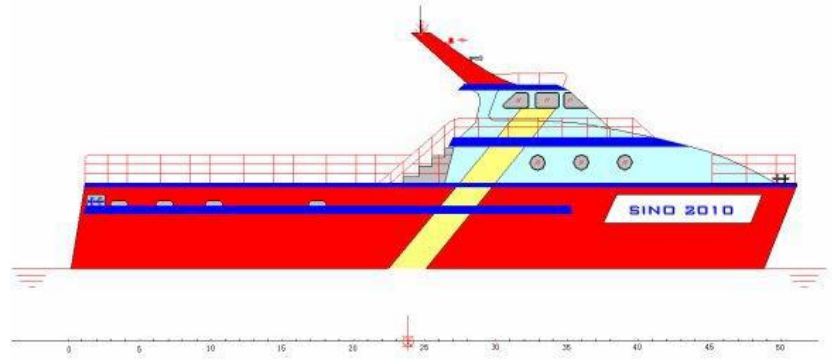
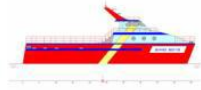


# Extreme Spill Technology



## New Oil Spill Technology for Ocean and Arctic Use



Distributor:

# Index

<b>Item</b>	<b>Page</b>
1) EST	1
2) Our Team	1
3) River Oil Skimmer System	2
3) Harbour and Coastal Skimmer Vessels	3
4) FAST 25m	4
5) Arctic Polar Ice-Class 5 Skimmer Ship	5
5) Ocean-Going Vessel of Opportunity Skimming System (VOSS)	6
6) Contact Information	6
7) Other Vessels Built by Newfound Boats	7, 8



EST technology captures the spilled oil on the high seas, *not* the beaches

## **EST**

Extreme Spill Technology (EST) is a Canadian company, incorporated in 2003, that has developed a breakthrough oil spill technology. It is the first truly innovative idea in 40 years and the only one with potential to work well in very high waves, moving ice (typical of the Arctic) and fast-moving currents. EST captures the spilled oil on the high seas, not the beaches.

An international patent has been accepted. Commercialization began in 2011 with the sale of a 12m skimmer vessel to the Canadian Coast Guard.

On December 31, 2009, tank tests with petroleum oil in Shandong, Weihai, China demonstrated again that the EST technology is a major breakthrough in oil spill technology and renders obsolete all existing oil spill technology in high wave and fast current situations. The tests demonstrated recovery speeds 4-6 times faster than the norm.

On July 7, EST was announced a winner of the 2011 Sustainable Shipping Awards in London, England <http://www.sustainableshipping.com/events/2011/london/categories.html> . Award winners were decided by a group of internationally respected industry figures that included Mike Penning, UK Parliamentary Under-Secretary of State for Transport, Peter Hinchliffe, Secretary General, International Chamber of Shipping, Charlie Brown from IKEA, Dr Simon Walmsley from the World Wildlife Fund (WWF), Jacob Sterling, Head of Climate and Environment at Maersk Line, and Natalie Bruckner-Menchelli, Senior Editor of SustainableShipping.com.

### **Our Team**

David Prior:

Extreme Spill Technology (EST) is the operating name of a corporation registered in Canada and located near Sussex, NB. The CEO and head of R&D is David Prior who has 35 years marine business experience in Atlantic Canada manufacturing marine equipment and developing new technology. Mr. Prior has successfully filed several international patents. He has developed innovative building systems with R&D funding from the National Research Council of Canada and worked closely with Dalhousie University in Halifax, Canada.

Wally Jackson:

Mr Jackson started Newfound Boats in Shandong, Weihai, China almost 5 years ago. Since then he has shipped 5 modern, Canadian-style fishing vessels to Norway. N-71-0 (right) was shipped from Weihai, China 30-11-2009. He has over 30 years experience building modern working vessels in Canada and China. He is now International Marketing Manager at Weihai Zhongfu Xigang Ship Company.





## River Oil Skimmer System

This system is permanently installed immediately downstream of an oil pipeline river crossing. The system for a stream would be sized accordingly. All systems can be placed by helicopter.

