

SAFETY RISK MANNAGEMENT IN TODAY'S SHIPPING INDUSTRY

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INTRODUCTION

If a company is going to achieve profit, there is a risk to manage and it is up to the company to really consider how best to approach it. There are different types of risk, ie. Commercial, financial, operational, technical, natural, etc., but the most important one, if it is not considered and controlled in the first place, it may affect negatively to others, is *safety risk*. To deal with safety risk, shipping companies and organizations should devise comprehensive risk management policy relating to the developments of *people, ships and ship's systems, and safety management system*.

Aim: This paper will examine Risk Management Policy, especially on the safety aspect, that the Government Fleet, Shipping Companies and/or Ships Management Agencies would adopt for their high performance and compliance with modern rules and regulations on marine safety, pollution prevention and human element measures. Safety policy, including *the choice and up-keep of ships and ships systems* (hardware), *the method of recruiting personnel for ships and shore*, and *the programs of personnel development*, will be discussed in the context of safety risk management. Followed will be a new concept of *the company's structural philosophy* in which the objectives can be achieved. The conclusion will touch on the *understanding relationship between ship's owners and their crew's members* and also will include *a risk management model* which can be applied to the management on maritime risk in order to achieve the goals and objectives of shipping business at the corporate level.

RISK MANAGEMENT POLICY ON HARDWARE (ships and ship systems) IN ACCORDANCE WITH SAFETY MANAGEMENT SYSYEM

Now-a-day ships' managers are very careful in screening and selecting the ships that they undertake to manage. They do not manage any ship or the fleet that they think it is not worth the effort to bring it to the good standard. Their policy is constituted as follows:

- Immediately after a vessel comes under their management, Risk Management Policy is implemented through the company's safety systems. Maintenance programs, operational procedures, safety practices, guidelines and instructions are put into action. All Safety Procedures on board are maintained but frequently

modified and improved to reinforce safety, pollution avoidance, operational efficiency and the welfare of the crew in compliance with ISM Code.

- The Canadian Coast Guard Fleet (CCGF) through its Fleet Safety Manual ensures that *“the ships and all machinery and equipment within the ships are maintained in accordance with all relevant standards and regulations”*. *“Where a manufacturer’s data is considered deficient, the CG Fleet has developed procedures to ensure that machinery or equipment is maintained to higher standards”* (CCGF, FSM, Sect.10.0, pg.1).
- The CCGF, through its publication entitled *“CCG Vessel’s Life Cycle Procedures Manual, DFO 5550”* ensures that *its ships are managed through a system of configuration management that generates sufficient, accurate and valid documentation reflecting the current configuration of as-fitted assets* (CCGF, FSM, Sect.10.0, pg.1).
- They believe on a smooth hull, a well-maintained and reliable propulsion plant, super-polished propellers ensuring the right speed and consumption, and modern navigational aids in order to mitigate the inherent risks of shipping. The instruments and equipment on board have to be reliable and work effectively.
- Strong pumps and cranes in order to turn the cargo over quickly
- Well preserved tank, hold and hatch covers to protect cargo.
- The safety priorities are:
 1. Sound, modern and effective maintenance programs.
 2. Safety equipment items, ie. Life boats, fire fighting equipment (fixed & portable) are up-kept timely and in quality.
 3. Classification and statutory requirements are certified and complied
 4. Pollution prevention and mitigation equipment is available and in quality, even costly.
 5. Cargo gear must be in excellent condition
 6. Port State Control inspections are complied with all national and international rules and regulations requirements. ISM Code compliance. Non-conformity is sent to the company’s Designated Person (DP), chartering Agent, and insurance broker.
 7. Ships and ships systems are inspected by the company’s inspectors four times per year, and audited by DP yearly.
- Adding to the ship’s safety risk management policies, many Shipping Companies are committed to a continuous inspection and vessel maintenance schedule with

the company's own dedicated team of fleet inspectors traveling around the world to ensure its effective implementation of ISO 9002, IEMS 14001 and ISM Code.

