Meeting the training challenge

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**THE NEED TO** prepare and equip personnel with the training and knowledge needed to safely maintain pressure control for exploration, development and production of oil and gas offshore has undergone numerous changes over the years. Today, extensive change is again underway in well control and production safety training requirements, procedures and certification.

The American Petroleum Institute created the first series of “recommended practices” for drilling and production personnel, but these recommended practices neither required companies to adopt them or mandate personnel training. In an effort to decrease the number of well control incidents in the late 1970s, the United States Geological Service forwarded prescriptive requirements for training for drilling and production personnel. More prescriptive requirements were incorporated in 1979, when a system was implemented for accrediting schools, companies and training organizations to conduct courses according to guidelines and issue time-sensitive certifications to personnel successfully completing the courses.

Shortly after the regulations were released, the US Minerals Management Services (MMS) replaced the USGS for offshore activities. As the industry expanded E&P activity in the Gulf, the number of incidents and accidents also increased.

After documenting numerous accidents, the MMS recognized that more stringent accountability was required to prove core knowledge of the skills and topics required at the various training levels, and core competency of the skills needed to perform the job duties.

The goal of the new MMS Subpart O regulations is to raise the level of training.

The importance of identifying areas through documentation where an employee or contractor needs remediation is the key. The new regulations led to numerous discussions between lessees and contractors. Their concern over creating a consistent training plan to help verify knowledge and skill levels has led to considering how to expand on traditional instructor-led schools and the possibility of alternative methods such as computer-based training.

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WellCAP, an IADC initiative first implemented in 1995, achieved new importance in the US as a means for operators and contractors to comply with the revised Subpart O regulations. The Offshore Operators Committee (OOC), an industry group representing the oil companies operating in the Gulf of Mexico, adopted WellCAP as its standard to ensure Subpart O compliance. As a result, nearly all MMS training plans developed by operators and contractors now reference WellCAP.

Traditional schools have long been considered one of the best methods for training personnel. With qualified instructors, limited classroom sizes, defined training levels, and approved course content and materials, companies can have personnel instructed and tested on the required topics and skills needed for certification.

**TECHNOLOGY DRIVES TRAINING**

An emerging option, accepted as an alternative training method by the MMS, is interactive computer-based training (CBT). Studies have shown that students have achieved significantly higher scores with computer-aided instruction than with traditional audio, visual and tactile methods of instruction. Students who conventionally are underachievers evidenced higher test scores with computer-assisted instruction than through conventional-led school.

This newer technology for training can offer extensive reporting systems to provide proof of competency and verify that the topics and skills have been administered and assessed. In well control training, interactive tasks and role playing familiarize learners with well control concepts, emphasizing correct procedure and teamwork. The inherent nature of CBT training allows the program to log not only an employee’s strengths, but also his weaknesses, providing a plan for further areas where improvement and remediation may be necessary. CBT also helps to eliminate bias by evaluating each student’s performance based on the standards required by the training curriculum.

Since the burden of proof for companies encompasses not only employees, but contract personnel as well, large companies will be more inclined to select contractors that follow their own guidelines for training. Lessees are hoping that by setting the example for the industry in providing diligent and consistent training worldwide. This will be their only way to feel confident that the contractors are trained and their skills are properly assessed in well control and production safety.