

SUBMISSION TO THE TANKER SAFETY EXPERT PANEL

Relating to

CANADA'S TANKER SAFETY SYSTEM

Dated 21st Jun 2013

By

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Executive Summary

This brief submission is intended to focus on three areas relating to the panel's mandate, including appropriate recommendations:

- 1- All the tools for ensuring a "world class" tanker safety system are already available. They will be summarized and recommendations proposed for their more effective and efficient use on a pro-active basis**

- 2- More attention needs to be paid to tanker terminal operations and training**

- 3- A strong recommendation to dissuade any proposal to put "riding inspectors" on inbound and outbound tankers at Canadian ports**

Preface to this submission

Although this submission has been provided under the corporate entity of *Vela Marine Services Ltd.* The author, who is sole director and president, has presented his discussions in the first person as all content is from personal experience.

The author has 48 years experience in the tanker industry comprising of 18 years at sea on all types of tankers, including 3 years in command. This has been followed by 30 years in the tanker and tanker terminal inspection industry for several oil majors.

Backgrounder to this submission

The Transport Canada initial press release noted that the last complete review of Canada's tanker safety system was with the *Brander Smith Enquiry* following the *Exxon Valdez* incident. I provided a 19 page submission to that enquiry at which I supported the overall concept of double hulls for tankers.

Many considered this to be the nadir of tanker safety standards but that actually occurred about 10 years earlier. Consider this, during a 1,000 day period between 16 December 1977 to 26 September 1980 no less than 87 tankers were involved in incidents resulting in them being declared Constructive Total Losses (CTL's). That is one loss every 11.5 days! And does not include accidents where the tankers were repaired and continued to trade. (* See Annex for research source by author).

The breakdown of the initial, (not root), causes are interesting in that they were fairly evenly divided:

- Grounding 23.0%
- Explosion 21.8% (inert gas protection not mandatory at the time)
- Collision 19.5%
- Fire 18.4% (mostly started in the Engine Room)
- Structural failure 12.6%
- Act of God 2.3% (all lightening strikes)
- Deliberately scuttled 1.2%
- Unknown 1.2%

The initial press release also indicated that there have been very few significant pollution incidents since the *Brander Smith Enquiry*. This is correct, but why is this?

1 REGULATIONS AND TOOLS IN PLACE THAT ENSURE TANKERS ARE SAFELY MANAGED AND OPERATED

Unfortunately public opinion and the media are poorly informed to the background processes in place to ensure that tankers are safely operated and managed. These systems need to be identified with recommendations as to their effective use. The following list is more in line with chronological events and not their level of importance.

Classification Society Rules and Inspections, (Class)

All tankers are required by Class to undergo annual inspections and 5 yearly Enhanced Survey inspections, (ESP's), for both the hull and machinery. As the tanker ages the severity of the inspections increase, to the point that at 15 years of age additional programmes kick in such as the *Condition Assessment Scheme, (CAS)* or the *Condition Assessment Programme, (CAP)*.

Classification Society rules and regulations were historically, and still are, considered the backbone of a tanker's structural and mechanical operational condition. Was this always sufficient? Probably not. The *Erika* and *Prestige* incidents provided a catalyst for improved inspections within these societies.

The societies provide reports following their attendances and inspections. Any findings are classed as “*Memorandums*” or “*Conditions of Class*”.(CoC).

International Safety Management System, (ISM).

This mandatory instrument was introduced in 1997 and required all critical systems on board to have documented policies, procedures and record keeping. Initially, this was considered a paper trail system putting further workloads on the vessel’s crew. In fact it was quickly realized that it could be an effective tool for the crew. For example, a spare part that was required but not forthcoming by the operator , or an unsafe procedure being in place could now be documented in the “Master’s Review of the SMS” and which requires responses from the operator.

Port State Control (PSC) Inspections

It is not my intention to discuss in detail what these well documented inspections entail but to emphasize that they are a another cog in the wheel to ensure tankers are in a sound condition and safely manned and operated. As part of the two *Memorandums of Understanding* (MOU’s) that Canada is party to, such inspections are strictly controlled by procedures detailed by the *International Maritime Organization*, (IMO), and deal mostly with statutory instruments that include SOLAS, MARPOL, STCW, Load Lines etc.

Inspection information is readily exchanged between participating signatories but, while a deficiency may require a tanker to be detained until it is fixed, the vessel would have already arrived in Canadian waters. This is rather akin to trying to close the door after the horse has bolted.

Oil Companies International Marine Forum (OCIMF)

The OCIMF has operated a detailed tanker inspection programme since the mid 1990’s and is called the *Ship Inspection Report* (SIRE) programme.

Much more detailed than a routine PSC inspection the resulting report filed by accredited inspectors is entered into a data base able to be viewed by all OCIMF members or contributing entities.

The principal difference between a PSC inspection and a SIRE inspection is that a *deficiency* noted in the PSC report may cause a vessel to be detained until it is rectified but that the number and/or severity of *Observations* in a SIRE report may prevent the vessel from being accepted by those charterers reviewing the report and thus may have difficulty trading commercially.

