Interviewee: Dwight Johnston
Interview: September 9, 2009

BOEM DEEPWATER GULF OF MEXICO HISTORY PROJECT

Interviewee:	Dwight Johnston
Date:	September 9, 2009
Place:	Robert, Louisiana
Interviewer:	Jason Theriot
Ethnographic preface:	Dwight Johnston grew up in Dallas, Texas, into a family full of engineers. He attended Texas A&M University, and graduated with a degree in civil structural engineering. In 1978 he went to work in the oil patch with Shell, and remained with the company for over 32 years. Johnston served in Houston and California, but landed in 1988 in the New Orleans area for good. There, Johnston got on the ground floor of the industry's push into deepwater in the Gulf of Mexico. Johnston worked as a manager of technical services for such landmark developments like Mars, Brutus, and Ursa. Afterwards, Johnston moved into the position of operations manager for both the Mars and Ram-Powell tension-leg platforms.

File 1

JT: Okay, this is an interview with Dwight Johnston. We are at Shell's Robert Deepwater Training facility in Robert, Louisiana. I'm Jason Theriot. This is September 9, 2009. This is for the MMS Deepwater Project.

Dwight, tell me about where you're from, a little bit about your days at Texas A&M, and then how you got involved with Shell and then we'll get onto your role at Mars.

DJ: All right. So, grew up in Dallas, Texas. I guess I'm unique because I worked for a dad who was an engineer, had his own engineering company. So I always knew from very early in life that I was going to be an engineer, I was going to study engineering and I was going to get out in the working world and do things that engineers did. So being in Texas, when it came time to go to college, of course there was no other place to go other than Texas A&M. So I applied there, got in, was lucky enough to graduate from A&M five years later. I got my degree in civil structural engineering.

The interesting thing was I did that because I was going to go work for my dad and take over the architectural, structural design engineering company that he has in Dallas, but along the way I served as an intern in the oil business for Otis Engineering there in Dallas, absolutely fell in love with the oil patch because every day is a new day, every day is a challenge, and it's just a wonderful place to be. So, started interviewing my senior year and was lucky enough for Shell to interview me and offer me a job. Went to work there in 1978. Here it is what, 2009, so I've been working for Shell almost thirty-two years now and have never regretted a minute of it.

I started working in Houston, was there for a few years, went to California, helped install a couple offshore platforms, beta platforms offshore California, went to head office for a year for my obligatory corporate requirement job, and then was lucky enough to get to come to New Orleans back in 1988 and I have been lucky enough to be here in the New Orleans area ever since, and, frankly, was lucky enough to get in on the ground floor of Shell's move into the deepwater. Wasn't around in the very early days like Cognac, which was back in the early eighties, but I got to know Gordon Sterling, I got to know Dan Godfrey and a few others that were around and did get to help a little on the Bullwinkle project and then was lucky enough, when it came time to do Mars, with Dan as the project manager, he pulled me in, and really got involved with Shell's big push into the deepwater with some of our very first tension-leg platforms that we installed. So I guess you could say I've been a civil, structural design engineer, project engineer, project manager pretty much my whole career with Shell, mainly focusing on offshore development.

JT: So Dan hired you or brought you along for Mars. What was your specific role? Was it in designing?

DJ: Well, so initially I was what you would call the Manager of Technical Services, which meant a lot of things. It meant that I had the group that ran project schedules, development and then monitoring of the project schedule, development of all the basic project documents like your basis of design, like your general arrangements, like your contracting strategies and things like that. So I did that, but I also did a lot of the marine systems design for the hull.

We kind of had the responsibilities split up between myself and one other guy, Aubrey Pippen. Aubrey Pippen had all of the topsides design responsibilities and issues with project services. I had all the hull and tendon and kind of below the water-level design responsibilities. So that's what I did. I ran a group that did that for the first couple of years of the Mars project.

Then I was kind of ready to do something different. I had been doing something like that for a number of years, either on shelf-type platforms or deepwater-type developments. So I asked Dan if I could get involved in the construction side of the business, and must have done something right, because he actually named me the construction manager for all the topside modules and I actually picked up from New Orleans and moved my family down to Houma, lived in Houma and then basically worked in Morgan City's yard there, McDermott's yard there in Morgan City and Amelia, for three years, while we built the Mars and Ram Powell topsides.

