BoomVane Spray

developing the *BoomVane* technology to a vessel borne dispersant system

_____ORC__

The *BoomVane* oil boom deployment system

- a shore-based river booming system

ORC

The *BoomVane* oil boom deployment system

- adopted by advancing systems, small ..

ORC

The *BoomVane* oil boom deployment system

- .. and large

ORC

multi function

mechanical AND chemical spill response tool

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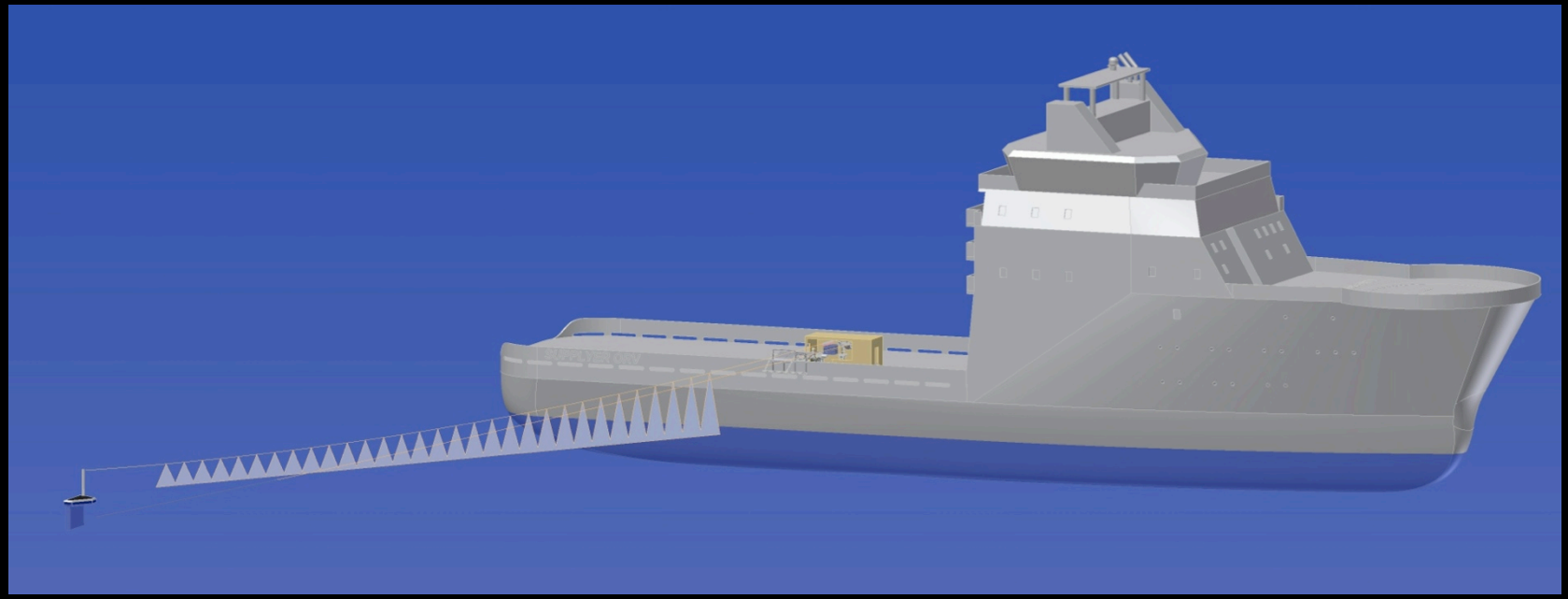
CONCEPT: “to suspend a hose with a series of nozzles between the vessel and the *BoomVane*, to achieve a high area treatment rate with high application accuracy”



