

# OBV SPRAY – QUICK REFERENCE (Ver. 7, 170308)

## PRE-MOB – MOB – PRE-LAUNCH



**⚠** This document is a complement to the *OBV Spray* manual. System operation requires adequate training!

### PRE-MOBILIZATION

ACTIVITY	MANUAL REF	NOTES / SAFETY CAUTION
1. Mount ladders, DISPCON	3.2.3	<p><b>Safety measures working at height</b></p> <p><b>Note risk of falling objects, fall, squeeze, crush injury. Always use PPE, and fall protection gear system when required.</b></p> <p>Forklift load 12 tons, crane lift w/ dedicated lift set</p> <p>Lash free ends to LDOVB railing for easy access</p> <p>Use dedicated hose set – check for damages</p> <p>Use dedicated cable set – check for damages</p> <p>Use dedicated webbing sling (green), “U” –lift</p>
2. Mount twistlocks & fillers, DISPCON top	3.2.4	
3. Mount ladders & platforms, SYSCON	3.2.5	
4. Mount hawse plates & brackets, SYSCON	3.2.6	
5. Mount NHA opening safety rail, SYSCON		
6. Mount ladders on LDOBV	3.2.7	
7. Mount twistlocks & fillers, SYSCON top	3.2.8	
8. Lift LDOBV onto SYSCON	3.2.9	
9. Mount end sections of dedicated lift set to SYSCON upper ISO corners		
10. Connect hydraulics supply SYSCON-LDOBV	3.2.10	
11. Connect electric supply SYSCON-LDOBV	3.2.11	
12. Fit lifting sling to OBV lifting eye		

### MOBILIZATION

ACTIVITY	MANUAL REF	NOTES / SAFETY CAUTION
13. Mount twistlocks & fillers in vessel deck	3.3.1	<b>Note risk of squeeze/crush injury, falling objects</b>
14. Load & seafasten DISPCON	3.3.1	
15. Load & seafasten SYSCON/LDOBV	3.3.1	Use dedicated lift-set, twistlocks w/ <i>Traena-locks</i> (DHS = Docking Head Stand)
16. Load DHS & fasten to DISPCON		
17. Load & seafasten OBV	3.3.1	Ref 12 above. Do not over-tighten ratchet straps
18. Load OBV access stairway and mate with DHS		Park position away from OBV
19. Connect vessel hydraulic supply to SYSCON	3.3.2	
20. Connect vessel electric supply to SYSCON	3.3.3	
21. Install bridge control system	3.3.4	Set procedures for alt. bridge & portable controls
22. Run remote control start-up procedure	3.3.5	
23. ‘Un-pack’ LDOBV from storage/transport pos	3.3.6	<b>Note free swinging docking head</b>
24. Park LDOBV in operating position	3.3.6 (3)	
25. Connect dispersant feeder hose to SYSCON	3.3.7	Check for leakage
26. Connect compressed air hose to SYSCON	3.3.7 (2)	(optional)

### PRE-LAUNCH

ACTIVITY	MANUAL REF	NOTES / SAFETY CAUTION
27. Part and thread NHL thru OBV masthead	3.4.1	<b>Winch mode MAN</b> throughout Pre-Launch phase .. using the pilot line (note ‘safe’ procedure)
28. Reconnect NHL at outer hanger	3.4.2	
29. Pay out hoist line and connect launch hook	3.4.5	Hand-tighten (only) locking pin with supplied tool
30. Place launch hook inside rim at OBV lifting eye	3.4.5 (2)	
31. Climb stairway to seat launch hook, close it & fit safety pin. Run recovery line thru line cleat.	3.4.6	Use LDOBV, re-park LDOBV <b>before</b> connecting hook
32. Run recovery line two turns over mast hook	3.4.8	Reposition stairway close to OBV, lock to secure it
33. Winch out towline and shackle to OBV D-plate	3.4.7	Re-park stairway away from OBV when done
34. Fasten recovery line eye to towline	3.4.8	Clockwise turns using boat hook from access stairs
35. Winch in towline and NHL slack		Back-tension line when winching. Mouse shackles
36. Prime dispersant pump	3.4.10	Ensure secure fastening at towline connection point
37. NHA & nozzle alignment pre-launch check	3.4.11	Use the tension winch for the NHL
		Remove deflector plate to access all nozzles

