SHELL OIL COMPANY

ORAL HISTORY PROJECT

Interviewee: John Bookout

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Bio

John Bookout had a tremendously successful career with Shell Oil Company. After serving in World War II as a B-17 pilot he attended the University of Texas earning a B.S. and a M.S. in Geology. He began working for Shell in 1950. He became District Geologist in Amarillo in 1954 and stayed in that position until 1958. That year he was promoted to Division Geologist for Wichita Falls, TX. He also worked as Exploration Manager for New Orleans in 1965, in Economics Department for E&P, and as exploration manager and VP Denver. (then he became president of Shell Oil Company from 1976-1988.)

Summary

The interview covers Bookout's background extensively including discussion of his experiences in World War II. Great information on his time in Amarillo as District Geologist with a commentary on his experience with the Dalhart Basin. More discussion of some of his various experiences through the early part of his career in Texas, New Orleans, Denver, and The Hague. Interesting information on the Corporate Culture of Shell or, the "Shell Family." Comments on the relationship Shell Oil had with the Group.

Side A

TS: This is July 16, 1998. I am in the offices of Mr. John Bookout. This is Tom Stewart, for the first interview for a update on the history of Shell. I appreciate, John, you being with us today. I would like for you to begin by just talking a little bit about John Bookout, the person, the individual. A little bit about where you were born, your background, kind of what got you interested in geology first and Shell secondly.

JB: O.K., I was born in North Louisiana, in the city of Shreveport, Louisiana, Caddo Parish. That also is a geographic area that generates considerable interest in the oil industry. It had oil and gas production in the early days, around the Shreveport area. And then, of course, everybody is familiar with Kilgore and Longview Fields which are only a few miles from Shreveport. The large Caddo field was a gas producer. Even in late elementary school days and early high school days, well, on an evening when it was overcast, you could look in the direction of Caddo Field and the sky was always lightened and kind of looked rosy red from the number of flares. Of course, natural gas had no value then, and so the gas was flared. And, as kids in high school, we took great delight in, say, driving to the Caddo Field and take a

newspaper and saying, "Look, we can read the newspaper by the light of the flares at Caddo gas field."

I also had some relatives, although not in the exploration and production business, who were associated with the oil business from the trucking standpoint. So, I guess you could say I grew up with some sort of knowledge and exposure to the oil and gas business.

That opens up a whole array of activities; say, land brokering to exploration to engineering. When I finally got around to settling on what I was majoring in at the universities, I chose geology because I thought that I really wanted to have a job that put me outdoors. I didn't think I wanted to be cooped up in an office. And the concept of a geologist in earlier days and even up to as late as the 1940s, was someone who went out in the field, did field mapping, and spent a lot of time in the oil fields, well setting, catching samples, and so forth, all of which seemed pretty glamorous at the time. But I guess we all know that the industry had progressed to a point, by the time I actually became engaged in a professional way with it, well, there was still some of that activity going on but it was kind of fast diminishing and there was much more action in the environment of an office. So, I ended up spending more of my time bound to a chair in an office.

On the education route . . . after World War II . . . I was in the service about four

years. After World War II, I had already taken, before going to service, a few courses at Centenary College, which is a Methodist-denomination college in Shreveport. I took a few courses there. When I returned from the service, it was in February of 1946, I went into Centenary for a semester because I could get into Centenary. I wanted to start with education as fast as possible. Then I transferred out of there to the University of Texas. And this kind of leads you to your question about, well, why Shell? At the University of Texas, I completed a bachelor's degree, and then worked on a master's degree. A supervising professor I had at the time felt I really should stay in the academic world. I don't know what in the world would cause him to think that, but that's what he thought. And so, he worked on me all during the time that I was working on my thesis, and finally convinced me that I should stay for a doctoral degree and pursue a research and teaching profession, associated with some university.

At the end of the master's degree requirements, I told him I really felt that I wanted to enter industry. I really wanted to get on with my life. I had spent a lot of time in the service and in the education world, and we arrived at Shell on the basis that I was asking him about various companies, the characteristics of certain companies, and he took, at great length, or he had consulted for a number of companies . . . and finally ended up saying, "Well, I think that of all the major companies that you will find, that Shell Oil is probably more dedicated to research. And they seem to try to apply their research. So, I believe that if you insist on leaving the academic world, I think

you would probably feel more comfortable in a company like Shell." I have to confess that I knew nothing of Shell, having spent most of my early days and all in the South. Well, Shell didn't market at that time in the South. That came on later. So, there was nothing that one encountered on a daily basis to remind me that there was a Shell Oil Company. There was an awful lot around to remind one that there was a Humble Oil and Refining Company though.

I recall that he fished around in his desk. He had a number of different kind of applications, blanks of different companies, and he came up with this application blank. I always remembered it was yellow in color. Yellow paper. And said, "You know, I think you ought to fill this out and seek an interview with Shell." That is the way I ended up with Shell. Shell had a training program, as you are well aware, that everyone went through that consisted of some field mapping in the Rocky Mountains. After everything that was part of the training program, including a three or four month exposure to Bellaire Research, and finishing that, I was assigned Oklahoma City, and I did have a mapping program. I was sent out to map the limestone hills of southern Oklahoma. In fact, I lived close to Fort Sill, that Army base down there, and mapped the limestone hills around that part of the country. And did some well-sitting along that trend to try to map the subsurface extension of it, followed by some well-sitting in the deep Arbonne Basin.

TS: O.K., John, let's back up for just a moment and talk a little bit more about your

experience in World War II. Tell us a little bit about that.

JB: I signed on as an aviation cadet. That was known then as the Army Air Force. It was kind of interesting in that I had taken the exam to go in the Naval Air Force. I needed my parents' agreement. They gave me a form because of age and I was volunteering, I had to get their signature. That caused a lot of family discussion. My father was absolutely opposed to anything that thought it could stay in the air very long and so he didn't think I should get in any airplane. But after much discussion, we worked that out and he just said, "Well, anything mechanical breaks down, and I can't see flying over water and having a breakdown. So, if you've just got to do this, it's going to have to be the Army Air Force that flies over land." And so, I went out and took the exam to get in the Army Air Force. And, of course, there was a whole series of aviation cadet training. For induction, I went to Shepherd Field. And about all they did there was to give you a whole series of shots, inoculations against various diseases . . . all kinds of physicals, and harassed you as much as possible. You know, they'd get you up in the morning, jogging and so forth.

Well, the next thing was Santa Ana. Santa Ana, again, was a preflight sort of thing, where you learned Morse code and took various courses. And from that, to primary training. And primary training was at Blight, California, followed by secondary, in which you moved up into a larger aircraft at La Mora, California. Then, the advanced training was at La Junta, Colorado, on B25's. That was an experimental

case. They were trying to see if they could shorten the training program, which had generally been . . . you started off with a single engine primary then moved to a secondary to a little heavier, larger, single engine plane and then went into the final phase and you flew very light twin-engine planes, as well as some AP6 which were a bigger single-engine plane. Well, they introduced this experimental course to try to see if they could introduce you into actual operational wartime twin-engine type planes in that last category. And that experimental class was conducted at Cornelius, so I went there.

Following that, it was right at a time that the medium bombardment twin-engine plane manufacturing was in a switch over to a more modern, more recently designed twin-engine fighter. So, there was a hiatus and not a lot of need for pilots at the present time at Cornelius. So, I went to what is called a four engine transitional school, and that was at Hobbs, New Mexico, which is old B17s. Following the completion of that, I went to Tampa to get crew assignment for the B-17 . . . I had to go through the indoctrination and fly together as a crew for a while, and that took place at Gulfport, Mississippi. We finished that. We went as a crew to Savannah, Georgia and picked up a new B-17 and flew that to overseas. Curiously, not direct to England but to Ireland. And there was a modification base in Ireland where a lot of B17's were finally equipped properly to enter combat. So, we crossed over by boat to the U.K. and then by train, to an airfield called Netherton East, near Norwich.

And so, we flew missions out of there until the conclusion of the war. I stayed after the war had finished, as I said earlier, until February, 1946. At that time, because I liked airplanes a lot, I had taken a lot of what free time I had on the base and got what was called checked out, to fly a number of different kinds of airplanes. And so, the Army decided that I should stay there, and I ferried a lot of equipment from the bases in England to Germany as the occupational forces were setting up. And then I ferried to Paris and some other fields on the continent, some of the surplus airplanes that were left on those bases.

And after we got all that done, then, by choice, I took a ship home because I had never taken a voyage on an ocean liner. I wasn't more than about a day and a half at sea that I figured that was a big mistake. I would have rather been flying! And, I mentioned, when I got back, I had went to Centenary for a while. I met my wife, who was a friend of one of my first cousins. She happened to be visiting. She was a Louisiana girl. She happened to be visiting there. So, she was looking around for some kind of job herself at the time. She had finished at a teaching college and had taught briefly after that, and she decided that she would rather be in the business world. And so, she really was in Shreveport to take courses in business.

So, I met her and we became acquainted and we got married. Our family came along at kind of a rapid rate. You know, we've told the story that we moved into a

two bedroom rented home in Oklahoma City, and really wondered what on earth would we do with a second bedroom. All we had was a little bit of furniture, and an English bulldog which was her favorite pet, and we moved out of that house and, not long after that, with three kids. And, of course our children came along at a rapid rate. We first had a daughter and then about sixteen months later, we had boy and girl twins. So, that is our entire family and, of course, they are grown, married, and pursuing things. And we have seven grandchildren now - four boys and three girls. They range over quite an age span mainly because our eldest daughter got married right out of college. The twins stayed in college a little while, took some advanced courses, and the girl got married next, several years after the first one. And then her twin brother, he waited even somewhat longer. And so, he has the youngest children and the youngest grandchild is about eight years old. And they go on way up to the twenties. They are all busy and they are scattered about although our son now lives in Houston. One daughter lives in New Orleans and one lives in Greenwich, Connecticut. And we have always been a close family. We stay in touch. We talk over the telephone often and we also visit.

TS: Let me ask you, to back up . . . you had mentioned, you call them "missions." How many combat missions were you on?

JB: Twenty-three.

TS: Twenty-three missions? Decorations?

JB: Yes, well, the standard all of those war things, you know, you do the European theatre. They had about six or eight bronze-star decorations. I certainly didn't get any of the real high, distinguished Iron Cross things. I didn't ever do that. One reason the mission cut like it was: you flew every mission that your group was assigned to fly, with one exception - there were four, so-called, lead crews, that flew the lead position for the group. And my crew, we were selected to be a lead crew. And that kind of takes you out of circulation because when they pull you out of that, first of all, some of the senior officers and all flew with you a little bit to make sure that they thought you to be able to lead the bomb group. And then, you went into this rotational thing where you flew every fourth mission rather than every mission. The copilot that I went overseas with, he was assigned to another crew that did finish all of his missions. So, I would have finished all of my missions had I not been selected in to do the crew. And the reason they do that is because the copilot's seat is generally occupied by a senior officer who accepts responsibility . . . who makes a decision like, well, do you turn back? Do you go to an alternate target, and so forth? And so, that right seat is occupied by one or two or three senior officers on the base. And so, you don't have any need for a copilot. So, when I was selected to lead the crew, he was assigned to another crew. He did finish all of his missions.

TS: Any close calls?

JB: Oh, the usual things I wouldn't want to exaggerate those. Everybody had a job to do. We did have an engine shot out. We had fuel lines, rather large fuel lines, that feed those engines was shot in two. The only way you could transfer fuel between tanks . . . it took a while to do that, which offered some exciting moments in that you just had a steady stream of 100 octane aviation fuel nearly drenching the plane. And particularly, a gunner who was pretty excitable. He was the youngest kid on the crew. He was 18. He was pretty excited. I had minor injuries when that engine was shot out over Frankfurt, well, some of the instruments were also hit because when a shell explodes the metal pieces go everywhere.

In a similar kind of situation over in Berlin, the navigator was wounded. He didn't even apply for a Purple Heart. In fact, I saw him not long ago and I was talking to him. He said, "Well, maybe I should have gone and got my Purple Heart!" That is just the way people took that. They didn't make a lot out of it. You had to be kind of carried off on a stretcher before anybody made much out of it.

My tail-gunner had a fairly close call in that the explosion of a shell set off a 50 caliber; you know, they shot 50-calibers in the back of the plane lying on their stomach, with these rats feeding alongside them. He shot and actually hit and caused one of the 50 calibers to explode. And the projectile hit his flak vest and he got a serious bruise out of that. He was nevertheless saved. And, of course,

thousands of holes in those airplanes. When they came back, they had had pieces of metal flying through.

TS: Do you just patch them out and go out again?

JB: Oh, yes. Patch them up. Didn't pay much attention to that, then patched them up. The crews would work all night on those things to get them ready for the next day.

TS: Any emergency landings?

JB: No. We landed basically without fuel one time. We were losing engines on the final approach, we were running out of fuel . . . we lost two engines before we actually set down . . .

But, like I said, nobody makes a lot out of that and they shouldn't. I mean, everybody was over there doing their job.

TS: Well, you obviously did yours there!

John, the next few minutes, I would like to talk about the idea of "the Shell family." What does that term, and we have all heard it, what did that mean to you? How did it affect you?

JB: Well, I think, kind of the culture of, particularly the larger companies, industry generally, not particularly the oil industry . . . you have to remember, the generation just coming out of World War II, are also the generating that had been exposed to the deep Depression days. And so, they went from the deep Depression days of seeing a lot of unemployment and a lot of hardship on people who never really complained; they always made the best out of what they could . . . into, say, some gear up of war years, and then, say, coming out of the war years, well kind of on what would be say more "normal" life, and the adjustment that took place in that. I think it is true that larger companies were viewed paternalistically. You know, it is kind of interesting . . . they were, in many, many ways, but compared to the kind of thing that employees look for and expect today, maybe not. I would say that, once employed, as long as you tried to undertake in a constructive, upbeat manner whatever assignments were given you, it is true that employment was almost assured. But I would say that, let's look at a couple of Shell's policies: Shell had the policy that was really not common so much in other companies of no nepotism. And "no nepotism" was rigidly enforced, no relatives could be employed by the company. And you go back and look at those of those policies, they were pretty specific when they said no relatives. They went down the chain pretty far, you know . . . aunts, uncles, nieces, cousins. Now, that was considered a very positive thing and I think, in fact, it was a very positive thing and influenced the culture at Shell in that you never had these issues about promotions being based on favoritism by

virtue of relationship. You could still have staff feel at times that some favoritism was shown, but certainly, it removed that element of it. Of course, that policy was abandoned . . . I guess, actually, under Harry Bridges. And, of course, there were two things that probably caused that: one is the Group had not followed such a policy. It was common for the children of active group employees to also be employed by Shell. So, Harry came out of that Group structure. And also, it was in the Bridges's era there was a time when there was a lot of expansion and demand, and it was getting more and more difficult to fill the positions that you were recruiting for. There was kind of a shortage there for a period of time. And so, that caused a relaxation of some of the standards. So, that was certainly a unique criteria at Shell that I think, you know, was positive in that regard.

Now, coming back to what did the company expect out of the employee and, like I say, it expected that you would be proficient in what you were trained to do and educated to do, and they expected you to be very responsive to the company's needs. That is kind of interesting. You could say, well, they put the company needs well above the family needs. Now, this won't sound all that attractive but, at the time, everyone accepted that as that as the right way to do business. That was the right thing you wanted to do and if you say it was a close-knit thing, you felt an obligation to the company . . . if the company needs me in Midland, Texas and I am in Denver, and they say they need me Monday morning and it is Friday, well, I need to get there on Monday morning. So, very often, the kinds of things, the policies that are in

place today, like various kinds of leave policies for employees at the time, you know, family difficult, or a new birth or things. Well, the management of the late 1940s and the 1950s never dreamed an employee should ask or should even entertain or should want to be away from their job that long. So, there was a more marked division in the fact that the employee was a family member in the company, signed on to do a job and to make family sacrifices in favor of a company family. And so, there was a larger burden on the spouse than it would be today in a lot of family situations. I think we moved 19 or 20 times and many of those, Carolyn pretty well handled it by herself. You know, you are in the office trying to finish up on what you had been working on before you take off to take on some new assignment. But you don't have a lot of time to be home helping with packing and things like that. And when you get to the next location you felt highly challenged to catch up on what is going on there to get yourself up to the point that you could begin to make some kind of impact. And so, from the family standpoint, I would say that it always struck me that it was a little tougher for the spouse in that we moved very frequently. When I say, "we," all of us moved frequently. And there was a structural reason for that, but that was the way the company was diversified at the time. And so, when you arrived at a new location, the employee had acquaintances and friends and things that they have met in a business relationship - at seminars, research seminars, other kinds of business meetings . . . so, they walk into an office environment of friendly faces and, of course, the spouse pretty well started over. There were never any complaints about that. I mean, there may have

been on some people's part but I guess I can only say in my case that Carolyn always said we have wonderful friends here and this has been a nice place and I am sure they are very nice people and nice things about the place where we're going. I think you really need to have that kind of attitude in that particular culture. If you are going to always look back, you're always going to be kind of unhappy.

Now, insofar as our personal family, I have always felt that that kind of policy tended to build close-knit families because the kids are going through the same thing. They are going to new schools, so they are not torn away from you and not compelled to go out, so there are not these conflicts because they are always trying to make new friends, too.

In discussing this issue in the past, I have told people about an incident which they always saw was kind of horrible. You didn't really do it, but I did do it in kind of a joking way . . . I remember, in Amarillo, one of our children got up and, every morning, school was just a block away and she wasn't old enough to go to school. But she'd get her books all packed and everything else and the magazines like she was going to follow the children down there. Well, we moved just before she started school. We moved in August just before she started in September. And then, when we entered school, the next two or three schools she was in, we moved the end of the school year. And, at first, she'd say, "I don't want to leave my friends." So, I'd say, "Look honey, you don't want to stay here because everybody moves at the end of the

year and you won't have any friends here next year!"

But I do think that caused a closeness in the family. The family depended on one another and it was beneficial when all is said and done. Our kids are of the age that would have kind of overlapped a little bit with difficulties that some families had with a drug problem. We never experienced that, thank goodness. I have often said it very well could be because a lot of folks say peer pressure is an issue there. Well, they never came under severe peer pressure because they never developed friends that closely. They didn't stay there long enough.

But we have always stayed in touch. And when they left to go to college, we were frequently on the phone with them, talking to them. I mean, there have been times where we just cleared out the whole day and had two or three conversations with our kids, no matter where they were.

I think you can sum up company culture in that there was an expected loyalty to the company. I think there really was a loyalty on the part of the employees, partly because it was, I guess, the paternal approach to the employees, but also, the company expected you, as part of the family, to turn to and to meet the company's needs, and there was also an expectation that your spouse and family, as part of the group, likewise, would be prepared to kind of undertake the sometimes disagreeable thing of locating or relocating at inopportune times. It seems to me that the

operation of the loyalty was always considered to be sort of a two-way street. I think that is something that is hard for maybe the current generation to appreciate. Well, how could you operate in that kind of environment? I go back to the point that a good association with a first-class company that had good personnel policies, was a highly valued thing. I can remember very well, in my early years, and not just me sitting around talking with the other professionals, we always felt fortunate that we were associated with a company that we could dredge up ideas and concepts, and we had a company prepared to bet money on that. And we used to say, we really ought to be paying the company because how can we ever get this done on our own? How can we ever go out and test some of these ideas and some of these creative things that are very important to you as a professional, but also require large sums of capital? So, I think it was a pretty good thing. It worked well, certainly, for those times.

TS: O.K., John, let's talk more about your career, moving from geologist into other disciplines on that road to the presidency.

JB: OK. I think I have talked, over a ten-year period, to the Century III leaders in the program which, you know, is the high school seniors leadership program Shell sponsored ten or twelve years in Williamsburg. And, of course, they always ask this question about how did you plan your career. And I think, without exception, I always gave them the answer that my formula would not be a formula that would be

understood or work today. I said I chose a profession, as we have already referred to, that would ordinarily be envisioned to lead to certain types of professional activities. And that is really kind of what I thought I wanted to do. And that is the kind of work, of course, the company assigned to me right out of the university.