Then actually after I finished that, I'm sure you've heard the term, these steering teams that we've had for installation and for the topsides fabrication, the whole fabrication. I actually came back after having done that and ran the steering team responsibilities, so I was kind of the sponsor for all of the commissioning, installation and integration activities for Brutus and for the Ursa platforms. So the nice thing is I wasn't involved in Auger, which was the first TLP we installed, but I actually had a pretty good role and a pretty good understanding of all of the other TLPs we have put in since then.

JT: Wow, man, sounds like you ran the gamut in experience there.

DJ: Well, I like that. You think a structural civil engineer likes the details and likes to get in and number crunch and do the detailed design. I actually enjoy the project engineering and project management side of the business much more so. So a couple of years doing this is probably enough. I like to move on to other things. The good thing is by the time the Brutus TLP was installed, I had seen design, I had seen project services, I had seen fabrication, I had seen installation, commissioning. Subsequent to that, I've actually been the operations manager for both the Mars and the Ram-Powell TLP.

In fact, it was funny, when I would go offshore and the guys knew I had worked on the design or the fabrication of both of those platforms. When something broke offshore or didn't work exactly right, they'd always come up to me, "This is your fault, Dwight. You just didn't design or build it right. If you designed it properly, it would work and I wouldn't have all these headaches here today."

JT: So what was it like working in McDermott's yard?

DJ: You know, I have to be honest with you. It's kind of like what I was referring to you about here earlier. We had built the Auger TLP, at least the topsides modules at Auger's yard and that job did not go real well. It was mainly long on schedule, they didn't make the scheduled completion date, and, frankly, they pretty much blew the budget. I think it actually is an EPIC [Engineering Procurement Installation Commissioning] type of project, so McDermott was pretty much locked into a fixed price, but the project did not go well and they ended up spending a lot more money than the contract was set up for. The bottom line is toward the end of the Auger job, the relationship between Shell and McDermott was not very good, was not very good.

So here we are coming back a couple of years later, or a year later, maybe, and we wanted to build the Mars topsides modules in McDermott's yard. It was the right thing to do. They had the previous deepwater experience. They were open to this new contracting strategy that we came up with. But I was there three years, having built the Mars and Ram Powell topsides, and I'll tell you that first six to twelve months was pretty challenging because we had to change a culture, we had to change a mindset. We went from a mindset of you set up a firm price and you hold the contractor's feet to the fire and he delivers on schedule and on that price and there's no extras, there's no changes, you deliver on that, to one where instead of the contractor being an adversary, the contractor is a partner. You're trying to build a relationship where you are working together for the same common goal.

It took a year before I would say most of the people on the team—and we were quartered in old quarters module there in the yard. We had McDermott folks in there, we had Shell folks in there, we had Bay, who did all the piping work, we had Sea Co. [phonetic], who did all the electrical and instrumentation work, and a few others. We were all right there together. So if it was a tough day between McDermott and Shell or Bay and McDermott, the whole place knew about it. It took probably the better part of a year for the team to really feel, you know, this is different. This isn't that same old adversarial, I've got to look out for my own company, my-own-self type of situation. This is different. I really believe this contracting approach and the steering team that was put in place and the people that were put in place were all done purposely to build an alliance that was true partners in relationship and were trying to achieve the same end goal.

JT: What was the incentive for McDermott, given the fact that they had the issues with Shell for the Auger? Shell comes back to build Mars. Now, there's not too many contractors that can build this type of equipment in the Gulf of Mexico. What was the incentive for McDermott to not only go along with it, buy into it, but force the change in culture at their own yard what they had been doing for thirty-four years?

DJ: That's a really insightful question here, Jason. I will say they had a change in senior management between Auger and Mars, so they had some fresh thinking coming into play, which always helps. But I think the secret to all of it was what I referred to already, the contracting approach that was put together. This was kind of unique for these day and times. McDermott was willing to open up their books and show us their costs, their cost infrastructure, what they actually spent to build these modules to basically run the yard.

