SAY WHAT YOU DO, DO WHAT YOU SAY:
USING THE NEW
SAIL TRAINING INTERNATIONAL
SAFETY MANAGEMENT SYSTEM TEMPLATE

Peter Cardy
CEO
Sail Training International

Paul Bishop
Head of Race Directorate
Sail Training International
My first Tall Ships Race: 1962

• Safety was a high priority though much has changed
• no radio, GPS, radar
• an engine, but definitely auxiliary
• no EPIRB
• no watertight compartments
• waistbelts, cotton webbing, mildewed
• oilskins, thirsty
Is safety so different in sail training from the rest of the maritime world?

- Compare the *Swanland* (half those on board drowned) with the *Concordia* (no one drowned)
- Sail training is different because of the crews and public emotion.
- The vessel *operators are different*: typically small non-profits with lean resources.
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The vessels are different: in the eyes of the authorities they are anomalies

- cargo vessels that carry no cargo
- obsolete main propulsion system
- using archaic materials
- construction may be re-created from history
- built for maximum, not minimum, physical effort
- trainees who are not training for the sea
- the voyage is the goal, not the destination port
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Our worthy social purpose does not protect us from accidents

- **Marques**: sinking
- **Irving Johnston**: grounding
- **Pride of Baltimore II**: dismasting
- **Pogoria**: dismasting
- **Frederyk Chopin**: dismasting
- **Lord Rank**: sinking
- **Asgard II**: sinking
- **Concordia**: sinking
Sail trainers don’t tolerate the crazy skipper or mate; but all seafarers can fall victim to the same killers:

- Fatigue
- Boredom with repeat voyages (‘complacency’)
- Technology saturation, neglecting to look
- Short cuts
- Concentration lapses
- Incorrect or misread data (charts, tides)
- Seeing what you expect to see
How can ISM help?

- Devised by IMO: can one size of SMS fit all ships?
- Levelling down?
- Eliminating variety in a sector of rich diversity?
- Can paper really make ships safer?
- Designed for big commercial ships
- Highly bureaucratic, procedural
1. To safeguard the shipmaster in the proper discharge of his responsibilities with regard to maritime safety and the protection of the marine environment

2. Appropriate organization of management to enable it to respond to the need of those on board ships to achieve and maintain high standards of safety and environmental protection

3. There is increased demand by many by flag states for the development of mini ISM culture and programs for smaller tonnage and domestic fleets
The Sail Training International ‘SMS Lite’ template introduced

- Developed by:
  - Rood Boven Groen and
  - Canadian Management Group

- For the use of *bona fide* sail training organisations
The Sail Training International ‘SMS Lite’ template introduced

• Why now?
• **Asgard II**, 24m sail training Brig
  – Well maintained Irish sail training vessel
  – Water ingress in the Bay of Biscay
  – Portable pump failure
  – All crew and trainees abandoned
  – Vessel believed to have hit a submerged underwater object
  – Crew and operation commended

• **Recommendation**
  – *The Department of Transport should review the statutory requirements relating to sail training ships and amend the legislation if considered necessary.*
T/S Royalist
• T/S Royalist, 24m sail training Brig
  • Ran aground on departure from Chapman’s pool
  • MAIB Full investigation
    ▪ Master distracted with setting sails
    ▪ No formal assessment and auditing of relief masters
    ▪ Flyer issued to sail training community
    ▪ Guidelines to writing a safety management system issued to sail training community (UK)
Flyer key recommendations

For many sail training vessels, there is no legal requirement to have a Safety Management System.

Nevertheless, in order to execute their duty of care, it is essential that sail training organisations ensure that best practice is consistently applied onboard their vessels.