I can recall that I was given, in about the second year, I suppose, I was given a summer employee out of the University of Oklahoma to supervise. I didn't like that very much because I felt responsible for his work and I didn't really understand how I could be responsible for something if I didn't do every detail myself. I went through that, I think, two or three summers. Then, I was called in and told that the company had made the decision that they were going to pursue getting into the natural gas business. Shell was slow to do that. It came out of an expensive exploration effort in about 1939, in which natural gas was discovered but there was really no market for the gas, so they spent the capital doing seismic work. It was decided that the professional staff should take into consideration the odds in favor of finding gas, but they should not initiate a play. All plays should be oil. And the company held to that policy, although it was debated a good bit after World War II. And, of course, gas became much more of a marketable product with some of the large lines built in World War II back to Eastern markets where there was a demand. So, it was in, I think, late 1954, in the budget process a decision was made that we should seek to be more active in the natural gas area. So, I was called in and told about this change of policy and told we want to make you district geologist, and we

want you to go to Amarillo, Texas and open an office and get us in the gas business. They gave me a brand new company car. That was a big thing then. I went out to Amarillo, Texas to start looking around for a place to office. I finally found a lot that was a building site, but didn't have a building on it, but it was close in to the city. I discovered that the owner of that was the publisher of the *Amarillo Globe*. So, I went to see him and told him we would like to have a building, would he be interested. He said he might and how long a lease would we sign. And I said, well, I think we can sign a five-year lease. He said, "Well, how big of a building?" I said, "I'll tell you tomorrow." So, over dinner that night . . .

End of Side A

Side B

TS: John, you were telling us about the relocation to Amarillo and looking for office space.

JB: This fellow's name was Tommy Thompson. So, Shell did have, in the locale, a scout . . . it was something, back in the old days, to call in the information on wells, how to find logs and so forth. The guy's name was Whitey Vanell. And Shell had had an office back in the 1930s in Amarillo. And when they closed that office, well, Whitey was a scout, had just stayed behind -- he'd always been there. So, he was the only employee we had out there. I drew this thing up, this plan, so he drew up a little, simple, five-year lease, and with that we built our little, simple building.

They started assigning me a few people - a couple of geologists, a land man, also. And we hired a couple of secretaries around there.

Going back to what I had mentioned when I had first supervised employees, I guess the first thing I had to learn was going from being a straight, individual professional to knowing what to do with all these people. I didn't like that, again, because they'd work things up and come in and say we ought to spend money on this -- buy leases there and so forth.

So, I got off to kind of not such a good start there because I would want to go sit . . . at that day and time, we looked at samples through microscopes, drill cuttings and so forth. So, I would want to go sit down and look at all those things with them. And, of course, that was very demotivating, I can understand now, to them. And finally, they said something about that . . . you know, if people were going to do everything over, well then there was no reason to have us here. In thinking about that, well, that certainly made sense. It surprised me that I had to learn it that way! And so, I next kind of concentrated on, well, how do I get comfortable, and I did that by a very simple process that would be apparent to anyone: that is, listening to a presentation and deciding, well, what is the one or two critical points about this that have to hold up for this to be worthwhile and ask them to take me through that in detail.

And then, all of a sudden, I felt kind of liberated from the standpoint, I thought, gee, you know, I could only do one thing at a time and now I have these people who can do four or five things at a time. So, I found that was pretty exciting.

We had really good luck. We got off to a good start, in making some gas discoveries. I was fortunate enough to meet a University of Texas guy who was operating as a land man, a gentleman named D.D. Harrington, who was a very prominent local citizen, and who had been very successful. And he had worked up in the Oklahoma Panhandle. I had the Texas Panhandle plus the Oklahoma

Panhandle. I think that is 23 counties, if I remember correctly. And we wanted to get what deep rights it was producing out of the shallow thing. So, I went down to . . . I tried and tried and tried, and I finally got an appointment to see this guy. I told him what I wanted. And he said, "Well, I'll tell you, young man, I am in litigation down in Houston over who owns those deep rights. But you give me your card." And, he said, "When I get that settled, I will call you and we will talk about it." And so, I called every now and then and asked for the land man. He said, "I don't know anything. Can't say anything right now." I said, "I need to come over to talk to him." "No, I can't do that." So, one day he called and said, "Look, if you can get over here in ten minutes, Mr. Harrington would like to see you." I said, I can make that. So, I went over there. I walked in and Harrington said, "Well, you know, I told you you'd be the first to know. I got a judgment in my favor today so the deep rights are mine. He had written it down on a piece of paper. It said, you're interested and you can have them for these terms. And I looked at that and said, "We'll take it." We made a few discoveries there, shallow, no deeper than about 7,000 feet, but the other stuff produces at about four.

We operated in those days by what they called teletype - the old machine that would type the message at the other end. And so, we were a district out of Oklahoma City, which was a Division out of Tulsa. And so, we would telex these long, written recommendations to buy land, drill wells and so forth.

One thing I learned, I learned kind of how to deal with the staff and hopefully, motivate the staff, and make them feel like they were adding something. And then the next thing I guess I think I learned that I never forgot and tried to practice but I suppose, maybe at times, I slipped a bit on this.

We started a large play in what is called the Dalhart Basin, which has been a nonproductive basin. It was over on the west side of our territory, joining New Mexico. One of the contacts I had made was with some people called Ware. They owned the Emerald National Bank. And one of them also owned what was called an LS Ranch. It was a little over a 100,000 acre ranch. So, we took a lease on that. Then, just north, northwest of there, there was Scarborough Ranch, that was another 100,000 acre ranch that we took a lease on. Now, in between those two 100,000 acre ranches, a third ranch called Alamosa Ranch, that Hunt had leased earlier. So, I flew back and forth down to Dallas trying to get some kind of farm out on the Alamosa Ranch.

Herbert Hunt, incidentally, was a new graduate and he was working the land desk for Hunt in Dallas. Finally, I worked out a deal with Herbert. So, we got a checkerboard interest through that land. Now, some very kind of interesting things happened: certainly, it probably at least made some people in New York aware that I existed. We drilled a well on the LS Ranch, about 9800 feet, and made an oil discovery. We moved up to the Scarborough Ranch and we drilled a well there and

made a gas discovery. We moved down to the Alamosa Ranch and drilled a well and made an oil discovery. Now, think about that - three, 100,000-acre ranches - and we drilled each of the ranches and made a discovery. No dry holes.

There was a guy named van Everdingen, a Dutchman who was a mathematician stationed out at Bellaire, and who had been taken to New York, and he was one of the few people that advised the president up there. That was before they had managed departments and all. He was called in and asked what's going on here, with the odds? So, he started with the normal industry odds of what the chances are of drilling a discovery well, and then what the chances are if you are in a nonproductive basin. And then he took it to the point of well, what are the odds that you could drill three straight wildcat wells that far apart? And he theoretically decided that science and technology could have nothing to do with this, that we could not be that good, because we defied all the mathematical odds of doing that, and of course, he knows nothing about geology, as a theoretical mathematician . . . so, he comes up with this thing that the only way you can explain this . . . there is just oil everywhere under those ranches. There was nothing to localize. These guys couldn't be that good. It defies everything that is known.

Now, as I learned number two, which upset us very much, then the first thing I know, I had all kinds of people flying in to Amarillo with draft books, you know, in their hip pocket. And I lost all control! They were running around out there,

leasing, paying anything they could pay. Just, you know . . . "how much do you want for it? Will you take a check?" They leased up the whole county. We never drilled another successful well. Now, we didn't try to offset LS Ranch because the reservoir did not have much energy. It was kind of a waxy oil and all, and it was really too deep to pump. We put a big pump on it and tried pumping for a while, but it was obviously not economic.

The gas well we drilled in Scarborough, we offset in two directions, and never found the pay again. The Alamosa Ranch, we offset in three directions, and never found a successful well. They were all dry. Now, this took place over, you know, another year-and-one-half, two years.

The well at the Alamosa Ranch, I doubt it would still be producing but I would say even after I was president, it was still producing oil. It produced almost one million barrels of oil.

The other thing that happened to me that I don't think it ever happened to anyone else in Shell . . . the Scarborough Ranch, you had to drive, and the nearest town was Vegas, which was on the highway there that goes east-west, an interstate highway. But you left that and you took Ranch Road. They were all dirt roads, and hard to travel. It was miles and miles back into Scarborough Ranch. Well now, you see,

you've got everybody looking over your shoulder asking all these questions. And Porter Bristol, now, was running the Tulsa office as vice-president. They wanted hourly reports on what the well was doing, you see? And this poor geologist sitting up there, Mays was his name, he would drive his little Chevy into Vegas and he would call in and say, "We've got lost circulation," or something like that, "and here is what we are planning to do." He would get in his little car and he would drive two hours back. By the time he would get there, well, you know, something else has happened. He would get in his little car and he would drive back down, you see! And I'm probably the only person, unsolicited, un-asked for or anything else, who had an airplane, bought for him, a pilot hired and sent to me without saying anything. Porter Bristol went out and bought one of these like Norton-type, big single-engine plane, put big, huge tires on it with the two pounds of pressure, so they could land out there anywhere those things. He said, "Now, you can tell me what is going on." That is how it was!

So, I tried to keep in mind, you know, if something like that happens along the way, as much as you want to get into it, to do your very best to say . . . support the folks on the ground, the ones you think that need support, and not come in and take it away from them, you know, just grab it and it is always . . . it is so demoralizing to have it . . . and plus the fact you felt it was so wasteful. I mean, we knew most of those ranchers and those people and we could have pulled it off if we wanted all the land bought. Another thing, much of the land involved we didn't think was

prospective and we didn't want to buy. So, I learned that.

Then I learned one thing about administration, and you are back to kind of the lawyer things we were talking about earlier. We had a secretary . . . we only had one, but we had a secretary, that the Tulsa administrative people had hired before we opened the office. They went down to Oklahoma University and had secretarial science course, and they had something called the Sands Orphanage up here in Tulsa. And a group of businessmen had picked annually one or two orphans they thought showed a lot of promise to take on and send them to college. So, he hired this young woman who had no idea who her parents were. And, well, you know, she just adopted the place. She worked any time we worked. You know, if we worked at night, she'd come at night, if she didn't have anything else to do. And so, I remember, Bristol had a moratorium on hiring. There could not be anyone else hired, period, unless he personally approved it. So, I had written a recommendation. It got rejected and I rewrote it, asking for a clerical employee. He sent out his assistant vice-president who was a lawyer. And so, he said, "Look, Bristol asked me to come out and determine what your needs are." So, we went through all this work together. I was saying, "Ella works at all times. She's down here on weekends, at night. She doesn't mind it. She doesn't mind but it's getting to the point of being physically impossible to get all the work done. That character didn't say anything, just went back to Tulsa, and all of a sudden I am in hot water. I can't remember whether she was exempt or non-exempt, but she was at a level to be paid overtime.

You had to keep overtime. God, I was covered up. That was an administrative issue I'd never thought of, never been exposed to. They said, "You have to go through and add up all of the hours." Now, see, by that time, we had been there two years. And they said add up all hours and pay her. Well, so, I sat down and talked to Ellen and she said, "I think they're nuts." She said, "I did it because I want to do it. I don't want pay for it." So, I went back to them and said, "Well, Ms. Luce doesn't want to be paid," and they said, "That is not her option. She's got to be paid." And, course, they had built it into a mountainous case of law suits, changed attitudes and so forth. So, finally, I told El, I said, "Look, we've got to sit down and add this all up and everything." And, you know, she tried to go back through there but, you know, her heart wasn't in it, probably a fraction of the time she spent. So, I learned on the administrative side, there are some administrative rules and government regulations things that we all kind of accept and grow up with. We know that now. But, say, just to go from a narrow technical professional, I would say that I learned two or three things out there. I began to realize that there are certain governmental regulations and rules to follow. And I have the same problem over in drafting. I had two draftsmen. We didn't have computers back then, and all of these maps had to be hand-drawn. And the interesting thing about it is I had exposure to working with a much larger drafting department in Oklahoma City. But those people weren't very motivated. They didn't seem to really . . . sometimes, it seems, to like their work. But out there, because these guys were right there in the office, you know, and we'd say, oh, we want to drill this well and all. Now, they'd do the same thing. They

work around the clock.

So, I think those are probably some of the experiences there . . .

TS: What years were you in Amarillo?

JB: I went out there . . . I was actually given the job December 1954, and I left in September of 1958. And although I left on what would be a six-month assignment to return to Amarillo, basically what we're saying . . . all this activity attracted enough interest. You know, those guys up in New York kind of said "we would like to see this character." I mean, I didn't understand them. I was just called and said, you are supposed to . . . and later on, you learn kind of how personnel development worked. And my reaction was, now, this is crazy! I've got a lot to do out here. Why do you want me to come back there?

So, we went back there and at the end of that period, they promoted me to division exploration manager, and I went to Wichita Falls, Texas, to take on that division. I think what I should have said right off and what I always told those kids out there . . . well, I would not be a very good example, particularly a modern-day example, in that I never sought a promotion. And I am serious. I think a lot of people probably think, you know, you're trying to con them. But I didn't. I always liked what I was doing and did not much like moving. When I went to Amarillo, I

wasn't sure I wanted to do that. I argued with them then. Let me just stay here and work as an individual. I'm working the Arbonne Basin and that's exciting and so forth. I don't want to go out there. But then I kind of got into it. Then when it came time for me to go to the head office for six months, I said there was too much to be done here, I didn't know why they didn't think of that. So, you know, they said, oh no, you've got to come along so I went up there. And while there they promoted me to take over the division in Wichita Falls, and they made the change to make the Amarillo District report to Wichita Falls. I wasn't there very long. They pulled me into Denver for a short period.

And then I was hauled back to New York, and it was supposed to be that I was going to be on an indoctrination and go over on one of those six-month The Hague assignments they used to send people on.

While I was there, the area exploration in Denver, a guy named Ludwig, suffered a heart attack. He survived it, but the feeling was he should slow down. So they elevated me to exploration manager of Denver. While in that job, since they cancelled The Hague assignment, some months later they said they'd still like me to go over.

In The Hague, I really had in interesting experience. Again, my family were almost on their own. We got settled in The Hague, but I was sent down to the Persian Gulf,

and I went to every Group office in those countries. At the time, the group still had offices and staff in the Emirates, Iran, Abu Dhabi. So, I went to every one of the countries around the Gulf and got a chance to see what they were doing. I went down to Oman, the discovery in Oman. The Bahrain Field had just been developed.

I was in the desert with a Western seismic crew that was shooting back in the desert when word came across a short-wave radio that Kennedy had been shot, assassinated. We had a bunch of Arabs and one interpreter, and I recall these Arabs could tell, kind of the excitement, you know . . . we were all talking about it. And they asked what it was all about, they wanted to know what country it was. We told them it was the United States. One of them wanted to know if that was an Arab state!

[LARGE PART OF TAPE INAUDIBLE HERE]

TS: You mentioned The Hague here. Do you have any comments about the relationship at that time between Shell and the Group during that period?

JB: Yes. At that time, I got into a good relationship that helped a little later when we came back. This is roughly, say, 1963. And by 1966, I was sent as Shell Oil envoy over there to try to negotiate something else we'll come back to in a minute. And I can speak more of the upstream, not so much downstream.

Shell Oil was the leading edge technology innovator, particularly in seismic. The group had no seismic research at all. There tried to be a division of labor on the basis that labor costs were less in The Hague than what they were in the United States. And as we began to move forward to the early use of computers, technology and all, they were still building huge scaled down models -- sand layers and things. Remember, the price of oil was $2-3 per barrel. The wonderment on their part was how we could afford to look for oil and gas with what they considered very expensive technology. Their target in exploration was ten cents a barrel. That is all that the company could allocate to find, in finding costs. At that time, Shell Oil was probably . . . a little later, three years later, I know it was fifty, fifty-five cents. So, there would be these annual research conferences where we would talk a lot about technology. They probably, at the time, did a little bit more basic geologic research than what Shell Oil did.

Although there was always a teenie bit of resentment, let's give everybody the benefit of the doubt here because it would probably stem more from misunderstanding. See, there were only two companies that had public shareholders at the time. So, there was a complete exchange of staff, information, technology, and all, without any restraints or barriers. At the time the Group had 142 or 143 operating companies around the world. Shell Canada had a small public shareholder interest but not in the upstream because it had been a downstream company, and the

Group went in as Royal Dutch just before World War II and conducted its own 100% E&P effort and made a couple of discoveries of gas on those large gas fields in 1939. No market so they backed out. So, after World War II, they made a deal with Shell Oil to be 50/50 joint venture partners, owning a piece of Shell Canada. Management had no role to play upstream. So, they had public shareholders, I'm just saying that could still have this exchange of information because the public was not involved.

So, there was always this kind of tiny resentment and suspicion about, well, why is it we all belong to the same company and we can all talk about our ideas and advance our common cause, but we can't with Shell because of legal barriers, minority shareholders and so forth. That was accepted with some regret. And also, always, maybe some kind of question about well, you know, does Shell Oil use this for its own devices, to keep it more separate. I think you can also say that in the upper ranks, at the time, there were more people that had been to Shell Oil for training programs, like, you know, the chairman of the CMD had been assigned to the Midland Division as a petroleum engineer. So, they had their own level of comfort feeling about Shell Oil's quality of staff, quality of work and, of course, Shell Oil was big enough, you could afford the expertise in all these areas. And you had to remember, in the Group configuration, many countries would be simply a marketing company. And every now and then in that company, they'd decide they wanted an E&P play, but didn't have people, really, to do this. So they had to go to The Hague

or someplace to get those people. And even those that operated E&P in South America, Australia and places where you had some E&P activity going on, the staff were very small and did not contain all of the knowledge you had to have to be successful in this kind of business. So, they had to rely very much on support and backing of the central offices in order to do that. So, there wasn't a full appreciation of how Shell Oil not only could be held accountable, but didn't actually need a lot of help. There weren't too many people to give it help because they didn't know the problems of the United States that well, and they operated in kind of a different way like, say, lower cost environment. But that was a good experience to go around and see all of those things.

I came back to the job in Denver, then I went down to New Orleans as exploration manager. This now would be September of 1965. And I was asked to come up and run the E&P Economics Department. Now, you raised the question about how do you prepare yourself? I think the point soon becomes obvious. I didn't prepare myself; there were people who were looking at some succession plans and things decided what you needed and where to plug you in. And you didn't even know it. I had a short stay in the E&P Economics when it was first set up. And I was told, 'well, you know, we really don't know how to get this exploration thing.' Well, I came in from Amarillo for that six months and worked a little on E&P Economics and let's try to capture what is the exploration thought process? How do you go about exploring? I actually wrote a paper on how one explores.

But while I was in E&P economics, the mutual understanding between Shell and the group began to break down. Shell Oil had never explored outside the United States. It didn't market outside the United States. It had no activity outside of the United States. And Shell Oil never felt the need to do that. I mean, in our own meetings and all, we felt like we have sufficient opportunity to utilize our discretionary capital inside the United States. Why should we go off and undertake things elsewhere. This issue then began to raise its head, primarily initiated by Monroe Spaght.

TS: What year roughly would this have been?

JB: I am thinking now, say . . . early 1966. He left, I think, in 1962 or 1963. Of course, you didn't move Shell Oil. You know, now he is a manager/director of the Group. I think Spaght felt that Shell Oil could be very successful outside. The Group at the same time was going through one of those periods that happens with companies in that they were not having as much success as some of their competition in exploration.

So, I was called in by my boss Ned Clark as manager of E&P Economics, and asked to go across and assess whether or not, in my opinion, Shell Oil could successfully operate internationally. I also was told that the upper management of Shell Oil didn't really have any desire to, that they were responding to a request on that side.