So what we would do is when you're getting ready to put in plate girders, so many dollars per ton. You would actually look on their books and see how many dollars per ton it would take to buy the steel, do the welding, and fabricate these plate girders. Same thing on handrails, same thing on stairways, same thing on grating. You had a unit cost that was McDermott's base cost it cost them to build those things. We then took those, added a profit margin, and agreed that every time we built a stairway, every time we built a plate girder, every time we put in deck steel, we would use that unit cost with that guaranteed profit, and all we had to do is estimate the tonnage because you had a dollars per ton or dollars per pound figure. All we had to do was figure out what the tonnage was, apply that unit cost, and you ended up with basically what was the contract price. If we added more steel, it increased the cost.

The great thing is that once the drawing were finished, we did that weight take off, we applied those unit costs, we came up with what turned out to be the lump-sum price, that locked in the price right then and there. If we did it for less than that, McDermott shared 50 percent of the savings. If it cost more than that, Shell paid for 50 percent of the increase. So that very thing right there created what is very unique in our industry, a win-win scenario. What was best for Shell was best for McDermott.

So I think with the senior management change and with the understanding that this is something special here, we've got the chance to make a lot of money, or if we lose money, Shell's right in here with us. They're going to be in there working with us to do the best—that was a term I'm sure you've heard before—best for the project. We made best-for-the-project decisions because we could make best-for-the-project decisions, given the contracting approach.

So you add all that up plus the fact that Shell was the leader in deepwater drilling at that point in time, and by that time, now we have Mars going, we knew Ram-Powell was coming and we know there were probably more on down the road. McDermott I'm sure felt it was absolutely in their best interest to stay in bed with Shell here because this is going to be good business for a number of years to come.

JT: How much aware were you of the new contracting approach for Mars? Were you involved in any of those meetings?

DJ: So the original idea started with an idea in Gordon Sterling's head, because he knew we needed something different after Auger. Going back with the same old firm-price bidding strategy wasn't going to work. So it was an idea that started in his head and he kind of roughly outlined what he wanted and he met with some of the senior McDermott folks, Bobby—I can't remember Bobby's last name now. I'm sure you've heard his name before. Anyway, they kind of furthered the idea a little bit and said, "You know there is the potential to do something here."

So then that's when they brought in myself, they brought in Dan Godfrey, they brought in John Haney—I'm sure you've talked to John Haney—brought in a couple of folks from McDermott and said, "All right, guys, this is what we see. This is the vision that we have. This is what we would like it to be. You guys go work this and figure out how to pull it and determine—put it into a contracting strategy." The contracting folks were called in and folks from a procurement association and probably spent six months. You know, this was a negotiation; it wasn't really a bid. It was a negotiation. We probably spent six months pulling together all of the terms and conditions and coming up with unit costs and coming up with the structure for how this contract would work, and did so. Then I probably spent the first year down in Morgan City helping my staff and McDermott folks really understand how this applied and how this worked.

It was so different that initially some people didn't quite understand it. In fact, some of the same construction guys I had working for me were also the ones that came off of Auger and they had the old culture, the old mindset about firm price, hold the feet to the fire of the contractor, and I kept telling them, "No, that's not the way this works. That price we end up with after we've done all the unit costs and weight takeoffs, every dollar we save below that, we get 50 percent of it, McDermotts get 50 percent, and every dollar over, we both share in the price." It was a very different concept and it took a while for people to catch on, but once they caught on, everybody saw the wisdom and the benefit of it.

In fact, one of the most wonderful compliments that was given to us in that first year of Mars, I told you we were all working in that same quarters building together, and we didn't have signs on the door that said "Dwight Johnston, Shell," or "Dennis Masters, McDermott," or whatever, we were all just in there working

together. We had a guy that had left McDermott and went to work for one of his competitors for a couple of years and he came back to McDermott. He came to visit us and walked through our quarters building. One of the guys that was working for Shell at the time previously had worked for McDermott. We had hired him away from McDermott. He walked through that building and he said, "You know what, guys? I couldn't tell who anybody in that building worked for. In fact, I thought this one guy here, Dale Norman [phonetic], was a McDermott hand and I found out he works for Shell. But in talking to him, I couldn't figure out who he worked for, because you guys were all just doing what was right for the project." I thought that was a wonderful compliment about how the team really did work together for what was right for the project.

