

Considerations for Phase II – Wells Inquiry

Building a Preventative Safety Culture in the C-NL Offshore Oil and Gas Industry

Submitted April 15, 2011 Submitted by: NLFL President Lana Payne The Newfoundland and Labrador Federation of Labour (NLFL) represents nearly 30 affiliated unions, 500 union locals and 65,000 working women and men in every sector of our provincial economy, including the offshore oil and gas industry.

For 75 years, we have worked to advance the rights of working people, including in the area of occupational, health and safety by advocating for stronger laws and regulations, enhanced enforcement and inspections, safer workplaces, worker health and safety rights and real worker participation and engagement in their health and safety at work.

Our Federation appreciates this second opportunity to make representation to this Inquiry.

As we noted in our Phase I submission, improved health and safety in any workplace, but especially in one like the offshore, means understanding how democratic models in our workplaces can make a difference. It means understanding that workers' rights – such as the right to know, the right to participate and the right to refuse – must be more than rights on paper. They must be supported through strong communication and structures that allow them to be exercised. They must be supported by a powerful and independent safety regulator and through strong, engaged and active joint workplace OHS committees.

It means viewing workers as more than a part of production. It means workers come to the table as true partners in occupational, health and safety and prevention, not as tokens because that is what the law requires.

Of all of our work in the labour movement, advocating for enhanced health and safety is the most important. There is nothing, nothing – not profit or production – more important than ensuring workers come home to their families at the end of the day or the end of their shift. And that should be the foundation of every decision we make.

In this Phase of the Inquiry, interested parties have been asked what matters dealt with by the recent Transportation Safety Board Report into the crash of Cougar Flight 491 should be considered by Commissioner Wells. As well, interested parties have been asked to make recommendations. Our Federation will endeavour to do both.

For our Federation, the TSB report into the crash raised as many questions as it answered. It left us questioning just how regulators do their job; the jurisdictional ambiguity; their relationship with industry; how decisions affecting health and safety are made; how risk assessments are determined; what role does and should Transport Canada be playing. We are extremely concerned with how little information is actually fed back to the workplace Joint Occupational, Health and Safety Committees – undermining the workers' right to know.

It left us questioning just how minor a role the CNLOPB has played in terms of the safety of helicopter transport and how that needs to change, as was recommended in Phase I report of the Wells Inquiry.

The TSB report confirms our Federation's position that there is a systemic problem with respect to offshore safety -16 different factors and causes as identified by the TSB fortifies our position that there is too much self-regulation and not enough inspection, enforcement, and follow-up – not enough vigilance. Regulators play more of an auditing and monitoring role rather than a proactive and vigilant role.

We question how matters are handled and carried out between the helicopter manufacturers and operators. How is compliance enforced or non-compliance penalized? We question the role and responsibilities of those oil companies granted authorization (and the privilege) to operate in our offshore to ensure helicopter transport is as safe as it can be.

The TSB report has also raised the issue of standards and how those standards are set or weakened because of industry "consultation." We saw how industry can influence the setting of lower standards as was the case with the creation of the "extremely remote" provision with respect to the certification helicopters or how industry can delay implementation of important health and safety advancements such as was the case with the EUBAs.

But perhaps the most troubling is how 16 different causes or contributing factors played a role in the loss of 17 lives on March 12, 2009. This raised many questions about protocols, safety culture, reporting mechanisms, how directives are ignored, the lack of enforcement with respect to maintenance directives and the lack of repercussions for companies that do not act on mandatory directives? What does it say about enforcement or the lack of it? What does it say about monitoring and who does that follow-up? What does it say about safety culture when so many things went wrong (unchecked) or contributed to this tragedy and what does it say about the role of the regulators charged with the health and safety of the people who work in the offshore oil and gas industry?

In its February 2011 report into the crash of Cougar Flight 491, the Transportation Safety Board, made several recommendations:

- 1. That the Federal Aviation Administration, Transport Canada and the European Aviation Safety Agency remove the "extremely remote" provision from the rule requiring 30 minutes of safe operation following the loss of main gearbox lubricant for all newly constructed Category A transport helicopters, and after a phase in period, for all existing ones;
- 2. That the Federation Aviation Administration assess the adequacy of the 30minute main gearbox run dry requirement for Category A transport helicopters;

- 3. That Transport Canada prohibit commercial operation of Category A transport helicopters over water when the sea state will not permit safe ditching and successful evacuation;
- 4. Transport Canada require that supplemental underwater breathing apparatus be mandatory for all occupants of helicopters involved in overwater flights who are required to wear a Passenger Transportation Suit System.