### Component:

#### 1) EST Skimmer Vessel:

This vessel will be based on the EST 6m x 2.4m, shallow draft, non-self-propelled



skimmer. It is moored at the apex of two floating booms, each of which is attached to the shore. They meet in the middle of the river where the floating booms are attached



to the skimmer bow. All spilled oil is guided under the bow of the EST skimmer and trapped in the oil pickup tower. An oil leak onshore that drained into the river would also be captured.

This product compares favourably to the costs of cleaning up an oil spill in the conventional manner. It's conceivable that every crossing could be protected with this EST system for far less cost than one spill. This EST product has a long and low-maintenance life so it could save the day in dozens of future spills. The EST skimmer vessel will last at least 50 years and the floating boom and hose has a lifespan of approximately 10 years. Reduced insurance and liability costs help pay for it.

There are existing river oil spill skimmer systems using floating boom with a skimmer at the apex but they are not automated and are slow. The other system is typical; it is labour-intensive and costs almost \$1 million c/w skimmer, onshore storage, etc. It is not automated and cannot detect oil. It would need replacing every 10 years.

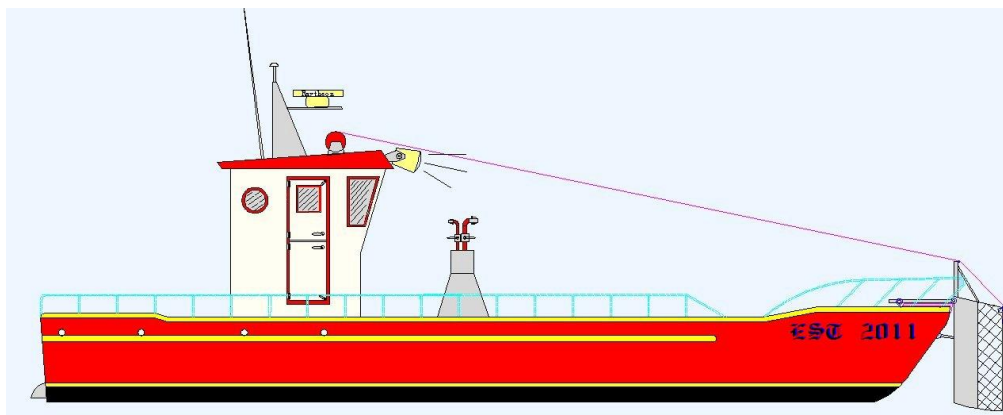
## Harbour and Coastal



**LOA** 33 ft (10.0m) **BOA** 8 ft (2.4m) **Draft** 1 ft (0.3m)

Sweeps over 15,000 m<sup>2</sup>/hour

- Speed 21 kt
- Automated oil recovery system
- The vessel is powered by an UltraJet jet drive (UJ 251) and air-cooled Deutz diesel (BF6 L 914) for use in shallow, debris-laden water
- The EST oil spill recovery system has no moving parts \_ very easy to clean and maintain
- Two (2) m<sup>3</sup> onboard oil storage plus 60 m<sup>3</sup> floating oil storage bladders (4 x 15 m<sup>3</sup>)
- Can efficiently recover oil at 4 kts (sweeps over 15,000 m<sup>2</sup>/hour)
- Can efficiently recover oil in 2.0m waves at slower speeds
- Heavy duty fibreglass construction (no corrosion and 50-year working life)
- **Can be easily transported by road**
- Easily removable oil spill and debris system so it can perform many tasks
- Wheelhouse has a separate wc plus a small galley
- Suitable for lakes, rivers, harbours and approaches, coastal waters