JT: Did you guys get a sense going through the early stage, the six months in putting this new project plan together and then once construction began, did you guys, you in particular, did you get a sense that this was not only something special, an industry first, but, of course, the importance that Mars would play in future deepwater?

DJ: So I mentioned to you that the first couple years I had the Technical Services Group, and one of the things that we did was help develop, update the economics for the projects. So we would pull in all the costs for design, fabrication, installation, but we would also update the reserves that we would be able to produce over time and what the production rates were and we came up with cash-flow curves to offset the costs associated with it. Frankly, I knew, even though at the time it was the single largest discovery in the Gulf of Mexico, we were estimating about 600 million barrels of recoverable reserves. That's since grown to about a billion. But even with 600 million barrels of estimated recoverable reserves, if you weighed that against the cost that we had had for the Auger platform, realizing that it cost a lot more than was originally estimated, we weren't going to make Mars fly, even with 600 million barrels and the largest discovery in the Gulf of Mexico history.

JT: Small margins.

DJ: The profit margins were small. We weren't sure we were going to make it fly. So we knew if we didn't figure out how to do it cheaper and how to create a relationship with McDermott that would allow it to be built cheaper, that Mars would never fly, Mars would never get started. So it was a wonderful incentive, because I'm a firm believer in those time periods, this was like'93, '94, '95, these were pretty tough years for the industry, and if you had a 600-million-barrel field and you couldn't figure out how to develop it, well, it was just a matter of time before the deepwater may never take off. Frankly, we may be out of work. So I'm a firm believer in real cultural change happens when a company or industry is in the survival mode, and the company and the industry was in a survival mode right then and there. If we couldn't figure out how to develop Mars with all of

this reserves, Shell probably would not be what it is in the Gulf of Mexico today, if it were there at all, and we probably would not be working for Shell today. So it was a wonderful motivator to help us do something a little different than what we'd ever done before.

Plus we had leadership in place at the time like Dan, like Gordon, that were open to doing things differently. Gordon Sterling, to me, is a visionary. He's a visionary for the offshore industry and the deepwater in particular. He helped lead Shell into the deepwater. He's the one that had this idea and he needed some people to bring it to fruition to put the details to it, but he was a visionary in what could be done. He set the vision out there and just grabbed the right people to go make it happen.

JT: What I'm discovering in this project is that the technology, although it wasn't quite there, was going to be there regardless. The technology was not the issue. It was the economics, it was the project management, and it was balancing that with the amount of reserves that were in these big deepwater fields. The cost of getting all that together is really what was so kind of touch and go in the nineties and really what allowed the deepwater to happen. It wasn't that TLP technology. I mean, yes, that was important, but you didn't have to create an entire new technology. You did to a certain extent. But it was all these other factors that really put Shell out there, wasn't it?

DJ: So certainly having done the Auger platform, there was a lot of new technologies developed there, and anytime you do something the second time around, it's going to be better and cheaper than the first time around. So I'm not going to downplay that as that there were some real learnings and some technological developments, even some cost savings that came out of Auger. But you're right, that by itself was not enough, even in a field the size of Mars at 600 million barrels. It really was figuring out how to really do things differently.

I think the big difference for Mars compared to Auger was the difference in the contracting approach. We came up with a contracting approach that allowed what was good for Shell to also be good for all of the contractors. That allowed us to save money like we'd never saved on a major development like that before, not in my thirty-two years of experience with Shell.

JT: So tell me about these technical services. Water, power, electric, these were parts of the platform that you designed or you helped the construction?

DJ: So there were two pieces there. There was the project services piece, like I say, that we handled development of the schedule, updating of it, the cost estimates, making sure we were spending things against the AFE properly, tracked actuals versus estimates, came up with all the project documentation, did a lot of the

regulatory permit filings and all those kind of things. That was one very big part of the job.

