

# OFFSHORE EXPLORATION: I

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*this article begins on the next page* 



## CANADIANS ABROAD

## Offshore exploration: I

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## EDITOR'S FOREWORD

*This is the first of a two-part series, covering Art Branscombe's experiences in England, Australia, Papua New Guinea, Malaysia, Burma, Japan, Ireland, the North Sea and other parts of the offshore-drilling world.*

WHILE I was working with Imperial Oil in Alberta in 1962, my wife and I took a two-month trip to Europe. This made us wonder what it might be like to live overseas. So, a year later, when I was offered a temporary assignment as senior drilling engineer to look after five onshore wells in England, I had the opportunity to find out first-hand what life in Europe was like.

My first posting was to London, and I must say that commuting to an office in the Haymarket could certainly not be considered a hardship post. Very early on, we realized that we could meet North Americans at home and so resolved to associate as much as possible with the locals, to study their culture and to see the countryside in many short trips. A love of exploring London and of taking advantage of visiting museums and art galleries, of attending the opera at Covent Garden, and collecting antiques was always to remain with us and to have a lasting effect on our family. Years later, our daughter would return there to do six year's post-graduate work in music.

In 1965, Esso Exploration of New York offered me a permanent position overseas. The choice of becoming "permanent" or remaining with them on a temporary basis was not easy. With permanency, I would have the advantage of substantial financial bonuses, but would have to resign from Imperial Oil in Canada. Willis Gibson, then Assistant under Tip Moroney, advised: "why don't you take the permanent and if you don't like it, you can always come back with us."

My first permanent assignment was supposed to be Australia onshore. When

I arrived at the Sydney office (managed by John Hamlin, now retired) in the spring of 1965, however, I was diverted to the Glomar No. 3 drill ship which by then was drilling its second well in the Bass Strait. It was this hole that found oil and was to be the first of many holes to produce the prolific reservoirs that were subsequently developed in Australia. Historically, this was the first fully floating vessel to operate outside the continental U.S. waters. Fully floating vessels with sub-sea blowout preventors had only been used in the States for a year, so, in a sense, we were still developing offshore drilling methods as we went along.

Soon I was to find that the drilling was the easier part of mastering offshore drilling. Contending with the sea was another matter. The weather was unpredictable and, in those days, there were no satellites or weather ships between the Bass Strait and the Antarctic. Normally, travelling ships report the weather as they proceed, but in this area there was a complete absence of shipping lines to do that. Storms, known as "southerly busters", blew up from the Antarctic and generated 40-foot waves and 200-foot swells which made operations difficult because the length of the drill ship was only 256 feet. These storms could break anchor chains and mooring lines which, in turn, could mean being blown off location. This made production testing a hair-raising experience. Eventually, Bill Bohlman, a Texan with Esso, claimed that I had tested more wells offshore than anyone else for Esso.

During my stay in Australia, we developed the now well-known technique of "hanging off". If there was enough time in the rough weather, it was best to pull out of the hole; but when this was not possible, one would try to pull the bit up into the casing and to land the drill pipe in the blowout preventor - "hanging off". To help control the pressure and to prevent the hole from caving in while shut in, Esso had a standing regulation of having no more than 5,000 feet of open hole. In those days, before automated equipment,

drill-collars had to be hand-wrestled and it was impossible to handle them in rough seas. To Esso's credit, if you had an idea which could be shown to save time and money, they would put it into effect.

To be able to drill at sea, close cooperation with the Captain of the drill ship was essential. Along with this, was the need for high-calibre, competent personnel who were capable of rendering good judgment quickly. The poor weather conditions made it mandatory to decide within minutes whether or not to stay on location or to secure the well before being blown off. It gradually evolved that the man on the ship had to have the final say. In addition, rough seas made it hard to transfer supplies on and off the boat, as well as for the three-passenger helicopter to land onboard to change personnel. Storms often disrupted our schedules to be on or off the boat and supplies sometimes could not be unloaded for days. There was always the added concern of survival at sea.

After having experience with four offshore wells, I was assigned to drill four onshore holes near Moree, 450 miles northwest of Sydney. The contractor for these was Richter-Bawden; and "Swede" Black (retired in Edmonton) of that company and I were able to renew our friendship. Drilling onshore at this time could also be considered pioneering because, although Halliburton and other services were established in Australia, not many wells had been drilled there. It was my job to oversee every detail to ensure that the necessary supplies were available, that the drilling progressed and that the well was completely evaluated. This included making the deals with the farmers, preparing the site itself, etc.

On one occasion, a particularly hot day, "Swede" Black and I had travelled about 400 miles to look at several of his drilling rigs. After viewing the last one, he suggested that we go to the "School of Fine Arts" in Roma, Queensland, otherwise known as the pub. Striking up a conversation with one of the locals in

the men's room, which had been reached by a long and circuitous route in and out of many hallways, I commented: "I found the place." Upon hearing this, the man hurriedly zipped up his pants and wanted to know why on earth I had done that. He then dashed out the door. After a few beers with the other Queenslanders, I found that this man had mistakenly thought that I had phoned the police! He had a pig in his truck and thought it had escaped. It was quite obvious that while many Queenslanders have broader accents than most Aussies, it is the Canadians who have the accents in that part of the world.

