

## Question / Interpretation Request / Rule Change Proposal Form

Please complete this form and submit it to the IACS Senior Technical Officer, Mr. Gil Yong Han, at [gilyonghan@iacs.org.uk](mailto:gilyonghan@iacs.org.uk) and [zoewright@iacs.org.uk](mailto:zoewright@iacs.org.uk) or fax it to +44 (0)20 7808 1100

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Question, Request for Interpretation or Rule Change Proposal (RCP):

Questions related to requirements in Ch. 6 Sec.1 and 2 for flooding:

Q1:

Ref. Ch. 6 Sec. 1 [3.1.3]/ [3.2.2] and Sec. 2 [3.1.3]/[3.2.5]

The item Ch. 6 Sec. 1 [3.2.2] is giving "Net thickness under flooded condition excluding corrugation of transverse vertically corrugated bulkheads separating cargo holds" and Sec.2 [3.2.5] "Net section modulus and net shear sectional area of single span ordinary stiffeners under flooded conditions(..)". The flooding pressure to pF to be used in the formulas is according to Ch.6 Sec. 1 [3.1.3] and Sec. 2[3.1.3] the flooding pressure pF of Ch. 4 Sec. 6 [3].

Ch. 4 Sec. 6 [3] have two definitions of pF:

- [3.2.1] flooding water pressure - static water head including 60% vertical acceleration.
- [3.3.6] flooding water pressure – static water head only

As Ch. 4 Sec. 6 [3.3.6] is referring to "pressure on corrugation in empty hold" we assume [3.2.1] should be used in this context.

Please consider revising Ch. 6 Sec. 1 [3.1.3] and Sec. 2 [3.1.3] to "The lateral pressure in flooded conditions pF is defined in Ch. 4 Sec. 6 [3.2.1]"

Q2:

Ref. Ch. 6 Sec. 1 [3.2.3] and Sec. 2 [3.2.6]

The item Ch. 6 Sec. 1 [3.2.2] is giving "Net thickness of corrugations (..) for flooded conditions" and Sec. 2 [3.2.6] is giving "Bending capacity and shear capacity (..) for flooded conditions." Both items refer to the design resultant pressure and resultant force as defined in Ch. 4 Sec. 6 [3.3.7].

Ch. 4 Sec. 6 [3.3.7] is defining the resultant pressure in combined bulk cargo water flooding. [3.3.6] is defining the pure water flooding pressures on corrugations. This pressure seem to be overlooked in Ch.6. We assume that the reference to [3.3.6] is missing in Ch. 6.

Please consider revising the definition of p in Ch. 6 Sec. 1 [3.2.3] and Sec. 2 [3.2.6] to "(..)either [3.3.6] or [3.3.7] whichever greater".

Q3:

Reference is made to above Q1 and Q2.

A summary of the flooding requirements in Ch. 6 is enclosed below. Please confirm/comment our understanding.

The following is noted with respect to flooding pressures:

Plane boundaries – covering plane bulkheads/stools of corrugated bulkheads etc.

– flooding pressure to be water head + 60% dynamic vertical acceleration

Corrugations of transverse bulkhead – covering corrugations in between stools only

- flooding of cargo and water combined
- flooding of water, static head only.

Use of requirements for flooding and corresponding pressure:

Type	Ch 6 Sec 1 3.2.2	Ch 6 Sec 1 3.2.3	Ch 6 Sec2 3.2.5	Ch 6 Sec2 3.2.6
Corrugations of corrugated bhd	N. A	Ch.4 Sec.6 [3.3.6]/[3.3.7]	N. A	Ch.4 Sec.6 [3.3.6]/[3.3.7]
Stool plating of corrugate bulkheads	Ch.4 Sec.6 [3.2.1]	N. A	Ch.4 Sec.6 [3.2.1]	N. A
Plane bulkheads	Ch.4 Sec.6 [3.2.1]	N. A	Ch.4 Sec.6 [3.2.1]	N. A

Rules: ☐ Tanker ☒ Bulker ☐ Both Type: ☒ Interpretation ☐ Question ☐ RCP

#### Rule Reference

EITHER:

Type	Section Name	Sub Section 1	Sub Section 2	Sub Section 3	Sub Section 4
<input checked="" type="checkbox"/> Text <input type="checkbox"/> Figure	Ch 6	1	3	2	2
<input type="checkbox"/> Table <input type="checkbox"/> Symbol (BC only)		1	3	2	3
		2	3	2	5
		2	3	2	6

OR:

General Rule Reference (e.g. 2/, or General):

Received (e.g. 12/02/06): Day: Month: Year:

Respondent: Client:

IACS Member (AB, LR, etc.): DNV Confidential: ☐ Y ☐ N

Answer or Interpretation:

☐ Answer has already been provided to client.

☐ Attachments included.

Number of attachments: