

Our Coastal Heritage

Critical Steps Taken in Saving MASTER

by R. G. Allan P.Eng. (ret)

In the ongoing quest to save and restore the historic steam tug MASTER, the SS Master Society has taken a critical step in removing the towing winch and anchor windlass from the tug for restoration and refurbishing. Removing these pieces of heavy gear enables some critical under-deck structural repairs.

In October 2022 MASTER was 100 years old, and by all research available we know this iconic BC-built vessel is the only wooden-hulled, steam-powered tug still afloat **In The World!** As such she is the single vessel in BC most deserving of public and private support for a comprehensive restoration. The Society is working hard to ensure this happens with the SS Master Centennial Restoration Project. The task of removing her deck machinery is an important step in this mission and exemplifies the kind of generous support both needed and received from BC's marine and industrial networks.

The winch and windlass were manufactured by Terminal City Iron Works of Vancouver, another local company with more than a century of service to BC businesses. Winch and windlass are both steam-powered and fully functional, and thus most likely the only examples of their type in existence today, making these items of century-old specialized tugboat deck equipment of historic importance in their own right.

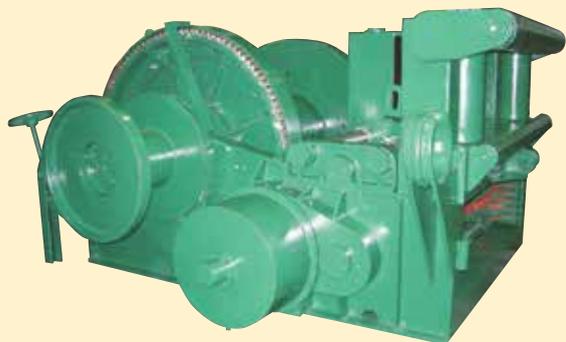
On the lovely calm and sunny morning of October 14th we were most gratefully supported in this mission by Capt. Tim Mackenzie and his crew from Harken Towing, who moved MASTER from her berth at the Britannia Heritage Shipyard in Steveston upriver a few hundred metres to a crane-accessible berth for the offload, and then towed her back to her berth on completion of the lifts. The cranaage was provided free of charge by Eagle West Crane and Rigging of Abbotsford. Once removed, the machinery was shipped to Vancouver's legendary winch manufacturer Burrard Iron Works who have most



The steam-powered tow winch is chained up and ready to hoist.

generously offered to undertake this important machinery rehabilitation work on a voluntary basis.

The work of our Society to save MASTER could not happen without this type of support from our industry partners, and we are most grateful to those who helped us with this vital work. Special thanks to Rob Brown at Burrard Iron Works for his support with this critical work, to all the Harken Towing crew; Tim and Rose Mackenzie on the COLBY M., and to Marshall Pringle, Jakob Lachane and Brad Curnew for their skilful towing services, and to the most professional crane crew, Brad, Rick and



BURRARD HEAVY DUTY DECK MACHINERY

TOWING WINCHES ANCHOR WINDLASSES
MOORING CAPSTANS CARGO WINCHES
HYDRAULIC OR ELECTRIC DRIVES

BURRARD IRON WORKS LIMITED

220 Alexander Street, Vancouver, B.C. V6A 1C1

Phone: (604) 684-2491 Fax: (604) 684-0458

E-Mail: sales@burrardironworks.com



Tim and Rose Mackenzie on the COLBY M ease MASTER onto a berth at the Paramount net loft for offloading (photo above) while the rest of the Harken Towing crew assisted at the stern.

Winches loaded and ready for transport to Burrard Iron Works.



PHOTOS BY ROB ALAN

Above, an Eagle West crew member guides the anchor winch as it lifts free of the foredeck.

TIDAL TOWING LTD.

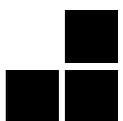


MARINE TOWING
WATER TAXI
RAMP BARGING
4200-TON FLAT DECK BARGES

PO Box 7, 1990 Argue Ave
Port Coquitlam, BC V3C 3V5
captaintim@shaw.ca T: 604-619-TUGS

TIMBER BLOCKING

SHIP DUNNAGE ■ PIPE SADDLES ■ TIMBER MATS



**INDUSTRIAL
TIMBER
PRODUCTS
BY CARLWOOD**

TIMBER WEDGES & BLOCKS ■ CARGO CHOCKS

Tel: 604 462 7517 www.industrialtimberproducts.com

BRITMAR MARINE LTD.



Toll Free: 1-866-401-2288 Phone: (604) 983-4303
102-2433 Dollarton Hwy, North Vancouver, BC V7H 0A1 Canada
<http://www.brtimar.com/>



- Introducing 2 new battery chargers for battery types : Lead Acid, AGM, Gel, LifePO4 and NMC.
- Switch for charging both 12volt and 24volt operation. Same charger, adjustable current.
- With RS232 NEMA output and optional temperature sensor.



The tow winch set up and ready for dismantling at the Burrard Iron Works' shop on Alexander St., Vancouver. The winch's steam engine (silver-painted object at lower left, photo far left) is coupled via a drive shaft to an eccentric on the main winch shaft. When the steam power is on, the capstan on the far side of the big gear turns constantly (top right photo). To rotate the winch, the drum is shifted sideways (to the right in photo) where it engages a set of large flat teeth. Big tooth clearances will make for noisy operation.

Trevor from Eagle West for their careful managing of the lifts.

This work is but one leg of the long voyage to a full restoration of this important ship in BC's maritime history. Much remains to be done, and a great deal of financial support is urgently required. Please join us in supporting this most important work by donating today to the SS Master Centennial Restoration Project at <https://www.ssmaster.org/support-us/>.

The anchor winch has a capstan at each end of the main shaft with a pair of wildcats to handle chain, just inboard. Both sides have a band brake for lowering anchor gear or easing line under control. The Terminal City Iron Works logo is cast into the main gear. ▶



HARKENTOWING

HARKEN TOWING CO. LTD.

- Canadian owned and operated, professional grade marine towing service in the Pacific Northwest for over 70 years.
- Bonded for cross-border towing in the U.S.A.

SAFE CERTIFIED EFFICIENT MARINE TOWING

Dedicated and experienced marine employees with decades of knowledge.

WE'VE GOT YOU COVERED

Our fleet of 500hp – 1,800hp tugs is available to meet your marine towing needs throughout the Pacific Northwest.

SERVICES

Ramp, Aggregate & General Barge Towing
Ship Loading • Fuel Sales • Water Taxi
Log Boom Towing & Storage • Ship Docking
Barge Moorage



604-942-8511 • info@harkentowing.com
www.harkentowing.com

2000 Argue Street, PO Box 7, Port Coquitlam, BC, V3C 3V5



ROBERT ALLAN

www.ral.ca

ElectRA 2800