

## **Sensing and Control Technology to Assist in Vehicle Launch and Recovery**

### Award Information

Agency: Department of Defense  
Branch: Navy  
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N/A

### Abstract

Launch and recovery (L&R) of manned and unmanned systems from ships is very challenging. The relative motion between the ship and the vessel being recovered is the primary source of the difficulty. It is often difficult and time consuming to match the motion of the capture device with the vessel being recovered. As sea state increases, the reliability of most existing L&R systems deteriorates. ATR proposes a simple, compact mechanical arm with a floating capture device to launch and recover both surface craft, such as RHIBs, and underwater vehicles, such as the RMMV. The L&R system is designed with the initial intention to be used aboard the Afloat Forward Staging Base (AFSB), which has a relatively low freeboard. The system is designed to be portable and to utilize relatively simple sensing and control technology. With the ability to reliably launch and recover in conditions up to sea state 6, the proposed system would have clear benefits for mine warfare and special operations since availability of such craft would be increased. In addition, the L&R technology developed for the AFSB could have applicability to other ships in the Navy and other organizations both in the military and in industry.

\* Information listed above is at the time of submission. \*