Actions should include the provision of detailed safety instructions, and sufficient training, continuation training and monitoring to ensure that the organisation’s required standards are achieved and maintained.
Lord Rank
Lord Rank, 21m OYC/OYT Ireland ketch

- Ran aground 20 minutes after leaving harbour
- Vessel total loss

- MAIB Preliminary Investigation
  - Lack of passage planning
  - Lack of position observance and fixing
  - Not investigated further as lessons already highlighted from T/S Royalist incident!
- Lack of salvage/maritime law knowledge on board
- Lack of available operational support
- Media interest
- Likely prosecutions
T/S Royalist

- Fatal fall from rigging while at anchor
- Fourteen year old cadet killed
- Full MAIB investigation – currently ongoing
1. **Operations Manual** – *which sets out the operating procedures of the organisation and the vessel in detail. The manual is a reference tool for ongoing education and review on the organisation’s procedural policies*

2. **Crew Familiarisation Forms** – *to ensure that each new crew member has received the required background on the operation and the vessel*

3. **Working Aloft Familiarisation** – *self explanatory and increasingly gaining attention under occupational health and safety revisions*

4. **Safety Equipment Checklist**

5. **Pre-departure and Pre-arrival Checklists**
ISM Light Safety Management Manual
Part B

Checklists, Emergency Flowcharts and Formats

Checklists
The use of the checklist must be recorded in the logbook.
Checklist 1 "Familiarisation new crewmember"
Checklist 2 "Prepare for sea, prepare bridge"
Checklist 3 "Prepare engine room"
Checklist 4 "Voyage preparation"
Checklist 5 "Bunkering fuels"
Checklist 6 "Standing orders bridge"

Emergency Flowcharts
Emergency Flowcharts 1 "Stranding or Grounding"
Emergency Flowcharts 2 "Collision"
Emergency Flowcharts 3 "Abandon ship"
Emergency Flowcharts 4 "Man over Board"
Emergency Flowcharts 5 "Wounded or Sick Person"
Emergency Flowcharts 6 "Oil Spill"
Emergency Flowcharts 7 "Fire"

Formats
Format 1 "Voyage preparation"
Format 2 "Crew list/Passenger list"
Format 3 "Drill schedule"
Format 4 "Emergency Drill schedule"
Format 5 "Muster list"
Format 6 "Internal audit"
Format 7 "System review"
Format 8 "Maintenance Schedules"
**Part C: Planned and Corrective maintenance**

### Maintenance schedule Sailing Vessel "XXX"

<table>
<thead>
<tr>
<th>Ships particulars</th>
<th>Running hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Main Engine</td>
</tr>
<tr>
<td></td>
<td>2999</td>
</tr>
<tr>
<td>Call Sign</td>
<td>Generator 1</td>
</tr>
<tr>
<td></td>
<td>3000</td>
</tr>
<tr>
<td>MMSI No</td>
<td>Generator 2</td>
</tr>
<tr>
<td></td>
<td>3000</td>
</tr>
<tr>
<td>IMO No</td>
<td>Gear Box</td>
</tr>
<tr>
<td>Register No</td>
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</tr>
<tr>
<td>Certificate of Registry No</td>
<td></td>
</tr>
<tr>
<td>Sat Com No</td>
<td></td>
</tr>
<tr>
<td>LOA</td>
<td></td>
</tr>
<tr>
<td>LOD</td>
<td></td>
</tr>
<tr>
<td>LWL</td>
<td></td>
</tr>
<tr>
<td>Breadth</td>
<td></td>
</tr>
<tr>
<td>Depth</td>
<td></td>
</tr>
<tr>
<td>Vertical clearance</td>
<td></td>
</tr>
<tr>
<td>Gross Reg. Tons</td>
<td></td>
</tr>
<tr>
<td>Net Reg. Tons</td>
<td></td>
</tr>
<tr>
<td>Displacement</td>
<td></td>
</tr>
<tr>
<td>Builder</td>
<td></td>
</tr>
<tr>
<td>Year Built</td>
<td></td>
</tr>
</tbody>
</table>
## Inter-Active Calendar

### Instructions

Enter current machine hours on Start Page

Fill in information as required in non-colored cells for each type of equipment

Update Last Change for each Maintenance point. Also go to Calendar tab and Mark Complete the last change.