# LAUNCH – OPERATE - RECOVER



## LAUNCH

ACTIVITY	MANUAL REF	NOTES/SAFETY CAUTION
38. Initiate vessel speed reduction to 1.0 - 1.5 kn		All speeds & headings thru water (not over ground)
39. Start up handling equipment	3.5.1	
40. Remove OBV sea fastening		Winch mode MAN, mind safety pin line
41. Dock and latch OBV		Lift OBV to latch with DH 300 mm above OBV
42. Verify vessel speed 1.0 - 1.5 kn		No DP or drift or offset compensation
43. Lift OBV overboard, then pull safety pin	3.5.2	Winch mode "L&R". Clear work/lift area
44. Rotate LDOBV to move OBV off vessel side		Note risk of mast head impacting LDOBV jib
45. Rotate OBV until stab. arms parallel to vessel	3.5.3	Clockwise rotation ~120°
46. Rotate LDOBV to ~120° off the bow	3.5.4	(LDOBV boom approx. 4 o'clock)
47. Max jib extension	3.5.5	
48. Final adjustment OBV orientation for take-off		Rotate nose forward for take-off. Set winch mode OBV (NHL follows towline).
49. Slacken towline 3-4 m (NHL follows)	3.5.6	... using tension winch.
50. Slacken an additional 3-4 m on tension line	3.5.6	... out from SYSCON, standing on cargo rail.
51. Manually pull out tow- & tension line slack		Lower OBV into sea at full hoist winch speed.
52. Unlatch and lower OBV into the sea	3.5.7	... to safe height above waves
53. Hoist in launch hook, raise LDOBV boom	3.5.8 (1)	
54. Adjust NHL slack	3.5.8 (2)	
55. Increase vessel speed to 2.0 - 2.5 knots		
56. Run out towline/OBV to operating position	3.5.10	Mind winch speed to maintain water flow thru OBV Adjust NHL tension if required ("slack but dry")
57. Winch control mode "TOW"		
58. Park LDOBV, lower hook into chute tray	3.5.9	

## OPERATE

ACTIVITY	MANUAL REF	NOTES/SAFETY CAUTION
59. Increase vessel speed to 4,5 knots		Maintain straight course for NHA launch & recovery
60. Increase NHL total tension to ~1 ton	3.6.1 (3)	(0,5-0,6 tons on both tension and out-haul lines)
61. Activate "Out-haul winch" and launch NHA	3.6.2-4	Inactivate Out-haul winch control as NHA is all out
62. Transfer system control to bridge unit	3.6.5	Notify control operator if ever entering SYSCON
63. Start / stop dispersant application pump	5.8.4	
64. Adjust dispersant flow rate	5.8.4	

## RECOVERY

ACTIVITY	MANUAL REF	NOTES/SAFETY CAUTION
65. Flush dispersant system with fresh water	3.7.1	When terminating operation
66. Purge system with compressed air	3.7.1	(optional)
67. Select control unit (pref. portable unit)	3.7.2	Winch mode TOW, activate out-haul control
68. Recover NHA (maintaining straight course)	3.7.3	Deactivate out-haul winch controls when done
69. Pay out on tension winch		... to reduce load on OBV mast-top
70. Reduce vessel speed to 1,0 - 2,0 knots		Ideal vessel course wind & sea in 25° on port bow
71. Rotate LDOBV to OBV recovery position and pay out hoist line to a line handler on the rail	3.7.5-6	LDOBV boom approx. 4 o'clock, max outreach .. running hoist line aft of, and under NHL !
72. Winch in OBV until recovery line eye is halfway across cargo rail	3.7.5-6	Winch mode OBV, adjust NHL as needed
73. Sew hoist line eye to recovery line eye, then detach line eye from towline.	3.7.5-6	Caution – squeeze risk! Stand back when done!
74. Winch OBV to recovery position	3.7.5-6	Take in recovery line slack
75. Lower LDOBV boom, hoist and dock OBV	3.7.6-7	Note latch colour markings, also mind mast head!
76. Lift OBV back to deck, taking in line slack	3.7.7-8	Winch mode L&R
77. Rotate & park OBV - unlatch at ~300 mm above deck, lower to deck w/ hoist winch	3.7.7-8	
78. Park LDOBV & unspool recovery line	3.5.9	Manually tension recovery line when spooling off
79. Seafasten OBV	3.3.1 (8)	