AMOSC
Australian Marine
Oil Spill Centre Pty Ltd

Standard Operating Procedure

Booms – NOFI Current Buster

Equipment Description

The **NOFI Current Buster 2** is a towable air inflated boom system designed to collect, separate and contain oil at speeds ranging from 0.5 up to 3 knots in calm, sheltered waters.

Technical Specification

Weight:	560kg	**Length (overall):**	27m
Front Opening:	15m	**Draft (separator):**	1.5m
Storage capacity:	5 m³ (oil)		

Health and Safety

To safely prepare, inflate and launch this equipment, 5 people are required.

Safe Operating Requirements

- Ensure adequate PPE is worn – as detailed above,
- All personnel are to be trained or under the close supervision of a trained operator
- If required a Job Safety Analysis (JSA) to be conducted prior to work commencing. Identification of the following safety factors are critical, but not limited to:
    - Manual Handling,
    - Slips/Trips/Falls,
    - Contamination/Decontamination.
- Ensure adequate Personal Protective Equipment (PPE) is worn –
    - * Life jackets must be worn on or near water dependant on operation
- A communication plan must be decided upon to ensure clear and concise communication at all times
- Be aware of pinch points and 'the bight' between the boom/ vessel during deployment.
- A full safety brief must be conducted.
- All incidents, accidents and near misses must be reported as per AMOSC company policy.

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Operational Instructions

Emergency shutdown

In the event that an emergency shutdown is required, the following measures should be taken:

- Stop operation of all equipment including power pack, boom reel and air blowers if safe to do so.
- Shut down power pack and air blowers.
- Communicate to bridge (if on a vessel) according to pre-designated communication plan.

Pre-start checks

- Prepare the deployment site by removing any rubbish or objects that may impede deployment operations.
- The deployment area required between the reel and the stern/wharf edge needs to be a minimum of 4 metres wide and 6-10 metres long (8 metres is preferable).
- Secure the reel to the deck/wharf by welding, or chains secured downward and back (see “Additional Information” below)

Note: Details of the securing type will depend on the vessel/wharf structure.

- If the surface over which the boom is to be deployed is rough, use an anti-chaff mat. This mat should be secured at both ends to ensure that it does not bunch-up or move as the NOFI boom slides over it.
- Check all fluid levels on power pack and air blowers prior to starting.

Deployment

- If tow lines aren’t already on the boom, attach suitable tow lines and deploy to water. Attaching buoys to ensure buoyancy and to aid retrieval.
- Vessel is to start moving slowly ahead at less than one knot through the water. Vessel is not to put any weight on the boom whilst being deployed. In some instances, it may be more suited to pick up tow lines at the very last point of the deployment.
- Safely pay the towline into the water.
- Commence reeling boom off the reel. With two separate blowers, inflating all chambers as they come off the reel.

Note: It is preferable to find a suitable constant, low speed for the reel rather than periodically starting and stopping of the reel to allow time to fill the air chambers.

- Initially the boom will need to be manhandled off the stern/wharf edge.
- Continue until the entire boom is inflated and in the water.

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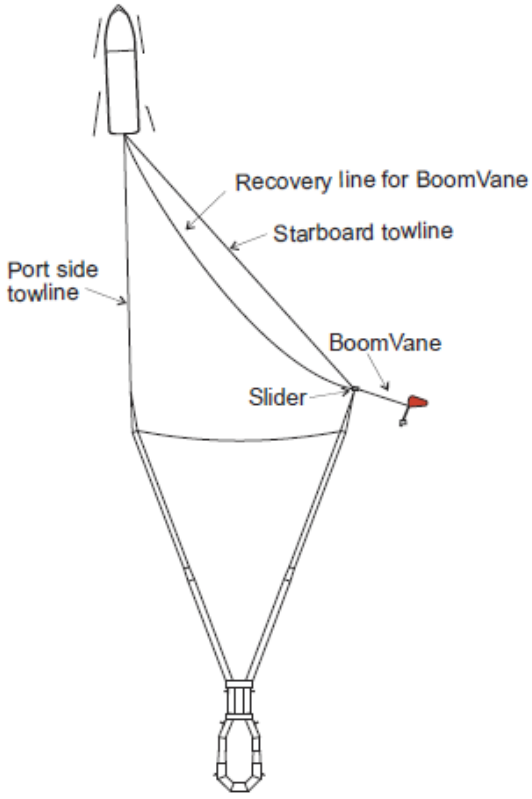
Operation