- Some companies are committed to acquiring new and well-kept vessels and maintaining them at high standards. They believe that well-maintained ships ultimately help enhance revenue and reduce operating costs. High standard vessels could also generate the best-managed quality tonnage and the best-recognized reputation.

RECRUITMENT POLICY:

The scope of hiring policy is to define, select and recruit qualified people. Crews members recruited are carefully selected and undergone an extensive testing period of probation before they are permanently hired.

Following is an example of the recruitment strategy described according to a Ships Management Agency "THENAMARIS" in Piraeus, Greece:

- Officers and crews are only Greeks, Bulgarians, and Philippines. The company explains that there are not enough Greek seafarers for the fleet, especially the ratings. Bulgarian officers have experiences on oil tankers. Philippines seafarers are always available and speak English well.
- Company maintains close relationships with these people for the continuity of their employment. Company representatives visit 2-3 times per year to Bulgarian agent office. In Philippines, company has established facilities to directly recruit officers and ratings. The importance is to retain the qualified people in employment, as 95% of them are loyal to the company.
- Company deploys same crew teams on same vessels, either same full Philippines crew or mixed, but the mixed crew does not comprise of more than two nationalities, being afraid of cultural conflicts.
- A pooling system is also established for relieving crews taking time off.
- Strict drug policy and random breathing tests help to eliminate the possibility of drug and alcohol abuses.
- Employment is based on the personnel collecting data to screen out the black list references.
- Personal evaluations in ability, character and languages carried out by superintendents while they are on board are retained for future employment reference.

- Only competent and qualified people are recruited.
- Norwegian fleets have employed multicultural crews for many years and devised an excellent training program for all crews members getting all the necessary skills and qualifications for Norwegian ships. Norway has set up a training center in the Philippines to help Filipinos seafarers gain skills, update qualifications and become ready to go to sea. Such a policy has helped the Norwegian fleet solve the problem of seafarer shortage in the future.
- The CCGF *requires all employees to comply with the laws of Canada at all times, to faithfully apply the procedures developed under its Fleet Safety Policy, and to take any necessary precaution to protect themselves, their colleagues, their ships, cargoes and the environment. It also commits to the quality of services it provides to its clients (CCGF, FSM, Sect. 2.4, pg. 2).*

Right crew and harmonious living condition create a safe working environment on board.

PERSONNEL DEVELOPMENT POLICY

According to Mr. George Gratsos, president of Hellenic Chamber of Shipping, 50% losses of ships are due to unsafe loading. Therefore, professional training and skill development are greatest efforts of all shipping companies that are committed to the ship safety and pollution prevention.

Ships Manager develops safety guidelines and training for cargo handling efficiency from their accumulated experience, ie. Knowledge of each particular ship, various port characteristics and terminal conditions to make loading and discharging a smooth process.

Training team organizes seminars at the head office, in the home countries of the mariners and on-the-job training on board the ships, emphasizing on familiarization of new equipment, safety, protection of environment, ship-board management, human communications and contingency management, etc.

The development of a common language and a general culture of professionalism are also the ultimate objective. Drug-free environment is a good example of human resource development.

People on land are the crucial link tying the ships to the land-based management effort. They include former master mariners and seagoing engineers who learned the business on board, have build up the team spirit necessary to lead problem solving, secure safety and improve operational efficiency.

Computer technology is applied to all communication networks internally and externally. Software applications are user-friendly and custom-made. Direct lines, public data network and satellite links enable constant communication with the ships and the associates around the world.

A creative environment of designing the office building and setting up the office spaces is a psychological innovation that could maximize communication and provide the grounds for creative teamwork. People in each of the departments can look out over the atrium and have visual contact. Such an environment encourages people to gather easily around a problem and work cohesively for a complete and quick solution.

In general, TRUST is the key word among shipping companies or ships management agencies between management and employees on board and on land which makes problem solving quickly and reduces risks effectively.

