LOSS PREVENTION
THROUGH RISK ASSESSMENT SURVEYS FOR THE MARITIME INDUSTRY

20 August 2008
STI Auditorium
Singapore
## The Programme

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Topic</th>
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<tr>
<td>2.10pm</td>
<td><strong>TOM WILSON</strong></td>
<td>- Introduction: Marine Risk Assessment&lt;br&gt;- Who we are: Qualifications and experience&lt;br&gt;- ShipShape: A Practical Insight into Marine Risk Assessment</td>
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<tr>
<td>3.00pm</td>
<td>Break</td>
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<tr>
<td>3.15pm</td>
<td><strong>BRIAN DOCHERTY</strong></td>
<td>- The JH143: Shipyard Risk Assessment Suite</td>
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<td>3.45pm</td>
<td><strong>K.S. WANG</strong></td>
<td>- Risk Assessment &amp; Loss Prevention of LNG Carriers</td>
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<td>4.30pm</td>
<td>Q &amp; A session</td>
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Typical Marine Risks

- Safety
- Environment
- Business
- Property
- Often involve risk of
  - foundering
  - capsizing
  - collision
  - contact
  - loss of hull integrity
  - fire
  - pollution
  - etc
Reasons we are Asked to do Marine Risk Assessments

- To demonstrate project feasibility
  - usually technical and financial

- To get regulatory consent
  - usually safety and environment

- To support investment decisions

- To identify and manage uninsurable risks

- As well as to identify and manage insurable risks
Who We Are: A History of Marine Assessment Since 1856

- Where we come from
  - The Salvage Association
    - Founded by Lloyd's 152yrs ago

- Where we are now
  - Part of BMT Group

- A World Wide Network
  - Global locations

- What we do
  - Not just a clever name
Where We Come From:

- Founded in 1856 by London Insurers & others
- Royal Charter in 1867 – Not for Profit
- Motto “Quaerite Vera” – Seek the Truth
- Later known as The Salvage Association
- Expanded up to 100 surveyors & offices worldwide
- Affected by downturn in London Market in 1990’s
- Sold in 2001 to British Maritime Technology Ltd
Role of The Salvage Association

- Membership - London Insurance Market
- Levy support given by members
- Pre risk, Loss Prevention & Casualty Surveys
- Provided insurers with information
- Worked for insurers and other parties worldwide
- Co-ordinated surveys for worldwide interests
- Assisted Governments & other parties
The Association for the Protection of Commercial Interests, as respects Wrecked and Damaged Property

Objective:

“A means of ascertaining the cause of the undue increase of losses arising from damage to ships and cargoes and of finding a remedy for such a state of things, injurious alike to every fair trader, whether merchant, ship owner or underwriter.”
A World Wide Network

AROUND THE CLOCK
AROUND THE WORLD
What we do

- Years 1999-2004
- Year 2005 Total
- Year 2006 to date

Bar chart showing percentages of total incidents for different categories:
- Machinery
- Grounding
- Fire/Explosion
- Collision/Allision
- Propeller/Steering
- Heavy Weather
- Sank/Capsized
- Warranty & Risk Assessment

% of Total
Structural Failure & Damage
Stability Determination

A Project that failed after 18months
Expert Attendance During Salvage
BMT Marine & Offshore Surveys

“Where will our knowledge take you?”

...Same Vessel
Casualty Management at Major Losses
All Aspects of Collision Response
Post Casualty Management On-Site
Ship-to-Ship Cargo Transfer Underway
Operation Approval after Temporary Repairs
And of Course ... Fire!
Plus the Aftermath & Consequences
And of Course ... Loss Prevention

Split into:

1. Marine Warranty Surveys
2. Risk Assessment and Feasibility Studies
Marine Warranty Surveys

- Towage approval
- Voyage approval
- Fire precautions and firefighting arrangements
- Mooring approval
- Lay-up and reactivation approval
- Vessel condition surveys – JH722 & JH112
- Vessel suitability assessment
- Load-out, stowage and securing approval
- Offshore energy construction and installation
Risk Assessment & Feasibility Studies

- Transport of critical heavy project equipment
- Power station & other jetties & navigational assessments
- Operation of floating production platforms
- Movement of large cranes and structures and large drydocks
- Operations in the Arctic and Antarctic
- Mooring of fish farms and wave generators
- Movement of damaged ships
- Shipyards JH143
- Office Management Assessment (JH 2006/010C) & fleet operations audits
- Condition Survey (JH 2006/010B) & Structural Condition Survey (JH 2006/010D)
- Engine Room Management & Machinery Risk Assessment (JH 2006/010A)
Vessel Condition Surveys
USS Oriskany:

Towage from San Francisco to Beaumont via Magellan Strait - for preparation for scrap in Kandla
Dockside Loading Crane
- prepared for shipment -
Transportation of Container Cranes
Gas Plant Project Cargo
Type 45 – New Warship Construction
Advanced Gas Reactor
Størebælt Fixed Link:
Dry Tow of Jack-Up Oil Rig
Offshore Oil & Gas Projects:

Tension Leg Drilling Platform Installation
Land Transport of Project Critical Items
Land Transport of Project Critical Items
112 Tonne Generator Discharged from Antonov Cargo Plane
Audit and Assessment on Ships: Loss Prevention

ShipShape©
Marine Risk Assessment
• Pre-purchase vessel condition surveys
• JH 115A condition surveys
• JH 722 structural condition surveys
• JH 143 shipyard risk assessment
• JH 89 reactivation surveys
• TA 2005 tuna vessel warranty surveys
• General condition and voyage approval surveys
• Shore management and ship operations assessments
• Ship safety audits
• Engineroom & machinery risk assessment surveys
• Pre ISM annual assessments
• Shipyard operational checklist surveys
• Ship construction quality assessment for owners
• Pre renewal claims record reviews
• Cargo loading & stowage, tug and tows, etc. etc.
Services Available

- Audits
  - Internal Audits
  - Independent Third-Party Audits
    - Management Reviews
    - Claims and Casualty Reviews
    - Risk Assessments

- Standards
  - International Safety Management Code
  - ISO 9000:2000 Quality Management System
Who can make use of our Services?
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Owners
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- **Owners**
  - Internal Audits
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  - Third-party Audits as a dry run
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- **Owners**
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  - Third-party Audits as a dry run
  - Management review and Claims Record Analysis
Risk Management
Minimize Risks
Lower Claims
And Ultimately Saves Money
15 Minute Break