RISK MANAGEMENT TODAY IN SHIPPING COMPANIES

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ABSTRACT

The risks at sea continue to be subject of many shipping documents describing the voyages completed by carriers engaged in maritime trading. The current policies aim for the development of some mutual insurances to cover the risks to which the ships are exposed to and, in particular, the crew which must be reimbursed in case of accidents. Currently, one of the biggest impediments standing in the way of the naval industry's progress on an international level is the lack of methods for determining risk levels. The volume of commercial activities and the pressure put on the market requires orientation towards new methods and techniques of risk administration, in other words the elaboration of a risk management plan, which, as professor Kuo also said, has the purpose of "maintaining and controlling risks and dangers between certain tolerance margins, to a practically negligible level". I consider that a coherent managerial plan must include techniques of identifying potential accidents and of analyzing risks, in order to improve the safety measures and to reduce the loss of human lives and also to increase the quality of decisions. The practice of an efficient management requires some quality standards to be set, which must be set progressively after a careful analysis of the organization and of the evolution perspectives. Therefore, synthetically, a system of safety management is based on going through the following steps: elaborating clear policies and safety objectives; planning concerning the development of action plans , with the determination of roles and the assignment of responsibilities; implementing the action plans and the methods; periodical evaluation, by comparing the results obtained with the objectives set; and last but not least, improving performance, by identifying malfunctions, periodical updating of the risk evaluation and by taking corrective measures.

Keywords: *Risk, management, safety, shipping, maritime industry*

1. INTRODUCTION

In Marine Insurance Act from 1906 risk was definite as:

The term risk is used in different senses, and must always be constructed by the light of its context. Sometimes it is used to denote the perils themselves to witch insurable property may be exposed, as when sea risk are contrasted with land risks, or when goods are insured against "all risks". Sometimes it is used to denote the risk run by a person whose property is exposed to danger. But more commonly perhaps ,it is use to denote the liability undertaken by the insurer in respect of his contract as, for example, when goods are lost, and it is said that "the risk had not attached"., that it to say, that the goods were not at the time of the loss covered by the policy".

On sea safety in principal is assure by:

- International Safety of Life at sea Convention.
- International Regulations for Preventing Collisions.
- Standards of Training Certification and Wachkeeping Convention.
- Rules of classification societies.
- International Ship Safety Management Code.

Risk can be seen as a chance of an incident happening and it has two components- the frequency and the consequence. The UK HEALTK and SAFETY EXECUTIVE divide risks into three categories:

- Negligible, where no risk reduction measures are needed.
- Tolerable, where the risk should be "as low as reasonably practical-ALRP".
- Intolerable, where risk measure must be taken irrespective of cost

Quantified risk assessment in the use of numerical estimate of hazards so as to make a calculated evaluation of risks. The savings in cost by reducing risks is the main economic reason for using the method of risk management.

Although the concept was used in different ways, the growth of shipping companies objectively led to the adoption of the principles of risk management.

Particularly shipping companies that provide services for the oil industry, nuclear industry, chemicals and liquefied gases, were the first to adopt these principles. Jhon Spruyt observed [2,3]: " most shipping businesses are getting more complex , impacted on by relation ,international economics and theological development. High intelligence, numeracy and judgment will be required of management. The world pool of bright people is not infinite. We have to compete with service industries than have more glamorous images". Spruyt recognized that the best risk management strategy is to have excellence in management. His criteria are as follows:"Shipping managers of the next decade must:

- Be recruited from industry in general as well as from seafarers and sipping specialist, and the role models appropriate to the industry's long term needs.
- View shipping's traditions and history as part of learning process, eschewing defensive nostalgia.
- Welcome new ideas and have the courage to find solutions to chronic problems.
- Face up to and solve the fundamental structural weakness of an industry that operates globally, but is a regulated nationally.

- Enthuse over total quality, zero defect management objectives.
- Be reedy to take control of public image building and to ensure effective spokesman ship.
- Reverse the industry's aversion to training especially in the personal development of senior management and seagoing officers. Use the business school, but also ensure the shipping orientated trainers are delivering what the industry needs. Be highly skilled in the fields of personnel management, industrial relations and employee welfare, and keen to work in multi-cultural teams.
- Think strategically about their relationship with governments, with markets and with trade unions.
- Believe in profitability as an achievable objective for an ethical, high quality, and caring industry, resisting the temptation to use the bottom line as an excuse for shot term sloppy management.

Excellence produces excellent balance sheets". A company witch is taking an investment risk in a new building or preventing losses through hazards identification and risk assessment is addressing two sides of the same coin. What matters, of course, is how those risks are assessed and managed.

There are risk related elements to:

- Business development.
- Innovation in ship theology.
- Communication and organization.
- Commercial contracting.
- Loss prevention.

Typically a risk profile will involve for fundamental risk categories:

- Propriety.
- Liability.
- Pecuniary.
- Personnel.

At the organizational level, in risk management 3 stages have been identified:

- First, it is necessary to have a person who understands the principles of risk management and who knows how to evaluate results;
- Second, it is necessary to establish a commission to assess risks;
- Third, the organization should have an interdisciplinary team that should be able to assess the nature of risks and also draw conclusions about reducing unacceptable risks.

When knows all of this, company can take proper measures for risk management.

"Risk is a measure of hazard's significance involving simultaneous examination of his consequence and probability of occurrence using a combination and practical experience and relevant information on the system and its operating environment".

"Managing and controlling the risks of hazards to ensure that they are always at a tolerable or negligible level"[1]

For proper risk management it is essential to create and update all databases on accidents, in other words, to collect relevant information in this field. In the completion of these databases, two elements are essential: frequency means repetition and severity of accidents.

In this case, it is advisable to use tools (standards) of comparison from the industrial field, which can be found in industrial associations, P & I Club, government statistics and classification societies.