MANAGEMENT PHILOSOPHY

The commitment of ships and Fleet's management is

- To protect health and human lives at sea and ashore
- To prevent harm to the environment
- To ensure the safe, intact and prompt delivery of the cargo
- To offer the shipping services at reasonable rates
- To provide quality services to the clients

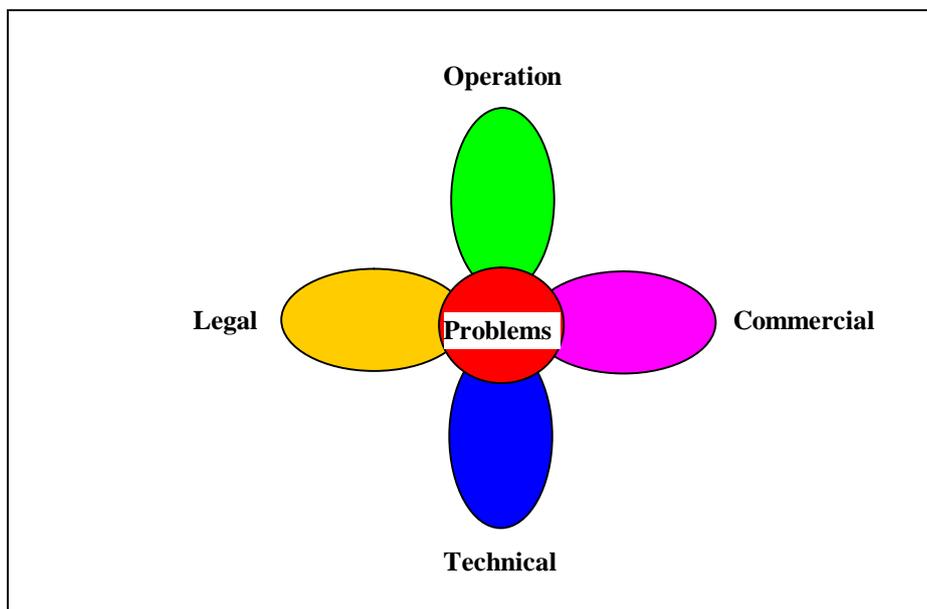
CCGF, through its Safety Management Policy, will *“provide and maintain a safe and healthy work environment that complies with and at times exceeds regulatory requirements, and will strive to eliminate any foreseeable hazards which could cause personal injuries or illnesses, losses or damage to property or loss to the environment. All management and employees will perform their job properly and in accordance with procedures and operating philosophy”* (CCGF, FSM, Sect.1, pg. 1)

To achieve of the above, shipping company believes in a Complete Risk Control Cycle that includes:

- Good teamwork
- Correction of the mistake
- Communication efficiency, and
- System to handle crisis

in order to build a tool to solve the problems. Every one knows their role and cooperation, and should love what he/she is doing.

“**Master is NO GOD**”. The company should create the arrangement in an equal environment of Authority and Responsibility (A & R) so that people of all departments being formed as Blades of a Propeller can contribute their knowledge, skill and constant alertness to solve the **problems** containing in the Hub as illustrated in following figure:



PROPELLER'S FUNCTION = ENVIRONMENT OF A & R

All departments -commercial, operation, technical, legal- work together, coordinate activities with each other in order to remove the risk and solve problems, then the whole system will be functioning smoothly as expected for a ship with a well-balanced and efficient propeller. By this concept, the philosophy of “*earning money but in Good Way*”, and “*cost effective but Not Danger to Safety*” is the newly adapted commitment to the safety risk management policy for today and future shipping industry.