Our Federation supports these recommendations and has written the Prime Minister of Canada and the Minister Responsible for Transport Canada demanding these recommendations, in conjunction with those made by Commissioner Wells in the Phase 1 report, be adopted in their entirety. Although we would recommend that mandatory maintenance directives or Alert Service Bulletins be included in Recommendation # 7 of Phase I which notes that information about the "airworthiness directives and incident reports should be promptly communicated to workers/passengers by notices posted on the website of the helicopter operator."

While the recommendation notes that these bulletins are excluded because they are maintenance-related, the TSB report confirms that effective maintenance and safety go hand in hand and workers have a right to know of such matters. Indeed, the TSB has argued that the failure to do proper maintenance contributed to the crash of Flight 491. We would also suggest that such bulletins are posted by the CNLOPB on its website and communicated to the workplace JOHSCs.

We also believe the TSB could have gone further in its investigation and analysis by examining in more depth the role of Transport Canada in this case and in particular with respect to its audit, enforcement and communications responsibilities. For example, the TSB report (section 1.17.2.5) discusses the oversight role of Transport Canada. This section of the report notes that "oversight is conducted regularly through inspections, audits, meetings and phone contact. Cougar Helicopters typically undergoes two separate audits, carried out by a team of TC inspectors, on either the operational or maintenance areas of the company. Cougar Helicopters is also audited by the oil companies under which it is under contract. Since 2007, Cougar has been subjected to 16 external audits, as well as its own internal audits."

And yet no one picked up on the fact that a mandatory directive from the manufacturer with respect to enhanced visible inspections had not been carried out. Our question is was Transport Canada made aware of the directives and bulletins from Sikorsky? If so, what protocols, if any, were put in place to see if these directives were being followed? And if TC was not made aware of them, then this needs to be remedied. Otherwise how will the directives be picked up on in the audits conducted by TC staff?

In addition, when the TSB was called on in the fall of 2008 by the Australian Civil Aviation Safety Association (CASA) to oversee the examination/investigation of the fractured studs from the VH-LOH, it found that one of the possible causes of the Australian incident "was galling of the titanium studs."

Further analysis by Sikorsky confirmed this was more than a possibility, but was rather the cause. As a result of this involvement by the TSB, were any internal recommendations made to Transport Canada? Was any of this information passed along to audit officers? Were there any checks and balances to ensure that the operators were actually complying with the orders? Or was it merely left in the hands of industry in the form of "self-regulation?"

Phase II of this Inquiry has asked that we deal with matters raised in the TSB report which is why we have the above questions. In addition, we would like to make the following comments, raise the following issues and put forward the following recommendations for consideration.

While we do not have any confirmation of this matter, we do understand that discussions may be taking place with respect to the resumption of night flights based on certain modifications to the S-92s.

With respect to the matter of night flights, our Federation believes there should be a permanent moratorium on them. The evidence is clear, not only is a rescue that much more difficult after dark, but the risk associated with ditching poses much too great of a risk for workers. The risk is quite frankly unacceptable.

As well, the lack of a minimum 30-minute dry-run capability adds to the risk workers are exposed to all the time, but even more so at night-time flight.

The confidence of workers and the public in the CNLOPB is still quite low, and much is required in order to restore an adequate level of confidence including the establishment of a separate, independent safety agency with helicopter expertise.

Despite the outstanding analysis and recommendations contained in the Phase I report, there appears to still be very little proactive action being taken by the regulator.

Long before the TSB report, the CNLOPB, based on concerns raised in Phase I of the Wells Inquiry, should have and could have imposed a ban on helicopter transport when sea states prevented a safe ditching or evacuation. The Board did not. This speaks to the difficulty this regulator is having in terms of changing it ways and developing a proactive safety culture as stressed in throughout the Phase I report.

Commissioner Wells noted in his Phase 1 report that "the matter of operational limitations on transport helicopters is...easier to regulate. Winds, sea states, darkness, and lack of visibility are factors which can be evaluated to a considerable extent before flights depart to or from the offshore." Commissioners Wells continues by stating that "helicopters cannot and must not fly in weather which compromises the safety of passengers either in the air or in a possible ditching." (page 204, Wells Inquiry, Phase I)

Commissioner Wells pointed out that "sea states seriously affect the survival times of any persons who survive a helicopter ditching or crash and can have a serious impact on the ability of a downed helicopter to stay upright." (page 60 Wells Inquiry, Phase I)

Phase I Recommendation 9 deals with the issue of operational sea states and visibility and the role of the regulator to set goal-oriented objectives. A proactive regulator ought to have banned flights in sea states that prevented safe ditching and evacuations. It did not.