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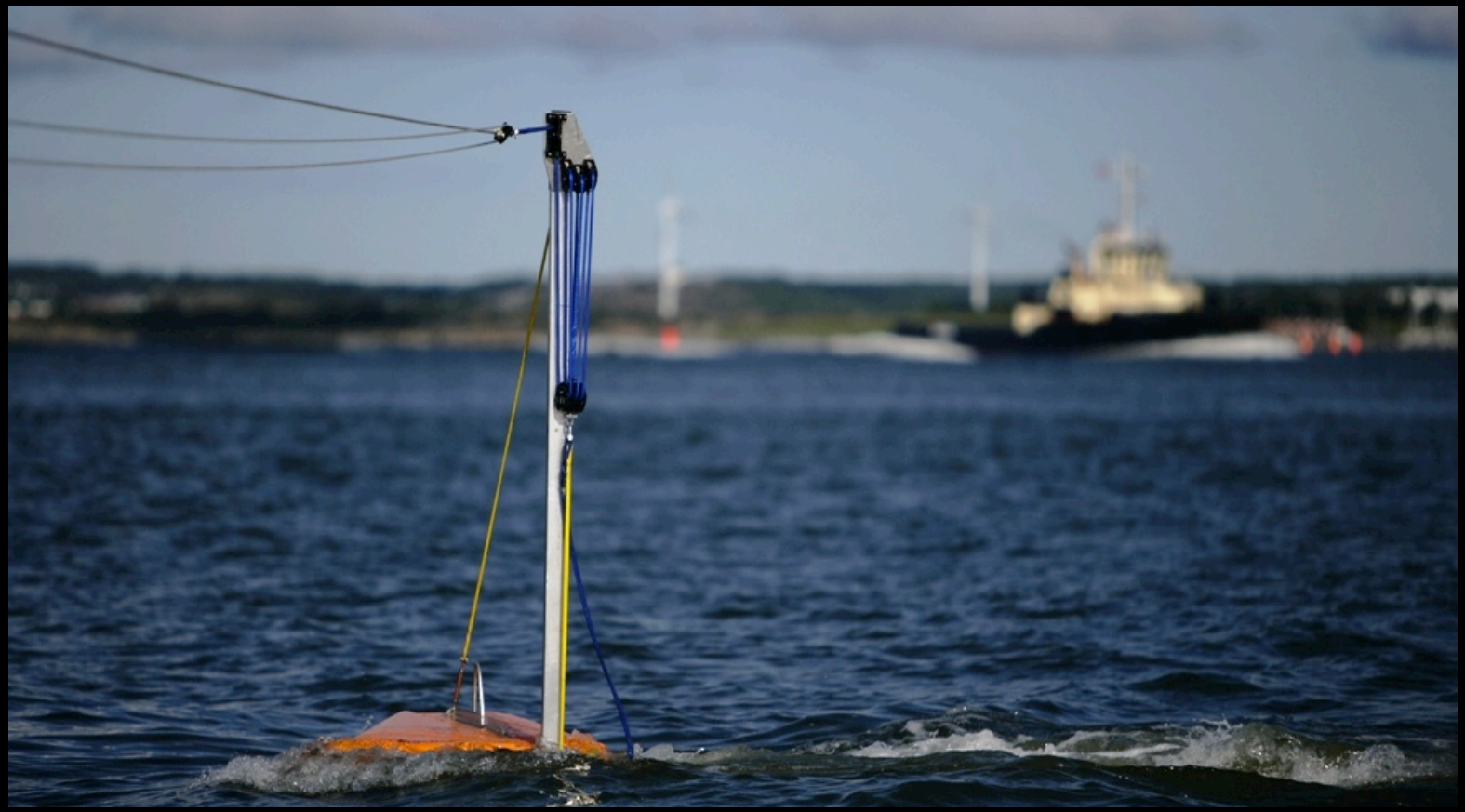
NOFO
2010 Technology Development Program on Oil Spill Response

3 steps:

- concept verification – *BoomVane* stability and nozzle hose line stability
- small scale prototype – coastal model
- large scale prototype – offshore model

Concept verification – *BoomVane* stability



‘anti-tilt’ rigging for horizontal load resistance

nozzle hose line

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lift on/off system components

