Topic 1: HUEBA

1.9

ORIGINAL

CANADA-NEWFOUNDLAND and LABRADOR OFFSHORE PETROLEUM BOARD

CANADIAN ASSOCIATION OF PETROLEUM PRODUCERS
MAR 15 2007

March 13, 2007

Mr. Pierre Alvarez
President
Canadian Association of Petroleum Producers (CAPP)
Suite 2100, 350 7th Avenue S.W.
Calgary, Alberta
T2P 3N9

Dear Sirs:

Re: Helicopter Escape Breathing Apparatus

I recently became aware of this initiative commencing, I believe around 2000, but still unresolved. The Canada-Newfoundland and Labrador Offshore Petroleum Board places the highest priority on safety, and believes that the introduction of this additional safety equipment could help to make helicopter transport safer for all our offshore workers.

I would like to receive, at your earliest convenience, an update on the status of this initiative, along with a target date for its implementation.

Yours truly,

Max Ruelokke, P. Eng.
Chairman & CEO

Fifth Floor, TD Place, 140 Water Street, St. John's, NL, Canada A1C 6H6
Telephone (709) 778-1400 Fax (709) 778-1473

Topic 1: HUEBA

1.10

1020

CAPP

CANADIAN ASSOCIATION
OF PETROLEUM PRODUCERS

May 22, 2007

Mr. Max Ruelokke
Chairman and CEO
Canada-Newfoundland and Labrador Offshore
Petroleum Board
Fifth Floor, TD Place, 140 Water St.
St. John's, NL
A1C 6H6

Dear Mr. Ruelokke:

Re: Helicopter Escape Breathing Apparatus

Further to your meeting during the week of April 18th in Calgary with Mr. Brian Maynard of the Canadian Association of Petroleum Producers and in response to your letter to Mr. Pierre Alvarez dated March 13, 2007, I am writing to provide you with an update on the status of the implementation plan for the compressed air Helicopter Underwater Escape Breathing Apparatus (HUEBA).

The implementation of the compressed air HUEBA for offshore East Coast personnel is estimated to begin during the 4th Quarter of 2007, subject to the completion of the following tasks:

1. CAPP continues to work with the Marine Institute and the Survival Systems Training Limited to prepare for the delivery of the in-class and in-pool HUEBA training which is scheduled to coincide with the delivery of the modified survival suits;
2. CAPP's medical advisory sub-committee is revising the CAPP *Medical Assessment for Fitness to Work Guideline* to incorporate the HUEBA associated amendments as well as appropriate changes to medical screening and status of health sections;
3. the incorporation of the HUEBA training component in the CAPP Standard Practice for the Training and Qualifications of Personnel is almost finalized and will be completed for the next Standard Practice revision date, December 2007;
4. the development of the HUEBA Standard which includes the technical aspects, the course standard, the course syllabus, and the instructor pre-qualifications has begun and is expected to coincide with the implementation date;
5. the development of the stakeholder communication plan and its various elements such as two presentations (management and personnel), the HUEBA notification process map and the FAQ sheet is ongoing;

2100, 350 – 7th Ave. S.W.
Calgary, Alberta
Canada T2P 3N9
Tel (403) 267-1100
Fax (403) 261-4622

403, 235 Water Street
St. John's, Newfoundland
Canada A1C 1B6
Tel (709) 724-4200
Fax (709) 724-4225

Email: communication@capp.ca Website: www.capp.ca

6. in addition, CAPP is facilitating various other tasks such as the training video development, consideration for interim voluntary HUEBA training, proper administrative forms such as release forms, medical exemptions and acknowledgment forms, as well as future considerations such as a training competency assessment program;
7. CAPP has recently received confirmation from Transport Canada that the transportation of the safety boxes and the compressed air equipment does not require TC approval or transport of dangerous goods permits.

As you can determine from the tasks above, we have been diligently working towards the completion of the various components necessary to ensure that this new HUEBA safety device is implemented appropriately and efficiently.