And, first person that I met when I got there was Monty, and it was the first time I had met Harry Bridges. Harry Bridges was manager of supplies. And that meeting started by Harry presenting the supply and demand outlook of the Group where he made the pitch that the Group didn't look like it could keep up with the internal refinery needs in all the different countries around the world. So, the conclusion at the end of that, summarized by Monty was that well, to some degree, Shell Oil here was vulnerable in that it could have always expected, as a member of the Royal Dutch family, that it could count on backup supplies. At the same time, entangled in that with the Shell Oil board -- Monty was still on the board of Shell Oil -- was that the directors began to develop their view that they had an obligation to the shareholders of Shell Oil, since Shell Oil had made big investments downstream, that every opportunity be made to supply those downstream assets. So, they began to think that, well, maybe that we ought to do more about the bigger possibilities at the time, which were outside the United States. So, I went over to The Hague. They had a head guy in The Hague present at this meeting. He was giving instructions and he was to show me anything and everything that I wished to see. So, I went over there and I went through all the plays. I picked out some that I felt we could do well; particularly, some in the Gulf of Mexico where we were logistically advantaged.

We went back to London to talk about this with a guy who was the coordinator at the time. He made his pitch to Monty that he really didn't think that Shell Oil would

be successful outside the United States because of our mentality and direction as a high tech company, and therefore, high cost. At that time, I think our finding costs were 50 cents a barrel. That is five times what they could afford. And to apply our rather high tech directions to try to find oil in the world at 50 cents a barrel would be a very losing proposition. Spaght asked me to comment on that.

I answered on the basis that we very successfully competed with the American internationals in the United States, with Exxon, Texaco, Chevron, and so forth. We are very proud of our background. Since they were successful outside, I thought we could be successful outside the United States. Then I took a few examples of prospects I had looked at. Well, I don't know what all the decision processes were there. At the end of that, I was thanked for coming over and looking into this. They would give some consideration to it. It certainly looked like something we should keep on the table. But nothing was decided at that particular meeting. I came back . . . I went into the office all set to brief Ned Clark, who was the executive vice-president. And I went in and I got through about four minutes. And he said, "Look, wait. You have a meeting in a few minutes with the president of Shell Oil," who was Dick McCurdy. And I thought, boy, I might have done something overseas, and I'll never recover.

So, I go into see McCurdy and McCurdy says "something is about to happen to you and it won't happen to you very many times in a company. We've decided to make

you a company officer."

He said, "You are going to be made vice president of the Denver area and the board is meeting today, and we want you to come along and have lunch with the board." Now, there was no more discussion. I started to tell McCurdy, I said, "Well, Dick, I would be glad to bring you up to date . . ." He said, "No, no. I don't want to hear all that." It probably meant the channels had already kind of worked and they knew what the decisions were. So, Shell going outside the United States, that was kind of one of the first steps that was talked about. You'll probably get more out of the Bridges interview.

THE END

SHELL OIL COMPANY

ORAL HISTORY PROJECT

Interviewee: John Bookout

Date: September 24, 1998

Place: Houston, TX

Interviewer: Tom Stewart

Code: SOC004

Keywords: exp, Shell, Mgmt

Bio

John Bookout had a tremendously successful career with Shell Oil Company. After serving in World War II as a B-17 pilot he attended the University of Texas earning a B.S. and a M.S. in Geology. He began working for Shell in 1950. He became District Geologist in Amarillo in 1954 and stayed in that position until 1958. That year he was promoted to Division Geologist for Wichita Falls, TX. He also worked as Exploration Manager for New Orleans in 1965, in Economics Department for E&P, and as exploration manager and VP Denver. He went on to become VP of E&P for Shell until finally becoming president of Shell Oil Company in 1976. He held that position until 1988.

Summary

This interview has extensive discussion on bright spots and their implementation. Commentary on the New Orleans office and other aspects of his tenure with E&P. E&P reflections included Shell Canada and international efforts. Discussion on Shell's success in the Gulf of Mexico with an emphasis on technological evolution and research. Talk about the move to deep water. Candid discussion about his preparation for presidency. Showdown regarding Chemical production vs. refining.

Tape #1, Side A

TS: I am here with Mr. John Bookout on September 24, 1998. I appreciate you being here, John, and would you begin by summarizing the events in the 1960s, which led Shell Oil Company, the E&P side of the business, into the international business activity?

JB: Yes, I can start with the initial part. I was general manager of E&P economics, and this is in the 1965-1966 time-frame. Ned Clark was executive vice-president. Dick McCurdy was president. When I was asked by Clark to travel across, at the request of one of the manager directors which, in this case, was Monroe Spaght, who, of course, was a managing director of The Group. He had been a president of Shell Oil. I was asked to discuss whether Shell Oil should undertake to explore and develop oil and gas deposits outside the United States. I want to make it clear that with the minority shareholding, it was not possible for the majority shareholder to maintain that Shell Oil could not explore outside the United States. It had never been an issue because Shell Oil had always felt that they had ample opportunity in North America, so they didn't explore in Canada, with a long list of groups. That they had ample opportunity to utilize all of their discretionary cash and utilize their

staff in the domestic exploration and production matters, so there had never really been any kind of compelling issue prior to the later period there.

The issue came up because it was in about that period of time that it began to look like that Shell companies might have difficulty producing the total amount of the liquid hydrocarbons it would need to meet their refining capacity needs. So, I went over and spent a few days, looked at a lot of the outside United States exploration opportunities, and then had a follow up meeting where there was some discussion regarding that between the E&P coordinator in the Hague and myself, and some of the senior group management in London. There was a little bit of conflict of views on that. One was the question: Did Shell Oil fully appreciate and understand the economics of international exploration and production? From that standpoint, the Group's allowed finding cost to be profitable was about ten cents a barrel at that time, whereas, in the United States, finding costs, industry finding costs including, say, Shell Oil, was more like fifty cents a barrel because we applied much more advanced technology and all to try to locate and drill harder-to-find deposits. So, there was a good bit of discussion about that.

There was some concern whether or not that Shell Oil could adjust to this very different kind of environment outside of the United States in a very short period of time, or whether it should be something to be considered over a longer period of time.

I returned to the States after that trip and reported briefly to the president and a little bit more extensive to the executive vice-president, Ned Clark. They thanked me very much but there was no action taken at that particular time. I am sure you are probably aware of the discussions and all with Shell Oil's board. And it was exactly at that time I was told that I was going to be elevated to corporate officer and made vice-president, and to go take the Denver area E&P, over which W.A. Alexander had reached retirement age. So, I was not actively involved in the further discussions, and we will come back to that in a few minutes. So, I went to Denver as E&P vice-president.

I was there not much more than about a year, year-and-one-half, at which time, I moved to New Orleans to take over the New Orleans region. We reconfigured the whole organization in E&P while I was there with, of course, a lot of people working on that. By now, Ned Clark had retired, and Ed Christianson was executive vice-president. He got a pretty big push on efficiency of organization, and so he did a lot of work and regionalized, finally, to New Orleans.

I ran a New Orleans region . . . we'll come back to international here soon . . . I ran the New Orleans region until very early 1970, when I was called to New York. Dick McCurdy had now retired, and Dennis Kemball-Cook was the president. He had a very short tenure, but he was president at that time. And I was told that there was an

opportunity to go to Shell Canada as president of Shell Canada. But I had to understand it entailed a resignation from Shell Oil, and that I had no right to expect that I would be returned to Shell Oil. I might come back to Shell Oil and I might not, and that depended on what opportunities and things happened. And that I should think very seriously about that, you know, whether I wanted to take it because I would no longer be a Shell Oil employee.

So, I decided to accept that. Harry Bridges, who was then the president of Shell Canada, was moved to the United States and Shell Oil. To start with, he was not executive vice-president of E&P because Ed Christianson was there. That move did trigger Ed Christianson's resignation. He felt he had been passed over. But Harry operated there for about, I guess, eight or nine months or something, before becoming president of Shell Oil.

Now, I'll come back to international. Then, Bridges, who had, incidentally, been in the meeting that I had spoken of earlier in 1966 overseas, was coordinator of supply. And he had actually presented the group's picture of supply and demand that had led to the conclusion that there was going to be some kind of shortage of crude oil in the Shell companies. Bridges, now being president of Shell Oil, and having a broad background experience in supplies around the world, had taken up this matter further with the Shell Oil board. Then, the Shell Oil board made the decision . . . I am in Canada, so this is really a repeat of what Bridges later told me. The Shell Oil board

decided, “we have made all of these investments and these downstream facilities, and the board has a duty and responsibility to make sure supply is provided for us, for those refineries.” There were no interlocking supply agreements, but it was always assumed, with the Group's long supply, that if Shell were to get desperate for crude oil supplies, they certainly could be bought, you know, from the Group. So, the board decided to kind of put a choice to the Group of saying there are two options: one, Shell Oil will come out and compete with other group companies around the world, or Shell Oil will content itself to continue domestic exploration provided that the Group will find a long-term supply agreement providing that in the event that Shell Oil is ever short of crude, that the group will be obligated to make it up. So, the Group, at that time, decided that that was a very tough agreement for them. You can understand, it could have been very uneconomic and everything else to do that. So, it was decided, well, maybe Shell Oil ought to go its own way. And so, that is the reason it went international.

TS: What is the time frame we are talking about?

JB: Well, let's see: that is about . . . certainly by the time they moved here in 1971, the headquarters moved here, were already exploring. It was done, I would say, probably in late 1970. I will tell you the best way to determine that. Gerry Burton was the first international E&P vice-president. And, to some degree, some of the things that were talked about when I went over in 1966, turned out to be true

because there was a very small group put together to launch E&P, and they really lashed out to establish themselves as fast as they could, and they took a large number of farm-out agreements, a number in South America and places like that. I don't think any of them resulted in anything successful, I mean, in respect to money and all. And then, from there, we kind of had successive self-evaluations and got a little more strategic in directing how the international activities were going to go, where we play, how much risk we take. We then set guidelines about trying to deal with the political risk, how much negative in cash flow, or, say, negative investment that we could have in a country. You know, how deep would we go to minimize exposure? At the time that we said one hundred million dollars, we did not have more than one hundred million dollars in the company. Even on the development side, you know, you filled in plants. Well, we would do it on an expanded time period that could have some self payout.

I came back in mid-1974 from Canada as executive vice-president of exploration and production. There is not a Shell Canada history, so I won't talk much about Shell Canada.

TS: Were there any joint projects between Shell Oil and Shell Canada?

JB: There was. And Bridges negotiated the agreement. While I was there in the transition period, he was working on it. The Shell Oil side had not actually been

contracted and agreed to. There was still some negotiation. Then, when Bridges was brought to Shell Oil, he pretty quickly convinced Shell Oil to enter into that large agreement up there. And the thing that really fostered that agreement was Shell Canada had a sort of extensive land position in the frontier basins, on the West Coast, East Coast, and up in the territories, in the McKenzie River Delta country. But Shell Canada was relatively small and really didn't have the cash flow to carry out those programs. They were faced where they were going to have to take on partners. The areas were considered to hold an awful lot of promise and so it was really decided that it would probably be a lot better to share that with Shell Oil and all than it would be than, say, with maybe Exxon or something. So, that agreement was put in place.

There were some hydrocarbons found. It included tar sands. A lot of work was done on tar sands. A lot of work was done off the East Coast. And Shell Oil, as I recall, we later kind of thought our way out of that. It had a very large expenditure over a five to six year period of time. And after like about the third year or so, well, it was beginning to look like that Shell Oil had better things to spend its money on. And so, we did negotiate an exit from the agreement.

You will get into the controversial area now of who did what on deepwater. I was the new executive vice-president of E&P, now we are talking, say, 1974. The budget cycle was coming up in the fall of 1974. I went with Bob Nanz, who was

chief geologist, and some of the staff, on a tour to talk to the people about their budgeting plans. When we got to New Orleans, Billy Flowers was running New Orleans. Well, I was really kind of shocked by the deterioration in roughly the five years that I had been away - I previously ran the New Orleans region, as I said - at the deterioration in the size of the prospects. So, the program was allocated to the shelf area, and the prospects that seemed to be left to be found, were very, very small. Like always, the argument could be made, if they were economic, how economic are they? Each one that was successful is economic. But whether they were of sufficient size but also pay for the unsuccessful dry holes and all, was a serious question. So, I told the staff, told Billy and all, that unless we could find something better, I thought, we, for the first time, had to kind of seriously think about downsizing the New Orleans area.

A very unique thing about the New Orleans organization: it was set up in, I think, like 1948 or 1949 when we went to the various regions. The people put in place at that time, remained in place until about maybe 1965 or 1966, or something like that. So, it had maybe a 15, 18 year kind of continuous tour. And they also were very independent within the E&P organization. It was very hard to get them to accept staff from outside of the New Orleans area, and it was impossible to get them to transfer or agree to transfer or either let people out. That was at a time when there was a lot of staff exchange. In other words, it was a real strong philosophy in E&P that the best way to get the benefits, in effect, out of the knowledge and the things

that were happening and the techniques being used at different geographic areas to transfer people around, rather than try to do it by reports, files, and so forth. And we never could get the New Orleans folks to agree.

Bouwe Dykstra, of course, a Dutchman who had come over back in the 1930s or something, was made the initial first vice-president of that. His exploration manager was a guy named Freddie Oudt, another Dutchman. They pretty well ran that thing the way they wanted to run it. Now, there are some good things about that because they actually began to move in to the shallow water by determination and ingenuity without the full support of the head office. And they did that by making some joint ventures with people like Doc LaBorde to design these barges and get it through leasing because they couldn't get it in the capital budget. So, they deserve a lot of credit for getting us kicked off in that.

The interesting thing about that region: not only did they protect their people quite well in that area, it was about the only area that the company had a continuous history of keeping technical teams in place throughout the period. It still does, I guess. What I am really saying is that in other parts of the country, well, you can take parts of Oklahoma, or you can take like where I worked in Oklahoma City district when we started, what we were talking about earlier. And the Texas Panhandle. There have been technical teams assigned out there, and Shell had had offices out there. But they closed and left, you know, and then something new

happens and they go back, new people go back. There is not a continuity of history, and so forth. So, more than any other region, the closest thing to it would have been the West Coast of California, but there had been a steady application of know-how, retention and memory of the organization, of the mistakes made and the things that worked. So, it would have been a real serious decision to say, shut that down, or close it down.

But anyway, I said, "Look guys, if we can't find something better than this to do, we have reached the end of the rope." And we agreed, out of that, we said, 'what we really need is new ideas.' We said, 'O.K., let's use a set of regional lines.' That often had been almost impossible to get budgeted because there was no concept that said I should shoot a line because I believe such and such. So, it was really almost kind of pure science in saying, 'well, let's try to understand this entire basin. So, we are going to fund you to go run some seismic lines from the shallow water just as far out in that Gulf of Mexico you care to go, and do wide space and regional line and cross line. And, let's see if we can understand the basin better.' There had been a concept before that that there would not be reservoir sands that far out.

So, they ran these seismic lines and there were some astonishing things that developed on the size of the structures and all. So, what that did was raise the issue. The other thing: all of our statistical studies, I remember very well, the statistical studies, that Shell Oil was very, very good at, revealed there had been 35 million

barrels of oil per average block. And that would support deep water drilling. And you had nothing to support you to say, well, I chould go out there and it would be economical. But the very large features we saw on this said, ah, there are much larger structures, so there might be much larger fields. There was still a question of whether or not there would be reservoir sands out there.

I only told one or two people and one of them is dead now, Tom Hart, while this was kind of going on. I had flown out to California for a Safeway board meeting, and the crew had put on board some local newspapers, and I was coming back to Houston that evening and they had an Oakland newspaper on there. There was a little article in there that said a Russian trawler that had been sailing from Russia to the West Coast, had followed the procedure of bailing, of bottom samples; just routinely, the Russians collecting bail. It was 175 miles off the coast, and there were signs that they had pulled up in their bailer loosely, and mostly unconsolidated, relatively poor sandstone. Here, I might be showing, probably am showing, great ignorance. There might be lots of geological reasons why they could find sand there and there wouldn't be sand in the Gulf Coast. But, at the time, with the region already what it was, now, we've got structure . . . do we have any reservoir sand . . . do we have any reason to think there is sand out there? I pushed on with that program, just with that in the back of my mind. I was too embarrassed to tell the technical staff of the Russian trawler guiding my intuition.

Now, there is hardly anybody available, I think, in the exploration organization, now, or I would say, in Phil's day, or I would say even in Frank's days, including the E&P management that was there, that has kind of any idea as to what it took to push acquiring that offshore land. The two Group directors were exceedingly negative, both from the standpoint of questioning the economics as well as even the prospects of finding the hydrocarbons out there.

TS: What depths were you talking about?

JB: Well, the very first hole we drilled was in 2,700 feet of water. No, it was 7,200 feet of water! Way out. 7,200 feet of water.

TS: Well, this is post Cognac then?

JB: No. The first AFE I signed when I came back was to build a platform on Cognac.

TS: That was 800, wasn't it?

JB: Yes. 1974. I signed the AFE to build the Cognac platform. Well, we had this background that was kind of oppositional. Now, a guy like Tom Hart came in kind of early on in the exploration cycle. But he really was involved there when we were having a hard time in the board room trying to sell that stuff.

I had good support certainly with the outside directors. I kind of went on two theories: I am getting up now as far as, say, during the price slow down in the mid-1980s, approximately mid-1980s. The industry began to slow down in 1981. Not so much the major companies. A lot of people don't appreciate the reason why that is. Reagan's Tax Act reduced the tax rate, dried up a lot of the kind of lawyer-doctor oil company investment money. Major companies did not use that, but all the independents used it.

My very best friend who is an independent sat in my office and told me, "Listen, I've got traditional investors that have been with me 25 years. I told them don't send me anymore money, and I can't make a profit for them on fifty cent dollars, the tax rate of fifty cents. Before that, it would have been sixty cents.

[PAUSE]

So, the industry was slowing down but we weren't so much. That was leading in to 1986 crash in oil price. And although there was discussion in the board room and all, it was clear that some of the directors were very supportive. As the environment got tougher, we began to win 90% of the tracts we bid on. If you go back and look at late 1985, certainly 1986, say, and the price went to ten dollars, twelve dollars a barrel, I remember we had swept the board 80-90% of everything we bid on.

Now, I recall that one director asked, "John, can we really be this much smarter than all of the other oil companies?" But I did not want to let up. I just said, “we couldn't be more confident.”

The other thing, which was probably an underestimate, was the cost. I had asked research . . . this is pretty well-documented, and Don Russell and people would know this because he was production manager at the time . . . I insisted that research go to work on developing techniques that would permit us, in a very short frame, to develop in 3,000 feet of water. And to try to get on the drawing board all the concepts that they thought would take us to 6,000 feet of water, which turned out to be worthwhile, and Frank knows that. In a Royal Dutch meeting later, I was told, he gave me a lot of credit for doing that, for getting it started early.

TS: What time frame was this?

JB: Well, that was probably started in about 1984, I guess, maybe a little bit earlier than that. When we went and started out in the deepwater, the opposition was going to be, what are you going to do with it? I was hearing some of that on the board. What are you going to do with it? You can't build a platform out there. And so, it could have been earlier, that we said, look, let's get the research people started. So, with the combination of the low price, deepwater and all, and questions such as “are we

this much smarter than other people," I told the board, "the way I look at this, and I firmly believe this, is that if oil stays at ten dollars a barrel forever, there is no future in this business anyway. We are all broke, we just don't know it yet. We are all broke. I don't think it is going to stay at ten dollars a barrel. I don't think it can stay at ten dollars a barrel. So, let's turn it over and look at it as a real opportunity." Now, the early economic models we developed were that we could meet our profitability criteria at fifteen dollars out there in really deepwater.

And see, we did a sensitivity test and said it would go at fifteen dollars. Now, the economic times got a lot worse after I left. I mean, I had about one year of that at the end, when prices were down, the whole industry was slowing down. Well, the one thing I did do, and something Richardson did was, he basically kind of put a moratorium on development and put an emphasis on, which I had not done until I researched it, innovative, creative ways to do the job at less cost. And so, Frank kind of kept things still there and probably didn't have a lot of cash flow to do much with anyway. There have been lots of benefits that came out of that, which they would still realize under a high price environment.

We had, even in 1987, I had a director take Bob Howard aside, who was running New Orleans, and tell him, he owed it to the company to quit recommending . . . he couldn't do anything with me . . .

And, of course, if you look back at the . . . there were discoveries earlier than most people are aware of. Now, there is a little bit of company politics in the way they treated that because . . . we will come back to that point . . .

