rather, we must redouble it.

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Finally, to capitalize on tomorrow, we must meet the question of environmental pollution squarely and honestly. We all live and work in this world, and considering the nature of our business, we have a major responsibility to keep it clean, natural, and free from contaminants.

This does not mean, however, that the industry need wear a hair shirt forever over Santa Barbara. That was truly an unfortunate accident, and you can be assured the industry will use all its resources to prevent any recurrence.

I would like to point out, however, that in the last 20 years, some 13,000 wells have been drilled offshore in the U.S.--- and there has been only one Santa Barbara. That's not what you could call a record of negligence.

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I personally see no reason the industry cannot provide the necessary solutions, and at the same time reason calmly and persuasively with its many publics.

Assuming that we do these things, the oil business will remain a very fine place to work, and an invaluable aid to society, for many years to come.

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