AMSA overview

OSV Safe deck, cargo operations

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Rules and regulations - AMSA Overview

Context:
- Offshore Supply Vessels: Loading, stowage and carriage of cargo on deck

Applicable legislation:
- Maritime safety legislation (Commonwealth Legislation)
  - Other than National Law
  - Navigation Act 2012
    - Marine Orders
      - International conventions
Navigation Act 2012 – subsection 114: Proper precautions in loading a vessel

- a person who is involved in an activity of packing, sending, stowing, loading, unloading, securing or carrying cargoes or ship’s stores on a vessel is responsible if contravenes the regulations.

..........NOT JUST THE MASTER..........
Navigation Act 2012 – subsection 112(4): the regulations may provide for the carriage of cargo on a vessel

Marine Order 42 (Cargo, stowage and securing) 2014
Marine Order 32 (Cargo handling equipment) 2011
Marine Order 41 (Carriage of Dangerous Goods) 2013
Marine Order 44 (Safe containers) 2013

Marine Order 59 (Offshore support vessel operations) 2011
Marine Order 42 (Cargo, stowage and securing) 2014

- SOLAS chapter VI & VII
- **2011 TDC Code** means the Code of Safe Practice for Ships Carrying Timber Deck Cargoes, 2011, as adopted by IMO resolution A.1048(27)
- **CSS Code** means the Code of Safe Practice for Cargo Stowage and Securing,
- **IMDG Code** means the International Maritime Dangerous Goods Code, and

- **Cargo Securing Manual**
SOLAS chapter VI – Carriage of cargoes and oil fuels
(Part A – General Provisions)

• Regulation 5 – Stowage and securing
  o Applies to all cargoes, other than
    o solid and liquid bulk cargoes,
SOLAS chapter VI – Regulation 5 – continued

- The cargoes **loaded** shall be **stowed** and **secured** in accordance with:
  - the **Cargo Securing Manual**, to prevent **damage** or **hazard**, to the ship, and
  - the persons on board, and
  - loss of cargo overboard

  throughout the voyage
SOLAS chapter VI – Regulation 5 – continued

- Cargo, cargo units and cargo transport units shall:
  - Be **packed** and **secured** within the unit
  - To prevent, **damage or hazard** to the **ship and the persons on board** throughout the voyage
Stowage and securing cargoes

SOLAS chapter VI & VII – Regulation 5

WHY?

To prevent damage to ship, hazard to persons or loss of cargo overboard
Cargo Securing Manual (CSM)

- shall be drawn up to a standard at least equivalent to relevant guidelines developed by IMO
CMS shall be:

- ship specific, and

- Relevant to the cargo intended to be transported
cargo securing devices

- **meet** functional and strength criteria
- **applicable** to the a particular ship and its cargoes, and
- **suitable** to the quantity, type of packing and physical properties of the cargo to be carried
• **cargo securing devices** takes into account
• **transvers**, **longitudinal** and **vertical** forces which may arise from adverse weather and sea conditions
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CMS shall ensure that: continued

• Appropriate cargo securing points or fittings are used (ISM code elements 7 and 10)

• Information on strength (SWL) and instructions for the use of each specific type of cargo securing are provided (ISM code elements 6 and 7)

• Information for inspection and maintenance of each specific type of cargo securing are provided (ISM code elements 6, 7 and 10)
CMS shall ensure that: continued

- Is written in the working language of the ship.
  - If the language is not English, French or Spanish a translation in one of these languages should be included (ISM Code element 6)

- The information provided is in accordance with the vessel’s
  - trim and stability booklet,
  - International Load Line Certificate, and
  - IMDG Code (if applicable)
SOLAS Chapter IX – Management for the Safe Operation of Ships (ISM Code)

- **Objectives:**
  - to ensure:
    - safety at sea,
    - prevention of human injury, or
    - loss of life, and
    - avoidance of damage to the environment,
    - in particular, to the marine environment, and to property
SOLAS Chapter IX – Management for the Safe Operation of Ships (ISM Code)

- **The Company** to ensure that (elements 2 and 3)
  - policies are established and implemented
  - Adequate resources are available to enable the DPA to carry out his/her functions

- **Master** to ensure that the vessel is operated in a safe manner in accordance with rules and regulations (element 5)
  - Operations to be carried out under the control of responsible and experience person
  - Establish good line of communications

- **Crew** qualified, trained and fit (element 6)
  - Properly rested, qualified in the operations of any gear/machineries and trained in the particular operation to be carried out
SOLAS Chapter IX – Management for the Safe Operation of Ships (ISM Code)