[PAUSE]

TS: This is October 1, continuing interview with John Bookout. John, we have been talking about Shell venturing into deeper waters, and we were about to begin the last session talking about bright spot. So, pick up anywhere along the line there you feel comfortable and just come and take off with it.

JB: We had come up with the idea that we needed to . . . this idea had nothing to do with bright spots. The idea was to put together multiple, disciplined teams. That is common these days but, you know, back in the period we are talking about, there weren't too many companies that were mixing geologists, geophysicists and engineers in a team to say, look for additional opportunities in the old fields and all that we had, but we put together such a team to work onshore in south Louisiana. From the geophysicists that were assigned to it, word came to me that one of the managers that Mike Forest, a geophysicist who had worked almost all his career in the Gulf of Mexico at the time, felt that he was seeing direct indications of hydrocarbons on the seismic records. They said, "you know, this guy is convinced that he thinks he sees indications of hydrocarbons on the seismic profile." And I

said, "Well, why haven't we heard about this?" They said, "well, the truth of the matter is, Mike is a little bit embarrassed, that he feels he observes this but he has no technical explanation for it, and it seems kind of like black box concept. He has told some of us about it but he is kind of cautious about it. " So, I said, "Well, why don't you send him in here and let me talk to him.. So, Mike came in . . .

TS: When was this?

JB: This would have been about in late 1969. So, Mike came in and showed me how these, what he called, bright spots, he was saying at the time; even we called them bright spots, but it was his terminology. He said, "Follow this reflection." And he said, "Now, see how much brighter it is?" which meant it was more distinguishable and it was stronger and you could see it. And he said, "Now, that happens to be right over production. And so, he showed me two or three examples of that. And I said, "Well, that is awfully important, Mike, and I don't think that we should ignore it, and I certainly don't think you should be a bit apologetic about it."

I called in the chief geophysicist and a couple of the production guys and said, "Let's see if we can develop any scientific reason for this to occur." You know, in the final analysis, if it is real, which it does look like it is real, there has to be some kind of explanation for it. And I can remember what happened on there, and I can remember where I was. I went up to Chicago to see Skidmore Owens. Were they in

the Sears Tower in the 1960s? Well, they were building that and there was a question of whether Skidmore Owens was going to be the architect and all on the new Shell building in New Orleans. So, I went up there because they had asked me to come up there and see how they treated everything. I remember very well, I got a call from McAdams. I had mentioned it to him. Well, he got all excited and wanted to make it Bellaire Research project, and basically, we kind of lost control. I mean, head office brought everybody in the world in on it. But an interesting thing about it was, I believe, the New Orleans staff discovered in a literature search . . . I know this happened, I just can't remember the exact time, that they found a paper written by a Mobil geophysicist some years earlier that had gone into the theory of the change in velocity that would come about by filling a reservoir with gas, which transmits velocity at a lower rate than oil or water. And it set out in the literature, kind of the differences you would have to see before it would reflect on the seismic. So actually, there was an existing paper, a Mobil guy who had never gotten around to any kind of practical application of it. It was more of a theoretical paper written in a geophysical journal. So, there was already some existing theory on it. And, of course, then we got Bellaire and everybody else involved in the thing.

Now, I get a little fuzzy on the sales where we used the thing. I left New Orleans in . . . I didn't actually pull up my family in there until July of 1970. But in April of 1970, I started going to Shell Canada for the transition. The upcoming sale, where we would have had the first chance to apply it, was canceled by the government.

You had had in 1968, 1969, something like that, the Santa Barbara spill. That put a moratorium on things. So, the opportunity to really scoop industry on the thing was partially lost by delaying the sale because, what happened, a little word began to leak out, like it does, you know, with things like that, and then competitors begin to hire away some of Shell's technical staff to try to learn about this. Now it still, I don't think, was in wide usage by industry. And I want to say the first sale that we applied it in was 1972. So, I think the fall of 1970 sale was canceled and delayed, and I believe 1972 was the first sale which was applied. Charlie Blackburn was running the region at the time.

Now, they did use the technology, but since it had never been tested, in actual practicalities out there, I think Charlie would tell you and other people involved in it, that they didn't go all out, and probably rightly so. They didn't just say, you know, we've got a brand new tool, and we know it is going to give us all the answers. And so, they used it to kind of sort out prospects where they observed this on the seismic. So, they made use of it. But the didn't make use of it on a wholesale basis. Now, I will say that early on, we did make some misjudgments.

I remember raising the question after a time when everyone was hot on the bandwagon . . . why don't we look for places onshore where we could apply this technology? One of the places that popped up was the Sacramento Basin out in California. And we did do some seismic work out there and all, and we did have

some bright spots in some of the wells. There were coal beds. The velocity attributes of coal were very much like a gas field sand. The velocity profile through that is it is a marked change from what it would be if it was water and oil.

TS: Did bright spot give you any idea of volume?

JB: Well, it did on the way you could map the structure.

End of Side A

Tape #1, Side B

JB: I am talking about Group relations on this. This was always kind of a source of conflict in technology transfer. At the time a lot of this was being done, the Group did not have a geophysical research department. Under the research sharing agreement, they participated in our projects. There was always a little bit of uneasiness in the fact that Shell Oil people generally felt the group who worked a lot more joint ventures and shared technology in their history was too prone to share technology that we considered proprietary in Shell Oil. I can think of two examples that that occurred: one I know for certain. We had developed some software programs to enhance seismic, quality of seismic data. The group hired a geophysical contractor to map off Nigeria and gave him the programs to process the data with. And Shell Oil people became aware of it when we saw a big advertisement in the *Oil and Gas Journal* from this contractor and geophysical company, saying "hire us and look at the quality of our data we can produce for you." That is one example I know of.

There is another example that I tried to get confirmation of at a much later date after I was president of Shell Oil, from the senior management in Royal Dutch, but never could get a confirmation on it. But let me tell you a story that was told to me by Mike Wright. And Mike Wright, of course, was the last chairman of Humble Oil and Gas. He told me that they had a technical meeting. You know, a group of joint

venture partners in the North Sea, on everything, with the Group. That they had never heard of bright spots or, if they had heard of them, they had not taken them seriously. And they went to a technical meeting, and I believe it was to determine the development of Brent. I may have the wrong field but I think it was Brent. And he said there was a dispute on the size of the field and the numbers of locations they might have. He said, they were astonished when Shell wrote out the seismic and said "here is the size of the field." And he told me, "Man, we got everybody involved in technology. We realize we are really behind." And, he said, "I will guarantee you we mounted a massive technical effort with no constraints on the resources and said, we've got to catch up. We've got to understand what is going on. And, like I say, I was told that from Mike Wright, not once but on two occasions about that. Now, no company likes to admit their failure. I have often wondered whether I should ask Tom Vera, you know, who was a classmate and all of mine, down at the University of Texas. He worked his way up to vice-chairman of Exxon. Where he was in that exact period, I don't know. I had never quite gotten around to asking him because generally, there is a resistance in organizations to say, yes, you guys were better, particularly on the technical side, and he was a technical man.

. . . the 1972 lease sale, I wasn't here. I was in Canada. And Blackburn is probably the source on that. He was general manager down in New Orleans at the time.

At the time, the predictability and reliability of it improved, like any tool used over

time. You know, the more you use it, the better you get it correlated to the point that you develop confidence in it. I would say, in all of my years as president, all of the offshore sales were reviewed with me, a technical review, and a decision on what to bid. E&P would go out and review it with them and sign on and so forth. And then, there was a review with me where all of the prospects were put up there: the critical seismic lines were shown on the prospects. We talked about the strengths and the weaknesses. We will come back to bright spots on that. And then we decided what the bid should be on it.

Well, we got to the point where we actually assigned a probability, like eight-tenths, let's say. Now, you know, a probability of one, you appreciate . . . is an absolute certainty that the event is going to happen. And there is hardly anything you can say is a probability of one in the business of looking for oil and gas. Very often, in normal use of technology, it is hard to get much better than a .5 or 50% chance. And so, we evaluated those prospects based on, well, what is the probability we know the reservoir is there and that was based on some certain information. What is the probability that the structural closure has, what we call, integrity? You got all of it tied down. And then, what are the chances that there are hydrocarbons, and if you can enhance its bright spots, what chance would it have of coming close to being a direct indicator? We got to the point in a number of prospects, where the technical staff would say, “we will give you eight-tenths probability that you have hydrocarbons.” Now, very often, they can't tell you the commerciality because they

can get some response from a bright spot from the thinner sand that maybe would have enough hydrocarbons to be commercial, as well as one that was thick and could be commercial. But that is a very, very high achievement. This let us bid with exceedingly high confidence, just routinely, on those sales. Now, not every prospect would lend itself to that. We bet on probabilities, but the range of probabilities on bright spots in the lease sale might be from, say, four-tenths up to eight-tenths. And that is quite extraordinary, really, to develop the confidence level that high. And what you learned out of that was that as soon as you move out of that environment to other environments, the risk goes very high. And so, again, coming back to the point that we were talking about at lunch, the fact that we had so much history, so much data on all of the fields, the sandstones, the units, and all in the Gulf, well, we kept adding to those depths on a comparative basis. And so, you just get your confidence higher and higher that if you put big bucks up, you are going to be right.

TS: Let's visit that again, the conversation we had about our success and leadership in the Gulf. To what do you attribute that success during the 1970s where we did, indeed, maintain a leadership position out there?

JB: Well, you can't start with just the 1970s. What you have to start with is the birth of the offshore, which we talked about a little bit up there, and, for the reasons I talked about. And Shell did not have the commanding position that its competition did. Certainly not east of the Rockies. And the fields west of the Rockies were getting

old and all. Shell had some fair success on the West Coast very early. You know, we are talking about the 1920. But west of the Rockies, they moved over here later with first, the purchase of Roxanna Petroleum. So, they were even a later, and not too far before the Depression era. We started kind of in-the-hole east of the Rockies. Therefore, we were unable to keep abreast of our competitors' activities because of the lack of funds and cash generation in the company. And so, we felt like, following World War II and all, we could start with a clean slate here in the Gulf of Mexico, and bet on our technology. So, we started with the concept that we are even with everyone else. It is going to be the player that has the best technology and can control the costs, and we never quit that. And so, what you have is an evolution. The concept is very simple, but so important in managing affairs of a large company, and I am addressing only the upstream at that time.

If you look at a history of the addition of oil reserves for the whole industry, starting with the birth of the industry, you will see these huge peaks, and then you would correlate with a new technology . People look for a seep and say, well, the seep is here, we will drill here. Or they just drilled at random thinking, I think this is a good place to build. No localizers. So, the concept of a closure to trap oil, now, not everything is expressed at the surface. So, you get a big burst of oil down there. Then came along the very primitive geophysical tubes, which were the gravity tube that would map really large features but they don't help find small pieces.

Now, Shell was an early entry in that because some of the earliest scientists we used were German scientists who used the torsion balance, which determined the gravity of the rock, the specific gravity of the rock, the density of the rock, the salt and surrounding rocks being different. And these tools were very blunt. If the salt is kind of close to the surface and you can see it, these things can map that.

So, I think I would interject here that there is a heritage Shell Oil got from the Group and benefited from the Group. They were scientifically inclined, from the earliest influences they had on the company. And then you come along to the fact you had what was called refraction seismic which, again, shot huge long lines, large amounts of dynamite, and you found only kind of the largest structural features.

Now, looking for a salt dome, to the degree that you could apply a seismic tool there, it did not work as well as in the Mid-Continent. Everybody applied the tools up there, because they were new tools, and that is all they had. So, you will see all these events when technology comes in. Now, what happens in the evolution of a company is you grasp a new technology, you apply the technology, and hopefully, your scientists are smart enough to apply it at the right place, and you get some results. Then, there are usually gaps in which there is no new technology. Now, part of it is that necessity is the mother of invention and so forth. So, what happens is that an organization continues to use that technology and apply it in places where it doesn't work very well, for the lack of a better tool. Then finally someone comes

along with a technological improvement. And then you get another burst and you go through that thing.

Now, I can give you an example: the 1950s was a period in which the industry was struggling to look for oil and gas with inadequate technology. It had been very adequate where it was designed to fly, but they were now trying to fly, since those plays were done, in other areas. Now, when I joined Shell, we had eight seismic crews mapping in the Anadarko Basin. Those seismic crews, the kind of processing programs we had and the knowledge we had and so forth, really were getting practically no usable data. You know, it was almost like beating your head against the wall. You don't know what else to do, and so you keep shooting and shooting. The hardest thing is to inflict the discipline. Leadership has to be strong enough to say, this is not working, let's stop spending money on it, and let's go find something better to do. This would also be true of the offshore. So you had "mini" conceptual improvements coupled with real technical breakthroughs. Let's say you start off and you are using reflection seismic, and you have great success. You are just taking what you already know onshore and are just stepping out in a little bit of water, and everything there looks just like what is on shore and all kind of works well. As soon as that is kind of done, well then, what you see and what you are mapping, you are not finding what you are looking for. Well then, say, geological concepts came along and began to help think about how sedimentation took place. Finally, the geological concepts that came along in the offshore allowed you to use a seismic

tool to look for something different. And then 3-D seismic came along. The problem, well, is position technology. You had to think back. Today, you can go down for fifty bucks and buy a global positioning device you can hold in your hand and it will tell you within two or three yards where you are standing geographically on a coordinate basis. Well now, go back to the 1950s, 1960s, 1970s, that wasn't true. We had a few position stations onshore, and you tried to shoot these radio beams to find out where the seismic vessel was offshore. So, many times, we would do seismic mapping and get seismic maps that would show, here is a structure. We drill a well. We wouldn't get anything. Well then, as always, the agonizing thought: well, was the structure where we thought it was? It may be that we have a perfectly valid structure that would still produce, but we didn't drill on it because it was not where we thought it was. Well, see, nobody even thinks about that today. You can position out there today within a few feet, and know where you are. So, things like that prove your accuracy in picking locations and things.

Then, the 3-D seismic survey came along, and it gives you the ability to remove a lot of these interferences. The reflection, you map it as though it came back from directly underneath where you set the charge off. But, the truth of the matter is, this wave goes out in a circle, hits this, bounces back up, and you map that as right here. You don't have any other way to do that. And so, you get all of these various type reflections and things coming from there; 3-D helps remove that. Plus, 3-D has a lot more traces and so, since a lot of these events are not absolutely continuous, it gives

you a lot better resolving power. Now, it was very expensive. And Shell Oil was the leader here. When it was born, the first concept was the only place you could use it was over a field, a discovery. You have a discovery well and you really wanted to find the field. And now, you drill a four billion dollar hole. You say, well, I can afford to invest in 3-D seismic if it saves me one four million dollar dry hole. So, you were just shooting little things like this. You were not using it as an exploratory tool.

O.K., Shell was the first to come up with a field configuration of running three boats simultaneously, so we could just zip across the Gulf. Now, there is tremendous cost associated with that. But, on a unit basis, it got it back into the cost area that you could afford to do. So, it was just another kind of way of Shell always thinking about how do I make use of the leading edge technology? How do I bring it in on a cost-effective basis so I can use it? If you just live through it, it is clear and you can understand it. It is kind of complicated to explain all the little, tiny improvements that add something. A new technology breakthrough immediately opens up things. In Shell's case, of course, we were pressing both. We were pressing the finding tools as well as the mechanical ability to take advantage of those things. I think I maybe already mentioned that to you.

Shell made a very important decision in, it was about the middle 1960s. I cannot recall . . . I would have to say it was either 1965 or 1967. We had had a lot of our

research dollars in what we called "basic geology," understanding rocks. Now, we got some good out of that. But you never understand depositional patterns to the point that you get predictability in the range that you would like to have it. It helps that the geologist has concepts to think about what you are looking for. And we ran all of these studies, managed this group, the Ginsburg group, down in Florida for several years. It took geologists off and showed them how all these things formed.

In the mid-1960s, we had a very important meeting in which we decided to reverse the relationship between research dollars spent on geophysics as opposed to geology. We downgraded, downsized, and became much more selective going into geology. And we pushed geophysics. Prior to that time, geophysics had always been, let's call it, instrumentation - how to get the little seismograph things to record a little better and so forth.

Bellaire came up with field vehicles that had these huge tires. They designed them themselves. Well, you say, why? It gave us a tremendous advantage in Oklahoma because, in the rainy season, the farmers wouldn't let you on their fields. Well, our vehicle didn't leave a big footprint. So, even that kind of thing gives you an advantage. You can get in the field when other people are not there. But that was the thrust of their things. So, we decided, in the mid-1960s, no, let's go the other way and let's put more emphasis on geophysical development of tools that will help us better find prospects, not just give us the advantage of getting in the field which is

important. It was the beginning of the evolution of the computer. The Cray computer was coming along about this time. It handled its massive amount of data, and it was a very timely thing that we did. All of these software programs, processing programs and all, some fantastic work was done by that group out there. It comes back to, again, kind of the concept of using this bright spot and being able to map those things. Well then, it was all greatly improved through the processing technique in Bellaire. It is all a fascinating story.

Other companies, I am sure, have done things, but they have never quite looked as consistently dedicated and innovative as Shell Oil has. There are some examples of where, sure, they have done some extraordinary things. I used to explain, like when we bought Belridge, the analysts first want you to criticize your competitors. And although Mobil complained that I was downgrading their capabilities, I was doing everything I could to not do that. I tried to explain to analysts, look, there are some things that you have a memory for and an expertise in by virtue of the company and the history of the company that another company doesn't have. And there are things that they have that we don't have. So, I said, you know, when it came to heavy oil, we had an advantage. Now, there is something most people don't know, is the Group did their part. The Group actually did the first kind of little experiments down in Venezuela with heavy oil. And they pumped the steam down the hole and they went back a few hours later and they opened the valve, and they didn’t get any oil. And so, they left it. Well, they went back after some considerable time had

elapsed to properly plug his well and all. And when they opened it, to their surprise, it started flowing oil. And they came up with the concept of steam-soak. You had to leave it there in time for the heat to get out and melt the oil. Those things were rather simple, but weren't thought of at the time. Now, they had spread that all around. What they said was, it is too expensive to make stream down in Venezuela. But this might not be too expensive in the United States. So, they tell us, look guys, we want you to know we ran this experimen. Now, we should have owned the world out of that. But I recall very well, Ned Clark did everything he could to convince the E&P organizations to make all of these evaluations and go buy all these fields. But you still had a mentality in the engineering side of disbelief, and they were unwilling to risk some money and so forth. But we did do a few little things, see, out in California. Well, when Bellridge came along, the link that was most important in evaluating the thing was how much oil would you recover out of the formation? Is it going to be 50%, is it going to be 60%, 70%? And, you know, normally speaking, on an average basis, under normal field conditions, you don't recover but about 55% of the oil in any of these fields around here. Well, we had the history where we had already recovered in one of the smaller fields, 80% of the oil that was in place. So, we had a much firmer idea, and much more confidence in how much oil you would get. And I used to tell the analysts that . . . "Look, we are blessed with the fact that we have technology that other folks don't." Well, their first reaction was, "What do you mean? You put some steam in a hole and all, everybody knows you do that." Yes, but it's more than that. So, all of those things

happened, and I will say, give the Group credit for being scientifically oriented and instilling this in Shell at a very early date.

Now, another way to look at that is Shell Oil, before everything kind of hit the rapids and I don't know what it does today, but in my day, we allocated a higher percentage of our operating cash income to research than any other company. That doesn't mean we had more total dollars. I am just saying of what we had, what we were generating, the cash income that came into the corporate, we were plowing more back in research and development as a percentage of that, than any of our competitors: Mobil, Gulf, Texaco. And, you know, that pretty well speaks for itself, where you are putting the dollars in.

TS: We are now talking about that period of 1-1/2 years or so, John, when before you became CEO of Shell Oil, you had been in Shell Canada, you had been called back as executive VP, let's talk about that period and your experiences then.

JB: O.K., I came back on the E&P side, but as executive vice-president of E&P, I was a member of what previously set up was called GEO. Also, in Canada, it was a very good assignment for me because I had a good chance to interface, for the first time directly, with marketers and refiners. The way Shell Canada was organized, it even afforded the opportunity to spend more time on that side of the business than E&P. The E&P was housed out in Calgary. So, there were no E&P people in Toronto.