Instead, it awaited the report of the TSB which in the strongest possible terms proposed that "if a helicopter has to ditch in rough waters, its Emergency Flotation System should keep it afloat long enough for everyone to evacuate safely. If it can't do that - if a helicopter isn't up to the task - it shouldn't be operating. Period."

And even then it was the oil and gas operators that responded to the TSB recommendation, not the CNLOPB. Despite the incredible scrutiny, the outstanding Phase 1 Inquiry report, and the TSB investigation, it's as if the CNLOPB still does not get what its job is to be. It's as if it does not understand the difference between proactive governance and reactive governance. Proactive governance saves lives. Reactive governance means it is too late.

It is all the more reason for both levels of government to act upon the recommendations contained in the Wells Inquiry Phase 1 report, including what Commissioner Wells called his most important recommendation, # 29: the creation of a powerful, independent Safety Regulator.

ISSUES FOR CONSIDERATION:

1. Stunning # of contributing factors and causes\

Our Federation was struck by the stunning number of causes and contributing factors to the crash of Cougar Flight 491 - 16 in total - found by the TSB. The TSB noted that if just one of those factors were different, 17 workers may not have died March 12, 2009. If two of those factors had been different, imagine the increased possibility of preventing this crash or the possibility of a higher rate of survival.

The entirety of what went wrong confirms a bigger and more systemic problem in offshore helicopter safety including the lax regard by the helicopter operators of mandatory directives from Sikorsky, the helicopter manufacturer, and the failure by the manufacturer to send very clear directives that contain the very real possible consequences if action is not taken.

Our question is why were copies of these mandatory directives not provided to the workplace JOHSCs? Why were these directives not posted to Cougar's website? To the CNLOPB's website? To Transport Canada's website?

This would certainly have provided another layer of pressure to comply with the orders. In addition and quite simply, according to our laws, workers have "the right to know" and the "right to participate" and the "right to refuse" dangerous work. They can not exercise their right to participate, to have a say, or their right to refuse, if their right to know has been violated. And what of the oil companies - those authorized to operate in the offshore. Are they informed of such matters? And if so, what of their follow-up?

We recommend more clarity and disclosure with respect to mandatory directives and Alert Bulletins. We recommend that the consequences of not acting are clearly conveyed to helicopter operators, to workplace health and safety committees, and on public websites. We recommend that the regulators involved follow-up and ensure such directives are being complied with and that there are severe repercussions for noncompliance. It must be made clear that it is the CNLOPB's job to enforce such matters.

Workers offshore need to know who is in charge and that there is a clear path of jurisdictional responsibility.

The TSB makes the following comments about the "just culture" of safety at Cougar Helicopters (page 50). "The safety program at Cougar Helicopters is very visible and all the employees of the company from the owner on down actively promote safety in all its activities." Workers, says the TSB report, are encouraged to report any safety issue.

But actions of Cougar in this case clearly highlight that their safety program is lacking, as it appears are the safety programs of many helicopter operators who failed to act on the October 2008 notice and the November 2008 mandatory directive from the manufacturer which highlighted the problem with the titanium studs and recommended an "enhanced" visible inspection. That enhanced inspection called for the use of a 10x magnifying glass to examine the studs during oil filter repairs and to look for galled, broken, missing or flattened threads. It's not like the studs had to be examined under a microscope in some far off laboratory. This was a pretty simple and straight forward procedure.

This enhanced inspection became mandatory in November 2008. In January 2009, Sikorsky followed up with an Alert Service Bulletin. That Bulletin, in addition to the enhanced visible inspections, required the replacement of all MGB filter bowl titanium mounting studs within 1,250 flight hours or one year.

This, of course, gave the absolute wrong message to operators. It lacked urgency. The message: there is plenty of time to get this done. It also failed to convey the serious consequences of inaction.

Despite that, it does appear as if the earlier directive, regarding enhanced visible inspections, was all but ignored by the operators. In addition to the written directive, this matter was conveyed to helicopter operators through Sikorsky's webcast meetings.

This apparent failure of Cougar - to act on the Safety Advisory SSA-S92-08-007 from Sikorsky issued in October 2008 and the subsequent November 2008 AMM Revision 13 following the investigation of what caused an S-92 to make an emergency landing in July 2008 (Australian incident/occurrence) when it started to lose oil from the main gearbox - raises a number of serious questions.

For example, why was the enhanced visible inspections directive not followed?

It is noted by the TSB that there were opportunities in which to act on the enhanced visible inspection directive as the helicopter underwent possibly as many as three filter changes between October/ November 2008 to the time of crash in March 2009?

