



2011 - NOTICE TO SHIPPING #3

NIAGARA REGION WELLAND CANAL

“LOCKAGE OF THE FUTURE”

THIS NOTICE CONTAINS THE FOLLOWING:

1. TESTING OF “LATERAL HYDRAULIC ASSIST” IN LOCKS 1, 2, 3 & 7
2. TESTING OF “SELF SPOTTING” IN LOCKS 1 TO 7

1. TESTING “LATERAL HYDRAULIC ASSIST” IN LOCKS 1, 2, 3 & 7

Lateral Hydraulic Assist was tested at Lock 7 during the 2010 navigation season with promising results therefore as part of the overall Hands Free Mooring strategy the SLSMC will continue using it at Lock 7 and expand it to include Locks 1, 2 & 3 during the 2011 navigation season for vessels 20m (65.6') OAB or less. The 'Lateral Hydraulic Assist' is designed to assist vessels in the upbound direction to keep to the mooring side of the lock chamber. The 'Lateral Hydraulic Assist' is activated when the stem of the upbound vessel passes the end of the bullnose below the lock. Once the operation is initiated the discharge valves at the lower end of the lock move to the fully closed position and the upper end tie-up side valves open to 0.38m.

This valve opening permits the water to flow through the filling culverts, pass under the vessel, and deflect off the opposite wall, then return in a lateral motion to create a force on the side of the vessel. This force keeps the vessel to the mooring side of the lock.

Masters / Pilots on vessels equipped with bow thrusters are encouraged to use them when entering the lock, once past the open lock gates, to assist the vessel in getting alongside of the tie-up side of the lock. If the vessel is participating in a Hands Free Mooring test the bow thrusters should not be used once the mooring pads are attached to the vessel as this could result in the pads detaching and / or damage to the pads.

2. SELF SPOTTING IN LOCKS 1 to 7:

During 2010 testing of the Vessel Self Spotting System, (VSSS), took place at Locks 1, 2, 3, 4, 5, 6 & 7 with good results / feedback. Mariners are advised that testing will continue at these locations during the 2011 navigation season. In addition, during the upcoming navigation season we will be testing Vessel Self Spotting at all remaining locks in the Welland Canal with the exception of Lock 8. This equipment uses eye safe laser ranging technology, located at both ends of the lock, to recognize the foremost portion of the vessel's hull and estimate its position in the lock. The vessel's position will be updated dynamically and displayed on both LED panels, located on the tie up side of the lock, as the vessel progresses to its final mooring position.

Masters / Pilots are asked to provide any comments / concerns with respect to the vessel self spotting system directly to the lock crew who will record them on the appropriate form.

The St. Lawrence Seaway Management Corporation
Corporation de Gestion de la Voie Maritime du Saint-Laurent

Région Maisonneuve
151, rue de l'Écluse
St-Lambert, Québec
J4R 2V6

Tél : (450) 672-4115 Fax : (450) 672-8493

Niagara Region
508 Glendale Avenue
P.O. Box 370
St. Catharines, Ontario
L2R 6V8

Tel : (905) 641-1932 Fax : (905) 641-5721

Note: Masters / Pilots should be aware that equipment for these new technologies are installed close to the lock walls which could be damaged if any part of the vessel is allowed to sufficiently overhang the lock wall. Therefore, extreme caution is to be exercised when maneuvering inside the lock chamber.

Alvina Ghirardi
Manager, Canal Services
St. Catharines, Ontario
March 23, 2011

The St. Lawrence Seaway Management Corporation
Corporation de Gestion de la Voie Maritime du Saint-Laurent

Région Maisonneuve
151, rue de l'Écluse
St-Lambert, Québec
J4R 2V6

Tél : (450) 672-4115 Fax : (450) 672-8493

Niagara Region
508 Glendale Avenue
P.O. Box 370
St. Catharines, Ontario
L2R 6V8

Tel : (905) 641-1932 Fax : (905) 641-5721