

Health and safety challenges face MODU operators

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THE UK HEALTH & SAFETY Executive/Offshore Division's views on specific health and safety challenges facing the MODU industry are set out in this article.

The most obvious challenge for drilling units is that they face seeking compliance with several regulatory regimes, as well as flag rules.

In the UK, the contractor who owns or manages a MODU is responsible for the safety of that unit and all those on it. He must prepare a Safety Case, which sets out how he complies with the law and controls major accident hazards.

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In the UK and elsewhere, the contractor is taking on more of the work involved in well construction, receiving less technical support from the client than a few years ago.

There are a number of challenges concerning control of operations and the hazards associated with them. If the unit is contracted to a small client, there may be uncertainties over standards for the work or how subcontractors are managed. UK law requires cooperation between parties and the principal duty holder in order to meet the regulatory requirements.

However, in the UK each unit must have an Offshore Installation Manager (OIM) with overall responsibility for the safety of the operations and this may conflict with the reporting systems and management controls assumed in third party contracts.

Clients may wish to introduce new technologies, which can pose safety and

operational problems for the drilling contractor if lines of responsibility are not made very clear. The need to communicate and cooperate seems obvious but it is worth emphasizing that the contractor is unable to assess and deal with the risks without full cooperation from the client.

Even when hazards are well known, control can be poor. This seems to be a particular problem where operating companies appoint a lead contractor, often a drilling contractor, with a number of subcontractors.

The operator may have critical information affecting the work of a specialist subcontractor but that information may

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not find its way down the contractual chain to the subcontractor. One recent example we found was the failure of the connection on a drill collar. The operator had adequate standards for inspection and acceptance.

These were passed to the drilling contractor, who passed them to the directional drilling contractor, who passed them to the rental company who failed to implement them.

On investigation, nobody had clear responsibility to ensure standards were enforced.

If the rig owner does not ensure cooperation, he cannot ensure a good, safe job.

Everything in business depends on people. The best designed and constructed unit is no good without a good crew. I appreciate that the upturn in business has left the industry short of skilled people and those that can be enticed to join take a while to come to terms with the safety behavior required when they work offshore.

My inspectors report that shortages of people are causing difficulties in operating safety management systems designed for higher crew complement. And we are seeing problems associated with reduced condition monitoring and maintenance, for example increases in the number of hydrocarbon releases.

The drilling business is going through fairly wrenching change at corporate level, with no blueprint which ensures the corporate safety message is not lost, nor goes quiet for a while. My Division is studying how we might assist in identifying and targeting key competency issues.

We intend to introduce a major inspection program in 2002 that will focus on human factors, occupational health and safety management to examine whether—and to what extent—competency issues are contributing to the accident rate plateau.

VALUE OF STANDARDS

Standards are important for both industry and HSE in that they:

- Help to support and complement goal-setting regulations;
- Provide an authoritative definition of good practice;
- Act as a vehicle for promoting good practice;
- Provide a basis for progressive improvement through the standards making and revision process;
- Provide a "common currency" for the

industry and the regulator in an international industry. In regulatory terms, compliance with good practice (eg as defined by standards) is a fundamental basis for ensuring and demonstrating that risks have been reduced as low as is reasonably practicable (ALARP).

But compliance with standards is not necessarily sufficient in itself to ensure that risks are ALARP, and needs to be complemented by explicit assessment of hazards, associated risks and their control measures.

Also, given the time taken to review and revise standards, these can become out of date. Rig owners are expected to take account of current developments in technology and practice in controlling risks.

HSE has had significant input into the development of some of the international standards for the oil and natural gas industries developed by ISO/TC67.

This is a very large program of work, and our involvement has been selective,



being geared to issues of particular importance to safety. We have participated via the UK delegation in various working groups, providing technical information and some financial support.

Our aims have been to be proactive, to achieve consistency with our regulatory requirements and to register any concerns at an early stage so that these can be taken into account in good time.

We have been looking to these standards to replace some of what was in

HSE's manual "Offshore Installations: Guidance on Design, Construction and Certification" known in the UK as the 'Fourth Edition' Guidance. This document was withdrawn from publication in July 1998 at the end of the transition from the Certificate of Fitness regime to a system of third party verification managed by the installation owner.

Unfortunately the development of some of these standards has taken longer than originally envisaged, partly due to the increasing difficulty of technical experts in the industry finding the time to devote to this work.

Some of the ISO standards (eg applying to offshore structures) are intended primarily for floating production and storage systems rather than MODUs.

However, reference is made to the IMO MODU Code and to the technical requirements of the Classification Societies. Although not intended for MODUs, these standards may have some relevance, and this will need to be considered by the MODU industry.

In contrast to ISO, the standards making process in IMO tends to be regulator led, although some member states are represented by commercial companies. HSE had a significant input to the first edition and the last revision of the MODU Code which took account of the Alexander Kielland and Ocean Ranger accidents.

My recollection of that process is that IADC tended not to get directly involved in this process and seemed wary of the improvement that standards can bring.

We can understand the interest of the industry in establishing a “level playing field” and I see a role for IADC as a leading player and in seeking to establish and promote higher standards in the industry.

WORKING TOGETHER

Recently, I’ve met with officers of IADC on both sides of the Atlantic, and have talked to the heads of a number of big drilling companies. IADC and its members have asked that my Division share

its knowledge with the Industry. I am happy to accept this invitation.

For instance, we shall work with drilling contractors to improve safety in lifting operations, which is a particular problem for the drilling industry. It also is a matter on which we have exchanges with the **US Minerals Management Service (MMS)** and **Norwegian Petroleum Directorate (NPD)**, to name but two regulators.

IADC also wants HSE to acknowledge good performers as well as target unsatisfactory performance and asked us to discuss their perception of a conflict between our role as guides and advisors, and our enforcement role (and our more recent duty to charge for our “services”).

I have agreed to discuss all these matters with IADC members, and I hope with oil companies and workforce representatives too. I hope we can make progress this year. In return I would like the support of IADC members to try to break through the plateau of incidents

and accidents that is stubbornly flat—in fact non-injury accidents are increasing slightly globally, we think.

The Government recently launched a program for revitalizing health and safety performance throughout the employment sector. Targets have been set to reduce major and fatal accidents by 10%, days lost to accidents and ill health by 30%, and the incidence of people suffering from work related ill health by 20%. These targets are to be met by 2010.

IADC is playing a leading part in the UK to secure these improvements.

Accident statistics are often referred to as lagging indicators. But if the accident figures disappoint, I am encouraged that several leading indicators are positive, including workforce involvement, safety stop programs, senior management commitment and safety training.

I think that in a number of ways, drilling contractors are giving leadership to the upstream industry as a whole. ■