What protocols are in place to ensure compliance of such directives? And again what role, if any, does the CNLOPB play? We recommend that it should be taking a more involved and proactive role in ensuring such directives are executed. What is the role of Transport Canada in picking up on these matters during its audits and inspections? Is Transport Canada made aware of such directives and if so what role does the regulator play in ensuring compliance?

It is appropriate that in this Phase II report, that the TSB's report section entitled "Conclusions: Findings as to Causes and Contributing Factors" be examined by this Inquiry. For example: Finding #5 states that Cougar Helicopters did not effectively implement the mandatory maintenance procedures in Aircraft Maintenance Manual (AMM) Revision 13 and, therefore, damaged studs on the filter bowl assembly were not detected or replaced.

Again what protocol is in place for dealing with and following up on such directives from the manufacturer? Clearly, as is pointed out in the TSB report, had the enhanced visible inspections been performed the galled studs would have been detected and replaced as per the directive. Are the directives incorporated into the helicopter operator's safety plan? If not, why not?

It is the position of the Federation of Labour that the CNLOPB has a clear role to play here in terms of ensuring such directives and Service Alert Bulletins are acted upon in future.

The TSB did find galling on the threads of helicopter flight 491 as well as on some of the studs removed from other Cougar helicopters. This begs the question as to why the enhanced visible inspections were not performed. The TSB found that the galling would have been detected using 10x magnification as recommended by Sikorsky and on some

studs the galling would have been detected even without the enhanced visible inspections. (Section 1.18.3.8 - TSB report) What is Cougar's protocol for acting on mandatory directives from the manufacturer? And from a regulator's perspective how is compliance of directives monitored?

If as pointed out in the TSB's report (section 3.15) the general consensus among the S-92 community was that this issue of the maintenance of the main gearbox was not urgent, then wouldn't the manufacturer have some understanding that the so-called S-92 community of which it is obviously a part of was not taking it's mandatory directives seriously. We assume the manufacturer of the S-92s is part of this community. What action did the manufacturer take to ensure its directives were being followed?

The TSB notes that because enhanced inspections were mandatory since the release of AMM Revision 13 in November 2008, both Sikorsky and the FAA felt the "immediate risk" of reoccurrence had been adequately mitigated and would allow for continued safe operation during the specified compliance period. (Section 1.18.3.7, TSB report)

Very clearly, we are seeing a pattern where risk assessments by both industry and regulators are erring too much on the side of self-regulation and assumption of industry compliance. As well, since the TSB was part of an earlier investigation into the Australian occurrence and uncovered the fact that one possibility for the incident was galling and since Sikorsky then confirmed this through their own analysis, what if anything did the TSB do as a follow-up in this matter? Did the TSB inform Transport Canada of the problem so that it could be picked up during their inspections and audits? Or was once again the matter left up to industry without adequate oversight? Our experience in the labour movement is self-regulation does not work. Regulators must be vigilant; they must monitor, inspect and enforce. Some of the conclusions at the 3rd International Regulators' Offshore Safety Conference, held in October 2010 in Vancouver, referred to government and industry promoting an improvement mentality, not a compliance mentality. Our Federation would suggest we are still far from reaching this goal, when there is such an obvious problem with compliance.

We question whether the protocol and procedures for helicopter operators are sufficient with respect to how they act or fail to act on mandatory directives and Alert Service Bulletins. It is apparent that there is little follow-up from the manufacturer with the operators with respect to whether the directives, in this case, were being followed. How are such mandatory directives enforced? The honour system? How are such directives incorporated into a helicopter operator's safety plan? How are these issues conveyed and communicated to the staff, the pilots, and the passengers? Simply if the directive was mandatory, why was it not followed?

The TSB report noted (Section 2.8) that following the Australian incident Sikorsky identified and mitigated the risk of the galled studs by implementing the AMM Revision 13. However, according to the TSB, *"the communication of the rationale for this revision*

and the guidance in the associated maintenance manual proved ineffective in stressing the potential consequences of non-compliance."

This was not unlike the issue around the "confusion" with respect to the marketing of the S-92 as having a 30-minute dry run capability. (Section 1.18.5.6, TSB report) "There is a perception in some parts of the aviation community that helicopters that meet the certification requirements...will have a MGB which has a 30-minute dry run capability. This perception is fostered by numerous sources such as manufacturers' brochures, websites, magazines and trade journals. Often, these information sources are not verified, or approved, by the applicable aircraft manufacturer."

It appears the manufacturer did little to clear up this confusion among industry once the S-92 was certified under the extremely remote provision.