The other piece of it was the hull systems and everything that's kind of below the upper deck, if you want to call it that, where we had our production modules and our process modules and our power modules. Even though I got to go help build those, I didn't have anything to do with the design for those. The designs that I helped with were led by a group of consultants and Shell folk that put together design for all of the hull systems that were in place, all the tendons that were actually used to tie the TLP back to the seafloor, the pilings that we had to drive into the mud so that we could latch the tendons into and eventually latch the TLP into to hold it in place. So it was basically everything below the water line.

JT: How many tendons are attached to that platform?

DJ: There's twelve tendons, three per leg. I think they were twenty-six inches in diameter. I think the wall thicknesses was anywhere from one-and-a-quarter- to one-and-three-quarter-inch thick. That was actually a pretty lucrative contract that Aker Gulf Marine picked up. Because if you thing about it, here we are in almost 4,000 foot of water, you got twelve tendons 4,000 foot long, and it's all twenty- and thirty-foot joints of pipe, so you've got to make a seam-weld every twenty or thirty feet. Then you've got to do a girth-weld to make sure it's all tied together properly. So that was a pretty good contract for Aker Gulf Marine to pick up. What's that, twelve times 4,000? That's a lot of tendon pipe, if you think about it, so that was a nice contract for them to pick up there.

JT: I always assumed, incorrectly, I guess, that the tendons were made out of steel cables. They're actually pipe.

DJ: They're actually steel pipe. Like I say, twenty-six-inches diameter, inch-and-a-quarter- to inch-and-three-quarter-inch steel that we had to roll into a tubular shape, do a seam weld, and then girth-weld each of them together. We could stack like three joints at a time, three twenty-foot joints up to about sixty foot, maybe ninety foot at the most, depending upon the barge you're going to be using for the installation. But when you get offshore, you're basically welding together sixty- or ninety-foot joints and just dropping them down into the water, welding on the next, dropping it down in the water, and you have to do that for a long period of time until you get the whole 4,000-foot of length put together.

JT: Wow. Twelve times.

DJ: Well, it was interesting, too, because we did the installation in the May-June time period, which is usually before hurricane season so you don't have to worry. But you never know for sure, there could be an early hurricane. Here you've got basically a several-hundred-million-dollar investment between the tendons and

the hull and even the topsides modules, that if you're out there installing it and it's not storm-safe, it might not be very good. So you actually watch the weather conditions very close and then you look for a week there that you can get all these tendons installed, because if you can get two tendons on each leg, a total of eight, you can actually get it storm-safe. So if a storm started coming, you ballast up on the hulls, which means you increase the tension on the pipe and you basically have enough to hold it in place even during a hundred-year hurricane design.

But everybody feels better to get three in place. We were actually lucky enough to get all twelve tendons in place before a hurricane came through. But it's always a really dicey period there. It's kind of like when you launch a fixed jacket, when it goes off from the launch barge into the water, you always hold your breath to see if it's actually going to come back to the surface and float, which they always have in my experience. But it was a little dicey there for a while because we had some weather pop up on us. It wasn't severe, but we had some weather pop up that always makes you wonder. You know, when you've got a several-hundred-million-dollar investment here, last thing we want to do is go rebuild it again for the same development. Luckily it all worked out.

JT: What about the pile systems? I'm imagining that as the tendon pipes came down they were attached to some type of leg joint and then they were driven in piles.

DJ: Yeah, we actually had [unclear] now, because we're consulting in these deeper developments, but either eighty- or ninety-inch piling, which here again was laid steel that we had to roll. Each one of the piling was probably 400, 450 foot long. So we would actually use underwater hammers, underwater pile-driving hammers that were hydraulically driven from the surface. You would have to lower the underwater hammer down to the top of the piling and then basically you'd beat on it and drive it anywhere from 400 to 425 feet, maybe 450 feet below the mud line. We did that twelve times.