There were good historic reasons why it was organized that way. But the refinery people and the marketing people were housed in the office. So, every day, they are in the office and it was very easy to talk with them and discuss the various problems that we might have. And I had developed a considerable amount of comfort and confidence about that side of the business. Shell Canada did have some very good people on the marketing and the manufacturing side. The manufacturing side, I would say, was as profit- and economic analyses-oriented, even more so, than Shell Oil.

So, I came back to be kind of immersed in E&P and, of course, the interesting thing was, well, it had been about 4-1/2 years since I had seen E&P here.

Now, the interesting thing about companies, and when I say what I am getting ready to say, I don't mean this as criticism at all. John Redmond, who originally had been with Shell Oil . . . in fact, when I joined Shell Oil, he was division manager of production in Oklahoma City. He moved in to the position in Tulsa. He was handpicked to be the first manager of the first E&P economics department in New York. He later went from that to Shell Canada on the downstream side. He was the MTM executive vice-president. Bridges had a lot of confidence in John, and John is a very smart guy. I mean, he has as much individual capacity as a senior manager to handle complicated mathematical problems and things of anyone I think I have known in Shell Oil. So, Bridges wanted Redmond to come down and take over

E&P because Christianson, Ed Christianson, resigned of resentment over the fact that Bridges was promoted over him. Redmond, the first thing he walked into almost was the Bay Marchand fire. It was very traumatic. And when you are thrown into something like that, I think the first thing to do is be pretty critical of the organization. Now, see, Redmond, who came up in Shell Oil, had left years earlier. He was probably thinking, "what the hell went wrong with the quality of the staff in Shell Oil." He had been away 10 years probably by now. You know, "you people have screwed up horribly here." Also, being, I think, wearing his E&P economics hat, he had some retention of his last job in the company, and was trying to get a handle on how well economically were we doing in E&P activities. He had developed some views that were certainly, in part, correct, that we had tended to perpetuate involvement in areas, geographic areas, that did not offer a lot of opportunity. So, he launched his own rather intensive review and all of E&P activities. He reduced staff a lot and he slashed programs. And he was taking Shell Oil out of the onshore. One of the first surprises I got when I proposed a big program in the Mid-Continent -- and Harry didn't say anything -- the board said, "My God, John, we just agreed six months ago with Redmond that we would never do anything in those areas again." So, it had been a process of withdrawal. And it certainly had been downgraded on the exploration side, and the exploration involvement in decision-making because he had kind of gone around it, probably for the lack of confidence in what he considered its economic analysis ability. And so, he leaned a lot more on his production staff to say, we're making money here, or we

aren't. So, the organization had been, I think it is fair to say, functionally demoralized, which will happen in any organization when there are budget cuts.

The other thing we had was decline in production. If you go back and look at the literature, the first objective I set for myself, and I think this is recorded, if I am not mistaken, in *Shell News* or whatever that book was that we had where they did a little interview. We had hit peak production in 1970 and 1971. I think it was first oil about late 1969 and 1970, followed by gas about one year or two after that. I did get production turned around. It took longer than what I thought. I thought I could do it in about a year, year-and-a-half, but it really took about two-and-a-half, as I remember. It happened after I was president.

TS: Wasn't this also an industry trend?

JB: Oh, yes. But see, the question was, how long can we stay on the down slope? Are we going to go out of business? Or is there enough opportunity . . . you know, you are going to go out of business . . . or you just begin to ask yourself the question, which Redmond was probably asking himself: Is there anything to bet on in exploration? So, if you have reached a point that you have no confidence, faith, or other reason to believe that it can provide you with the opportunities, the best thing to do is cut your losses, get rid of all exploration, and maximize the return on the liquidation of your production base.

TS: Where were you looking for those opportunities to turn that around?

JB: Well, I went to a number of places. First, we went to, as I said earlier, to New Orleans. It would be interesting to see how many people will remember this meeting. I would be interested in what Nanz would say. Now, there is a little bit of animosity between Nanz and myself in this area, and I will tell you why. Nanz was Redmond's chief geologist. And Nanz is not a rock-your-boat, agitator, in-your-face sort of guy. Basically, Nanz was kind of helping justify Redmond's execution, let's call it, of exploration. So, he will be a lot more sensitive to the fact that that was what was going on, and how he helped the thing. But I can tell you clearly that I sat through the review and said, "I cannot believe it, Billy. I left here 4-1/2 years ago and we had things to do." And I said to him, "Look, if there is nothing better to do, I hate to be the one to say that for the first time in Shell Oil's history, finally, we've come to the point that we need to downgrade the offshore, to begin to evacuate our exploration out here. So, if you can't come up with better ideas, this is where it is going to lead to. So, how do we get some new ideas?" Now, this is where, if you talk to technical staff, they'll say I came up with the idea to look for the deepwater. They do. I am not looking at seismograph. All I can do is improve plans. But, out of that, Billy came up with the idea of long seismic lines. And we sat around there, and Nanz participated in this because he is a very fine, doable type geologist, and he said, "We don't really understand this basin. We have always worked on this margin

around here, you know. We don't really understand how the basin is put together. And, think about it, most of the time we go in a basin where we shoot lines from one side all the way to the other side, no matter how far it is. We have never done that." So, we said, fine, we are going to approve a set of regional lines.

TS: What kind of a basin are you talking about with boundaries on it?

JB: All the way from Texas to Alabama. But these are not coastlines. These lines will probably be 25-50 miles apart, going straight out across the Gulf of Mexico, and then one or two hooking those together. So now you can sit back and say, well, what is the shape of this basin? Now, out of that, these big structures popped up out there. Everybody was just astonished with . . . look at all of the different kinds of possible traps and different configurations.

TS: Do you think any other companies knew this at that time?

JB: I don't know. All I know is they didn't follow us to the deep water for two years. Well, one or two companies took protective leases. But, say, as far as going in and picking prospects, it was two years before they ever began to follow us in there.

Now, like I say, that is when you've got to be sure you can develop this, and that is when I got Blackburn and all these guys together in a meeting right there on the 45th

floor and I said, "Now, I cannot, in good conscience, fund and launch this kind of program unless we can develop it. You guys know that." And that is when I said, " You've got to give me confidence you can get to 3,000 feet, and I want something on the drawing board saying you can see you can get to 6,000 feet." And I gave them a time frame. I can't remember, like 3-5 years. I gave them a time frame for that. Now, almost the first hole we drilled was in 7,000 feet of water, the first exploration hole we drilled out there. And then we went out and tied up these rigs.

The *Seven Seas* was a new rig, it was just coming out. The other rig was drilling for us on the East Coast at the time, and that was relatively deep water. We couldn't handle this. Russell and his production staff designed the riser and commissioned the building of the riser if we committed to operate it in real deepwater.

I then reviewed all of the exploration opportunities that people had in their minds, whether it be Alaska, the Rocky Mountains, or the West Coast. And then restarted those plays. And that is when I walked in to the boardroom and said, "Here is my proposed exploration program." And, it's funny, I always wondered why . . . I guess I should say about Harry . . . Harry never seemed to want to bother himself too much with what his top lieutenants were going to say in the boardroom. You know, it is nice to have a lot of confidence. Also, I have seen him disagree, which is bad to have that happen. He almost went to the board meetings like, I am an independent director and I am going to react to what you guys are showing. He never said that

but very often, that is the way it went.

TS: So, you were still executive vice president.

JB: Oh, yes. See, what I am talking about, I am probably talking about November of 1974, you see. In other words, that was when we would have gone in with our 1975 program. So, I got here in late July, the first of August 1974, made all these tours, and I am probably in the boardroom . . .

End of Tape #1, Side B

Tape #2, Side A

TS: This is tape #2 of the October 1, 1998, interview with John Bookout. We are now talking about that period of time when he was executive VP in Shell Oil, preparing to become president, and you were at the board meeting presenting your plans.

JB: O.K., one of the things I had done to prepare for this, I had done a brief look at industry, what industry was doing and what their results had been. So, industry was continuing to have some pretty good results in some of these target areas. The question had always been, like in the exit phase, well, are there any oil fields worth having in Oklahoma? I recall very well when I walked out of that board meeting, Harry Walker . . . Harry would probably remember this . . . Harry Walker came up to me and said, "That was the most informative presentation that I have seen since I have been sitting in the board room in the E&P business. It made sense why you want to do the program." So, what I would presume that says is that John Redmond didn't like presentations himself to begin with, and he liked to play things more on a political basis. All this is not criticism, but he would much prefer to sidle up to Harry or something and say, well, I think Harry ought to start this or ought to do that, and so forth, than he would to expose all this in the boardroom. And kind of give it a high, glossy-type presentation from his seat at the board table, and not let himself be drawn in any more than he wanted to. So, I could immediately see that when Harry said that, he was thinking, well, I've been sitting in boardrooms, not

really understanding why we were doing what we were doing. Now, although they were in a little bit of shock about that, I got my program. I mean, they backed me. And they backed me primarily because boards are like that. Here is a new guy, came in here, and he wants to do some things that we don't understand, sounds crazy to us . . . we just had one guy left here, said it was all the wrong thing to do but fine, let's do it. And I had things, like we had to reverse declining production.

So, that got us kind of launched on those things. I cannot remember a lot about my November 1975 presentation. I believe in December of 1975, Bridges came to see me . . . I remember very well, it was after a board meeting, so it must have been in November because we didn't have a December board meeting. So, it was probably after the presentation at the November board meeting that Harry came down to my office and said, "I want you to know that the board has agreed with my recommendation that you succeed me." He gave me a nice little kind of friendly piece of advice which I did not follow. He said, "Now, John, you haven't been here very long and so some of these directors don't really know you, of course. Whereas, they are solidly behind this decision, they said that you have spoken to your E&P business, but you haven't said much about the other piece of the business. And therefore, over these next few months, they would like to hear of it more." But I didn't that. I stayed with my E&P business.

Now, I had some ideas about that. I did participate in the GEO meetings. I took two

positions: When I arrived in mid-1974, Harry and Jack were deeply involved in trying to work a deal with the Iranians, and that was supposed to come with a big crude oil supply contract. I will say that Jack also, for his own good reasons – I didn't think they were good reasons, but I didn't question his belief -- felt that because he had the refineries, he had marketing, he had transportation and supplies, he could wheel and deal and make supply agreements, and that we would be more profitable as a company doing that than trying to find our own oil. So, he was a big believer in pushing these contracts. He and Harry had been working on this Iranian deal. I was asked about it. I actually said, "Guys, you know, I am not sure you want your trademark associated with this." One of their conditions was that they really wanted to fly an Iranian flag over every one of these tankers. You know, national flags. And I even said, the first thing you know, they will want a service station in Washington. At the time, it wasn't on the table. At the time, it was East Coast, you see. But it based on the fact that, you know, we get crude oil to the East Coast and we could refine it there through an arranged sort of supply and service station . . . . And I'll be damned, before any time, they came along and said, well, they had to have a couple of service stations in Washington. It was the capital city and they had to be represented there. Then, of course, as I recall, in December . . . this was taking place, say, from August, September, October. December, I think, was when the petrochemical plant remained in question. Now, I supported that and fought pretty hard for it. The Group was against it. It was an interesting meeting during which Jack really lost his temper.

Gerry Wagner was the chairman. Gerry Wagner asked Harry if he could visit with the team before the board meeting, in which they were going to talk about the chemical plant. And he did kind of everything he could to persuade us that this was not in our interest. Now, he was approaching it on the basis that you guys are getting into things that you think you understand, but you don't understand. You haven't built plants internationally. You haven't operated with these treacherous governments and things, and you are just letting yourself in for lots of trouble. And I can understand you wanting to do it. I am just telling you I don't think it is wise. Well, Jack lost his temper and just . . .

TS: Was this the Saudi plant?

JB: Yes, Saudi, now. It was not a launch yet. We were trying to negotiate the thing, you see. It still went on in negotiations after I was president. Jack turned to Wagner and said, "You guys as a group just are not going to let us do what is in the interest of the minority shareholders. This is a good deal and all this stuff that you are going is just nothing but made up reasons. It is disingenuous. The truth is you just do not want us to be outside. Now, there is probably some truth in that but, you know, Wagner couldn't let that stand. He just said, "Well, no way would we try to bust rate something that was good for the minority because if something is good for the minority, it is good enough for us, too. We will make money off of it, you know,

and I reject your conclusions here."

Now, I became a real big defender of that because they were still beating on me about not doing it. Now, I give Stan Stiles a lot of credit here. Stan Stiles went around and negotiated the contract. It was the first of the fabricated plants not on site. And one of the things the Group had said was there isn't a high quality work force in Saudi Arabia. Well, Stan went . . . as the plant was designed, it was built in huge pieces. The only thing that we built in Saudi Arabia was Saudi labor.

TS: In Japan?

JB: Yes, most of it was done in Japan. There seemed to be some little part that was done in Korea. I said, "I am going to give you my word that we are going to build this plant on budget." Nobody believed it because nobody had never built a plant that way at the time. Now, we had lots and lots of issues on the supply contract side, and I had a lot of trouble with Stan. He was always kind of undermining me. I was trying to tell him, if we can't have a supply contract . . . we started off at 150,000 barrels a day . . . if we don't get $150,000 barrels a day, we are not going to do this thing. Well, see, the Saudis were having big trouble with that, and the reason they were having trouble is Yamani ran the oil side and the production side. Ghazi Algosaibi was set up as minister of electricity and new industry. Yamani had opposed that. He wanted that portfolio under him. And so, it was . . . what you had

was two ministries and we were trying to deal with both. The new minister was trying to get something done, which was helpful, and a minister who didn't want the new minister to succeed and was making life difficult on the supply side. And, of course, we got it done and, the truth of the matter is, we never really benefited by the crude oil contract at all because, first of all, we never got the price competitive. We only got within 25 cents a barrel equal to, say, Aramco. That wasn't enough. That put us to a bigger disadvantage.

TS: You definitely had the option not to take the crude oil.

JB: Yes, after a period of time, or you lost it. So, you had a period in which you could not take it. It wasn't too long. And then annually, if you underlifted by a volume, you lost a certain volume. If you underlifted by a volume, you dropped a certain volume. And so, it all went away pretty quickly.

Let's go back to the GEO meeting. The other place where I took exception, and I am really proud of this, and I took exception and got, thank God, in the position to do something about it as president, was Jack had decided that the future was all in the chemical business, and not in the refining and retail business of gasoline. Now, he had some good reasons, he convinced himself, and I will come back to that. Harry had bought into that. Now, I remember very well sitting in the GEO meeting saying, "I am opposed to this company going out of the refining and marketing business." I

couldn't come up with a good reason at the time but, Harry would say, "Well John, it just doesn't make sense. You don't understand. That business is no good. We have not made any money. We are not making any money." I said, "I know that, Harry, but I am just telling you that I think, as an oil company, the integration part of it is damned important, and I would be very uneasy to see this company go out of that business." Now, I didn't know I was going to be president, but perhaps Harry already had in mind of that, and I think the only reason I can think of that he listened to me . . . he didn't say no. He never said no, but they just didn't move along as closely on that. What Jack was hammering the board with is "look, the raw material cost in a refinery . . . let's look at the cost of doing something in refinery . . . the raw material cost is 80% of the cost, just to go buy it from somebody to barrel the oil and put it in there. Now, you've only got 20% or, to put it another way, twenty cents out of a dollar, that you can work on to improve. And then he broke that down into taxes and things. He got down to . . . all I got is about a dime out of a dollar. That is the only way I can impact a refinery is about ten cents on the dollar. And so, I can never get there."

"Now, let's look at the chemical business. The raw material costs in a chemical plant is a very small part of the total sales price of the upgraded derivatives. And so, now, my raw material costs, and I don't remember the exact amount but it is like I do on the refinery side, but, you know, I think it was like 30-40% of buying the ethane or buying the crude oil and, say, extracting from it the ethane to make ethylene and

selling the rest of it." He got the raw material costs to chemical plants down very low. Where the philosophy was flawed, and Jack and I had terrible fights about, was he wanted to build world-scale plants, which we did, unfortunately, and they were built on what was called the merchant market. So, we didn't build for our internal needs. We built two-and-a-half times, what was projected internally . . . we built even more than what our needs turned out to be, and that was on a projected basis. So, each plant you were building, you were building . . . half of a capital was being spent to make a product to sell somewhere to someone else. That was the first flawed thing on it.

The other thing that Jack did . . . we quickly had a confrontation over the Deer Park and N0rco chemical plants. He had a scheme where he wanted to build a plant in Deerpark, a plant in Norco, a storage facility in between, and a pipeline connecting the two. Now, I argued until I was blue in the face without affecting Jack at all. "Jack, it doesn't make sense. We are building a plant twice our needs, and you want to build a pipeline, and you want to build an underground storage facility. So, why don't we build one plant, a pipeline and a storage facility? We can supply the market out of Norco if you want, or out of Deerpark. We can build it in Norco and ship it by pipeline over here. And let's kind of grow into that and then build another plant." "Absolutely not." We are going to have both of these plants." Now, I called one of the more reasonable directors. I had been president just months when this came up because going back to, say, when I was in E&P, they were already talking about

getting out of the oil business and pushing the chemical business and building a plant overseas. I called the director and I said, "Look, I've got to ask you a question: I am at loggerheads with Jack over this. I really think that the strategy is not sound. Now, I have been unable to convince him, just one-on-one, to accept my views on this. So, what I am considering now is how to discharge my responsibility. Jack has expressed determination that he is going to present and recommend his plan to the board. I suppose I could throw it open to the directors. I could say, 'I am opposed to this and I don't think we should do this,' thereby forcing a choice between Jack and myself." It was interesting what he said. He said, "Don't do it. You'll lose." And I said, "Oh, why?" He said, "Look, Jack has been executive vice-president of chemicals for a long period of time. The directors all know him well. Let's face it, you know, they don't know you very well. You are a brand new president. And they are going to have a hard time choosing between you two guys in the chemical business. If it was anything else, it would be hands-down, you'd win." Now, the issue was, to show you how our growth was, the issue was, as far as I know, I wondered if anybody had ever focused on it. Before I called this guy, I looked at the delegation of authority. The delegation of authority to the executive vice-president of E&P, to the executive vice-president of chemicals, and to the president, were all the same, except the delegation of the president included all of the businesses. But the delegation to the executive vice-president of E&P gave him all the authority to do in E&P that I had to do in E&P. And the same with chemicals. Now, that intrigued me, as I trace back on it. And what I think it came from was this early

Group involvement. If you go back and look at the board, when Shell decided to go into chemicals, a managing director that handled chemicals on the other side came on the board. Well, I would imagine, following their way of doing things over there, he would have been responsible for chemicals to the board. So, see, probably the delegation was set up out of the board. So, I said, fine, we are going to change that. We are going to have the board meeting in New York, and we followed the procedure sometime in having two hour meetings before our board meeting to discuss subjects, you know, like, in detail. And so, I said, "I want to schedule an in-depth discussion about these chemical plants, Jack." Now, I did let two or three people know I wasn't happy with this. So, I sat in the back while they presented all this. Now, a fascinating thing occurred. Jack presented the thing. Now, a couple of guys turned and said, "Well John, what is your view?" So, I tell them, in kind of language . . . and I don't try to kill him, you know, because of what he said . . . "There are two ways to approach this: there is a more cautious way to approach it, to conserve capital and only build one plant. Frankly, I think it has some merit." I said, "Another way to approach it is build two plants and take a partner on one of the plants. And I think we could get a partner." Now, you were at a time when ethylene was kind of . . . long-term ethylene supply was questionable, and DuPont was uneasy. I don't think they had Conoco. They hadn't bought Conoco yet.

