

SOLIS

MARINE CONSULTANTS



Nautical Institute HK Branch Annual Conference

“Safe Manning On Board Ships?”

24 November 2017

www.solis-marine.com

Solis Marine Consultants Established in 2012



LONDON - SINGAPORE - HONG KONG - SHANGHAI - CAPE TOWN

- Unsafe Ports and Berths
- Collisions and groundings - Casualty investigation and causation
- Expert witness
- Accurate reconstruction of events using AIS & VDR data using Solis' Rapid Replay® tool
- VDR data extraction and analysis using Solis' Open VDR tool
- Shipping and Management Company - 3rd Party due diligence
- Fixed and floating object damage (FFOD)
- Salvage consultancy and casualty management - 3 SCR's on Lloyds panel, London and Singapore
- Hull & machinery damage - Investigation and assessment
- Cargo loss and damage
- Strength and stability analysis

- Overview of the international requirements
- The Minimum Safe Manning Certificate
- Manning onboard ships in the real world
- The role of management
- Incidents and accidents
- Incident investigation
- Brief case study and implications

STANDARDS REQUIRED BY IMO

SOLAS Chapter 5 Regulation 14 - Ship's Manning

“From the point of view of safety of life at sea, all ships shall be sufficiently and efficiently manned”

IMO Resolution A.1047(27)

Sets out the principles of minimum safe manning:

“BEING AWARE that the ability of seafarers to maintain observance of these requirements is dependent upon their continued efficiency through conditions relating to training, hours of work and rest, occupational safety, health and hygiene and the proper provision of food”

IMO Resolution A.1047(27)

- Maintain safe watches at sea and in port
- Moor and unmoor the ship safely
- Manage the safety functions of the ship
- Prevention of damage to the marine environment
- Cleanliness of spaces to minimize the risk of fire
- Provide for medical care on board ship
- Ensure safe carriage of cargo during transit
- Inspect and maintain, the structural integrity of the ship
- Damage control and maintenance
- Fire fighting, emergency, life saving equipment
- Operate main propulsion and auxiliary machinery
- Ongoing training and specialised training
- Emergency duties

IMO Requires the Company to:

- Make an assessment of the tasks and responsibilities
- Ensure fitness for duty and maintain record of hours
- Assess the numbers and grades of the ship's complement required
- Submit a proposal to the Administration
- Ensure that the minimum safe manning is adequate, at all times and in all respects
- Prepare a new proposal if trading areas, or any of the above, changes

The Administration then:

- Evaluates the proposal and gives approval if fully satisfied

However

- The document may be withdrawn (persistent offenders)

In the real world a ship owner/manager knows how many crew is required for his ships?




Minimum Safe Manning Document

Capesize Bulk Carrier

Minimum - 13 Crew

Operates with 22 to 24



MINIMUM SAFE MANNING DOCUMENT
Issued under the provisions of regulation V/14.2 of the
INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, as amended
under the authority of the Government of
The Republic of Liberia
by the Liberia Maritime Authority

Particulars of ship		
Name of Ship:	IMO Number:	Official Number:
Port of Registry:	Gross Tonnage:	Main Propulsion (KW):

Type of Ship: Bulk Carrier
Periodically Unattended Machinery Space: Yes


Trading area: Unrestricted International Voyage

The ship named in this document is considered to be safely manned if, when it proceeds to sea, it carries not less than the number and grades/capacities of personnel specified in the table(s) below:


Grade/Capacity	Certificate (STCW Regulation)	Number of Persons
Master (See Note 1)	II/2	1
Chief Mate (See Note 2)	II/2	1
Navigational Watch Officer (See Note 2)	II/1	2
Able Seaman or Able Seafarer Deck (See Note 2)	II/4 or II/5	3
Ordinary Seaman (See Note 2 and 3)	II/4	2
1. GMDSS 1st/2nd class Radio Electronic Operator/Maintainer or 2. At least two Deck Officers holding GMDSS General Operator Certificates		
Chief Engineer (See Note 1)	III/2	1
Second Engineer (See Note 2)	III/2	1
Engineering Watch Officer (See Note 2 and 5)	III/1	0
Oiler/Motorman or Able Seafarer Engine (See Note 2 and 5)	III/4 or III/5	1
Engine Rating (See Note 2)	III/4	1

Special requirements or conditions

1. Watchkeeping arrangements shall be at the discretion of the Master but shall never be of lesser standards than those prescribed by the Standards of Training, Certification and Watchkeeping, 1978 as amended thereafter, and IMO Resolution A.1047(27), as amended, (see Marine Notice MAN-001).
2. All officers and ratings shall be licensed or rated in the grade listed or a grade above.
3. A rating with Basic Safety Training and training by the company as a lookout can replace one of the two required Ordinary Seamen (STCW II/4).
4. If all ratings are qualified as General Purpose (GP) and certified as both AB and Oiler, the total number of ratings carried may be reduced by one.
5. Classed for Periodically Unattended Machinery Operation: Unless there is a record of a satisfactory periodic Automation Notation survey completed by Class on board the vessel, two additional Engineering Watch Officers and one additional Oiler are required.



Issued at
on the day of



Margaret Ansumana
Deputy Commissioner Maritime Affairs

Numbers are only part of the picture for Owners/Managers

- Management of hours - STCW and the SMS
- Hazard identification / risk analysis
- Monitoring of onboard standards - Navigation Assessments - VDR analysis
- Keeping of records
- Do what you say you are going to do and verify
- Is it really safe?

Incidents where crewing issues are relevant

- Certification and experience of master and crew
- Scrutiny of on board records - present and past
- Hours of work and rest - cross checked against ship board documents
- Compliance with SMS requirements
- Assessment of the SMS for answers
- Assessment of recruitment structure with Managers/Owners and Agency
- VDR, ECDIS, AIS and other electronic data
- There is nowhere to hide!

Case Study 'SHEN NENG 1'

- Panamax Bulk Carrier
- 23 Crew
- Master, chief officer and second officer with years of experience
- SMS system in place and fully compliant
- Loaded a coal cargo at Gladstone, Australia for China

Case Study 'SHEN NENG 1'

- Vessel grounded on a shoal on the Great Barrier Reef shortly after departure
- Fatigue issues
- Extensive environmental pollution and reef damage
- Extensive salvage operations
- Intense media coverage
- Reputation issues
- Intervention by Government departments (AMSA)
- Legal disputes and heavy claims
- Chief officer jailed
- Exposure to insurers



Lessons learned the
hard way

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