Review priorities in the risk analysis process are dictated by circumstances and are based on:

- Analysis of incidents and avoidance of their repetition;
- Infrastructure development such as, for example creating new landing craft terminals;
- Analysis of current operating procedures;
- Review of these procedures for reducing risks through performance management.

As in most activities, a major role is played by the planning process, which requires that documents contain at least the following data:

- Field of the investigations;
- Measures that need to be taken for risk reduction;
- Individual responsibilities;
- Time evolution;
- Data of the planning review;
- Name of the person in charge of the review.

Techniques that can be applied in this process can be chosen according to the following criteria:

- Experience and analysis skills;
- Experts resorting;
- Quantitative evaluation;
- Development of the multidisciplinary risk matrix.

If, after review, the event falls in the shaded area, then it is likely to have serious consequences. (fig.1)

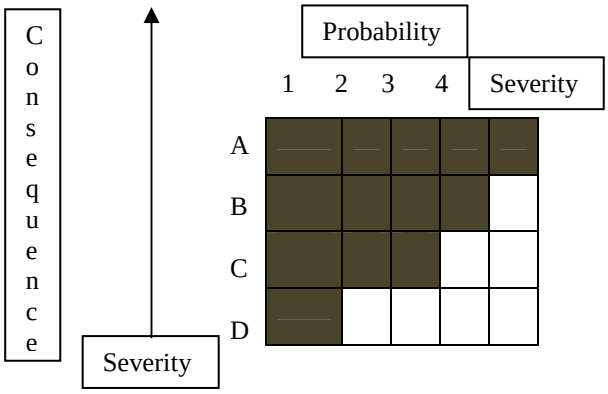

Figure no. 1.

One of the major phases in a risk management plan is represented by plan approval. This requires a careful risk assessment and a detailed analysis of contract terms. The plan should cover: Shipbuilding standards (norms); The methods used for the correct assessment of the plan; Structural Integrity; Vessels impact; Pipelines, Aces; Engine room; Deck; Navigation system; Anchor handling; Accommodation spaces; Cargo plan; Rescue measures; Warehouses; Bunker tanks; Safety systems.

When a ship is built in order to meet a specific operational requirement such as a passenger ship, the owner will manage a team of designers. They will

consider feasibility in accordance with the following principles:

- Safety management
- Risk Management
- Feasibility and maintenance
- Integrating human factor

An important part of the process is ensuring that the main systems and subsystems function as designed and that they are tested.

In any complex operational environment things can go wrong. A latent defect may lead to a catastrophe, people make errors, communications can be misunderstood, the team may not be familiar with a certain system. In such situations the following principles can be applied:

- Speed of response
- Effective use of resources
- Management, control and coordination

Many dangers can be scrutinized and response plans can be issued.

There is a need to provide training about risk management techniques, hazard identification, awareness, risk assessment and control.

Professional training is required for risk reduction, since these skills can not be simply acquired. Training materials need to be used and professional trainers, well prepared for the navigation industry.

As part of major loss prevention plan, The Nautical Institute has undertaken an international tour in order to raise awareness of preventive measures. It was proved that all the incidents (collisions and standings) took place between well-equipped ships and with qualified personnel on board.

Det Norske Veritas is the first classification society to introduce risk based class rules. [4]

This establish:

- Safety for the ship and equipment.
- Safety for the cargo.
- Safety for personnel.
- Safety for environment.
- Economy through vessel availability.

Risk classification according to certain rules is:

• Safety for ships and equipment
• Safety of products
• Crew safety
• Environmental Safety
• Economy by ship availability

In according with this classification societies involved in this process can provided a ship life cycle. Lloyds Register developed the IT program The Mariner. It consists of three components: program for Lloyds Register, for the office and for the ship. It is an electronic interactive system that allows both office and personnel at sea to:

• Identify hazards in each operation on board
• Assess the risk associated with each operation on board
• Establish where the operational control can be improved
• Maintain improvement by setting realistic goals

The main point in this process is represented by link between ship management and classification society. Now, when the I.S.M. code is a reality, shipping companies may use the recording data and managing the operation of ships more safety. Risk management take a complementary view in considering the risk exposure over the full spectrum of company operations and is the way of linking the commercial technical and operational risks in the way which makes it possible for senior management to make Decision Maker Process better. Managing risk within acceptable limits, although it may not be a legal requirement as such, is certainly a professional responsibility. Examples where risk management techniques have proven effective:

- Reduction of collision incidents in multinational fleets
- Control of secure operation of a passenger line in a new port of call. All aspects included, from navigation to garbage collection
- Protection against piracy
- Design and construction of chemical tankers
- Introduction of escort tugs
- Tanks with double hull tankers compared to simple hull tankers;
- Operation of ships carrying liquefied gas and security of the population in the terminal areas
- Marine Constructions
- Planning routes depending on the weather
- Negative influences of media involved in the case of oil spill

Both ship-owner and cargo insurer use insurance as a risk control measure. For the ship-owner it is trough the liability cover provided by the P&I Clubs and for the cargo owner, the indemnity cover offered by, amongst others, the London market through Lloyds, the international Underwriters Association (IUA) and what is termed the Agency company market.

The provision of cargo insurance encompasses much more than underwriting element and includes the specialist broking community who undertaken much of the administrative work and manage the interface between the assured and the underwriter.

Outside the direct market are the specialist law firms whose expertise can focus a penetrating light on the effectiveness of a carrier's risk management procedures. The basis of cargo insurance is the Institute Cargo Clauses(ICC) but around this many shippers will negotiated through their brokers an open cover witch goes beyond the facultative voyage policy covering a single transit and provides protection foe all the assureds voyages on world wide basis.[5,6]

2. REFFERENCES

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