CAPP assures you that we have placed the timely implementation of this important device for offshore personnel as a high priority and when all is in place to proceed in a safe manner, we anticipate a seamless and smooth transition.

We value any questions or comments that the C-NLOPB may provide on any aspect of the implementation plan. As we have done throughout the process we will keep both Boards' Chief Safety Officers informed of progress at regular intervals.

Sincerely,

R. Paul Barnes

Paul Barnes
Manager, Atlantic Canada

Cc: Ms. Diana Dalton, CNSOPB
Mr. Pierre Alvarez, Canadian Association of Petroleum Producers
Atlantic Canada Safety Sub-committee
HUEBA TF

Topic 1: HUEBA

1.11

MEETING DATE February 2, 2009 (10:00am – 4:00pm at the CAPP Boardroom in St. John's)

COMMITTEE HUEBA Task Force – Operators Meeting

NOTE TAKER [redacted]

ATTENDEES

[redacted] ExxonMobil (Chair)
[redacted] Petro-Canada
[redacted] Husky
[redacted] Husky
[redacted] Husky
[redacted] StatOil Hydro (first half)
[redacted] EnCana
[redacted] CAPP

Meeting Scope
The CAPP Atlantic Canada Executive Policy Group directed that implementation of a compressed air Helicopter Underwater Escape Breathing Apparatus (HUEBA) continue however, final approval would be reserved until a training and communications plan had been completed and approved by them. Operators on the HUEBA Task Force therefore, met to brainstorm and assess options for the training and communications aspects of implementation. Priorities for discussion included the training plan and training objectives, communications plan, frequently asked questions and a review of the 2005 EBS (emergency breathing system) risk assessment.

Sections 1 – 7 below summarize the discussion regarding the training aspects of HUEBA

1. Helicopter Underwater Egress Training (HUET) Training
Operators discussed whether, and how, to revisit the option of ultimately progressing the training on the HUEBA into the HUET. It was agreed that for the present the priority will be to focus on implementing the device and including it in training at surface only rather than extending resources to a review of the HUET option. There is interest in asking the question at a future date; however, when and what work will be required to assess that option will be better understood after the device is implemented.

Action item 1.1: After implementation period (8 weeks in NL) operators to review the implementation process and consider whether a mechanism needs to be established to review the option of progressing HUEBA training into the HUET.

2. Heliport HUEBA Briefing During Implementation Period
Operators felt that the most important aspect of the implementation with respect to initial training is to have trained people at the heliports for all flights during the implementation period (8 weeks in NL). These individuals must be an expert on the HUEBA and its fit on the suit and would be required to demonstrate the device and its usage to all workforce personnel. It was felt that the most ideal people for this would be Helly Hanson (HH) representatives (options, should HH not be available, included a trainer from the local training institute or a manufacturer rep).

3. Training Video

All present agreed that the SSTL HUEBA training video (approx. 16 minutes in duration) developed in 2005 is no longer appropriate for the training and implementation process intended today. The SSTL video remains available to operators who have the right to edit as they see fit but the video will play no role in the implementation of HUEBA. Further, if it is considered for use caution is recommended with respect to the messaging that currently forms its content. Many aspects of the video portray the use of the device inconsistently with industry's intention, there appears to be too much emphasis on the risks given what is known as a low risk probability, and the video does not take into account accurate training processes that occur at the training institutes presently.

Video training at the heliport is to consist of a 2-3 minute long HUEBA segment to be spliced into the video currently shown at the heliport. This segment will be the same in NS and NL and will be developed by HH. The development of this segment is to be coordinated between HH, industry and helicopter companies. The content of the HUEBA component of the heliport video must encompass the following:

- how to locate the device on the suit (land-marking)
- how to deploy it (activated by breathing)
- how to purge (both ways)
- to maintain continuous breathing while surfacing
- how to read the gauge and conduct a visual inspection (with indication that purging the device is not to be conducted and any cautions in handling the device)

Action item 3.1: [redacted] to immediately initiate discussions with HH, CHC and Cougar and to coordinate a meeting between these organizations and operators to develop the video content