CONCLUSION

The most important factor for the success of a shipping company or organization is **people** whose welfare must be properly taken care of. Continuing a close relationship between employers (owners), management staff and seafarers is considered as being

an integral part of the greater family of an organization. All ship's owners and managers should encourage for

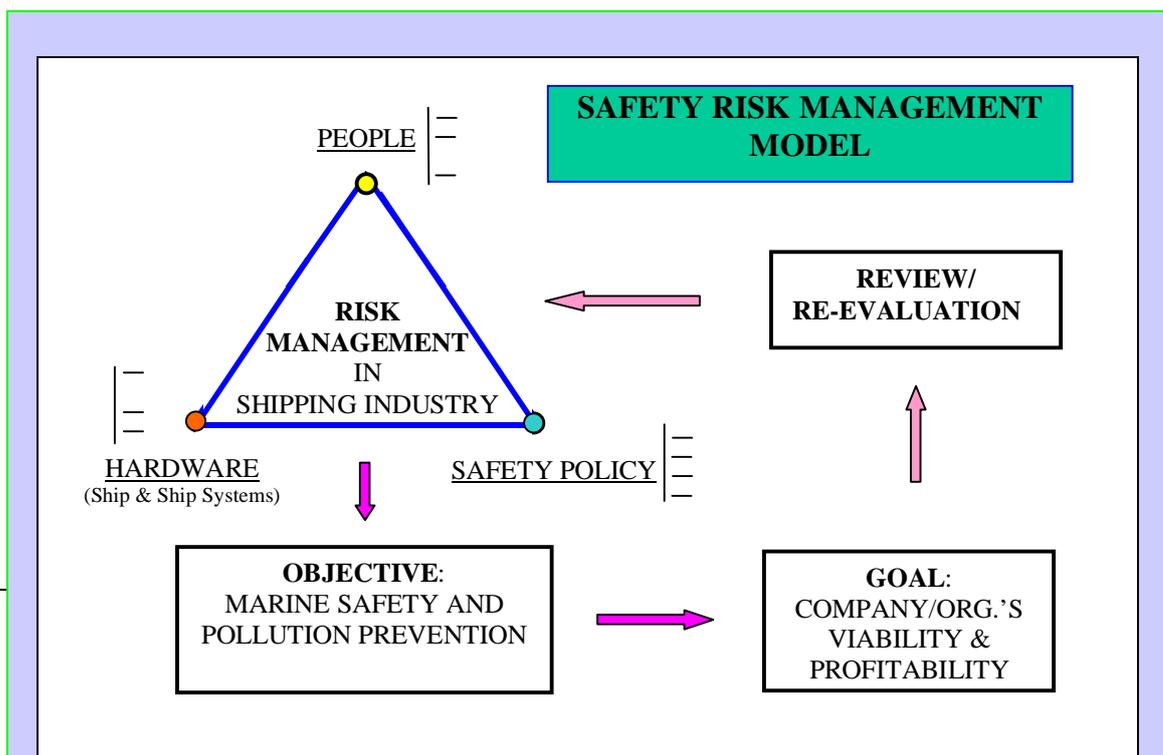
- Good living conditions on board
- Attractive salaries
- Recognition of top performers
- Continuity of employment,

and should express their view on *supporting to mariners and mariners' families in times of need.*

The best risk management strategy is the commitment to nurturing human resources and to the concept of welfare society. Incentive schemes are established open to all personnel together with family health care and insurance schemes. Performance bonuses, stock option, annual awards and other fringe benefits ensure attractive, long-term career within the company.

The reality is *if the company takes care of its people, people will take care of its business.* And, the conclusion is if a company is going to achieve profit and quality services, there are risks to manage, especially *safety risk.* It is up to the maritime company and organization to really consider how to motivate *people*, maintain *reliable ship and ship's systems*, and create *practical and enforceable safety risk management policy.*

Following is a safety risk management model. Hopefully it could be a *primary concept* that most of us, somewhat having related to the shipping industry, should consider on and be responsible for:



References:

- *Greek Shipping Policies, upon a recent field trip visited to various shipping companies/organizations in Greece.*
- *DFO, Canadian Coast Guard Fleet Safety Manual, Chapters 1.0 and 10.0 Glossary & Maintenance of the Ship & Equipment respectively.*

Please note: Content expressed in this paper is from the author's own opinion and research effort, and does not necessarily reflect the Canadian Coast Guard's policy or mandate on the subject. (kht)