At the top of that you've got this big J-locking mechanism. So when you come out there to install the hull, like I say, you'll join the tendon pipe up, welding them as you go, and then you get down to a point using an ROV, you'll stab the tendon head into the J-lock at the top of the piling, lock it in place and then pull it up. Then you attach it to the same type of locking mechanism back on the TLP and you'll ballast up on the hull to try and put your tendon on a pipe that holds it in place. The installation took for the piling and for the tendons and the hull, if you added it all up, it was probably about five or six weeks' worth of work installing all that equipment.

JT: The same system for Ram-Powell and Ursa and on down the line?

DJ: That was the beauty. We made some modifications to the hull and the topsides design as we went on, but each one of those installations post-Auger was almost exactly the same. In fact, that was one of the wonderful things about having worked on both the Mars and Ram-Powell topsides, identical modules. Now, some of the pieces of equipment were different because Ram-Powell's mainly a gas-production platform, Mars was mainly oil production. But the modules themselves, the piece that really [unclear] were exactly the same.

So it's almost like we got a chance to do round two of the same thing we did on round one, and all the mistakes that we made on round one we got to improve upon in round two. So we actually saved money, even though steel prices had gone up from Mars to Ram-Powell. We actually built the Ram-Powell modules cheaper than the Mars ones because we got better at it.

JT: And that contract relationship with McDermott.

DJ: Exactly. In fact, the other thing I'll tell you about that contracting relationship, it really was McDermott and Shell at the forefront of putting that contracting strategy together. But let's be honest, we had Bay in there doing all the piping. We had Seaco in there doing all the electrical and instrumentation. And initially, even though McDermott and Shell worked together very well, McDermott and the contractors, Bay and Seaco, didn't necessarily always agree or see things the same. So it took McDermott almost the whole Mars project to realize this is a pretty good contracting approach, and they were actually the ones out there leading the way for Ram Powell and Ursa with Bay and Sea Co., because they saw the advantages of it for the relationship with Shell. They basically created that same relationship and strategy for subsequent platforms with Bay and Sea Co.

JT: I asked Mike Cushman this question and he said that he would have to get back to me, because he wanted to think long and hard about how he would answer it. But what happened to that contracting strategy, that alliance? Do you have any comments on why other companies in the business did not pick up on it so quickly or were maybe too quick to judge it or why Shell didn't continue on? If it worked so well, if it was such a cost-saver and was such a trust-building tool between companies and contractors, and it seemed to work so well for Mars, Ram-Powell and down the line, why didn't it continue?

DJ: So Mike was right not to just jump right in and give you an easy answer, because I don't know if there is an easy answer to that question. I have some thoughts on what happened around Shell. I don't know for sure what happened in the industry. I actually know that BP and some others tried to replicate what we had done with McDermott during those days, and I don't know for sure why it never really caught on other than, let's be honest, we've been in the Gulf of Mexico

building offshore platforms and developing offshore fields for over fifty years now, and at the time it was thirty-five or forty years. You had an industry built up on just a certain way of doing things. And here a different group comes along and does something different and it appears to be successful. You try to replicate it, but you've still got this thirty-five years of history about how it's done. Without inspirational leaders like Dan Godfrey or Gordon Sterling, with that vision really helping to make it happen—because I never worried. I had their complete and utter trust and support. If I was trying to stick to the guns of the contracting strategy and best-for-project decisions. Even if it cost Shell money but it was the right thing to do for the project, I never once doubted for a second either one of those two would ever challenge me, and they didn't.

So I guess this a long-winded way of saying you had to have the right leadership in place and, frankly, you had the right mindset, because we'd been doing things a certain way around Shell for a long period of time. We do the design, turn it over to the fabricators, they give us a lump-sum cost, we'd put construction inspectors in the yard and we'd expect them to build according to those drawings, no matter what it cost and no matter what hardships it placed upon them. So the reason it might not have caught on in the rest of the industry is, it's just so different from how things had been done before and maybe not always the right leaders were in place to make it happen.

Now, around Shell—I'm probably going to lose my job if I tell you this. I don't think it will get me in trouble. But up until probably 2000, somewhere in that time period, even though we were part of a global Shell company, we were a fairly autonomous organization. Shell U.S. was very autonomous. We kind of did our own thing. We did what we thought was best from a strategic standpoint and that led to contracting the way we thought was best.