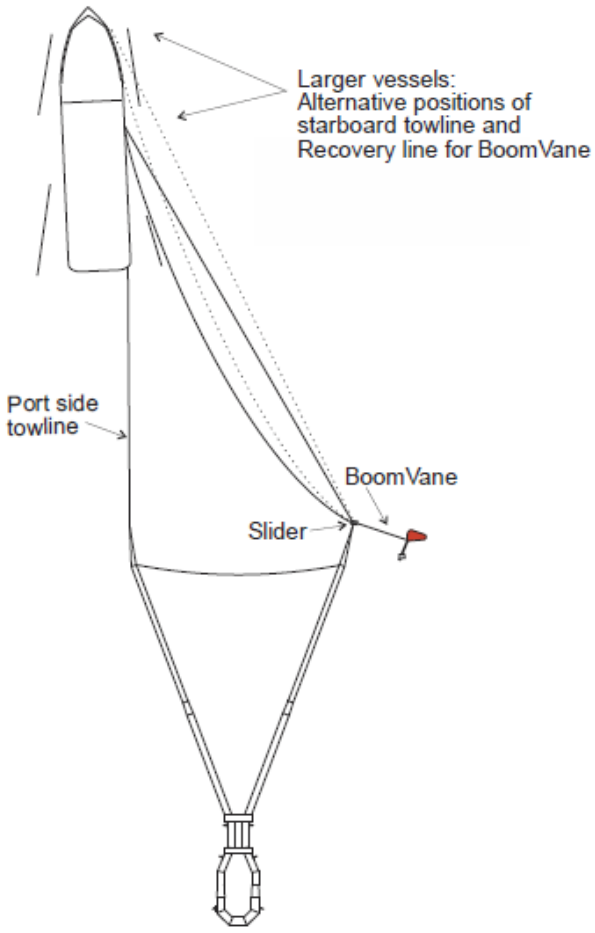
Single vessel – Boom vane

- Prepare boom vane on the deck of vessel for preferred side of deployment (port or starboard). For details, see Operation & Service Manual - Boom Vane.
- When the vessel is at the desired location for recovery, shackle the boom vane to the Current Buster towline on the selected side, launch the boom vane and adjust its position appropriately.
- From time to time, when the separator is full of oil, it should be emptied using a skimmer or submersible pump. Refer to the appropriate SOP for chosen skimmer or pump.

Caution Ensure the depth of water at all times is sufficient to ensure the bottom of the Current Buster separator does not touch the sea bed.



Smaller vessel typical arrangement "Single point"



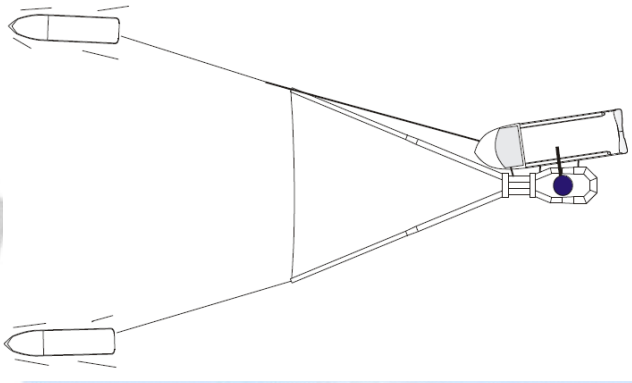
Larger vessel typical arrangement

Two vessels

- When the vessels are at the desired location for recovery, pass one tow line to the second vessel and commence recovery.
- Designate one vessel to be the lead vessel and ensure good communication between the two vessels.
- From time to time, when the separator is full of oil, it should be emptied using a skimmer or submersible pump. Refer to the appropriate SOP for chosen skimmer or pump.

Caution Ensure the depth of water at all times is sufficient to ensure the bottom of the Current Buster separator does not touch the sea bed.

- Connect boom tow lines to vessels as per the following diagram



Recovery

- The recovery operation is performed in the reverse order of deployment/operation.
- The boom is recovered back onto the hydraulic winder, with the separator end being wound on first
- Deflate the chambers as they approach the reel.
- During winding there must be 2 operators guiding the boom straight on the winder.
- The recovery continues until all boom is recovered.

Caution If the boom has been contaminated with oil, care must be exercised when retrieving the boom and reel to minimise secondary contamination, using sorbent booms and/or sorbent rolls.

Post operation – Contaminated boom

- If the boom is no longer required for operations then use plastic sheet, tarpaulins and sorbents to reduce secondary contamination.
- Remove the contaminated boom and transport to a bunded cleaning station.

Note - Maintenance of the boom is to be performed as listed below.

Post operation – Non-Contaminated boom

- Hose down the reel and boom thoroughly with fresh water.
- Boom to be dry prior to maintenance inspection, re-stowage and storage

Note - Maintenance of the boom is to be performed as listed below.

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Additional Information

Securing the reel

The boom reel must be secured in a manner that will not allow it to move during heavy sea states and operation. It is recommended that the reel is lashed securely using appropriate chains or straps to rated fixings on the deck of the vessel. It is acceptable to weld either directly to the deck or by means of brackets to secure the reel. In the event of welding a full risk assessment must be conducted and only fully qualified welders are to be used to undertake this work.

Maintenance

- All maintenance and repairs are to be completed in accordance with either the manufacturer or AMOSC procedures.
- All equipment must be left in an operational condition when not in use.
- All defects must be repaired or the equipment is to be “tagged out” for maintenance and repair.

Related Documents

AMOSC HSSE Plan
PN08 - HSSE Policy
AMOSC JSA Template
PN 11 AMOSC Vehicle Use Policy (AMOSC Vehicle Checklist / AMOSC Load Assessment Checklist)
SOP 1001 Ops; Forklift Operations
SOP 1002 Ops; Loading and Securing of Cargo
SOP 1003 Ops; Transporting Equipment To/ From Warehouse
Operation & Service Manual - BoomVane.
NOFI Current Buster – User Documentation