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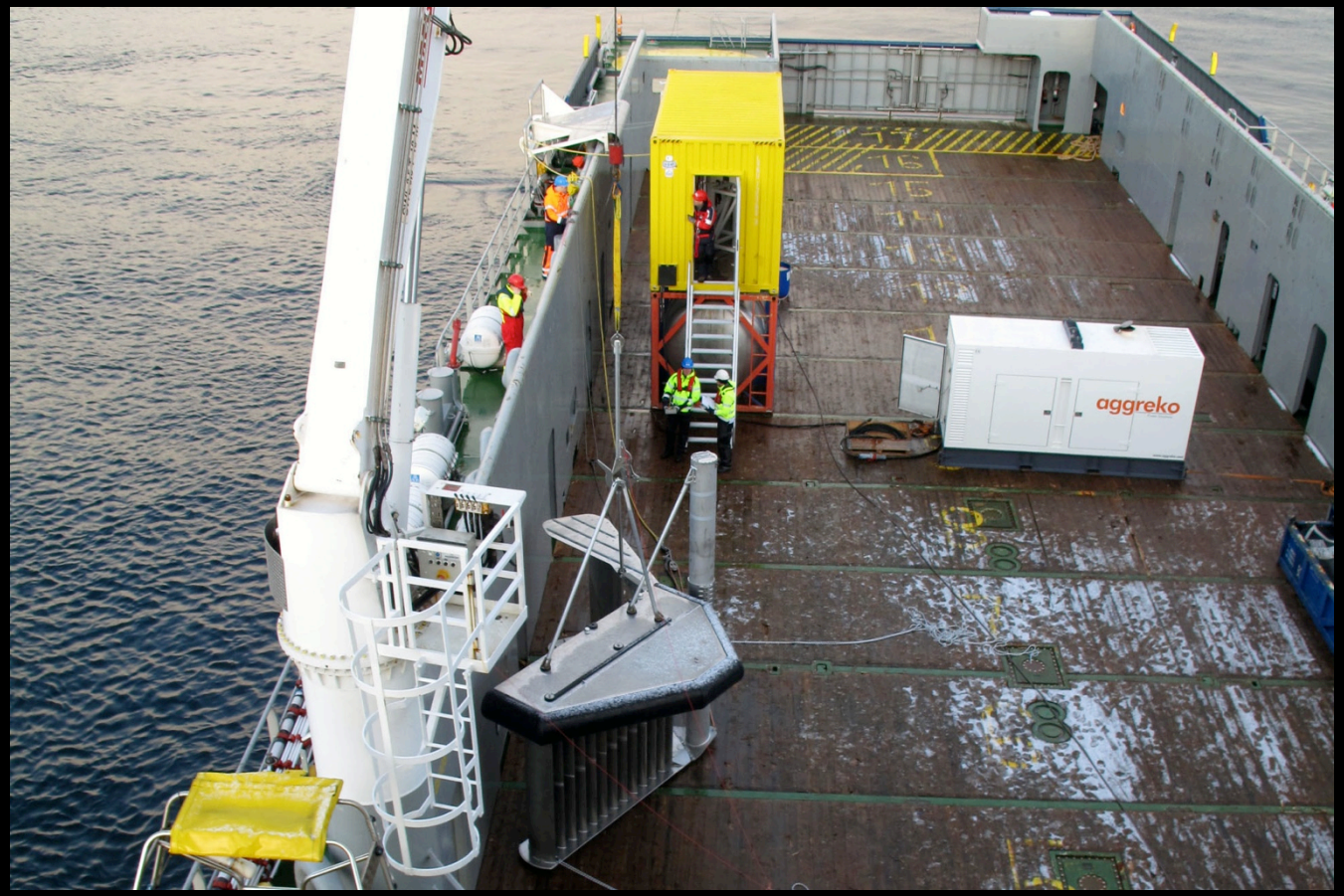
extensive testing

Offshore BoomVane Spray



80 m NHL = 50 m swath speed 3,5 – 5,5 knots

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80 m NHL - catenary load magnitude 0,8 ton