The TSB report confirms that a powerful, independent safety authority/regulator with helicopter expertise and beefed up resources can and should play a proactive role here – holding industry to account. This is in alignment with a recommendation from the 3^{rd} International Regulators conference which noted that "regulatory regimes function most effectively when a single entity has broad safety and pollution prevention responsibility. Gaps, overlaps and confusion are not in the interest of safety or regulatory efficiency."

2. Certification of the S-92

Since the release of the TSB report in February 2011, there has been much public discourse about the issue of the certification by the FAA of the S-92 <u>without</u> a 30-minute dry-run technology – even though this was to be the new standard for commercial aviation. The FAA had certified the S-92 under the "extremely remote" provision. It is the only helicopter to be certified under this provision.

This extremely remote provision was developed after industry (stakeholders), presumably the manufacturers of helicopters, provided feedback to the FAA after its decision to require that Category A helicopters have 30-minute dry-run time after total loss of lubricant. This was proposed in 1984 as the new standard. The FAA's final rule was published in 1988 and included "unless such failures are extremely remote." This is not defined by the FAA in its rule, but according to the TSB report (Section 1.18.5.1) regulatory documents and industry practices describe those failure conditions as "those not anticipated to occur to each aircraft during its total life, but which may occur a few times when considering the total operational life of all aircraft of the type."

Like the families of the 17 workers who died in the crash of Cougar flight 491 and the sole survivor, Robert Decker, our Federation questions how the S-92 was certified in the first place when even after repairing the initial problems with the main gearbox's cooling system, it still did not meet the 30-minute run dry requirement. If this was to be the new standard in commercial aviation why was an exception to the rule granted, negating the standard?

The 30-minute dry run capability is now 25-year-old technology and yet helicopters operating in the toughest offshore environment in the world, the North Atlantic, do not meet this international best practice. This is not unlike the issues with search and rescue response times or the EUBAs. While higher standards are being practiced in many parts of the world, our offshore is far behind and that is totally unacceptable.

Our Federation is extremely troubled by the fact that more serious action was not taken after the Australian incident/occurrence in July 2008 and the subsequent investigation and findings with respect to the galling of the titanium studs causing rapid oil loss.

This incident completely negated the "extremely remote" possibility.

In other words, no longer was it an extremely remote possibility for the gearbox to run dry of oil. Indeed, the findings by the Canadian engineering firm and the TSB in the fall of 2008 on behalf of CHC – the operators of the S-92 in the Australian incident – highlighted that the possibility of further problems was no longer remote, but considerable, so considerable that the titanium studs were to be replaced. Presumably this was why the manufacturer issued its *mandatory* enhanced visible inspection directive and followed it up with a Service Alert in January 2009.

This Australian incident should have triggered a different reaction from the FAA given it had certified this helicopter, and this helicopter only, under its extremely remote provision. It should have triggered some kind of reaction from Transport Canada. And what of the CNLOPB? Did our offshore regulator even know of this serious safety issue?

Yet the helicopters were not grounded. That did not happen until 17 workers died off the coast of Newfoundland and Labrador, eight months later.

The Australian incident brought to light another serious problem with the S-92's gearbox, a completely separate problem from the one that occurred during the certification simulation tests resulting in the rebuilt cooling valve system.

This should have been enough to send a huge red flag to the regulator. Yet it was not. Once again a regulator, charged with protecting the interests of health and safety of workers and passengers, does not appear to have taken into account in its risk assessment analysis the consequences of non-compliance. There is clearly too much reliance on selfregulation.

This leaves our Federation with even more questions about the role and relationship between regulators and industry. The FAA should have to answer for its decisions and actions. Why did the FAA not take more serious steps in the fall of 2008 when the "extremely remote" possibility was negated by the Australian incident? And what of Transport Canada's role as a regulator of aviation matters in Canada.

Our Federation would agree with the TSB's assessment (Section 2.1) that by focussing on the extremely remote concept, both the FAA and Sikorsky, "lost sight of the purpose of

this rule" of the 30-minute run dry capability. As was pointed out in the report by investigator Mark Clitsome:

"It's important to note that if the rules state that you don't have to pass a test, then you don't have to pass a test. The problem is with the rule. And this hasn't changed. Yes the titanium studs have now been replaced with steel ones, thereby addressing the causes of this specific crash. But the gearbox has not changed. In the event of a sudden loss of oil, there would still only be 11 minutes before the gearbox fails."

So we need to fix the rule. There is absolutely nothing preventing the CNLOPB from requiring a certain standard be met with respect to helicopters used in the North Atlantic – in our offshore. Why can not our regulator require a higher standard? Such standards can be a condition of authorization in order to operate in the C-NL offshore.

