

IADC: Up to speed at 65 and not slowing down

Mike Killalea, Editor & Publisher

IADC REACHED 65 this year, but that's no speed limit for the only organization representing the global drilling industry. Since our founding, IADC's mission has remained laser steady—to advance drilling technology, improve industry safety and environmental protection, and champion sensible legislation and regulation.

In 1940, IADC was founded as the American Association of Oilwell Drilling Contractors, boasting just 5 paid members. **J E Brantly**, owner of **Drilling and Exploration Company**, became AAODC's first President (the post today called Chairman). Mr Brantly was a driller heart and soul. In addition to founding AAODC, he wrote technical handbooks on rotary drilling, and authored the definitive history of the birth and growth of the drilling industry, "History of Oil Well Drilling".

Mr Brantly also produced a legacy of thought on the value of a trade association for the drilling industry. IADC President **Dr Lee Hunt** has reprised the best of these in the "From the President" column on page 11.

My favorite is: "The lone wolf individualist can function as such in so long as he may be allowed to attain his selfish ends by receiving only. A house which fails to recognize the wisdom and necessity of cooperation, cannot maintain itself."

True then, true now.

DEMOGRAPHICS & TECHNOLOGY

The industry has changed, to be sure, since Brantly's day. The demographics alone are startling, and thanks to industry consolidation, a virtual mirror image of 1941. I like to quip that, IADC began in an industry of 800 contractors with 5 rigs each. Today, it's more like 5 contractors with 800 rigs each. An exaggeration, but you get the idea.*

Wells were much shallower. In 1941, the average US well depth was approximate-

* Actually, according to a presentation at the 1941 AAODC Annual Meeting, more than 2,000 drilling contractors then operated in the US. There were about 4,000 rotary and 2,800 cable rigs available, with contractors owning about 75% of the units.

ly 3,000 ft. By 1951, that had risen to about 3,600 ft. A half century later in 2001, US well depths averaged 5,572 ft, according to IPAA.

These increasing depths spelled the doom of the steam-powered cable tool rig, shouldered aside by the rotary rig, arguably the greatest technical development of the drilling industry. It remains the bedrock of the drilling technology. The rotary rig, with its advantages of improved hole cleaning and greater power, began displacing those trusty cable rigs well before IADC's founding.

The inevitable demise of the cable rig took time, though. AAODC boasted a Cable Tool Committee early on. And in 1953, New York drillers set a depth record for that technology—11,145 ft, a long way from the 69 ft of Drake's well in 1869.

THE MORE THINGS CHANGE...

Engineers in the 1990s and 21st Century have produced a plethora of new ideas, such as slim-hole drilling. Oops, did I say slim hole? Well actually, slim-hole drilling was discussed at our annual meeting back in 1941. By the mid-1950s, California operators looked to slim hole as the answer to drilling in tight locations and to cutting costs.

"We feel there is a good deal that could be developed on this subject," observed **George P Livermore** of **George P Livermore Inc**, Chairman of the Drilling Practices Committee, speaking at the 1941 AAODC Annual Meeting.

Of course, there's always drilling with casing. Oops again. Drilling with casing was also a topic of conversation at the '41 Annual Meeting.

Noted **J A Chapman** of **Grey Wolf Drilling**, Chairman of the Drilling Equipment Committee, "In the Mid-Continent oil area we have heard a lot about drilling with casing.... From the stories we hear, they are successful."

Underbalanced drilling is similarly not completely a child of the late 20th Century. An article in *DRILLING CONTRACTOR* from 1958, for example, discussed air drilling in detail, claiming that 1958 was the year of the greatest advances for that technology.

Today, IADC is intimately involved in developing guidelines, best practices and

standards for underbalanced and managed pressure operations. In 1998, the Underbalanced Operations Forum became the IADC Underbalanced Operations Committee. It was recently re-named the IADC Underbalanced Operations and Managed Pressure Drilling Committee.

Under IADC auspices, this committee has continued to advance UBO/MPD. In 2004, API adopted the committee's specification for the manufacture of rotating control devices—API Spec 16RCD.

The committee has also issued the IADC Classification System for Underbalanced Wells, among other milestones.



IADC rides the crest of drilling technology. In 2004, for example, we issued our IADC Surface BOP Guidelines for Floating MODUs.

GLOBALIZATION

Another sea change has been the sweeping globalization of our industry over the past quarter century or so. Drilling has always been as global as, say, farming. But until the 1950s, contractors for the most part drilled in their own back yards, rather than expanding to international markets.