‘anti-tilt’ rig inside mast

horizontal load resistance 1 ton/5 knots

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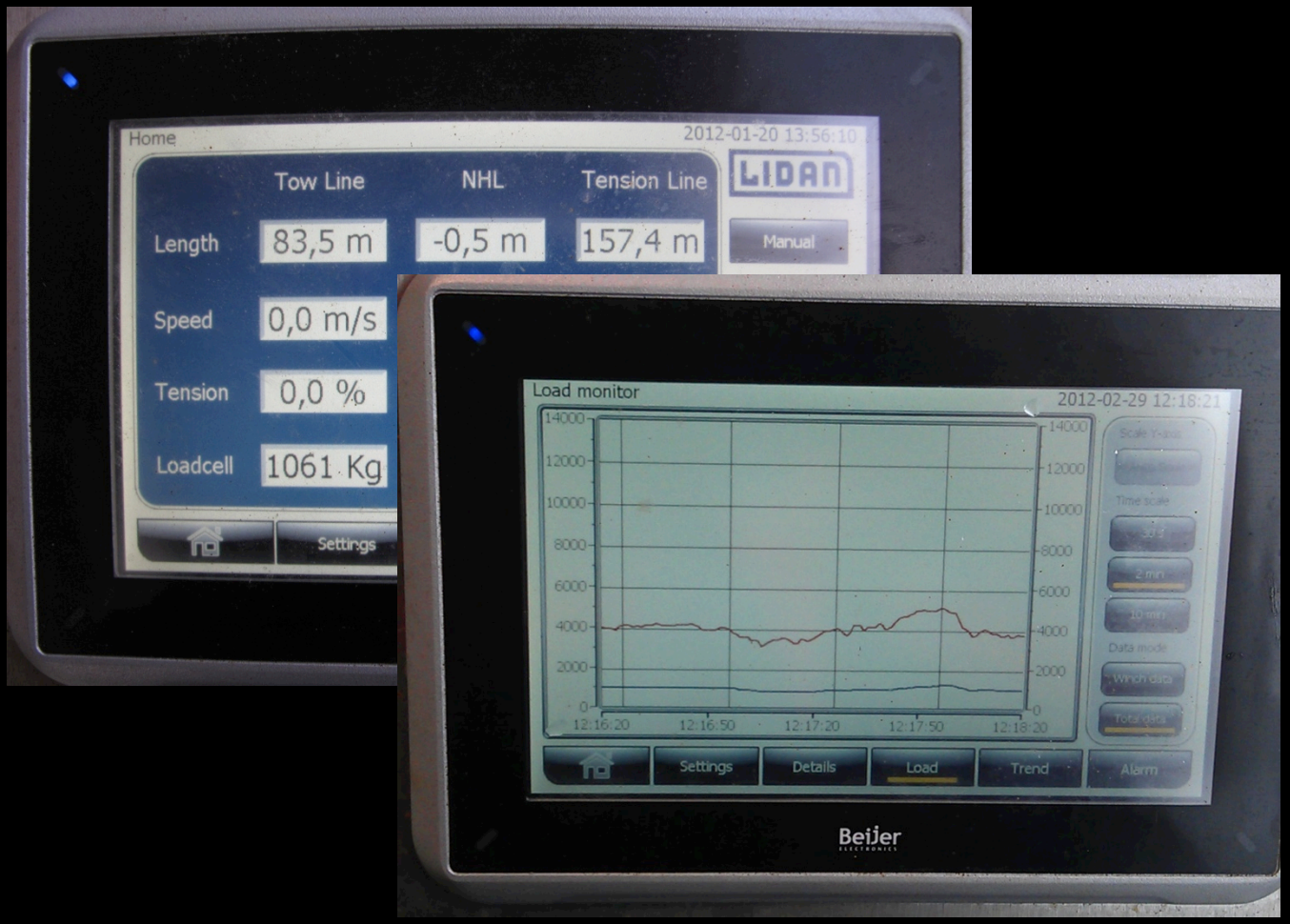
additional challenges

- high system forces
- safety requirement – min manual handling
- nozzle hose line stability
  - low frequency NHL undulation (vessel)
  - high frequency NHL undulation (OBV)

continuous load monitoring of system lines



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’handsfree’

fully automatic NHL launching & recovery

constant tension / vessel roll compensation

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offshore NHL stability

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OBV in wave action

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status March 2012 – *Offshore BoomVane Spray*

final improvements re NHL stability before
NOFO oil-on-water exercise June 2012

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status March 2012 – *Coastal BoomVane Spray*

1:st operational system due March 2012
NOFO Finnmark near-coast project

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