Tasks due to be completed in the next 10 days will appear as green in date column

Overdue tasks will appear as red in the next change column. These should not be reentered in calendar unless missed previously.

Enter "green tasks" in the tab marked Add & Remove Tasks. Enter the date, the task, and a frequency of 1.

### Main Engine

**Running Hours:** 3200

<table>
<thead>
<tr>
<th>Hours to go</th>
<th>Last Change</th>
<th>Next Change</th>
<th>Maintenance point</th>
<th>Description</th>
<th>Interval</th>
<th>Estimate of Running Hrs per day</th>
<th>Estimated Number of Days before Task</th>
<th>Date</th>
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</thead>
<tbody>
<tr>
<td>200</td>
<td>3100</td>
<td>3400</td>
<td>Oil Change</td>
<td>Oil Change</td>
<td>300</td>
<td>8</td>
<td>25</td>
<td>23-Feb-12</td>
</tr>
<tr>
<td>200</td>
<td>3100</td>
<td>3400</td>
<td>Oil Filter Change</td>
<td>Oil Filter Change</td>
<td>300</td>
<td>8</td>
<td>25</td>
<td>23-Feb-12</td>
</tr>
<tr>
<td>200</td>
<td>3100</td>
<td>3400</td>
<td>Fuel Filter</td>
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</tr>
</tbody>
</table>
How to download:

- [www.sailtraininginternational.org](http://www.sailtraininginternational.org)
- ‘Vessels’
- ‘Register’
- ‘Download’
Ocean Youth Trust Scotland describes how they designed their SMS

- Say what you do
- Do what you say
- Prove that you do what you say that you do

- OYTS, Rona Trust, Discovery Sailing Project started from different points and converged on SMS Lite
Still need to run an organisation:
• Requires massive time commitment to implement and manage
• Requires human resources
• Can strain operational staff!

Requires buy in from:
• Operational staff, Office staff and Volunteers

Consistency in systems and processes - Training:
• New staff
• To ensure understanding
• To communicate changes

Implementing SMS Lite
Emergency procedures, according to James Stevens (ASTO Chairman and past RYA Chief Examiner):

- “SMS is how to avoid killing people...
- …emergency procedures are what to do if you have killed anyone.”
Feedback from the ASTO Conference three days ago

Feedback 1

• Development of culture on board
• Decision support system - not laying down the only way that things must be done
• Recognisable system based upon international standards
• Easy to understand, navigate and designed specifically for OYTS
• Strong links with the safety committee to ensure quality training in documentation
Feedback from the ASTO Conference three days ago

Feedback 2

• Current work
  • Reorganised paperwork
  • Priorities highlighted
  • Review and improvements begun

• Future work
  • Formal risk assessment study underway
  • Constant review of system
  • Complete buy in to system from all involved
  • Very safe (and still fun) sail training voyages
Feedback from the ASTO Conference three days ago

Feedback 3
• Accidents have necessitated a response from ASTO and the MCA
• Industry consultation between ASTO, Sail Training staff, and MCA
  ASTO working group established
  Conference consultation

• Encouraged to write our own Safety Management Systems before MCA lay down the law
• ASTO document “What is a safety management system”
“Will use Template as index to direct to existing documents.”

“Good cross-check to see where holes are.”

“Will be buying into it to make life easier.”

General agreement on the importance of Conferences and Seminars to have opportunity to share best practice documents.
International Safety Management

Implementing SMS could:

• Increase transparency in your operations and breakdown cultural barriers for new sea staff *(ensure they know what your organisation wants instead of making assumptions)*

• Simplify external auditing for the benefit of your organisation

• Develop a culture that allows team-members to question/challenge poor operational practices and decisions

• And avoid a catastrophic single-point failure...
Questions...