

# Marine Safety Flash



A17-05 (17<sup>th</sup> July 2017)

## Shark Jaw Failure

### Incident Overview

Vessel was performing anchor handling operations on location with Anchor wire secured in the shark jaw.

Port shark jaw gave way while holding pennant wire socket which lead to loss of pennant wire.

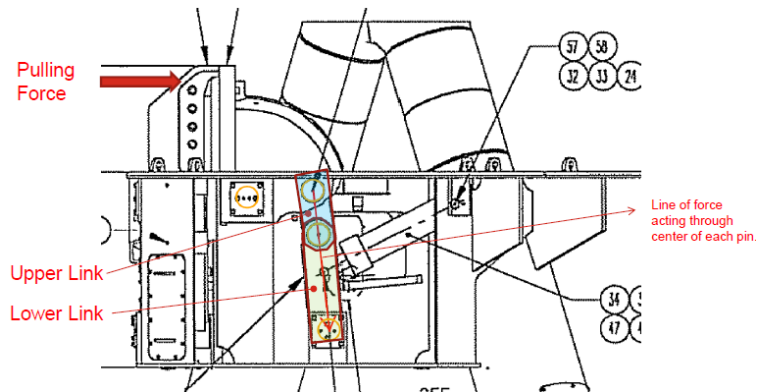
### Key Findings

- Loss of pennant Wire - Due to internal leak in the port shark jaw hydraulic cylinder; it gave way while holding pennant wire socket lead to loss of pennant wire.
- Port shark jaw hydraulic cylinder was found to be leaking internally.
- No audible alarm on the shark jaw panel when the locking indicator light went off.
- Work description in the PMS for the task needs improvement to include; test to verify if there was any internal leak inside the hydraulic piston and piston rod to be cleaned & lubricated during monthly inspection and after every anchor handling operations.

### Recommendations

- Preventive Maintenance needs improvement: As per PMS (based on maker's recommendation) the piston seal is to be renewed every 5 years. However, the hydraulic piston seal lost its integrity before 5 years.

### Shark Jaw – Force Transmission



Picture of shark jaw mechanical link IN its over center position and position of proximity sensor when in locked position (Green light is on)



Picture of shark jaw mechanical link OUT of its over center position and position of proximity sensor when the shark jaw gave up (Green light is off)