4. Heliport Process

1. Arrive, check-in agent to identify whether this is the first time flying with the device*
2. Suit provided with HUEBA installed
3. HUEBA briefing/demonstration by HH rep during implementation period (8 weeks in NL) or by trained staff or champion as needed post-implementation phase
4. Video containing HUEBA segment
5. Visual check by personnel as per demonstration/video instruction

Departure from installation will be a similar process but no HH HUEBA debrief (heli-lounge staff will be trained to conduct HUEBA briefing if requested, install device on suits and answer HUEBA questions). Implementation will occur such that all personnel will carry the HUEBA for the first time departing from shore, not from the installation. Note: medic (or other designated individual at heli-lounge offshore) will inspect and 'turn on' the device in preparation for departure and turn off on arrival.

* Discuss with heliport staff the best approach to identifying and possibly recording whether personnel arriving at the heliport will be carrying HUEBA for the first time (potentially an added check mark to the form completed upon arrival) to ensure that these individuals receive a HUEBA briefing (during the implementation period this will occur for every flight and be

conducted by a HH representative, after the implementation period there will be staff trained at the heliport to conduct the briefing as needed).

Action item 4.1: Discuss heliport process with helicopter operators at or prior to next HUEBA TF to identify any issues - [redacted] to take the lead in discussions with heliport staff in their respective jurisdictions and ensure coordination between jurisdictions to maintain consistent approach.
Action item 4.2: Revision of Heliport Process schematic (to be completed by the editor of the Implementation Guide)

5. Stand Alone 3-hour HUEBA Training
A voluntary stand alone 3-hour HUEBA training module was felt by those present to be impractical to encompass within the implementation plan. However, operators must still be able to avail of such a course. A training objectives document will be developed for training institutes to use to prepare a course; objectives were brainstormed and are listed below. Operators who wish to use the course would work directly with the training institute to coordinate the availability of the course. An additional option is to suggest that training institutes consider opening the HUEBA portion of the regular basic safety training courses up to one or two additional trainees on an as-needed basis.

HUEBA Training Competencies (to be incorporated into BST, BST-R, OSI & OHS)
Lecture

- familiarization with the HUEBA components, maintenance & checks
- safety (handling of device, etc.)
- science (Boyle's law, divers reflex & cold shock)
- technical aspects (how much air, how long it lasts on average, etc.)
- land-marking & when to use
- discuss nose plug/mask connected with HUEBA use
- breathe – how, precautions (air embolism - breathe when surfacing)

Practical

- land-marking (consider including sitting in a chair with 4-pt harness engaged)
- clear underwater (both ways)
- breathe in air & water (drain cylinder)
- remove from dust cover & clear underwater
- disorient/(roll?), locate, remove, clear and breathe while submerged

A suggestion was made to develop a requirement of wearing the HUEBA (or an empty HUEBA) during normal HUET exercises. Benefits of this approach included the potential to build confidence in the workforce that the device would not physically impede escape. Cautions included creating the situation in which the trainees would be wearing but unable to use the device and it was unclear what type of reaction might be received to this. Operators felt it important to discuss this scenario with training institutes in order to better understand implications and benefits of such an exercise. It was suggested that a solution could be to include a practical exercise outside the HUET that requires the trainee to sit in a seat in the suit with a 4-

point harness engaged and learn to locate and deploy the HUEBA from this position (potentially pool side).

Action item 5.1: [redacted] to re-draft the Training Objectives for review by HUEBA TF
Action item 5.2: [redacted] to flag the request for advice to TIs prior to next HUEBA TF such that they can be prepared to address (refer to sec 5 below)

6. HUEBA Training Exemptions

Operators considered whether there needed to be any thing specific defined for HUEBA training exemptions. It was agreed that nothing additional to the existing process individual operators have in place with the regulator is required for HUEBA training. There are no additional medical criteria for training on the HUEBA in the manner that will be implemented (i.e. at surface), thus the existing CAPP Medical requirement for training and working offshore apply without additions. Further, the HUEBA component of the safety courses is not a pass/fail criterion. The CAPP Standard Practice for the Training and Qualifications of Personnel and the individual operator agreements appropriately address HUEBA.