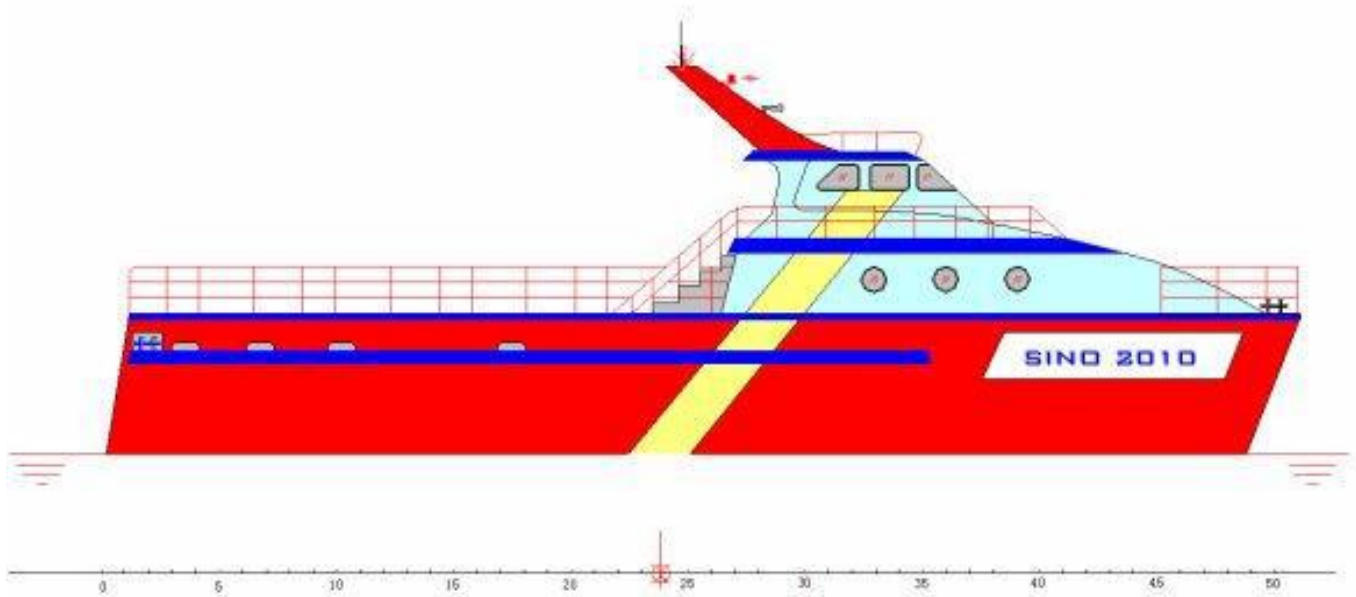


**LOA** 12.0m **BOA** 3.3m **Draft** 0.5m

Sweeps over 20,000 m<sup>2</sup>/hour

(4)

## FAST 25.0m



**LOA 25.0m BOA 13.0m Draft 0.8m**

Sweeps over 75,000 m<sup>2</sup>/hour

***Can be used for search and rescue, patrol, firefighting, standby duties***

- Speed 30-35 kt
- Automated oil recovery system
- The vessel is powered by UltraJet jet drives and Volvo diesel engines as standard equipment. Customers may prefer alternative engines and drive systems which will be installed
- The EST oil spill recovery system has no moving parts \_ very easy to clean and maintain
- **100 m<sup>3</sup> onboard oil storage plus 500 m<sup>3</sup> floating oil storage bladders (10 x 50 m<sup>3</sup>)**
- Can efficiently recover oil at 4 kts
- Can efficiently recover oil in 3.0m-4.0m waves at slower speeds
- Heavy duty fibreglass construction (no corrosion and 50-year working life)  
Optional aluminum construction.
- Wheelhouse has full living accommodations for crew and many passengers
- Suitable for large rivers and deltas, harbours and approaches, coastal and offshore waters
- Easily removable oil spill and debris system so it can perform many tasks
- This vessel is very seaworthy and can safely cross any ocean
- A larger version of this vessel could be based on the Seacor Crewzer PSV  
<http://seacormarine.com/crewzer/index.html>