After these holes were drilled at Moree, I returned to the Bass Strait and my family arrived to live in Sydney. Family life in a foreign country is all too often underestimated in its difficulties—especially in the early stages of exploration work when the company has organized few amenities to help the employee and his family. It was not easy for the wives and children to find their own ways in a new country; they were really on their own. This was compounded when the husband would be away for weeks at a time and when there was no communication or contact with him. This is an aspect not readily appreciated by those who remained in the office and who were home every evening, weekend and holiday.

Both Sydney and Melbourne have populations of 2½ to 3 million. Driving there on the left-hand side of the road was a nightmare with a ten-year-old serving as chief navigator and map-reader. Inevitably it was, "Oh Mommy, you should have turned back there." Unable to get a work-permit in Australia, my wife Terry, an R.N., could keep her licence up to date only by doing volunteer work in a Sydney leprosarium and at blood donor clinics.

The children's lives were complicated by the fact that the Australian school year runs from February to December and so life was always six months out-of-phase with Canada. Australian schools were excellent, but the curriculum dealt with the subjects in different order. Our daughter studied Greek and Roman history for five consecutive years in high school, yet was never formally taught anything that happened between the fall of the Roman Empire and how Australia won the Second World War. Our son, already used to the idea in England that boys had to wear shorts to school, readily gave in this time and learned to play cricket instead of hockey. From our experience, I would say that moving children around in their younger years may not be harmful academically, but

later it may be necessary for them to return to Canada to complete high school so as to meet Canadian university standards.

Of course, there is more to life than academic attainments and in the broadest sense of the word, children overseas receive a wonderful "education", but socially and peer-group-wise, they are either made or broken by the experience of being constantly up-rooted. Fortunately, ours were adaptable and made it through school and university with honours.

Part of our own general "education" was to heed the local dangers. One did not swim in Sydney Harbour or the nearby inlets and coves, because this was where the sharks bred. Beaches were somewhat safer, but one had to adopt the curious Australian philosophy: "if 500 go in swimming, the risk of losing a leg to a shark is reduced to one chance in a thousand!"

Another danger was the highly poisonous funnel-web spider for which no antidote was available. Our son discovered this creature by accident while camping in the backyard with a friend. Red-backed spiders were more plentiful, but there was an antidote serum for them. Needless to say, we gave up camping and many other outdoor activities.

A much larger physical hazard to deal with in the outback was the kangaroo. At night this animal has a tendency to be attracted to the headlights of cars and will run along beside it. Collisions were avoided only by slowing down or slamming on the breaks; and cars had to be protected by front bumperguards. Yet, in other parts of the country, the only kangaroos seen would be those in the zoo. To our great disappointment, koala bears, though cute in appearance, were drugged by the leaves they ate and would grunt like pigs as they crossed the roads at night.

One of my interesting experiences was to look after a well-site in Papua New Guinea from its very inception. I was there for the seismic work and heard the story of how, previously, another oil company had drilled off-structure because it was convenient for access. I told the geologists that they could go ahead and pick any site they wanted and that I could drill on it, convenient or not. That was how I was faced with the prospect of drilling a hole on a location often covered by four to five feet of water, depending on the tide.

The location was 500 feet from the sea on Ini Island, some 250 miles west of Port Moresby, at that time under Australian jurisdiction. After the seismic

work was completed, a three-mile-long creek was dredged, also a turning basin to bring in the rig and supplies the back way. Although we used a boat with a seven-foot draft, we often had to wait for the tide to come up to be able to get up and down the creek. These tides could rise as high as twenty-five feet at sea level and were locally known as "king tides".

Time was of the essence to drill this well because of a 60-day farm-out deadline. To help accomplish this, we hired an interpreter who had 20 years' experience with many different languages, including "Pidgin English". This was the language we used in speaking with members of the Kukuku tribe. These huge New-Guinean natives were six feet tall and weighed 200 pounds. They were feared by all the other tribes who would make a rapid departure just at the sight of the Kukukus, the only tribe who travelled at night because they were unafraid of the spirits. Once, when 50 Kukukus arrived at a "jamboree" at Mount Hagen, all 5,000 other natives left immediately. To be fair though, the other natives were only about half their size.

It was only due to 200 barefoot natives that the 50- to 60-foot mangrove trees in the swamps were cut down and cleared away. The trees, which were to be used as the piles, then had to be carried up to half a mile, before being driven to submission (60 to 90 feet to hold up the rig foundation, a Richter-Bawden National N-55). Other piles were used as stilts for housing the camp and for walk-ways.

Among the many things which the Kukukus and the other natives had not seen before were movies. Space was made for them to watch an evening's entertainment and they particularly enjoyed the cowboy shows with the horse chases, as most had never seen horses before. Nor had they tasted ice-cream, which they liked. (Some of them considered python and rat to be the Number One Kai-Kai or the very finest food.) Their word for a helicopter, another new sight, was "Mixmaster Jelah Chris."

My wife spent a fortnight with me in New Guinea and, during her stay, we visited a local village from which many laborers came. About 300 children immediately descended on her, touching her skin and pinching her arms. The interpreter said that she was the first white woman they had ever seen. Another village, about 30 miles distant, was literally having a guest for dinner from a neighbouring tribe when surprised by the Australian area officer. He was advised to ignore the menu.