

## The Loss of the Bourbon Dolphin

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## Transocean Rather- rig move



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## Bourbon Dolphin




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## Bourbon Dolphin – the ship



- built August 2006
- 4 x main engines – 3000kw each
- bowthrusters – 2 x aft; 1x fwd + azimuth thruster fwd
- generators: 2x 700kw + 2 x shaft of 2400kw ea
- max bollard pull – 180 tonnes

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## Incident 12 April 2007– part 1

- 0920hrs - last anchor- no 2 being run out
- 1215 hrs - 1000m rig's chain run between the starboard towing pins

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## Anchor Handling equipment



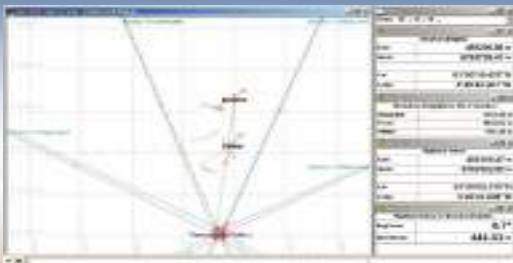
## Incident – part 1

- 0920hrs - last anchor- no 2 being run out
- 1215 hrs - 1000m rig's chain run between the starboard towing pins
- 1300hrs - thrusters at full power –one overheated – SE wind and current & drifting east of the mooring line
- 1500hrs - struggling to get back on line; Highland Valour relieves the weight on the chain by grappling

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## Running out no 2 anchor



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## Anchor handling deck



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## Incident - part 2

- 1620hrs - grappling operation not successful. Ship 850m off line, 2000m from the rig
- 1626hrs - near miss collision

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## Near collision



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## Incident part 2

- 1620hrs - grappling operation not successful. Ship 850m off line, 2000m from the rig
- 1626hrs - near miss collision
- 1640hrs - rig instructed ship to head west
- other ships aware Bourbon Dolphin's manoeuvring problems

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## Bourbon Dolphin



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## Incident part 3

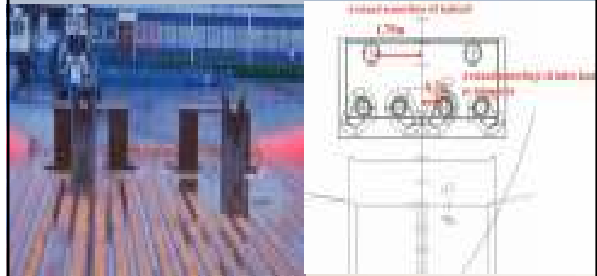
- 1647hrs - Bourbon Dolphin heading west.
- ship listing 5 degrees to port under the weight of chain
- starboard inner pin lowered and chain whips across to port outer pin

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## Double towing pins & sharks jaws



## Incident part 3

- 1647hrs - Bourbon Dolphin heading west
- ship listing 5degrees to port under weight of chain
- starboard inner pin lowered and chain whips across to port outer pin
- the vessel lists 30 degrees to port
- starboard main engine stops
- 1708hrs - ship capsizes

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## Last picture of the Bourbon Dolphin



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## What the Commission found

- ship-owner
  - no experience of Ulstein A102 design
  - risks not identified - bollard pull reduced
  - no specific anchor handling procedures
  - company did not review RMP
  - no time allowed for handover
- ship's master and crew
  - master had 1.5 hrs familiarisation
  - lack of anchor handling experience
  - use of roll reduction tanks

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## What the Commission found

- vessel stability
  - previous stability incident
  - stability problems not notified by shipyard
  - insufficient stability for lateral forces
  - winch too powerful
  - incorrect anchor handling stability conditions prepared
  - operating with full fuel tanks to increase stability

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## What the Commission found

- rig move plan
  - lacked risk assessments
  - lacked safety barriers - weather
  - no account that bollard pull would be reduced
  - no start up meeting with all involved parties
  - no contingency plans; e.g. uncontrolled drifting
  - inadequate communication between rig and ship

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## Commission conclusions – cause of incident

- ship related
  - stability characteristics
  - load condition
  - unfavourable heading
  - use of anti roll tanks
  - lowering of the starboard pin
  - starboard engine failure
  - misunderstanding of the winch quick release
- external factors
  - wind and current

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## Commission's recommendations

- safety management
  - separate stability calculations for AHTS
  - specific AHTS procedures
  - rig move planning
  - bollard pull certificate
  - training – anchor handling / winch operating
- training + simulator training, qualifications
  - testing of emergency winch release system
  - certification of the winch operator
- familiarisation – handovers

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## Your responsibility as a shipowner

- do not accept the situation
- know your vessels
- know your masters and crews

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## Your masters need to know

'The Master has the paramount responsibility for the safety of the vessel and crew ..... This allows him to have the undisputed right to halt an ongoing activity even if others object. He is the last human safety barrier for crew and vessel'

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## Bourbon Dolphin –lost at sea



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