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SUB-COMMITTEE ON SAFETY OF  
NAVIGATION  
49th session  
Agenda item 6

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## ANCHORING, MOORING AND TOWING EQUIPMENT

**Submitted by the International Maritime Pilots Association (IMPA) and the Oil Companies  
International Marine Forum (OCIMF)**

### SUMMARY

**Executive summary:** This paper provides information on recent incidents of mooring equipment failure, as requested by NAV 48

**Action to be taken:** Paragraph 5

**Related documents:** DE 46/12/1, DE 46/12/2, NAV 48/19, DE 45/16, DE 46/INF.7

### Introduction

1 The International Maritime Pilots Association (IMPA), and the Oil Companies International Marine Forum (OCIMF) have noted DE 46/12/1 submitted by Australia, and DE 46/12/2 submitted by the Republic of Korea and note the general principles contained within both documents relating to Proposal for SOLAS amendments for Anchoring, Mooring and Towing Equipment.

2 IMPA and OCIMF have become aware of a number of incidents in which ships' mooring equipment has failed. At NAV 48, the Chairman asked the organisations to submit a report on the potential size of the problem.

3 OCIMF recently published 'Recommendations for Ships Fittings for Use with Tugs', in which a number of proposals and suggestions are made.

### Details of the information paper

4 IMPA and OCIMF have conducted a survey of their members as requested by the Chairman of NAV 48. The two organisations sent a simple one-page questionnaire to all their members, who comprise over 50 national pilot organisations and the 45 oil companies of OCIMF. Eleven reports were submitted which have been tabulated in a very simplified form in Annex I. The organisations were charged at NAV 48 with reporting the size of the problem so the matter could be considered in context.

### Action to be taken

5 With the results of these surveys now available, IMPA and OCIMF invite the NAV Sub-Committee to note the information attached in the annex to this paper and take action as appropriate.

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## ANNEX

## SCHEDULE OF BITT/FAIRLEAD/CHOCK FAILURES

Date	Type Vsl & Tonnage	Nature of Failure	Summary Narrative
Apr 2003	Tanker 21,249 GRT	Chock tore loose from its welds	Tug was reducing vessels sternway at minimum speed when chock about 15-20 feet aft of bitts tore loose from its welds, slid down tugs lines landing on bow of tug.
Jan 2003	Tanker 5699 GRT	Fairlead suffered gradual collapse.	36T VT Tug pulled astern, and fairlead fractured. It then collapsed pulling rope into fracture where it held till parting.
2002	Tanker 59,999 DWT	Std 2 – bitt posts failed	Tug unberthing vessel. After pulling off at “slow”, then “half”, when increased to “full” bitts failed with 42 Tonnes on Strain Gauge.
2002	Tanker 149,349	Aft pin of std 2 bitts “Squashed”	Tug following vessel to FPSO on 300 metres of 78mm wire. When vessel turned Bitt “squashed.” Bitt rated at 150 tones and tug said it only used 10% of its 220 tonne bollard pull.
Feb 2002	Gen Cargo 16,121 GRT	Fairlead came off deck and went overboard	When tug on Stbd quarter pulled astern Dead Slow fairlead came off deck and fell overboard – Tugs line then came off bitts.
Feb 2002	Chemical 28,000 DWT	Inner part of closed type chock suffered a large crack	Crack discovered in daylight after mooring vessel in darkness. Tractor tug had been fast to what was described as a fitting not designed for towing.
July 2001	Gen Cargo 8,922 GRT	Stern mooring hole part fell off	Stern tug taking vessel off berth pulled Dead Slow when “stern mooring hole part (port side) fell off.”
Aug 2000	Container 17,117 GRT	Mooring chock became detached and went overboard	Whilst unberthing, Tug was pulling astern, mooring chock came off ship’s structure in the centre of the stern.
Aug 2000	Tanker 3166 GRT	Fairlead became detached from Deck	Approaching Berth, tug on stbd quarter pulled astern Dead Slow when Fairlead came off deck.
July 2000	Gen Cargo 15,455	Mooring chock and pedestal torn from deck.	Tug ordered to pull astern dead slow on stbd quarter bitts approaching berth. The mooring chock and all of pedestal was torn from the deck.
Apr 1997	Container 19,872	Bitts torn from deck	Tug pulling dead slow on stbd quarter when bitts came off from deck.