I remember one of the Group directors said, "Now Jack, you say that you have the capacity of this new plant sold out. Do you mean you have contracts for all that this

plant will manufacture?" "Absolutely. I have contracts." "Do you have contracts in hand now with customers to buy this?" "Absolutely." So, everybody said, "Well, what's the risk?" I still leaned on them to try to take on a partner. Now, I really had to rough up Jack and the guys to get them to take DuPont. I insisted. I even finally said to Jack, "Jack, I'm going to have another day on this before you get it built. You can get it approved in one day but it is a long way before you start it and I don't give up." Of course, we talked more frankly out of the board meeting. "But I will support it on a partnership basis." So, they went and got DuPont. That was the best thing that ever happened to us. The best thing. We lost our ass on that plant for years. DuPont screamed like a bloody stuffed pig. Tried every way . . . I even had the chemical people come back to me and say, look, we've got to let DuPont out of this contract. We do too much business with them otherwise and this is killing them.

TS: That thing was a drag on the market.

JB: Oh, yes. The whole market situation turned around. So, we did O.K.

Then the next thing I did is I had a review of all authority, and I went to the staff development committee and said, "This is crazy. Either the president, myself, or some other president, either runs this company or they don't. They can't be put in this position." So, we laid out a new delegation of authorities that clearly established one line to the president. Then we presented that in a board meeting later and that

was approved and eliminated all that hassle that we had.

THE END

SHELL OIL COMPANY

ORAL HISTORY PROJECT

Interviewee: John Bookout

Date: December 18, 1998

Place: Houston, TX

Interviewer: Tom Stewart

Code: SOC005

Keywords: exp, Shell, Mgmt

Bio

John Bookout had a tremendously successful career with Shell Oil Company. After serving in World War II as a B-17 pilot he attended the University of Texas earning a B.S. and a M.S. in Geology. He began working for Shell in 1950. He became District Geologist in Amarillo in 1954 and stayed in that position until 1958. That year he was promoted to Division Geologist for Wichita Falls, TX. He also worked as Exploration Manager for New Orleans in 1965, in Economics Department for E&P, and as exploration manager and VP Denver. He went on to become VP of E&P for Shell until finally becoming president of Shell Oil Company in 1976. He held that position until 1988.

Summary

Interview covered more information on move to international. More on the role of technology and secondary recovery. He ties much of this to the Belridge acquisition. Extensive commentary on the debate to diversify the company. Excellent anecdote on the Carter years and public criticism during his API years. He contrasts API's position to Shell's. He also discussed regulation as it pertained to the environment and safety. Interview ends with a long commentary on Shell strategic planning leading up to, during, and after the downturn of the mid 80s

Tape #1, Side A

TS: This is Friday, December 18, 1998. I am in the offices of Mr. John Bookout for a follow up interview on the history of Shell.

JB: The implementation of it took place during Harry Bridges' regime. And Harry was instrumental, which I think we talked about a little earlier, in negotiating while he was CEO of Canada, Shell Canada, negotiating the joint venture between Shell Canada and Shell Oil on E&P in Canada. He did that just before leaving Canada and coming to the United States. So, you might say, well, there was kind of the first step to actually invest outside the U.S. Then, it was really Harry who . . . I wouldn't know what discussions took place with the board and all, and Harry is being interviewed, so perhaps it will come out . . . it is certainly a good question to ask him . . . but then Harry set up the organization, the first organization, to go international. Gerry Burton, who had been in E&P by background . . . he was a geophysicist . . . he had been an E&P vice-president. He'd run the West Coast E&P operations for a number of years . . . and he was selected to be, as I recall, the first vice-president of international E&P for Shell Oil.

They started with a very, very small staff, and I am going to put that somewhere like 1971-1972. It was about the time the headquarters were being moved to Houston, and Burton was set up over in Shell, too. They started with a very small

organization. You'd have to understand, as I already said, with no technical background to drawn on, no geophysical work to draw on, no real studies except published stuff to draw on, and so, to try to get the business started, Gerry's approach was to take a number of farm-ins from other major companies. As I recall, principally located through South America. So, he went down and took some very large blocks of companies who didn't want to go forward for various reasons. That, as you might expect, was not successful. In other words, it didn't result in any kind of . . .

I came along after they had had about two or three years of that, and we said, look, we've got to change the approach. I mean, now, when I say that, I am not taking kudos there. I think anyone would have said, O.K., they started the best way they could at the time. We now know a little bit more about international activities. We've got to have better technical work studies based on our analysis, our ideas and so forth. We changed vice-presidents over there a couple of times, if I am not mistaken, and when I did this, of course, I was executive vice-president of E&P. We talked about I had that year-and-a-half or so. So, Gerry would have been reporting to me. As I recall, I moved Jack Threet into that job at the time. And I think it was because Gerry was retiring anyway. But I would say, actually, the implementation: establishing an organization, naming someone, spending money. The Canadian venture would have been first. A little different venture in that regard because it was two Shell companies, followed on fairly shortly thereafter by setting up this international organization.

The successes, I guess, while I was associated with the thing, is that we had a

success in Malaysian waters off Sabah. We got the assets in Cameroon, which were some very small production in oil fields. We got that by the fact that the Group, you know, had lost a minority shareholder suit and there had to be some kind of compensation to Shell Oil shareholders. I don't recall how the dollar value was set, where the court set the dollar value or what, but anyway, we had a dollar value we were working against that the Group needed to compensate Shell Oil for. We talked for a while about cash. Finally, we could not really kind of come to a meeting of the minds on the amount of cash, and so we gravitated to some sort of an asset. They had kind of totally de-emphasized Cameroon . . . didn't think it really had much future. At the time I was associated with it, they were relatively small structures. But we took that as settlement and had considerable success with it because, you know, again, there maybe North American experience worked to an advantage because we were accustomed to looking for smaller structures and exploiting those things. And so, that worked to our advantage.

We went in the China Sea thing. We chose not to partner with a Group, do it with Phillips. The Group partnered in the bidding with Exxon . . . there was always a certain amount of pride in the Shell organization that Shell Oil got success out of and the Group did not. As I recall, I believe we either maybe originally or shortly after, we gave Phillips operations, if I am not mistaken, on that. Anyway, it ultimately evolved after the merger. And I don't know what really drove all this. Frank probably would cover that . . . I think we were escalating this competition . . . oh, the other thing I should mention is Syria, which was probably the best grassroots discovery that we made, you know . . . we went in and did the seismic in Syria. It worked well. Marlin Downey was running International at the time. He was having

some trouble with the Syrian oil company. He asked me to go over and talk to Assad about altering the program some, which I did and, you know, of course, we did make discoveries there.

Now, Shell Oil lost control of that because the administration declared Syria on the terrorist list after we had production and all, and ordered us out of Syria. So, we negotiated the terms for the Group to take over operations of Syria, and I guess they continued to operate it.

There was more and more as Shell Oil began to learn more about international and probe into other areas. It actually was causing more difficulty, some perhaps, well-founded. There were growing concerns that, you know, with minority content, we really could not discuss our plans with the Group. We certainly couldn't discuss bidding levels, concessions, terms and all. So, there was a growing amount of competition which maybe wasn't all that healthy, although it was still very much underway when I left.

TS: O.K., now we are into 1976. You are CEO. The subject of, since many companies are diversifying into areas not directly related to our industry. The question comes up, why not Shell?

JB: Well, that was a question that was posed by one of the directors who said that they had had discussions amongst themselves, and they were a little uneasy and felt they were entitled to some kind of thorough discussion of what Shell Oil's path as far as diversification should be. And they took note of the fact that some of our

competitors were already announcing and making some major acquisitions outside of the traditional business. I didn't really anticipate or expect this question, nor was it with any great insight when I said, "Well, that is a fair question. Give me a year and I will answer that question for you." There wasn't anything particularly magical about the year, and there was certainly, like I say, no forethought on it, because I didn't even anticipate that question, but I figured it would take some considerable analysis to do that. So, coming out of that meeting, we set up a planning department, economics analysis department, greatly strengthened by drawing on people out of all the various parts of the business. And we assigned various segments that, on first examination, might have some reason to think that it would be, in some way, associated with our business, but not necessarily the same business. And so, you know, some parts of it were like mining: it was an extractive business, and so forth. As I recall, Tony Dempster had actually worked at Kennecott and he headed up a little subgroup there to study the mining. We did all the wood products companies, because some people said, well, trees, and growing trees and replenishing the depleting assets and making boxes out of it was not closely associated. So, we set up these various groups to study all these businesses. And the approach on that was first, understand the sector, understand the performance of the sector, understand what effects its economic success and the like thereof at various periods of time, and then once you have done that, which we were having meetings and discussions at all times regarding the progress on that, let's pick the best, most superior performing company in an individual segment. And then let's assume that it would be a 30-35% premium to buy the market, so we'll take the share price and about 30-35% to that; consider that to be the acquisition cost. And then let's superimpose, you know, that outlay as well as the expected future performance of

that business, on top of the Shell model.

Now, one thing we also were working on and we didn't have: we were working on developing a Shell Oil model; you know, one that we really . . . we had most of our long-term planning before. You could not actually manipulate and play games with it. You see, the staff built it on a set of assumptions: you know, oil prices will be X, gas prices will be X, costs will be a certain percent. And then once you got the return, the model didn't have the flexibility to say, oh well, let's assume oil prices are going to be three dollars lower, and so forth. And so, we worked very hard on improving that plan so it would say, we could have meetings and raise questions and say, well, we think you E&P was too high, would you go back and do this? So, by the time they finished these studies, we had a pretty good model, and we improved on it later. That enabled us to be able to say superimpose theoretical acquisitions and play out the growth. And then we stood back and looked at the thing in, say, five years from now, ten years from now, look, we made this acquisition . . . would we like ourselves better, would it be a better performing company, would our profitability be improved? What we really got out of that was that the answer, almost in every case, was no, that it was hard to recover the premium that you had to pay for the company. It was hard to believe that when you started juggling the variables and trying to make the newly acquired business perform up to a level it would have to perform to make it a good decision to buy, it was not really much of a stretch to just side and determine from the thing that our likelihood of being able to achieve that was very, very small, because, starting with the best performing company in the industry, it meant we had to be able to take it over from strangers and run it even better than it had ever been run by the experienced people in it.

We were also going parallel with that study and working on a model . . . well, what is the future of the conventional oil and gas business? Now, you are in a period of time there that just sometimes is easy to forget about, but you are right there in a period of time where there were kind of mixed reactions, and had been some mixed reactions even in Shell about what was a resource potential. Was it pretty well depleted? And so, should one stay in the oil and gas business? That was being worked also. Shell Oil had made, about a year or two earlier, and I think I mentioned that, under Johnny Redmond's analysis of the performance of the exploration effort onshore, in particular, that had convinced him it was not economic, so he had pretty well shut down the exploration program throughout the United States. Not the offshore. So, all I am saying is you had in the background, our board pretty well conditioned to say that there was not much future.

So, when we finished this at the end of this first year, and I can't remember exactly how long it took but it took almost that year anyway . . .

TS: Now, would that be in the late 1970s at this point then?

JB: Yes, we should be somewhere . . . we are probably somewhere like early 1978, late 1977, early 1978, and I can tie it to an event is the reason I say that. It might have even been a little bit later than that. So, I went back to the board and said, the decision not to diversify, in my opinion, has been a correct one. I explained to them the . . . we did not take . . . we had originally planned to take them through sector by sector; you know, detail analysis . . . we decided not to do that. We decided to say,

look, we have looked at every one of these things in detail and we cannot see where we can make it perform better than the present people running it. We can't recover the premium we have to pay to buy it. It does not look to be a very intelligent thing to do. And then, we added onto that. And also, we have been looking at the oil business and we think that there is promise in the oil business, a promise for us to grow our little business. And it is our view . . . and we made a lot of miles on that, too . . . it is our view that we can get a greater return for the shareholders staying in our group and concentrating on our conventional business traditionally. They accepted that. Now, I don't recall exactly the time, but it wasn't a great length of time, from the conclusion of that report out until Belridge came along. And Belridge was an easy sell to the board for that reason. You know, we had said, O.K., we have just dispensed to your satisfaction, that the company doesn't need to go in new business for growth. Here, we have an opportunity to say, acquire, this asset and potentially, it can do more for us than some of these other things that we are talking about.

Now, I think we had bid on Belridge, like in December of 1979, but we worked on it for a long period of time. In other words, I am just saying, we were probably starting to work on that in early 1978.

TS: At the time, it was the largest acquisition to date, wasn't it?

JB: Yes. Current dollars, the largest that had ever been made. That was an acquisition and, right now, I don't remember the name of it, but GE had made an acquisition that, if you converted it to present day dollars, was larger. So, if you took the price

they paid four or five years earlier and added inflation to it, it was bigger, but there had been no larger in current dollar acquisition made.

TS: I believe you had mentioned one time . . . we had just touched on Belridge, but one of the reasons was that our technology was such that we probably felt like we had a leg up on opposition, on our competition.

JB: Part of that came out of the . . . not specifically this acquisition, but part of that came out of the study that we had opportunity in oil and gas, and what we did a little work on was trying to decide, well, what are our strengths, you know, and let's play to our strengths. Now, that was refined as we went on. And if you go look at my analyst presentation somewhere about 1986, maybe 1987, I finally laid that out in clear form; you know, set up . . . here are our strengths upstream, here are our strengths downstream. Now, we didn't do it sooner than that because we weren't interested in educating our competitors exactly where we were focusing our attention. And it was really by benefit of our association with the Group, that is one good thing they did for us, because there was heavy oil down in Venezuela and, of course, the Group had always been and Exxon, had been big operators in Venezuela. In the early 1960s, the group had done an experimental program about whether they could recover commercial quantities of oil by the application of heat. And I cannot recall specifically whether it was steam or not. And they ran a pilot study for one or two wells, where they injected in a well and tried to produce in a nearby well. And on a simultaneous operation, they got no response. They shut the wells in, declared the project a failure. Some time went by when they went out to plug these wells, officially plug them, and when they opened the well up, it started flowing oil. Now,

they didn't go forward with the study in Venezuela, but they did notify us that it might be of some interest in the states because, again, you know, the higher cost of finding oil and so forth, so they declared it wasn't profitable for them to do, but it might be for us. So, that started us fiddling around with this stuff. Frankly, I will say, the executive vice-president of E&P at the time really wanted to go out and buy a lot of properties on the West Coast, just on the belief that we would solve it. He met all kinds of resistance from the organization and the production side of the organization about, you know, kind of it wasn't invented here, it won't work; you know, you are throwing away money, and so forth. So, they didn't do it but they decided to go ahead and do some pilot, smaller studies of their own. The only trouble about that is it taught the whole industry a lot, too, but they didn't have the exact data. So now, where did our advantage come from? Well, starting somewhere in the 1960s, and I think it was at the Mount Poso, if I am not mistaken, field, they had run this thermal recovery project dating probably somewhere in the 1960s. So, we had 15-20 years of experience with that. And it was like a research project. So, you know, they would produce it for a while and you would have so many wells that produce out and then you move to the next wells. And so, they were core drilling in between the locations. They'd take core samples and find out how much of the oil actually had been moved out of the reservoir, what percentage of it. That was an important number because when you start trying to do the economics on Belridge, it comes down to it is no mystery to how much oil is in place in the reservoir is how much can you recover. And, well, we had good solid data.

TS: This field again now?

JB: I think it is Mount Poso. You'd better check it, but I think it is Mount Poso. So, we could take the actual known result and translate it over to Belridge. Now, you had the thickness of the reservoir, you had hundreds of holes in that thing, so we could sit down and calculate, well, how much oil we can recover. And then, of course, that accounted for operating costs and all, and using our price projections we could determine the value of the thing to it. There wasn't anyone else in industry that would have been brave enough or not brave enough to presume that they would recover that much oil out of the reservoir, just to do it on a theoretical basis and ask the reservoir engineer, you know, how much oil can I expect to get out of this thing? There wasn't anyone else that had the long production history. There was one exception, but we decided they were not big enough. The only company that was close to Shell Oil on the technology was Getty, and principally Getty with Shell Oil. Getty had made a practice for 20 years of luring away Shell's production engineers and things out there. So, it was just like a little Shell organization. And we were aware of that going in. We sat down and tried to analyze all these companies, as far as their knowledge, what would they bid. And so, one thing that some people were concerned about was Mobil. Well, we discounted Mobil because just south of Belridge, on what is called South Belridge, Mobil owned that. And they had done nothing in years. So, we said, well, if they really understood this, it wouldn't be so silly just to sit there, they would have been in the building and everything. And so we backed it out of the point that the only company that would probably unravel this would be Getty. But at the level and the values at the time we were being considered, we didn't think Getty had that.

TS: What price did you trim this crude oil down to?

JB: Oh, God, it was kind of funny . . . I know we did study that thing for two or three years because actually, when we started, if I remember correctly, crude oil was still under control at a very low price. Maybe two or three dollars. Had we moved through the study period, it was a long, complicated process, because, see, Mobil and Texaco owned 17-1/2 percent interest each, and they were doing everything they could, from the board level and all, to block the sale, understandably. The price of crude oil moved up and people began to make more bullish forecasts. We finished the analysis because it was such a large expenditure. The Group really played this straight up. I was called by Shell Oil's chairman and asked if would I like to come over and discuss it with him and his colleagues. So, I said, sure, you know; I'd be glad to do that. The presentation was made in a little board room next to the chairman's office in the old building in the Hague. It had pictures of the two founders at each end of it. And I always remembered the secretary to the CMD, his amazement. He was assigned to get me set up in this little conference room. I told him I wanted a slide machine. And so, he finally found one. I think he borrowed one from KLM or something. And then I told him I needed a 35 mm projector, which he had in there, of course. And so, the room is maybe as long as this room. Probably not quite as long as this room. About the same. A very elegant room. So, I had a slide machine sitting on this beautiful 150-year-old table down here. Over here I had . . . which, I could work from up here, you know . . . a slide projector. And this guy, he looked with amazement every time I was setting these things up and running these machines back and forth. I was standing around . . . happened to look over . . . he's standing there shaking his head. I went to the table and I asked him, I said, "What's wrong?" He said, "Do you see that photograph, or that painting

down there?" I said, "Yes," and that was Detering. And he said, "Do you see the one that is on the other end of this table?" He said, "That is Mr. Loudon." The two founders. He said, "I am sitting here thinking, those gentlemen must just be whirling in their graves." I said, "Well, why would that be?" He said, "They would never have tolerated all of these mechanical devices in here. They were very much of the strong opinion, if you couldn't put it on a page-and-a-half, and tell them in 10 minutes so they could understand what it was you wanted to do, you didn't know what you wanted to do, and it wasn't worth wasting their time on!"

But I went through that thing and I ended up where I ended up. I am convinced that Bellaire Research operations and technical staff have the research right on this . . . personally accept responsibility that we will get our billion barrels. Now, nobody was saying that. There was nothing based on it, based on . . . as I recall, the actual crude that was reserved at this time was 390,000,000 barrels. I said, "Now, if you believe the price of crude in real terms will be up ten dollars in the next five years, and if you further believe that the price of crude oil in real terms will be up another ten dollars in another five years, you've got a project that is going to make us very profitable, we're glad we do it." Now, I know I have gotten . . . I am even sure, I got an awful lot of criticism for buying Belridge from Frank and people like that, you know, later on, that had to live with, you know, the low crude prices. I want to tell you, and I'll bet you money it is in the minutes if you go get them out of the group over there because they take minutes. Andre Bernard, a Frenchman, that was the managing director. His responsibility was the Middle East; Middle East relations and crude oil. He spoke up and said, "John, there is no doubt about that. In fact, I would say your price is conservatively low." So, I had a complete confidence on

that . . . now, later on, you know, sure, a lot of mumbling about the price premise. I got a lot of follow up questions from the Group and all later on. Well, show me what you bid on and what the actual price was, which is a hell of a big difference and all. But it is not legitimate. In other words, certainly, I am no rocket scientist, but certainly, I am smart enough to know that that wasn't something I controlled. And I was glad that they invited me so I could at least have some shared responsibility on the price. And I clearly separated the issues in the meeting: technical results, oil being in place, producing the oil, clearly, our responsibility. The price is the price. This is what everybody thinks. It was no different. It was probably conservative at the time. We had, you know, the Department of Energy projected prices, industry projected prices and all. So, it was probably considered to be a realistic price at the time.

TS: Where the production goes to . . .