Today, we are transcending national boundaries in rig operations. Chinese contractors drill in the Middle East and South America; German contractors in Africa,

Asia, and Europe. The great leap offshore begun in 1947 spread mobile offshore drilling units worldwide. In particular, the discovery of oil in the North Sea catapulted offshore drilling into a global endeavor.

US land contractors had long since been working internationally. In addition, many non-US contractors, founded in the early 20th Century, were also drilling around the world.

In 1972, looking at a growing global drilling market, the old AAODC changed its name to the International Association of Drilling Contractors.

worked feverishly to harmonize training requirements within the North Sea nations, for instance.

Tax issues also throw road blocks in the way of smooth rig movement. IADC's Government Affairs Department works these issues round the globe.

So, while our mission remains broadly the same as in 1941, the methods by which IADC pursues that mission have changed dramatically.

SAME MISSION, NEW TACTICS

Early on in our history, IADC established the drilling industry's framework documents and practices, many of which remain vibrant today. In the 1950s, for example, IADC focused on developing the foundation of a growing industry. Such stalwart tools as IADC Model Form Contracts, IADC Daily Drilling Report, IADC Drilling Manual ("Toolpushers Manual"), IADC Safety Manual, Primer of Oilwell Drilling and other key technical works were produced during this era.

The IADC Daily Drilling Report was approved in 1953 and has stood the test of time. Today, the DDR is still a critical tool for the drilling industry. However, since 1999, IADC members have had the option of producing the IADC tour reports electronically, as well as in the familiar hard copy.

SAFETY FIRST AND LAST

Safety has been paramount among IADC's priorities. In 1958, the IADC Safety Manual (now the IADC Health, Safety & Environmental Reference Guide) was joined by a companion volume exclusively focused on accident prevention offshore. IADC co-published this book with the Offshore Operators Committee.

In 1962, IADC launched the so-called "Charlie Report", which has matured into the definitive statistical record of drilling safety incidents. Originally focused on US land and offshore safety statistics, the IADC ASP Program now offers separate reports for Africa, Asia Pacific, Canada, Central/South America, Europe and the Middle East, for both land and offshore.

IADC's programs have long been recognized for their effectiveness. For instance, in 1946 the **National Safety Council** recognized IADC's programs. And in 2003, the **Offshore Energy Center** inducted IADC into the center's Hall of Fame as a Technology Pioneer in its HSE category, recognizing our "outstanding development of Offshore Safety Programs".

Today's IADC initiatives are a quantum leap beyond those of the 1940s and 1950s, but build on that solid foundation. Instead of simply publishing manuals, we develop entire training programs for industry use. In 1994, IADC launched its landmark HSE RIG PASS program, designed to ensure that rig personnel have received a solid grounding in rig safety.

The industry still lacked a solid, training-based system to ensure accreditation in well control, however. IADC tackled this challenge by establishing an industry task force of operators, contractors, trainers, simulator developers and academics. Thanks to their efforts, WellCAP, the IADC Well Control Accreditation Program, was unveiled in 1995.

IADC's involvement in improving well control is not limited to training. We work closely with regulators to fine tune procedures and equipment, as well as advance technology. In 1998, for example, IADC and OOC issued the landmark Deepwater Well Control Guidelines, subsequently expanded in 2001. These guidelines were recognized in 2004 when the Offshore Technology Conference awarded IADC and OOC a special citation for their development.

We have continued to expand IADC's network of accreditation systems, in 2001 issuing a RIG PASS program for under-balanced operations.

Just this year, we have unveiled WellCAP Plus, a high-powered alternative to WellCAP's Supervisory Level accreditation program in which the focus is on team-based problem solving.

Also this year, IADC announced its new Ballast Control and Stability Accreditation Program, offered in conjunction with the London-based Nautical Institute.

IADC's mission—advance drilling technology, improve safety and environmental protection, and champion sensible legislation and regulation—hasn't changed in 65 years. Our tools and strategies to achieve our goals have evolved with the times and industry needs over 65 years. And 65 or not, we are not stepping on the brakes.

AUTHOR'S NOTE

Material for this article was largely drawn from past issues of Drilling Contractor, the minutes of the 1941 IADC Annual Meeting, and research conducted by my friend and predecessor Alvaro Franco, in celebration of IADC's 50th anniversary in 1990. ■



Remarked then-President **H B "Hank" Harkins** of **Harkins & Co**, the name change was a result of the "transformation of the contract drilling industry and the AAODC membership from US-based to one of a true international stature... "Our Association will increase its scope and value to its membership and the industry it serves."

Also in 1972, IADC formed the North Sea Chapter, electing **Charlie Orr** of **Santa Fe Drilling** its first Chairman.

But regulations still hamper the efficient movement of rigs across national borders. The IADC European Working Group and North Sea Chapter have