SUT, MASTS & D’Arcy Thompson Forum

Session 2: The Marine Ecosystem
What are we protecting it for..?
The need to think differently..!

November 2022
www.waves-group.co.uk
Prevention rather then cure
Prevention rather than cure

UNFAVOURABLE COMBINATIONS OF ROLLING PERIOD, VESSEL, SPEED, HEADING AND WAVE CONDITIONS, CAN TRIGGER SUDDEN AND EXTREMELY RAPID INCREASES IN ROLL MOTIONS, WHICH WOULD LEAD TO EXCESS LOADING ON CONTAINER SECURING DEVICES AND IN THE WORST CASES, CONTAINER STACK COLLAPSES AND CONTAINER LOSSES.

MD MEGS / Dec. 2013 provides guidance to the Master for avoiding dangerous situations in adverse weather and seas conditions, which may cause collapsing of the vessel or heavy rolling with a risk of damage. The worst situations are described as:

- SURF-RISEING AND BRAKING-TO
- SUCCESSIVE HIGH-WAVE ATTACK
- SYNCHRONOUS AND PARAMETRIC ROLL MOTIONS

HOW TO IDENTIFY SYNCHRONOUS AND PARAMETRIC ROLL MOTIONS

- Synchronous rolling occurs when both vessel motions (roll, pitch and surge) are in phase. This is when the vessel experiences the wave period. The vessel heaves over with larger successive roll angles.
- Parametric rolling occurs when changes in vessel stability on the vessel moves in waves. It is most common in heavy seas area but can occur also in following seas. It is a sudden phenomenon with large and rapidly increasing roll angles experienced over a short period of time.

KEY TRIGGERING CONDITIONS TO WATCH FOR

- Wave encounter period: time is taken for the wave to translate the vessel in the forward direction, to stand back, then back to port (approximately equal to the wave encounter period) or below the wave encounter period.
- Average meteorological trim (MET) rothers in long rolling period
- No tearing acting conditions or head seas.
- The wave encounter period can be measured with a stopwatch as the time between two wave crests. It is close to the vessel pitching period (time it takes for the vessel to pitch bow down, stern down and back to bow down).

STEPS OF PARAMETRIC ROLLING

- Vessel rolls to one side whilst on the wave crest, stability decreases and large roll motions are experienced.
- Vessel rolls right on the trough of the wave, stability increases leading to a strong push, experienced as a high roll or drift vessel.
- Vessel is on top of the wave crest again and rolls even further...

WHAT TO DO WHEN IT HAPPENS

In the list of dangers from the International Maritime Organization (IMO) guidance recommendations changing the vessel heading or adjusting this speed, whilst avoiding abrupt steering. The guidance in the following pages shows a range of generic combinations of wind, wave and roll conditions, the expected tale when where dangerous situations are likely to occur.

Masters should use this guidance with particular attention of the specific features of their vessel and its behavior in heavy weather. All chief officers should familiarize themselves with the applicable chart for their size of vessel and the loading conditions at the beginning of the voyage, so they are familiar with actions to take in order to reduce the rolling, as parametric rolling in particular, can develop quickly remorsesting prompt remedial actions.

If you have any questions, or would like further advice on reducing container losses, then contact Wavem Group at: mail@wagroup.co.uk
Prevention rather than cure
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The global salvage industry
Key messages

Saving lives

Protecting the environment

Preventing loss and mitigating risk

keeping trade flowing and ports open
LLOYD'S STANDARD FORM OF SALVAGE AGREEMENT
(Approved and Published by the Council of Lloyd's)

NO CURE - NO PAY

1. Name of the salvage Contractors:
   - The vessel:
   - her cargo, freight, bunkers, stores and any other property thereon but excluding the personal effects or baggage of passengers, master or crew.
   (referred to in this agreement as "the Contractors").

2. Property to be saved:
   - (referred to in this agreement as "the property").

3. Agreed place of safety:
   - Agreed currency of any arbitral award and security (if other than United States dollars).

4. Date of this agreement:
   - Place of agreement

5. Is the Scopio Clause incorporated into this agreement? Yes/No

6. Person signing for and on behalf of the Contractors:
   - Signature:

7. Capitan or other person signing for and on behalf of the property:
   - Signature:

8. Scope of authority: The Master or other person signing this agreement on behalf of the property identified in Box 2 enters into this agreement as agent for the respective owners thereof and binds each (but not the one for the other or himself personally) to the due performance thereof.

9. Indemnification prohibited: No person signing this agreement or any party on whose behalf it is signed shall at any times or in any manner whatsoever offer promise give or promise to provide or demand or take any form of indemnity for entering into this agreement.

IMPORTANT NOTICES

1. Salvage security. As soon as possible the owners of the vessel should notify the owners of other property on board that this agreement has been made. If the Contractors are unsuccessful the owners of such property should note that it will be necessary to provide the Contractors with salvage security promptly in accordance with Clause 4 of the LSAG referred to in Clause 1. The provision of General Average security does not relieve the salvors of their separate obligation to provide salvage security to the Contractors.

Current issues - sustaining LOF
Environmental protection