Tanker Management and Self Assessment (TMSA)

This voluntary programme, initiated by the OCIMF, was introduced in 2004 and encouraged tanker operators to provide inspections of their offices, policies and procedures. There are 12 elements requiring inspection and these are rated at 4 levels of achievement. These inspections in turn have created a more transparent system of operation and information exchange between the tanker crew and its operator's. Most oil majors participate in this programme and it has served to mostly eliminate the "one or two vessel operator"

International Labour Organization, (ILO) and STCW Hours Worked and Rested Requirements

Fatigue has always, and still is in many cases, a cause of incidents.

Regulations requiring the proper documentation of hours worked and rested are presently in force. All logs are required to be signed off by the participation crew member

Non Statutory Training Courses

The *International Convention on Standards of Training, Certification and Watchkeeping for Seafarers*, (STCW), regulations require specific training and certification for all ranks on board. These certificates are routinely checked by many inspection entities

My routine inspection of the certificates for Deck and Engine officers has indicated that a wide range of non statutory courses are also attended. Examples include:

- Canadian master – shuttle tanker - 42 courses
- Greek master- Suezmax tanker – 24 courses
- Russian master – Aframax tanker – 28 courses
- Filipino chief officer – product tanker – 22 courses

The point here, is that in almost every well run tanker company's operations a wide range of courses are readily available. Many officers have noted that on almost every leave schedule they have been required to attend one course or another. Evidence and documentation of any such courses are not noted in PSC reports.

Additionally, almost all tankers now have on board Computer Based Training (CBT) libraries with required participation according to job and rank on board. These records are carried from vessel to vessel.

The Minimum Manning Certificate (MMC)

In short, this document is not worth the paper it is printed on. I have never inspected a tanker where the manning is at the minimum level while actively trading.

As an example, the Canadian Government's MMC for a 15 year old, sophisticated Canadian flagged East Coast shuttle tanker is 9 persons! Suffice it to say the actual manning is always close to triple that.

2. TANKER TERMINAL OPERATIONS AND TRAINING

My inspections and training courses of oil handling terminals, large and small, have rarely produced stellar results, particularly with respect to the terminal's actions and staff knowledge with respect to the ship/shore interface and information exchange. Many of the other criteria inspected such as pollution prevention, fire fighting, security etc have been satisfactory.

A tanker at a berth whether loading or discharging is a shared responsibility. There are many aspects where the terminal staff, (from the manager to the berth operator), need to have adequate knowledge of shipboard operations and be able to check them accordingly

Many berth operator training programmes operate on the "trickle down" training effect which often introduces poor operating procedures.

To my knowledge, there is no formal training programme in place for terminal operators.

In 2001 OCIMF introduced their comprehensive training guide, "*Marine Terminal Training and Competence Assessment Guidelines*". It was not well publicized or implemented. In 2012 it was superseded by the "*Marine Terminal Management and Self Assessment*", (MTMSA), (A Best Practice Guide for Terminal Management). These guidelines are similarly based on the TMSA recommendations with 15 Elements and 4 levels of achievement.

At this time I know of no terminal in Canada operating under these guidelines.

3. RIDING INSPECTORS ON INBOUND AND OUTBOUND TANKERS

Quite simply, do not go this route, I have been there and done that.

Following the *Exxon Valdez* incident my client, Canada's largest integrated oil company, routinely flew myself and then partner to Victoria to board and ride the tankers up to the then Trans-Mountain oil facility, (Westridge terminal), monitor the loading operation of Cold Lake crude and ride the vessels back to Victoria. The object was to observe the Master/Pilot interaction.

Was it useful or effective? – NO

The Master/Pilot relationship has been well defined in maritime law over centuries. The master welcomes the pilots advice but, unless the pilot is proven to be incompetent, the master will take the responsibility for all actions and incidents. Consider now a third entity on the bridge monitoring events. Firstly, it is not normal practice and his/her presence will be resented or ignored by both the master and pilot who will be fully qualified for their respective duties. What if the inspector does not agree with the passage plan or actions of the bridge team? What if he/her intervenes to the point that, an incident occurs? I do not think I need to go any further on this issue.

RECOMMENDATIONS RELATING TO THIS SUBMISSION

- 1. Formalized procedures should be in place for effective information exchange between the tanker charterer and the terminal operator that provide transparency and that the charterer has undertaken proper due diligence in the selection of a suitable tanker.**
Most charterers utilize the "Q88" Questionnaire as a start. Because this relies on the vessel operator's accurate responses, additional data regarding the vessel should be accessed using any or all of the tools noted in this submission.
It is suggested that a Risk Assessment template be drawn up to ensure all areas of inspection and reporting have been covered and rated "acceptable" in the selection of the tanker.
- 2. Ensure that terminal operators, from management to the dock operator, have received adequate training for their respective duties and responsibilities particularly with respect to the Ship/Shore interface prior to the arrival and, during the vessel's stay alongside.**
- 3. Do not, I repeat, do not entertain the notion that placing government riding inspectors on board during inbound and outbound tanker passages will make things any safer**

Respectfully yours

Captain Barry Scott

- Research source – "Modern Shipping Disasters" – Lloyds of London Press Ltd – ISBN 1-85004-211-8