JB: Oh, yes, absolutely. We had 105,000 barrels of oil to be released. I used to show that curve all the time, and probably in some of the material Shell . . . 105,000, I believe, 105,000 barrels of day, as I recall . . . was our estimate at peak production, which was to occur something like in the first five years, and we actually did to 125,000, if my five-year time frame is right, and I think it is. As I recall, we produced 3.5 million barrels more in that period of time with, you know, higher production and all, accumulated over that period of time of what was forecasted.

TS: Where did that crude go? To our West Coast refinery?

JB: Yes. In other words . . . see, at the time, the downstream was included in on that. They were supportive. But see, we had some coping capacity and all and we were very crude short on the West Coast. And so, it was considered, to have a multiplier, you know, used in our refineries downstream. The problem we had with the transportation situation . . . you know, we finally worked out this long train ride and everything, which is an added cost. The pipeline situation was very difficult. Already, the environmental thing was taking hold over there. Our competitors were not interested in letting us in their pipelines. And so, you know, we resorted to those long . . . that is a fascinating picture. I guess you have seen that picture of that thing . . .

TS: Was the modernization and expansion at Martinez tied into this?

JB: Heavy crude? Yes, we put the flexicoker in up there, which was Exxon technology. That was a point of disagreement in the technical ranks. The MF people, manufacturing people in The Hague, wanted us to use a more conventional coking process. I went with a flexicoker because it has less by-product things, and looked like . . . which really was sort of disappointing, a nice way to put it . . . angered, you might say, the people in the Hague and the manufacturing side. I did it because Exxon had already installed a flexicoker. It seems to me, it was in Japan; certainly, in the Far East. It was their technology -- had installed it, had one working. The group had a new technology for coker that had never been applied. It had had only kind of benchmark studies and little model studies. So, I said, "Look, I'm going for it." Now, I remember very well the kind of remarks and all about that, is that he was insulted that I was taking competitors' technology and so forth. That goes back to

what we were talking about earlier. I think you have to keep the balance of trying to make sure you are remaining objective in the interest of the organization and the shareholders. And I used to always try to turn that around and say, look guys, I am trying to do the right thing for the shareholders. And, after all, don't forget, you are a big shareholder. And if you are convinced, and if it is for the right reasons and it is not part of some bickering and everything, well, I think you just have to hold to your beliefs on the things. And that is what we did. And that is one that it took top manager directors to overrule The Hague staff. We were in a mode where you could proceed, you know. We had a minority shareholder. I had a board behind me. There was not any way to stop you except to use their power to fire you and put somebody in there, which is pretty drastic! So, they finally told them, O.K., he is going to do it.

TS: This period, the late 1970s, when all these things are happening, could you comment on the political environment that you were working in? Now, this was during the Carter years -- high inflation, environmental concerns, and you were a spokesman for the industry, not just for Shell but for the industry, voted quite often. Could you comment about that particular area?

JB: Well, first of all, I don't think we really had much influence. That is one of the difficulties in our society, that it is easy to stir up a conspiracy type thing in the public's mind. It is easy in a lot of the oil industry activities to do it in such a way that even for a thoughtful person, it looks justified. And a lot of that are the complications which you never can get away with, trying to tell the public or a reporter or someone, it was a business that was too complex that you would

understand. It is not really that. It is cause and effect and lags. You know, like, crude oil prices go down. Why didn't gasoline prices go down the same day? Well, it doesn't because you've got a bunch of tanks full, filled up down there with the stuff you paid a big price for. And so, you need to get that price set. I have even argued with them to say, O.K., the crude oil price goes up. Well, you raise your inventory prices, you know, to go up. And they would always argue, well, you shouldn't do that. You should sell it at the same thing, you know. And you said, look, when the tank is empty, I've got to go fill that tank with higher priced stuff. Now, how can I do that if I keep losing? In other words, I've got to recover the cost of refilling that tank with something of a higher cost than that. So, all these delays and allocations and things we were on, it is so easy to take a little piece of it and, you know, cause people to feel like you don't really have to take them.

We were very, very, unjustifiably, I think, criticized, from the standpoint that although we were making profits, and we tried to get very hard . . . I mean, if you look back at all my speeches, and I think all of the management speeches in Shell Oil at the time, we were trying to emphasize that we were reinvesting it. We are not getting rich off of it. We are not piling up the bank. We are not buying vacation homes down in Florida with it or something. It is all going back into trying to find more supplies, you know, for you, so you will have a future supply. That is almost with disbelief on the part of the public.

I recall I went to Detroit . . . I was addressing a group up there. I can't remember what it was . . . I think it was Lynn. I think Lynn was with me. And there was a young woman there from the local television station. Well, all the studies showed

that the publishing industry, the communications industry, the newspaper industry, their returns on invested capital far exceeded ours, even in those days. Well, she just kept hammering away and hammering away, you know, and interrupting us. And finally, I stopped and I said to her, "Look, we are making a lot of money. Now, our financials, which are audited, will show you without any doubt, that it is all being reinvested. If we are successful, that benefit accrues to the public. If we are wildly successful, it even brings down prices because it is going to create more supply. Now, I know what we are doing, you know, with our profits." Now, here is where Lynn almost died! I said, "Now, let me ask you a question. What does" . . .

End of Side A

Tape #1, Side B

JB: . . . Then I am going to ask you a question: "I told you what we are doing with our profits. Can you tell me what your bosses and your owners are doing with their profits? I rather suspect that they are down in the Caribbean, you know, in some fat resort sailing around in some sailboat." Well, that is when Lynn almost died. Everybody else laughed, but she didn't laugh. She knew some of the people at that station, so she beat it to the telephone right then and called them and said, "Now, look, you know, that wasn't an attack on your industry." But it illustrates the point that it was always a very hostile environment. I tried in every way to say, hit the high ground. Right after I became president, and I don't remember how many months, but I guess the speeches are available, Lynn called me up and said a friend of hers called and wanted to know if I wanted to speak to, what do you call it, RNT . . . radio and television . . .

TS: RNTV.

JB: Which is in Las Vegas? I said, "I don't know anything about it." She said, "Well, they won't be particularly friendly but I think you ought to do it." I said, "Fine, if you think I should do it, I'll do it." I had no idea what I was getting into. I had no idea what kind of folks were there, and everything else. It was one of those things like they often kind of try. It didn't particularly bother me but at one time . . . and it would have bothered me in Cliff's place, but one time, Cliff accepted something liked that. You might remember the thing . . . where they set him in a little single

kind of wooden chair in the middle of a stage. It was a huge stage and there was all this audience out there. And here is this little guy sitting there and they are just slamming him from all sides. Well, I did have a microphone, thank goodness. And so, I gave a speech. And then, of course, the hostility about profits, profit things. So, I don't remember where I ended up on that. There was a guy sitting in the front who was just cynical, you know. And I said, "I'll tell you what: I am going to make a deal with you. If your employers will give you a year's leave of absence, I will give you a job in our financial department, and I will pay you your salary, and you can look at the books of account and ask all the questions you want to, and let's see if you come out better informed than what you are now. I would hope so." So, it was really, really great hostility.

Now, as chairman of API, you know, I beat those halls a lot up there talking to key senators and representatives. Now, I always tried to keep personal views, opinions, Shell views, you know, separate from industry. And sometimes, maybe frequently, you were expected to carry an API position forward and try to sell it. And if you didn't really subscribe to it . . . but it was an industry view, I mean. And what I always tried to do with that was, if it was a senator or somebody at the end, says, what is your view, I generally would try to say, "Well, I am here to represent the industry, the oil and gas industry." If you persisted . . . I always told them, "My personal view is different, but you know, that is not my job. My job is to tell you this." But if they persisted, I would tell them what my own personal view or what Shell's view was on the thing.

I also always tried to be very fair on that. One of the big run-ins I had was with Fred Hartley with Unocal, and he wanted to put in a plant during those times to make crude oil out of shale, processing the shales -- a very expensive process. He wanted $40 a barrel. He wanted a guarantee of $40 a barrel. Well, he wanted API to take on that position. Now, that was one I refused to do. Now, he got his $40 on his own campaign and, for a limited number of barrels . . . it lasted like three or four years or something like that. So, they said, we'll subsidize $40 a barrel for X barrels. And it took three or four years to produce that barrel. But, I said, "I am not willing to do that, Fred." He said, well, you know, all the risk he had to take and so forth. I said, "No, I am not willing to do it because I think, you know, private business ought to make up its mind on which way it wants to go. Now, if you say you are doing this for public good, and you're using your expertise and so forth, then my view is you should do it as a contractor. Not own that resource." He wanted to own these millions of acres and have the government develop a process and pay for it. And then if it is successful, Unocal would benefit. I said, "You know, that is not a deal, and I am not willing to support that. I would support either way, you develop the process, you own the lease and you benefit from it, and you pay for it all. If you want the government to do it, then I think it ought to be as a contractor, and that the technology and all, because they pay for it, becomes in the public sector, and that it is up to the government now to extract what they can out of the industry and, say, marketing the position." Fred got very mad, very upset about that. And API did not take a position on it. Not to my knowledge.

TS: Do you have any other examples where Shell's position was contrary to industry

during that period of time?

JB: Always different on controls. I always divided it in my mind this way: that the role of government was one of trying to remove the barriers we faced that made it more difficult for us to do our job, not to subsidize the industry. The more direct approach of most people was to want some kind of subsidy to do this or that and so forth. A lot of people . . . you see, when people were arguing a lot of times about protection from imports, outside products and things like that, I always took the position, you really don't want that, and I will come back and tell you why. And I just got back from the National Petroleum Council meeting and the same thing is on the table right now. We have lower prices . . . there are a bunch of people up there banging on the Secretary of Energy . . . we need direct price supports, tax reliefs, we need incentives to keep from shutting in the wells and a whole bunch of things like that. I never felt that, first of all, that that was the right thing for the public to support but secondly, even if they do, I always feel that the industry is a loser, and I would like to come back to why I think they are a loser and illustrate that . . . So, throughout this time, I always pushed on, you know, rather than restrict the flow of products in crude oil, rather than try to put barriers up, work hard on making sure our industry is not at a disadvantage competing with the foreign international, where . . . I don't know what the tax structure is now. But, I can tell you, as we went through this hostility of industry here, more and more tax benefits were pulled back, and some of them were very justified. The depletion allowance is a very justifiable . . . and they never took it away from the timber business which shows you, to some degree, it is justifiable. Never took it away from the gravel business, but they sure took it away

from the oil business.

So, there was a period of time where the large European companies still enjoyed those things, and how they could handle write-offs for failures and such things as that. So, my argument always was, look, that is an appropriate role for government to play . . . interface with foreign governments and associations, and try to level the playing field so that we are competing on equal kind of conditions. You know, for you to give the industry whatever the foreign industry we competing against is getting, or talk the governments into understanding that it is not justified in here or there either.

TS: Foreign tax credits would be a part of that then?

JB: Foreign tax credits, and there is a whole host of other things about what you can write. Like, I don't know today, but some years back, what Royal Dutch could write failures off against, and how it was written off. Whether it is 100% of it, which you will never recover 100% of something in the states. It was always you just recovered whatever the benefit of the tax rate is. If the tax rate is 30%, you've got the benefit of 30%. And there were some circumstances in which they would get dollar-for-dollar. Not just Royal Dutch. I am just saying from the foreign companies. I always argued that the UK government, you know, was a model in how they did honest analyses in understanding of the oil business. Sure, they extracted a tax out of the producers in the North Sea, but as soon as the tax began to threaten drilling or development of, say, smaller sized fields, they were quick to

recognize that was not in their interest. So, you know, they changed the tax. One of the things I always bemoan: how in the devil do you, in the UK, the government just openly announced a new revenue policy and changed the tax structure? And everyone, you know, accepts it and understands and trusts their government that they are doing the right thing. And here, if you try to do something like that, there is an outrage about, you know, giveaways to the industry and all. Like I say, that never really got anywhere but it was a difference. You asked about difference, and that was a difference in our approach.

I think that we tried very hard on the environmental side particularly, the plant environmental side. I don't think we cut any corners. I don't think we cut any corners on disposal of materials out of wells. I don't think we ever cut a corner that I am aware of in pumping something in a zone that you were not supposed to pump it in. I don't recall us ever taking any kind of advantage of undercover clean up of wells in the Gulf, and so forth. I don't recall in Louisiana, in places where there was salt water being produced in some of the old fields, to just dump it in the streams. I could name your operators that routinely would cut their costs by dumping salt water in the stream. Until finally, dead fish start floating down and then, you know, the regulators come out and they maintain, oh, it was some kind of accidental slip, and so forth. I think we were very, very responsible in that way. I think in Deerpark, although we felt that it was not enlightened regulations. The regulations inflicted on us cleaning that water up a lot cleaner than what we took it out of the river, to put it back in the river. You know, we had that pond out there to demonstrate fish that swim around and live in the water we put back in the Mississippi River.

TS: Now, this is Norco?

JB: Norco. Out there in Deerpark. Norco. So, I think, I am not trying to put us up on a pedestal there but I am only saying that we felt in Shell, and I will say I personally felt that some of the environmental regulations were being prematurely pushed and there should have been a little more willingness to sort of wait for some technology that would solve the problem. But I will say that we always lived up to them and we never really fought them real hard unless we felt it really was a principal involved.

One thing that we did with industry, fought very hard, was to avoid trying to classify drill cuttings, out for the wells, of hazardous material, because it would just horrendously increase the cost, you know, of drilling the wells. It would just mean there were a lot of wells you wouldn't drill and they were hazards. But there was a big environmental push to try to classify those things. There is a difference in something that is toxic and something that is hazardous.

So, I think that I am not here to say that no one else, no other company, you know, did it as well as we would, but I will say, as an industry player, I think that we were very responsible in that regard. You didn't always get rewarded for it, even when you were trying to do a good job. I want to come back and give you two examples of where we were very unfairly treated by government, one in which I was absolutely infuriated. So, I think not pushing, say, openness of markets consistently, I used to get accused a lot, which was not true at all, by some members of API, that I

really was towing a Royal Dutch line, you know, that it was to Royal Dutch's advantage to have open market. I never discussed it with the Group at all.

The two places I'd like to give you examples of where we were being very responsible and got hurt badly for it: following the Santa Barbara spill, government regulations were already being issued about bringing offshore platforms in compliance. I was running the New Orleans region at the time. We went to work on studying all of our platforms and developing a plan to bring them in compliance and not just shut them all down to do it; but say, platform A needs this done to it. Here is our work schedule. You know, in two years, three years, we will have it in full compliance. Platform B, and so forth. We get all that and we went and talked to the Department of the Interior at the time, talked to the Department of the Interior staff, laid out the plans, had a complete sign on. Hickel was Secretary of the Interior at the time. The Santa Barbara spill happened. We had done this just before this happened, because there had been some new regulations. The Santa Barbara spill happened and there was all this outrage. Well, who got their platform shut in? Shell Oil. Because they had a plan. I mean, Hickel came down to Louisiana and started beating on the staff. Well, see, they had in their hands a plan which they had agreed to that clearly demonstrated, you know, we are not in compliance. We accept we are not in compliance with these regulations. We clearly demonstrated we were going to do that . . . they shut in our platform. Flat shut it down. Now, we were way ahead of industry. There were no platforms in the Gulf of Mexico in compliance at the time, and nobody else was doing very much about, you know, getting where they are at. So, we got shut in because we really were kind of leading the pack and trying to

come in compliance.

I will give you another example that we had, this was after I was president of Shell Oil. We had a safety compliance inspection done at Deerpark, and this had to do with health, too. This was not just safety, as offshore. You know, like the employees had been exposed to hazardous materials, and then, you know, what dangers, and so forth. And there were, of course, certain reporting requirements as part of that. Now, we filed all the records we needed to file. That is all that you had to start with. In the conversation, we tell them that we are doing some epidemiology studies on our own tracing . . . it wasn't required at all . . . following Shell employees, because we felt responsible. "Well, we'd like to see those." Fine, we show them, and it is not required, and wasn't part of it at all. We go through all of that with them, and then in this analysis there was a fatality that occurred at a dock down there. Now, those rascals charged us with a willful violation of not reporting a death. It wasn't on the refining thing. The refinery has a fence around the refinery. You know, there are pipelines and things out to the refinery that go down to the docks down there. So, the accident occurs on the dock. No one in Shell considers the dock part of the refinery operation, and it wasn't in the reporting, so it wasn't even reported in there. So now, they want to fine us on that. And Alan Lackey is there, and Lackey can confirm all this. So finally, I said . . . I was in the mind of fighting and just said, "Look, that is what I am trying to go to court with them on it." So finally, Lackey gets them down to a settlement, and I don't recall what . . . $1.5 million or something like that, and he is leaning on me . . . "Look, let's just settle it. It is going to cost a lot more," and so forth. I said, "Now, Alan, I am not going to

accept a willful violation thing because it wasn't . . . and I mean, we could defend ourselves, and I think we owe it to the company to not put that on, basically, on our records. So, what I am saying is we will settle it as long as you will make the understanding that the press release they make, we have to be part of and sign also." So, he goes back to them and they say fine. So, press releases change hands, drafts, faxes, two or three times. He brings in the final press release being released and I look at it. It doesn't say anything about a willful. It said something about we had a fatality, but nothing about a willful, avoidance of reporting it. Those rascals call a big press conference to hand out their report in Washington. With the press release, that we have a willful violation in not reporting a death. Now, I flat hit the ceiling over that. Alan gets the guy back on the line he is dealing with and he said, "Well, when I took the press release to get it signed by my boss, he was unwilling to sign it unless we put willful back in there." Now, I wanted to issue a press release and contest the settlement. Now, Alan didn't want to have any part of it but I said, "Listen, I would like to just issue a press release and say it is misrepresentation," and everything else. But we didn't because Alan felt that, persuaded me . . . my temper had taken control of my good judgement. But, you know, as an example of the difficulty in dealing sometimes with government, who have so many political angles to play to, and do not seem to have really much in the way of real integrity when it comes to the damage it can do. They take care of their own house first on the thing. You know, not very many statesmen at all.

The other argument that I used to try to make to reporters, and I made at that RNT thing we were talking about . . . I was thinking, why doesn't it occur to you people in

the media that you often report where an employee or the government has leaked a document, told of some wrongdoing? I said, "Now, we all hire from the same universities. Shell Oil hires from all the major universities in the United States. So, why doesn't it ever occur to you that if we really were such bad citizens, that there wouldn't be some real good red, white and blue Americans that come from the same universities in our organization, that would be mailing you memorandums, be mailing you inside company documents, you know, alerting you to where we were doing that? I said, it is just not happening. It is not happening because we are not doing what you are accusing us of doing." But you can't get logic, and maybe you can't get logic because of deep mistrust.

I think I recall a discussion I had that was perfectly obvious . . . I think I would have to say that Walker, when he was vice-president, I was talking to him about my frustrations and all this, and he said, "Well, look, you have to remember, where did you hear or first learn about antitrust legislation?" And I said, "I don't know, somewhere in the second year or something of high school, you know, in the civics courts or something like that." And he said, "And why was antitrust legislation needed?" I said, "Well, Standard Oil." He said, "Now, you think about" . . . I don't know whether it is still done but it was done up until just recently . . . he said, "Every citizen in the United States that gets through anywhere approaching, say, the ninth or tenth grade, learns about the need for antitrust legislation because of the oil industry. Maybe it kind of starts with that. If you are taught at a very early time that you need regulations and control and all for the oil industry" . . . maybe he is right. I just don't know.

TS: You know, getting into the 1980s, there are three areas here that I would like for us to . . . I don't know if you are kind of running out of gas or what.

JB: I am not staying on the subject for you very well.

TS: No, you are doing fine, because I am going through it and we are hitting those.

JB: I am assuming you will clean all that up.

TS: Oh, yes, we will.

JB: And take whatever is important.

TS: Right. There are three things that somewhere I would like to hit upon. One, in the mid-1980s when crude oil prices started falling, and our reaction to that. How well-prepared were we in the face of that? That is number one. Second, we have not talked about the Royal Dutch acquisition of the remaining minority shareholders and I think we need to get into that in some depth. And then I would like to also talk about the South African Apartheid.