But late nineties, early 2000s, things changed in our country and Royal Dutch Shell felt the opportunity to come in and exert more influence in Shell U.S. operations. Before, I think they were always worried that the Justice Department would have concerns about a European-based company coming in exerting influence over a U.S.-operating company. But that changed around that time period. BP acquired Amoco, Justice Department didn't overreact, so I think Royal Dutch felt, "Well, wow, this is an opportunity to really bring the U.S. operations into the global fold here."

That started happening around the late nineties, early 2000s, and when that happened, the group practices from elsewhere around the world were always EPC-type contracts. You just didn't do offshore platform contracting any other way. That was the way it was always done. That was the way it was always going to be done. So I think what we had going for these deepwater projects was while good, solid, it was just so different from how all of our procurement

practices and contracting strategies were put together that slowly but surely, their influence overcame our practices and we kind of got back into the old way of doing things.

JT: So the contracting alliance worked on Mars, Ram-Powell, Ursa, Boxer?

DJ: Brutus.

JT: Brutus, I'm sorry.

DJ: Brutus was the last TLP, yeah.

JT: I don't know a whole lot about Brutus. Tell me a little bit about it. Did you work on it?

DJ: At that point in time we didn't really have a, quote, "project manager." We had a topsides lead, we had a fabrication lead, we had a technical services lead. Then we had what we called a project sponsor. I was actually the project sponsor for Brutus.

It was the last of the TLPs, but it was the cheapest of the TLPs because we had built three before it, and by the time we got around to that one, plus the industry had gone through a little bit of a downturn there and prices for steel and prices for labor were about as cheap as they'd been in a while, we actually built Brutus, which was almost an exact replica of Mars and Ram-Powell, cheaper than any of the others, and this was five or six years later.

JT: Where is it?

DJ: Brutus is in Green Canyon. I can't remember the block number now, but it's Green Canyon area in the Gulf.

JT: So 4,000 foot?

DJ: Yeah, it's still in 4,000 foot of water, that's right. It's very, very similar to Ram Powell as far as water depth and hull and topsides.

JT: Same for Ursa? Ursa is a similar TLP?

DJ: Ursa is also in the Mars Basin area, in the Mississippi Canyon area. In fact, you can see Ursa and Mars when you're offshore. They're very close to each other, about seven or eight miles apart.

JT: That's interesting. So Brutus was the last one. Now, was there partners with Shell on Brutus and Ursa?

DJ: Brutus was 100 percent Shell. It was interesting, because Exxon was a partner, but they weren't as excited about developing the Brutus prospect as we were. So we actually negotiated with them for a couple of years. In fact, we had started the design. We had put together all the contracting documents. We were ready to move forward, but then Exxon wasn't ready to move forward. So we had to negotiate for a couple of years and we ended up buying Exxon's working interest, so Brutus became a 100 percent Shell development, which is, Auger's 100 percent Shell, Brutus is 100 percent shell, but all the others, Ram-Powell, Mars, Ursa, they were all partners. Usually it was BP, BP was involved in about all of them. Then we had Exxon in Ram Powell and Ursa. Then we had ConocoPhillips in Ursa, here, so we actually got more partners as it went along, until we got to Brutus, then we went back to 100 percent Shell.

JT: So at what point did you come to this facility? When did you start working here?

DJ: Here in Robert?

JT: Yes.

DJ: I don't work at Robert. I actually work in One Shell Square. But I think I told you, after we built those four TLPs, I moved from the project world into the operations world, and I've actually been an operations manager once on Ram Powell and once on Mars since the late 1990 time period. The last ten years of my career, I've worked in some type of operations management or operations services role. Right now, at least up until September the first, which I have a new job, I was the operations services manager for all of Shell's operations in North and South America, which means I supplied all the construction support for the Field Improvement Pack project, not the major developments, but installed a new 50-million-dollar water flood or additional field gas compressor or something like that.