- **Procedures** to identify critical shipboard operations shall be available (element 7)
  - Including prevailing weather conditions
  - Condition of the deck, e.g. wet/dry, rolling/pitching

- **Equipment** and gears to be maintained (element 10)
  - Maintenance in accordance with manufacturer requirements and rules/regulations
SOLAS Chapter IX – Management for the Safe Operation of Ships (ISM Code)

- Keep records
  - Fitness, training, qualifications, maintenance, JSAs..... (element 11)

- Review
  - learn/improve from the past experiences (element 12)
Marine Order 44 (Safe containers) 2013

- **Offshore bulk containers** IMO MSC/Circular 860
  - Designed and certified to have sufficient strength to withstand the forces exercised in the offshore operations
  - Approved by Class or a NATA organization evidenced by a plate permanently attached to it
  - Annual inspections required
Marine Order 32 (Cargo handling equipment) 2011

• **cargo gear** means an article, for use with a lifting appliance in loading or unloading cargo, that:

  (a) is not permanently attached to the lifting appliance; and

  (b) is designed to be detachable from the lifting appliance.

Examples

- wire rope, fiber rope, sling, net, clamp, grab, pallet bar, lifting beam, lifting frame, spreader, tray, tub, scrap bin or other cargo receptacle, magnetic lifting device, vacuum lifting device, patent cargo handling system or self unloading system.
Legislations - Others

Marine Order 32 (Cargo handling equipment) 2011

- **loose gear** means an item of equipment that can be used to attach a load to a lifting appliance but that does not form an integral part of the appliance or load, including a block, shackle, hook, swivel, connecting plate, ring, chain block or hoist, chain or overhauling weight.

- **material handling equipment** means an article or an integrated assembly of articles designed to convey or for use in conveying cargo, including

  - lifting appliances, **cargo gear**, **loose gear**, mechanical stowing appliances or personnel cradles. (to comply with schedule 6 – Safe use of material handling equipment)
Marine Order 59 (Offshore support vessel operations) 2011

- Navigation Act 2012 does not allow AMSA to include matters of OH&S in the legislation
  
  - That is why, most likely, this Order will be repelled

HOWEVER.........
SEACARE

- established a working group to develop a **Code of Practice for the offshore industry**
  - The **Guidelines for Offshore Marine Operations (GOMO)** most likely will part of it
- The current **Code of practice 1/2000**, issued under Sec.109 of the OH&S(MI)Act 1993, **includes**
  - The **Code of Safe Working Practice for Australian Seafarers**
    - Available from SEACARE website

Seacare Authority Code of Practice 1/2000

- F2007B00361
  - In force
Failing to comply with the legislation
**Shipper**: to ensure the cargo is packed in accordance with the requirements and provide appropriate information to the master.

**Ship owner**: to ensure that the vessel is seaworthy and manned with fit, qualified and trained crew.

*Communication is the key for a successful operation.*
Who does what?

**Ship operator**: to ensure the procedures/instructions are provided to the crew and proper equipment made available and maintained.

**Master**: to ensure that the vessel is seaworthy, manned with qualified, fit and trained crew, implement the operator’s procedures/instructions.

**Crew**: to follow the master’s instructions and company procedures, use equipment in a proper manner and report any issue they may identify.

*Communication is the key for a successful operation.*
Who does what?

Every ship is different and Everyone is responsible for a safe deck cargo operations:

The deck of a ship is:
- Dynamic, and
- Full of Hazards, that
- Continually change, and
- Effected by internal and external factors
- Worked/Operated by crew (human element)
  - Crew to follow procedures
  - Crew to use equipment properly
  - Crew to continually assess the environment they are working in
AMSA common findings

• **Generic cargo operations procedures**
  − Not necessarily relevant to the particular cargo been worked

• **Cargo information not provided to the master**
  − Information for the master prior to load not provided or cargo information incorrectly provided

• **Cargo secured not in accordance with CSM**
  − Method of securing not approved as per SOLAS Ch. VI or VII reg.5
  − Including lashing points
  − Container/offshore containers stowed over steel on steel

• **cargo securing devices in poor condition or incorrectly used**
  − Lack of maintenance
  − Number of devices and configuration used not as per CSM

• **Offshore containers without approval plate or current inspection date**
  − Magazines are not offshore containers and should be loaded in approved open tray

• **Dangerous goods not loaded in accordance with the vessel DOC DG**
  − Loaded in area of deck not allowed for
  − Class of DG not allowed for

• **Declared weight of containers not the actual weight**