As was pointed out by Commissioner Wells in the Phase 1 report the Canada-Newfoundland and Labrador offshore helicopter conditions are as severe or more severe than those elsewhere in the world.

"Those of us with knowledge of offshore waters of Newfoundland and Labrador are aware that the challenge of these waters makes for one of the most difficult operational environments in the offshore helicopter world."

This begs the question of why the S-92 is being used offshore Newfoundland and Labrador when helicopters with the 30-minute dry run capability are available and being used in other parts of the world where sea states and operational environments are not as challenging or difficult.

It also raises the question of what role the CNLOPB has been playing and what role it should play, in conjunction with Transport Canada, with respect to helicopter safety and how will those roles be co-ordinated to ensure the best possible safety protection for workers.

We are also left to question the discussions and the relationship between the FAA, as regulator, and the helicopter manufacturer, Sikorsky. How was the 1,250 hours or one-year timeframe to replace the titanium studs reached?

Is it, for example, the same kind of relationship that resulted in the lack of action with respect to the implementation of the use of EUBAs in the C-NL offshore - a nearly decade-long conversation about underwater breathing apparatuses between the CNLOPB and the oil industry with no real action being taken until 17 workers lost their lives?

Is this a case of what Commissioner Wells describes in his Phase I report as "regulatory capture?" (page 277)

"It has long been known that regulators and those they regulate work so closely together that friendships and close working relationships develop. Common interests and what are sometimes referred to as cosy relationships may unconsciously influence the hard decisions that safety regulation requires. In fact, the safety authority in the United Kingdom advised me when we met that they are always wary of the dangers of regulatory capture, always guarding against it and taking steps to make sure the risk of it is minimized by rotation of personnel to avoid the development of too-close relationships."

Surely it was plain luck that there was not another serious incidence involving an S-92 during the five months between November 2008 when the AMM Revision 13 was issued and March 23, 2009 (11 days after the crash of Cougar flight 491) when the Emergency Airworthiness Directive was issued by the FAA.

During this five-month period, every time the MGB oil filter was changed it was mandatory for operators to carry out the enhanced inspections and to replace damaged studs. They did not.

After issuing its March 2009 directive, Sikorsky requested operators return the studs they removed in order to show compliance with the AD. (This should and could have been part of the original November 2008 mandatory directive to perform enhanced visible inspections as part of a compliance tracking system. Had this been the case and no studs were returned, it would have been an indication to the manufacturer and the FAA that further action was necessary as the operators were in non-compliance.) As it stood, there was no way to ensure compliance of the mandatory directive.

And even when it was requested that operators return the studs, operators were under no "obligation" to do so and comply with the request. As a result, Sikorsky only received 59 studs from various operators.

The story of those 59 studs is chilling. All the studs had different degrees of galling consistent with the number of times the nut was installed and removed. Based on its investigation, the TSB found that it is likely that most, if not all, of the 59 studs returned to Sikorsky would have been subject to inspection at least once during that period of November 2008 to March 2009.

What this tells us is there is a serious breakdown in safety plans for the operators with respect to acting on directives from the manufacturer. It also tells us that we have had a serious regulatory failure. Despite numerous audits, inspections and communications, this issue was not detected.

In addition, the manufacturer appears to have a history of not being as clear or as firm as it should be, consider for example (as referred above) the confusion over the S-92's 30-minute run-dry capability and the failure of the manufacturer to address or clarify this in any real or meaningful way.

And what of the role of the regulators in this mix? Shouldn't the regulator, whether it is the C-NLOPB, the FAA or Transport Canada be charged with the responsibility of follow-up, monitoring and enforcement. And to avoid regulator ambiguity and confusion over who is in charge of what, perhaps the simplest thing in this case is to make the CNLOPB in charge. The CNLOPB should receive notice of such directives and the CNLOPB should ensure the directives are acted upon.

This entire incident reeks of self-regulation. Too much is left up to industry without any accountability by the regulator and in the end to the people who depend on safety being the number one priority.

Once again safety didn't come first.

The compliance time to replace the studs as issued in the Alert Service Bulletin of January 2009 was based on Sikorsky's assessment of the risk and the time it would take to "replace the studs in the field without compromising safety." (TSB report)

This issue of "compromising safety" is not explained. But we are left to question the assessment when after the crash of Cougar Flight 491, the studs in the S-92s were replaced in far less than the one-year compliance time allotted in January of 2009. In this case, the studs were replaced as a condition of being able to resume flying.

The Emergency Airworthiness Directive from the FAA in March 2009 stated that all S-92s were required - before further flight (unless accomplished previously) - to replace the titanium studs with steel studs.