Action item 6.1: operators to review their exemption agreements as per discussion in sec 6 below prior to next HUEBA TF meeting

7. Additional Training

Additional training to that forming the implementation plan (i.e. heliport video and demonstration at the heliport) is to be left to the discretion of individual operators (though NL operators encouraged to develop any additional training requirements consistently given the shared flights). Options suggested include:

- identifying 'champions' amongst the crew who would have additional training on the HUEBA (i.e. the stand-alone course discussed in sec 5 above) such that there would be a specified number of individuals available per crew shift with the additional training to assist any other personnel with questions, concerns or difficulties of any kind;
- ensuring that a senior safety officer be available to travel with anyone new to the jurisdiction after the initial implementation period (8 weeks in NL);
- ensure that the training institutes have a stand alone HUEBA course readily available to operators who chose to have workforce personnel trained (note: training objectives have been defined for such a course, refer to sec. 5 above)

8. Other Training & Implementation Aspects (no order of priority)

- Helly Hanson's role: to train the heliport staff for the handling and transferring of the device (including ensuring heliport staff know to communicate to end users how to handle the device); to undertake annual maintenance program; develop video component for HUEBA; ensure heliport staff are adequately trained to provide HUEBA briefing after implementation period (8 weeks in NL)

Action item 8.1: [redacted] to communicate with HH reps in each jurisdiction regarding their role (as outlined in sec 8 below) – connected to action item 3.1

- Concern has been raised that some trainers are expressing frustration in their communication about the HUEBA review process and training in a way that is not necessarily positive or confidence building in approach (extends into all aspects of basic safety training). It needs to be communicated to training institutes that they must ensure the messaging to the workforce is consistent and clear and avoids all personal opinion during communication with and training of workforce personnel.

- It is important to ensure that the trainers who will be responsible for HUEBA training are familiar with the aspects of using and training on the device (e.g. risk of choking while purging).

Action item 8.2: All operators to consider raising above 2 bullets in discussions with TIs also, consider raising as a general concern at the next full HUEBA TF meeting.

- Whether or not to designate 'HUEBA trained' on the basic safety training course certificates was discussed. There was agreement that this is not needed since the HUEBA training, though a required component of the courses, is not a pass/fail component. Thus trainers are to undertake all efforts to ensure trainees complete this component as with other aspects of the courses but an individual will not be failed on an inability to complete the HUEBA component alone. Pass or fail of a course or competency is defined and managed by the training institutes.

- Operators to check the number of HUEBA devices available against their requirements (particularly those to be housed offshore); consider the routine maintenance schedule (annual) and the possibility of a device becoming damaged or regular wear and tear (should be same number as PLBs)

Action item 8.3: Operators to confirm numbers of HUEBA required

- CHC & Cougar took the lead in consultations with Transport Canada and received Transportation of Dangerous Goods exemptions for carrying HUEBA within the purpose-built containers. Confirm terms of exemption still valid / not expired.

Action item 8.4: Discuss TDG exemption with helicopter companies at next HUEBA TF meeting

- Operators felt that it would be important for those engaged in the implementation to train on the device as per the training objectives outlined above (sec 5). This would ensure those individuals engaged in communicating the implementation of the device to the workforce are well versed about the device in order to address any fear, concerns or technical questions received during the discussions with workforce personnel. Further, this would be beneficial for operators to ensure that the training on the HUEBA device fits appropriately with the training objectives and confirm that the training received on the device results in the desired competency.

Action item 8.5: All operator reps with a significant role in communication about HUEBA with the workforce are advised to train on the HUEBA device at a training institute – NL operators to coordinate this with MI-OSSC and NS operators to coordinate with SSTL

9. Communication Plan

The CAPP Atlantic Canada Executive Policy Group (EPG) directed that the communications plan and messages regarding HUEBA be clear and consistent across both jurisdictions. Further, it was agreed that the communications plan and messaging must be finalized before any details are communicated to the workforce. Any plans to address HUEBA at upcoming workforce meetings need to be very high-level until the EPG has approved the communications plan. The communications plan will provide messages about HUEBA and a series of tools to be used in updating management, stakeholders, the workforce, etc. The messages to be communicated are captured within the Frequently Asked Questions document (refer to discussion in sec 10 below). This document is to be disseminated throughout the HUEBA TF and within operators' management levels. The 'top 5' questions anticipated to be asked by the workforce will comprise the materials used to brief them (materials listed below).