My organization supported all the new design and construction field-equipment-type projects. We also handled the integrity assurance and all the maintenance activities. We handled the operational readiness, the guys that were getting ready to commission and start up all these new developments and logistics, all the boats and trucks and helicopters we need to move people around in our operations, and also operations training. Operations training is part of Operations Services. So for the last four years, Robert and all the operations training requirements have been one of my areas of responsibility.

JT: You live in Mandeville?

DJ: I live in Mandeville.

JT: So it's a quick little drive for you.

DJ: So I don't mind coming to Robert; fifteen minutes.

JT: Then Shell is downtown New Orleans, so you've just got to go across the pond.

DJ: It's forty-five minutes going that way. It's fifteen minutes coming this way. So it's never been a pain for me to come here.

JT: This will be the last question. What role does this training facility? That's one thing that struck me when I drove up, seeing the equipment, seeing the people, and trying to get a feel for what has been the influence of training people because the deepwater is so different. The days of hiring a kid out of high school and putting him on a platform on the shelf may not apply way out there, especially now that you've got female employees, you've got highly trained academics, geologists, what have you. What role does training in training facilities play in the deepwater development?

DJ: That's a very good question. It's good that we were out here at Robert today so you actually got a chance to see the place a little bit. But they actually built Robert—I wasn't even in New Orleans yet—they built Robert in, what was it, 1986, '87, maybe '88 at the latest. I think it was '87. It was just this building, which is the accommodations building, and that building over there, which is the classroom building. That's all that was here up until about three years ago, when we added the new accommodations building and the new classroom building that's across the way here.

But I guess the way I describe it, Shell's always felt training was essential, and we've always liked to do internal training as compared to sending all our employees to the outside training that's available. But I guess the big difference today, now that we're in the deepwater, compared to the eighties, when most of our development activity was the shelf area, is what I call the cost of making a mistake. The cost of making a mistake on a deepwater development that costs you anywhere from one and a half billion to four billion dollars to install and produces 150,000 barrels a day at current oil prices, the cost of making a mistake there is significantly and infinitely more than the cost of making a mistake back in the days of a fixed platform in 300 foot of water producing 5 or 10,000 barrels a day. I mean, neither one's good. But we've realized here in the last ten years that we've really moved out into the deepwater, the cost of doing a mistake is more significant, so you can't make those mistakes.

Frankly, the move into what I call the technology world, everything offshore these days is controlled with instrumentation, with electronics. Long gone are the days of instrument or air pneumatic control systems and safety shutdown systems. Everything is electronic these days. So if you really looked around Robert, what you'd see is a lot of cutaways of actual process vessels so people can actually see what goes on inside all these production facilities. But what you also see is some excellent both subsea training capabilities, because here again, it's something that you never get to put your hands on once it's installed, and a lot of instrumentation systems, electronic instrumentation systems. So we can bring people here, let them put their hands on the equipment, let them make mistakes in a classroom type of environment, so you don't get the consequences, and let them learn here.

Like you said, you can't just bring in a kid straight out of high school and expect them to operate in deepwater development. You can bring in that young man, you can put him through school here, and then put him with somebody offshore who can mentor him, and in four, five, six years, you've got a pretty good person you can turn out on their own. But without having Robert, I don't know how long that transition would take, because they can come here and put their hand on it and learn here in a way that you can't learn any other way. So Shell, we just spent 25 million dollars expanding the facility because of that recognition.

You know, it's interesting, but you never really can put a tangible dollar amount on the advantage of training. It's kind of like spending money on safety. How do you know what you've prevented? When you spend money on training, how do you know what you've saved or benefitted that wouldn't have happened if you hadn't done that training? But I can honestly say, Shell, whether you put a dollar value on it or not, believes in the value of training, and everybody we bring here, whether it's a new hire straight out of school or whether it's one that's an experienced hire, they spend a lot of time here their first few years really learning the equipment before we'll turn them loose offshore. It's great to work for a company like that, too, to be honest with you.

JT: To go back in time and look at the development of like the Bellaire research facility, shell has always been more than just an operator. They've been trying to stay ahead of the curve in several phases and this is one example of that.

DJ: Both the technical and the operations training.

JT: Well, good, I'm going to shut this off and say thank you.

DJ: Hope you got what you needed.

[End of interview]