JB: Phil Carroll's timing couldn't have been better. And, to some degree, that is certainly true of my time, too. Although we went through the kind of violent swings of too high prices. Something we have never talked about but some time we could touch is

the impact of the shortage of supply . . . was the embargo, followed by the Iran-Iraqi war, that took three or four percent of the world's supply of oil off. And our difficulties in buying oil for our refineries. That impacted our strategy and we made great efforts to react to that strategically going forward in how we were going to conduct business that before we ever really got them implemented, it wasn't required because the supply situation returned to normal. So, there is a history in there that probably . . . even from a strategic standpoint, of trying to build alliances with foreign governments for supplies.

Well, the slowdown in the business started but really wasn't noticed very much, I think, by the majors. It certainly wasn't particularly noticed in Shell Oil. And I brought back . . . I had a beautiful warning of it but didn't heed it early on, with something that was called the Tax Reduction Act of 1985, I believe. Anyway, maybe it was the Tax Reduction Act of 1986. But, the Reagan Administration tax reduction. A large part of the industry activity being driven by independents, who depended on wealthy individuals and people looking for tax hedges . . . begin to feel the effect almost immediately. So, all of their prospect drilling and partnership money began to dry up. Now, the reason I said I should have know this was because I had a very longtime friend, I never really did much business with him as far as the company was concerned, that happened to drop by and was visiting with me, sitting in the office, and saying, "Well, I am selling my rigs, and I have advised all my long-term investments I am going to sell, had with me for years, that I cannot make a profit for them if they are spending anything more than fifty cent dollars. I don't want their money, because I don't think I can deliver it, unless they are willing to tell

me that it is an after-tax fifty-cent dollar. So, that impact began to slow down demand for rigs, slow down the activity, began to cause some havoc in the industry by the overrun of the number of rigs that were in the pipelines and so forth. It really wasn't until about the last two years, I guess . . . well, let's go back . . .

I would have to go back to 1986, 1985, 1984, 1983. So probably in 1983, I had decided that kind of the high inflation area mentality and all was where everything was going up, up, up, that we needed to get off that kick and start moving the other way and pay a little bit more attention. And we were sitting in our conference room looking at our 10-year projection plan, so it had a projection that the staff would pass, I think, over 44,000 or 45,000 at the end of the period there. And that just hit me, I said: "I know you think this kind of sounds like witchcraft, but I have seen the company exceed 40,000 employees two times previously and every time, it was followed by a massive staff reduction program, that it just pretty hard, I guess, for our size company, to get to the point where you can support a staff, and they are overburdened and all; you know, 50,000 employees." I said, "Let's start a staff reduction program in some kind of an intelligent way so we are not laying off a bunch of people that the shareholders have just invested a lot of money, and we have invested a lot of time in training," because we had been here two or three years or something. So, I asked personnel to kind of present data on normal attrition: people that retired, people that resigned, and a very small group of people that we generally felt were underperforming. I can't really recall the number but somehow or another, I think it was around 7 to 7-1/2 percent. So, I said, well look, if we do that, over a two or three year period, that amounts up to really a substantial amount of people.

So, that implemented the policy of no automatic job replacement. So, we set out to say, well, if somebody retires, we want the organization to combine the job in some way.

When 1986 hit and the price of oil went down, if not at 1986, shortly thereafter . . . we do staff over 3,000, but had not had a real all-out staff reduction program. We had also worked very hard on the economics of the offshore under . . . what would look like was going to be a more severe outlook than what we had generally been considering. And had convinced ourselves, which I don't know whether it all held true because it was a very short test of this but, that at $15 a barrel, we could develop in the deep water. "Bullwinkle" was the last actual fabricated platform that was installed before I retired. And what is it in, 3,300 feet of water, or something like that? We did economics on $15 average, you know, there. So, we felt like there was a fair chance that that was a reasonable price, on the average.

TS: When you say $15, are those constant dollars into the future or do you have it at $15 with inflation added on it as the years go on?

JB: Well, what we have usually done . . . if you add on the inflation, you add on inflationary costs and everything else, you see. So, if you inflate the price, it doesn't always mean the same dollars now because the big number and the little number . . . but if you escalate the price three percent or four percent, you will escalate all the costs. When you meet staff additions, cost of supplies, cost of operating the wells and everything else, will go up three percent, too. Now, most of Shell, we were the

only major company, and I hear of lots of outsiders talk about the thing . . . they always had trouble kind of following Shell on economics. We were working, at the time, and had been for a number of years, on what was called real dollars. So, we did all of our analysis by taking inflation out, or doing it, say, after inflation.

TS: To try to eat inflation?

JB: Yes, or say what is the real cost? And we also, at the time you are talking about, implemented a program that there ought to be productivity improvements, so even in on the staff side and all, which we normally had just said, well, if the CPIs are four percent, well, all salaries go up four percent, etc. We starting saying, no, we can't do that, that we ought to expect some kind of productivity gain. So, if inflation is up four percent, well let's assume three-and-a-half or three-and-three quarters, that each year we ought to gain a little productivity, productivity improvement. The staff containment in Shell really was . . . sometimes people would say, well, the numbers have grown. The kind of interesting thing about it is we had done a pretty damned good job on staff containment in the conventional businesses. But I remember one time, kind of getting uneasy about upstream staff increase . . . and I look back on some historical numbers . . . what it really amounted to was it held the staff pretty well flat, but we had done it on the mining business and we had 1,500 people associated with the mining business, which is a business that Shell wasn't even in before, which always, you know, presents some of the competition of analyzing that. I think it was safe to say it was not until 1987 that it began to look to me like we were going to have to take some further steps because of the declining economics

and performance. And if you look in the 1987 annual report which, of course, was published in early 1988, and I had been following a format in the annual report, you might remember, where I talked about, under the same heading "Each and Every Year," and under the strategic planning portion of it, I recall that I said, if the present economic and price conditions prevail, we are going to have to reexamine our strategy and our future plan. So, the plan we have been operating off of, and pretty successful so, is probably not a valid plan for a very low price environment. Now, of course, Frank came along and he got the organization and he got the job in making that adjustment. I didn't have to make that adjustment. And I am sure when Frank is interviewed, well, he will have good key memories of all that. I never discussed it with him but . . .

TS: Sure. In that same period, we had the 75th anniversary of Shell, in 1987. Again, going back to the statements you made on that occasion, in the annual report, that we were strongly positioned financially and operationally, innovative technology . . .

JB: What year are you in?

TS: This is 1987, we were sort of saying, here is where Shell Oil Company is on its 75th birthday, with a strong resource base. I guess kind of the question I had raised here was what were the characteristics that led Shell to these strengths, that have sort of transcended the time? What brought us to where we were, the things that were constant through that period?

JB: Well, I think . . . I have never been able to articulate it. I have never been

comfortable with it. Some of the planning group were terribly disappointed that we wrote a book on the CEO's Role as a Strategic Planner. Harvard University wanted to write one. The staff worked back and forth on a number of drafts and they are still around. I never kind of got my heart in it because I felt that what was wrong with it is that it looked like words, and it looked obvious, and it would look like many companies might say was exactly what we do and is pretty obvious. Where I never felt that I could articulate was how that stuff is used and what role the president plays in its use. Now, going back to those early days when we started those studies we talked about a few minutes or go, well, that really kind of formulated the corporate planning section that stayed in place. Some people in corporate planning, and I went along with that in some of the speeches, several of my comments at staff meetings and the retiring episodes were to the effect that the contributions had been the strategic plan at Shell. I had a very perceptive colleague that I had known from back in the 1950s, he used to always say, "I don't consider that your strength at all," and maybe he didn't think I had any strength . . . in a way, I tried to use this thing as a control device of what the functions did as some way to catch that. So, it seems like people, and I have made some presentations on this thing to groups and all, outside groups, not the oil industry groups . . . on the one hand, it seems like, well, you don't have a plan at all, you know, because you are talking about something you change every day, you know, and that is not a long-term plan.

End of Tape #1, Side B

Tape #2, Side A

JB: O.K., we were talking about this strategic planning thing now. I had grown up in a company where the worst chore that we had, you know, in operations, was to prepare and participate in preparing some kind of plan, projection. And as an operator, I always felt, well, it intrudes on what I am really out here to do, and it detracts from the company's overall progress and efforts, and I have never seen any benefit out of it, and it was done and it was put away. And no one gave it another thought until the following year. So, in trying to decide, well, how in the world do I manage, you know, bring some discipline to this organization, is that . . . how do you put an implant on the organization that it does what you think it should be doing; at the same time, does it stifle them going about their work? In other words, to put it another way, if we can reach an agreement on what it is we are going to do and where we are going, then I don't have to be involved in the day-to-day decisions, you know. In other words, I can follow them, and that is the way a lot of CEO meetings were. They were kind of reporting on progress. So, I decided this plan. It had to have a lot of work on it because how it is formulated . . . because, the one I am talking about in the past, very often, I was asked in the division to prepare my long-term plan. I prepared it, I sent it forward to the division office, they built it with theirs, they prepared a division, they sent it forward to the area and finally, it gets up to New York or something like that. And I don't hear of it anymore. But nothing came back down and said we agree or we don't agree with their plan, or we think you are going in the wrong direction. So, I said, O.K., let's start by getting some general instructions about the level of investment, what kind of growth opportunities

are we trying to achieve, what do we think inflation is going to be that we have to deal with, what do we think the crude price will be? So, let's take the responsibility at corporate headquarters and all to take the risk out of the departments for things that they have no control over. Now, before that, you had a piecemeal plan. Products would make their own assumption on what they thought these parameters were going to be. E&P would make different ones. So, that was the first time we pulled together all plans that be built on these price premises, these inflation premises, etc. Also, how much cash we are going to reinvest, what percentage of the cash we generate will be reinvested in the corporate activities? So, that was sent down as a basis to build on. Then, we spent a lot of time saying, do we agree with this, does this make sense, how do we get around this, as far as money and so forth. Now, the way I used that thing was we did have weekly meetings and things, and so you heard about plans. You cannot put these things in concrete. New things come along, things move, so we heard about plans. So, I go and listen at those things. At first, it didn't make sense as a project and secondly, it is a project that fits the plan, what we said we were going to do. Very often, it wouldn't, and I would generally try to, say, chastise the managers a little bit . . . now, look guys, you all are in here. We all agreed, you know, here are the kinds of things we are going to invest in. Here is where we try to build market share. Here is where we are trying to shed market share. What are we doing buying five service stations in Atlanta when we only have two percent of the market shares, as an illustration, when we said we were going to get out of those kinds of areas. And very often, well, they really hadn't thought that much about it and they just saw it as an opportunity to capture more market share. And sometimes, they would get tired of hearing it. So, I would

always say "what we face here is do we need to change the plan or are you guys trying to go off in the pasture somewhere where we agreed we were not going to go?" So, I tried to use a plan, and did use a plan. Now, a lot of folks would feel like, that means you are running operations. It is not really a plan. I never saw it that way. I always saw it like if we all agree on the plan and get enough input, which is what we tried to do, and we put it down, then all of the business decisions that we take ought to fit within that. It doesn't mean, you know, that it would have to be something brand new, but it would be something brand new that further is a development of that particular plan. And, of course, part of this also was financial performance -- cash, and how much cash. In other words, E&P might have strong cash flow, or we might say, well, we really need to do something over in some refineries, and downstream, it is not going to generate enough cash to carry those investments. So, we are going to subsidize. We are going to say to E&P, you can't spend all of your cash income. You have to cut back your plans. And so, in a way, there was a give and take to that. A lot of times, the executive vice-president didn't particularly like it, but on the other hand, at times, they were the recipient of those things. So, I would think that using that plan that way always gave me great comfort that I knew what direction we were on, you know, that we had agreed to take that direction, and for good reasons. Like I say, it starts with strengths do we have? What do you want to do?

One good example on the marketing side . . . coming out of those sessions we talked about earlier, about whether some people were feeling we should get out of the business of marketing, and moving forward into, well, look at what we

accomplished. The problem with the marketing organization was it had no economic parameters by which to make a decision. It was strictly conceived originally and created as a department to sell the crude oil that you produced. No one really looked at it to make any money. So, it had grown up almost 100 years that way. So, to turn it around and say, we want you to sell a service station, well, the immediate reaction was, but I will lose volume, I will lose market share. And they spent all their lives, you know, gaining market share. But it shows you what you can do with a plan and all, with an organization. And it really harps back to the first of the 1960s when I was asked to come to head office and work with the executive vice-president up there in the exploration and production planning section. I thought I got the clearest assignment I ever got. It didn't take me about a minute and a half . . . he said, "You are the manager of my new economics and planning section. Your job is to not get into opinions. Your job is to help the people who are doing the operations, do their operations better, and do it in a manner that achieves and it results what we have set for the company." "How do you do that?" He said, "You devise better tools for them. You go in and devise ways that can cause them to make better decisions." So, I was kind of thinking about that . . . "Well, what we need to do with marketing is we need to give them a nudge and we need to accept the responsibility for them, the outcome, if this turns out to be that it wrecks the marketing effort, and we need to give them some tools. So, in corporate planning, we worked up a very simple kind of four-way script on the service stations based on volume, and we said . . . we got the marketing section in there, and they worked very well. We put it up there and said, "Look, if you've got retail outlets in this band here , I don't ever want to hear about them again, and I don't want them on the books

six months from now. I want you to sell them. And, oh, by the way, you can have the money you make from them to reinvest. The ones in this group, I will give you six months to move them up to this one. If you can't get them up here in six months, they belong here. Sell them. Get rid of them. Don't come back and talk to us. Don't come back and try to persuade us, just sell them. And then, we are going to work on improving the return on what we have left over here."

And all kind of moaning. How can I forget to mention . . . kind of big guy, a real inspirational leader. I mean, some people . . . Bill . . .

TS: Bill Bittles?

JB: Bill Bittles was the leader. Now, there, I gained from my experience up in Canada in working the market. Not that it had something like that, but I went out and rode around with Bill and looked at service stations. And, you know, built a little bridge with him . . . I am interested in the marketing. Well, he had grave doubts about this, but he was a good soldier. But it was amazing, as soon as it kind of started, all of a sudden, they all bought into this, you know, and now, boy, they were proud to report, you know, 'I got rid of x service stations and put x dollars and so forth.' And then what we started doing is saying, O.K., now, let's look at what we have left. That basically got us out of all the rural areas because they were evidently low volume high-cost supply things. And let's look at what we have left. Now, you know, how do we strengthen that position in that? And then we set a target for that 15-17% of market share, because we said we were so small in so many markets, we

had . . . we just can't influence the market. And so, we set 15-17% in strategic market share, which made us then concentrate in basically, the large cities, which led to us being the number one retail marketer, but not number one in any state, and the most popular retail marketer. And I remember, I think, an interview, I told in an annual meeting or something like that . . . it would have never occurred to me to have a goal to be number one retail marketer.

TS: I remember that.

JB: That it was to be the most profitable marketer and, out of that, we became number one retail marketer. So, that is an example out of the strategic plans.

Over on the upstream thing, we had some of the same problems. We had little fields we had for years and years, some of them starting 35-40 years. It was awfully hard to convince the staff that they should sell those things, get rid of them. And I use the argument about they take time. I'd rather you work on the bigger things. Well, they would generally argue, they don't take much time. We have a decline chart in the file, we open the file once a year, you would put what production is and draw a line and we would project what it is going to be next year. So, to break that I finally decided, if you have a field that is producing less operating cash income than x dollars, sell it. Just give it up. It doesn't matter whether it is profitable right now or not, just get rid of it. So, with that process, then we begin to kind of concentrate on it. And then, the next step is like in marketing. The next step was O.K. now, let's further strengthen our position through making acquisitions and add on to what we

have that we do well, you see, or trading properties. And that is where we sold $1.8 billion worth of properties, and we bought about almost $4 billion worth. But the nice thing about that, because, when it came time to sell off a property, one of the things, it was always argued, well, how well do you know what the future price is going to be? So, we developed a concept, you are shielded from that if you buy and sell on the same price, dollar for dollar. So, if it was $1.8 billion that we sold on a given price premise, the $1.8 billion of properties we bought, on the same price premise, you know, is different because of the effect of the price. You get the benefit of the loss the same as you would have had for being wrong. And so, that began to strengthen us and build up concentration. We began to see pretty good results on that, where production began to improve. Focusing attention on the properties. They began to find more things to do in them. So, I think that the strategic plan served us exceedingly well in that we worked through each of the businesses and tried to decide what is it in this business that we . . . you know, I hate to say competitive advantage. I tried to put it more on the basis of what is it in our experience in the company, not just present people but our historical experience and all, that has positioned us that we should know as much if not more than any other company about this kind of problem, this kind of production? And, you know, let's stay with our expertise on that. Let's push that. And the one that we probably had the most problem with was chemicals. In other words, it was clear, as I said earlier, building the ethylene plants, it was excess capacity. And so, there were all kinds of maneuvers, and what do you do about it? Well, Chemicals decided that the best thing to do was to develop derivative businesses, downstream businesses. So, we will grow a bunch of businesses that will consume this upstream stuff. Does that

seem logical? I remember I sat looking at some data one day and, at the time, I think what I decided was that the . . . and it seemed awfully small, so maybe I am wrong . . . that the derivative business was only about $3 billion a year. And really relatively small as a total industry business. And we probably would never fill up the need out of all of those plants that need that. I did sign on and fiercely support, and a lot of people thought it was wrong and it turned out to be it was wrong, that I signed on to try and develop new markets in chemicals, since we had been unsuccessful as marketers. If you listen to Baron, the head of our research at the time, you would hear that we had some of the best performance plastics in the world. You know, in other words . . .

TS: Is Tom Baron?

JB: I remember Tom telling me at one time, "I can build you a Corvette engine out of our plastics and it will operate and run fine just as well as the one out of aluminum alloys or steel. The only problem is it is not economic. So we tried to market straighter than Detroit on all kinds of plastics and performance things there to fill that niche. We weren't getting anywhere. So, I said, O.K., fine, maybe we don't know how to market this stuff. So, we went out . . . if you go back and look, we went out and bought like one-half dozen little companies that already had supplier relationships with these . . . it didn't, and it didn't work primarily because those folks saw us as a cash cow. And almost immediately, they wanted more cash. They wanted to expand their plans. They wanted to develop other products. And I can't even remember where all of them were gone by the time I left.

So, we had less success on that side, I think, than the other businesses. And I am not sure I know exactly why. I don't know that it might mean, and some of the chemical people would argue that, although I always felt that it was not a valid argument but perhaps it is, that we really were not, in chemical products, ingrained, trained, dedicated. You know, I could never make up my mind whether it was mostly an excuse-making charge, of course, or whether they were right . . . they used to argue, well, O.K., Dupont is a chemical company, it has been a chemical company, it doesn't have interference from characters like you that run oil companies, so that is the reason we are not successful. Maybe they are right, I don't know. The reason though, the starting reason to why the oil company was involved in it, because it was a commodity chemicals business, and it was a commodity off of oil products, you know, a commodity out of refinery by-products, and so forth.

A forecast bust. Maybe. I don't know where it stands today. Our chemical strategy in ethylene manufacturing was based on the steam cracker or the heavy oil cracker. Up until the time that Shell started building this olefins plants, the plants were built to operate on ethylene. The capital costs of building an ethylene plant probably is 30% less than a steam cracker plant. That was based on the late 1960s analysis of the natural gas business in the United States, and so, the gas stream has, you know, went products with it. So, that is when you have gasoline extraction plants and they extract the ethylene to the products. Well, the gas production in the United States seemed to be getting drier and drier, you know, it was less and less with deeper discoveries and new discoveries. So, the decision was taken in the late 1960s that

we would get the jump on folks. We would go to heavy oil, and that Shell would emerge with a competitive advantage. As the gas stream dried up, ethylene got more and more precious and expensive. The raw material costs would go very high for them at a time when crude oil would be more available. Now, we couldn't have been further along. By the time we got the damned thing built, this is when we were talking about these embargoes and the crude oil prices doubling and tripling . . .

Phillips, they have even, in recent years, built another big ethylene cracker, but the have a lot of the Texas Panhandle gas and a lot of ethylene in it . . .

TS: This is the end of the December 18, 1998, taped interview with Mr. Bookout.

THE END