If this could be accomplished just after the crash of Cougar 491, it begs the question why the year was needed in the first place and why it took so long for the FAA to make such an emergency directive. Too little, too late.

3. 30-minute run dry. Is it even enough?

Our Federation supports the recommendation of the TSB calling for the elimination of the extremely remote provision. This provision negated the requirement for a 30-minute run dry capability.

"Therefore, it needs to go. It's as simple as that: We recommend that all Category A helicopters, including the S-92, should be able to fly for at least 30 minutes following a massive loss of main gearbox oil. Moreover, with advances in technology, we want the FAA to look at today's operating environments – Hibernia, the Arctic, the North Sea, any of these extreme locations – and decide whether even 30 minutes is enough time." (TSB)

Our Federation struggled with the question of whether to call for the grounding of the S-92s until they were equipped with a minimum 30-minute dry run capability, if such repairs to the gearbox were even possible. We asked ourselves wouldn't the TSB have made such a recommendation had it been necessary? This entire matter should be considered under Phase II of the Inquiry.

Our Federation concurs with all the recommendations from the CEP Union and their lawyer Mr. Randell Earle in their Phase II submission and in particular the recommendation dealing with the 30-minute dry run capability.

As Mr. Earle points out:

"The issue is not what is to be done with the existing fleet of S-92s. The issue is what are the appropriate steps to ensure worker safety in helicopter transportation in the NL offshore? There is no logical reason why workers in the NL offshore should have less than the best available safety capacity in the helicopters which they must ride to work."

Certainly the evidence is compelling that such technology should be the minimum standard and indeed within our offshore there is just as compelling rationale that this minimum is still insufficient. Given the winds, the extreme cold, the rough seas, a higher standard is likely required and compliments the notion of a performance/goal-based regime.

We have also struggled with the role of the CNLOPB in this matter. Why, for example, do we need to await Transport Canada's review of the TSB's recommendations? Can not the CNLOPB make its own recommendations, issue its own directives? After all, we heard in testimony from the Board's chief safety officer during hearings for Phase I of this Inquiry that:

"Again, failure to comply with such conditions can result in cancellation of the authorization, in other words, the operator has to stop work, or it is considered an offence under the Act and the operator can be prosecuted." (page 195, transcript October 20, 2009)

Can not the CNLOPB, for example, require helicopters transporting workers in the C-NL offshore be equipped with a 30-minute dry run capability? Certainly there should be no logical reason why as part of the oil operator safety plan that the

"contract for helicopter operations provide a condition that the helicopters used to transport workers to and from installations in the NL offshore have a run dry capability equal to the maximum available in a helicopter at the time such contract is made and that no such contract should be for a period of greater than five years." (CEP submission, Phase II)

The 3rd International Regulators conference concluded that "wherever possible, the best standards should be identified and applied internationally."

Our Federation concurs, which is why the best possible and highest standards for helicopter transport should apply in the NL offshore.

4. The EUBAs – why 10 years?

Our Federation has from the beginning found this matter inexplicable, and unfortunately too typical of how matters relating to safety have been dealt with.

There is no excuse for the failure of the CNLOPB to require and enforce the implementation and use of emergency underwater breathing apparatuses (EUBAs) in our offshore. It was another case of a regulator not acting as it should, in a proactive manner, but rather buying into the "fudge and delay" tactics of industry.

The TSB found that had the workers been equipped with these devices, it may well have made a difference to their survival given all 17 victims did not die from the impact of the crash, but rather from drowning.

"They lost their breath hold ability before they could escape the rapidly sinking helicopter...Cold water makes it almost impossible to hold your breath. That is why passengers and crew on flights offshore NL are now being provided with EUBAs." (TSB report)

It took the loss of 17 lives before the apparatuses were introduced. It is this patterned procrastination on matters of safety that is so troubling and speaks to why a vigilant and proactive safety regulator is not only required, but essential to worker safety

The lessons learned from the delayed implementation of the EUBAs:

- 1. Industry must be given firm deadlines; and those deadlines must be met or there are consequences for not meeting them.
- 2. Workers must be kept informed of matters like this so they can be part of the decision-making. Their right to know was clearly violated. Therefore how could they exercise their right to participate on this issue and in turn their right to refuse? Both the right to participate and the right to refuse have as their foundation the right to know. Indeed, when workers did ask the CNLOPB to intervene on their behalf, no action was taken. It's as if the CNLOPB never felt compelled to respond to issues brought forward by the workers; as if their only interactions were to be with industry as part of their safety audit role.
- 3. As, Randell Earle, Counsel for CEP pointed out in his concluding submission to Phase I of the Inquiry: "the delays demonstrate an incredible lack of will on the part of the operators to make the implementation happen. (and) Neither the CNLOPB, CAPP nor the operators presented any insight as to why their respective organizations failed so dismally in bringing this obvious safety improvement about."