**Extreme Spill Technology\_EST**

**Canada-China**

## 70.0m Ocean/Arctic Skimmer Ship



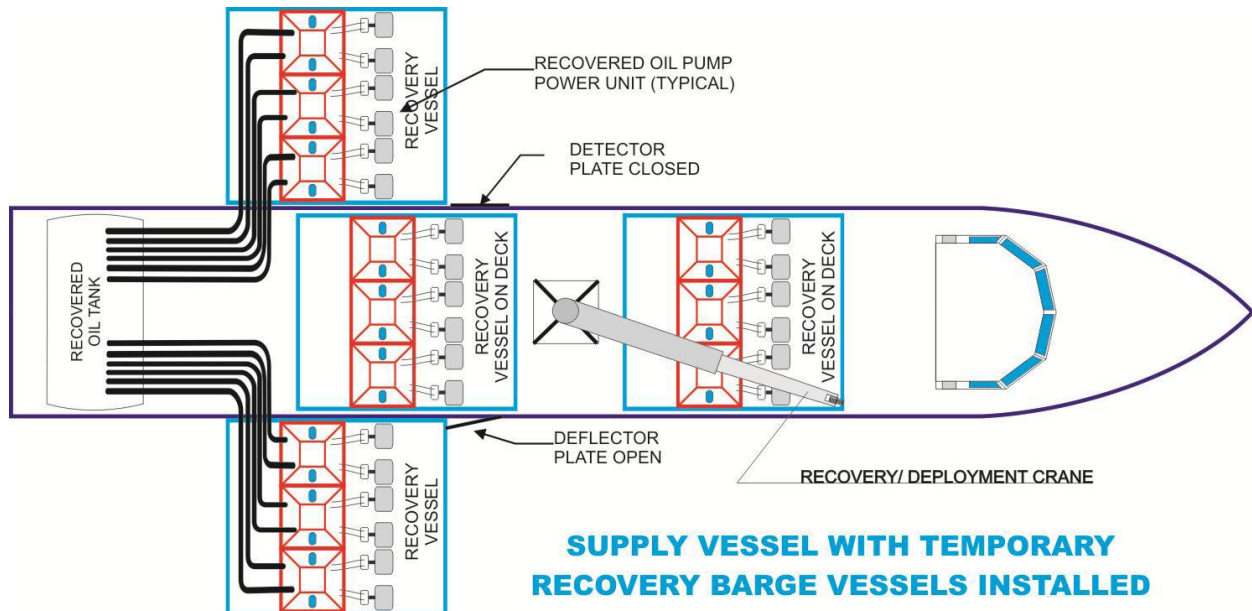
**LOA 70.0m BOA 23.0m Draft 4.65m**

Sweeps over 175,000 m<sup>2</sup>/hour

- Speed 10 kt
- Automated oil recovery system
- The vessel is powered by Azimuth thrusters. Customers may prefer alternative engines and drive systems which will be installed
- The EST oil spill recovery system has no moving parts \_ very easy to clean and maintain
- ***2,870 m<sup>3</sup> recovered oil storage***
- Can efficiently recover oil at 4 kts
- Can efficiently recover oil in 3.0m-4.0m waves at slower speeds
- ***Polar Ice-Class 5 steel construction***

## Ocean-Going Vessel-of-Opportunity with Oil Recovery Barges

Sweeps over 200,000 m<sup>2</sup>/hour



Two barges towed alongside: (each) **LOA 12.0m BOA 9.0m Draft 1.5m**

One barge towed behind on a bridle: **LOA 16.0m BOA 12.0m Draft 1.5m**

- Heavy steel or aluminum construction\_multi-purpose barges
- Can efficiently recover oil in 5.0m-6.0m waves at slower speeds
- Oil pumping capacity up to 3500 m<sup>3</sup>/hour with 24 Foilex TDS 250 oil transfer pumps

### Extreme Spill Technology

#### Canadian Offices

165-1096 Queen St, 9219 Route 3,  
Halifax, NS, B3H 2R9, Old Ridge, NB, E3L 4X2  
Canada Canada

-

#### Beijing Office

Suite 11A16,  
Tower A, Hanwei Plaza,  
No 7 Guanghua Rd,  
Beijing, China



Canada China Business Council  
Conseil commercial Canada-Chine  
加中贸易理事会

CEO: David Prior

邮箱: [david.prior@spilltechnology.com](mailto:david.prior@spilltechnology.com)



## Other Vessels Built By Newfound Boats



Our 15-25m fiberglass vessels have been used in heavy ice packs off Canada's East Coast and have crossed the North Atlantic to northern Norway in winter time.

They are the most rugged fiberglass vessels in their class available anywhere in

the world and will easily outlast aluminum and steel.

They are built to the highest classifications such as ABS, DNV, Lloyds Register etc.

Our Canadian boatbuilder, Wally Jackson, is now international business dept manager at a modern shipyard in China that is ISO 9001 certified. He produces all our oil spill vessels that accept the patented EST oil spill technology system which is built in Canada with American, Swedish and German mechanical components.



**12m Workboat  
Weihai, China**

(8)

