

USV LAUNCH AND RECOVERY (L/R) SYSTEM

SOLUS is a patented integrated L/R system for use on Unmanned Surface Vessels (USV). The SOLUS system in combination with a "standard" davit makes it possible to safely and easily launch and recover USVs as well as regular rescue and work boats on the same system.

The SOLUS system achieves a practical and safe way to launch and recover USVs without the use of advanced and expensive robotic lifting systems. The SOLUS system fulfills all safety regulation in accordance with SOLAS, thus enables the system also to lift a manned USV.

EXPERIENCE

The SOLUS system is not just merely a concept, but a trialed and tested system developed based on existing marked leading technology from H. Henriksen and Vestdavit.

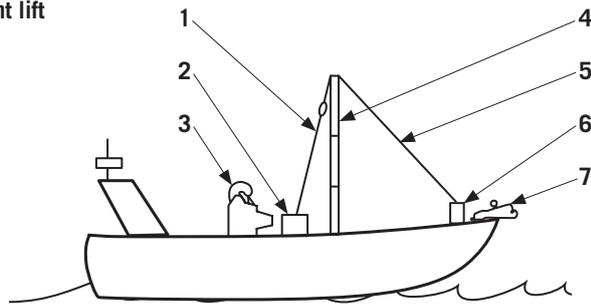
- Vestdavit is today the world leader in advanced davit systems for L/R of naval crafts to and from ships.
- H. Henriksen AS is the world leader in providing a safe lifting hook systems (Henriksen Hooks) to naval and civilian crafts been lifted to and from ships.
- Together we have created a different approach on L/R of USVs in a safe and practical way using more or less standard davit system.

The system is easy to use, requires few operators, and has already proved its worth in rough conditions with untrained operators. The system can be operated up to sea state 4+.

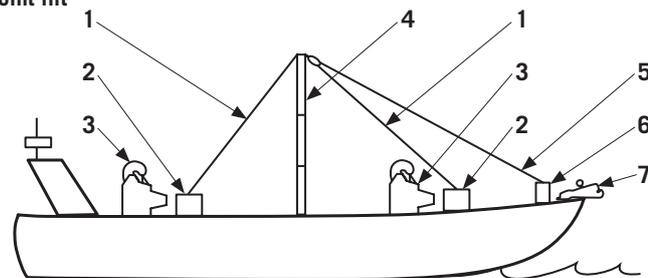
The technology used in SOLUS has a proven track record of low maintenance and through life costs. The manufactures behind the products are robust and renowned companies, securing lifetime support for the system.

SYSTEM OVERVIEW

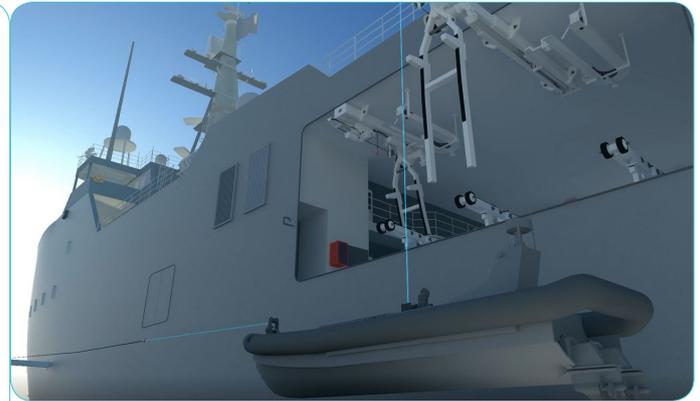
Single point lift



Dual point lift



- | | |
|-------------------|----------------|
| 1 Lifting line | 5 Painter line |
| 2 Lifting drum | 6 Painter drum |
| 3 Lifting hook | 7 Painter hook |
| 4 Telescopic pole | |



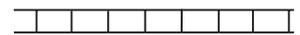
LAUNCH PROCEDURE

The launch procedure is the same as applied for launching rescue boats / workboats.

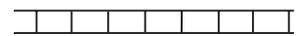
The activated lifting hook(s) open(s) and release(s) the lifting line(s) automatically when the USV is waterborne. The painter hook opens and releases the painter line after the lifting hook(s) has opened and the USV can drive off.

RECOVERY PROCEDURE

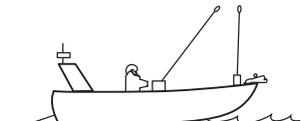
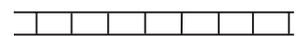
1. USV approaches the ship, recovery starts



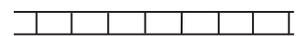
2. Telescopic pole hoisted with the lifting/painter lines



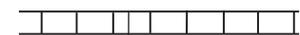
3. Crew catches the lifting/painter lines, telescopic pole lowers



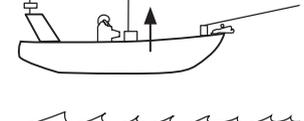
4. Crew connects the painter line, USV slows down to get towed by the painter drum



5. Crew connects the lifting line (lifting lines at dual point davits) to the davit fall line(s)



6. USV lifted and placed in the crib, recovery completed



With crew on board conventional recovery procedure applies.