Our Federation would suggest that it was simply not a priority, not important enough. And that is part of the safety culture in our offshore that needs changing. Safety improvements for safety's sake (those which have no impact on improved production or profit) can not be relegated to a secondary list as too often appears to be the case. It speaks to why Commissioner Wells' Recommendation #29 is so important. Clearly industry needs to be held accountability for proactive safety even when those investments do not wield additional profit. Safety can not be secondary to production or profit. If that means establishing a system where inaction on safety costs the industry profit, then so be it.

5. Training – Basic Survival Training

The TSB noted that the BST is completed every three years, but that research shows that this may be too long. According to the TSB, frequency of training is important because repetitive exposure has been shown to reduce the time required to escape.

As there are no training standards, per se, our Federation recommends the establishment of a multi-stakeholder training standards board, with clear worker/union representation (appointed by the union), to review this matter and recommend standards, frequency of training, etc. This Board should consider how to avoid what the TSB refers to as "skill decay." A more frequent BS training requirement should be considered as repetition certainly can make a difference.

6. Night Flights

While the TSB report does not make specific recommendations with respect to night flights, it does, as does Phase 1 of the Inquiry, refer to the dangerous environment of the North Atlantic. Indeed the rationale behind the recommendation dealing with prohibiting commercial operation of Category A transport helicopters over water when the sea state will not permit safe ditching and successful evacuation might also be considered while examining this issue of night flights.

As Commissioner Wells pointed out (page 205), helicopter travel is the most dangerous part of an offshore worker's employment.

"Asking passengers to fly at night adds considerable risk to that part of their work which is already the riskiest."

Night rescue is by its nature that much more difficult. And "almost every nighttime condition will contribute to risk." Statistics from the North Sea support this analysis.

Our Federation supports Commissioner Wells' recommendation to halt night flying. Certainly the workers we have spoke with would have a great deal more confidence in the transport if night flights were banned. Workers do not feel that a safe ditching or rescue can be accomplished at night. Therefore, we recommend a complete ban on night flights.

Conclusion

The TSB report confirms why it is we need a separate, powerful, independent safety regulator for the C-NL offshore.

It also raised as many questions as it answered.

It raised real concerns around the role of the regulators and their relationship with industry.

The TSB report raised our anger with respect to how so much could go wrong. This is not a case of one error. This is a case of a stunning 16 factors or causes. This is a shocking statement about a health and safety culture littered with holes that need plugging.

It raised the question of why workers in our offshore do not have the best available safety capacity in the helicopters in which they ride to work.

It raised questions about the relationship between helicopter operators and manufacturers and how directives from the later are dealt with by the operators. It raised issues about how compliance is enforced and who does that? And how these directives are incorporated into safety plans and fed to the regulator and the joint workplace occupational, health and safety committees.

Surely there must be a role for the regulator, like the kind recommended by Commissioner Wells in Phase I, to ensure compliance of such orders. Manufacturers should be required to inform all regulators governing offshore helicopter transport as well as operators. And regulators must be vigilant about ensuring directives are followed, complied with and if they are not then steps need to be taken to enforce their compliance.

The TSB report also raised the issue of what role Transport Canada actually plays. Has it conceded too much of its decision-making authority to its sister organization, the FAA?

The workers employed in the C-NL offshore deserve the best international practices. They deserve to have the safest and best of helicopter technology available. We should indeed be setting standards not lagging by a quarter of a century. As we expressed in our Phase 1 submission, we believe and support a model of industrial democracy. We believe this concept was embraced by Commissioner Wells in his first report.

"In a free and democratic society such as Canada, as much information as possible on all safety matters should be made public at all times....exceptions should be kept to a minimum."

In free and democratic societies, unions have an important and legitimate role to play. The union representing workers in the offshore must be given every opportunity to play that role – this means electing and choosing their own representatives for bipartite and multi-stakeholder boards as we would expect in any democracy. It means they must be part of the communication stream, but they can only do that if they have the knowledge and information to share.

Finally, we thank you for this opportunity. We hope our comments are helpful to your deliberations.

We firmly believe that every accident is preventable. Our hope is through this Inquiry process, offshore health and safety is transformed. The families of 16 men and one woman who died March 12, 2009 deserve this to be the least of our efforts. The women and men who continue to seek their living offshore deserve the same.