

Control of Launch and Recovery of Small Vessels from Motherships

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Figure 1: Launch of rescue vessel from a mothership [1]

Marine rescue operations often include the launch and recovery (L&R) of small vessels from large ships. These processes are simple to carry out in calm waters, but are significantly complicated in high seas where the wave height is above 1.5 metres. This project aims to aid the human decision-making during the L&R processes. This will be done by implementing Quiescent Period Prediction (QPP) to predict a period of calmer sea, subsequently using this wave data to predict the motion of the two vessels and the crane onboard the mothership. These predictions will be used to develop an algorithm to control the movement of the crane for safe L&R.

- [1] *Launching the Rescue Boat and Lifeboat — Seaman VLOG ep 041.*
<https://www.youtube.com/watch?v=CkPCiW3SRs>.