Tools/materials suggested include the following:

Management

- Frequently Asked Questions
- PowerPoint presentation

Workforce

- PowerPoint presentation
- posters, flyers
- quick reference card (to include: purpose of device, anticipated top 5 frequently asked questions, how to locate, how to use, how to perform a visual check)
- short frequently Asked Questions document (more likely to be incorporated into posters & quick reference rather than to have as a separate document)

Communication is expected to follow similar processes as those used for the introduction of the new suits. Once implementation is imminent there will be materials available and presentations made at the workforce committees.

Note: there is a contractors' forum planned for Feb 12th, operators intend to advise of the imminent implementation of HUEBA (at a high level) at this meeting.

Action item 9.1: [redacted] to finalize the FAQ document as per the edits agreed to on Feb 2 and circulate to the HUEBA TF for review and discussion at its next meeting

Action item 9.2: [redacted] to update the management & workforce presentations and circulate this to operators for review

Action item 9.3: All to review the communications tree (provided in advance of Feb 2 meeting) for completeness

Action item 9.4: [redacted] to coordinate the development of quick reference card & posters (in conjunction with [redacted])

Action item 9.5: [redacted] to update the CAPP HUEBA Implementation Guide

10. Frequently Asked Questions

The Frequently Asked Questions (FAQ) was reviewed and edited. This will form a key communications tool. It will be provided to the HUEBA TF for dissemination to all individuals with a role in communicating with the workforce. It is meant as a reference listing of answers to questions that may be asked by those expected to carry HUEBA. It is anticipated that most questions will be asked at the heliports and training institutes, it is key therefore that the individuals at these locations thoroughly review the FAQ. The intent is to ensure that those being asked questions provide consistent answers. The FAQ is a living document and as questions are received that are not on the FAQ list they will be addressed and captured. The primary (top 5) questions anticipated to be asked by the workforce will be incorporated into the material used to communicate with them (i.e. quick reference card, presentation, posters, etc.).
(refer to action 9.1 above)

11. Review of 2005 EBS Risk Assessment

A Risk Assessment was conducted by operators and stakeholders, lead by Petro-Canada, in 2005 on the implementation of EBS (at the time HUEBA was referred to as EBS – Emergency Breathing System). This risk assessment and was reviewed and all recommendations made for implementation in 2005 addressed and responded to. A document will be produced that will be appended to the 2005 report that depicts the response to each recommendation. Operators agreed that all recommendations have been appropriately addressed and implementation as described above, according to the review of this risk assessment, is appropriate.

Action item 11.1: [redacted] to prepare a document to attach to 2005 risk assessment

12. Items outside of HUEBA TF Scope

Raised for consideration was the debate about the value of training for using the mask provided under the helicopter seat (as is conducted at MI-OSSC) versus considering making the nose plug a more prominent component of the training (potentially a requirement); particularly in connection with HUEBA use. Further, it was asked whether there could be a nose plug attached directly to the HUEBA. The group agreed that this discussion ought to be had at the Training and Qualifications Committee (TQC) as this is an aspect of general training objectives connected to all safety courses requiring HUET. In addition to this there has been significant research undertaken into the effect of a trainee's comfort in the water, and their swimming ability, with their success and confidence in the training. A device, called a swimmer, has been designed to address some of the anxiety experienced by inexperienced swimmers during training by focusing on building capability in the water. This device has been successful in this regard (defined by increased ability to meet training competencies and objectives and thus confidence building in the trainees). It was proposed that this also be communicated to the TQC for consideration/discussion as it may be a valuable build on the required basic safety training.