“RISK ASSESSMENT IN SHIP OPERATIONS”
Background

How do we define Risk?

- **Risk** includes any possible change of undesirable, adverse consequences to human life, health, property, or the environment.”

- The threat or probability that an action or event will adversely or beneficially affect an organization’s ability to achieve its objectives.
  - Risk is a Combination of the likelihood of an occurrence of a hazardous event or exposure(s) and the severity of injury or ill health that can be caused by the event or exposure(s)”
Background

Definition of *risk* often simply is:

- RISK = (Probability of an accident) x (Losses per accident)

Or in more general terms:

- RISK = (Probability of event occurring) x (Impact of event occurring)
Background

- Risk is a combination of the likelihood of an occurrence of a hazardous event or exposure(s) and the severity of injury or ill health that can be caused by the event or exposure(s)“.

OHSAS 18001:2007
**Background**

- **Risk assessment** is the overall process of risk identification, risk analysis and risk evaluation.
- **Risk management** is activity directed towards the assessing, mitigating (to an acceptable level) and monitoring of risks.
All activities of an organization involve risks

“..Risk management aids decision-making by taking account of uncertainty and its effect on achieving objectives and assessing the need for any actions.”

ISO 31000:2009
Risk Assessment now “Mandatory”

- ISM Code - Explicit as amended and entering into force on 1 July 2010
- EU Regulations
- IMO
- Flag Requirements
- Industry Best Practice - TMSA - Mandatory!
Company Responsibility

“Safety management objectives of the Company should assess all identified risks to its ships, personnel and the environment and establish appropriate safeguards”

Ref. ISM Code 1.2 “Objectives” as Amended by Resolution MSC.273(85)
Company Responsibility

“Shipping Companies are required to ensure the health and safety of anyone working on the ship, by the application of certain principles, including the evaluation of risk and the taking of action to reduce them.”

The Method

- There are different methods for hazard identification and assessment of the risks.
- Clients should adopt the most practical and effective method specific for the type of fleet and organization.
- Risk Assessment will take into consideration the ship’s type & trading handled cargo(s), crew nationality and experience, historical data and statistics.
- Specific procedures shall be agreed upon and developed accordingly.
Benefits for Risk Management

- Risk management creates value
- Risk management is an integral part of the organizational process
- Risk management is part of the decision-making
- Risk management explicitly addresses uncertainty
- Risk management is systematic, structured and timely
- Risk management is based on the best available information
- Risk management takes human and cultural factors into account
- Risk management is dynamic, iterative and responsive to change
- Risk management facilitates continual improvement and enhancement of the organization
Benefits of Risk Management

- less accidents
- less injuries
- less breakdowns
- less off-hires
- optimization of ship operations
- optimization of resources
- less running costs =

HIGHER PROFIT
Our Skills and Approach

- Experienced & qualified assessors with maritime background
  - The assessors have been trained by recognized maritime organization(s).
  - They have maritime backgrounds in senior positions and have performed risk assessments for various types of ships and organizations.

- Practical tools and methods
  - Practical tools, user-friendly procedures and easy methods are used in order to minimize the workload of involved personnel.
  - Soft copy of procedures and risk assessment documentation is provided.
Our Skills and Approach

- **Fast and effective service**
  - Time optimization for on board assessment and for documentation development is ensured by using dynamic personnel only.

- **Continuous support and training**
  - Onsite job support and training is provided to involved personnel while performing risk assessment.
5 Steps to Risk Assessment

1. Select a ship
2. Identify hazards associated with ship
3. Evaluate hazards using matrix
4. Identify who & what will be damaged
5. Record assessment by writing out plan
6. Review plan
7. File completed RA Plan
Framework for managing risk
(Clause 5)

5.2 Mandate and Commitment

5.3 Design of framework for managing risk

5.4 Implementing risk management

5.5 Monitoring and review of the framework

5.6 Continual improvement of the framework
What we can do in 5 Steps

Meet with Client

Step 1
Conduct on board risk assessment

Step 2
Conduct risk analysis and Prepare documentation

Step 3
Develop procedures, instructions related to risk assessment

Step 4
Review amendments of risk assessment tasks

Step 5
File completed RA Plan