

WORK IN CONFINED SPACES

SUMMARY

At the 44th SSHSCC meeting the circumstances of the Glomar Artic double fatality were discussed. The discussion was carried forward to the 45th meeting. This paper:

- continues that discussion, particularly in relation to the Sherrif's recommendations;
- outlines the possible content of a series of seminars addressing the issue of work in confined spaces; and
- introduces an early draft of a possible self-audit tool.

BACKGROUND

1. Paper SSHSCC/44/A outlined the circumstances of the fatal accident on board the Glomar Artic oil rig and highlighted the main concerns identified by the fatal accident inquiry.
2. Paper SSHSCC/45/B listed a number of the recommendations made by the Sheriff who sat on the inquiry (see paras 3 to 5). There was insufficient time to discuss these at the 45th meeting:

Recommendations from the Glomar Artic Fatal Accident Inquiry

3. Consideration should be given to amending the Confined Spaces Regulations or the ACoP to take account of:
 - whether persons should be permitted to carry out work in a confined space where flammable gases or oxygen is to be used without a safe means to regulate the supply of these gases to the confined space. This should be achieved by a remote start system operated out with the confined space so that the supplies of gas to the confined space are only live when the gas is actually required for flame cutting etc.;
 - whether such work should be permitted without the presence of suitable and sufficient atmospheric monitoring equipment and a person sufficiently trained in its use so that the presence of oxygen deficiency or enrichment or the presence of toxic or flammable gases can be detected;
 - whether such work of a planned nature should be permitted without an effective and properly operated permit to work system;
 - whether prior to any person being permitted to issue or monitor a permit to work they should be required to pass a written test of competence in the particular permit system and in the importance generally of the permit system;

4. Those who operate a permit to work system should consider:

- the adequacy of their system for cross referring permit to works to the associated risk assessment, entry certificate etc.
- when deciding upon appropriate precautions to specify the exact precautions required i.e. 3 fire extinguishers of the dry foam type to be located within the confined space rather than using a “tick box” approach;
- whether there are any circumstances where revalidation of a permit should be permitted; and
- whether communication of information from manager to manager, supervisor to supervisor and tradesman to tradesman at shift changeovers is adequate or requires to be formalised.

5. General consideration should also be given to:

- whether hot work in a confined space, the installation of hot work equipment, the maintenance, connection and disconnection of such equipment, the supervision of such work and the preparation of a risk assessment of such work should only be undertaken by tradesmen holding an appropriate certificate of competence;
- how the safety of temporary workers could be improved where the work site is constantly changing and there is an absence of continuity of employment such that there is a lack of safety of temporary workers;
- how to improve the quality of supervision, with particular regard to the safety of temporary workers; and
- whether there is a need for statutory provision to enable local fire services to have access for familiarisation exercises to ships whether for repair or upgrading, for a period in excess of seven days.

Previous discussion

6. At the 45th meeting, ways of promoting improved working practises in confined spaces were discussed, these included:

- holding a series of seminars addressing the issue of working safely in confined spaces;
- the development of a self audit tool; and
- the use of monitoring devices to detect dangerous atmospheres.

SEMINARS

7. The Secretariat agreed to report back to the 46th meeting with proposals for seminars. It is proposed that there might be 3 seminars to be held in Scotland, the north of England and the south of England in the spring/summer of 2003. The seminars could be hosted by member yards for which they may wish to charge a nominal fee to cover their costs. Speakers could include representatives from:

- the HSE covering the legal requirements,

- member yards providing examples of good working practices for confined space rescue, confined space training etc.
- the MoD providing details of the stretcher they use for confined space rescue;
- providers of training in confined space work detailing what they consider the key issues to be; and
- providers of personal gas monitors advising on the range of monitors available and how they should be used.

8. To reduce travelling costs, different speakers may be needed for each seminar. It is proposed that the seminars be open to member and non-member shipyards and their contractors although numbers may have to be limited.

AUDIT TOOL

9. A draft audit tool based on the Glomar Artic incident has been developed to assist member yards in assessing whether they have adequate arrangements in place to prevent a similar incident happening in their yards. This is enclosed as a separate document “Safe work in confined spaces – an audit tool.

MONITORING DEVICES

10. A variety of personal gas monitors are available which can detect a variety of different gases including flammable gases (methane, propane etc.), toxic gases (hydrogen sulphide, carbon monoxide, nitrogen dioxide etc.) and oxygen.

11. Monitors are available from a large number of suppliers including:

- Shawcity Ltd (tel. 01367 2412675 <http://www.shawcity.co.uk>)
- Unidata (tel. 0114 2626800 <http://www.unidata-europe.co.uk>),
- Zellweger Analytics (tel. 01202 676161 <http://www.zelana.com>),
- Scott Instruments (<http://www.scottinstruments.com> UK supplier Anachem Ltd tel. 01582 747502) and
- Crowcon (tel. 01235 553057 <http://www.crowcon.com>).

The above is for illustration purposes only and is not an endorsement of the products sold by these companies. Other suppliers of personal gas monitors can be obtained by searching on the internet using the search phrase “personal gas monitor.”

FURTHER ADVICE ON WORK IN CONFINED SPACES

12. Advice on working in confined spaces is available on the internet at several different locations:

- HSE's website at: <http://www.hse.gov.uk/spd/frameset/spdconf.htm> (includes access to a copy of the Confined Space Regulations) and <http://www.hse.gov.uk/pubns/indg258.pdf> ,
- the website of Total Access, Staffordshire, who provide equipment and training for confined space work (see: <http://www.totalaccess.co.uk> tel. 01785 850333),
- the website of the Fire Service College, Gloucestershire who provide training on confined space work (see: <http://www.fireservicecollege.ac.uk/datasheets/Cscp-data.htm> tel. 01608 651788),
- Expert Ease International who provide guidance on working in confined spaces at: <http://www.confinedspaces.com> and
- Evolve International Safety Training, Aberdeen tel. 01224 724008 <http://www.evolve-training.com>

The above is for illustration purposes only and is not an endorsement of the products and services sold by these organisations. Guidance and training on working in confined spaces is available from a wide variety of different organisations who can be located by searching on the internet using the search phrase "confined spaces training UK. "

ACTION

13. Members are asked to:

- note the recommendations made by the Sheriff and to discuss their thoughts on these recommendations;
- note the proposals put forward for the seminars and to discuss their thoughts on the proposals, including whether they feel the seminars would be beneficial, whether they would be willing to host a seminar and their thoughts on the proposed speakers; and
- read the audit tool for safe work in confined spaces and to discuss their thoughts on this including the potential value of the tool and whether it can be improved.