



## MARINE INSTITUTE

Canadian Association of Petroleum Producers

403 235 Water Street,

St. John's, NL

Canada, A1C 1B6

November 13th 2009

Dear Mr. Barnes

We are pleased that your review team determined that the BST and BST-R courses taught at the Marine Institute Offshore Safety and Survival Centre met the requirements of the CAPP Standard Practice for the Training and Qualifications of Personnel.

With respect to the suggestions noted for continuous improvement, as noted in our previous correspondence, we believe that it would be useful to schedule a workshop involving all stakeholders at which the various recommendations could be discussed and agreement reached on best practice.

As requested, however, we are happy to provide a response to the suggestions noted and will look forward to further discussion:

*It is suggested that:*

- *how to launch the skyscape be demonstrated*

The launching of the skyscape is explained in a video shown during the classroom portion of the course. We would be happy to discuss this with industry to determine if this sufficiently encompasses the various systems in use. If a launchable skyscape is required to be installed we can certainly give this consideration during our facility upgrade or look at alternative ways in which this could be addressed.

- *individual entry and a team approach to entry of the life raft in the pool should be taught*

Individual entry is taught at the start of the course and the students then progress to a team approach where students use various techniques to assist each other during boarding.

- *the participants be instructed to stand in the openings of the billy pugh and that practice be conducted in this manner*

Two types of Billy Pugh are in use at the OSSC, one is a rescue basket and students are taught how to get into the unit, while the other is used for transfer where students hold on while standing outside the unit. We will follow up with instructors to confirm that all are aware of the correct use.

- *MI consider using high fidelity [HUET] simulator training (Norway and Netherlands)*

MI will consider acquisition and installation of a higher fidelity unit at the next facility upgrade. A proposal has been submitted to the Provincial Government and to the Operators.

It should be noted that close physical fidelity is not essential for training purposes. The fidelity is determined by task analysis which identifies the information required for learning and focuses on the actions that the individual will have to undertake rather than a precise representation of the helicopter environment.

- *the MI include training in the use of fire blankets in the BST course*

Training in the use of fire blankets is not currently included in the BST and BST-R courses. This training can be included if required by CAPP. We would recommend that this be included in the BST course only. Please advise.

- *should occasions arise where abandonment training is not conducted upwind [sea day training] the situation should be explained to participants so that they are aware of the proper procedure*

Discussions on the different emergency/abandonment scenarios takes place throughout the BST/BST-R course. We will augment this element to ensure that the students are aware of all options available when abandoning a platform via, liferaft, lifeboat or direct water entry.

- *the MI continue to actively investigate and pursue measures to reduce any possibility of premature opening of the [lifeboat] on-load hook mechanism as well as any associated measures to reduce and mitigate risk*

MI will continue to follow up on this item and will be happy to discuss a way forward with the CAPP and the Operators. Our most recent response from the Lifeboat supplier is included below for your information:

Bob,

We are now fitting all new boats with the Schat-Harding LHR in your case with MCB 24 it would be the LHR 6 this hook is in compliance with DE52. The new boat we are supplying is to be factory fitted with the LHR 6. DE52 is not a regulation, at this time it's still a recommendation that is on the MSC agenda for May 2010 and if accepted in present format will not be in force until 2012. Your boats are fitted with PrOD HOOKS we are currently reviewing the interface of the LHR 6 with the PrOD HOOK.

Schat-Harding does not supply or recommend the use of FPD Fall prevention devices. The use of FPD requires the FPD to be fitted to the maintenance pendant lug on the hook - this connection is not designed for FPD only for maintenance pendants with empty boat & 3 persons with equipment for service. The use of FPD has not been well thought of by MSC/ SOLAS in terms of connection to the boat or operation during launching as it adds another feature to disconnecting the boats when in the water also FPD do not allow for on load release - couple this with adverse conditions and or file in case of offshore / tanker version systems and you could have a real problem.

All Schat-Harding boats are type approved -this means a certificate is issued by survey authority listing the hooks that may be fitted in the boats - any boat with non OEM 3rd party hooks fitted are no longer certified by Schat-Harding.

Additional note: The TOR hooks currently fitted are flat to flat cam type, but as noted, this is a hook that there are thousands in service and is considered safe based on past performance - the problems with hooks are generally caused by non OEM parts, lack of or incorrect service.

I am away on vacation until Nov 18 will call you later that week to discuss.

Regards , Colin Edwards, Manager & Principal Engineer. Schat-Harding Inc.

As noted above, at this time there is not a hook available which will interface with the PrOD system. We will continue to follow up and will address as soon as possible.

- *the MI do a more thorough accident investigation using a root cause analysis technique to identify ways to prevent the repetition of accidents*

All incident and near misses at OSSC are reported on incident reports which are reviewed by the Manager Operations and Administration to determine cause/corrective action and/or other follow up required. A decision is taken at this time whether a formal root cause analysis will add value and if so will carried out. All incident reports are subject to secondary analysis by the Operations and Administration committee, comprised of all OSSC managers, as well as by the OSSC Occupational Health and Safety committee – again if an incident indicates that a formal root cause analysis will add value then this will be undertaken.

In the specific incidents identified, a formal root cause analysis was determined to not add further value. There has not been any reoccurrence of the incidents. We will continue to monitor incidents and near misses and will undertake root cause analysis where appropriate. The Manager Operations and Administration, the manager responsible for monitoring of and action related to safety incidents has recently completed a course in advanced root cause analysis.

- *that MI consider implementing a formal English as a Second Language test,*

We are having some trouble understanding the intent of this recommendation. Is it intended that ESL testing be incorporated into the BST/BST-R course? This would add several hours duration to the course. As part of Memorial University, we do have access to ESL testing services, if required by our clients.

Our approach to instruction is that we maintain a low instructor student ratio in the classroom and during practical exercises. If a student has any issues which would impact on his/her ability to complete the training course including having difficulty understanding English it would be noticed and brought to the attention of the administration for remedial action as appropriate.

- *that MI should further investigate whether the difference in HUET versus the helicopters flown offshore (i.e. seat belts, seat backs & window size) warrant a change in HUET (note: changing seat belts and seat backs is being undertaken by the MI*

As noted in earlier response, close physical fidelity is not required for training purposes.

Nevertheless, we have developed a prototype seat which is currently undergoing testing. We need to ensure that we do not introduce elements to the exercise which would negatively impact student safety.

Regarding the windows, we currently have installed three push out windows sizes 480mm\*380mm, 480mm\*400mm and 650mm\*470mm. The windows on the Sikorsky 92 are 508mm \* 422 mm and the emergency exit is 915mm\* 610mm.

We believe that the windows are sufficiently representative of the Sikorsky helicopter window and emergency exit and being smaller do provide students with an enhanced challenge within a risk managed environment.

As previously noted, we look forward to further discussions aimed at continuous improvement of the BST, BST-R courses.

Sincerely



Robert J. Rutherford